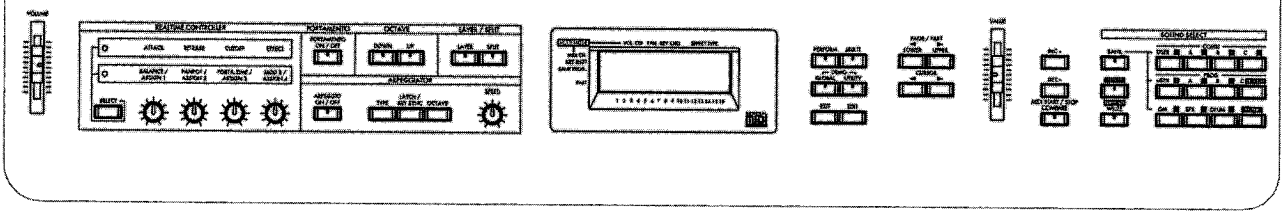
N1/N5 Owner's Manual



MUSIC SYNTHESIZER

AI² SYNTHESIS SYSTEM
64 VOICE POLYPHONY
ARPEGGIATOR
DYNAMIC STEREO EFFECTS

KORG

PCI/F

GENERAL MIDI INSTRUMENT

Ⓔ ④

Precautions

Location

Using the unit in the following locations can result in a malfunction.

- In direct sunlight
- Locations of extreme temperature or humidity
- Excessively dusty or dirty locations
- Locations of excessive vibration

Power supply

Please connect the AC/AC power supply to an AC outlet of the correct voltage. Do not connect it to an AC outlet of voltage other than that for which your unit is intended.

Handling

To avoid breakage, do not use excessive force on the switches or controls.

Care

If the exterior becomes dirty, wipe it with a clean, dry cloth. Do not use liquid cleaners such as benzene or thinner, or cleaning compounds or flammable polishes.

Interference with other electrical devices

This product contains a microcomputer. Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

Keeping foreign matter out of your equipment

- Never set any container with liquid in it near this equipment. If liquid gets into the equipment, it could cause a breakdown, fire, or electrical shock.
- Be careful not to let metal objects get into the equipment. If something does slip into the equipment, unplug the AC/AC power supply from the wall outlet. Then contact your nearest Korg dealer or the store where the equipment was purchased.

Keep this manual

After reading this manual, please keep it for later reference.

CE mark for European Harmonized Standards

CE mark which is attached to our company's products of AC mains operated apparatus until December 31, 1996 means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).

And, CE mark which is attached after January 1, 1997 means it conforms to EMC Directive (89/336/EEC), CE mark Directive (93/68/EEC) and Low Voltage Directive (73/23/EEC).

Also, CE mark which is attached to our company's products of Battery operated apparatus means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).

THE FCC REGULATION WARNING

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 user's authority to operate this equipment.

Data handling

Unexpected malfunctions can result in the loss of memory contents. Please be sure to save important data on an external data filer (storage device). Korg cannot accept any responsibility for any loss or damage which you may incur as a result of data loss.

LCD Display

Some pages of the manuals show LCD screens along with an explanation of functions and operations. All sound names, parameter names, and values are merely examples and may not always match the actual display you are working on.

Table of Contents

Introduction

Thank you for purchasing the Korg N1/N5 music synthesizer.

Features of the N1/N5

- Performance Play mode for playing convenience Split, Layer and Portamento are easily accessible. The four Realtime Controller knobs let you modify parameters in realtime as you play.
- Arpeggiator
  20 types of arpeggio can be produced easily.
- High-quality sounds featuring the AI²-squared synthesis system.
- A versatile collection of multisounds covering a wide range of variation.
- A rich complement of programs covering a diverse array of musical genres.
- Multi-timbral tone generator supports multiple formats (Korg Super Series/GM/XG sound map/GS sound map).
- Computer interface for direct connection to your personal computer.
- Maximum 64-note simultaneous polyphony is ample even for large ensembles.
- Combinations allow for up to 8 program sounds to be combined freely.
- Drum kits that support a wide variety of rhythmic expression.
- Digital multi-effects cover a full range from soundfield processing to dramatic creativity.

How to read this owner's manual

1. First, read from "Front and rear panel" (starting on the following page) through "The modes of the N1/N5." This will explain basic topics such as connections with your audio system.
2. Next, read "Chapter 1. Quick start – Play." This chapter explains how to hear the demo songs and how to select sounds.
3. If you wish to modify sounds or settings, read "Chapter 2. Quick start – Edit." For details on each mode, refer to "Chapter 3. Parameter guide."
4. If you wish to play the N1/N5 from your computer or sequencer, refer to "Chapter 4. Connections with a computer/sequencer."
5. The "Appendices" at the end of the manual include the following material:

   "Parameter list"
   This lets you quickly find the page which explains the parameter you are interested in.

   "Voice name list"
   All Programs, Combinations and Multisounds are listed here.

   "Troubleshooting"

In general, operations are identical for both the N1 and the N5, but the two models differ as follows. Differences in their OUTPUT structures will affect Effect Placement (refer to p.45).

Keyboard	N1: 88 notes N5: 61 notes
OUTPUT	N1: 4 outputs (1/L/MONO, 2/R, 3, 4) N5: 2 outputs (L/MONO, R)
Headphone jack	N1: stereo phone jack N5: stereo mini jack
Multisounds	(Refer to "Voice name list")

Front and rear panel

Front panel

[PORTAMENTO ON/OFF] key
This switches portamento on/off. When it is on, the LED will light.

[REALTIME CONTROLLER]
Of the two groups of functions, the group selected by the [SELECT] key can be controlled by the four knobs to modify the sound in realtime while you play.

[SELECT] key
This selects the group of parameters controlled by the REALTIME CONTROLLER.

[VOLUME] slider
This adjusts the volume that is output from the rear panel OUTPUT jack and the PHONES jack.

[OCTAVE DOWN] key
Pressing this key to make the LED light will shift the pitch of the N1/N5 keyboard one octave lower than normal. Pressing it again to make the LED blink will shift the pitch two octaves lower than normal.

[OCTAVE UP] key
Pressing this key to make the LED light will shift the pitch of the N1/N5 keyboard one octave higher than normal. Pressing it again to make the LED blink will shift the pitch two octaves higher than normal.

[LAYER] key
By pressing this key to make the LED light, you can play layered sounds. (For details refer to p.11)

[SPLIT] key
By pressing this key to make the LED light, you can play split sounds. (For details refer to p.11, p.23, p.27)

LCD display screen
This indicates information such as the sound bank, sound name, various parameters and their settings, and the volume of each part, etc.

[GLOBAL] key
Pressing this key to make the LED light will select Global mode.

[PERFORM] key
Pressing this key to make the LED light will select Performance Play mode. While you are in Performance Play mode, the display will switch each time this key is pressed.

[MULTI] key
Pressing this key to make the LED light will select Multi mode.

[UTILITY] key
Pressing this key to make the LED light will select Utility mode.

[PAGE/PART ◄ LOWER] key *
In Program Play mode SPLIT or LAYER, this key selects the Lower part.
In Part Edit mode, this key goes back to the previous part.
In other Edit modes and in Global and Utility modes, this key goes back to the previous page.

[PAGE/PART ► UPPER] key *
In Program Play mode SPLIT or LAYER, this key selects the Upper part.
In Part Edit mode, this key advances to the next part.
In other Edit modes and in Global and Utility modes, this key advances to the next page.

[CURSOR◄] key, [CURSOR►] key **
Use these keys to select items that are displayed in the LCD.

[VALUE] slider
Use this to modify the value of the currently selected parameter.

[INC+] key, [DEC–] key
These keys increase or decrease the value of the selected parameter in steps of 1.
You can press the [INC+] and [DEC–] keys simultaneously to bring back the value that the parameter had when it was first selected.

[MIDI START/STOP COMPARE] key
In the various Edit modes Performance Edit, Part Edit, Combination Edit, Program Edit, Drumkit Edit and Effect Edit, pressing this key will alternate between the un-edited sound and the currently edited sound, allowing you to compare them.
In Performance Play mode or Multi mode, pressing this key will transmit a Start or Stop message to an external MIDI device. (Refer to p.64, Global mode <Clock Source>)

[BANK] key
When this key is pressed to make the LED light, you can use the numeric keys to select sound banks. (For details refer to p.10)

Numeric keys
Use these keys to select program numbers or sound banks. While editing, you can use these to enter a value directly.

[C/10's HOLD] key
When the [10's HOLD] function is active, pressing a numeric key will enter only a single digit. When this function is active, a frame will appear surrounding the number in the display.
In the various edit modes, pressing this key will switch the sign of the parameter value between negative and positive.

[ENTER] key
After using the numeric keys, press this key to select the specified program.
After using the numeric keys, press this key to finalize the parameter value.
This key is also used to execute an operation such as Save.

[EFFECT] key
When this key is pressed to make the LED light, you can use the numeric keys to select an effect. (For details refer to p.10)

[PERFORM WRITE] key
In the various Edit modes Performance Edit, Part Edit, Combination Edit, Program Edit, Drumkit Edit and Effect Edit, use this key to write data into memory. When this key is pressed to turn on the LED, you can use the numeric keys to select performances.

[PITCH BEND] wheel
This lets you modify the pitch. Normally, moving the wheel away from yourself will raise the pitch, and moving it toward yourself will lower the pitch.

[MODULATION] wheel
This controls modulation depth. Moving the wheel away from yourself will deepen the modulation.

Headphone jack
N5: Stereo mini jack (N1: Stereo phone jack)

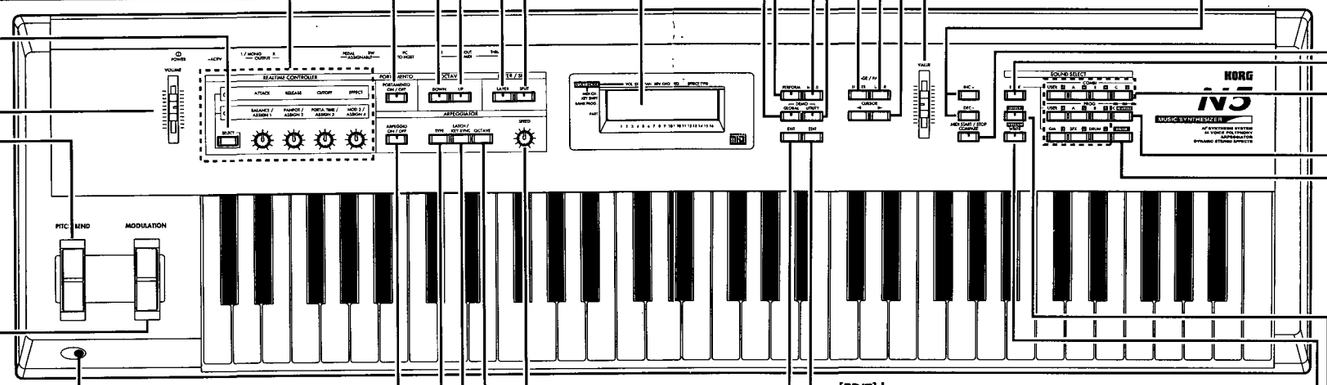
[ARPEGGIO ON/OFF] key
This switches the arpeggiator on/off. When on, the LED will blink in the specified tempo. (For details refer to p.13 and p.24)

[TYPE] key
Selects the arpeggio type.

[LATCH/KEY SYNC] key
Each time you press this key, the function of the arpeggiator LATCH/KEY SYNC key will cycle through the settings LATCH → KEY SYNC → LATCH & KEY SYNC → OFF. (For details refer to p.13 and p.25)

[OCTAVE] key
Selects the pitch range of the arpeggio. Each time you press this key, the octave range will cycle through the settings 1 → 2 → 3 → 4.

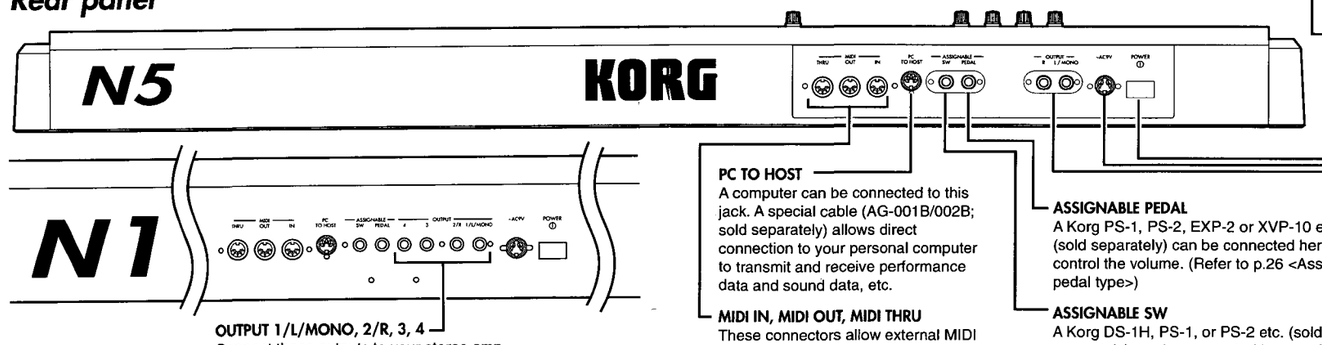
[SPEED] knob
Adjusts the speed of the arpeggiator.



[EDIT] key
Press this key to select the Edit mode corresponding to the current mode: Performance Edit, Combination Edit, Program Edit, Drumkit Edit or Effect Edit. Refer to p.8 "Moving between modes" for details on how to enter each mode.

[EXIT] key
Press this key to exit the current page, or to cancel an operation.

Rear panel



OUTPUT 1/L/MONO, 2/R, 3, 4
Connect these outputs to your stereo amp, mixer, or multitrack recorder etc. When connecting a monaural amp, use the 1/L/MONO jack.

PC TO HOST
A computer can be connected to this jack. A special cable (AG-001B/002B; sold separately) allows direct connection to your personal computer to transmit and receive performance data and sound data, etc.

MIDI IN, MIDI OUT, MIDI THRU
These connectors allow external MIDI devices to be connected. Messages received at MIDI IN are re-transmitted without change from MIDI THRU.

ASSIGNABLE PEDAL
A Korg PS-1, PS-2, EXP-2 or XVP-10 etc. (sold separately) can be connected here to control the volume. (Refer to p.26 <Assignable pedal type>)

ASSIGNABLE SW
A Korg DS-1H, PS-1, or PS-2 etc. (sold separately) can be connected here and used as a damper pedal. Other functions can also be assigned. (Refer to p.26 <Assignable switch type>)

POWER switch

~AC9V (AC/AC power supply connector)
Connect the included AC/AC power supply to this connector.

OUTPUT L/MONO, R
Connect these outputs to your stereo amp, mixer or multitrack recorder. When connecting a monaural amp, use the L/MONO jack.

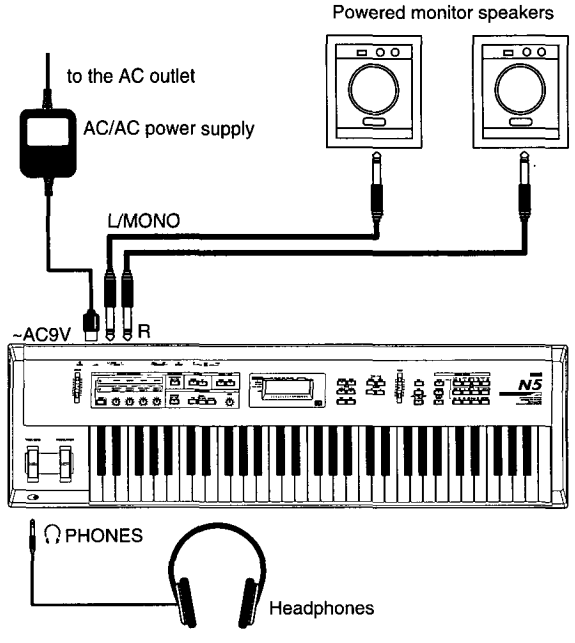
The front panel diagram shows the N5, but the N1 is identical. Only the rear panel OUTPUT jacks are different.

* keys are abbreviated in this manual as PAGE/PART[◄] and [►]
** keys are abbreviated in this manual as CURSOR[◄] and [►]

Connections

Connecting to audio equipment

Refer to the following diagram, and connect the AC/AC power supply, and audio cables. In order to take full advantage of the N1/N5's high-quality sound, we recommend that you listen in stereo as much as possible. If you connect a monaural amp, use the L/MONO jack.



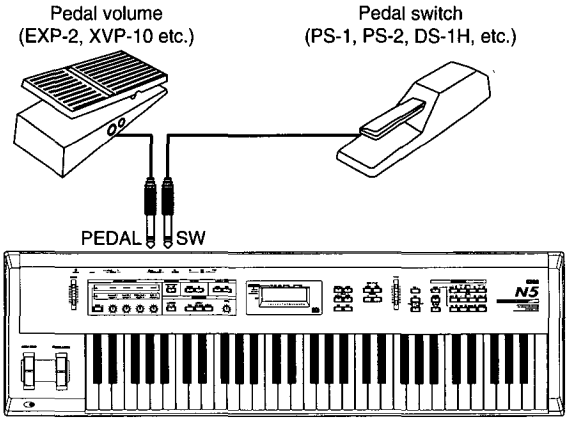
If you use headphones, connect them to the PHONES jack located on the front left of the N1/N5.

If you are playing the N1/N5 through a stereo audio amp or a stereo cassette player which has external inputs, connect the N1/N5 to the jacks marked LINE IN, AUX IN or "external input." (You may need to obtain the appropriate plug adapters or cables.) When playing the N1/N5 through a stereo audio amp, be careful not to raise the volume excessively, since this can damage your speaker system.

This completes basic preparations.

Connecting a pedal switch/pedal volume

An optional pedal switch (PS-1, PS-2, DS-1H, DS-2 etc.) can be connected to sustain the notes you play (i.e., the switch will act like the damper pedal of a piano). An optional pedal volume (EXP-2, XVP-10 etc.) can be connected to control the volume as you play.



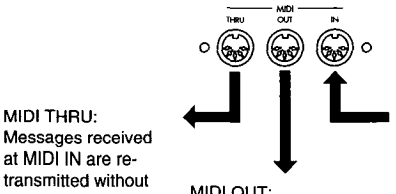
The polarity of the pedal switch (the ON/OFF condition) can be set in Global mode <Assignable Switch Polarity> (p.65). If pedal switch operation is the opposite of the effect (i.e., if notes are sustained when the pedal is released), change the polarity.

MIDI connections

By connecting MIDI cables to the MIDI connectors of the N1/N5 you can play the N1/N5 from an external MIDI device, or play an external MIDI tone generator from the keyboard of the N1/N5.

(If you are using the N1/N5 by itself, the following connections are unnecessary.)

MIDI connectors



MIDI THRU:
Messages received at MIDI IN are re-transmitted without change from this connector. Use this connector when you wish to connect three or more MIDI devices simultaneously.

MIDI OUT:
MIDI messages are transmitted from this connector. When you wish to play another MIDI tone generator from the keyboard of the N1/N5, connect a MIDI cable to this connector.

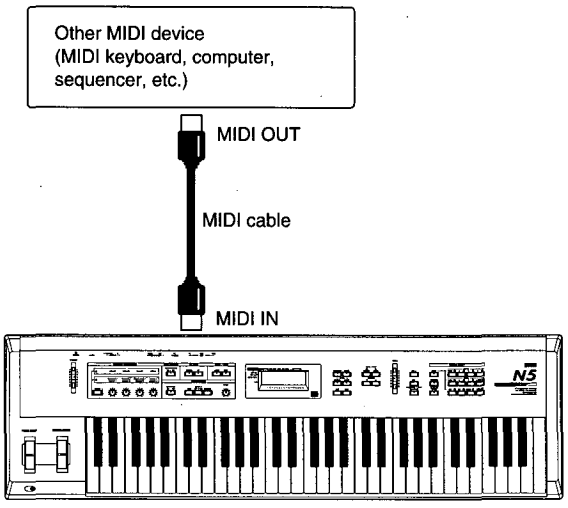
MIDI IN:
MIDI messages are received at this connector. When you wish to play the N1/N5 from another MIDI keyboard or computer etc., connect a MIDI cable to this connector.

By using the MIDI THRU connector you can "daisy chain" multiple MIDI devices to receive the same stream of data. However to prevent problems caused by faulty data transmission, it is best to daisy-chain no more than two or three devices. If you need to simultaneously control more MIDI devices than this, use a MIDI patch bay.

The additional connections explained on the following pages may be made as necessary.

Controlling the N1/N5 from another MIDI device

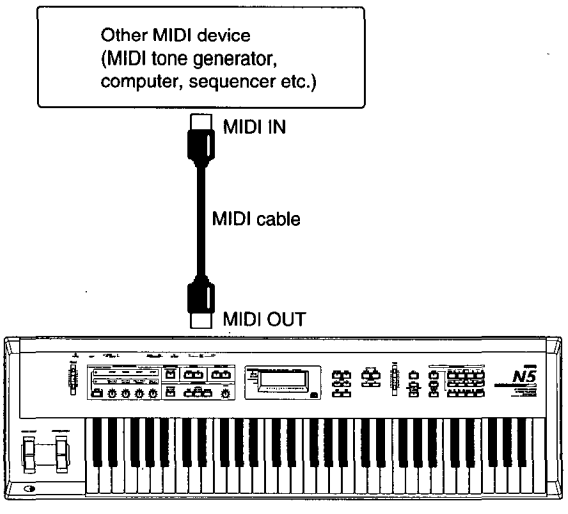
If you wish to control the N1/N5 from a computer or sequencer, or from another MIDI keyboard, use a MIDI cable to connect the MIDI OUT of the other MIDI device to the MIDI IN connector of the N1/N5.



If you wish to connect a computer, refer to chapter 4 (p.67).

Controlling another MIDI device from the N1/N5

If you wish to use the keyboard of the N1/N5 to record on a computer or sequencer, or to play another MIDI tone generator, use a MIDI cable to connect the MIDI OUT connector of the N1/N5 to the MIDI IN connector of the other MIDI device.



When connecting to a computer, you will need a MIDI interface. As an alternative to connection via MIDI, you can use a special cable to connect your computer. For details refer to chapter 4 (p.67).

How the N1/N5 and its sounds are organized

The sounds of the N1/N5 are organized as Programs and as Combinations. This section will provide an overall explanation, and will then discuss how you can play and edit these sounds in the various modes. (For detailed explanations and the actual procedures, refer to chapter 1 and following.)

1. Program

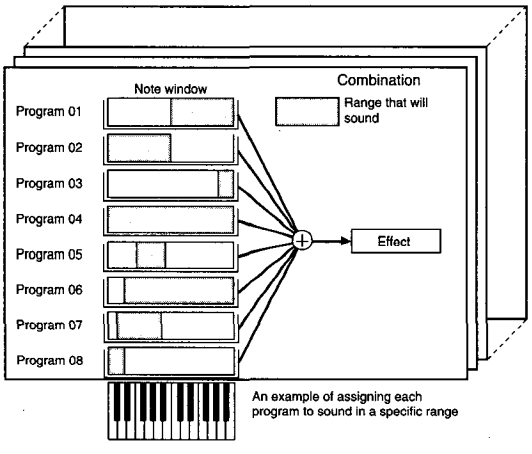
Programs are the most basic unit of sound that you can use. The N1/N5 provides 1269 different programs. Some of these 1269 programs are "drumkits." Drumkits spread a set of drum sounds (bass drum, snare, hi-hat etc.) across the keyboard. Programs are organized into the following banks.

GM-a, r01-r40, r:CM, y01-y101, ySFX, GM-b, PrgU, PrgA, PrgB, PrgC, yDr2, rDrm, kDrm

Program sounds that you create by editing their parameters can be saved in the PrgU (user) bank (100 programs).

2. Combination

A Combination contains up to eight "timbres" (slots which accommodate a program; refer to the diagram below), and assigns a program to each timbre, allowing you to play these sounds simultaneously. Since this lets you play up to 8 program sounds simultaneously, it provides a convenient way to play very dense and rich sounds in a live performance situation etc. In addition, you can specify a keyboard range and velocity range for each timbre program, so that different sounds are produced by different keyboard areas and playing strengths.



The N1/N5 provides 402 combinations, and these are organized into the following five banks.

CmbU, CmbA, CmbB, CmbC, yDr1

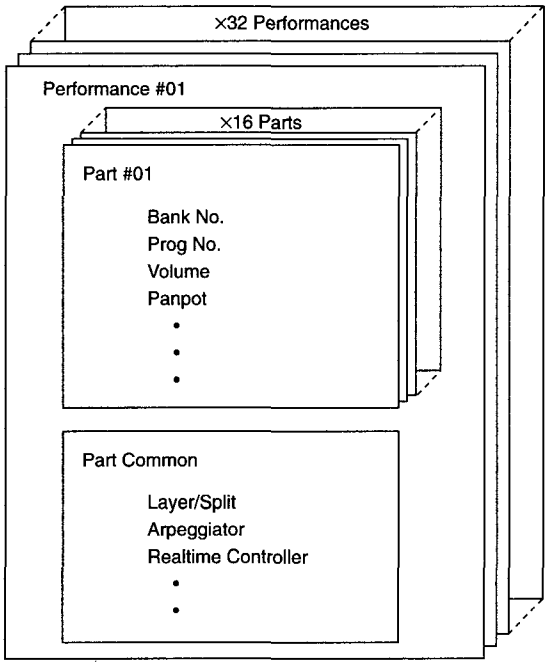
Combination sounds that you create by editing their parameters can be saved in the CmbU (user) bank (100 combinations).

3. Multi mode

Multi mode lets the N1/N5 function as a multi-timbral MIDI tone generator that will produce sound in response to MIDI messages it receives from an external MIDI device such as a computer or sequencer. This mode provides 32 "parts," and a different program or combination can be assigned to each part. You can also adjust parameters such as volume and panpot for each part.

4. Performance

A "Performance" is a collection of settings which let you instantly select programs or combinations and play them on the keyboard, and also allows a computer to play backing parts at the same time. A performance consists of a set of 16 parts (the first 16 of the 32 parts of Multi mode), together with "Part Common" data. Part Common data contains settings for the four Realtime Controller knobs, split, layer and arpeggiator settings etc. The N1/N5 has 32 of these performances.



5. Effect

Effects add various types of effect (Reverb, Chorus, Delay, etc.) to the sounds.

The N1/N5 lets you select effects for any type of sound: Program, Combination, Multi or Performance. However the settings of the last-selected program, combination or performance will override the settings of the previously-selected sound.

Effects for Multi are shared with (i.e., the same as) effects for a Performance.

6. Bank names and their contents

The N1/N5 contains the program, combination and drumkit banks shown below. The program names etc. in each bank are listed in "Voice name list."

Bank	Remark
GM-a	GS sounds and basic GM sounds for XG
r:01...r:40	GM variation sounds for GS
r:CM	CM-64 (Roland) sounds
y:01...y:101	GM variation sounds for XG
ySFX	SFX sounds for XG
GM-b	05R/W sounds, basic GM sounds for X5 series
PrgU	Program sounds; user bank (rewritable)
PrgA	Program sounds; bank A
PrgB	Program sounds: bank B
PrgC	Program sounds: bank C
CmbU	Combination sounds: user bank (rewritable)
CmbA	Combination sounds: bank A
CmbB	Combination sounds: bank B
CmbC	Combination sounds: bank C
yDr1	SFX drum bank for XG
yDr2	Normal drum bank for XG
rDrm	Drum bank for GS
kDrm	05R/W, X5 series drum bank
****	silent sounds

Of these banks, only PrgU and CmbU are rewritable. Other banks are in ROM (Read Only Memory), and any modified ROM sounds can only be saved in either the PrgU or CmbU banks.

Modes of the N1/N5

On digital instruments such as the N1/N5, the large number of functions are organized into groups according to their use, and these groups are referred to as "modes." The functions of the N1/N5 are organized into the following 10 modes.

1. Performance Play mode

This mode lets you select Program sounds and Combination sounds, and play them on the keyboard.

In addition to the keyboard, you can use the Realtime Controller knobs to modify the sound, and press various front panel keys to apply portamento (a smooth glide in pitch from one note to the next) or to make split or layered settings.

The arpeggiator (a function which sounds an arpeggio based on the notes that you hold down) can also be used to play arpeggios (broken chords).

Arpeggiator functions

Twenty different arpeggio types are available (UP, DOWN, ALT1, ALT2, RANDOM, etc.), so you can enjoy diverse styles of arpeggiation. For details, refer to the explanation of Performance Edit mode parameters (chapter 3, p.24).

2. Performance Edit mode

In Performance Edit mode you can make settings for the arpeggiator, layer/split, and settings for the four Realtime Controller knobs.

3. Combination Edit mode

This mode lets you edit a combination. Edit refers to the process of modifying the values of various settings (parameters). On the N1/N5, you can bring together up to 8 programs and use them as if they were a single program. Such a collection of programs is called a "Combination."

For each program in a combination, you can specify the volume and pan (stereo position), effect send levels, keyboard range and velocity range, and how they will be controlled by MIDI messages etc., allowing you to create highly complex performance setups.

4. Program Edit mode

This mode lets you edit a program. In Program Edit mode, editing refers to the process of changing the sound by modifying the value of the parameters which make up the program.

5. Effect Edit mode

The N1/N5 contains two digital effect processors. Each effect (EFFECT 1 and 2) allows you to select one of 48 types of effect such as reverb, delay, flanger, distortion and exciter. (These are referred to as "effect types.")

In Effect Edit mode you can modify the type and settings of these effects.

6. Drumkit Edit mode

This mode lets you edit a Drumkit.

For each note, you can assign a drum sample, and edit the pitch, level and pan etc.

7. Multi mode

While Performance Play mode is designed to be played from the keyboard, Multi mode is designed to be played by MIDI messages from an external MIDI device such as a sequencer, and lets the N1/N5 function as a multi-timbral MIDI tone generator.

As with Performance Play mode, any one of the 1269 program sounds (including programs which use a drumkit) or 402 combination sounds can be assigned to each of the 32 parts.

8. Part Edit mode

For each of the 32 parts of the N1/N5, this mode lets you make settings for parameters other than the Multi mode parameters. The settings that you make here take the form of adjustments to the program or combination sounds. This means that you are not modifying the original sounds themselves.

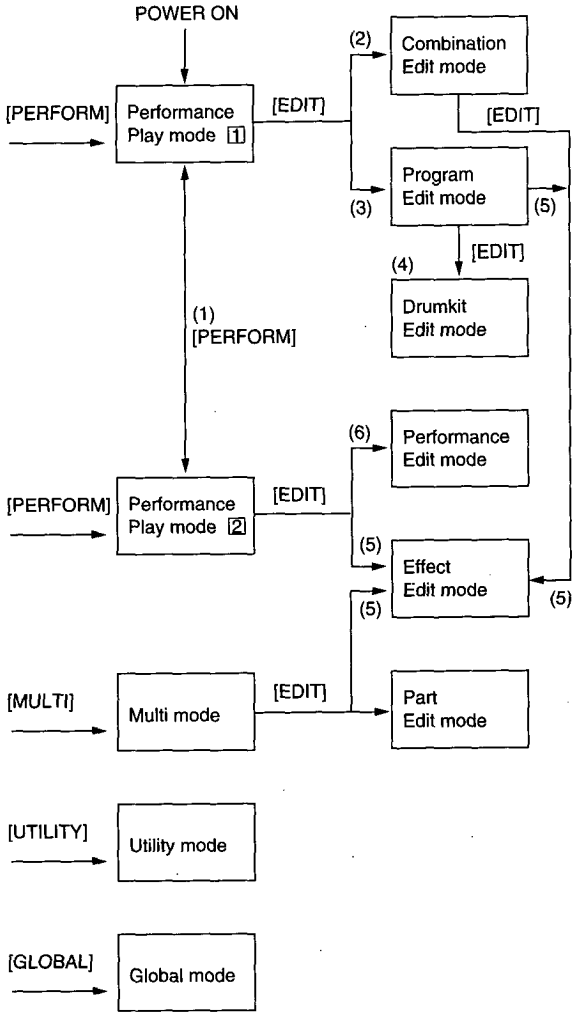
9. Utility mode

In this mode you can save various N1/N5 parameters to an external data storage device or computer, and initialize various types of settings.

10. Global mode

In this mode you can make settings which affect the entire N1/N5. These include settings that affect the display functions of the N1/N5, the types of MIDI message which are transmitted and received, and memory protect settings. Settings related to aftertouch and the response of the keyboard (velocity curve) can also be made here.

11. Moving between modes



(1) In Performance Play mode, pressing the [PERFORM] key will take you back and forth between screens 1 and 2. (Refer to p.11)

(2) In Performance Play mode, select a Combination sound and press the [EDIT] key.

(3) In Performance Play mode, select a Program sound and press the [EDIT] key.

(4) In Program Edit mode, set the Oscillator Mode to "DRUMS" and press the [EDIT] key.

(5) Press the [EDIT] key in the following situations.

- In Performance mode when an effect bank or effect number is selected
- In Combination mode when an effect bank or effect number is selected
- In Program Edit mode when an effect bank or effect number is selected
- In Multi mode when an effect bank or effect number is selected

(6) In Performance Play mode, press the [EDIT] key in a situation not covered in (5).

Chapter 1. Quick start – Play

1. Preparations

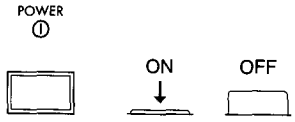
Checking the connections

Make connections as shown in "Connections" (p.4).

This chapter will explain how to play the N1/N5 by itself. (Refer to chapter 4 for connections to a computer.)

Turning the power on

① Press the [POWER] switch of the N1/N5 to turn the power on.



② Turn on the power of your powered monitored speakers or stereo amp.

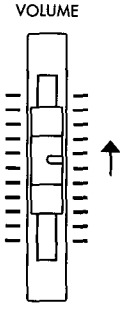
When the N1/N5's power is turned on, a start display will appear for several seconds, and then the Performance Play mode display will appear. With the factory settings, the performance program 01 will be selected.

Turning the power off

When you press the [POWER] switch once again, the N1/N5's power will be turned off. Before turning off the N1/N5, turn off the power of your powered monitor speakers or stereo amp.

Adjusting the volume

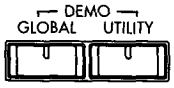
Raise the [VOLUME] slider to adjust the volume to an appropriate level. The headphone volume is also adjusted by the [VOLUME] slider.



2. Listening to the demo songs

The N1/N5 contains 2 demo songs. Listen to the demo songs to hear the rich variety of sounds and expressive potential offered by the N1/N5.

① Simultaneously press the [GLOBAL] key and [UTILITY] key to enter demonstration mode.



②

Use the CURSOR [◄][►] keys or the [INC+][DEC–] keys to select a demo song.

③ Press the [EDIT] key or the [ENTER] key, and after a short wait the demo song will begin playback. To halt playback, press the [EXIT] key.

④ Press the [EXIT] key to exit demonstration mode.

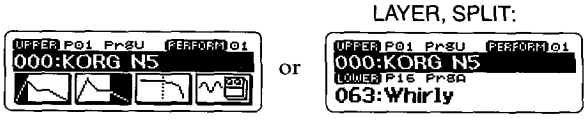
3. Playing the keyboard of the N1/N5

Normally when you play the keyboard of the N1/N5, you will use Performance Play mode to select a sound (program or combination) and play it. At this time, you can operate controllers such as the switches and knobs to modify the sound. For more on controllers, refer to "6. Using controllers to modify the sound" and "7. Using the Realtime Controller to modify the sound."

Selecting Performance Play mode

Press the [PERFORM] key to select Performance Play mode.

The following display will appear.

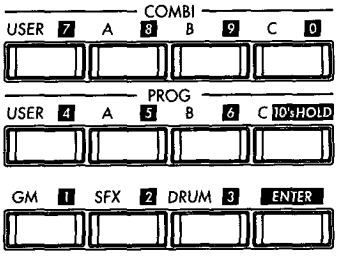


Selecting a sound bank

Using the [BANK] key

① Press the [BANK] key (the LED will light) to turn on the Bank function. When this is on, the numeric keys will select the following sound banks. The [BANK] key will turn off (LED dark) when a numeric key is pressed or when the [BANK] key is pressed again. When the [BANK] key is off, the numeric keys can be used to input numbers.

② Press one of the following keys to select the desired bank.



COMBI[USER] key:	CmbU	(58:00)
COMBI[A] key:	CmbA	(59:00)
COMBI[B] key:	CmbB	(5A:00)
COMBI[C] key:	CmbC	(5B:00)
PROG[USER] key:	PrgU	(50:00)
PROG[A] key:	PrgA	(51:00)
PROG[B] key:	PrgB	(52:00)
PROG[C] key:	PrgC	(53:00)
[GM] key:	GM-b	(38:00)
[SFX] key:	ySFX	(40:00)
[DRUM] key:	kDrm	(3E:00)

Moving the cursor in the LCD and using the [INC+][DEC–] keys or [VALUE] slider to select a sound bank

① Use the CURSOR [◄][►] keys to move the cursor to the sound bank.

② Use the [VALUE] slider or the [INC+][DEC–] keys to select the desired bank.

Selecting a sound number

Using the numeric keys [0]–[9]

① Make sure that the [BANK] key LED is dark. (If it is lit, press [BANK] to turn it off.)

② Starting with the upper digit, use the numeric keys to select the desired sound number.

When you begin selecting, a list of the programs available for selection will appear in the LCD.

③ When you finish selecting the number, press the [ENTER] key to finalize your selection. The actual program change will occur when you enter the second digit or press the [ENTER] key.

