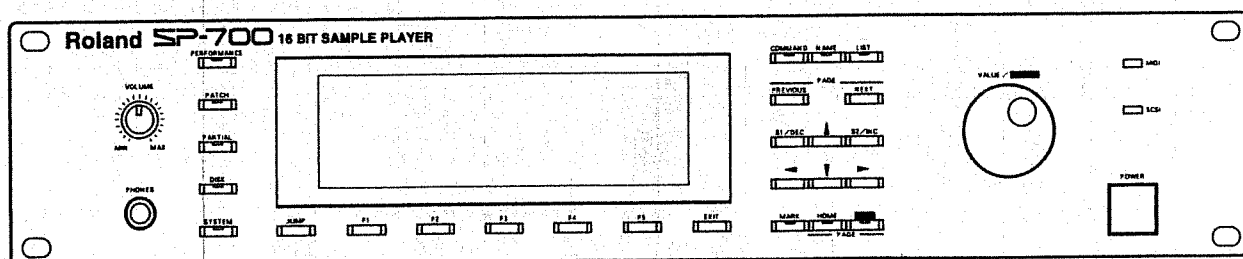


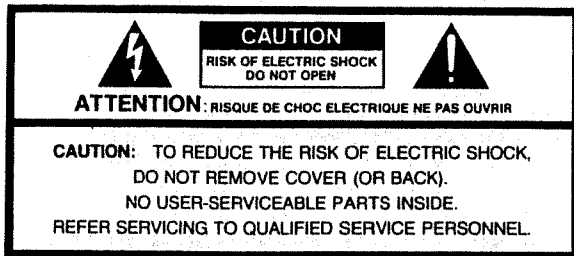
Roland

16 BIT SAMPLE PLAYER

SP-700

OWNER'S MANUAL





The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTIONS

WARNING — When using electric products, basic precautions should always be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water — for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
3. This product should be used only with a cart or stand that is recommended by the manufacturer.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. Avoid using the product where it may be affected by dust.
8. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
10. Do not tread on the power-supply cord.
11. Do not pull the cord but hold the plug when unplugging.
12. When setting up with any other instruments, the procedure should be followed in accordance with instruction manual.
13. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
14. The product should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the product; or
 - C. The product has been exposed to rain; or
 - D. The product does not appear to operate normally or exhibits a marked change in performance; or
 - E. The product has been dropped, or the enclosure damaged.
15. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

For Polarized Attachment Plug

For Canada

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCs ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.


SAVE THESE INSTRUCTIONS

WARNING: THIS APPARATUS MUST BE EARTHED

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.
GREEN-AND-YELLOW: EARTH, BLUE: NEUTRAL, BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

The product which is equipped with a THREE WIRE GROUNDING TYPE AC PLUG must be grounded.

16BIT SAMPLE PLAYER

Roland SP - 700

OWNER'S MANUAL

Before Using the SP - 700

Thank you for purchasing the Roland SP - 700 16 - bit Sample Player.

The SP - 700 is a 16 - bit linear sample player designed specifically for playback of existing sampled sound data found in the extensive sound library (on CD - ROM) of Roland's S - 770 and S - 750 Digital Samplers.

Setting up the unit for playback is exceptionally quick and easy, thanks to the special Quick Load function. This function allows you to easily select and load any sampled sound from a large bank of sounds.

The SP - 700 also features a convenient load - while - playing function that allows you to play the current sound data while loading another. Now you don't have to interrupt your performance just to load a new sound.

As sound data is compatible with the S - 770 and S - 750 (SYS - 772 Version 2.0), you can easily (and inexpensively) increase the number of sound programs available for simultaneous use by combining the SP - 700 with an existing S - 770/S - 750 system. Doing so will upgrade and extend the performance potential of your sampling system.

The SP - 700 is compatible not only with the sound library of the S - 770 and S - 750 (on CD - ROM) but also, through the Convert Load function, with the CD - ROM sound library of the S - 550 and W - 30.

No sound will be output from the SP - 700 unless it is connected to another device (such as a CD - ROM drive). See P.1 - 1, P.App. - 6 for more information.

To get the most out of the SP - 700, and to ensure years of trouble - free service, please take the time to read this entire manual.

CD - ROM drives, hard disk drives, the MO - 7 optical disk drive or other MIDI devices can be connected to the SP - 700. The SP - 700 may not function properly if these devices are not compatible. Please refer to the owner's manuals of the connected devices when using them with the SP - 700.

MAIN FEATURES

- The Quick Load function greatly facilitates loading specific sounds from a large bank of sound data (once you have pre-assigned the desired sound data). This is especially convenient in performance situations, as you need not spend a lot of time searching through a huge bank of sound data to locate a certain sound.
- Up until now, sound modules and samplers, including the S - 770, were not capable of simultaneously playing one sound while loading another. However, the SP - 700 has a load-while-playing function that lets you play the currently selected sound while loading another.
- The SP - 700 has a standard eight megabytes of wave memory (RAM). By installing optional wave memory expanders (two four-megabyte SIMMs is one unit), wave memory can be expanded up to 32 megabytes.
- The internal memory of the SP - 700 can be divided into two separate memory sections, Volume A and Volume B, and each can be loaded with different sound data. By switching between these Volume memory sections, you can instantly change between different sound programs. (However, the Volume A and Volume B memory sections cannot be used simultaneously.) A single Volume containing up to 64 Performances, 128 Patches, 255 Partials and 512 Samples can be stored in each Volume memory section.
- With the four-system STEREO OUT section on the SP - 700, Patches can be freely assigned to specific outputs. This extremely flexible and versatile output system provides a wide variety of output assignments, such as one stereo pair out, or one stereo pair out and six individual outs, or eight individual outs, for example.
- The built-in standard SCSI port allows you to connect CD-ROM drives and hard disk drives for exceptionally fast loading and saving of sound data.
- As the SP - 700 is compatible with sound data for the S - 770 and S - 750 (SYS - 772 Version 2.0), the extensive sound library for the S - 770/S - 750 (and sound data stored on S - 770/S - 750-compatible hard disks and optical disks) can be loaded via the SCSI port. It is also possible (using the Convert Load function) to load from a SCSI drive the CD-ROM sound library for the S - 550 and W - 30, as well as the sound data stored on S - 550/W - 30-compatible hard disks.
- The SP - 700 supports the MIDI sample dump standard (universal Exclusive message). This allows you to transfer sample data back and forth between other sample-dump-standard-compatible devices, regardless of type or manufacturer.
- Sound data stored on a hard disk can also be copied to SCSI-equipped streaming tape backup devices. In this way, you can ensure the safety of the sound data on the hard disk by backing it up to DDS (digital data storage) tape.
- By combining the SP - 700 with an existing S - 770/S - 750 system, you can easily (and inexpensively) increase the number of simultaneously available sounds and upgrade the performance potential of the system.
- The SP - 700 gives you comprehensive sound shaping tools for editing and processing the sampled sound, just as on a synthesizer. Parameters include TVF (low pass/high pass/band pass filters), TVA and LFO.
- "Seamless" split points, in which the sounds change gradually across the keyboard, can be created using the Positional Crossfade function.
- An on-board equalizer allows you to alter the sound just prior to output.
- A maximum of four sample mix ratios can be set for switching between samples by velocity (sample mix table). In other words, a maximum of four samples can be used in a velocity split, allowing you to change among four different samples according to the strength with which you play.
- The SP - 700 also responds to MIDI pan messages for changing the stereo position of the sound during performance. (As for conventional devices, the pan position changes for each new sound, not continuously.)
- The pan position of a Partial can be modulated by LFO.
- A convenient mark function allows you to mark an often used display page so that you can "jump" to (or recall) that page directly from any other page whenever you wish.
- The sound data of the SP - 700 is played back in response to incoming MIDI data. The Partials which are not sounded can be turned off all together on the Patch split (Listen Delete function).
Sound data can be stored on a SCSI device, such as a hard disk. Using this function, you can save only the important data, and thus use memory more effectively. (☞ P.Pfom - 49)
- The SP - 700 has a maximum polyphony of 24 voices.

PRECAUTIONS

☐ Power Supply

- All data in the internal memory of the SP - 700 is erased once the power has been turned off. Therefore, you should be careful not to inadvertently press the power switch or disconnect the power plug from the outlet. Also, be sure to save important data regularly (and often)!
- When making any connections with other devices, always turn off the power to all equipment first; this will help prevent damage or malfunction.
- Do not use this unit on the same power circuit with any device that will generate line noise, such as a motor or variable lighting system.

☐ Placement

- This unit may interfere with the normal operation of radios, TVs or computer monitors. Do not use the unit in the vicinity of such devices.
- Condensation and moisture, which can damage sensitive electronic parts (including a hard disk), may collect inside the unit if it is subjected to extreme environmental changes, such as heating the room suddenly or quickly moving the unit from a cold environment to a warm one. Wait for an hour (or more) before turning the unit on.
- Using the unit near power amplifiers (or other equipment containing large transformers) may induce hum.
- Install the unit on a solid, level surface in an area free from vibration.

☐ Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth (or one that has been slightly dampened with water). To remove stubborn dirt, use a mild neutral detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the risk of discoloration and/or deformation.

☐ Additional Precautions

- Protect the unit from strong impact.
- Never strike or apply strong pressure to the display.
- A small amount of noise may be heard from the display, and thus should be considered normal.
- A small amount of heat will radiate from the unit, and thus should be considered normal.
- Before using the unit in a foreign country, consult with qualified service personnel.

☐ About Use With SCSI Devices

- Be sure that the Busy and/or SCSI indicators are not lit when removing the disk or the tape. The disk or tape may be damaged if you attempt to remove it while the indicator is lit.
- Carefully read the manual of the SCSI device (a hard disk drive, for example) connected to the SP - 700.
- Roland is not responsible for any damage or loss of data caused by damage to the unit during operation.

☐ Turning Off the Power/Transporting the SP - 700

Although the SP - 700 does not include a hard disk, if a SCSI - equipped data storage device (such as hard disk drive, etc.) has been connected, always save the data and properly park the head(s) of the device before turning off the power. Also be sure to park the head(s) when moving the SCSI device. See P.1 - 9 for more information on turning off the power.

- * Keep the original shipping box and packing materials and use them when transporting the unit.
- * Be very careful whenever you move or need to ship the SP - 700 and any SCSI devices, since they are precision electronic devices. You need to be sure they will be protected from any excessive shock.

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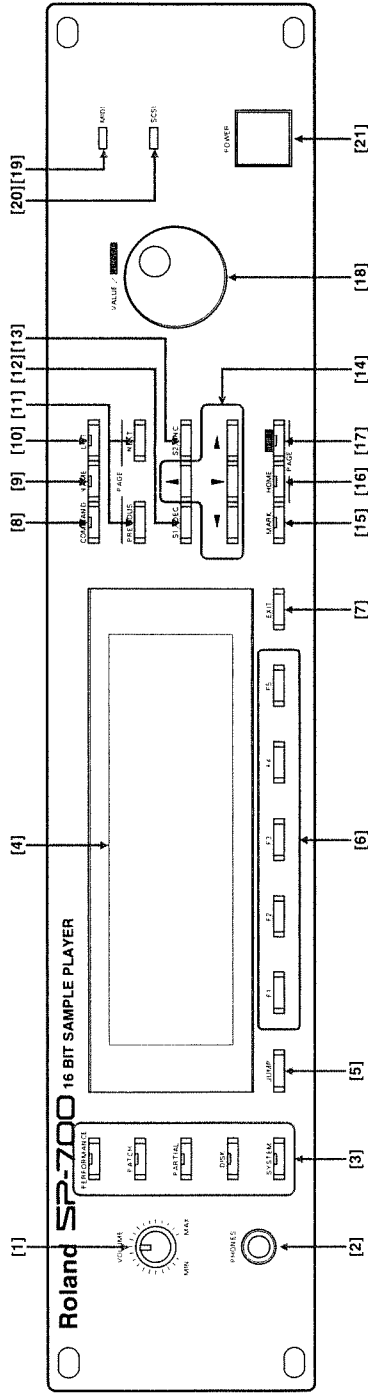
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MEMO



[1] VOLUME knob

This knob adjusts the sound level of the STEREO OUT A jacks (INDIVIDUAL OUT 1&2) and the headphones.

* The sound levels of other jacks are not affected by this knob.

[2] PHONES (Headphone) jack

This jack accepts connection of stereo headphones. The same sounds are output from the STEREO OUT A jacks (INDIVIDUAL OUT 1&2) on the rear panel.

[3] Mode buttons

These buttons select the various functions of the SP-700. The indicator of the presently selected mode will light.

[4] LCD display

The LCD displays a variety of operational information.

[5] JUMP button

When this button is pressed, the [F1] - [F5] function buttons can be used to jump directly to previously specified display pages.

The Jump function lets you specify two pages for each function button ([F1] - [F5]), for a total of ten pages. Each press of the JUMP button switches between the two specified pages of each function button.

[6] Function buttons ([F1] - [F5])

These buttons are used either to jump to specific pages or execute commands. The function of each button is displayed in the LCD at the bottom of each display page.

[7] EXIT button

Pressing this button either advances to the next page (one level up) or returns to the previous page.

[8] COMMAND button

Pressing this button (when the indicator is green) selects the Command menu page (the indicator will then turn red).

* The indicator lights (green) depending on the currently selected display page.

[9] NAME button

Pressing this button (when the indicator is green) selects the ASCII keyboard page and allows you to name Patches and Performances. (≠ P.3 - 13) The indicator is red when this function is on.

* The indicator is green when the cursor is positioned for selecting a Performance, Patch or Partial (such as when moving the cursor to the home position by pressing the [HOME] button).

[10] LIST button

Pressing this button (when the indicator is green) calls up the Select page, from which you can select a Performance, Patch or Partial while viewing the list (≠ P.3 - 9). The indicator is red when this function is on.

* The indicator is green when the cursor is positioned for selecting a Performance, Patch or Partial.

[11] Page buttons ([PREVIOUS] / [NEXT])

When a function is spread out over several display pages, these buttons are used to select those pages.

[12] S1/DEC button

This button is used to decrease the selected parameter value or to select sound programs from the List page. The functions change depending on the cursor position, and the function is indicated at the top right of the display.

[13] S2/INC button

This button is used to increase the selected parameter value. The functions change depending on the cursor position, and the function is indicated at the top right of the display.

[14] Cursor buttons

These buttons move the cursor. (The cursor is the highlighted part of the display. Data can be entered or changed at the cursor position.) When a function is spread out over several pages, the pages can be changed by moving the cursor.

[15] MARK button

Pressing this button calls up the Mark Set page. The pages indicated by [F1] - [F5] can be assigned for use with the JUMP button. (The page which was open before the MARK button is pressed can be assigned.) (≠ P.3 - 10) The indicator will be red.

[16] HOME button

This button moves the cursor to the home position. (≠ P.3 - 12)

[17] SHIFT button

The SHIFT button is used in the following ways:

* To allow you to use the [VALUE/CURSOR] dial for cursor movement. To do this, hold down the SHIFT button and rotate the [VALUE/CURSOR] dial. This is a quick and easy way to switch between selecting parameters and then editing them.

* To call up the page for adjusting the contrast of the LCD. To do this, hold down the [SHIFT] button and press the [HOME] button.

The indicator will be red when the [SHIFT] button is pressed.

* If the SHIFT Lock parameter has been turned ON, the [SHIFT] button need only be pressed once to use the shift functions described above; holding the button down is unnecessary. The indicator remains lit when the Shift Lock is on. Press the button again to release the Shift Lock (and turn the indicator off).

[18] VALUE/CURSOR dial

This dial increases and decreases parameter values. When the [SHIFT] button indicator is lit, this dial moves the cursor in the display.

[19] MIDI indicator

This indicator lights when MIDI messages are received.

[20] SCSI indicator

This indicator lights when the connected SCSI device is being accessed.

[21] POWER switch

Turns the unit on and off.

HOW TO USE THIS MANUAL

This owner's manual consists of the following:

Chapter 1 Before using this Unit

This chapter describes preliminaries for using the SP - 700, such as how to set up the SP - 700 with external units, how to switch them on, how to produce sound, etc.

Chapter 2 Basic Structure of the SP - 700

This chapter explains about the basic structure of the SP - 700, such as the structure of the internal memory and sound data, how to handle sound data, how the signals flow, etc.

Chapter 3 Basic Operation

This chapter explains about the 5 modes and the basic operation of the SP - 700, such as how to output the sound, how to use each button, how to name data, etc.

Chapter 4 Changing the Sound

This chapter explains about sound selection using the panel controls and MIDI messages.

Chapter 5 Precautions when Editing Sound Programs

This chapter refers to sound editing and compatibility of sound data between the SP - 700 and the S - 770/750(SYS - 772 Version 2.0).

Chapter 6 Parameters

This chapter describes the parameters in each page.

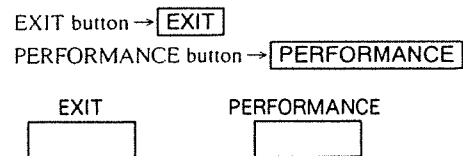
Chapter 7 Appendix

This chapter contains advanced information for using the SP - 700, such as increasing wave memory, SCSI, controlling the contrast of the LCD, troubleshooting/error messages, parameter list, etc.

The explanations and instructions in this manual assume a basic system of one SP - 700, a CD - ROM drive, a hard disk or optical disk drive, and a MIDI keyboard.

About indications of the buttons in this manual:

The buttons on the panel are indicated throughout this manual as shown below.



About the display

The functions of this unit are explained using example display pages from the LCD. Please keep in mind that the actual appearance of the LCD (such as sound program names) of the included CD - ROM disk may differ from that shown in the manual.

MEMO

CHAPTER 1

BEFORE USING THIS UNIT

Be sure to read this section before using your SP - 700.

The SP - 700 contains no sound data and cannot output any sound by itself; a separate SCSI device must be connected in order to load sound data into the SP - 700. Moreover, expansion of the wave memory may be necessary to handle the large amount of sample data contained in many SCSI - compatible sound libraries.

For this reason, you should also read the sections “Increasing the Wave Memory” (☞ P.App. - 2) and “About SCSI” (☞ P.App. - 6) in the reference section. These may prove to be helpful when using the SP - 700 for the first time.

CONNECTIONS

Basic Connections

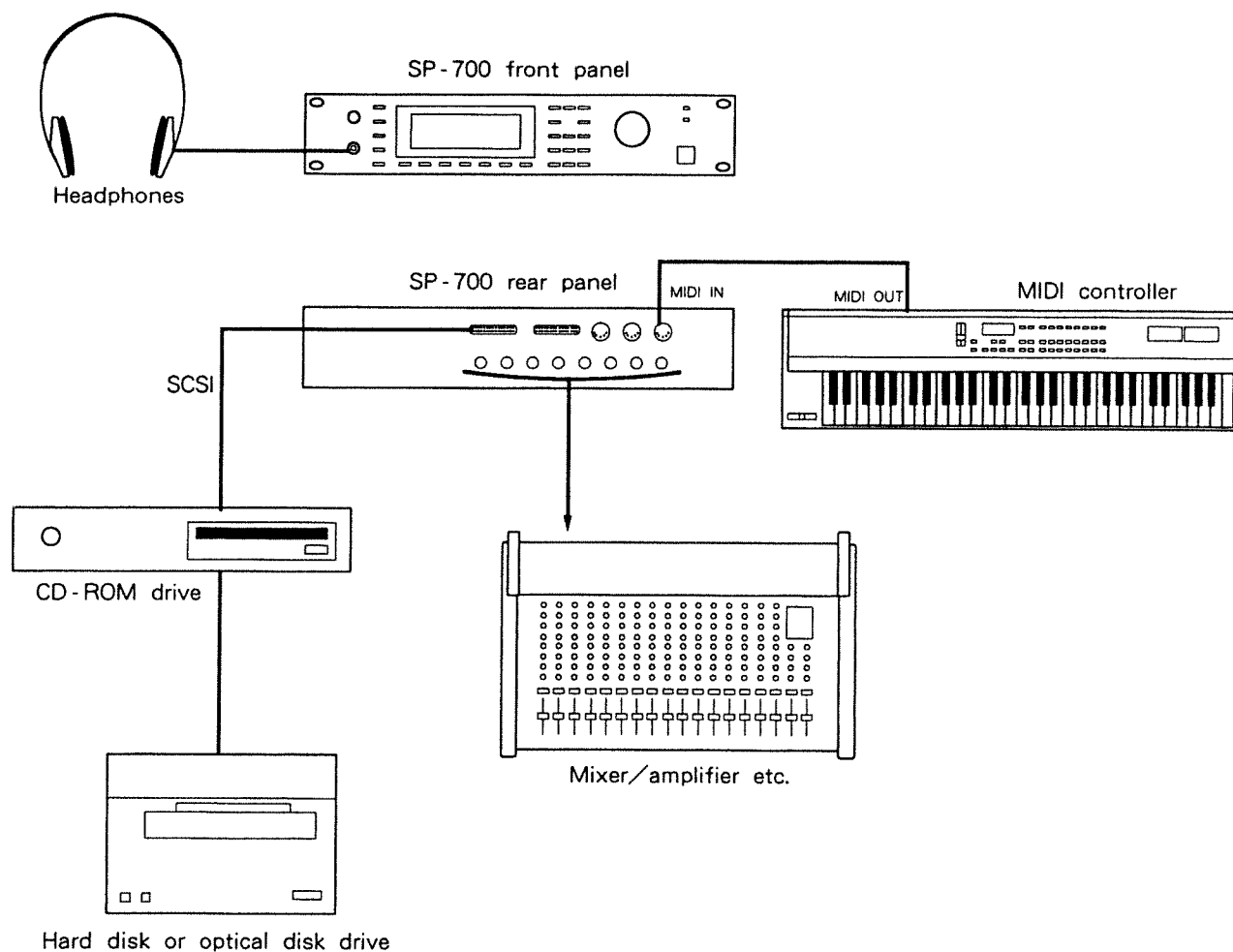
To operate the SP - 700, you will need (at the very least) the following equipment:

- CD - ROM drive
- MIDI controller (keyboard controller, sequencer, etc.)
- Mixer/amplifier and speakers or headphones

In addition to the equipment mentioned above, we recommend that you also use another SCSI device, such as a hard disk drive or optical disk drive, to get the most out of your SP - 700.

The explanations and instructions in this manual assume a basic system of one SP - 700, a CD - ROM drive, a hard disk or optical disk drive, and a MIDI keyboard.

*Be sure all devices are turned off before making any connections. This will help prevent possible damage or malfunction.



* You can freely assign the sound to the various output jacks using the Output Mode of the System parameters and the Output Assign of the Performances, Patches and Partials (→ P.2 - 24).

Connecting SCSI Devices

Connect the CD - ROM drive and the hard disk or optical disk drive to the SCSI connectors.

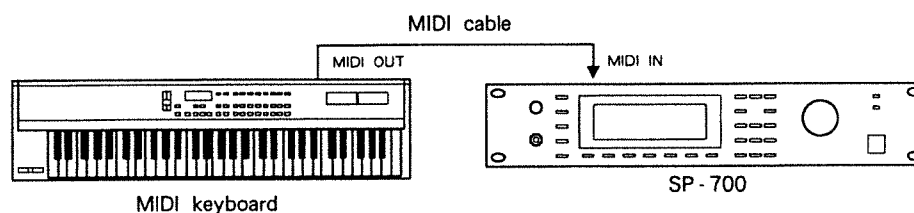
Be sure to read the section "About SCSI" (P.App. - 6) for details on connection and making the necessary SCSI settings (SCSI ID, installing a terminator, etc.).

Refer to the included list "SCSI Devices Compatible with the SP - 700" for information on the SCSI - equipped drives that can be used with the SP - 700.

* For the sake of these instructions, set the device number of the CD - ROM drive (the SCSI ID) to 0. (P.App. - 12)

Connecting a MIDI device

The sounds of the SP - 700 are played by external MIDI data. Connect the SP - 700 to a MIDI keyboard (for example, the A - 30, JV - 80, etc.) or a sequencer (for example, the MV - 30, MC - 50, MC - 50MK II etc.). Connect a MIDI cable from the MIDI OUT connector of the MIDI controller to the MIDI IN connector of the SP - 700.



When using a MIDI sound module together with the SP - 700, connect it to the MIDI THRU connector. Several MIDI sound modules can be connected in this daisy - chain fashion: MIDI THRU → MIDI IN/MIDI THRU → MIDI IN/MIDI THRU ...

Three or four MIDI sound modules can be connected in this way. Daisy - chaining too many MIDI sound modules may result in signal deterioration or delay. If you have four or more modules to connect, use a MIDI through box (for example, A - 880, A - 220, etc.).

Connecting the Audio Devices

The SP - 700 has eight output jacks.

The voice - to - output assignments depend on how the Output Mode parameters of the System parameters (⇐ P.2 - 24), and the Output Assign parameters (⇐ P.2 - 27) for the Performances, Patches and Partials are set.

The factory output mode of the system is set to "4 stereo" (four STEREO OUTs), and the output assignment of each Part is automatically set to STEREO OUT A when loading a Volume of sound data from the included CD - ROM disk. (⇐ P.Edit - 9)

Connect the STEREO OUT A jacks to the input jacks of your amplifier/mixer.

- * For optimum performance and accurate reproduction, use only an amplifier and speakers with superior frequency response and dynamic range.
- * The SP - 700 is designed so that the optimum dynamic range is obtained when the VOLUME knob is set to the maximum position. Set the VOLUME knob as high as possible and adjust the sound level from the connected mixer or amplifier.
- * When using a set of headphones, connect the headphones to the PHONES jack on the bottom left of the front panel. The sound level of the headphones can be adjusted by the VOLUME knob.
- * The sound output through the STEREO OUT A jacks is the same as that output through the headphones.

Example SP - 700 Systems

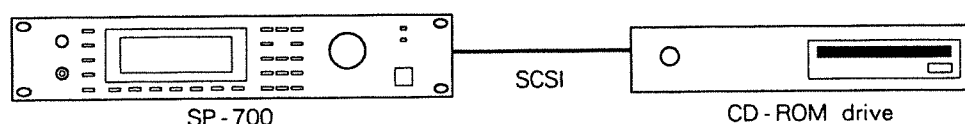
You can create various sample playback systems by combining the SP - 700 with other SCSI devices. Some possible examples are shown below.

* Refer to the included leaflet "SCSI Devices Compatible with the SP - 700" for information on the SCSI - equipped drives that can be used with the SP - 700.

* See the section "About SCSI" (P.App. - 6) for more information on SCSI devices.

When using without an S - 770 or S - 750:

SP - 700+CD - ROM drive



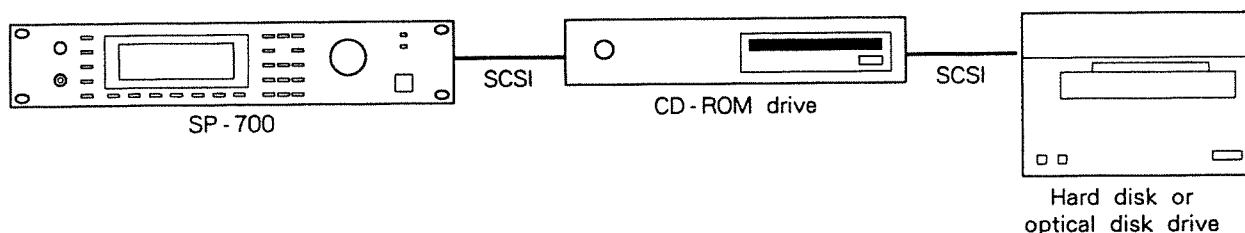
This is the most basic system in which the SP - 700 can be used.

The sounds can be output by loading sound data into the SP - 700 from a CD - ROM drive. The settings of the sound data can be changed; they cannot be saved, however.

* See "Sound Libraries Compatible with the SP - 700" (P.1 - 17) for the sound libraries which can be used with the CD - ROM drive.

* Generally, any edits or changes made to the sound data cannot be saved. However, the settings of the sound data can be saved to the SP - 700 as backup. (P.2 - 6)

SP - 700+CD - ROM drive+hard disk/optical disk drive



The sounds can be output by loading sound data into the SP - 700 from the CD - ROM drive. The sound data can be edited and stored on the hard disk or optical disk.

* If you do any editing of sound data and want to save your own custom sound files, you should connect a hard disk or optical disk drive.

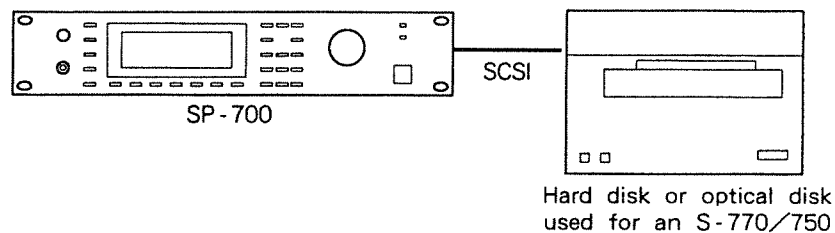
* This manual is written assuming a basic system of an SP - 700, CD - ROM drive and hard disk/optical disk drive.

When using an S - 770 or S - 750:

The sound data stored on a hard disk or optical disk used for an S - 770/S - 750 can be loaded into the SP - 700. The explanation below describes how to set up a system with a hard disk or optical disk drive.

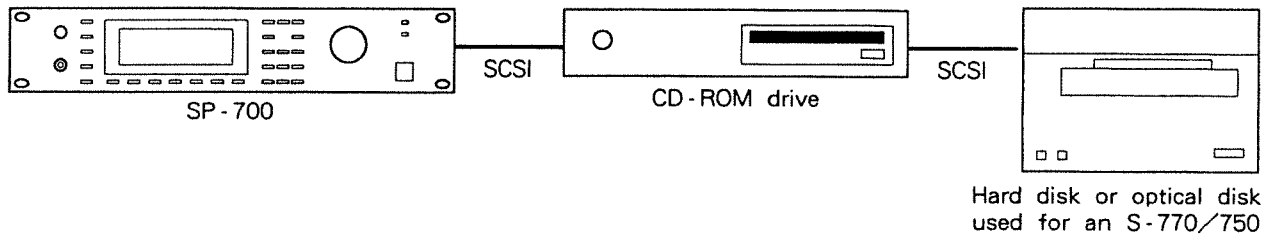
* The sound data of an SP - 700 may not be the same as that of the S - 770/S - 750 (SYS - 772 Version 2.0). Refer to P.Edit - 9 for information on the compatibility of sound data.

SP - 700+hard disk/optical disk drive



Sounds can be output by loading the sound data from the hard disk or optical disk into the SP - 700.
The settings of the sound data can be edited and saved on the hard disk or optical disk.

SP - 700+CD - ROM drive+hard disk/optical disk drive



Sounds can be output by loading the sound data from the CD - ROM drive or the hard disk/optical disk into the SP - 700.

The settings of the sound data can be edited and saved on the hard disk/optical disk.

Reference

You can also create a system in which the SP - 700 shares a hard disk drive with an S - 770/S - 750 or another SP - 700. See P.App. - 13 for more information.

TURNING THE POWER ON AND OFF

For normal operation, the SP - 700 is connected to a SCSI device and sound data is transferred between the two devices via the SCSI port. When SCSI devices have been connected, you should follow a specific order in turning the power of the units on and off. Always follow the correct order as given below to avoid malfunctions.

Turning On the Power

Be sure to check the following points before turning on the power:

- Have the SCSI ID and the terminator of the SCSI device been set correctly?
(☞ P.App. - 6)
- Have the SCSI device, the audio equipment and the MIDI controller been connected correctly? (☞ P.1 - 2)
- Have you set the volume of the connected audio equipment to zero?

1. Turn on the SCSI device that is fitted with the terminator.

* Do not turn on the SP - 700 yet.

2. Turn on the SCSI device(s) which are not terminated.

Wait for a few seconds until all drives have properly started up.

* Do not turn on the SP - 700 yet.

* Turn on the rest of the SCSI devices, even if there are some which will not actually be used during the session.

* For SCSI devices such as a CD - ROM drive, optical disk drive, or streaming tape drive, for which a disk or tape has to be inserted, insert the disk or the tape after steps #1 and #2 (after turning on the power).

If you insert the disk or tape after turning on the SP - 700, the SP - 700 will not recognize the connected SCSI device(s). If this happens, you will have to execute the Scan command in order to have the SP - 700 recognize the device(s).

3. Turn on the SP - 700.

The reason for turning on the SP - 700 after the SCSI devices is that this is necessary to have the SP - 700 recognize all the devices (☞ P.App. - 6) when powered up.

4. Turn on the MIDI controller.

5. Finally, turn on the audio equipment and set the volume to an appropriate level.

How To Execute the Scan Command

The SP - 700 has a convenient Scan command (⇨ P.Disk - 45) in the Select Drive page allowing the SP - 700 to recognize connected SCSI devices, even if those devices have been turned on after the SP - 700, or if a different disk or tape has been inserted after all devices have been turned on. To use the Scan command:

1. Press **DISK** to select the Disk Mode page.
2. Press **F1** (Load) to select the Disk Load page. Move the cursor to the current drive (CD) using the cursor buttons. The **LIST** indicator lights (green).
3. Press **LIST** to select the Select Drive page.
4. Press **F5** (Scan) to execute the Scan command.
5. Press **PERFORMANCE** to select the Performance mode page.
6. Press **F1** to select the Performance Play page.

Turning Off the Power

Turn off all the devices after parking the heads of the connected SCSI devices by executing the Park Heads command (⇐ P.Disk - 29).

Check the following points before turning off the SP - 700:

- Did you save any sound data (⇐ P.2 - 5, P.Disk - 7) and System data (⇐ P.2 - 5, P.Sys - 32) which should be stored?
- Did you set the volume of the audio equipment to zero?

1. Press **[DISK]** to select the Disk Mode page.
2. Press **[F5]** (Util) to select the Disk Utility page.
3. Press **[F2]** ParkHds to execute the Park Heads command.

While in operation, "Now Working" appears at the top of the display. In a moment, "Complete" appears when the Park Heads operation is complete.

[Disk Utility] Muted Dec/Inc [A]			
•TG[Volm]	•ID[All]	•CD[ID0:Heads	Park..]
68files	Time	PG#	Int.
1: ***:RHYTHM SEC.1	106.0	---	A 90.8s
2: KIT:Drum Kits 1	201.5	---	B .0s
3: KIT:Cheese Kits	36.0	---	Disk
4: DRM:Brushes	85.6	---	.0s
[Format] [ParkHds] [Restart] [Optimiz] [Conver]			

4. Turn off the audio equipment.
5. Turn off the MIDI device(s).
6. Turn off the SCSI device(s).

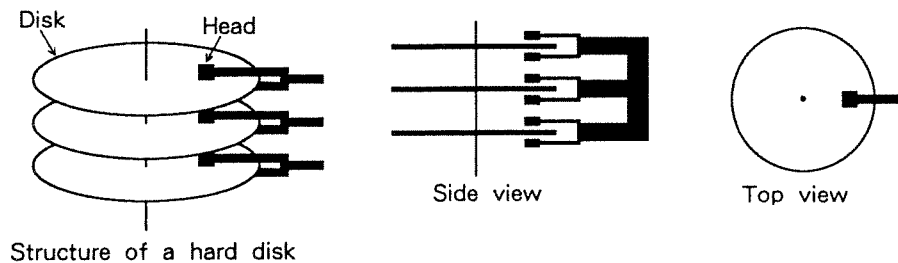
* You should wait at least 30 seconds before moving a SCSI device after turning off the power.

* The head of a hard disk remains parked until the next time the power is turned on. Turning on the power automatically engages the head.

7. Finally, turn off the SP - 700.

About the Park Heads Function

A hard disk has heads which track along the surface of the disk (similar to the way a needle tracks along a record). The disk rotates at an extremely high speed allowing the head to read data from, and write data to, the hard disk.



However, since the heads are continually touching the surface of the disk, the disk could be damaged if the drive is jarred or bumped.

This is why it is necessary to move the heads to a safe position, off the disk surface, in order to protect the disk when moving the disk drive. This is called "parking the heads."

All the heads of the hard disks on a SCSI chain can be parked simultaneously from the SP - 700 when executing the Park Heads command.

- * Storage units (for example, disks or tapes) of an optical disk drive, removable hard disk drive, CD - ROM drive or streaming tape backup unit may automatically be ejected when the Park Heads operation is executed.
- * Avoid subjecting the unit to shock or vibration even after parking the heads. The disk itself can be damaged if it receives a shock, even when the head is disengaged from the disk surface. Treat the disk drive with the greatest care and properly protect it during transport.

Precautions in Turning Off the Hard Disk Drive

There are two types of hard disk drives; one type automatically parks the heads when the power is turned off (under certain conditions), and the other type requires the heads to be parked manually before powering down. Read the owner's manual of the connected device for information on turning off your particular drive.

Auto Park Type

Turn off the power after confirming that the disk is not currently running (the disk drive indicator/SCSI indicator is off). The head is automatically re - engaged when the power is turned on again.

- * Avoid turning off the power while the disk is running.

Manual Park Type

Turn off the power after parking the heads by executing the SP - 700's Park Heads command.

USING THE SP - 700

Unlike synthesizers and other sound modules, the SP - 700 has no sounds of its own when the power is turned on. The SP - 700 is a sound source module designed for playback of sound data of the sound libraries for the S - 770/750 (SYS - 772 Version 2.0) loaded into its internal memory. (There are no sampling functions on the SP - 700.) Therefore, no sounds are output unless sound data is first loaded into the internal memory.

Let's try loading sound data from the included CD - ROM disk.

As the device number (SCSI ID) of the CD - ROM drive was set to 0 in previous instructions, the currently selected SCSI device for transferring data to the SP - 700 is the CD - ROM drive.

(⇐ P.App. - 12)

The presently selected SCSI device (drive) is called the current drive.

Loading the Sound Data (Volume)

First, load a Volume of the sound data. (For more on Volumes: ⇐ P.2 - 9)

1. Insert the included CD - ROM disk into the CD - ROM drive. Turn on each device according to the instructions in "Turning On the Power," P.1 - 7.
2. When the SP - 700 is turned on, the Performance Play display automatically appears.

Performance Play 1 Perform Dec/Inc 1A					
[C 1] - : 1					
Part Ch	Patch Name	[Lew]	[Part]	[Out]	
01 1	-----Off-----	127	0	A	
02 2	-----Off-----	127	0	A	
03 3	-----Off-----	127	0	A	
04 4	-----Off-----	127	0	A	
Play MIDI EQ Monitor Q-Load					

*If you have inserted the CD - ROM disk after the Performance Play display appears, be sure to use the Scan command to properly read the disk. See P.1 - 8 for details.

3. Press [F5] (Q - Load) to select the Quick Load page. The Volume list is displayed.

Quick Load 1 Muted Dec/Inc 1A					
<Target> Volume					
No.	Name	Time	Dr.	Int.	
1	WND:Woodwinds	78.2	[0]	A	90.8s
2	STR:.Sect.Muted	78.8	[0]	B	.0s
3	STR:.Marcato 2	53.2	[0]		
4	ORG:Organs	45.4	[0]		
Volume Delete SortABC toA toB					

*At this time, check that the Target (the sound program unit to be loaded, indicated at the top left of the LCD) is set to Volume. If not, press [F1] until Volume is set as the Target.

4. Press [PREVIOUS] or [NEXT] to select the desired list.

*The mark shown at the left of the display indicates the number of pages in the list. The currently selected page is highlighted.

*You can also move among the pages of the list using the cursor buttons (▲/▼).

5. Using the cursor buttons (▲ / ▼), move the cursor to the name of the Volume to be loaded.

* The required memory capacity for all wave data of the Volume is indicated to the right of the Volume. (Memory capacity is expressed in seconds, based on a sampling frequency of 44.1kHz.)

The wave memory capacity of the SP - 700 is indicated in seconds at the "Int." indication at the right of the display. Any Volume can be selected for loading, as long as its memory requirement is less than the available memory of the SP - 700. If you select a Volume with greater memory requirements, only part of the data can be loaded.

* "A" and "B" in the display indicate the Volume A and Volume B memory sections. See P.2 - 3 for more on Volume memory sections.

6. Press [F4] (to [A]) to load the Volume into Volume A.

* [F4] (to [A]) and [F5] (to [B]) are used to select the internal memory division or section (Volume A or Volume B) into which the data is to be loaded.

7. "Complete" is shown at the top right of the display when the load operation is complete.

Reference

When the Volume to be loaded is larger than the amount of wave memory, only the necessary Performance can be loaded. Press [F1] to change the display of Target to Performance ("Pform") at operation step 3.

Playing the SP - 700 from a MIDI Keyboard

Now that you've loaded a Volume of sound data, try playing it from the connected MIDI keyboard.

1. Press [EXIT] or [PERFORMANCE] to select the Performance Mode page.
2. Press [F1] (Play) to select the Performance Play page.

[Performance Play] Perform Dec/Inc A				
• [1]WIND:Wdwind Sect1				
Part Ch	Patch Name	[Lew][Pam][OUT]		
01 1	1WIND:Bassoon 8Va	127	0	A
02 1	2WIND:Clarinet 1a	110	0	A
03 1	3WIND:Oboe 3a	110	0	A
04 -	Off-----	127	0	A
Play	MIDI	EQ	Monitor	Q-Load

3. Set the MIDI channel of the MIDI keyboard to match the MIDI channel of Part 1.
Alternately, you can move the cursor to the MIDI channel parameter of Part 1 using the cursor buttons, then set it to match the MIDI channel of the MIDI keyboard using [S1/DEC] or [S2/INC].

4. The sound program (Patch) assigned to Part 1 will sound when you play the MIDI keyboard.

- * If you match the MIDI channel of the MIDI keyboard to the MIDI channel of another Part, the Patch assigned to that Part will sound.
- * The SP - 700 is designed so that the optimum dynamic range is obtained when the VOLUME knob is set to the maximum position. Set the VOLUME knob as high as possible and adjust the sound level from the connected mixer or amplifier.

There are a total of 32 Parts. Move the indicator among the Parts in the display using the cursor buttons (▲/▼). The mark to the left of the display indicates how many pages there are for any one Part. The currently selected page is highlighted.

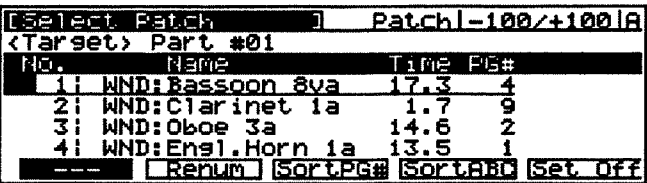
The group of settings that determine how the programs (Patches) of the 32 Parts are sounded is called a Performance.

* See P.4 - 1 "CHANGING THE SOUND" for information on selecting Sound programs.

Selecting Patches

In this section, we'll select a different sound by changing the Patch of Part 1. (Patch: ⇐ P.2 - 9)

1. Use the cursor buttons to move the cursor to the Patch name of Part 1.
2. The **LIST** indicator lights (green). Press **LIST** to select the Select Patch page. The **LIST** indicator changes to red.



No.	Name	Time	PG#
1:	WND: Bassoon 8va	17.3	4
2:	WND: Clarinet 1a	1.7	9
3:	WND: Oboe 3a	14.6	2
4:	WND: Ensl. Horn 1a	13.5	1

--- ReNum SortPG# SortABO Set off

3. Check that the cursor is at the Patch number (No.). If not, press **HOME** to move the cursor to the Patch number (No.).

- * At the Patch number indication (No.), the cursor can be moved between the digits of the sound program number. When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units when rotating the **VALUE/CURSOR** dial.
- * The cursor can be moved by the cursor buttons.

4. Scroll through the list by rotating the **VALUE/CURSOR** dial.

5. Move the cursor to the desired Patch name using the cursor buttons.

* You can quickly check the sounds by selecting a Patch with the cursor and then playing it from the MIDI keyboard.

6. Select a Patch by pressing **S1/DEC**. The display returns to the Performance Play page.

* Press **EXIT** to cancel the change.

* When the cursor is located at the Patch indication in the Performance Play page, Patches can be changed by rotating the **VALUE/CURSOR** dial or by pressing **S1/DEC** or **S2/INC**, without the need for selecting the Select Patch page.

* See P.4 - 1 for more information on selecting Sound programs.

Selecting Performances

Now let's select a Performance. (Performance: \square P.2 - 9)

1. Check that the cursor is located at Performance in the display (the second line from the top). If not, press **HOME** in the Performance Play page to move the cursor to Performance.

* The cursor can also be moved using the cursor buttons.

2. The **LIST** indicator lights (green). Press **LIST** to select the Select Performance page. The **LIST** indicator changes to red.

[Select Performance] Perform Dec/Inc [A]				
<Target> Performance				
No.	Name	Time	PG#	
1:	WND:Wdwind Sect1	33.6	3	
2:	WND:Wdwind Sect2	45.4	4	
3:	WND:Wdwind Sect3	32.8	5	
4:	WND:Wdwind Sect4	60.9	6	
---	Renam	SortPG#	SortPch	Blank

3. Check that the cursor is at the Performance Number (No.) position. If not, press **HOME** to move the cursor to Performance number (No.).

* The cursor can also be moved using the cursor buttons.

4. Scroll through the list by rotating the **VALUE/CURSOR** dial.

5. Move the cursor to the desired Performance name using the cursor buttons.

* You can quickly check the sounds by selecting a Performance with the cursor and then playing it from the MIDI keyboard.

(In this case, the Patch that sounds is the one belonging to the Part whose MIDI channel matches that of the MIDI keyboard.)

6. Select a Performance by pressing **[S1/DEC]**. The display returns to the Performance Play page.

* Press **[EXIT]** to cancel the change.

* When the cursor is located at the Performance indication in the Performance Play page, Performances can be changed by rotating the **[VALUE/CURSOR]** dial or by pressing **[S1/DEC]** or **[S2/INC]** without the need for selecting the Select Performance page.

After selecting a Performance, match the MIDI channel of the MIDI keyboard with the MIDI channel of the Part to be played.

* See P.4 - 1 for more information on selecting Sound programs.

Reference

In the above instructions, the Volume was loaded with the Quick Load function. You can also have the Volume loaded from the current drive automatically when you turn the power on. Set the current drive for this automatic loading with the Initial Drive parameter of the System parameters (☞ P.Sys - 8). Set the Volume to be loaded with the Initial Volume parameter of the System parameters (☞ P.Sys - 4).

* Refer to the instructions "On loading the Volume automatically when turning on the power" (☞ P.Sys - 6).

* When the SP - 700 is set to recognize the CD - ROM drive as the current drive at power up, insert the CD - ROM disk after turning on the CD - ROM drive. Then turn on the SP - 700. (See P.App. - 12 for information on the current drive at power up.)

In this case, the included disk and disks for the S - 770/750 can be used in the CD - ROM drive. No other CD - ROM disks can be used.

Sound Libraries Compatible with the SP - 700

The SP - 700 is only a sample playback device; sound data from a sound library is loaded into the SP - 700 and then played. (The SP - 700 has no sampling functions.)

The following sound libraries can be used:

CD - ROM disk included with the SP - 700

Optional sound library CD - ROM disks for the S - 770/750

(L - CD series, RS - 1, USV - 3, DS - 60711, C50CD02)

The included CD - ROM disk has been created with samples from the sound libraries for the S - 770/750. This means that the sound data structure (parameter structure) is the same as that of the S - 770/750 (SYS - 772 Version 2.0). See P.Edit - 9 for compatibility of sound data between the SP - 700 and the S - 770/750 (SYS - 772 Version 2.0).

* Sound data of hard disks and optical disks used for the S - 770/750 (SYS - 772 Version 2.0) can also be used with the SP - 700.

In addition to the sound libraries described above, the following can also be used:

Optional sound library CD - ROM disks for the S - 550/W - 30

(USV - 1 (discontinued), USV - 2, C50CD01)

L - CD1 (The disk included with the Roland CD - 5)

In order to use these sound libraries, you must use the Convert Load operation, not the normal load operation. (Convert Load is an operation which loads sound data having different parameter structures and converts them into a format compatible with the SP - 700.)

* See P.Disk - 33 for details of the Convert Load operation.

* The reverse of this operation is not possible; data of the SP - 700 cannot be loaded into an S - 550 or W - 30.

* The sound data of the S - 50 cannot be loaded directly into the SP - 700. However, you can use the data by first converting it to the S - 550/W - 30 format on either of those devices, and then using the Convert Load operation to load it into the SP - 700.

Reference

The SP - 700 processes all sound data at a sampling frequency of 48kHz. Some of the sound data in the compatible sound libraries has been recorded at a frequency other than 48kHz, such as 32kHz or 44.1kHz. When loaded into the SP - 700, this sound data is processed at 48kHz.

* The amount of sound data on a disk and the remaining capacity of the SP - 700's internal memory (Volume memory) are indicated as time values (in seconds) in the Disk Load page. These values are based on a standard 44.1kHz sampling frequency. Even though the SP - 700 does not actually use a 44.1kHz frequency in processing, this frequency is used in measuring memory capacity, so as to be consistent and avoid confusion. If the values shown were for different sampling frequencies, discrepancies in the displayed memory capacity would result.

MEMO

BASIC STRUCTURE OF THE SP-700

CHAPTER 2

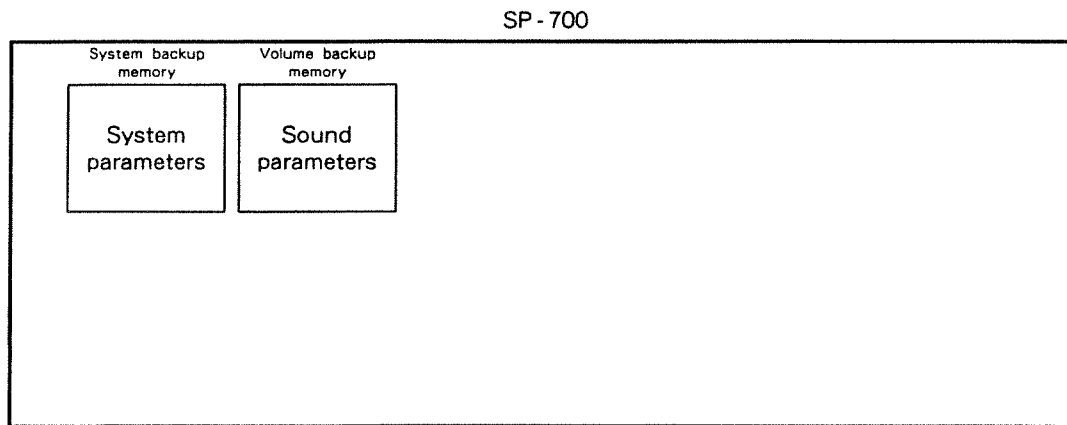
The SP - 700 is capable of producing sound once sound data has been loaded from a SCSI device. This section describes certain basic elements of the SP - 700, such as its internal memory structure, sound data structure and signal flow.

STRUCTURE OF THE INTERNAL MEMORY

The internal memory of the SP - 700 is designed to accommodate wave (sample) data, sound parameter data and System parameter data. Before the SP - 700 can produce any sound on its own, this data must be loaded into internal memory.

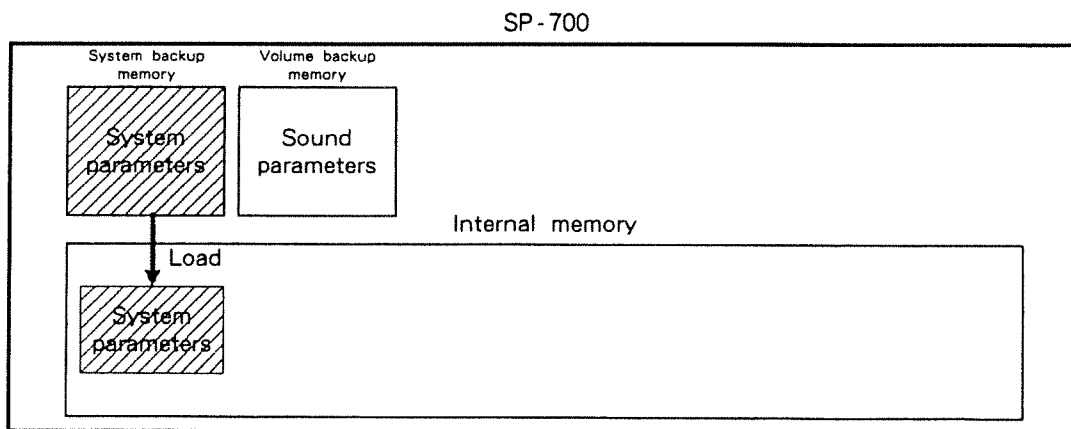
Memory Allocation of the SP - 700 Before Turning on the Power

The System parameter settings, which are used in the operations of the SP - 700, are stored in the System backup memory, even with the power off.



Memory Allocation of the SP - 700 After Turning on the Power

The current System parameter settings are automatically loaded into internal memory when the power is turned on.



- * In this condition, with the power turned on, the SP - 700 is still not capable of producing sounds; sound data must be loaded first. (⇨ P.1 - 2, P.Pfom - 20, P.Disk - 2)
- * See P.Sys - 32 for details on the System parameters.
- * The original System parameters can be separately re - loaded into memory, depending on the types (groups). This is convenient when you have changed the settings and want to restore the original ones. (⇨ P.Sys - 32)

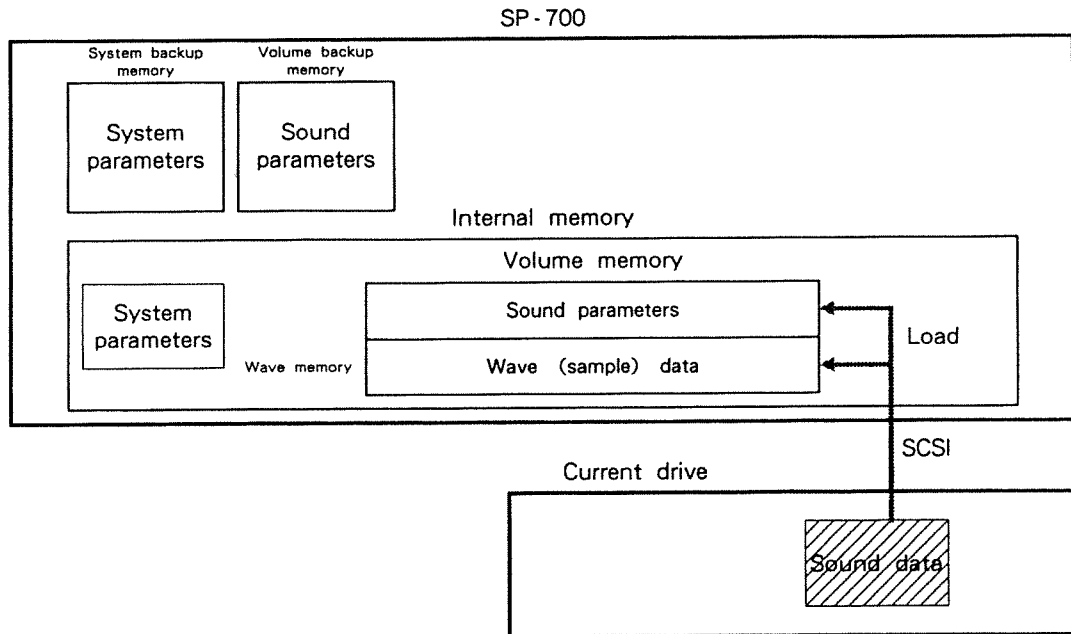
Memory Allocation of the SP - 700 After Loading Sound Data

The SP - 700 is capable of producing sounds after sound data is loaded from the current drive (the currently selected SCSI device used for transferring sound data to the SP - 700).

The memory location to which the sound data is loaded is called the Volume memory.

Sound data can be roughly divided into two categories: wave (sample) data and sound parameter data.

The memory location to which the wave data is loaded is called the Wave memory.



The Volume memory can be divided into two separate memory sections (Volume A memory and Volume B memory), depending on the setting of the Volume A parameter in the System parameters (⇐ P.Sys - 5). Memory can be freely allocated between the two. In the example chart above, only Volume A memory is used.

Reference

The data below can be saved to the Volume memory sections and the SCSI device(s).

<u>Data type</u>	<u>Each Volume memory capacity</u>	<u>SCSI device capacity</u>
Volume	Maximum of 1	Maximum of 128
Performance	Maximum of 64	Maximum of 512
Patch	Maximum of 128	Maximum of 1024
Partial	Maximum of 255	Maximum of 4096
Sample	Maximum of 512	Maximum of 8192

Using Volume Memory Sections

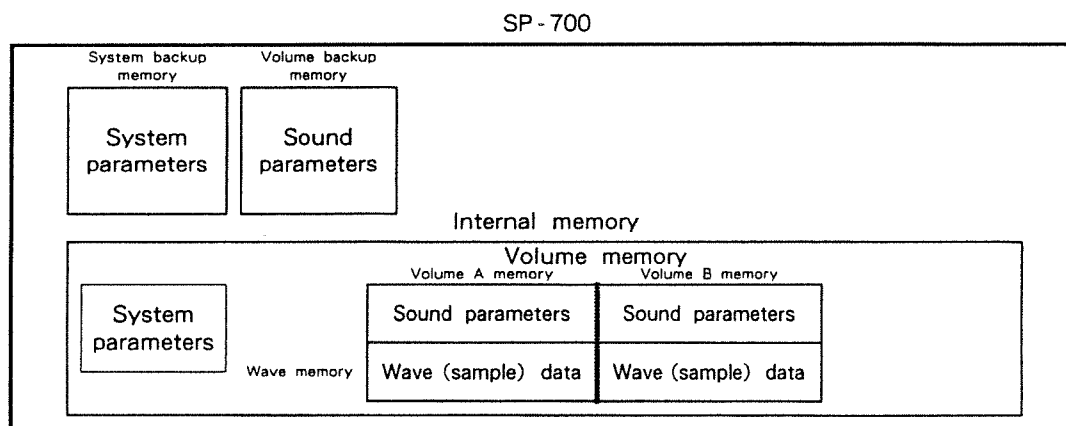
By dividing memory into two Volumes, Volume A and Volume B, the Volume memory feature effectively gives you two SP - 700s in one.

To give a specific example, the sound data loaded into Volume A can be played while different sound data is being loaded into Volume B (using the Load - while - playing function (⇐ P.Sys - 4)).

However, the two sets of sound data (loaded into each Volume memory) cannot be used simultaneously (either in playing the sounds or changing their settings). The setting of the Current Volume Memory parameter in the System parameters (⇐ P.Sys - 1) determines which Volume memory of the sound data is to be used. The Current Volume memory setting in this parameter is selected when the power is turned on. The default (factory) setting is for Volume A memory.

The presently selected Volume memory is called the current Volume memory.

* The ratio of the wave memory allocation between each Volume can be freely set in the Volume A parameters (⇐ P.Sys - 5). (The sum of A and B can be a maximum of 32 megabytes.)



As shown above, the wave (sample) data, sound parameters and System parameters are loaded into the SP - 700 and then played. The settings of the data in internal memory can be changed (or edited) for playback. (However, the wave data itself cannot be edited from the SP - 700.)

* The sound parameters available for editing are only those in the current Volume memory. Switch to the other Volume memory section (⇐ P.Sys - 1) when you want to edit the sound parameters of that Volume.

* If you have edited any parameters and then turn off the SP - 700 without saving those parameters, all edits will be lost. Be sure to save edits in memory before turning off the power.

Different Memory Locations for Saving Data

Data is saved in different memory locations, depending on the type of data. You should understand which type of data is saved where.

System Parameters

The System parameters are saved in the System backup memory of the SP - 700.

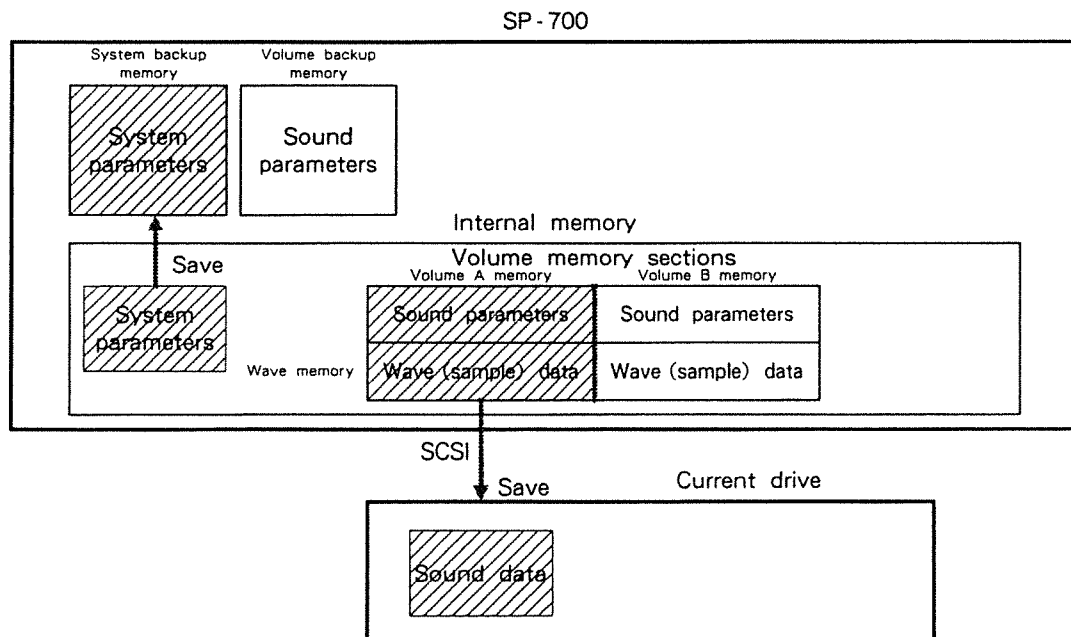
- * See P.Sys - 32 for details on the System parameters.
- * See P.Sys - 32 and P.Sys - 35 for details and precautions when saving data.
- * By using the System Dump function, a part of the System data can be output via MIDI as MIDI Exclusive data, and can be recorded and saved in a MIDI sequencer. See P.Sys - 17 for details.

Sound Data

Sound data itself cannot be saved in the internal memory of the SP - 700. You must save data in the appropriate connected SCSI device.

In addition, only sound data of the current Volume memory can be saved. Switch to the other Volume memory section when you want to save the sound data of that Volume. (⇄ P.Sys - 1)

- * Sound data cannot be saved on a CD - ROM disk.
- * Check that the storage media of the connected SCSI device has been properly formatted for use with the SP - 700. (There is no need to format media for SCSI devices designed for use with the S - 770/750.) See P.Disk - 28 for details on formatting.
- * See P.Disk - 7 and P.Disk - 10 for details and precautions when saving data.



* In this example chart, the sound data of Volume A memory is saved.

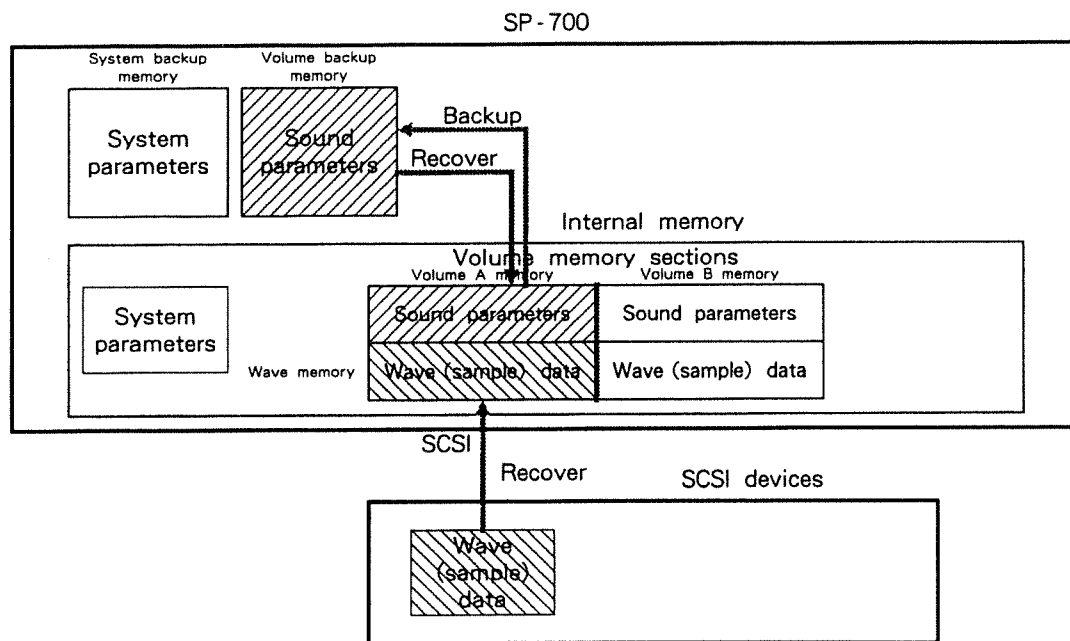
Volume Recover / Backup Function

Basically, sound data cannot be stored in the internal memory of SP - 700. Therefore, sound data cannot be saved at all if the only SCSI device connected to the SP - 700 is a CD - ROM drive.

However, it is possible to save the settings of all the sound parameters of the current Volume memory (the present condition) to the internal Volume backup memory using the Volume Recover/Backup function. (The wave data, which contains the actual sampled sounds, cannot be saved.)

The data saved with the Backup function can be restored by executing the Recover operation. All sound parameters are loaded from the Volume backup memory and the wave data is loaded from the CD - ROM drive.

* See P.Sys - 36 for details on the Volume Recover/Backup function.



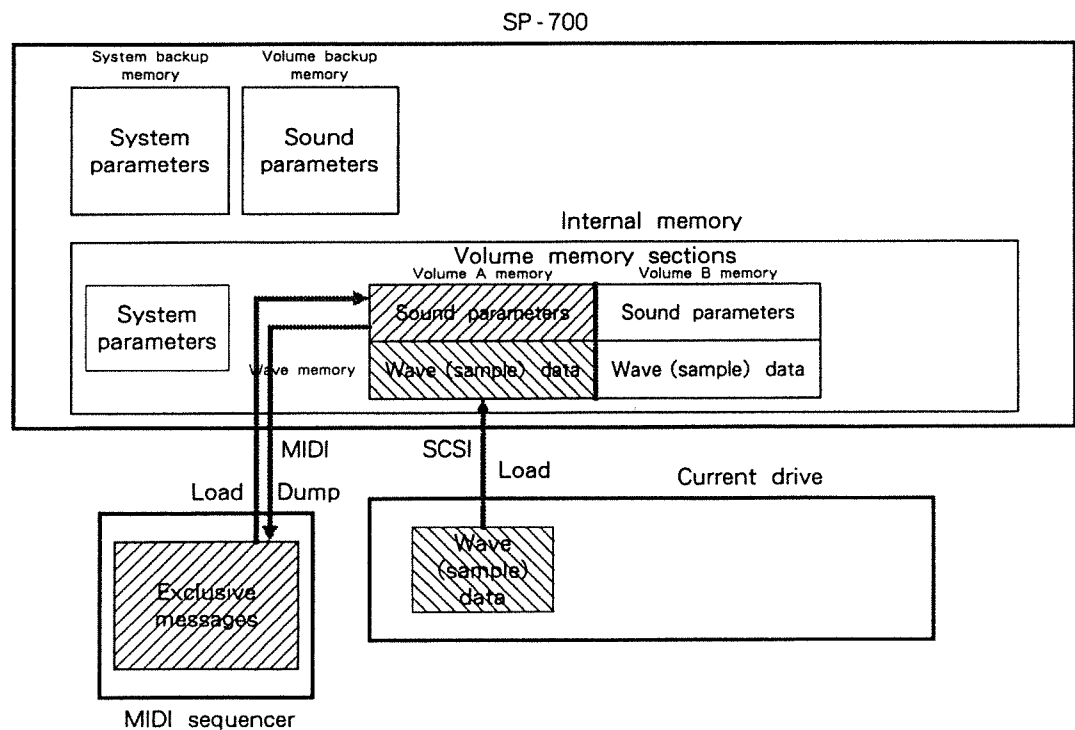
* This example chart shows the Recover/Backup operation for sound data of the Volume A memory.

Volume Dump Function

In addition to the Volume Recover/Backup function described above, there is also a Volume Dump function. This lets you transmit the current Volume data (including that of Performances, Patches and Partial's contained in the Volume) as MIDI Exclusive messages. (The wave data, which contains the actual sampled sounds, cannot be transmitted in this way.)

By recording this MIDI Exclusive data in a MIDI sequencer, then transmitting it back to the SP - 700 as needed, Volume data can be loaded to the current Volume memory and wave data can be loaded from the CD - ROM drive.

* See P.Sys - 16 for details on the Volume Dump function.



* This example chart shows the operation when Volume A is selected as the current Volume memory.

How to Switch the Current Drive

The current drive (the presently selected drive for loading/saving data with the SP - 700) can be switched from each display page of the Disk Mode (except the Disk Mode page itself). The procedure for switching the current drive on the Disk Load page is explained below.

1. Press **DISK** to select the Disk Mode page.
2. Press **F1** (Load) to select the Disk Load page.
3. Move the cursor (using the cursor buttons) to the CD (current drive) indication.
4. Change the current drive using **S1/DEC** or **S2/INC**.

*It is possible to change the current drive using **VALUE/CURSOR** when the **SHIFT** indicator is not lit.

Alternately, since the **LIST** indicator is green, press **LIST** to select the Select Drive page.

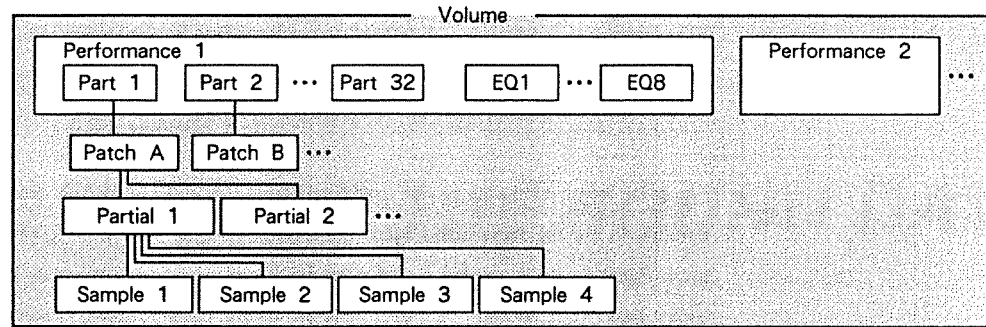
Move the cursor to the drive to be switched using the cursor buttons. Press **S1/DEC** to change the current drive.

The display automatically returns to the Disk Load page after switching the drive.

*When a different disk or tape is inserted, or when the SP - 700 cannot recognize the connected drive for some reason or another, be sure to execute the Scan Command by pressing **F5** (Scan) in the Select Drive page (⇐ P.Disk - 44) to make it possible for the SP - 700 to recognize the drive.

STRUCTURE OF THE SOUND DATA

The structure of the sound data of the SP - 700 is shown below.



Sample

Sample refers to the wave data (waveform data of the sound) and the various parameters (such as the sustain and release portions of the loop, the original key etc.) that are used to process it. The sample is the smallest sound unit or the basic sonic 'building block' of a sampler.

As the SP - 700 does not have any sampling functions itself, samples cannot be created with the unit. In loading sound data into the SP - 700, the samples used by the Sound programs in the data are also automatically loaded into the wave memory.

Partial

A maximum of four samples can be combined together to create a Partial. In other words, four separate sounds (samples) can be combined to make a single, composite sound (Partial). This makes it possible to create rich and complex sounds, to more accurately reproduce actual instrument sounds or to create completely new and unique sound combinations.

Patch

A Patch is much like the Sound program on a conventional synthesizer and is made up of Partials assigned to the eighty - eight keys of the keyboard (note numbers 20 (A0)—108 (C8)). Patches also include the necessary parameters and settings for playback. For example, a Patch could be the sound of a single musical instrument (such as a piano) by having the same sounding Partial or Partials assigned to each key. It could also be many different instruments (such as in a drum/percussion kit or bank of special sound effects) by assigning a different Partial to each key. The Patch is the basic sound unit in playing the SP - 700.

Performance

A Performance is made up of 32 Parts, each of which contains a single Patch, and can be played independently as separate MIDI sound sources. The terms Part and Patch are largely synonymous; however, a Part contains a Patch and the necessary settings (such as MIDI channel and volume) for playing that Patch in a Performance. In a Performance, equalizer settings can be made for processing the sounds prior to output. A Performance basically determines which Patches are used, what their relative levels are to be, and how they are to be assigned to the outputs and the MIDI channels.

Volume

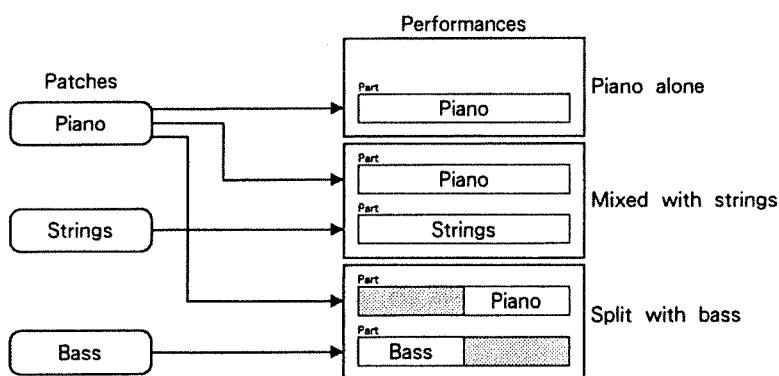
All of the above described sound data is saved as a single Volume in the SP - 700. All the sound data in each Volume memory can be organized together as a Volume. A maximum of 128 Volumes can be saved on a SCSI device (including a hard disk).

*Patches, Performances and Volumes can be selected by the Bank Select and Program Change messages from an external controller. (☞ P.4 - 12)

Relationship of Sound Data

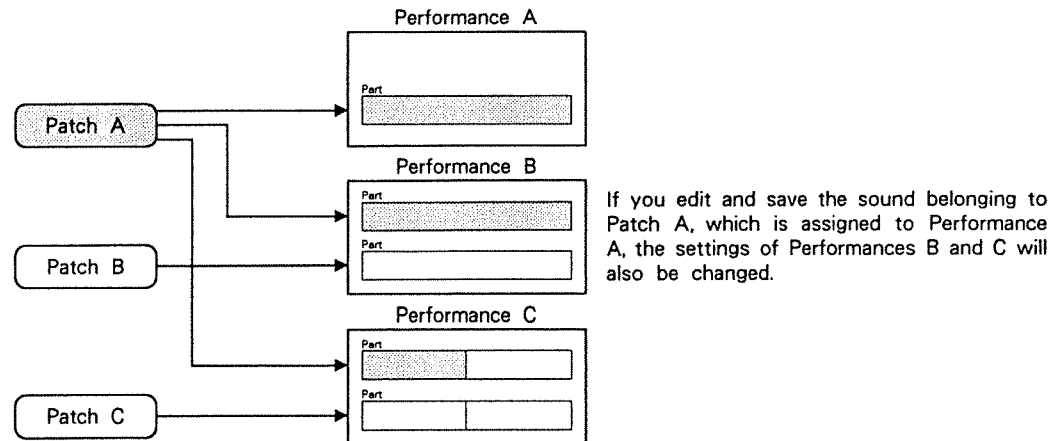
When saving or loading sound data, all lower level data is also saved or loaded. For example, when saving or loading a Volume, all the Performances, Patches, Partials and samples used in that Volume are also saved or loaded. Refer to "Loading/Saving Sound Data" on P.2 - 15 for details.

The same lower level data can be used for several different higher data categories. For example, it is possible to use the same piano Patch in a Performance in several different ways, such as using the piano Patch by itself, mixing it with a strings Patch, or splitting it across the keyboard and using it with a bass Patch. (It may seem as if there are several piano Patches; however, there is just one being used in several different ways.)



In the example shown above, each of the three Performances has a piano Patch; however, you don't need to create three separate piano Patches. All you have to do is to assign the Piano Patch name to the Performance. In this way, you can determine how higher level data (such as Performances) use the lower level data (such as Patches, in this case), by properly assigning the names of the lower level data. This is how sounds are organized and controlled on the SP - 700. Therefore, if you save identical sound programs under different names, they will be recognized by the SP - 700 as being different programs.

On the other hand, when several different higher data categories share the same lower level data, all the higher categories will be changed if the lower data is edited and saved.



Copy the lower level data before editing. Edit the copy of that data and save it under a different name to avoid altering data of the higher categories. For example, if you want to change only a sound in Patch A of Performance A (as shown in the chart above), create a Patch D, which is an exact copy of Patch A. Edit the settings of Patch D, and assign it only to Performance A.

As you can see, the lower level data is always controlled by the data above it. Before loading, saving or disk deleting any data, be sure that existing upper level data will not inadvertently be affected.

* When the Overwrite switch (☐ P.Sys - 10) of the SCSI System parameters is set to OFF, the SP - 700 lets you confirm whether or not sound data (including the ID number) of the same name should be transferred when executing the Load, Save or Disk Copy functions. When the Fast Delete mode (☐ P.Sys - 8) of the SCSI System parameters is set to OFF, the SP - 700 checks through all the level relationships of the data and lets you confirm whether or not data is being used in higher categories when executing the Disk Delete function.

ORGANIZING SOUND DATA WITH THE VOLUME ID

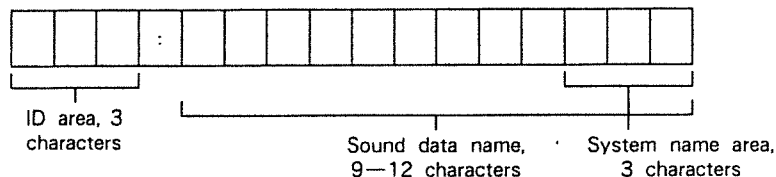
When working with the large amounts of sound data that can be stored in SCSI - compatible drives, some clear method of organization is necessary. The SP - 700 organizes the sound data using Volume IDs.

* See P.Sys - 31 for information on setting the Volume ID.

Using the Volume ID

The relationship between various kinds of data (for example, which Partials and samples are used in which Patch, etc.) becomes very complicated when storing a huge amount of sound data on a disk. Because of this, the SP - 700 is designed to efficiently handle data by assigning exclusive Volume identification characters to all sound data — from Volumes down to samples — in addition to the data's name.

For example, even two different sets of sound data having the same name can be recognized as being distinct, if different identification characters have been assigned. This identification character is called the Volume ID. The first three letters of the sound data name are used.



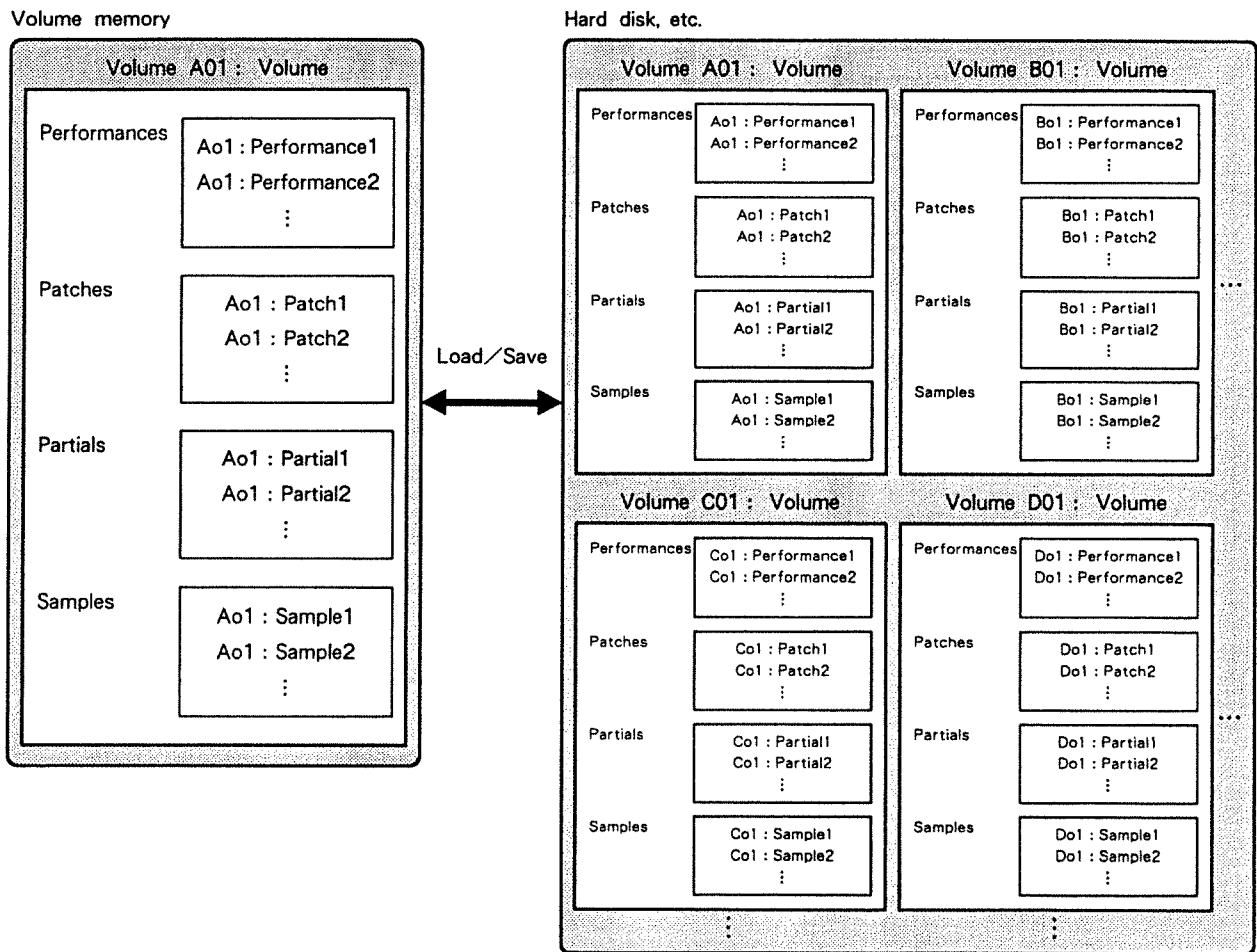
* The System Name area is a three - character space in which letter designations, such as
– L, – R, AA and AB, are automatically added to the end of the names of stereo samples
and duplicated sound data. (⇒ P.Pfm - 45, P.Prtl - 35)

The desired sound data can be quickly located by specifying the Volume ID. The larger the memory capacity of the drive, and the greater the amount of stored sound data, the more convenient this function proves to be.

Easy (but Memory - Intensive) Method of Using Volume IDs

Sound data is organized by assigning the same Volume ID to each Volume (including all sound data contained in the Volume).

This would come in handy, for example, when you are loading sound data from several different hard disks to create a new Volume. As you can quickly and easily check which Volume uses which sound data, you can set the same Volume ID to all sound data within the Volume from the System Volume ID page (P.Sys - 29) and then save the entire Volume.



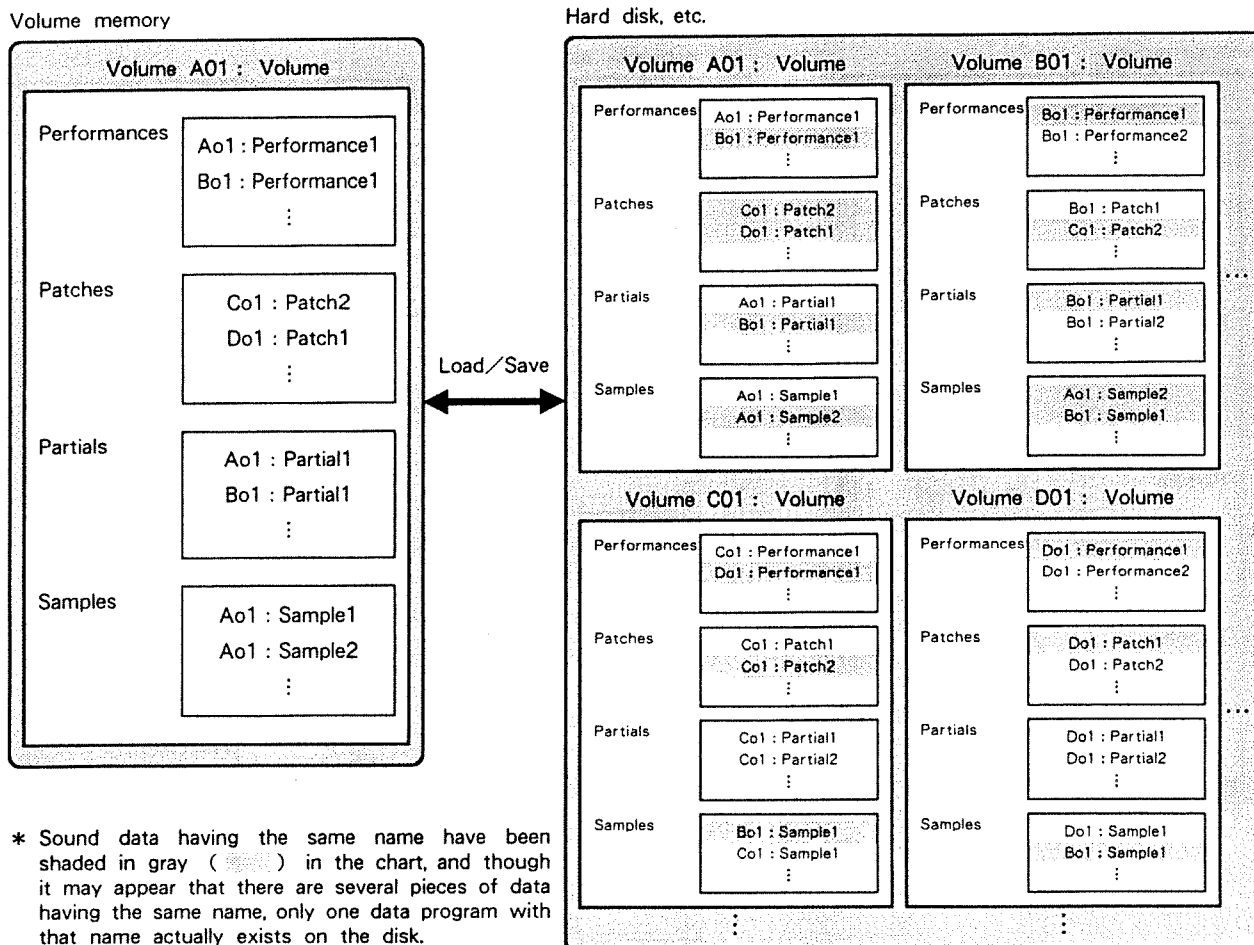
* With this method, you can tell at a glance which sound data is saved in which Volume.