Each time you press the [10's HOLD] key, the "hold" setting for the upper digit of the sound number will be turned on or off. When Hold is on, the program will change when only the lower digit of the number is entered.

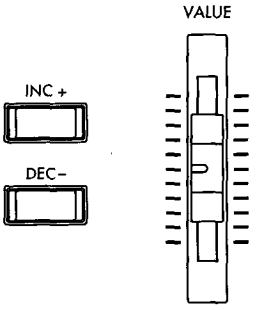
The numeric keys [0]–[9] allow you to select program/combination sounds numbered from 00 to 99. To select sound numbers 100 and above (in sound banks such as GM-a, GM-b, r:01–R:CM and y:01–ySFX), use the method explained below in "Using the [INC+][DEC–] keys or [VALUE] slider to change the sound number in the LCD display."

Using the [INC+][DEC–] keys or [VALUE] slider to change the sound number in the LCD display

① Use the CURSOR [◄][►] keys to move the cursor to the sound number.

② Press the [+] key to increase the sound number by one, or the [–] key to decrease it by one.

③ Instead of the [INC+][DEC–] keys, you can also change the sound number by moving the [VALUE] slider.



4. Selecting effects

Here's how you can select the effects used by the program or combination of the currently-selected performance.

Using the [EFFECT] key and the numeric keys

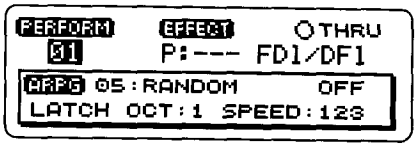
① Press the [EFFECT] key to turn it on (LED lit). When this is on, you can use the following procedure to select the bank and number of the effect.

② Use the numeric keys to enter the desired effect number. Effects 00–99 can be selected using numeric keys [0]–[9].

③ As explained in the above section "Selecting sound numbers," you can press [EFFECT], then the [BANK] key, and then use the numeric keys to select the effect bank.

Moving the cursor in the LCD and using the [INC+][DEC–] keys to select effects

① Press the [PERFORM] key to select the following display.



② In the above display, use the CURSOR [◄][►] keys to move the cursor to the effect bank or effect number.

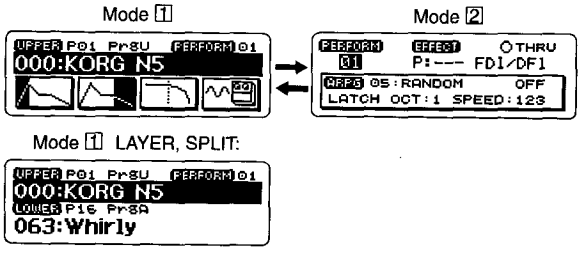
③ Use the [VALUE] slider or the [INC+][DEC–] keys to select the desired effect bank or program.

5. Selecting a performance

Using the [PERFORM] key and the numeric keys

① Press the [PERFORM] key to turn it on (the LED will light).

② Use numeric keys [0]–[9] to select the desired performance number. Performance numbers 01–32 can be selected using the numeric keys.



Using the cursor in the LCD

In Performance Play mode, press the [PERFORM] key to access the mode 2 display. With the performance number under "PERFORM" selected, use the [VALUE] slider or the [INC+][DEC–] keys to change the performance number. (If the effect bank or number, or the arpeggio pattern is selected, use the CURSOR [◄][►] keys to select the performance number.)

6. Using controllers to modify the sound

The N1/N5 provides various controllers which can be used to modify the pitch, tone and volume. By moving a controller while you play, you can modify the volume or brightness of the sound, or adjust the amount of effects, etc.

Settings for these controllers can be stored independently for each performance (refer to p.25).

Using the [PORTAMENTO] key

The portamento effect causes the pitch to glide smoothly from one note to the next-pressed note.

Press the [PORTAMENTO] key to turn portamento on (the LED will light). Press it again to turn portamento off.

If the Program Edit mode (Fx/Mod) parameter <Portamento Time> is set to 0, there will be no portamento even if the [PORTAMENTO] key is on.

The Write operation lets you memorize the on/off status of the [PORTAMENTO] key for each program. (Refer to <Portamento Switch> p.41)

Using the OCTAVE [DOWN][UP] keys

These keys shift the pitch range of the keyboard in one-octave increments/decrements. Pressing the OCTAVE[UP] key once will shift the keyboard upward one octave (LED lit), and pressing it again will shift the keyboard upward two octaves (LED blinking). Similarly, the OCTAVE[DOWN] key shifts the pitch downward one or two octaves.

Using the [LAYER] and [SPLIT] keys

Pressing the [LAYER] key (LED lit) will cause another sound to be layered with the current program/combination sound.

Pressing the [SPLIT] key (LED lit) will cause two different sounds to be assigned to the higher range (UPPER) and lower range (LOWER) of the keyboard. This can be used in conjunction with the arpeggiator to create complex performance possibilities. (For details refer to Performance Edit mode, p.25)

For both Layer and Split, sounds are selected in the same way.

Use the PAGE/PART [◄][►] keys to select either the Upper or the Lower part. Next use the CURSOR [◄][►] keys to access the program or combination selection. Now you can use the [VALUE] slider or the [INC+][DEC–] keys to select the desired programs. The split point setting can be made in Performance Edit mode. (Refer to chapter 3, p.27)

Using the [BEND] wheel

Pitch Bend can be applied by moving the [BEND] wheel away from or toward yourself.

Normally, the [BEND] wheel is used to apply pitch bend.

Using the [MODULATION] wheel

Modulation can be applied by moving the [MODULATION] wheel away from yourself. In addition to pitch modulation depth, various parameters such as LFO speed or VDF cutoff frequency can also be controlled.

Keyboard Controllers

Velocity

The force with which you play a note can affect some aspect of the sound. Normally this is used to control volume, or EG speed or sensitivity.

After Touch

After playing a note, you can apply additional pressure to the keyboard to control some aspect of the sound. Normally this is used to control cutoff frequency or LFO depth etc.

Keyboard Tracking

Some aspect of the sound can be varied according to the note number (the keyboard location). Normally this is used to control volume, tone <Cutoff Frequency>, or EG speed or depth, etc.

Using controllers connected to the rear panel (Option)

ASSIGNABLE SW (Assignable Switch)

Normally this is used in the same way as the damper pedal of a piano, to sustain notes as long as the pedal is pressed. It can also be used to increment/decrement performance numbers etc. (refer to p.26).

You will need a separately sold PS-1, PS-2 or DS-1H pedal switch.

ASSIGNABLE PEDAL (Assignable Pedal)

A number of modulators can be controlled by moving a foot pedal.

This pedal can be assigned to control a function such as modulation, breath control, volume, pan or expression etc. (refer to p.26).

You will need a separately sold EXP-2 or XVP-10 expression pedal.

7. Using the Realtime Controllers to modify the sound

In addition to the functions listed in section 6, the N1/N5 provides four knobs that let you control the pitch, tone and volume in realtime.

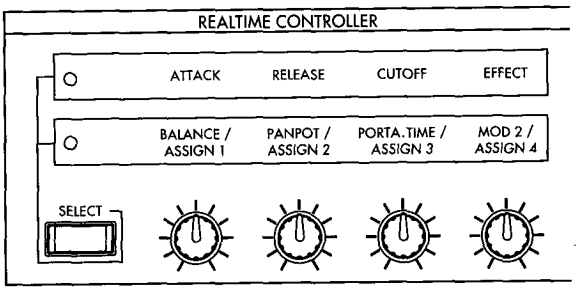
Settings for these controllers can be stored independently for each performance (refer to p.25, p.26).

Using the four knobs to modify the sound

While you are playing in Performance Play mode or Multi mode, you can use the four knobs to modify the tone or volume of the part that is currently shown in the LCD. If you wish to control a different part, use the PAGE/PART [◄][►] keys to select the desired part.

The four knobs can be switched between FIXED (upper LED lit) and ASSIGNABLE (lower LED lit) conditions. When ASSIGNABLE is selected, user-defined parameters will be assigned to the knobs.

When a knob is positioned at 12 o'clock, the parameter being controlled by that knob will have the value assigned by the program. Moving the knob to left or right will decrease or increase this value.



① Press the [SELECT] key (LED lit) to select the functions that will be controlled by the knobs.

② Rotate the knobs to control the following effects. The explanations below are for when FIXED (upper LED lit) is selected for the four knobs.

ATTACK

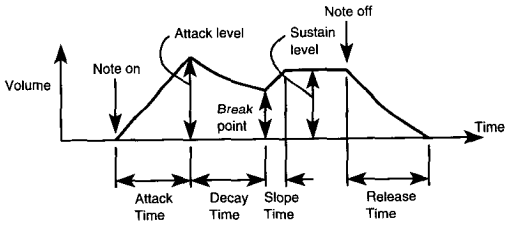
This affects the brightness (VDF) and volume (VDA) of the beginning of the sound.

Rotating the [ATTACK] knob will change the time over which the VDF/VDA changes from key-on (when a note is pressed) until the attack level is reached. Normally, rotating the knob toward the right will slow the attack, and rotating it toward the left will sharpen the attack.

RELEASE

This affects the brightness (VDF) and volume (VDA) of the sound when it decays after the note is released.

Rotating the [RELEASE] knob will change the time over which the sound decays after the note is released (the release time). Normally, rotating the knob toward the right will length the release time, and rotating it toward the left will shorten the release time.



CUTOFF

This adjusts the VDF cutoff frequency (VDF Filter Cutoff) to control the brightness of the sound.

Rotating the [CUTOFF] knob will increase or decrease the VCF cutoff frequency value (refer to <Cutoff Frequency> p.35), changing the brightness of the sound. Normally, rotating the knob toward the right will brighten the tone, and rotating it toward the left will darken the tone.

EFFECT

This controls Effect Dynamic Modulation. The result will depend on the effect that is selected for each sound.

ASSIGN 1/2/3/4

For the parameters assigned to each knob when ASSIGNABLE is selected for the four knobs (the lower LED lit), refer to p.25 and p.26.

Saving the state that was modified by the Realtime Controller

After using the Realtime Controller in Performance Play mode, you can save the modified state as a Performance in one of 32 memories. For the procedure refer to p.22.

8. Using the arpeggiator

The N1/N5 provides 20 different arpeggio patterns. Since you can change the octave setting and the velocity and length etc. of the arpeggio notes, a wide variety of arpeggios can be produced.

Selecting the play mode

Press either the [PERFORM] key or the [MULTI] key to enter either Performance Play mode or Multi mode.

Turning the arpeggiator on/off

Press the [ARPEGGIO ON/OFF] key to turn on the arpeggiator. The LED will blink.

Now you can play the keyboard to sound arpeggios.

Hold down any chord you like, and use the [TYPE] key to switch the arpeggio type and hear the different patterns.

To stop the arpeggiator, press the [ARPEGGIO ON/OFF] key once again to turn off the LED.

Selecting the arpeggio type

Each time you press the [TYPE] key, the arpeggio type will change. When you press the [TYPE] key, a window will appear in the LCD to indicate the type. You can also select the arpeggio type by pressing the [INC+][DEC–] keys, when the window is indicated.

Changing the pitch range (octave) of the arpeggio

Each time you press the [OCTAVE] key, the pitch range over which the arpeggio is played will change. When you press the [OCTAVE] key, an arpeggio window indicating the setting will appear in the LCD. You can also change the octave setting of the arpeggiator by using the [INC+][DEC–] keys, when the window is indicated.

Changing the tempo of the arpeggiator

Rotate the [SPEED] knob to specify the desired tempo.

You can also use MIDI to synchronize the arpeggiator to Tempo messages from an external MIDI device <Clock Source> (refer to p.64).

Continuing the arpeggio after you release the keyboard

Press the [LATCH/KEY SYNC] key. Each time you press this key, the setting will cycle through LATCH→ KEY SYNC → LATCH&K.SYNC → OFF.

When you press this key, an arpeggio window indicating the setting will appear in the LCD.

You can also select the arpeggio latch/key sync setting by using the [INC+][DEC–] keys, when the window is indicated.

With a setting of LATCH or LATCH&K.SYNC, the arpeggio will continue playing even after you take your hand off the keyboard.

Using key sync with the arpeggiator

With a setting of KEY SYNC or LATCH&K.SYNC, the arpeggio will start at the moment that you play the keyboard (KEY SYNC).

By editing the Performance Edit mode parameter <Arpeggio Sort> (p.27), you can cause notes to be sounded in the order in which they were pressed, or to be sounded in the order of their pitch. You can also edit the step interval, and the velocity and length of the arpeggio notes.

In addition, you can modify various other arpeggiator parameters to produce a wide variety of arpeggios. (For details refer to Performance Edit mode, p.25.)

9. Other performance-related settings

Tuning to another instrument

If you wish to play the N1/N5 together with another instrument, or to adjust the tuning to music on CD or tape, adjust the "Master Tune."

This setting is made in Global mode. Refer to <Master Tune> (p.63).

Transposing

If you wish to transpose the pitch in semitone steps, adjust the "Master K.Shift" setting. This can be adjusted over a range from –24 (2 octaves down) through +24 (2 octaves up).

This setting is made in Global mode. Refer to <Master Key Shift> (p.63).

Bypassing the effects

In Performance Play mode, you can temporarily bypass the effects specified by each program or combination.

Use the CURSOR [◄][►] keys to select the <Effect Thru Switch> parameter. Press the [INC+] key to change the "radio button" setting to "◉ " and the effects will be bypassed ("Thru").

Press the [DEC–] key to change the setting to "◯ ," and the effects will function.

Changing the velocity curve

On the N1/N5 you can select one of eight types of curve to determine how key velocity will affect the dynamics (refer to p.64).

Changing the aftertouch curve

You can select one of eight types of curve to determine aftertouch sensitivity (refer to p.65).

Creating an original scale

You can create your own scale and play using that scale. Part Edit mode <Scale Tuning> (refer to p.59).

10. Useful operations

Simultaneously press the [INC+] and [DEC–] keys

The value which the parameter had when it was selected will reappear. This is a convenient function to use while editing.

Hold down [ENTER] and press the [0] key

"All Sound Off" will occur. Use this if "stuck notes" occur.

Hold down [ENTER] and press the [1] key

"GM Mode On" will occur. The result is the same as when the Utility mode <Initialize> command is used to perform a GM Mode On.

Hold down [ENTER] and press the [5] key

Each time this is done, you will alternate between the 05R/W map and the default map. The result is the same as when the Global mode <MIDI Channel To Port> is switched.

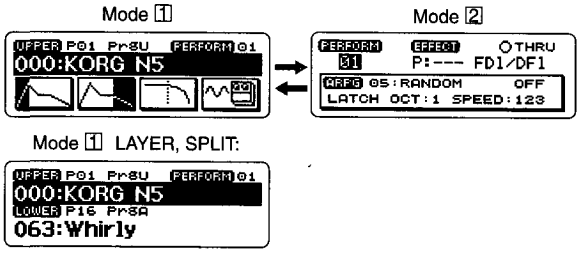
Chapter 2. Quick start – Edit

1. Editing a performance (Performance Edit mode)

In Performance Edit mode you can make settings for the arpeggiator, layer/split, and the four Realtime Controller knobs.

Basic procedure in Performance Edit mode

Press the [PERFORM] key to alternate between the following two screens.



From the mode 2 display (the figure at the right), press the [EDIT] key to enter Performance Edit mode. Use the PAGE/PART [◄][►] keys to select pages, and use the CURSOR [◄][►] keys to move the cursor (the highlighted area) to select a parameter. Then use the [VALUE] slider or the [INC+][DEC–] keys to modify the parameter value.

For details on the function of each parameter, refer to chapter 3 "2. Performance Edit mode."

Editing using the Realtime Controllers

① In Performance Play mode 2, use the CURSOR [◄][►] keys to select <Performance Select>, and use the [INC+][DEC–] keys to select the performance that you wish to edit. Then press the [EDIT] key to enter Performance Edit mode.

② Use the CURSOR [◄][►] keys to select <Control knob #1 Type>. For this example, use the [INC+][DEC–] keys to select "VDF.A DECAY."

③ Use the CURSOR [◄][►] keys to select <Control knob #2 Type>. Use the [INC+][DEC–] keys to select "EFFECT D.MOD."

④ Press the REALTIME CONTROLLER [SELECT] key to make the lower LED light. While playing the keyboard, rotate [Control knob #1] to modify the Decay Time, and rotate [Control knob #2] to modify the effect depth.

⑤ If you wish to save the settings, refer to the Write operation (p.22). With the factory settings, the four frequently-used functions of [BALANCE], [PAN-POT], [PORTA T] and [MOD2] are assigned.

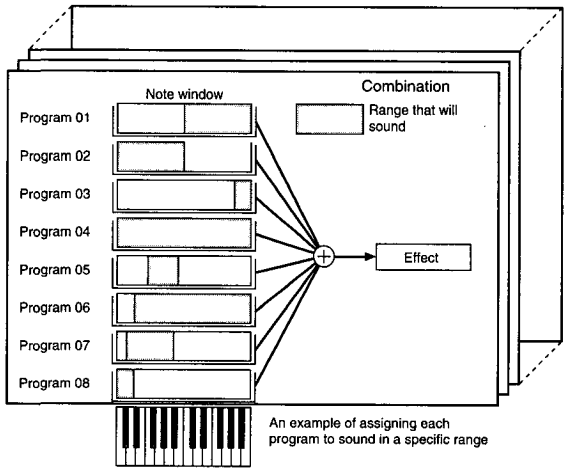
2. Editing a combination (Combination Edit mode)

In Combination Edit mode you can perform various edits to create and modify combination sounds, which consist of up to eight "timbres" with a program assigned to each one.

When you finish editing, use the Write operation (refer to p.22) to save the data if necessary.

How a combination is organized

On the N1/N5, combination sounds are organized as follows:



Combination sounds can be classified into the following categories:

Layered

Two or more timbre programs will sound when you play the keyboard.

Split

Different timbre programs will sound depending on the keyboard area that you play. (Split combinations are created using the <Note Window Bottom> and <Note Window Top> parameters.)

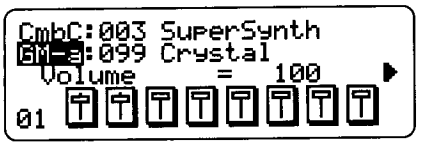
Velocity Switch

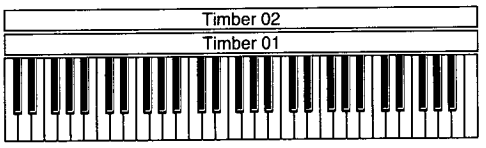
Different timbre programs will sound depending on the velocity (the force of your playing).

Layer and split combinations have no relation to the [LAYER] or [SPLIT] keys of the front panel. Settings of the front panel [LAYER] and [SPLIT] keys are made in Performance Play/Edit mode.

Creating a layer

① In Performance Play mode [1], select the combination number from which you wish to start editing, and press the [EDIT] key.





② Use the PAGE/PART [◀][▶] keys to select timbre 03. Use the CURSOR [◀][▶] keys to select the <Receive Note On> parameter, and press the [DEC–] key to turn this "OFF." In the same way, turn the <Receive Note On> parameter OFF for timbres 04–08.

③ Use the PAGE/PART [◀][▶] keys to select timbre 01 for editing.

④ Use the CURSOR [◀][▶] keys to select the sound bank and program number of the program assigned to timbre 01, and use the [VALUE] slider or the [INC+][DEC–] keys to specify them.

⑤ Press the CURSOR [▶] key several times to move to timbre 01 <Receive Note On> and press the [INC+] key or use the VALUE slider to turn this ON.

In the same way, use the [INC+][DEC–] keys or the [VALUE] slider to set <Note Window Bottom> to 001, and <Note Window Top> to 127.

⑥ Press the PAGE/PART [▶] key to move to timbre 02, and make the same settings as steps ④ and ⑤.

⑦ This completes a combination which layers timbre 01 and timbre 02. Play the keyboard to hear the result.

Unlike the earlier Korg models 05R/W and X5DR, each combination can use only one MIDI channel.

Creating a split

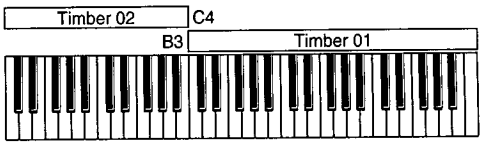
① Follow steps ① through ⑥ of "Creating a layer" to select a program sound and make <Receive Note On> settings for timbres 01 and 02.

② Use the PAGE/PART [◀][▶] keys to select timbre 01. Use the CURSOR [◀][▶] keys to select <Note Window Bottom>, and use the [VALUE] slider or the [INC+][DEC–] keys to select C4.

In the same way, set <Note Window Top> to C9.

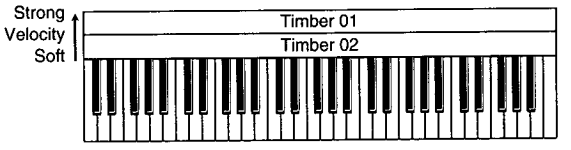
③ Use the PAGE/PART [◀][▶] keys to select timbre 02. Use the CURSOR [◀][▶] keys to select <Note Window Top>, and use the [VALUE] slider or the [INC+][DEC–] keys to select B3.

In the same way, set <Note Window Bottom> to C-1.



④ This completes split settings. Play the keyboard to hear the result. In this way, you can create split-type combinations in which (for example) timbre 01 plays an electric-piano program in the keyboard area of C4 and above, and timbre 02 plays a bass-type program in the area of B3 and below.

Creating a velocity-switched combination



① Follow steps ① through ⑥ of "Creating a layer" to select a program sound and make <Receive Note On> settings for timbres 01 and 02.

(If you have made the split settings described above, you will need to set the <Note Window Top> to G9 and the <Note Window Bottom> to C-1 for both timbres 01 and 02.)

② Use the PAGE/PART [◀][▶] keys to select timbre 01. Use the CURSOR [◀][▶] keys to select <Velocity Window Bottom>, and use the [VALUE] slider or the [INC+][DEC–] keys to set this to 80.

In the same way, set <Velocity Window Top> to 127.

③ Use the PAGE/PART [◀][▶] keys to select timbre 02. Use the CURSOR [◀][▶] keys to select <Velocity Window Top>, and use the [VALUE] slider or the [INC+][DEC–] keys to set this to 79.

In the same way, set <Velocity Window Bottom> to 001.

④ This completes a velocity-switched combination in which timbres will switch depending on the force with which you play the keyboard. In this example, softly-played notes will sound timbre 02, and strongly-played notes will sound timbre 01. Change the values (80 and 79) to settings that feel right for you.

Adjusting volume, pan and effect amount

In situations such as the layer example above, you may wish to correct the volume balance between timbres 01 and timbres 02, or to set them to different pan positions. To do so, use the PAGE/PART [◀][▶] keys to select the timbre that you wish to edit, and use the CURSOR [◀][▶] keys to select the parameter.

For each timbre, the volume is adjusted by <Timbre Volume>, pan is adjusted by <Timbre Panpot>, and the amount of effect is adjusted by <Timbre C Send Level> or <Timbre D Send Level>.

Effect settings

You can select the bank and effect number of the effects used by each combination.

The parameter values of the effect can be modified in Effect Edit mode. Use the CURSOR [◄][►] keys to move the cursor, and with Fx (Bank) or Fx (Name) selected, press the [EDIT] key to enter Effect Edit mode.

Other combination parameters

In addition to the combination parameters discussed above, Combination Edit mode allows you to set filters for MIDI message reception (<Receive Control Change>, <Receive Pitch Bend>, <Receive Aftertouch>, <Receive Damper>, <Receive Portamento>) and the parameters <Timbre Transpose>, <Timbre Fine Tune> and <Combination Rename>. For details on each parameter, refer to p.28: Combination Edit mode.

Saving combination settings

After editing a sound, use the Write operation (p.22) if you wish to save your changes.

Be aware that if you edit a program which is assigned to a combination, the sound of that combination will be affected as well.

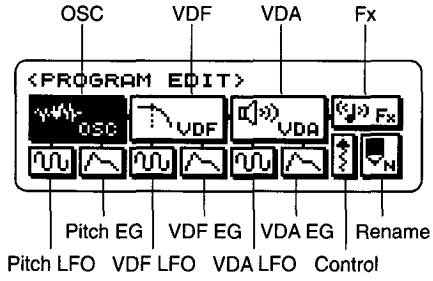
3. Editing a program (Program Edit mode)

Although the Realtime Controller can be used even in Performance Play mode to edit the sound, the parameters which can be edited are limited.

In Program Edit mode, you can edit all parameters, allowing you to modify the sound of a program or to create a completely new sound.

How a program is organized

Programs of the N1/N5 have the following structure.



Use the PAGE/PART [◄][►] keys or the CURSOR [◄][►] keys to select the desired section, and press the [EDIT] key to edit that section.

OSC (Oscillator)

In this section you can select the waveform which will determine the basic character of the sound. Select a multisample as the basic waveform, and set various parameters for the oscillator.

Pitch LFO

This applies cyclic modulation to the pitch, creating a vibrato effect.

Pitch EG

This specifies how the pitch will change over time.

VDF (Variable Digital Filter)

This section lets you use a low pass filter to modify the waveform by attenuating or boosting the high-frequency portion of the sound. This will change the tonal character (brightness) of the sound.

VDF LFO

This applies cyclic modulation to the tone, creating a wah effect.

VDF EG

This specifies how the tone will change over time.

VDA (Variable Digital Amplifier)

This applies time-varying change to the volume which is output from the VDF section. "Volume change" in this case refers to the way in which the volume of an individual note changes from the time that a key is struck until that key is released and the note decays to silence.

VDA LFO

This applies cyclic modulation to the volume, creating a tremolo effect.

VDA EG

This specifies how the volume will change over time.

Control

This section contains parameters related to the various modulation effects, and settings such as portamento.

Fx (Effect)

In this section you can select the effects used by a program, and set the effect send amounts etc. Two completely independent stereo multi-effect units are provided.

Rename

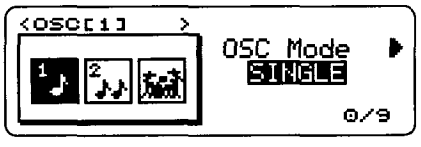
The Rename section lets you assign a new name to the program or to modify the existing name.

Oscillator settings (OSC section)

Although one way of editing a program is to start with a program that resembles the desired sound and then modifying it, you can also create a sound from scratch, and when doing so you will normally start by selecting a multisample in this section, and then continue editing in the other sections to complete the sound.

① In Performance Play mode [1], select the program number that will be the basis for your editing, and press the [EDIT] key.

② Use the CURSOR [◄][►] keys to move the cursor (the highlighted area) to the OSC section, and press [EDIT] to enter the OSC section.



③ Use the CURSOR [◄][►] keys to move to the <Multisample Select> page. Here you can use the [VALUE] slider or the [INC+][DEC–] keys to select a multisample. Play the keyboard to hear the selected multisample.

You will be able to hear the original sound of the multisample most clearly if you set the VDF <Cutoff Frequency> parameter to 127 (maximum) and listen with an organ-type envelope (an envelope without change).

④ Use the CURSOR [◄][►] keys to move to the <Octave Select> page. Here you can use the [VALUE] slider or the [INC+][DEC–] keys to specify the basic pitch range of the oscillator.

⑤ Use the CURSOR [◄][►] keys to move the cursor to <Oscillator Level>. Here you can use the [VALUE] slider or the [INC+][DEC–] keys to adjust the level (volume) of the oscillator.

⑥ Use the CURSOR [◄][►] keys to select other parameters of the OSC section and edit them in the same way.

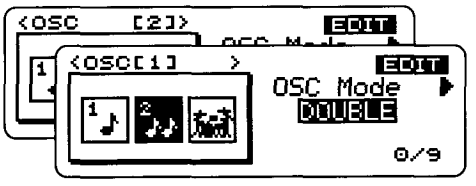
⑦ Use the PAGE/PART [◄][►] keys to select the PITCH LFO page. Use the CURSOR [◄][►] keys to select <Pitch LFO Waveform>. Use the [VALUE] slider or the [INC+][DEC–] keys to change the waveform of the pitch LFO. Play the keyboard and move the modulation wheel to verify that the Pitch LFO waveform has changed.

If you cannot hear the difference, try setting the <Pitch LFO Intensity> to about +80. Also try modifying parameters such as <Pitch LFO Frequency>.

Creating a double-oscillator program

By setting the <Oscillator Mode> parameter to "DOUBLE," you can create a program sound that uses two oscillators. When <Oscillator Mode> is "DOUBLE," each press of the [EDIT] key will alternate between the oscillator 1 and 2 editing displays.

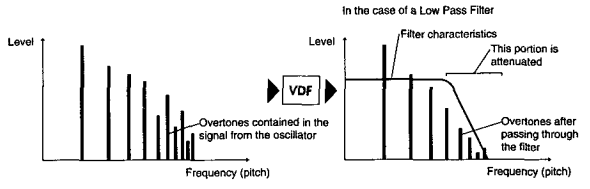
(DOUBLE)



To create a double-oscillator program, use the same procedure as described in steps ③–⑥, make settings for oscillator 2 as well.

Filter settings (VDF section)

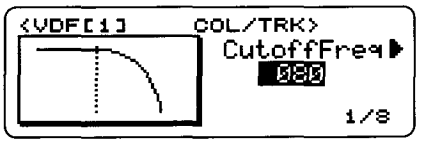
The filter adjusts the tone (brightness, etc.) by cutting or boosting a specified portion of the oscillators frequency content. The sound can change dramatically depending on the these filter settings. The filters of the N1/N5 are low pass filters (LPF). Use them to modify the tone.



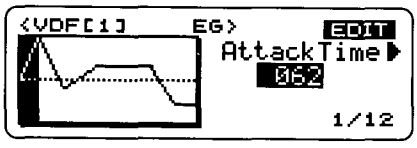
① In Performance Play mode, select the program number that will be the basis for your editing, and press the [EDIT] key.

② Use the CURSOR [◄][►] keys to move the cursor (the highlighted area) to the VDF section, and press the [EDIT] key to enter the VDF section.

③ Make sure that the <Cutoff Frequency> parameter is selected, and use the [VALUE] slider or the [INC+][DEC–] keys to modify the value. Notice that the sound becomes brighter or darker as you move the [VALUE] slider.



④ You can use the PAGE/PART [◄][►] keys to change the page. In this example, press the PAGE/PART [►] key twice to move to the VDF EG page.

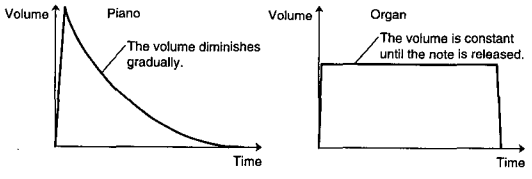


⑤ You can use the CURSOR [◄][►] keys to select parameters such as <VDF EG Attack Time> (Attack Time), <VDF EG Attack Level> (AttackLvl), and <VDF EG Decay Time> (DecayTime), and use the [VALUE] slider or the [INC+][DEC–] keys to edit their values. While you play the keyboard, edit the parameters shown in the display and notice the correspondence between the graphical indication and the resulting sound.

If you have difficulty hearing the results, try raising the <VDF EG Intensity> setting to approximately +80.

Amp settings (VDA section)

The amp section creates time-varying change in the volume. We are referring here to the volume change which takes place within each note, such as "sounds which rise to their full volume immediately when a key is pressed," or "sounds which decay slowly." For example when you play a note on a piano, the sound will begin at the maximum volume, and will then decay slowly. On the other hand, a note played on an organ will maintain the same volume until the key is released, and a note played on a violin can be varied in volume throughout the duration of the note. It is the role of the VDA section to create this type of volume change.



① In Performance Play mode, select the program number that will be the basis for your editing, and press the [EDIT] key.

② Use the CURSOR [◄][►] keys to move the cursor (the highlighted area) to the VDA section, and press the [EDIT] key to enter the VDA section.

③ Use the CURSOR [◄][►] keys to select a parameter, and use the [VALUE] slider or the [INC+][DEC–] keys to modify the parameter value.

④ You can use the PAGE/PART [◄][►] keys to change pages. For this example, press the PAGE/PART [►] key twice to move to the VDA EG page. Here you can edit parameters such as <VDA EG Attack Time> (AttackTime) and <VDA EG Attack Level> (AttackLvl). Edit various parameters as described in step ③ while you play the keyboard and notice the correspondence between the graphical indication and the sound.

Effect section settings (Fx section)

The sound of a program is sent through two completely independent digital multi-effect units before being output as the final stereo sound. Here you can specify the amount of sound that is sent from the program to the effect (the effect send level).

Saving your settings

After editing a sound, use the Write operation if you wish to save the changes you have made (Refer to p.22).

Effect settings

You can select the bank and effect number of the effects which the program will use.

If you wish to modify the various parameters of the effect itself, you can do so in Effect Edit mode.

Modulation settings (Control section)

Here you can specify the depth of the modulation that will be controlled by the modulation wheel or incoming MIDI messages.

4. Editing an effect (Effect Edit mode)

In Effect Edit mode you can edit the parameters of the effects used by program sounds and combination sounds. Effects are related to program or combination sounds as follows:

In Performance Play mode, selecting a Program sound will cause the effects specified by that program to operate.

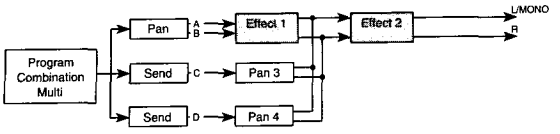
In Performance Play mode, selecting a Combination sound will cause the effects specified by that combination to operate, and the effect settings of the programs will be ignored.

In Multi mode, effects will not change even if you change the Program or Combination that is being used by each part.

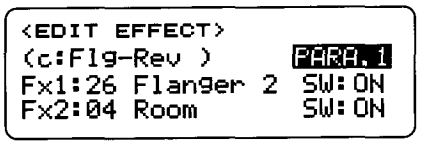
In Performance Play mode, selecting an effect will cause the selected effect to operate, and the effects selected by the Combination or Program will be ignored. If you subsequently select a Program or Combination, the effects selected by that Program or Combination will operate.

Effects can be connected in one of four ways (N1: six ways). (This is referred to as "Placement.") The following diagram is an example of serial placement. For details on other placements, refer to the section on Effect Edit mode in "Chapter 3. Parameter Guide" (p.45

and following).



① Press the [PERFORM] key to enter Performance Play mode [2]. Then move the cursor to the effect bank or effect number and press [EDIT] to enter Effect Edit mode.



② Use the PAGE/PART [◄][►] keys to change pages, and use the CURSOR [◄][►] keys to select parameters. In the first page, you can edit the effect placement (connection), select the types of the two effects, and turn them on/off.

③ Use the [VALUE] slider or the [INC+][DEC–] keys to modify parameter values.

Set <Effect Placement> to either PARA1 or PARA2.

Turn <Effect 1 Switch> ON and <Effect 2 Switch> OFF, and select and try out various types of effects in <Effect 1 Type>.

When #24 Symphonic Ensemble is selected as the effect type, there are limitations on the other effect which can be used simultaneously with this. (Refer to p.52)

For an explanation of the parameters of Effect Edit mode, refer to p.45.

When you finish editing, be sure to use the Write procedure (refer to p.22) to save your changes.

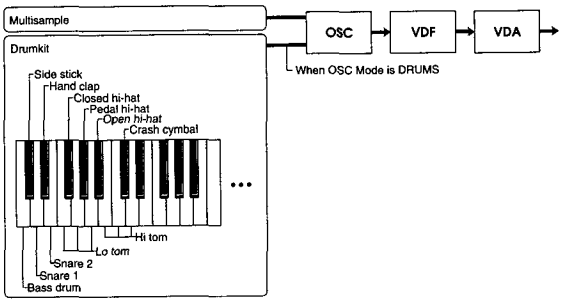
5. Editing a drumkit (Drumkit Edit mode)

In Drumkit Edit mode, you can modify and create drumkits, which are the basic elements of a drum program.

When you finish editing, use the Write operation (p.22) to save your changes if necessary.
Two drumkits can be saved.

How drumkits and program sounds are related

A drumkit is a special type of oscillator in which, instead of a conventional multisample, a different percussion sound is assigned to each note of the keyboard. For each of the percussion sounds (referred to as "instruments"), you can adjust the pitch and attack time, etc.



① In Program Edit mode, make sure that OSC Mode is set to "DRUMS." If you now press the [EDIT] key, you will enter Drumkit Edit mode.

② Use the CURSOR [◄][►] keys to select the parameters of each instrument, and use the [VALUE] slider or the [INC+][DEC–] keys to modify the value.

③ When you wish to change instruments, use the PAGE/PART [◄][►] keys. Alternatively, you can hold down the [ENTER] key and play a note on the N1/N5's keyboard to select the instrument which is assigned to that note.

④ Enter Drumkit Edit mode, and hold down the [ENTER] key and play a single note to select the key that you wish to edit. Use the CURSOR [◄][►] keys to select the <Drum Sample Select> parameter. Notice how you can use the [VALUE] slider or the [INC+][DEC–] keys to change the drum sound.

For details on instrument parameters, refer to the section on Drumkit Edit mode on pages 43 and following of chapter 3 "Parameter guide."

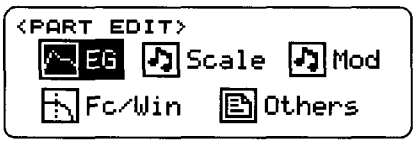
6. Editing a part (Part Edit mode)

For each of the 32 parts of the N1/N5, you can make settings for various part parameters. Unlike the editing that is done in Program Edit mode or Combination Edit mode, editing in Part Edit mode creates only temporary changes (offset editing) to the original program or combination sounds used by each part. This means that the original sounds themselves are not actually modified.

Part parameters are used when you play in Performance Play mode, and when you listen to song data in Multi mode. Thus, they will be cleared and reset to their default settings (initial settings) by initialization messages such as GM Mode On, GS Reset, or XG System On.

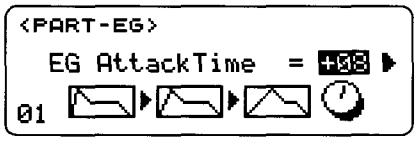
Basic operation in Part Edit mode

In Multi mode, press the [EDIT] key to enter Part Edit mode. The following part edit menu will appear:



Part Edit parameters are grouped into five sections: EG (envelope generator), scale, MOD, filter/window, and others.

Use the PAGE/PART [◄][►] keys or the CURSOR [◄][►] keys to move the cursor (the highlighted area) to the desired section and press [EDIT] once to access the parameter editing screen for that section. The following screen is an example of when EG is selected.



In Part Edit mode, use the PAGE/PART [◄][►] keys to switch parts, the CURSOR [◄][►] keys to move the cursor to select a parameter, and the [VALUE] slider or the [INC+][DEC–] keys modify the value.

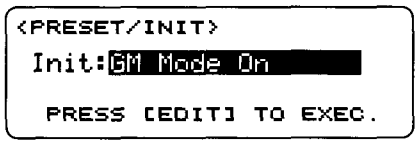
In the EG display shown above as an example, try modifying the attack time or decay time, and notice how the sound is affected.

For details on the function of each parameter, refer to chapter 3, "8. Part Edit mode."

7. Utility mode and Global mode settings

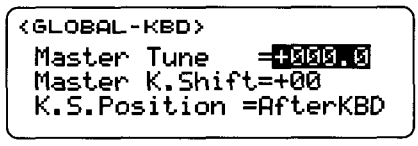
Utility mode allows you to save (dump) various parameters of the N1/N5 for storage on an external storage device or computer, and to initialize settings of the tone generator.

Press the [UTILITY] key to enter Utility mode.



Global mode allows you to make settings which affect the entire N1/N5. Here you can make settings relating to the display functions of the N1/N5, select the MIDI messages which will be transmitted or received, and make memory protect settings.

Press the [GLOBAL] key to enter Global mode.



In Utility mode and Global mode, use the PAGE/PART [◄][►] keys to change pages, the CURSOR [◄][►] keys to move the cursor (the highlighted area) to select a parameter, and the [VALUE] slider or the [INC+][DEC–] keys to modify the value.

For details on the function of each parameter, refer to chapter 3, "9. Utility mode" and "10. Global mode."

8. Saving (Write) and renaming

Settings that you modify in Performance Edit mode, Program Edit mode, Combination Edit mode, Drumkit Edit mode, Effect Edit mode and Part Edit mode can be saved to internal memory.

To write a program sound or combination sound, press the [WRITE] key in Program Edit mode or Combination Edit mode respectively. To write the parameters of a Performance (settings for the four knobs and the arpeggiator, etc.), press the [WRITE] key in Performance Edit mode.

Changes you make in Part Edit mode for parts 1–16 can be saved as a performance (refer to p.6, Performance). To write this data, enter Performance Edit mode and press the [WRITE] key.

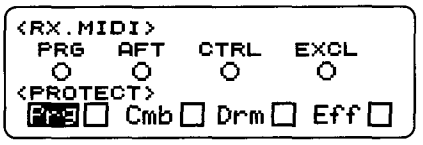
Since changes you make in Utility mode and Global mode are saved when you move to a different mode, it is not necessary to use the Write operation for these modes.

Write protect

To prevent data from being rewritten accidentally, the N1/N5 provides a write protect setting (which prevents data from being written into memory). If you wish to write edited data, you must first use the following procedure to turn write protect OFF (so that the corresponding check box is unchecked).

① Press the [GLOBAL] key to move to Global mode.

② Use the PAGE/PART [◄][►] keys to access the <Write Protect> page.



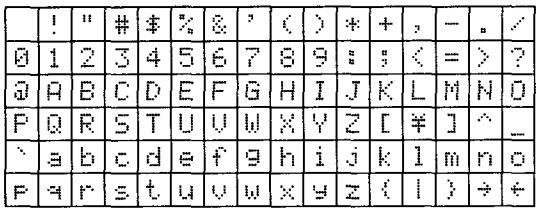
③ Use the CURSOR [◄][►] keys to select the check box located at the right of Prg, Cmb, Drm or Eff. Press the [INC+] key to add a check mark to the box. When a box is checked, it will be impossible to write data into the corresponding type of memory. Press the [DEC–] key to un-check the box, and allow data to be written.

Assigning a name (Rename)

You can assign a name to (or modify the existing name of) a program, combination, or effect program that you have edited.

① Make sure that the program or combination whose name you wish to assign (or modify) is selected. Use the PAGE/PART [◄][►] keys to select the Rename parameter of the appropriate edit mode.

② Use the CURSOR [◄][►] keys to highlight the character within the name that you wish to modify. Use the [VALUE] slider or the [INC+][DEC–] keys to select the desired character. Repeat this process to create the desired name. The following characters and symbols are available:



Write (save) procedure

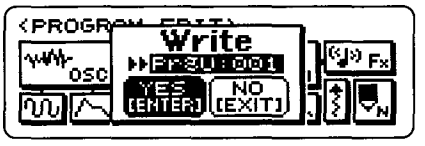
① To write a combination, program, drumkit or effect, turn <Write Protect> OFF (so that the check box is un-checked). (Refer to "Write protect" in the left column.)

② As necessary, modify the name of the combination, program or effect. (Refer to "Assigning a name (Rename)" in the left column.)

③ Press the [WRITE] key.

A message will appear in the LCD.

When you press the [WRITE] key, the current program number etc. will automatically be selected as the writing destination.



④ Specify the writing destination.

Programs can be written only to bank PrgU, and combinations can be written only to bank CmbU. Use the [VALUE] slider or the [INC+][DEC–] keys to select the writing destination program number.

⑤ Execute the Write operation. Use the CURSOR [◄][►] keys to select "YES," and press the [ENTER] key to write the data into memory. To cancel without writing the data, press the [EXIT] key.

Chapter 3. Parameter guide

1. Performance Play mode

In this mode, you can select combination sounds and play them on the keyboard.

When you turn the power on, this mode will be selected. From other modes, you can press the [PERFORM] key to enter this mode.

Each performance you write into memory consists of the following data. The N1/N5 can store 32 performances in internal memory.

Edited data	Editing location
Part parameters for 16 parts	Part edit (refer to Multi mode, Part edit mode, and "Part parameter change" in the appendix)
Effect parameters (1 effect)	Effect edit in Multi, Effect Edit in Performance (Internally, the same effect data is used for Multi and for Performance)
Master volume, Master key shift	Performance edit
Layer/Split condition	Panel switches
Part number for upper/ lower parts	Performance play
Upper and lower level balance	Control knobs
Split point for when split is used	Performance edit
Control knob/pedal assignments	Performance edit
Select key status	Panel switches
All arpeggiator parameters	Panel switches + Performance edit
Portamento on/off status	Panel switches

The part parameters of parts 17–32 are not memorized.
The Modify Drum parameters are not memorized (refer to p.61 <Part Mode>).

<Part> (UPPER, LOWER)

01...16

Select the part of the performance which you will play.

<Bank> (UPPER, LOWER)

CmbU, A, B, C, PrgU, A, B, C, GM-b, GM-a, r:01...r:40, r:CM, y:01...y101, ySFX, yDr1, yDr2, rDrm, kDrm, ****

Select the bank that you will play in the performance.

<Program Select> (UPPER, LOWER)

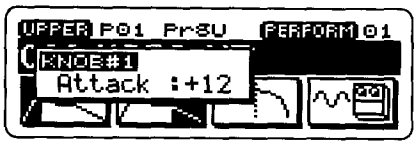
000...099 (PrgU, A, B, C, CmbU, A, B, C)
001...128 (for banks other than the above)

Select the program or combination sound. Use the [VALUE] slider or the [INC+][DEC–] keys to modify the value. You can also enter the value directly using the numeric keys.

In Performance Play/Edit modes, changing the program or combination will set the Bend Range of the part to "PRG." (The Part Edit mode item Mod <Part Pitch Bend Range> BNDWHL will be set to "PRG.")

<Control knob #1 value>

Value will depend on the parameter specified for the knob



This displays the value of the parameter assigned to control knob 1. Use the knob to modify the value.

Only part parameters are edited by the control knobs. Program parameters are not edited.

<Control knob #2 value>

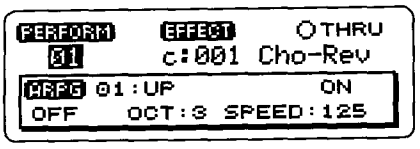
<Control knob #3 value>

<Control knob #4 value>

(Same as Control knob #1)

<Performance Select>

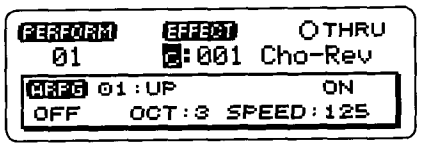
01...32



Select the performance. Use the [VALUE] slider or the [INC+][DEC–] keys to modify the value. The value can also be inputted directly using the numeric keys.

<Effect Bank>

P, U, A, B, C, u, a, b, c, G

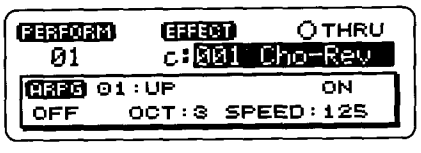


Change the bank of the effect used by the current performance. Use the [VALUE] slider or the [INC+][DEC–] keys, or inputted directly using the numeric keys.

Effect bank name	Contents
P	The effect written in the performance (Effect number cannot be selected)
U	User effect for bank "CmbU"
A	Preset effect for bank "CmbA"
B	Preset effect for bank "CmbB"
C	Preset effect for bank "CmbC"
u	User effect for bank "PrgU"
a	Preset effect for bank "PrgA"
b	Preset effect for bank "PrgB"
c	Preset effect for bank "PrgC"
G	Effect for GM or GM variation sounds

<Effect Program>

000...099 (other than bank G)
001...128 (G bank only)



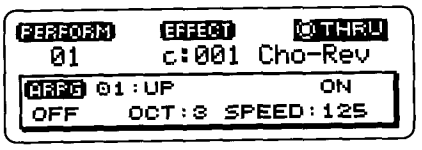
Changes the program number of the effect used by the current performance. Use the [VALUE] slider or the [INC+][DEC–] keys, or input directly using the numeric keys.

In Performance Play/Edit modes, changing the sound selected for the upper part will also cause the effect to change in tandem with the sound. The effect number specified in Program Edit or Combination Edit will be selected.

In Multi mode, the effect will not change in tandem with the sound.

<Effect Thru Switch>

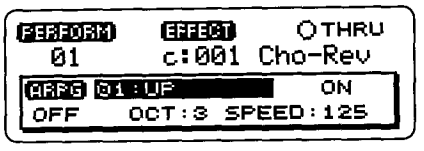
○ (Effect on), ◉ (Thru)



When you press the [INC+] key to select "◉," the effect will be bypassed.

<Arpeggio Types>

01...20

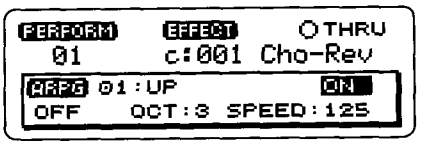


Select the arpeggiator pattern. 20 types are available.

01. UP
02. DOWN
03. ALT1
04. ALT2
05. RANDOM
06. ARP 1
07. ARP 2
08. ARP 3
09. ARP 4
10. ARP 5
11. ARP 6
12. B-TECHNO
13. B-DANCE
14. B-FUNK
15. B-SOUL
16. B-JAZZ
17. D-TECHNO
18. D-JUNGLE
19. D-FUNK
20. D-R&B

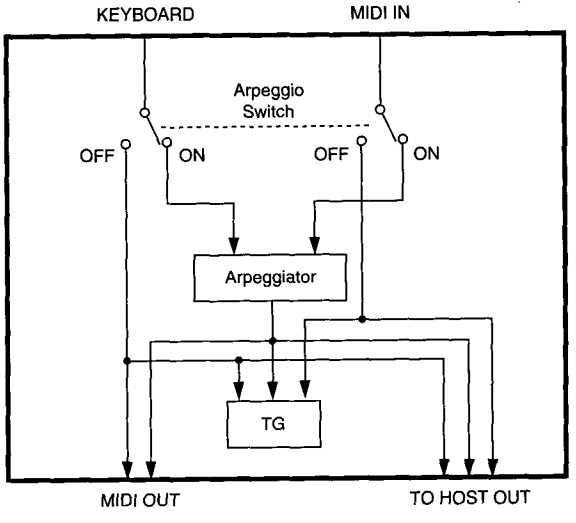
<Arpeggio Switch>

OFF, ON



Specifies whether or not the arpeggiator will be left on when the performance is changed.

Signal flow for arpeggiator ON/OFF



In this case the diagram shows a scenario in which Local Control is ON, and the Global parameter PC I/F TO PORT = Emulate.

<Arpeggio Octave>

1, 2, 3, 4

Specify the octave range of the arpeggio produced by the arpeggiator.

If the note data transmitted from MIDI OUT would exceed 127 (or does not exceed 0), one octave will be subtracted (or added) before the note is transmitted.

<Arpeggio Speed>

40...240 [BPM]

Specify the speed (tempo) of the arpeggio. This also specifies the tempo of the MIDI clock that is transmitted from MIDI OUT.

If Global mode <Clock Source> is set to MIDI or PCIF so that the arpeggiator is operating on an external clock, this setting will be ignored.

<Latch/Key Sync>

OFF, LATCH, K.SYNC, L&K.S

Specify how the arpeggio will be controlled by the keyboard. Operation of each type is as follows.

(A) OFF
The arpeggio will begin playing at the specified speed regardless of the timing at which the keys are pressed.

(B) LATCH
The arpeggio will continue repeating even after the keys are released.

(C) K.SYNC
While with setting (A) the arpeggio will play without regard to the timing at which the keys are pressed, this setting causes the arpeggio to start at the moment that the keys are pressed.

(D) L&K.S
The settings of (B) and (C) will both apply.

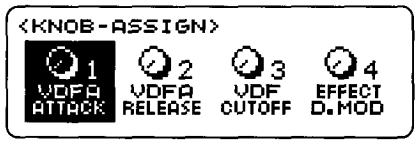
If you wish to synchronize the beats of the arpeggio with an external sequencer, select OFF or LATCH.

2. Performance Edit mode

In Performance Edit mode you can make arpeggiator settings, LAYER/SPLIT settings, and assignments for the four Realtime Controller knobs, etc. From Performance Play mode [2], press the [EDIT] key to enter this mode.

<Control knob #1 Type>

, VDFA ATTACK, VDFA RELEASE, VDFA DECAY, VDF CUTOFF, EFFECT D.MOD, Lo:Up Balance, PAN POT, Porta TIME, FX.1 SEND, FX.2 SEND, Volume, Express, Mod.2, Mod.3, CTRL#000...CTRL#095



Specifies the parameter which will be controlled by control knob 1. Use the [VALUE] slider or the [INC+][DEC–] keys to modify the assignment.

The parameter that you specify here will be assigned to the Realtime Controller [ASSIGN 1/] knob of Performance Play mode. The specified parameter will function when the [SELECT] key has been pressed to make the lower LED light.

:
No function

VDFA ATTACK:
Adjusts the attack times of the VDF and VDA EGs. The Part parameter EG Attack Time will be edited. Refer to p.58 <EG Attack Time>.
Control change #73 will be transmitted from MIDI OUT.

VDFA RELEASE:
Adjusts the release times of the VDF and VDA EGs. The Part parameter EG Release Time will be edited. Refer to p.58 <EG Release Time>.
Control change #72 will be transmitted from MIDI OUT.

VDFA DECAY:
Adjusts the decay times of the VDF and VDA EGs. The Part parameter EG Decay Time will be edited. Refer to p.58 <EG Decay Time>.
Control change #75 will be transmitted from MIDI OUT.

VDF CUTOFF:
Adjusts the cutoff frequency.
The Part parameter Cutoff Frequency will be edited. Refer to p.60 <Cutoff Frequency>.
Control change #74 will be transmitted from MIDI OUT.

EFFECT D.MOD:
Effect Dynamic Modulation will be controlled. Regardless of the Effect Dynamic Modulation Source setting, the effect will apply at the depth specified by the Effect Dynamic Modulation Intensity setting.
This will apply to both effects 1 and 2. Refer to p.46 <Effect 1 Dynamic Modulation Intensity>.
Control change #12 will be transmitted from MIDI OUT.

Lo:UP BALANCE:
Adjusts the volume balance between the sounds of the upper part and the lower part.

In cases other than layer or split, setting this to the Lower side will mean that no sound will be heard. Control change #8 will be transmitted from MIDI OUT.

PANPOT:
Adjusts the panpot.
This edits the Part parameter Panpot.
Refer to p.57 <Panpot>.
Control change #10 will be transmitted from MIDI OUT.

Porta TIME:
Adjust the portamento time.
This edits the Part parameter Portamento.
Refer to p.61 <Portamento Time>.
Control change #5 will be transmitted from MIDI OUT.

FX1 SEND:
Adjusts effect "C" send.
This edits the Part parameter C Send Level. Refer to p.57 <C Send Level>.
Control change #91 will be transmitted from MIDI OUT.

FX2 SEND:
Adjusts effect "D" send.
This edits the Part parameter D Send Level. Refer to p.58 <D Send Level>.
Control change #93 will be transmitted from MIDI OUT.

Volume:
Adjusts the volume of the part.
This edits the Part parameter Volume.
Refer to p.57 <Volume>.
Control change #7 will be transmitted from MIDI OUT.

Express:
Adjusts the volume of the part.
The volume of the part is determined by the product of Expression and Volume. Refer to p.57 <Expression>.
Control change #11 will be transmitted from MIDI OUT.

Mod.2:
Applies the effect specified by MOD.2 of the Part Edit mode Mod section. Refer to p.59 <Part Pitch Bend Range> – p.60 <Part VDA LFO Depth>.
Control change #16 will be transmitted from MIDI OUT.

Mod.3:
Applies the effect specified by MOD.3 of the Part Edit mode Mod section. Refer to p.59 <Part Pitch Bend Range> – p.60 <Part VDA LFO Depth>.
Control change #17 will be transmitted from MIDI OUT.

CTRL#000...CTRL#095
The specified control change (#0–#95) will be transmitted from MIDI OUT. If the N1/N5 is able to respond to the transmitted message, the corresponding change will occur in the sound.

The assignment you specify here and the value edited in the performance will be memorized when you write the performance.

<Control knob #2 Type>

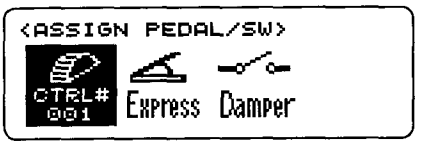
<Control knob #3 Type>

<Control knob #4 Type>

(Same as Control knob #1)

<Modulation Wheel Type>

(VALUE: Same as Control knob #1)



Specifies the function that will be controlled by the Modulation Wheel.

<Assignable Pedal Type>

(VALUE: Same as Control knob #1)

Specifies the function that will be controlled by a pedal connected to the rear panel ASSIGNABLE PEDAL jack.

<Assignable Switch Type>

Damper, Lower Damper, Upper Damper, PFRM#UP, PFRM#DOWN, FX1.On/Off, FX2.On/Off, SCALE Switch

Specifies the function that will be controlled by a pedal connected to the rear panel ASSIGNABLE SW jack.

Damper:
The switch will function as a damper pedal.
When the SPLIT or LAYER function is on, the damper pedal function will apply to both the LOWER and UPPER parts.

Lower Damper, Upper Damper:
When the SPLIT or LAYER function is on, the switch will function as a damper pedal for either the lower or the upper part, respectively.
When SPLIT and LAYER are off, the switch will function in the same way as with a setting of Damper.

PFRM#UP:
The switch will increment the performance number by 1.

PFRM#DOWN:
The switch will decrement the performance number by 1.

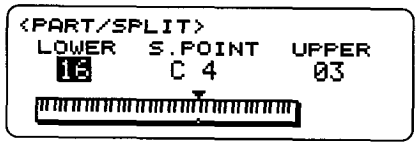
FX1.On/Off:
The switch will turn Effect 1 on/off.

FX2.On/Off:
The switch will turn Effect 2 on/off.

SCALE Switch:
The switch will alternate between equal temperament and the scale specified by Scale Tuning.

<Lower Part Number>

01...16



Specify the part number of the Lower part.

<Split point>

C2...C7 (N5), A0...C8 (N1)

Specifies the key (note number) at which the keyboard will be divided into upper and lower when the [SPLIT] key is pressed.

The note number specified here and the notes above it will play the Upper sound.

To set the value, use the [INC+][DEC–] keys or the [VALUE] slider, or hold down the [ENTER] key and play a note on the keyboard.

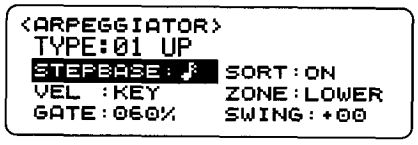
<Upper Part Number>

01...16

Specifies the part number of the Upper part.

<Arpeggio Step Base>

♩ (quarter note), ♩3 (quarter note triplet), ♪ (eighth note), ♪3 (eighth note triplet), 𝅘𝅥𝅯 (16th note), 𝅘𝅥𝅯3 (16th note triplet)



Specifies the note value for each step of the arpeggio.

<Arpeggio Velocity>

001...127, KEY, STEP

Specifies the strength (velocity) of the arpeggio notes. With a setting of 001–127, the notes of the arpeggio will sound at the specified velocity. With a setting of KEY, the velocity with which you play the keyboard will be used.

With a setting of STEP, the velocity that has been specified for each step will be used.

<Arpeggio Gate>

001...100 [%], STEP

Specifies the note length (gate time) of each step of the arpeggio. With a setting of 100%, notes will be the same length as the step time. With a setting of 50%, they will be half the gate time.

With a setting of STEP, the step time that has been specified for each step will be used.

<Arpeggio Sort>

OFF, ON

Specifies whether the arpeggio will be sorted. With a setting of ON, the notes you press will be sorted in order of their pitch, and played. With a setting of OFF, the notes will be played in the order in which they were pressed.

<Arpeggio Zone>

LOWER, UPPER, ALL

Specifies the part which the arpeggiator will use when the Split or Layer function (refer to p.11) is turned on.

(A) LOWER
When the Split function is on, the arpeggiator will function in the keyboard area below the split point.

When the Layer function is on, the arpeggiator will function only for the Lower part.

(B) UPPER
When the Split function is on, the arpeggiator will function in the keyboard area above the split point.

When the Layer function is on, the arpeggiator will function only for the Upper part.

(C) ALL
The arpeggiator will function for both the Lower and Upper parts.

<Arpeggio Swing>

–99...00...+99 [%]

Moves the timing of even-numbered steps forward or backward to modify the groove.

<Master Volume>

Adjusts the volume of the entire performance.

In Multi mode, this will adjust the volume of all parts. In Performance Play/Edit modes, this is used to adjust the volume balance etc. between each performance. In Multi mode, this is used to create fade-in/out effects during playback. This parameter can be controlled using the MIDI system exclusive message Master Volume.
(Refer to "Universal exclusive messages" at the end of the manual.)

<Master Balance>

This shifts the panpot settings of the entire performance.
In Multi mode, the panpot of all parts will be shifted. This will have no effect on parts which are set to RND or OFF.

This parameter can be controlled using the MIDI system exclusive message Master Balance.
(Refer to "Universal exclusive messages" at the end of the manual.)

3. Combination Edit mode

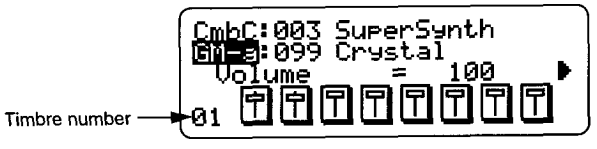
The N1/N5 allows you to bring together up to 8 programs and play these as though they were a single sound. Such a collection of programs is called a Combination.

Each program of which the combination consists (called a "timbre"), contains independent settings for volume, pan, effect send level, keyboard range and velocity range, and how the timbre will be controlled by MIDI messages. These settings allow you to create highly sophisticated playing setups.

Combination parameters determine the effect numbers which are used by the combination.

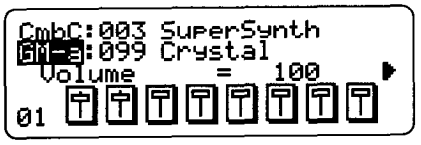
Combination Edit mode is where you can edit the parameters described above. You can enter this mode from Performance Play mode by selecting the combination sound that you wish to edit, and pressing the [EDIT] key.

To select the timbre (1–8) that you wish to edit, use the PAGE/PART [◄][►] keys. To move to the desired parameter, use the CURSOR [◄][►] keys. The timbre number which you are currently editing is shown in the lower left of the LCD.



<Timbre Bank Select>

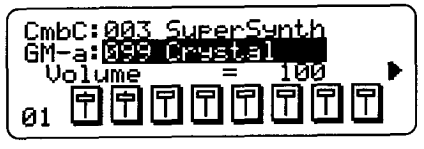
PrgU, A, B, C, GM-b, GM-a, r:01...r:40, r:CM, y:01...y101, ySFX, yDr2, rDrm, kDrm



Selects the sound bank for each timbre program in the combination.

<Timbre Program Number Select>

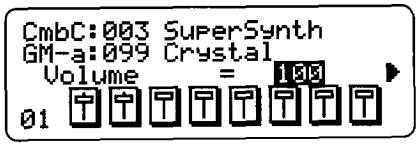
000...099 (for sound banks PrgU, A, B, C)
001...128 (for sound banks other than the above)



Selects the program number for each timbre program in the combination.

<Timbre Volume>

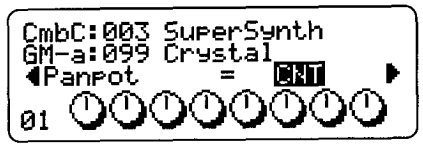
000...127



Specifies the volume for each timbre program in the combination.

<Timbre Panpot>

RND, L63...CNT...R63, OFF

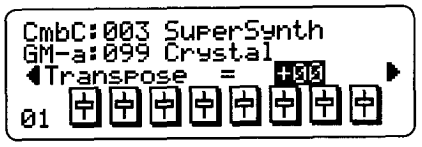


Specifies the left/right volume balance for each timbre program in the combination. RND is random, and CNT is center. This setting will also be the balance for the sound which is sent to the effect section (refer to p.45).

The panpot value of the program parameter for each timbre program will be added to this value to determine the actual setting.

<Timbre Transpose>

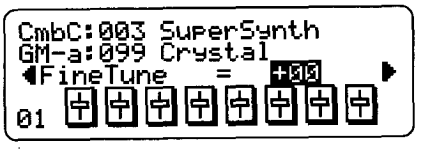
–24...00...+24



Each timbre in the combination can be transposed in semitone steps.

<Timbre Fine Tune>

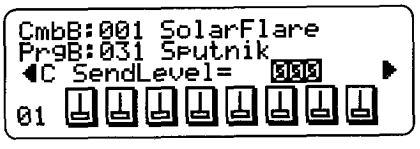
–50...00...+50



Adjusts the fine tuning of each timbre in the combination.

<Timbre C Send Level>

000...127

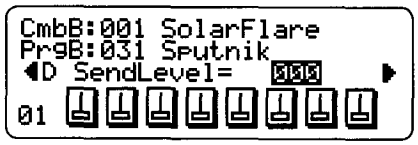


Specifies the amount of sound that will be sent from each timbre of the combination to the effect used by the combination.

This parameter will be multiplied by the Part C/D Send Level to determine the final amount of the effect.
The program parameter C/D Send Level of each timbre program will be ignored.
Please be aware that when a GM ON message etc. is received, the part C (REV) send will be set to 40, and D (CHO) send will be set to 00.

<Timbre D Send Level>

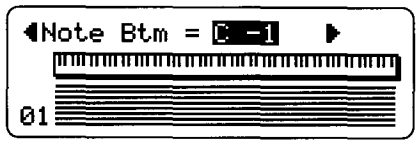
000...127



As with C Send Level, this specifies the amount of sound that will be sent from each timbre to the effect.

<Note Window Bottom>

C-1...G9

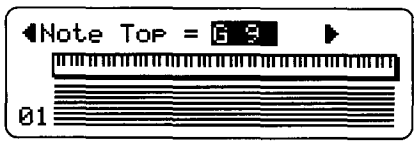


Specifies the lowest note for which each timbre in the combination will sound.

This can also be specified by holding down the [ENTER] key and pressing a note.

<Note Window Top>

C-1...G9



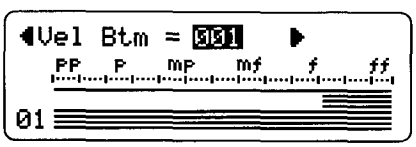
Specifies the highest note for which each timbre in the combination will sound.

This can also be specified by holding down the [ENTER] key and pressing a note.

By setting the note window, you can cause a program to sound only in a specified range of the keyboard.

<Velocity Window Bottom>

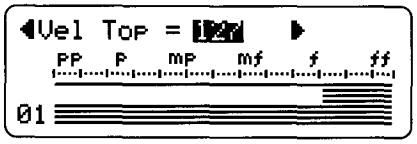
001...127



Specifies the minimum velocity (MIDI data that indicates the force with which a note was played) for which each timbre in the combination will sound.

<Velocity Window Top>

001...127

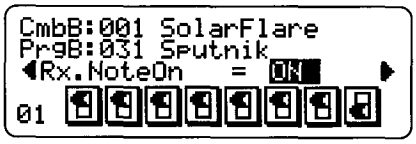


Specifies the maximum velocity for which each timbre in the combination will sound.

By setting the velocity window, you can cause a program to sound only for notes which are played with a specific range of force.

<Receive Note On>

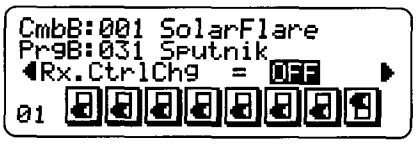
ON, OFF



Specifies whether or not MIDI note-on messages will be received. If this parameter is OFF, the timbre will be as though it were muted, and will not sound.

<Receive Control Change>

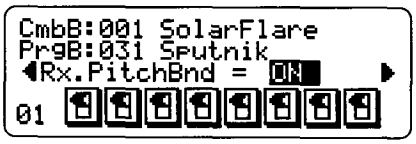
ON, OFF



Specifies whether or not MIDI control change messages will be received. If this parameter is OFF, the timbre will not receive MIDI control change messages.

<Receive Pitch Bend>

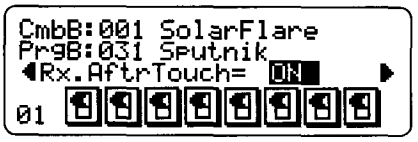
ON, OFF



Specifies whether or not MIDI pitch bend messages will be received. If this parameter is OFF, the timbre will not receive MIDI pitch bend messages.

<Receive Aftertouch>

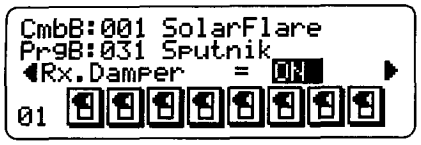
ON, OFF



Specifies whether or not MIDI aftertouch messages will be received. If this parameter is OFF, the timbre will not receive MIDI aftertouch messages.

<Receive Damper>

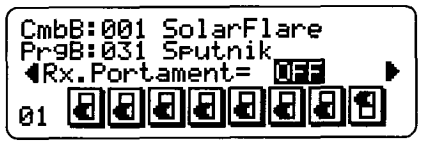
ON, OFF



Specifies whether or not MIDI damper messages will be received. If this parameter is OFF, the timbre will not receive MIDI damper messages.

<Receive Portamento>

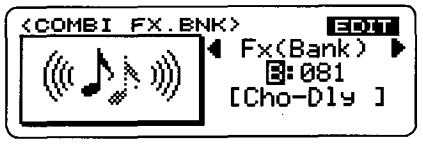
ON, OFF



Specifies whether or not MIDI portamento messages will be received. If this parameter is OFF, the timbre will not receive MIDI portamento messages.

<Effect Bank Select>

U, A, B, C, u, a, b, c, G



Specifies the bank of the effect which the combination sound will use.

From this display page, you can press the [EDIT] key to enter Effect Edit mode.

Refer to p.24 Performance Play mode <Effect Bank>. Here it is not possible to select "P."

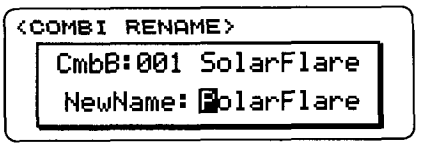
<Effect Number Select>

001...128 (for effect bank G)
00...99 (for effect banks other than the above)

Selects the number of the effect which the combination sound will use.

From this display page, you can press the [EDIT] key to enter Effect Edit mode.

<Combination Rename>



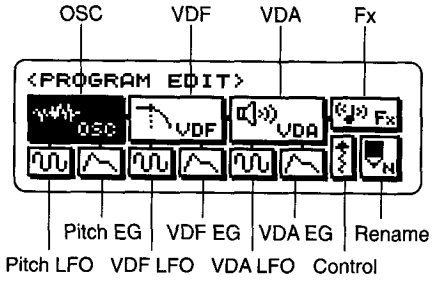
Here you can modify the name of the combination. Use the CURSOR [◄][►] keys to select the character that you wish to modify, and use the [VALUE] slider or the [INC+][DEC–] keys to modify the character. Here you can also press the [WRITE] key to execute the Save operation.

The following characters and symbols can be used:

	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P	Q	R	S	T	U	V	W	X	Y	Z	[	¥	]	^	_
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
p	q	r	s	t	u	v	w	x	y	z	{	|	}	→	←

4. Program Edit mode

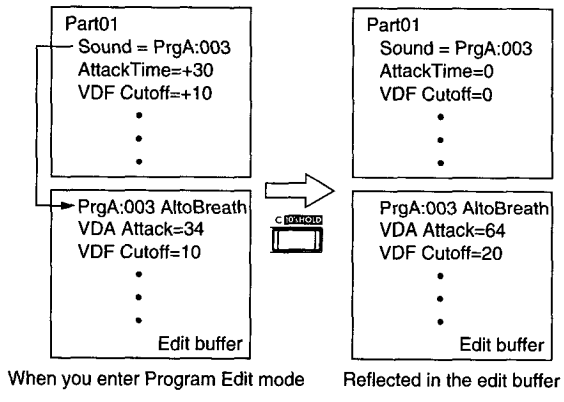
In this mode you can edit program sounds. From Performance Play mode, you can enter this mode by selecting the program that you wish to edit, and pressing the [EDIT] key.



Program Edit mode consists of 12 sections.

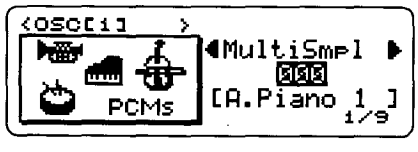
Sounds you edit in Program Edit mode can be saved in the user area which is indicated as "PrgU: (number)," with the name you have assigned.

If you wish to make the program sound reflect changes you have made by rotating the four knobs in Performance Play mode, press the [10's HOLD] key immediately after you enter Program Edit mode (i.e., from the above display).



When you enter Program Edit mode — Reflected in the edit buffer

If the OSC Mode is "DOUBLE," you can press the [EDIT] key in a relevant parameter page to jump between the two oscillators for editing. If "SINGLE" is selected, it will not be possible to edit the OSC2 parameters. When the OSC Mode is "DRUMS," you can press the [EDIT] key to edit the drumkit.



The effect of the number specified by the program parameter will be selected.

In Program Edit mode, editing any parameter will cause an indication of EDIT to appear in the upper right of the LCD. If you press the [EXIT] key to leave Program Edit mode while this display is shown, a popup window like the following will appear. This asks you to choose whether to save the current modified program in the user bank, or to discard your edits.

If you now channel CNCL and press the [ENTER] key, the popup window will disappear, and you can continue editing.

If you select YES and press the [ENTER] key, the modified program will be saved in the indicated program number of the user bank. You can also use the [INC+][DEC–] keys or the [VALUE] slider to specify the program number before saving it.

In this case, if you save the edited program to a user bank number which already contains a different program, all settings of that program will be lost; it will be overwritten by the newly-saved program.

If you select NO and press the [ENTER] key, the edited settings will be discarded, and you will exit Program Edit mode without saving any changes.

OSC

<Oscillator Mode>

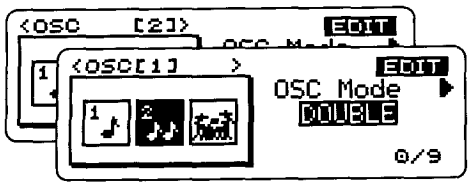
SINGLE, DOUBLE, DRUMS

This specifies whether one or two oscillators will be used, or whether a drumkit oscillator will be used. If you select SINGLE, one set of oscillator, filter and amplifier will be used. In this case, the N1/N5 will be able to play a maximum of 64 notes simultaneously.

If you select DOUBLE, two sets of oscillators, filters and amplifiers will be used, allowing you to combine two different sounds (or the same sound) to be played as one sound, so that a richer and more sophisticated sound can be created. However in this case, the N1/N5 will be able to play a maximum of 32 notes simultaneously.