However, one disadvantage to this method is that it takes up more memory as the same sound data may be saved under different names (Volume IDs) and is recognized on the disk as different data.

Memory - Saving (but Complicated) Method of Using Volume IDs

It is possible to manually set individual Volume IDs for each set of sample, Partial, Patch, Performance or Volume data from the System Volume ID page (⇐ P.Sys - 29). It is also possible to change the Volume IDs when you create names for sound data.

In this way, you can save memory on the disk by using the same sound data in different Volumes (by assigning different Volume IDs to sound data within the same Volume).



In this method, the relationship among the sound data is very complicated. This saves memory on the disk, but there is a trade off in the increased difficulty of keeping track of the data and the relationship between elements of the various data categories.

* Be sure to set both the Overwrite Switch (⇐ P.Sys - 10) for SCSI in the System parameters, and the Fast Delete Mode (⇐ P.Sys - 8) to OFF. This prevents you from inadvertently overwriting or deleting important sound data.

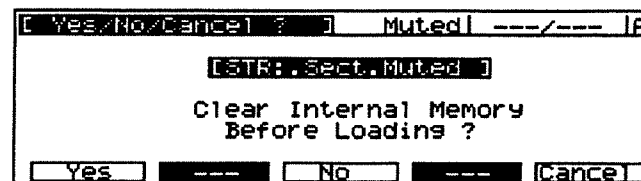
ABOUT LOADING / SAVING DATA

When loading or saving data, the way in which sound data is handled differs from that of System data. The following section describes some special points you should keep in mind.

Sound Data

Loading

When using the panel for operation, if sound data already exists in the target Volume memory, the following message appears before the load operation is actually executed. Select one of the three choices shown below.



```
[ Yes/No/Cancel ? ] Muted | ---/--- | A
[STR: Sect. Muted ]
Clear Internal Memory
Before Loading ?
[ Yes ] [ --- ] [ No ] [ --- ] [ Cancel ]
```

Yes: This deletes all sound data existing in the target Volume memory, then loads the new data.

No: This loads the new data in any unoccupied memory space, leaving the existing sound data intact. When there is not enough memory space, the new data will only be partially loaded.

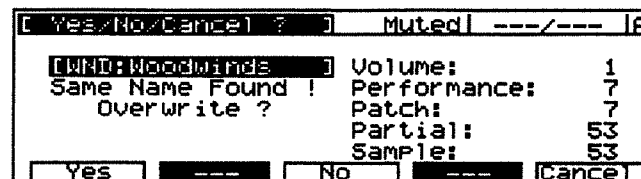
Cancel: The operation is aborted and no data is loaded.

Setting the Overwrite Switch

If different sound data having the same name (including Volume ID) exists in the Volume memory where data is to be loaded, and you attempt to load the data by selecting "No", the following conditions will result, depending on the setting of the Overwrite Switch for SCSI in the System parameters. (This switch determines whether existing data in the Volume memory will be overwritten by the new sound data or not; for more information, see P.Sys - 10.)

When the Overwrite switch is set to off

The following display appears, prompting you to confirm whether or not you wish to overwrite the data. Select one of the three choices shown below.



```
[ Yes/No/Cancel ? ] Muted | ---/--- | A
[WIND: Woodwinds ] Volume:      1
Same Name Found ! Performance:  7
Overwrite ?       Patch:       7
Partial:         53
Sample:         53
[ Yes ] [ --- ] [ No ] [ --- ] [ Cancel ]
```

Yes: All selected sound data is loaded and overwrites any sound data with the same name.

No: Sound data of the same name are not loaded, nor is existing data overwritten. Only sound data with different names are loaded.

Cancel: The load operation is aborted.

When the Overwrite switch is set to on

All selected sound data is automatically loaded without the above display appearing. Any sound data having the same name is automatically overwritten.

Saving

When a Volume is saved, Performances which are used in the Volume are saved along with the Volume. Patches, Partials, and samples which are used for these Performances are also saved.

However, this does not necessarily mean that all sound data (from Performances down to samples) in the Volume are saved.

The following sound data can be saved:

Performance: Only Performances that have been named can be saved.

Patch: Only Patches that have been named and are assigned to a Part of a Performance can be saved.

Partial: Only Partials which have been named and are assigned to the Patch of a Part can be saved.

Sample: Only samples which have been named and are assigned to the Partial of a Patch (of a Part) can be saved.

* Sound data of 0 seconds cannot be saved.

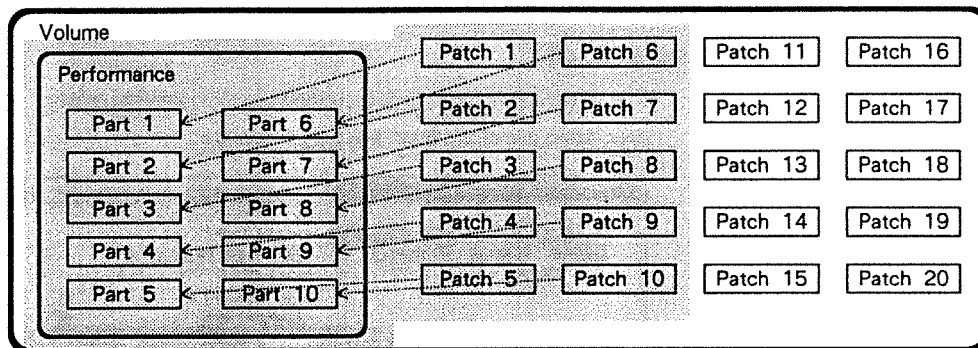
* All sound data to be saved must be named, from the Volume down to the sample.

* Remember that the data relationships above apply to the Volume Dump function as well.
(☞ P.2 - 7)

As for the Volume Recover/Backup function, all sound data (excluding wave data) in the current Volume memory can be saved in the Volume Backup memory. For example, the sound data of Patches, which have not been named or assigned to Parts, can be saved as well (☞ P.2 - 6).

Precautions when Saving

To illustrate some precautions you should take when saving data, let's consider the following example. In this situation, we are saving a Volume which has 1 Performance (with a name) and 20 Patches (also with names). It was saved with Patches 1—10 assigned to the Parts of the Performance. However, at this time the unassigned Patches 11—20 (as well as the Partials and samples used by these Patches) will not be saved.



(Only the data in the shaded area will be saved.)

In order to prevent this, save the data by assigning Patches 11—20 to unused Parts. (Set the MIDI channels of the unused Parts to off.)

When all the Parts of a Performance are set for use — in other words, when there are no unused Parts (when all Parts have MIDI channel and Patch assignments) —, you should create a new Performance (with a name), and assign the unassigned Patches to the Parts of the new Performance. (Be sure to set the MIDI channel of each Part to off.) Finally, save the data.

You may want to have a large selection of Patches that you can select by MIDI Bank Select and Program Change messages. In that case, you'll have to save many Patches. Using the above procedure is a good way to do this.

Setting the Overwrite Switch

When you wish to save sound data in Volume memory which has the same name (including that of the Volume ID) as data already stored on the hard disk, the following conditions will result, depending on the on/off setting of the Overwrite Switch for SCSI in the System parameters. (This switch determines whether existing data on the hard disk will be overwritten by the new sound data or not; for more information, see P.Sys - 10)

When the Overwrite switch is set to off

The following display appears, prompting you to confirm whether or not you wish to overwrite the data. Select one of the three choices shown below.

[Yes/No/Cancel ?]		Muted	---/---	A
[MMD:WOODWINDS]		Volume:	1	
Same Name Found !		Performance:	7	
Overwrite ?		Patch:	7	
		Partial:	53	
		Sample:	53	
Yes	---	No	---	Cancel

Yes: All selected sound data is saved and overwrites any sound data with the same name.

No: Sound data of the same name are not saved, nor is existing data overwritten. Only sound data with different names are saved.

Cancel: The save operation is aborted.

When the Overwrite switch is set to on

All selected sound data is automatically saved without the above display appearing. Any sound data having the same name is automatically overwritten.

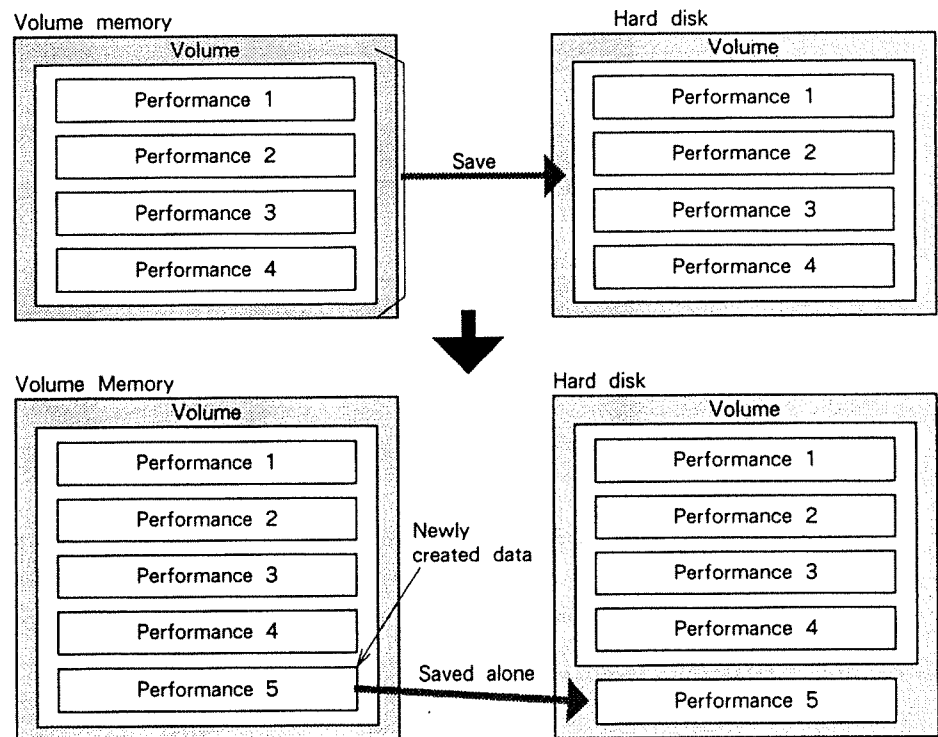
Precautions when Saving and Loading

The names of all sound data (all names from Performances to samples) which are used for a Volume, are written in the Volume when it is saved. Likewise, when loading a Volume, the sound data of all the names written into the Volume are loaded.

Using specific examples to illustrate, the section below describes some precautions you should take when saving and loading.

Example 1

Suppose that you have saved a Volume that includes four Performances. After saving the Volume, you want to create a fifth Performance for the Volume (maintaining the same Volume ID), and save the newly edited data on the same hard disk.



After saving the data in this fashion and then loading the Volume back into the SP - 700, Performance 5 will not be loaded.

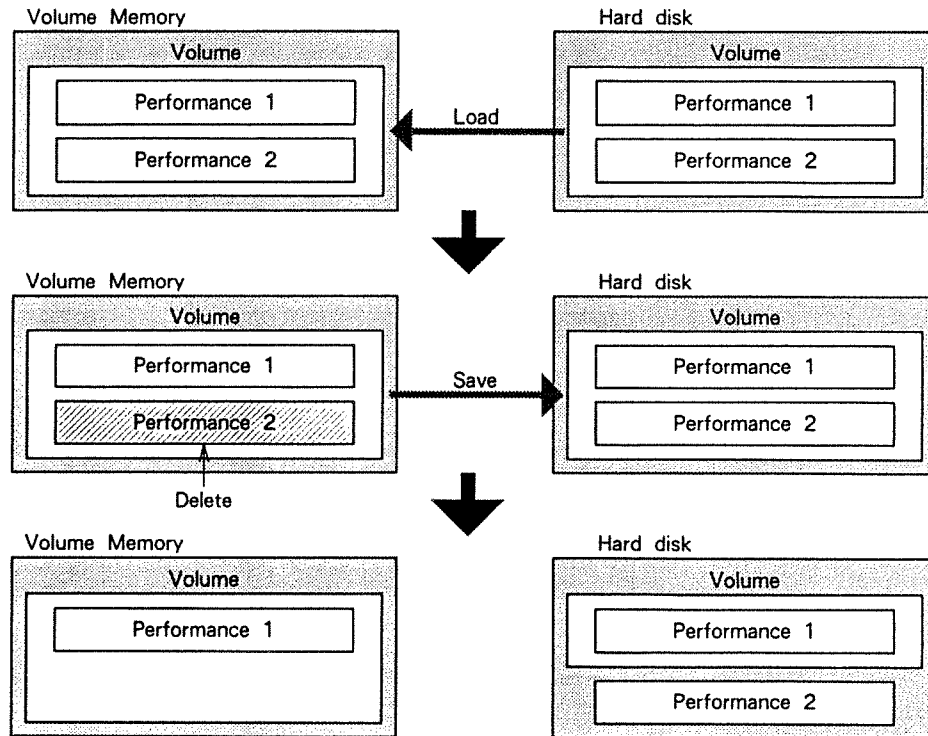
As Performance 5 was saved by itself after the Volume was created, it has not been stored in the previously saved Volume (or any other Volume, for that matter) and cannot be loaded with the Volume.

To remedy this, you must save the Volume again, this time with all five Performances. Then overwrite the previously saved Volume on the hard disk.

Better yet, you should save the entire Volume at the time you make any additions to it.

Example 2

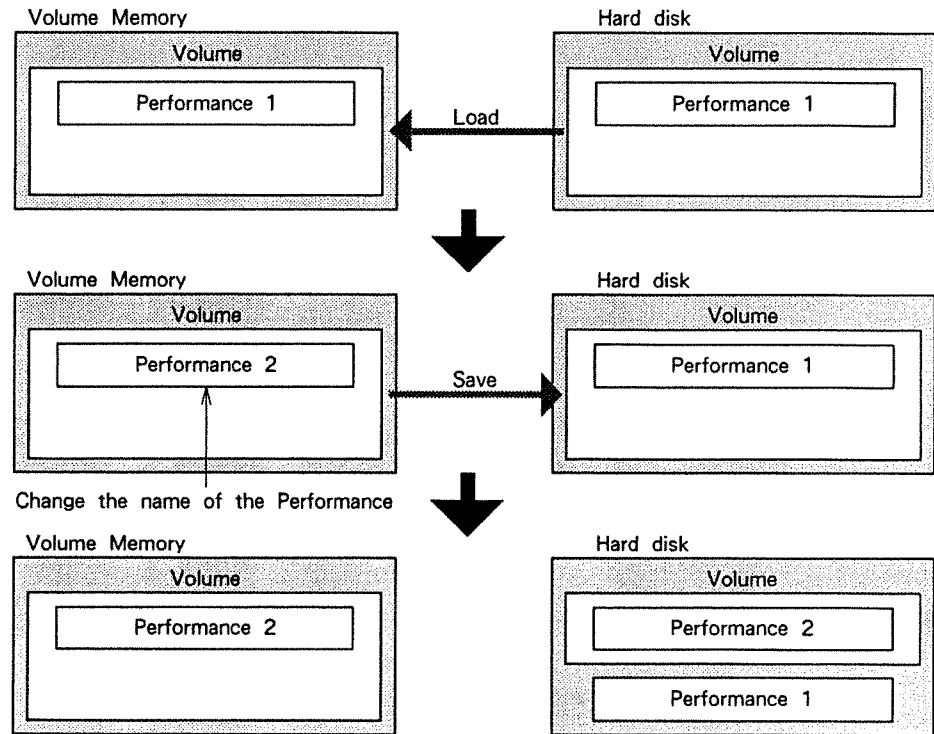
Suppose that you have loaded a Volume (with two Performances) from a hard disk. Now, with the data in the Volume memory, you delete Performance 2 using the Delete command (⇐ P.Pfom - 37) of the Performance commands. Finally, you save (overwrite) the new Volume containing only Performance 1 on the same hard disk.



In this case, only the name of the first Performance is written into the saved Volume, since the names of all sound data (from Performances to samples) which make up the Volume are written into the Volume when saving it. The data of Performance 2 is not deleted from the hard disk, however, it is left without a Volume assignment (unless it is being used for another Volume). If it is not needed at all, delete Performance 2 from the hard disk using the Disk Delete page (⇐ P.Disk - 20).

Example 3

Suppose that you have loaded a Volume (with one Performance) from a hard disk. After changing the name of the Performance, you save (overwrite) the newly changed Volume to the same hard disk. The Performance with the changed name is written into the Volume.



The Performance with the old name is not deleted from the hard disk, but is left unassigned unless it is being used in another Volume. If it is not needed at all, delete the Performance from the hard disk using the Disk Delete page (P.Disk - 20).

System Data

Unlike other data, System data is not saved in the SCSI device (such as a hard disk), but is saved in the internal System backup memory.

Loading

All System parameters are loaded into internal memory (from the System backup memory) when the power is turned on.

After the power is turned on, it is possible to reload the System parameters in groups (System PRM, Quick Load, Volume ID, etc.). (⇐ P.Sys - 32) This is convenient if you have done some editing but want to restore the original settings.

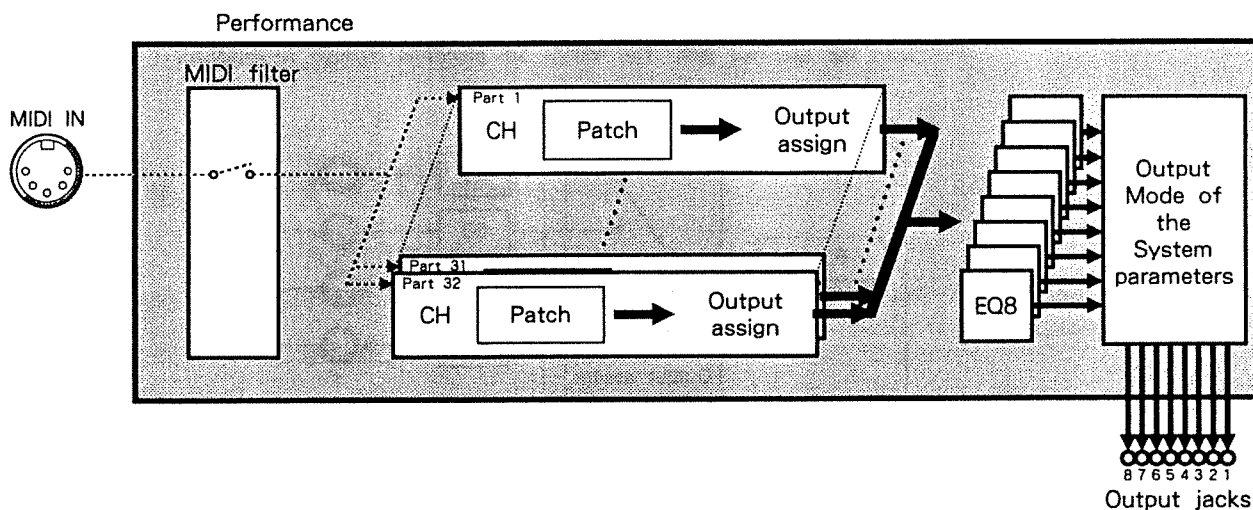
If the Volume A parameter setting (the relative memory allocation between Volume A and Volume B; ⇐ P.Sys - 5) as saved to the System backup memory differs from the setting currently in internal memory, all sound data in the Volume memory will be lost if you attempt to load System data which includes the Volume A parameter. See P.Sys - 34 for more information.

Saving

It is possible to save the System parameters in individual groups. (⇐ P.Sys - 32)

SIGNAL FLOW (From MIDI Reception to Sound Output)

The SP - 700 produces sound in response to MIDI messages (such as note messages) received through the MIDI IN connector. This section explains the signal flow within the SP - 700, from reception of MIDI messages to output of audio signals.



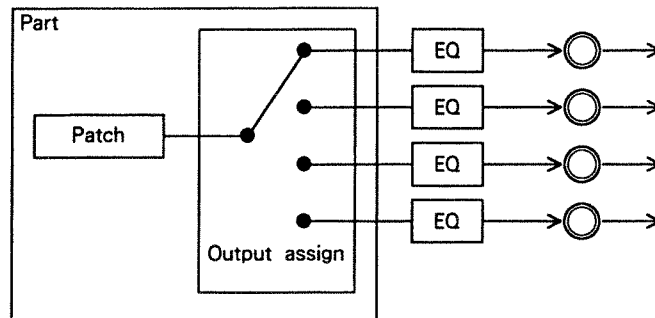
MIDI messages received through the MIDI IN connector are monitored by the MIDI filter (☞ P.Pfom - 10) and either received or ignored. For example, if you want to prevent the volume of the sounds from changing, you can set the SP - 700 to filter out (ignore) received MIDI volume data.

The received MIDI data is sent only to Parts whose MIDI channel setting matches that of the transmitted data (☞ P.Pfom - 4). The filtered data then triggers the Patch of the Part.

The maximum polyphony of the SP - 700 is 24 voices. (This includes sounds which are released, and where one Sample is counted as one sound.) If the maximum polyphony of 24 is exceeded, the sounds will be played and cut off according to the setting made in the Patch priority parameter (☞ P.Pfom - 6, P.Pach - 4).

How Sounds Are Output

The Output Assign parameter (⌘ P.Pfom - 5) of each Part determines that each Patch will be output from the specified jack. The sounds are processed through an equalizer (⌘ P.Pfom - 15) corresponding to each jack and then output.



This is the basic sound output configuration of the SP - 700.

* Depending on the setting made in the Output Mode of the System parameters (when it is set to MIX), sounds may not be output through the jacks as you have assigned from the Output Assign parameter. As a result, all sounds will be mixed and output through the STEREO OUT A jacks (⌘ P.2 - 25).

How to Use the Outputs

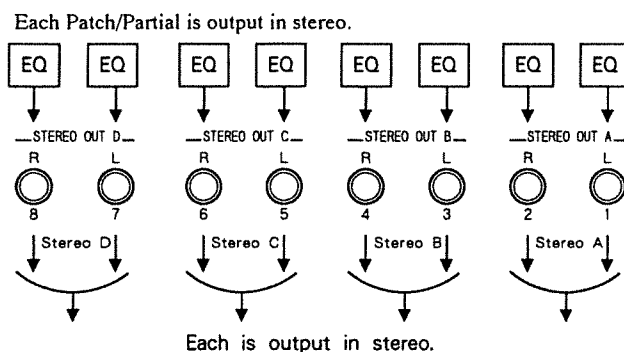
The eight output jacks can be used as described below, depending on the Output Mode settings of the System parameters (⌘ P.Sys - 3).

Four separate settings are provided in the Output Mode parameter: "4 STEREO OUTs," "mix output," "1 STEREO OUT+6 INDIVIDUAL OUTs," and "8 INDIVIDUAL OUTs."

* The Output Mode settings (which control the eight outputs) are not the only parameters that affect the output assignments of the sounds; the assignment of Patches and Partials to the individual jacks is determined by the Output Assign settings of the Performance, Patch or Partial. (⌘ P.Pfom - 5, P.Pach - 4 and P.Prtl - 5.)

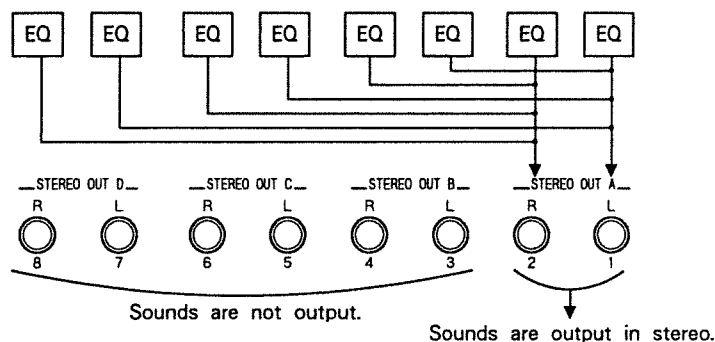
As each jack is equipped with a dedicated equalizer, each sound is output after being processed. Equalizer settings can be made for each Performance. (⌘ P.Pfom - 15)

4 Stereo Output (Stereo A, B, C and D)

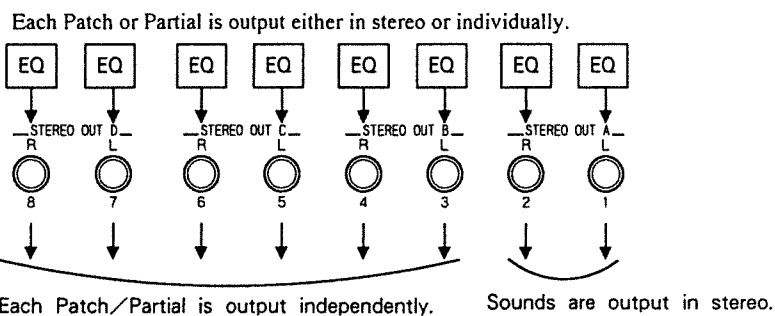


Mix Output (Stereo A)

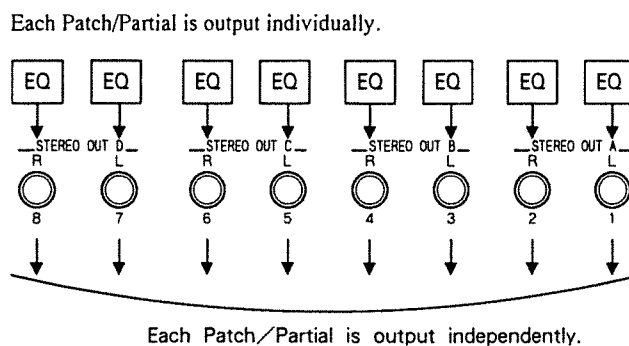
By mixing the sound of the other six outputs with those of STEREO OUT A, all sounds are output together from a single set of STEREO OUTs. The equalized signals are mixed.



Stereo Output+6 Individual Outputs (STEREO A+Individual 3, 4, 5, 6, 7 and 8)



8 Individual Outputs (Individual 1, 2, 3, 4, 5, 6, 7 and 8)



As you can see, output jacks can be used in two different ways: as STEREO OUTs or INDIVIDUAL OUTs.

* Pan settings (the stereo position of the sound) can be made when STEREO OUTs are used. (☞ P.2 - 31)

* If a sound is assigned to an output jack and no cable has been connected to that jack, normally that sound is not heard. However, there are exceptions to this rule, as described below.

➡ When the System Output Mode is set to either "4 STEREO OUTs", "MIX" or "1 STEREO OUT+6 INDIVIDUAL OUTs," leaving the R (right) jack of the STEREO OUT A outputs unconnected results in the sound being mixed to the L (left) jack and output in mono.

➡ If you do not have any plug inserted into the "2" jack of the INDIVIDUAL OUTs while the System Output Mode is at "8 INDIVIDUAL OUTs," the signals will be mixed and output in monaural from the "1" jack.

The Output Assign parameter for all Parts are set to "A" when loading a Volume from the included CD - ROM disk or a CD - ROM disk for the S - 770/750. (For information on data compatibility, ☞ P.Edit - 9) As the Output Mode of the System parameters is set to "4 stereo" at the factory, all Patches are output in stereo through the equalizers for jacks 1 and 2.

Set the Output Assign parameter of each Part (☞ P.Pfom - 5) when you wish to output Patches from other jacks (separate equalizer settings can also be made).

Save the edited sound data to the hard disk (or other media) as part of a Volume or Volumes. This data is saved as SP - 700 sound data, and is output according to saved Output Assign settings when loading the Volume the next time.

* See P.Edit - 9 for information on sound data compatibility between the SP - 700 and the S - 770/750 (SYS - 772 Version 2.0).

Output Assignments of the Sound Data

Output Assign parameters are available not only for each Part of the Performance, but also for the Patches and Partials. Generally, the Output Assign parameter of the higher level sound categories has priority. In other words, the output assignment for the Patch is determined by the Output Assign parameter of the Performance (which has priority).

However, it is possible to output a sound by giving priority to the Output Assign parameter of a lower level sound category. For example, you could determine the output assignment of a Patch by giving Output Assign priority at the Patch level, or you could determine the output assignment of a Partial by giving Output Assign priority at the Partial level.

Performance Output Assign

The Output Assign parameter for the Performance is set as described below. (⇐ P.Pfom - 5)

() : The Patch is output according to the Output Assign parameter setting of the Patch. The Output Assign setting of the Patch is indicated in parentheses.

A—D: The Patch is output through the A—D jacks in stereo. The Output Assign settings for the Patch and Partial are ignored.

1—8: The Patch is output through INDIVIDUAL OUTs 1—8. The Output Assign settings for the Patch and Partial are ignored.

The Output Assign parameter of the Performance can be set from the Performance Play page. To call up the Performance Play page, press **PERFORMANCE**, then **F1** (Play).

[Performance Play]		Perform		Dec/Inc		A
* [1] WND: Wdwind Sect1						
Part Ch		Patch Name		[Lev]	[Per]	[Out]
01	1	1WND: Bassoon 8va	127	0	A	A
02	1	2WND: Clarinet 1a	110	0	A	A
03	1	3WND: Oboe 3a	110	0	A	A
04	-	Off	127	0	A	A
Play		MIDI	EQ	Monitor	@-Load	

The Output Assign setting for the Performance is displayed on the first page. Press **PREVIOUS** when the first page is not displayed.

[Out] indicates the Output Assign parameter of the Performance.

* The parameters displayed in brackets on the first page, and the parameters on the sixth and seventh pages, are all Performance parameters.

Patch Output Assign

The Output Assign parameter for the Patch can be set as described below. (☞ P.Pach - 4)

* The available settings of the Output Assign parameter for the Patch differ depending on how the Output Mode of the System parameters is set (☞ P.Sys - 3). For the sake of the explanation below, the Output Mode is set to "4 stereo."

— P — :When the Output Assign parameter of the Performance is set to (), each Partial is output according to the Output Assign setting for each Partial in the Patch.

You should use this setting for Patches which have different sounds (Partials) assigned to different keys, such as with a drum set.

A—D: When the Output Assign parameter of the Performance is set to (), the Patch is output through outputs A—D in stereo.

1—8: When the Output Assign parameter of the Performance is set to (), the Patch is output through INDIVIDUAL OUTs 1—8.

The Output Assign parameter of the Patch can be set from the Performance Play page. To select the Performance Play page, press **PERFORMANCE**, then **F1** (Play).

[Performance Play] Perform Dec/Inc A										
* [1]WND:Wdwind Sect1										
Part	Ch	Patch	Name	Lev	Pan	Out	Pr			
01	1	1WND:	Bassoon 8va	127	0	A	Off			
02	1	2WND:	Clarinet 1a	127	0	A	Off			
03	1	3WND:	Oboe 3a	127	0	A	Off			
04	-	-----Off-----								
Play	MINI			EQ	Monitor	R-Load				

The Output Assign parameter of the Patch is displayed on the second page. Use **PREVIOUS** or **NEXT** if the second page is not displayed.

"Out" indicates the Output Assign parameter of the Patch.

* The parameters displayed on pages 2—5 are all Patch parameters.

The Output Assign parameter of the Patch can also be set from the Patch Common page. To select the Patch Common page, press **PATCH**, then **F1** (Common).

[Patch Common] Patch Dec/Inc A									
* [1]WND:Bassoon 8va									
Parameter Information									
Patch Level 127									
Panning 0									
Out Assign A [A~D][1~8][~P~]									
Priority Off [Off][On]									
Common Split Ctrl ---									

The Output Assign parameter of the Patch is displayed on the first page. Press **PREVIOUS** when the first page is not displayed.

"Out Assign" indicates the Output Assign parameter of the Patch.

* There are some different ways to edit the Patches and Partials.

The page can be opened by pressing the appropriate Mode button, or it can be also opened from the Command menu. See the section on precautions for editing sound programs (☞ P.Edit - 1) for details.

Partial Output Assign

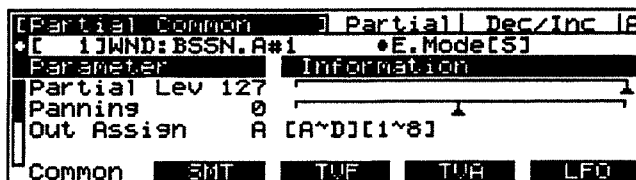
The Output Assign parameter of the Partial can be set as described below. (Also see P.Prt1 - 5.)

* The available settings of the Output Assign parameter for the Partial differ depending on how the Output Mode of the System parameters is set (☐ P.Sys - 3). For the sake of the explanation below, the Output Mode is set to "4 stereo."

A—D : When the Output Assign parameter of the Performance is set to (), and Output Assign for the Patch is set to " - P - ," each Partial is output through STEREO OUTs A—D according to the Output Assign setting for each Partial in the Patch.

1—8: When the Output Assign parameter of the Performance is set to (), and Output Assign for the Patch is set to " - P - ," each Partial is output through INDIVIDUAL OUTs 1—8 according to the Output Assign setting for each Partial in the Patch.

The Output Assign parameter of the Partial can be set from the Partial Common page. To select the Partial Common page, press **PARTIAL**, then **F1** (Common).



The Output Assign parameter of the Partial is displayed on the first page. Press **PREVIOUS** if the first page is not displayed.

"Out Assign" indicates the Output Assign parameter of the Partial.

* There are some different ways to edit the Patches and Partials.

The page can be opened by pressing the appropriate Mode button, or it can be also opened from the Command Menu. See the section on precautions for editing sound programs (☐ P.Edit - 1) for details.

Overview of Output Assignment

	Output Assign settings for the Part	Output Assign settings for the Patch	Output Assign settings for the Partial	Actual Output Assignment upon output from the SP - 700 Note :1
In order to output with the Output Assign setting of the Part	When set to stereo A—D	No specific setting is necessary since the Output Assign parameter of the Patch is ignored.	No specific setting is necessary since the Output Assign parameter of the Partial is ignored.	Output through stereo outputs A—D Note :2 Note :3
	When set to individual outputs 1—8	No specific setting is necessary since the Output Assign parameter of the Patch is ignored.	No specific setting is necessary since the Output Assign parameter of the Partial is ignored.	Output through individual 1—8
In order to output with the Output Assign setting of the Patch:	Make the setting in the parentheses () in the LCD. * This makes the Output Assign setting of the Patch active.	When set to stereo A—D	No specific setting is necessary since the Output Assign parameter of the Partial is ignored.	Output through stereo outputs A—D
		When set to individual 1—8	No specific setting is necessary since the Output Assign parameter of the Partial is ignored.	Output through individual outputs 1—8.
In order to output with the Output Assign setting of the Partial:	Make the setting in the parentheses () in the LCD. * This makes the Output Assign setting of the Patch active.	Set it to Partial – P – * This makes the Output Assign setting of the Partial active.	When set to stereo A—D	Output through stereo outputs A—D
			When set to individual 1—8	Output through individual outputs 1—8

Note 1: The output jack to be used is determined by this “actual” Output Assign and the System’s Output Mode (⇐ P.Sys - 3).

Note 2: When the Output Assign parameter of the Patch is set to individual 1—8, output is through the stereo A—D output jacks, and the left and right channel signals are mixed.

Note 3: When the Output Assign of the Patch is set to Partial – P –, and the Output Assign of the Partial is set to individual 1—8, output is through the stereo A—D output jacks, and the left and right channel signals are mixed.

About Pan

When outputting sounds in stereo, you can position (and move) the sounds left or right in the stereo field.

The Pan setting lets you set the stereo position for Patches or for Partials.

Pan settings can be made for each level.

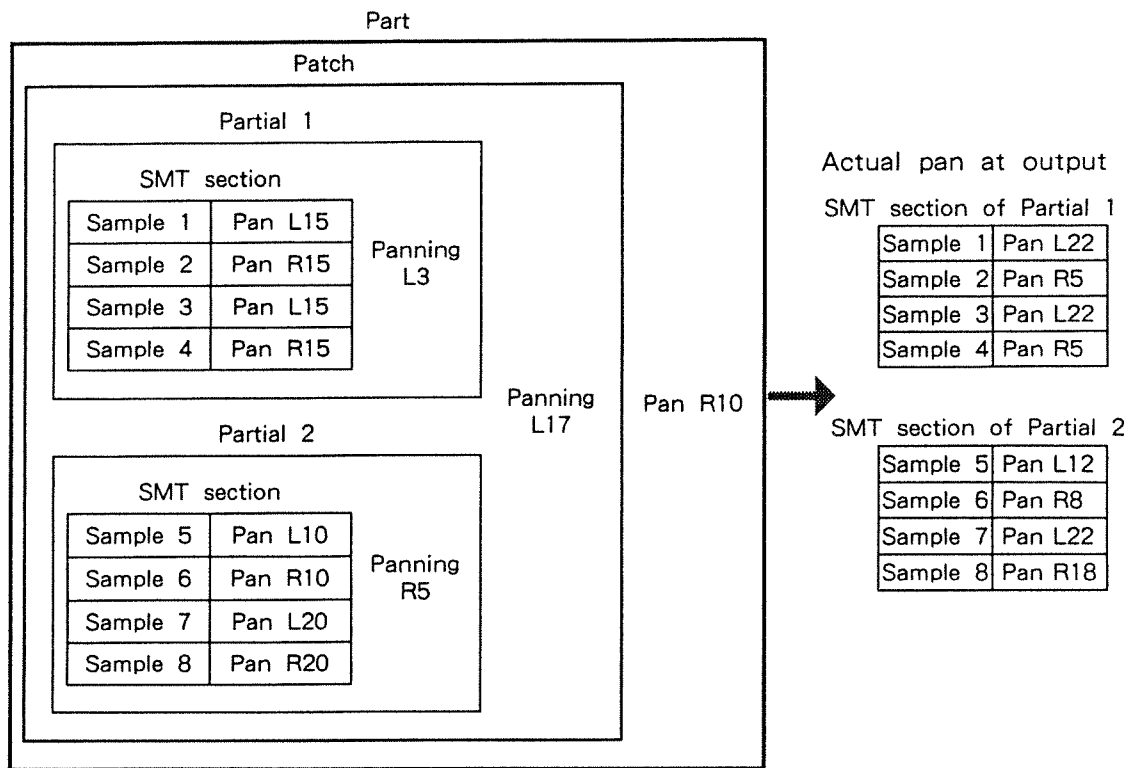
The following pan settings are available: Pan of each component of the SMT section of a Partial (⇐ P.Prtl - 9), panning of a Partial (⇐ P.Prtl - 4), panning of a Patch (⇐ P.Pach - 3) and pan of each Part in a Performance (⇐ P.Pfom - 5).

Whether the sound is output in stereo or not is determined by the Output Assign parameter. According to the Output Assign settings, the pan settings are either active or inactive. The actual pan settings result as described in the chart below.

Setting of Part Output Assign	Setting of Patch Output Assign	Setting of Partial Output Assign	Actual pan setting at the SP - 700's outputs
When set to STEREO OUTs A—D	When set to STEREO OUTs A—D	Ignore the setting here.	All pan settings (for Part—each component) become effective and are output as set.
	When set to INDIVIDUAL OUTs 1—8	Ignore the setting here.	Only the pan setting of the Part becomes effective and is output as set.
	When set to Partial - P - .	When set to STEREO OUTs A—D	All pan settings (for Part—each component) become effective and are output as set.
		When set to INDIVIDUAL OUTs 1—8	Only the pan setting of the Part becomes effective and is output as set.
When set to INDIVIDUAL OUTs 1—8	Ignore the setting here.	Ignore the setting here.	All pan settings (for Part—each component) are ignored.
When set to ().	When set to STEREO OUTs A—D	Ignore the setting here.	All pan settings (for Part—each component) become effective and are output as set.
	When set to INDIVIDUAL OUTs 1—8	Ignore the setting here.	All pan settings (for Part—each component) are ignored.
	When set to Partial - P - .	When set to STEREO OUTs A—D	All pan settings (for Part—each component) become effective and are output as set.
		When set to INDIVIDUAL OUTs 1—8	All pan settings (for Part—each component) are ignored.

*To make it so that only the pan setting of the Part is active, set the Output Assign of the Patch to individual 1—8.

Although pan settings can be made at each level, the actual pan setting of the sound is a cumulative result of all active settings, as shown below.



* The final pan setting cannot be greater than L32 or R32.

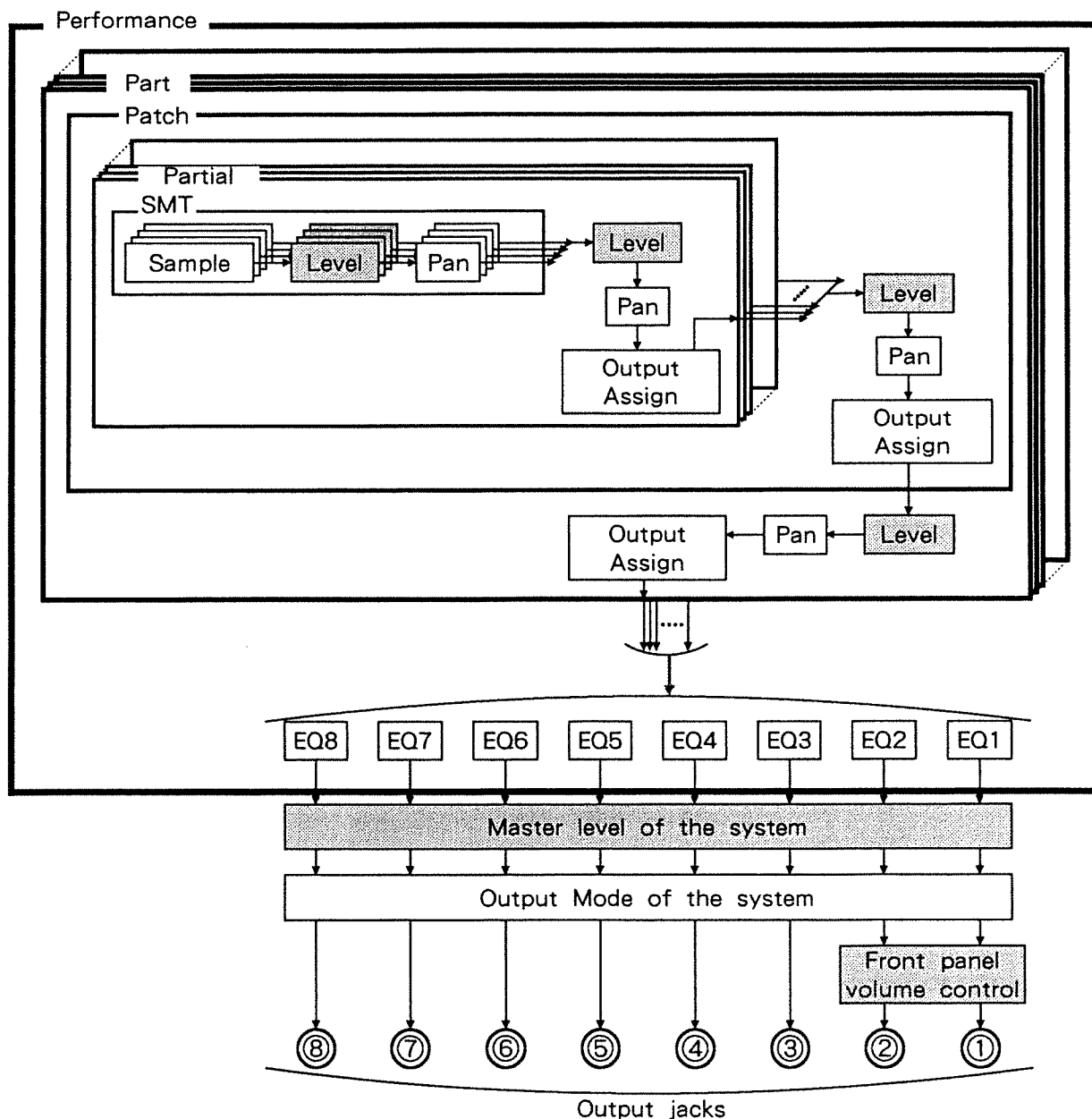
Setting the Volume

The volume (level) of the sound can be set at each level.

There are volume controls of each component level of the Partial SMT section (☐ P.Prtl - 9), Partial level (☐ P.Prtl - 4), Patch level (☐ P.Pach - 3), each Part level of a Performance (☐ P.Pfom - 4), System Master level (☐ P.Pfom - 2, P.Sys - 3) and the front panel.

* The front panel **VOLUME** control affects the sound level of only output jacks 1 and 2.
Use the Master Level parameter in the System parameters to control the sound level of all output jacks (1 — 8).

The following diagram shows the signal flow from sample to final output.



About Pitch

The actual pitch of the output sound can be determined by the settings of the pitch - related parameters of the various levels, from Patch to sample, or the settings of the Master Tune parameter of the System parameters, as described below:

Original key of the Sample (⇐ P.Prtl - 35), Pitch Key Follow (⇐ P.Prtl - 7), Coarse Tune (⇐ P.Prtl - 8) or Fine Tune (⇐ P.Prtl - 8) of each component of the Partial SMT, Coarse Tune (⇐ P.Prtl - 5), Fine Tune (⇐ P.Prtl - 5) or Envelope Pitch Depth (⇐ P.Prtl - 20) of the Partial, Octave Shift (⇐ P.Pach - 4), Coarse Tune (⇐ P.Pach - 4), Fine Tune (⇐ P.Pach - 4) or Analog Feel (⇐ P.Pach - 5) of the Patch, and the Master Tune (⇐ P.Sys - 3) of the System parameters.

The pitch range of the sound is up to a maximum of two octaves above the original key of the sample. When the sum of each parameter related to the Pitch (with the exception of the Octave Shift of the Patch) exceeds the limit, the sound is always output at a pitch two octaves higher.

CHAPTER 3

BASIC OPERATION

The basic operation of the SP - 700 is explained in this section.

The explanations that follow assume that a CD - ROM drive, a hard disk or optical disk drive, and a MIDI keyboard are properly connected to the SP - 700.

Let's take a look at the organization of the basic operations of the SP - 700 before explaining each function.

*As the explanations that follow are illustrated with example LCD screens, the data in this manual may not be identical to the data (Sound program names, etc.) on the included CD - ROM disk.

OPERATION MODES

The parameters are organized according to the hierarchy or structure of the sound data, and are organized accordingly for each mode of operation. Likewise, the settings for transferring data to and from the SCSI device, and the settings of the entire system of the SP - 700, are organized accordingly for each operation mode.

Five Modes

The functions of the SP - 700 can be roughly categorized into five modes: Performance, Patch, Partial, Disk and System. The functions of each mode are explained below.

PERFORMANCE MODE: A MIDI sequencer can be played in this mode. Also, Performances can be edited in this mode; Partials and Patches can also be edited from the Command Menu.

PATCH EDIT MODE: Only the Patches themselves are edited in this mode. Partials can also be edited from the Command Menu.

PARTIAL EDIT MODE: Only the Partials themselves are edited in this mode.

DISK MODE: Data can be transferred to and from SCSI devices in this mode.

SYSTEM MODE: The settings of the entire system, such as setting of the Output Mode or Volume memory, MIDI - related settings, and SCSI - related settings, are edited in this mode.

* There are some different ways to edit the Patches and Partials.

See the section on precautions for editing Sound programs (⇐ P.Edit - 1) for details.

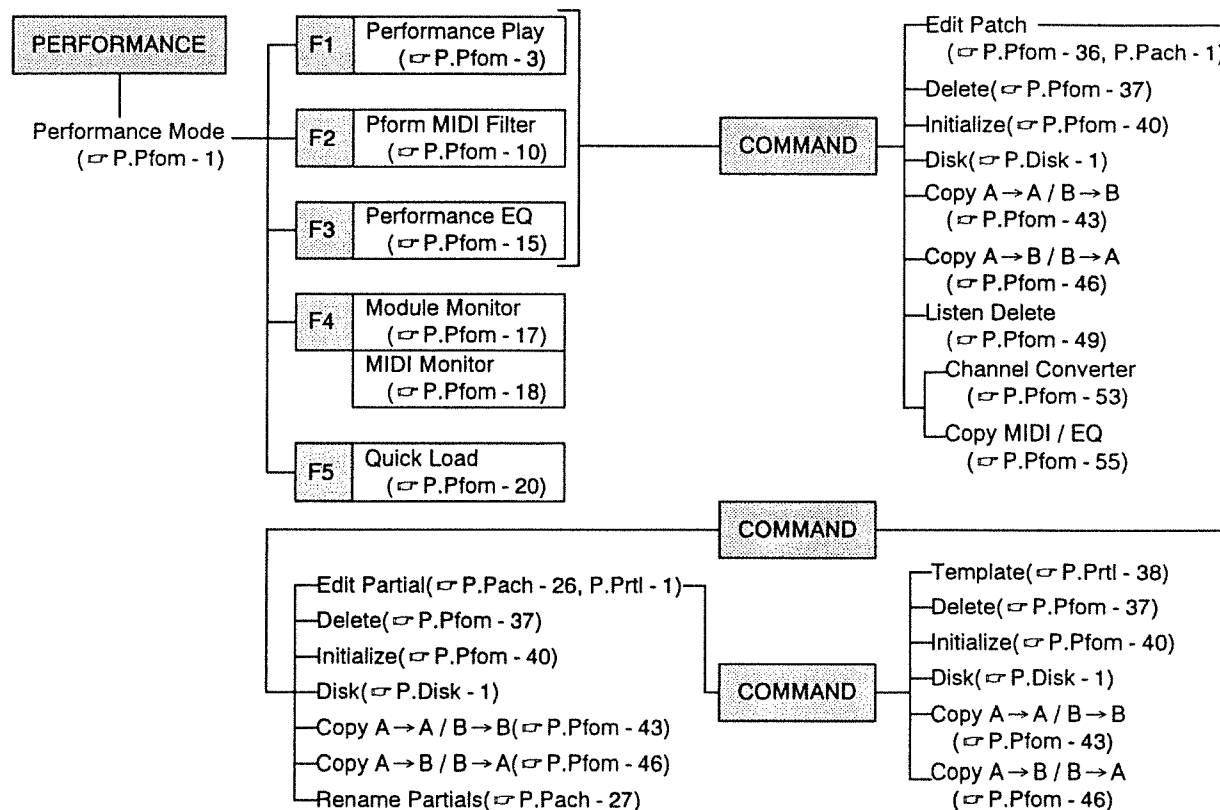
* If the Load - while - playing function (⇐ P.Sys - 4) of the System parameters is set to OFF, no sound can be produced while the Quick Load or Disk Mode pages have been selected.

Structure of Each Mode

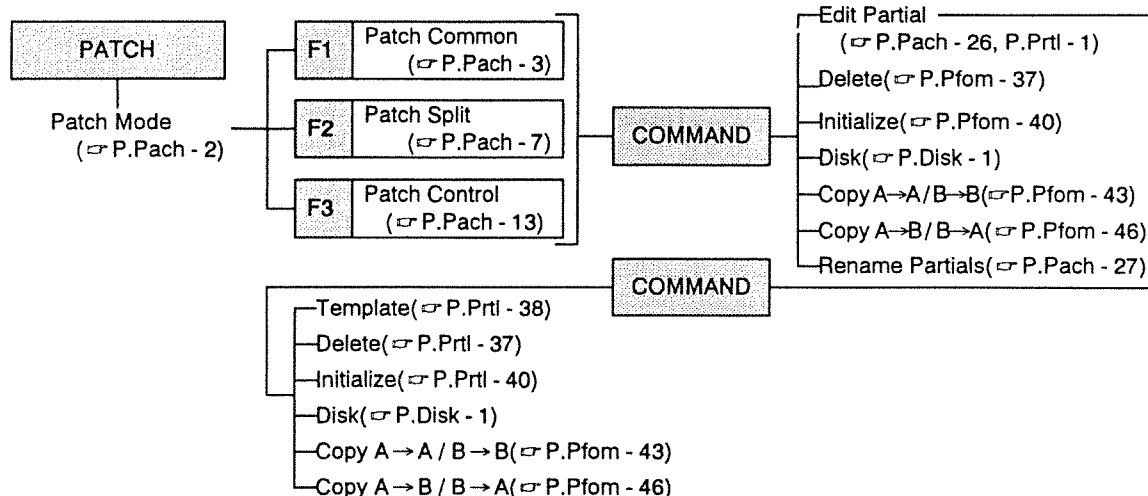
Each mode is organized into several pages according to its functions.

*The individual functions (and their display pages) are explained in Section 6, "Parameters." The numbers in each display page in the chart below refer to the relevant page in the Parameters Chapter of this manual.

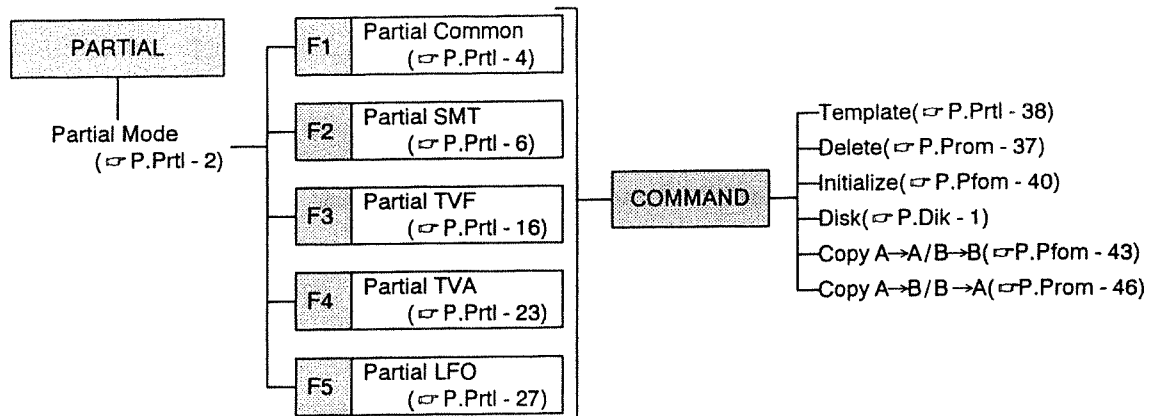
Performance Mode



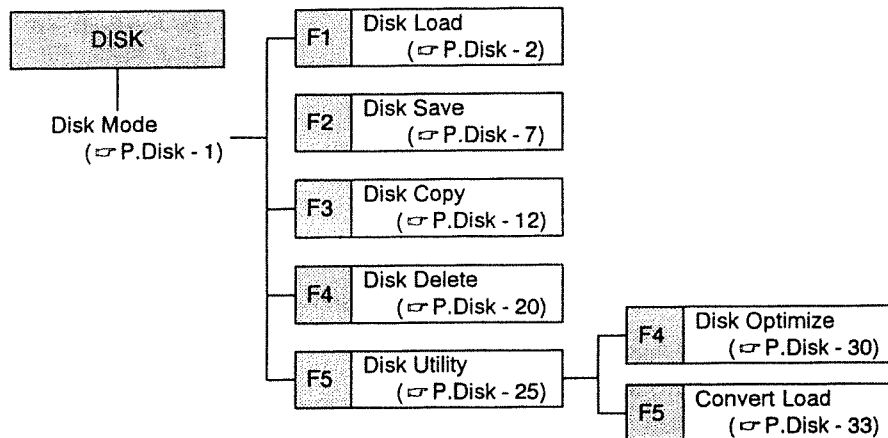
Patch Edit Mode



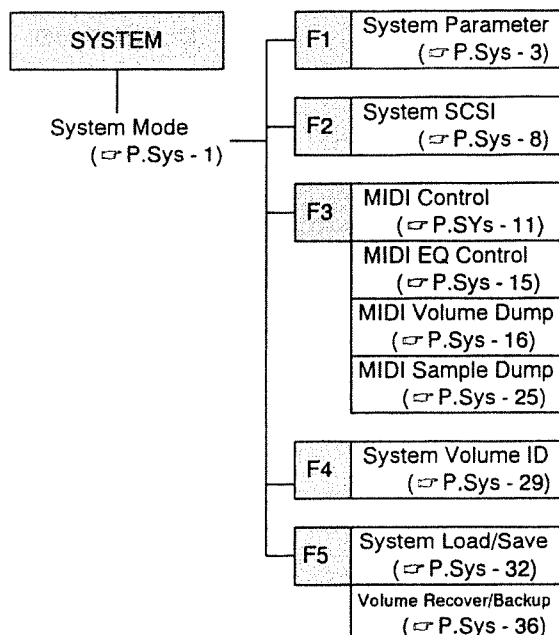
Partial Edit Mode



Disk Mode



System Mode



SOUND OUTPUT

Output of sound from the SP - 700 is not the same for all display pages.

For example, the entire sound of the Performance is output (in multi timbral operation) when the Performance Play page is selected.

However, from the Patch Edit Mode page, opened by pressing **PATCH**, the entire sound of the Performance cannot be output, but the sound of the Patch itself currently selected on the page is output. (The Performance parameters, such as those of the equalizer, are all inactive.)

Since the way the sounds are output differs depending on the page selected as explained above, the current output condition is indicated at the top right of the display.

Perform

This is indicated in each display of the Performance mode and Select Performance page. The sound is output according to the settings of the entire Performance (all parameters from Performance to sample are active).

The MIDI channel to be used is that of the Part channel. The output jack assignment is determined by the Output Assign parameter of the Part.

Patch

This is indicated in each display of the Patch Edit mode and the Select Patch page. The sound is output according to the settings of the selected Patch itself (the Performance parameters are inactive).

Since the MIDI channel to be used is set to OMNI ON, any channel from 1 to 16 can be used. The output jack assignment is determined by the Output Assign parameter of the Patch.

Partial

This is indicated in each display of the Partial Edit mode and the Select Partial page. The sound is output according to the settings of the selected Partial itself (all Performance and Patch parameters are inactive). Since the MIDI channel to be used is set to OMNI ON, any channel from 1 to 16 can be used. The output jack assignment is determined by the Output Assign parameter of the Partial.

Sample

This is indicated in the Select Sample page. The sound is output according to the settings of the sample itself currently selected by the cursor (all Performances, Patches and Partials are inactive). Since the MIDI channel to be used is set to OMNI ON, any channel from 1 to 16 can be used. The output jack assignment is automatically fixed to STEREO OUT A (INDIVIDUAL OUT 1 and 2).

Muted

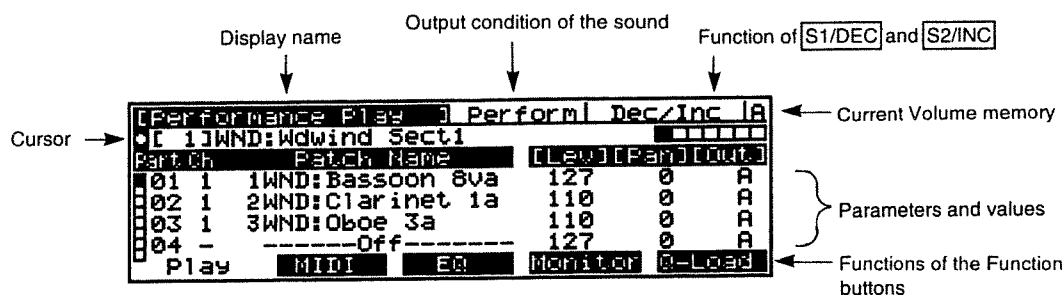
No sound is output. This is indicated in each display of the Disk Mode or the Quick Load page. However, when the Load - while - playing function of the System (⇐ P.Sys - 4) is set to ON, Perform is indicated.

* No sound is output also while executing commands such as Copy.

Since the way sounds are output differs depending on the selected page, there are some different ways to edit the sounds as well. See the section on precautions for editing Sound programs (⇐ P.Edit - 1) for details.

UNDERSTANDING AND USING THE LCD

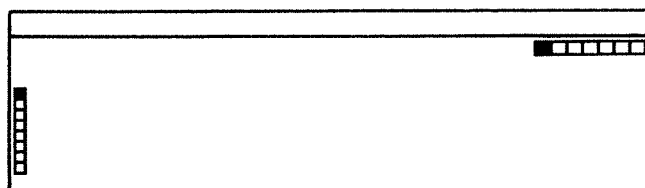
The Performance Play page is displayed when the power is turned on.



The following three messages are indicated at the top right of the display in all display pages:

- The output condition of the SP - 700 is indicated. The output condition of the sounds differs depending on the page selected.
- The current functions of [S1/DEC] and [S2/INC] are indicated. These functions change depending on the selected page or cursor position.
- The current Volume memory is indicated.

Some display pages have additional "sub - pages." For example, in the Performance Play page, the marks shown below appear at the left or the top right of the display. These indicate the number of additional pages that can be accessed from the current one. The currently selected page number is highlighted.



Function Buttons

The selectable functions of the Function buttons are indicated at the bottom of the display. They can be divided into several types. How they are indicated depends on the type.

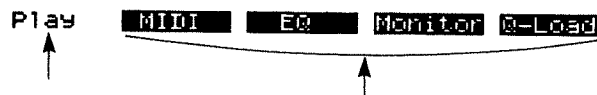
* The Function buttons which are indicated by " — — — " in the display have no function.

Changing Pages

Each mode consists of several pages. By pressing the Function button which corresponds to the displayed page name, the display changes to that page.

The names for the Function buttons are sometimes highlighted or only letters are shown (as below), when using the page changing function.

A name indicated by letters only is the currently selected page. Pressing the Function button below the highlighted display selects that page.



Function buttons can also be used to "jump" to specified pages, when **JUMP** is pressed (⇐ P.3 - 10).

Executing Commands

These are used to execute commands such as loading and saving.

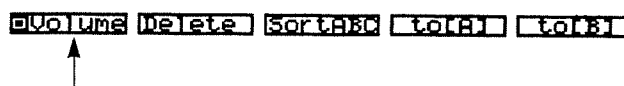
The Function button indications appear in a box, as shown below, when they are used to execute commands.



Changing Display - Related Settings

The settings related to the display pages can be changed (for example, selecting the target, changing the edit modes, etc.). Each time a Function button is pressed, the presently selected setting is indicated.

When the Function buttons are used to change settings, their indications in the display appear in boxes and a square appears before the first letter of the name, as shown below.



HOW TO SELECT THE PAGES

As each mode consists of several display pages (⇐ P.3 - 3), follow the steps below to select the desired page.

Selecting Each Mode

1. Select the mode by pressing the appropriate Mode button (**PERFORMANCE**, **PATCH**, **PARTIAL**, **DISK** or **SYSTEM**).

*There are some different ways to edit Patches and Partials; the page is opened by pressing the appropriate Mode button, or opened from the Command Menu.

See the section on precautions for editing Sound programs (⇐ P.Edit - 1) for details.

2. Select pages within the mode by pressing the Function button (**F1** — **F5**) corresponding to the desired page.

3. When a function is spread out over several display pages, change among the pages by pressing **PREVIOUS** or **NEXT**.

*Pages can also be changed using the cursor buttons.

4. When the symbol indicating multiple pages appears at both the left and the top right of the display (such as in the Performance Play page), the page marked at the left in the display can be changed using the cursor buttons (**▲**/**▼**).

5. Press **EXIT** to move to the next higher page, or to return to the previous page of the mode.

*Display pages that have been properly specified can be selected directly using the Mark Jump function (⇐ P.3 - 10).

Selecting the Command, Name and List Pages

Select the desired page by pressing **COMMAND**, **NAME** or **LIST** when executing commands, naming or changing the Sound program name, or selecting sounds from a list. These buttons are not necessarily active at all times. They function only when their indicators are lit (green).

Command Page

The **COMMAND** indicator lights (green) when a page of the Performance Mode, Patch Edit Mode or the Partial Edit Mode has been selected (except for the Module Monitor page, MIDI Monitor page and the Quick Load page of the Performance Mode).

Select the command menu page by pressing **COMMAND**. The **COMMAND** indicator lights (red).

Select the command page by pressing the Function button which corresponds to the command.

* Press **EXIT** to return to the previous page without executing the command.

Name Page

The **NAME** indicator is sometimes green, depending on the cursor position.

For example:

- When the cursor is located at the position for selecting a Performance, Patch or Partial (when moving the cursor to the home position by pressing **HOME**), the **NAME** indicator is green.
- When the cursor is located at the Volume name of the System Volume ID page of the System parameters (when moving the cursor to the home position by pressing **HOME**), the **NAME** indicator is green.
- When opening the Select page of a Performance, Patch, Partial or sample by pressing **LIST**, the **NAME** indicator is also green.

Open the ASCII Keyboard page by pressing **NAME**. The **NAME** indicator will be red at this time.

* Press **EXIT** to return to the previous page without changing the name.

List Page

The **LIST** indicator is sometimes green, depending on the cursor position.

For example:

- When the cursor is located at the position for selecting a Performance, Patch, Partial or sample, the **LIST** indicator is green.
- When the cursor is at the sound program name in the Quick Load page, the **LIST** indicator is green.
- When the cursor is at the Target (TG), Volume ID (ID), Current Drive (CD), Source Drive (Source) or Destination Drive (Destin), the **LIST** indicator is also green.

Open the Select page by pressing **LIST**. The **LIST** indicator will be red at this time.

* Press **EXIT** to return to the previous page without selecting.

In addition to selecting pages by pressing one of the Mode buttons, it is also possible to directly select pages with the Jump function.

Selecting, Specifying and Changing Marked Pages

You can specify or "mark" the display page indicated above a Function button by pressing **JUMP** from the Mark Set page. This is handy as it lets you immediately, with a single keystroke, select a page that might otherwise require several keystrokes to access.

1. First, select the page to be specified. Then press **MARK** to select the Mark Set page.
2. Use the cursor buttons (**▲** / **▼**), **PREVIOUS** or **NEXT** to move the cursor to the Function button to which you wish to assign the marked page.
3. Mark the page by pressing **S1/DEC**.
4. Return to the previous page by pressing **EXIT** after completing the operation.
5. Up to ten pages can be specified in this way. Repeat steps 1 — 4 above.

* The Name, List and LCD Contrast pages cannot be marked. This also means that when the **NAME**, **LIST**, or **HOME** and **SHIFT** indicators are red, the Mark Set page cannot be opened, even if **MARK** is pressed.

* The Mark Stack Free indication (shown at the bottom right of the Mark Set page) shows the remaining memory for marking additional pages. If this value is small, it may be impossible to mark additional pages. This is because not only is the page itself saved, but so are the operations necessary for selecting the page (for example, pressing **COMMAND** to select a page from the command menu page). Therefore, to conserve memory, avoid opening the menu when there is limited memory available. (In particular, selecting the Command page requires a fair amount of memory.)

* The page list of the Mark Set page is part of the System parameters. The data will be lost if you turn off the power without saving it. (⇐ P.Sys - 32)

Jumping to a Marked Page

You can select a marked page instantly with a single keystroke.

1. Press **JUMP** to change the indication over the Function button to the marked page name.

 * Since up to ten pages can be marked, press **JUMP** again to change the name to the next marked page.
 The indication will return to the original Function button when **JUMP** is pressed again.
2. To select the desired page, press the Function button corresponding to that page.

CHANGING THE SETTINGS

The operations and controls used to change the settings are described here.

First, select the page containing the parameters you wish to change (⇐ P.3 - 8).

1. Use the cursor buttons to move the cursor to the parameter to be changed.
The cursor position (selected parameter) is highlighted.
2. Change the value using **S1/DEC**, **S2/INC** or the **VALUE/CURSOR** dial.
Pressing **S1/DEC** decreases the value and pressing **S2/INC** increases it. Rotating the **VALUE/CURSOR** dial clockwise increases the value.

* When the **SHIFT** indicator is red (⇐ P3 - 12), rotating the dial does not change the value but instead moves the cursor within the page.

About the functions of **S1/DEC**, **S2/INC**

The functions of **S1/DEC** and **S2/INC** differ depending on the cursor position. Their functions are indicated at the top right of the display.

* Button, marked with " — — " at the top right of the display, does not function.

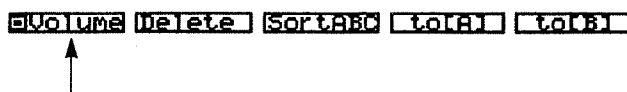
The functions of **S1/DEC** and **S2/INC**, depending on the indications in the display, are shown below.

Dec/Inc	The value of the selected parameter is decreased or increased in single steps.
— 100/+100	Scrolls the Sound program list in units of 100 in the page of the Disk Mode.
Select/ — —	Selects the Sound program in the Sound Program select page.
Mark/ — — —	Marks the Sound program in the Disk Mode page.
Type/Del	Enters or deletes characters in the ASCII Keyboard page.
Search ← / →	Searches automatically for stereo samples in the Partial SMT page.
Get/ — —	Provides for selection of the name of the sound which is to be rearranged when making a change in the sound order from the Disk Utility page.
Ins/Cancel	Employed to make changes in the sound order, or to cancel the procedure when using the Disk Utility page.
Set/ — —	The page name is registered in the Mark Set page.

Settings which can be made with the function buttons

Depending on the page selected, the settings can be changed by the Function buttons (**F1**—**F5**).

The indications above the Function buttons can be used to change the settings, as shown below.



About **HOME**

Normally, the cursor is moved using the cursor buttons. However, the cursor can also be moved to the home position (in most cases, this will be at the top left of the display) by pressing **HOME**. This is handy when you want to quickly move the cursor to the home position in a page that has many selections.

About **SHIFT**

Pressing another button while holding down **SHIFT** changes the normal function of that button. The buttons whose functions can be changed by pressing **SHIFT** are listed below.

HOME

When shifted, the cursor is not moved to the home position. Instead, the page which adjusts the contrast of the LCD is selected. The contrast of the display can then be changed by rotating the **VALUE/CURSOR** dial.

- * Press **EXIT** or one of the Mode buttons when you've completed the adjustment.
- * The contrast of the LCD is part of the System parameters. The data is lost if you turn off the power without saving it. (→ P.Sys - 32)

VALUE/CURSOR

When shifted, the value of the parameter is not changed. Instead, the cursor is moved within the page. When there are several pages for one function, the cursor moves only within the selected page.

- * The **SHIFT** operation can be accomplished in two different ways: one, by pressing another button while holding down **SHIFT**, or by pressing and releasing **SHIFT** then pressing another button. You can switch between the two methods by setting the SHIFT Lock parameter of the System parameters. (→ P.Sys - 5)
- The **SHIFT** indicator will be red in both cases.

ENTERING NAMES

Select the ASCII Keyboard page by pressing **NAME** when the **NAME** indicator is green.

The indicator is red. A name can contain up to 12 characters.

To assign a name, or change names of a sound or drive, follow the procedure for the kind of data you are working with.

Volume Name

Select the System Volume ID page (⇐ P.Sys - 29). Move the cursor to the Volume Name (to cause the **NAME** indicator to light (green). Press **NAME** to name the Volume.

Performance Name

Select the Performance Mode page (⇐ P.Pfom - 1). Move the cursor to Performance Select (to cause the **NAME** indicator to light (green). Press **NAME** to name the Performance.

Patch Name

Select the Patch Edit Mode page (⇐ P.Pach - 2). Move the cursor to Patch Select (to cause the **NAME** indicator to light (green). Press **NAME** to name the Patch.

Partial Name

Select the Partial Edit Mode page (⇐ P.Prtl - 2). Move the cursor to Partial Select (to cause the **NAME** indicator to light (green). Press **NAME** to name the Partial.

Sample Name

Select the Partial SMT page (⇐ P.Prtl - 6). Move the cursor to Sample Select (to cause the **LIST** indicator to light (green). Press **LIST** to open the Select Sample page. Move the cursor to Name (to cause the **NAME** indicator to light (green). Press **NAME** to name the Sample.

Drive Name

Select the Disk Load page (⇐ P.Disk - 2). Move the cursor to Current Drive (CD) (to cause the **LIST** indicator to light (green). Press **LIST** to open the Select Drive page. The **NAME** indicator is lit (green), so you can name the drive by pressing **NAME**.

Sound Data Name on a Drive

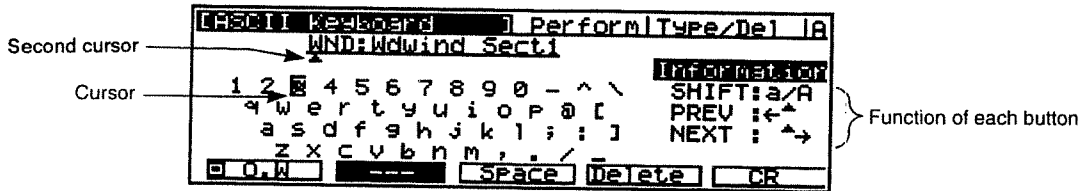
Select the Disk Utility page (⇐ P.Disk - 25). Move the cursor to Sound Name (to cause the **NAME** indicator to light (green). Press **NAME** to change names.

The **NAME** indicator will light (green) in situations other than those described above. For a detailed explanation, refer to "**NAME** in mode" in the respective mode. (Pages Pfom - 25, Pach - 20 , Prtl - 31 , Disk - 40 or Sys - 39)

Depending on the cursor position, there are two ways of entering a name.

With the Cursor at the ASCII Keyboard

As shown below, when the cursor is at the ASCII Keyboard display, move the second cursor to the position of the name to be entered. Move the cursor to the character to be input, and press **SI/DEC**. The second cursor will move to the right.



To move the second cursor

Use **PREVIOUS** or **NEXT**. The character is input at the second cursor position.

To move the cursor

Use the cursor buttons or the **VALUE/CURS** dial.

To switch between upper and lower case letters

A graphic ASCII keyboard (just like a computer keyboard) is displayed in the ASCII Keyboard page.

Pressing **SHIFT** (the indicator will be red) allows you to enter upper case letters.

*When the ASCII Keyboard page is open, the **SHIFT** button is unaffected by the setting of the SHIFT Lock parameter of the System parameters. (☞ P.Sys - 5)

About ASCII:

ASCII (American Standard Code for Information Interchange) is a standard code for data communication. The available characters, including letters of the alphabet and numbers, standardized by ASCII, can be seen on computer keyboards.

Switching the Input mode

The Input mode changes each time **F1** is pressed.

[O. W] (Overwrite mode)

The character is input over the character at the second cursor position. The old character is deleted (overwritten).

[INS] (Insert mode)

The character is inserted at the second cursor position, and the characters following the inserted character are moved to the right.

-
- Entering spaces** Move the second cursor to the position where the space is to be input, then press **F3** (Space).
- Deleting characters** Move the second cursor to the character to be deleted, then press either **F4** (Delete) or **S2/INC**.
The character at the second cursor is deleted, and the following characters are moved to the left.
- Entering a name** Press **F5** (CR).
The name you have entered is stored, changing the previously entered name.
- Canceling the name input** Press **EXIT**.
The name you have input is canceled and the display returns to the previous page. (The original name is restored.)

With the Cursor at the Name

When the cursor is at the name, as shown below, move the cursor to the desired character space. Change the character using **S1/DEC**, **S2/INC** or the **VALUE/CURSOR** dial. Letters (character codes) change as you rotate the **VALUE/CURSOR** dial.

* Character code refers to the ASCII code.



- To move the cursor** Use the cursor buttons (**◀**/**▶**).
- To enter a space** Move the cursor to the position where the space is to be input, then press **F3** (Space).
- To delete a character** Move the cursor to the character to be deleted, then press **F4** (Delete).
The character at the cursor position is deleted and the following characters are moved to the left.

* All other naming operations—switching between small and capital letters, changing the input modes, entering the name and canceling input—are the same as those when the cursor is at the ASCII keyboard.

MEMO

CHAPTER 4

CHANGING THE SOUND

In this section, changing the sound is explained. There are two ways to change the sound: one is the procedure from the panel, the other is the procedure from an external MIDI device.

CHANGING SOUND PROGRAMS FROM THE PANEL

Volume memory, Volumes, Performances and Patches are changed by front panel operations. There are two methods of changing them: one is to change the Sound program to be used within the Volume memory, and the other is to change the Volume memory itself.

Changing Within the Volume Memory

Changing the Volume Memory

Sound programs (Performances, Patches, etc.) are loaded in each Volume memory.

All the Sound programs to be used are changed when the Volume memory is changed.

To change the Volume Memory

1. Press **SYSTEM**.
This selects the System Mode page.
2. Select the Volume memory to be used by pressing **S1/DEC** or **S2/INC**.

* If the Volume B memory has not been set for use (as when the Volume B memory is set to 0 megabytes), Volume memories cannot be changed.

* See P.Sys - 5 for setting of the Wave Memory Ratio (Volume A parameter) between Volume A memory and Volume B memory.

* Since all sound data in each Volume memory is lost when resetting the Volume A parameter, be sure that you save any important sound data before executing the function.

Changing Performances

The current Volume memory can contain up to 64 Performances. (⇐ P.2 - 3)

The currently selected Performance is displayed in the Performance Mode page, Performance Play page, Performance MIDI Filter page and Performance EQ page.

[Performance Play]		Perform	Dec/Inc	[A]
• [1] WND: Wdwind Sect1				
Partch	Patch Name	[Lew]	[Pan]	[Out]
01 1	1WND: Bassoon 8va	127	0	A
02 1	2WND: Clarinet 1a	110	0	A
03 1	3WND: Oboe 3a	110	0	A
04 -	-----Off-----	127	0	A
Play	MIDI	EQ	Monitor	0-Load

To change the Performance

1. Move the cursor to the currently selected Performance name using the cursor buttons or **HOME**.
2. Change the Performance by pressing **S1/DEC** or **S2/INC**.

* When the **SHIFT** indicator is dark, Performances can be changed by rotating the **VALUE/CURS** dial.

Changing the Performance from the List

You can also change the Performance while viewing the Performance list.

1. Move the cursor to the desired Performance using the cursor buttons or **HOME**.
The **LIST** indicator will be green.
2. Open the select page of the Performance by pressing **LIST**.
The **LIST** indicator will be red.

[Select Performance] Perform Dec/Inc LA				
<Target> Performance				
No.	NAME	Time	PG#	
1	WND:Wdwind Sect1	33.6	3	
2	WND:Wdwind Sect2	45.4	4	
3	WND:Wdwind Sect3	32.8	5	
4	WND:Wdwind Sect4	60.9	6	
---	Renum	SortPG#	SortABO	Blank

3. Move the cursor to the Performance number indication (No.) by pressing **HOME**.
4. Search for the Performance to be changed by scrolling through the list by pressing **S1/DEC** or **S2/INC**.

*When the **SHIFT** indicator is dark, the list can be scrolled by rotating the **VALUE/CURSOR** dial.

5. Using the cursor buttons, move the cursor to the name (Name) of the Performance you wish to change.

*You can check the sound; move the cursor to the Performance name and play the MIDI keyboard. (In this case, the Patch of the Part assigned to the same MIDI channel as the MIDI keyboard will be heard.)

6. Change the Performance by pressing **S1/DEC**. The previous page will then return.

* Press **EXIT** to cancel the operation.

Changing Patches



There are a maximum of 128 Patches in the current Volume memory (⇐ P.2 - 3).

Patches which can be sounded for each Part (1—32) are displayed in the Performance Play page.

[Performance Play] Perform Dec/Inc LA				
• [1]WND:Wdwind Sect1				
Part	Ch	Patch Name	[Level]	[Pan]
01	1	1WND:Bassoon 8va	127	0 A
02	1	2WND:Clarinet 1a	110	0 A
03	1	3WND:Oboe 3a	110	0 A
04	-	-----	127	0 A
Play MIDI EQ Monitor D-Load				



To change Patches

1. Move the cursor to the Patch name (Patch Name) using the cursor buttons.

* Use the cursor buttons ( / ) to change the Part indication (page).

2. Change Patches by pressing  or .

If the Patch has been set to OFF, the Part will not sound.

* When the  indicator is dark, Patches can be changed by rotating the  dial.

Changing the Patch from the List


You can also change Patches while viewing the Patch list.


1. Move the cursor to the Patch name (Patch Name) using the cursor buttons.

The  indicator will be green.

* To change indications (pages) for a Part, press the cursor buttons ( / ).

Alternatively, move the cursor to Part, then use  or .


2. Choose the Select page of the Patch by pressing .



The  indicator will be red.

[Select Patch] Patch -100/+100 [A]			
<Target> Part #01			
No.	Name	Time	PG#
1	WND: Bassoon 8va	17.3	4
2	WND: Clarinet 1a	1.7	9
3	WND: Oboe 3a	14.6	2
4	WND: Ensl. Horn 1a	13.5	1
--- [Renum] [SortPG#] [SortABC] [Set Off]			

3. Move the cursor to the Patch number (No.) by pressing .

* At the Patch number indication (No.), the cursor can be moved between the 100s position and the 1s position of the Sound program number. When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.

4. Search for the desired Patch by scrolling through the list by pressing  or .

* When the  indicator is dark, you can scroll through the list using the .

- 5.** Move the cursor to the name (Name) of the Patch to be changed using the cursor buttons.

*You can check the sound; move the cursor to the Patch name and play the MIDI keyboard.

- 6.** Change the Patch by pressing **S1/DEC**.
The previous page will return.

* Press **EXIT** to cancel the operation.

Switching Volume Memory Sections

Changing Volumes (Loading)

Only one Volume can be loaded at a time into each Volume memory (⇐ P.2 - 3).

A Volume can be loaded from the Quick Load page or Disk Load page.

Precautions when Loading a Volume

Setting the Volume Memory

Either Volume A or B can be selected as the destination Volume memory for loading. However, the Volume cannot be loaded to Volume B memory when the Volume B memory is set to 0 megabytes.

Setting the Load - While - Playing Function

If the Load - while - playing function (⇐ P.Sys - 4) of the System parameters is set to OFF, and the Quick Load page or Disk Mode page has been selected, no sound can be played.

If Load - while - playing of the System parameters has been set to ON, the play status of the SP - 700 is as described below for the following situations:

☐ **When the destination is a Current Volume Memory**

If you clear all existing sound data and load a Volume, no sound can be produced during loading. If you load the Volume in an empty location without clearing the existing sound data, you can play the unit even during loading. However, if sound data of the same name as the sound data to be loaded exists, and you erase (overwrite) the existing sound data and then load, no sound can be produced during loading.

☐ **When the destination is a Volume Memory that is not currently selected**

You can play the unit even during loading, whether you clear the existing sound data or load into a free memory area. However, if sound data of the same name as the sound data to be loaded exists, and you erase (overwrite) the existing sound data and then load, no sound can be produced during loading.

About the Message display (while loading)

When sound data already exists in the destination Volume memory, the Message page is automatically selected when you try to execute the load operation.

The Message page is also selected when the overwrite switch (⇐ P.Sys - 10) of the System parameters is set to OFF, and when sound data having the same name as the data to be loaded already exists in the destination Volume memory.

See P.2 - 15 for more details.

Quick Load page

If a Volume has been properly assigned beforehand, you can easily load it from the Quick Load page.

1. Select the Performance Mode page by pressing **PERFORMANCE**.
2. Select the Quick Load page by pressing **F5** (Q - Load).
3. Press **F1** to set the sound data to be loaded to Volume. (Set the Target to Volume.)
The Targets change each time you press **F1**.

Quick Load					Muted	Dec/Inc	1A
<Target> Volume							
No.	Name	Time	DP	Int.			
1	WND:Woodwinds	78.2	[0]	A 90.8s			
2	STR: Sect. Muted	78.8	[0]	B .0s			
3	STR: Marcato 2	53.2	[0]				
4	ORG: Organs	45.4	[0]				
Volume Delete					SortAsc	to A	to B

4. Pressing **PREVIOUS** or **NEXT**, or using the cursor buttons (**▲**/**▼**), changes the list of the Volumes (which were already assigned in the Quick Load page) to search for the Volume to be loaded.
5. Using the cursor buttons (**▲**/**▼**), move the cursor to the name of the Volume you wish to load.

*The remaining memory for each Volume is displayed (in seconds; calculated for a sampling rate of 44.1kHz) at the "Int." indication at the right side of the display. Since the capacity (Time) of the Sound program to be loaded is also indicated in seconds, check whether there is enough memory or not to load. If not enough memory remains, the data will only be partially loaded.

*When the Volume A parameter (P.Sys - 5) of the System parameters is set, and when Volume B memory is set to 0 megabytes, no data can be loaded, even by pressing **F5** (to [B]).

6. Determine the Volume memory to which the data will be loaded by pressing either **F4** (to [A]) or **F5** (to [B]). The load operation is executed and "Complete" appears in the display when the operation is complete.
7. Return to the Performance Mode page by pressing **EXIT**.

How to Assign and Change Sound Data in the Quick Load Function

The Sound program list in the Quick Load page can be freely registered or changed.

- 1.** Select the Performance Mode page by pressing **PERFORMANCE**.
- 2.** Select the Quick Load page by pressing **F5** (Q - Load).
- 3.** Select the unit (Target) of the Sound program to be assigned by pressing **F1**.
The Targets change each time **F1** is pressed.
- 4.** Using the cursor buttons, move the cursor to the Sound program name of the list number to be assigned.
The **LIST** indicator will be green when moving the cursor to the Sound program name.
- 5.** Press **LIST**.
The Select page of the selected Sound program (Target) is selected.

* You can also choose the Select page by pressing **S1/DEC**.
- 6.** Move the cursor to the indication "CD" in order to change the current drive (CD).
Change the current drive (CD) using **S1/DEC**, **S2/INC** or the **VALUE/CURS** dial. (When the **SHIFT** indicator is red, the dial can be used to move the cursor.)
- 7.** Move the cursor to the Sound program name to be assigned.
- 8.** Finally, assigned the data by pressing either **F5** (Select) or **S1/DEC**.
The display automatically returns to the Quick Load page.

* Press **EXIT** to cancel the operation.

- 9.** Make the Sound program list for Quick Load by repeating steps 3—8 above.

* Since the Sound program list of the Quick Load page is part of the System parameters, it will be lost if you turn off the power without saving it (→ P.Sys - 32).

Precautions when Quick Loading

The drive number (Drv) is displayed in the Quick Load page, and it indicates the SCSI ID of the SCSI device that contains the Sound program. The drive number is also automatically registered when assigning the Sound program name in the Quick Load page.