When DOUBLE is selected, you can press the [EDIT] key in subsequent edit pages to switch the indicator located in the LCD between [1] and [2]. This indicates which of the two sets of oscillators, filters and amplifiers you are currently editing. I.e., oscillator, filter and amplifier settings with the same number ([1] or [2]) belong to the same system.

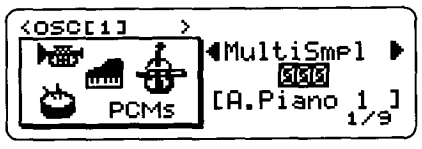
(DOUBLE)



If you select DRUMS, you can choose a drumkit. Unlike a conventional multisample, a drumkit plays a different percussion instrument sound for each note. When the oscillator mode is set to "DRUMS," you can press the [EDIT] key to enter Drumkit Edit mode, and edit the various parameters of the drumkit. (Refer to p.43)

<Multisample Select>

000...527



Selects the multisample that you wish to use. (When OSC Mode is SINGLE or DOUBLE)

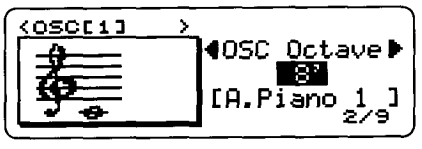
<Drumkit Select>

000...038

Selects the drumkit that you wish to use. (When OSC Mode is DRUMS)

<Octave Select>

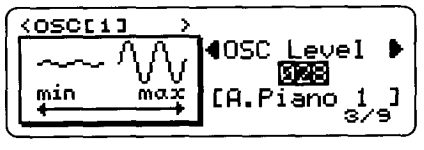
32', 16', 8', 4'



Adjusts the pitch of the oscillator in one-octave units. 8' is the standard pitch. If you are using a drumkit oscillator, set this to 8'.

<Oscillator Level>

000...127



Adjusts the volume of the oscillator.

<Key Transpose>

–12...00...+12

Adjusts the pitch of the oscillator in semitone steps.

<Fine Tune>

–99...00...+99

Makes fine adjustments to the pitch of the oscillator. When OSC Mode is DOUBLE, this parameter is also used to create detuning between oscillators 1 and 2.

<Velocity Window Bottom>

001...127

Specifies the lower limit of the velocity for which the oscillator will sound.

<Velocity Window Top>

001...127

Specifies the upper limit of the velocity for which the oscillator will sound.

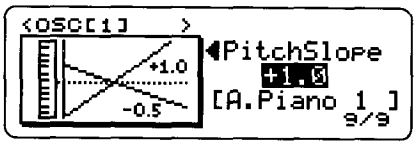
<Delay Start>

000...127

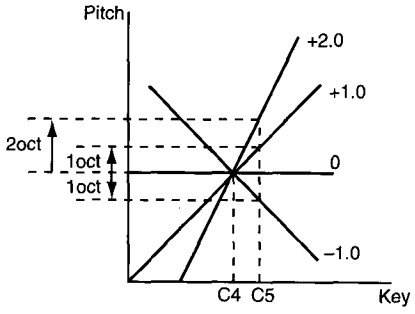
Specifies the time from when the note-on message is received until the oscillator actually begins to sound.

<Pitch Slope>

–1.0...0.0...+2.0



Specifies how the pitch will be related to the keyboard position. When this parameter is set to +1.0, the pitch will rise one octave as the note number increases by 12 (i.e., for every 12 notes). This is the normal setting. The following diagram shows how the value of this parameter will affect the way in which the keyboard determines the pitch.



PITCH LFO

<Pitch LFO Waveform>

TRIANGLE, SAW UP, SAW DOWN, SQUARE 1, SQUARE 2, RANDOM

Selects the waveform which the pitch LFO will use.

<Pitch LFO Frequency>

000...127

Specifies the frequency of the pitch LFO waveform.

<Pitch LFO Intensity>

–128...000...+127

Specifies the depth (strength) of the pitch LFO effect.

<Pitch LFO Delay>

000...127

Specifies the time from note-on until when the pitch LFO begins to take effect.

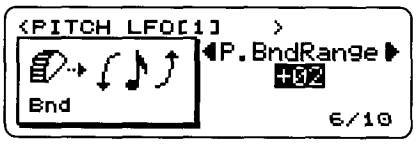
<Pitch LFO Fade-in Time>

000...127

After the Delay Time has elapsed, specify the time from when the LFO begins to take effect until the specified intensity is reached.

<Pitch Bend Range>

–24...00...+24

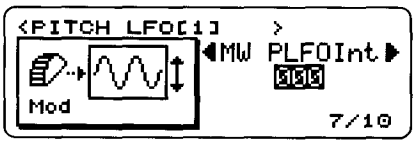


Specifies the range of pitch bend in semitones.

This parameter is valid only if the Part parameter <Part Pitch Bend Range> (p.59) is set to PRG.

<Modulation Wheel Pitch LFO Intensity>

000...127



Specifies the depth with which the modulation wheel will control the pitch LFO.

This value will be added to the value of the Part parameter <Part Pitch LFO Depth>.

<Modulation Wheel Pitch LFO Speed>

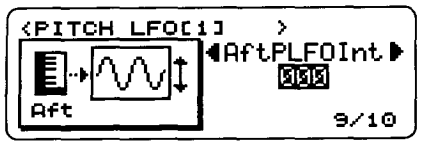
000...127

Adjusts the amount of control that the modulation wheel will have on the frequency of the Pitch LFO.

This value is added to the value of the Part parameter <Part LFO Rate>.

<Aftertouch Pitch LFO Intensity>

000...127



Adjusts the amount of control that aftertouch will have on the Pitch LFO modulation depth.

This value is added to the value of the Part parameter <Part Pitch LFO Depth>.

<Aftertouch Pitch LFO Speed>

000...127

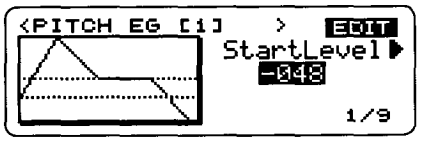
Adjusts the amount of control that aftertouch will have on the frequency of the Pitch LFO.

This value is added to the value of the Part parameter <Part LFO Rate>.

PITCH EG

<Pitch EG Start Level>

–128...000...+127

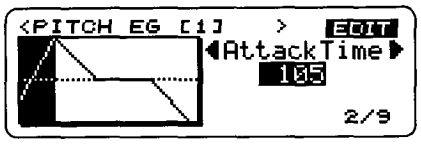


Specifies the pitch at the instant of note-on.

This value is added to the value of the Part parameter <Pitch EG Start Level>.

<Pitch EG Attack Time>

000...127

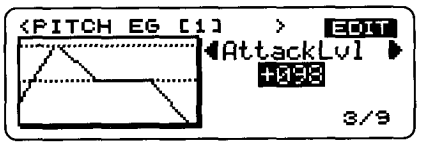


Specifies the time from note-on until the attack level is reached.

This value is added to the value of the Part parameter <Pitch EG Attack Time>.

<Pitch EG Attack Level>

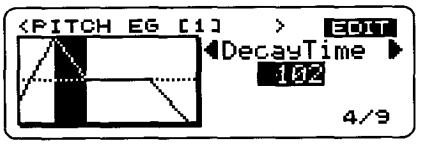
–128...000...+127



Specifies the pitch after the attack time has elapsed.

<Pitch EG Decay Time>

000...127



Specifies the time over which the pitch will return to the standard pitch, after the attack time has elapsed.

<Pitch EG Release Time>

000...127

Specifies the time from note-off until the release level is reached.

This value is added to the value of the Part parameter <Pitch EG Release Time>.

<Pitch EG Release Level>

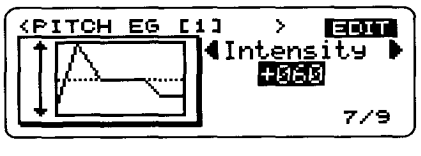
–128...000...+127

Specifies the pitch after the release time has elapsed.

This value is added to the value of the Part parameter <Pitch EG Release Level>.

<Pitch EG Intensity>

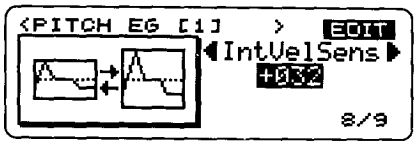
–128...000...+127



Specifies the depth (strength) of the pitch EG effect.

<Pitch EG Intensity Velocity Sensitivity>

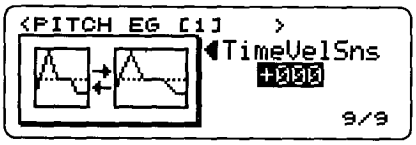
–128...000...+127



Specifies how velocity will affect the way in which the pitch EG changes.

<Pitch EG Time Velocity Sensitivity>

–128...000...+127

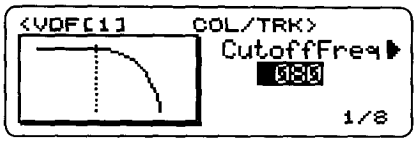


Specifies how velocity will affect the times of the pitch EG.

VDF

<Cutoff Frequency>

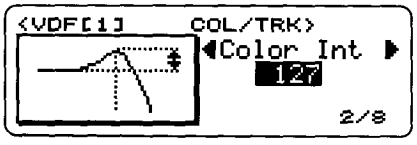
000...127



Specifies the cutoff frequency of the VDF (the brightness of the sound).

<Color Intensity>

000...127

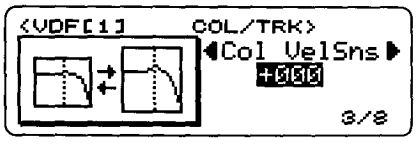


This setting boosts the level in the region of the VDF cutoff frequency, adding a distinctive character to the sound.

For some types of multisample, the effect of this parameter may not be obvious.

<Color Velocity Sensitivity>

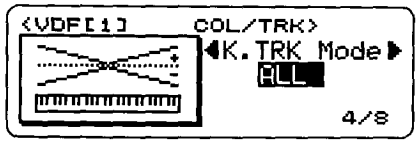
–128...000...+127



Specifies how velocity will affect the Color intensity.

<VDF Keyboard Tracking Mode>

OFF, LOW, HIGH, ALL

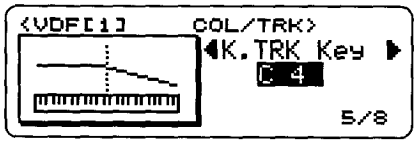


Specifies how keyboard tracking will apply.

If LOW or HIGH is selected, you can use the following parameter to specify the key from which tracking will begin.

<VDF Keyboard Tracking Key>

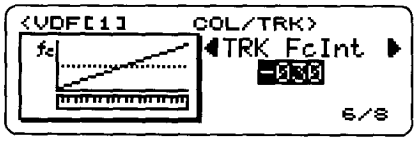
C-1...G9



If the Keyboard Tracking Mode is LOW or HIGH, this parameter specifies the key at which tracking will begin. If the tracking mode is ALL, this parameter specifies the center key.

<VDF Keyboard Tracking Intensity>

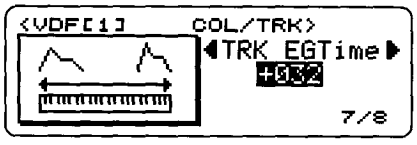
–128...000...+127



Specifies how the keyboard location will affect the VDF cutoff frequency.

<VDF Keyboard Tracking EG Time>

–128...000...+127

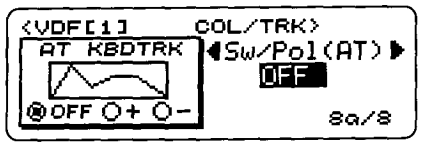


Specifies how the keyboard location will affect the various VDF EG times.

If this value is increased in the positive (+) direction, VDF EG times will be shorter when you play higher notes in the area specified by Keyboard Tracking Mode and Keyboard Tracking Key, causing the tone (brightness) of the sound to change more rapidly. When you play lower notes in this area, VDF EG times will be longer, causing the tone to change more slowly.

<VDF Keyboard Tracking EG Time Switch & Polarity (AT), (DT), (ST), (RT)>

OFF, ON(+), ON(–)



Specifies the direction of the change in VDF EG Attack Time (AT), Decay Time (DT), Slope Time (ST) and Release Time (RT) that will be produced by VDF keyboard tracking.

For each time, a setting of "+" will cause notes played above the Keyboard Tracking Key to have shorter times, and a setting of "–" will cause them to have longer times. With a setting of 0 there will be no effect.

This parameter specifies the direction (±) in which each of the four EG time parameters will change. The amount of change is determined by the value of the Keyboard Tracking EG Time parameter.

VDF LFO

<VDF LFO Waveform>

TRIANGLE, SAW UP, SAW DOWN, SQUARE 1, SQUARE 2, RANDOM

Selects the waveform which the VDF LFO will use.

<VDF LFO Frequency>

000...127

Specifies the frequency of the VDF LFO waveform.

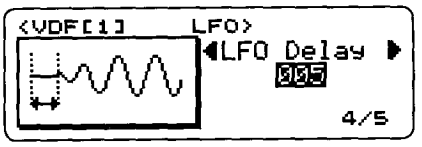
<VDF LFO Intensity>

–128...000...+127

Specifies the depth (strength) of the VDF LFO effect.

<VDF LFO Delay>

000...127



Specifies the time from note-on until the VDF LFO begins to take effect.

<VDF LFO Fade-in Time>

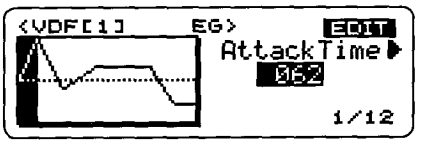
000...127

After the Delay Time has elapsed and the LFO begins to take effect, this parameter specifies the time over which the specified Intensity is reached.

VDF EG

<VDF EG Attack Time>

000...127



Specifies the time from note-on until the Attack Level is reached.

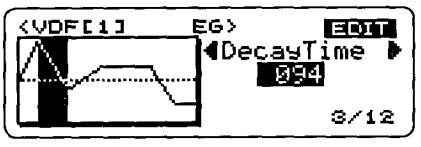
<VDF EG Attack Level>

–128...000...+127

Specifies the VDF cutoff value that will be reached after the Attack Time.

<VDF EG Decay Time>

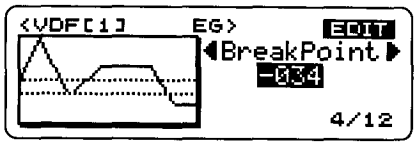
000...127



After the Attack Time has elapsed, this parameter specifies the time until the Break Point is reached.

<VDF EG Break Point>

–128...000...+127



Specifies the VDF cutoff value that will be reached after the Decay Time.

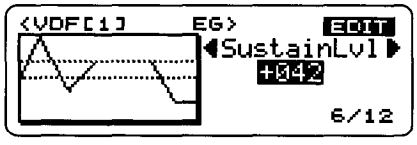
<VDF EG Slope Time>

000...127

After the Decay Time has elapsed, this parameter specifies the time until the Sustain Level is reached.

<VDF EG Sustain Level>

–128...000...+127



Specifies the VDF cutoff level that will be held after the Slope Time has elapsed until note-off.

<VDF EG Release Time>

000...127

Specifies the time from note-off until the Release Level is reached.

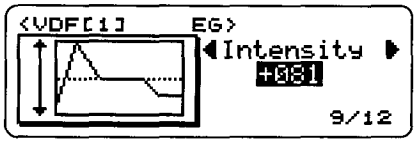
<VDF EG Release Level>

–128...000...+127

Specifies the VDF cutoff level that will be reached after the Release Time has elapsed.

<VDF EG Intensity>

–128...000...+127



Specifies the depth (strength) of the VDF EG effect.

<VDF EG Intensity Velocity Sensitivity>

–128...000...+127

Specifies how velocity will affect the VDF EG effect.

<VDF EG Time Velocity Sensitivity>

000...127

Specifies how velocity will affect the various VDF EG times.

This setting specifies how greatly the various times <VDF EG Attack Time>, <VDF EG Decay Time>, <VDF EG Slope Time> and <VDF EG Release Time> specified by the VDF EG will be affected by velocity.

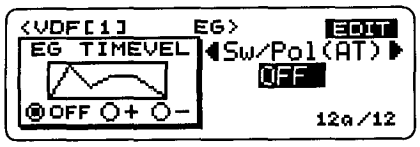
When this value is increased in the positive (+) direction, strongly played notes will cause the VDF EG times to be shortened, so that the brightness of the sound will change more rapidly. Softly played notes will cause the VDF EG times to be lengthened, so that the brightness of the sound will change more slowly.

Conversely, increasing this value in the negative (–) direction will cause the brightness of strongly played notes to change more slowly, and softly played notes to change more rapidly.

Positive/negative settings are made by the <VDF EG Time Velocity Sensitivity Switch & Polarity> parameter.

<VDF EG Time Velocity Sensitivity Switch & Polarity (AT), (DT), (ST), (RT)>

OFF, ON(+), ON(–)



Specifies the direction of the change in VDF EG Attack Time (AT), Decay Time (DT), Slope Time (ST) and Release Time (RT) that will be produced by velocity.

This specifies how velocity will affect the various times <VDF EG Attack Time>, <VDF EG Decay Time>, <VDF EG Slope Time> and <VDF EG Release Time> that are specified for the VDF EG.

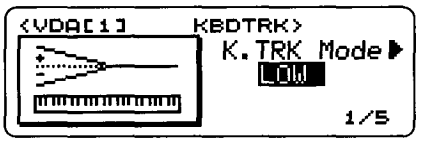
For each time, a setting of "+" will cause strongly played notes to have shorter VDF EG times, and a setting of "–" will cause them to have longer times. With a setting of 0 there will be no effect.

This parameter specifies the direction (±) in which each of the four EG time parameters will change. The amount of change is determined by the VDF EG Time Velocity Sensitivity parameter.

VDA

<VDA Keyboard Tracking Mode>

OFF, LOW, HIGH, ALL



Specifies how VDA keyboard tracking will apply.

If LOW or HIGH is selected, you can use the following parameter to specify the key from which tracking will begin.

<VDA Keyboard Tracking Key>

C-1...G9

If the Keyboard Tracking Mode is LOW or HIGH, this parameter specifies the key at which tracking will begin. If the tracking mode is ALL, this parameter specifies the center key.

<VDA Keyboard Tracking Intensity>

–128...000...+127

Specifies how the keyboard location will affect the volume change produced by the VDA.

<VDA Keyboard Tracking EG Time>

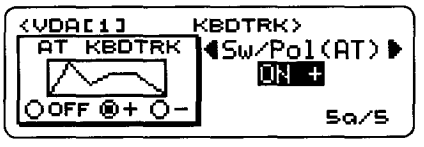
–128...000...+127

Specifies how the keyboard location will affect the various VDF EG times.

(Refer to the explanation of <VDF Keyboard Tracking EG Time> on p.35.)

<VDA Keyboard Tracking EG Time Switch & Polarity (AT), (DT), (ST), (RT)>

OFF, ON(+), ON(–)



Specifies the direction of the change in VDA EG Attack Time (AT), Decay Time (DT), Slope Time (ST) and Release Time (RT) that will be produced by VDA keyboard tracking.

(Refer to the explanation of <VDF Keyboard Tracking EG Time Switch & Polarity> on p.36.)

VDA LFO

<VDA LFO Waveform>

TRIANGLE, SAW UP, SAW DOWN, SQUARE 1, SQUARE 2, RANDOM

Selects the waveform which will be used for VDA modulation.

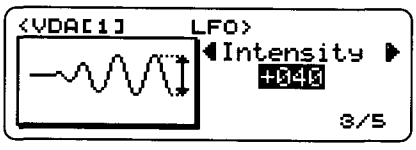
<VDA LFO Frequency>

000...127

Specifies the frequency of the VDA modulation waveform.

<VDA LFO Intensity>

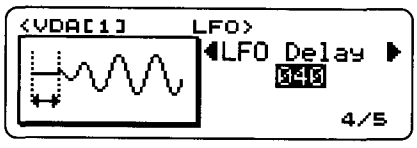
–128...000...+127



Specifies the depth (strength) of the VDA modulation effect.

<VDA LFO Delay>

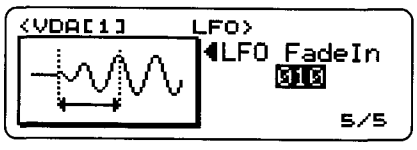
000...127



Specifies the time from note-on until VDA modulation begins to take effect.

<VDA LFO Fade-in Time>

000...127



After the Delay Time has elapsed and modulation begins to take effect, this parameter specifies the time over which the specified Intensity is reached.

VDA EG

<VDA EG Attack Time>

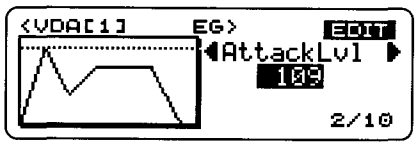
000...127

Specifies the time from note-on until the Attack Level is reached.

This value is added to the value of the Part parameter <EG Attack Time>.

<VDA EG Attack Level>

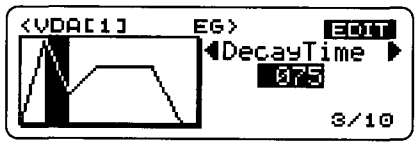
000...127



Specifies the volume that will be reached after the Attack Time.

<VDA EG Decay Time>

000...127

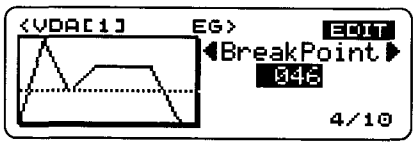


After the Attack Time has elapsed, this parameter specifies the time until the Break Point is reached.

This value is added to the value of the Part parameter <EG Decay Time>.

<VDA EG Break Point>

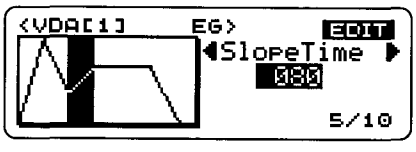
000...127



Specifies the volume level that will be reached after the Decay Time.

<VDA EG Slope Time>

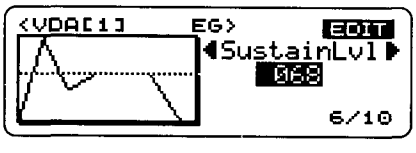
000...127



After the Decay Time has elapsed, this parameter specifies the time until the Sustain Level is reached.

<VDA EG Sustain Level>

000...127



Specifies the volume level after the Slope Time has elapsed.

<VDA EG Release Time>

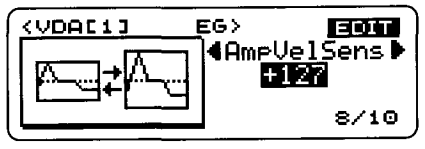
000...127

Specifies the time from note-off until the volume reaches 0.

This value is added to the value of the Part parameter <EG Release Time>.

<VDA EG Amplitude Velocity Sensitivity>

–128...000...+127



Specifies how velocity will affect the changes produced by the VDA EG.

<VDA EG Time Velocity Sensitivity>

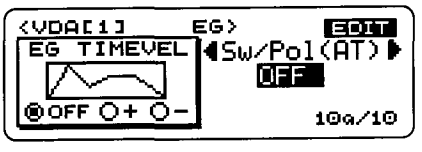
000...127

Specifies how velocity will affect the various VDA EG times.

Refer to the explanation for <VDF EG Time Velocity Sensitivity> on p.37.

<VDA EG Time Velocity Sensitivity Switch & Polarity (AT), (DT), (ST), (RT)>

OFF, ON(+), ON(–)



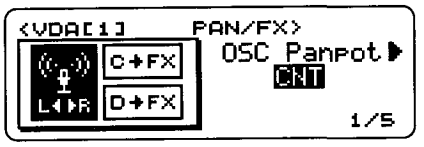
Specifies the direction of the change in VDA EG Attack Time (AT), Decay Time (DT), Slope Time (ST) and Release Time (RT) that will be produced by velocity.

Refer to the explanation for <VDF EG Time Velocity Sensitivity Switch & Polarity> on p.38.

Fx

<Oscillator Panpot>

RND, L63...CNT...R63, OFF, ***

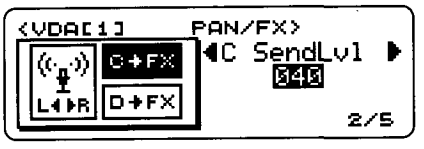


Specifies the output balance of the oscillators. This will be the input to the effect section.

In the case of a drumkit oscillator, the setting for each instrument (note) will be used, and the value of this parameter will be displayed as "***."

<C Send Level/D Send Level>

000...127



Specifies the amount that will be output to C and D. This will be the input to the effect section.

In Multi mode, this parameter is ignored, and the C/D Send Levels of each Part will be used.

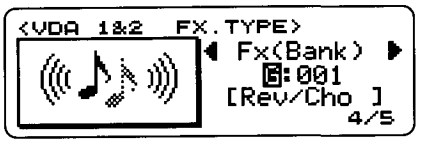
In Performance Play/Edit modes, this parameter will be multiplied by the Part parameter C/D Send Level to determine the actual result. In the case of a program selected by a combination, this parameter will be ignored, and the C/D Send Levels of the Timbre and the Part will be multiplied to determine the actual result.

Please be aware that when a GM ON message etc. is received, the Part C (REV) Send will be set to 40, and the D (CHO) Send will be set to 00.

In the case of a drumkit oscillator, the send amount for each instrument (note) will be multiplied by the value of this parameter to determine the actual send levels to C and D.

<Effect Bank>

U, A, B, C, u, a, b, c, G



Selects the bank of the effect which the program sound will use.

From this display, you can press the [EDIT] key to enter Effect Edit mode.

Refer to Performance Play mode <Effect Bank> on p.24. It is not possible to select "P" for this setting.

<Effect Number>

001...128 (for effect bank G)
000...099 (for effect banks other than the above)

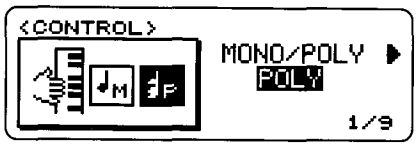
Specifies the number of the effect which the program sound will use.

From this display, you can press the [EDIT] key to enter Effect Edit mode.

Control

<Mono/Poly>

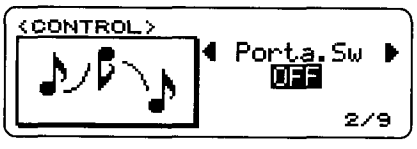
MONO, POLY



Specifies whether the program sound will be played monophonically (single notes) or polyphonically (chords). When MONO is selected, only one note will sound even if you press two or more notes.

<Portamento Switch>

ON, OFF



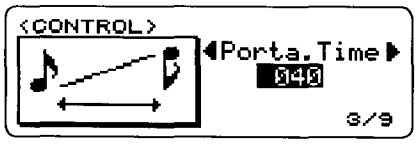
Turns portamento on or off. (Portamento creates a smooth change in pitch between notes.)

When the setting is changed or when a program change occurs, this will be copied to the Part parameter <Portamento Switch>.

Combination sounds will ignore this setting.

<Portamento Time>

000...127

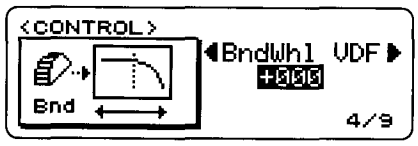


Specifies the portamento time (the time over which the pitch will move to the next note).

The value of this parameter will be added to the value of the Part parameter <Portamento Time>.

<Bend Wheel VDF>

–128...000...+127

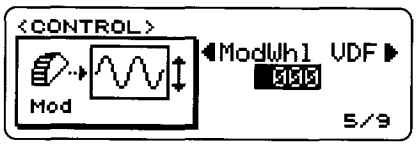


Specifies how the pitch bend wheel will affect the cutoff frequency.

The value of this parameter will be added to the value of the Part parameter <Part VDF Cutoff>.

<Modulation Wheel VDF>

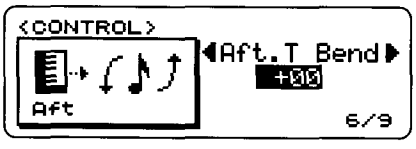
000...127



Specifies how the modulation wheel will affect the VDF cutoff frequency.

<Aftertouch Pitch Bend Range>

–24...00...+24



Specifies the range of pitch bend that will be controlled by aftertouch.

The value of this parameter will be added to the value of the Part parameter <Part Pitch Bend Range>.

<Aftertouch VDA>

–128...000...+127

Specifies how aftertouch will affect the VDA volume.

The value of this parameter will be added to the value of the Part parameter <Part VDA Amplifier>.

<Aftertouch VDF>

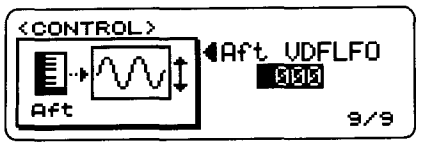
–128...000...+127

Specifies how aftertouch will affect the VDF cutoff frequency.

The value of this parameter will be added to the value of the Part parameter <Part VDF Cutoff>.

<Aftertouch VDF LFO>

000...127



Specifies how aftertouch will affect the depth of VDF LFO modulation.

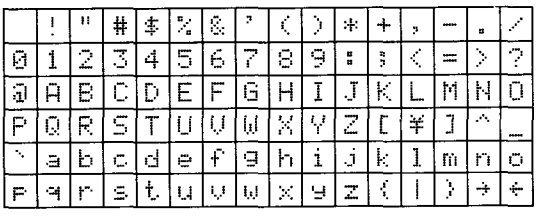
The value of this parameter will be added to the value of the Part parameter <Part VDF LFO Depth>.

Rename

<Program Rename>

Here, you can modify the name of the program sound. Use the CURSOR [◄][►] keys to select the character that you wish to modify, and use the [VALUE] slider or the [INC+][DEC–] keys to modify the character. Also, you can press the [WRITE] key in this display to save your edits.

The following characters and symbols can be used:



5. Drumkit Edit mode

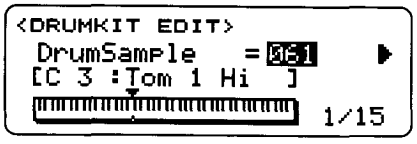
A drumkit is a set of waveforms which assign different percussion instrument sounds to each note number. If a program sound uses a drumkit, each note of the keyboard will play a different drum sound, allowing you to play the keyboard as if you were playing a drum set.

To enter Drumkit Edit mode, first set the Program Edit mode parameter <Oscillator Mode> to "DRUMS" (refer to p.31). Then press the [EDIT] key.

In Drumkit Edit mode, a diagram of a keyboard will appear in the LCD screen. The small downward-pointing triangle above this keyboard corresponds to the note name that is shown on the line immediately above, indicating the note which you are currently editing. You can use the PAGE/PART [◄][►] keys to select the note that you wish to edit. You can also select a note for editing by holding down the [ENTER] key and playing the note on the N1/N5's keyboard.

<Drum Sample Select>

000...285



Specifies the drum sample which will be assigned to the currently selected note. For details on the available drum samples, refer to the "DrumSample" at the end of this manual.

<Drum Sample Level>

000...127

Specifies the volume of the drum instrument for the currently selected note.

<Transpose>

–64...00...+63

Transposes the pitch of the currently selected note in semitone steps. The available transposition range will differ slightly depending on the drum sample.

<Fine Tune>

–64...00...+63

Makes fine adjustments to the pitch of the currently selected note.

<Panpot>

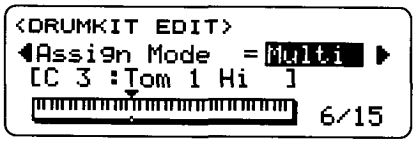
RND, L63...CNT...R63, OFF

Specifies the panning (the location when heard in stereo) for the currently selected note. CNT indicates center. With a setting of RND, the sound will be heard from a different location each time a note is played.

With a setting of OFF, there will be no output from either A or B.

<Assign Mode>

Single, Multi



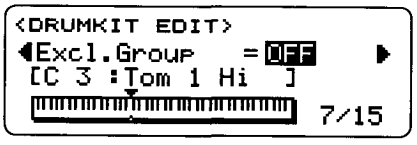
Specifies how the drum instrument will sound when multiple note-on messages arrive in succession for the currently selected note.

(A) Single
If an identical note-on message is received when the note is already sounding, the currently-sounding note will be forced off, and a new note will be started.

(B) Multi
If an identical note-on message is received when the note is already sounding, the currently-sounding note will be allowed to continue, and a duplicate note will be started.

<Exclusive Group>

OFF, 001...127

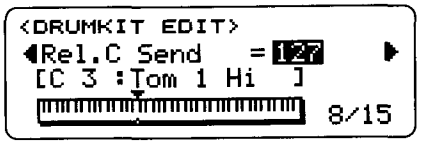


If this parameter is set to a value of 001–127, the currently selected instrument will be prevented from sounding simultaneously with any other note which is set to the same Exclusive Group number. For example since it is physically impossible for a hi-hat cymbal to produce both open and closed sounds simultaneously,

you may wish to set open and closed hi-hat sounds to the same Exclusive Group number, so that they will not sound simultaneously.

<Relative C Send Level>

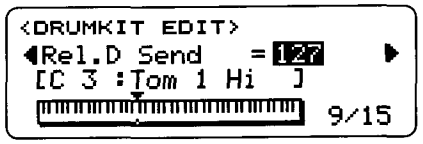
000...127



Specifies the level that is sent from the currently selected instrument to the effect C input. The actual amount that is sent to the effect C input is determined by multiplying the value of this parameter with the Program parameter C Send Level.

<Relative D Send Level>

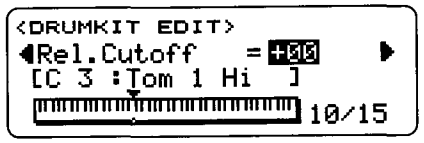
000...127



Specifies the level that is sent from the currently selected instrument to the effect D input. The actual amount that is sent to the effect D input is determined by multiplying the value of this parameter with the Program parameter D Send Level.

<Relative Cutoff>

–64...00...+63



Adjusts the cutoff frequency (brightness) of the currently selected instrument.

<Relative Color>

–64...00...+63

Adjusts the color (boost at the region of the cutoff frequency) of the currently selected instrument.

For some instruments, adjusting this parameter may not have significant effect.

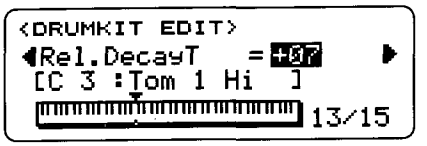
<Relative Attack Time>

–64...00...+63

Adjusts the attack time of the VDF and VDA (tone and volume) for the currently selected instrument.

<Relative Decay Time>

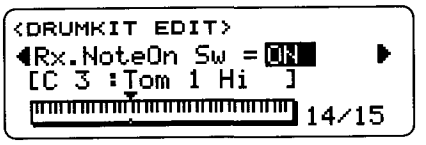
–64...00...+63



Adjusts the decay time of the VDF and VDA (tone and volume) for the currently selected instrument.

<Receive Note On Switch>

ON, OFF



Specifies whether or not note-on messages will be received for the note number of the currently selected instrument. If this is turned OFF, the corresponding note number will not sound.

<Receive Note Off Switch>

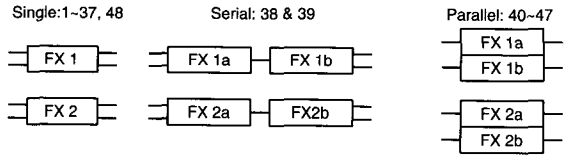
ON, OFF

Specifies whether or not note-off messages will be received for the note number of the currently selected instrument. Turn this parameter OFF for a drum instrument that you do not want to stop sounding when it receives a note-off message.

6. Effect Edit mode

The N1/N5 contains two digital effect processors. For each effect processor (EFFECT 1 and 2) you can select one of 48 types of effects such as reverb, delay, flanger, destination, exciter, and resonance filter etc. (These are referred to as "effect types.")

The 48 effect types are numbered individually. Types 1–37 and 48 are single effects, types 38–39 are serial-connected effects, and types 40–47 are parallel-connected effects. By using parallel-connected effects, you can simultaneously use up to four types of independent effect.



On the N5, the effect section consists of four inputs (A, B, C, D), two effect units (EFFECT 1 and 2), two pan-pots (PAN 3 and 4), and two outputs (L/MONO, R).

On the N1, there are four outputs (1/L/MONO, 2R, 3, 4).

In the case of a Combination, the effect settings of programs 01–08 are ignored, and the effect settings specified for that combination will be used instead. Similarly in the case of a Multi, the effect settings of the program for each part are ignored, and the effect settings specified for that multi will be used instead.

To enter Effect Edit mode, press the [EDIT] key in one of the following situations.

- In Performance Play mode or Multi mode, when the bank or effect number of the currently-used effect is selected (i.e., when the cursor is located there).
- In Program Edit mode or Combination Edit mode, when the bank or effect number of the effect used by that sound is selected (i.e., when the cursor is located there).

To leave Effect Edit mode, press the [EXIT] key.

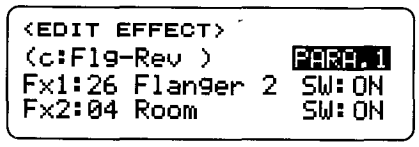
If you press the [EXIT] key without executing the Write operation, or if you press another mode key to exit Effect Edit mode, the edited effect will not be saved. If you wish to save the modified settings, be sure to press the [WRITE] key.