This drive number determines which drive the Sound program should be loaded from when loading Sound programs using Quick Load. (When loading a Sound program in the Disk Load page, select the drive containing the desired Sound program from the "CD" (current drive) parameter, then load the Sound program. In the Quick Load page it is unnecessary to select the drive in order to load the Sound program, as this is determined by the drive number. The current drive is not changed even when loading the Sound program using Quick Load.)

The drive number can be changed from the Quick Load page, but normally this should not be changed.

The following example illustrates in what situations the drive numbers should be changed:

Two CD - ROM drives (A and B) are connected, and the Sound program name is registered to the Quick Load page from the A drive. The drive number of the Sound program is the same as the SCSI ID of drive A. Save the Sound program list of the Quick Load function (System parameters) and turn off the power.

The next time you use the SP - 700, suppose that you insert the CD - ROM disk intended for drive A in CD - ROM drive B by mistake. The drive number of the Sound program in the Quick Load page remains at drive A's SCSI ID. When you try to execute the Quick Load, the Sound program cannot be loaded as the correct CD - ROM disk (which has the desired Sound program) has not been inserted in CD - ROM drive .

In such a case, the Sound program can be loaded by executing the Quick Load function after changing the drive number of the Sound program to the SCSI ID of CD - ROM drive B.

Alternately, you can exchange the CD - ROM disks between CD - ROM drives A and B, then execute the Quick Load operation.

- * Eject the CD - ROM disk only after the drive indicator on the SCSI device goes out.
- * Be sure to execute the Scan command when replacing CD - ROM disks. (→ P.1 - 8)

Disk Load Page

Volumes can be loaded in the Disk Load page.

1. Press **[DISK]** to select the Disk Mode page.
SCSI devices connected to the SP - 700 are indicated in this page. The SCSI device indicated by ● in the display is the currently selected drive (current drive).

```

[Disk Mode] Perform ---/--- 1A
* [0]ID0:CD-ROM DRIVE [4]ID4: - No Drive
 [1]ID1:Formatted      [5]ID5: - No Drive
 [2]ID2: - No Drive    [6]ID6: - No Drive
 [3]ID3: - No Drive    [7]ID7: SP-700 Self
Load Save Copy Delete Util

```

* The connected SCSI device can be named. See P.Disk - 44 for details.

2. Press **[F1]** (Load) to select the Disk Load page.

```

[Disk Load] Muted Dec/Inc 1A
*TG[Volm] *ID[All] *CD[ID0:CD-ROM DRIVE]
Exfiles Time PG# Int.
1: ***:RHYTHM SEC.1 106.0 --- A 12.6s
2: KIT:Drum Kits 1 201.5 --- B .0s
3: KIT:Cheese Kits 36.0 --- Disk
4: DRM:Brushes 85.6 --- .0s
AllOff AllOn --- totA totB

```

3. Set the Sound program to be loaded with the Target parameter (TG).
Check that Target is set to "Volm." If not, press **[HOME]** to move the cursor to TG, then press **[S1/DEC]** or **[S2/INC]** to change it to "Volm."

*When the **[SHIFT]** indicator is dark, the setting can also be changed using the **[VALUE/CURSOR]** dial.

4. Check that ID (Volume ID) is set to "All." If not, move the cursor to ID, then press **[S1/DEC]** or **[S2/INC]** to set it to "All."

When this is set to "All," the Sound program names of all Volume IDs are displayed. When assigning the Volume ID, only the Sound program which has the assigned Volume ID is displayed.

5. Move the cursor to "CD" then press **[S1/DEC]** or **[S2/INC]** to change the current drive.

6. Move the cursor to the Sound program number.

The cursor can be moved between the 100s position and the 1s position of the Sound program number.

When scrolling through the list using **S1/DEC** or **S2/INC**, the method of scrolling differs depending on the cursor position.

When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

7. Scroll through the Volume list using **S1/DEC**, **S2/INC** or the **VALUE/CURSOR** dial to search for the desired Volume. (When the **SHIFT** indicator is red, the dial can be used to move the cursor.)**8.** Move the cursor to the name of the Volume to be loaded.

* The remaining memory of each Volume memory is indicated (in seconds) at the "Int." indication at the right of the page. Since the capacity (Time) of the Sound program to be loaded is also indicated in seconds, determine whether or not there is enough memory for it to be loaded. If not enough memory remains, the wave data would only be partially loaded.

9. Mark the Volume to be loaded by pressing **S1/DEC**.

Only the marked Sound program will be loaded.

* Several Sound programs can be marked. If not enough memory remains, the wave data would only be partially loaded.

* All previously programmed marks are canceled when pressing **F1** (AllOff). All the Sound programs of the selected target can be marked by pressing **F2** (AllOn).

* Changing the target automatically cancels all marks.

* When even one Volume is marked, an unmarked Sound program at the cursor position cannot be loaded. (When there is no marked Volume, the Sound program at the cursor is loaded.)

10. Determine the Volume memory to which the data will be loaded by pressing either **F4** (to [A]) or **F5** (to [B]). The load operation is executed and "Complete" appears in the display when the operation is complete.

* When the Volume A parameter of the System parameters is set (⇐ P.Sys - 5), and when Volume B memory is set to 0 megabytes, the Volume cannot be loaded, even by pressing **F5** (to [B]).

11. Return to the Performance Mode page by pressing **PERFORMANCE**.

CHANGING THE SOUND PROGRAMS BY MIDI MESSAGES

You can change the Volume memory section or the Sound programs of a Volume/Performance/Patch by MIDI messages from a connected MIDI controller.

These Sound programs are changed by a combination of a Bank Select message and a Program Change message.

* To change sounds, you must open the Performance Mode page or Performance Play page. When you are in the Patch Edit mode or Partial Edit mode or a Command page/ASCII Keyboard page/Select page, etc., you cannot change sounds.

Changing Within the Volume Memory

Changing the Volume Memory

When using the SP - 700 in the Performance Mode, it is possible to change the Volume memory by a Bank Select message (Control Change number 0) received over the control channel.

When a Bank Select message value of 0 is received, the SP - 700 switches to Volume A memory, and switches to Volume B memory when receiving a value of 1. The SP - 700 ignores all other values, 2—127.

If the Volume B memory has not been set for use (when set to 0 megabytes), it cannot be selected, even when a Bank Select message value of 1 is received.

* The sound may be cut off at the instant the Volume memories are switched. This does not indicate a malfunction.

The Volume memory sections are not switched when only a Bank Select message (Control Change number 0) is received. The Volume memory is not actually switched until the unit receives a Program Change message over the control channel (after the Bank Select message is received). The Sound program is also changed at the same time. The Sound program to be changed, whether Performance or Volume, is determined by the Control Mode parameter and the received program number.

See P.4 - 13, "Changing Performances," and P.4 - 19 "Changing Volumes (Loading)."

Related Parameters

Control channel (☞ P.Sys - 11)

Control mode (☞ P.Sys - 11)

Volume A (☞ P.Sys - 5)

Current Volume memory (☞ P.Sys - 1)

Changing Performances

Each Volume memory can contain a maximum of 64 Performances (☞ P.2 - 3).

When using the SP - 700 in the Performance mode, the Performances can be changed by Program Change messages received over the control channel.

Program numbers to be used to change the Performances are 1—64 (65—128 may be used depending on the Control Modes). The Performance having the same number as the program number received via MIDI is selected.

The Control Mode determines (☞ P.Sys - 11) which Volume memory section is selected for changing the Performance. The three following Control Modes are available:

[Perf]

When a program number from 1—64 is received, the Performance in Volume A memory having the same number as the program number received is selected.

When a program number from 65—128 is received, the corresponding Performance in Volume B memory is selected. In this case, program number 65 corresponds to program number 1 of the parameter, and so on, up to 128 (which corresponds to 64).

For example, suppose that the current Volume memory is set to A, and the received program number is 100. In this case, the Volume memory is changed from A to B, and the Performance that corresponds to program number 36 in the Volume B memory is selected.

If Volume B memory has not been set for use (when set to 0 megabytes), the Volume memory and selected Performances will not change, even when a program number from 65—128 is received.

* The sound may be cut off at the instant the Volume memories are switched. This does not indicate a malfunction.

* When a Bank Select message and Program Change message are received, the Bank Select message is ignored.

[Perf/Volume], [Perf/Volume2]

When a program number from 1—64 is received, the Performance number in the current Volume memory is changed to match the received program number.

* A new Volume is loaded when a program number from 65—128 is received.

* When a Program Change message from 1—64 is received after a Bank Select message, the Volume memory sections are switched and the Performance is changed to match the received program number.

* When a Bank Select message and a Program Change message (from 65—128) are received, the Bank Select message is ignored.

Related Parameters

Control channel (☞ P.Sys - 11)

Control mode (☞ P.Sys - 11)

Program number of Performance (☞ P.Pfm - 27)

Volume A (☞ P.Sys - 5)

Current Volume memory (☞ P.Sys - 1)

To change the Performance

1. Press **SYSTEM**.
This selects the System Mode page.
2. Press **F3** (MIDI) to select the MIDI Control page.
3. Move the cursor to the control channel.
4. Set the control channel by pressing **S1/DEC** or **S2/INC**.
The Performance is changed when a Program Change message is received over the control channel.

 - * The control channel value here should NOT match the MIDI channel for the Part. Since the Program Change message of the control channel has priority, when they are the same value, the Patch assigned to the Part cannot be changed.
 - * When the control channel is set to OFF, Performances cannot be changed by Program Change messages.
 - * When the **SHIFT** indicator is dark, you can set the control channel by rotating the **VALUE/CURSOR** dial.
5. Move the cursor to the Control Mode using the cursor buttons.
6. Set the Control Mode to one of the settings 1 (Perf)—3 (Perf/Volum2) by pressing **S1/DEC** or **S2/INC**.

 - * Set the Control Mode to 1 when you wish to change only the Performance without loading the Volume by a Program Change message.
 - * When the **SHIFT** indicator is dark, the Control Mode can be set by rotating the **VALUE/CURSOR** dial.
7. Set the current Volume memory, if necessary.
Press **EXIT** to select the System Mode page.
Set the Current Volume Memory using the cursor buttons and **S1/DEC** or **S2/INC**.

 - * If the Volume A parameter is set in the System Parameter page, and the ratio of used wave memory between Volume A and Volume B has been changed, all sound data in both Volumes will be lost. Edit this parameter when there is no sound data currently loaded or when there is sound data that can be erased.
8. Return to the Performance Mode by pressing **PERFORMANCE**.

9. Press **[F1]** (Play) to select the Performance Play page.
10. Press **[HOME]** to move the cursor to the home position.
11. Press **[LIST]** to select the Select page of the Performance.
12. Press **[HOME]** to move the cursor back to the home position.
13. Check the program numbers of each Performance by scrolling through the list using the cursor buttons (**[▲]**/**[▼]**).

*When the **[SHIFT]** indicator is dark, you can scroll through the list by rotating the **[VALUE/CURSOR]** dial.

[Select Performance] Perform Dec/Inc 18				
<Target> Performance				
No.	Name	Time	PG#	
1:	WND:Wdwind Sect1	33.6	3	
2:	WND:Wdwind Sect2	45.4	4	
3:	WND:Wdwind Sect3	32.8	5	
4:	WND:Wdwind Sect4	60.9	6	
--- [Renum] [SortPG#] [SortABO] [Blank]				

14. Move the cursor to the program number indication (PG#) using the cursor buttons.
15. Set the program number by pressing **[S1/DEC]** or **[S2/INC]**.

*When the **[SHIFT]** indicator is dark, the program number can be set by rotating the **[VALUE/CURSOR]** dial.

*Do not assign the same program number to several Performances. When the same program number is assigned, the Performance with the lowest number has priority in being changed.

*When changing the program number, check the correspondence between the program numbers transmitted by the MIDI device (such as a sequencer) and the program numbers of the SP - 700. Data cannot be played when the correspondence of program numbers and Performances is changed.

A Renumber command is available from the Select Performance page (☞ P.Pfom - 27). By executing this command, the program number of the Performance can be changed to match the Sound program number (Performance). Press **[F2]** (Renum) to execute this operation.

16. Press **[PERFORMANCE]** to select the Performance Mode page.
17. Performances can be changed from a connected MIDI device by sending a Bank Select message and a Program Change message (program number 1—64) over the control channel.

Changing Patches

The current Volume memory can contain a maximum of 128 Patches (☞ P.2 - 3).

When using the SP - 700 in the Performance mode, Patches can be changed by a program number received over the MIDI channel for each Part.

The program numbers that can be used to change Patches range from 1 — 128. A Patch (number) is changed to match the received Program Change number.

The Patches are changed in the current Volume memory.

You can set the SP - 700 to either respond to or ignore Program Change messages for each MIDI channel. You should set it to respond to Program Change messages so that Patches can be changed.

Related Parameters

Part channel (☞ P.Pfom - 4)

Patch program number (☞ P.Pfom - 29, P.Pach - 22)

MIDI filter (☞ P.Pfom - 10)

Volume A (☞ P.Sys - 5)



Current Volume memory (☞ P.Sys - 1)

To change a Patch

1. Set the current Volume memory, if necessary.
Press **SYSTEM** to select the System Mode page.
Set the Current Volume Memory using the cursor buttons and **S1/DEC** or **S2/INC**.

* If the Volume A parameter is set in the System Parameter page, and the ratio of used wave memory between Volume A and Volume B has been changed, all sound data in both Volumes will be lost. Edit this parameter when there is no sound data currently loaded or when there is sound data that can be erased.

2. Press **PERFORMANCE** to select the Performance Mode page.
3. Press **F1** (Play) to select the Performance Play page.


4. Scroll through the Part indications using the cursor buttons (/) to check and change the MIDI channel for each Part.

* The Part channel value here should NOT match the control channel. Since the Program Change message of the control channel has priority, when they are set to the same value, the Patch assigned to the Part cannot be changed.


* When the Part channel is set to OFF, Patches cannot be changed by Program Change messages.


* When a Program Change message is received over a channel, all the Patches of the Parts sounding on that channel are changed. Be careful when setting the channels of several Parts to the same value, and then setting split or positional crossfades using different Patches. In such situations, change the Performances over the control channel.

5. Move the cursor to the Patch name.



The  indicator will be green.

6. Press  to select the Select Patch page.




The  indicator will be red.



7. Press  to move the cursor to the home position (the 100s position of the Sound program number).

* The cursor can be moved between the 100s position and the 1s position of the Sound program number.

When scrolling through the list using  or , the scrolling method differs depending on the cursor position.

When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

8. Check the program number of each Patch by scrolling through the list using ,  or the  dial.

* When the  indicator is dark, you can scroll through the list by rotating the  dial.

[Select Patch] Patch -100/+100 A			
<Target> Part #01			
No.	Name	Time	PG#
1	WND:Bassoon 8va	17.3	4
2	WND:Clarinet 1a	1.7	9
3	WND:Oboe 3a	14.6	2
4	WND:Engl.Horn 1a	13.5	1
--- [ReNum] [SortPG#] [SortABC] [Set Off]			

9. Move the cursor to the program number indication (PG#) using the cursor buttons.

10. Assign the program number by pressing **S1/DEC** or **S2/INC**.

* When the **SHIFT** indicator is dark, the program number can be set by rotating the **VALUE/CURSOR** dial.

* Do not assign the same program number to several Patches. If the same program number has been assigned, the Patch with the lowest number has priority in being changed.

* When changing the program number, check the correspondence between the program numbers transmitted by the MIDI device (such as a sequencer) and the program numbers of the SP - 700. Data cannot be played when the correspondence of program numbers and Patches is changed.

A Renumber command is available from the Select Patch page (P.Pfom - 29, P.Pach - 22). By executing this command, the program number of the Patch can be changed to match the Sound program number (Patch). Press **F2** (Renum) to execute this operation.

11. Press **EXIT** to select the Performance Mode page.

12. Press **F2** MIDI to select the MIDI Filter page.

[Perform MIDI Filter] Perform Dec/Inc [A]																
Ch.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 All
Prog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
Bend	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
Mod	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
Hold	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
Play MIDI EQ Monitor D-Load																

13. Move the cursor to the Prog indication (receiving switch of Program Change messages) of each MIDI channel.

* If "Prog" is not shown in the display, press **PREVIOUS**.

14. Determine whether or not the SP - 700 will respond to Program Change messages by pressing **S1/DEC** or **S2/INC**.

When this is set to "○", Program Change messages are received. When it is set to "—", they are ignored.

* You can set all channels to the same number by moving the cursor to "All" and pressing **S1/DEC** or **S2/INC**. This is convenient when you want to have sounds on all channels respond to the same MIDI data.

* When the **SHIFT** indicator is dark, you can set whether Program Change messages are received or not by rotating the **VALUE/CURSOR** dial.

15. Press **PERFORMANCE** to select the Performance Mode page.

16. Patches are changed by reception of Program Change messages (program numbers 1 — 128) over the Part channel.

Replacing Volume Memory Sections

Changing Volumes (Loading)

Only one Volume can be loaded at a time into each Volume memory (☞ P.2 - 3)

When using the SP - 700 in the Performance Mode, the Volume can be loaded from the current drive by reception of a Program Change message over the control channel.

The program numbers to be used for loading a Volume are 65—128. The Volume which is assigned to the same program number as the received program number will be loaded.

*When loading a Volume with a MIDI Program Change message, the Message page will not appear, unlike when loading a Volume from the panel. Load the Volume after erasing all sound data in the destination Volume memory. Be careful, since all edited data will be lost if you load the new Volume without saving.

The destination Volume memory is determined by the Control Mode (☞ P.Sys - 11). The following three Control Modes are available:

[Perf]

In this mode, Performances are changed.

*Since a Volume cannot be loaded, do not select this setting when you wish to load a Volume.

*When a Bank Select message and Program Change message are received, the Bank Select message is ignored.

[Perf/Volum]

In this mode, the Volume in the current drive which has the same program number as the received program number (65—128) is loaded into the current Volume memory.

*No sound can be output while a Volume is being loaded.

*When the received program number is from 1—64, the Performance in the current Volume memory will be changed.

*When receiving a Program Change message from 1—64 after receiving the Bank Select message, the Volume memory sections are switched and the Performance is changed to the one that corresponds to the received program number.

*When a Bank Select message and Program Change message from 65—128 are received, the Bank Select message is ignored.

[Perf/Volum2]

In this mode, the Volume in the current drive which has the same program number as the received program number (65—128) is loaded into the Volume memory not currently selected.

- *If the Load - while - playing function is set to ON, sound can be output even while loading. When it is set to OFF, no sound can be output at all.
- *If the Volume B memory has not been set for use (when set to 0 megabytes), a new Volume cannot be loaded into Volume B memory.
- *When the received program number is from 1—64, the Performance in the current Volume memory will be changed.
- *When receiving a Program Change message from 1—64 after receiving the Bank Select messages, the Volume memory sections are switched and the Performance is changed to the one which corresponds to the received program number.
- *When a Bank Select message and Program Change message from 65—128 are received, the Bank Select message is ignored.

Related Parameters

Control channel (☞ P.Sys - 11)
 Control mode (☞ P.Sys - 11)
 Current drive (☞ P.Disk - 3)
 Program number of Volume (☞ P.Disk - 27)
 Load - while - playing function (☞ P.Sys - 4)
 Volume A (☞ P.Sys - 5)
 Current Volume memory (☞ P.Sys - 1)

To change a Volume

1. Press **[SYSTEM]** to select the System Mode page.
2. Press **[F3]** MIDI to select the MIDI control page.

[MIDI Control]		1 Perform	Dec/Inc	1A
Parameter	Information			
Control Channel	Off	[Off][1~16]		
Control Mode	2	[1:Perf] [2:Perf/Volum] [3:Perf/Volum2]		
PRM	SCSI	MIDI	Vol ID	LD/BU

3. Move the cursor to the control channel (Control Channel).
4. Assign the control channel by pressing **[S1/DEC]** or **[S2/INC]**.
 The Volume is loaded by the Program Change message received over the control channel set here.

- *Do not set the control channel to the same value as that of the MIDI channel of the Part.
 Since the Program Change message of the control channel has priority, if they are the same, the Patch of the Part cannot be changed.

* When the control channel is set to Off, the Volume cannot be loaded by Program Change messages.

* When the **[SHIFT]** indicator is dark, set the control channel by rotating the **[VALUE/CURSOR]** dial.

5. Move the cursor to the Control Mode using the cursor buttons.

6. Set the Control Mode to either 2 (Perf/Volume) or 3 (Perf/Volume2) by pressing **[S1/DEC]** or **[S2/INC]**.

* When this is set to 1 (Perf), the Volume cannot be loaded by Program Change messages.

* The Volume can be loaded by Program Change messages 65—128. The Performances can be changed by Program Change messages 1—64.

* When the **[SHIFT]** indicator is dark, you can set the Control Mode by rotating the **[VALUE/CURSOR]** dial.

7. Set the Load - while - playing function or Current Volume memory as necessary.

To set the Load - while - playing function:

Press **[F1]** (PRM) to select the System Parameter page.

Call up the second page by using **[PREVIOUS]** or **[NEXT]**.

Set Load/Play to ON using the cursor buttons and **[S1/DEC]** or **[S2/INC]**.

To set the Current Volume memory:

Press **[EXIT]** to select the System Mode page.

Set the Current Volume Memory using **[S1/DEC]** or **[S2/INC]**.

* When you load a Volume to a Current Volume Memory (when the Control Mode is set to 2:Perf/Volume), you cannot play the unit even if 'Load While Playing' is set to ON. When loading into the Volume Memory not currently selected (when the Control Mode is set to 3:Perf/Volume2), you can play the unit even during loading if 'Load While Playing' is set to ON.

* If the Volume A parameter is set in the System Parameter page, and the ratio of used wave memory between Volume A and Volume B has been changed, all sound data in both Volumes will be lost. Edit this parameter when there is no sound data currently loaded or when there is sound data that can be erased.

8. Press **[DISK]** to select the Disk Mode page.

9. Press **[F5]** (Util) to select the Disk Utility page.

[Disk Utility] Muted Dec/Inc [A]			
• [TG(Volm)] • [ID(All)] • CD [ID1:Formatted]			
30files	Time	PG#	Int.
1: ***:RHYTHM SEC.1	106.0	65	A 12.6s
2: KIT:Drum Kits 1	201.5	66	B .0s
3: KIT:Cheese Kits	36.0	67	Disk
4: DRM:Brushes	85.6	68	41.9s
[Format]	[ParkHds]	[Restart]	[Optimize]
[Cancel]			

- 10.** Using the cursor buttons and **S1/DEC** or **S2/INC**, set the Target (TG) to "Volm," the Volume ID (ID) to "All," and change the current drive (CD) as necessary.

* Set the Volume ID (ID) to "All." Since a maximum of 128 Volumes can be stored in a single SCSI device, it is necessary to check for redundant program numbers by indicating all the Volumes.

- 11.** Move the cursor to the Sound program number.

The cursor can be moved between the 100s position and the 1s position of the Sound program number. When scrolling through the list using **S1/DEC** or **S2/INC**, the scrolling method differs depending on the cursor position.

When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

- 12.** Check the program number by scrolling through the Volume list using **S1/DEC**, **S2/INC** or the **VALUE/CURSOR** dial. (When the **SHIFT** indicator is red, this dial is used to move the cursor.)

- 13.** Use the cursor buttons to move the cursor to the program number (PG#) and assign the program number using **S1/DEC**, **S2/INC** or the **VALUE/CURSOR** dial.

* Do not assign the same program number to several different Volumes. If the same program number is used for different Volumes, the Volume retrieved first by the SP - 700 is loaded.

* The program numbers for the Volume are from 65—128. Set the Volumes which do not use these program numbers to OFF.

* When changing the program number, check the correspondence between the program numbers transmitted by the MIDI device (such as a sequencer) and the program numbers of the SP - 700. Data cannot be played when the correspondence of program numbers and Performances is changed.

- 14.** Press **PERFORMANCE** to select the Performance Mode page.

- 15.** The Program Change message (program numbers 65—128) is output on the control channel from the MIDI keyboard, and the Volume is loaded into the Volume memory.

About MIDI Program Numbers

The MIDI program number messages are sent as values from 0—127. Since the range on the SP - 700 is from 1—128, keep this discrepancy in mind when selecting programs via MIDI; for example, when the SP - 700 receives a program number of 0, it changes to Volume, Performance or Patch number 1.

PRECAUTIONS WHEN EDITING SOUND PROGRAMS

There are some precautions you should take when creating sounds by editing existing Sound programs. Such precautions are explained in this section.

*When Sound programs of lower levels are being edited, all higher level Sound programs (in the hierarchy) which use those lower level Sound programs are changed as well.

Refer to the section about the sound data relationships on P.2 - 10 for details.

HOW TO EDIT PATCHES

There are two ways to edit a patch.

Method A (Editing in the Performance Mode)

You can edit parameters of the Patch (which is assigned to the Part) while listening to the Sound program of the entire Performance. As you are editing the Patch, all parameters (from those of Performance to sample) are active.

With this method of editing, the sounds are output in multi timbral fashion. This means that you can monitor the entire sound of the Performance while finely adjusting the individual Sound programs of a Patch assigned to a particular Part, allowing you to easily and intuitively blend the sounds in making a Performance.

For example, when you are editing the Patch level or Output Assign, the sound that is output during editing is affected by the level or Output Assign of the Part of the Performance. Because of this, the actual sound may sometimes sound differently from the settings you make during editing.

This is the same method of editing as that of a parameter of the Patch assigned to the Part in the Performance Play page.

To select the page:

Press **PERFORMANCE** → Press **COMMAND** → Press **F1** (Edit Patch)
→ Edit page for the Patch

* The LEDs of the Mode buttons change as follows: **PERFORMANCE** lights and **PATCH** flashes.

* The * marks are shown at both the left and right of the page name when opening the Edit page from the Command Menu.

Caution!

If no Patch is assigned to any of the Parts (1 — 32) of the selected Performance (for example, when the Performance has been initialized), Method B (described on the next page) should be used instead of Method A, even though the page is opened according to Method A.

Caution!

Just by selecting this Edit page, it is not possible to tell whether Method A or Method B is being used. The way in which the sounds are output is indicated at the right side of the page name.
If “Perform” is indicated, the entire Performance sounds and Method A is being used.
If “Patch” is indicated, only the Patch itself sounds and Method B is being used.

Conditions of this method:

→ Only the Patch which is assigned to the Part can be selected for editing; it cannot be changed, however.

If you wish to edit a Patch which is not assigned to the Part using Method A, assign the Patch to the Part from the Performance Play page. (⇐ P.Pfom - 4)

→ The Patch to be edited responds over the same MIDI channel set for the Part to which that Patch has been assigned. Therefore, that Patch will not be output if the MIDI controller is transmitting over a different MIDI channel. When the MIDI channel of the Part is set to off, the Patch will not be output either.

To change the MIDI channel, set the MIDI channel of the Part from the Performance Play page. (⇐ P.Pfom - 4)

Method B (Editing in the Patch Edit Mode)

You can edit the parameters of a Patch while listening to the Sound program of only the Patch itself. As you are editing the Patch, the Performance parameters are inactive; in other words, only the parameters from Patch to sample are active.

Since the manner in which the sound is output is not affected by the Performance parameter settings in this method, you can create a Sound program for a Patch while monitoring only that sound.

For example, if you are editing the Patch Level or Output Assign, the current level and Output Assign settings when monitoring the edit by outputting the sound will become the same as those of the Patch parameters, since they are not affected by the Part Level or Part Output Assign of the Performance.

To select the page: Press PATCH → Patch Edit page

Conditions of this method:

- Any Patch in the current Volume memory can be selected for editing.
- Since the OMNI ON condition is active, any MIDI channel (1 — 16) can be used to play the Patch to be edited.

HOW TO EDIT PARTIALS

There are three ways to edit a Partial.

Method C (Editing in the Performance Mode)

You can edit parameters of the Partial used by a Patch (assigned to a Part) while listening to the Sound program of the entire Performance. As you are editing the Partial, all parameters (from those of Performance to sample) are active.

With this method of editing, the sounds are output in multi-timbral fashion. This means that you can monitor the entire sound of the Performance while finely adjusting the individual sounds of the Partial of a Patch (assigned to a particular Part), allowing you to easily and intuitively blend the sounds in making a Performance.

For example, when you are editing the Partial level or Output Assign, the sound that is output during editing is affected by the Part Level and Output Assign parameters of the Performance, and the Patch Level and Output Assign parameters of the Patch. Because of this, the actual sound may sometimes sound differently from the settings you make during editing.

To select the page:

Press **PERFORMANCE** → Press **COMMAND** → Press **F1** (Edit Patch) → Press **COMMAND** → Press **F1** (Edit Partial) → Edit page for the Partial

*The LEDs of the Mode buttons change as follows: **PERFORMANCE** lights and **PARTIAL** flashes.

*The * marks are shown at both the left and right of the page name when opening the Edit page of the Partial from the Command Menu.

Caution!

If no Patch is assigned to any of the Parts (1 — 32) of the selected Performance (for example, when the Performance has been initialized), Method D should be used instead of Method C, even though the page is opened according to Method C.

Also, when no Partial is assigned to any key of the selected Patch (for example, when the Patch has been initialized), the method of editing automatically switches to Method E (not C).

Caution!

Just by selecting this Edit page, it isn't possible to tell whether Method C, Method D or Method E is being used. The way in which the sounds are output is indicated at the right side of the page name.

If "Perform" is indicated, the entire Performance sounds and Method C is being used.

If "Patch" is indicated, only the Patch itself sounds and Method D is being used.

If "Partial" is indicated, only the Partial itself sounds and Method E is being used.

Conditions of this method:

→Only Partial which are being used by the Patch assigned to the Part (Partial assigned to each key with the Patch Split), can be selected for editing; they cannot be changed, however.

If you wish to edit a Partial which is not assigned to a key using Method C, assign the Partial to the key in the Patch Split page. (⇐ P.Pach - 8)

- The Partial to be edited responds over the same MIDI channel set for the Part to which that Partial's Patch has been assigned. Therefore, the sound of the Partial will not be output if the MIDI controller is transmitting over a different MIDI channel. When the MIDI channel of the Part is set to off, the Partial will not be output either. To change the MIDI channel, set the MIDI channel of the Part from the Performance Play page. (☞ P.Pfm - 4)
 - Two different ways of editing are possible: changing all Partial's used by the Patch to the same value simultaneously (Global Edit), or changing only the currently selected Partial (Single Edit). This can be set in the Edit Mode. (☞ P.Prtl - 3)
 - The Partial to be edited can also be selected from a connected MIDI keyboard (note messages).
- *When editing, be sure to check the sound by hitting the same key. This is to avoid inadvertently changing the Partial to be edited.

Method D (Editing in the Patch Edit Mode)

You can edit parameters of a Partial used by a Patch while listening to the sound of only the Patch itself. As you are editing the Partial, the Performance parameters are inactive; in other words, only the parameters from Patch to sample are active.

With this method of editing, you can listen to the sound of only the desired Patch while finely adjusting the individual Partial's, allowing you to easily and intuitively blend the sounds in making a Patch.

For example, when you are editing the Partial level or Output Assign, the sound that is output during editing is affected by the Patch level and Output Assign parameters. Because of this, the actual sound may sometimes sound differently from the settings you make during editing.

To call up the page:

Press **[PATCH]** → Press **[COMMAND]** → Press **[F1]** (Edit Partial)
→ Edit page for the Partial

- * The LEDs of the Mode buttons change as follows: **[PATCH]** lights and **[PARTIAL]** flashes.
- * The * marks are shown at both the left and right of the page name when opening the Edit page of the Partial from the Command Menu.

Caution!

When no Partial is assigned to any key of the selected Patch (for example, when the Patch has been initialized), the method of editing automatically switches to Method E (not D).

Caution!

Just by selecting this Edit page, it isn't possible to tell whether Method D or Method E is being used. The way in which the sounds are output is indicated at the right side of the page name (see the section "UNDERSTANDING AND USING THE LCD," page 3-6).

If "Patch" is indicated, only the Patch itself sounds and Method D is being used.

If "Partial" is indicated, only the Partial itself sounds and Method E is being used.

Conditions of this method:

- Only Partial which are being used by the Patch (Partials assigned to each key with the Patch Split) can be selected for editing; different partials cannot be selected.
If you wish to edit a Partial which is not assigned to the key using Method D, assign the Patch to the key in the Patch Split page. (⇐ P.Pach - 8)
If you wish to edit a Partial which is not assigned to the key using Method D, assign the Patch to the key in the Patch Split page. (⇐ P.Pach - 8)
- Since the OMNI ON condition is active, any MIDI channel (1 — 16) can be used to play the Partial to be edited.
- Two different ways of editing are possible: changing all Partials used by the Patch to the same value simultaneously (Global Edit), or changing only the currently selected Partial (Single Edit). This can be set in the "Edit Mode." (⇐ P.Prtl - 3)
- The Partial to be edited can also be selected from a connected MIDI keyboard (note messages).
- * When editing, be sure to check the sound by hitting the same key. This is to avoid inadvertently changing the Partial to be edited.

Method E (Editing in the Partial Edit Mode)

You can edit the parameters of a Partial while listening to the sound of only the Partial itself. As you are editing the Partial, the Performance and Patch parameters are inactive; in other words, only the parameters from Partial to sample are active.

Since the manner in which the sound is output is not affected by the Performance and Patch parameter settings in this method, you can edit the sound of the Partial by monitoring that sound by itself.

For example, when you are editing the Partial Level or Output Assign, the sound to be output when editing is not affected by the Part Level and Output Assign parameters of the Performance or the Patch Level and Output Assign parameters of the Patch. The actual level and Output Assign settings (when checking the edit by outputting the sound) become the same as the parameter settings of the Partial.

To select the page:


Press PARTIAL → Partial Edit page

Conditions of this method:

- Any Partial in the current Volume memory can be selected for editing.
- Since the OMNI ON condition is active, any MIDI channel (1 — 16) can be used to play the Partial to be edited.
- Only the currently selected Partial can be edited in the Edit Mode (Single Edit). (⇐ P.Prtl - 3)
- The Partial to be edited cannot be selected by the connected MIDI keyboard (note messages).

OUTPUT JACKS TO BE USED WHEN EDITING

When editing, you have to change the output connections since the output assignments become active or inactive depending on the specific editing conditions.

However, you can avoid having to change connections by setting the Output Mode of the System parameters to Mix. ( P.Sys - 3) Since all Sound programs are then output through STEREO OUT A (INDIVIDUAL OUT 1 and 2), this makes it convenient for editing.

Return the previous setting when you've completed editing.

SUMMARY OF PRECAUTIONS IN EDITING

	Edit Method	To select the page	Manner in which the sound is output	MIDI channel to be used	Jacks to be used	The state of indicator on the Mode Button
Patch Edit	A	Press PERFORMANCE → Press COMMAND → Press F1 Edit Patch * When the Patch setting of all the parts is OFF, the edit method is B, not A.	Perform	The same MIDI channel set for the Part	Depending on the Output mode of System and the Output Assign of Performance, Patch and Partial.	PERFORMANCE will light. PATCH will blink.
	B	Press PATCH .	Patch	Since the OMNI ON condition is active, any MIDI channel (1 — 16) can be used.	Depending on the Output mode of System and the Output Assign of Patch and Partial.	PATCH will light.
Partial Edit	C	Press PERFORMANCE → Press COMMAND → Press F1 Edit Patch → Press COMMAND → Press F1 Edit Partial * When the Patch setting of all the parts is OFF, the edit method is D, not C. * When the Partial setting of all the keys on the Patch Split are OFF, the edit method is E, not C.	Perform	The same MIDI channel set for the Part	Depending on the Output mode of System and the Output Assign of Performance, Patch and Partial.	PERFORMANCE will light. PARTIAL will blink.
	D	Press PATCH → Press COMMAND → Press F1 Edit Partial * When the Partial setting of all the keys on the Patch Split are OFF, the edit method is E, not D.	Patch	Since the OMNI ON condition is active, any MIDI channel (1 — 16) can be used.	Depending on the Output mode of System and the Output Assign of Patch and Partial.	PATCH will light. PARTIAL will blink.
	E	Press PARTIAL .	Partial	Since the OMNI ON condition is active, any MIDI channel (1 — 16) can be used.	Depending on the Output mode of System and the Output Assign of Partial.	PARTIAL will light.

SOUND DATA COMPATIBILITY

The SP - 700 can play sound data from the included CD - ROM disk, CD - ROM disks for the S - 770/750 (P.1 - 17) or hard disk drives compatible with the S - 770/750.

The parameter structure of the sound data of the SP - 700 differs slightly from that of the S - 770/750 (SYS - 772 Version 2.0).

The parameters that have been changed, added or deleted are shown below.

* The "Value at loading" category in the chart refers to the default parameter value that is set when sound data for the S - 770/750 (SYS - 772 Version 2.0) is loaded into the SP - 700.

The parameters changed/added to the SP - 700

	Parameter		Value at loading
Performance	Part 1 — 32	Part Pan	0
		Part Output assign	A
	CH1 — 16	Pan receiving switch	C
	EQ1 — 8	High frequency	6.0k
		High gain	0
		Low frequency	120
		Low gain	0
Patch	* Patch Output Assign *		Value set on SYS - 772 Ver. 2.0
	Resonance offset		0
	Attack time offset		0
	Release time offset		0
	Aftertouch	LFO Pan Depth	0
	Modulation	LFO Pan Depth	0
	Control change	LFO Pan Depth	0
Partial	* Partial Output Assign *		Value set on SYS - 772 Ver.2.0
	Component 1 — 4	* Sample pan *	Value set on SYS - 772 Ver.2.0
	TVF	Release Velocity Sense	0
	TVA	Release Velocity Sense	0
	LFO	Pan Modulation Depth	0

* The parameters between asterisks (* *) are the same as those on the S - 770/750 (SYS - 772 Version 2.0). However, the setting range of these parameters has been expanded. When loading them into the SP - 700, they are loaded with the values set on the S - 770/750 (SYS - 772 Version 2.0)

Parameters Deleted from SYS - 772 Version 2.0

Stereo mix level for the Patch

Stereo mix level for the Partial

Even when sound data of the S - 770/750 (SYS - 772 Version 2.0) is loaded, the values of the parameters above are ignored by the SP - 700.

When sound data of the S - 770/750 (SYS - 772 Version 2.0) is loaded into the SP - 700, the added parameters have default values. Therefore, edit each parameter and save it to the hard disk. By doing so, SP - 700 sound data can be created.

* Data cannot be saved to a CD - ROM disk. When loading a Volume from a CD - ROM disk, the added parameters will have default values.

CHAPTER 6

PARAMETERS

The details of each command and function of the SP - 700 are explained (for each display page) in this Chapter.

Volume, **Perform**, **Patch**, **Partial**, **Sample**, **System** and **Disk** in Chapter 6 indicate Volume parameters, Performance parameters, Patch parameters, Partial parameters, Sample parameters, System parameters and Disk parameters.

* The name of the button to be pressed to select the page shown in the LCD is indicated at the top of the manual page in Chapter 6.

ABOUT THE FIVE MODES

The SP - 700 has five modes: the Performance Mode, the Patch Edit mode, the Partial Edit mode, the Disk mode and the System mode.

Performance Mode (P.Pfom - 1 —)

PERFORMANCE

This mode is for playing the SP - 700 from a MIDI sequencer. Performances can be edited in this mode. Patches and Partials are also edited from the Command Menu.

Patch Edit Mode (P.Pach - 1 —)

PATCH

Only a Patch itself can be edited in this mode.
Partials can also be edited from the Command Menu.

Partial Edit Mode (P.Prtil - 1 —)

PARTIAL

Only the Partial itself can be edited in this mode.

Disk Mode (P.Disk - 1 —)

DISK

Sound data is transferred to and from the drive in this mode.

System Mode (P.Sys - 1 —)

SYSTEM

The settings of the entire system (such as output mode and volume memory, MIDI and SCSI) are edited in this mode.

PERFORMANCE MODE

This mode is used to play the sounds of the SP - 700.

* To play, select either the Performance Mode page or the Performance Play page.

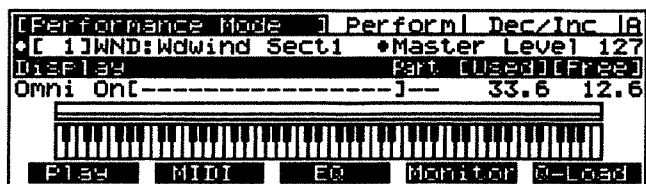
The parameters of the Performance mode (Performance parameters), used in playing the SP - 700, can be edited in this mode.

The Performance parameters can be divided into two groups: those that determine which types of MIDI messages are received by which channel, and those that determine the output assignments of the audio signals (Sound programs).

Performance Mode

Select this page in order to play the instrument. The note which is currently sounding is highlighted on the keyboard in the LCD.

* The sounding note can be indicated for the MIDI channel or for each Part.



* MIDI system Exclusive messages and MIDI sample dump data of the SP - 700 can be received in the Performance Mode page. (⇐ P.Sys - 16 and P.Sys - 25)

PERFORMANCE

Indications

Performance (no indication) (Performance Select)

This changes the Performance which is to be played or edited. (☞ P.4 - 2)

Performances can also be changed when Program Change messages are received over the MIDI control channel. (☞ P.4 - 13)

* The ASCII Keyboard page can be selected by pressing **NAME**, and the Performance can be named. (☞ P.Pfom - 25)

* The Select Performance page can be selected by pressing **LIST**, and the Performance can be changed. (☞ P.Pfom - 26)

Master Level

(Master level) **System** [0]—[127]

This determines the level of sound output from jacks A—D (1—8).

See P.2 - 33 for information on the sound volume.

* Master Level can be controlled by MIDI Volume messages of the Control Change messages received by the control channel (☞ P.Sys - 11). Refer to the MIDI implementation for details. (☞ P.App. - 39)

[Used]

(Capacity of the Performance)

The memory capacity of all samples currently being used by the selected Performance is displayed in seconds (standard of 44.1kHz).

[Free]

(Remaining Memory Capacity of Current Volume Memory)

The remaining memory capacity of the current Volume memory is indicated in seconds (at a standard of 44.1kHz).

Display

(Keyboard Display)

[OmniOn], [MIDI 1]—[MIDI 16], [Part 1]—[Part 16]

This determines the MIDI channel or Part number for which incoming MIDI performance data is displayed on the keyboard in the LCD.

The performance data of all MIDI channels is displayed when this is set to OmniOn.

* The selected MIDI channel or the Patch name of the Part is displayed to the right side when selecting MIDI 1—MIDI 16 or Part 1—Part 32. (When the same MIDI channel is assigned to several Parts, the Patch with the lowest Part number is displayed.)

The split point of the Patch is also displayed on the keyboard.

Performance Play

This page should be selected when you play the SP - 700. The condition of each Part (Performance parameter) can be checked or edited.

Some parameters of the Patch assigned to the Part can also be checked or edited.

[Performance Play] Perform Dec/Inc [A]					
• [1] WND: Wind Sect1					
Part Ch		Patch Name	[Lew]	[Pan]	[Out]
01	1	1WND: Bassoon 8va	127	0	A
02	1	2WND: Clarinet 1a	110	0	A
03	1	3WND: Oboe 3a	110	0	A
04	-	Off	127	0	A
Play MIDI EQ Monitor M-Load					

*When the same Patch is assigned to several Parts, editing parameters of that Patch automatically changes the parameter values of that Patch assigned to the other Parts as well.

PERFORMANCE + **F1** (Play)

Indications

Performance (no indication) (Performance Select)

This determines the Performance which is played or edited.

See the section "CHANGING THE SOUND PROGRAMS," P.4 - 1, for more information on changing Performances.

* The ASCII Keyboard page can be selected by pressing **NAME**, and the Performance can be named. (☞ P.Pfom - 25)

* The Select Performance page can be selected by pressing **LIST**, and the Performance can be changed. (☞ P.Pfom - 26)

Part

(Part)

Move the cursor here, then change Part indications using **S1/DEC** and **S2/INC** or **VALUE/CURSOR** dial.

Ch

(MIDI Channel) **Perform** [- (Off)], [1]—[16]

This determines the receiving MIDI channel for the Part. Turn any unused Parts off (-).

* When saving the Volume, make sure that all Patches you want saved have been assigned to a Part or Parts. Turn the MIDI channel of any unused Parts Off. See P.2 - 17 for details.

Patch Name

(Patch select) **Perform**

This determines the Patch to be assigned to the Part by using the name (Patch name). The Patch can also be changed when Program Change messages are received over the MIDI channel assigned to the Part. (☞ P.4 - 16)

The Patch is not assigned to the Part when this is set to Off.

* The Select Patch page can be opened by pressing **LIST** and the Patches can be changed. (☞ P.Pfom - 28)

[Lev]

(Part Level) **Perform** [0]—[127]

This determines the level of each Part.

* The actual volume output is affected by other parameters as well. (☞ P.2 - 33)

[Pan]	(Part Pan) Perform [L32]—[0 (Center)]—[R32]
	This determines the overall pan setting for the Patch/Partial when outputting in stereo.
	* The final pan position of the output is affected by other parameters as well. (☞ P.2 - 31)
[Out]	(Part Output Assign) Perform
	[(), [A], [B], [C], [D], [1], [2], [3], [4], [5], [6], [7], [8]
	This determines from which jack the sound of the Patch assigned to the Part is to be output.
	When this is set to (), the sound is output according to the Output Assign setting for the Patch. (☞ P.Pfom - 5 and P.Pach - 4)
	* The actual output assignment of the sound is affected by other parameters as well. (☞ P.2 - 24)
	The parameters (Lev—Release) from P.2 to P.5 are Patch parameters.
Lev	(Patch Level) Patch [0]—[127]
	This determines the volume of the Patch.
	* The level of the actual output is affected by other parameters as well. (☞ P.2 - 33)
Pan	(Patch Panning) Patch [L32]—[0 (Center)]—[R32]
	This determines the overall Patch pan setting when outputting in stereo.
	* The final pan setting is affected by other parameters as well. (☞ P.2 - 31)
Out	(Patch Output Assign) Patch
	[A], ([B]), ([C]), ([D]), ([1]), ([2]), [3], [4], [5], [6], [7], [8], [- P - (Partial)]
	This determines from which jack the sound of the Patch is output.
	When this is set to [- P -] (Partial), the Output Assign setting for the Partial is used.
	* Because of the Output Mode setting of the System parameters, the jacks indicated in parentheses ([]) may not be selected. (☞ P.Sys - 3)
	* The final output configuration is affected by other parameters as well. (☞ P.2 - 24)

PERFORMANCE + **F1** (Play)

Pri (Patch Priority) **Patch** [Off], [On]

When receiving note messages exceeding the simultaneous polyphonic capacity of the SP - 700, this determines whether the voices of the sounds being used for each Patch will be allowed to decay naturally or be abruptly cut off.

The maximum polyphony of the SP - 700 is 24 voices. There may be a shortage of voices if you layer many samples, or use the SP - 700 as a multi - timbral sound source. When this happens, the voices currently sounding are cut off one by one as new notes are played (last note priority); however, the Patches whose priority has been set to On will continue to sound.

If you are concerned about the number of available voices when playing the SP - 700 as a multi - timbral sound source, set the priority of Patches used for melody and bass lines to On. In this way, the most important parts (the melody and bass lines in this case) continue to sound even though some backing chords may be cut off in the middle.

*When the priority settings of all Patches are on, the earlier sounds have priority and recently played notes (the ones which exceed the 24 - voice limit) are ignored and not sounded.

Oct (Octave Shift) **Patch** [- 2]—[2]

This shifts the received MIDI note number up or down (in octave units) and sounds the Patch accordingly.

Coar (Patch Coarse Tune) **Patch** [- 48]—[48]

This determines the pitch (in semi - tone units) at which the Patch is sounded.

*The sounding range of each Sample can be up to two octaves higher than the original key (☐ P.Prtl - 35). Even when a pitch setting greater than two octaves is determined by the tuning or pitch modulation, the sound can go no higher than the two octave limit.

Fin (Patch Fine Tune) **Patch** [- 50]—[50]

This determines the fine pitch setting of the Patch.

The value is adjusted up or down in 1 - cent steps (1 cent is equivalent to 1/100 of a semi - tone).

A.F (Analog Feel) **Patch** [0]—[127]

This provides a subtle, pitch modulation to sound.

Higher values create a minute modulation of the Pitch each time a Patch sounds (for each sound), allowing you to obtain a warmer, more natural sound like that of an analog synthesizer. This is also useful for adding thickness and depth to string sounds, especially when playing chords.

C.Off	(Cutoff Offset) Patch [- 63]—[63]	
	This affects the overall sound of the Patch. This value is added to the cutoff frequency (⇨ P.Prtl - 17) of each Partial being used by the Patch. If the cutoff frequency of the Partial has already been set to 127, setting this parameter to a positive value will not change the actual value any further.	
	* When the TVF Filter mode (⇨ P.Prtl - 16) is off, the setting of the Cutoff Offset becomes inactive.	
Reso	(Resonance Offset) Patch [- 63]—[63]	
	This affects the overall sound of the Patch. This value is added to the resonance value of each Partial being used by the Patch (⇨ P.Prtl - 17). If the resonance of the Partial has already been set to 127, setting this parameter to a positive value will not change the actual value any further.	
	* When the TVF Filter mode (⇨ P.Prtl - 16) is off, the setting of the Resonance Offset becomes inactive.	
Vel	(Velocity Sense Offset) Patch [- 63]—[63]	
	This affects the overall TVF and TVA Velocity Curve Sense value (⇨ P.Prtl - 19 and P.Prtl - 24) of each Partial being used by the Patch.	
Attack	(Attack Time Offset) Patch [- 63]—[63]	
	This affects the entire TVA envelope attack time (the Time 1 parameter) of each Partial being used by the Patch (⇨ P.Prtl - 26).	
Release	(Release Time Offset) Patch [- 63]—[63]	
	This affects the entire TVA envelope release time (the Time 4 parameter) of each Partial being used by the Patch (⇨ P.Prtl - 26).	
L.P	(Lower Key Point) Perform [A0]—[C8]	
U.P	(Upper Key Point) Perform [A0]—[C8]	
	This determines the range over which the Part can be sounded. The sound range is from the key number of the lower point (L.P) to the key number of the upper point (U.P). The minimum and maximum points that can be set for the range are A0 (21) and C8 (108).	
	* The settings of the lower point and upper point (the sound range) can be seen in the graphic display on display P.7.	

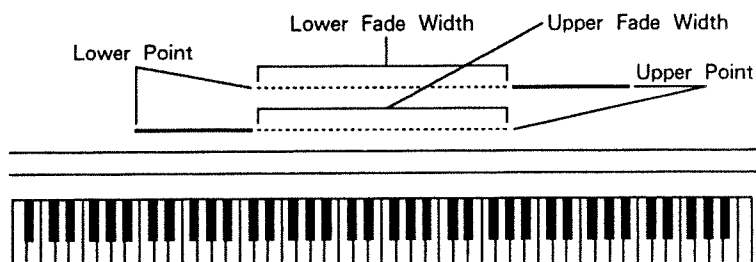
PERFORMANCE + **F1** (Play)

L.W (Lower Fade Width) **Perform** [0]—[86]
 U.W (Upper Fade Width) **Perform** [0]—[86]

These determine the positional crossfade settings. The range over which the sound is to be faded is set by each point (lower key point and upper key point).

* The settings of the Lower Fade Width and Upper Fade Width can be seen in the graphic display on display page 7.

By using the Lower Fade Width and Upper Fade Width, you can control the level according to the range played on the keyboard, or combine several Parts in a positional crossfade.



Setting the Positional Crossfade

Positional crossfade is used to create continuous changes in the Sound program over the entire pitch (or keyboard) range by fading out the lower and upper extremes of the sound range for each Part and by combining several Parts together.

This technique is used in order to smooth the flow between Sound programs assigned to different sound ranges and to group different Sound programs together over the entire keyboard range.

1. Select the Performance Play page.
Press **PERFORMANCE**, then press **F1** (Play).
2. Set the MIDI channel of the Parts to be positionally cross - faded to the same channel.
Parameter : Ch
Setting : 1—16
3. Assign the desired Patch to the Part that is to be positionally cross - faded.
Parameter: Patch Name
4. Select the 6th page of the Performance Play pages.
Press **PREVIOUS** or **NEXT**.
5. Set the sound range of the Parts to be positionally cross - faded so that the Parts overlap.
Parameter : L.P, U.P
6. Set the overlapped sound area to be the range for the crossfade.
Parameter : L.W, U.W
7. You can check the settings made in the 7th page of the Performance Play pages since the setting is indicated graphically. Press **NEXT**.



Part

(Part) [01]—[32]

This determines the Part to be edited.

An arrow mark "➡" is indicated at the sound range of the presently selected Part.

* The sound range of the Part to which the Patch is assigned is indicated by a thick line.

PERFORMANCE + F2 (MIDI)

MIDI Filter

This determines the type of MIDI messages that are to be received over each MIDI channel, the method of sound production (phase lock), and the type of dynamics (velocity curve type) applied to the Note On velocity.

From this MIDI filter page you can cut or filter out any unnecessary MIDI messages, and yet leave the basic performance nuances intact. By selectively allowing only the necessary MIDI messages to be received, the amount of internal processing is reduced.

Perform MIDI Filter 1 Perform Dec/Inc 1A																
13WIND:Wdwind Sect1																
Ch.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 All
Prog	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	*
Bend	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	*
Mod	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	*
Hold	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	*
Play MIDI EQ Monitor R-Load																

Indications

Performance (no indication) (Performance select)

This determines the Performance which is to be played or edited.

See the section "CHANGING THE SOUND PROGRAMS," P.4 - 1, for information on changing Performances.

* The ASCII Keyboard page can be selected by pressing **NAME**, and the Performance can be named. (☞ P.Pfom - 25)

* The Select Performance page can be selected by pressing **LIST**, and the Performance can be changed. (☞ P.Pfom - 26)

Prog

(Program Change) **Perform** [○], [–]

This determines whether Program Change messages are received or not.

○ (On) : Messages are received.

– (Off) : Messages are not received.

Program Change messages received over MIDI channels 1 — 16 can be used to change the Patch of the Part for each of the respective MIDI channels. The correspondence between received Program Change numbers and Patch numbers can be changed as desired from the Select Patch page (☞ P.Pfom - 29).

* All Patches of the Parts which are being sounded over a specific MIDI channel are all changed when receiving a Program Change message on that channel. Be careful when assigning a single MIDI channel to several Parts, such as when using a split or positional crossfade with the Lower Point, Upper Point, Lower Fade Width and Upper Fade Width parameters of the Performance parameters. (In such a case, change the Performance over the control channel.) (☞ P.4 - 13)

If the control channel has been set, the Performance or Volume will be changed when receiving a Program Change message over the control channel (☞ P.4 - 12). When the control channel and the Part channel are set to the same value, the control channel has priority and the Performance or Volume is changed instead of the Patch.

Bend

(Pitch Bend) **Perform** [○], [–]

This determines whether Pitch Bend messages are received or not.

○ (On) : Messages are received.

– (Off) : Messages are not received.

* The actual range over which the SP - 700 bends the pitch (bend range) in response to Pitch Bend messages can be set in the Patch Control page. Pitch Bend messages can also be used to control other parameters besides pitch, such as the sound volume or the timbre of a sound. Refer to the Patch Control page (☞ P.Pach - 13) for details.

PERFORMANCE + **F2** (MIDI)

Mod

(Modulation) **Perform** [○], [–]

This determines whether Modulation messages are received or not.

○ (On) : Messages are received.

– (Off) : Messages are not received.

* The particular parameter or type of effect that Modulation messages control can be set in the Patch Control page. See the Patch Control page (⇐ P.Pach - 13) for details.

Hold

(Hold) **Perform** [○], [–]

This determines whether hold messages (Control Change #64, damper) are received or not.

○ (On) : Messages are received.

– (Off) : Messages are not received.

* When the unit receives Hold messages, the sound of the Patch in the Part that is played on the same MIDI channel will be sustained. If that Patch of that Part is set as follows, the tone of the Patch will be controlled by receiving Hold messages. The Hold messages that control the Patch tone will be received even when Hold in the MIDI Filter is set to OFF (–).
→64 (Damper (Hold1)) is selected at the "Ctrl Sel" in the Patch Control page. It is also set so that SMT, Pitch or TVF etc. will be controlled with Hold messages. (⇐ P.Pach - 14)

A.T

(Aftertouch) **Perform** [–], [C], [P]

This determines whether Aftertouch messages are received or not; it also determines the type of aftertouch data responded to (polyphonic/channel).

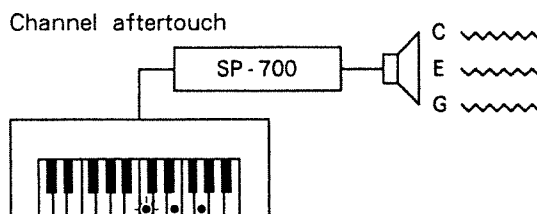
– (Off) : No Aftertouch messages are received.

C : Channel Aftertouch messages are received.

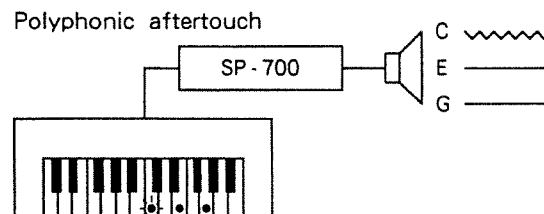
P : Polyphonic Aftertouch messages are received.

The particular parameter or type of effect that Aftertouch messages control can be set in the Patch Control page. See the Patch Control page (⇐ P.Pach - 13) for details.

* Channel aftertouch affects all notes which sound over the specified MIDI channel. Polyphonic aftertouch on the other hand affects each note individually for each sound played over the specified MIDI channel.



Modulation is applied equally to all notes C, E and G, even though only the note C of the C chord is pressed down strongly.



Modulation is applied only to note C, since only note C of the C chord is pressed down strongly.

Vol

(Volume) **Perform** [○], [–]

This determines whether volume messages (Control Change #1) are received or not.

- (On) : Messages are received.
- (Off) : Messages are not received.

- * When the SP - 700 receives Volume messages, the Part Level of the Part that is played on the same MIDI channel will change. If that Patch of that Part is set as follows, the tone of the Patch will be controlled by receiving Volume messages. The Volume messages that control the Patch tone will be received even when 'Vol' in the MIDI Filter is set to OFF (–).
 ➔7 (Main Volume) is selected at the "Ctrl Sel" in the Patch Control page. It is also set so that SMT, Pitch or TVF etc. will be controlled with Volume messages. (☞ P.Pach - 14)
- * The master level of the system can also be controlled by this MIDI message. See P.Sys - 3 and P.Sys - 11 for details.

Pan

(Pan) **Perform** [–], [C], [D]

This determines whether pan messages (Control Change #10) are received or not; it also determines how the pan position changes (continuous or discreet) when messages are received.

- (Off) : No pan messages are received.
- C (Continuous) : The pan position changes continuously in realtime while the sound is output, as pan messages are received.
- D (Discreet) : The pan position does not change continuously in realtime while the sound is output, but changes with the next note or sound that is played.

- * When the SP - 700 receives Pan messages, the Part Pan of the Part that is played on the same MIDI channel will change. If the Patch of that Part is set as follows, the tone of the Patch will be controlled by received Pan messages. The Pan messages that control the Patch tone will be received even when the Pan in the MIDI Filter is set to OFF (–).
 ➔10 (Pan) is selected at the "Ctrl Sel" in the Patch Control page. It is also set so that SMT, Pitch or TVF etc. will be controlled with Pan messages. (☞ P.Pach - 14)

P.L

(Phase Lock) **Perform** [○], [–]

This determines whether the Phase Lock function is on or off. Phase Lock unifies (or synchronizes) the sound timing of different Parts which are being played over the same MIDI channel.

- (On) : The Parts of the same MIDI channel sound simultaneously.
- (Off) : The Parts of the same MIDI channel sound one by one, starting with the lowest Part numbers.

- * When several different Parts are being played over the same MIDI channel, the particular nuance of the attack of notes played together may be lost if the timing of the Parts is not exact. If this is the case, you can set Phase Lock to on to unify the timing. However, since this function introduces a slight delay on actual sounding of notes after reception of the note messages, you should set this to on only as needed.

PERFORMANCE + **F2** (MIDI)

Vel

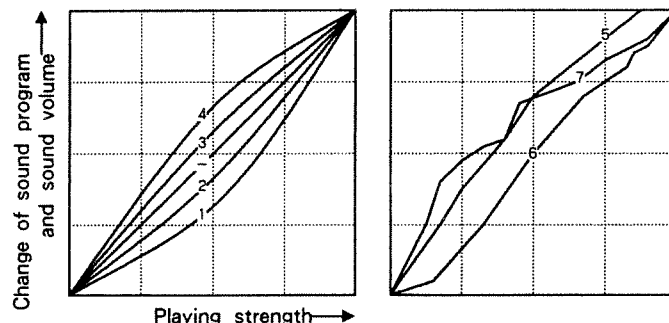
(Velocity Curve Type) **Perform**

[– (Off)], [1]—[7]

This determines the velocity curve.

The Velocity Curve determines how the sound responds to velocity changes (the strength at which the keyboard is played) in the received note messages. Set this parameter to get the most natural and dynamic velocity control from the connected MIDI controller.

* When this is set to – (Off), the received velocity changes are used as is. (A velocity curve of 1/1 represents a straight, linear curve.)



All

(All)

This allows you to change all parameter settings of all MIDI channels to the same value (○ / – , etc.) by moving the cursor to * of ALL and pressing **S1/DEC** or **S2/INC**.

To change the Hold, sound volume or Pan settings:

1. Select the first or second page of the MIDI Filter pages.
Press **PERFORMANCE**, then **F2** (MIDI), then **PREVIOUS** or **NEXT**.
2. Make the following setting for each parameter in order to receive these MIDI messages.
Parameter: Hold, Vol, Pan
Setting : ○
3. Select the Performance Mode page by pressing **PERFORMANCE**. Transmit the desired MIDI message from the connected MIDI controller to the SP - 700 while playing.

Performance EQ (Performance equalizer)

This determines the equalizer settings for each output jack.

[Performance EQ] Perform Dec/Inc A									
• [1] WND:Wdwind Sect1 <E.Mode>Individual									
	H.F	H.G	L.F	L.G		H.F	H.G	L.F	L.G
[1]	6.0K	0	120	0	[2]	6.0K	0	120	0
[3]	6.0K	0	120	0	[4]	6.0K	0	120	0
[5]	6.0K	0	120	0	[6]	6.0K	0	120	0
[7]	6.0K	0	120	0	[8]	6.0K	0	120	0
P134 MIDI EQ EQ On Indivi									

[Performance EQ] Perform Dec/Inc A									
• [1] WND:Wdwind Sect1 <E.Mode>Stereo									
	H.F	H.G	L.F	L.G		H.F	H.G	L.F	L.G
[A]	6.0K	0	120	0	[A]	6.0K	0	120	0
[B]	6.0K	0	120	0	[B]	6.0K	0	120	0
[C]	6.0K	0	120	0	[C]	6.0K	0	120	0
[D]	6.0K	0	120	0	[D]	6.0K	0	120	0
P134 MIDI EQ EQ On Stereo									

Indications

Performance (no indication) (Performance select)

This selects the Performance to be played or edited.

* See the section "CHANGING THE SOUND PROGRAMS," P.4 - 1, for information on changing Performances.

* The ASCII Keyboard page can be selected by pressing **[NAME]**, and the Performance can be named. (⇐ P.Pfm - 25)

* The Select Performance page can be called up by pressing **[LIST]**, and the Performance can be changed. (⇐ P.Pfm - 26)

<E.Mode>

(Edit Mode) [Individual], [Stereo]

The equalizer has two editing modes: Individual and Stereo.

Individual : Eight equalizers can be edited individually.

Stereo : A pair of equalizers (for stereo output) can be edited together. When one of the pair is edited, the other automatically changes to the same value.

Press **[F5]** to change the Edit Mode. The mode changes each time **[F5]** is pressed.

The equalizer is used to adjust the sound by increasing or decreasing the signal level in a particular frequency range.

* Each of the equalizer parameters can be adjusted by Control Change messages (#1 — 95) received over the control channel (⇐ P.Sys - 11 and P.Sys - 15).

PERFORMANCE + **F3** (EQ)

H.F (High Frequency) **Perform** [750]—[18K]
 This determines the high range frequency which is cut or boosted by the High Gain parameter below.

H.G (High Gain) **Perform** [- 12]—[+12]
 This cuts or boosts the signal level of the high range frequency (set in High Frequency above) in decibel (dB) units.

Positive values boost the high frequency range and create a brighter sound. Negative values cut the high frequency range and create a softer, more mellow sound.

L.F (Low Frequency) **Perform** [16]—[600]
 This determines the low range frequency which is cut or boosted by the Low Gain parameter below.

L.G (Low Gain) **Perform** [- 12]—[+12]
 This cuts or boosts the signal level of the low range frequency (set in Low Frequency above) in decibel units.

Positive values boost the low frequency range and create a fatter, warmer sound. Negative values cut the low frequency range and create a thinner sound.

*Depending on the equalizer settings, the sound might be distorted. If this happens, readjust the equalizer settings. Alternately, try turning down the Part level slightly (↵ P.Pfom - 4) which is being fed to the equalizer that seems to be distorting, or turn down the master level (↵ P.Pfom - 2 and P.Sys - 3).

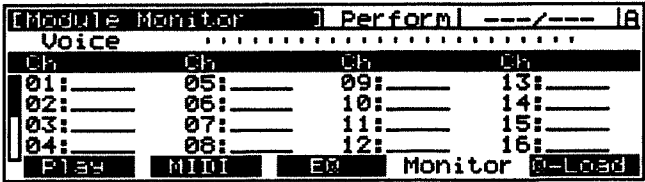
F4 (EQ On/Off Switch) [EQ On], [Bypass]
 This key lets you bypass the eight equalizers, allowing you to easily compare the equalizer-processed sound with the dry (unprocessed) sound.
 Each press of this key switches between the equalizer on and bypass settings.

*Since this is not an actual parameter, this setting becomes active only when the Performance EQ page is selected. For example, even when Bypass is turned on in this page, the equalizer effect is restored when selecting other pages. To turn off the equalizer effect, set all high gain and low gain parameters to 0.

F5 (Edit mode) [Indivi], [Stereo]
 This determines the Edit Mode setting. Each press of this key changes between the Individual mode and Stereo mode.

Module Monitor

This page allows you to monitor the number of voices currently being used and sounded. If some sounds seem to be missing when playing, select this page and check the number of voices being used.



* The maximum polyphony of the SP - 700 is 24 voices (Samples). When the number of voices used exceeds 24, some voices being output are cut off and new voices are sounded (newer ones have priority). However, the voices from a Patch whose Patch priority has been set to on will continue to sound (☞ P.Pform - 6 and P.Pach - 4).

Indications

Voice

(Voice)

The display shows the same amount of squares ☐ as the number of voices used by all the MIDI channels.

Ch.1 — 16

(MIDI Channel 1 — 16)

The display shows the bar graphs as the number of voices used by each MIDI channel.

PERFORMANCE + F4 (Monitor) + PAGE NEXT

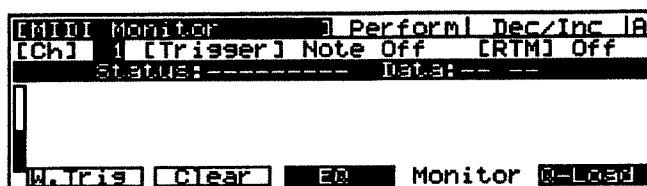
MIDI Monitor

MIDI messages received via the MIDI IN terminal can be checked in realtime and viewed as hexadecimal data.

*This monitors all incoming MIDI data, and not only the data selectively filtered with the MIDI filter control.

This function is useful for troubleshooting and isolating MIDI problems, such as when MIDI data is not being received properly or when sounds are not output as expected. It lets you easily determine whether the problem is with the connected MIDI controller or the SP - 700 itself.

Three conditions including MIDI channel, realtime message indication on/off and monitor start trigger can be set in this page. By selecting the monitor conditions, the particular MIDI message can be checked.



Indications

Ch

(MIDI Channel) [1]—[16], [All]

This determines the MIDI channel to be monitored. All MIDI channels can be monitored when this is set to All.

Trigger

(Trigger) [Note Off], [Note On], [Poly After], [Ctrl],
[Program], [Ch After], [Bender], [Sys.Com&EX]

This determines which MIDI message starts the MIDI monitor.

Note Off	: Note off message (8n kk vv/9n kk 00)
Note On	: Note on message (9n kk vv)
Poly After	: Polyphonic aftertouch message (An kk vv)
Ctrl	: Control change message (Bn cc vv)
Program	: Program change message (Cn pp)
Ch After	: Channel aftertouch message (Dn vv)
Bender	: Pitch bend message (En ll mm)
Sys.Com & EX	: System Common message or Exclusive message (F0...F7)

* Press F1 (W.Trig) in order to execute the trigger function.

RTM	<p>(Realtime Message) [On], [Off]</p> <p>This determines whether realtime messages are monitored or not.</p> <p>The MIDI Monitor indication may be hard to read when incoming realtime messages, such as active sensing or timing clock, clutter up the screen. Set the RTM parameter to Off when this happens.</p> <p>* Refer to the MIDI implementation at the end of this manual or to reference books on MIDI for the contents of Status and Data messages.</p>
Status	<p>(Status)</p> <p>This indicates the contents of the transmitted status messages. The indication changes in realtime when the monitor is started.</p>
Data	<p>(Data)</p> <p>This indicates the contents of the transmitted MIDI data. The indication changes in realtime when the monitor is started.</p>
F1 W.Trig	<p>(Wait for Trigger)</p> <p>The message "Waiting for Trigger" appears in the LCD when pressing F1, and the monitor starts when receiving the specific type of MIDI message set by the trigger.</p>
F2 Clear	<p>(Clear Display)</p> <p>All MIDI messages indicated in the LCD display can be erased at once by pressing F2.</p>

To monitor received MIDI messages:

1. Select the MIDI monitor page.
Press PERFORMANCE, then F2 (MIDI), then NEXT.
2. Set the MIDI channel to be monitored by the MIDI Channel (Ch) parameter.
Set this to All when monitoring all MIDI channels.
3. Set the MIDI messages which you wish to trigger the start of the monitor.
4. Set whether realtime messages will be monitored or not.
5. When pressing F1 (W.Trig), the MIDI monitor is set to a "waiting for input" condition for the settings made above, and the message "Waiting for Trigger" appears in the LCD.
6. The MIDI monitor starts displaying data when the MIDI message specified in the Trigger parameter is received.

PERFORMANCE + **F5** (Q – Load)

Quick Load

The Quick Load function greatly facilitates loading specific sounds from a large bank of sound data, once you have assigned the desired sound data beforehand. The sound can be easily loaded in this page without having to change the current drive. This makes it unnecessary to spend time searching through a huge bank of sound data on a disk in the Disk Mode to load one certain sound.

Quick Load					Muted	Dec/Inc	IA
<Target> Volume							
No.	NAME	Time	Dr.	Int.			
1	WND:Woodwinds	78.2	[0]	A 90.8s			
2	STR:.Sect.Muted	78.8	[0]	B .0s			
3	STR:.Marcato 2	53.2	[0]				
4	ORG:Organs	45.4	[0]				
Volume Delete					SortAsc	toLA	toLB

- *No sound is output when selecting this page if the Load - while - playing function of the System parameters (☐ P.Sys - 4) is set to off.
- *When the Load - while - playing function of the System parameters (☐ P.Sys - 4) is set to on, executing Quick Load and the various commands of the Disk Mode (Load, Save, Copy, Delete, Format and Convert Load) takes approximately eight times as long as when the parameter is set to off. Set it to off if there is no need to output sound while executing these commands.

Indications

<Target>	<p>(Target) [Volume], [Performance], [Patch]</p> <p>This selects the type of the Sound program to be loaded, or the type of Sound program to be assigned to the Quick Load list.</p> <p>* Each time F1 is pressed, the target is changed.</p>
No	<p>(Number)</p> <p>Scroll through the Sound program list by moving the cursor to the number, then using S1/DEC or S2/INC, or VALUE/CURSOR (when the SHIFT indicator is dark).</p> <p>* You can also change the page of the list by using PREVIOUS or NEXT. In this case the position of the cursor doesn't matter.</p>
Name	<p>(Sound Program Name) System</p> <p>The Sound program list for the Quick Load function is indicated. By moving the cursor to the name, select the Sound program to be loaded, or the Sound program to be assigned to the Quick Load Sound program list.</p> <p>* The Select File page can be selected by pressing LIST, and the Sound program name (file name) can be assigned or changed.</p> <p>* Since the Sound program list and drive number belong to the System parameters, the data will be lost if you turn off the power without saving them (☞ P.Sys - 32).</p>
Time	<p>(Capacity of the Sound Program)</p> <p>The capacity of the Sound program is indicated in seconds (at a standard of 44.1kHz).</p> <p>This displayed capacity of the Sound program could be less than or greater than the actual capacity. Refer to the section "Correction for Time Indication" on P.Disk - 31 for details.</p>
Drv	<p>(Drive Number) System [0]—[7]</p> <p>This indicates the SCSI ID of the drive which contains the desired Sound program. The drive number is automatically assigned when you assign the Sound program name to the Sound program name list of the Quick Load page.</p> <p>* Refer to the two sections immediately following; "Assigning or Changing the Sound Program Name for Quick Load" and "Cautions Concerning Drive Number (Drv)."</p>

PERFORMANCE + **F5** (Q – Load)

Int. (Remaining Memory Capacity of each Volume memory)
 The remaining memory capacity of each Volume memory is indicated in seconds. Since the capacity (time) of the Sound program to be loaded is also indicated in seconds, you can easily determine whether it can be loaded or not. If there isn't enough Volume memory left, the wave data can only be partially loaded.

F1 (Changing the Target) [Volume], [Pform], [Patch]
 This changes the target (the type of Sound program to be loaded).

F2 Delete (Delete)
 This deletes the selected Sound program name from the Sound program list.

F3 SortABC (Alphabetical Sort)
 This function sorts the Sound programs (selected by the target indicated in the Sound program list) alphabetically.

F4 to [A] (Load to Volume A Memory)
 This loads the selected Sound program into the Volume A memory.

* Even when a Quick Load is carried out, the current drive will not change.

F5 to [B] (Load to Volume B Memory)
 This loads the selected Sound program into the volume B memory.

* When the Volume A parameter of the System parameters (⇐ P.Sys - 5) is set so that all wave memory will be used by the Volume A memory, loading cannot be done even by pressing **F5** (to [B]).

Assigning or Changing the Sound Program Name for Quick Load

The Sound program list of the Quick Load page can be assigned or changed freely.

1. Select the Performance Play page by pressing

PERFORMANCE

.
2. Call up the Quick Load page by pressing

F5

 (Q – Load).
3. Select the unit (Target) of the Sound program to be assigned by pressing

F1

. The Target changes every time

F1

 is pressed.
4. Move the cursor to the Sound program name of the list number to be assigned using the cursor buttons. The

LIST

 indicator lights (green) when the cursor is moved to the Sound program name.
5. Press

LIST

 in order to call up the Select page of the selected Sound program (Target).
 - * You can also call up the Select page by pressing

S1/DEC

.
6. When changing the current drive (CD), move the cursor to CD using the cursor buttons. Use

S1/DEC

 or

S2/INC

, or

VALUE/CURSOR

 in order to change the current drive (CD). (

VALUE/CURSOR

 is used to move the cursor when the

SHIFT

 indicator is red.)
7. Move the cursor to the Sound program name to be assigned using the cursor buttons.
8. Assign the Sound program name by pressing either

F5

 (Select) or

S1/DEC

. The display returns automatically to the Quick Load page. Press

EXIT

 when you wish to stop the assignment.
9. Make a list of Sound programs for the Quick Load function by repeating steps #3—#8 above.
 - * Since the Sound program list and drive number of the Quick Load page belong to the System parameters, the data will be lost if you turn off the power without saving them (⇐ P.Sys - 32).

Cautions Concerning Drive Number (Drv)

The drive number (Drv) is indicated in the Quick Load page, and this indicates the SCSI ID of the drive which has the assigned Sound program. The drive number is automatically assigned when assigning the Sound program name to the Quick Load page. The SP - 700 uses this drive number to determine the drive from which the Sound program is loaded, when using the Quick Load function. When loading a Sound program from the Disk Load page, you must select the drive containing the desired Sound program with the CD (current drive) parameter, then load the program. However, the Quick Load page allows you to load the Sound program without having to select the drive. This is because the drive number is specified when the Sound program is selected. Moreover, the current drive is not changed even when loading the Sound program by Quick Load.

The drive number can be changed in this display, but normally you should not change this.

Let's take a look at the following example in which the drive number is changed.

Two CD - ROM drives (A and B) are connected, and the Sound program name is assigned in the Quick Load page from CD - ROM drive A. The drive number of the Sound program has a SCSI ID of A. Save the Sound program list of the Quick Load (in the System parameters) and turn off the power.

However, in using the SP - 700 system the next time, the CD - ROM disk previously used in CD - ROM drive A, has been mistakenly inserted into CD - ROM drive B. The drive number of the Sound program in the Quick Load page remains set to a SCSI ID of A.

The specified Sound program cannot be loaded with the Quick Load function, since the CD - ROM disk with the desired Sound program has not been inserted in CD - ROM drive A.

To remedy this, you could change the drive number of the Sound program to the SCSI ID of CD - ROM drive B, then execute the Quick Load.

Another way would be to switch the CD - ROM disks of CD - ROM drives A and B, then execute the Quick Load function again. (Eject the CD - ROM disk only when the drive lamp of the CD - ROM drive is dark. Make sure also to execute the Scan command when replacing CD - ROM disks; ⇨ P.1 - 8.)

* The operation above also applies to optical disks.

NAME

NAME in the Performance Mode

When the NAME indicator is lit (green), press NAME to call up the ASCII keyboard page for naming the Sound program and drive.

The NAME indicator lights (green) depending on the display or cursor position.

The indicator lights in the following cases:

→When the cursor is at Select (home position) of the Performance in the Performance Mode page, Performance Play page, MIDI Filter page, or Performance EQ page, the NAME indicator lights (green).

→When the cursor is at Select (home position) of the Performance in the Performance Mode page, Performance Play page, MIDI Filter page, or Performance EQ page, the LIST indicator lights (green). Select the Select Performance page by pressing LIST. If the cursor is at the Performance name, the NAME indicator lights (green).

→When the cursor is at the Patch name (Patch Select) in the Performance Play page, LIST lights (green).

Open the Select Patch page by pressing LIST. If the cursor is at the Patch name, the NAME indicator lights (green).

→When the cursor is at the name in Quick Load, the LIST indicator lights (green). Call up the Select File page by pressing LIST. If the cursor is at the current drive (CD), the LIST indicator lights (green). Call up the Select Drive page by pressing LIST, and the NAME indicator lights (green).

*See P.3 - 13 for details on naming operations.

LIST

LIST in the Performance Mode

When the LIST indicator is lit (green), you can call up the Select page by pressing LIST and select the Sound program, Volume ID and current drive.

The LIST indicator lights (green) depending on the display or cursor position.

Select Performance

[Select Performance] Perform Dec/Inc [A]				
<Target> Performance				
No.	Name	Time	PG#	
1:	WND:Wdwind Sect1	33.6	3	
2:	WND:Wdwind Sect2	45.4	4	
3:	WND:Wdwind Sect3	32.8	5	
4:	WND:Wdwind Sect4	60.9	6	
---	Renam	SortPG#	SortABO	Blank

When the cursor is at Select (home position) of the Performance in the Performance Mode page, Performance Play page, MIDI Filter page, or Performance EQ page, the LIST indicator lights (green). Select the Select Performance page by pressing LIST.

In this condition, changing the Performances, naming, setting the program number and sorting can be done.

Indications

<Target> (Target)
This changes the Performance.

No (Number)
Scroll through the Performance list by moving the cursor to the number and using S1/DEC or S2/INC, or VALUE/CURSOR (when the SHIFT indicator is dark).

Name (Performance Name) Perform
The Performance list of the current Volume memory is indicated. Select the Performance to be changed by moving the cursor to the Performance name. Change the Performance by pressing S1/DEC.

- * When the cursor is moved to the Performance name, the Performance can temporarily be selected and the sound can be checked.
- * The ASCII Keyboard page can be selected by pressing NAME, and the Performance can be named. (⇐ P.3 - 13)

Time	<p>(Capacity of Performance)</p> <p>The memory capacity of all samples being used by the Performance is indicated in seconds (standard of 44.1kHz).</p> <p>*The time it takes to select the Select Performance page becomes longer when the Performance capacity is indicated. If you don't need to have this displayed, you can save time by setting Time Display (⇨ P.Sys - 5) in the System parameters to off.</p>
PG#	<p>(Program Number) Perform [1]—[64]</p> <p>This determines the program number of the Performance.</p> <p>This program number is used when changing the Performance by MIDI Program Change messages received over the control channel.</p> <p>See P.4 - 13 for details.</p> <p>*Do not assign the same program number to several different Performances. If the same program number is assigned to several Performances, the Performance with the lowest list number has priority in being changed.</p>
F2 Renum	<p>(Renumber)</p> <p>This sorts all the program numbers of the Performances into the same order as the Performance order (Performance number) indicated in the Select Performance page.</p>
F3 SortPG#	<p>(Program Number Sort)</p> <p>This sorts the Performances indicated in the Select Performance page into the order of the program numbers of the Performances.</p>
F4 SortABC	<p>(Alphabetical Sort)</p> <p>This sorts the Performances indicated in the Select Performance page into alphabetical order.</p>
F5 Blank	<p>(Blank)</p> <p>This selects a new, blank Performance (with no data).</p> <p>Press this when you wish to create a Performance from scratch.</p>

LIST

Select Patch

[Select Patch]		1	Patch -100/+100 A	
<Target> Part #01				
No.	Name	Time	PG#	
1	WND:Bassoon 8va	17.3	4	
2	WND:Clarinet 1a	1.7	9	
3	WND:Oboe 3a	14.6	2	
4	WND:Engl.Horn 1a	13.5	1	
---		[Renum]	[SortPG#]	[SortABC] [Set Off]

When the cursor is at the Patch name (Patch select) of the Part in the Performance Play mode, the

LIST indicator lights (green). Select the Select Patch page by pressing **LIST**.

Changing the Patch, naming, setting the program number and sorting can be done.

Indications

<Target>

(Target)

This indicates the Part whose Patch is to be changed.

No

(Number)

Scroll through the Patch list by moving the cursor to the number and using **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is dark).

*When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

Name

(Patch Name) **Patch**

The Patch list of the current Volume memory is indicated. Select the Patch to be changed by moving the cursor to the Patch name. Change the Patch by pressing **S1/DEC**.

*When the cursor is moved to the Patch name, you can temporarily select a Patch and check the sound.

*The ASCII Keyboard page can be selected by pressing **NAME**, and the Patch can be named. (⇐ P.3 - 13)

Time	<p>(Capacity of Patch)</p> <p>The memory capacity of all samples being used by the Patch is indicated in seconds (standard of 44.1kHz).</p> <p>* The time it takes to select the Select Patch page becomes longer when the Patch capacity is indicated. If you don't need to have this displayed, you can save time by setting Time Display (⇐ P.Sys - 5) in the System parameters to off.</p>
PG#	<p>(Program Number) Patch [1]—[128]</p> <p>This determines the program number of the Patch.</p> <p>This program number is used when changing the Patch by MIDI Program Change messages received over the Part channel.</p> <p>See P.4 - 16 for details.</p> <p>* Do not assign the same program number to several different Patches. If the same program number is assigned to several Patches, the Patch with the lowest list number takes priority in being changed.</p>
F2 Renum	<p>(Renumber)</p> <p>This sorts all the program numbers of the Patch into the same order as the Patch order (Patch number) indicated in the select Patch page.</p>
F3 SortPG#	<p>(Program Number Sort)</p> <p>This sorts the Patches indicated in the Select Patch page according to the order of their program numbers.</p>
F4 SortABC	<p>(Alphabetical Sort)</p> <p>This sorts the Patches indicated in the Select Patch page alphabetically.</p>
F5 Set Off	<p>(Set Off)</p> <p>This effectively turns off the Patch by not assigning it to a Part.</p>

LIST

Select File

[Select File] Muted Dec/Inc A			
<TG>No. 1 •ID[All] •CD[ID0:CD-ROM DRIVE]			
Files	Time	PG#	Int.
1: ***:RHYTHM SEC.1	106.0	---	A 12.6s
2: KIT:Drum Kits 1	201.5	---	B .0s
3: KIT:Cheese Kits	36.0	---	Disk
4: DRM:Brushes	85.6	---	.0s
---	---	---	Select

When the cursor is at the Sound program name in the Quick Load page, the **LIST** indicator lights (green). Call up the Select File page by pressing **LIST**.

* You can also call up the Select File page by pressing **S1/DEC**.

Assignments and changes are made to the Sound program list of the Quick Load page.

* Set the type (Volume, Performance, or Patch) and the list number of the Sound program to be assigned from the Quick Load page before opening the Select File page. The unit of the Sound program can be set by pressing **F1**. The list number can be set by moving the cursor to the Sound program name.

Indications

<TG>

(Target)

This assigns or changes the Sound program name at the list number selected by the cursor in the Quick Load page.

ID

(Volume ID)

The Sound program (file) indicated in the Select File page can be determined by the Volume ID. Only the Sound program (file) of the Volume ID, which is determined here, is indicated in the Select File page. Set it to All when you wish to indicate all Sound programs (files).

* You can select the Select Volume ID page by pressing **LIST**, and set the Volume ID (P.Pfom - 32).

CD

(Current Drive)

This changes the current drive, and changes the Sound program (file) indicated in the Select File page. The SCSI ID of this current drive is automatically assigned as the drive number (Drv) when assigning the Sound program (file) to the Sound program list in the Quick Load page.

* You can select the Select Drive page by pressing **LIST**, and change the current drive (P.Pfom - 34).

* files	<p>(Number of Files)</p> <p>This indicates the number of Sound programs (files) in the current drive. (The mark "*" indicated here actually appears as a number in the display.)</p>
No (no indication)	<p>(Number)</p> <p>Scroll through the Sound program (file) list by moving the cursor to the number and using S1/DEC or S2/INC, or VALUE/CURSOR (when the SHIFT indicator is dark).</p> <p>* When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.</p>
Name (no indication)	<p>(File Name)</p> <p>The Sound program (file) list in the current drive is indicated. Select the Sound program name (file name) to be assigned by moving the cursor to the Sound program name (file name). Press F5 (Select) or S1/DEC to assign the Sound program name (file name) to the Sound program list of the Quick Load page.</p>
Time	<p>(File Capacity)</p> <p>The capacity of the Sound program is indicated in seconds (at a standard of 44.1kHz).</p> <p>This displayed capacity of the Sound program could be less than or greater than the actual capacity. Refer to the section "Correction for Time Indication" on P.Disk - 31 for details.</p>
PG#	<p>(Program Number)</p> <p>When assigning the Volume, the program number of the Volume is indicated. The mark " - - - " indicates off.</p> <p>When assigning the Performance or the Patch, the program number is not indicated.</p>
Int	<p>(Remaining Capacity of each Volume Memory)</p> <p>The remaining memory capacity of each Volume memory is indicated in seconds (standard of 44.1kHz).</p>
Disk	<p>(Remaining Capacity of the Current Drive)</p> <p>The remaining capacity of the current drive is indicated in seconds (at a standard of 44.1kHz).</p>
F5 Select	<p>(Select)</p> <p>By moving the cursor to the Sound program name (file name), that Sound program can be assigned to the Sound program list of the Quick Load page.</p>

LIST

Select Volume ID

Select Volume ID

MutedSelect/---A

ATX	BR5	BS	BT5	CLP	CMB	CYM	DRM
ETH	FLT	FRT	FX	GTR	HAT	HIT	HRP
KEY	KIK	KIT	MLT	ORG	PLK	PNO	PRC
SAX	SFX	SNP	SNR	STR	SYN	TEK	TOM

↓

DeleteSortABCSelectAllMake

When the cursor is at the Sound program name in the Quick Load page, the LIST indicator lights (green). Call up the Select File page by pressing LIST. When the cursor is at the Volume ID (ID) in this Select File page, the LIST indicator lights (green). Call up the Select Volume ID page by pressing LIST.

Determining the Volume ID, assigning to the list, and deleting can be done.

Indications

Volume ID (no indication)

(List of Volume ID) System

This indicates the Volume ID list. Up to 200 Volume IDs can be assigned. This list can be referred to when determining the Volume ID in the Select File page, Disk Load page, Disk Save page, Disk Copy page, or Disk Delete page.

- * Since this list is part of the System parameters, it doesn't directly retrieve data on the drive and indicate the list. Therefore, this data will be lost if you turn off the power without saving it. Be sure to save the data (P.Sys - 32).
- * The Volume ID of the loaded Sound program is automatically assigned to this list when loading in the Quick Load page or Disk Load page.

Use the cursor buttons (▲/▼) to scroll through the list.

F1 Delete

(Delete)

This deletes the Volume ID selected by the cursor.

F2 SortABC

(Alphabetical Sort)

This sorts the Volume IDs indicated in the Select Volume ID page alphabetically.

F3 Select**(Select)**

This selects the Volume ID at the cursor position. The selected Volume ID is indicated at the Volume ID (ID) in the Select File page.

F4 All**(All)**

This selects all Volume IDs. All is indicated at the Volume ID (ID) in the Select File page.

F5 Make**(Make)**

This calls up the ASCII keyboard page, and a new Volume ID can be assigned (⇐ P.3 - 13).

LIST

Select Drive

```

[Select Drive] Muted Select/--IA
* [0]ID0:CD-ROM DRIVE [4]ID4: - No Drive
  [1]ID1:Formatted     [5]ID5: - No Drive
  [2]ID2: - No Drive   [6]ID6: - No Drive
  [3]ID3: - No Drive   [7]ID7: SP-700 Self
  --- --- --- --- Scan

```

When the cursor is at the Sound program name in the Quick Load page, the **LIST** indicator lights (green). Call up the Select File page by pressing **LIST**. With the Select File page selected, and the cursor at the Current Drive indication (CD), the **LIST** indicator lights (green) again. Press **LIST** again to select the Select Drive page.

From this page, you can change the current drive and name the drive.

Indications

Drive Name (no indication) (Drive Name) **Disk**

This indicates the list of the drives connected to the SP - 700.

* The "●" mark is shown at the left side of the current drive.

Move the cursor to the drive to be changed or to be named.

Press **S1/DEC** in order to change the drive.

Press **NAME** in order to name the drive.

* CD - ROM drives and streaming tape drives cannot be named.

* The ASCII Keyboard page can be selected by pressing **NAME**, and the drive can be named. (⇨ P.3 - 13)

* Since this drive name rewrites the data directly to the disk, there is no need to save it.

The names that you enter for the drives are indicated; however, these originally have the indications shown below.

Unformatted : The connected hard disk or optical disk has not been formatted. Please format it (⇨ P.Disk - 28).

Formatted : The connected hard disk or optical disk has been formatted.

CD - ROM DRIVE : A CD - ROM drive has been connected.

TapeStreamer : A streaming tape drive has been connected.

SP - 700 Self : The SP - 700 itself.

No Drive : A drive has not been connected.

F5 Scan**(Scan)**

This function is used to “re - recognize” the drive connected to the SP - 700. You should use this function when, for some reason, the SP - 700 fails to recognize a drive. This usually happens when replacing disks or tapes, or when turning the drive on/off after the SP - 700 has been turned on.

COMMAND**COMMAND in the Performance Mode**

When the **COMMAND** indicator is lit (green), pressing **COMMAND** selects the Command Menu page, allowing you to select from the commands.

The **COMMAND** indicator lights (green) when the following pages have been selected : Performance Mode page, Performance Play page, MIDI Filter page, and Performance EQ page.

```
[Perform Commands] Perform|Select/--|A
[1:Edit Patch] [5:Copy A→B/B→B]
[2>Delete] [6:Copy A→B/B→A]
[3:Initialize] [7:Listen Delete]
[4:Disk] [8:Pform Utility]
1:E.Pch 2:Delet 3:Init 4:Disk 1-4/5-8
```

Move the cursor to the command and select the command by pressing **S1/DEC**. The command can also be selected with the Function buttons. The indication of the Function buttons can be changed by pressing **F5** (1 — 4/5 — 8).

Edit Patch

This selects the Patch Edit page. There are two ways (A and B) to edit a Patch.

- * Refer to the section "PRECAUTIONS IN EDITING SOUND PROGRAMS" on P.Edit - 1, and the explanations of each display page of the Patch Edit Mode starting on P.Pach - 1.
- * Make sure to change the Volume memory beforehand when editing a Patch in another Volume memory (⇐ P.Sys - 1), since all editing is done for the current Volume memory.

Delete

This deletes the sound data in the Volume memory.

Delete				
Perform Dec/Inc [A]				
•TG[Volm] •Target Vol[A]				
No.	NAME	Time	PG#	Int.
1	WND:Woodwinds	78.2	A	12.6s
			B	.0s
<input type="checkbox"/> ANOff <input type="checkbox"/> ANOn <input type="checkbox"/> --- <input type="checkbox"/> --- <input type="checkbox"/> Delete				

Indications

TG (Target) [Volm (Volume)], [Pfm (Performance)],
[Pach (Patch)], [Prtl (Partial)], [Samp (Sample)]

This selects the type of sound data to be deleted.

All sound data below (in the hierarchy) the selected data type is also deleted.

Sound data which is also used by other programs is not deleted regardless of the setting of the Fast Delete Mode (☐ P.Sys - 8), since the relationship of the various sound data is always checked when data is deleted from the Volume memory.

*All sound data in the Volume memory (including any data unassigned to a program) which is selected by the Target Volume Memory, is deleted when deleting the Volume.

Target Vol (Target Volume Memory) [A], [B]

This selects the Volume memory having the sound data to be deleted.

*The current Volume memory is not changed.

No. (List Number)

To scroll through the list, move the cursor to the number and use or , or the (when the indicator is not dark).

*When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

COMMAND

Name	<p>(Sound Data to be Deleted)</p> <p>All sound data in the Volume memory selected by the Target Volume Memory is indicated in the list. Mark the sound data to be deleted, then delete the data.</p> <p>The mark alternately appears and disappears each time [S1/DEC] is pressed after moving the cursor to the name. Press [F2] (All On) in order to mark all the sound data. Press [F1] (All Off) in order to release all marks.</p> <ul style="list-style-type: none"> * There is no need to mark the sound data when selecting a Volume by the Target. * Marks are all canceled when changing the target. * The sound data at the cursor position is deleted when no other data is marked. * In this condition, the sound data at the cursor position is selected temporarily and the Sound program can be checked by playing it from a MIDI keyboard. * Unnamed Sound data cannot be deleted. <p>Execute the Delete function after marking the sound data to be deleted. Press [F5] (Delete).</p>
Time	<p>(Capacity of the Sound Data)</p> <p>The memory capacity of the sound data is indicated in seconds (at a standard of 44.1kHz).</p>
PG#	<p>(Program Number)</p> <p>When selecting the Performance or Patch as the target, the program number of this sound data is indicated. However, when the target is a Volume, Partial or Sample, it is not indicated.</p>
Int.	<p>(Remaining Memory Capacity of each Volume Memory)</p> <p>The remaining memory capacity of each Volume Memory is indicated in seconds (at a standard of 44.1kHz).</p>
[F1] All Off	<p>(Mark All Off)</p> <p>This erases all marks.</p>
[F2] All On	<p>(Mark All On)</p> <p>This marks all sound data.</p>
[F5] Delete	<p>(Delete)</p> <p>This deletes the marked sound data. The message "Are you sure?" in the display prompts you for confirmation. The Delete operation is actually executed by pressing [F2] (Yes). Cancel the Delete operation by pressing [F4] (No).</p>

COMMAND**Caution!**

When Delete is executed, all the selected parameters of sound data one level above (in the hierarchy) which use the deleted sound data are automatically turned off.

For example, when deleting a Partial, the Partial name is deleted from the split for all Patches which use the Partial and the Partial is automatically turned off. In the same way, when deleting a Patch, the Patch Select of the Part is automatically turned off. Also, when deleting a sample, the Sample Select of SMT is automatically turned off.

Be careful when using the Disk Delete function (⇨ P.Disk - 20), since it doesn't automatically turn off the select parameter of sound data one level higher.

Caution!

Reset the program number as needed since the Performance or Patch program number (PG#) becomes the same as the list number after deleting a Performance or a Patch.

For example, if the Performance of list number 10 is deleted, the program number of the deleted Performance becomes 10.

COMMAND

Initialize

This returns the sound data parameters in the Volume memory to the initial factory - set values.

[Initialize]		Perform		Dec/Inc		A	
•TG[Pfom]		•Target Vol[A]					
No.	Name	Time	PG#	Int.			
1:	WND:Wdwind	Sect1	33.6	3	A 12.6s		
2:	WND:Wdwind	Sect2	45.4	4	B .0s		
3:	WND:Wdwind	Sect3	32.8	5			
4:	WND:Wdwind	Sect4	60.9	6			
[AllOff]		[AllOn]		---		[Initial]	

Indications

TG (Target) [Pfom (Performance)], [Pach (Patch)], [Prtl (Partial)]

This selects the kind of sound data that is to be initialized.
Sound data of lower levels (in the hierarchy) are not initialized in this operation.

* Be careful in executing this operation, since all data of the selected sound data type will be irretrievably lost.

Target Vol (Target Volume Memory) [A], [B]

This selects the Volume memory having the sound data to be initialized.

* This does not change the currently selected Volume memory.

No. (List Number)

To scroll through the list, move the cursor to the number and use [S1/DEC] or [S2/INC], or the [VALUE/CURSOR] (when the [SHIFT] indicator is dark).

* When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

COMMAND

Name	<p>(Sound Data to be Initialized)</p> <p>All sound data in the Volume memory selected by the Target Volume Memory is indicated in the list. Mark the sound data to be initialized, then initialize it.</p> <p>The mark alternately appears and disappears each time S1/DEC is pressed after moving the cursor to the name. Press F2 (All On) in order to mark all the sound data. Press F1 (All Off) in order to release all marks.</p> <ul style="list-style-type: none"> * Marks are all canceled when changing the target. * The sound data at the cursor position is initialized when no other data is marked. * In this condition, the sound data at the cursor position is selected temporarily and the Sound program can be checked by playing it from a MIDI keyboard. * Unnamed sound data cannot be initialized. <p>Execute the initialize function after marking the sound data to be initialized. Press F5 (Initial).</p>
Time	<p>(Capacity of the Sound Data)</p> <p>The memory capacity of the sound data is indicated in seconds (at a standard of 44.1kHz).</p>
PG#	<p>(Program Number)</p> <p>When selecting the Performance or Patch as the target, the program number of this sound data is indicated. However, when the target is a Partial, it is not indicated.</p>
Int.	<p>(Remaining Memory Capacity of each Volume Memory)</p> <p>The remaining memory capacity of each Volume Memory is indicated in seconds (at a standard of 44.1kHz).</p>

COMMAND

F1 All Off

(Mark All Off)

This erases all marks.

F2 All On

(Mark All On)

This marks all sound data.

F5 Initialize

(Initialize)

This initializes the marked sound data.

See the parameter list (P.App. - 28) for the initialized values of each parameter. Remember that the Patch Select parameter, Partial Select parameter and Sample Select parameter are turned off in this condition and no sound is output.

Caution!

All names for sound data become blank when the data is initialized. All the selected parameters of sound data one level above (in the hierarchy) which use the initialized sound data also become blank.

For example, when initializing a Partial, the Partial name of the split becomes blank for all Patches which use the Partial. In the same way, when initializing a Patch, the Patch Select of the Part becomes blank. Also, when initializing a Sample, the Sample Select of SMT becomes blank.

Caution!

Reset the program number as needed since the Performance or Patch program number (PG#) becomes the same as the list number after initializing a Performance or a Patch.

For example, if the Performance of list number 10 is initialized, the program number of the initialized Performance becomes 10.

Disk

This selects each page of the Disk Mode. Refer to the explanation on page Disk - 1, since it is the same as that for each page of the Disk Mode.

Copy A → A/B → B

This copies the sound data parameter in the Volume memory to within the same Volume memory.

COPY A→A/B→B				
TG[PrPM] • Source Vol[A]				
No.	Name	Time	PG#	Int.
1	WND:BSSN.A#1	2.5		A 12.6s
2	WND:BSSN.C#2	2.5		B .0s
3	WND:BSSN.E2	2.5		
4	WND:BSSN.G2	2.5		
AllOff AllOn --- --- [A]→[A]				

Indications

TG (Target) [PrPM (Partial parameter),
[PaPM (Patch parameter)],
[PfPM (Performance parameter)]

This selects the kind of sound data (only parameters) to be copied.
Sound data of lower levels (in the hierarchy) is not copied.

Source Vol (Source Volume Memory) [A], [B]

This selects the Volume memory having the sound data to be copied.

* The current Volume Memory does not change.

* What is shown at **[F5]** will change in accord with the circumstances; either [A] → [A] or [B] → [B].

No. (List Number)

To scroll through the list, move the cursor to the number and use **[S1/DEC]** or **[S2/INC]**, or the **[VALUE/CURSOR]** (when the **[SHIFT]** indicator is dark).

* When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

COMMAND

Name	<p>(Sound Data to be Copied)</p> <p>All sound data in the Volume memory selected by the Source Volume Memory is indicated in the list. Mark the sound data to be copied, then copy it.</p> <p>The mark alternately appears and disappears each time S1/DEC is pressed after moving the cursor to the name. Press F2 (All On) in order to mark all the sound data. Press F1 (All Off) in order to release all marks.</p> <p>* Marks are all canceled when changing the target.</p> <p>* The sound data at the cursor position is copied when no other data is marked.</p> <p>* In this condition, the sound data at the cursor position is selected temporarily and the Sound program can be checked by playing it from a MIDI keyboard.</p> <p>* Unnamed sound data cannot be copied.</p> <p>Execute the Copy function after marking the sound data to be copied. Press F5 ([A] → [A]/[B] → [B]).</p>
Time	<p>(Capacity of the Sound Data)</p> <p>The memory capacity of the sound data is indicated in seconds (at a standard of 44.1kHz).</p>
PG#	<p>(Program Number)</p> <p>When selecting the Performance parameter or Patch parameter as the target, the program number of this sound data is indicated. When the target is a Partial parameter, it is not indicated.</p>
Int.	<p>(Remaining Memory Capacity of each Volume Memory)</p> <p>The remaining memory capacity of each Volume Memory is indicated in seconds (at a standard of 44.1kHz).</p>

COMMAND**F1** All Off**(Mark All Off)**

This erases all marks.

F2 All On**(Mark All On)**

This marks all sound data.

F5 Copy**(Copy)**

This copies the marked sound data within the same Volume memory.

The sound data is copied to an empty number on the list. The letters "AA" are added to the last two characters of the copied sound data name. When making additional copies, this suffix changes to "AB," "AC," and so on, as more copies are made.

Since the name is different from the original sound data, it is handled as different sound data.

Since the amount of the sound data (64 Performances, 128 Patches and 255 Partials) which can be copied to the Volume memory is fixed, it is impossible to copy more than this maximum number. When the amount exceeds the limit, the SP - 700 copies as much data as it can, then stops. The marks of the sound data which were not copied remain without being erased.

Caution!

Reset the program number since the Performance or Patch program number (PG#) becomes the same as the original Performance or Patch program number after copying the Performance parameter or the Patch parameter.

When the program number of several different sets of sound data is the same, the one with the lowest list number has priority to be changed.

COMMAND

Copy A → B/B → A

This copies the sound data in the Volume memory to a different Volume memory.

[COPY A→B/B→A]		Perform		Dec/Inc		A
•TG[Pfom]		•Source Vol[A]				
No.	Name	Sect	Time	Pst#	Int.	
1:	WND:Wdwind	Sect1	33.6	3	A	12.6s
2:	WND:Wdwind	Sect2	45.4	4	B	.0s
3:	WND:Wdwind	Sect3	32.8	5		
4:	WND:Wdwind	Sect4	60.9	6		
[AllOff]		[AllOn]		[A]→[B]		

Indications

TG (Target) [Pfom (Performance)], [Pach (Patch)], [Prtl (Partial)],
[Samp (Sample)], [PrPM (Partial parameter)],
[PaPM (Patch parameter)],
[PfPM (Performance parameter)]

This selects the kind of the sound data to be copied.
Sound data of lower levels (in the hierarchy) is also copied together with the selected type. However, when only parameters are being copied, the lower level sound data is not copied.

Source Vol (Source Volume Memory) [A], [B]

This selects the Volume memory containing the sound data to be copied.

- * The current Volume Memory does not change.
- * What is shown at [F5] will change in accord with the circumstances; either [A] → [B] or [B] → [A].

No. (List Number)

To scroll through the list, move the cursor to the number and use [S1/DEC] or [S2/INC], or the [VALUE/CURSOR] (when the [SHIFT] indicator is dark).

- * When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

COMMAND

Name	<p>(Sound Data to be Copied)</p> <p>All sound data in the Volume memory selected by the Source Volume Memory is indicated in the list. Mark the sound data to be copied, then copy it.</p> <p>The mark alternately appears and disappears each time [S1/DEC] is pressed after moving the cursor to the name. Press [F2] (All On) in order to mark all the sound data. Press [F1] (All Off) in order to release all marks.</p> <p>* Marks are all canceled when changing the target.</p> <p>* The sound data at the cursor position is copied when no other data is marked.</p> <p>* In this condition, the sound data at the cursor position is selected temporarily and the Sound program can be checked by playing it from a MIDI keyboard.</p> <p>* Unnamed sound data cannot be copied.</p> <p>Execute the Copy function after marking the sound data to be copied. Press [F5] ([A] → [B]/[B] → [A]).</p>
Time	<p>(Capacity of the Sound Data)</p> <p>The memory capacity of the sound data is indicated in seconds (at a standard of 44.1kHz).</p>
PG#	<p>(Program Number)</p> <p>When selecting the Performance, Patch, Performance parameter or Patch parameter as the target, the program number of this sound data is indicated. When the target is not any of the above, it is not indicated.</p>
Int.	<p>(Remaining Memory Capacity of each Volume Memory)</p> <p>The remaining memory capacity of each Volume Memory is indicated in seconds (at a standard of 44.1kHz).</p>

COMMAND

[F1] All Off

(Mark All Off)

This erases all marks.

[F2] All On

(Mark All On)

This marks all sound data.

[F5] Copy

(Copy)


This copies the marked sound data to the other Volume memory.

The sound data is copied to an empty number on the list on the destination Volume memory. When sound data of the same name exists in the destination Volume memory, the message "Same Name Found! Overwrite?" appears, prompting you to confirm the operation.

Pressing **[F1]** (Yes) copies the sound data and overwrites the sound data having the same name.

Pressing **[F3]** (No) does not copy data having the same name but only copies data with different names.

Press **[F5]** (Cancel) to stop the Copy operation.

*Regardless of the setting of the overwrite switch ( P.Sys - 10), the SP - 700 always checks whether same named sound data exists or not when this Volume memory copy function is used.

Since the amount of the sound data (64 Performances, 128 Patches, 255 Partials, and 512 Samples) which can be copied to the Volume memory is fixed, it is impossible to copy more than this maximum number.

When the amount exceeds the limit, the SP - 700 copies as much data as it can, then stops. The marks of the sound data which were not copied remain without being erased.

It is also impossible to copy beyond the capacity (in seconds) of the destination Volume memory. When this capacity is exceeded, the SP - 700 copies as much data as it can, then stops. The marks of the sound data which were not copied remain without being erased.

Caution!

When copying a Performance, Patch, Performance parameter or Patch parameter, reset the program number of the Performance or Patch program number (PG#) after executing the copy so that they won't become the same as another Performance or Patch program number.

When the program number of several different sets of sound data is the same, the one with the lowest list number has priority to be changed.

Listen Delete

The sound data of the SP - 700 is played by MIDI messages. The Partials of keys which are not played at all can be turned off all together in Patch split. This function is called Listen Delete.

Sound data is saved to the hard disk. By using this function and saving the sound data, important memory in the hard disk, etc. can be saved without saving unnecessary sound data (e.g., the Partials of the keys that do not sound and Samples being used by the Partial).

This function is especially suited for playing the SP - 700 with song data from a MIDI sequencer, since it lets you create sound data with minimum use of memory and use only that data for playing from the sequencer.

* Since the Listen Delete function works in the current Volume memory, change the Volume memory beforehand when you wish to use Listen Delete in another Volume memory (⇐ P.Sys - 1).

* See "Save" (⇐ P.2 - 16) for information on the sound data that is actually saved in the Save operation.

Listen Delete Perform Dec/Inc 18															
11WIND:Wdwind Sect1															
Ignore - Part								- MIDI Ch.							
01	05	09	13	17	21	25	29	1	5	9	13				
02	06	10	14	18	22	26	30	2	6	10	14				
03	07	11	15	19	23	27	31	3	7	11	15				
04	08	12	16	20	24	28	32	4	8	12	16				
Start															

Indications

Performance (no indication) (Performance Select)

This selects the Performance to be affected by the Listen Delete function.

* Pressing **LIST** selects the Select Performance page, and the Performance can be changed.

Patch (no indication) (Patch)

This indicates the Patch of the Part when the cursor is at the Pan number.

COMMAND

Ignore - Part

(Part for which Listen Delete is not applied)

This function lets you specify or mark Parts you wish to be unaffected by the Listen Delete function.

The mark alternately appears and disappears each time **S1/DEC** is pressed after moving the cursor to the Part number.

Ignore - MIDI Ch.

(MIDI channel over which Listen Delete is not applied)

This function lets you specify or mark MIDI channels you wish to be unaffected by the Listen Delete function.

The mark alternately appears and disappears each time **S1/DEC** is pressed after moving the cursor to the MIDI channel number.

Caution!

Even while 'Listen Delete' is being executed, you can proceed with a normal performance with a MIDI Controller. You cannot, however, change Volume Memories with Bank Select messages and Program Change messages, or load a Volume with Program Change messages. However, you can change Patches or Performances within the Current Volume Memory with Program Change messages. Even after you have changed Patches or Performances, the Listen Delete function will continue to work. In other words, the Listen Delete function is effective to both Patches; the one before being changed and after being changed.

To use the Listen Delete function:

1. Select the Performance Play page.
Press **PERFORMANCE**, then **F1** (Play).
2. Select the Performance or Patch to be affected by Listen Delete.
3. Select the Listen Delete page.
Press **COMMAND**, **F5** (1—4/5—8) then **F3** (Listen Delete).
4. Mark the Part or MIDI channel that you wish to leave unaffected by the Listen Delete function.
5. Press **F1** (Start). The message "Wait for Note ON" is then indicated at the top right of the display. In this condition, the SP - 700 is waiting for a Note On message from the MIDI controller.
Once this is pressed, the indication changes to **F1** (Stop).
6. Play the MIDI controller to transmit note messages to the SP - 700.
The message "Now logging" is indicated at the top right of the display.
7. Press **F1** (Stop) when you are finished playing the MIDI controller.
The message "Stop" is indicated at the top right of the display, and the indication changes to **F1** (Go On); **F4** (Cancel) and **F5** (Exec) are also indicated.
8. Press **F1** (Go On) when continuing to use Listen Delete. The message "Now logging" is indicated at the top right of the display, returning to step #6 above. Press **F4** (Cancel) to stop Listen Delete.
Press **F5** (Exec) to execute Listen Delete.
9. When **F5** (Exec) is pressed, the following message will appear.

```

[Select Patches !] Perform! ---/--- 1A
Target Patches are:
F1: All Patches
      in the current Volume Memory.
F3: The actually sounded Patches
      in the Listen Delete Page.
F5: Cancel.
[All] [Sounded] [Cancel]

```

You can select the Patch to which the Listen Delete function will apply.

When **F1** (All) is pressed, the Patches actually played will be the targets of the Listen Delete Function (the Patches where Note On messages are input will also be the targets even if they are not played). Furthermore, all the Patches in the Current Volume Memory where Note On messages have never been input will also be the targets. Patches where Note On messages have never been input are initialized, that is, it is not the case that the Partial of the Split is turned off.

When **F2** (Sounded) is pressed, only the Patches actually played will be the targets of the Listen Delete Function (the Patches where Note On messages are input will be the targets even if they are not played). When Listen Delete is executed, and the Partial of all the Split keys are turned off, the Patches will be initialized.

When **F5** (Cancel) is pressed, the Listen Delete function will be canceled.

When Listen Delete is finished, "Completed" will be shown in the upper right of the screen.

(continued on next page)

COMMAND

10. Save the sound data where the Listen Delete is executed.

- * First assign the Patch to be saved to a Part, then save it. For a detailed explanation, see "SAVE" on P.2 - 16.

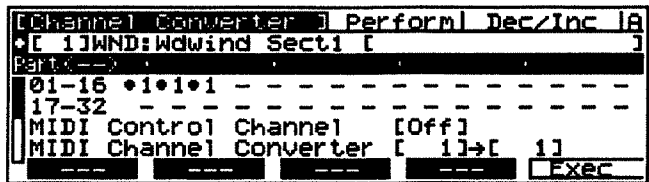
Perform Utility (Performance Utility)

There are two Performance Utility commands; the Channel Converter and the Copy MIDI Filter/Equalizer functions.

Channel Converter

This converts the MIDI channel of the Part into a specified MIDI channel.

*Switch the Volume memory beforehand when converting the MIDI channel of the other Volume memory since the Channel Converter converts the MIDI channel only for the currently selected Volume memory (⇐ P.Sys - 1).



Indications

Performance (no indication) (Performance Select)

This selects the Performance of the MIDI channel to be converted.

*Pressing **LIST** selects the Select Performance page, and the Performance can be changed.

Patch (no indication) (Patch)

This indicates the Patch of the Part when the cursor is at the MIDI channel of the Part.

Part () (MIDI Channel of the Part) **Perform** [1]—[16], [- (Off)]

The MIDI channels of Parts 1 — 32 are indicated.

This can be edited by moving the cursor to the MIDI channel of each Part.

When the cursor is at the MIDI channel of the Part, the Part number is indicated in parentheses (), and the Patch which is assigned to the Part is indicated at the top right of the display.

COMMAND

MIDI Control Channel (MIDI Control Channel) **System** [Off] [1]—[16]
This is for editing the MIDI control channel.

* The MIDI channel setting of the MIDI control channel cannot be converted.

MIDI Channel Converter (MIDI Channel Converter)

[]→ (Assigning the MIDI channel to be converted) [Off], [1]—[16], [All]
[]→ determines the MIDI channel to be converted. The “●” mark appears in the display to the left of the MIDI channel, which is the same as the assigned MIDI channel.
The MIDI channels of all Parts are converted when this is set to All.

→[] (Determining the MIDI channel after conversion) [Off], [1]—[16]
→[] determines the MIDI channel after conversion.

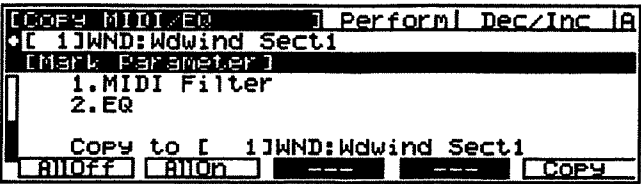
For example, set [5]→[8] and execute by pressing **F5** (Exec). All Parts which have been set to MIDI channel 5, are reset to MIDI channel 8.

F5 Exec (Execute)
This executes the conversion of the MIDI channel.

Copy MIDI/EQ (Copy MIDI Filter/Equalizer)

This copies the settings of the MIDI filter or equalizer of the Performance to another Performance.

* Switch the Volume memory beforehand when copying to the other Volume memory since this function copies only within the currently selected Volume memory (⇐ P.Sys - 1).



Indications

Performance (no indication) (Original Performance to be Copied)

This selects the original Performance to be copied.

* Pressing **LIST** selects the Select Performance page, and the Performance can be changed.

Mark Parameter (Parameter to be Copied)

Mark the parameter (MIDI filter or equalizer) to be copied.

The mark alternately appears and disappears each time **S1/DEC** is pressed after moving the cursor to the parameter. Press **F2** (All On) in order to mark both the filter and equalizer. Press **F1** (All Off) in order to release all marks.

* When no mark exists, the parameter which is at the cursor position is copied.

Copy to [] (Destination Performance) [1]—[64], [All]

This selects the destination Performance. The Performance name is indicated at the right.

The settings are copied to all Performances when this is set to All.

F5 Copy (Copy)

This executes the copy.

MEMO

Patch Edit Mode

This is the mode used for editing Patches.

A Patch is created by setting the necessary parameters for playing a maximum of 88 Partials which are assigned (split) to the 88 keys.

How the pitch, level and cutoff frequency of the filter are affected by control messages (Control Change, Pitch Bend, Aftertouch, etc.) from a MIDI controller (such as a master keyboard) can also be determined in this mode.

Methods of Editing a Patch

There are two ways to edit a Patch:

Method A : This method allows you to edit the Patch assigned to a Part while listening to the entire Sound program of the Performance.

Method B : This method allows you to edit a Patch while listening only to the Patch Sound program itself.

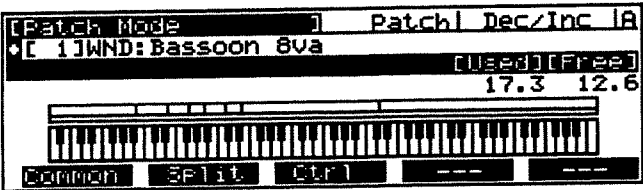
See the section "PRECAUTIONS IN EDITING SOUND PROGRAMS," on P.Edit - 1, for details.

PATCH

Patch Mode

The split condition of the Patch is indicated on the keyboard display. The note which is currently sounding is highlighted on the keyboard display.

* Keys to which Partials have not been assigned are not highlighted.



Indications

Patch (no indication)

(Patch select)

This changes the Patch to be edited (⇐ P.4 - 3).

In the case of Method A (⇐ P.Edit - 2):

Only the Patch which is assigned to the Part can be selected.

The currently selected Part and its MIDI channel are shown in parentheses () to the right of the Patch name. While editing, you can check the sound by playing the external MIDI controller. The MIDI channel to be used is the same as that for the Part.

In the case of Method B (⇐ P.Edit - 3):

Any Patch in the current Volume memory can be selected.

There is no parentheses () indication to the right of the Patch name.

While editing, you can check the sound by playing the external MIDI controller. Since the OMNI ON condition is active, any MIDI channel from 1 — 16 can be used.

* The ASCII Keyboard page can be selected by pressing **[NAME]**, and the Patch can be named. (⇐ P.Pach - 20)

* Pressing **[LIST]** selects the Select Patch page, and the Patch can be changed. (⇐ P.Pach - 21)

[Used]

(Patch Capacity)

The memory capacity of all samples (which the currently selected Patch uses) is indicated in seconds (at a standard of 44.1kHz).

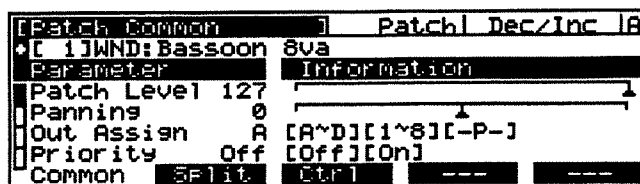
[Free]

(Remaining Memory Capacity of Current Volume Memory)

The remaining memory capacity of the current Volume memory is indicated in seconds (at a standard of 44.1kHz).

Patch Common

This determines the settings related to the entire Patch, such as how the Patch should sound when playing.



The parameter is indicated at the left side of the display. The value range of each parameter is indicated at the right.

Indications

Patch (no indication)

(Patch Select)

This changes the Patch to be edited. (☞ P.4 - 3)

* The ASCII Keyboard page can be selected by pressing **NAME**, and the Patch can be named. (☞ P.Pach - 20)

* Pressing **LIST** selects the Select Patch page, and the Patch can be changed. (☞ P.Pach - 21)

Patch Level

(Patch Level) **Patch** [0]—[127]

This determines the sound volume of the Patch. No sound is output when this parameter is set to 0.

* The actual sound volume that is output is affected by other parameters as well. (☞ P.2 - 33)

Panning

(Patch Panning) **Patch** [L32]—[0 (Center)]—[R32]

This determines the pan setting when using the stereo out jacks. This pan setting of the Partial (included in the Patch) moves the entire sound to the left or right.

* The actual pan position is affected by other parameters as well. (☞ P.2 - 31)

PATCH + **F1** (Common)

Output Assign

(Patch Output Assign) **Patch**

[A], ([B])—([D]), ([1]), ([2]), [3]—[8], [—P— (Partial)]

This determines from which jack the Patch is output.

When this is set to [—P—] (Partial), the Output Assign setting for the Partial is active.

* It may happen that the jack indicated in parentheses () may not be set according to the Output Mode setting of the System parameters. (⇐ P.Sys - 3)

* The actual output configuration is affected by other parameters as well. (⇐ P.2 - 24)

Priority

(Patch Priority) **Patch** [Off], [On]

When receiving note messages exceeding the maximum polyphony of the SP - 700, this determines whether the voices of the sounds being used for each Patch will be allowed to decay naturally or be abruptly cut off.

The maximum polyphony of the SP - 700 is 24 voices. There may be a shortage of voices if you layer many samples or use the SP - 700 as a multi - timbral sound source. When this happens, the voices currently sounding are cut off one by one as new notes are played (last note priority); however, the Patches whose priority has been set to On will continue to sound.

If you are concerned about the number of available voices when using the SP - 700 as a multi - timbral sound source, set the priority of Patches used for melody and bass lines to On. In this way, the most important parts (the melody and bass lines in this case) continue to sound even though some backing chords may be cut off unexpectedly.

* When the priority settings of all Patches are on, the earlier played sounds have priority and recently played notes (the ones which exceed the 24 - voice limit) are ignored.

Oct Shift

(Octave Shift) **Patch** [—2]—[2]

This shifts the received MIDI note number up or down (in octave units) and sounds the Patch accordingly.

Coarse Tune

(Patch Coarse Tune) **Patch** [—48]—[48]

This determines the pitch (in semi - tones) at which the Patch is sounded.

* The sound range of each sample can be up to two octaves higher than the original key (⇐ P.Prtl - 35). Even when a pitch setting greater than two octaves is determined by tuning or pitch modulation, the sound can go no higher than the two octave limit.

Fine Tune

(Patch Fine Tune) **Patch** [—50]—[50]

This determines the fine pitch setting of the Patch.

The value is adjusted up or down in 1 - cent steps (1 cent is equivalent to 1/100 of a semi - tone).

Analog Feel (Analog Feel) **Patch** [0]—[127]
 This provides a subtle, pitch modulation when playing.
 Higher values create a minute modulation of the Pitch each time a Patch sounds (for each sound), allowing you to obtain a warmer, more natural sound—like that of an analog synthesizer. This is also useful for adding thickness and depth to string sounds, especially when playing chords.

Program # (Program Number) **Patch** [1]—[128]
 This determines the program number when changing the Patch in the Performance Mode.

* The PG# in the Select Patch display (⇐ P.Pach - 22) is also changed when changing this Program Number.

* See P.4 - 16 for changing Patches via MIDI.

Caution!

Do not assign the same program number to several Patches. When the same program number is set to different Patches, the Patch with the lowest list number indicated in the Select Patch page has priority.

Cutoff Offs (Cutoff Offset) **Patch** [- 63]—[63]
 This adjusts the cutoff setting for the entire Patch. This value is added to the cutoff frequency (⇐ P.Prtl - 17) of each Partial being used by the Patch. If the cutoff frequency of the Partial has already been set to 127, setting this parameter to a positive value will not change the actual value any further.

* When the TVF Filter Mode (⇐ P.Prtl - 16) is off, the setting of the Cutoff Offset becomes inactive.

Reso Offs (Resonance Offset) **Patch** [- 63]—[63]
 This affects the entire sound of the Patch. This value is added to the resonance value of each Partial being used by the Patch. (⇐ P.Prtl - 17) If the resonance of the Partial has already been set to 127, setting this parameter to a positive value will not change the actual value any further.

* When the TVF Filter mode (Page Prtl - 16) is off, the setting of the Resonance Offset becomes inactive.

Attack Offs (Attack Time Offset) **Patch** [- 63]—[63]
 This affects the entire TVA envelope attack time (the Time 1 parameter) of each Partial being used by the Patch. (⇐ P.Prtl - 26)

PATCH + **F1** (Common)

ReleaseOffs

(Release Time Offset) **Patch** [- 63]—[63]

This affects the entire TVA envelope release time (the Time 4 parameter) of each Partial being used by the Patch (⇐ P.Prtl - 26).

V - Sens Offs

(Velocity Sense Offset) **Patch** [63]—[- 63]

This affects the entire TVF and TVA Velocity Curve Sense value (⇐ P.Prtl - 19 and P.Prtl - 24) of each Partial being used by the Patch.

Patch Split

From this page you can assign Partials (and the range over which they will sound) to the 88 keys of the keyboard. The assignment of each single Partial is referred to as a “split” and a maximum of 88 Partials can be split over the keyboard. You can also assign splits by using a MIDI keyboard.

*When setting up a split in which different keys (or key ranges) have completely different sounds (such as for a drum Part), create the Partials beforehand (for example, kick drum, snare and cymbal), then use the Patch Split function to assign the sounds.



Indications

Patch (no indication)

(Patch Select)

This changes the Patch to be edited (☞ P.4 - 3).

*The ASCII Keyboard page can be selected by pressing **NAME**, and the Patch can be named. (☞ P.Pach - 20)

*Pressing **LIST** selects the Select Patch page, and the Patch can be changed. (☞ P.Pach - 21)

PATCH + **F2** (Split)

F5

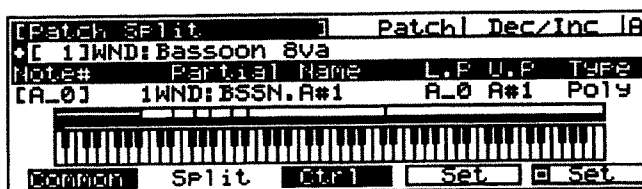
(Changing the Mode) [Info], [Set]

Each press of **F5** switches between two modes: the Information Mode, which allows you to check the condition of the split, and the Set Mode, in which you actually set the split.

* Keep in mind that editing cannot be done in the Information Mode, even by moving the cursor to the parameter.

* In the case of the Set Mode, press **F4** (Set) to execute the split setting. The split cannot be set if **F4** (Set) is not pressed.

However, you can set the split without pressing **F4** (Set) just by pressing the appropriate key on a connected MIDI keyboard.



* See P.Pach - 11 and P.Pach - 12 for information on how to set the split.

Note #

(Note number for checking or setting)

[A 0]—[C 8]

In the case of the Information Mode:

This page indicates the current note number condition (setting of individual parameters such as Partial Select or Lower Key Point). This note number can also be set by pressing the key of a connected MIDI keyboard.

In the case of the Set Mode:

Select the note number to which the Partial is assigned.

It is unnecessary to set the note number here since it can be set just by pressing the appropriate key on a connected MIDI keyboard.

Partial Name

(Partial Select) **Patch**

This selects the Partial to be assigned to the note number.

* When saving a Volume, not all sound data in the current Volume memory is saved. As far as Partials are concerned, only the Partial which is assigned to a Patch is saved. See P.2 - 19 for details.

* Pressing **LIST** selects the Select Partial page in the Set Mode and the Partial can be changed. Pressing **F5** (Set Off) turns off the assignment of the Partial. The Select Partial page can be called up in the Information Mode, but the Partial cannot be changed.

L.P (Lower Key Point) **Patch** [A0]—[C8]
 U.P (Upper Key Point) **Patch** [A0]—[C8]

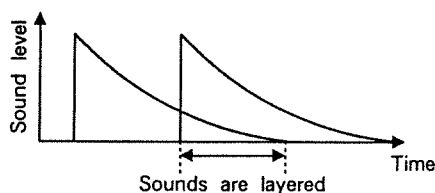
This determines the range over which the Partial can be played. The sound range is from the key number of the lower key point (L.P) to the key number of the upper key point (U.P).

* It is impossible to set the lower key point higher than the upper key point, or vice versa.

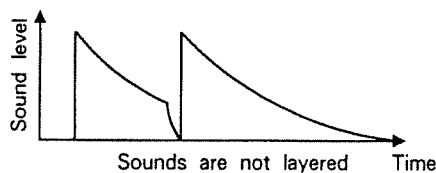
Type (Assign Type) **Patch** [Poly], [Mono], [Exc1]—[Exc16]

This determines how the Partial will sound when several notes are played simultaneously.

Poly In this setting, successively played sounds of the same note number are layered. For example, when repeatedly playing a sound with a long decay, such as a crash cymbal, the individual sounds are layered, and subsequently played sounds do not cut off previous ones.

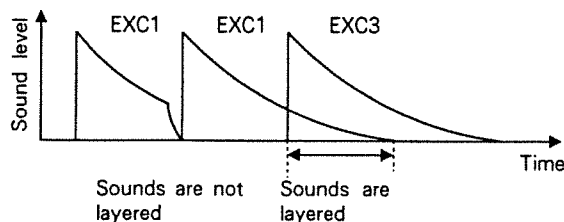


Mono In this setting, successively played sounds of the same note number are sounded individually. The last sound played cuts off the previous sound when repeatedly playing a sound with a long decay.



Exc1—Exc 16 (Exclusive 1—16)

In this setting, the sounds of Partial set to the same EXC number are sounded individually, regardless of the note number played. This setting is useful when there are Partial which you don't want to sound at the same time, such as a closed high-hat and open high-hat. In such as case, set these Partial to the same Exclusive number (1—16).



PATCH + **F2** (Split)

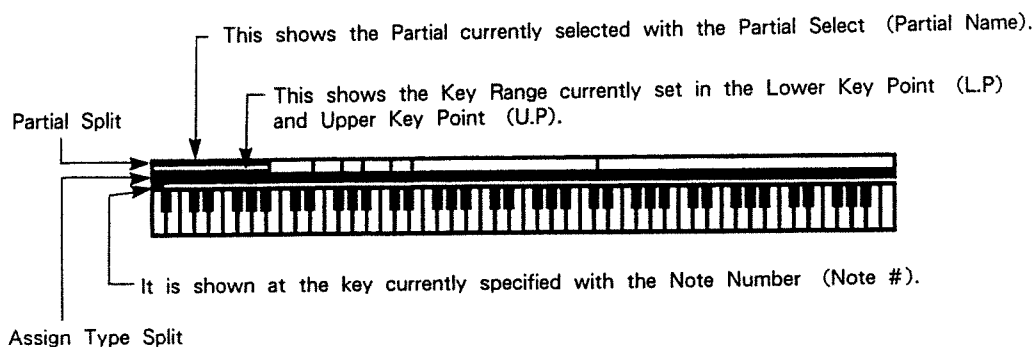
How to Read the Graphic Display

The split condition of the Partial and the Assign Type are indicated in the graphic display.

The Partial and Assign Type conditions of the note number determined by the Note# are highlighted.

* When the split is over several adjacent note numbers, the condition of these note numbers is also highlighted.

When one of the keys is pressed, all of the keys which are assigned the same Partial (or Assign Type) will be highlighted.



[PATCH] + [F2] (Split)

To set up the split from the panel of the SP - 700:

1. Call up the Patch Split page.
There are two ways (A and B) to edit the Patch, and depending on the method, the way of selecting the display differs. Refer to the section "PRECAUTIONS IN EDITING SOUND PROGRAMS" (P.Edit - 1) for details.
A: Press [PERFORMANCE], [COMMAND], [F1] (Edit Patch) then [F2] (Split).
or
B: Press [PATCH] then [F2] (Split).
2. Select the Set Mode by pressing [F5].
3. Move the cursor to the note number, then determine the note number to which the Partial is assigned or to which the Partial is not assigned (the note number to be set to off) using [S1/DEC] or [S2/INC], or [VALUE/CURSOR] (when the [SHIFT] indicator is dark).
 - * If the note numbers to which the Partial is assigned or the note numbers to be set to off are several adjacent note numbers, such as all notes from C2—C3, any note number between C2—C3 can be determined in step #3.
 - * For a Patch in which the split settings have already been made, the Partials and other information are indicated for each split range each time [PREVIOUS] or [NEXT] is pressed. The lowest split note number in the range is indicated.
4. Move the cursor to Partial Select, then select the Partial to be assigned (or turned off) using [S1/DEC] or [S2/INC], or [VALUE/CURSOR] (when the [SHIFT] indicator is dark). The [LIST] indicator lights (green) at this time, and the Select Partial page can be selected by pressing [LIST], and the Partial can be assigned.
Move the cursor to the number in the select Partial page, and scroll through the Partial list using [S1/DEC] or [S2/INC], or [VALUE/CURSOR] (when the [SHIFT] indicator is dark).
When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.
Move the cursor to the Partial name to be assigned, then assign it by pressing [S1/DEC]. Or press [F5] (Set Off) to turn off the Partial.
5. Move the cursor to the Lower Key Point or Upper Key Point, and determine the note number to which the selected Partial is to be assigned, or determine the note number range for which the Partial is to be turned off using [S1/DEC] or [S2/INC], or [VALUE/CURSOR] (when the [SHIFT] indicator is dark).
6. Move the cursor to the Assign Type, then determine the Assign Type using [S1/DEC] or [S2/INC], or [VALUE/CURSOR] (when the [SHIFT] indicator is dark).
7. Execute the split setting by pressing [F4] (Set).
8. Set the split by repeating steps #3—#7 above.
 - * When the split ranges (note numbers) overlap, the split range which was set last has priority. It is impossible for the output of several splits to overlap.
9. Call up the Information Mode by pressing [F5].
10. Check that the split setting was correctly made by playing the keyboard. If the split is not satisfactory, try making the settings again.

PATCH + **F2** (Split)

To set up the split from the connected MIDI keyboard:

1. Select the Patch Split page.
There are two ways (A and B) to edit the Patch, and depending on the method selected, selecting the display also differs. Refer to the section "PRECAUTIONS IN EDITING SOUND PROGRAMS" (⇐ P.Edit - 1) for details.
A : Press **PERFORMANCE**, **COMMAND**, **F1** (Edit Patch) then **F2** (Split).
or
B : Press **PATCH** then **F2** (Split).
2. Select the Set Mode by pressing **F5**.
3. Move the cursor to Partial Select, then select the Partial to be assigned (or turned off) using **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is dark).
The **LIST** indicator lights (green) at this time, and the Select Partial page can be selected by pressing **LIST**, and the Partial can be assigned.
Move the cursor to the number in the Select Partial page, and scroll through the Partial list using **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is dark).
When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.
Move the cursor to the Partial name to be assigned, then assign it by pressing **S1/DEC**. Or press **F5** (Set Off) to turn off the Partial.
4. Move the cursor to Assign Type, then determine the Assign Type using **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is dark).
5. Set the note number to which the selected Partial is assigned, or the note number range over which the Partial is set to off, by pressing the appropriate keys of the MIDI keyboard.
When assigning to several adjacent note numbers, such as from C2—C3, press all the keys of the MIDI keyboard that correspond to C2—C3.
6. Set the split by repeating steps #3—#5 above.
 - * There is no need to press **F4** (Set) when setting from the MIDI keyboard.
 - * When the split ranges (note numbers) are overlapped, the split range which was set last has the priority. It is impossible for the output of several splits to overlap.
7. Select the Information Mode by pressing **F5**.
8. Check that the split setting was correctly made by playing the keyboard. If the split is not satisfactory, try making the settings again.

Patch Control

This determines the effects to be applied when receiving MIDI messages such as Pitch bend, Control Change or Aftertouch.

* In the case of editing with Method A (⇐ P.Edit - 2), some MIDI messages may not have any effect, depending on the MIDI Filter setting (⇐ P.Pfm - 10).

[Patch Control] Patch Dec/Inc 18	
• [1] WND: Bassoon 8va	
Parameter	Information
SMT C.Sel Off	[Off][Bend][A.T][Mod][Ctrl]
SMT C.Sens 0	
Ctrl Sel 2	[Breath Control]
Common Split Ctrl	---

The parameter is indicated at the left of the display and the value range of the parameter is indicated at the right.

Indications

Patch (no indication)

(Patch Select)

This changes the Patch to be edited. (⇐ P.4 - 3)

* The ASCII Keyboard page can be selected by pressing **NAME**, and the Patch can be named. (⇐ P.Pach - 20)

* Pressing **LIST** selects the Select Patch page, and the Patch can be changed. (⇐ P.Pach - 21)

SMT C.Sel

(Sample Mix Table Control Select) **Patch**

[Off (off)], [Bend (Pitch bend)],

[A.T (aftertouch)], [Mod (modulation)], [Ctrl (Control Change)]

This determines the type of MIDI message which controls the SMT. (⇐ P.Prtl - 6)

* The SMT is controlled either with Velocity or MIDI messages. Velocity and MIDI messages cannot control the SMT at the same time. You must select either of them with SMT V. Ctrl in the Partial (Page Prtl - 5). When the SMT is being controlled with Velocity, it cannot be controlled with MIDI messages.

* The Control number (when setting to Ctrl) can be set by the Control Select parameter.

PATCH + **F3** (Ctrl)

SMT C.Sens

(Sample Mix Table Control Sense) **Patch**

[- 63]—[0]—[63]

This sets the depth of the effect when controlling the SMT by the Control message selected in the Sample Mix Table Control Select parameter.

* The greater the value, the deeper the effect becomes. There is no effect at 0. The effect is inverted (reversed) when this is set to a negative value.

Ctrl Sel

(Control Select) **Patch** [0]—[95]

This determines the Control number of the Ctrl (Control Change) parameter which controls pitch, TVF, TVA and LFO. It also determines the Control Number when "Ctrl" is set in the Control Select parameter of the Sample Mix Table. In this case, the Sample Mix Table is also controlled together with the pitch, TVF, TVA and LFO by the Control Number set here.

Refer to the "Control Change List" (⇐ P.App. - 34) in the Reference Section for more information on the Control Numbers.

* When 7 (Main Volume), 10 (Pan) or 64 (Damper (Hold1)) is selected, the SP - 700 will receive Volume, Pan or Hold messages even if the Vol, Pan or Hold in the MIDI Filter of the Performance is set to OFF, and will control the pitch, TVF or SMT etc. in the Patch.

* Some of the Control Numbers (above #64) function as an on/off control. A value of 0 corresponds to Off, and a value of 127 corresponds to On. (This differs depending on the MIDI transmission function of the connected MIDI controller, such as in the case of a switch - type controller like a footswitch.)

Bend - Up

(Pitch Bend Up Range) **Patch** [0]—[48]

This determines how far the pitch will be raised when the Pitch Bender is at its maximum positive position. One step corresponds to a rise in pitch of one semi - tone.

* This can be controlled by the RPN of the Control Change which is received over the Part channel. Refer to the MIDI implementation for details. (⇐ P.App. - 39)

Bend - Down

(Pitch Bend Down Range) **Patch** [0]—[48]

This determines how far the pitch will be lowered when the Pitch Bender is at its maximum negative position. One step corresponds to a lowering of the pitch by one semi - tone.

* This can be controlled by the RPN of the Control Change which is received over the Part channel. Refer to the MIDI implementation for details. (⇐ P.App. - 39)

Bend (Pitch Bend)

Bend TVF Control (Bend TVF Control) **Patch** [- 63]—[63]
This changes the TVF cutoff frequency by Pitch Bend messages.

Bend TVA Control (Bend TVA Control) **Patch** [- 63]—[63]
This changes the TVA level by Pitch Bend messages.

A.T (Aftertouch)

A.T Pitch Control (Aftertouch Pitch Control) **Patch** [- 48]—[48]
This determines the range over which pitch (in semi - tone steps) is to be controlled by Aftertouch messages.

A.T TVF Control (Aftertouch TVF Control) **Patch** [- 63]—[63]
This controls the TVF cutoff frequency by Aftertouch messages.

A.T TVA Control (Aftertouch TVA Control) **Patch** [- 63]—[63]
This controls the TVA level by Aftertouch messages.

A.T LFO Rate Control (Aftertouch LFO Rate Control) **Patch** [- 63]—[63]
This controls the LFO rate by Aftertouch messages.

A.T LFO Pitch Depth (Aftertouch LFO Pitch Depth) **Patch** [- 63]—[63]
This controls the depth of the vibrato (the periodic pitch change) as modulated by the LFO, via Aftertouch messages.

A.T LFO - TVF Depth (Aftertouch LFO TVF Depth) **Patch** [- 63]—[63]
This controls the depth of the filter sweep effect (the movement of the TVF cutoff frequency) as modulated by the LFO, via Aftertouch messages.

A.T LFO - TVA Depth (Aftertouch LFO TVA Depth) **Patch** [- 63]—[63]
This controls the depth of the tremolo (the periodic change of the sound level) as modulated by the LFO, via Aftertouch messages.

A.T LFO - PAN Depth (Aftertouch LFO Pan Depth) **Patch** [- 63]—[63]
This controls the depth of the pan (the periodic change of the pan position) as modulated by the LFO, via Aftertouch messages.

PATCH + **F3** (Ctrl)

Mod (Modulation)

Mod LFO Rate Control	(Modulation LFO Rate Control) Patch	[- 63]—[63]	This controls the LFO rate by Modulation messages.
Mod LFO - Pitch Depth	(Modulation LFO Pitch Depth) Patch	[- 63]—[63]	This controls the depth of the vibrato (the periodic pitch change) as modulated by the LFO, via Modulation messages.
Mod LFO - TVF Depth	(Modulation LFO TVF Depth) Patch	[- 63]—[63]	This controls the depth of the filter sweep effect (the movement of the TVF cutoff frequency) as modulated by the LFO, via Modulation messages.
Mod LFO - TVA Depth	(Modulation LFO TVA Depth) Patch	[- 63]—[63]	This controls the depth of the tremolo (the periodic change of the sound level) as modulated by the LFO, via Modulation messages.
Mod LFO - PAN Depth	(Modulation LFO Pan Depth) Patch	[- 63]—[63]	This controls the depth of the pan (the periodic change of the pan position) as modulated by the LFO, via Modulation messages.

Ctrl (Control Change)

Ctrl Pitch Control	(Control Change Pitch Control) Patch	[- 48]—[48]	This determines the range over which pitch (in semi-tone steps) is to be controlled by Control Change messages.
Ctrl TVF Control	(Control Change TVF Control) Patch	[- 63]—[63]	This controls the TVF cutoff frequency by Control Change messages.
Ctrl TVA Control	(Control Change TVA Control) Patch	[- 63]—[63]	This controls the TVA level by Control Change messages.
Ctrl LFO Rate Control	(Control Change LFO Rate Control) Patch	[- 63]—[63]	This controls the LFO rate by Control Change messages.
Ctrl LFO Pitch Depth	(Control Change LFO Pitch Depth) Patch	[- 63]—[63]	This controls the depth of the vibrato (periodic pitch change) as modulated by the LFO, via Control Change messages.
Ctrl LFO - TVF Depth	(Control Change LFO TVF Depth) Patch	[- 63]—[63]	This controls the depth of the filter sweep effect (the movement of the TVF cutoff frequency) as modulated by the LFO, via Control Change messages.

PATCH + **F3** (Ctrl)

Ctrl LFO - TVA Depth

(Control Change LFO TVA Depth) **Patch**

[- 63] — [63]

This controls the depth of the tremolo (the periodic change of the sound level) as modulated by the LFO, via Control Change messages.

Ctrl LFO - PAN Depth

(Control Change LFO Pan Depth) **Patch**

[- 63] — [63]

This controls the depth of the pan (the periodic change of the pan position) as modulated by the LFO, via Control Change messages.

To change the pitch of the Patch by MIDI Pitch Bend messages:

1. Open the first page of the MIDI Filter pages.
Press **PERFORMANCE**, **F2** (MIDI) then **PREVIOUS**.
2. Set it so that Pitch Bend messages can be received.
Parameter : Bend
Setting : ☐
3. Open the second page of the Patch Control pages.
There are two ways (A and B) to edit the Patch, and depending on the method selected, selecting the display also differs. Refer to the section "PRECAUTIONS IN EDITING SOUND PROGRAMS" (⇐ P.Edit - 1) for details.
A : Press (**PERFORMANCE**), **COMMAND**, **F1** (Edit Patch), **F3** (Ctrl) then **PREVIOUS** or **NEXT**.
or
B : Press **PATCH**, **F3** (Ctrl) then **PREVIOUS** or **NEXT**.
4. Set the Pitch Bend Up range.
Parameter: Bend Up
Setting : 0—48
5. Set the Pitch Bend Down range.
Parameter: Bend Down
Setting : 0—48
The two settings above determine the range over which pitch can be bent up and down, and they can be set independently in semi - tone steps. A setting of 48 corresponds to a four - octave pitch change range.
- * Pitch can be raised by a maximum of two octaves above the original key's pitch (⇐ P.Prfl - 35). When the sum of the settings of each pitch - related parameter (e.g., Coarse Tune and Fine Tune of Patch, Partial and SMT, etc.) exceeds this limit, pitch change (for bend up only) cannot be controlled by Pitch Bend messages.
6. Press **PERFORMANCE** to select the Performance Mode page. Transmit Pitch Bend messages from the connected MIDI controller to the SP - 700 while playing.

PATCH + **F3** (Ctrl)

Controlling the Patch Sound Program by MIDI Messages

It is possible to control the Patch Sound program via MIDI by Pitch Bend messages, Aftertouch messages, Modulation messages (Control Change #1) or Control Change messages (#0—95).

1. Select the MIDI Filter page.

Press **PERFORMANCE**, then **F2** (MIDI).

2. Set the SP - 700 to receive MIDI messages for controlling the Patch Sound program.

When controlling by Pitch Bend messages or Modulation messages (Control Change #1), select the first page by pressing **PREVIOUS**.

Parameter : Bend, Mod

Setting : ☐

When controlling by Aftertouch messages, open the second page by pressing

PREVIOUS or **NEXT**.

Parameter : A.T

Setting : ☐

When you use Hold (Control Change #64), Volume (Control Change #7) or Pan (Control Change #10) of Control Change messages (#0—95), not only the tone of a Patch, but also Hold, Part Level or Part Pan will be altered. If you do not wish to change the Hold effect, Part Level or Part Pan, you must set the SP - 700 so that it will not receive the relevant messages on the first and second pages.

* Even when the MIDI Filter is set to OFF, the tone of a Patch can be controlled.

Parameter: Hold, Vol, Pan

Setting : —

3. Select the Patch control page.

There are two ways (A and B) to edit the Patch, and depending on the method selected, selecting the display also differs. Refer to the section "PRECAUTIONS IN EDITING SOUND PROGRAMS" (→ P.Edit - 1) for details.

A : Press (**PERFORMANCE**), **COMMAND**, **F1** (Edit Patch) then **F3** (Ctrl).

or

B : Press **PATCH**, then **F3** (Ctrl).

4. Open the third page and fourth page by pressing **PREVIOUS** or **NEXT**, then set what parameter of the Sound program is to be controlled by Pitch Bend messages, Aftertouch messages, Modulation messages or Control Change messages.

Parameter Pitch—LFO - Pan

Setting — 63—63

(continued on next page)

5. When controlling by Control Change messages (#0—95), set which control number is to control the sound of the program.

Open the first page by pressing **PREVIOUS**.

Parameter: Ctrl Sel

Setting : 0—95

6. Call up the Performance Mode page by pressing **PERFORMANCE**.

7. Transmit the appropriate MIDI message from the connected MIDI controller to the SP - 700 as you play.

NAME

NAME in the Patch Edit Mode

When the **NAME** indicator is lit (green), press **NAME** to select the ASCII keyboard display and name the Sound program.

The **NAME** indicator lights (green) depending on the selected page or cursor position.

The indicator lights in the situations described below:

→When the cursor is at Patch Select (the home position) in each page of the Patch Edit mode, the **NAME** indicator lights (green).

→When the cursor is at Patch Select (the home position) in each page of the Patch Edit Mode, the **LIST** indicator lights (green). Select the Select Patch display by pressing **LIST**. If the cursor is at the Patch name, the **NAME** indicator lights (green).

→When the cursor is at the Partial name in the Patch Split page, the **LIST** indicator lights (green).
Select the Select Partial page by pressing **LIST**. If the cursor is at the Partial name, the **NAME** indicator lights (green).

* See P.3 - 13 for more information on naming.

LIST

LIST in the Patch Edit Mode

When the **LIST** indicator is lit (green), pressing **LIST** selects the Select display and the Sound program can be selected.

The **LIST** indicator lights (green) depending on the display or cursor position.

Select Patch

[Select Patch] Patch -100/+100 A			
<Target> Patch			
No.	Name	Time	PG#
1	WND:Bassoon 8va	17.3	4
2	WND:Clarinet 1a	1.7	9
3	WND:Oboe 3a	14.6	2
4	WND:Engl.Horn 1a	13.5	1
--- [Renam] [SortPG#] [SortABC] [Blank]			

When the cursor is at Patch Select (the home position) in each page of the Patch Edit Mode, the **LIST** indicator lights (green). Call up the Select Patch page by pressing **LIST**.

Changing Patches, naming, setting the program number and sorting can be done here.

Indications

<Target>

(target)

This changes the Patch to be edited.

No

(number)

To scroll through the Patch list, move the cursor to the number and use **S1/DEC** or **S2/INC**, or the **VALUE/CURSOR** (when the **SHIFT** indicator is dark).

* When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

Name

(Patch name) **Patch**

The Patch list of the current Volume memory is shown. Select the Patch to be changed by moving the cursor to the Patch name. Change the Patch by pressing **S1/DEC**.

* When the cursor is moved to the Patch name, the sound can be checked.

* The ASCII Keyboard page can be selected by pressing **NAME**, and the Patch can be named. (⇐ P.3 - 13.)

* In the case of Method A (⇐ P.Edit - 2), only the Patch which is assigned to the Part can be changed. The Patches which cannot be changed are indicated in parentheses ().

LIST**Time****(Capacity of the Patch)**

The capacity of all samples being used by the Patch is indicated in seconds (at a standard of 44.1kHz).

* The time it takes to select the Select Patch page becomes longer when the Patch capacity is indicated. If you don't need to have this displayed, you can save time by setting Time Display in the System parameters to off.

PG#**(Program Number) **Patch** [1]—[128]**

This determines the program number of the Patch.

This program number is used when changing the Patch by a Program Change message received over the Part channel.

See P.4 - 16 for details.

* Do not assign the same program number to several different Patches. If the same program number is assigned to several Patches, the Patch with the lowest list number has priority in being changed.

****F2** Renum****(Renumber)**

This arranges all the program numbers of the Patch into the same order as the Patch order (Patch number) indicated in the select Patch page.

****F3** SortPG#****(Program Number Sort)**

This sorts the Patches indicated in the Select Patch page according to their program numbers.

****F4** SortABC****(Alphabetical Sort)**

This sorts the Patches indicated in the Select Patch page alphabetically.

****F5** Blank****(Blank)**

This selects a new, blank Patch (with no data).

Select this when you wish to create a Patch from scratch.

LIST

Select Partial

When the cursor is at the Partial name in the Patch Split page of the Set Mode, the **LIST** indicator lights (green). Select the Select Partial page by pressing **LIST**.

Changing Partials, naming and sorting can be done here.

* The Select Partial page can be selected in the Information Mode, but Partials cannot be changed.

[Select Partial] Partial -100/+100/A		
<Target> Partial		
No.	Name	Time
1	WND:BSSN.A#1	2.5
2	WND:BSSN.C#2	2.5
3	WND:BSSN.E2	2.5
4	WND:BSSN.G2	2.5
---	---	---
		Sort:AB Set: Off

Indications

<Target>

(Target)

This changes the Partial that is to be assigned to the key.

No

(Number)

To scroll through the Partial list, move the cursor to the number and use **S1/DEC** or **S2/INC**, or the **VALUE/CURSOR** (when the **SHIFT** indicator is dark).

* When the cursor is at the 100s position, the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

Name

(Partial Name) **Partial**

The Partial list of the current Volume memory is indicated. Select the Partial to be changed by moving the cursor to the Partial name. Change the Partial by pressing **S1/DEC**.

* When the cursor is moved to the Patch name, the Partial is temporarily selected and the sound can be checked.

* The ASCII Keyboard page can be selected by pressing **NAME**, and the Partial can be named. (⇐ P.3 - 13.)

LIST

Time

(Capacity of the Partial)

The capacity of all samples being used by the Partial is indicated in seconds (at a standard of 44.1kHz).

*The time it takes to select the Select Partial page becomes longer when the Partial capacity is indicated. If you don't need to have this displayed, you can save time by setting Time Display in the System parameters to off.

F4 SortABC

(Alphabetical Sort)

This sorts the Partials indicated in the Select Partial page alphabetically.

F5 Set Off

(Set Off)

This turns off the key assignment of the Partial.

*Unnecessary Partials can be simultaneously turned off using the Listen Delete command (⇐ P.Pfom - 49).

COMMAND

COMMAND in the Patch Edit Mode

When the **COMMAND** indicator is lit (green), the Command Menu display is opened and each command can be selected by pressing **COMMAND**.

The **COMMAND** indicator lights (green) when the Patch Mode page, Patch Common page, Patch Split page, or Patch Control page is selected.

```
[Patch Command] Patch>Select/--|A
[1:Edit Partial] [5:Copy A→B/B→B]
[2:Delete] [6:Copy A→B/B→A]
[3:Initialize] [7:RenamePartials]
[4:Disk]
1:E.Pr1 2:Delet 3:Init 4:Disk 1-4/5-8
```

Move the cursor to the command and select it by pressing **S1/DEC**. The command can also be selected by the Function buttons. The indication of the Function button is changed by pressing **F5** (1—4/5—8).

COMMAND

Edit Partial

This section covers the Partial Edit page. There are three ways (C, D and E) to edit a Partial. Refer to the section "PRECAUTIONS IN EDITING SOUND PROGRAMS" on P.Edit - 1 and the explanations of each display page of the Partial Edit Mode starting on P.Ptl - 1.

*When editing a Partial in the other Volume memory, be sure to change the Volume memory beforehand (⇐ P.Sys - 1), since all editing is done within the current Volume memory.

Delete

This deletes the sound data in the Volume memory.

*Refer to P.Pfom - 37, since the operation is the same as the Delete function in the Performance Mode.

Initialize

This initializes the sound data parameters in the Volume memory.

*Refer to P.Pfom - 40, since the operation is the same as the initialize function in the Performance Mode.

Disk

This selects each page in the Disk Mode. Refer to P.Disk - 1, since it is the same as that for each page of the Disk Mode.

Copy A → A/B → B

This copies the sound data parameters within the same Volume memory.

*Refer to P.Pfom - 43, since the operation is the same as the Copy A → A/B → B function in the Performance Mode.

Copy A → B/B → A

This copies the sound data in the Volume memory to the other Volume memory.

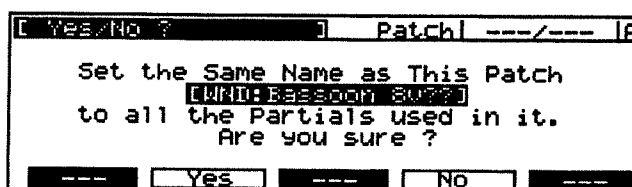
* Refer to P.Pfom - 46, since the operation is the same as the Copy A → B/B → A of the Performance Mode.

RenamePartials

This renames all Partials being used by the currently selected Patch (in the Patch edit page) to the same name as that of the Patch.

* A Patch without a name does not allow you to open the Rename Partials page.

* Make sure to change the Volume memory beforehand when renaming Partials in another Volume memory (⇐ P.Sys - 1), since the renaming of Partials is done in the current Volume memory.



Indications

F2 Yes

(YES)

This executes the renaming of the Partials.

F4 No

(NO)

This cancels the renaming of the Partials.

MEMO

Partial Edit Mode

Partials are edited in this mode.

Settings such as moving the pan position of the sample left and right in the stereo image, or mixing several samples (up to a maximum of four) by velocity can be set here. It is also possible here to edit the Sound program, sound level and vibrato with the TVF, TVA and LFO parameters.

How to Edit the Partials

Editing of the Partials is done in the following three ways:

Method C : This method allows you to edit the Partial being used by a Patch assigned to a Part while listening the Sound program of the entire Performance.

Method D : This method allows you to edit the Partial being used by a Patch while listening to the Sound program of the Patch itself.

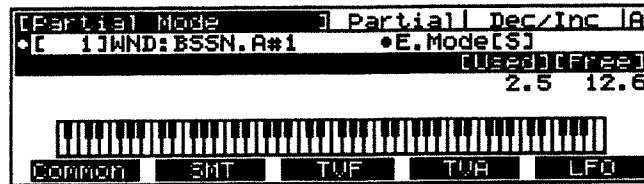
Method E : This method allows you to edit the Partial while listening to the Sound program of the Partial itself.

*See the section "PRECAUTIONS IN EDITING SOUND PROGRAMS" (⇐ P.Edit - 1) for details.

PARTIAL

Partial Mode

The key which is currently sounding is highlighted in the keyboard in the display.



Indications

Partial (no indication)

(Partial Select)

This changes the Partial to be edited.

In the case of editing with Method C (⇐ P.Edit - 4)

Only the Partial being used by the Patch assigned to the Part can be selected.

While editing, you can check the sound by playing the external MIDI controller. The MIDI channel to be used is the same as that for the Part.

The Partial to be edited can be changed also by the external MIDI controller (by note messages).

For example, it is possible to change the Partial for editing by playing the note C4, which selects the Partial assigned to the key C4.

In the case of editing with Method D (⇐ P.Edit - 5)

Only the Partial being used by the currently selected Patch can be selected.

While editing, you can check the sound by playing the external MIDI controller. Since the OMNI ON condition is active, any MIDI channel from 1 — 16 can be used.

The Partial to be edited can be changed also by the external MIDI controller (by note messages).

For example, it is possible to change the Partial for editing by playing the note C4, which selects the Partial assigned to the key C4.

In the case of editing with Method E (⇐ P.Edit - 6)

Any Partial in the current Volume memory can be selected.

While editing, you can check the sound by playing the external MIDI controller. Since the OMNI ON condition is active, any MIDI channel from 1 — 16 can be used.

An external MIDI controller (note messages) cannot be used to change the Partial which is to be edited.

* The ASCII Keyboard page can be called up by pressing **NAME** and the Partial can be named. (⇐ P.Prtl - 31)

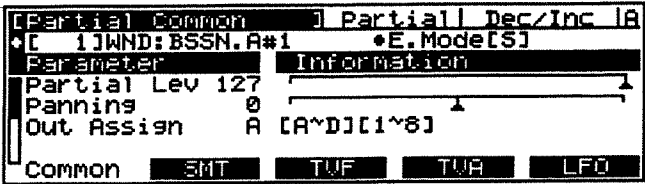
* Pressing **LIST** calls up the Select Partial page, and the Partial can be changed. (⇐ P.Prtl - 32)

E. Mode	<p>(Edit Mode) [S], [G]</p> <p>This determines the Edit Mode.</p> <p>There are two modes in the Edit Mode: S (Single Edit mode) and G (Global Edit mode). The Partials to be edited differ between S and G.</p> <p>S : In this mode, only the Partials which are currently selected can be edited.</p> <p>G : In this mode, all the Partial parameters, which are used by the currently selected Patch, can be simultaneously edited to the same value.</p> <p>In case of Method C and Method D (☞ P.Edit - 4 and P.Edit - 5) Either Single Edit Mode or Global Edit Mode can be selected.</p> <p>In case of the Method E (☞ P.Edit - 6) There is no choice; only the Single Edit Mode can be selected.</p>
Target Patch	<p>(Target Patch)</p> <p>When the Partial Mode page is open in Edit Methods C and D, the Partial used by the Patch is edited. The page shows the Patch being edited.</p>
Part	<p>(Part)</p> <p>When the Partial Mode page is open in Edit Method C, the Partial used by the Patch is edited. The page shows the Part where the Patch is assigned.</p>
Ch	<p>(Channel)</p> <p>When the Partial Mode page is open in Edit Method C, the Partial used by the Patch is edited. The page shows the MIDI channel of the Part where the Patch is assigned.</p>
[Used]	<p>(Partial Capacity)</p> <p>The capacity of all samples being used by the currently selected Partial is indicated in seconds (at a standard of 44.1kHz).</p>
[Free]	<p>(Remaining memory capacity of current Volume memory)</p> <p>The remaining memory capacity of the current Volume memory is indicated in seconds (at a standard of 44.1kHz).</p>

PARTIAL + **F1** (Common)

Partial Common

This determines the settings of the output and the settings related to pan and pitch.



The parameter is indicated at the left in the display. The value range of each parameter is indicated at the right.

Indications

Partial (no indication)

(Partial Select)

This selects the Partial to be edited.

* The ASCII Keyboard page can be called up by pressing **NAME**, and the Partial can be named. (☞ P.Prtl - 31)

* Pressing **LIST** calls up the Select Partial page, and the Partial can be changed. (☞ P.Prtl - 32)

E. Mode

(Edit Mode) [S], [G]

This determines the edit mode. See P.Prtl - 3 for details.

Partial Lev

(Partial Level) **Partial** [0]—[127]

This adjusts the sound volume of the entire Partial.

* See P.2 - 33 for details on the actual sound level that is to be output.

Panning

(Partial panning) **Partial** [L32]—[0 (Center)]—[R32]

This determines the pan setting of the entire Partial.

* See P.2 - 31 for details on the actual pan position of the output sound.

Out Assign

(Partial Output Assign) **Partial**

[A], ([B])—([D]), ([1]), ([2]), [3]—[8]

This determines the jack from which each Partial is output.

This parameter becomes active when the Output Assign parameter of the Patch (⇐ P.Pach - 4) is set to "P."

* It may happen sometimes that the jack indicated in parentheses () may not be set according to the Output Mode setting of the system.

* See P.2 - 24 for details on the actual output configuration.

Coarse Tune

(Partial Coarse Tune) **Partial** [- 48]—[0]—[48]

This adjusts the pitch of the entire Partial in semi - tone units.

* A setting of +48 results in a pitch setting four octaves higher.

* The sounding range of each sample can be up to two octaves higher than the original key (⇐ P.Prtl - 35). Even when a pitch setting greater than two octaves is determined by the tuning or pitch modulation, the sound can go no higher than the two octave limit.

Fine Tune

(Partial Fine Tune) **Partial** [- 50]—[0]—[50]

This finely adjusts the pitch of the entire Partial in 1 - cent units (1/100 of a semi - tone).

* A change of 50 cents equals 1/2 of a semi - tone.

SMT V.Ctrl

(SMT Velocity Control) **Partial** [Off], [On]

This determines whether the Sample Mix Table is controlled by velocity or not. When this is set to Off, the SMT can be controlled by MIDI messages determined by the Patch C.Sel parameter (⇐ P.Pach - 13). When this is set to On, the SMT can be controlled by velocity.

* The SMT is controlled either by velocity or MIDI messages. It cannot be simultaneously controlled by both velocity and MIDI messages.

* When the Partial Common page is opened by pressing **PARTIAL** (Edit Method E), even if this parameter is turned off, how the sound is output is determined by the velocity that controls the SMT. The parameter value set here does not affect the output of the sound, but it will when the unit is returned to a mode such as the Performance mode.

PARTIAL + **F2** (SMT)

Partial SMT (Partial Sample Mix Table)

This determines the range over which samples in the Partial can be sounded by changes in velocity.
This also determines how the sound of the sample is panned to the left or right, or how several samples are mixed and switched by velocity messages.

[Partial] SMT		Partial Dec/Inc		[A]	
* [1] WND: BSSN. A#1		• E. Mode [S]			
SAMPLE NAME		K.F	G.T	F.T	
* [1]	1WND: BSSN. A#1	Norm	0	0	
[2]	-----Off-----	Norm	0	0	
* [3]	-----Off-----	Norm	0	0	
[4]	-----Off-----	Norm	0	0	
COMMON SMT		TUF	TVA	LFO	

The parameter is indicated at the left of the display, and the parameter value is indicated at the right for reference.

Indications

Partial (no indication)

(Partial Select)

This selects the Partial for editing.

*The ASCII Keyboard page can be called up by pressing **NAME**, and the Partial can be named. (⇐ P.Prtl - 31)

*Pressing **LIST** calls up the Select Partial page, and the Partial can be changed. (⇐ P.Prtl - 32)

E. Mode

(Edit Mode) [S],[G]

This determines the Edit Mode. See P.Prtl - 3 for details.

Sample Name

(Sample Select) **PARTIAL**

This assigns a maximum of four samples to the Partial. (Four samples are assigned to sections 1 — 4, referred to as components. How the sample sounds can be set for each component.)

No sample is assigned when this is set to Off.

Stereo samples are automatically assigned to components 1 and 2, and components 3 and 4 by moving the cursor to *[1] or *[3] at the left in the display and pressing **S1/DEC** or **S2/INC**. Press **S1/DEC** to search for samples 512 — 1 and press **S2/INC** to search for samples 1 — 512.

* Not all sound data in the current Volume memory can be saved when saving the Volume.

Only the samples which are assigned to the Partial can be saved. See P.2 - 16 for details.

* Press **LIST** to call up the a Select sample page, and enable selection of samples. Press **F2** (Set Off) when setting a sample to off. (↵ P.Prtl - 35)

* Stereo samples received by MIDI Sample dump (↵ P.Sys - 25) cannot be retrieved. Execute the Set Stereo command (↵ P.Prtl - 36) in the Select Sample page to retrieve them.

K.F

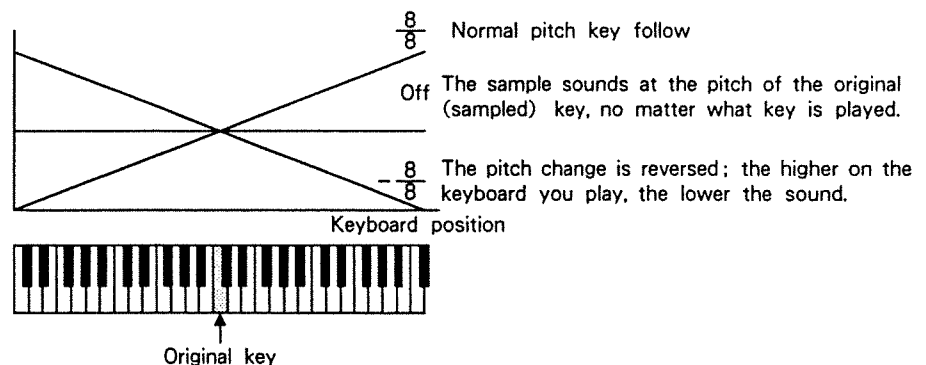
(Pitch Key Follow) **PARTIAL** [- 16/8] — [- 8/8] — [Off] — [Norm] — [16/8]

This sets the relationship between the note number (key position) of the Partial to be used and the pitch which actually sounds.

This can be set over a range of 32 steps.

* The pitch of each sample is changed relative to the original key (↵ P.Prtl - 35) of each Sample.

16/8	When the note number is increased by one octave, the actual pitch increases by two octaves
Norm(8/8)	When the note number is increased by one octave, the pitch increases by one octave (the normal pitch change in semi - tone units).
Off(0/8)	The pitch doesn't change even though the note number is changed.
- 8/8	When the note number is increased by one octave, the actual pitch decreases by one octaves.
- 16/8	When the note number increases by 1 octave, the pitch decreases by 2 octaves.



PARTIAL + **F2** (SMT)**Using Pitch Key Follow**

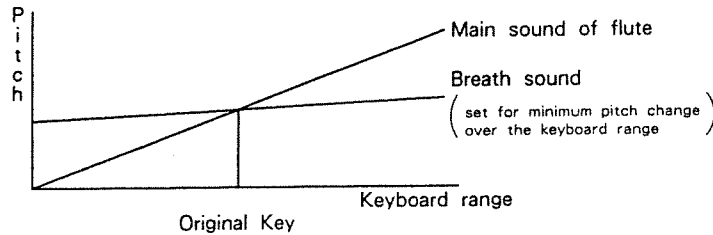
Since the pitch changes chromatically (in semi - tone units) when playing a conventional keyboard from the low range to high range, this parameter should usually be set to "Norm."

One use for settings other than "Norm" involves assigning several samples with different key follow settings to a Partial. In this way, a detune effect can be created and change according to the range of the keyboard played; the higher or lower you play on the keyboard, the greater the detuning effect becomes.

Minute pitch changes of less than a semi - tone can be played when setting Key Follow to a value between 7/8 — 1/8. This makes it possible to play in alternate tunings and special scales useful especially in some ethnic and folk music. When this is set to minus, the higher on the keyboard you play, the lower the sound.

Sound Creation Using Pitch Key Follow

A maximum of four samples can be assigned to a Partial, and you can build composite sounds with these samples by using them for the portions of a total sound, such as the attack and decay. For example, you can take only the breath attack sound of flute or the piano sound of a hammer striking the strings, and set Key Follow to a low value so that the sound remains basically at the same pitch throughout the keyboard range. Then, assign the sample of the main part of the sound (using the same instrument sound) to the Partial, to create an even more realistic reproduction of the actual acoustic sound. The same technique could be used to create unique effects like combining individual component sounds from different musical instruments, such as the hammer sound of piano grafted onto the main sound of a string sample.



And, when making a sound like a bell, by slightly shifting the Key Follow of each sample, you can make a very complicated sound.

C.T

(Sample Coarse Tune) **Partial** [- 48]—[48]

This determines the pitch of the sample to be used, in semi - tone units.

- * A setting of +48 results in a pitch change four octaves higher.
- * The sounding range of each sample can be up to two octaves higher than the original key (see Page Ptrl - 35). Even when a pitch setting greater than two octaves is determined by the tuning or pitch modulation, the sound can go no higher than the two octave limit.

F.T

(Partial Fine Tune) **Partial** [- 50]—[50]

This determines the fine pitch setting of the sample to be used, in 1 - cent steps (1/100 of a semi - tone).

- * A setting of 50 cents results in a pitch change of 1/2 of a semi - tone.

Pan

(Sample Pan) **Partial** [L32]—[0 (Center)]—[R32], [Rnd],
[Ky +], [Ky -], [LF +], [LF -], [Alt]

This determines the pan setting for each sample.

The stereo position is fixed at the center at 0, the far left at L32, and far right at R32.

The stereo position changes irregularly at Random (Rnd).

The stereo position changes according to the notes played on the keyboard (note number) when it is set to Ky + or Ky - . When this is set to Ky +, the higher up on the keyboard that you play, the further the sound is shifted to the right; when set to Ky - , the higher the notes played on the keyboard, the further left the sound is shifted.

Ky +	A0	C4	C7
	L32	←	0	→	R32
Ky -	A0	C4	C7
	R32	←	0	→	L32

At LF + and LF - , the sample pan is 0 (center), and the sound is panned left and right automatically with the LFO. The depth of the pan movement is determined by the Pan Modulation Depth parameter.

(⇐ P.Prtl - 30)

The LFO phase is reversed between LF + and LF - .

In the Alt (Alternate) setting, the stereo position of sound is shifted hard left and hard right (i.e., L32, R32, L32, etc.) each time a key is played.

* When moving the cursor to the component number *[1] or *[3] to select the stereo sample by using **S1/DEC** or **S2/INC**, this is set automatically to L32, R32.

* See P.2 - 31 for further information on the actual pan output.

Lev

(Sample Level) **Partial** [0]—[127]

This determines the sound volume of each sample.

* See P.2 - 33 for details on the actual sound volume output.

PARTIAL + **F2** (SMT)

- V.L

(Velocity Low Point) **Partial**

[1]—[126]

This determines the lowest limit of the velocity for which the sample will sound.
- V.H

(Velocity High Point) **Partial**

[2]—[127]

This determines the highest limit of the velocity for which the sample will sound.
- F.L

(Fade Width Low) **Partial**

[0]—[125]

This determines the width of the area over which the sound level is faded from the velocity low point.
- F.H

(Fade Width High) **Partial**

[0]—[125]

This determines the width of the area over which the sound level is faded from the velocity high point.