When an initialization message such as GM ON etc. is received in Multi mode, the effect section will automatically be initialized to the following settings:

Effect 1: 01 Hall
Effect 2: 19 Chorus1
Placement: PARA.3

<Effect Placement>

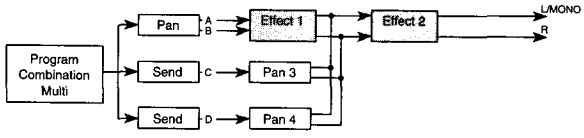
SERIAL, PARA.1, PARA.2, PARA.3, SERI.S (N1 only), **PARA.S** (N1 only)



Specifies how the two effects will be connected. For details refer to the diagrams below.

A and B are pan, and C and D are send. These parameters are found in Program Edit mode, Combination Edit mode and Multi mode.

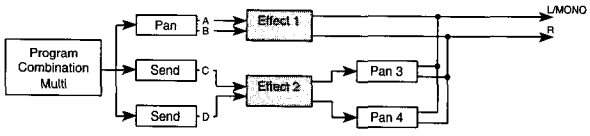
SERIAL (Serial placement)



In serial placement, effects 1 and 2 will be applied to the sound that is input to A and B, and output from L/MONO and R. The sound that is output from C and D will be mixed with the output of effect 1, and will be processed by effect 2 and then output.

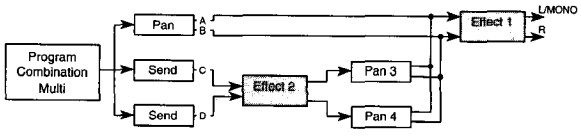
By using the C and D inputs, you can avoid applying effect 1 to specific sounds (or conversely apply effect 1 only to specific sounds), and then apply effect 2 to everything.

PARA.1 (Parallel 1 placement)



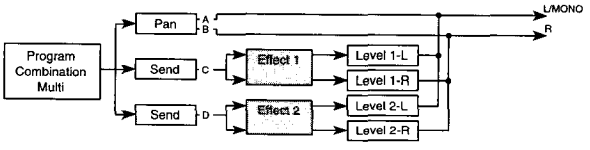
When Parallel 1 is selected, effect 1 will be applied to the sound that is input to A and B. Effect 2 will be applied to the sound that is input to C and D, and this will be mixed with the output of effect 1. Effects 1 and 2 can be used independently.

PARA.2 (Parallel 2 placement)



When Parallel 2 is selected, effect 1 will be applied to the sound that is input to A and B, and then will be output. Effect 2 will be applied to the sound that is input to C and D, and the result will be mixed with the input to effect 1.

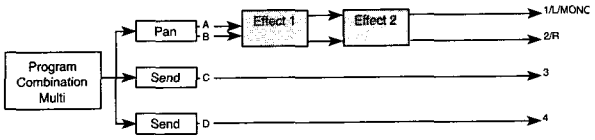
PARA.3 (Parallel 3 placement)



When Parallel 3 is selected, the sound that is input to A and B will be output without further processing. The sound that is input to C and D will be processed by

effect 1 and effect 2 respectively, and then pass through an additional assignment before it is mixed into the L/MONO and R outputs. GM normally uses this placement.

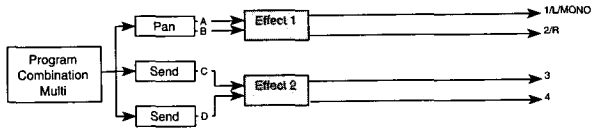
SERI.S (Serial sub placement) N1 only
There is no panning for the effect output.



When Serial Sub placement is selected, effects 1 and 2 will be applied to the sound that is input to A and B, and the sound will be output from 1/L/MONO and 2/R. The sound that is input to C and D will be output directly from 3 and 4.

Inputs C and D can be used to send unprocessed sound to external effect units, or to send unprocessed sound to the mixer, etc.

PARA.S (Parallel sub placement) N1 only
There is no panning for the effect output.

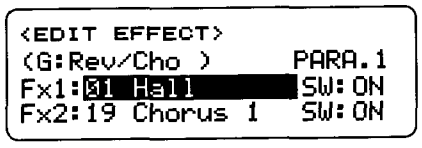


When Parallel Sub placement is selected, effect 1 will be applied to the sound that is input to A and B, effect 2 will be applied to the sound that is input to C and D, and the output of the effects will be sent from 1/L/MONO, 2/R, 3 and 4 respectively.

Sound will be output from 3 and 4 only when effect placement is Serial Sub or Parallel Sub. Also, the sound which is input to C and D can not be heard in the headphones.

<Effect 1 Type>

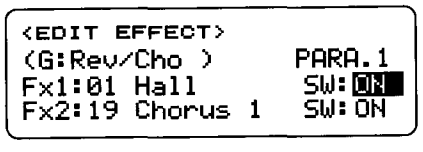
01...48



Selects one of the 48 effect types for effect 1. When you change the effect selection, the effect parameters (p.48–) will be set to their initial values.

<Effect 1 Switch>

ON, OFF



Turns effect 1 on/off. If this is OFF, the effect will not apply. (However in the case of the following effects, the EQ Low and EQ High settings of the equalizer will still be valid even if the effect switch is OFF.)

#13 Stereo delay
#14 Cross delay
#19 Chorus 1
#20 Chorus 2
#28 Exciter
#35 Auto pan
#36 Tremolo

<Effect 2 Type>

01...48

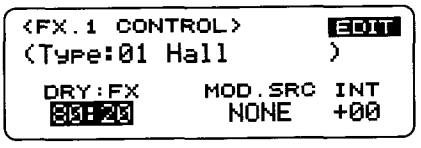
<Effect 2 Switch>

ON, OFF

In the same way as for effect 1, selects the effect type that will be used by effect 2.

<Effect 1 Balance>

DRY, 99:01...01:99, EFF



For effect 1, this parameter specifies the proportion of the unprocessed (dry) sound to the processed (effect) sound. A setting of DRY will output only the unprocessed sound, and a setting of EFF will output only the sound processed by the effect.

<Effect 1 Dynamic Modulation Source>

NONE, MOD1, MOD2, MOD3, AFTR.T, VDA-EG

Specifies the control which will apply dynamic modulation to effect 1. "Dynamic modulation" refers to the capability of controlling a specific effect parameter such as modulation speed, depth, or effect level or balance etc. while you play.

The factory settings are as follows.

MOD1: MIDI CC#1
MOD2: MIDI CC#16
MOD3: MIDI CC#17
AFTR.T: Aftertouch

<Effect 1 Dynamic Modulation Intensity>

–15...00...+15

Specifies the depth of dynamic modulation for effect 1.

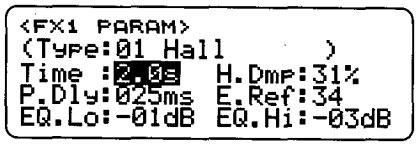
In Performance Play/Edit modes, you can assign a con-

trol knob to EFECT D.MOD to control this. (Refer to Performance Edit mode <Control knob#1 Type>.)

MIDI messages on the MIDI channel of the Upper part will control this effect.

<Effect 1 Effect Parameters>

Parameters for effect 1



The parameters will depend on the selected effect type.

Refer to "Effect types and parameters."

<Effect 2 Balance>

<Effect 2 Dynamic Modulation Source>

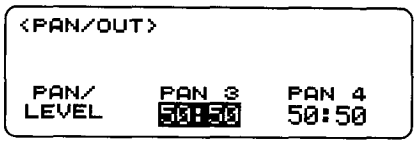
<Effect 2 Dynamic Modulation Intensity>

<Effect 2 Effect Parameters>

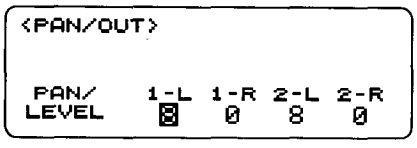
(These are the same as for effect 1.)

<Panpot/Output Level>

OFF, L, 99:01...01:99, R (when Effect Placement is SERIAL, PARA.1 or PARA2)
0...9 (when Effect Placement is PARA.3)



Adjusts the balance and volume for the final output from the effect to the stereo output section. When Effect Placement is SERIAL, PARA.1 or PARA.2, the display will be as shown above, allowing you to adjust the L/R output balance for PAN3 and PAN4.



When Effect Placement is PARA.3, the display will be as shown above, allowing you to adjust the individual levels.

<Effect Rename>

Here you can modify the name of the effect program.

For details refer to <Program Rename> on p.42.

Effect parameter table

	REVERB	**Reverb Time**		**Pre Delay**		**E.R Level**	
1	Hall	0.2~9.9	[2.3]	0~200	[60]	0~99	[62]
2	Ensemble Hall	〃	[3.1]	〃	[15]	〃	[23]
3	Concert Hall	〃	[3.3]	〃	[80]	〃	[46]
4	Room	0.2~4.9	[1.3]	〃	[8]	〃	[68]
5	Large Room	〃	[2.4]	〃	[25]	〃	[51]
6	Live Stage	〃	[2.2]	〃	[12]	〃	[81]
7	Wet Plate	0~99	[59]	〃	[29]	1~10	[7]
8	Dry Plate	〃	[30]	〃	[26]	〃	[5]
9	Spring Reverb	〃	[25]	〃	[0]	〃	[9]
	EARLY REFLECTION	**E.R Time**				**Pre Delay**	
10	Early Reflection 1	100~800	[220]			0~200	[0]
11	〃 2	〃	[180]			〃	[30]
12	〃 3	〃	[300]			〃	[90]
	STEREO DELAY	**Delay Time L**		**Delay Time R**		**Feedback**	
13	Stereo Delay	0~500	[185]	0~500	[370]	−99~+99	[−40]
14	Cross Delay	〃	[190]	〃	[380]	〃	[+40]
	DUAL MONO DELAY	**Delay Time L**		**Feedback L**		**Hight Damp L**	
15	Dual Mono Delay	0~500	[20]	−99~+99	[0]	0~99	[0]
	MULTI-TAP DELAY	**Delay Time**				**Delay Time 2**	
16	Multi-Tap Delay 1	0~500	[175]			0~500	[350]
17	〃 2	〃	[200]			〃	[400]
18	〃 3	〃	[250]			〃	[500]
	CHORUS	**Delay Time**		**Mod Speed**		**Mod Depth**	
19	Chorus 1	0~200	[3]	0.03~30	[0.33]	0~99	[99]
20	〃 2	〃	[2]	〃	[0.42]	〃	[84]
	CHORUS	**Delay Time L**		**Delay Time R**		**Mod Speed**	
21	Quadrature Chorus	0~250	[24]	0~250	[12]	●1~99	[30]
22	Crossover Chorus	〃	[2]	〃	[24]	● 〃	[16]
	HARMONIC CHORUS	**Delay Time 1**		**Delay Time 2**			
23	Harmonic Chorus	0~500	[4]	0~500	[12]		
	SYMPHONIC ENSEMBLE	**Mod Depth**					
24	Symphonic Ensemble	0~99	[92]				
	FLANGER	**Delay Time**		**Mod Depth**		**Mod Speed**	
25	Flanger 1	0~200	[5]	0~99	[50]	●1~99	[20]
26	〃 2	〃	[24]	〃	[99]	● 〃	[42]
27	Crossover Flanger	〃	[1]	〃	[60]	● 〃	[22]
	EXCITER	**Blend**				**Emphatic Point**	
28	Exciter	−99~+99	[+60]			1~10	[01]
	ENHANCER	**Harmonic Density**		**Hot Spot**		**Stereo Width**	
29	Enhancer	1~99	[28]	1~20	[3]	0~99	[85]
	DISTORTION	**Drive**		**Hot Spot**		**Resonance**	
30	Distortion	1~111	[107]	●0~99	[99]	0~99	[07]
31	Overdrive	〃	[85]	● 〃	[70]	〃	[63]
	PHASER	**Manual**		**Mod Speed**		**Mod Depth**	
32	Stereo Phaser 1	0~99	[98]	●0.03~30	[0.24]	0~99	[90]
33	〃 2	〃	[96]	● 〃	[0.24]	〃	[90]
	ROTARY SPEAKER	**Vibrato Depth**				**Acceleration**	
34	Rotary Speaker	0~15	[2]			1~15	[12]
	TREMOLO	**Mod Waveform**		**Mod Wave Shape**		**Mod Speed**	
35	Auto Pan	SIN, TRI	[TRI]	−99~+99	[+96]	0.03~30	[0.21]
36	Tremolo	〃	[TRI]	〃	[−99]	〃	[3.9]
	PARAMETRIC EQ	**Low Freq**		**Low Gain**		**Mid Freq**	
37	Parametric EQ	0~29	[15]	−12~+12	[+06]	●0~99	[50]
	COMBINATION EFFECT SERIAL	**Flg / Cho Delay**		**Flg / Cho F.Back**		**Mod Speed**	
38	Chorus-Delay	0~50	[24]	−99~+99	[+24]	1~99	[12]
39	Flanger-Delay	〃	[1]	〃	[+80]	〃	[04]
	COMBINATION EFFECT PARALLEL	**Delay Time**		**Feedback**		**High Damp**	
40	Delay / Hall Reverb	0~500	[30]	−99~+99	[0]	0~99	[0]
41	Delay / Room Reverb	〃	[20]	〃	[0]	〃	[0]
		Delay Time		**Feedback**		**High Damp**	
42	Delay / Chorus	0~500	[220]	−99~+99	[+15]	0~99	[50]
		Delay Time		**Feedback**		**High Damp**	
43	Delay / Flanger	0~500	[400]	−99~+99	[+20]	0~99	[60]
		Delay Time		**Feedback**			
44	Delay / Distortion	0~500	[250]	−99~+99	[+40]		
45	Delay / Overdrive	〃	[350]	〃	[+50]		
		Delay Time		**Feedback**		**High Damp**	
46	Delay / Phaser	0~500	[300]	−99~+99	[+15]	0~99	[60]
		Delay Time		**Feedback**			
47	Delay / Rotary Speaker	0~500	[280]	−99~+99	[+15]		
	Resonance Filter	**Trim**		**Resonance**		**FC**	
48	Resonance Filter	0~99	[70]	●0~99	[90]	0~99	[0]

[ ]: Initial Value ●: Dynamic Mod Dest

High Damp			EQ Low		EQ High		Dry: FX Balance		
0~99	[31]		−12~+12	[−3]	−12~+12	[−1]	●DRY~FX	[80:20]	
〃	[32]		〃	[−1]	〃	[−3]	● 〃	[80:20]	
〃	[41]		〃	[−2]	〃	[−4]	● 〃	[80:20]	
〃	[36]		〃	[+1]	〃	[+2]	● 〃	[78:22]	
〃	[32]		〃	[−1]	〃	[+2]	● 〃	[78:22]	
〃	[36]		〃	[−5]	〃	[−4]	● 〃	[75:25]	
〃	[51]		〃	[0]	〃	[−4]	● 〃	[80:20]	
〃	[47]		〃	[+2]	〃	[+2]	● 〃	[80:20]	
〃	[30]		〃	[+2]	〃	[−4]	● 〃	[78:22]	
			EQ Low		EQ High		Dry: FX Balance		
			−12~+12	[−4]	−12~+12	[−4]	●DRY~FX	[68:32]	
			〃	[+1]	〃	[0]	● 〃	[65:35]	
			〃	[0]	〃	[0]	● 〃	[75:25]	
High Damp			EQ Low		EQ High		Dry: FX Balance		
0~99	[10]		−12~+12	[0]	−12~+12	[0]	●DRY~FX	[80:20]	
〃	[10]		〃	[0]	〃	[0]	● 〃	[80:20]	
Dry: FX Balance L		Delay Time R	Feedback R		High Damp R		Dry: FX Balance R		
DRY~FX	[50:50]	0~500 [40]	−99~+99	[0]	0~99	[0]	●DRY~FX	[35:65]	
Feedback			EQ Low		EQ High		Dry: FX Balance		
−99~+99	[+30]		−12~+12	[0]	−12~+12	[0]	●DRY~FX	[80:20]	
〃	[0]		〃	[0]	〃	[0]	● 〃	[70:30]	
〃	[+20]		〃	[0]	〃	[0]	● 〃	[75:25]	
Mod Waveform			EQ Low		EQ High		Dry: FX Balance		
SIN, TRI	[TRI]		−12~+12	[+4]	−12~+12	[+4]	●DRY~FX	[50:50]	
〃	[SIN]		〃	[+3]	〃	[+4]	● 〃	[60:40]	
Mod Depth		Mod Waveform	EQ Low		EQ High		Dry: FX Balance		
0~99	[50]	T+10~S+10 [T+0]	−12~+12	[0]	−12~+12	[0]	DRY~FX	[50:50]	
〃	[99]	〃 [T+0]	〃	[0]	〃	[0]	〃	[50:50]	
Mod Speed		Mod Depth	Filter Split Point				Dry: FX Balance		
● 1~99	[36]	0~99 [99]	0~18	[3]			DRY~FX	[25:75]	
			EQ Low		EQ High		Dry: FX Balance		
			−12~+12	[0]	−12~+12	[0]	●DRY~FX	[67:33]	
		Resonance	EQ Low		EQ High		Dry: FX Balance		
		−99~+99 [+80]	−12~+12	[0]	−12~+12	[0]	DRY~FX	[50:50]	
		〃 [+36]	〃	[0]	〃	[0]	〃	[50:50]	
		〃 [+80]	〃	[0]	〃	[0]	〃	[50:50]	
			EQ Low		EQ High		Dry: FX Balance		
			−12~+12	[+3]	−12~+12	[+3]	●DRY~FX	[50:50]	
Delay Time			EQ Low		EQ High		Dry: FX Balance		
1~99	[25]		−12~+12	[0]	−12~+12	[0]	●DRY~FX	[50:50]	
EQ Low		EQ High	Out Level				Dry: FX Balance		
−12~+12	[0]	−12~+12 [0]	0~99	[6]			DRY~FX	[50:50]	
〃	[0]	〃 [0]	〃	[8]			〃	[50:50]	
Feedback		Mod Waveform					Dry: FX Balance		
−99~+99	[96]	SIN, TRI [TRI]					DRY~FX	[50:50]	
〃	[90]	〃 [SIN]					〃	[50:50]	
		Slow Speed			Fast Speed		Dry: FX Balance		
		1~99 [25]			1~99	[69]	DRY~FX	[34:66]	*
Mod Depth			EQ Low		EQ High		Dry: FX Balance		
0~99	[96]		−12~+12	[0]	−12~+12	[0]	●DRY~FX	[20:80]	
〃	[99]		〃	[0]	〃	[0]	● 〃	[50:50]	
Mid Gain		Mid Width	High Freq		High Gain		Dry: FX Balance		
−12~+12	[+6]	0~99 [50]	0~29	[12]	−12~+12	[+6]	DRY~FX	[50:50]	
Mod Depth		Delay Time	Feedback				Dry: FX Balance		
0~99	[75]	0~450 [120]	−99~+99	[+16]			●DRY~FX	[60:40]	
〃	[99]	〃 [300]	〃	[+30]			● 〃	[50:50]	
Dry: FX Balance		Reverb Time	Pre Delay		High Damp		Dry: FX Balance		
●DRY~FX	[FX]	0.2~9.9 [3.0]	0~150	[68]	0~99	[34]	●DRY~FX	[70:30]	
● 〃	[FX]	0.2~4.9 [1.1]	〃	[0]	〃	[28]	● 〃	[65:35]	
Dry: FX Balance		Mod Speed	Mod Depth		Mod Waveform		Dry: FX Balance		
●DRY~FX	[70:30]	0.03~30 [0.39]	0~99	[99]	SIN, TRI	[TRI]	●DRY~FX	[50:50]	
Dry: FX Balance		Mod Speed	Mod Depth		Feedback		Dry: FX Balance		
●DRY~FX	[70:30]	0.03~30 [0.21]	0~99	[96]	−99~+99	[−75]	●DRY~FX	[50:50]	
Dry: FX Balance		Drive	Hot Spot		Resonance		Out Level		
DRY~FX	[79:21]	1~111 [105]	1~99	[99]	0~99	[07]	1~99	[10]	
〃	[75:25]	〃 [65]	〃	[90]	〃	[63]	〃	[20]	
Dry: FX Balance		Mod Speed	Mod Depth		Feedback		Dry: FX Balance		
●DRY~FX	[60:40]	0.03~30 [0.69]	0~99	[90]	−99~+99	[+99]	●DRY~FX	[25:75]	
Dry: FX Balance		Acceleration	Slow Speed		Fast Speed		Dry: FX Balance		
DRY~FX	[70:30]	1~15 [10]	1~99	[25]	1~99	[69]	DRY~FX	[30:70]	*
EG Int		AttackTime	DecayTime		Trigger [Multi1]		LFO Int		
−99~+99	[+99]	0~127 [20]	0~127	[50]	Single, Multi1, Multi2		0~127	[0]	

*: Dynamic modulation is used to switch between slow and fast.

Effect types and parameters

Depending on the effect type that you select, the parameters will differ. For each effect unit 1 and 2, you can select any effect type from 00 (No Effect) to 48 (Resonance Filter).

NO EFFECT

00: No Effect

For some of the effect types, the equalizer settings (EQ High and EQ Low) will still be valid even if the effect switch is turned off (refer to p.46). If you wish to cut out the equalizer completely, select 00 (No Effect).

REVERB

These effects simulate the acoustics of a hall etc. to add a sense of spatial presence to the sound.

01: Hall
This simulates the reverberation of a medium sized hall, producing a sense of natural acoustics.

02: Ensemble Hall
This reverb is suitable for string or brass ensembles, and simulates the natural acoustics of an ensemble hall.

03: Concert Hall
This simulates the acoustics of a large concert hall, with emphasis on the early reflections.

04: Room
This simulates the acoustics of a smaller room.

05: Large Room
This simulates the acoustics of a larger room, with the reverb density emphasized. When the reverb time is set to approximately 0.5 seconds, an impression similar to gated reverb will be produced.

06: Live Stage
This simulates the reverberation and acoustics of an on-stage live performance in a larger room.

07: Wet Plate
An effect of deeply applied plate reverb.

08: Dry Plate
An effect of lightly applied plate reverb.

09: Spring Reverb
This simulates a resonant spring-type reverb unit.

Parameter	Range
Reverb Time (Time)	**0.2...9.9 sec** (HALL types) **0.2...4.9 sec** (ROOM types) **00...99** (PLATE/SPRING types)
The time over which the reverb will decay	
High Damp (H.Dmp)	**0...99%**
High frequency attenuation. Higher settings of this parameter will cause the high frequencies to decay more rapidly, making the sound darker.	
Pre Delay (P.Dly)	**0...200 ms**
The time from the direct sound until the early reflections	
Early Reflection Level (E.R.)	**0...99** (HALL/ROOM types) **1...10** (PLATE/SPRING types)
The level of the early reflections	
EQ Low (EQ.Lo)	**–12...+12 dB**
Amount of cut/boost for the LOW EQ	
EQ High (EQ.Hi)	**–12...+12 dB**
Amount of cut/boost for the HIGH EQ	

For effects 01–09, the dry:effect balance can be controlled by the selected dynamic modulation source.

EARLY REFLECTION

The early reflection effects isolate the initial reflections of the sound (a very important element in determining the overall acoustic character of a space) from the rest of the reverberation. By adjusting the Early Reflection Time you can create a wide range of effects, such as adding richness to the sound, or creating echo-like sounds.

10: Early Reflection 1
This isolates the acoustically important initial reflections of the sound from the rest of the reverberation. Since the low frequency range is emphasized, this effect type is ideal for drums and other percussion.

11: Early Reflection 2
The way in which the early reflections change in level over time differs from Early Reflection 1. Use this according to your taste.

12: Early Reflection 3
Compared with Early Reflection 1 and Early Reflection 2, this effect reverses the envelope of the early reflections. When used on sound which have a strong attack, such as cymbals, it produces a reverse-playback effect.

Parameter	Range
Early Reflection Time (Time)	**100...800 ms**
Duration of the early reflections (10 ms steps)	
Pre Delay (P.Dly)	**0...200 ms**
The time from the direct sound until the early reflections	
EQ Low (EQ.Lo)	**–12...+12 dB**
Amount of cut/boost for the LOW EQ	
EQ High (EQ.Hi)	**–12...+12 dB**
Amount of cut/boost for the HIGH EQ	

For effect types 10–12, you can use the selected dynamic modulation source to control the dry:effect balance.

STEREO DELAY

These effect types allow you to set independent delay times for the left and right channels, so that you can create delay patterns which take advantage of stereo. The High Damp setting lets you apply a natural-sounding attenuation to the repeated delays.

13: Stereo Delay
A stereo delay with feedback, that allows independent delay times to be set for the left and right channels.

14: Cross Delay
A stereo delay that allows independent delay times to be set for the left and right channels. For the input to

the delay, the feedback of the left and right channels is crossed, so that the repeated delays alternate between left and right.

Parameter	Range
Delay Time Left (D.Time L)	**0...500 ms**
Left channel (A or C input) delay time	
Delay Time Right (D.Time R)	**0...500 ms**
Right channel (B or D input) delay time	
Feedback (F.Back)	**–99...+99%**
The amount which is fed back into the effect. Negative (–) settings will invert the phase.	
High Damp (H.Dmp)	**0...99%**
High frequency attenuation. Increasing this value will cause the high frequencies to decay more rapidly, making the sound darker.	
EQ Low (EQ.Lo)	**–12...+12 dB**
Amount of cut/boost for the LOW EQ	
EQ High (EQ.Hi)	**–12...+12 dB**
Amount of cut/boost for the HIGH EQ	

For effect types 13 and 14, you can use the selected dynamic modulation source to control the dry:effect balance. Even if the Effect Switch is OFF, the equalizer (EQ Low and EQ High) settings will be valid. If you wish to turn off all effects including the equalizer, select 00 (No Effect).

DUAL MONO DELAY

15: Dual Mono Delay

This consists of two mono delays, with independent delay time, feedback and high damp settings.

Parameter	Range
Delay Time Left (D.Time L)	**0...500 ms**
Left channel delay time	
High Damp Left (H.DmpL)	**0...99%**
High frequency attenuation of the left channel. Increasing this value will cause the high frequencies to decay more rapidly, making the sound darker.	
Feedback Left (F.BackL)	**–99...+99%**
The amount which is fed back into the left channel. Negative (–) settings will invert the phase.	
Delay Time Right (D.Time R)	**0...500 ms**
Right channel delay time	
High Damp Right (H.DmpR)	**0...99%**
High frequency attenuation of the right channel. Increasing this value will cause the high frequencies to decay more rapidly, making the sound darker.	
Feedback Right (F.BackR)	**–99...+99%**
The amount which is fed back into the right channel. Negative (–) settings will invert the phase.	

For effect type 15, you can use the selected dynamic modulation source to control the dry:effect balance.

MULTI-TAP DELAY

Each effect input is equalized, and sent to two independent delays. The output of one delay is fed back into the input.

16: Multi-Tap Delay 1

A 2-channel multi-repeat delay.

17: Multi-Tap Delay 2

A 2-channel multi-repeat delay with cross-panning.

18: Multi-Tap Delay 3

A 2 channel multi-repeat delay with feedback alternating between the two delays.

Parameter	Range
Delay Time 1 (D.Time1)	**0...500 ms**
Delay time of delay 1	
Delay Time 2 (D.Time2)	**0...500 ms**
Delay time of delay 2	
Feedback (FB)	**–99...+99%**
The amount which is fed back into the effect. Negative (–) settings will invert the phase.	
EQ Low (EQ.Lo)	**–12...+12 dB**
Amount of cut/boost for the LOW EQ	
EQ High (EQ.Hi)	**–12...+12 dB**
Amount of cut/boost for the HIGH EQ	

For effect types 16–18, you can use the selected dynamic modulation source to control the dry:effect balance.

CHORUS

These are stereo-type effects with two chorus blocks, and can add natural spaciousness and depth to any type of sound; piano, string, or brass etc.

19: Chorus 1

The modulation of the right channel is out of phase with the modulation of the left channel. This produces a spacious stereo chorus.

20: Chorus 2

The left and right channels are modulated in-phase.

Parameter	Range
Delay Time (Time)	***0...200 ms***
Delay time	
Mod Waveform (Wave)	**Sine (SIN), Triangle (TRI)**
Selects the modulation waveform	
Mod Depth (Depth)	**0...99**
Depth of modulation	
Mod Speed (Speed)	**0.03...30 Hz**
Speed of modulation	
EQ Low (EQ.Lo)	**–12...+12 dB**
Amount of cut/boost for the LOW EQ	
EQ High (EQ.Hi)	**–12...+12 dB**
Amount of cut/boost for the HIGH EQ	

For effect types 19 and 20, you can use the selected dynamic modulation source to control the dry:effect balance. Even if the Effect Switch is OFF, the equalizer (EQ Low and EQ High) settings will be valid. If you wish to turn off all effects including the equalizer, select 00 (No Effect).

21: Quadrature Chorus

This is a stereo chorus in which the two channels are modulated 90 degrees out of phase with each other.

22: Crossover Chorus

This is a stereo chorus in which the two channels are modulated 90 degrees out of phase with each other, and the chorus portion of each channel is mixed into the output of the other channel.

Parameter	Range
Delay Time Left (Time:L) Left channel delay time	**0...250 ms**
Delay Time Right (R) Right channel delay time	**0...250 ms**
Mod Depth (Depth) Depth of modulation	**0...99**
Mod Speed (Speed) Speed of modulation	**1...99**
Mod Shape (Shape) Select the modulation waveform. T: triangle wave, S: sine wave. The range from +10 to –10 specifies the symmetry of the waveform.	**T+10...T-10, S-10...S+10**
EQ Low (EQ.Lo) Amount of cut/boost for the LOW EQ	**–12...+12 dB**
EQ High (EQ.Hi) Amount of cut/boost for the HIGH EQ	**–12...+12 dB**

For effect types 21 and 22, you can use the selected dynamic modulation source to control Mod Speed.

23: Harmonic Chorus

This splits the signal into a high-frequency and a low-frequency band. Quadrature Chorus is applied to the high-frequency band, and the low-frequency band is output without modification. This is ideal for low-range instruments such as bass.

Parameter	Range
Delay Time 1 (DT1) Chorus unit 1 delay time	**0...500 ms**
Delay Time 2 (DT2) Chorus unit 2 delay time	**0...500 ms**
Mod Depth (Depth) Depth of modulation	**0...99**
Mod Speed (Speed) Speed of modulation	**1...99**
Frequency Split Point (SplitPoint) Frequency at which the input signal will be split into high and low frequency bands.	**0...18**

For effect type 23, you can use the selected dynamic modulation source to control Mod Speed.

SYMPHONIC ENSEMBLE

24: Symphonic Ensemble

This is a multi-stage chorus effect, and is ideal for rich and thick sounds such as strings.

Parameter	Range
Mod Depth (Depth) Depth of modulation	**0...99**
EQ Low (EQ.Lo) Amount of cut/boost for the LOW EQ	**–12...+12 dB**
EQ High (EQ.Hi) Amount of cut/boost for the HIGH EQ	**–12...+12 dB**

For effect type 24, you can use the selected dynamic modulation source to control the dry:effect balance.

This effect cannot be used simultaneously with the following effects.

19–23: Chorus
24: Symphonic Ensemble
25–27: Flanger
32–33: Phaser
34: Rotary Speaker
35–36: Tremolo
38–39: Chorus/Flanger - Delay
42: Delay/Chorus
43: Delay/Flanger
46: Delay/Phaser
47: Delay/Rotary Speaker
48: Resonance Filter

FLANGER

This effect adds feedback to a chorus effect. When used on sounds with rich overtone content, such as cymbals, it creates a strongly distinctive effect with a pitched feeling added to the modulation.

25: Flanger 1

Same-phase modulation is applied to both channels.

26: Flanger 2

The right and left channels are modulated in opposite phase. This produces a spacious stereo flanging effect.

27: Crossover Flanger

Two flangers with opposite-phase modulation apply feedback to each other.

Parameter	Range
Delay Time (Time) Delay time	**0...200 ms**
Resonance (Reso) Amount of output signal that will be fed back to the input	**–99...+99**
Mod Depth (Depth) Depth of modulation	**0...99**
Mod Speed (Speed) Speed of modulation	**1...99**
EQ Low (EQ.Lo) Amount of cut/boost for the LOW EQ	**–12...+12 dB**
EQ High (EQ.Hi) Amount of cut/boost for the HIGH EQ	**–12...+12 dB**

For effect types 25–27, you can use the selected dynamic modulation source to control Mod Speed.

EXCITER

28: Exciter

This adds sparkle to the sound itself, sharpening the definition of the sound.

Parameter	Range
Blend (Blend) Depth of the exciter effect	**–99...+99**

Emphatic Point (Emphatic Point) **1...10**
Center frequency at which the exciter effect will be applied

EQ Low (EQ.Lo) **–12...+12 dB**
Amount of cut/boost for the LOW EQ

EQ High (EQ.Hi) **–12...+12 dB**
Amount of cut/boost for the HIGH EQ

For effect type 28, you can use the selected dynamic modulation source to control the dry:effect balance. Even if the Effect Switch is OFF, the equalizer (EQ Low and EQ High) settings will be valid. If you wish to turn off all effects including the equalizer, select 00 (No Effect).

ENHANCER

29: Enhancer

This is a 2-channel enhancer. It contains a delay to give the sound spaciousness. An enhancer raises the clarity of the sound, sharpens its definition and strengthens its presence, bringing the sound to the front of the mix.

Parameter	Range
Harmonic Density (Density) Depth of the enhancer effect	**1...99**
Hot Spot (H.Spot) Center frequency at which the enhancer effect will be applied	**1...20**
Stereo Width (S.Width) Width of the stereo image spread by the delay	**0...99**
Delay Time (D.Time) Delay time	**1...99**
EQ Low (EQ.Lo) Amount of cut/boost for the LOW EQ	**–12...+12 dB**
EQ High (EQ.Hi) Amount of cut/boost for the HIGH EQ	**–12...+12 dB**

For effect type 29, you can use the selected dynamic modulation source to control the dry:effect balance.

DISTORTION

30: Distortion

This effect provides a range of distortion from slight to intense, and even adds a wah effect, making it ideal for solos. The wah effect is adjusted by Hot Spot and Resonance. Hot Spot can be controlled in realtime by dynamic modulation.

31: Overdrive

Applies a smooth overdrive. Like distortion, above, dynamic modulation can be used to control the Hot Spot of the wah filter.

Parameter	Range
Drive (Drive) Amount of distortion/overdrive	**1...111**
Resonance (Reso) Gain of the resonant wah filter	**0...99**
Hot Spot (H.Spot) Center frequency of the wah filter	**0...99**
Out Level (Level) Output level of the distorted sound	**0...99**
EQ Low (EQ.Lo) Amount of cut/boost for the LOW EQ	**–12...+12 dB**
EQ High (EQ.Hi) Amount of cut/boost for the HIGH EQ	**–12...+12 dB**

For effect types 30 and 31, you can use the selected dynamic modulation source to control Hot Spot.

PHASER

These effect types are 2-channel stereo phasers.

While chorus and flanger modulate the delay time to create modulation, a phaser modulates the phase of the input signal, creating an effect with a different character than either chorus or flanger. It is especially effective when used on electric piano or guitar-type sounds.

The optimal effect will be produced when the dry:effect balance is set at 50:50.

32: Stereo Phaser 1

Since the modulation of the right and left channels is in opposite phase, a spacious phaser effect is produced.

33: Stereo Phaser 2

Same-phase modulation is applied to both phaser blocks.

Parameter	Range
Manual (Manual) Center frequency at which the phase shift effect is applied	**0...99**
Mod Depth (Depth) Depth of the phase shift modulation effect	**0...99**
Mod Speed (Speed) Modulation speed	**0.03...30 Hz**
Feedback (F.Back) Amount that is fed back into the effect. Negative (–) settings will invert the phase.	**–99...+99**
Mod Waveform (Wave) Modulation waveform	**Sine (SIN), Triangle (TRI)**

For effect types 32 and 33, you can use the selected dynamic modulation source to control Mod Speed.

ROTARY SPEAKER

This effect type simulates the rotary speaker effect which is popular for organ sounds.

34: Rotary Speaker

This effect type uses independent LFOs to simulate the rotational effect of the rotor and horn of a rotary speaker. Use the dynamic modulation source to switch between slow and fast speeds. The speed of rotation will switch (between slow and fast) at the rate specified by Acceleration, regardless of the speed at which the controller was actually moved. Also, the speed change will not be affected by the dynamic modulation intensity setting.

Parameter	Range
Vibrato Depth (Vib.Depth) Depth of the effect	**0...15**

Acceleration (Accel) **1...15**
Time required for the speed to change

Slow Speed (Slow Speed) **1...99**
Slow rotation speed

Fast Speed (Fast Speed) **1...99**
Fast rotation speed

For effect type 34, you can use the selected dynamic modulation source to switch between Slow Speed and Fast Speed.

TREMOLO

These effect types cyclically modulate the volume.

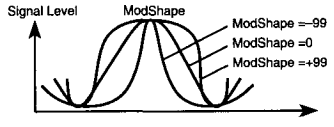
35: Auto Pan

This is a stereo-type program which combines two tremolo blocks. Since opposite-phase modulation is applied to each tremolo block, the sound will appear to be panned back and forth between left and right.

36: Tremolo

Unlike the above Auto Pan, the two tremolo blocks are modulated with the same phase.

Parameter	Range
Mod Waveform (Wave)	**Sine (SIN), Triangle (TRI)**
Select the modulation waveform	
Mod Shape (Shape)	**–99...+99**



Mod Depth (Depth)	**0...99**
Depth of modulation	
Mod Speed (Speed)	**0.03...30 Hz**
Speed of modulation	
EQ Low (EQ.Lo)	**–12...+12 dB**
Amount of cut/boost for the LOW EQ	
EQ High (EQ.Hi)	**–12...+12 dB**
Amount of cut/boost for the HIGH EQ	

For effect types 35 and 36, you can use the selected dynamic modulation source to control the dry:effect balance. Even if the Effect Switch is OFF, the equalizer (EQ Low and EQ High) settings will be valid. If you wish to turn off all effects including the equalizer, select 00 (No Effect).

PARAMETRIC EQ (Parametric Equalizer)

37: Parametric EQ (Parametric Equalizer)

This is a 3-band equalizer, with adjustable cutoff frequency and gain for each of the bands (low, mid, high). For the mid-range, you can also adjust the width of the frequency band.

Parameter	Range
Low Freq (L=Freq)	**0...29**
Low range cutoff frequency	
Low Gain (Gain)	**–12...+12 dB**
Amount of cut/boost for the low EQ	
Mid Freq (M=Freq)	**0...99**
Mid range center frequency	
Mid Gain (Gain)	**–12...+12 dB**
Amount of cut/boost for the mid EQ	
Mid Width (W)	**0...99**
Width of the mid-frequency range	
High Freq (H=Freq)	**0...29**
High range cutoff frequency	
High Gain (Gain)	**–12...+12 dB**
Amount of cut/boost for the high EQ	

For effect type 37, you can use the selected dynamic modulation source to control Mid Freq, allowing you to create a wah effect.

COMBINATION EFFECT SERIAL

Effect types 38 and 39 connect a mono-in/stereo-out chorus or flanger in series with a stereo delay.

38: Chorus-Delay

The signal is sent through a mono-in/stereo-out chorus which uses LFOs that are 90 degrees out of phase, and then through a stereo delay. Feedback can be adjusted for both chorus and delay.

39: Flanger-Delay

The signal is sent through a mono-in/stereo-out flanger which uses LFOs that are 90 degrees out of phase, and then through a stereo delay. Feedback can be adjusted for both flanger and delay.

Chorus, Flanger

Parameter	Range
Delay Time (Cho.DT)	**0...50 ms**
Delay time of the chorus/flanger	
Feedback (FB)	**–99...+99%**
Amount that is fed back to the effect. Negative (–) settings will invert the phase.	
Mod Depth (Cho. Depth)	**0...99**
Depth of modulation	
Mod Speed (Speed)	**1...99**
Speed of modulation	

Delay

Parameter	Range
Delay Time (Dly.DT)	**0...450 ms**
Delay time (2 msec steps)	
Delay Feedback (FB)	**–99...+99**
Amount that is fed back to the effect. Negative (–) settings will invert the phase.	

For effect types 38 and 39, you can use the selected dynamic modulation source to control the dry:effect balance.

COMBINATION EFFECT PARALLEL

The following effect types (40–47) are parallel effects in which two different effects are applied to each of the two channels.

For details on what each effect does, refer to the explanations for effect types 1 to 34.

MONO DELAY/REVERB

40: Delay/Hall Reverb
This effect type provides delay on the left channel, and hall-type reverb on the right channel.

41: Delay/Room Reverb
This effect type provides delay on the left channel, and room-type reverb on the right channel.

MONO DELAY/MODULATED DELAY

42: Delay/Chorus
This effect type provides delay on the left channel, and chorus on the right channel.

43: Delay/Flanger
This effect type provides delay on the left channel, and flanger on the right channel.

Delay

Parameter	Range
Delay Time (Dly.DT) Delay time	**0...500 ms**
Feedback (Dly.FB) Amount that is fed back to the effect. Negative (–) settings will invert the phase.	**–99...+99%**
High Damp (H.Dmp) High frequency attenuation. Increasing this parameter value will cause the high range to decay faster, making the sound darker.	**0...99%**

Reverb (Hall, Room)

Parameter	Range
Reverb Time (Time) Time over which the reverberation will decay	**0.2...9.9 sec** (Hall) **0.2...4.9 sec** (Room)
High Damp (H.Dmp) High frequency attenuation. Increasing this parameter value will cause the high range to decay faster, making the sound darker.	**0...99%**
Pre Delay (P.Dly) Time from the direct sound until the first early reflection.	**0...150 ms**

Chorus

Parameter	Range
Mod Depth (Depth) Depth of modulation	**0...99%**
Mod Speed (Spd) Speed of modulation	**0.03...30 Hz**
Mod Waveform (Wave) Modulation waveform	**Sine (SIN), Triangle (TRI)**

Flanger

Parameter	Range
Mod Depth (Depth) Depth of modulation	**0...99%**
Mod Speed (Spd) Speed of modulation	**0.03...30 Hz**
Feedback (FB) Amount that is fed back to the effect. Negative (–) settings will invert the phase.	**–99...+99%**

For effect types 40, 41, 42 and 43, you can use the selected dynamic modulation source to control the dry:effect balance.

MONO DELAY/DISTORTION, OVERDRIVE

44: Delay/Distortion
This effect type provides delay on the left channel, and distortion on the right channel.

45: Delay/Overdrive
This effect type provides delay on the left channel, and overdrive on the right channel.

Delay

Parameter	Range
Delay Time (Dly.DT) Delay time	**0...500 ms**
Feedback (Dly.FB) Amount that is fed back to the effect. Negative (–) settings will invert the phase.	**–99...+99%**

Distortion, Overdrive

Parameter	Range
Drive (Drive) Amount of distortion/overdrive	**1...111**
Resonance (Res) Gain of the resonant wah filter	**0...99**
Hot Spot (HotSpot) Center frequency of the wah filter	**1...99**
Level (Level) Output level of the distorted sound	**1...99**

MONO DELAY/PHASER

46: Delay/Phaser
This effect type provides delay on the left channel, and phaser on the right channel.

Delay

Parameter	Range
Delay Time (Dly.DT) Delay time	**0...500 ms**
Feedback (Dly.FB) Amount that is fed back to the effect. Negative (–) settings will invert the phase.	**–99...+99%**
High Damp (H.Dmp) High frequency attenuation. Increasing this parameter value will cause the high range to decay faster, making the sound darker.	**0...99%**

Phaser

Parameter	Range
Mod Depth (Depth) Depth of modulation	**0...99%**
Mod Speed (Spd) Speed of modulation	**0.03...30 Hz**
Feedback (FB) Amount that is fed back to the effect. Negative (–) settings will invert the phase.	**–99...+99%**

For effect type 46, you can use the selected dynamic modulation source to control the dry:effect balance.

MONO DELAY/ROTARY

47: Delay/Rotary Speaker

This effect type provides delay on the left channel, and a rotary speaker effect on the right channel.

Delay

Parameter	Range
Delay Time (Dly.DT)	**0...500 ms**
Delay time	
Feedback (Dly.FB)	**–99...+99%**
Amount that is fed back to the effect. Negative (–) settings will invert the phase.	

Rotary Speaker

Parameter	Range
Acceleration (Accel)	**1...15**
The time over which the speed will change	
Slow Speed (Slow)	**1...99**
Speed of slow rotation	
Fast Speed (Fast)	**1...99**
Speed of fast rotation	

For effect type 47, you can use the selected dynamic modulation source to switch between Slow Speed and Fast Speed.

Resonance Filter

48: Resonance Filter

This effect type boosts the level in the region of the cut-off frequency. This will boost the overtones, creating a hard and distinctive sound.

Parameter	Range
Trim	**0...99**
Input level	
LFO	**0...127**
Apply LFO to the cutoff frequency. The LFO speed will follow the Program parameter VDF LFO of OSC1.	
Trg	**Single/Multi1/Multi2**
Select the trigger type which will determine how the EG responds to note-on.	

Single
The EG will be started by the first note-on (the first note which is pressed from a condition of all notes being off).
If all notes go off during the attack, the EG will switch to decay.
At the first note-on during the decay, the EG will switch to attack, starting from the EG value at that time.
LFO will correspond to the note which was first turned on.
The LFO will stop when that note is turned off.

Multi1
When the first note-on occurs, the EG will switch to attack, starting from the EG value at that time.
If the note which was first turned on goes off during the attack, the EG will switch to the decay.
At the first note-on during the decay, the EG will switch to attack, starting from the EG value at that time.
LFO will correspond to the note which was last turned on.
The LFO will stop when that note is turned off.

Multi2
When the first note-on occurs, the EG value will return to 0 (zero), and will then begin the attack.
If the note which was last turned on goes off during the attack, the EG will switch to the decay.
LFO will correspond to the note which was last turned on.
The LFO will stop when that note is turned off.

Reso	**0...99**
Depth of the resonance effect	
Fc	**0...99**
Cutoff frequency. This will be the start level of the EG.	
EGint	**–99...0...+99%**
Depth of the EG effect. Negative (–) settings will invert the EG curve.	
AttackTime	**0...127**
DecayTime	**0...127**
Resonance has a special EG used only for attack time and decay time, causing the cutoff frequency to sweep when triggered by note-on.	

The EG will be triggered by a note-on in the Upper part of Performance mode. This EG will not function in Multi mode.

The selected dynamic modulation source will control the Reso parameter.

7. Multi mode

Multi mode is the mode in which you can use a computer or sequencer to play the N1/N5. For each part, you can specify parameters such as sound, volume, and panpot etc.

The Multi mode settings of the N1/N5 are compatible with the NS5R, the X5 and X5DR. However for the 05R/W, only the effect settings are compatible.

In Multi mode, the LCD will show an indicator of the sounding status for each of the 32 parts. When the N1/N5 is sounding in response to musical data received from an external device, the indicator for the corresponding part will act as a level meter.

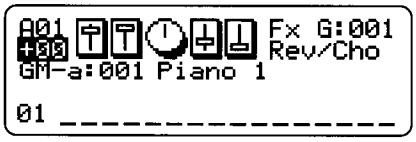
<Receive MIDI channel>

A01...A16, B01...B16, OFF

Specifies the MIDI receive channel for each part. With a setting of OFF, that part will not receive MIDI messages.

<Key Shift>

–24...00...+24 [Semitone]

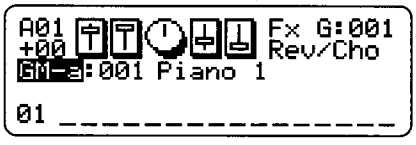


For each part, you can specify a key shift (transposition) in semitone steps.

If MIDI RPN 00:02 (Coarse Tune) is received, the pitch that will sound is determined by the sum of the RPN value and this value.
(The RPN value will not affect this display.)

<Bank Number>

CmbU, A, B, C, PrgU, A, B, C, GM-b, GM-a, r:01...r:40, r:CM, y:01...y101, ySFX, yDr1, yDr2, rDrm, kDrm, ****



Selects the sound bank for each part. For details refer to the "Bank names and their contents" on p.6.

**** indicates a silent program.

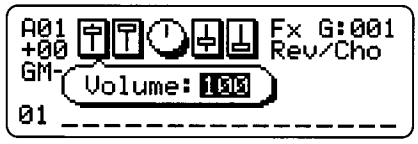
<Program Number>

000...099 (for sound banks PrgA, B, C, U, CmbA, B, C, U)
001...128 (for sound banks other than the above)

Selects the program number for the sound of each part. If a combination sound bank is selected, that part will play a combination sound.

<Volume>

000...127



Adjusts the volume of each part.

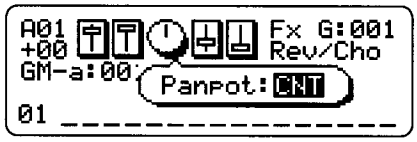
<Expression>

000...127

Adjusts the expression (the depth of MIDI control change #11) for each part.

<Panpot>

RND, L63...CNT...R63, OFF



Adjusts the panpot for each part. When CNT is selected, that part will be heard from the center. When RND is selected, the sound will be heard from a different location each time a note is played. When OFF is selected, that program will be output only from C and D (refer to p.45). Remember that the N1/N5 also has panpot settings for each program and combination, and that these will also be valid.

<C Send Level>

000...127

Specifies the amount that is sent from output C of each part to the effects.

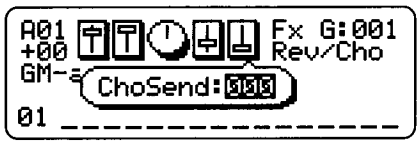
In Multi mode, the Program parameter C/D Send Level is ignored.

In Performance Play/Edit mode, the Program parameter C/D Send Level will be multiplied by this (Multi

mode) parameter to determine the result. (Only for the Upper and Lower parts; other parts will use their Multi mode setting.) For the C/D Send Levels of Combination parameters and of each instrument in a drumkit, the value will be multiplied by this (Multi mode) parameter to determine the result.

<D Send Level>

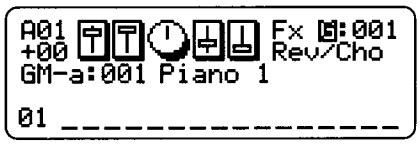
000...127



Specifies the amount that is sent from output D of each part to the effects.

<Effect Bank Select>

U, A, B, C, u, a, b, c, G, P



Selects the effect bank for the effect used in Multi mode.

Refer to p.24 Performance Play mode <Effect Bank>.

<Effect Number Select>

001...128 (for effect bank G)
000...099 (for effect banks other than the above)

Selects the number of the effect used in Multi mode.

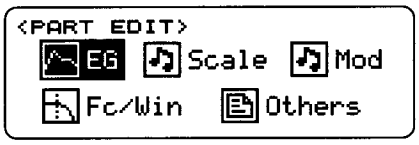
A number cannot be selected when <Effect Bank Select> is P.

8. Part Edit mode

In this mode you can make parameter settings to specify how each part will sound in Multi mode. From Multi mode, you can enter this mode by pressing the [EDIT] key.

Unlike the sound editing that you do in Program Edit mode or Combination Edit mode, the edits you make in Part Edit mode modify the sound by applying an offset value to the parameters of the program or combination. This means that the original sound (program or combination) is not itself modified.

Part Edit mode consists of the five sections shown in the following diagram.



EG

<EG Attack Time>

–64...00...+63

Adjusts the attack time of the tone and volume of each part.

This value is added to the value of the Program parameter <VDA EG Attack Time>, <VDF EG Attack Time>.

<EG Decay Time>

–64...00...+63

Adjusts the time over which the volume and tone of each part fall from their maximum level to the Sustain Level.

This value is added to the value of the Program parameter <VDA EG Decay Time>, <VDF EG Decay Time>.

<EG Release Time>

–64...00...+63

Adjusts the time from note-off over which the volume and tone of each part fall until the sound disappears.

This value is added to the value of the Program parameter <VDA EG Release Time>, <VDF EG Release Time>.

<Pitch EG Start Level>

–64...00...+63

Adjusts the pitch at which the waveform of each part will begin.

This value is added to the value of the Program parameter <Pitch EG Start Level>.

<Pitch EG Attack Time>

–64...00...+63

Adjusts the rise time of the pitch EG for each part.

This value is added to the value of the Program parameter <Pitch EG Attack Time>.

<Pitch EG Release Time>

–64...00...+63

Adjusts the time from note-off over which the pitch EG of each part reaches the target pitch.

This value is added to the value of the Program parameter <Pitch EG Release Time>.

<Pitch EG Release Level>

–64...00...+63

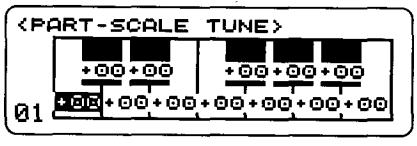
Adjusts the pitch toward which the pitch EG waveform of each part will move after note-off.

This value is added to the value of the Program parameter <Pitch EG Release Level>.

Scale

<Scale Tuning>

(for each note C–B)
–64...00...+63



For each part, you can make a fine adjustment to the pitch of each note C–B. Use this when you wish to use special tunings such as the temperaments of classical or ethnic music, or for modern music.

Refer to the table of temperament data on p.107.

Mod

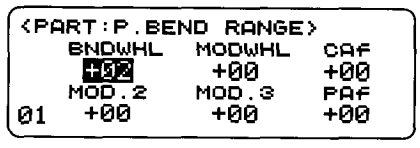
The pages in the Mod section specify how the operations of various controllers (or corresponding MIDI messages that are received) will modify each part.

The following controllers and MIDI messages can be used as modulation sources.

	Controller	MIDI message
BNDWHL	Pitch bend wheel	Pitch bend
MODWHL	Modulation wheel	Modulation (control change 1)
CAf	Aftertouch	Channel pressure
Mod.2	Modulation 2 (when assigned to a realtime controller or the foot controller)	Control change assigned to AC1 (default=16)
Mod.3	Modulation 3 (when assigned to a realtime controller or the foot controller)	Control change assigned to AC2 (default=17)
PAf	–	Polyphonic key pressure

<Part Pitch Bend Range>

(common to all controllers)
PRG (PRG is bend wheel only), **–24...00...+24**



For each part, this parameter specifies the range of the pitch bend that can be produced by each controller (or by the corresponding MIDI message).

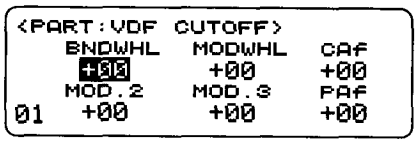
In Performance Play mode, this will be PRG when a program change occurs for a part.

In Multi mode, a setting of –24–+24 will cause the setting of the Program parameter Bend Range to be ignored.

With a setting of PRG, the setting of the Program parameter <Pitch Bend Range> (p.33) will be used.

<Part VDF Cutoff>

(common to all controllers)
–64...00...+63

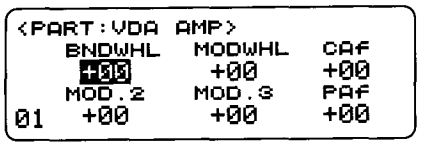


For each part, this parameter specifies how the VDF cutoff frequency will be affected by each controller (or by the corresponding MIDI message).

For CAf, this setting will be added to the value of the Program parameter <Aftertouch VDF>.

<Part VDA Amplifier>

(common to all controllers)
–64...00...+63

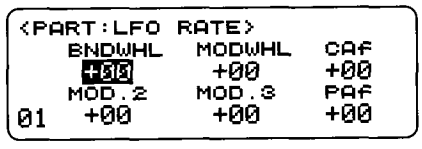


For each part, this parameter specifies how the VDA volume will be affected by each controller (or by the corresponding MIDI message).

For CAf, this setting will be added to the value of the Program parameter <Aftertouch VDA>.

<Part LFO Rate>

(common to all controllers)
–64...00...+63



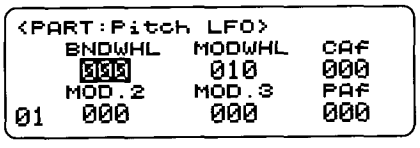
For each part, this parameter specifies how the LFO frequency will be affected by each controller (or by the corresponding MIDI message).

For MODWHL, this setting will be added to the value of the Program parameter <Modulation Wheel Pitch LFO Speed>.

For CAf, this setting will be added to the value of the Program parameter <Aftertouch Pitch LFO Speed>.

<Part Pitch LFO Depth>

(common to all controllers)
000...127



For each part, this parameter specifies how the pitch LFO depth will be affected by each controller (or by the corresponding MIDI message).

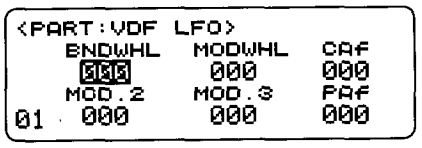
For CAf, this setting will be added to the value of the Program parameter <Aftertouch Pitch LFO Intensity>.

For MODWHL, this setting will be added to the value of the Program parameter <Modulation Wheel Pitch LFO Intensity>.

When a GM-ON message is received, MODWHL will be initialized to 10.

<Part VDF LFO Depth>

(common to all controllers)
000...127



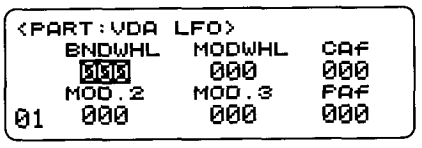
For each part, this parameter specifies how the VDF LFO depth will be affected by each controller (or by the corresponding MIDI message).

For MODWHL, this setting will be added to the value of the Program parameter <Modulation Wheel VDF>.

For CAf, this setting will be added to the value of the Program parameter <Aftertouch VDF LFO>.

<Part VDA LFO Depth>

(common to all controllers)
000...127

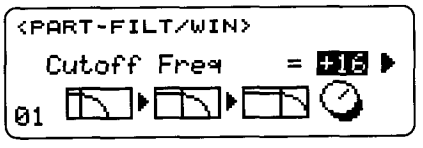


For each part, this parameter specifies how the VDA LFO depth will be affected by each controller (or by the corresponding MIDI message).

Fc/Win

<Cutoff Frequency>

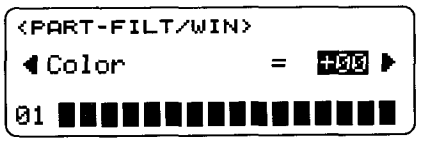
–64...00...+63



Adjusts the cutoff frequency (brightness) of each part.

<Color>

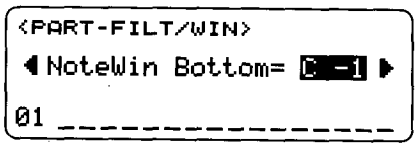
–64...00...+63



Adjusts the color (tonal character) of each part.

<Note Window Bottom>

C-1...G9



Specifies the lower limit of the notes for which each part will sound.

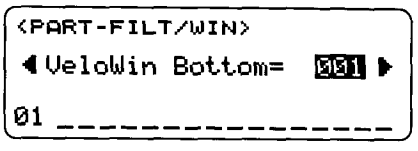
<Note Window Top>

C-1...G9

Specifies the upper limit of the notes for which each part will sound.

<Velocity Window Bottom>

001...127



Specifies the lower limit of velocity for which each part will sound.

<Velocity Window Top>

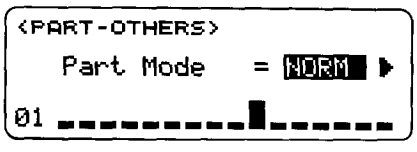
001...127

Specifies the upper limit of velocity for which each part will sound.

Others

<Part Mode>

NORM, DRUM, MDrm1...4



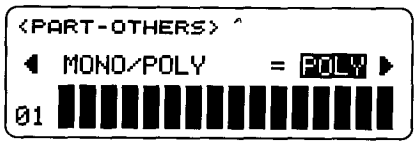
For each part, this parameter specifies whether it will use a normal sound (i.e., not a drumkit oscillator) or a drumkit sound.

Modify Drum (MDrm1–4) lets you use MIDI messages (NRPN and Part parameter changes) to control the sound of each note. If an identically-numbered MDrm is selected for another part, it will have the same sound.

Sounds that you edit for Modify Drum are temporary. When you re-select a drumkit, they will return to their initial values.

<Mono/Poly>

MONO, POLY, ----
(displayed as ---- if Part Mode is other than NORMAL)



For each part, this parameter specifies whether it will sound only single notes (mono) or will be able to sound chords (poly). This setting has no effect if Part Mode = DRUM.

If the Program parameter setting is MONO, the POLY setting will be unavailable.

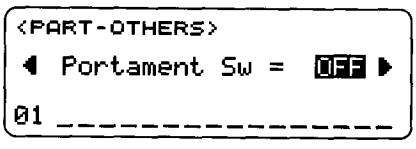
<Fine Tune>

–50...00...+50

Makes a fine adjustment to the pitch of each part.

<Portamento Switch>

ON, OFF, ----
(displayed as ---- if Part Mode is DRUM)

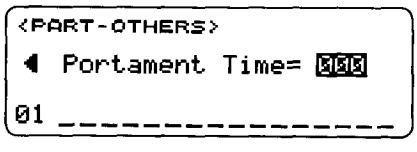


For each part, this parameter turns the portamento effect (which connects notes smoothly from one pitch to the next) on/off. This setting has no effect if Part Mode = DRUM.

This setting will be reflected by panel operations.

It will follow the setting of the Program parameter <Portamento Switch>.

<Portamento Time>

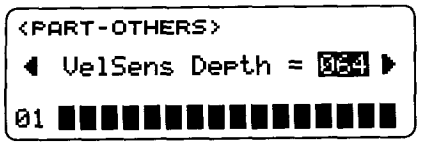


When the portamento switch is on, this parameter specifies the time over which the pitch will change.

The actual portamento time will be determined by adding this value to the Program parameter.

<Velocity Sensitivity Depth>

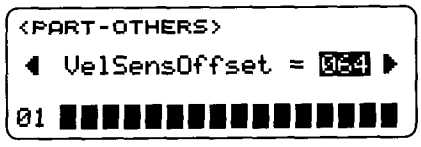
000...127



For each part, this parameter specifies how volume will be affected by MIDI velocity data.

<Velocity Sensitivity Offset>

000...127



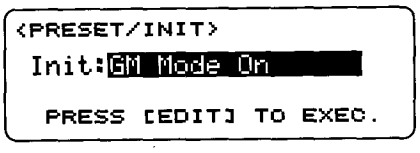
For each part, this parameter specifies a value that will be added to the entire curve of volume change that is controlled by MIDI velocity data.

9. Utility mode

Here you can initialize the N1/N5 and perform MIDI data dumps, etc. To enter this mode, press the [UTILITY] key.

<Initialize>

GM Mode On, N-Reset(R), N-Reset(Y), ALL Perform, ALL Program, ALL Combi, User Effect(u), User Effect(U), ALL Drumkit, Factory Preset

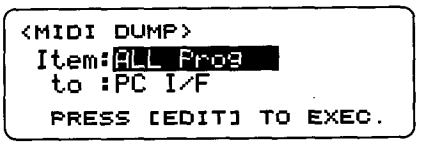


Initializes the state of the N1/N5. The contents are following.

VALUE	Explanation
GM Mode On	Set to the same condition as when a GM Mode On message is received.
N-Reset (R)	Set to the same condition as when a GS Reset message is received.
N-Reset (Y)	Set to the same condition as when an XG System On message is received.
ALL Perform	Initialize the settings of the 32 performances
ALL Program	Initialize the settings of the 100 programs of the PrgU bank
ALL Combi	Initialize the settings of the 100 combinations of the CmbU bank
User Effect (u)	Initialize the 100 effects of effect bank "u"
User Effect (U)	Initialize the 100 effects of effect bank "U"
ALL Drumkit	Initialize the two user drumkits
Factory Preset	Restore all settings of the N1/N5 to the factory condition

<MIDI Data Dump>

(Item:) ALL Prog, ALL Combi, ALL Perform, ALL Drumkit, ALL Effect
(to:) PC I/F, MIDI OUT



This operation transmits N1/N5 sound parameters to a connected computer or to another N1/N5. Select the parameters to be transmitted in "Item:" and select either the PC I/F or MIDI OUT from which the data will be transmitted. If you select PC I/F, the data will be transmitted from the TO HOST connector.

<Bend Calibration>

If you experience difficulty using the bend wheel, you can calibrate it here.

Calibration procedure

① Move the bend wheel upward until it stops. Next, move it downward until it stops.

② Return the wheel to the center position, and press the [EDIT] key or the [ENTER] key to access the confirmation display.

③ Press the [EDIT] key (YES) to complete the setting. If the display indicates "NG," perform the procedure again from step ①.

<Modulation Wheel Calibration>

If you experience difficulty using the modulation wheel, you can calibrate it here.

Calibration procedure

① Move the bend wheel upward until it stops. Next, move it downward until it stops.

② Press the [EDIT] key or the [ENTER] key to access the confirmation display.

③ Press the [EDIT] key (YES) to complete the setting. If the display indicates "NG," perform the procedure again from step ①.

<Aftertouch Calibration>

If you experience difficulty using aftertouch, you can calibrate it here.

The aftertouch sensitivity may be slightly uneven for each key. This means that for some keys, the maximum aftertouch effect may not be attainable even if you press down hard. If there are any such keys, use the following procedure to calibrate the aftertouch.

Calibration procedure

① Press only one key which is not as sensitive as it should be.

② Take your hand off the keyboard, and press the [EDIT] key or the [ENTER] key to access the confirmation display.

③ Press the [EDIT] key (YES) to complete the setting. If the display indicates "NG," perform the procedure again from step ①.

<Assignable Pedal Calibration>

If you experience difficulty using the assignable pedal, you can calibrate it here.

Calibration procedure

① Connect the pedal you wish to use to the ASSIGNABLE PEDAL jack.

② Advance the pedal all the way forward. Next, return the pedal all the way back.

③ Press the [EDIT] key or the [ENTER] key to access the confirmation display.

④ Press the [EDIT] key (YES) to complete the setting. If the display indicates "NG," perform the procedure again from step ①.

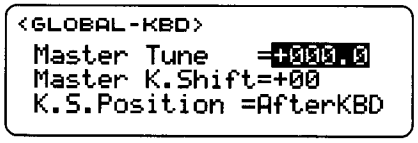
10. Global mode

In Global mode you can make basic settings which affect the overall operation and functionality of the entire N1/N5. Settings for Master Tune, Key Shift, LCD screen and interface with external devices, and memory protect etc. are made in this mode.

To enter this mode, press the [GLOBAL] key.

<Master Tune>

–100.0...000.0...+100.0 [cent]



Adjusts the tuning of the entire N1/N5. You can use this setting to tune the N1/N5 to other instruments.

<Master Key Shift>

–24...00...+24 [semitone]

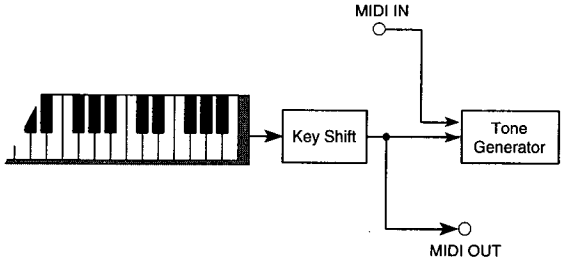
Transposes the pitch of the entire N1/N5 in semitone steps.

<Key Shift Position>

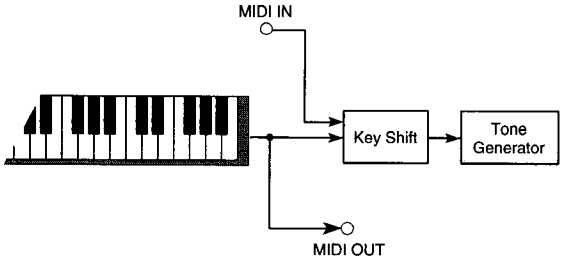
AfterKBD, BeforeTG

Specifies the location at which Key Shift will be applied. The choices differ as shown in the following diagrams.

(A) AfterKBD



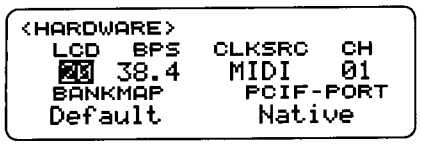
(B) BeforeTG



In the case of a drumkit, a Master Key Shift setting (Global mode) of [After KBD] will cause the shifted notes to be sounded. A setting of [Before TG] will have no effect.

<LCD Contrast>

00...31



Adjusts the contrast of the N1/N5's LCD screen. Higher settings will make the display darker.

<BPS Select>

31.25, 38.4

This specifies the rate at which data will be transmitted from the N1/N5's TO HOST connector to the computer. For the appropriate selection for your computer, refer to p.67–p.68 "Connecting a computer."

<Clock Source>

INT, MIDI, PCIF

Selects whether the internal clock or an external source of timing will be used to control the arpeggiator speed or to synchronize with an external device via MIDI Clock. If you wish to synchronize the N1/N5 to an external sequencer, select MIDI. If you wish to synchronize to an external computer, select PCIF.

When PCIF is selected, the N1/N5 will receive the Clock messages that are input to the TO HOST connector.
This setting will also affect transmission and reception of Start/Stop by the [MIDI START/STOP COMPARE] key. If you wish to synchronize the arpeggiator to an external sequencer, set the Performance Play <Latch/Key Sync> parameter to OFF or LATCH.

<Exclusive Channel>

01...16

Specifies the MIDI channel on which the N1/N5 will transmit and receive MIDI system exclusive messages to/from an external MIDI device connected to the N1/N5.

<Bank Map Type>

Default, 05R/W

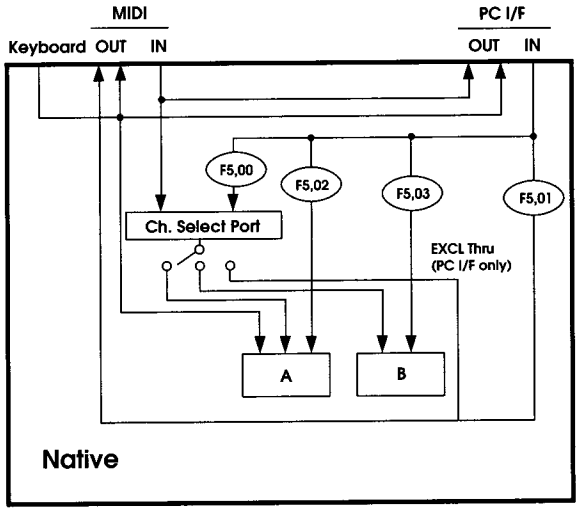
Switches the sound map of the N1/N5. You can specify the bank map used on some Korg products such as the 05R/W. This setting differs from the Default (factory setting) as follows.

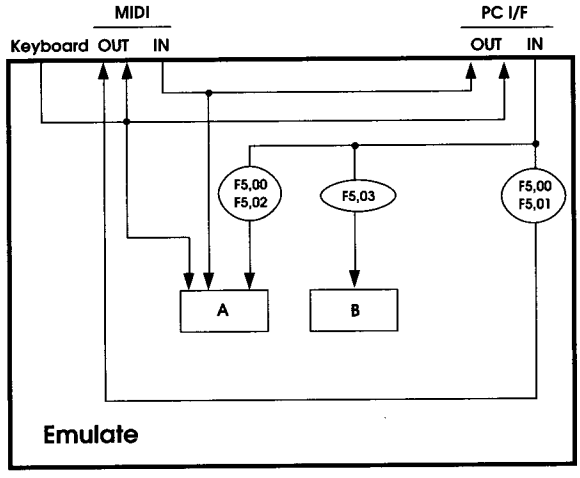
Bank select MSB:LSB	Default	05R/W
00:00	GM-a	PrgU
78:00	rDrm or yDrm	KDrm

<PC Interface To Port>

Native, Emulate

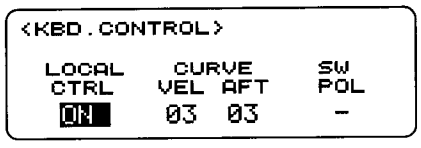
This setting specifies how the tone generator will be switched when a MIDI Line Control signal (F5.vv) is received from the TO HOST connector. With a setting of Emulate, operation will be the same as on Korg's earlier models (05R/W etc.). With a setting of Native, the MIDI Channel To Port settings will be applied. Signal flow will be as follows.





<Local Control>

OFF, ON



Turns Local Control on/off. When Local Control is turned OFF, the controller section (keyboard and wheels, etc.) will be internally disconnected from the tone generator section.

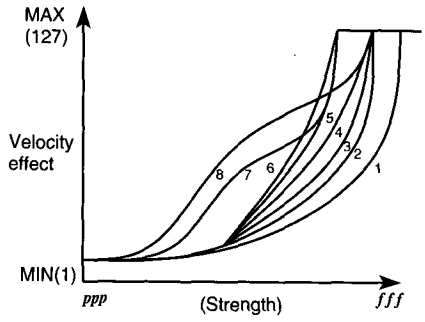
<Velocity Curve>

01...08

Selects one of eight curves to determine how changes in keyboard playing dynamics will affect volume or tone. The diagram below shows the relationship between

playing strength and the resulting velocity value.

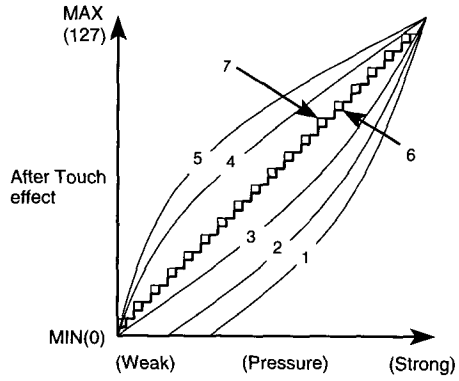
Since curves 7 and 8 produce little change for medium playing strengths, they are suitable for when you do not wish to use velocity or when you wish to even out the dynamics of the notes; however in the softly played range, these curves will produce large changes, making control more difficult. Choose the velocity curve that is appropriate for your situation.



<Aftertouch Curve>

01...08

Selects one of eight curves to determine how pressure applied to the keyboard after playing a note will affect volume or tone.



1: A significant effect will not be produced unless you apply strong pressure
2: :
3: The normal curve
4: :
5: A significant effect will be produce even by light pressure
6: Rough curve (24 steps)
7: Even rougher curve (12 steps)
8: Random

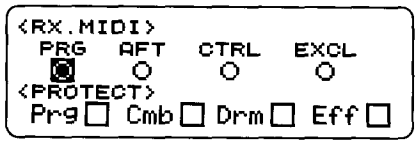
<Assignable Switch Polarity>

+, –

Specifies the polarity of the foot switch that you are using. If you are using a Korg PS-1 foot switch, or if you are not using a foot switch, set this to "–". If the foot switch has no effect when you press it, set this to "+".