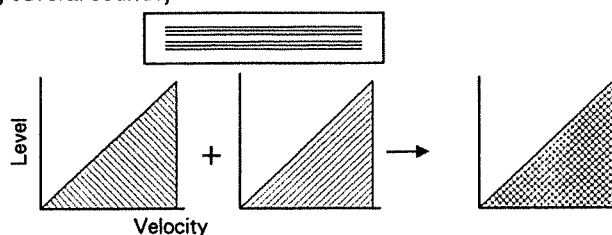
[Partial] SMT GRAPH [Partial] Dec/Inc [A	
•[1] 1WND:BSSN.A#1	•E.Mode[S]
SAMPLE NAME	
	U.L U.H F.L F.H
*[1] 1WND:BSSN A#1	1 127 0 0
[2] -----Off-----	1 127 0 0

When playing the keyboard, the strength at which you play the keys (velocity value) is indicated by the “▼” mark at the top of the graphic display. Use this as a standard when setting the velocity value or fade width.

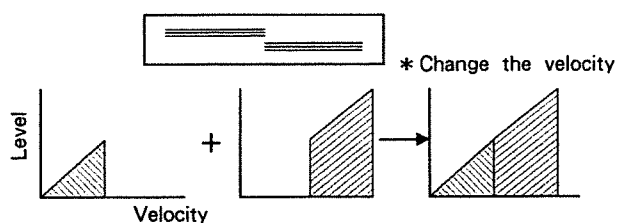
You can use the Velocity Range and the Fade Width settings of the sample Mix Table to simultaneously output the sounds of different samples, or to have samples (such as the loud and soft samples of the same sound) be played independently, depending on how hard the keyboard is played (velocity).

Effects Possible with the SMT

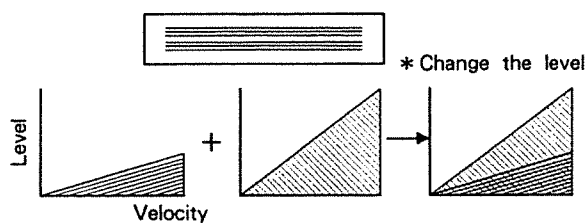
Layer (layering several sounds)



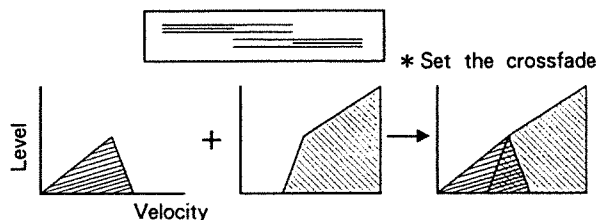
Velocity switch (sounding different samples separately depending on playing strength)



Velocity mix (change the mix ratio of several sounds by playing strength)



Velocity crossfade (change the sound balance of several samples by playing strength)



- * The SMT is normally controlled by velocity messages, however, it is also possible to control it by MIDI messages such as pitch bend and aftertouch. See Patch Control (P.Pach - 13) for details.

PARTIAL + **F2** (SMT)

How to Control the SMT (Sample Mix Table) by Velocity

1. Call up the second page of the Partial Common pages.
There are three methods (C, D and E) for editing the Partial. The way the page is called up differs depending on the method used. See the section "PRECAUTIONS IN EDITING SOUND PROGRAMS," on P.Edit - 1, for details.
Method C : Press **PERFORMANCE**, **COMMAND**, **F1** (Edit Patch), **COMMAND**, **F1** (Edit Partial), **F1** (Common), then **NEXT**.
or
Method D : Press **PATCH**, **COMMAND**, **F1** (Edit Partial), **F1** (Common), then **NEXT**.
or
Method E : Press **PATCH**, **F1** (Common), then **NEXT**.
2. When setting the SMT of all Partials being used by the Patch to the same value, you can edit from the Partial SMT page (called up from the Command Menu). All the Partials can be set to the same value at once by setting the Edit Mode (E.Mode) to Global Mode (G). When you wish to work on each Partial individually, set the Edit Mode to Single Edit (S).
3. Set the SMT Velocity Control to On.
Parameter : SMT V. Ctrl
Setting : On
4. Call up the third page or fourth page of the Partial SMT display.
Press **F2** (SMT), then **PREVIOUS** or **NEXT**.
5. Set the SMT.
Parameters: V, L, V.H, F.L, F.H

* Check the settings by playing the MIDI controller (transmitting the note data).
6. In order to make settings for all Partials being used by the Patch, change the Partial then repeat steps #1 — #5 above.
7. Press **PERFORMANCE** to call up the Performance Mode.
8. Play the MIDI controller.

How to Control the SMT (Sample Mix Table) by MIDI Messages

It is possible to control the SMT by the MIDI pitch bend data, aftertouch data, modulation data (control change #1) or the other Control Change messages (#0—95).

1. Call up the MIDI Filter page.

Press **PERFORMANCE**, then **F2** (MIDI).

2. Set the MIDI Filter so that it will receive the proper MIDI data for controlling the SMT.

When controlling by pitch bend or modulation data (control change #1), call up the first page by pressing **PREVIOUS**.

Parameter : Bend, Mod

Setting : 0

When controlling by aftertouch data, call up the second page by pressing **PREVIOUS** or **NEXT**.

Parameter : A.T

Setting : 0

When you use Hold (Control Change #64), Volume (Control Change #7) or Pan (Control Change #10) of Control Change messages (#0—95), not only the SMT will be controlled, but also the Hold effect, Part Level or Part Pan. If you do not wish to change the Hold effect, Part Level or Pan, you must set the SP - 700 so that it will not receive the relevant messages on the first and second pages.

Parameter : Hold, Vol, Pan

Setting : —

* Even when the MIDI Filter is set to OFF, the SMT can be controlled.

3. Call up the first page of the Patch Control pages.

There are two methods (A and B) for editing the Patch, and the way of calling up the page differs depending on the method used. See the section "PRECAUTIONS IN EDITING SOUND PROGRAMS," on P.Edit - 1, for details.

Method A : Press (**PERFORMANCE**), **COMMAND**, **F1** (Edit Patch), **F3** (Ctrl), then **PREVIOUS**.

or

Method B : Press **PATCH**, **F3** (Ctrl), then **PREVIOUS**.

4. Determine the type of MIDI data to be used for control of the SMT.

Parameter : SMT C. Sel

Setting : Bend, A. T. Mod, Ctrl

5. When the above is set to Ctrl, determine the particular control number.

Parameter : Ctrl Sel

Setting : 0—95

(continued on next page)

PARTIAL + **F2** (SMT)

6. Set the depth over which the SMT will respond to the control.

Parameter : SMT C. Sens

Setting : - 63—63

* The SMT cannot be controlled when this is set to 0.

7. Call up the third page or fourth page of the Partial SMT pages.

There are three methods (C, D and E) for editing the Partial. The way the page is called up differs depending on the method used. See the section "PRECAUTIONS IN EDITING SOUND PROGRAMS," on P.Edit - 1, for details.

Method C : Press **PERFORMANCE**, **COMMAND**, **F1** (Edit Patch), **COMMAND**, **F1** (Edit Partial), **F2** (SMT), then **PREVIOUS** or **NEXT**.

or

Method D : Press **PATCH**, **COMMAND**, **F1** (Edit Partial), **F2** (SMT), then **PREVIOUS** or **NEXT**.

How the SMT responds to control over MIDI cannot be checked by Method E (the method for calling up the Edit page display by pressing **PARTIAL**).

You can edit here in the Partial SMT display, which is called up from the Command Menu by using either Method C or Method D.

8. When setting the SMT of all PartialS being used by the Patch to the same value, set the Edit Mode (E.Mode) to Global Mode (G). When you wish to set each Partial individually, set the Edit Mode to Single Edit (S).

9. Set the SMT.

Parameters: V. L, V.H, F.L, F.H

* Check the settings by transmitting note data from the MIDI instrument. At this time, the SMT is controlled by velocity.

10. In order to make settings for all PartialS being used by the Patch, change the Partial then repeat the setting of the SMT.

11. Open the second page in the Partial Common page.

Press **F1** (Common) → **Next**.

* If the fourth page in the Partial SMT page is open, press **PREVIOUS** → **F1** (Common) → **NEXT**.

12. Set the unit so that all the PartialS used in the Patch will be set to the same value at the same time.

Parameter: E.mode

Setting : G (Global Edit)

13. Set the unit so that the SMT will be controlled with MIDI messages.

Parameter : AMT V.Ctrl

Setting : Off

(continued on next page)

14. Press **PERFORMANCE** to call up the Performance Mode.

15. Transmit the MIDI data to be used for control (from the MIDI instrument to the SP - 700).

* If you wish to set the SMT again, repeat from step #7 above. On this condition, however, as the SMT is controlled by the MIDI message (not by velocity), the Note message and the MIDI message (which will control the SMT) should be sent from the MIDI controller.

PARTIAL + F3 (TVF)

Partial TVF (Partial Time Variant Filter)

This page is like the VCF section of an analog synthesizer, and it lets you control the timbre change over time by applying a common filter to four samples combined in the Sample Mix Table.

[Partial] TVF		[Partial] Dec/Inc [A]	
* [1] WND: BSSN. A#1		* E. Mode [S]	
Parameter	Information		
Filter Mode	[Off] [LPF] [BPF] [HPF]		
CutOff Freq	127		
Resonance	0		
CutOff KF	0		
Common	SMT	TVF	TVA LFO

The parameter is indicated at the left of the display and the value range of each parameter is indicated at the right (for reference).

Indications

Partial(no indication)

(Partial Select)

This determines the Partial to be edited.

* The ASCII Keyboard page can be called up by pressing [NAME], and the Partial can be named. (P.Prtl - 31)

* Pressing [LIST] calls up the Select Partial page, and the Partial can be changed. (P.Prtl - 32)

E. Mode

(Edit Mode) [S],[G]

This determines the Edit Mode. See P.Prtl - 3 for details.

Filter Mode

(Filter Mode) [Partial] [Off], [LPF], [BPF], [HPF]

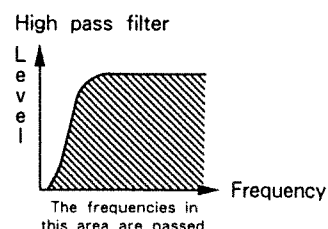
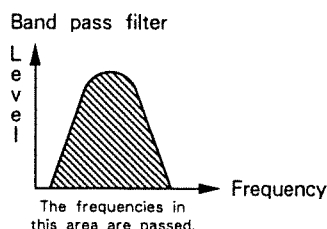
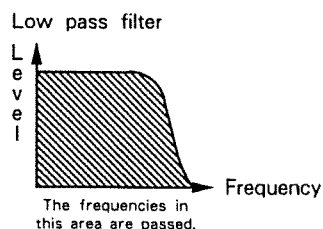
This determines the type of the filter.

Off (Off) : Samples are sounded or passed without being filtered. The pitch envelope is inactive at this time.

LPF (Low Pass Filter) : This lets frequencies lower than the set cutoff frequency pass, and cuts out the higher frequency elements.

BPF (Band Pass Filter) : This lets frequencies in a certain specified frequency band pass through without filtering. Higher resonance settings result in a narrower frequency band width.

HPF (High Pass Filter) : This lets frequencies higher than the set cutoff frequency pass, and cuts out the lower frequency elements.



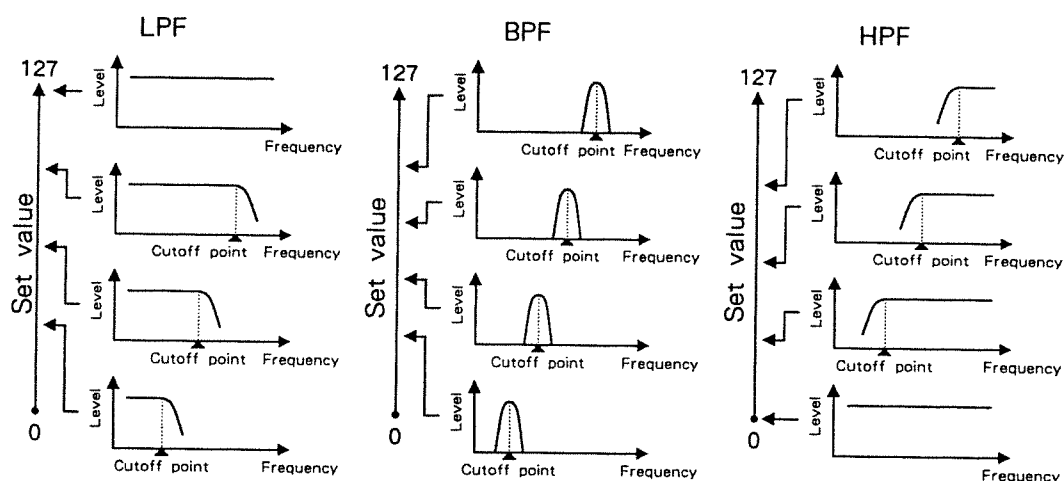
Cutoff Freq

(Cutoff Frequency) **Partial** [0]—[127]

This determines the cutoff frequency of the entire TVF.

This sets the frequency point at which the filter begins cutting out overtone elements. The smaller the value of the low pass filter, the more the overtone elements are cut, and the sound becomes close to a sine wave. (No sound is output if this setting is too low.) On the other hand, the timbre becomes light and sharp for higher values, since the high pass filter cuts out the low frequencies.

The cutoff setting can be changed in realtime by the envelope, messages from each controller, or a modulation source such as the LFO.

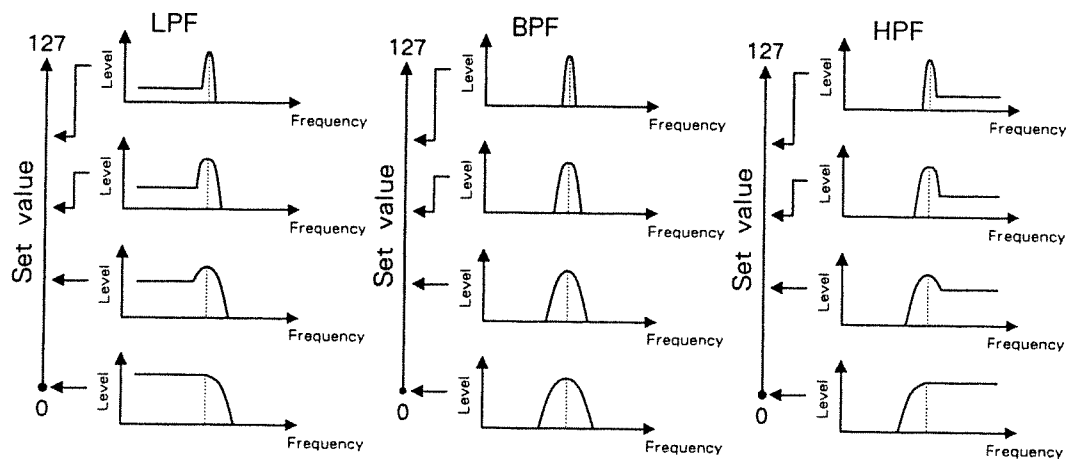


Resonance

(Resonance) **Partial** [0]—[127]

This determines the resonance of the cutoff frequency.

The greater the value, the more the overtone elements around the cutoff frequency are emphasized; the timbre changes, taking on some of the characteristics of a synthesizer. Extremely high values result in oscillation.



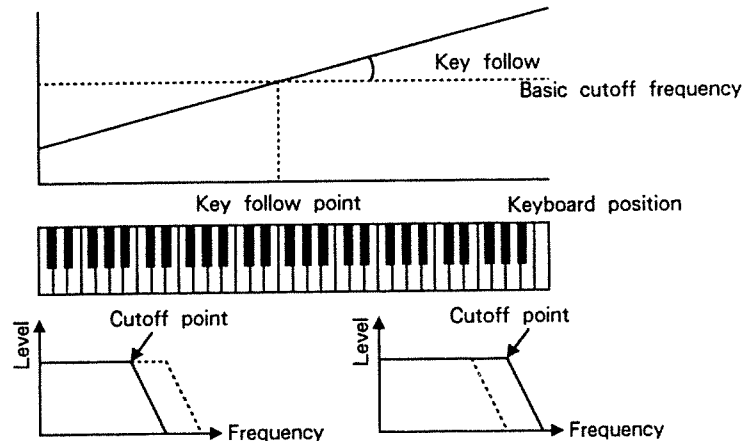
PARTIAL + **F3** (TVF)

Cutoff KF

(Cutoff Frequency Key Follow) **Partial** [- 63]—[63]

This changes the cutoff frequency relative to the key follow point, and lets you change the timbre of the sound according to what range of the keyboard (note data) you play.

When this is set to 0, the cutoff cannot be controlled by key follow; the cutoff frequency remains at the setting which was made in the Cutoff Freq parameter.



KF Point

(Key Follow Point) **Partial** [A0]—[C8]

This determines the key used for the center of the key follow effect.

The two independent parameters controlled by key follow (cutoff frequency and envelope time) are both affected by the Key Follow Point set here.

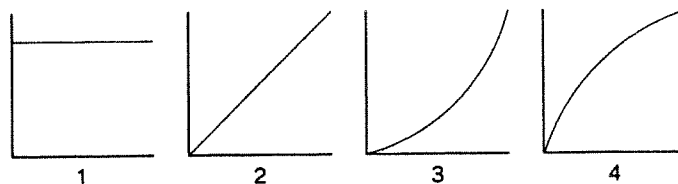
Vel - Curve

(Velocity Curve Type) **Partial** [1]—[4]

This selects the curve which corresponds to the velocity value and the cutoff frequency.

When this is set to "1," velocity has no effect on the cutoff frequency.

X axis : Velocity
Y axis : Cutoff frequency



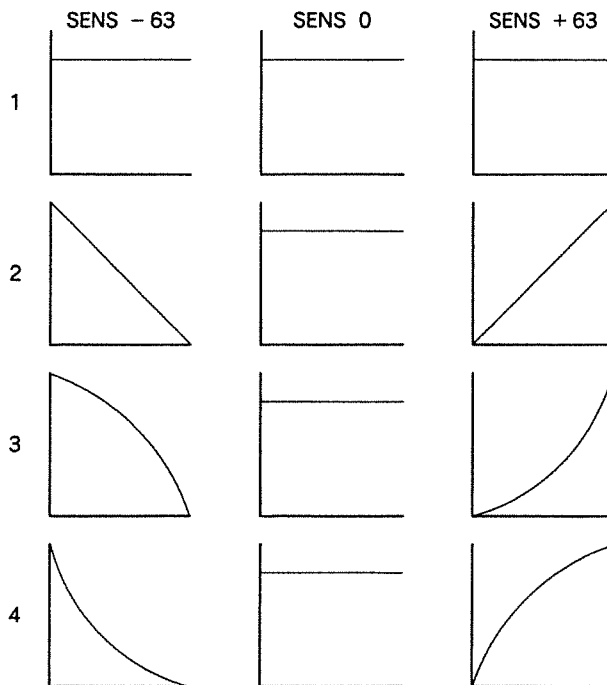
Vel - C.Sens

(Velocity Curve Sense) **Partial**

[- 63]—[63]

This determines the depth and polarity (positive/negative) of the velocity curve.

A curve effect can be gained by setting the velocity curve to higher values close to 63; in other words, the cutoff frequency increases for high velocity values. Setting this close to 0 results in little change in the cutoff frequency, even with high velocity. With negative values, the effect becomes reversed; in other words, the cutoff frequency decreases for high velocity values.



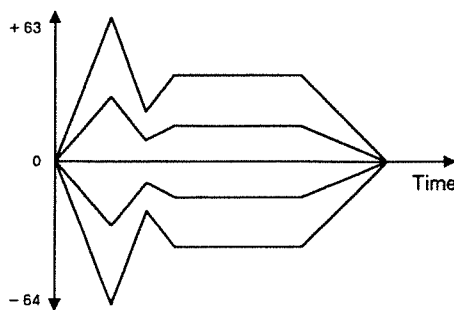
Envelope - TVF Depth

(Envelope TVF Depth) **Partial**

[- 63]—[63]

This determines the depth of the envelope when changing the TVF cutoff frequency by the envelope.

The envelope has the greatest effect at 63, has no effect at 0, and creates a reverse effect for negative values.



PARTIAL + **F3** (TVF)

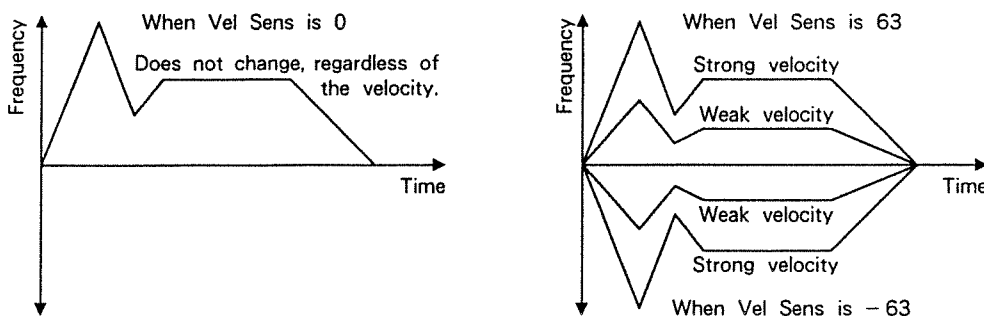
Envelope - Vel Sens

(Envelope Velocity Sense) **Partial**

[- 63]—[63]

This determines how responsive the depth of the envelope is (in changing TVF cutoff frequency and pitch) to velocity data.

The envelope is most responsive to velocity at 63, has no effect at 0, and creates a reverse effect for negative values.



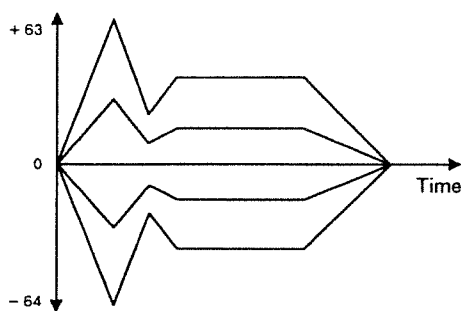
Envelope - Pitch Depth

(Envelope Pitch Depth) **Partial**

[- 63]—[63]

Not only the cutoff frequency, but also the pitch can be changed by the TVF envelope. Set the effect depth in this parameter when changing pitch by the TVF envelope.

The envelope has the greatest effect at 63, has no effect at 0, and creates a reverse effect for negative values. When the set value is 63 and the envelope level is set to 127, the pitch rises two octaves. When the set value is - 63, and the envelope level is set to 127, the pitch goes down four octaves.



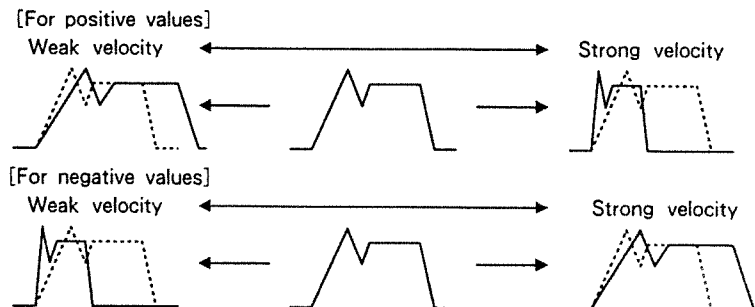
Time - Vel Sens

(Time Velocity Sense) **Partial**

[- 63]—[63]

This determines the degree to which velocity affects the Time 1 length of the envelope.

When this is set to a positive value, Time 1 becomes shorter as the velocity value increases (the envelope attack becomes faster). When this is set to a negative value, Time 1 becomes longer as the velocity value increases (the envelope attack becomes slower).



Time - Key Follow

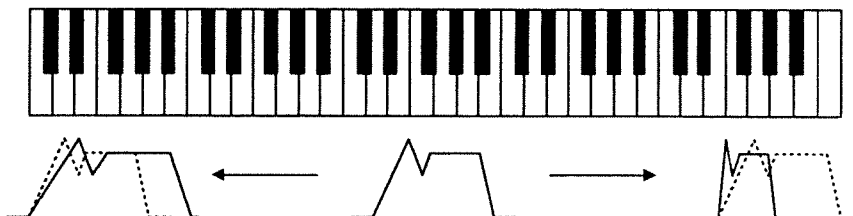
(Envelope Time Key Follow) **Partial** [- 63]—[63]

This changes the envelope time (from Time 1 to 4) relative to the key follow point.

When this is set to a positive value, the higher on the keyboard that you play (in other words, the greater the note number), the faster the attack of the envelope. When this is set to a negative value, the higher on the keyboard that you play (in other words, the greater the note number), the slower the attack of the envelope.

The envelope time cannot be changed by the key follow when this is set to 0.

[For positive values]



Using Envelope Time Key Follow

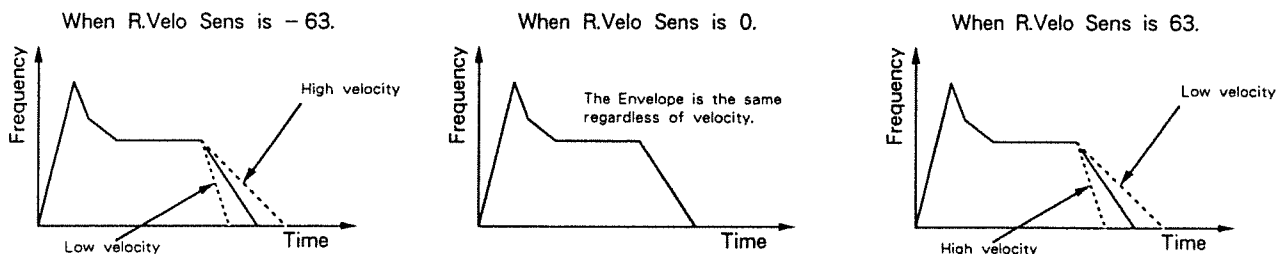
Acoustic instruments (stringed instruments in particular) have a long decay for low sounds, and as the pitch gets higher, the shorter the decay time becomes. To reproduce this characteristic for acoustic sampled sounds, set this parameter to a positive value. No effect is applied when this is set to 0. When set to a negative value, the higher the pitch of the sound becomes, the longer its envelope time.

R. Velo Sens

(Release Velocity Sense) **Partial** [- 63]—[63]

The release time (Time 4), can be changed by the speed at which you release your fingers from the keys (release velocity). The greater the value, the more pronounced the effect becomes.

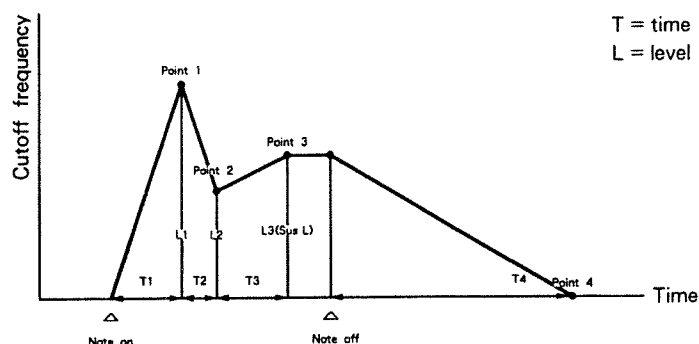
Setting this to a negative value creates a reverse effect.



*When the release velocity is 64, the release time becomes the same as set in the Time 4 parameter.

TVF Envelope

The Y axis in the graphic display indicates the cutoff frequency and the X axis indicates the time from the note on.



- Time 1 (Envelope Time 1) **Partial** [0]—[127]
This determines the time which it takes from when the key is pressed until Point 1.
- Level 1 (Envelope Level 1) **Partial** [0]—[127]
This determines the cutoff frequency level of Point 1.
- Time 2 (Envelope Time 2) **Partial** [0]—[127]
This determines the time which it takes from Point 1 to Point 2.
- Level 2 (Envelope Level 2) **Partial** [0]—[127]
This determines the cutoff frequency level of Point 2.
- Time 3 (Envelope Time 3) **Partial** [0]—[127]
This determines the time which it takes from Point 2 to Point 3.
- Level 3 (Envelope Level 3) **Partial** [0]—[127]
This determines the cutoff frequency level of Point 3 (sustain level).
- Time 4 (Envelope Time 4) **Partial** [0]—[127]
This determines the time which it takes from when the key is released until Point 4.
- Level 4 (Envelope Level 4) **Partial** [0]—[127]
This determines the cutoff frequency level of Point 4.

* In addition to the TVF envelope, the TVA envelope of the currently selected Partial is also indicated in the graphic display. It is easier and more efficient to edit the TVF envelope while also seeing how it might affect or be affected by the TVA envelope.

* Level 4 of the TVF envelope is linked with the level at the note on (the level before Point 1).

Partial TVA (Partial Time Variant Amplifier)

This display is like the VCA section of an analog synthesizer, and it controls the sound volume change over time by passing the four samples combined in the Sample Mix Table through a common amplifier.

[Partial] TVA		[Partial] Dec/Inc	[A]
• [C] 1]WND: BSSN.A#1		• E.Mode[S]	
Parameter		Information	
Vel-Curve	2	[1:] [2:] [3:] [4:]	
-C.Sens	0	↑	
Level KF	0	↑	
KF Point	C-4	[A-0]~[C-8]	
COMMON		ENT	TUF TVA LFO

The parameter is indicated at the left of the display and the value range of each parameter is indicated at the right (for reference).

Indications

Partial (no indication)

(Partial Select)

This determines the Partial to be edited.

* The ASCII Keyboard page can be called up by pressing **NAME**, and the Partial can be named. (☞ P.Prtl - 31)

* Pressing **LIST** calls up the Select Partial page, and the Partial can be changed. (☞ P.Prtl - 32)

E. Mode

(Edit Mode) [S],[G]

This determines the Edit Mode. See P.Prtl - 3 for details.

Vel - Curve

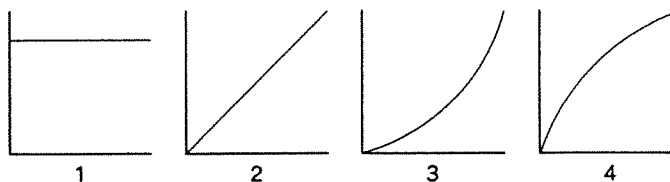
(Velocity Curve Type) **Partial** [1]—[4]

This selects the curve which corresponds to the velocity value and the sound level.

When this is set to "1," velocity has no effect on the level.

X axis : Velocity

Y axis : Sound level



PARTIAL + **F4** (TVA)

Vel - C.Sens

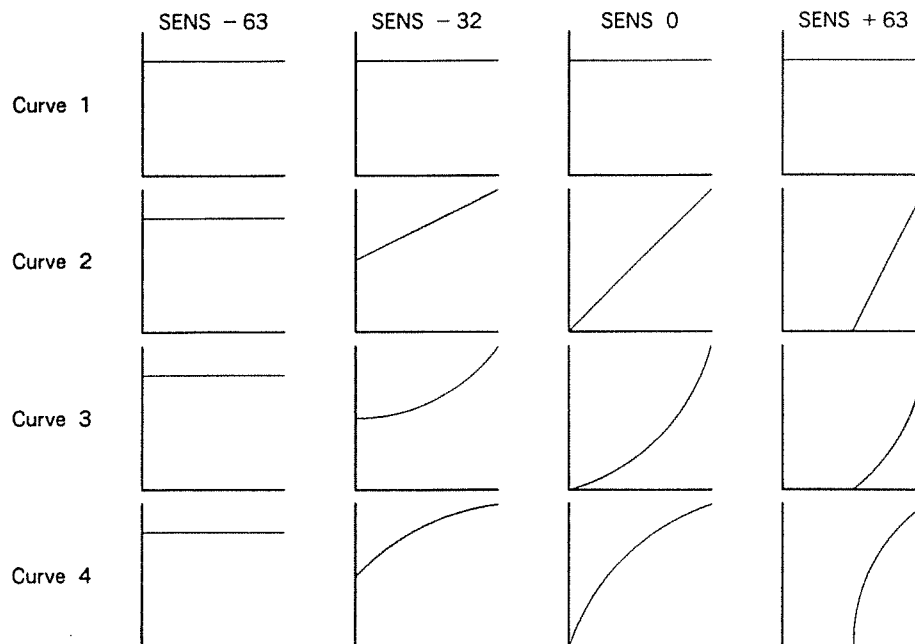
(Velocity Curve Sense) **Partial**

[- 63] — [63]

This determines the depth of the velocity curve.

The curve effect which was set in the Velocity Curve parameter can be gained at a setting of 0 here.

The effect is emphasized for positive values, and becomes weaker for negative values.



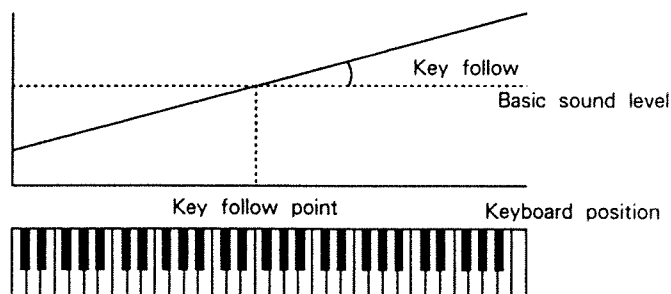
Level KF

(Level Key Follow) **Partial**

[- 63] — [63]

This changes the sound volume relative to the key follow point, and lets you change the timbre of the sound according to what range of the keyboard (note data) you play.

When this is set to 0, the sound level cannot be controlled by key follow.



KF Point

(Key Follow Point) **Partial**

[A0] — [C8]

This determines the key used for the center of the key follow effect.

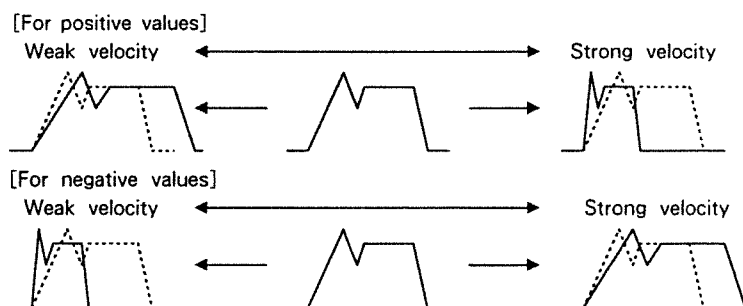
The two independent parameters controlled by key follow (level and envelope time) are both affected by the Key Follow Point set here.

Time - Vel Sens

(Time Velocity Sense) **Partial** [- 63]—[63]

This determines the degree to which velocity affects the the Time 1 length of the envelope.

When this is set to a positive value, Time 1 becomes shorter as the velocity value increases (the envelope attack becomes faster). When this is set to a negative value, Time 1 becomes longer as the velocity value increases (the envelope attack becomes slower).



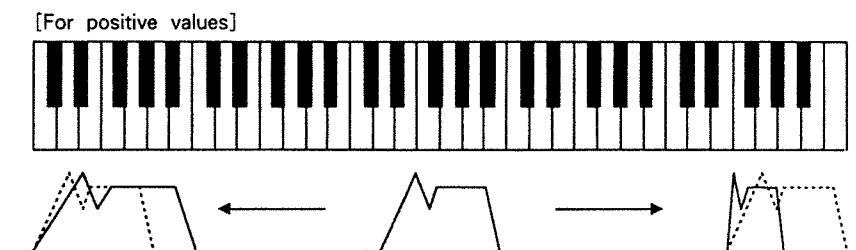
Time - Key Follow

(Time Key Follow) **Partial** [- 63]—[63]

This changes the envelope time (from Time 1 to 4) relative to the key follow point.

When this is set to a positive value, the higher on the keyboard that you play (in other words, the greater the note number), the faster the attack of the envelope. When this is set to a negative value, the higher on the keyboard that you play (in other words, the greater the note number), the slower the attack of the envelope.

The envelope time cannot be changed by the key follow when this is set to 0.

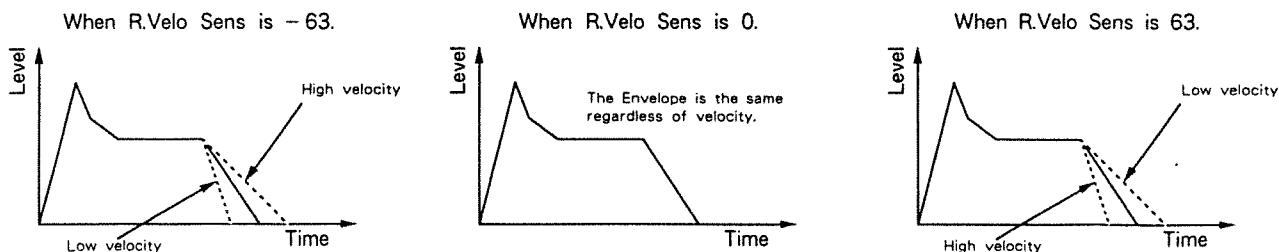


R. Velo Sens

(Release Velocity Sense) **Partial** [- 63]—[63]

The release time (Time 4), can be changed by the speed at which you release your fingers from the keys (release velocity). The greater the value, the more pronounced the effect becomes.

Setting this to a negative value creates a reverse effect.

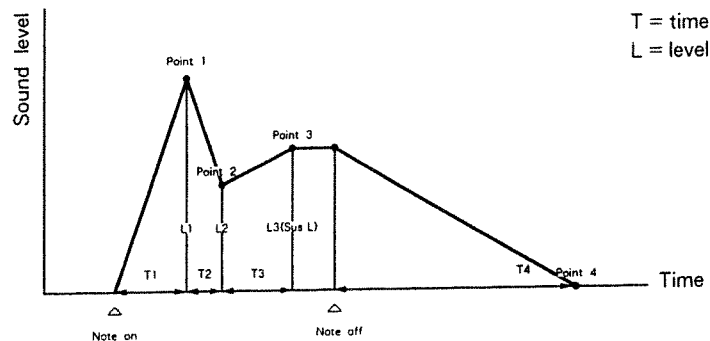


*When the release velocity is 64, the release time becomes the same as set in the Time 4 parameter.

PARTIAL + **F4** (TVA)

TVA Envelope

The Y axis in the graphic display indicates the level and the X axis indicates the time from the note on.



Time 1

(Envelope Time 1) **Partial** [0]—[127]

This determines the time which it takes from when the key is pressed until Point 1.

Level 1

(Envelope Level 1) **Partial** [0]—[127]

This determines the sound level of Point 1.

Time 2

(Envelope Time 2) **Partial** [0]—[127]

This determines the time which it takes from Point 1 to Point 2.

Level 2

(Envelope Level 2) **Partial** [0]—[127]

This determines the sound level of Point 2.

Time 3

(Envelope Time 3) **Partial** [0]—[127]

This determines the time which it takes from Point 2 to Point 3.

Level 3

(Envelope Level 3) **Partial** [0]—[127]

This determines the sound level of Point 3 (sustain level).

Time 4

(Envelope Time 4) **Partial** [0]—[127]

This determines the time which it takes for Level 3 to reach 0, from the time the key is released.

* In addition to the TVA envelope, the TVF envelope of the currently selected Partial is also indicated in the graphic display. It is easier and more efficient to edit the TVA envelope while also seeing how it might affect or be affected by the TVF envelope.

* Level 4 of the envelope is fixed to 0.

Partial LFO (Partial Low Frequency Oscillator)

The LFO is an oscillator which constantly outputs a very low frequency waveform. LFO modulation can be applied to pitch, the TVF or the TVA.

[PARTIAL] LFO [PARTIAL] Dec/Inc [A]	
* [1] WND: BSSN.A#1 * E.Mode[S]	
Parameter	Information
Waveform	Sin [Sin][Tri][SwUP][SwDW]
Rate	103 [Squ][Rnd][B.UP][B.DW]
-Detune	0
Common SMT TVF TVA LFO	

The parameter is indicated at the left of the display and the value range of each parameter is indicated at the right (for reference).

Indications

Partial (no indication)

(Partial Select)

This determines the Partial to be edited.

*The ASCII Keyboard page can be called up by pressing [NAME], and the Partial can be named. (P.Prtl - 31)

*Pressing [LIST] calls up the Select Partial page, and the Partial can be changed. (P.Prtl - 32)

E. Mode

(Edit Mode) [S],[G]

This determines the Edit Mode. See P.Prtl - 3 for details.

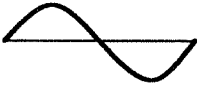
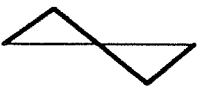
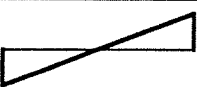
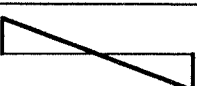
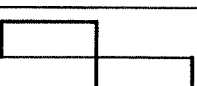
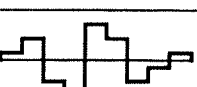


PARTIAL + **F5** (LFO)


Waveform

(Waveform) **Partial**

[Sin], [Tri], [SwUP], [SwDW], [Squ], [B. UP], [B.DW]

This selects the type of LFO waveform.

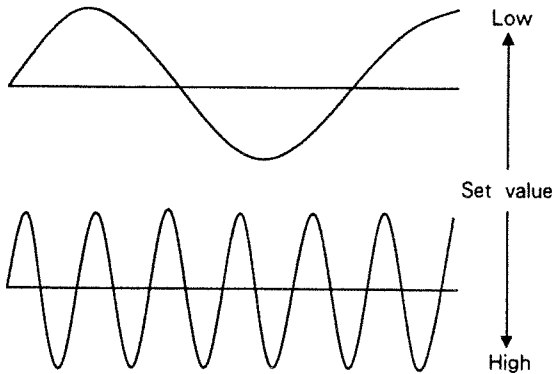
Sin	Sine		Sine wave
Tri	Triangle		Triangle wave
SwUP	Saw Up		Saw wave (up)
SwDW	Saw Down		Saw wave (down)
Squ	Square		Square wave
Rnd	Random		Sample and hold (the LFO value is converted once for every cycle)
B.UP	Bend Up		It stays at the same level, once the wave reaches the specific value.
B.DW	Bend Down		It stays at the same level, once the wave reaches the specific value.

- *An effect similar to a pitch envelope can be created by applying LFO to the pitch and using "B. UP" or "B. DW" for the LFO waveform type.
- *When "B.UP" or "B.DW" is selected, set the Key Sync ( P.Prtl - 30) to ON. If it is set to OFF, no effect will be obtained.

Rate

(LFO Rate) **Partial** [0]—[127]

This determines the speed of the LFO.
The greater the value, the faster the LFO speed.



Rate - Detune

(LFO Rate Detune) **Partial** [0]—[127]

This makes subtle changes to the LFO rate each time a key is played.

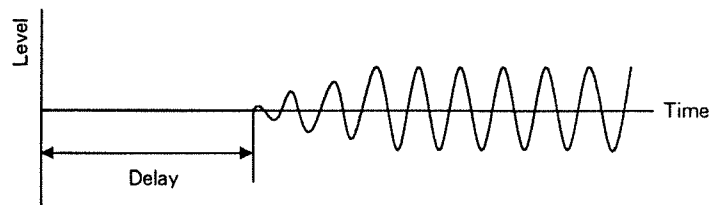
The greater the value, the greater the range of the rate variation becomes.

* This parameter is especially effective when playing chords with a string Sound program, since the speed of each sound's vibrato can be changed, making it sound richer and much more natural.

Delay

(LFO Delay) **Partial** [0]—[127]

This sets the time (0.01 — 22 sec) that it takes from the time the key is pressed (key on) until the LFO effect is applied.

**Using LFO Delay (Delay Vibrato)**

When playing the sound of stringed instruments (such as violins), an effective technique is to apply a delay to the vibrato, letting the sound sustain for a while before the vibrato comes in, rather than applying it immediately when the sound starts. This imitates the actual playing technique used by violinists. If the LFO delay is set with the pitch modulation depth and the LFO rate, the pitch modulation (vibrato) is automatically applied after a certain time following the note on. This effect is called "delay vibrato."

Delay - Key Follow

(Delay Key Follow) **Partial** [0]—[63]

The LFO delay time becomes shorter the higher in the key range that you play, with the C4 key (middle C, or note number 60) as the standard.

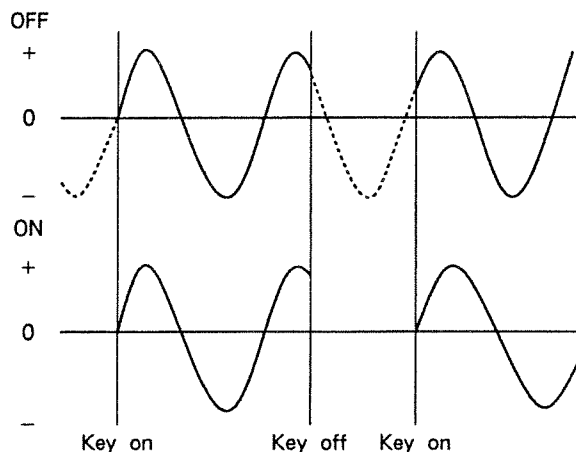
PARTIAL + **F5** (LFO)

Key Sync

(Key Sync) **Partial** [Off], [On]

When this is set to On, the LFO phase can be started from 0 at the key on.

*When "B.UP" or "B.DW" is selected with the Waveform (⇐ P.Prtl - 28), set the Key Sync to ON. If it is set to OFF, no effect will be created.



Pitch Depth

(Pitch Modulation Depth) **Partial** [- 63] — [63]

This determines the depth of the LFO pitch modulation.

The pitch can be changed periodically, creating a vibrato effect. The LFO waveform phase becomes reversed when this is set to a negative value.

TVF Depth

(TVF Modulation Depth) **Partial** [- 63] — [63]

This determines the depth of the LFO filter modulation.

The timbre of the sound can be changed periodically and a filter sweep effect can be created. The LFO waveform phase becomes reversed when this is set to a negative value.

TVA Depth

(TVA Modulation Depth) **Partial** [- 63] — [63]

This determines the depth of the LFO amplifier modulation.

The sound volume can be changed periodically, creating a tremolo effect. The LFO waveform phase becomes reversed when this is set to a negative value.

PAN Depth

(Pan Modulation Depth) **Partial** [- 63] — [63]

This sets the depth of the LFO pan modulation.

The position of the sound in the stereo image can be periodically shifted between the left and right channels, creating a stereo tremolo effect. The LFO waveform phase becomes reversed when this is set to a negative value.

* This parameter is active when the Sample Pan parameter is set to LF+/LF - .

NAME in the Partial Edit Mode

When the **NAME** indicator is lit (green), press **NAME** to call up the ASCII keyboard page and enable naming of the Sound program.

The **NAME** indicator lights (green) depending on the display or cursor position.

The indicator lights in the cases described below.

- When the cursor is at Partial Select (home position) of each display page of the Partial Edit Mode, the **NAME** indicator lights (green).
- When the cursor is at Partial Select (home position) in each display page of the Partial Edit Mode, the **LIST** indicator lights (green). Call up the Select Partial page by pressing **LIST**. If the cursor is at the Partial name, the **NAME** indicator lights (green).
- When the cursor is at the Sample name in the Partial SMT page, the **LIST** indicator lights (green). Call up the Select Sample page by pressing **LIST**. If the cursor is at the Sample name, the **NAME** indicator lights (green).

* The wave data of the changed sample cannot be read in even by executing the Volume Recover/Backup function, or the Volume Dump function when the sample name (including volume ID) has been changed. See P.Sys - 36 and P.Sys - 16 for details.

* See P.3 - 13 for details on naming.

LIST

LIST in the Partial Edit Mode

When the LIST indicator is lit (green), press LIST to call up the Select page and enable selection of the Sound program.

The LIST indicator lights (green) depending on the display or cursor position.

Select Partial

When the cursor is at Partial Select (home position) in each display page of the Partial Edit Mode, the LIST indicator lights (green). Call up the Select Partial page by pressing LIST.

Changing, naming, and sorting of the Partials can be done here.

[Select Partial] 1 Partial -100/+100[A		
<Target> Partial		
No.	Name	Time
1	WND:BSSN.A#1	2.5
2	WND:BSSN.C#2	2.5
3	WND:BSSN.E2	2.5
4	WND:BSSN.G2	2.5
SortABC		Blank

Indications

<Target> (Target)

This changes the Partial to be edited.

No (Number)

Scroll through the Partial list by moving the cursor to the number and using S1/DEC or S2/INC, or VALUE/CURSOR (when the SHIFT indicator is not lit).

*When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.

Name

(Partial Name) **Partial**

The list of the Partials in the current Volume memory is indicated. Select the Partial to be changed by moving the cursor to the Partial name. Change the Partial by pressing **SI/DEC**.

* When the cursor is moved to the Partial name, the Partial can temporarily be selected and the sound can be checked.

* When Method C or Method D (⇐ P.Edit - 4 and P.Edit - 5) is used, you can change only to the Partial being used by the Patch. The Partials which cannot be changed are indicated in parentheses ().

* The ASCII Keyboard page can be called up by pressing **NAME**, and the Partial can be named. (⇐ P.3 - 13)

Time

(Capacity of the Partial)

The capacity of all samples being used by the Partial is indicated in seconds (at a standard of 44.1kHz).

* The time it takes to call up the Select Partial page becomes longer when the Partial capacity is indicated. If you don't need to have this displayed, you can save time by setting Time Display in the System parameters to off.

F4 SortABC

(Alphabetical Sort)

This sorts the Partials indicated in the Select Partial page into alphabetical order.

F5 Blank

(Blank)

This calls up a new, blank Partial (with no data).

Select this when you wish to create a Partial from scratch.

LIST

Select Sample

[Select Sample] Sample -100/+100 A				
<Target> No.1				
No.	Name	Time	Key	Mono
1	WND:BSSN A#1	2.5	A#1	1
2	WND:BSSN C#2	2.5	C#2	Stereo
3	WND:BSSN E2	2.5	E_2	[1] 1
4	WND:BSSN G2	2.5	G_2	[2] 1
SortABC Set Off --- Mono Stereo				

When the cursor is at the Sample name in the Partial SMT page, the **LIST** indicator lights (green).

Call up the Select Sample page by pressing **LIST**.

In this section you can change Samples, name them, set the original key, and sort them.

Indication

<Target>**(Target)**

This shows the component that changes Samples in the Partial SMT page.

No**(Number)**

Scroll through the Sample list by moving the cursor to the number and pressing **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is not lit).

* When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.

Name**(Sample Name) Sample**

The Sample list in the current Volume memory is indicated. Move the cursor to the Sample name to select the Sample to be changed. Change the Sample by pressing **S1/DEC**.

* When the cursor is moved to the sample name, the sample can temporarily be selected and the sound can be checked.

* The ASCII Keyboard page can be called up by pressing **NAME**, and the Sample can be named. (⇐ P.3 - 13)

* Do not change the sample name when using the Volume Recover/Backup function (⇐ P.Sys - 36) or the Volume Dump function (⇐ P.Sys - 16), even though the sample name can be changed. If you change it, the wave data of the sample (whose name was changed) cannot be read by the SP - 700 and no sound will be output when executing the Recover/Load function.

There is no problem, however, in changing the sample name when saving sample data to a hard disk.

Time	(Capacity of the Sample) The capacity of the sample is indicated in seconds (at a standard of 44.1kHz).
Key	(Original Key) Sample [A 0]—[C 8] This sets the key number (note number) which sounds at the original pitch of the sample (the pitch at which the sample was recorded). * C4 is middle C (note number 60).
Mono	(Set mono) This converts a selected stereo sample to a mono sample. Press F4 Mono to convert the sample to mono. The suffixes " - L" or " - R" of the sample name are deleted. * When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.
Stereo [1], [2]	(Set Stereo) This lets you select two mono samples and pair them together to make one stereo sample. Stereo samples received by the Sample Dump cannot be treated as stereo, and stereo samples in the Partial SMT page cannot be retrieved. (⇐ P.Prtl - 7) Execute the Set Stereo function when you wish to use these types of sample s as stereo sample s. Press F5 (Stereo) to convert the sample to stereo. The suffixes " - L" or " - R" are added to the last two characters of the sample name, which is selected by [1]. * When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units. * This function cannot be executed when the capacities (in seconds) of the Samples selected by [1] and [2] are different. * It is not possible to make a Stereo sample by paring two identical samples.
F1 SortABC	(Alphabetical Sort) This sorts the sample s indicated in the Select Sample page into alphabetically.
F2 Set Off	(Set Off) This turns off the assignment of the sample to the component.

LIST

F4 Mono

(Set Mono)

This executes the Set Mono function.

* When executing the Set Mono or the Set Stereo functions, the - L/ - R designations of the last two characters of the sample name are deleted or added and the sample name is changed. In cases like these, the wave data of the sample (whose name was changed) cannot be read by the SP - 700 and no sound will be output, even when executing the Recover/Backup function or the Volume Dump function (⇐ P.Sys - 36 and P.Sys - 16).

F5

Stereo (Set Stereo)

This executes the Set Stereo function.

COMMAND

COMMAND in the Partial Edit Mode

When the **COMMAND** indicator is lit (green), pressing **COMMAND** calls up the Command Menu page, and enables selection of the commands.

The **COMMAND** indicator lights (green) when each display page of the Partial Edit Mode is called up.

```
[Partial Commands] Partial Select/--|A
[1:Template      ] [5:Copy A→B/B→B ]
[2:Delete        ] [6:Copy A→B/B→A ]
[3:Initialize    ]
[4:Disk          ]
1:TEMP 2:Delet 3:Init 4:Disk 1-4/5-8
```

Move the cursor to the desired command and select the command by pressing **S1/DEC**. Alternately, the command can be selected by the Function buttons. Change the indication of the Function button by pressing **F5** (1—4/5—8).

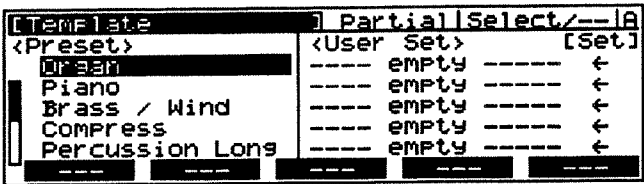
COMMAND

Template

This changes the TVF/TVA parameter settings of the currently selected Partial (selected from the Partial Edit page) to a set of pre - assigned parameter settings.

Select the assigned parameter settings according to the Template which most closely matches the intended Sound program, and change the TVF/TVA parameters to the Template values, then edit them as needed. This provides a quick and efficient method of editing Partial.

*When editing a Partial in the other Volume memory, be sure to change the Volume memory beforehand (⇐ P.Sys - 1), since all editing is done within the current Volume memory.



Indications

<Preset>

(Preset)

<User Set>

(User Set) **System**

There are a total of 10 presets.

Organ

Piano

Brass/Wind

Compress

Percussion Long

Percussion Short

Velocity Strings

Velocity Perc.

TVF Sweep Up/Dwn

TVF Sweep Down

* See the preset list of the Template (⇐ P.App. - 33) for the data (TVF/TVA parameter values) of each preset.

You can copy the TVF/TVA parameter to the Partial currently being edited by moving the cursor to Preset or User and pressing **S1/DEC**.

* Assign the TVF/TVA parameter beforehand when using the User Set.

COMMAND

The following parameters are changed when executing the copy of the Template settings.

<TVF>	<TVA>
Filter Mode	Vel - Curve
Cutoff Freq	Vel - C. Sence
Resonance	Level KF
Cutoff KF	KF Point
KF Point	Time Vel - Sence
Vel - Curve	Time - KeyFollow
Vel - C. Sens	R. Velo Sence
Env - TVF Depth	Time 1
Env - Vel Sens	Level 1
Env - Pitch Depth	Time 2
Time - Vel Sens	Level 2
Time - Key Follow	Time 3
R. Velo Sens	Level 3
Time 1	Time 4
Level 1	
Time 2	
Level 2	
Time 3	
Level 3	
Time 4	
Level 4	

[Set]

(Set)

This assigns the TVF/TVA parameters of the currently selected Partial to a User Set.

To register the TVF/TVA parameters of the currently selected Partial as a User Set, move the cursor to the arrow (←) of the set and press **S1/DEC**.

The name of the Partial is assigned to the User Set.

COMMAND

Assigning the User Set of the Template

1. Call up one of the Partial Mode pages (any display page is fine as long as it is one of the Partial Edit pages). Three methods (C, D and E) are available for editing a Partial. The ways in which the display pages are called up differs depending on the method. Refer to the section "PRECAUTIONS IN EDITING SOUND PROGRAMS" (⇐ P.Edit - 1) for details.
Method C : Press **PERFORMANCE**, **COMMAND**, **F1** (Edit Patch), **COMMAND**, then **F1** (Edit Partial).
or
Method D : Press **PATCH**, **COMMAND**, then **F1** (Edit Partial).
or
Method E : Press **PARTIAL**.
 2. Select the Partial to be assigned to the User Set.
 3. Call up the Template display.
Press **COMMAND**, then **F1** (Template).
 4. Move the cursor to the arrow (←) of the Set, then press **S1/DEC** to assign.
 5. Up to 10 Partials can be assigned to the User Set. Repeat steps #1 to #4 above.
- * User Set is a System parameter. The data is lost if you turn off the power without saving it. (⇐ P.Sys - 32)

Delete

This deletes the sound data in the Volume memory.

* See P.Pfom - 37, since the operation is the same as Delete in the Performance Mode.

Initialize

This initializes the sound data parameter in the Volume memory.

* See P.Pfom - 40, since the operation is the same as Initialize in the Performance Mode.

Disk

This calls up the display pages in the Disk Mode.

* See P.Disk - 1, since the operation is the same for each display page of the Disk Mode.

Copy A → A/B → B

This copies the sound data parameters within the same Volume memory.

* See P.Pfom - 43, since the operation is the same as Copy A → A/B → B in the Performance Mode.

Copy A → B/B → A

This copies the sound data in the Volume memory to the other Volume memory.

* See P.Pfom - 46, since the operation is the same as Copy A → B/B → A of the Performance Mode.

MEMO

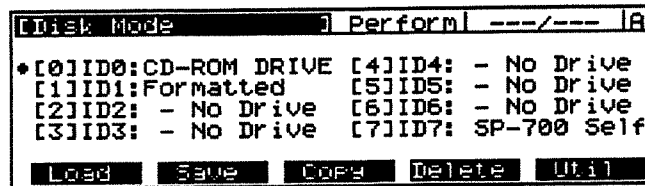
DISK MODE

In the Disk Mode, sound data can be transferred (with load/save operations) between drives, the sound data in the drive can be copied/deleted, and the drive can be formatted.

Disk Mode

The drive which is connected to the SP-700 is indicated for each SCSI ID.

The "●" mark indicates the current drive (the currently selected drive for transferring sound data).



Caution!

The maximum memory capacity of a drive which can be used with the SP-700 is 600 megabytes. For example, if an 800-megabyte hard disk is formatted, it works as a 600-megabyte hard disk; the remaining 200 megabytes cannot be used at all.

The names you give to the drives are indicated (though a CD-ROM drive and a streaming tape drive cannot be named). However, they are indicated at first as shown below (⇨ P.Disk-44).

- Unformatted : The connected hard disk or optical disk has not been formatted yet. Please format it (⇨ P.Disk-28).
- Formatted : The connected hard disk or optical disk has been formatted.
- CD-ROM DRIVE : A CD-ROM drive has been connected.
- TapeStreamer : A streaming tape drive has been connected.
- SP-700 Self : The SP-700 itself.
- No Drive : A drive has not been connected.

Make sure to execute the Scan Command (⇨ P.1-8 and P.Disk-45) when the connected drive is not indicated (when it is not recognized) or when you have changed the disks or tapes.

Caution!

Remove the optical disk, CD-ROM disk or tape ONLY when the busy indication of the drive is off. Removing a disk while the indicator is still lit may damage the disk and render it unusable.

DISK + **F1** (Load)

Disk Load

The sound data is read in from the current drive to the Volume memory of the SP-700.

[Disk Load]		Muted	Dec/Inc	[A]
•TG[Volm] •ID[All]		•CD[ID0:CD-ROM DRIVE]		
Files		Time	PB#	Int.
1:	***:RHYTHM SEC.1	106.0	---	A 12.6s
2:	KIT:Drum Kits 1	201.5	---	B .0s
3:	KIT:Cheese Kits	36.0	---	Disk
4:	DRM:Brushes	85.6	---	.0s
[AllOff] [AllOn]		---	[ToA]	[ToB]

*When the Load-while-playing function of the System parameters (⇐ P.Sys – 4) is set to on, the Quick Load function or the commands of each page in the Disk Mode (Load, Save, Copy, Delete, Format, and Convert Load) take about eight times as long to execute than when the Load-while-playing function is set to off. You should set this to off unless it is necessary to output the sound while executing one of the above commands.

Indications

TG

(Target) [Volm (Volume)], [Pfom (Performance)],
[Pach (Patch)], [Prtl (Partial)], [(Samp (Sample)],
[[PrPM (Partial parameter)], [PaPM (Patch parameter)],
[PfPM (Performance parameter)]

This selects the type of the sound data to be loaded.
When selecting Volm, Pfom, Pach or Prtl, sound data of the lower levels are also loaded at the same time.
When PrPM, PaPM or PfPM is selected, only each parameter itself is loaded; lower level sound data is not loaded.

*Press **LIST** to call up the Select Target page, and enable selection of the Target.
(⇐ P.Disk-41)

ID:

(Volume ID)

With the enormous amounts of data that can be saved to a hard disk or optical disk, it becomes difficult to find the sound data you want. Because of this, the SP-700 lets you classify the sound data for each Volume using the first three letters of the name. The first three letters are called the Volume ID (⇐ P.2-12).

Assign a Volume ID to the sound data to be loaded so that only the sound data which has the assigned Volume ID can be indicated in the list (shown in the Disk Load page). By determining the Volume ID, sound data can be easily found.

Set this to All in order to indicate all the sound data in the list.

* Pressing **LIST** calls up the Select Volume ID page, and the Volume ID can be determined (⇐ P.Disk-42).

CD

(Current Drive)

The current drive is the drive which is selected at present for transferring of the sound data. Select the drive which has the sound data that is to be loaded.

* Data cannot be loaded from the streaming tape drive. A "Can't Execute" message is displayed when trying to load.

* A "Can't Communicate" message is displayed when selecting "No Drive" (selecting a SCSI ID for a drive that has not been connected). And a "SCSI ID Error" message is displayed when selecting "SP-700 itself". Select only connected drives.

* Pressing **LIST** calls up the Select Drive page, and the current drive can be changed (⇐ P.Disk-44).

* Make sure to execute the Scan Command (⇐ P.1-8 and P.Disk-45) when replacing the disk or when the connected drive cannot be recognized.

* files

(Amount of Files)

The amount of the files of the sound data (selected by the Target) in the current drive is displayed.

Number (no indication)

(List Number)

Scroll through the list by moving the cursor to the number and pressing **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is not lit).

* When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.

DISK + **F1** (Load)

Sound program (no indication)

(Sound Program to be Loaded)

The names of the various sound data in the current drive are listed.

Mark the sound data to be loaded and execute the load operation. The mark alternately appears and disappears each time **S1/DEC** is pressed after moving the cursor to the name. Press **F2** (All On) in order to mark all the sound data. Press **F1** (All Off) in order to release all marks.

* Marks are all cancelled when changing the Target.

* The sound data at the cursor position is loaded when no other data is marked.

Execute the load operation after marking the sound data to be loaded.

The data is loaded to the Volume A memory when pressing **F4** (to [A]), and is loaded to the Volume B memory when pressing **F5** (to [B]).

* When the Volume A parameter of the System parameters (⇐ P.Sys-5) is set to use all the wave memory in the Volume A memory, it cannot be loaded even when **F5** (to [B]) is pressed.

Time

(Capacity of the Sound Data)

The capacity of the sound data is indicated in seconds (at a standard of 44.1kHz).

This displayed capacity of the sound data could be less than or greater than the actual capacity. Refer to the section "Correction for Time Indication" on P.Disk-31 for details.

PG#

(Program Number)

When the Volume is set by the Target, the program number of the Volume is indicated. When the Target is a Performance or Patch, the applicable program number cannot be displayed.

Int.

(Remaining Capacity of each Volume Memory)

The remaining memory capacity of each Volume memory is indicated in seconds (at a standard of 44.1kHz). Since the capacity (time) of the Sound program to be loaded is also indicated by the second, you can easily determine whether it can be loaded or not. If there isn't enough Volume memory left, the wave data can only be partially loaded.

Disk

(Remaining Capacity of the Current Drive)

The remaining capacity of the current drive is indicated in seconds (at a standard of 44.1kHz).

DISK + **F1** (Load)**F1** All Off

(Mark All Off)

All marks are deleted.

F2 All On

(Mark All On)

All sound data can be marked.

F4 to [A]

(Load to Volume A Memory)

This loads the marked sound data to the Volume A memory.

* See P.2-15 for information on precautions to take when loading.

F5 to [B]

(Load to Volume B Memory)

This loads the marked sound data to the Volume B memory.

* When the Volume A parameter of the System parameters (☞ P.Sys-5) is set to use all the wave memory in the Volume A memory, it cannot be loaded even when **F5** (to [B]) is pressed.

DISK + **F1** (Load)

Loading Sound Data from the Current Drive

1. Call up the Disk Load page.
Press **DISK**, then **F1** (Load).
2. Select the type of the sound data to be loaded by selecting "TG."
* The list indication changes according to the type of the sound data.
3. Select the drive having the desired sound data with "CD."
* Data cannot be loaded from the streaming tape drive.
* A "Can't Communicate" message is indicated at the top right when selecting a SCSI ID for a drive that has not been connected. Make sure to select a SCSI ID corresponding to a properly connected drive.
4. Set the Volume ID only as needed, and limit the sound data to be indicated in the list.
* When there is a huge amount of sound data in the drive, you can quickly find and load the desired sound data by determining the Volume ID.
5. Select the sound data to be loaded from the list and press **S1/DEC** to mark it. Several sets of sound data can be marked.
Load the data to the Volume memory by pressing either **F4** (to [A]) or **F5** (to [B]).
The type of the sound data (if it is a Patch, it is indicated as Patch File) being loaded and the sound data names are indicated following the # File Scanning indication.
If there is sound data already in the destination Volume memory, and you attempt to execute the Load operation, a message ("Clear Internal Memory Before Loading?") prompts you to confirm whether the old sound data is to be deleted or not. Pressing **F1** (Yes) clears (deletes) all the old sound data and loads the new data. If **F3** (No) is pressed, the new data is loaded to the remaining empty memory space without clearing (deleting) the old sound data. The Load operation can be aborted by pressing **F5**.
If you try to load by pressing **F3** (No), the message "Same Name Found! Overwrite?" prompts you to confirm whether you wish to overwrite the sound data of the same name or not (when there is sound data in the destination Volume memory that has the same name as the sound data to be loaded, and the SCSI Overwrite Switch (⇐ P.Sys-10) has been set to off). If **F1** (Yes) is pressed, the sound data of the same name in the Volume memory is overwritten and the new data is loaded. If **F3** (No) is pressed, the sound data of the same name cannot be loaded, and only sound data with different names can be loaded. The Load operation can be aborted by pressing **F5** (Cancel).
6. A "Complete" message is indicated at the top right of the display when the load operation is completed.

Caution!

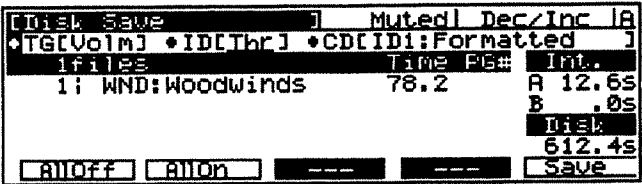
The error message "Error Wave Memory Full" is indicated when trying to load sound data which is greater than the memory capacity of the Volume memory, or when loading sound data to the remaining memory and the capacity of the data exceeds the remaining memory. In such a case, only part of the sound data can be loaded. A "Directory Full" message is indicated when trying to load beyond the maximum permissible number of sound data items of the Volume memory. (The sound data cannot be loaded).

Disk Save

This saves the sound data in the current Volume memory of the SP-700 to the current drive.

- * Since the Volume memory cannot be changed in the Disk Save page, change the Volume memory beforehand as needed (⇐ P.Sys-1).
- * When the Load-while-playing function of the System parameters (⇐ P.Sys-4) is set to on, the Quick Load function or the commands of each page in the Disk Mode (Load, Save, Copy, Delete, Format, and Convert Load) take about eight times as long to execute than when the Load-while-playing function is set to off. You should set this to off unless it is necessary to output the sound while executing one of the above commands.

* If, for some reason, the power to the SP-700 is cut off, all sound data currently in the Volume memory will be lost. Make it a habit to regularly and often save important sound data.



Indication

TG (Target) [Volm (Volume)], [Pform (Performance)], [Pach (Patch)], [Prtl (Partial)], [(Samp (Sample))]

This selects the type of the sound data to be saved.

When selecting Volm, Pform, Pach or Prtl, the sound data of lower levels are also saved at the same time.

* Pressing **LIST** calls up the Select Target page, and the Target can be selected. (⇐ P.Disk-41)

ID: (Volume ID)

With the enormous amounts of data that can be saved to a hard disk or optical disk, it becomes difficult to find the sound data you want. Because of this, the SP-700 lets you classify the sound data for each Volume using the first three letters of the name. The first three letters are called the Volume ID (⇐ P.2-12).

Unlike the ID in the Disk Load page, the Volume ID of the sound data to be saved can be changed to the determined Volume ID, while saving.

When saving the Volume ID of the current Volume memory without changing, set it to "Thr."

* Pressing **LIST** calls up the Select Volume ID page, and the Volume ID can be selected. (⇐ P.Disk-42)

DISK + **F2** (Save)

CD

(Current Drive)

The current drive is the drive which is selected at present for transferring of the sound data. Select the drive to which the sound data is to be saved.

- * Data cannot be saved to the CD-ROM drive or streaming tape drive. A "Can't Execute" message is displayed when trying to save.
- * A "Can't Communicate" message is displayed when selecting "No Drive" (selecting a SCSI ID for a drive that has not been connected). And a "SCSI ID Error" message is displayed when selecting "SP-700 itself". Select only connected drives.
- * Pressing **LIST** calls up the Select Drive page, and the current drive can be changed (⇐ P.Disk-44).
- * Make sure to execute the Scan Command (⇐ P.1-8 and P.Disk-45) when replacing the disk or when the connected drive cannot be recognized.

* files

(Amount of Files)

The amount of the files of the sound data (selected by the Target) in the current Volume memory is displayed.

Number (no indication)

(List Number)

Scroll through the list by moving the cursor to the number and pressing **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is not lit).

- * When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.

Sound Program
(no indication)

(Sound Program to be Saved)

The names of the various sound data in the current Volume memory are listed.

When ID (Volume ID) is set to "Thr"

Mark the sound data to be saved and execute the save operation. The mark alternately appears and disappears each time **S1/DEC** is pressed after moving the cursor to the name. Press **F2** (All On) in order to mark all the sound data. Press **F1** (All Off) in order to release all marks.

- * Marks are all cancelled when changing the Target or the Volume ID.
- * The sound data at the cursor position is saved when no other data is marked.

When ID (Volume ID) is set to other than "Thr"

No mark will be assigned to the sound data you wish to save. Move the cursor to the relevant sound data, then execute the save.

Execute the save operation after marking the sound data to be saved or moving the cursor. Press **F5** (Save) to save the data.

* Sound data of 0 seconds cannot be saved.

Time

(Capacity of the Sound Data)

The capacity of the sound data is indicated in seconds (at a standard of 44.1kHz).

* Sound data of 0 seconds cannot be saved.

Int.

(Remaining Capacity of each Volume Memory)

The remaining capacity of each Volume memory is indicated in seconds (at a standard of 44.1kHz).

Disk

(Remaining Capacity of the Current Drive)

The remaining capacity of the current drive is indicated in seconds (at a standard of 44.1kHz).

You can easily check whether the data can be saved or not since the capacity (time) of the sound data to be saved is also indicated in seconds. When there is not enough memory remaining in the current drive, only part of the wave data can be saved.

F1 All Off

(Mark All Off)

When the ID (Volume ID) is set to Thr, all the marks will be erased.

F2 All On

(Mark All On)

When the ID (Volume ID) is set to Thr, all sound data will be marked.

F5 Save

(Save)

The marked sound data is saved to the current drive.

* See P.2-16 for information on precautions to take when saving.

DISK + **F2** (Save)

Saving Sound Data to the Current Drive

1. Call up the System Mode page.
Press **SYSTEM**.
2. Select the Volume memory which has the sound data to be saved by the Current Vol Memory.
3. Call up the Disk Save page.
Press **DISK**, then **F2** (Save).
4. Select the type of the sound data to be saved with "TG."
 - * The list indication changes according to the type of the sound data.
5. Select the drive to be saved with "CD."
 - * Data cannot be saved to the CD-ROM drive or the streaming tape drive.
 - * A "Can't Communicate" message is indicated at the top right of the display when selecting a SCSI ID for a drive that has not been connected. Make sure to select a SCSI ID corresponding to a properly connected drive.
6. Set the Volume ID as needed.
 - * You can change the Volume ID of sound data while saving it, or save it without changing the Volume ID (when set to Thr).
 - * When assigning the Volume ID to the sound data of the current Volume memory, set it in the System parameters' Volume ID page (☞ P.Sys-29).
7. Select the sound to be saved from the List.
When the Volume ID is set to Thr, press **S1/DEC** to assign a mark. You can mark more than one sound.
When the Volume ID is set to other than Thr, move the cursor to the sound data you wish to save.
 - * Sound data of 0 seconds cannot be saved.

Save the data to the current drive by pressing **F5** (Save).
The type of the sound data (if it is a Patch, it is indicated as Patch File) being saved and the sound data names are indicated following the # File Scanning indication.
If you try to save, the message "Same Name Found! Overwrite?" prompts you to confirm whether you wish to overwrite the sound data of the same name not (when there is sound data in the current drive that has the same name as the sound data to be saved, and the SCSI Overwrite Switch (☞ P.Sys-10) has been set to off). If **F1** (Yes) is pressed, the sound data of the same name in the current drive is overwritten and the new data is saved. If **F3** (No) is pressed, the sound data of the same name is not saved, and only sound data with different names is saved. The Save operation can be aborted by pressing **F5** (Cancel).
8. A "Complete" message is indicated at the top right of the display when the Save operation is completed.

Caution!

The error message, "Disk Memory Full," is indicated when trying to save sound data which has memory capacity exceeding the remaining memory capacity of the destination current drive. Only part of the sound data can be saved to the current drive.

A "Directory Full" message is indicated when trying to save beyond the maximum permissible number of sound data items of the current drive. (This sound data cannot be saved.)

DISK + F3 (Copy)

Disk Copy

This operation lets you copy sound data between SCSI devices, such as a hard disk.

* When the Load-while-playing function of the System parameters (P.Sys-4) is set to on, the Quick Load function or the commands of each page in the Disk Mode (Load, Save, Copy, Delete, Format, and Convert Load) take about eight times as long to execute than when the Load-while-playing function is set to off. You should set this to off unless it is necessary to output the sound while executing one of the above commands.

The following four patterns are available, depending on the type of the objective drive.

* The display automatically changes when selecting the objective drive by the source drive or the destination drive.

[Disk Copy] Muted/Dec/Inc/A	
•TG[Volm]	•Source[ID1:Formatted]
•ID[All]	•Destin[ID2:Formatted]
Files	Time PS# Source
1: GTR:Guitars	229.1 --- 612.4s
2: STR:Various Sect	106.7 --- Dest.in
3: ORG:Organs	45.4 --- 41.9s
[AllOff] [AllOn] --- ---	[Copy]

The sound data is copied from the hard disk/optical disk to the hard disk/optical disk.

[Disk Copy] Muted/Dec/Inc/A	
•TG[Volm]	•Source[ID1:Formatted]
•ID[All]	•Destin[ID3:TapeStreamer]
Files	Time PS# Source
	612.4s
Backup to Tape	
	Dest.in
	****.s
[AllOff] [AllOn] --- ---	[Copy]

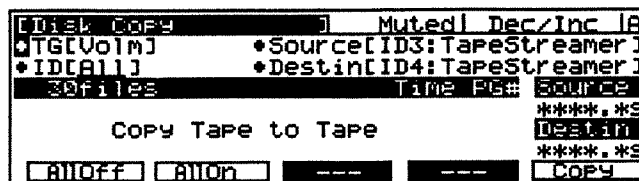
The sound data is copied (backed-up) from the hard disk/optical disk to the streaming tape drive.

A "Backup to Tape" message is indicated.

[Disk Copy] Muted/Dec/Inc/A	
•TG[Volm]	•Source[ID3:TapeStreamer]
•ID[All]	•Destin[ID1:Formatted]
Files	Time PS# Source
	****.s
Recover from Tape	
	Dest.in
	612.4s
[AllOff] [AllOn] --- ---	[Copy]

The sound data backed up to the streaming tape drive is copied (recovered) to the hard disk/optical disk. A "Recover from Tape" message is indicated.

[DISK] + [F3] (Copy)



The sound data backed up to the streaming tape drive is copied from the streaming tape drive to the streaming tape drive. A "Copy Tape to Tape" message is indicated.

Indications

TG

(Target)

[Volm (Volume)], [Pform (Performance)],
[Pach (Patch)], [Prtl (Partial)], [Samp (Sample)]

This selects the type of sound data to be copied.

When selecting Volm, Pform, Pach or Prtl, the lower level sound data are also copied at the same time. However, this setting becomes inactive when the streaming tape drive is set for the source drive or the destination drive.

* Pressing [LIST] calls up the Select Target page, and the Target can be selected.
(⇒ P.Disk-41)

ID:

(Volume ID)

With the enormous amounts of data that can be saved to a hard disk or optical disk, it becomes difficult to find the sound data you want. Because of this, the SP-700 lets you classify the sound data for each Volume using the first three letters of the name. The first three letters are called the Volume ID (⇒ P.2-12).

Assign a Volume ID to the sound data to be copied so that only the sound data which has the assigned Volume ID can be indicated in the list (shown in the Disk Copy page). By determining the Volume ID, sound data can be easily found.

Set this to All in order to indicate all the sound data in the list.

However, this setting becomes inactive when the streaming tape drive is set for the source drive or the destination drive.

* Pressing [LIST] calls up the Select Volume ID page, and the Volume ID can be selected.
(⇒ P.Disk-42)

DISK + **F3** (Copy)

Source**(Source Drive)**

This selects the original drive to be copied.

Select the drive which has the sound data you wish to copy.

* A "Can't Communicate" message is displayed when selecting "No Drive" (selecting a SCSI ID for a drive that has not been connected). And a "SCSI ID Error" message is displayed when selecting "SP-700 itself". Select only connected drives.

* This source drive changes linking with the current drive (CD) of other page.

* The select drive page opens when pressing **LIST**, and the source drive can be changed (☞ P.Disk-44).

* Make sure to execute the Scan Command (☞ P.1-8 and P.Disk-45) when replacing the disk/tape or when the connected drive cannot be recognized.

Destin**(Dstination drive)**

This selects the destination drive of the copy.

Select the drive to which the sound data is copied.

* It cannot be copied to the CD-ROM drive. "Can't Execute" is displayed when trying to copy.

* A "Can't Communicate" message is displayed when executing the disk copy operation with "No Drive" (selecting a SCSI ID for a drive that has not been connected). And a "SCSI ID Error" message is displayed when executing the disk copy operation with "SP-700 itself". Select only connected drives.

* Pressing **LIST** calls up the Select Drive (D) page, and the destination drive can be changed (☞ P.Disk-44).

* Make sure to execute the Scan Command (☞ P.1-8 and P.Disk-45) when replacing the disk/tape or when the connected drive cannot be recognized.

*** files****(Amount of Files)**

The amount of the files of the sound data (selected by the Target) in the source drive is displayed.

However, the list is not displayed when the streaming tape drive is set for the source drive or the destination drive.

Number (no indication)**(List Number)**

Scroll through the list by moving the cursor to the number and pressing **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is not lit).

However, the list is not displayed and not scrolled when the streaming tape drive is set for the source drive or the destination drive.

* When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.

Sound program (no indication)

(Sound Program to be Copied)

The names of the various sound data in the source drive are listed.

However, the list is not displayed when the streaming tape drive is set for the source drive or the destination drive.

Mark the sound data to be copied and execute the copy operation. The mark alternately appears and disappears each time **S1/DEC** is pressed after moving the cursor to the name. Press **F2** (All On) in order to mark all the sound data. Press **F1** (All Off) in order to release all marks.

Execute the copy after marking the sound data to be copied.

The sound data is copied from the source drive to the destination drive by pressing **F5** Copy.

* Marks are all cancelled when changing the Target.

* The sound data at the cursor position is copied when no other data is marked.

* When there is unassigned sound data in the source drive (sound data which is not assigned to any Performance, Patch or Partial; see P.2-19, examples 1—3), the unassigned sound data cannot be copied to the destination drive, even by setting the Target to the Volume, and marking all Volumes by pressing **F2** (All On) to execute the disk copy.

In order to copy the unassigned sound data, copy all sound data by changing the Target one by one: Sample, Partial, Patch, Performance, Volume.

Or, back up the sound data to the streaming tape drive then recover from the tape to the destination drive.

Time

(Capacity of the sound data)

The capacity of the sound data is indicated in seconds (at a standard of 44.1kHz).

However, it is not displayed when the streaming tape drive is set for the source drive or the destination drive.

* This displayed capacity of the sound data could be less than or greater than the actual capacity. Refer to the section "Correction for Time Indication" on P.Disk-31 for details.

PG#

(Program Number)

When the Volume is set by the target, the program number of the Volume is indicated. When the target is a Performance or Patch, the program number of the Performance or Patch is not displayed.

However, the list is not displayed when the streaming tape drive is set for the source drive or the destination drive.

DISK + **F3** (Copy)**Source****(Remaining Capacity of the Source Drive)**

The remaining capacity of the source drive is indicated in seconds (at a standard of 44.1kHz).
However, it is not displayed when the streaming tape drive is set for the source drive.

Destin**(Remaining Capacity of the Destination Drive)**

The remaining capacity of the destination drive is indicated in seconds (at a standard of 44.1kHz).
However, it is not displayed when the streaming tape drive is set for the destination drive.

F1 All Off**(Mark All Off)**

This releases all marks.
However, it cannot be executed when the streaming tape drive is set for the source drive or the destination drive.

F2 All On**(Mark All On)**

This marks all sound data.
However, it cannot be executed when the streaming tape drive is set for the source drive or the destination drive.

F5 Copy**(Copy)**

This copies the marked sound data to the destination drive.
However, all sound data is backed up/recovered/copied to the destination drive when the streaming tape drive is set for the source drive or the destination drive.

*When the streaming tape drive is set for the source drive or the destination drive, or when copying a large amount of sound data, such as that of an optical disk, the copy operation may take quite a long time.

Caution!! When the streaming tape drive is selected for the Source Drive or the Destination Drive:

All sound data in each Volume memory of the SP-700 is lost when executing the backup, recover, or copy operations by pressing **F5** (Copy). Therefore, save the necessary sound data (⇐ P.Disk-7) before executing these operations by pressing **F5** (Copy).

Caution!! When backing up from a hard disk/optical disk to the streaming tape drive:

All sound data in the hard disk/optical disk are backed up to the tape.

For example, there are 60 megabytes of sound data in the 100-megabyte hard disk. If you back up this disk, the 60 megabytes of sound data is not backed up alone, but the total 100-megabyte capacity of the hard disk is backed up as well.

Therefore, you should make sure that the capacity (length) of the tape you are using is the same or greater than the capacity of the hard disk/optical disk.

Keep in mind that if there is already sound data in the tape to be used, these sound data will all be lost. (Only one set of backup data can be copied to one tape.)

Caution!! When recovering from the streaming tape drive to the hard disk/optical disk:

All sound data in the tape is recovered to the hard disk/optical disk.

Therefore it is necessary to recover to a hard disk/optical disk which has the same or greater capacity than the sound data in the tape.

However, when recovering to a hard disk/optical disk which has more capacity than the sound data in the tape, the capacity that can be used on the hard disk/optical disk will only be the same as the capacity of the sound data in the tape.

For example, there are 150 megabytes of sound data in the tape, and this data is recovered to a 200-megabyte hard disk. In this condition, the 200-megabyte hard disk functions as a 150-megabyte hard disk, and the remaining 50 megabytes cannot be used at all.

Keep in mind that if there is already sound data in the hard disk to be used, this sound data will all be lost.

Caution!! When copying from the streaming tape drive to the streaming tape drive:

All sound data in the original tape is copied to the destination tape.

Therefore, it is necessary to copy to a destination tape which has the same or greater capacity than the sound data in the original tape.

Keep in mind that if there is already sound data in the destination tape to be used, this sound data will all be lost (only one set of backup data can be copied to one tape).

DISK + **F3** (Copy)**Concerning the tape which can be used (Streaming Tape Drive)**

Make sure to use 4-mm data grade DDS DAT cassette tapes. We recommend that you use Maxell HS-4/60, FUFU FILM DG-60M or SONY DG-60 M.

* Do not use audio DAT tape for data backup purposes.

The relation between the length and the capacity of the tape is shown below.

<u>Length (meter)</u>	<u>Time (minute)</u>	<u>Capacity (Mbyte)</u>
23	45	About 490
30	60	About 670
45	90	About 1000
60	120	About 1350

* The maximum capacity of the drive which can be used for the SP-700 is 600 megabytes.

It is unnecessary to format the newly purchased tape or the tape which was already used by other device, since the SP-700 automatically formats the tape.

Copying the Sound Data between Drives

1. Call up the Disk Copy Page.
Press [DISK], then [F3] (Copy).
2. Select the SCSI device with "Source" and "Destin" and determine which of the four patterns is to be used.
 - * It is impossible to copy the sound data by determining the same drive for both the source drive and the destination drive. A "Can't Execute" message is displayed, and the copy operation is aborted.
 - * The SP-700 itself cannot be selected. Also, a CD-ROM drive cannot be selected as the Destination.
 - * A "Can't Communicate" message is indicated at the top right of the display when selecting a SCSI ID for a drive that has not been connected. Make sure to select a SCSI ID corresponding to a properly connected drive.
3. Select the type of the sound data to be copied with "TG" when copying from a hard disk/optical disk to another hard disk/optical disk.
 - * The list indication of the sound data changes according to the type of the sound data to be copied.
4. Set the Volume ID as necessary when copying from a hard disk/optical disk to a hard disk/optical disk.
 - * When there is a lot of sound data in the drive, the selected sound data can be found quickly and copied by determining the Volume ID.
5. When copying from the hard disk/optical disk to the hard disk/optical disk, select the sound data to be copied from the sound data list, and mark it by pressing [S1/DEC]. Several sets of sound data can be marked.
Copy the sound data to the destination drive by pressing [F5] Copy.
The type of the sound data (if it is a Patch, it is indicated as Patch File) being copied and the sound data names are indicated following the # File Scanning indication.
If you try to copy the data, the message "Same Name Found! Overwrite?" prompts you to confirm whether you wish to overwrite the sound data of the same name or not (when there is sound data in the destination drive that has the same name as the sound data to be copied, and the SCSI Overwrite Switch (⇐ P.Sys-10) has been set to off). If [F1] (Yes) is pressed, the sound data of the same name in the destination drive is overwritten and the new data of the source drive is copied. If [F3] (No) is pressed, the sound data of the same name is not copied, and only sound data with different names are copied. The Copy operation can be aborted by pressing [F5] (Cancel).
 - * The error message, "Disk Memory Full," appears when you attempt to copy sound data using a greater amount of memory than the remaining memory capacity of the destination drive. The sound data can be copied only partially to the destination drive. A "Directory Full" message is indicated when trying to copy beyond the maximum permissible number of sound data items of the destination drive, and only a part of this sound data can be copied.

When the streaming tape drive is selected with "Source" or "Destin," press [F5] (Copy) to backup/recover/copy to the destination drive.
6. A "Complete" message is indicated at the top right of the display when the copy operation is completed.

DISK + **F4** (Delete)

Disk Delete

This deletes the sound data in the current drive.

Disk Delete					Muted	Dec/Inc	LA
•TGT[Volm] •ID[All] •CD[IDI:Formatted]							
SFiles	=RdrM=	Time	PG#	Int.			
1:	GTR:Guitars	229.1	---	A	12.6s		
2:	STR:Various Sect	106.7	---	B	.0s		
3:	ORG:Organs	45.4	---	Disc			
4:	KEY:Pop E.Pianos	117.5	---	612.4s			
ANOff		ANOn		---	---	Delete	

*When the Load-while-playing function of the System parameters (☐ P.Sys-4) is set to on, the Quick Load function or the commands of each page in the Disk Mode (Load, Save, Copy, Delete, Format, and Convert Load) take about eight times as long to execute than when the Load-while-playing function is set to off. You should set this to off unless it is necessary to output the sound while executing one of the above commands.

Indication

TG

(Target) [Volm (Volume)], [Pfm (Performance)],
[Pach (Patch)], [Prtl (Partial)], [(Samp (Sample))]

This selects the type of the sound data to be deleted.

When selecting Volm, Pfm, Pach or Prtl, the lower level sound data is also deleted at the same time.

*Pressing **LIST** calls up the Select Target page, and the Target can be selected.
(☐ P.Disk-41)

ID:

(Volume ID)

With the enormous amounts of data that can be saved to a hard disk or optical disk, it becomes difficult to find the sound data you want. Because of this, the SP-700 lets you classify the sound data for each Volume using the first three letters of the name. The first three letters are called the Volume ID (☐ P.2-12).

Assign a Volume ID to the sound data to be deleted so that only the sound data which has the assigned Volume ID can be indicated in the list (shown in the Disk Delete page). By determining the Volume ID, sound data can be easily found.

Set this to All in order to indicate all the sound data in the list.

*Pressing **LIST** calls up the Select Volume ID page, and the Volume ID can be selected.
(☐ P.Disk-42)

CD

(Current Drive)

The current drive is the drive which is selected at present for transferring of the data. Select the drive which has the sound data you wish to delete.

- * The sound data in the CD-ROM drive or streaming tape drive cannot be deleted. A "Can't Execute" message is displayed if you attempt to delete the data.
- * A "Can't Communicate" message is displayed when selecting "No Drive" (selecting a SCSI ID for a drive that has not been connected). And a "SCSI ID Error" message is displayed when selecting "SP-700 itself". Select only connected drives.
- * Pressing **LIST** calls up the Select Drive page, and the current drive can be selected (⇐ P.Disk-44).
- * Make sure to execute the Scan Command (⇐ P.1-8 and P.Disk-45) when replacing the disk or when the connected drive cannot be recognized.

=Norm= or =Fast=

(Setting the Fast Delete Mode)

The way of deleting sound data differs depending on the settings (on/off) of the Fast Delete Mode for SCSI (⇐ P.Sys-8).

Norm : The Fast Delete Mode is set to off.

This function checks whether the sound data to be deleted is used for other sound data or not, and if it is not used, then it deletes only that unused sound data.

Fast : The Fast Delete Mode is set to on.

This deletes all sound data without checking whether the sound data to be deleted is used for other sound data or not. In this way, the delete operation can be performed much faster.

* files

(Amount of Files)

The amount of the files of the sound data (selected by the Target) in the current drive is displayed.

Number (no indication)

(List Number)

Scroll through the list by moving the cursor to the number and pressing **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is not lit).

- * When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.

DISK + **F4** (Delete)

Sound Program (no indication)

(Sound Program to be Deleted)

The names of the various sound data in the current drive are listed.

Mark the sound data to be deleted and execute the delete operation. The mark alternately appears and disappears each time **S1/DEC** is pressed after moving the cursor to the name.

Press **F2** (All On) in order to mark all the sound data. Press **F1** (All Off) in order to release all marks.

Execute the delete operation after marking the sound data to be deleted.

The sound data is deleted by pressing **F5** (Delete).

* Marks are all cancelled when changing the Target.

* The sound data at the cursor position is deleted when no other data is marked.

Time

(Capacity of the Sound Data)

The capacity of the sound data is indicated in seconds (at a standard of 44.1kHz).

* This displayed capacity of the sound data could be less than or greater than the actual capacity. Refer to the section "Correction for Time Indication" on P.Disk-31 for details.

PG#

(Program Number)

When the volume is set by the target, the program number of the Volume is indicated. When the target is a Performance or Patch, the program number of the Performance or the Patch cannot be displayed.

Int.

(Remaining Capacity of each Volume memory)

The remaining capacity of each Volume memory is indicated in seconds (at a standard of 44.1kHz).

Disk

(Remaining Capacity of the Current Drive)

The remaining capacity of the current drive is indicated in seconds (at a standard of 44.1kHz).

DISK + **F4** (Delete)**F1** All Off

(Mark All Off)

This releases all marks.

F2 All On

(Mark All On)

This marks all sound data.

F5 Delete

(Delete)

This deletes all marked sound data.

* Deleting a large amount of sound data, such as that of an optical disk, may take quite a long time.

Caution!

When executing Disk Delete, different from the Delete Command (see Page Pform-37), the name of a sound will be retained in a 'Select' of data one level higher that uses sound data even after being disk-deleted.

For example, when a Partial is disk-deleted, the name of the Partial deleted remains within the Split Partial Select in all the Patches that use that Partial.

Similarly, when a Patch is disk-deleted, the name in the Part Patch Select will remain. This applies to the Sample Select of the SMT where the Sample is disk-deleted.

That is, you must be aware that the Disk Delete function cannot automatically delete (turn off) the name in a Select Parameter of sound data one level higher.

DISK + **F4** (Delete)**Deleting Sound Data in the Current Drive**

1. Call up the System SCSI page.
Press **SYSTEM**, then **F2** (SCSI).
2. Set the Fast Delete Mode.
3. Call up the Disk Delete page.
Press **DISK**, then **F4** (Delete).
4. Select the type of the sound data to be deleted with "TG."
 - * The list indication changes according to the type of the sound data.
5. Select the SCSI device having the sound data you wish to delete with "CD."
 - * Sound data in the CD-ROM drive or the streaming tape drive cannot be deleted.
 - * A "Can't Communicate" message is indicated at the top right of the display when selecting a SCSI ID for a drive that has not been connected. Make sure to select a SCSI ID corresponding to a properly connected drive.
6. Set the Volume ID as needed and limit the sound data to be indicated in the list.
 - * When there is a large amount of sound data in the drive, the selected sound data can be found quickly and deleted by determining the Volume ID.
7. Select the sound data to be deleted from the list and press **S1/DEC** to mark it. Several sets of sound data can be marked.
Delete the data by pressing **F5** (Delete).
A message prompting you to confirm whether you wish to delete the sound data or not, appears following the # File Scanning indication.
The type and number of the sound data to be deleted are indicated and the prompt appears for confirmation. Keep in mind that the lower sound data of unassigned sound data might be deleted when the Fast Delete Mode is set to on. When the Fast Delete Mode is set to off, the SP-700 checks the relationship of the various sound data automatically, in order to avoid deleting the lower sound data which is used by other sound data.
Press **F2** (Yes) to execute the Delete operation.
Press **F4** (No) to abort the Delete operation.
8. A "Complete" message appears at the top right of the display when the Delete operation is completed.

Disk Utility

These operations are used to format and park the heads the hard disk or optical disk. Keep in mind that some of the commands in this page change the data in the drive.

Disk Utility		Muted	Dec/Inc	1A
TG[Volm]		ID[All]	CD[IDI:Formatted]	1
3Dfiles		Time	FB#	Int.
1:	***:RHYTHM SEC.1	106.0	65	A 12.6s
2:	KIT:Drum Kits 1	201.5	66	B .0s
3:	KIT:Cheese Kits	36.0	67	Disk
4:	DRM:Brushes	85.6	68	41.9s
Format		ParkHds	Restart	Optimiz
		Compl.D		

* When the Load-while-playing function of the System parameters (☐ P.Sys-4) is set to on, the Quick Load function or the commands of each page in the Disk Mode (Load, Save, Copy, Delete, Format, and Convert Load) take about eight times as long to execute than when the Load-while-playing function is set to off. You should set this to off unless it is necessary to output the sound while executing one of the above commands.

Indications

TG

(Target) [Volm (Volume)], [Pform (Performance)],
[Pach (Patch)], [Prtl (Partial)], [(Samp (Sample))]

This selects the type of the sound data whose name or program number will be changed.

* Pressing **LIST** calls up the Select Target page, and the Target can be selected.
(☐ P.Disk-41)

ID:

(Volume ID)

With the enormous amounts of data that can be saved to a hard disk or optical disk, it becomes difficult to find the sound data you want. Because of this, the SP-700 lets you classify the sound data for each Volume using the first three letters of the name. The first three letters are called the Volume ID (☐ P.2-12).

Assign a Volume ID to the sound data whose name or program number is to be changed so that only the sound data which has the assigned Volume ID can be indicated in the list (shown in the Disk Utility page). By determining the Volume ID, sound data can be easily found.
Set this to All in order to indicate all the sound data in the list.

* Pressing **LIST** calls up the Select Volume ID page, and the Volume ID can be selected.
(☐ P.Disk-42)

DISK + **F5** (Util)**CD****(current drive)**

The current drive is the drive which is selected at present for transferring of the data. Select the drive containing the sound data whose name or program number is to be changed, or the drive which will be formatted.

* Editing and executing of commands cannot be done for the CD-ROM drive or the streaming tape drive. A "Can't Execute" message is displayed when attempting to execute commands.

* Pressing **LIST** calls up the Select Drive page, and the current drive can be selected (☞ P.Disk-44).

* Make sure to execute the Scan Command (☞ P.1-8 and P.Disk-45) when replacing the disk or when the connected drive cannot be recognized.

* A "Can't Communicate" message is displayed when selecting "No Drive" (selecting a SCSI ID for a drive that has not been connected). And a "SCSI ID Error" message is displayed when selecting "SP-700 itself". Select only connected drives.

*** files****(Amount of Files)**

The amount of the files of the sound data (selected by the Target) in the current drive is displayed.

Number (no indication)**(List Number)**

Scroll through the list by moving the cursor to the number and pressing **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is not lit).

* When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.

Sound program (no indication)**(Sound Program in the current drive)**

The names of the various sound data in the current drive are listed.

This function can be used to change the name of the sound data.

Move the cursor to the sound data whose name to be changed, then call up the ASCII keyboard page by pressing **NAME**. The name can then be changed.

This can also be used to change the order of the sound data in the current drive.

To do this, move the cursor to the sound data whose order is to be changed, and press **S1/DEC**.

Scroll through the List using the Cursor buttons (**▲**/**▼**) and move the cursor to the destination for the sound data (the sound data will be inserted at the position just before the sound data that is highlighted with the cursor).

The order of the sound data is changed by pressing **S1/DEC**.

It is also possible to find the destination sound data by scrolling through the list using **S1/DEC** or **S2/INC** or **VALUE/CURSOR** (when the **SHIFT** indicator is not lit), after moving the cursor to the list number. Once you find the sound data, move the cursor to it and press **S1/DEC** to change the order.

* There is no need to save here, since the data in the current drive is rewritten directly.

Time	<p>(Capacity of the Sound Data)</p> <p>The capacity of the sound data is indicated in seconds (at a standard of 44.1kHz).</p> <p>* This displayed capacity of the sound data could be less than or greater than the actual capacity. Refer to the section "Correction for Time Indication" on P.Disk-31 for details.</p>
PG#	<p>(Program Number) DISK [--- (off)], [65]—[128]</p> <p>When the Volume is set with the Target, the program number of the Volume can be determined. When the Target is a Performance or Patch, the program number of the Performance or Patch cannot be displayed.</p> <p>* There is no need to save here, since the data in the current drive is rewritten directly.</p> <p>This program number of the Volume is used to determine the Volume to be changed (loaded) by program change messages over the control channel when the Control Mode (☞ P.Sys-11) of the MIDI parameters is set to [Perf/Volume] or [Perf/Volume2].</p> <p>The program number of the Volume is also used when determining the Volume to be read in at the powering on the SP-700 (Initial Volume). (☞ P.Sys-4)</p> <p>* Up to 128 Volumes can be saved to a hard disk, and the program numbers can be determined for up to 64 Volumes out of 128 volumes. Set the program numbers of Volumes that are not to be changed (loaded) to " --- " (off).</p> <p>See "Changing the Sound Program by MIDI" on P.4-12 for details.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p>Caution!</p> <p>Do not assign the same program number to several different Volumes; when the same program number is set, the Volume that the SP-700 retrieves first has priority. All Volumes in the current drive can be indicated in the list by setting the Volume ID to "All." This lets you easily check whether or not the same program number is set to several Volumes, when setting the program number. It is recommended that you don't set the program number for each Volume ID, since it takes time to check these.</p> </div>
Int.	<p>(Remaining Capacity of each Volume memory)</p> <p>The remaining capacity of each Volume memory is indicated in seconds (at a standard of 44.1kHz).</p>
Disk	<p>(Remaining Capacity of the Current Drive)</p> <p>The remaining capacity of the current drive is indicated in seconds (at a standard of 44.1kHz).</p>

DISK + **F5** (Util)

F1 Format

(Format)

This formats the hard disk and optical disk in the current drive.

* There is no need to format a hard disk/optical disk which is used by an S-770/750 or the hard disk which is used by an S-550/W-30.

Caution!

Be careful when initializing or formatting, since all data will be lost. Lost sound data cannot be recovered.

* Commands cannot be executed for the CD-ROM drive and the streaming tape drive.

* The maximum memory capacity of a drive which can be used with the SP-700 is 600 megabytes. This means for example, that even if you format an 800-megabyte hard disk, it functions only as a 600-megabyte hard disk; the remaining 200 megabytes cannot be used at all.

To format a disk:

1. Call up the Disk Mode page by pressing **DISK**.
An "Unformatted" message is displayed for hard disks and optical disks which have not been formatted. The "●" indicates to the current drive (the drive which is presently selected for transferring data with the SP-700).
2. Call up the Disk Utility page by pressing **F5** (Util).
3. Move the cursor to "CD" (current drive) using the cursor buttons.
4. Select the hard disk or optical disk to be formatted by pressing **S1/DEC** or **S2/INC**.

* The disk can be selected by **VALUE/CURSOR** when the **SHIFT** indicator is not lit. Or, since the cursor is at "CD" (current drive), and the **LIST** indicator is lit (green), you can call up the Select Drive page by pressing **LIST**.
Move the cursor to "Unformatted" using the cursor buttons and press **S1/DEC**. Operation returns automatically to the Disk Utility page, and the hard disk or optical disk to be formatted can be selected.
5. Execute the format operation by pressing **F1** (Format).
The message "!! CAUTION!! (Current Drive is formatted.)" appears when the current drive has already been formatted.
Press **F4** (No) to abort the format operation.
Press **F2** (Yes) to call up another message display.
 Press **F2** (Yes) to call up the display for selecting initialize or format operations.
 Press **F4** (No) to abort the format operation.
Press **F2** (Yes) to call up the Select display ("Only Initialize Function?").
 Press **F1** (Yes) to initialize (erasing all the sound data in the drive) without formatting, and the condition becomes the same as if it were formatted.
 * It takes less time to initialize than format.
Press **F3** (No) to re-format.
Press **F5** (Cancel) to abort the initialize/format operation.
6. Re-set the CD (current drive) as needed.
The operation is the same as steps #3 and #4.

[F2] ParkHds**(Park Heads)**

This function safely parks the heads of all connected SCSI hard disks and optical disks.

Hard disk drives have heads which track along the surface of the disks, which constantly rotate at an extremely high speed allowing the heads to read data from, and write data to, the hard disk at any time.

However, since the heads are continually touching the surface of the disks, the disks could be damaged if the drive is jarred or moved suddenly.

This is why it is necessary to move the heads to a safe position, off the disk surface, in order to protect the disks when moving the disk drive. This is called "parking the heads."

All the heads of the hard disk and the optical disk drive on a SCSI chain can be parked simultaneously from the SP-700 when executing the Park Heads command (⇐ P.1-10).

Execute the [F3] Restart command, when accessing the hard disk or optical disk after executing the Park Heads operation.

* The message "Heads Park." is indicated at the current drive (CD) in the park heads condition, and loading or saving of the sound data cannot be executed.

The parked heads can be released when executing the [F3] Restart command.

[F3] Restart**(Restart)**

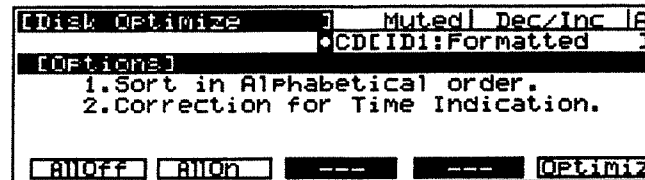
This starts up (or re-engages) the hard disk or optical disk whose heads were parked.

* Be sure to execute the Scan Command (⇐ P.1-8 and P.Disk-45) after executing the Restart Command.

DISK + **F5** (Util) + **F4** (Optimiz)

F4 Optimiz (Optimize)

This function is used to optimize the sound data in the current drive, or re-sort the sound data into alphabetical order, or re-calculate the capacity (time) of the sound data.



*When the Load-while-playing function of the System parameters (☐ P.Sys-4) is set to on, the Quick Load function or the commands of each page in the Disk Mode (Load, Save, Copy, Delete, Format, and Convert Load) take about eight times as long to execute than when the Load-while-playing function is set to off. You should set this to off unless it is necessary to output the sound while executing one of the above commands.

The sound data in the drive are sorted by the optimize function according to the best order for retrieval. When this is done, the time it takes to execute each command (Load, Save, Copy, Delete, etc.) in the Disk Mode becomes slightly shorter.

Indications

CD

(Current Drive)

The current drive is the drive which is selected at present for transferring the data. Select the drive which has the sound data to be optimized.

- *The sound data in the CD-ROM drive or the streaming tape drive cannot be optimized. A "Can't Execute" message is displayed when attempting to optimize.
- *A "Can't Communicate" message is displayed when selecting "No Drive" (selecting a SCSI ID for a drive that has not been connected). And a "SCSI ID Error" message is displayed when selecting "SP-700 itself". Select only connected drives.
- *Pressing **LIST** calls up the Select Drive page, and the current drive can be selected (☐ P.Disk-44).
- *Make sure to execute the Scan Command (☐ P.1-8 and P.Disk-45) when replacing the disk or when the connected drive cannot be recognized.

[Options]**(Options)**

The function of the marked option is also executed together when executing Optimize.

The mark alternately appears and disappears each time **S1/DEC** is pressed after moving the cursor.

Press **F2** (All On) in order to mark all the options. Press **F1** (All Off) in order to release all marks on the options.

* When no option is marked, the option which is selected by the cursor is executed together.

1. Sort in Alphabetical Order (Alphabetical Sort)

All the sound data (from Volume to sample) in the current drive are rearranged into alphabetical order.

2. Correction for Time Indication

The capacity of the sound data in the current drive is indicated by the time indication (second) in each display (Load, Copy, Delete, Utility) of the Disk Mode. This is due to the fact that this time value is also saved for reference purposes when saving sound data (from Volumes to samples) to the drive.

However, if you save the sound data of the same name after having saved sound data into a drive (overwrite), or copy a part of the sound data with the Disk Copy function, or delete a part of the sound data with Disk Delete, or save sound data after Listen Delete. The actual time will differ from the time written on the drive (time written when the sound data has been saved for the first time).

You can re-calculate this time for the current drive and have the corrected time properly indicated by executing this option.

Caution!

The time (in seconds) of the sound data is also indicated in the Quick Load page. However, the correct time is not indicated even when executing this option, since the Sound program list in this page is of the System parameters. For example, when registering the Sound program name to the Sound program list of the Quick Load function from a drive whose time is not accurate, the indicated time remains inaccurate. In this case, execute the option to correct the time, and register the Sound program again. In order to prevent this from happening, execute this option to correct the time, then register the Sound program name to the Sound program list of the Quick Load function.

DISK + **F5** (Util) + **F4** (Optimiz)

F1 All Off

(Mark All Off)

This deletes all marks.

F2 All On

(Mark All On)

This marks all the options.

F5 Optimiz

(Optimize)

This executes the Optimize function.

When the option is marked, its function is also executed together.

This will erase all the sound data in the Volume Memories (A and B) and therefore opens the confirmation message screen.

Pressing **F2** (Yes) will erase Sound Data and execute the Optimize function.

Pressing **F4** (No) will cancel the Optimize function.

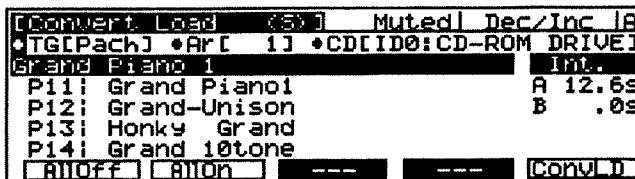
* Before executing the Optimize function, be sure to save necessary sound data.
(⇐ P.Disk-7)

* For large amounts of data as commonly contained on an optical disk, it takes quite a long time to optimize (especially when executing the options as well).

DISK + F5 (Util) + F5 (ConvLD)

F5 ConvLD (Convert Load)

In this page, a CD-ROM disk for the S-550/W-30 can be read into (convert loaded) the SP-700 and then used.



Since the sound data of the S-550/W-30 is structured differently and has different parameters, it cannot be loaded to the SP-700 as it is. However, by executing the Convert Load operation, a portion of the parameters can be automatically converted by the SP-700 and used, leaving the wave data unchanged. Convert Load can be used on the sound units of Patch and Tone.

- * The Sound program might be changed slightly by executing Convert Load since the parameter structure, the playback frequency and the analog circuits are different.
- * When the Load-while-playing function of the System parameters (P.Sys-4) is set to on, the Quick Load function or the commands of each page in the Disk Mode (Load, Save, Copy, Delete, Format, and Convert Load) take about eight times as long to execute than when the Load-while-playing function is set to off. You should set this to off unless it is necessary to output the sound while executing one of the above commands.

Compatible disks for the Convert Load operation are as follows:

- CD-ROM disk for the S-550, W-30 (option: USV-1 (discontinued), USV-2, CD50CD01)
- CD ROM disk (L-CD1) supplied with the Roland CD-5.
- Hard disk which contains sound data used for the S-550 or W-30.

- * The sound data created by the SP-700 cannot be used for these Roland Samplers: S-50/330/550, W-30.

DISK + **F5** (Util) + **F5** (ConvLD)

Indications

TG

(Target)

[Pach (Patch to Patch)],
[Tone (Tone to Partial)]

This selects the type of the sound data to be convert loaded.

Patch : The Patch of the S-550/W30 is convert loaded to the current Volume memory as a Patch for the SP-700. The lower level sound data are also convert loaded at the same time.

Tone to Partial: The Tone of the S-550/W30 is convert loaded to the current Volume memory as the Partial for SP-700. The lower level sound data are also convert loaded at the same time.

* When convert loading from the CD-ROM drive, it takes a little time to make each setting.

Ar

(Area Number)

This selects the area number when convert loading from a CD-ROM drive or hard disk.

* Pressing **LIST** calls up the Select Area page, and the area can be changed. (⇨ P.Disk-45)

CD

(Current Drive)

The current drive is the drive which is selected at present for transferring the data. Select the SCSI device which contains the sound data to be convert loaded.

* Sound data cannot be loaded from the streaming tape drive. A "Can't Execute" message appears when attempting to load.

* A "Can't Communicate" message is displayed when selecting "No Drive" (selecting a SCSI ID for a drive that has not been connected). And a "SCSI ID Error" message is displayed when selecting "SP-700 itself". Select only connected drives.

* Pressing **LIST** calls up the Select Drive page, and the current drive can be selected (⇨ P.Disk-44).

* Make sure to execute the Scan Command (⇨ P.1-8 and P.Disk-45) when inserting/replacing the CD-ROM disk or when the connected drive cannot be recognized in the Convert Load page.

* Area Name (no indication)

(Area Name)

The area name which is selected by the area number is indicated.

DISK + **F5** (Util) + **F5** (ConvLD)

Number (no indication)

(List Number)

Scroll through the list by moving the cursor to the number and press **S1/DEC** or **S2/INC**, or **VALUE/CURSOR** (when the **SHIFT** indicator is not lit).

Sound program (no indication)

(Sound Program to be Convert Loaded)

The names of the various sound data in the current drive are listed.

Mark the sound data to be convert loaded and execute the convert load operation. The mark alternately appears and disappears each time **S1/DEC** is pressed after moving the cursor to the name. Press **F2** (All On) in order to mark all the sound data. Press **F1** (All Off) in order to release all marks.

* Marks are all cancelled when changing the Target.

* The sound data at the cursor position is convert loaded when no other data is marked.

Execute the convert load operation after marking the sound data to be convert loaded.

The sound data is convert loaded to the current Volume memory by pressing **F5** (ConvLD).

Capacity of Tone (no indication)

(Capacity of Tone)

The capacity of the Tone is indicated in seconds (at a standard of 44.1kHz), when the Tone is selected with the Target.

This is not indicated when the Patch is selected with the Target.

Int.

(Remaining Capacity of each Volume Memory)

The remaining capacity of each Volume memory is indicated in seconds (at a standard of 44.1kHz).

When sound units from Tone to Partial are set with the Target, the Tone capacity to be convert loaded is also indicated in seconds. Check whether convert load can be executed or not. The wave data can only be partially loaded when there is not enough memory left in the Volume memory.

F1 All Off

(Mark All Off)

This deletes all marks.

F2 All On

(Mark All On)

This marks all sound data.

DISK + **F5** (Util) + **F5** (ConvLD)

F5 ConvLD

(Convert Load)

This convert loads the marked sound data to the current Volume memory.

* The volume recover/backup function or Volume Dump function (⇐ P.Sys-36 and P.Sys-16) cannot be used correctly for the Sound program loaded by the convert load function.

The name of the convert-loaded sound data becomes as shown below:

Patch → P11: name /

P12: name \

Partial → T11: name

Sample → T11: name

* The "/" at the end of the Patch name indicates the 1st Tone and "\" indicates the 2nd Tone.

The characters "P11" or "T11" are added automatically to the Volume ID, or "/" or "\" are added automatically to the end of the name. Change the name in the ASCII keyboard page (⇐ P.3-13) as needed. When entering the Volume IDs continuously, you can enter them individually from the ASCII keyboard page, or enter them all together in the System Volume ID page (⇐ P.Sys-29).

Caution!

When the hard disk contains sound data which has the same name as the sound data that has been convert loaded to the internal memory, it cannot be saved unless the name is changed. However, it can be saved without changing the name (the name after the ID area) by changing the Volume ID in the System Volume ID page (⇐ P.Sys-29). The sound data saved to the disk can be controlled in Volume units.

[DISK] + [F5] (Util) + [F5] (ConvLD)

Convert Loading Sound Data from the Current Drive

1. Call up the System Mode page.
Press [SYSTEM].
2. Select the destination Volume memory to which the sound data is convert loaded by the Current Vol Memory.
3. Insert the CD-ROM disk (which contains the sound data to be convert loaded) into the CD-ROM drive.

* In this situation only, there is no need to execute the Scan Command.
4. Call up the Convert Load (S) page.
Press [DISK], [F5] (Util), then [F5] (CnvLD).
5. Select the type of the sound data to be convert loaded with "TG."

* The list indication changes depending on the type of sound data.
6. Select the area of the sound data to be convert loaded with "Ar."

* The list indication changes depending on the area.
7. Select the drive which contains the sound data to be convert loaded with "CD."

* Sound data cannot be loaded from the streaming tape drive.
* A "Can't Communicate" message is indicated at the top right of the display when selecting a SCSI ID for a drive that has not been connected. Make sure to select a SCSI ID corresponding to a properly connected drive.
8. Select the sound data to be convert loaded from the list, and mark it by pressing [S1/DEC]. Several sets of sound data can be marked.
Load the sound data to the current Volume memory by pressing [F5] (ConvLD).
The type of the sound data (Patch File, if it is a Patch) and the sound data name being convert loaded following # File Scanning are indicated.
When the destination Volume memory to which the sound data will be convert loaded contains sound data, the message "Clear Internal Memory Before Loading?" appears, prompting you to confirm whether you wish to delete the old sound data or not.

Press [F1] (Yes) to clear (delete) all the old sound data, and execute convert loading.
Press [F3] (No) to convert load the sound data to the remaining memory without clearing (deleting) all the old sound data.
Press [F5] (Cancel) to abort the convert load operation.

(continued on next page)

DISK + **F5** (Util) + **F5** (ConvLD)

If you try to convert load by pressing **F3** (No), the message "Same Name Found! Overwrite?" prompts you to confirm whether you wish to overwrite the sound data of the same name or not (when the destination Volume memory contains sound data that has the same name as the sound data to be convert loaded, and the SCSI Overwrite Switch (\square P.Sys-10) has been set to off).

If **F1** (Yes) is pressed, the sound data of the same name in the Volume memory is overwritten and the new data is convert loaded. If **F3** (No) is pressed, the sound data of the same name cannot be convert loaded, and only sound data with different names can be convert loaded. The convert load operation can be aborted by pressing **F5** (Cancel).

9. A "Complete" message is indicated at the top right of the display when the Convert Load operation is completed.

Caution!

The error message, "Error Wave Memory Full," is indicated when trying to convert load sound data which has a greater amount of memory than the memory capacity of the Volume memory, or when trying to convert load the sound data to the remaining memory and it exceeds the capacity. In such a case, the sound data can only be partially convert loaded. A "Directory Full" message appears when trying to convert load beyond the maximum permissible number of sound data items of the Volume memory. (The sound data cannot be convert loaded.)

DISK + F5 (Util) + F5 (ConvLD)



From this page, the sound data (CD-ROM disk) of other manufacturers can be convert loaded.

- * Since the SP-700 automatically scans CD-ROM disks, the Convert Load (A) page is called up when a CD-ROM disk of another manufacturer is inserted into the CD-ROM drive.
- * Make sure to execute the Scan Command (⇐ P.1-8 and P.Disk-45) when inserting or replacing the CD-ROM disk in the convert load page or when the connected drive cannot be recognized.

Since the structure of the sound data and the parameter structure are different, a portion of the parameters is automatically converted by the SP-700 and convert loaded as Patches. Therefore, some Sound programs may differ from the original one depending on the programs. In such case, edit the parameters after convert loading.

The sound may also be slightly different because of differences in the playback frequency or the analog circuits.

See P.Disk-33, since all operations (excepting the ones shown below) are the same as those in the Convert Load (S) pages.

Indications

- Part (Partition)
This selects the partition in the CD-ROM disk.
- Vol (Volume)
This selects the Volume in the CD-ROM disk.

NAME

Name of Disk Mode

When the

NAME

 indicator is lit (green), press

NAME

 to call up the ASCII keyboard page and enable naming of the Sound program and the drive.

The

NAME

 indicator lights (green) depending on the selected page or cursor position.

The indicators light as explained below.

→

LIST

 lights (green) when the cursor is at the current drive (CD), the source drive (Source), or the destination drive (Destin) in each display page of the Disk Mode (except the Disk Mode page). The

NAME

 indicator lights (green) when the Select Drive page is called up by pressing

LIST

.

→ The

NAME

 indicator lights (green), when the cursor is at the file name in the Disk Utility page.

See P.3-13 for instructions on naming.

LIST in the Disk Mode

When the **LIST** indicator is lit (green), pressing **LIST** calls up the Select page, and the Target, Volume ID or current drive can be selected.

The **LIST** indicator lights (green) depending on the selected page or cursor position.

Select Target

[Select Target] Muted>Select/-- A	
•Volume [UoIM]	
Performance[Pfom]	Perform PRM[PfPM]
Patch [Pach]	Patch PRM [PaPM]
Partial [Prt1]	Partial PRM[PrPM]
Sample [Samp]	

The **LIST** indicator lights (green) when the cursor is at the Target (TG) in the Disk Load page, Disk Save page, Disk Copy page, Disk Delete page, and the Disk Utility page. Call up the Select Target page by pressing **LIST**.

Select the type of sound data that is to be loaded or saved.

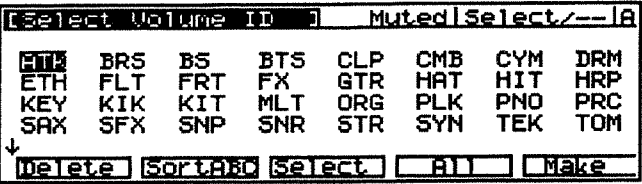
Move the cursor and press **S1/DEC**

The Performance parameter, Patch parameter and the Partial parameter are indicated at the right side of the Select Target page, but these can be displayed only in the Disk Load page.

LIST

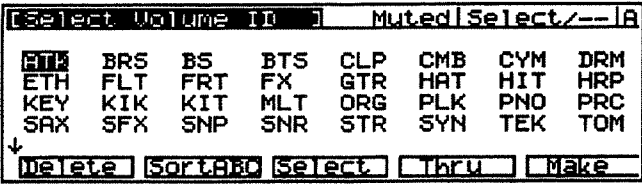
Select Volume ID

There are two types of Select Volume ID pages depending on the display page in which the LIST indicator lights (green). The functions of F4 are different.



The LIST indicator lights (green) when the cursor is at the Volume ID (ID) in the Disk Load page, Disk Copy page, Disk Delete page, and the Disk Utility page. Call up the Select Volume ID page by pressing LIST.

The Volume ID can be determined, registered to the list or deleted.



The LIST indicator lights (green) when the cursor is at the Volume ID (ID) in the Disk Save page. Call up the Select Volume ID page by pressing LIST.

The Volume ID can be determined, registered to the list or deleted.

Indications

Volume ID (no indication) (List of Volume ID) System

This indicates the Volume ID list. Up to 200 Volume IDs can be registered. This list is referred to when determining the Volume ID in the Select File page, Disk Load page, Disk Save page, Disk Copy page, and the Disk Delete page.

- *The Volume ID of the loaded Sound program is automatically registered to this list when loading in the Quick Load page or in the Disk Load page.
- *Since the list is one of the System parameters, it doesn't retrieve the data in the drive directly when indicating the list. Therefore, the data of the list is lost if the power is turned off without saving (P.Sys-32).

Use the cursor buttons (▲/▼) to scroll through the list.

F1 Delete

(Delete)

This deletes the Volume ID (selected by the cursor) from the list.

F2 SortABC

(Alphabetical Sort)

This sorts the Volume IDs (in the Select Volume ID page) into alphabetical order.

F3 Select

(Select)

This selects the Volume ID at the cursor position. The selected Volume ID is indicated in the Volume ID (ID).

F4 All

(All)

F4 is used to select "All" when calling up the Select Volume ID page from the Disk Load page, Disk Copy page, Disk Delete page, and the Disk Utility page.

In this case, the function of the Volume ID is to limit the sound data indicated in the list of the display page and to make it easy to find sound data by determining the Volume ID.

Pressing **F4** (All) determines all Volume IDs and indicates all sound data.

F4 Thr

(Through)

F4 is used to select "Thr" when calling up the Select Volume ID page from the Disk Save page.

In this case the function of the Volume ID is to change the Volume ID of the sound data to be saved into an assigned Volume ID while saving it.

Therefore, the Volume ID is saved as a Volume ID of the Volume memory without being changed when pressing **F4** (Thr).

F5 Make

(Make)

This calls up the ASCII keyboard page, and the new Volume ID can be registered (☞ P.3-13).

LIST**Select Drive**

```

[Select Drive] Muted>Select/--|A
•[0]ID0:CD-ROM DRIVE [4]ID4: - No Drive
[1]ID1:Formatted      [5]ID5: - No Drive
[2]ID2: - No Drive    [6]ID6: - No Drive
[3]ID3: - No Drive    [7]ID7: SP-700 Self
[---] [---] [---] [---] [Scan]

```

The **LIST** indicator lights (green) when the cursor is at the current drive (CD), source drive (Source) or the destination drive (Destin) in the Disk Load page, Disk Save page, Disk Copy page, Disk Delete page, Disk Utility page, and the Convert Load page. Call up the Select Drive page by pressing **LIST**

This is used to change the current drive or the source/destination drive, or to name the drive.

Indications

Drive Name (no indication) (Drive Name) **Disk**

This indicates the list of the drives connected to the SP-700.

* The mark "●" appears at the left of the current drive.

The mark "●" appears at the left of the destination drive when changing the destination drive.

Move the cursor to the drive to be changed or to be named.

Press **S1/DEC** in order to change the drive.

Press **NAME** in order to name the drive.

* The CD-ROM drive and the streaming tape drive cannot be named.

* Press **NAME** to call up the ASCII keyboard page and name the drive (☞ P.3-13).

* Since this drive name rewrites the data in the drive directly, there is no need to save.

The drives are indicated by the names you enter. However, they are first indicated as shown below:

Unformatted : The connected hard disk or optical disk has not been formatted yet. Please format it (☞ P.Disk-28).

Formatted : The connected hard disk or optical disk has been formatted.

CD-ROM DRIVE : A CD-ROM drive has been connected.

TapeStreamer : A streaming tape drive has been connected.

SP-700 Self : The SP-700 itself.

No Drive : A drive has not been connected.

F5 Scan

(Scan)

This function is used to “re-recognize” the drive connected to the SP-700. You should use this when, for some reason, the SP-700 fails to recognize the drive. This usually happens when replacing disks or tapes, or when turning the drive on/off after the SP-700 has been turned on.

Select Area

[Select Area] Muted -10/+10 [A]	
1: Grand Piano 1	< 1>
2: Grand Piano 2	< 1>
3: Midi Grand Piano 1	< 1>
4: Midi Grand Piano 2	< 1>
5: Tack Piano	< 1>
6: Trumpets	< 2>
7: Mute Trumpets	< 2>

When the cursor is at the area number (Ar) in the Convert Load (S) page, the **LIST** indicator lights (green). Call up the Select Area page by pressing **LIST**. The area can be changed.

Indications

No (no indication)

(Area Number)

This scrolls through the area list by moving the cursor to the area number and using **S1/DEC** or **S2/INC** or **VALUE/CUROSr** (when the **LIST** indicator is not lit).

- * When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.
- * The area name which is selected at present is underlined.
- * The group number, which is classified according to the types of musical instruments, is indicated at the right of the display.

Move the cursor to the area name to be changed and press **S1/DEC** to change it.

MEMO

SYSTEM MODE

In this mode, the general or global operating settings of the SP-700 are made (such as for receiving and transmitting data with external devices), and the System parameters are loaded/saved.

Caution!

Be sure to save the System parameters since they are lost if you turn the power off without saving them. (☞ P.Sys-32)

System Mode

In this page the Volume memory can be changed, and information related to global operations are indicated.

System Mode		Perform		Dec/Inc		A
*Current Vol		Memory[A]		WND:Woodwinds		
Files	[A]	[B]	Master Tune	Self ID		
Perform	7	-	0cent	ID=7		
Patch	7	-	Load/Play	Wave Memory		
Partial	53	-	Off	8Mbyte		
Sample	53	-		A: 8M B: 0M		
PRM	SCSI	MIID	Vol ID	LID/SU		

Indications

Current Vol Memory

(Current Volume Memory) [System]

[A], [B]

This determines which Volume memory of the SP-700 is being used (for playing or editing).
The Volume memory which is determined here is selected automatically when the power is turned on.

*When the Volume B memory is set to "0 M" in the Volume A parameters, the Volume B memory cannot be selected. (☞ P.Sys-5)

Volume Name (no indication)

(Volume Name)

This indicates the Volume name of the current Volume memory.

Files [A], [B]

(Amount of Files in each Volume Memory)

This indicates the number of Performances, Patches, Partials and samples in each Volume memory.

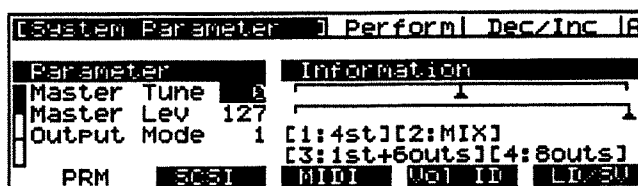
*"—" is indicated when the Volume B memory is set to 0 megabytes.

SYSTEM

Master Tune	<p>(Master Tune)</p> <p>You can check the setting of the master (overall) tuning. The setting can be changed in the System Parameter page (⇐ P.Sys-3).</p>
Load/Play	<p>(Load-while-playing)</p> <p>You can check the setting of the Load-while-playing function. The setting can be changed from the System Parameter page (⇐ P.Sys-4).</p>
Self ID	<p>(SCSI ID of the SP-700)</p> <p>You can check the setting of the SCSI ID of the SP-700. The setting can be changed in the System SCSI page (⇐ P.Sys-8).</p>
Wave Memory	<p>(Wave Memory)</p> <p>You can check the entire capacity of the wave memory and the capacity of each Volume memory. The setting of the capacity of each Volume memory can be changed from the System Parameter page (⇐ P.Sys-5).</p>

System Parameter

The global settings of the SP-700 are made from this page.



Indications

Master Tune

(Master Tune) **System** [- 50]—[50] (cent)

This adjusts the overall pitch of the SP-700.

A change in pitch of 50 cents equals 1/2 of a semi - tone.

The included CD-ROM disk was designed to be played at a tuning of A4=440 Hz.

*This can be controlled by the RPN of the Control Change which is received over the control channel. See the MIDI implementation (⇐ P.App.-39) for details.

Master Lev

(Master Level) **System** [0]—[127]

This adjusts the overall sound level of the SP-700. This adjusts the sound level of all stereo output jacks A—D (individual output jacks 1—8).

* See P.2-33 for more information on the sound level.

* This can be controlled by MIDI volume data of Control Change messages, received over the control channel (⇐ P.Sys-11).

Output Mode

(Output Mode) **System** [4st], [Mix],
[1st+6 outs], [8 outs]

This determines how the stereo output jacks A—D (individual output jacks 1—8) should be used.

* When you wish to use sound data of the S-770/750 as they are, you should set this to "1st + 6 outs" or "8 outs."

* See P.2-24 for more information on how to output the sounds.

SYSTEM + **F1** (PRM)**Init Vol**(Initial Volume) **System** [Off], [65]—[128]

This determines which Volume should be loaded when turning on the SP-700.

No Volume is loaded when turning on the power if this is set to off.

Program numbers 65—128 are the program numbers of the Volume, and the Volume whose program number is specified here will be loaded automatically when you turn on the power.

The correspondence between the Volume and the program number is determined by PG# in the Disk Utility page (⇐ P.Disk-27).

The destination Volume memory (to which the Volume is loaded) is determined by the Current Volume Memory parameter in the System Mode page (⇐ P.Sys-1).

From which drive the Volume is to be loaded is determined by the Initial Drive parameter in the System SCSI page (⇐ P.Sys-8).

* Do not set the Initial Drive to the streaming tape drive or "SP-700 Self." Data cannot be loaded with these settings.

Be sure to insert the CD-ROM disk before turning on the SP-700 when setting this to the CD-ROM drive. Data cannot be loaded if the disk is not inserted. Use the included CD-ROM disk or a disk which is specially designed for the S-770/750. (Data cannot be loaded from CD-ROM disks for the S-550/W-30.)

Also, data cannot be loaded from a hard disk used for the S-550/W-30.

Load/Play(Load while playing) **System** [Off], [On]

This sets whether commands related to the Disk Mode, such as loading sound data while you perform, are executed or not.

When this is set to Off, no sound is output at all when you call up the Quick Load page or each of the display pages of the Disk Mode.

When this is set to On, sound will be produced even when the Quick Load or Disk Mode page is opened. Moreover, sound is produced even while sound data is being loaded. (However, no sound is played during optimization.)

When you clear (erase) the sound data in the Current Volume Memory and load to the Current Volume Memory (⇐ P.2-15), or when you overwrite sound data (rewrite the sound data of the same name. ⇐ P.2-15.) when loading into an empty space in the Volume Memory (Current Volume Memory or another Volume Memory), or when you load a Volume into the Current Volume Memory with MIDI (clears all sound data in the Current Volume Memory. ⇐ P.4-12.), no sound will be heard.

* When the Load-while-playing function of the System parameters is set to on, the Quick Load function or the commands of each display page in the Disk Mode (Load, Save, Copy, Delete, Format, and Convert Load) take about eight times as long to execute than when the Load-while-playing function is set to off. You should set this to off unless it is necessary to output the sound while executing one of the above commands.

* When you load sound data with 'Load While Playing' set to ON, loading a Volume will take a long time. To solve this problem, you may wish to load Patches or Performances individually.

SYSTEM + **F1** (PRM)

SHIFT Lock(Shift Lock) **System** [Off], [On]

This determines the function of the **SHIFT** button (⇐ P.3-12).

When this is set to Off, the functions of **HOME** and **VALUE/CURSOR** change only when **SHIFT** is held down. The indicator also lights (red) only while the button is held down.

When this is set to On, the function of **HOME** and the function of **VALUE/CURSOR** change each time **SHIFT** is pressed.

The indicator alternately lights (red) and turns off each time **SHIFT** is pressed.

Time Disp(Time Display) **System** [Off],[On]

The capacity (in seconds) of the Performance, Patch, and Partial are indicated in the Select Performance page, Select Patch page, Select Partial page or each command page (for the Performance, Patch, or Partial). Set it to Off if you wish to shorten the waiting time for these pages to be opened. Normally, though, set this to On.

Volume A(Capacity of Volume A Memory) **System** [1M]—[**M]

The “**M” mark indicates the capacity when the wave memory of the SP-700 is expanded (up to a maximum of 32 megabytes).

This determines the capacity ratio of the Volume A memory and the Volume B memory.

The message display is called up when pressing **F5** (Exec).

*All sound data in the Volume memory is lost when changing the capacity ratio of the Volume A memory and the Volume B memory. Use this function only after making sure that important sound data has been saved.

Press **F2** (Yes) to change the capacity ratio of the Volume A memory and the Volume B memory.

Press **F4** (No) to abort the operation.

*When making changes in the memory expansion, such as increasing or taking out the wave memory, the capacity ratio of the Volume A memory and the Volume B memory is automatically changed so that all wave memory belongs to the Volume A memory. After you add or take out any wave memory expansion boards, be sure to reset the capacity ratio of the Volume memory.

F5 Exec

(Execute)

This calls up the message display and executes the changing of the capacity ratio of the Volume A memory and the Volume B memory.

SYSTEM + **F1** (PRM)

To select the Volume automatically loaded when the unit is switched on, follow this procedure:

1. Open the System SCSI page.
Press **SYSTEM** → **F2** (SCSI).
2. Set the unit so that the drive that contains the Volume you wish to load will be set to the Current Drive when switched on.
Parameter : Initial Drive SCSI ID
Valid Values : 0—7

* Do not set to the SCSI ID of the SP-700 or the streaming tape drive.
3. Open the Disk Utility page.
Press **DISK** → **F5** (Util).
4. Set the TG to Volm (Volume) and the ID to All.
5. Select the drive for the Current Drive with CD.
The Volume List contained on that drive will be displayed.
6. The program number of the Volume is shown at PG# so that you can check the program number of the Volume you wish to load.

* You can edit program numbers in this page. Do not assign the same program number to more than one Volume. If the same program number is assigned to more than one Volume, the Volume that the SP-700 first detects will be loaded. Also, be sure to set Volumes that do not have any program number to OFF (— — —).
* You cannot edit the program numbers when using a CD-ROM drive.
7. Open the second page of the System Parameter page.
Press **SYSTEM** → **F1** (PRM) → **PREVIOUS** or **NEXT**.
8. Set the program number of the Volume to be loaded from the Current Drive at power-up.
Parameter : Init Vol
Valid Values : 65—128
9. Open the System Load/Save page(the first page).
Press **F5** (LD/SV) → **PREVIOUS**.
If you edit the Initial Drive SCSI ID parameter or Init Vol parameter, you must save the system data (in the System parameter group).
10. Move the cursor to SYSTEM PRM, then press **S1/DEC** to assign a mark.
11. Press **F5** (Save) and the Message page will appear. Press **F2** (Yes) to execute saving.
The message "Now Working" is shown in the upper right of the page. "Completed" appears when the saving is finished.

(continued on next page)

12. Open the Disk Utility page.
Press **DISK** → **F5** (Util).
13. Press **F2** (ParkHds) to 'park' the heads of the drive.
The message "Now Working" is shown in the upper right of the page. "Heads Park" appears at the CD position when the operation is complete.
14. Switch off the drive.
15. Switch off the SP-700.
16. The next time the SP-700 is switched on, the Volume will be loaded.
 - * Refer to P.1-7 for the proper procedure for switching on the units.
 - * When you use a removable disk type drive, such as a CD-ROM drive, be sure to insert a disk before switching the SP-700 on. You can use only the supplied CD-ROM disk or one for the S-770/750.

System SCSI

The SP-700 features built-in SCSI ports, and they are used to transfer the sound data between the SP-700 and the drive (such as a CD-ROM and a hard disk). The SCSI relationships are determined in this page.

System SCSI		Perform	Dec/Inc	18
Parameter	Information			
SP-700 Self SCSI ID	7	[0~7]		
Initial Drv SCSI ID	0	[0~7]		
Fast Delete Mode	Off	[Off][On]		
Overwrite Sw	Off	[Off][On]		
PRM	SCSI	MIDI	Wsl ID	LD/30

Indications

SP-700 Self SCSI ID

(SP-700 Self SCSI ID Number) **System** [0]—[7]

This determines the SCSI ID number of the SP-700.

* Normally, this should be set to 7.

* This parameter only becomes active when the power is turned off and then on again.

Initial Drv SCSI ID

(Initial Drive SCSI ID Number) **System** [0]—[7]

This sets the drive which becomes the current drive when turning on the SP-700.

* Do not set this to the streaming tape drive or the SP-700 itself.

* This parameter only becomes active when the power is turned off and then on again.

* Be sure to insert the CD-ROM disk before turning on the SP-700. Use the included CD-ROM disk or a disk which is designed specifically for the S-770/750. (Insert the CD-ROM disk for the S-550/W-30 from the Convert Load page). Do not set it to the hard disk which is used for the S-550/W-30.

* A maximum of 7 drives can be connected. Set the SCSI ID numbers for each drive and the SP-700 (0—7). Be sure not to assign the same SCSI ID number to different devices when connecting the devices. This could result in some problems (☞ P.App.-6).

* Refer to the owner's manual of each connected device for information on setting the SCSI ID number of the drive.

Fast Delete Mode

(Fast Delete Mode) **System** [Off], [On]

This sets the Fast Delete Mode when executing the Disk Delete function (☞ P.Disk-21).

Off : This sets the Fast Delete Mode to Off. It deletes after checking the dependent relationships of the sound data. This setting makes the delete operation extremely time consuming; it could take up to an entire day to delete the data.

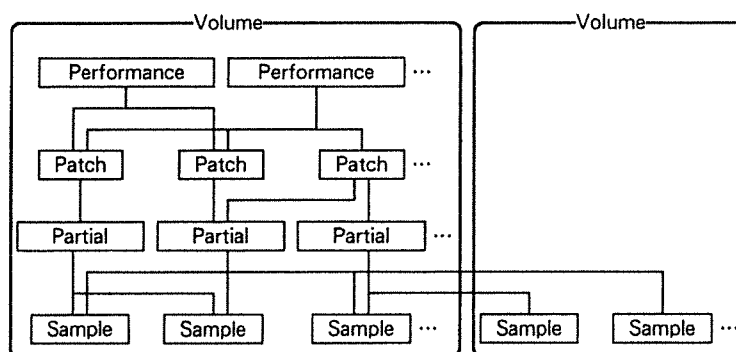
On : This sets the Fast Delete Mode to On. This setting allows the data to be deleted at high speed, ignoring the relationships of the sound data.

* The delete function of the Volume memory (☞ P.Pfom-37) always checks the data relationships, regardless of this setting.

The Relationships of the Sound Data

When executing the Disk Delete function, not only the selected sound data, but also the lower level sound data are deleted at the same time. For example, when deleting a Performance, the Patches, Partials and Samples being used by the Performance are all deleted.

The way that the SP-700 handles sound data, several higher level sound data programs or categories can share the same lower level sound data. For example, two Performances can use the same Patch.



When deleting the sound data in such a condition, the Sound programs of other sound data might be destroyed, since other sound data might be using its lower level sound data. In order to prevent such problems from occurring, the SP-700 can automatically check through all the level relationships of the data before deleting the sound data with the Fast Delete Mode parameter.

When the Fast Delete Mode is set to ON, all applicable sound data (including the lower level sound data) are deleted without checking the relationships of the sound data. In this case, the sound data can be deleted quickly; however, if you delete sound data that is shared by several different higher level categories, the higher level categories will be destroyed.

When the Fast Delete Mode is set to Off, the lower level sound data is not deleted and the Sound program of other sound data is not destroyed, even when other sound data is using the same lower level sound data, since relationships of the sound data is checked.

* When the sound data is controlled in Volume units (except when several high level sound data are using the same lower sound data), depending on the Volume ID, the operation can be performed efficiently by setting the Fast Delete Mode to on.

On the other hand, make sure to check the relationships of the sound data before deleting by setting the Fast Delete Mode to Off, when one sound data is used by several Volumes (⇨ P.2-12).

SYSTEM + **F2** (SCSI)

Overwrite Sw

(Overwrite Switch) **System** [On], [Off]

This determines whether or not the System will prompt you before performing the overwrite operation.

When the Overwrite Switch is set to Off, a message appears prompting you to confirm whether you wish to overwrite (delete the old data and replace it) or not. This message appears if, while loading or saving sound data or while copying data to disk (except with streaming tape drive), sound data of the same name already exists in the destination (Volume memory when loading, current drive when saving, or destination drive when copying to disk).

F1 (Yes) : All data is overwritten.

F3 (No) : Sound data of the same name is not transferred. (Only sound data with different names are transferred).

F5 (Cancel) : The Load, Save and Disk Copy operations are aborted.

* The Copy A → B/B → A function for sound data of the Volume memory (⇐ P.Pfom-46) always checks whether same named data exists or not, regardless of this setting. When data of the same name exists, a message appears in the page, prompting you to confirm the operation.

When the Overwrite Switch is set to On, the overwrite operation is performed even when data of the same name exists. (No message prompting you for confirmation appears.)

MIDI Control

The MIDI controls can be set in this page.

[MIDI Control] Perform Dec/Inc LA	
Parameter	Information
Control Channel	[Off], [1~16]
Control Mode	[1:Perf] [2:Perf/Volum] [3:Perf/Volum2]
PRM	SCSI MIDI Vol 10 LO/50

Indications

Control Channel

(Control Channel) **System** [Off], [1]—[16]

This determines the control channel.

While the MIDI channel controls operations for each Part, the control channel here, on the other hand, controls operations for the entire SP-700. The master level value is changed by control change data (#7: volume), the master tune value is changed by the RPN of the control change data, each parameter setting of the equalizer is changed by control change data (#1—95), and the Volume memory, Performance and Volume of the SP-700 can be changed by control change data (#0: bank select) and program change data.

* See P.4-12 for details of changing Sound programs by using MIDI.

* Do not set the control channel to the same value as the Part channel. If they are set to the same channel, the program change of the control channel has priority and the Patch of the Part cannot be changed.

* The Volume A memory is selected when the value of the control change data (#0: bank select) is 0, and Volume B memory is selected when the value is 1. Values from 2—127 are ignored.

The Volume memory cannot be changed only by receiving bank select data. To change the Volume memory, program change data must be received after receiving bank select data. See the following Control Mode parameter for details.

* Control Change messages received on the control channel are irrelevant to settings of the MIDI Filter in a Performance.

Control Mode

(Control Mode) **System** [Perf], [Perf/Volum],
[Perf/Volum2]

This sets how the sound data (Volume or Performance) is to be selected when receiving program change data over the control channel.

Refer to the following pages for information on how the data is selected.

See P.4-12 for details on changing the Sound programs using MIDI.

SYSTEM + **F3** (MIDI)

When the Control Mode is set to "Perf":

When receiving program change data, the program number correspondence is as shown below:

When a program number of 1—64 is received,	When a program number of 65—128 is received,
The Performance in the Volume A Memory with the corresponding program number will be selected .	The Performance in the Volume B Memory with the corresponding program number will be selected.

- *The received program numbers 65—128 correspond to the Performance program numbers 1—64.
- *When the Volume B memory is 0 megabytes, the received program numbers 65—128 are ignored and the Performance is not changed.
- *The current Volume memory may change automatically depending on the received program change data. For example, when the current Volume memory is Volume A and program number 65 is received, the Volume memory changes to Volume B and the Performance at program number 1 is selected.
- *When receiving a program number from 1—128 after receiving the bank select message, that bank select is ignored.
- *The program number of a Performance is set in the Select Performance page (P.Pfom-26). Do not set the same program number to several different Performances. When the same program number is assigned, the Performance with the smaller list number has priority to be changed.
- *No sound is output when the Volume memory is changed.

SYSTEM + **F3** (MIDI)

When the Control Mode is set to "Perf/Volum":

When receiving program change data, the program number correspondence is as shown below:

When a program number of 1 — 64 is received,	When a program number of 65 — 128 is received,
The Performance in the current Volume Memory with the corresponding program number will be selected.	The Volume in the current drive with the corresponding program number will be loaded to the current Volume Memory.

- * All sound data which was already contained in the destination current Volume memory is lost when loading the Volume.
- * When receiving a program number from 1—64 after receiving bank select data, the Volume memory is changed and the Performance is changed.
- * When receiving a program number from 65—128 after receiving bank select data, the bank select message is ignored.
- * The program number of the Performance is set in the Select Performance page (P.Pfom-26). Do not set the same program number to several different Performances. When the same program number is assigned, the Performance with the smaller list number has priority to be changed.
- * The program number of the Volume is set in the Disk Utility page (⇐ P.Disk-27). Do not set the same program number to several different Volumes. When the same program number is assigned, the Volume which is first retrieved by the SP-700 has priority to be loaded. Any Volumes for which program numbers have not been assigned should be set to Off.
- * No sound is output when the Volume memory is changed, or while loading a Volume.

SYSTEM + **F3** (MIDI)

When the Control Mode is set to "Perf/Volum2":

When receiving program change data, the program number correspondence is as shown below:

When a program number of 1—64 is received,	When a program number of 65—128 is received,
The Performance in the current Volume Memory with the corresponding program number will be selected.	The Volume in the current drive with the corresponding program number will be loaded to the Volume Memory which has not currently been selected (not the current Volume Memory).

- * All sound data which was already contained in the destination Volume memory is lost when loading the Volume.
- * When the Volume B memory is 0 megabytes, the received program numbers 65—128 are ignored and the data is not loaded to Volume B memory.
- * When receiving a program number from 1—64 after receiving bank select data, the Volume memory is changed and the Performance is changed.
- * When receiving a program number from 65—128 after receiving bank select data, the bank select message is ignored.
- * The program number of the Performance is set in the Select Performance page (⇐ P.Pfom-26). Do not set the same program number to several different Performances. When the same program number is assigned, the Performance with the smaller list number has priority to be changed.
- * The program number of the Volume is set in the Disk Utility page (⇐ P.Disk-27). Do not set the same program number to several different Volumes. When the same program number is assigned, the Volume which is first retrieved by the SP-700 has priority to be loaded. Any Volumes for which program numbers have not been assigned should be set to Off.
- * No sound is output when changing the Volume memories or loading the Volume. However, when the received program number is 65—128, and the Load-while-playing function in the System parameters is set to On, the sound can be output.

MIDI EQ Control

Each parameter setting of the equalizer of the Performance can be controlled by the control change data (#1—95), which is received over the control channel.

The correspondence between each parameter of the equalizer and the control change data is set in this page.

[MIDI EQ Control] Perform Dec/Inc									
[- undefined -]									
	H.F	H.G	L.F	L.G		H.F	H.G	L.F	L.G
[1]	78	24	70	16	[2]	79	25	71	17
[3]	80	26	72	18	[4]	81	27	73	19
[5]	82	28	74	20	[6]	83	29	75	21
[7]	84	30	76	22	[8]	85	31	77	23
PRM	SCSI			MIDI	Vol ID		LO/SW		

* The original function of the control number which is selected by the cursor is indicated at the top right of the display.

Indications

H.F

(High Frequency) **System** [Off], [1]—[95]

This determines which control number of the control change data is to control the High Frequency parameter of the equalizer.

It can be controlled by "7" (main volume), and the master level (⇐ P.Pfom-2 and P.Sys-3) can also be controlled at the same time.

Set this to Off when not controlling the High Frequency.

H.G

(High Gain) **System** [Off], [1]—[95]

This determines which control number of the control change data is to control the High Gain parameter of the equalizer.

It can be controlled by "7" (main volume), and the master level (⇐ P.Pfom-2 and P.Sys-3) can also be controlled at the same time.

Set this to Off when not controlling the High Gain.

L.F

(Low Frequency) **System** [Off], [1]—[95]

This determines which control number of the control change data is to control the Low Frequency parameter of the equalizer.

It can be controlled by "7" (main volume), and the master level (⇐ P.Pfom-2 and P.Sys-3) can also be controlled at the same time.

Set this to Off when not controlling the Low Frequency.

L.G

(Low Gain) **System** [Off], [1]—[95]

This determines which control number of the control change data is to control the Low Gain parameter of the equalizer.

It can be controlled by "7" (main volume), and the master level (⇐ P.Pfom-2 and P.Sys-3) can also be controlled at the same time.

Set this to Off when not controlling the Low Gain.

* The control channel is set in the MIDI Control page (⇐ P.Sys-11).

* See the MIDI implementation (⇐ P.App.-40) for the correspondence between the control number value and the equalizer value.

* Refer to the "Control Change List" in the Appendix chapter for more information on control numbers (⇐ P.App.-34).

* Control Change messages received on the Control Channel are irrelevant to settings of the MIDI Filter in a Performance.

MIDI Volume Dump

The data of the Volume (including that of the Performances down to the Partials being used by the Volume) in the current Volume memory and the System data of the internal memory are transmitted as MIDI Exclusive data from this display page. Wave (or sample) data cannot be transmitted. Conditions for receiving of Exclusive data are also set here. (⇐ P.2-7)

[MIDI Volume DUMP] Perform Dec/Inc 1A	
Volume Name [WND:Woodwinds]	
Parameter	Information
Device ID	8 [0~31]
Exclusive RX	Off [Off][On]
Interval <Kbyte>	All Total 40Kbyte
PRM	SCSI MIDI SysDUMP VolDUMP

Indications

Device ID	(Device ID Number) System [0]—[31] This determines the device ID number for the Exclusive data transfer or Sample dump. When several SP-700s coexist in the same system, the Exclusive data and wave data can be transmitted and received among the devices whose device IDs numbers match. Set the device ID number of the SP-700 different than the MIDI channel. * This device ID number is also indicated in the MIDI Sample Dump page, and it can be used also for transmitting and receiving wave data. (⇐ P.Sys-25)
Exclusive RX	(System Exclusive Receiving Switch) System [Off], [On] This determines the condition of Exclusive data reception and wave data reception by Sample dump. Exclusive data or wave data is received in the Performance Mode (except from the Quick Load page) when this is set to On. * Receiving Exclusive data or Sample dump is done for the current Volume memory.
Interval	(Capacity Partition of the Volume Dump) [16]—[128], [All] The maximum data of one Volume (from Performances to Partials) is about 250 kilobytes. Some sequencers which record Exclusive data cannot record 250 kilobytes of data at once. For such sequencers, it is necessary to divide the Exclusive data of the Volume into amounts that it can handle simultaneously. This parameter determines how much (in kilobytes) of the Exclusive Volume data is to be sent in a single transmission. When this is set to "All," all Exclusive data in the Volume is transmitted at once. The capacity of the Volume data that is converted into the Exclusive data is indicated at "Total."

SYSTEM + **F3** (MIDI) + **PAGE** **NEXT**

* For MIDI sequencers that are capable of recording all Volume data at once, set the Interval to "All."

* When executing the Volume dump by dividing up the data of the Volume, the message "Continue Volume Dump function?" appears each time the set amount of data has been transmitted. You can select here whether to continue the Volume dump or not.

Press **F2** (Yes) to transmit all the data.

Press **F4** (Cancel) to abort the Volume dump operation in the middle.

Caution!

Make sure to make a note of the order of the disks or files made when dividing the data and recording it to a MIDI sequencer. If you are using disks, write the order down on the disk label and name the files properly. When you reload the data from the MIDI sequencer to the SP-700, the sound will not be output properly unless the data is loaded in the correct order (the same order as when it was recorded).

F4 SysDump

(System Dump)

The System data of the groups, the Quick Load, the Volume ID, the Mark Set and the Template in internal memory are transmitted as MIDI Exclusive data.

The setting of the Interval doesn't matter here since System data is transmitted in a single operation.

* See P.Sys-32 for information on the groups of System data.

F5 VolDump

(Volume Dump)

The Volume data in the current Volume memory is transmitted as MIDI Exclusive data. The data divided up and transmitted in separate "packets" according to the Interval setting.

Using MIDI Sequencers with System Dump or Volume Dump

Only MIDI sequencers capable of recording MIDI Exclusive data can be used with System Dump or Volume Dump.

When using the Volume Dump function, set the amount of data to be transmitted at once with the Interval parameter above, considering the capacity of the MIDI sequencer (how much data it can record at once) and the capacity of the Volume to be recorded.

- * Refer to the owner's manual of your MIDI sequencer for more information on the points above.
- * For the MIDI sequencer, we recommend that you use the Roland MC-50 or MC-50MKII. When the capacity of the Volume exceeds 128k byte, set the Interval to 128 and record it into the MC-50 or MC-50MKII sequencer.

SYSTEM + **F3** (MIDI) + PAGE **NEXT**

Recording Exclusive Data of the System to a MIDI Sequencer by System Dump

1. Connect the MIDI OUT of the SP-700 and the MIDI IN of the sequencer with a MIDI cable.
2. Open the Volume Dump page.
Open the third display page by pressing **SYSTEM**, **F3** (MIDI) then **PREVIOUS** or **NEXT**.
3. Determine the device ID number for transmitting the data.
Parameter : Device ID
Setting : 0—31
Be sure to note the device ID number you set here. If you forget the number, the Exclusive data cannot be loaded back to the SP-700. Write this information down on the disk lable.
4. Start the recording of the MIDI sequencer.
Be sure to note the tempo of the recording. Write this information down on the disk lable as well.
5. Execute the System Dump by pressing **F4** (SysDump).
A "Now Working" message appears at the top right of the display, and "Complete" is indicated when the operation is finished.
6. Stop the recording of the MIDI sequencer when the System Dump is completed.

Loading Exclusive Data of the System from the MIDI Sequencer to the SP-700

1. Connect the MIDI IN of the SP-700 and the MIDI OUT of the MIDI sequencer with a MIDI cable.
2. Open the Volume Dump page.
Open the third display page by pressing **SYSTEM**, **F3** (MIDI), then **PREVIOUS** or **NEXT**.
3. Set the device ID number to the same as the device ID number which had been saved with the Exclusive data recorded to the MIDI sequencer.
Parameter : Device ID
Setting : 0—31
The Exclusive data cannot be loaded if these device numbers are not the same.
4. Set the Exclusive Receiving Switch to On.
Parameter: Exclusive RX
5. Open the Performance Mode page.
Press **PERFORMANCE**.
The Exclusive data can be received in any page (with the exception of the Quick Load page) of the Performance Mode.
 - * Do not play the SP-700 here. Exclusive data can only be received when the SP-700 is not being played.
6. Load the Exclusive data into the SP-700 by playing the MIDI sequencer.
In playing back the data from the MIDI sequencer, make sure that the tempo is the same as (or slower than) that set when the Exclusive data was recorded.
 - * Do not stop the MIDI sequencer while it is still playing. If you do so, the Exclusive data will not be loaded properly into the SP-700. If this happens, select the beginning of the Exclusive data, then start the MIDI sequencer again.

About the Volume Dump Function

The Volume dump function can be used in the following ways:

Record the Volume data in the current Volume memory as MIDI Exclusive data to the MIDI sequencer, and load it back by receiving the Exclusive data from the MIDI sequencer. Once the Volume data is loaded into the current Volume memory, the wave data can be loaded from the drive to which the wave (Sample) data has been saved. (However, the Samples being used by the Volume must be contained in a single drive or a single CD-ROM disk.)

This means that the sound data (Volume) of the SP-700 can be handled or controlled with an Exclusive data disk.

For example, if you make Volume data (which uses samples contained on one CD-ROM disk), as the Exclusive data disk, it can be controlled with the CD-ROM disk.

Moreover, if you create song data with the sound data of the Volume to MIDI sequencer, and make the song data as another song data disk, it can be controlled as three disks; CD-ROM disk, Exclusive data disk and the song data disk.

About Wave (Sample) Data

In order to load Exclusive data from the MIDI sequencer and load wave data (samples) from the drive, the samples being used by the Volume must satisfy all the conditions described below when executing the Volume Dump. The wave data cannot be loaded from the drive when the Volume does not satisfy all these conditions.

- All the samples being used by the Volume must be loaded to the Volume memory from a single drive or a single CD-ROM disk.

For example, when loading Sound programs from several different drives, or even in using one CD-ROM drive, if you load Sound programs from several different CD-ROM disks by changing the disks, the wave (sample) data cannot be loaded from the drive.

- The names of all samples being used by the Volume cannot be changed.

The wave (sample) data cannot be loaded from the drive if the names have been changed.

Do not execute any of the following operations, since the sample names will be changed by these operations.

- 1.Editing of the sample name (including Volume ID) in the Select Sample page (☞ P.Prtl-34 and P.Sys-40).
- 2.Executing the Set Mono/Set Stereo command in the Select Sample page (☞ P.Prtl-36 and P.Sys-41).
- 3.Changing the Volume ID of the sample in the System Volume ID page (☞ P.Sys-29).

- Samples received by the MIDI Sample Dump function (☞ P.Sys-25) cannot be used.

Do not load Sound programs with the Convert Load function (☞ P.Disk-33).

These samples cannot be loaded since they are not from one drive or one CD-ROM disk.

Recording Exclusive Data of the Volume to a MIDI Sequencer by Volume Dump

1. Connect the MIDI OUT of the SP-700 and the MIDI IN of the sequencer with one MIDI cable.
2. Call up the System Mode page.
Press **SYSTEM**.
3. Change the Volume memory and select the Volume to be transferred.
Parameter : Current Vol Memory
Setting : A, B
4. Call up the Volume Dump page.
Call up the third display page by pressing **SYSTEM**, **F3** (MIDI), then **PREVIOUS** or **NEXT**.
5. Determine the device ID number for transmitting the data.
Parameter : Device ID
Setting : 0—31
Be sure to note the device ID number you set here. If you forget the number, the Exclusive data cannot be loaded back to the SP-700. Write this information down on the disk label.
6. Set the amount of the Exclusive data of the Volume that is to be transmitted at one time.
Parameter: Interval
 - * The amount you specify here depends on the capacity of the MIDI sequencer (how much data it can record at once).
7. Start the recording of the MIDI sequencer.
Be sure to note the tempo of the recording. Write this information down on the disk label as well.
8. Execute the Volume Dump by pressing **F5** (VolDump).
A "Now Working" message is indicated at the top right of the display, and "Complete" is indicated when the operation is finished.

When executing the Volume dump by dividing up the data of the Volume, the message "Continue Volume Dump function?" appears each time the set amount of data has been transmitted.

When this message appears:

- Stop recording on the MIDI sequencer.
- Save the recorded Exclusive data to disk.
- Delete the recorded Exclusive data from memory by using an initialize or erase operation.
- Start recording again on the MIDI sequencer.
- Continue the Volume Dump by pressing **F2** (Yes).
- Repeat the same operation when the transmission is finished and the same message appears again.

* Make sure to make a note of the order of the disks or files made when dividing the data and recording it to a MIDI sequencer. If you are using disks, write the order down on the disk label and name the files properly. When you reload the data from the MIDI sequencer to the SP-700, the sound will not be output properly unless the data is loaded in the correct order (the same order as when it was recorded).

9. Stop the recording on the MIDI sequencer when the Volume Dump operation is finished.
10. Save the recorded data to disk.

SYSTEM + **F3** (MIDI) + PAGE **NEXT**

Loading Exclusive Data of the Volume from the MIDI Sequencer and Wave Data from the Drive to the SP-700

1. Connect the drive containing the samples to be used in the Volume, and turn on the SP-700.
 - * When using a CD-ROM drive, insert the CD-ROM disk which contains the samples to be used in the Volume.
2. Connect the MIDI IN of the SP-700 and the MIDI OUT of the sequencer with a MIDI cable.
3. Call up the Disk load page.
Press **DISK**, then **F1** (Load).
4. Set the connected drive to be the current drive.
Move the cursor to "CD" (current drive) and select the appropriate drive.
Parameter: CD
 - * Wave data cannot be loaded if the drive has not been selected, or the CD-ROM disk has not been inserted.
5. Call up the System Mode page.
Press **SYSTEM**.
6. Change the Volume memory and determine the destination Volume memory to which the data will be loaded.
Parameter : Current Vol Memory
Setting : A, B
 - * The data is loaded to the current Volume memory. Be careful when executing this operation, since if the current Volume memory already contains sound data, all the data will be lost.
7. Call up the Volume Dump page.
Call up the third display page by pressing **F3** (MIDI), then **PREVIOUS** or **NEXT**.
8. Set the device ID number to the same as the device ID number which had been saved with the Exclusive data recorded to the MIDI sequencer.
Parameter : Device ID
Setting : 0—31
The Exclusive data cannot be loaded if these device numbers are not the same.
9. Set the Exclusive Receiving Switch to On.
Parameter: Exclusive RX

(continued on next page)

10. Call up the Performance Mode page.

Press **PERFORMANCE**.

- * The Exclusive data can be received in any page of the Performance Mode (with the exception of the Quick Load page).
- * Do not play the SP-700 here. Exclusive data can only be received when the SP-700 is not being played.

11. Load the Exclusive data of the Volume to the SP-700 by playing the MIDI sequencer.

- * In playing back the data from the MIDI sequencer, make sure that the tempo is the same as (or slower than) that set when the Exclusive data was recorded.
- * Do not stop the MIDI sequencer while it is still playing. If you do so, the Exclusive data will not be loaded properly into the SP-700. If this happens, select the beginning of the Exclusive data, then start the MIDI sequencer again.
- * When Exclusive Data of the Volume is divided into several disks or files, load the data in the correct order (the same order as when it was recorded).

12. When all Exclusive data of the Volume has been completely loaded, the message "Requested to Load Wave Data by Exclusive Command" appears, and the wave data is automatically loaded from the drive.

Transmitting and Receiving Exclusive Data and Wave (Sample) Data with a Computer

Instead of using the Volume Dump function above, Exclusive data (except the sample data) can be transmitted and received by connecting the SP-700 to a computer. In this case, the Exclusive data is transferred by the Exclusive command.

- * Since the SP-700 cannot transmit Exclusive data by panel operations (except through the Volume Dump function), the Exclusive command is used.
- * Wave (sample) data cannot be loaded when using the command without using the Volume Dump function.

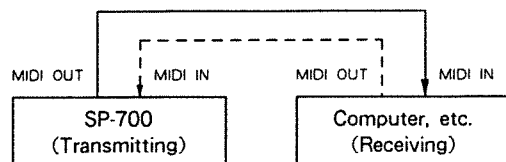
There are two methods of transferring Exclusive data, by handshaking or one-way. Use of handshaking provides higher reliability, since the data is checked for errors by each device during transfer. Moreover, since the data is transferred as soon as the receiver is ready, it takes less time to transfer than the one-way method, which waits for a certain time. Because of this, we recommend that you use the handshaking method to transfer Exclusive data of the SP-700.

See the section "Roland Exclusive Messages" (P.App.-35) and "MIDI Implementation" (P.App.-41) for details.

One-Way Method

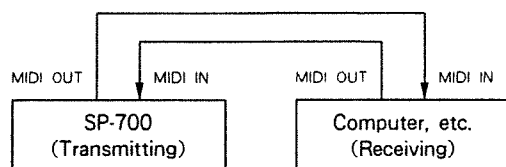
Connect the SP-700 and the receiver as shown in the illustration below by two MIDI cables, shown by the solid and dotted lines, when the SP-700 receives the command and transmits Exclusive data.

- * Connect only the solid line (not the dotted line) when Exclusive data is transmitted from the SP-700 to the MIDI sequencer by the Volume dump function.



Handshaking Method

Connect by two cables as shown in the illustration below.



MIDI Sample Dump

The wave data is transmitted by Sample Dump of the MIDI Universal Exclusive Messages (refer to the MIDI implementation, ⇐ P.App.-48) in this page. The wave data, which includes the loop point and the loop mode, is transmitted to the Sampler which corresponds to the MIDI Sample Dump Standard (wave data from other samplers can also be received).

This also sets the receiving of the wave data by the Sample Dump.

* The sound quality may be affected when transferring the wave data between the SP-700 and another manufacturer's sampler when using the Sample Dump Standard.

[MIDI Sample Dump]		Sample	Dec/Inc	▲
*Source [1] WND: BSSN		A#1		
Parameter		Information		
Device ID	0	[0~31]		
Exclusive RX	Off	[Off][On]		
PRM		SCSI	MIDI	Vol ID
		SMP DUMP		

Indications

Source

(Source Select)

This selects the sample (wave data) to be transmitted.

* Pressing **LIST** calls up the Select Sample page, and the sample can be selected. (⇐ P.Sys-40)

Device ID

(Device ID Number) **System** [0]—[31]

This determines the device ID number of the Exclusive or Sample Dump.

When several SP-700s coexist in the same system, the Exclusive data and wave data can be transmitted and received among the devices whose device IDs numbers match. Set the device ID number of the SP-700 different than the MIDI channel.

* This device ID number is also indicated in the MIDI Volume Dump page, and it can be used also for transmitting and receiving Exclusive data. (⇐ P.Sys-16)

Exclusive RX

(System Exclusive Receiving Switch) **System** [Off], [On]

This determines the condition of Exclusive data reception and wave data reception by Sample dump.

Exclusive data or wave data is received in the Performance Mode (except from the Quick Load page) when this is set to On.

* Receiving Exclusive data or Sample dump is done for the current Volume memory.

SYSTEM + **F3** (MIDI) + PAGE **NEXT**

F5 SmpDump

(Sample Dump)

This starts the transmission of the Sample (wave data).

* The Sample Dump Standard transfers only the data which affects or determines how the wave data is read, such as the actual wave data itself and the start/loop/end points. Since other parts of the data such as the sample name, the way the samples are combined (their soundable range and how they are to be sounded), and the envelope settings for the filter and amplifier, etc. are not transmitted, you must make these settings individually on the received sampler after using Sample Dump to transmit the data.

The SP-700 tries first to transmit the wave data by the handshaking method. When the receiving sampler does not support the handshaking method, the SP-700 automatically transmits the data using the one-way method. However, even when using the one-way method, it is necessary to connect the MIDI OUT of the receiving unit with the MIDI IN of the transmitting unit in order for the receiving unit to send out a "data request" message. Therefore, connect two MIDI cables, as is done for the handshaking method (see "Roland Exclusive Messages," P.App.-35).

* Receiving is executed in the same way as transmitting.

Transmitting Wave Data to Another Sampler by Sample Dump

1. Connect the MIDI terminals of the two units with two MIDI cables so that the MIDI OUT on one is connected to the MIDI IN on the other.
2. Call up the MIDI Sample Dump page on the SP-700.
Call up the fourth display page by pressing **SYSTEM**, **F3** (MIDI), then **NEXT**.
3. Match the device ID number of the receiving sampler.
Parameter : Device ID
Setting : 0—31

* The device ID number may be referred to as "unit number" or "channel" depending on the device used. Refer to the owner's manual of the other device for more information.
The value of the device ID number is 0—31 for some devices, and 1—32 for other devices. In this case, 0 corresponds to 1 and 31 corresponds to 32.
4. Select the sample to be transmitted.
Parameter : Source
5. Execute the data transfer by pressing **F5** (SmpDump).

Receiving Wave Data from Another Sampler by Sample Dump

1. Connect the MIDI terminals of the two units with two MIDI cables so that the MIDI OUT on one is connected to the MIDI IN on the other.
2. Call up the MIDI Sample Dump page.
Call up the fourth display page by pressing **SYSTEM**, **F3** (MIDI) then **NEXT**.
3. Set the Exclusive RX to On.
4. Match the device ID number of the transmitting sampler.
Parameter : Device ID
Setting : 0—31

* The device ID number may be referred to as "unit number" or "channel" depending on the device used. Refer to the owner's manual of the other device for more information.
The value of the device ID number is 0—31 for some devices, and 1—32 for other devices. In this case, 0 corresponds to 1 and 31 corresponds to 32.
5. Set the SP-700 to the Performance Mode.
Press **PERFORMANCE**.

* Sample Dump transfers data to the current Volume memory when it is in the Performance Mode.
* Data cannot be received while executing commands such as Load.
6. Set the transmitting sampler appropriately and execute the data transfer.

SYSTEM + **F3** (MIDI) + PAGE **NEXT**

Checking the Wave Data After the Sample Dump

1. Call up the Select Sample page.
Press **PARTIAL**, then **F2** (SMT). Then move the cursor to the Sample name and press **LIST**.

2. Scroll through the list to search for the received sample name.
The received sample name should appear as shown below.

: MIDI Samp * * *

Numbers (1 - -) are added to the last three digits.

There is no mark to distinguish between stereo and mono samples for the data received by Sample Dump. The SP-700 handles stereo data as two single samples. Since only the number is shown at the end of the name, you can check whether it is a stereo sample or not by actually outputting the sound from the Select Sample page; move the cursor to the sample name and play the MIDI keyboard in order to check the sound.

- * The Volume Recover/Backup function and Volume Dump function cannot be executed correctly for samples which are received by the Sample Dump (☞ P.Sys-36 and P.Sys-16).

It is possible to change the names of samples by the Set Stereo command in the Select Sample page, so as to distinguish two different samples having the same name (the left and right parts of a stereo sample) for the sake of convenience, by adding " - L/ - R" at the end of the same name. When the data is not handled as a stereo sample, it does not become the object of the automatic retrieval (search) of the stereo sample in the Partial SMT page (☞ P.Prtl-7).

Changing Sample Names (for using Sample Dump Data as Stereo Samples)

1. Call up the Select Sample page.
Press **PARTIAL**, then **F2** (SMT). Then move the cursor to the sample name and press **LIST**.

- * The sample name is changed by adding or deleting " - L/ - R" of the last two characters of the sample name when executing the Set Mono or the Set Stereo command. In this case, neither the Volume Recover/Backup function nor Volume Dump Function can be executed correctly (☞ P.Sys-36 and P.Sys-16).

2. Scroll through the list to find the received sample name.
Move the cursor to each sample name and play the MIDI keyboard to search for the stereo sample.
3. Move the cursor to Stereo [1] and select the stereo sample number.
4. Move the cursor to Stereo [2] and select the stereo sample number.
5. Press **F5** (Stereo) to create a stereo sample out of the two samples.

- * The characters " - L" or " - R" are added at the end of the name.

SYSTEM + **F4** (Vol ID)

Determining the Sound Data After selecting the Volume ID to be assigned with the Volume ID parameter, determine the sound data to which the Volume ID will be assigned by marking the sound data.

Move the cursor to the sound data to which the Volume ID will be assigned, then press **S1/DEC** to mark it.

Press **F2** (AllOn) in order to mark all the sound data when adding Volume IDs to all sound data.

Press **F1** (AllOff) to release all marks.

Volume
Performance
Patch
Partial
Sample

*If the Volume ID of the sample has been changed (remember that the Volume ID is a part of the name), the wave data of the changed sample cannot be loaded, even by executing the Volume Recover/Backup function or Volume Dump function. See P.Sys-36 and P.Sys-16 for details.

*When none of the sound data is marked, the Volume ID is added to the sound data at the cursor position.

F1 AllOff

(Mark All Off)

All the marks of the sound data from Volume to sample are released.

F2 AllOn

(Mark All On)

All sound data from Volume to sample are marked.

F5 Exec

(Execute)

The specified Volume ID is added to the marked sound data.

How to Supply the Volume ID for Sound Data

1. Open the System Volume ID page.

Press **SYSTEM** → **F4** (Vol ID).

2. Move the cursor to the type of sound data (Volume—sample), then press **S1/DEC** to attach a marker to the sound data for which you wish to supply a Volume ID. The **S1/DEC** button acts as a toggle; the marker either appears or disappears each time it is pressed.

* Should you wish to attach a marker to every item of sound data, press **F2** (All On). To remove the markers from all data, press **F1** (All Off).

3. Move the cursor to Volume ID.

4. Use **S1/DEC** or **S2/INC** to select one of the pre-registered Volume IDs from the Volume ID list.

Alternately, you can display the Volume ID list, and select from it.

Press **LIST** to open the Select Volume ID page.

Move the cursor to the desired Volume ID and press **F3** (Select). You are then automatically returned to the System Volume ID page.