<MIDI Filter>

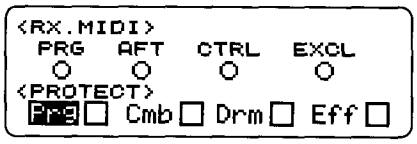
o (received, transmitted), x (not received, transmitted)



If you wish to restrict the MIDI messages that will be received and transmitted by the N1/N5, make settings here. You can disable reception and transmission of program changes, aftertouch, control change, and exclusive messages.

<Write Protect>

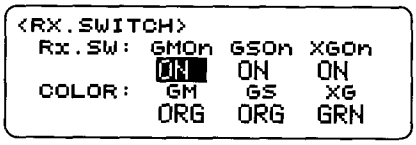
☐, ☑



You can protect the user area of the N1/N5 so that important data cannot be overwritten accidentally. When the box located at the right of Program, Combination, Drumkit and Effect is checked ✓, the corresponding type of memory is protected.

<Receive Switch>

ON, OFF



Specifies whether the GM, GS and XG initialization messages will each be received or not.

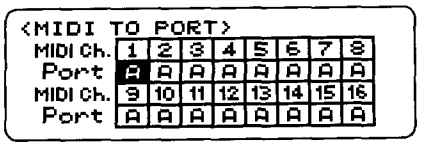
<Receive Color>

GRN (yellow/green), **ORG** (orange)

When a GM, GS or XG initialization message is received, the backlight of the LCD screen will be switched.

<MIDI Channel To Port>

A, B (internal), **C** (external)

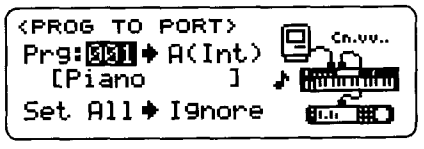


For each channel, this parameter specifies whether messages received from an external MIDI device connected to the N1/N5's MIDI IN will be sounded by the N1/N5's tone generator or will be transmitted from MIDI OUT. If you connect another tone generator to MIDI OUT, you can cause different channels of MIDI message to be played either by the N1/N5 or by the other tone generator.

This function is enabled only when the Global mode PC I/F TO PORT is set to Native.

<Program Change To Port>

A, B (internal), **C** (external), **Ignore**



Specifies whether each MIDI program change message received by the N1/N5 will cause internal sounds or external sounds to be played. For example you can make settings so that piano (#001) will be sounded by the N1/N5 and strings (#049) will be sounded by an external tone generator connected to MIDI OUT.

With a setting of Ignore, this function will be disabled. If you wish to set all numbers 001–128 to the same destination, move the cursor to the Set All parameter, and press the [EDIT] key.

This function is enabled only when the Global mode PC I/F TO PORT is set to Native.

Chapter 4. Connections with a computer/sequencer

If you wish to connect the N1/N5 with a computer, you can either use MIDI cables to make connections via a MIDI interface (connection via MIDI), or use a special cable to make a connection directly (connection via special cable). Read the explanation that is appropriate for your computer and system. If you are using a stand-alone MIDI sequencer, read the section on MIDI connections.

- Connecting a MIDI sequencer ... "Connecting via MIDI"
- Connecting a computer (using a MIDI interface) ... "Connecting via MIDI"
- Connecting an IBM PC (compatible) (using a special cable) ... "Connecting an IBM PC (compatible)" (p.68)
- Connecting an Apple Macintosh (using a special cable) ... "Connecting an Apple Macintosh" (p.68)

1. About Interfacing With Your computer

When a special cable is used to connect the N1/N5 to a computer, the included "Korg MIDI Driver" can be used to play music with up to 32 parts. In addition, the N1/N5 can be used as the MIDI interface of the computer, so that other MIDI devices can be controlled.

The N1/N5 can be connected directly to the following computers.

IBM PC (compatibles):

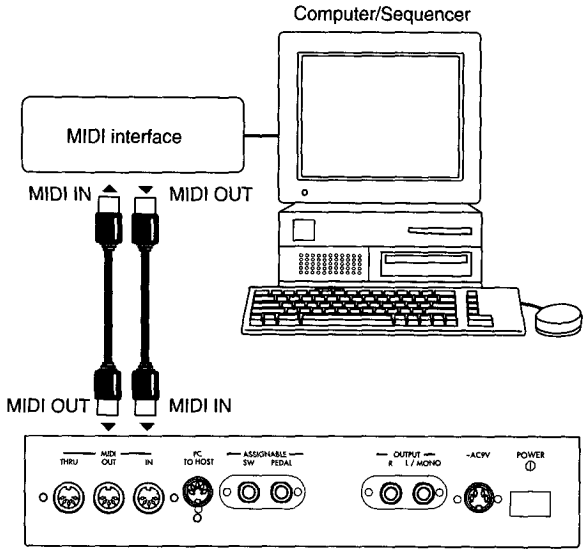
Connection kit AG-001B (connection cable, "Korg MIDI Driver" driver software) [sold separately]

Apple Macintosh series:

Connection kit AG-002B (connection cable, "Korg MIDI Driver" driver software) [sold separately]

Connecting via MIDI

If you wish to connect the N1/N5 to a stand-alone MIDI sequencer or to a computer with a MIDI interface, use a MIDI cable to connect the MIDI OUT connector of the sequencer/computer (MIDI interface) to the MIDI IN of the N1/N5. Use a MIDI cable to connect the MIDI OUT connector of the N1/N5 to the MIDI IN of the sequencer/computer (MIDI interface).



If you wish to connect additional MIDI devices, you can either connect them to the MIDI OUT connector of the sequencer/computer (MIDI interface), or to the MIDI THRU connector of the N1/N5.

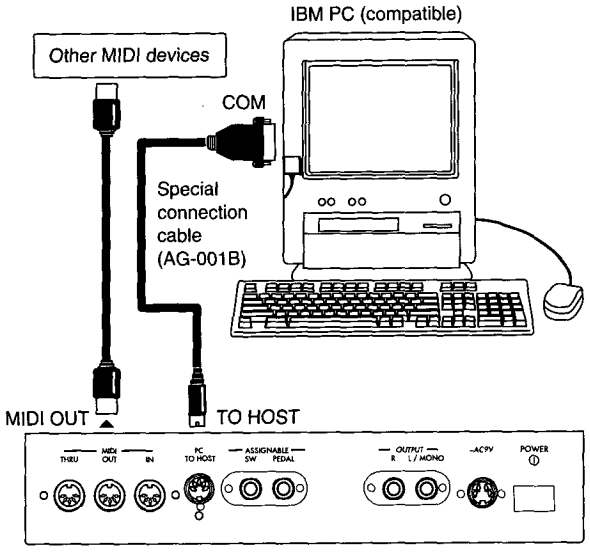
For details connecting your computer and MIDI interface, and for MIDI port settings, refer to the owner's manual for your MIDI interface.

If you want what you play on the N1/N5 keyboard to be recorded on the computer or sequencer, and then to playback on the N1/N5 (i.e., using the N1/N5 both as a MIDI input keyboard and as a MIDI tone generator), connect the MIDI OUT and MIDI IN connectors of the N1/N5 and of the computer/sequencer respectively to each other. In this case if the Echo Back setting (a function which causes messages received at MIDI IN to be retransmitted from MIDI OUT) of the computer/sequencer is ON, notes will be sounded on the N1/N5 in duplicate (both from the keyboard, and by the echo-back via MIDI IN). When using this type of connection, set the N1/N5 to Local Off (to disconnect the keyboard section from the tone generator section). The Local Off setting is made in Global mode <Local Control> (p.64).

With a setting of Local Off, the N1/N5 will not be able to produce sound by itself. (No sound will be heard when you play the keyboard.) If you are using the N1/N5 by itself, leave the setting at Local On.

Connecting an IBM PC (compatible)

Connect the special cable (AG-001B) [sold separately] to the serial port (COM port) of the IBM PC (compatible) and to the TO HOST connector of the N1/N5.



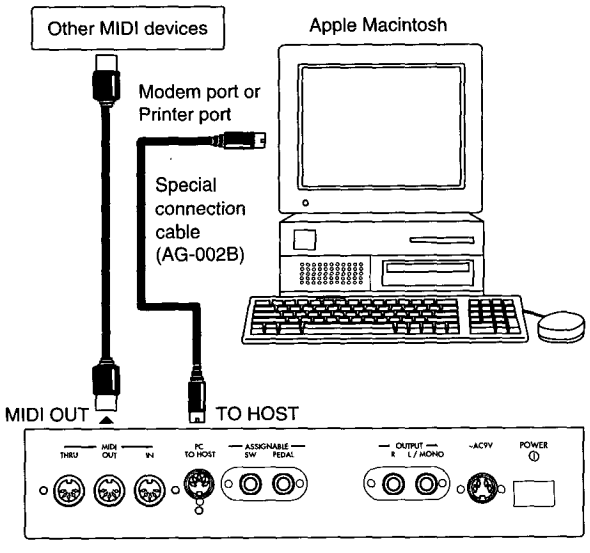
If your computer has a 25 pin serial port, you will need a 9 pin – 25 pin conversion adapter.

When connecting the N1/N5 to an IBM PC (compatible), set the Global mode BPS Select to "38.4" (refer to p.64).

If you are using Windows, install the Korg MIDI Driver. For the installation procedure, refer to p.69–p.71.

Connecting an Apple Macintosh

Connect the special cable (AG-002B [sold separately]) to the modem port or printer port of the Apple Macintosh and to the TO HOST connector of the N1/N5.



If your application program (sequencer) has a clock setting, set it to 1 MHz.

When connecting the N1/N5 to an Apple Macintosh, set the Global mode BPS Select to "31.25" (refer to p.64).

If your application program (sequencer) is compatible with the Apple MIDI Manager, installing the Korg MIDI Driver will allow you to use the N1/N5 as a 32-part tone generator. For details on installing the Korg MIDI Driver, refer to p.71.

Making connections to your computer

BPS Select setting (p.64).

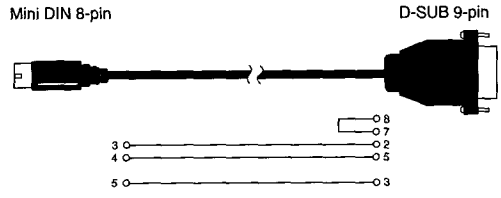
1) Press the [Global] key.
2) Use the CURSOR [◄][►] keys to select "BPS."
3) Use the [VALUE] slider or the [INC+][DEC–] keys to select either 31.25 or 38.4.

   31.25k: Connection to an Apple Macintosh

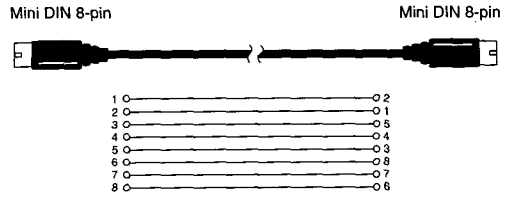
   38.4k: Connection to an IBM PC (compatible)

Wiring diagram for special connection cable

(1) AG-001B (for IBM PC or Compatible)



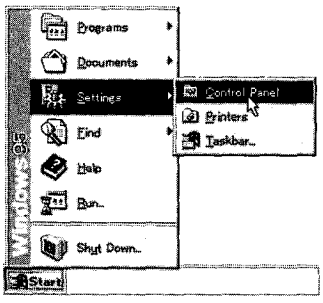
(2) AG-002B (for Macintosh)



2. Korg MIDI Driver installation and setup

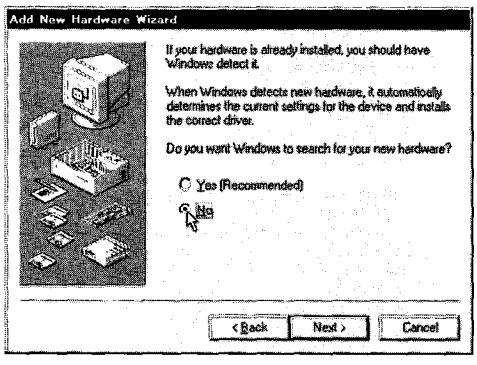
Installing the Korg MIDI Driver into Windows 95

① Click the [Start] button in the taskbar, and in [Settings], click [Control Panel].

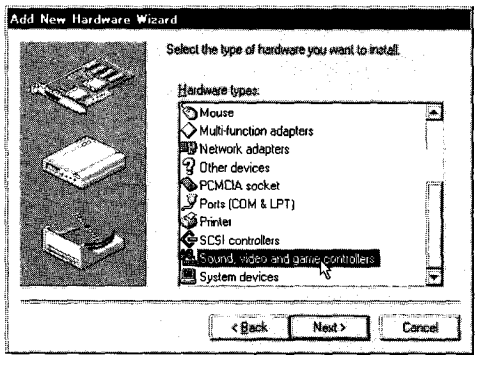


② In the control panel, double-click the [Hardware] icon to start up the hardware wizard, and then click [Next>].

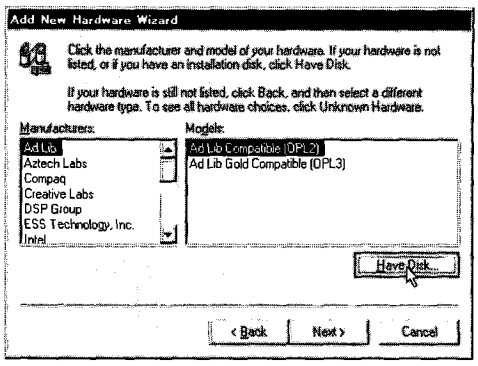
③ In response to the question "Automatically detect new hardware?" be sure to reply "No," and then click the [Next>] button.



④ Select [Sound, video and game controllers], and click the [Next>] button.



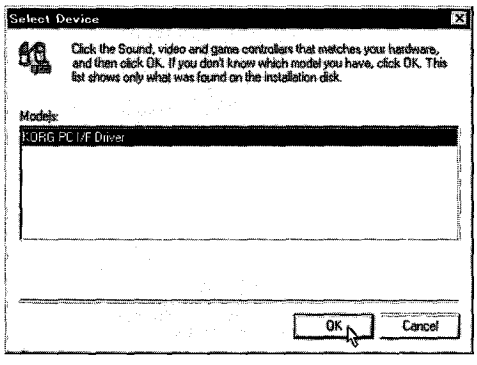
⑤ Click [Have Disk].



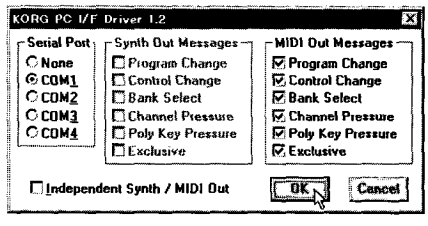
A dialog box will appear, allowing you to specify the drive and directory.

⑥ Insert the disk included with the AG-001B into the disk drive of the computer. If the disk was inserted into drive A, type "A:\" (or if drive B, type "B:\") and click the [OK] button.

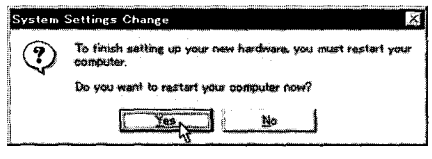
⑦ Click the [OK] button and click [OK].



⑧ Perform the setup as directed in "Setting up the Korg MIDI Driver (Windows)," and click the [OK] button.

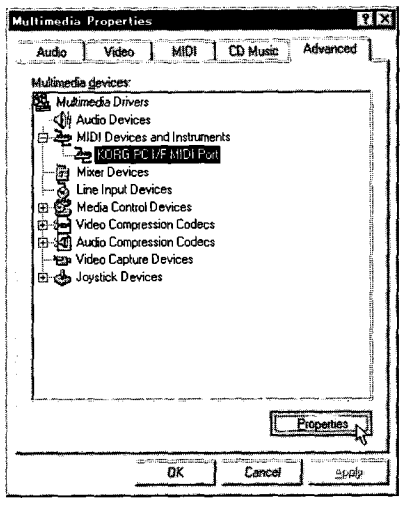


⑨ Be sure to restart your computer so that the driver will take effect.



Modifying the Korg MIDI Driver setup for Windows 95

① In the control panel, double-click the [Multimedia] icon, and the multimedia properties dialog box will appear.



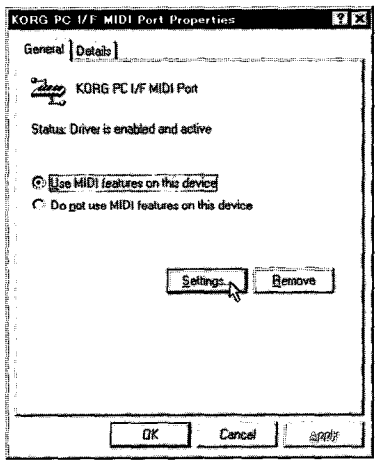
② Click the [Advanced] tab located at the upper right.

③ Click the [+] for [MIDI Devices] (the display will change to [–]), and click [KORG PC I/F MIDI Port].

④ Click the [Properties] button.

The KORG PC I/F MIDI Port properties will be displayed.

⑤ Click the [Settings] button.

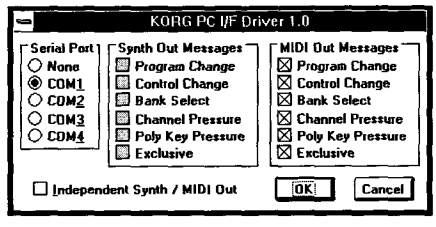


Perform the setup as directed in "Setting up the Korg MIDI Driver (Windows)," and click the [OK] button.

If you have modified the settings, you must re-start Windows.

Setting up the Korg MIDI Driver (Windows)

① For the Serial Port setting, select the serial port to which the N1/N5 is connected ([COM1]–[COM4]).



If you wish to use the serial port for another purpose after installing the Korg MIDI Driver, select [None] to disable the driver.

② Check [Independent Synth/MIDI Out].

When this is checked, the two internal ports of the N1/N5 (port A and port B) can be used independently.

For data which is output to Default MIDI, operation will depend on the Global mode <PC Interface To Port> setting of the N1/N5.

If Default Out is selected, and if the N1/N5 is set to Emulate mode, data will be output to both N1/N5 ports A and C. If Native mode is selected, data will be output to the port that is specified by the Global parameter MIDI Channel To Port.

Regardless of whether the N1/N5 is operating in Native mode or Emulate mode, MIDI Out will output from port C, Synth-A Out will output from port A, and Synth-B Out will output from port B.

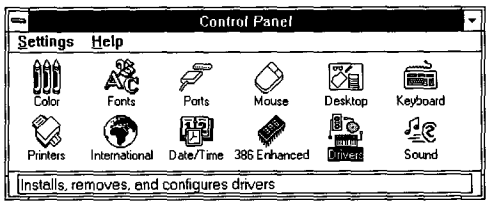
If [Independent Synth/MIDI Out] is not checked, only Default MIDI can be used.

③ [MIDI Out Messages] allows you to select the types of message that will be transmitted to the N1/N5.

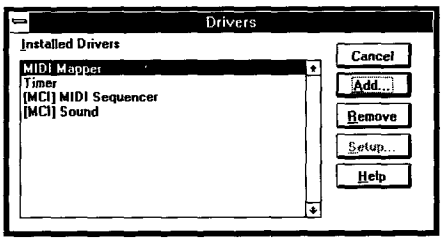
④ When you finish making settings, click the [OK] button. If you wish to cancel your settings, click [Cancel].

Installing the Korg MIDI Driver into Windows 3.1

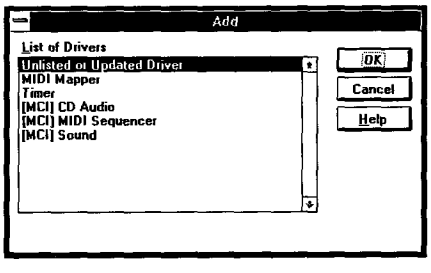
① In the control panel, double-click the Driver icon.



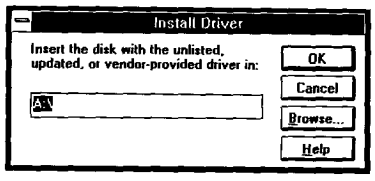
② Click the [Add] button.



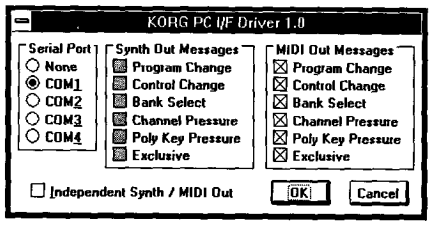
③ In the driver list, select [Unlisted or updated driver] and click the [OK] button.



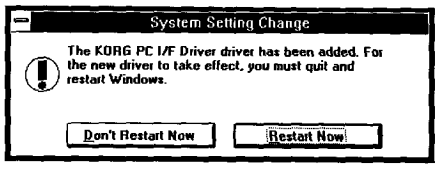
④ Insert the disk included with the AG-001B into the disk drive of the computer. If you inserted the disk into drive A, type "A:\" (for drive B, type "B:\"), and click the [OK] button.



⑤ Select Korg PC I/F Driver, and click the [OK] button. The setup window will appear. Follow the directions in "Setting up the Korg MIDI Driver (Windows)" (refer to p.70) to perform the setup.



⑥ After setup is complete, remove the disk and select [Restart] to make the newly installed driver available.



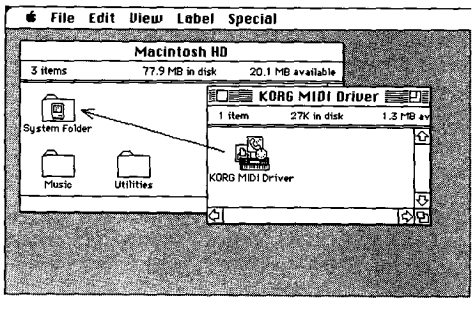
Installing the Korg MIDI Driver into a Macintosh

In order to use the Korg MIDI Driver, the Apple MIDI Manager and PatchBay must already be installed. Use the versions of Apple MIDI Manager and PatchBay that are included with your MIDI application. They are not included with the AG-002B.

When the Korg MIDI Driver and Apple MIDI Manager are used together, you will be able to playback 32 parts on the N1/N5.

If you are using a MIDI application (sequencer) which does not use the Apple MIDI Manager, select the port to which the N1/N5 is connected, and if the application has a Clock setting, set it to [1 MHz].

① Copy the Korg MIDI Driver from the disk included with the AG-002B into the system folder of your startup disk.



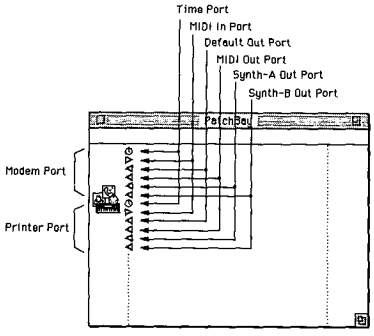
② If there is a copy of Apple MIDI Driver in your system folder, either delete it, or move it to another folder. Be careful not to delete or move the Apple MIDI Manager.

The Korg MIDI Driver includes the functionality of the Apple MIDI Driver.

③ From the Special menu, select "Restart."

Setting up the Korg MIDI Driver (Macintosh)

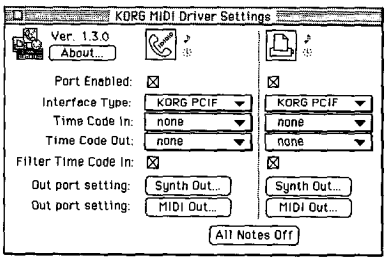
① Start up PatchBay.



If installation has been performed correctly, the KORG MIDI Driver icon shown above will appear in the PatchBay window when PatchBay is started up. (The modem and printer ports will be displayed differently depending on the setup condition.)

② In PatchBay, double-click the KORG MIDI Driver icon.

The setup dialog box will appear.



③ Check the Port Enable box for the port to which the N1/N5 is connected, and specify [KORG PCIF] as the Interface Type.

When "KORG PCIF" is selected as the Interface Type, you will be able to use Default Out, MIDI Out, Synth-A Out, and Synth-B Out.

The operation of Default Out will depend on the Global mode Program Port setting of the N1/N5.

If Default Out is selected, and if the N1/N5 is set to Emulate mode, data will be output to both ports A and C of the N1/N5. If it is set to Native mode, data will be output to the port specified by the Global mode parameter <MIDI Channel To Port>.

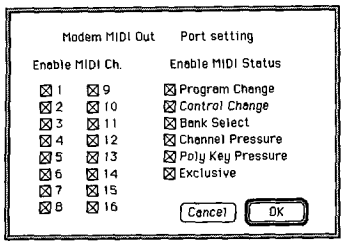
Regardless of whether the N1/N5 is in Native mode or Emulate mode, MIDI Out will output to port C, Synth-A Out will output to port A, and Synth-B Out will output to port B.

(Please read p.66 as well.)

④ Press the [Out Port Setting] button.

The following dialog box will appear. Here you can select the MIDI channels/messages which will be output to each port. Only those channels/messages

whose box is checked will be output.



⑤ When you have finished making settings, click the [OK] button.

⑥ Start up your MIDI application (sequencer), and drag the mouse from the "◁" of the your MIDI application's Out Port to connect it to the MIDI Out of the MIDI Driver.

For details on using PatchBay, refer to "About PatchBay..." etc. in the Apple menu.

Using PC Exchange to convert SMF data

Most commercially available Standard MIDI File (SMF) song data is saved in MS-DOS format.

You can use PC Exchange to make MS-DOS format SMF song files recognizable by the Macintosh.

① In the control panel, open PC Exchange.

The PC Exchange control panel will appear.

② Press the [Add...] button.

The [Specify application associated with DOS extension] window will appear.

③ Input ".MID" into the DOS extension field.

In order to distinguish different types of file, MS-DOS adds an extension consisting of a period and three characters to the end of the filename. It is customary for SMF data to have an extension of ".MID"

④ From the list that appears in the lower part of the dialog box, select your SMF-compatible MIDI application (sequencer).

The selected icon will appear in the Application field.

⑤ From the [Document type] popup menu, choose [Midi], and click the [OK] button.

The item which was added to the PC Exchange window will appear, and has now been registered.

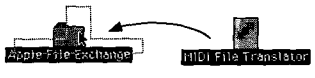
Now when an MS-DOS SMF disk is inserted into the disk drive, it can be used immediately.

For details refer to the documentation for "Macintosh PC Exchange."

About the MIDI File Translator included with the AG-002B

If the Macintosh you are using does not have PC Exchange but does have Apple File Exchange, you can use the MIDI File Translator included with the AG-002B to convert MS-DOS SMF data.

① Put the MIDI File Translator into the same folder as Apple File Exchange.



② Double-click Apple File Exchange to start it up.

③ Insert the MS-DOS disk that you wish to convert into the disk drive.

Be sure to insert the MS-DOS format disk into the disk drive only after Apple File Exchange has already started up.

④ Select the song file that you wish to convert.

⑤ Press the "<<Convert<<" (or ">>Convert>>") button located in the center.

Conversion will begin. When the bar graph reaches 100%, conversion is complete. The converted file will appear in the left-hand box.

⑥ Exit Apple File Exchange.

3. Using the N1/N5 in Multi mode as a sound module

Default settings

In Multi mode, the N1/N5 can function as a multi-timbral (GM) sound module with 16 channels each for A and B (a total of 32 channels).

When a MIDI GM System ON message is received, or when the Utility mode <Initialize> operation is used to execute a GM Mode On command, the N1/N5 will be set to the following condition.

	Default settings
Rx.MIDI Ch.	Part 01–16=A01–A16, Part 17–32=B01–B16
Program	GM-a:001 Piano 1 (except for parts 10 and 26) rDrm:001 STANDARD (parts 10 and 26)
Effect	A:001 Rev/Cho
Volume	100
Expression	127
Panpot	CNT
Key Shift	+00
Rev.Send	40
Cho.Send	0
Part Mode	NORM (except for parts 10 and 26) MDrm1 (part 10) MDrm3 (part 26)
MONO/POLY	POLY
FineTune	+00
Note Window	C-1–G 9
Velocity Window	001–127
ModWheel P.ModInt	10
PitchBend Range	+02
Portamento Switch	OFF
Portamento Time	0

The above table shows the settings when the Global mode <Bank Map Type> is set to Default.

If the Global mode <Bank Map Type> is set to 05R/W, only the programs will be set as follows, and the rest will be the same as shown in the table on the previous page.

GM-b: 001 Piano 1 (except for parts 10 and 26)
kDrm: 001 GMkit (parts 10 and 26)

Voices, Parts and MIDI channels

On synthesizers, the part which generates the sound is generally called an "oscillator" (OSC). On the N1/N5, the word "voice" is used to refer to a unit of sound-generating capability for one note. The program sounds of the N1/N5 are either "single voice" or "double voice," and the combination sounds (which consist of up to eight of these program sounds) can therefore use up to 16 voices to create their sound.

"Parts" are like musicians in a band. The N1/N5 has 32 parts, meaning that it is able to simulate an ensemble of up to 32 musicians. For example, piano could be assigned to part 1, bass to part 2, trumpet to part 3, and so on.

It is important to remember that there is a total number of 64 voices available for all parts. If more than 64 voices are requested at any one time, the N1/N5 will turn off the oldest note that is currently sounding. If you use combination sounds which use a large number of voices, you need to be aware of this.

The MIDI reception channel can be set independently for each of the N1/N5's 32 parts. The MIDI channels that can be set on the N1/N5 are A1–A16 and B1–B16. The MIDI channels of the transmitting device (computer or sequencer) must match the MIDI channels of each receiving (N1/N5) part. When the power of the N1/N5 is turned on, parts 1–16 are set to A1–A16, and parts 17–32 are set to B1–B16.

For more on MIDI messages, refer to "About MIDI" on p.74.

4. Performance Play mode (playing the N1/N5's keyboard along with a computer/sequencer)

In Performance Play mode, you can play only the first 16 parts of Multi mode's 32 parts. Of these, two parts can be selected as the <Lower Part Number> and <Upper Part Number> of Performance Edit mode, and played on the keyboard.

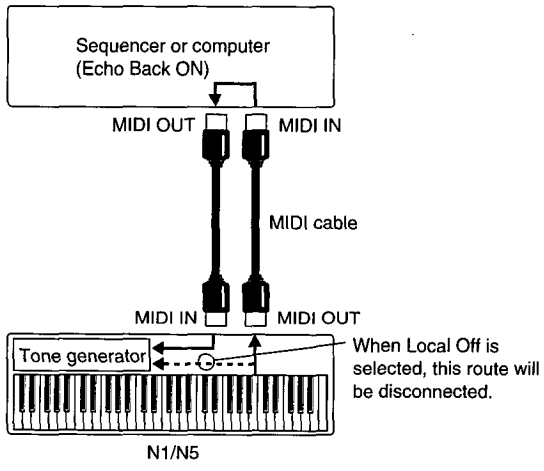
You can use your computer/sequencer to play 14 backing parts while you play two parts split on the keyboard.

Except for the fact that there are 16 parts, control via MIDI can be done in the same way as in Multi mode.

5. Using the N1/N5 as an input keyboard

The notes you play on the N1/N5's keyboard are transmitted both from MIDI OUT and from the TO HOST connector. The parts that you play in Performance Play mode are transmitted from MIDI OUT and TO HOST on the MIDI channels that you specify for each part. These MIDI channels are set by the Multi mode parameter <Receive MIDI Channel>.

When using the N1/N5 as a keyboard for entering musical data, it is usual to turn on the Echo Back function of your sequencer so that you can hear the notes that you are entering. However this would cause the notes transmitted from the keyboard to the tone generator and the notes transmitted from the keyboard to the sequencer and back to the tone generator to be sounded in duplicate, so to prevent this, turn the Global mode parameter <Local Control> to OFF. When <Local Control> is OFF, the keyboard and tone generator of the N1/N5 will be disconnected internally, so that duplicate notes will not be sounded.



When <Local Control> is turned OFF, it will not be possible to play the N1/N5 by itself. (Note data etc. from the keyboard will be transmitted from MIDI OUT and from TO HOST, and the tone generator section will sound only in response to messages from MIDI IN and TO HOST.) If you are playing the N1/N5 by itself, be sure to set <Local Control> ON.

If the Global mode <Key Shift Position> is set to AfterKBD, the <Master Key Shift> setting will affect the notes which are transmitted from the N1/N5's MIDI OUT and TO HOST. If <Key Shift Position> is set to BeforeTG, the <Master Key Shift> setting will affect all notes received at the N1/N5's MIDI IN and TO HOST. (Refer to the diagram on p.63.)

The Global mode <MIDI Filter> setting allows you to disable reception for program change, aftertouch, control change or system exclusive messages. (Refer to p.65)

6. About MIDI

1. MIDI channels

Similarly to the way in which a television set operates, the data of a channel can be received when the receiving device is set to the same channel as the transmitting device.

- In Performance Play mode, musical data from the N1/N5 is transmitted on the MIDI channel of the part which you are playing. The MIDI channel of the part you are playing is set by the Multi mode <Receive MIDI Channel> parameter.
- The receive channel for each part of the N1/N5 is set by the Multi mode <Receive MIDI Channel> parameter.
- The N1/N5 transmits and receives system exclusive messages on the channel specified by the Global mode <Exclusive channel> setting.

2. Note on/off

When you press a note on the keyboard, a MIDI message will be transmitted conveying the keyboard location that you pressed (the note number) and the force (velocity) with which you pressed the key as a Note On message [9n, kk, vv] ('n' is the channel, 'kk' is the note number, and 'vv' is the velocity).

When you release the note, a MIDI Note Off message (8n, kk, vv) will be transmitted. However there are very few instruments that transmit or receive Note Off velocity, nor does the N1/N5 transmit or receive Note Off velocity.

Each time you press or release a note on the keyboard, the N1/N5 will normally transmit a Note On or Note Off message on the MIDI channel of the part which you are playing.

3. Selecting a program

A sound (program) can be selected using MIDI Program Change messages [Cn, pp] ('pp' is the program number that specifies one of 128 programs). Bank Select messages [Bn, 00, mm] (control change #00) and [Bn, 20, bb] (control change #32) and [Bn, 20, bb] ('mm is the bank number MSB, 'bb' is the bank number LSB, together selecting one of 16384 possible banks) can be used in conjunction with Program Change messages to select programs from other banks. When a Bank Select message is received on a channel which matches the receive channel of a part, the program bank will be selected, but not actually changed at that point; the change will take effect when the next Program Change message is received.

Program Change messages can be disabled by the Global mode MIDI Filter parameter.

4. Selecting a combination

Combinations can also be selected by incoming MIDI Program Change and Bank Select messages, just as programs are selected.

5. Damper pedal

The type of effect can be changed by the Performance Edit mode <Assignable Switch Type>.

When a damper pedal connected to the N1/N5 is operated, the damper effect will be switched on/off, and at the same time, a MIDI Hold message [Bn, 40, vv] (control change #64; 'vv' is 127 [7FH] for ON, or 00 for OFF) will also be transmitted.

When the N1/N5 receives this message, the damper will be turned off for 'vv' values of 63 [3FH] or lower, and turned on for 'vv' values of 64 [40H] or above.

6. Aftertouch

If you play a note on the keyboard of the N1/N5 and then press down harder on the keyboard, an aftertouch effect will be applied. At the same time, MIDI Aftertouch messages [Dn, vv] (vv: value) will also be transmitted.

When the N1/N5 receives these messages, the aftertouch effect will be applied.

In the Global mode <MIDI Filter> page, transmission and reception of aftertouch can be turned on or off. There is another type of aftertouch, Polyphonic Key Pressure, which applies an effect independently for each note. The N1/N5 can receive this message, but cannot transmit it.

7. Pitch bend

When you move the N1/N5's [PITCH BEND] wheel, pitch bend will be applied. At the same time, MIDI Pitch Bend messages [En, bb, mm] ('bb' = lower byte of the value, 'mm' = upper byte of the value; a total of 16384 levels, with center value at 8192 ['bb' and 'mm' = 00H, 40H]) will be transmitted.

When the N1/N5 receives these messages, pitch bend will be applied. The range (depth) of the resulting pitch bend can also be set via MIDI (see "19. Changing the pitch bend range").

8. Adjusting the volume

When the function of the assignable pedal is set to "volume", and a volume pedal connected to the ASSIGNABLE PEDAL jack is operated, the volume of the N1/N5 will be adjusted. At the same time, MIDI Volume messages [Bn, 07, vv] (control change #07) (vv: value) will be transmitted.

When the N1/N5 receives these messages, the volume will change. However, the volume of the N1/N5 is determined by the product of the value of the Volume message and the value of the Expression message [Bn, 0B, vv] (control change #11) (vv: value). This means that if the volume does not increase sufficiently in response to Volume messages, or if there is no sound, you should try transmitting a MIDI Expression message to the N1/N5 to reset the Expression value to 127.

- By using the Universal Exclusive message Master Volume (refer to "23. About system exclusive messages"), you can adjust the overall volume without changing the balance between timbres or tracks.

9. Applying vibrato (PITCH LFO)

When you move the [MODULATION] wheel of the N1/N5 away from yourself, vibrato will be applied. At the same time, MIDI Modulation 1 Depth messages [Bn, 01, vv] (control change #01) (vv: value) will be transmitted.

When the N1/N5 receives these messages, vibrato will be applied.

10. Adjusting the stereo location (PANPOT)

The oscillators, programs and parts of the N1/N5 can be sent to outputs A–D (= effect inputs A–D). Of these, A and B are adjusted by the Panpot. (C and D are adjusted by Send.) In particular, the panpot setting of a program or part can be adjusted by the MIDI Panpot message [Bn, 0A, vv] (control change #10) (vv: value, where 00 is A, 64 is center, and 127 is B).