5. When you wish to supply a new Volume ID for some sound data, you need to register the new Volume ID while in the Select Volume ID page.

Press **LIST** to open the Select Volume ID page.

Press **F5** (Make), and the ASCII Keyboard page will appear. Enter the new Volume ID, then press **F5** (CR). You are automatically returned to the Select Volume ID page.

Move the cursor to the new Volume ID, and press **F3** (Select). You are then automatically returned to the System Volume ID page.

6. Press **F5** (Exec) to attach the Volume ID to the sound data which was marked.

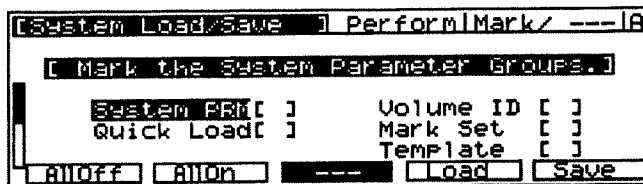
"Now Working" will appear at the page's upper-right until the procedure is completed, and "Complete" appears instead.

In addition to the above procedures, you could also use "Name Edit" to supply names individually (⇐ P.3-13); or you can specify the Volume ID when saving the sound data (⇐ P.Disk-7).

SYSTEM + F5 (LD/SV)

System Load/Save

System parameters are loaded from the System backup memory, or are saved to the System backup memory from this page.



The System parameters are divided into certain groups and each group can be loaded or saved separately.

- *It is necessary to save the System parameter data, since it is lost when turning off the power.
- *If you haven't saved the edited System parameters, and you want to restore the previous settings, it is convenient to load the System parameters.

The available System parameters are shown in the list below.

Group Name	Parameter		Page	
System parameter	Current Volume Memory		System Mode page	
	Master Tune		System Parameter page	
	Master Level			
	Output Mode			
	Initial Volume			
	Load While Playing			
	SHIFT Lock			
	Time Display			
	Volume A			
	SP-700 Self SCSI ID		System SCSI page	
	Initial Drive SCSI ID			
	Fast Delete Mode			
	Overwrite Switch			
	Control Channel		MIDI Control page	
	Control Mode			
	EQ 1—8	High Frequency		MIDI EQ Control page
		High Gain		
		Low Frequency		
		Low Gain		
	Device ID		MIDI Volume Dump page	
System Exclusive Reception		MIDI Sample Dump page		
LCD Contrast		LCD Contrast page		
Quick Load	Volume List (up to 32)	Volume Name	Quick Load page	
		Drive Number		
	Performance List (up to 32)	Performance Name		
		Drive Number		
	Patch List (up to 32)	Patch Name		
	Drive Number			
Volume ID	Volume ID List (up to 200)		Select Volume ID page	
Mark Set	Mark Set List (up to 10 pages)		Mark Set page	
Template	User Set List (up to 10)		Template page	

Indications

Determining the Group

Determine the group to be loaded or saved by marking it.
 Move the cursor to the group and then press **S1/DEC** to mark it.
 Press **F2** (AllOn) in order to mark all groups when you wish to load or save all the groups.
 Press **F1** (AllOff) to release all marks.

- System PRM (System Parameter)
- Quick Load (Quick Load List)
- Volume ID (Volume ID List)
- Mark Set (Mark Set List)
- Template (Template User Set)

* When none of the groups is marked, the group at the current cursor position is loaded or saved.

When the System Load/Save page is called up, the SP-700 constantly compares the saved System parameter settings in the System backup memory with the System parameter settings of the internal memory. The mark “*” appears in the brackets [] at the right side of the group name for the group whose settings are different. Refer to this when loading or saving.

F1 AllOff

(Mark All Off)
 All the marks of the groups are released.

F2 AllOn

(Mark All On)
 All the groups are marked.

F4 Load

(Load)
 The data of the marked group is loaded.

SYSTEM + **F5** (LD/SV)**Loading the System Parameters**

1. Call up the System Load/Save page.
Press **DISK**, then **F5** (LD/SV).
Since the System Load/Save page is the first display page, press **PREVIOUS** if another page appears.
2. Move the cursor to the group of the System parameters to be loaded using the cursor buttons.
3. Mark the group.
Press **S1/DEC**. The mark is released if you press it again.
4. Mark the group to be loaded by repeating steps #2 and #3 above.
5. Execute the load operation by pressing **F4** (Load).
A warning message appears, since the System data of the internal memory is about to be rewritten.
Press **F2** (Yes) to execute the load operation.
Press **F4** (No) to abort the load operation.
When loading by pressing **F2** (Yes) here, the System PRM is marked, and the current setting of the Volume A parameter (the capacity ratio of the Volume A memory and the Volume B memory; ⇨ P.Sys-5) differs from the setting that has been saved to the System backup memory; not only is the System data rewritten, but also the sound data of each Volume memory is erased. That is why another warning message appears.
Press **F2** (Yes) to execute the load operation.
Press **F4** (No) to abort the load operation.

F5 Save

(Save)

The data of the marked group is saved.

Saving the System Parameters

1. Call up the System Load/Save page.
Press **DISK**, then **F5** (LD/SV).
Since the System Load/Save page is the first display page, press **PREVIOUS** if another page appears.
2. Move the cursor to the group of the System parameters to be saved using the cursor buttons.
3. Mark the group.
Press **S1/DEC**. The mark is released if you press it again.
4. Mark the group to be saved by repeating steps #2 and #3 above.
5. Execute the save operation by pressing **F5** (Save).
A warning message appears, since the System data of the System backup memory is about to be rewritten.
Press **F2** (Yes) to execute the save operation.
Press **F4** (No) to abort the save operation.

SYSTEM + F5 (LD/SV) + PAGE NEXT

Vol Recover/Backup (Volume Recover/Backup)

When the only drive connected to the SP-700 is a CD-ROM drive, the data edited on the SP-700 cannot be saved to that CD-ROM drive.

However, all sound data of the current Volume Memory (except the wave data of samples) can be saved in the internal Volume backup memory. This function is called Volume Recover/Backup (⇨ P.2-6).

[Vol Recover/Backup] Perform Mark/ --- A									
[A]WIND:Woodwinds [Bak]- :									
Files [A] [B] [Bak] Scanned Drive									
Perform	7	-	0	✓	[0]	CD	[4]	TP	
Patch	7	-	0		[1]	HD	[5]	--	
Partial	53	-	0		[2]	MO	[6]	--	
Sample	53	-	0		[3]	TP	[7]	ME	
[AllOff] [AllOn] [toA] [toB] [Backup]									

All sound data (except the wave data of the samples) in the current Volume memory can be saved to the Volume backup memory by executing the Backup function.

All sound data (except the wave data of the sample), which has been backed up (saved) to the Volume backup memory can be loaded to the Volume memory, and the wave data of the samples being used by the sound data can be loaded from the drive by executing the Recover function. (The SP-700 switches to the mode in which the sound data is backed up.)

* The backup system of the Volume Backup Memory can only support sound data of either the Volume A Memory or Volume B Memory. Select either the Volume Memory A or B as the Current Volume Memory (⇨ P.Sys-1).

Indications

[A] or [B]

(Volume Name of the Current Volume Memory)

The name of the Volume of the current Volume memory is indicated.

[Bak]

(Volume Name of the Volume Backup Memory)

The Volume name, which is backed up to the Volume backup memory, is indicated.

Files [A], [B]

(Amount of Files in each Volume Memory)

This indicates the number of files in each Volume memory.

Files [Bak]

(Amount of Files in the Volume Backup Memory)

This indicates the number of files which are stored in the Volume backup memory.

Scanned Drive

(Selection of the Drive to be scanned for Recover Function)

This loads the wave data of the samples being used by the sound data from the drive during the Recover operation. This marks the drive from which the wave data is to be loaded. (It checks the drive to be scanned, This means that it checks whether there is wave data or not in the drive, and if wave data is in the drive, it uses that drive for loading.) Determine the drive from which the sound data was loaded.

The type of the connected drive is indicated at the right of the SCSI ID.

ME : SP-700 itself
 CD : CD-ROM drive
 HD : Hard disk
 MO : Optical disk
 TP : Streaming tape drive

Move the cursor to the SCSI ID and press S1/DEC to mark it.

Press F2 (AllOn) in order to mark all SCSI IDs, so that all drives are scanned.

Press F1 (AllOff) to release all the marks.

* This mark setting is saved to the Volume backup memory together with the sound data when backing up the sound data.

* If executing Recover when there is no marked SCSI ID, the drive which is selected by the cursor is scanned.

* Make sure to execute the Scan command when there is a drive which has not been recognized (→ P.1-8 and P.Disk-45).

F1 AllOff

(Mark All Off)

The marks of all SCSI IDs are released.

F2 AllOn

(Mark All On)

All SCSI IDs are marked.

F3 to [A]

(Recover to Volume A Memory)

This loads all sound data (except the wave data of the samples), which has been backed up to the Volume backup memory, to the Volume A memory; also, the wave data of the sample being used by the sound data is loaded from the drive to the Volume A memory. A warning message appears in the display, since all sound data which was already in the Volume A memory will be lost when this operation is executed.

Press F2 (Yes) to execute the Recover operation.

Press F4 (No) to abort the Recover operation.

* When the sound data capacity to be recovered is larger than the destination Volume memory capacity, only part of the sound data can be loaded.

* The current drive is not changed when executing the Recover operation.

SYSTEM + **F5** (LD/SV) + **PAGE** **NEXT**

F4 to [B]

(Recover to Volume B Memory)

This loads all sound data (except the wave data of the samples), which has been backed up to the Volume backup memory, to the Volume B memory; also, the wave data of the Sample being used by the sound data is loaded from the drive to the Volume B memory. A warning message appears in the display, since all sound data which was already in the Volume B memory will be lost when this operation is executed.

Press **F2** (Yes) to execute the Recover operation.

Press **F4** (No) to abort the Recover operation.

* When the sound data capacity to be recovered is larger than the destination Volume memory capacity, only part of the sound data can be loaded.

* When the Volume B memory is set to 0 megabytes, the data cannot be recovered to the Volume B memory.

F5 Backup

(Backup)

All sound data (except the wave data of the samples) in the current Volume memory is saved to the Volume backup memory.

The setting of the drive (marked SCSI ID) which is to be scanned is also saved at the same time. A warning message appears in the display, since the sound data in the Volume backup memory will be rewritten.

Press **F2** (Yes) to execute the backup operation.

Press **F4** (No) to abort the backup operation.

Caution!

Wave data is not loaded, even when using Recover after backing up, in the cases described below. Do not execute the following operations when you want to use the Volume Recover/Backup function.

- When editing the sample name (including the Volume ID) in the Select Sample page (⇨ P.Prtl-34 and P.Sys-40).
- When executing the Set Mono/Set Stereo command in the Select Sample page (⇨ P.Prtl-36 and P.Sys-41).
- When changing the Volume ID of the sample in the System Volume ID page (⇨ P.Sys-29).
- When loading the Sound program by the Convert Load operation (⇨ P.Disk-33).
- When receiving samples by the MIDI Sample Dump function (⇨ P.Sys-25).
- When the drive to be scanned is not marked (⇨ P.Sys-37).
- When the disk to be loaded has not been inserted in the CD-ROM drive/optical disk drive, or when the disk is not the right one.
- When you try to load sound data from several disks after changing the disks, when one CD-ROM drive/optical disk is connected.
- When the drive to be loaded from is not connected when using Recover.

* Some wave data cannot be loaded because the Sample Names have been changed (the SP-700 handles sound data with names) while being recovered. Or because the drive cannot be scanned or no wave data exists on the drive. When this happens, the number of samples recovered in the Volume Memory is smaller than the number of samples in the Volume Backup Memory because some of them were not recovered.

NAME

System Mode **NAME**

Press **NAME** to call up the ASCII keyboard page when the **NAME** indicator is lit (green), and the Sound program can be named.

The **NAME** indicator lights (green) depending on the page selected or the cursor position.

The indicator will light in the following conditions:

→When the cursor is at the Source Select (home position) in the MIDI Sample Dump page, **LIST** lights (green). Call up the Select Sample page by pressing **LIST**, and the **NAME** indicator will light (green) when the cursor is at the sample name.

*If the sample name (including the Volume ID) is changed, the wave data of the changed sample cannot be read, even when executing the Volume Recover/Backup function or Volume Dump function. See P.Sys-36 and P.Sys-16 for details.

→The **NAME** indicator lights (green), when the cursor is at the Volume name in the System Volume ID page.

See P.3-13 for more information on naming.

LIST

System Mode LIST

When the LIST indicator is lit (green), pressing LIST calls up the Select page, and the Sound program and the Volume ID can be selected.

The LIST indicator lights (green) depending on the page selected or the cursor position.

Select Sample

[Select Sample] Sample -100/+100[A				
<Target> Sample				
No.	Name	Time	Key	Mono
1	WND:BSSN A#1	2.5	A#1	1
2	WND:BSSN C#2	2.5	C#2	Stereo
3	WND:BSSN E2	2.5	E_2	[1] 1
4	WND:BSSN G2	2.5	G_2	[2] 1
SortABC		---	---	Mono Stereo

When the cursor is at Source (home position) in the MIDI Sample Dump page, the LIST indicator lights (green). Press LIST to open the Select Sample page.

Samples can be changed, named and sorted, and the original key can be set from this page.

Indications

<Target> (Target)
This changes the sample to be transmitted by the Sample Dump function.

No (Number)
Scroll through the Sample list by pressing S1/DEC or S2/INC, or VALUE/CURSOR (when the SHIFT indicator is not lit) after moving the cursor to the number.

* When the cursor is at 100s position the list scrolls in units of 100. When the cursor is at the 1s position, the list scrolls in single units.

Name (Sample Name) Sample
The Sample list in the current Volume memory is indicated. Move the cursor to the sample name and select the sample to be changed. Change the sample by pressing S1/DEC.

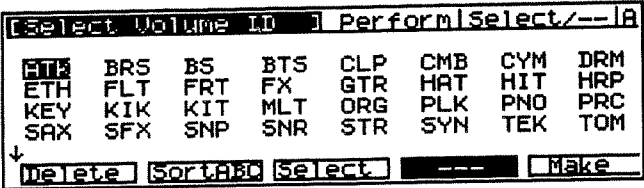
- * When the cursor is moved to the sample name, the sample is temporarily selected and the sound can be checked.
- * The sample name can be changed; however, you shouldn't change the sample name when using the Volume Recover/Backup function (⇨ P.Sys-36) or Volume Dump function (⇨ P.Sys-16). If you do change the name, the wave data of the sample cannot be read into the SP-700 when recovering or loading and no sound can be output. When saving the sample data to hard disk, however, the sample name can be changed without any problem.
- * Press NAME to call up the ASCII keyboard page and the sample can be named. (⇨ P.3-13)

Time	<p>(Capacity of the Sample)</p> <p>This indicates the capacity of the sample in seconds (at a standard of 44.1kHz).</p>
Key	<p>(Original Key) Sample [A 0]—[C 8]</p> <p>This determines the key number (note number) which sounds at the original pitch of the sample (the pitch at which the sample was recorded) when playing the connected MIDI instrument.</p> <p>* C4 is middle C (note number 60).</p>
Mono	<p>(Set Mono)</p> <p>This determines the stereo sample which is to be converted to mono.</p> <p>Press F4 (Mono) to convert the sample to mono.</p> <p>The " - L" or " - R" designation in the sample name is deleted.</p> <p>* When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.</p>
Stereo [1], [2]	<p>(Set Stereo)</p> <p>This selects a couple of the mono samples which are to be converted to a stereo sample.</p> <p>Stereo samples received by the Sample Dump function are not actually treated as stereo, and the stereo sample cannot be retrieved in the Partial SMT page (⇨ P.Prtl-7). Execute the Set Stereo function if you want to be able to handle the sample as a stereo sample.</p> <p>Press F5 (Stereo) to convert the sample to stereo.</p> <p>The " - L" or " - R" designation is added to the last two characters of the sample name selected by [1].</p> <p>* When the cursor is at the 100s position, the list scrolls in units of 100, and when the cursor is at the 1s position, the list scrolls in single units.</p> <p>* This function cannot be executed when the samples selected by [1] and [2] are of different capacities (expressed in seconds).</p> <p>* It is not possible to make a stereo sample by paring two identical samples.</p>
F1 Sort ABC	<p>(Alphabetical Sort)</p> <p>This rearranges the samples indicated in the Select Sample page into alphabetical order.</p>
F4 Mono	<p>(Set Mono)</p> <p>This executes the Set Mono function.</p> <p>* When Set Mono or Set Stereo is executed, the " - L/ - R" designation of the last two characters of the sample name is either deleted or added, and the sample name is changed. In this case, the wave data of the sample (whose name is changed) cannot be read in to the SP-700, even when executing the Volume Recover/Backup function or Volume Dump function, and no sound can be output (⇨ P.Sys-36 and P.Sys-16).</p>
F5 Stereo	<p>(Set Stereo)</p> <p>This executes the Set Stereo function.</p>

LIST

Select Volume ID

When the cursor is at the Volume ID in the System Volume ID page, the **LIST** indicator lights (green). Press **LIST** to call up the Select Volume ID page.



This lets you determine the Volume ID, register(add) it to the list, or delete it.

Indications

Volume ID (no indication)

(List of the Volume ID) **System**

This indicates the list of the Volume ID. Up to 200 Volume IDs can be registered. This is the list you should refer to when determining the Volume ID.

- * When loading data in the Quick Load page or the Disk Load page, the Volume ID of the loaded Sound program is automatically registered to this list.
- * Since this list is part of the System parameters, the list is not called up by retrieving it directly from the drive. The data of this list will be lost if you turn off the power without saving. Be sure to save the data. (☞ P.Sys-32)

Use the cursor buttons (**▲**/**▼**) to scroll through the list.

F1 Delete

(Delete)

This deletes the Volume ID, currently selected by the cursor, from the list.

F2 Sort ABC

(Alphabetical Sort)

This rearranges the Volume IDs (indicated in the Select Volume ID page) alphabetically.

F3 Select

(Select)

This selects the Volume ID at the cursor position. The System Volume ID page will be automatically retrieved and the selected Volume ID will be shown.

F5 Make

(Make)

This calls up the ASCII keyboard page and the new Volume ID can be registered (☞ P.3-13).

APPENDIX

This section contains advanced information that will be useful when using the SP - 700 in a more sophisticated way. Here you will find information on increasing wave memory, SCSI, adjusting the LCD contrast, troubleshooting/error messages, Parameter Lists, etc.

INCREASING WAVE MEMORY

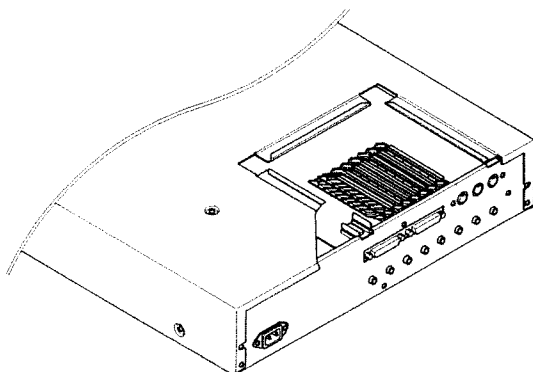
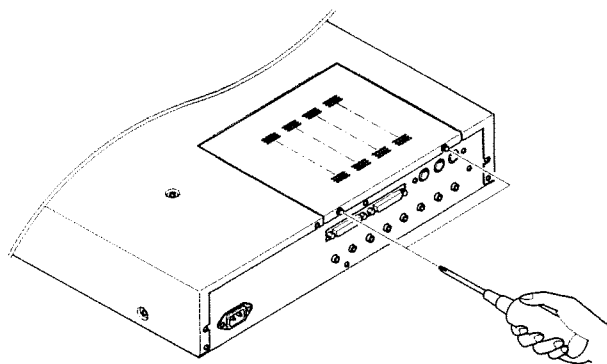
The SP - 700 features a standard 8 megabytes of built - in wave memory, expandable to 32 megabytes. Increasing the wave memory extends the performance potential of the instrument, since a greater amount and variety of sound data and Sound programs can be used simultaneously.

* Be sure to use the SIM - 8 Roland Memory Expander (optional) for wave memory expansion.

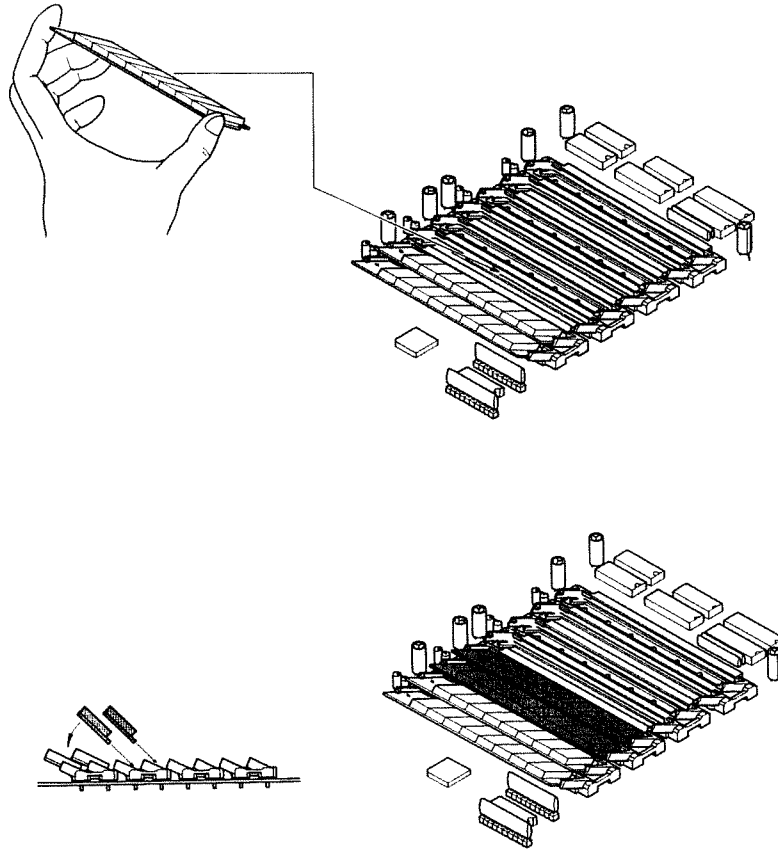
How to Increase the Wave Memory

* During operation, the temperature of the wave memory circuits becomes relatively high. Because of this, you should wait 30 minutes or so after turning off the power before attempting to install additional memory.

- 1.** Check that the SP - 700 is OFF, and that the power cord is unplugged. This is very important!
- 2.** Remove the top panel as shown in the illustration below.



- 3.** Install the wave memory as shown in the following illustration.



Insert the wave memory modules into the sockets from the left, as viewed from the rear panel.

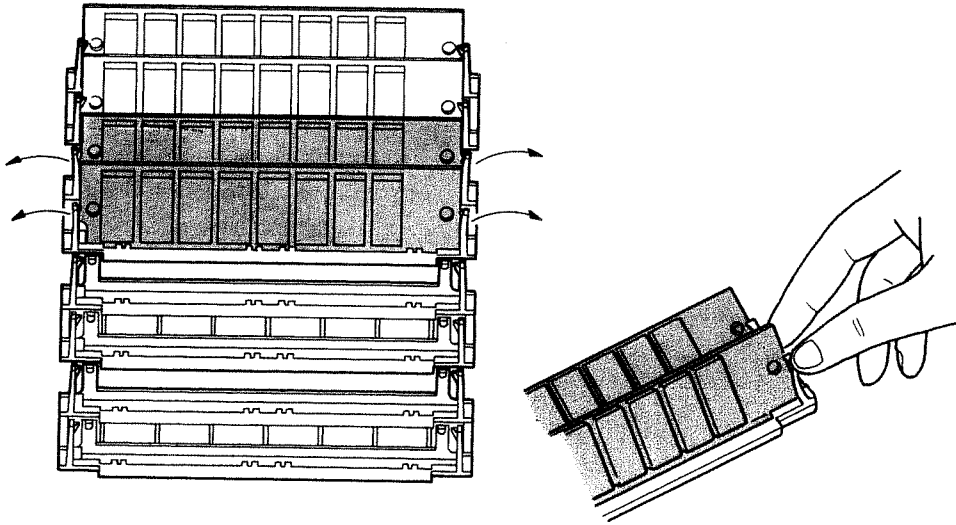
With the IC chips of the wave memory modules facing up, insert the board firmly until the latches on the left and right are locked.

* Be careful not to break the latches by applying too much pressure.

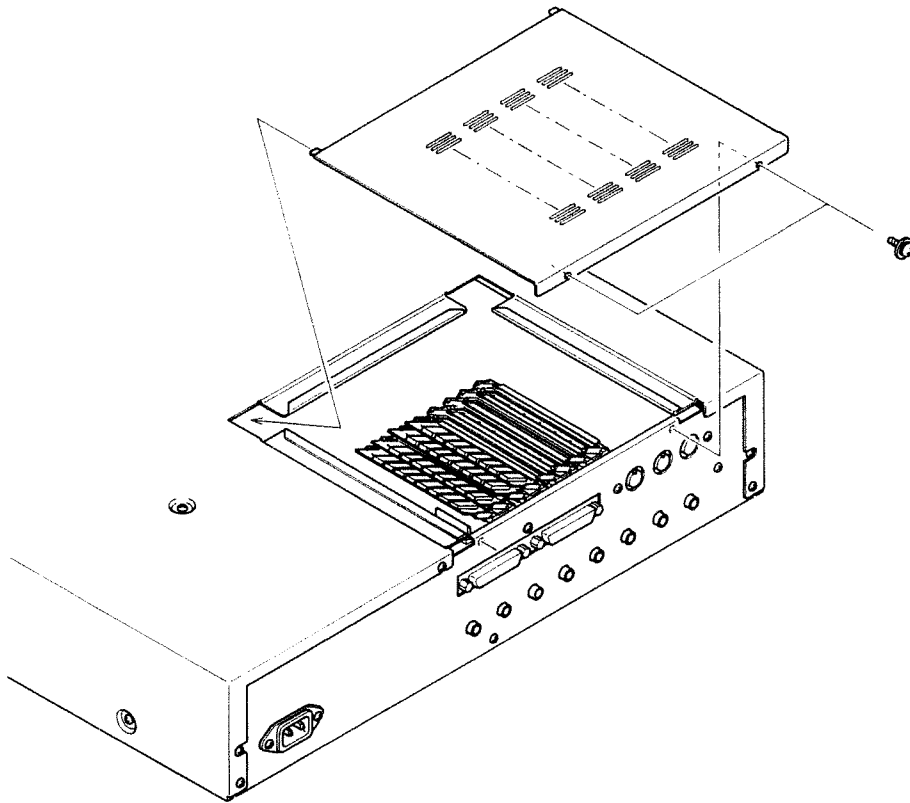
* Be sure to increase the wave memory in units of 8 megabytes (two 4 - megabyte SIMMs).

* Pull the left and right catches of the socket toward the outside when removing the wave memory modules.

* Be sure to remove wave memory in units of 8 megabytes (two 4 - megabyte SIMMs).



4. Replace the cover after installing the wave memory.



5. Turn on the SP - 700 and check whether the wave memory was correctly installed.

This can be done by reading the "Wave Memory check" message which appears in the display when the power is turned on.

Alternately, press **SYSTEM** to select the System Mode page. You can see the Wave Memory indication at the bottom right of the display.

* Turn off the power immediately and check if the wave memory was correctly installed when the actual memory capacity (the total of Volume A memory and Volume B memory) is different from that indicated in the display.

* If there is still a discrepancy in the memory capacities even after checking the installation of the wave memory, consult your local Roland Service Center or your Roland retailer.

* When installing or removing wave memory, the setting of the capacity ratio of the Volume memories is switched automatically to the setting of Volume A memory only (⇐ P.Sys - 5). Save the System parameters (⇐ P.Sys - 32) after resetting the Volume memory.

Precautions when Installing Wave Memory

As the wave memory module contains an extremely sensitive semiconductor circuit, it can easily be damaged by static electric charges. Avoid placing it directly on a desk or carpeted floor after taking it out of the package. When placing it on such surfaces, keep it in the package or put it on an electric conductor (such as aluminum foil). Please handle the board carefully. Special care should be taken in winter as the air is dry and static electricity is easily produced.

ABOUT SCSI

The SP - 700 is capable of transferring large amounts of sound data (including wave data) to and from external SCSI devices.

What is SCSI?

SCSI (Small Computer System Interface) is a data communication standard which allows high - speed transmission and reception of large amounts of data.

Check the following points when connecting a CD - ROM drive and hard disk to the SP - 700.

- ☐ Device number of the connected device (SCSI ID)
- ☐ Connector and cable
- ☐ Terminator
- ☐ Power source of the terminator
- ☐ Format

* Refer to the included leaflet "SCSI Devices Compatible with the SP - 700" for a list of the SCSI devices (CD - ROM drives, hard disk drives and optical disk drives) which can be connected to the SP - 700 SCSI port.

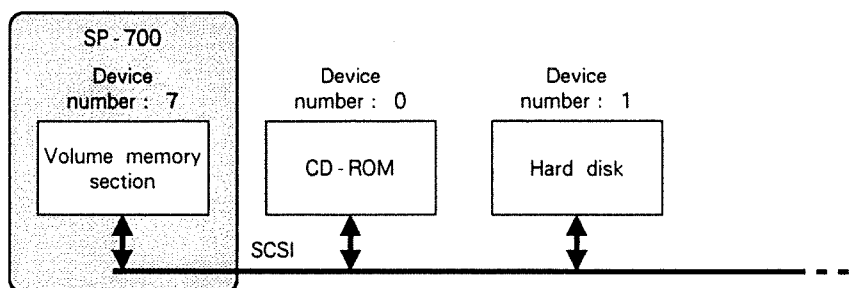
* When selecting a hard disk for the SP - 700, you should get a device that has a capacity greater than 40 megabytes. However, you should realize that the maximum capacity of a drive which can be used by the SP - 700 is 600 megabytes. For example, even if you format an 800 - megabyte hard disk, it will function as a hard disk of only 600 megabytes. The remaining 200 megabytes will not be used at all.

Device Number (SCSI ID)

Up to eight devices can be connected by SCSI. The connected devices are recognized by device numbers 0—7. From the perspective of SCSI, the SP - 700's Volume memory has an independent device number. A device number is referred to on the SP - 700 as the SCSI ID. (⇨ P.Sys - 8)

The Volume memory is set to a default device number of 7 at the factory. The remaining seven device numbers are used for connected SCSI devices.

* Refer to the section "SCSI Devices Which can be used when the Power is Turned On" (⇨ P.App. - 12) before setting the device numbers of the SCSI devices.



* The ID number of each SCSI device is set on each device. Refer to the owner's manual for each of the connected devices for details.

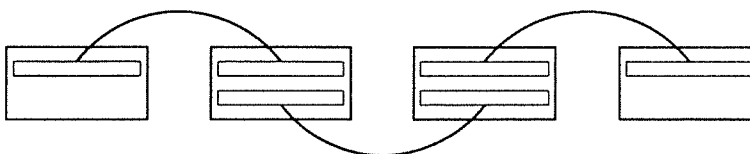
* Do not assign the same device number to several devices. If several devices have the same number, they will fail to function properly.

* It is possible to name each connected device (for each device number) in the Select Drive page. See P.Disk - 44 for details.

Connectors and Cables

There are some SCSI - compatible devices with two connectors (or ports) and some with only one. You can easily create a SCSI network (called a SCSI chain) by connecting devices one by one using special cables. However, a device which has only one connector can only be connected as the first or last device in a SCSI chain.

*When creating a SCSI chain, the cable used should be as short as possible; the total length of the connected cables must be less than 6.5 meters. The network does not function well if the total length is more than that.



Devices with only one connector are connected as the first or last device in the chain.

There are several types of SCSI connectors depending on the shape and the number of pins of the connector.

The SCSI connector of the SP - 700 has two D - Sub 25 - pin connectors.

SCSI connectors for SCSI devices are available in full - pitch 50 and halfpitch 50 configurations.

Check the shape and the number of pins on the SCSI connector and on the cable to be used. Use only high - quality cables which conform to the SCSI standard.

* Optional SCSI cables available from Roland are listed below.

C - 5025 - 6: full - pitch 50 pin ↔ D - Sub 25 pin

C - 5050 - 3: full - pitch 50 pin ↔ full - pitch 50 pin

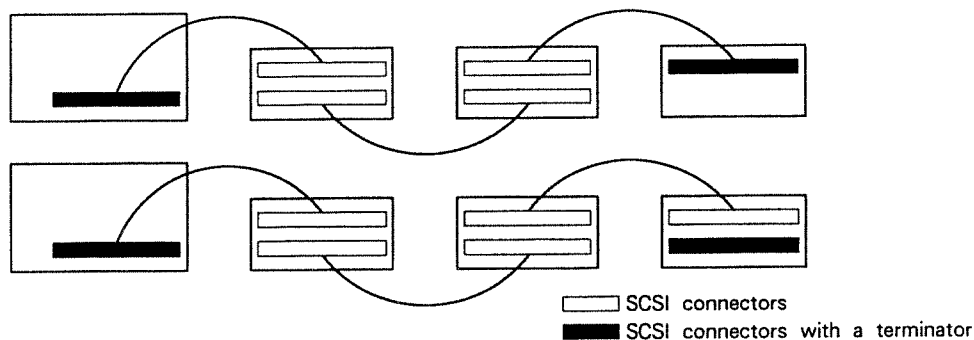
Caution!

The RS - 232C type connector is used for 25 - pin SCSI connectors. Never use improper cables or connect an incompatible unit to the SCSI port, as these can cause problems.

Terminator

A terminator is a resistor installed in the SCSI devices which are at the ends of the chain.

Terminators installed on devices in the middle of the chain must be removed.



There are two types of terminators; external and internal.

The external type is inserted into the SCSI connector of the SCSI device.

The internal type is installed in the main controller board of the SCSI device. There are some SCSI devices with internal types that allow you to use DIP switches to turn the terminator on and off.

The terminator of the SP - 700 is an internal type. When creating a SCSI chain, install (turn on) or remove (turn off) the terminator as necessary. (The terminators are installed at the factory.)

Terminators are usually installed in SCSI devices which can only be connected at the end of a chain (devices with one connector).

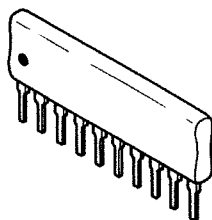
Refer to the owner's manual of your device for information on installing/removing (turning on/off) the terminator.

* There are some SCSI devices which have built - in terminators. Do not install an external terminator on such a device.

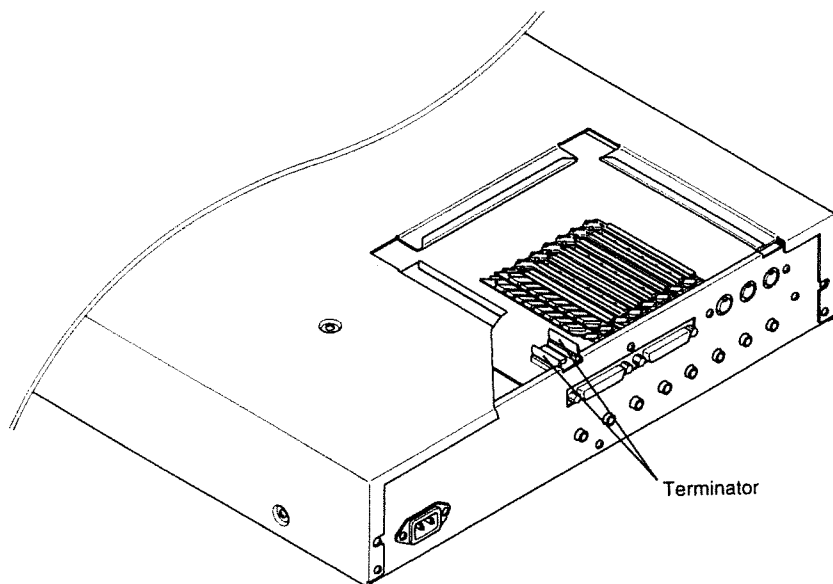
Removing/Installing the SP - 700's Terminator

*During operation, the temperature of the wave memory circuits becomes relatively high. Because of this, you should wait 30 minutes or so after turning off the power before attempting to remove/install the SCSI terminator.

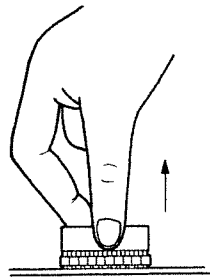
A single terminator for the SP - 700 is made up of two resistors. Be sure to remove/install both resistors.



- 1.** Turn off the unit and unplug the power cord. Let the unit cool for at least 30 minutes.
- 2.** Remove the top panel.

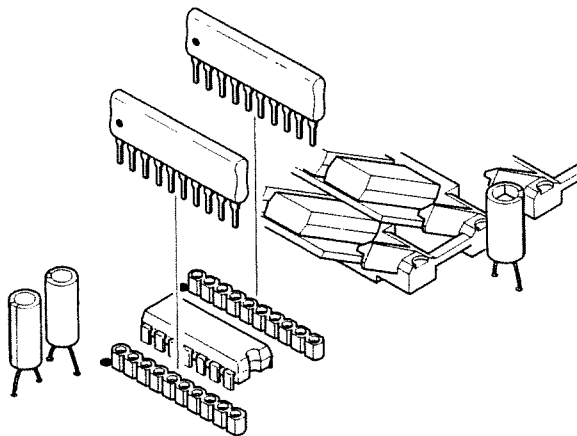


- 3.** Remove the terminator (two resistors) as shown in the illustration.



- * Pull up vertically on the terminator.
- * Store the resistors in a safe place.

Install the terminator (two resistors) as shown in the illustration.



A "●" mark appears near the socket into which the terminator is inserted. The same "●" mark appears on the terminator itself. Install the terminator by matching these marks. The connection will not function if these marks are not aligned properly.

- * Be careful not to bend or break the pins of the resistors.

- 4.** Replace the cover after installing the terminator.

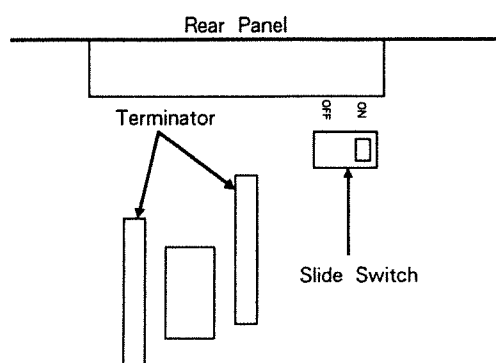
Terminator Power

Terminators are installed in the devices at both ends of a SCSI chain. These must be powered by a 5 - volt power source.

The SP - 700 provides for the supply of power to its internal terminator. Additionally, it sends out power on the SCSI bus (for use by external SCSI devices). This provision of power for the SCSI bus is a feature which was set to "On" when the unit left the factory, but you can also turn it "Off" whenever necessary. Therefore, no additional settings need be made to any of the SCSI devices in the SCSI chain.

Turning ON/OFF Output of Terminator Power

The slide switch located next to the terminator is used to select whether or not you wish to have power for a terminator to be output on the SCSI bus.



ON : Power will be output on the SCSI bus.

OFF : No power will be output on the SCSI bus.

* For instructions on how to remove the cover, and other important information, please refer to "Removing/Installing the SP - 700's Terminator" (⇨ P.App. - 9).

How to Connect the SCSI Chain

Generally, the order in which the SCSI devices (including the SP - 700) are connected does not matter, as long as you consider whether they contain terminators or not, and that all the SCSI devices are powered on. However, it is recommended that you put those SCSI devices with terminator DIP switches in the middle of the chain. This is simply because their terminators are easily turned on and off.

Format

When connecting external devices (except a CD-ROM drive or streaming tape backup), disks or cartridges which have been newly purchased or have been used for something else, must be formatted by the SP-700 so that data can be stored on them. (External SCSI devices which have been used by the S-770/750 can be used without being formatted.)

The SP-700 can format the disks in the current drive (the presently selected disk drive for transferring data to and from the SP-700) via SCSI. See P.Disk - 28 for details.

* There is a compatibility problem of the sound data for external SCSI devices used by S-770/750s. See P.Edit - 9 for details.

* The format systems differ between the SP-700 and personal computers. Therefore, even if these are part of the same SCSI chain, it is impossible for the two devices to share the same area within a disk or to check the data in the other's disk.

In addition to reading the points described above, you should also refer to the section "SCSI Devices Which can be used when Turning the Power On."

SCSI Devices Which can be used when Turning the Power On

At power up, the SP-700 determines whether the connected SCSI devices can be used or not.

It starts checking from device number (SCSI ID) 0. The SCSI device with the device number which is registered by the System Initial Drive parameter (⇐ P.Sys - 8) becomes the current drive (the presently selected drive for transferring data to and from the SP-700).

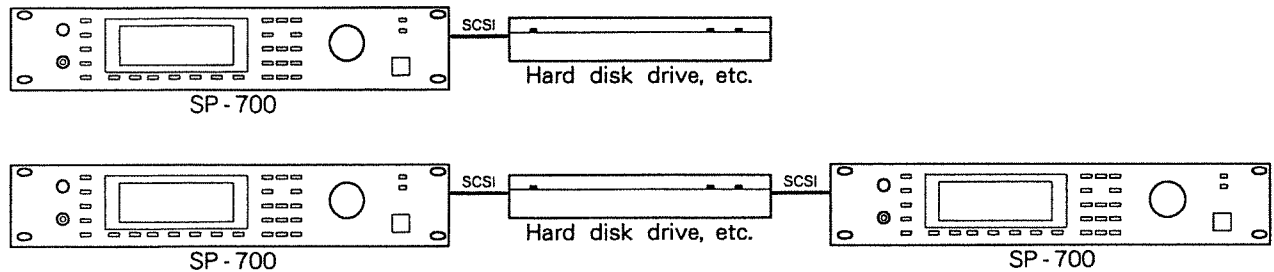
Therefore, the device number of the SCSI unit to be used when the power is turned on can be set by the Initial Drive parameter. The Initial Drive parameter is set to 0 at the factory. For the convenience of this explanation, please set the device number of the CD-ROM drive to 0.

* The current drive can be freely switched even after turning the power on (⇐ P.2 - 8, P.Disk - 3).

* See P.1 - 7 for information on turning on the power of the SP-700 and the SCSI device.

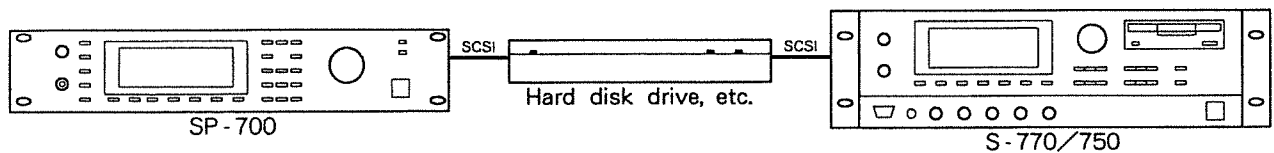
Sharing a Hard Disk with the S - 770/750 (SYS - 772 Version 2.0)

In addition to hard disks formatted for the SP - 700 itself, the SP - 700 can also use hard disks formatted for the S - 770/750 (SYS - 772 Version 2.0).



No particular problem should arise with the connection examples shown above.

However, care should be taken when sharing a single hard disk between the SP - 700 and the S - 770/750 (SYS - 772 Version 2.0), as shown below. This is because new parameters have been added to the SP - 700 (⇐ P.Edit - 9).



The following precautions should be taken when using the system shown above.

Suppose that you have edited sound data on the SP - 700 and saved it to the hard disk. After that, you have loaded the sound data to the S - 770/750 and edited it on the S - 770/750. Then, you saved the twice - edited data back to the hard disk (overwriting the original data). A part of the sound data (that of the parameters added to the SP - 700) is now changed to the default (or initial) values.

To avoid this situation, change the name of the sound data (Volume ID) edited on the S - 770/750 before saving it.

Alternately, edit the sound data from the S - 770/750 first and save it to the hard disk. Then edit the sound data on the SP - 700 and save.

Caution!

Please take note of the following if you plan to use the SP - 700 and an S - 770/750, or two SP - 700s. You must never perform any operation that requires disk access (commands in the Disk Mode, such as Save/Load) on more than one of your units at the same time. Otherwise, the units may fail to operate.

Always make sure to allow the disk to work on one disk access at a time. You will need to watch and make sure that a previous access operation has been completed before you proceed and give a command on one of the other units (whether it be a second SP - 700 or an S - 770/750) that also requires a disk to be accessed.

Powering up a Complex System

Carefully follow the instructions and steps below when turning the power on and off in a system containing an S - 770/750 or a second SP - 700.

Turning on the power

Be sure to check the following points before turning the power on.

- Are the SCSI ID and terminator of the SCSI device set correctly? (⇐ P.App. - 6)
Assign different SCSI IDs to all connected SCSI devices.
- Are the SCSI device, audio equipment and MIDI devices correctly connected? (⇐ P.1 - 2)
- Is the volume of connected audio equipment (such as an amplifier) turned down?

- 1.** Turn on the SCSI device containing the terminator.
* Do not turn on the power of the two SP - 700s, or the SP - 700 and the S - 770/750 yet.
- 2.** Turn on the SCSI devices not containing terminators.
Wait for a short while until all drives have properly started up. Be sure to turn on the power of all connected SCSI devices, even if there are some which will not actually be used during the session.

* Do not turn on the power of the two SP - 700s, or the SP - 700 and the S - 770/750 yet.
* For SCSI devices such as a CD - ROM drive, optical disk drive, or streaming tape drive, for which a disk or tape has to be inserted, insert the disk or the tape after step 1 and 2 (after turning on the power).
- 3.** Turn on the two SP - 700s, or the SP - 700 and S - 770/750. The order in which these are turned on does not matter.
- 4.** Execute the Scan command on the two SP - 700s or the SP - 700 and S - 770/750.
(⇐ P.1 - 8, P.Disk - 45)
- 5.** Press **DISK** to select the Disk Mode page.
- 6.** Press **F1** (Load) to select the Disk Load page.
- 7.** Move the cursor to the current drive (CD) using the cursor buttons.
The **LIST** indicator will be green.
- 8.** Press **LIST** to select the Select Drive page.

9. Press **[F5]** Scan to execute the Scan command.

* See the owner's manual of the S - 770/750 for information on executing the Scan command.

10. Press **[PERFORMANCE]** to select the Performance Mode page.

11. Turn on the connected MIDI device.

12. Finally, turn on the connected audio equipment and set the volume at an appropriate level.

Turning off the power

Be sure to check the following points before turning off the SP - 700 or the S - 770/750.

→ Have you saved all sound data and System data which you want to keep? (→ P.Disk - 7 and P.Sys - 32)

* See the owner's manual of the S - 770/750 for information on executing the Save command.

→ Have you set the volume of the audio equipment to minimum?

Be sure to park the heads of the connected SCSI devices by executing the Park Heads command.

1. Press **[DISK]** to select the Disk Mode page.

2. Press **[F5]** (Util) to select the Disk Utility page.

3. Press **[F2]** (ParkHds) to execute the Park Heads command.

"Now Working" is indicated at the top right of the display. The Park Heads operation is complete when "Complete" appears in the display.

* This operation also parks the heads of the built - in hard disk of the S - 770.

4. Turn off the audio equipment.

5. Turn off the MIDI device.

6. Turn off the SCSI device(s).

* You should wait at least 30 seconds before moving a SCSI device after turning off the power.

* The heads of a hard disk remain parked until the next time the power is turned on. Turning on the power automatically engages the heads.

7. Finally, turn off the two SP - 700s or the SP - 700 and S - 770/750.
The order in which these are turned off does not matter.

ADJUSTING THE LCD CONTRAST

If it is difficult to read the display, you can adjust the contrast in the LCD Contrast page.

1. Press **HOME** while holding down **SHIFT** to select the LCD Contrast page.

The **SHIFT** indicator will light (red) and the **HOME** indicator flashes (red).

* When the **SHIFT** indicator is red (☞ P.3 - 12), select the LCD Contrast page by pressing **HOME**.

* When the indicators of **COMMAND**, **NAME**, **LIST** and **MARK** are red, the LCD Contrast page cannot be selected.

Press **EXIT** or **PERFORMANCE** to return to the normal display page.

2. Adjust the contrast by rotating the **VALUE/CURSOR** dial.

3. Press **EXIT** or **PERFORMANCE** after completing the adjustment.

* The LCD Contrast parameter is a System parameter. The data is lost if you turn off the unit without saving it. (☞ P.Sys - 32).

HOW TO CREATE SOUND PROGRAMS

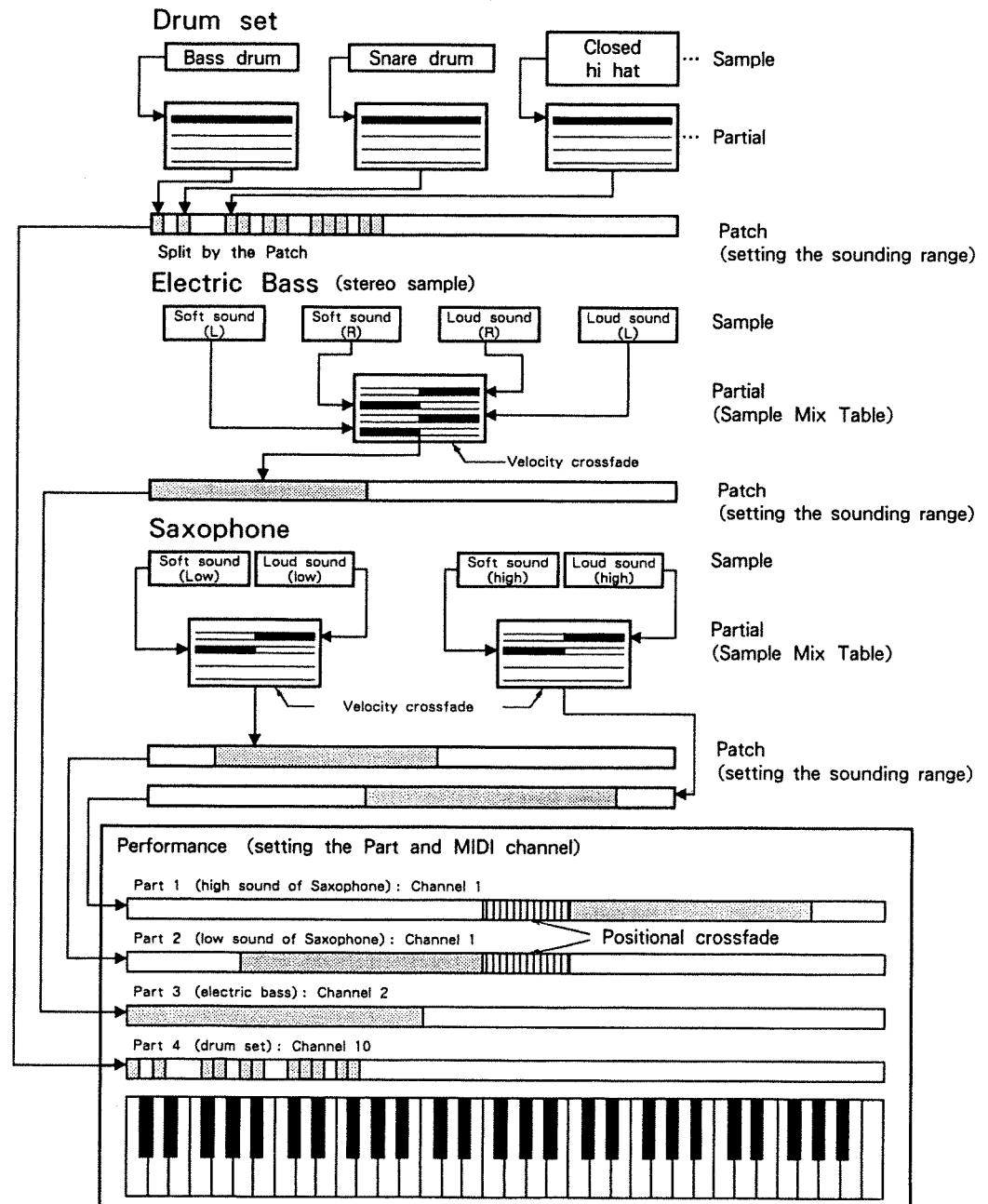
(SPLIT AND POSITIONAL CROSSFADE)

The SP - 700 is a device designed specifically for loading existing sound data and playing it back. It can, however, also be used to edit Sound programs. (However, actual sampling cannot be done.) It can assign several Sound programs (Partials) to the keys of a keyboard and control the different Sound programs (samples) by velocity data.

* Refer to P.Pfom - 1, P.Pach - 1 and P.Prtl - 1 for details on editing Sound programs.

Example of Creating a Sound Program

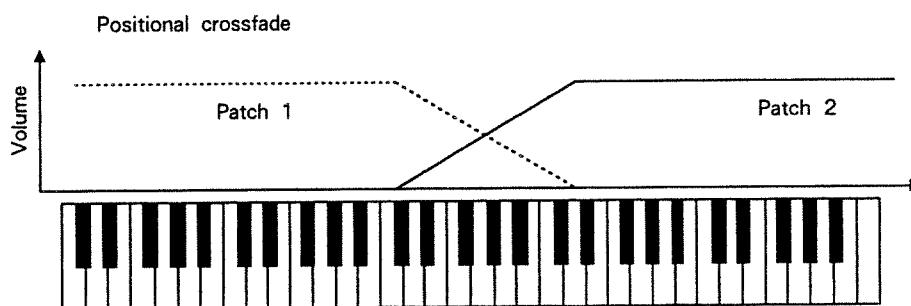
The example below combines a drum set, electric bass and saxophone. The SP - 700 can set two kinds of splits; one is a standard keyboard split (set by Patch or Performance), and the other is done by positional crossfade (set for a Performance).



* Refer to P.Pfom - 7 and P.Pach - 7 for the actual operation instructions for the Split and Crossfade functions.

About each Sound program

The saxophone uses positional crossfade on two Patches in a Performance. Positional crossfade is one way of splitting the sound range. By crossfading the sound volume of each Patch around a split point, a smooth sound change can be achieved.



The split can be set at either the Patch or Performance level; however, the positional crossfade can only be set at the Performance level.

When combining many percussion sounds (like those of a drum set), they are split at the Patch level. When combining the separate sound elements of a musical instrument like a saxophone (for example, the breathy attack and the sustained tone), the positional crossfade is done at the Performance level. In this case, set the Parts of these elements that are to be combined to the same MIDI channel.

* Since the MIDI channels of the Parts are the same, each Part is switched to the same Patch when receiving a Program Change message, and the Sound program which was made by the addition of Parts will be lost. In order to avoid this, change the Performances using a Program Change message. (☞ P.4 - 13, "Changing Performances.")

Let's take a closer look at the structure of each sound.

【Drum Set】

Assign the sample of each percussion sound (such as bass drum, snare and closed hi hat) to each Partial. In order to create a stereo image, set the Pan (the stereo position of the sound) for each Partial. Set (split) the sounding range of these Partials within the Patch, and make the drum set. Finally, assign the Patch (of the drum set) to a Part of the Performance.

【Electric Bass】

In order to have the sound of the electric bass change according to playing velocity, stereo samples are used for the soft sound and loud sound. These four samples are assigned to Partials. In order for the Sound program to change naturally with velocity changes, the soft and loud samples are velocity crossfaded (⇐ P.Prtl - 11) by the Sample Mix Table. Assign this Partial to a Patch, then assign this Patch (made by setting the sounding range of the bass) to a Part of the Performance.

【Saxophone】

The Sound program of the saxophone changes depending on the loudness of the sound or the sound range. Therefore, a low sound and high sound when blowing softly, and a low sound and high sound when blowing hard have been sampled.

Next, make a pair of soft sounds and a pair of loud sounds, then assign these two pairs to two Partials. In order for the Sound program to change naturally with playing velocity, the soft and loud samples are velocity crossfaded by the Sample Mix Table. Set the sounding range for each Patch, and finally, combine the two Patches in the Performance. Each Patch is now assigned to a different Part (with the same channel) and the sounds that overlap each other are positionally crossfaded.

* The stereo position of the sound depends on whether the Pan of the low sound Partial and of the high sound Partial are sent to the left and right respectively.

TROUBLESHOOTING

The following provides some solutions for a range of problems that could possibly be encountered while using the SP - 700.

PROBLEMS WITH THE SOUND

Sound Not Produced

- Have you checked to make sure that all audio and MIDI cables are connected properly?
- Are you sure that the volume on your amplifier or mixer is not turned down too low?
- Have you checked the settings affecting the volume produced by the SP - 700?

Once again, check through the following items.

Position of the Volume knob.

System setting for the Master Level (⇐ P.Pfom - 2, P.Sys - 3).

Part Level set for each of the Parts (⇐ P.Pfom - 4).

Patch Level set for each of the Patches (⇐ P.Pfom - 5, P.Pach - 3).

Partial Level set for each of the Partial (⇐ P.Prtl - 4).

Sample Level set for each of the Samples (⇐ P.Prtl - 9).

- Are the MIDI channels matched properly?

Check the channels you have set for the connected MIDI controller, and the receive channels you have set for each of the Parts. The settings in effect on the SP - 700 can be checked from the Performance Play page (⇐ P.Pfom - 4). You should also check to see if MIDI messages are being properly received, by checking the MIDI indicator, and the MIDI monitoring page (⇐ P.Pfom - 18).

- Have you selected the appropriate output jacks?

Check the settings you have for the Output Mode (⇐ P.Sys - 3), and the output assignments in effect for Performances/Patches/Partial (⇐ P.Pfom - 5, P.Pach - 4, P.Prtl - 5). For an explanation, refer to "Signal Flow" (⇐ P.2 - 23).

- Are you sure Exclusive messages are not being received?

The unit cannot produce sound while it is receiving Exclusive messages. You may want to turn OFF the System Exclusive reception switch (⇐ P.Sys - 16), if you are certain that there is no need to receive such messages.

- Did you make sure the size (in seconds) of the sound data you loaded was not too large to fit in the available space at the targeted Volume Memory?

If the data was too large, it most likely was impossible to load all of the sample itself. However, the Performance/Patch/Partial will have been loaded, and as a result their names are displayed. To see if this is the case, check the size of the sound data from the select Sound program page. Is it "0" seconds?

- Have you performed a Listen Delete? (⇐ P.Pfom - 49).

The Patch might have been initialized.

Pitch Is Strange

- Could the Master Tune setting have strayed? (⇐ P.Sys - 3).

- Have you checked to make sure the settings you have made for Octave Shift (⇐ P.Pfom - 6, P.Pach - 4) and Coarse Tune/Fine Tune (⇐ P.Pfom - 6, P.Pach - 4) for each of the Patches are appropriate?

- Could you have Analog Feel (⇐ P.Pfom - 6, P.Pach - 5) for any of the Patches set to the maximum?

- Do you possibly have inappropriate settings made for Pitch Key Follow (⇐ P.Prtl - 7) for any of the Partial?

- Do you possibly have inappropriate settings made for Coarse Tune/Fine Tune (⇐ P.Prtl - 5) for any of the Partials?
- Do you possibly have inappropriate settings made for Sample Coarse Tune/Fine Tune (⇐ P. Prtl - 8) for any of the Partials?
- Are you sure you have the appropriate settings made for Envelope Pitch Depth (⇐ P. Partl - 20) for each of the Partials?
The pitch will change in accord with the settings for the TVF envelope.
- Could a pitch bend still be in effect?
On occasion, when playing a sequencer and a reset has not been performed, the pitch could remain changed (the pitch remains high and does return to normal).

The Expected Effect Is Not Obtained From A Control Message (Pitch Bender, Modulation, Aftertouch, or others such as Breath)

- Could it be because you have the reception switch in the MIDI Filter page (⇐ P.Pfom - 10) turned OFF?
Check to see if you have the settings for controllers set correctly for every Patch (⇐ P.Pach - 13).

Velocity Not Expressed As Expected

- Check to make sure the controller you have connected actually provides control over Velocity.
- Are you sure you have made the correct settings for the Velocity Curve (⇐ P.Pfom - 14) in the MIDI Filter page?
- Could you possibly have inappropriate settings made for Velocity Sens Offset (⇐ P.Pach - 6) for any of the Patches?
- Could you possibly have inappropriate settings made for the TVA and TVF Velocity Curve/Velocity Curve Sens (⇐ P.Prtl - 23, P.P.Prtl - 24, P.Prtl - 18, P.Prtl - 19) for any of the Partials?
- Could you possibly have inappropriate settings made for Velocity Sens & Level Key Follow (⇐ P.Prtl - 25, P.Prtl - 26, P.P.Prtl - 20, P.Prtl - 22) for the TVA and TVF Envelope/Envelope Time for any of the Partials?

No Patch selection via Program Change Message

- Could you possibly have the channels for any of the Parts (⇐ P.Pfom - 4) set incorrectly?
If the channel is set to the same number as the Control Channel, Patch changes cannot be obtained (⇐ P.Sys - 11).
- Do you have Program Changes turned ON in the MIDI Filter page (⇐ P.Pfom - 10)?
- Could you possibly have the same Program Number assigned to several Patches (⇐ P.Pfom - 29)?
- Have you made a Patch change while either the Performance Mode or Performance Play page is open?
You need to be in one of the above pages. Sound changes cannot be made from pages within the Edit mode (Patch Edit or Partial Edit Mode pages), nor can they be made from the various other pages (such as the Command, ASCII Keyboard, or Select pages).

No Volume Memory, Volume, or Performance selection via Program Change Messages

- Could you possibly have the Control Channel (⇐ P.Sys - 11) set incorrectly?
- Are you sure you have made the correct settings for the Control Mode (⇐ P.Sys - 11) ?
- Could you possibly have the Volume's Program Number (⇐ P.Disk - 27) set to OFF (— — —), or have the same Program Number assigned to more than one Volume?
- Could you possibly have the same Program Number assigned to several Performances (⇐ P.Pfom - 27)?
- Have you made a change in the sound while either the Performance Mode or Performance Play page is open?

Sound changes cannot be made from pages within the Edit mode (Patch Edit or Partial Edit Mode pages), nor can they be made from the various other pages (such as the Command, ASCII Keyboard, or Select pages).

For details, refer to "Making Changes in the Sound" (⇐ P.4 - 12).

Sounds Are Left Out

- The SP - 700 is only capable of playing a maximum of 24 voices at the same time. Sounds in excess of this will not be played. Check on the number of voices being used from the Module Monitor page (⇐ P.Pfom - 17).
- Could the Assign Type (⇐ P.Pach - 9) for the sound which has not been sounded possibly be at "Exc1" through "16," or be set to "Mono"? If the Assign Type is set to anything other than "Poly," sounds that were sounding will be canceled out when other affiliated Partials start sounding.
- Have you excessively employed Positional Crossfades (⇐ P.Pfom - 7) or Velocity Crossfades (⇐ P.Prtl - 11).

Maximum polyphony will be reduced considerably within all crossfade regions.

The Timing Of Sounds Is Off

- Have you made the setting for Phase Lock (⇐ P.Pfom - 13), when you have identical channel settings for a multiple number of Parts which are being sounded together?
- Do you have a number of MIDI devices connected between the SP - 700 and the controller, linked by means of MIDI THRU? You should be aware that if any unit is placed too far down the line in a MIDI chain, you will not only encounter delays in sound production, but errors in the data content could also occur. Try using a MIDI Thru Box instead (⇐ P.1 - 3).
- Could you have possibly made inappropriate settings for the Key Follow for the TVA and TVF Envelope Time, and other Envelope settings for any of the Partials (⇐ P.Prtl - 25, P.Prtl - 26, P.Prtl - 21, P.Prtl - 22)?
- Note that the length of a particular piece of data will change when the pitch is changed for playback. As a result, it will take a little longer for the attack portion to be realized with pitches that are lower than the original key; and conversely, the attack of higher pitched sounds will be faster. So some variances in the timing of the attack should be expected, depending on the sound. If you wish, you can correct such variances to some extent by splitting the sound into separate, independent Partials (⇐ P.Pach - 7). However, you can eliminate most problems entirely by listening to and carefully adjusting each of the notes, so as to achieve just the right timing (as you input them by means of Step Recording into a sequencer).

PROBLEMS WITH DRIVES

Commands Directed To A Drive (Load/Save/Copy/Delete) Do Not Work

- Check all settings related to SCSI (including SCSI IDs), and check that cables, terminators, and all other elements of your SCSI chain are configured appropriately. For details, refer to "About SCSI" (⇨ P.App. - 6).
- Did you change the disk or tape in a drive? After every change to another disk or tape, or at any other time when the drive is no longer recognized, you should always execute the Scan command from the Select Drive page.
- Are you sure the drive you have selected is capable of performing the command you requested? A CD-ROM drive or streaming tape backup device will not accept certain commands.

Other Sound Data Was Corrupted When Sound Data Was Deleted From A Disk

- Did you have the Fast Delete Mode ON?
If you inadvertently erase lower region sound data that is used by more than one upper region sound, all of such upper region sound data (that using the data that was erased) will be corrupted. When the Fast Delete mode is OFF, you can check the sound data's relationship with other data before performing a deletion from the disk. This way, you can proceed without adversely affecting other sounds and their sound data (⇨ P.Sys - 8).

Although A Patch Was Deleted To Create Free Space, The Available Space Reading For The Current Drive Has Not Changed

- The reason for this could be that you have the Fast Delete Mode OFF (⇨ P.Sys - 8), and the sample associated with the Patch is also used by some other Patch (⇨ P.2 - 9). In situations such as this, the samples on the drive will not be erased, so the available space reading for the drive will not change.
- * If you should switch the Fast Delete Mode ON, and then carry out the deletion, you will obtain an increase in the amount of available space, but you also risk destroying other sound data. The best policy to follow when you need to create free space is to have the Fast Delete Mode OFF, then carefully select for deletion from the disk only those Patches which you have confirmed will not adversely affect other sound data.

Sound Not Produced Even Though It Was Loaded

- Have you checked to make sure it wasn't loaded into the other Volume Memory?

Cannot Load Into Volume B Memory

- Check to make sure that you have the parameters for Volume A set properly.
(⇨ P.Sys - 5)

Quick Load Cannot Be Carried Out

- Check to make sure that the Drive Number (SCSI ID) of the sound is matched with the SCSI ID of the drive on which the sound is contained. Care should be taken with CD-ROM drives and magneto-optical disks, since the disk on which the sound is located could have been inserted into a different drive, and as a result, can't be loaded. As a solution, either change the number of the drive containing the sound, or reinsert the disk and execute the Scan command.

Parameters Added For The SP - 700 Have Reverted To Their Defaults When Sharing Sound Data On A Hard Disk Also Used With The S - 770/750

- Although you can share a hard disk between the SP - 700 and the S - 770/750 (SYS - 772 Version 2.0), certain restrictions apply. For details, refer to "Sharing a Hard Disk with the S - 770/750 (SYS - 772 Version 2.0)" (⇐ P.App. - 13).

VARIOUS OTHER PROBLEMS

Power Accidentally Turned Off During Editing

- All data located in internal memory that had not been saved will be lost.
(There is no way that it can be restored.)
As a precaution against such accidents, try to save your data frequently, and at regular intervals.

Power Accidentally Turned Off While Saving To Hard Disk

- All data that was stored on the hard disk will be corrupted. In certain cases, all sound data on the drive will have been destroyed, so an initialization will not be sufficient; you will need to start over by reformatting the disk.

Power Accidentally Turned Off While Saving System Data To System Backup Memory, Or While Backing Up The Volume Onto Volume Backup Memory

- All of the SP - 700's System Data will revert to their original settings, the ones in effect when the unit was first purchased.

Performance Play Page Does Not Appear After Power Is Turned On

- Check that all settings related to SCSI, and all connections have been made correctly. For details, refer to "About SCSI" (⇐ P.App. - 6).
- The SP - 700 cannot start up if all of its wave memory has been eliminated. Always make sure to have installed the 8 MBytes of wave memory.

Exclusive Data Cannot Be Recorded/Loaded During A Volume Dump/System Dump

- ➔Have you checked to make sure the sequencer you are using is capable of recording Exclusive data?
 - ➔If loading, do you have the Device ID set to the same number as you did when recording?
 - ➔If loading, are you playing the MIDI sequencer at the same tempo (or slower) you used when recording?
 - ➔If loading, do you have either the Performance Mode or Performance Play page open?
With one of these pages open, cancel play or whatever command that was given.
 - ➔Are you following the same disk order that was used when recording, while you are loading (performing a Volume Dump)?
 - ➔If carrying out a Volume Dump, have you changed the name of any of the samples?
Any samples which have been given different names will not be loaded.
 - ➔If loading (carrying out a Volume Dump), do you have the drive containing the samples to be loaded selected as the current drive?
 - ➔If carrying out a Volume Dump, do you have an appropriate setting made for the amount of data to be sent in each transmission packet (interval)?
- For further information about Volume Dumps/System Dumps, see P.Sys - 16.

Volume Recover/Backup Cannot Be Performed

- ➔Have you changed the name of any of the samples?
Any samples which have been given different names cannot be loaded.
 - ➔If carrying out a Recover, have you marked the drive containing the samples you would like to load (drive you wish to scan)?
- For further information about Volume Recovers/Backups, see P.Sys - 36.

ERROR MESSAGES

The following provides explanation for the unit's Error Messages (such as SCSI ID Errors), and provides some solutions for them.

SPC Hardware Error

The LSI governing SCSI is faulty.

Target ID Error

SCSI ID Error

Self ID Error

The SCSI ID settings are in error. Check and reset if necessary.

SCSI Device Error

A futile attempt has been made to save/copy/delete data on a CD-ROM drive. Or, a load/save/delete has been attempted with respect to a streaming tape backup device.

Such procedures cannot be performed with the above types of drives.

Can't Communicate

Either "No Drive" is selected as the current drive, or the SCSI cable has been disconnected, and as a result communication with the drive is impossible. Check the settings and connections, then execute the Scan command from the Select Drive page.

Arbitration Failed

Bus Free Waiting

Interrupt Error

Phase Error

Check Condition

Busy Status

Status Error

Message Error

No_define sense

Satisfactory communications with the SCSI drive could not be achieved. Check the connections, then execute the Scan command from the Select Drive page.

Not Formatted

The SCSI drive has not been formatted for use with the SP - 700 or S - 770/750. If the error has appeared for a drive which you are certain has been formatted for the SP - 700 or S - 770/750 (excluding streaming tape backup devices), check the connections, then execute the Scan command from the Select Drive page.

MEDIUM ERROR

Abnormalities have been found in the media in the SCSI device. The drive may be usable after it has been reformatted (initialization is not sufficient).

HARDWARE ERROR

The SCSI drive is faulty. Please contact the manufacturer of the device for advice.

ILLEGAL REQUEST

ABORTED COMMAND

A command sent by the SP - 700 to the SCSI drive is apparently not supported by that drive, and as a result was rejected. Any SCSI drive that presents this problem cannot be used with the SP - 700 system.

Caddy not inserted

NO DISK

No media has been inserted into a removable - media drive (CD-ROM or magneto - optical disk drive). Insert a disk.

WRITE PROTECT

The disk is set so it cannot be written onto.

NOT READY

The SCSI drive is not ready for operation.

TOC reading

The CD - ROM drive is getting ready for operation (it is reading the TOC (Table of Contents)).

HD MODE ERROR**CD MODE ERROR****Not 512 byte/sector**

The media in the SCSI drive is not configured to have sectors that are 512 bytes in size.

The SP - 700 can only work with media having 512 - byte sectors.

NOT DATA DISK

An audio CD has mistakenly been inserted into a **CD - ROM** drive.

Canceled

Execution of the command has been canceled.

File Not Found

The selected file (sound data) does not exist.

No Name**Please Rename**

Either the file (sound data) does not yet have a name, or an existing file already has the same name. Supply a new name for the file.

Not S550/W - 30 Disk

An unsuccessful Convert Load was attempted using an HD/CD - ROM disk that is not compatible with the S - 550 or W - 30.

No Data/Wrong Data

There is no data on the tape in the streaming tape backup device.

End of Tape

The end of the tape in the streaming device tape backup unit has been reached.

Directory Full

During loading or saving, the maximum permissible number of sound data items has been exceeded, for either Volume Memory or a SCSI drive. Loading/saving cannot be carried out once the maximum number has been exceeded.

Disk Memory Full

During a save process, the unit found that there was insufficient free space on the hard disk/magneto-optical disk.

Wave Memory Full

During loading, the unit found that there was insufficient free space in the wave memory.

Can't Execute

The requested command could not be carried out.

PARAMETER LISTS

System Parameters

Group	Parameter		Display	Values	Page
System Parameter	Current Volume Memory		Current Vol Memory	A, B	System Mode
	Master Tune		Master Tune	- 50—50	System Parameter
	Master Level		Master Lev	0~127	
	Output Mode		Output Mode	4st, MIX, 1st + 6outs, 8outs	
	Initial Volume		Init Vol	Off, 65—128	
	Load While Playing		Load/Play	Off, On	
	Shift Lock		SHIFT Lock	Off, On	
	Time Display		Time Disp	Off, On	
	Volume A		Volume A	1—	
	SP-700 self SCSI ID		SP-700 Self SCSI ID	0—7	System SCSI
	Initial Drive SCSI ID		Initial Drv SCSI ID	0—7	
	Fast Delete Mode		Fast Delete Mode	Off, On	
	Overwrite Switch		Overwrite Sw	Off, On	
	Control Channel		Control Channel	Off, 1—16	MIDI Control
	Control Mode		Control Mode	Perf, Perf/Volum, Perf/Volum2	
	EQ	High Frequency	H. F	Off, C. Chg1—95	MIDI EQ Control
		High Gain	H. G	Off, C. Chg1—95	
		Low Frequency	L. F	Off, C. Chg1—95	
		Low Gain	L. G	Off, C. Chg1—95	
	Device ID		Device ID	0—31	MIDI Volume Dump/MIDI Sample Dump
	System Exclusive Reception		Exclusive RX	Off, On	
	LCD Contrast		LCD Contrast	- 63—63	LCD Contrast
Quick Load	Volume List (Up to 32)	Volume Name	Name	Volume Name	Quick Load
		Drive Number	Drv	0—7	
	Performance List (Up to 32)	Performance Name	Name	Performance Name	
		Drive Number	Drv	0—7	
	Patch List (Up to 32)	Patch Name	Name	Patch Name	
		Drive Number	Drv	0—7	
Volume ID	Volume ID List (Up to 200)		List	The first three letters of the sound name	Select Volume ID
Mark Set	Mark Set List (Up to 10)		F1 ~ F5	Page Name	Mark Set
Template	User Set List (Up to 10)		User Set	Partial Name	Template

Disk Parameters

Parameter	Display	Values	Page
Disk Name	Disk Name	12 letters	Select Drive
Program Number of Volume	PG#	— — — , 65—128	Disk Utility

Volume Parameters

Parameter	Display	Values	Page
Volume Name	Volume Name	15 letters (Volume ID+Name)	System Volume ID

Performance Parameters

	Parameter	Display	Values	Initial Values	Page
Part 1—32	Performance Name	Performance Name	15 letters (ID + Name)	space	Performance Play
	Part Channel	Ch	1—16, —	1—16 (Part 1—16), — (Part 17—32)	
	Patch Select	Patch Name	Off, 1—128	Off	
	Part Level	[Lev]	0—127	127	
	Part Pan	[Pan]	L32—0—R32	0	
	Part Output Assign	[Out]	(), A—D, 1—8	A	
	Lower Key Point	L.P	A0—C8	A0	
	Upper Key Point	U.P	A0—C8	C8	
	Lower Fade Width	L.W	0—	0	
	Upper Fade Width	U.W	0—	0	
Channel 1—16	Program Change Reception	Prog	— , 0	0	Pform MIDI Filter
	Pitch Bend Reception	Bend	— , 0	0	
	Modulation Reception	Mod	— , 0	0	
	Hold Reception	Hold	— , 0	0	
	Aftertouch Reception	A.T	— , C,P	C	
	Volume Reception	Vol	— , 0	0	
	Pan Reception	Pan	— , C,D	C	
	Phase Lock	P.L	— , 0	—	
	Velocity Curve Type	Vel	— , 1—7	—	
EQ 1—8	High Frequency	H. F	750—18K	6.0k	Performance EQ
	High Gain	H. G	— 12—+12	0	
	Low Frequency	L. F	16—800	120	
	Low Gain	L. G	— 12—+12	0	
	Program Number	PG#	1—64	1—64 (Performance 1—64)	Select Performance

Patch Parameters

Parameter		Display	Values	Initial Values	Page
Patch Name		Patch Name	15 letters (ID+ Name)	space	Patch Common
Patch Level		Patch Level(Lev)	0—127	127	
Patch Panning		Panning(Pan)	L32—0—R32	0	
Patch Output Assign		Out Assign(Out)	A,(B)—(D),(1),(2), 3—8, — P —	— P —	
Patch Priority		Priority(Pri)	Off,On	Off	
Octave Shift		Oct Shift(Oct)	— 2—2	0	
Patch Coarse Tune		Coarse Tune(Coar)	— 48—48	0	
Patch Fine Tune		Fine Tune(Fin)	— 50—50	0	
Analog Feel		Analog Feel(A. F)	0—127	0	
Patch Program Number		Program #(PG#)	1—128	1—128	
Cutoff Offset		CutOff Offs(C. Off)	— 63—63	0	
Resonance Offset		Reso Offs(Reso)	— 63—63	0	
Attack Time Offset		Attack Offs(Attack)	— 63—63	0	
Release Time Offset		ReleaseOffs(Release)	— 63—63	0	
Velocity Sens Offset		V — Sens Offs(Vel)	— 63—63	0	
A0 — C8	Partial Select	Partial Name	Off,1—255	Off	Patch Split
	Lower Key Point	L. P	A0—C8	A0	
	Upper Key Point	U. P	A0—C8	C8	
	Assign Type	Type	Poly, Mono, Exc1—Exc16	Poly	
SMT Control Select		SMT C. Sel	Off,Bend,A.T, Mod,Ctrl	Off	Patch Control
SMT Control Sens		SMT C. Sens	— 63—63	0	
Control Select		Ctrl Select	0—95	2	
Bender	Pitch Bend Up Range	Bend - Up	0—48	2	
	Pitch Bend Down Range	Bend - Down	0—48	2	
	TVF Control	Bend,TVF Control	— 63—63	0	
	TVA Control	Bend,TVA Control	— 63—63	0	
Aftertouch	Pitch Control	A.T,Pitch Control	— 63—63	0	
	TVF Control	A.T,TVF Control	— 63—63	0	
	TVA Control	A.T,TVA Control	— 63—63	0	
	LFO Rate Control	A.T,LFO Rate Control	— 63—63	0	
	LFO Pitch Depth	A.T,LFO - Pitch Depth	— 63—63	35	
	LFO TVF Depth	A.T,LFO - TVF Depth	— 63—63	0	
	LFO TVA Depth	A.T,LFO - TVA Depth	— 63—63	0	
	LFO Pan Depth	A.T,LFO - PAN Depth	— 63—63	0	
Modulation	LFO Rate Control	Mod,LFO Rate Control	— 63—63	0	
	LFO Pitch Depth	Mod,LFO - Pitch Depth	— 63—63	30	
	LFO TVF Depth	Mod,LFO - TVF Depth	— 63—63	0	
	LFO TVA Depth	Mod,LFO - TVA Depth	— 63—63	0	
	LFO Pan Depth	Mod,LFO - PAN Depth	— 63—63	0	
Control Change	Pitch Control	Ctrl,Pitch Control	— 48—48	0	
	TVF Control	Ctrl,TVF Control	— 63—63	0	
	TVA Control	Ctrl,TVA Control	— 63—63	0	
	LFO Rate Control	Ctrl,LFO Rate Control	— 63—63	0	
	LFO Pitch Depth	Ctrl,LFO - Pitch Depth	— 63—63	0	
	LFO TVF Depth	Ctrl,LFO - TVF Depth	— 63—63	0	
	LFO TVA Depth	Ctrl,LFO - TVA Depth	— 63—63	0	
	LFO Pan Depth	Ctrl,LFO - PAN Depth	— 63—63	0	

Partial Parameters

Parameter		Display	Values	Initial Values	Page
Partial Name		Partial Name	15 letters (ID + Name)	space	Partial Common
Partial Level		Partial Lev	0—127	127	
Partial Panning		Panning	L32—0—R32	0	
Partial Output Assign		Out Assign	A,(B)—(D),(1),(2), 3—8	A	
Partial Coarse Tune		Coarse Tune	— 48—48	0	
Partial Fine Tune		Fine Tune	— 50—50	0	
SMT Velocity Control		SMT V. Ctrl	Off,On	On	
SMT Component 1—4	Sample Select	Sample Name	Off,1—512	Off	Partial SMT
	Pitch Key Follow	K.F	— 16/8— — 8/8 —Off—Norm—16/8	Norm	
	Sample Coarse Tune	C.T	— 48—48	0	
	Sample Fine Tune	F.T	— 50—50	0	
	Sample Pan	Pan	L32—0—R32,Rnd, Ky+,Ky — ,LF+,LF — , Alt	0	
	Sample Level	Lev	0—127	127	
	Velocity Low Point	V. L	1—126	1	
	Velocity High Point	V. H	2—127	127	
	Fade Width Low	F. L	0—125	0	
	Fade Width High	F. H	0—125	0	
TVF	Filter Mode	Filter Mode	Off,LPF,BPF,HPF	Off	Partial TVF
	Cutoff Frequency	Cutoff Freq	0—127	127	
	Resonance	Resonance	0—127	0	
	Cutoff Frequency Key Follow	Cutoff KF	— 63—63	0	
	Key Follow Point	KF Point	A0—C8	C4	
	Velocity Curve Type	Vel - Curve	1—4	2	
	Velocity Curve Sens	Vel - C.Sens	— 63—63	0	
	Envelope TVF Depth	Envelope - TVF Depth	— 63—63	63	
	Envelope Velocity Sens	Envelope - Vel Sens	— 63—63	0	
	Envelope Pitch Depth	Envelope - Pitch Depth	— 63—63	0	
	Time Velocity Sens	Time - Vel Sens	— 63—63	0	
	Time Key Follow	Time - Key Follow	— 63—63	0	
	Release Velocity Sens	R. Velo Sens	— 63—63	0	
	Envelope Time 1	Time1	0—127	0	
	Envelope Level 1	Level1	0—127	127	
	Envelope Time 2	Time2	0—127	10	
	Envelope Level 2	Level2	0—127	127	
	Envelope Time 3	Time3	0—127	10	
	Envelope Level 3	Level3	0—127	127	
	Envelope Time 4	Time4	0—127	0	
	Envelope Level 4	Level4	0—127	0	

PARAMETER LISTS

	Parameter	Display	Values	Initial Values	Page
TVA	Velocity Curve Type	Vel - Curve	1—4	2	Partial TVA
	Velocity Curve Sens	Vel - C.Sens	— 63—63	0	
	Level Key Follow	Level KF	— 63—63	0	
	Key Follow Point	KF Point	A0—C8	C4	
	Time Velocity Sens	Time - Vel Sens	— 63—63	0	
	Time Key Follow	Time - Key Follow	— 63—63	0	
	Release Velocity Sens	R. Velo Sens	— 63—63	0	
	Envelope Time 1	Time1	0—127	1	
	Envelope Level 1	Level1	0—127	127	
	Envelope Time 2	Time2	0—127	10	
	Envelope Level 2	Level2	0—127	127	
	Envelope Time 3	Time3	0—127	10	
	Envelope Level 3	Level3	0—127	127	
	Envelope Time 4	Time4	0—127	10	
LFO	Waveform	Waveform	Sin, Tri, SwUP, SwDW, Squ, Rnd, B. Up, B. DW	Sin	Partial LFO
	LFO Rate	Rate	0—127	102	
	LFORate Detune	Rate - Detune	0—127	0	
	LFO Delay	Delay	0—127	0	
	Delay Key Follow	Delay - Key Follow	0—63	0	
	Key Sync	Key Sync	Off,On	On	
	Pitch Modulation Depth	Pitch Depth	— 63—63	0	
	TVF Modulation Depth	TVF Depth	— 63—63	0	
	TVA Modulation Depth	TVA Depth	— 63—63	0	
	Pan Modulation Depth	PAN Depth	— 63—63	0	

Sample Parameters

Parameter	Display	Values	Page
Sample Name	Name	15 letters (Volume ID + Name)	Select Sample
Original Key	Key	A0—C8	

TEMPLATE PRESET LIST

A: Organ
 B: Piano
 C: Brass/Wind
 D: Compress
 E: Percussion Long
 F: Percussion Short
 G: Velocity Strings
 H: Velocity Perc.
 I : TVF Sweep Up/Down
 J: TVF Sweep Down

	A	B	C	D	E	F	G	H	I	J
TVF	Filter Mode	Off	Off	Off	Off	Off	Off	Off	LPF	LPF
	Cutoff Freq	70	70	70	70	70	70	70	50	50
	Resonance	20	20	20	20	20	20	20	20	20
	Cutoff KF	0	0	0	0	0	0	0	0	0
	KF Point	C4	C4	C4	C4	C4	C4	C4	C4	C4
	Vel - Curve	2	2	2	2	2	2	2	2	2
	Vel - C.Sens	0	0	0	0	0	0	0	0	0
	Envelope - TVF Depth	63	63	63	63	63	63	63	63	63
	Envelope - Vel Sens	0	0	0	0	0	0	0	0	0
	Envelope - Pitch Depth	0	0	0	0	0	0	0	0	0
	Time - Vel Sens	0	0	0	0	0	60	63	0	0
	Time - Key Follow	0	10	0	0	0	0	0	0	0
	R. Velo Sens	0	0	0	0	0	0	0	0	0
	Time1	0	0	6	0	0	40	15	64	0
	Level1	127	127	80	127	127	127	127	127	127
	Time2	0	10	6	0	0	0	0	0	0
	Level2	127	80	127	127	127	127	127	127	127
	Time3	0	75	20	5	90	30	40	80	80
	Level3	127	0	110	48	0	127	0	0	0
	Time4	0	10	10	10	90	30	40	40	40
	Level4	0	0	0	0	0	0	0	0	0
TVA	Vel - Curve	2	2	2	2	2	2	2	2	2
	Vel - C.Sens	0	0	0	0	0	0	0	0	0
	Level KF	0	0	0	0	0	0	0	0	0
	KF Point	C4	C4	C4	C4	C4	C4	C4	C4	C4
	Time - Vel Sens	0	0	0	0	0	60	63	0	0
	Time - Key Follow	0	10	0	0	0	0	0	0	0
	R. Velo Sens	0	0	0	0	0	0	0	0	0
	Time1	0	0	6	0	0	40	15	0	0
	Level1	127	127	80	127	127	127	127	127	127
	Time2	0	10	6	0	0	0	0	0	0
	Level2	127	80	127	127	127	127	127	127	127
	Time3	0	75	20	5	90	30	40	0	0
	Level3	127	0	110	48	0	127	0	127	127
	Time4	0	10	10	10	90	30	40	40	40
	Level4	0	0	0	0	0	0	0	0	0

CONTROL CHANGE LIST

Control Number	Function	Control Number	Function
0	Bank Select	64	Hold 1 (Damper Pedal)
1	Modulation Depth	65	Portamento
2	Breath Controller	66	Sostenuto
		67	Soft Pedal
4	Foot Controller		
5	Portamento Time	69	Hold 2 (freeze)
6	Data Entry (using at the RPN/NRPN)		
7	Main Volume		
8	Balance Control	91	Effect 1 Depth
		92	Effect 2 Depth
10	Pan	93	Effect 3 Depth
11	Expression Controller	94	Effect 4 Depth
12	Effect Control 1	95	Effect 5 Depth
13	Effect Control 2		
32	} LSB of 0—31		
:			
63			

REFERENCE

The SP - 700 supports the use of these Control Change numbers: 0, 1, 6, 7, 10, 38, & 64.

Note, however, that any of the Control Change numbers from 0 through 95 can be employed for control over the SMT (Sample Mix Table) of the Partial.

To accomplish this purpose, the following parameters need to be set:

- SMT Control Select for the Patch needs to be set to "Ctrl" (☞ P.Pach - 13).
- A selection needs to be made for SMT Control Sens for the Patch (☞ P.Pach - 14).
 - * If left at "0" control cannot be obtained.
- A Control number from 0 to 95 needs to be selected by means of Control Select for the Patch (☞ P.Pach - 14).

Additionally, any of the Control numbers from 0 through 95 can also be employed for control over the sound of Patches.

- A Control number from 0 to 95 needs to be selected by means of Control Select for the Patch (☞ P.Pach - 14).
- A setting needs to be made for the Pitch Control through LFO Pan Depth for the Patch's Control Change (☞ P.Pach - 16).

Further, any of the Control numbers from 1 through 95 can be employed for control over the various parameters of a Performance's equalization.

- The Control Channel for the System needs to be set (☞ P.Sys - 11).
- A Control number from 1 to 95 needs to be selected in the MIDI EQ Control page (☞ P. Sys - 15).

Roland Exclusive Messages

- * The size of the requested data does not indicate the number of bytes that will make up a DT1 message, but represents the address fields where the requested data resides.
- * Some models are subject to limitations in data format used for a single transaction. Requested data, for example, may have a limit in length or must be divided into predetermined address fields before it is exchanged across the interface.
- * The same number of bytes comprises address and size data, which, however, vary with the Model-ID.
- * The error checking process uses a checksum that provides a bit pattern where the least significant 7 bits are zero when values for an address, size, and that checksum are summed.

#Data set 1: DT1 (12H)

This message corresponds to the actual data transfer process. Because every byte in the data is assigned a unique address, a DT1 message can convey the starting address of one or more data as well as a series of data formatted in an address-dependent order.

The MIDI standards inhibit non-real time messages from interrupting an exclusive one. This fact is inconvenient for the devices that support a "soft-through" mechanism. To maintain compatibility with such devices, Roland has limited the DT1 to 256 bytes so that an excessively long message is sent out in separate segments.

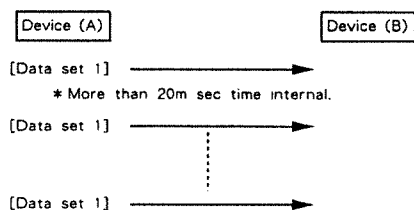
Byte	Description
F0H	Exclusive
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
12H	Command ID
aaH	Address MSB
...	...
...	...
ddH	Data
...	...
...	...
sum	Check sum
F7H	End of exclusive

- * A DT1 message is capable of providing only the valid data among those specified by an RQ1 message.
- * Some models are subject to limitations in data format used for a single transaction. Requested data, for example, may have a limit in length or must be divided into predetermined address fields before it is exchanged across the interface.
- * The number of bytes comprising address data varies from one Model-ID to another.
- * The error checking process uses a checksum that provides a bit pattern where the least significant 7 bits are zero when values for an address, size, and that checksum are summed.

#Example of Message Transactions

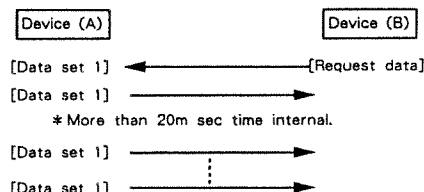
● Device A sending data to Device B

Transfer of a DT1 message is all that takes place.



● Device B requesting data from Device A

Device B sends an RQ1 message to Device A. Checking the message. Device A sends a DT1 message back to Device B.



4. Handshake-Transfer Procedure

Handshaking is an interactive process where two devices exchange error checking signals before a message transaction takes place, thereby increasing data reliability. Unlike one-way transfer that inserts a pause between message transactions, handshake transfer allows much speedier transactions because data transfer starts once the receiving device returns a ready signal.

When it comes to handling large amounts of data--sampler waveforms and synthesizer tones over the entire range, for example--across a MIDI interface, handshaking transfer is more efficient than one-way transfer.

Types of Messages

Message	Command ID
Want to send data	WSD (40H)
Request data	ROD (41H)
Data set	DAT (42H)
Acknowledge	ACK (43H)
End of data	EOD (45H)
Communication error	ERR (4EH)
Rejection	RJC (4FH)

#Want to send data: WSD (40H)

This message is sent out when data must be sent to a device at the other end of the interface. It contains data for the address and size that specify designation and length, respectively, of the data to be sent.

On receiving a WSD message, the remote device checks its memory for the specified data address and size which will satisfy the request. If it finds them and is ready for communication, the device will return an "Acknowledge (ACK)" message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
40H	Command ID
aaH	Address MSB
...	...
...	...
ssH	Size MSB
...	...
...	...
sum	Check sum
F7H	End of exclusive

Otherwise, it will return a "Rejection (RJC)" message.

- * The size of the data to be sent does not indicate the number of bytes that make up a "Data set (DAT)" message, but represents the address fields where the data should reside.
- * Some models are subject to limitations in data format used for a single transaction. Requested data, for example, may have a limit in length or must be divided into predetermined address fields before it is exchanged across the interface.
- * The same number of bytes comprises address and size data, which, however, vary with the Model-ID.
- * The error checking process uses a checksum that provides a bit pattern where the least significant 7 bits are zero when values for an address, size, and that checksum are summed.

#Request data: RQD (41H)

This message is sent out when there is a need to acquire data from a device at the other end of the interface. It contains data for the address and size that specify designation and length, respectively, of data required.

On receiving an RQD message, the remote device checks its memory for the data address and size which satisfy the request. If it finds them and is ready for communication, the device will transmit a "Data set (DAT)" message, which contains the requested data. Otherwise, it will return a "Rejection (RJC)" message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
41H	Command ID
aaH	Address MSB
...	...
...	LSB
ssH	Size MSB
...	...
...	LSB
sum	Check sum
F7H	End of exclusive

* The size of the requested data does not indicate the number of bytes that make up a "Data set (DAT)" message, but represents the address fields where the requested data resides.

* Some models are subject to limitations in data format used for a single transaction. Requested data, for example, may have a limit in length or must be divided into predetermined address fields before it is exchanged across the interface.

* The same number of bytes comprises address and size data, which, however, vary with the Model-ID.

* The error checking process uses a checksum that provides a bit pattern where the least significant 7 bits are zero when values for an address, size, and that checksum are summed.

#Data set: DAT (42H)

This message corresponds to the actual data transfer process. Because every byte in the data is assigned a unique address, the message can convey the starting address of one or more data as well as a series of data formatted in an address-dependent order.

Although the MIDI standards inhibit non-real time messages from interrupting an exclusive one, some devices support a "soft-through" mechanism for such interrupts. To maintain compatibility with such devices, Roland has limited the DAT to 256 bytes so that an excessively long message is sent out in separate segments.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
42H	Command ID
aaH	Address MSB
...	...
...	LSB
ddH	Data
...	...
sum	Check sum
F7H	End of exclusive

* A DAT message is capable of providing only the valid data among those specified by an RQD or WSD message.

* Some models are subject to limitations in data format used for a single transaction. Requested data, for example, may have a limit in length or must be divided into predetermined address fields before it is exchanged across the interface.

* The number of bytes comprising address data varies from one model ID to another.

* The error checking process uses a checksum that provides a bit pattern where the least significant 7 bits are zero when values for an address, size, and that checksum are summed.

#Acknowledge: ACK (43H)

This message is sent out when no error was detected on reception of a WSD, DAT, "End of data (EOD)", or some other message and a requested setup or action is complete. Unless it receives an ACK message, the device at the other end will not proceed to the next operation.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
43H	Command ID
F7H	End of exclusive

#End of data: EOD (45H)

This message is sent out to inform a remote device of the end of a message. Communication, however, will not come to an end unless the remote device returns an ACK message even though an EOD message was transmitted.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
45H	Command ID
F7H	End of exclusive

#Communications error: ERR (4EH)

This message warns the remote device of a communications fault encountered during message transmission due, for example, to a checksum error. An ERR message may be replaced with a "Rejection (RJC)" one, which terminates the current message transaction in midstream.

When it receives an ERR message, the sending device may either attempt to send out the last message a second time or terminate communication by sending out an RJC message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
4EH	Command ID
F7H	End of exclusive

#Rejection: RJC (4FH)

This message is sent out when there is a need to terminate communication by overriding the current message. An RJC message will be triggered when:

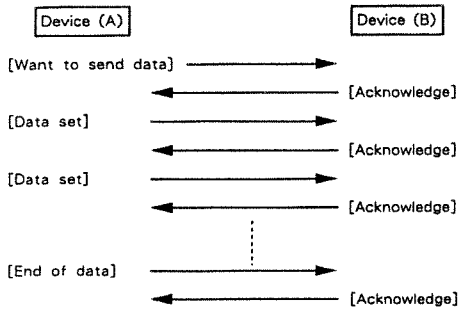
- a WSD or RQD message has specified an illegal data address or size.
- the device is not ready for communication.
- an illegal number of addresses or data has been detected.
- data transfer has been terminated by an operator.
- a communications error has occurred.

An ERR message may be sent out by a device on either side of the interface. Communication must be terminated immediately when either side triggers an ERR message.

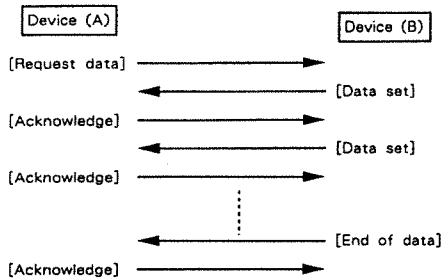
Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
4FH	Command ID
F7H	End of exclusive

#Example of Message Transactions

- Data transfer from device (A) to device (B).

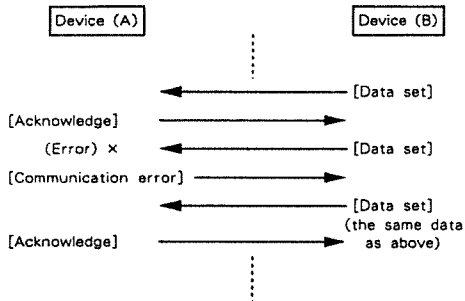


- Device (A) requests and receives data from device (B).

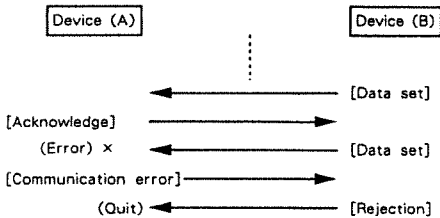


- Error occurs while device (A) is receiving data from device (B).

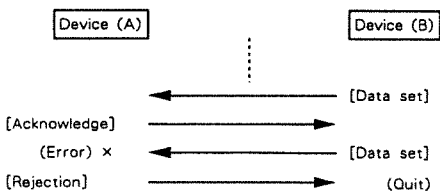
- 1) Data transfer from device (A) to device (B).



- 2) Device (B) rejects the data re-transmitted, and quits data transfer.



- 3) Device (A) immediately quits data transfer.



1. RECOGNIZED RECEIVE DATA**■ Channel Voice Messages****● Note Off**

Status	Second	Third
8nH	kkH	vvH
9nH	kkH	00H

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 kk = Note No. : 15H - 6CH (21 - 108)
 vv = Velocity : 00H - 7FH (0 - 127)

● Note On

Status	Second	Third
9nH	kkH	vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 kk = Note No. : 15H - 6CH (21 - 108)
 vv = Velocity : 01H - 7FH (1 - 127)

* When the Velocity of the received Note On message is 0, the SP-700 recognizes it as a Note Off message and Velocity is 64.

● Polyphonic Key Pressure

Status	Second	Third
AnH	kkH	vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 kk = Note No. : 15H - 6CH (21 - 108)
 vv = Value : 00H - 7FH (0 - 127)

* The SP-700 accepts this message when the Aftertouch switch of the Performance parameter is set at POLY (P).

● Channel Pressure

Status	Second
DnH	vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 vv = Value : 00H - 7FH (0 - 127)

* The SP-700 accepts this message when the Aftertouch switch of the Performance parameter is set at Channel (C).

● Control Change**○ Bank select**

Status	Second	Third
BnH	00H	vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 vv = Bank No. : 00H - 01H (0 - 1) 0 = A 1 = B

* Bank select is processed only after a Program change is received.

* The SP-700 receives this message on the system control channel.

* When the SP-700, while in the system control mode 2 (Perf/Volum) or 3 (Perf/Volum2), receives a program change on the control channel, it responds as follows: if the program number is 0 - 63 and the bank No. is 0 or 1, it selects volume A memory or B memory and selects in that volume the performance corresponding to the program number.

* Ignored if the capacity of volume B memory is set at 0.

○ Modulation

Status	Second	Third
BnH	01H	vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 vv = Modulation depth : 00H - 7FH (0 - 127)

* Recognized when the modulation receive switch (performance parameter), is On (o).

○ Main volume

Status	Second	Third
BnH	07H	vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 vv = Main volume : 00H - 7FH (0 - 127)

* Adjusts the volume of the part corresponding to the receiving MIDI channel number.

* Recognized when the volume receive switch (performance parameter) is On (o).

* When the receiving MIDI channel No. matches the control channel No. (system parameter) the SP-700 adjusts the master level (system parameter) but does not control the volume of the part (even if exists) corresponding to that MIDI channel number.

○ Pan

Status	Second	Third
BnH	0AH	vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 vv = Pan : 00H - 7FH (0 - 127)

* Adjusts the pan of the part corresponding to the receiving MIDI channel number.

* Recognized when the pan receive switch (performance parameter) is On (o).

○ Hold 1

Status	Second	Third
BnH	40H	vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 vv = Control value : 00H - 7FH (0 - 127)
 0 - 63 = OFF
 64 - 127 = ON

* Holds or releases the part corresponding to the receiving MIDI channel number.

* Recognized when the hold receive switch (performance parameter) is On (o).

○ PRN MSB, LSB

Status	Second	Third
BnH	64H	mmH
BnH	65H	llH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 mm = Upper byte of the parameter No. designated by RPN.
 ll = Lower byte of the parameter No. designated by RPN.

○ Data entry MSB, LSB

Status	Second	Third
BnH	06H	mmH
BnH	26H	llH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 mm = Upper byte of the parameter data designated by RPN.
 ll = Lower byte of the parameter data designated by RPN.

**** RPN ****

Control change includes RPNs (registered parameter numbers), functions which are defined by the MIDI standard. Each RPN may be used to change parameters of equipment.

To effect PRN, first designate the parameter to be controlled using PRN MSB and RPN LSB, and then specify the value of the designated parameter in the data entry.

The SP-700 can recognize the two RPNs: pitch bend sensitivity (RPN #0) and master fine tune (RPN #1).

NRPN	Data	Function
MSB LSB	MSB LSB	

00H 00H mmH 11H Pitch bend sensitivity
 * Sets bender up/down of the patch parameter.
 mm: 00H-30H (0-48 in unit of semitones)
 * Up to 4 octaves, common to bender up and down.
 11: 00H-7FH (any value in this range)
 * mm becomes effective when 11 is received.

Example: Set bender range to 2.

MIDI DATA [HEX]	Description
B0 64 00	RPN LSB = 00H
B0 65 00	RPN MSB = 00H
B0 06 02	Data entry, MSB
B0 26 00	Data entry, LSB

00H 01H mmH 11H Master fine tune
 * Sets system master tune.
 Received on the SP-700 system control channel.
 mm: 00H-7FH (0-127) MSB
 11: 00H-7FH (0-127) LSB
 * e.g. Center 440Hz can be tuned up or down up to 50 cents in steps of 100/8192 cents.
 100/8192 cents are translated into 1 cent in the SP-700.
 A value below 27H 00H is translated into -50 cents, and value above 59H 00H into +50 cents.

MSB LSB	
27H 00H	-50 cents
:	
40H 00H	0 cent
:	
59H 00H	+50 cents

Example: Set master tune to A = 440Hz.

MIDI DATA [HEX]	Description
B0 64 01	RPN LSB = 01H
B0 65 00	RPN MSB = 00H
B0 06 40	Data entry, MSB
B0 26 00	Data entry, LSB

** Other control changes **

Status	Second	Third
BnH	mmH	vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 mm = Control No. : 00H - 5FH (0 - 95)
 vv = Control data : 00H - 7FH (0 - 127)

* By selecting a control number (0 - 95) with Controller select (patch parameter), a control change can be recognized as a controller.

* A control change can be received through the control channel (system parameter) to change settings of an EQ (equalizer, a performance parameter). The control number can be one of 1 - 95 and memorized.

* The default allocation of control numbers is as shown in the table below (factory settings).

Default Control Change Number for EQ				
	Lo Gain	Lo Freq	Hi Gain	Hi Freq
EQ-1	16	70	24	78
EQ-2	17	71	25	79
EQ-3	18	72	26	80
EQ-4	19	73	27	81
EQ-5	20	74	28	82
EQ-6	21	75	29	83
EQ-7	22	76	30	84
EQ-8	23	77	31	85

When to keep an EQ independent of any control change, set the desired EQ to off.

* The control data affect the following parameters.

vv	Lo/Hi Gain	Hi Freq	Lo Freq
0 - 5	-12dB	750	16
6 - 10	-11dB	1.0K	20
11 - 15	-10dB	1.3K	24
16 - 20	-9dB	1.5K	28
21 - 25	-8dB	1.8K	32
26 - 30	-7dB	2.0K	36
31 - 35	-6dB	2.3K	40
36 - 40	-5dB	2.5K	48
41 - 46	-4dB	3.0K	56
47 - 51	-3dB	3.5K	64
52 - 56	-2dB	4.0K	72
57 - 61	-1dB	5.0K	80
62 - 66	0dB	6.0K	120
67 - 71	1dB	7.0K	160
72 - 76	2dB	8.0K	200
77 - 81	3dB	9.0K	240
82 - 87	4dB	10K	280
88 - 92	5dB	11K	320
93 - 97	6dB	12K	360
98 - 102	7dB	13K	400
103 - 107	8dB	14K	440
108 - 112	9dB	15K	480
113 - 117	10dB	16K	520
118 - 122	11dB	17K	560
123 - 127	12dB	18K	600

● Program Change

Status	Second
CnH	ppH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
 pp = Program No. : 00H - 7FH (0 - 127)

* The SP - 700 responds to a program change coming on the system control channel by performing the following process depending on the system control mode.

When the control mode = 1 (Perf),
 pp = 0 - 63 : Selects the performance being set in the program number matching the pp of the volume A memory.
 pp = 64 - 127 : Selects the performance being set in the program number matching the pp - 64 of the volume B memory.

* Bank select is ignored.

When the control mode = 2 (Perf./Volum),
 pp = 0 - 63 : Selects the performance being set in the program number matching the pp of the volume memory that corresponds to the bank number of the previously received bank select.

pp = 64 - 127 : Loads the volume file, being set in the program No. matching the pp and stored in the current drive, into the current volume memory.

When the control mode = 3 (Perf./Volum2),
 pp = 0 - 63 : Selects the performance being set in the program number matching the pp of the volume memory that corresponds to the bank number of the bank select previously received.

pp = 64 - 127 : Loads the volume file, being set in the program No. matching the pp and stored in the current drive, into the volume memory which is not currently selected.

* A program change received on the MIDI channel of a part serves as a patch change.
 Any patch can be assigned a program number.
 A control change is recognized when the program change receive switch (performance parameter) is on (o).

● Pitch Bend Change

Status	Second	Third
EnH	llH	mmH

n = MIDI channel No. : 0H - FH (0 - 150 = ch 1 15 = ch 16
mm, ll = Value : 00H, 00H - 40H, 00H - 7FH, 7FH (-8192 to 0 to +8191)

* Controls the pitch bend of the part corresponding to the receiving MIDI channel number.

* Recognized when the pitch bend receive switch (performance parameter) is on (o).

■ Channel Mode Messages

● All Notes Off

Status	Second	Third
BnH	7BH	00H

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16

* The SP - 700 will turn off all MIDI - on notes on the receiving channel if it has not previously received the damper on: the SP - 700, if has received damper on, will turn off the notes upon receiving the damper off.

● OMNI Off

Status	Second	Third
BnH	7CH	00H

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16

* With the SP - 700, this message serves as an All notes off.

● OMNI On

Status	Second	Third
BnH	7DH	00H

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16

* With the SP - 700, this message serves as an All notes off.

● MONO

Status	Second	Third
BnH	7EH	mmH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16
mm = Mono channel range : Ignored

* With the SP - 700, this message serves as an All notes off.

● POLY

Status	Second	Third
BnH	7FH	00H

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch 1 15 = ch 16

* With the SP - 700, this message serves as an All notes off.

■ System Exclusive Messages

Status

F0H : System exclusive
F7H : EOX (End Of Exclusive)

* For details, refer to "Roland Exclusive Messages" and Section 3.

■ System Real Time Messages

● Active Sensing

Status
FEH

* When the SP - 700 receives active sensing messages, it measures the time intervals between incoming messages. If no message (status, data) is received within 300 ms of the previous one, the SP - 700 turns off all MIDI note on messages and, returns to the normal mode. Monitoring of Active Sensing messages is terminated.

2. TRANSMITTED DATA

■ System Exclusive Messages

Status

F0H : System exclusive messages
F7H : EOX (End Of Exclusive)

* For details, refer to "Roland Exclusive Messages" and Section 3.

3. EXCLUSIVE COMMUNICATIONS

■ SP - 700 Exclusive Information

The SP - 700 transfers the following information as exclusive information.

- System Exclusive Messages (in Roland proprietary format)
Tone parameter information and others
- Universal System Exclusive Messages (in MIDI common format)
Sample dump standards (sampling data)

■ System Exclusive Messages

● General Description

The SP - 700 can transfer tone parameters and other information using exclusive messages which are transferred in either of two communication formats: one way communications or handshaking communications.

● Terminology

○ Model ID

The model ID of the SP - 700 is 34H.

○ Control channel

The MIDI channel having control over the entire SP - 700. The control channel can be set to one of 1 - 16 channels.

○ Device ID

Exclusive messages are not assigned to any particular MIDI channel. Instead, they have their own special control parameter called device ID. The Roland exclusive messages use device IDs to specify various devices. The SP - 700 has several basic channels which can be assigned to individual device IDs of value 00H - 1FH.

● One Way Communications

○ Request data RQ1 11H

On receiving this message, the SP-700 checks to see that the specified address matches a parameter base address and that the specified size is 1 or larger. If the SP-700 finds the required parameter, it will transmit it in a Data set (DAT) message.

The SP-700 does not transmit this message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
34H	Model ID
11H	Command ID (RQ1)
aaH	Address MSB * 3 - 1
aaH	Address
aaH	Address
aaH	Address LSB
ssH	Size MSB
ssH	Size
ssH	Size
ssH	Size LSB
sum	Checksum
F7H	EOX (End Of Exclusive)

○ Data set DT1 12H

◇ The SP-700 handles this message as outlined below.

The received device ID is legal, and the address specified in the message is found in the parameter addresses. Then the SP-700 stores the received data into memory location starting with the specified address.

◇ The SP-700 transmits this message in the following case.

Received a Request data (RQ1) and to send the specified parameter. Or, upon execution of Volume dump.

For parameters that may be transferred, see the parameter address map.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
34H	Model ID
12H	Command ID (DT1)
aaH	Address MSB * 3 - 1
aaH	Address
aaH	Address
aaH	Address LSB
ddH	Data
:	
sum	Checksum
F7H	EOX (End Of Exclusive)

● Handshaking Communications

○ Want to send data WSD 40H

On receiving this message, the SP-700 returns an acknowledge (ACK) message and waits for a Data set (DAT) message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
34H	Model ID
40H	Command ID (WSD)
aaH	Address MSB * 3 - 1
aaH	Address
aaH	Address
aaH	Address LSB
ssH	Size MSB
ssH	Size
ssH	Size
ssH	Size LSB
sum	Checksum
F7H	EOX (End Of Exclusive)

○ Request data

RQD 41H

On receiving this message, the SP-700 checks to see that the specified address matches a parameter base address and that the specified size is 1 or larger. If the SP-700 finds the required parameter, it will transmit a Data set (DAT) message which contains the requested data.

The SP-700 does not transmit Request data message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
34H	Model ID
41H	Command ID (RQ1)
aaH	Address MSB * 3 - 1
aaH	Address
aaH	Address
aaH	Address LSB
ssH	Size MSB
ssH	Size
ssH	Size
ssH	Size LSB
sum	Checksum
F7H	EOX (End Of Exclusive)

○ Data set

DAT 42H

Upon receiving this message, the SP-700 checks it to see that the designated address is a parameter base address. If correct, it stores the received data into a memory location starting with that address.

Upon receiving a Data request (RQD), the SP-700 transmits the data whose length and addresses correspond to the ones specified in the Request data messages, together with the parameter base address.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
34H	Model ID
42H	Command ID (DAT)
aaH	Address MSB * 3 - 1
aaH	Address
aaH	Address
aaH	Address LSB
ddH	Data
:	
sum	Checksum
F7H	EOX (End Of Exclusive)

○ Acknowledge

ACK 43H

When this message is returned in response to the sent Data set (DAT), the SP-700 transmits another Data set (DAT) providing the data that follows the data it previously sent.

When this message is returned in response to the last End of data (EOD) message, the SP-700 terminates the current handshaking communication.

The SP-700 transmits this message upon receiving a Want to send data (WSD), End of data or Data set (DAT).

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
34H	Model ID
43H	Command ID (ACK)
F7H	EOX (End Of Exclusive)

○ End of data

EOD 45H

On receiving this message the SP-700 terminates the current handshaking communication by sending an acknowledge.

Also sends this message at the end of data in bulk dumping.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
34H	Model ID
45H	Command ID (BOD)
F7H	EOX (End Of Exclusive)

○ Communications error

ERR 4EH

The SP-700 sends this message to indicate that a communications fault was encountered due to, for example, a checksum error.
The SP-700 terminates the current communication by sending a Rejection message upon receiving an ERR message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
34H	Model ID
4EH	Command ID (ERR)
F7H	EOX (End Of Exclusive)

○ Rejection

RJC 4FH

When the SP-700 receives a Communication error, it sends this message.
When the SP-700 receives this message, it immediately terminates the current communication.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
34H	Model ID
4FH	Command ID (RJC)
F7H	EOX (End Of Exclusive)

* 3-1 Address and size are illegal when no data exists in these locations.

● Parameter Address Mapping

Addresses are expressed in 7-bit hexadecimal values.

Address	MSB			LSB
Binary	0aaa aaaa	0bbb bbbb	0ccc cccc	0ddd dddd
7 bit Hex	AA	BB	CC	DD

In the actual data, the value of the address is larger than the starting address of a block by the offset address.

● Parameter Base Address

Address Mapping			
Address	Block	Sub Block	Reference
00-00-00-00	Volume Parameter		Table 1
00-01-00-00		Performance #1 Performance #2 Performance #64	Table 2
00-03-00-00	Extended Performance Parameter	Performance #1 Performance #2 Performance #64	Table 2-1
00-04-00-00	Patch Parameter	Patch #1 Patch #2 Patch #128	Table 3
00-08-00-00	Partial Parameter	Partial #1 Partial #2 Partial #256	Table 4
00-0C-00-00	Sample Parameter	Sample #1 Sample #2 Sample #512	Table 5
00-0F-00-00			
01-00-00-00	Request for Sample Load		Table 6

○ Temporary area

The size of a parameter must be within the area defined in the table below.

Start address	Size	Description
00 00 00 00	00 00 00 20 (32 x 1)	Volume Parameter
00 01 00 00	00 02 00 00 (512 x 64)	Performance Parameter
00 03 00 00	00 01 00 00 (256 x 64)	Extended Performance Parameter
00 04 00 00	00 04 00 00 (512 x 128)	Patch Parameter
00 08 00 00	00 04 00 00 (256 x 256)	Partial Parameter
00 0C 00 00	00 03 00 00 (96 x 512)	Sample Parameter
01 00 00 00	00 00 00 04	Request for Sample Load

* 3-2 Do not use a Data set for writing parameter data into the 256th slot of the Partial parameter area.

○ Table 1 : Volume Parameter.

Offset address	Description	
00 00H 0000 aaaa	Volume Name 1	
00 01H 0000 bbbb	aaaa bbbb	32 - 127 (ASCII)
:		
00 1EH 0000 aaaa	Volume Name 16	
00 1FH 0000 bbbb	aaaa bbbb	32 - 127 (ASCII)
Total size	00 00 20H	

○ Table 2 : Performance Parameter.

Offset address	Description	
00 00H 0000 aaaa	Performance Name 1	
00 01H 0000 bbbb	aaaa bbbb	32 - 127 (ASCII)
:		
00 1EH 0000 aaaa	Performance Name 16	
00 1FH 0000 bbbb	aaaa bbbb	32 - 127 (ASCII)
00 20H 0000 aaaa	Part 1 Patch Select	
00 21H 0000 bbbb	aaaa bbbb	-1(Off), 0 - 127
:		
00 5EH 0000 aaaa	Part 32 Patch Select	
00 5FH 0000 bbbb	aaaa bbbb	-1(Off), 0 - 127
00 60H 0000 aaaa	Part 2 MIDI Ch	
00 61H 0000 aaaa	aaaa	0 - 15
00 61H 0000 aaaa	Part 1 MIDI Ch	
00 62H 0000 aaaa	aaaa	0 - 15
00 7EH 0000 aaaa	Part 32 MIDI Ch	
00 7FH 0000 aaaa	aaaa	0 - 15
01 00H 0000 caaa	Part 1 Level	
01 01H 0000 bbbb	caaa bbbb	0 - 127
:		(c=0:MIDI ch Off, c=1: MIDI ch On)
01 3EH 0000 caaa	Part 32 Level	
01 3FH 0000 bbbb	caaa bbbb	0 - 127
:		(c=0:MIDI ch Off, c=1: MIDI ch On)
01 40H 0000 aaaa	Part 1 Zone Range Lower	
01 41H 0000 bbbb	aaaa bbbb	21 - 108
:		
01 7EH 0000 aaaa	Part 32 Zone Range Lower	
01 7FH 0000 bbbb	aaaa bbbb	21 - 108
02 00H 0000 aaaa	Part 1 Zone Range Upper	
02 01H 0000 bbbb	aaaa bbbb	21 - 108
:		
02 3EH 0000 aaaa	Part 32 Zone Range Upper	
02 3FH 0000 bbbb	aaaa bbbb	21 - 108
02 40H 0000 aaaa	Part 1 Zone Fade Width Lower	
02 41H 0000 bbbb	aaaa bbbb	0 - 86
:		
02 7EH 0000 aaaa	Part 32 Zone Fade Width Lower	
02 7FH 0000 bbbb	aaaa bbbb	0 - 86
03 00H 0000 aaaa	Part 1 Zone Fade Width Upper	
03 01H 0000 bbbb	aaaa bbbb	0 - 86
:		
03 3EH 0000 aaaa	Part 32 Zone Fade Width Upper	
03 3FH 0000 bbbb	aaaa bbbb	0 - 86
03 40H 0000 hgfe	Program Change Switch	
03 41H 0000 dcba	a Ch 1	
03 42H 0000 ponm	:	0:Off 1:On
03 43H 0000 lkjl	p Ch 16	
03 44H 0000 hgfe	Pitch Bender & Bend Range Switch	
03 45H 0000 dcba	a Ch 1	
03 46H 0000 ponm	:	0:Off 1:On
03 47H 0000 lkjl	p Ch 16	

03 48H 0000 hgfe	Modulation Switch	
03 49H 0000 dcba	a Ch 1	
03 4AH 0000 ponm	:	0:Off 1:On
03 4BH 0000 lkjl	p Ch 16	
03 4CH 0000 hgfe	Hold Pedal Switch	
03 4DH 0000 dcba	a Ch 1	
03 4EH 0000 ponm	:	0:Off 1:On
03 4FH 0000 lkjl	p Ch 16	
03 50H 0000 hgfe	Phase Lock Switch	
03 51H 0000 dcba	a Ch 1	
03 52H 0000 ponm	:	0:Off 1:On
03 53H 0000 lkjl	p Ch 16	
03 54H 0000 hgfe	MIDI Volume Switch	
03 55H 0000 dcba	a Ch 1	
03 56H 0000 ponm	:	0:Off 1:On
03 57H 0000 lkjl	p Ch 16	
03 58H 0000 hgfe	After Touch Switch	
03 59H 0000 dcba	a Ch 1	
03 5AH 0000 ponm	:	0:Off 1:On
03 5BH 0000 lkjl	p Ch 16	
03 5CH 0000 hgfe	After Touch Mode	
03 5DH 0000 dcba	a Ch 1	
03 5EH 0000 ponm	:	0:Channel(ExH) 1:Poly(AxH)
03 5FH 0000 lkjl	p Ch 16	
03 60H 0000 aaaa	Velocity Curve Type Ch 1	
03 61H 0000 bbbb	aaaa bbbb	0 - 7
:		
03 7EH 0000 aaaa	Velocity Curve Type Ch 16	
03 7FH 0000 bbbb	aaaa bbbb	0 - 7
Total size	00 04 00H	

○ Table 2 - 1 : Extended Performance Parameter

Offset address	Description	
00 00H 0000 aaaa	EQ -1 High Gain	
00 01H 0000 bbbb	aaaa bbbb	-12 - +12:-12dB - +12dB
:		
00 0EH 0000 aaaa	EQ -8 High Gain	
00 0FH 0000 bbbb	aaaa bbbb	-12 - +12:-12dB - +12dB
00 10H 0000 aaaa	EQ -1 High Frequency	-12 - +12:
00 11H 0000 bbbb	aaaa bbbb	(750, 1.0K, 1.3K, 1.5K, 1.8K, 2.0K, 2.3K, 2.5K, 3.0K, 3.5K, 4.0K, 5.0K, 6.0K, 7.0K, 8.0K, 9.0K, 10K, 11K, 12K, 13K, 14K, 15K, 16K, 17K, 18K,)
00 1EH 0000 aaaa	EQ -8 High Frequency	
00 1FH 0000 bbbb	aaaa bbbb	
00 20H 0000 aaaa	EQ -1 Low Gain	
00 21H 0000 bbbb	aaaa bbbb	-12 - +12:-12dB - +12dB
:		
00 2EH 0000 aaaa	EQ -8 Low Gain	
00 2FH 0000 bbbb	aaaa bbbb	-12 - +12:-12dB - +12dB
00 30H 0000 aaaa	EQ -1 Low Frequency	-12 - +12:
00 31H 0000 bbbb	aaaa bbbb	(16, 20, 24, 28, 32, 36, 40, 48, 56, 64, 72, 80, 120, 160, 200, 240, 280, 320, 360, 400, 440, 480, 520, 560, 600)
00 3EH 0000 aaaa	EQ -8 Low Frequency	
00 3FH 0000 bbbb	aaaa bbbb	
00 40H 0000 aaaa	Part - 1 Output Assign	
00 41H 0000 bbbb	aaaa bbbb	-1(Patch), 0 - 11
:		
00 7EH 0000 aaaa	Part -32 Output Assign	
00 7FH 0000 bbbb	aaaa bbbb	-1(Patch), 0 - 11
01 00H 0000 aaaa	Part - 1 Panning	
01 01H 0000 bbbb	aaaa bbbb	-32 - +32:L32 - R32
:		
01 3EH 0000 aaaa	Part -32 Panning	
01 3FH 0000 bbbb	aaaa bbbb	-32 - +32:L32 - R32
01 40H 0000 hgfe	Pan Switch	
01 41H 0000 dcba	a Ch 1	
01 42H 0000 ponm	:	0:Off 1:On
01 43H 0000 lkjl	p Ch 16	

01 44H	0000 hgfe	Pan Mode	
01 45H	0000 dcba	a Ch 1	
01 46H	0000 ponm	:	0:Continuous 1:Discrete
01 47H	0000 lkji	p Ch 16	
01 48H	0000 aaaa	Dummy	
01 49H	0000 bbbb	aaaa bbbb	
:	:	:	:
01 7EH	0000 aaaa	Dummy	
01 7FH	0000 bbbb	aaaa bbbb	
Total size	00 02 00H		

Table 3 : Patch Parameter.

Offset address	Description	
00 00H	0000 aaaa	Patch Name 1
00 01H	0000 bbbb	aaaa bbbb 32 - 127 (ASCII)
:	:	:
00 1EH	0000 aaaa	Patch Name 16
00 1FH	0000 bbbb	aaaa bbbb 32 - 127 (ASCII)
00 20H	0000 aaaa	Program Change #
00 21H	0000 bbbb	aaaa bbbb 0 - 127
00 22H	0000 aaaa	Dummy
00 23H	0000 bbbb	aaaa bbbb
00 24H	0000 aaaa	Total Panning
00 25H	0000 bbbb	aaaa bbbb -31 - +32:L32 - R32
00 26H	0000 aaaa	Patch Level
00 27H	0000 bbbb	aaaa bbbb 0 - 127
00 28H	0000 aaaa	Output Assign (stereo+6outs)
00 29H	0000 bbbb	aaaa bbbb -1:A, 0 - 5:3 - 8 6:Partial
00 2AH	0000 aaaa	Priority
00 2BH	0000 bbbb	aaaa bbbb 0:Off 1:On
00 2CH	0000 aaaa	Cutoff Offset
00 2DH	0000 bbbb	aaaa bbbb -63 - +63
00 2EH	0000 aaaa	Velocity Sensitivity Offset
00 2FH	0000 bbbb	aaaa bbbb -63 - +63
00 30H	0000 aaaa	Octave Shift
00 31H	0000 bbbb	aaaa bbbb -2 - +2
00 32H	0000 aaaa	Coarse Tune
00 33H	0000 bbbb	aaaa bbbb -48 - +48
00 34H	0000 aaaa	Fine Tune
00 35H	0000 bbbb	aaaa bbbb -50 - +50
00 36H	0000 aaaa	SMT Ctrl Select
00 37H	0000 bbbb	aaaa bbbb -1:Off, 0:Bend 1:A.T, 2:Mod, 3:Ctrl
00 38H	0000 aaaa	SMT Ctrl Sensitivity
00 39H	0000 bbbb	aaaa bbbb -63 - +63
00 3AH	0000 aaaa	Out Assign (8outs)
00 3BH	0000 bbbb	aaaa bbbb -1:A, 0 - 7:1 - 8 8:Partial
00 3CH	0000 aaaa	Analog Feel
00 3DH	0000 bbbb	aaaa bbbb 0 - 127
00 3EH	0000 aaaa	Out Assign (4stereo)
00 3FH	0000 bbbb	aaaa bbbb 0 - 3:A - D, 4 - 11:1 - 8 12:Partial
00 40H	0000 aaaa	Partial Select Key # 21
00 41H	0000 bbbb	aaaa bbbb -1(Off), 0 - 254
:	:	:
01 6EH	0000 aaaa	Partial Select Key # 108
01 6FH	0000 bbbb	aaaa bbbb -1(Off), 0 - 254
01 70H	0000 aaaa	Dummy
01 71H	0000 bbbb	aaaa bbbb
:	:	:
01 7EH	0000 aaaa	Dummy
01 7FH	0000 bbbb	aaaa bbbb

02 00H	0000 aaaa	Assign Type	Key # 21
02 01H	0000 bbbb	aaaa bbbb	
:	:	:	0:Poly
03 2EH	0000 aaaa	Assign Type	Key # 108
03 2FH	0000 bbbb	aaaa bbbb	1:Mono 2 - 17:Ext 1 - Ext16
03 30H	0000 aaaa	Dummy	
03 31H	0000 bbbb	aaaa bbbb	
:	:	:	:
03 3EH	0000 aaaa	Dummy	
03 3FH	0000 bbbb	aaaa bbbb	
03 40H	0000 aaaa	Bender Pitch Ctrl Up	
03 41H	0000 bbbb	aaaa bbbb	0 - +48
03 42H	0000 aaaa	Bender Pitch Ctrl Down	
03 43H	0000 bbbb	aaaa bbbb	0 - +48
03 44H	0000 aaaa	Bender TVA Ctrl	
03 45H	0000 bbbb	aaaa bbbb	-63 - +63
03 46H	0000 aaaa	Bender TVF Ctrl	
03 47H	0000 bbbb	aaaa bbbb	-63 - +63
03 48H	0000 aaaa	After Touch Pitch Ctrl	
03 49H	0000 bbbb	aaaa bbbb	-48 - +48
03 4AH	0000 aaaa	After Touch TVA Ctrl	
03 4BH	0000 bbbb	aaaa bbbb	-63 - +63
03 4CH	0000 aaaa	After Touch TVF Ctrl	
03 4DH	0000 bbbb	aaaa bbbb	-63 - +63
03 4EH	0000 aaaa	After Touch LFO Rate Ctrl	
03 4FH	0000 bbbb	aaaa bbbb	-63 - +63
03 50H	0000 aaaa	After Touch LFO Pitch Depth	
03 51H	0000 bbbb	aaaa bbbb	-63 - +63
03 52H	0000 aaaa	After Touch LFO TVA Depth	
03 53H	0000 bbbb	aaaa bbbb	-63 - +63
03 54H	0000 aaaa	After Touch LFO TVF Depth	
03 55H	0000 bbbb	aaaa bbbb	-63 - +63
03 56H	0000 aaaa	Modulation LFO Rate Ctrl	
03 57H	0000 bbbb	aaaa bbbb	-63 - +63
03 58H	0000 aaaa	Modulation LFO Pitch Depth	
03 59H	0000 bbbb	aaaa bbbb	-63 - +63
03 5AH	0000 aaaa	Modulation LFO TVA Depth	
03 5BH	0000 bbbb	aaaa bbbb	-63 - +63
03 5CH	0000 aaaa	Modulation LFO TVF Depth	
03 5DH	0000 bbbb	aaaa bbbb	-63 - +63
03 5EH	0000 aaaa	TVF Resonance Offset	
03 5FH	0000 bbbb	aaaa bbbb	-63 - +63
03 60H	0000 aaaa	Controller Select	
03 61H	0000 bbbb	aaaa bbbb	0 - 95
03 62H	0000 aaaa	Controller Pitch Ctrl	
03 63H	0000 bbbb	aaaa bbbb	-48 - +48
03 64H	0000 aaaa	Controller TVA Ctrl	
03 65H	0000 bbbb	aaaa bbbb	-63 - +63
03 66H	0000 aaaa	Controller TVF Ctrl	
03 67H	0000 bbbb	aaaa bbbb	-63 - +63
03 68H	0000 aaaa	Controller LFO Rate Ctrl	
03 69H	0000 bbbb	aaaa bbbb	-63 - +63
03 6AH	0000 aaaa	Controller LFO Pitch Depth	
03 6BH	0000 bbbb	aaaa bbbb	-63 - +63
03 6CH	0000 aaaa	Controller LFO TVA Depth	
03 6DH	0000 bbbb	aaaa bbbb	-63 - +63
03 6EH	0000 aaaa	Controller LFO TVF Depth	
03 6FH	0000 bbbb	aaaa bbbb	-63 - +63
03 70H	0000 aaaa	TVA Attack Offset	
03 71H	0000 bbbb	aaaa bbbb	-63 - +63

03 72H	0000 aaaa	TVA Release Offset	
03 73H	0000 bbbb	aaaa bbbb	-63 ~ +63
03 74H	0000 aaaa	After Touch LFO Pan Depth	
03 75H	0000 bbbb	aaaa bbbb	-63 ~ +63
03 76H	0000 aaaa	Modulation LFO Pan Depth	
03 77H	0000 bbbb	aaaa bbbb	-63 ~ +63
03 78H	0000 aaaa	Controller LFO Pan Depth	
03 79H	0000 bbbb	aaaa bbbb	-63 ~ +63
03 7AH	0000 aaaa	Dummy	
03 7BH	0000 bbbb	aaaa bbbb	
:			
03 7EH	0000 aaaa	Dummy	
03 7FH	0000 bbbb	aaaa bbbb	
Total size	00 04 00H		

○ Table 4 : Partial Parameter

Offset address	Description	
00 00H	0000 aaaa	Partial Name 1
00 01H	0000 bbbb	aaaa bbbb 32 - 127 (ASCII)
:		
00 1EH	0000 aaaa	Partial Name 16
00 1FH	0000 bbbb	aaaa bbbb 32 - 127 (ASCII)
00 20H		
:		
00 35H		SMT Slot -1 Parameter Table 4-1
00 36H	0000 aaaa	Dummy
00 37H	0000 bbbb	aaaa bbbb
00 38H	0000 aaaa	Output Assign (8outs)
00 39H	0000 bbbb	aaaa bbbb -1:A, 0 ~ 7:1 - 8
00 3AH	0000 aaaa	Dummy
00 3BH	0000 bbbb	aaaa bbbb
00 3CH	0000 aaaa	Partial Level
00 3DH	0000 bbbb	aaaa bbbb 0 - 127
00 3EH	0000 aaaa	Output Assign (stereo+6outs)
00 3FH	0000 bbbb	aaaa bbbb -1:A, 0 ~ 5:3 - 8
00 40H		
:		
00 55H		SMT Slot -2 Parameter Table 4-1
00 56H	0000 aaaa	Dummy
00 57H	0000 bbbb	aaaa bbbb
00 58H	0000 aaaa	Panning
00 59H	0000 bbbb	aaaa bbbb -32 ~ +32:L32 ~ R32
00 5AH	0000 aaaa	Coarse Tune
00 5BH	0000 bbbb	aaaa bbbb -48 ~ +48
00 5CH	0000 aaaa	Fine Tune
00 5DH	0000 bbbb	aaaa bbbb -50 ~ +50
00 5EH	0000 aaaa	SMT Velocity Ctrl
00 5FH	0000 bbbb	aaaa bbbb 0:Off 1:On
00 60H		
:		
00 75H		SMT Slot -3 Parameter Table 4-1
00 76H	0000 aaaa	Dummy
00 77H	0000 bbbb	aaaa bbbb
00 78H	0000 aaaa	Out Assign (4stereo)
00 79H	0000 bbbb	aaaa bbbb 0 ~ 3:A - D, 4 ~ 11:1 - 8
00 7AH	0000 aaaa	Dummy
00 7BH	0000 bbbb	aaaa bbbb
:		
00 7EH	0000 aaaa	Dummy
00 7FH	0000 bbbb	aaaa bbbb

01 00H			SMT Slot -4 Parameter	Table 4-1
01 15H				
01 16H	0000 aaaa	TVF Filter Mode		
01 17H	0000 bbbb	aaaa bbbb	-1:Off, 0:LPF, 1:BPF, 2:HPF	
01 18H	0000 aaaa	TVF Cutoff		
01 19H	0000 bbbb	aaaa bbbb		0 - 127
01 1AH	0000 aaaa	TVF Resonance		
01 1BH	0000 bbbb	aaaa bbbb		0 - 127
01 1CH	0000 aaaa	TVF Velocity Curve Type		
01 1DH	0000 bbbb	aaaa bbbb		0 - 3
01 1EH	0000 aaaa	TVF Velocity Curve Ratio		
01 1FH	0000 bbbb	aaaa bbbb		-63 - +63
01 20H	0000 aaaa	TVF Time Velocity Sensitivity		
01 21H	0000 bbbb	aaaa bbbb		-63 - +63
01 22H	0000 aaaa	TVF Cutoff Velocity Sensitivity		
01 23H	0000 bbbb	aaaa bbbb		-63 - +63
01 24H	0000 aaaa	TVF Level 0,4		
01 25H	0000 bbbb	aaaa bbbb		0 - 127
01 26H	0000 aaaa	TVF Level 1		
01 27H	0000 bbbb	aaaa bbbb		0 - 127
01 28H	0000 aaaa	TVF Level 2		
01 29H	0000 bbbb	aaaa bbbb		0 - 127
01 2AH	0000 aaaa	TVF Level 3 (S)		
01 2BH	0000 bbbb	aaaa bbbb		0 - 127
01 2CH	0000 aaaa	TVF Time 1		
01 2DH	0000 bbbb	aaaa bbbb		0 - 127
01 2EH	0000 aaaa	TVF Time 2		
01 2FH	0000 bbbb	aaaa bbbb		0 - 127
01 30H	0000 aaaa	TVF Time 3		
01 31H	0000 bbbb	aaaa bbbb		0 - 127
01 32H	0000 aaaa	TVF Time 4 (R)		
01 33H	0000 bbbb	aaaa bbbb		0 - 127
01 34H	0000 aaaa	ENV TVF Depth		
01 35H	0000 bbbb	aaaa bbbb		-63 - +63
01 36H	0000 aaaa	ENV Pitch Depth		
01 37H	0000 bbbb	aaaa bbbb		-63 - +63
01 38H	0000 aaaa	TVF KF Point		
01 39H	0000 bbbb	aaaa bbbb		21 - 108
01 3AH	0000 aaaa	ENV Time KF		
01 3BH	0000 bbbb	aaaa bbbb		-63 - +63
01 3CH	0000 aaaa	ENV Depth KF		
01 3DH	0000 bbbb	aaaa bbbb		-63 - +63
01 3EH	0000 aaaa	TVF Cutoff KF		
01 3FH	0000 bbbb	aaaa bbbb		-63 - +63
01 40H	0000 aaaa	TVA Velocity Curve Type		
01 41H	0000 bbbb	aaaa bbbb		0 - 3
01 42H	0000 aaaa	TVA Velocity Curve Ratio		
01 43H	0000 bbbb	aaaa bbbb		-63 - +63
01 44H	0000 aaaa	TVA Time Velocity Sensitivity		
01 45H	0000 bbbb	aaaa bbbb		-63 - +63
01 46H	0000 aaaa	TVA Level 0, 4		
01 47H	0000 bbbb	aaaa bbbb		0
01 48H	0000 aaaa	TVA Level 1		
01 49H	0000 bbbb	aaaa bbbb		0 - 127
01 4AH	0000 aaaa	TVA Level 2		
01 4BH	0000 bbbb	aaaa bbbb		0 - 127
01 4CH	0000 aaaa	TVA Level 3 (S)		
01 4DH	0000 bbbb	aaaa bbbb		0 - 127

01 4EH	0000 aaaa	TVA Time 1	
01 4FH	0000 bbbb	aaaa bbbb	0 - 127
01 50H	0000 aaaa	TVA Time 2	
01 51H	0000 bbbb	aaaa bbbb	0 - 127
01 52H	0000 aaaa	TVA Time 3	
01 53H	0000 bbbb	aaaa bbbb	0 - 127
01 54H	0000 aaaa	TVA Time 4 (R)	
01 55H	0000 bbbb	aaaa bbbb	0 - 127
01 56H	0000 aaaa	Dummy	
01 57H	0000 bbbb	aaaa bbbb	
01 58H	0000 aaaa	TVA KF Point	
01 59H	0000 bbbb	aaaa bbbb	21 - 108
01 5AH	0000 aaaa	TVA ENV Time KF	
01 5BH	0000 bbbb	aaaa bbbb	-63 - +63
01 5CH	0000 aaaa	Dummy	
01 5DH	0000 bbbb	aaaa bbbb	
01 5EH	0000 aaaa	TVA Level KF	
01 5FH	0000 bbbb	aaaa bbbb	21 - 108
01 60H	0000 aaaa	LFO Wave Form	0:Sin, 1:Tri, 2:Saw+, 3:Saw-
01 61H	0000 bbbb	aaaa bbbb	4:Squ, 5:Rnd, 6:Bend+, 7:Bend-
01 62H	0000 aaaa	LFO Rate	
01 63H	0000 bbbb	aaaa bbbb	0 - 127
01 64H	0000 aaaa	LFO Key Sync	
01 65H	0000 bbbb	aaaa bbbb	0:Off, 1:On
01 66H	0000 aaaa	LFO Delay	
01 67H	0000 bbbb	aaaa bbbb	0 - 127
01 68H	0000 aaaa	LFO Delay KF	
01 69H	0000 bbbb	aaaa bbbb	-63 - +63
01 6AH	0000 aaaa	LFO Detune	
01 6BH	0000 bbbb	aaaa bbbb	0 - 127
01 6CH	0000 aaaa	LFO Pitch Mod Depth	
01 6DH	0000 bbbb	aaaa bbbb	-63 - +63
01 6EH	0000 aaaa	LFO TVF Mod Depth	
01 6FH	0000 bbbb	aaaa bbbb	-63 - +63
01 70H	0000 aaaa	LFO TVA Mod Depth	
01 71H	0000 bbbb	aaaa bbbb	-63 - +63
01 72H	0000 aaaa	LFO Pan Mod Depth	
01 73H	0000 bbbb	aaaa bbbb	-63 - +63
01 74H	0000 aaaa	TVF Release Velocity Sensitivity	
01 75H	0000 bbbb	aaaa bbbb	-63 - +63
01 76H	0000 aaaa	TVA Release Velocity Sensitivity	
01 77H	0000 bbbb	aaaa bbbb	-63 - +63
01 78H	0000 aaaa	Dummy	
01 79H	0000 bbbb	aaaa bbbb	
:	:	:	:
01 7EH	0000 aaaa	Dummy	
01 7FH	0000 bbbb	aaaa bbbb	
Total size		00 02 00H	

○ Table 4 - 1 : SMT (Sample Mix Table) Parameter

Offset address	Description	
00 00H	0000 cccc	Sample Select
00 01H	0000 dddd	aaaa bbbb cccc dddd -1(Off), 0 - 511
00 02H	0000 aaaa	
00 03H	0000 bbbb	
00 04H	0000 aaaa	Pitch KF
00 05H	0000 bbbb	aaaa bbbb -16 - +16
00 06H	0000 aaaa	Level
00 07H	0000 bbbb	aaaa bbbb 0 - 127
00 08H	0000 aaaa	Panning -32 - +32:L32 - R32, 33:Random
00 09H	0000 bbbb	aaaa bbbb 34:Key+, 35:Key-, 36:LFO+, 37:LFO-, 38:Alternate
00 0AH	0000 aaaa	Coarse Tune
00 0BH	0000 bbbb	aaaa bbbb -48 - +48
00 0CH	0000 aaaa	Fine Tune
00 0DH	0000 bbbb	aaaa bbbb -50 - +50
00 0EH	0000 aaaa	SMT Vel Lower
00 0FH	0000 bbbb	aaaa bbbb 1 - 126
00 10H	0000 aaaa	SMT Lower Fade Width
00 11H	0000 bbbb	aaaa bbbb 0 - 125
00 12H	0000 aaaa	SMT Vel Upper
00 13H	0000 bbbb	aaaa bbbb 2 - 127
00 14H	0000 aaaa	SMT Upper Fade Width
00 15H	0000 bbbb	aaaa bbbb 0 - 125
Total size		00 00 16H

○ Table 5 : Sample Parameter

Offset address	Description	
00 00H	0000 aaaa	Sample Name 1
00 01H	0000 bbbb	aaaa bbbb 32 - 127 (ASCII)
:	:	:
00 1EH	0000 aaaa	Sample Name 16
00 1FH	0000 bbbb	aaaa bbbb 32 - 127 (ASCII)
00 20H	0000 gggg	Start Point
00 21H	0000 hhhh	
00 22H	0000 eeee	aaaa bbbb cccc dddd eeee ffff. gggg hhhh
00 23H	0000 ffff	
00 24H	0000 cccc	
00 25H	0000 dddd	000000.00H - FFFFFFF.FFH
00 26H	0000 aaaa	
00 27H	0000 bbbb	
00 28H	0000 gggg	Sustain Loop Start Point
00 29H	0000 hhhh	
00 2AH	0000 eeee	aaaa bbbb cccc dddd eeee ffff. gggg hhhh
00 2BH	0000 ffff	
00 2CH	0000 cccc	
00 2DH	0000 dddd	000000.00H - FFFFFFF.FFH
00 2EH	0000 aaaa	
00 2FH	0000 bbbb	
00 30H	0000 gggg	Sustain Loop End Point
00 31H	0000 hhhh	
00 32H	0000 eeee	aaaa bbbb cccc dddd eeee ffff. gggg hhhh
00 33H	0000 ffff	
00 34H	0000 cccc	
00 35H	0000 dddd	000000.00H - FFFFFFF.FFH
00 36H	0000 aaaa	
00 37H	0000 bbbb	
00 38H	0000 gggg	Release Loop Start Point
00 39H	0000 hhhh	
00 3AH	0000 eeee	aaaa bbbb cccc dddd eeee ffff. gggg hhhh
00 3BH	0000 ffff	
00 3CH	0000 cccc	
00 3DH	0000 dddd	000000.00H - FFFFFFF.FFH
00 3EH	0000 aaaa	
00 3FH	0000 bbbb	

00 40H	0000 gggg	Release Loop End Point	
00 41H	0000 hhhh		
00 42H	0000 eeee	aaaa bbbb cccc dddd eeee ffff. gggg hhhh	
00 43H	0000 ffff		
00 44H	0000 cccc		
00 45H	0000 dddd	000000.00H - FFFFFFF.FFH	
00 46H	0000 aaaa		
00 47H	0000 bbbb		
00 48H	0000 aaaa	Loop Mode	0:Forward, 1:Fwd+R, 2:OneShot
00 49H	0000 bbbb	aaaa bbbb	3:Fwd+One, 4:Alt, 5:Rev One, 6:Rev
00 4AH	0000 aaaa	dummy	
00 4BH	0000 bbbb	aaaa bbbb	
00 4CH	0000 aaaa	Sustain Loop Tune	
00 4DH	0000 bbbb	aaaa bbbb	-50 ~ +50
00 4EH	0000 aaaa	Release Loop Tune	
00 4FH	0000 bbbb	aaaa bbbb	-50 ~ +50
00 50H	0000 cccc	Segment Top	
00 51H	0000 dddd	aaaa bbbb cccc dddd	0 ~ 3637
00 52H	0000 aaaa		
00 53H	0000 bbbb		
00 54H	0000 cccc	Segment Length	
00 55H	0000 dddd	aaaa bbbb cccc dddd	0 ~ 3638
00 56H	0000 aaaa		
00 57H	0000 bbbb		
00 58H	0000 aaaa	Sampling Frequency	0:48k, 1:24k, 2:44.1k
		aaaa	3:22.05k, 4:30k, 5:15k
00 59H	0000 aaaa	dummy	
		aaaa	
00 5AH	0000 aaaa	Original Key	
00 5BH	0000 bbbb	aaaa bbbb	21 ~ 108
00 5CH	0000 aaaa	Dummy	
00 5DH	0000 bbbb	aaaa bbbb	
00 5EH	0000 aaaa	Dummy	
00 5FH	0000 bbbb	aaaa bbbb	
Total size		00 00 60H	

○ Table 6 : Request for Sample Load

Offset		
address		Description
00 00H	0000 0010	
00 01H	0000 0000	Request for Sample Load
00 02H	0000 0000	
00 03H	0000 0000	
Total size		00 00 04H

* Loads from the current drive the sample having the name as the one specified by the sound data stored in the current volume memory.

* Since the loading takes a long time, the MIDI communications may not be correctly established during loading.

* This message is valid only when it is sent using a Data set (DT1) in a one way communication procedure, and the designated address is 01 00 00 00H and size is 00 00 00 04H.

■ Universal System Exclusive Messages

● Sample Dump Standard

To transfer data using the Sample Dump Standard use the following messages.

○ Dump request

This message is a command to request the dump of the sample by specifying its number. Upon receiving this message, the SP-700 checks to see if the requested sample number falls in a legal range. If it is, the SP-700 dumps the requested sample to the requesting equipment. If it is not within a legal range, the message is ignored.

The SP-700 does not send this message.

Byte	Description
F0H	Exclusive status
7EH	Sample dump command
ccH	Channel No.
03H	Command ID (Dump Req)
ss ss	Request sample (LSB first)
F7H	EOX

* For a system exclusive message transfer, use a device ID as a channel number.

○ Dump header

The SP-700 transmits a Dump header when it receives a Dump request or when it wants to start a Sample dump. It immediately aborts the dump upon receiving a Cancel. If it receives an ACK, it will start sending data. It will pause indefinitely upon receiving a Wait until another message is received. If the other party does not return any message within 2 seconds after the SP-700 sent a Dump header, the SP-700 will assume an open loop (one way communications) and begin sending data.

When the SP-700 receives this message, it checks to see if the memory will be enough to accept the dump, and if the sustain loop start/end points are correct. If all is OK, the SP-700 sends an ACK and waits a Data packet; if NG, sends a Cancel.

Byte	Description
F0H	Exclusive status
7EH	Sample dump command
ccH	Channel number
01H	Command ID (Dump head)
ss ss	Request sample (LSB first)
10H	Sample format (16 bits)
ff ff ff	Sample period (1/sampling rate nS)
gg gg gg	Data (word) length
hh hh hh	Sustain loop start point (word number)
ii ii ii	Sustain loop end point (word number)
jH	Loop type
	00H = Forwards only (unidirectional)
	01H = Backwards/Forwards (bi-directional)
	7FH = Off
F7H	EOX

* For a system exclusive message transfer, use a device ID as a channel number.

○ Data packet

Each data byte consists of 7 bits. The unit of data transmission is three bytes /word (40 words/packet). The data is left-justified within the 7-bit bytes and sent with the upper byte first and the 5th lower bit of the 3rd byte filled with a zero.

The SP-700 keeps a running checksum during reception of a Data packet and returns an ACK if the checksums match, and then waits for the next Data packet. If the checksums do not match, it sends a NAK and waits for retransmission of the packet.

The SP-700 transmits the next Data packet upon receiving an ACK; or immediately aborts the dump upon receiving a Cancel. It pauses the dump if a Wait is returned and it waits for the next messages.

Byte	Description
F0H	Exclusive status
7EH	Sample dump command
ccH	Channel number
02H	Command ID (Data packet)
ppH	Packet number
:	}
:	}
:	} 120-byte data
:	}
:	}
III	Checksum
F7H	EOX

* For a system exclusive message transfer, use a device ID as a channel number.

○ ACK

This is a handshaking flag. It means "Last data packet was received correctly. Start sending the next one." The packet number represents the packet being acknowledged as correct.

Byte	Description
F0H	Exclusive status
7EH	Sample dump command
ccH	Channel number
7FH	Command ID (ACK)
ppH	Packet number
F7H	EOX

* For a system exclusive message transfer, use a device ID as a channel number.

○ NAK

This is a handshaking flag. It means "Last data packet was received incorrectly. Please re-send." The packet number represents the packet being rejected.

Byte	Description
F0H	Exclusive status
7EH	Sample dump command
ccH	Channel number
7EH	Command ID (NAK)
ppH	Packet number
F7H	EOX

* For a system exclusive message transfer, use a device ID as a channel number.

○ Cancel

This is a handshaking flag. It means "Abort dump." The packet number represents the packet on which the abort takes place. The receiver will send this message when its memory becomes full.

Byte	Description
F0H	Exclusive status
7EH	Sample dump command
ccH	Channel number
7DH	Command ID (Cancel)
ppH	Packet number
F7H	EOX

* For a system exclusive message transfer, use a device ID as a channel number.

○ Wait

This is a handshaking flag. It means "Do not send any more packets until told to do so." The packet number represents the last packet received. The receiver will send this message when it needs time before receiving the remainder of the dump. An ACK will continue the dump while a Cancel will abort the dump.

The SP-700 does not transmit this message.

Byte	Description
F0H	Exclusive status
7EH	Sample dump command
ccH	Channel number
7CH	Command ID (Wait)
ppH	Packet number
F7H	EOX

* For a system exclusive message transfer, use a device ID as a channel number.

4. References

● Decimal VS hexadecimal

With a MIDI system the data value and the addresses and sizes in an Exclusive message is expressed in 7-bit hexadecimal values. The table below shows decimal values and their hexadecimal counterparts.

Decimal	Hex	Decimal	Hex	Decimal	Hex	Decimal	Hex
0	00H	32	20H	64	40H	96	60H
1	01H	33	21H	65	41H	97	61H
2	02H	34	22H	66	42H	98	62H
3	03H	35	23H	67	43H	99	63H
4	04H	36	24H	68	44H	100	64H
5	05H	37	25H	69	45H	101	65H
6	06H	38	26H	70	46H	102	66H
7	07H	39	27H	71	47H	103	67H
8	08H	40	28H	72	48H	104	68H
9	09H	41	29H	73	49H	105	69H
10	0AH	42	2AH	74	4AH	106	6AH
11	0BH	43	2BH	75	4BH	107	6BH
12	0CH	44	2CH	76	4CH	108	6CH
13	0DH	45	2DH	77	4DH	109	6DH
14	0EH	46	2EH	78	4EH	110	6EH
15	0FH	47	2FH	79	4FH	111	6FH
16	10H	48	30H	80	50H	112	70H
17	11H	49	31H	81	51H	113	71H
18	12H	50	32H	82	52H	114	72H
19	13H	51	33H	83	53H	115	73H
20	14H	52	34H	84	54H	116	74H
21	15H	53	35H	85	55H	117	75H
22	16H	54	36H	86	56H	118	76H
23	17H	55	37H	87	57H	119	77H
24	18H	56	38H	88	58H	120	78H
25	19H	57	39H	89	59H	121	79H
26	1AH	58	3AH	90	5AH	122	7AH
27	1BH	59	3BH	91	5BH	123	7BH
28	1CH	60	3CH	92	5CH	124	7CH
29	1DH	61	3DH	93	5DH	125	7DH
30	1EH	62	3EH	94	5EH	126	7EH
31	1FH	63	3FH	95	5FH	127	7FH

● Checksum in an exclusive message

Any data contained in a Roland exclusive message should be followed by a checksum (just before F7) to ensure that the data is correctly received. The value of the checksum depends on the associated address, data (or size).

◇ Calculating checksum (hexadecimal value is followed by the suffix H)

The checksum bits must have the value which, when added to the address and size bits, will make the least significant 7 bits of the sum filled with zeroes.

The equation below shows an example of the calculation to determine the value of checksum bits assuming that the address of the exclusive message is aa bb cc ddH, and data or size is ee ff gg hhH.

$$\begin{aligned}
 aa + bb + cc + dd + ee + ff + gg + hh &= \text{sum} \\
 \text{sum} \div 128 &= \text{quotient} \dots \text{remainder} \\
 128 - \text{remainder} &= \text{checksum}
 \end{aligned}$$

MIDI Implementation Chart

Function ...		Transmitted	Recognized	Remarks
Basic Channel	Default	×	1 - 16, OFF * 3	
	Changed	×	1 - 16, OFF * 3	
Mode	Default	×	3	
	Messages	×	×	
	Altered	*****	×	
Note Number	True Voice	×	21 - 108	
		*****	21 - 108	
Velocity	Note ON	×	○	
	Note OFF	×	○	
After Touch	Key's	×	* 1	
	Ch's	×	* 1	
Pitch Bender		×	* 1	
Control Change	0 - 95	×	○	* 2
	0, 32	×	○ (MSB only) * 4	Bank select Modulation Data entry Volume Pan Hold 1
	1	×	* 1	
	6, 38	×	○	
	7	×	* 1	
	10	×	* 1	
	64	×	* 1	
	100, 101	×	○	RPN LSB, MSB
Prog Change	True #	×	0 - 127 * 1	
		*****	0 - 127	
System Exclusive		* 1	* 1	
System Common	Song Pos	×	×	
	Song Sel	×	×	
	Tune	×	×	
System Real Time	Clock	×	×	
	Commands	×	×	
Aux Messages	Local ON/OFF	×	×	
	All Notes OFF	×	○ (123 - 127)	
	Active Sense	×	○	
	Reset	×	×	
Notes		* 1 ○ or × selectable. * 2 optional setting. * 3 multiple basic setting can be made.		

Mode 1 : OMNI ON, POLY

Mode 2 : OMNI ON, MONO

○ : Yes

Mode 3 : OMNI OFF, POLY

Mode 4 : OMNI OFF, MONO

× : No

Specifications

SP - 700:16 BIT SAMPLE PLAYER

Maximum Polyphony

24 voices

Sound Source

DI (Differential Interpolation) synthesis

Sampling Frequency

48 kHz

Data Format

16 bit linear

Signal Processing

D/A Conversion 18 bit
Internal Processing 24bit linear

External Media Interface

SCSI connectors 2

Display

64 × 240 dots (backlit LCD)

Effects

2 band equalizer 8

Wave Memory (8Mbytes type:SIM - 8)

RAM 8Mbytes (maximum installed : 32Mbytes)

Volume Memory (A, B)

Volume 1
Performance 64
Patch 128
Partial 255
Sample 512

Connectors

Headphone jack (stereo) 1
AC inlet 1
SCSI connectors 2
MIDI connectors IN, OUT, THRU
STEREO OUTPUT jacks 4
(INDIVIDUAL OUTPUT jacks 8)

* Note that the AC inlet does not apply to units designed for 117 V use.

Residual Noise Level (IHF - A Type)

STEREO OUTPUT A ... more than - 85 dBm (All Volume:Max)
(INDIVIDUAL OUTPUTs 1, 2)
STEREO OUTPUTs B — D more than - 85 dBm
(INDIVIDUAL OUTPUTs 3 — 8)

Rated Output

+9 dBm (maximum output per voice)

Output Impedance

1.6 k Ω

Power Supply

AC117V, AC230V or AC240V (50/60Hz)

Power Consumption

AC117V :28W
AC230V :25W
AC240V :25W

Dimensions

482 (W) × 389 (D) × 88 (H) mm
19 (W) × 15 - 3/8 (D) × 3 - 1/2 (H) inches
(EIA - 2U rack mount type)

Weight

6.5 kg
14 lbs 6 oz

Accessories

Owner's Manual
The list of "SCSI compatible devices for SP - 700"
CD - ROM disk (PREVIEW)
MIDI cable × 1

Options

Memory Expander : SIM - 8
SCSI cable :
..... C - 5025 - 6 (full - pitch 50 pin ↔ D - Sub 25 pin)
..... C - 5050 - 3 (full - pitch 50 pin ↔ full - pitch 50 pin)
CD - ROM disks :
for S - 770/750
..... L - CD series, RS - 1, USV - 3, DS - 60711, C50CD02
for S - 550/W - 30 (Convert Load necessary)
..... USV - 2, C50CD01
MIDI cable : MSC - 15/25/50

* The specifications for this product are subject to change without prior notice.

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Information

When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

U. S. A.

Roland Corporation US
7200 Dominion Circle
Los Angeles, CA.
90040-3647, U. S. A.
☎ (213)685 - 5141

CANADA

Roland Canada Music Ltd.
(Head Office)
5480 Parkwood
Richmond B. C., V6V 2M4
CANADA
☎ (604)270 - 6626

Roland Canada Music Ltd.
9425 Transcanadienne
Service Rd. N., St Laurent,
Quebec H4S 1V3,
CANADA
☎ (514)335 - 2009

Roland Canada Music Ltd.
346 Watline Avenue,
Mississauga, Ontario L4Z
1X2, CANADA
☎ (416)890 - 6488

AUSTRALIA

Roland Corporation
(Australia) Pty. Ltd.
(Head Office)
38 Campbell Avenue
Dee Why West. NSW 2099
AUSTRALIA
☎ (02)982 - 8266

Roland Corporation
(Australia) Pty. Ltd.
(Melbourne Office)
50 Garden Street
South Yarra, Victoria 3141
AUSTRALIA
☎ (03)241 - 1254

UNITED KINGDOM

Roland(U.K.) Ltd.
Rye Close
Ancells Business Park
Fleet, Hampshire GU13
8UY, UNITED KINGDOM
☎ 0252 - 816181

Roland(U.K.) Ltd.,
Swansea Office
Atlantic Close, Swansea
Enterprise Park, Swansea,
West Glamorgan SA79FJ,
UNITED KINGDOM
☎ (0792)700 - 139

ITALY

Roland Italy S. p. A.
Viale delle Industrie 8
20020 ARESE MILANO
ITALY
☎ 02 - 93581311

SPAIN

Roland Electronics
de España, S. A.
Calle Bolivia 239
08020 Barcelona, SPAIN
☎ 93 - 308 - 1000

GERMANY

Roland Elektronische
Musikinstrumente
Handelsgesellschaft mbH.
Oststrasse 96, 2000
Norderstedt, GERMANY
☎ 040/52 60 090

FRANCE

Musikengro
102 Avenue Jean-Jaures
69007 Lyon Cedex 07
FRANCE
☎ (7)858 - 54 60

Musikengro (Paris Office)
Centre Region Parisienne
41 rue Charles-Fourier,
94400 Vitry s/Seine
FRANCE
☎ (1)4680 86 62

BELGIUM/ HOLLAND/ LUXEMBOURG

Roland Benelux N. V.
Houtstraat 1
B-2260 Oevel-Westerlo
BELGIUM
☎ (0032)14 - 575811

DENMARK

Roland Scandinavia A/S
Langebrogade 6
Box 1937
DK-1023 Copenhagen K.
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☎ 31 - 95 31 11

SWEDEN

Roland Scandinavia A/S
Danvik Center 28 A, 2 tr.
S-131 30 Nacka
SWEDEN
☎ 08 - 702 00 20

NORWAY

Roland Scandinavia
Avd. Norge
Lilleakerveien 2
Postboks 95 Lilleaker
N-0216 Oslo 2
NORWAY
☎ 02 - 73 00 74

FINLAND

Fazer Musik Inc.
Länsituulentie
POB 169
SF-02101 Espoo
FINLAND
☎ 0 - 43 50 11

NEW ZEALAND

Roland Corporation
(NZ) Ltd.
97 Mt. Eden Road, Mt.
Eden, Auckland 3,
NEW ZEALAND
☎ (09)3098 - 715

SWITZERLAND

Musitronic AG
Gerberstrasse 5, CH-4410
Liestal, SWITZERLAND
☎ 061/921 16 15

Roland CK (Switzerland)
AG
Postfach/Hauptstrasse 21
CH-4456 Tenniken
SWITZERLAND
☎ 061/98 60 55
Repair Service by
Musitronic AG

AUSTRIA

E. Dematte & Co.
Neu-Rum Siemens-
Strasse 4
A-6021 Innsbruck Box 591
AUSTRIA
☎ (0512)63 451

GREECE

V. Dimitriadis & Co. Ltd.
2 Phidiou Str., GR 106 78
Athens, GREECE
☎ 1 - 3620130

PORTUGAL

Casa Caius Instrumentos
Musicais Lda.
Rua de Santa Catarina 131
Porto, PORTUGAL
☎ 02 - 38 44 56

HUNGARY

Intermusica Ltd.
Warehouse Area 'DEPO'
Torokbalint, Budapest
HUNGARY
☎ (1)1868905

ISRAEL

D.J.A. International Ltd.
25 Pinsky St., Tel Aviv
ISRAEL
☎ 972 - 3 - 5283015

CYPRUS

Radex Sound Equipment
Ltd.
17 Panteli Katelari Str.
P.O.Box 2046, Nicosia
CYPRUS
☎ 453426, 466423

TURKEY

Barkat Sanayi ve Ticaret
Siraselviler Cad. 86/6
Taksim Istanbul, TURKEY
☎ 149 93 24

EGYPT

Al Fanny Trading Office
9, Ebn Hagar Askalany
Street, Ard El Golf,
Heliopolis, Cairo, EGYPT
☎ 2917803 - 665918

BRAZIL

Roland Brasil Ltda.
R. Alvarenga 591
CEP-05509 Sao Paulo
BRAZIL
☎ (011)813 - 7967
Repair Service for Roland
and Rhodes products

Oliver do Brasil S.A.
Instrumentos Musicais
Av. Ceci. No.578 Centro
Empresarial Tambore
Barueri SP CEP 06400
BRAZIL
☎ (011)709 - 1267
Repair Service for BOSS
products

MEXICO

Case Veerkamp, s.a. de c.v.
Mesones No. 21
Col. Centro
C.P. 06080 Mexico, D.F.
MEXICO
☎ (5)709 - 3716

La Casa Wagner de
Guadalajara s.a. de c.v.
Av. Corona No. 202 S.J.
C.P.44100
Guadalajara, Jalisco
MEXICO
☎ (36)13 - 1414

ARGENTINA

Netto S.A.
Venezuela 1433
1095 Buenos Aires
ARGENTINA
☎ 37 - 1632

HONG KONG

Tom Lee Music Co., Ltd.
Service Division
22-32 Pun Shan Street,
Tsuen Wan, New
Territories, HONG KONG
☎ 415 - 0911

KOREA

Cosmos Corporation
Service Station
261 2nd Floor Nak-Won
arcade
Jong-Ro ku, Seoul, KOREA
☎ (02) 742 8844

SINGAPORE

Swee Lee Company
Bras Basah Complex
#03-23 Singapore 0178
SINGAPORE
☎ 3367886

THAILAND

Theera Music Co., Ltd
330 Verng Nakorn Kasem,
Soi 2, Bangkok 10100,
THAILAND
☎ 2248821

MALAYSIA

Syarikat Bentley
No.142, Jalan Bukit
Bintang 55100 Kuala
Lumpur, MALAYSIA
☎ 2421288

INDONESIA

PT Galestra Inti
Kompleks Perkantoran
Duta Merlin Blok C/59
Jl. Gajah mada No.3-5
Jakarta 10130
INDONESIA
☎ (021) 354604, 354606

TAIWAN

Siruba Enterprise(Taiwan)
Co., LTD.
Room. 5, 9fl. No. 112
Chung Shan N.Road Sec.2
Taipei, TAIWAN, R.O.C.
☎ (02)5364546

SOUTH AFRICA

That Other Music
Shop(PTY) LTD.
256 Bree Street,
Johannesburg 2001
Republic of South Africa
☎ 337 - 6573

Paul Bothner(PTY) LTD.

17 Werdmuller Centre
Claremont 7700
Republic of South Africa
☎ 021 - 64 - 4030

SCSI compatible devices for SP - 700

SP - 700 に接続できる SCSI 機器

The following devices can be connected to the SP - 700 by using the SCSI interface.

ローランドで動作確認を行なった機種として、次のものがあります。

In order to connect a SCSI device to the SP-700, you will need to have the appropriate SCSI cable.

The SCSI connector on the SP-700 is of the DB-25 type. You should check the shape of the connector on your SCSI device and count the number of pins it has to make sure you obtain the right SCSI cable. Refer to the section "About SCSI" of the SP-700's owner's manual.

Note that you will not need to use any SCSI driver software that may have been supplied with your SCSI device.

SCSI 機器と SP-700 を接続するには、SCSI ケーブルが必要です。

SP-700 の SCSI コネクターは D-Sub 25 ピンです。SCSI 機器を SP-700 に接続するには、その SCSI 機器の SCSI コネクターの形状とピン数をご確認のうえ SCSI ケーブルをご用意頂くことになります。SP-700 の取扱説明書の「SCSI について」をご覧ください。

また、SCSI 機器に付属されている SCSI ドライバーなどのソフトウェアは使用する必要はありません。

The operation of the following products listed below have been checked by Roland.

下記のリストは、ローランドで動作確認をしたものです。

■ CD-ROM drives

TEXEL CORPORATION
DM-5024

TOSHIBA CORPORATION
XM-3300A (Japan only/日本国内のみ)

ROLAND CORPORATION
CD-5

■ Magneto-Optical drives

《5 inch》

SONY CORPORATION *
RMO-S550

ROLAND CORPORATION *
MO-7

* Available removable disks/使用できるディスク
Sony Corporation
EDM-1DA1 (512 Byte/sector)
Seiko/Epson Corporation
EPM-C51 (512 Byte/sector)

MAXTOR CORPORATION
TAHITI-2

Available removable disks/使用できるディスク
MAXOPTIX Corporation
1 Gigabyte (512 Byte/sector)
650 Megabyte (512 Byte/sector)

KUBOTA CORPORATION
TAHITI-1000S (Japan only/日本国内のみ)

Available removable disks/使用できるディスク
KUBOTA Corporation
C1000-512 (512 Byte/sector)
C650-512 (512 Byte/sector)

RICHO COMPANY, LTD.
RS-9200EX (Japan only/日本国内のみ)

Available removable disks/使用できるディスク
RICOH Company, Ltd
ROD-5064F (512 Byte/sector)

《3.5 inch》

SONY CORPORATION
RMO-S350
RMO-S360

Available removable disks / 使用できるディスク
Sony Corporation
EDM-128 (128 MByte single-sided disk)

RICHO COMPANY, LTD.
RS-3100E (Japan only / 日本国内のみ)

Available removable disks / 使用できるディスク
RICOH Company, Ltd
ROS-3010F (128 MByte single-sided disk)

MIDORI ELECTRONICS CO., LTD
OMC-120 (Japan only / 日本国内のみ)

Available removable disks / 使用できるディスク
Sony Corporation
EDM-128 (128 MByte single-sided disk)

■ HARD DISK drives

In most cases, any hard disk of a capacity less than 600 MByte can be used. Although you can use disks that are larger than 600 MByte, you will only be able to use a maximum of 600 MByte. So, for example, with an 800 MByte disk, you would have 600 MByte of usable space, and 200 MByte that must remain idle.

You can also use removable-media hard drives (SyQuest 44 MByte and 88 MByte disks).

容量600 MByte以下のハード・ディスクであれば、基本的に使用できます。600 MByteより容量の大きいハード・ディスクも使用できますが、使用できる容量は600 MByteまでです。例えば、800 MByteのハード・ディスクの場合、600 MByteまで使用でき、残りの200 MByteは一切使用できません。

また、リムーバブル式のハード・ディスク (SyQuestタイプの44 MByteと88 MByte) も使用できます。

■ STREAMING TAPE drives

《4mm DAT》

WangDAT (Hardware Manufacturer) *
1300

ARCHIVE (Hardware Manufacturer) *
4360XT

Roland CORPORATION *
DDS-80 (Japan only / 日本国内のみ)

*We recommend you to use data-grade
DDS DAT cassettes.

*データ・グレードDDS DATのカセットを使用
することを推奨します。

Concerning the Terminator

When shipped, the unit was set so the following settings were in effect for termination:

- ★ A terminator is installed (and turned ON) inside the SP - 700.
- ★ The unit is set so power for a terminator will be output on the SCSI bus (set to "ON").

* Any of these settings can be set to "Off" if desired.

For details, refer to "Removing/Installing the SP - 700's Terminator" (☞ P. App. - 9),
and "Turning ON/OFF Output of Terminator Power" (☞ P. App. - 11).

You also should refer to "About SCSI" (☞ P. App. - 6).

ターミネーターについて

お買上げ時のターミネーターの設定は以下の通りです。

- ★ターミネーターは、SP - 700 に装着 (オン) されています。
- ★SCSI バスに対してのターミネーター電源は、出力するよう設定されています (オン)。

*これらの設定は、それぞれオフすることができます。

詳しくは、「SP - 700 のターミネーターの取り外し／装着」(☞ P. App. - 9) や「ターミネーター電源出力のオン／オフについて」(☞ P. App. - 11) をご覧ください。

また、「SCSI について」(☞ P. App. - 6) の合わせてご覧ください。

About the Load - While - Playing Feature

The SP - 700 provides a convenient Load - While - Playing feature which allows sound data to be loaded without experiencing any interruptions in the music being played.

For further details about Load - While - Playing, see p. Sys - 4.

Note, however, that some types of SCSI drives make it impossible to use the Load - While - Playing feature. If you should encounter such a drive, you will need to turn OFF Load - While - Playing.

The “CDR - 30”, “CDR - 35D - 01”, “CDR - 36” and “PC - CD10” (which are CD - ROM drives), produced by NEC Corp., are SCSI drives which we know at the time of this printing is not compatible with the Load - While - Playing feature.

ロード・ホワイル・プレイング機能について

SP - 700 には、演奏を中断することなくサウンド・データをロードできるロード・ホワイル・プレイング機能があります。

ロード・ホワイル・プレイング機能の詳細については、P.Sys - 4 をご覧ください。

しかし、ご使用になる SCSI ドライブによっては、このロード・ホワイル・プレイング機能が使用できないものがあります。この場合には、ロード・ホワイル・プレイングをオフしてお使いください。

この機能が使用できない SCSI ドライブとして、NEC 社の「CDR - 30」、「CDR - 35D - 01」、「CDR - 36」、「PC - CD10」、(すべて CD - ROM ドライブ) などがあります。

For Germany

Bescheinigung des Herstellers / Importeurs

Hiermit wird bescheinigt, daß der/die/das
Roland 16BIT SAMPLE PLAYER SP-700

.....
(Gerät, Typ Bezeichnung)

in Übereinstimmung mit den Bestimmungen der
Amtsbl. Vfg 1046 / 1984

.....
(Amtsblattverfügung)

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

.....
Roland Corporation Osaka / Japan

.....
Name des Herstellers/Importeurs

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

For Canada

CLASS B

NOTICE

This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

CLASSE B

AVIS

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Règlement des signaux parasites par le ministère canadien des Communications.

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