11. Adjusting the effect send levels (Send C, D)

The oscillators, programs and parts of the N1/N5 can be sent to outputs A–D (= effect inputs A–D). Of these, C is adjusted by Send C, and D is adjusted by Send D. (A and B are adjusted by the Panpot.) In particular, Send C for timbres and tracks can be adjusted by the MIDI Reverb Level message [Bn, 5B, vv] (control change #91) (vv: value), and Send D can be adjusted by the MIDI Chorus Level message [Bn, 5D, vv] (control change #93) (vv: value).

These messages are normally used to control the depth of the reverb and chorus effects, but if they are transmitted to other instruments these messages will not necessarily have the same result.

If these messages are received while a note is sounding, the change in effect send level will not occur immediately, but will take effect from the next played note.

12. Effect dynamic modulation

Effects can be controlled by selecting a dynamic modulation source and operating that source.

- At the same time, MIDI Effect Control 1 messages [Bn, 0C, vv] (control change #12) (vv: value) will be transmitted.

When this message is received, the dynamic modulation for effect is set to Pedal 1 will be controlled.

This message is transmitted and received on the MIDI channel of the part which you are playing in Performance Play mode, and on Global mode <Exclusive Channel> MIDI channel in Multi mode.

13. Adjusting the tone color

When a MIDI Brightness message [Bn, 4A, vv] (control change #74) (vv: value) is received, the tone color will change. For a 'vv' value of 64 [40H], there will be no change in the tone. For lower values the sound will become darker, and for higher values the sound will become brighter.

Since this message has come into use only recently, it may not be implemented on some instruments.

14. Adjusting the attack time

When a MIDI Attack Time message [Bn, 49, vv] (control change #74) (vv: value) is received, the attack time will change. For a value of 64 [40H] there will be no change in the attack time. For lower values the attack will become faster, and for higher values the attack will become slower.

Since this message has come into use only recently, it may not be implemented on some instruments.

15. Adjusting the release time

When a MIDI Release Time message [Bn, 48, vv] (control change #72) (vv: value) is received, the release time will change. The rest is the same as explained above in Attack.

16. Editing with RPN messages

RPN (Registered Parameter Number) messages allow settings to be made in the same way for instruments of different manufacturers. In contrast, NRPN (Non-registered Parameter Number) messages and exclusive messages can be used freely by each instrument manufacturer.

To edit using RPN messages, you must first use RPN (LSB) [Bn, 64, rr] and RPN (MSB) [Bn, 65, mm] messages (control changes #100 and #101) (rr, mm: parameter number lower and upper bytes) to specify the parameter.

Then, use Data Entry (MSB) [Bn, 06, mm] and Data Entry (LSB) messages [Bn, 26, vv] (control changes #06 and #38) to specify the value. ('mm' and 'vv' are the upper and lower bytes, allowing a total of 16384 steps.)

You can also use Data Increment [Bn, 60, 00] (control change #96: value fixed at 00) and Data Decrement [Bn, 61, 00] (control change #97: value fixed at 00) messages to increase or decrease the value in steps of 1.

17. Tuning

You can use RPN messages to adjust the tuning of each part. You can also adjust the Master Tune that is set in Global mode.

First, select RPN 01. This is done by transmitting [Bn, 64, 01, 65, 00] (control change #100 with a value of 01, and #101 with a value of 00). Then use Data Entry messages to adjust the value. This is done by using [Bn, 06, mm, 26, vv] (control change #06 and #38). A value of 8192 [mm, vv = 40H, 00H] is center (normal pitch). A value of 0 is –100 cents, and a value of 16383 [mm, vv = 7FH, 7FH] is +100 cents.

18. Transposing

You can use RPN messages to set the transposition for each part.

First, select RPN 02. This is done by transmitting [Bn, 64, 02, 65, 00] (control change #100 with a value of 02, and #101 with a value of 00). Then use Data Entry messages to adjust the value. Normally, however, only the upper byte can be set. This is done using [Bn, 06, mm] (control change #06). A value of 8192 [mm = 64 = 40H] is center (normal pitch). A value of 6656 (mm = 52 = 34H) is –12 semitones, and a value of 9728 (mm = 76 = 4CH) is +12 semitones.

19. Setting the pitch bend range

You can use RPN messages to adjust the pitch bend range for each part.

First, select RPN 00. This is done by transmitting [Bn, 64, 00, 65, 00] (control change #100 with a value of 00, and #101 with a value of 00). Then use Data Entry messages to adjust the value. Normally, however, only the upper byte can be set. This is done using [Bn, 06, mm] (control change #06). A value of 00 (mm = 00) sets a pitch bend range of 0. A value of 1536 (mm = 12 = 0CH) sets a pitch bend range of +12 semitones. The N1/N5 allows negative values to be set as well, but only positive values can be set using RPN messages.

20. If a note does not stop

If for some reason a note "sticks" (i.e., continues to sound without stopping), moving to a different mode will normally solve the problem. If the note was played via MIDI, disconnecting the MIDI cable will also stop the note.

MIDI transmits a message known as Active Sensing [FE] at regular intervals. This allows a device that receives this message to know that an external MIDI device is connected. If no MIDI messages are received for a certain length of time, the receiving device will decide that the connection has been broken, and will turn off notes and reset controller values that were received via MIDI.

21. Turning off all notes of a channel

When a MIDI All Note Off message [Bn, 7B, 00] (control change #123, data of 00) is received, all notes currently sounding on that channel will be turned off (as though you had released them on the keyboard).

A MIDI All Sound Off message [Bn, 78, 00] (control change #120, data of 00) will stop all sound being produced on that channel. While an All Note Off message allow note decays to remain, the All Sound Off message will stop the sound immediately.

These messages are only for use in emergency situations, and are not for use while you play.

22. Resetting all controllers of a channel

When a MIDI Reset All Controller message [Bn, 79, 00] (control change #121, data of 00) is received, the values will be reset for all controllers currently being used on that channel.

23. System exclusive messages

Since manufacturers are free to use system exclusive messages in any way they please, these messages are used mainly to transmit and receive sound data or editing data for parameters that are unique to a given model of instrument.

On the N1/N5, the system exclusive message format is [F0, 42, 3n, 4C, ..., F7] (n: exclusive channel).

However some exclusive messages are defined to have a specific purpose common to all manufacturers. These are called universal system exclusive messages.

The N1/N5 uses the following four universal system exclusive messages.

- When an Inquiry Message Request message [F0, 7E, nn, 06, 01, F7] is received, the N1/N5 will respond with an Inquiry Message [F0, 7E, nn, 06, 02, (nine bytes), F7] that means "I am a Korg N1/N5, system version ..."
- When a GM System On message [F0, 7E, nn, 09, 01, F7] is received, the N1/N5 will switch to Multi mode, and will be initialized for GM operation.
- A Master Volume message [F0, 7F, nn, 04, 01, vv, mm, F7] (vv: lower byte of value, mm: upper byte of value; together expressing 16384 steps) can adjust the overall volume while preserving the volume balance between timbres of a combination, or between parts.
- A Master Balance message [F0, 7F, nn, 04, 02, vv, mm, F7] (vv: lower byte of value, mm: upper byte of value; together expressing 16384 steps, where 8192 is the initial setting, and lower values will move increasingly to the left) can adjust the overall pan position while preserving the relative pan position between timbres in a combination or between parts.

24. Transmitting sound data settings (Data Dump)

Program, combination, drum kit, and global settings can be transmitted as MIDI exclusive messages and stored on an external device.

To transmit this data, use the Utility mode <MIDI Data Dump> page to select the type of data, and specify whether it will be transmitted from MIDI OUT or from the PC I/F.

The channel for reception or transmission is specified by the Global mode <Exclusive Channel>.

Data dumps can be executed by transmitting the appropriate type of Data Dump Request.

25. Synchronizing the arpeggiator

To synchronize the arpeggiator to MIDI Clock messages from an external device, set the Global mode <Clock Source> to MIDI or PC IF.

26. About GM/GS/XG

GM-compatibility means that sound selections etc. will function in the same way regardless of the manufacturer or model of instrument. However when using this, you should be aware of the following points.

- When the N1/N5 receives a MIDI GM System On message [F0, 7E, nn, 09, 01, F7], it will switch to Multi mode, and will be initialized for GM operation.

Roland GS and Yamaha XG are expansions of the GM specification which Roland and Yamaha respectively have created on their own. The N1/N5 supports the GS and XG sound maps and recognizes some of the messages.

You can specify whether or not these messages will be received or not by setting the Global mode <Receive Switch> parameters "GM On," "GS On" and "XG On."

Program bank names with "r" are for the GS sound map, and bank names with "y" are for the XG sound map.

Appendices

Parameter List

Performance Play mode

Performance Edit mode

Combination Edit mode

Program Edit mode

OSC

PITCH LFO

PITCH EG

VDF

Drumkit Edit mode

Effect Edit mode

Multi mode

Part Edit mode

EG

Scale

Mod

Fc/Win

Others

Utility mode

Global mode

Voice Name List

GM-a/r:Bank/y:Bank

Bank Select r:Bank MSB=r:Bank No., LSB=0
Bank Select y:Bank MSB=0, LSB=y:Bank No.

PC	rBank	yBank	Instrument
Piano			
1	0	0	Piano 1
	8	1	Piano 1w
	16	18	Piano 1d
	---	40	Piano Str.
	---	41	Dream
2	0	0	Piano 2
	8	1	Piano 2w
3	0	0	Piano 3
	8	1	Piano 3w
	---	32	DetElGrPno
	1	40	ElGrPiano1
	2	41	ElGrPiano2
4	0	0	HonkeyTonk
	8	1	OldUpright
5	0	0	E.Piano 1
	---	1	E.Piano 1w
	26	18	Mellow EP
	8	32	Soft EP
	25	40	Hard EP
	16	45	FM+AI EP
	24	64	60's EP
6	0	0	E.Piano 2
	---	1	E.Piano 2w
	8	32	Detune EP2
	24	33	Hard FM EP
	---	34	FM Legend
	---	40	FM Phase
	---	41	FM+Analog
	---	42	FM Koto EP
	16	45	FM EP
7	0	0	Harpsicord
	16	1	Harpsi.w
	24	25	Harpsi.o
	8	35	CoupleHps.
8	0	0	Clav.
	---	1	Clav. w
	---	27	Clav.Wah
	---	64	Pulse Clav
	---	65	PierceClav
Chromatic Percussion			
9	0	0	Celesta
10	0	0	Glocken
11	0	0	Music Box
	---	64	Orgel
12	0	0	Vibraphone
	8	1	Vibe.w
	1	45	Hard Vibe
13	0	0	Marimba
	8	1	Marimba w
	---	64	SineMarimb
	16	96	Balaphone1
	17	97	Balaphone2
	24	98	Log Drum
14	0	0	Xylophone
15	0	0	Tubular
	8	96	ChurchBell
	9	97	Carillon
16	0	0	Santur 1
	1	35	Santur 2
	8	96	Cimbalom
	---	97	Santur 3
Organ			
17	0	0	Organ 1
	8	32	DetuneOrg1
	16	33	60's Org.1
	17	34	60's Org.2
	1	35	Organ 101
	32	36	Organ 4

PC	rBank	yBank	Instrument
17	18	37	60's Org.3
	33	38	EvnenBar
	---	40	Organ 6
	40	64	Organ Bass
	9	65	Organ 109
	24	66	Cheese Org
	---	67	Organ 7
18	0	0	Organ 2
	1	24	Organ 201
	8	32	DetuneOrg2
	---	33	Lite Organ
	32	37	Organ 5
19	0	0	Organ 3
	8	64	RotaryOrg
	16	65	RotaryOrgS
	24	66	RotaryOrgF
20	0	0	ChurchOrg1
	16	32	ChurchOrg3
	8	35	ChurchOrg2
	---	40	NotreDam
	24	64	OrganFlute
	32	65	Trem.Flute
21	0	0	Reed Org.1
	---	40	Puff Org.
22	0	0	AccordionF
	8	32	AccordionI
23	0	0	Harmonica1
	1	32	Harmonica2
24	0	0	Bandneon1
	---	64	Bandneon2
Guitar			
25	0	0	NylonGtr.1
	32	16	NylonGtr.2
	16	25	NylonGtr.3
	24	43	VelHarmnix
	8	96	Ukulele
	40	---	LequintGtr
26	0	0	SteelGtr.1
	32	16	SteelGtr.2
	8	35	12-str.Gtr
	9	40	Nylon+Stel
	---	41	Steel&Body
	16	96	Mandolin
27	0	0	Jazz Gtr.
	1	18	Mellow Gtr
	---	32	JazzAmp
	8	96	PedalSteel
28	0	0	CleanGtr.1
	8	32	Chorus Gtr
	---	64	CleanGtr.2
29	0	0	Muted Gtr.
	8	40	Funk Gtr.1
	---	41	MuteStlGtr
	16	43	Funk Gtr.2
	---	45	Jazz Man
	1	96	MuteDstGtr
30	0	0	OverDriveGt
	---	43	Gtr.Pinch
31	0	0	Dist.Gtr.1
	---	12	DstRthmGtr
	1	24	Dist.Gtr.2
	2	35	Dazed Gtr.
	17	36	PowerGtr.2
	16	37	PowerGtr.1
	18	38	5th Dist.
	8	40	FeedbackG1
	9	41	FeedbackG2
	25	43	RockRythm1
	24	45	RockRythm2

PC	rBank	yBank	Instrument
32	0	0	GtHarmonx1
	16	64	AcGtHarmnx
	8	65	GtFeedback
	---	66	GtHarmonx2
Bass			
33	0	0	AcousticBs
	---	40	JazzRhythm
	---	45	Uprght Bs.
34	0	0	FingerdBs1
	---	18	FingerDark
	---	27	Flanger Bs
	---	40	Bs&DstEGtr
	---	43	FingerSlap
	1	45	FingerdBs2
	2	64	Jazz Bass
	---	65	ModAlem
35	0	0	PickedBass
	8	28	MutePickBs
36	0	0	Fretless 1
	1	32	Fretless 2
	2	33	Fretless 3
	3	34	Fretless 4
	4	96	SynFretles
	5	97	Mr.Smooth
37	0	0	SlapBass 1
	8	27	Reso Slap
	---	32	PunchThum
38	0	0	SlapBass 2
	---	43	Velo Slap
39	0	0	SynthBass1
	1	18	SynthBs101
	9	20	FastResoBs
	8	24	Acid Bass
	---	35	Clav Bass
	10	40	Tekno Bass
	---	64	Oscar
	---	65	SqrBass
	---	66	RubberBass
	---	96	Hammer
	16	---	SlowResoBs
40	0	0	SynthBass2
	---	6	MelloSynBs
	3	12	Seq Bass
	1	18	SynthBs201
	17	19	AnaSynBs.1
	19	32	SmoothBass
	2	40	Modular Bs
	8	41	BeefFMBass
	9	64	X WireBass
	16	---	RubberBass
	18	---	AnaSynBs.2
Strings			
41	0	0	Violin
	8	8	SlowViolin
42	0	0	Viola
43	0	0	Cello
44	0	0	Contrabass
45	0	0	TremoloStr
	8	8	SlowTrmStr
	9	40	SuspensStr
46	0	0	Pizzicato
47	0	0	Harp
	---	40	YangChin
48	0	0	Timpani
Ensemble			
49	0	0	Strings 1
	16	3	St.Strings
	1	8	Strings 2
	---	24	ArcoStr

GM-a/r:Bank/y:Bank

Bank Select r:Bank MSB=r:Bank No., LSB=0
Bank Select y:Bank MSB=0, LSB=y:Bank No.

PC	rBank	yBank	Instrument
49	---	35	60sStrings
	8	40	Orchestra1
	9	41	Orchestra2
	10	42	TremOrch
	24	45	VeloString
	11	---	Choir Str.
50	0	0	Slow Str.1
	10	3	St.SlowStr
	8	8	Legato Str
	9	40	Warm Str.
	---	41	Kingdom
	1	64	Slow Str.2
	---	65	Slow Str.3
51	0	0	SynthStr.1
	---	27	Reso Str.
	8	35	SynthStr.3
	1	64	OB Strings
	---	65	SS Str.
52	0	0	SynthStr.2
53	0	0	ChoirAahs1
	8	3	St.Choir
	32	16	ChoirAahs2
	9	32	MelloChoir
	---	40	Choir Str.
	---	64	StringAahs
	---	65	Male Aahs
54	0	0	Voice Oohs
	---	64	Voice Doo
	---	96	Voice Hmn
55	0	0	SynVox
	8	40	Syn.Voice
	---	41	Choral
	---	64	AnaVoice
56	0	0	Orch.Hit 1
	---	35	Orch.Hit 2
	8	64	Impact Hit
	9	65	Philly Hit
	10	66	Double Hit
	---	67	BrassStab
	16	---	Lo Fi Rave
Brass			
57	0	0	Trumpet 1
	1	16	Trumpet 2
	24	17	Bright Tp.
	25	32	Warm Tp.
	8	96	FlugelHorn
58	0	0	Trombone 1
	1	18	Trombone 2
59	0	0	Tuba 1
	1	16	Tuba 2
60	0	0	Muted Tp.1
	---	64	Muted Tp.2
61	0	0	Fr.Horn 1
	8	6	FrHornSolo
	1	32	Fr.Horn 2
	16	37	Horn Orch
62	0	0	Brass 1
	---	14	SfrzndBrs
	---	35	Tp&Tb Sec.
	16	39	Brass Fall
	8	40	Brass 2
	---	41	HiBrass
	---	42	Mellow Brs
63	0	0	Syn.Brass1
	9	12	QuackBrass
	---	20	RezoSynBrs
	1	24	Poly Brass
	8	27	Syn.Brass3
	---	32	Jump Brass
	---	45	AnaVeloBrs

PC	rBank	yBank	Instrument
63	---	64	Analog Brs
	16	---	Octave Brs
64	0	0	Syn.Brass2
	1	18	Soft Brass
	8	40	Syn.Brass4
	---	41	ChoirBrass
	17	45	VeloBrass2
	16	64	VeloBrass1
Reed			
65	0	0	SopranoSax
66	0	0	Alot Sax
	---	40	Sax Sect.
	8	43	Hyper Alto
67	0	0	TenorSax 1
	8	40	BrethTenor
	---	41	Soft Tenor
	---	64	TenorSax 2
68	0	0	Bari.Sax
69	0	0	Oboe
70	0	0	EnglishHrn
71	0	0	Bassoon
72	0	0	Clarinet
	8	96	BsClarinet
Pipe			
73	0	0	Piccolo
74	0	0	Flute
75	0	0	Recorder
76	0	0	PanFlute 1
	---	64	PanFlute 2
	8	96	Kawala
77	0	0	BottleBlow
78	0	0	Shakuhachi
79	0	0	Whistle
80	0	0	Ocarina
Synth Lead			
81	0	0	SquareWave
	1	6	Square
	6	8	LM Square
	2	18	HollowMini
	5	19	Shmoog
	3	64	Mellow FM
	4	65	Soft Solo
	8	66	Sine Wave
82	0	0	Saw Wave
	1	6	Saw
	3	8	Thick Saw
	7	18	LA Saw
	---	19	Digi.Saw
	4	20	Big Lead
	6	24	HeavySynth
	16	25	WaspySynth
	2	40	Pulse Saw
	8	41	DoctorSolo
	5	45	Velo Lead
	---	96	Seq.Analog
83	0	0	SynCaliope
	1	64	Vent Synth
	2	65	PurePanLd.
84	0	0	Chiffer Ld
	---	64	Rubby
85	0	0	Charang
	8	64	Dist.Lead
	---	65	Wire Lead
86	0	0	Solo Vox
	---	24	Synth.Aahs
	---	64	Vox Lead
87	0	0	5th Saw
	1	35	Big Fives
88	0	0	Bass&Lead
	1	16	Big & Raw

PC	rBank	yBank	Instrument
88	2	64	Fat&Perky
	---	65	SoftWurl
Synth Pad			
89	0	0	Fantasia 1
	1	64	Fantasia 2
90	0	0	Warm Pad
	1	16	Thick Pad
	4	17	Soft Pad
	---	18	Sine Pad
	2	64	Horn Pad
	3	65	Rotary Str
91	0	0	PolySynth
	1	64	80sPolySyn
	---	65	Click Pad
	---	66	Analog Pad
	---	67	Square Pad
92	0	0	SpaceVoice
	1	64	Heaven
	---	65	Lite Pad
	---	66	Itopia
	---	67	Cycle Pad
93	0	0	Bowed Glass
	---	64	Glacier
	---	65	Glass Pad
94	0	0	Metal Pad
	1	64	Tine Pad
	2	65	Panner Pad
95	0	0	Halo Pad
96	0	0	Sweep Pad
	9	20	Shwimmer
	8	27	Converge
	1	64	Polar Pad
	---	65	Sweepy
	10	66	Celestial
Synth Effects			
97	0	0	Ice Rain
	8	45	Clavi Pad
	1	64	Harmo Rain
	2	65	AfricaWood
	---	66	Caribean
98	0	0	Soundtrack
	2	27	Prologue
	1	64	Ancestral
	8	65	Rave
99	0	0	Crystal
	---	12	SynDrComp
	---	14	Popcorn
	---	18	Tiny Bell
	3	35	RoundGlock
	5	40	GlockChime
	6	41	ClearBells
	16	42	ChoralBell
	1	64	Syn.Mallet
	2	65	SftCrystal
	4	66	Loud Glock
	7	67	Xmas Bell
	8	68	VibraBells
	9	69	Digi Bells
	17	70	Air Bells
	18	71	Bell Harp
	19	72	Gamelimba
100	0	0	Atmosphere
	1	18	Warm Atmos
	4	19	HollowRels
	5	40	Nylon+EP
	2	64	Nylon Harp
	3	65	Harpvox
	6	66	AmbientPad
	---	67	Planet
101	0	0	Brightness

GM-a/r:Bank/y:Bank

Bank Select r:Bank MSB=r:Bank No., LSB=0
Bank Select y:Bank MSB=0, LSB=y:Bank No.

PC	rBank	yBank	Instrument
101	---	64	Fanta Bell
	---	96	Smokey
102	0	0	Goblin
	1	64	Goblinson
	2	65	50s Sci-Fi
	---	66	Ring Pad
	---	67	Ritual
	---	68	ToHeaven
	---	69	Milky Way
	---	70	Night
	---	71	Glisten
	---	72	Puffy
	---	96	Bell Choir
103	0	0	Echo Drops
	3	8	Echo Pan 2
	2	14	Echo Pan 1
	1	64	Echo Bell
	4	65	Big Panner
	6	66	WaterPiano
	---	67	Creation
	---	68	Stardust
	5	69	ResoPanner
104	0	0	StarTheme1
	1	64	StarTheme2
	---	65	Odyssey
Ethnic			
105	0	0	Sitar 1
	2	32	Det.Sitar
	1	35	Sitar 2
	8	96	Tambra
	16	97	Tamboura
106	0	0	Banjo
	1	28	MutedBonjo
	8	96	Rabab
	16	97	Gopichant
	24	98	Oud
107	0	0	Shamisen
	1	96	Tsugaru
108	0	0	Koto
	8	96	TaishoKoto
	16	97	Kanoon
109	0	0	Kalimba
	---	64	BigKalimba
110	0	0	Bagpipe
111	0	0	Fiddle
112	0	0	Shanai 1
	1	64	Shanai 2
	8	96	Pungi
	16	97	Hichiriki
Percussive			
113	0	0	TinkleBell
	8	96	Bonang
	9	97	Gender
	10	98	GamelaGong
	11	99	St.Gamelan
	16	100	RamaCymbal
	---	101	Asian Bell
114	0	0	Agogo
	8	96	Atarigane
115	0	0	SteelDrums
	---	96	Tablas
	---	97	Glass Perc
	---	98	Thai Bell
116	0	0	Woodblock
	8	96	Castanets
117	0	0	Taiko
	8	96	Concert BD
118	0	0	Melo.Tom 1
	8	64	Melo.Tom 2
	1	65	Real Tom
118	9	66	Rock Tom
119	0	0	Synth Drum
	8	64	Analog Tom
	9	65	Elec Perc
120	0	0	RevCymbal1
	1	64	RevCymbal2
	8	96	Rev.Snare1
	9	97	Rev.Snare2
	16	98	Rev.Kick 1
	17	99	Rev.ConBD
	24	100	Rev.Tom 1
	25	101	Rev.Tom 2
Sound Effects			
121	0	0	FretNoise
	1	---	CutNoise 1
	2	---	StringSlap
	3	---	CutNoise 2
	4	---	DstCutNoiz
	5	---	Bass Slide
	6	---	PickScrape
122	0	0	BreathNoiz
	1	---	FlKeyClick
123	0	0	Seashore
	1	---	Rain
	2	---	Thunder
	3	---	Wind
	4	---	Stream
	5	---	Bubble
124	0	0	Bird 1
	1	---	Dog
	2	---	Gallop
	3	---	Bird 2
	4	---	Kitty
	5	---	Growl
125	0	0	Telephone1
	1	---	Telephone2
	2	---	Door-Creak
	3	---	Door-Slam
	4	---	Scratch 1
	5	---	WindChimes
	7	---	Scratch 2
126	0	0	Helicopter
	1	---	Car-Engine
	2	---	Car-Stop
	3	---	Car-Pass
	4	---	Car-Crash
	5	---	Siren
	6	---	Train
	7	---	Jetplane
	8	---	Starship
	9	---	BurstNoise
127	0	0	Applause 1
	1	---	Laughing
	2	---	Screaming
	3	---	Punch
	4	---	Heart Beat
	5	---	Footsteps
	6	---	Applause 2
128	0	0	Gun Shot
	1	---	MachineGun
	2	---	Laser Gun
	3	---	Explosion

ySFX Bank

Bank Select MSB=64, LSB=0

PC	Instrument
1	CutNoise 1
2	CutNoise 2
3	DstCutNoiz
4	StringSlap
5	Bass Slide
6	PickScrape
17	FlKeyClick
33	Rain
34	Thunder
35	Wind
36	Stream
37	Bubble
38	Feed
49	Dog
50	Gallop
51	Bird 2
52	Kitty
53	Growl
54	Haunted
55	Ghost
56	Maou
65	Telephone1
66	Door-Creak
67	Door-Slam
68	Scratch 1
69	Scratch 2
70	WindChimes
71	Telephone2
81	Car-Engine
82	Car-Stop
83	Car-Pass
84	Car-Crash
85	Siren
86	Train
87	Jetplane
88	Starship
89	BurstNoise
90	Coaster
91	Submarine
97	Laughing
98	Screaming
99	Punch
100	Heart Beat
101	FootSteps
102	Applause 2
113	MachineGun
114	Lasergun
115	Explosion
116	Firework

r:CM Bank

Bank Select MSB=127, LSB=0

PC	Name
1	Piano 1
2	AcouPiano1
3	AcouPiano2
4	DigiPiano
5	Elec.Piano
6	FunkyRoads
7	Whiry
8	HonkyTonk
9	Elec Org 1
10	Elec Org 2
11	Elec Org 3
12	Elec Org 4
13	Pipe Org 1
14	Pipe Org 2
15	Pipe Org 3
16	AccordionF
17	Harpsi 1
18	Harpsi 2
19	Harpsi 3
20	Clav.1
21	Clav.2
22	Clav.3
23	Celesta
24	Celesta 2
25	Syn.Brass5
26	Syn.Brass6
27	Syn.Brass7
28	Syn.Brass8
29	SynthBass4
30	SynthBass5
31	SynthBass6
32	SynthBass7
33	Fantasy
34	Harmo Pan
35	Chorale
36	Glasses
37	Soundtrack
38	Atmosphere
39	Warm Bell
40	Funny Vox
41	Echo Bell
42	Ice Rain
43	Syn.Oboe
44	Echo Pan
45	DoctorSolo
46	SchoolDaze
47	Bellsinger
48	SquareWave
49	Str Sect 1
50	Str Sect 2
51	Str Sect 3
52	Pizzicato
53	Violin 1
54	Violin 2
55	Cello 1
56	Cello 2
57	ContraBs.2
58	Harp 2
59	Harp
60	Guitar 1
61	Guitar 2
62	Nyln+Steel
63	Elec Gtr
64	Sitar 3

PC	Name
65	AcouBass 1
66	AcouBass 2
67	ElecBass 1
68	ElecBass 2
69	SlapBass 3
70	SlapBass 4
71	Fretless 1
72	Fretless 1
73	Flute 1
74	Flute 2
75	Piccolo 1
76	Piccolo 2
77	Recorder
78	PanFlute 1
79	Tenor Sax
80	Bari.Sax
81	Bari.Sax
82	SopranoSax
83	Clarinet 1
84	Clarinet 2
85	Oboe
86	EnglishHrn
87	Bassoon
88	Harmonica
89	Trumpet 3
90	Trumpet 4
91	Trombone 3
92	Trombone 4
93	Fr.Horn 3
94	Fr.Horn 4
95	Tuba 1
96	Brs Sect 1
97	Brs Sect 2
98	Vibe 1
99	Vibe 2
100	SynMallet2
101	Wind Bell
102	Glocken
103	Tubular
104	Xylophone
105	Marimba
106	Koto
107	Sho
108	Shakuhachi
109	Whistle
110	Whistle
111	BottleBlow
112	Arabesque
113	Timpani
114	Melo.Tom 1
115	Deep Snare
116	GiantDrums
117	Synth Drum
118	Taiko
119	Taiko Rim
120	Cymbal
121	Castanets
122	Triangle
123	Orch.Hit 1
124	Telephone1
125	Brid Tweet
126	MalletLoop
127	FlyingToys
128	Festival!

GM-b

Bank Select MSB=56 or 57, LSB=0

PC	Name
1	Piano
2	BritePiano
3	HammerPno
4	HonkeyTonk
5	NewTines
6	Digi Piano
7	Harpsicord
8	Clav
9	Celesta
10	Glocken
11	Music Box
12	Vibes
13	Marimba
14	Xylophon
15	Tubular
16	Santur
17	Full Organ
18	Perc Organ
19	BX-3 Organ
20	ChurchPipe
21	Positive
22	Musette
23	Harmonica
24	Tango
25	ClassicGtr
26	A.Guitar
27	JazzGuitar
28	CleanGtr
29	MuteGuitar
30	Over Drive
31	DistGuitar
32	RockMonics
33	Jazz Bass
34	Deep Bass
35	Pick Bass
36	Fretless
37	SlapBass1
38	SlapBass2
39	SynthBass1
40	SynthBass2
41	Violin
42	Viola
43	Cello
44	ContraBass
45	TremoloStr
46	Pizzicato
47	Harp
48	Timpani
49	Marcato
50	SlowString
51	Analog Pad
52	String Pad
53	Choir
54	Doo Voice
55	Voices
56	Orch Hit
57	Trumpet
58	Trombone
59	Tuba
60	Muted Trpt
61	FrenchHorn
62	Brass
63	SynBrass1
64	SynBrass2

PC	Name
65	Soprano Sax
66	Alto Sax
67	Tenor Sax
68	Bari Sax
69	Sweet Oboe
70	EnglishHrn
71	BasoonOboe
72	Clarinet
73	Piccolo
74	Flute
75	Recorder
76	Pan Flute
77	Bottle
78	Shakuhachi
79	Whistle
80	Ocarina
81	SquareWave
82	Saw Wave
83	SynCaliope
84	Syn Chiff
85	Charang
86	AirChorus
87	Rezzo4ths
88	Bass&Lead
89	Fantasia
90	Warm Pad
91	Poly Pad
92	Ghost Pad
93	BowedGlass
94	Metal Pad
95	Halo Pad
96	Sweep
97	Ice Rain
98	SoundTrack
99	Crystal
100	Atmosphere
101	Brightness
102	Goblin
103	Echo Drop
104	Star Theme
105	Sitar
106	Banjo
107	Shamisen
108	Koto
109	Kalimba
110	Scotland
111	Fiddle
112	Shanai
113	Metal Bell
114	Agogo
115	SteelDrums
116	Woodblock
117	Taiko
118	Tom
119	Synth Tom
120	RevCymbal
121	Fret Noise
122	NoiseChiff
123	Seashore
124	Birds
125	Telephone
126	Helicopter
127	Stadium!!
128	GunShot

PrgU (N1)

Bank Select MSB=80, LSB=Ignored
MSB=0, LSB=0 (05R/W Map)

PC	Name	PC	Name
0	Expansions	50	Intro Pad
1	St. Piano	51	Piano Pads
2	BigBadBari	52	Fox Horns
3	Droid Beat	53	Ark Textur
4	RosewoodGt	54	N1 Clav
5	Rock Organ	55	N1 Organ
6	WalkinBass	56	Snap Bass
7	Symphony	57	Horns&Bows
8	Modular 3C	58	Syn Bottle
9	Techno Kit	59	BadWeather
10	Color Pad	60	KorgStatio
11	N1WhirlyEP	61	N1GrandEP
12	Big Brass	62	SopranoAir
13	Band Hit	63	Synthasaur
14	AcousticGT	64	O.D. Lead
15	VintageBX3	65	Brilliant
16	Solid Bass	66	StringSlap
17	LightVoice	67	St.Quartet
18	Solo Synth	68	Pulse
19	Harp Gliss	69	[ComboKit]
20	PlanetS+H	70	Padonomic
21	DWGS Dream	71	N1 Dyno EP
22	Reed&Flute	72	Orch&Horns
23	Throbmastr	73	CraterDust
24	Air Guitar	74	Stadium GT
25	N1JazzOrg	75	WhiteShade
26	AnaSawBass	76	Digi Bass
27	WindString	77	ArcoString
28	Mega Keys	78	WhiteHorns
29	Power Drum	79	ChurchBell
30	GlideSweep	80	The Voyage
31	N1 A.Piano	81	EP&Waves
32	TP & Brass	82	SuperBrass
33	Visitors	83	Smash It
34	PedalSteel	84	Mega Clav
35	StageOrgan	85	MasterFisa
36	SuperRound	86	LowRezBass
37	Divisi	87	Super Pizz
38	SynthBrass	88	SynLead 1
39	ODRaveKit	89	InTheTrees
40	AnaSquares	90	VeloSweep
41	N1StageEP	91	Magic Tines
42	V.S. Brass	92	Big Bones
43	PluggedIn	93	SonicBlast
44	Strummers	94	Guitar Pad
45	SmallPipes	95	Perc Trem
46	Slap&Slide	96	Big Mini
47	MixedChoir	97	GlassVoice
48	Pizarro's	98	Lead Stab
49	SteelDrums	99	Good Vibes

PrgU (N5)

Bank Select MSB=80, LSB=Ignored
MSB=0, LSB=0 (05R/W Map)

PC	Name	PC	Name
0	REZ:Matrix	50	Intro Pad
1	Classic	51	Wire Grand
2	BigBadBari	52	Fox Horns
3	Droid Beat	53	Ark Textur
4	RosewoodGt	54	Electric12
5	Rock Organ	55	VS Organ
6	WalkinBass	56	Snap Bass
7	Symphony	57	Horns&Bows
8	Modular 3C	58	Syn Bottle
9	Techno Kit	59	BadWeather
10	Color Pad	60	KorgStatio
11	Piano&Air	61	StagePiano
12	Big Brass	62	SopranoAir
13	Band Hit	63	Synthasaur
14	AcousticGT	64	O.D. Lead
15	VintageBX3	65	Brilliant
16	Solid Bass	66	StringSlap
17	LightVoice	67	St.Quartet
18	Solo Synth	68	Pulse
19	Harp Gliss	69	[ComboKit]
20	PlanetS+H	70	Padonomic
21	DWGS Dream	71	Crystal EP
22	Reed&Flute	72	Orch&Horns
23	Throbmastr	73	CraterDust
24	Air Guitar	74	Stadium GT
25	TremoloOrg	75	WhiteShade
26	AnaSawBass	76	Digi Bass
27	WindString	77	ArcoString
28	Mega Keys	78	WhiteHorns
29	Power Drum	79	ChurchBell
30	GlideSweep	80	The Voyage
31	GrandPiano	81	Tine Waves
32	TP & Brass	82	SuperBrass
33	Visitors	83	Smash It
34	PedalSteel	84	Fly Clav
35	StageOrgan	85	MasterFisa
36	SuperRound	86	LowRezBass
37	Divisi	87	Super Pizz
38	SynthBrass	88	SynLead 1
39	ODRaveKit	89	InTheTrees
40	AnaSquares	90	VeloSweep
41	Velvet EP	91	Classic EP
42	V.S. Brass	92	Big Bones
43	PluggedIn	93	SonicBlast
44	Strummers	94	Guitar Pad
45	SmallPipes	95	Perc Trem
46	Slap&Slide	96	Big Mini
47	MixedChoir	97	GlassVoice
48	Pizarro's	98	Lead Stab
49	SteelDrums	99	Good Vibes

PrgA

Bank Select MSB=81, LSB=Ignored

PC	Name
0	RunawayPad
1	N Piano
2	Tenor&Alto
3	Chord Vox
4	Flamenco
5	RockSteady
6	Upright
7	N Strings
8	LA Synth
9	Street Kit
10	Alaska
11	PF&Strings
12	Octa Brass
13	Rave Mix
14	BriteSteel
15	Rotary Org
16	BassPicker
17	Boys Choir
18	MonoLead
19	TheSunrise
20	Vortex
21	VS E.Piano
22	Dyno Flute
23	WhiteNoise
24	Bouzouki
25	Jazz Organ
26	ReMixBass
27	Air Vox
28	Stab Pad
29	Lazer Toms
30	Sunrise
31	Rock Piano
32	Classic TP
33	Velo rez
34	HollowBody
35	R&B Organ
36	SweetStick
37	TheStrings
38	Xanalog
39	VeloGated
40	Swell Pad
41	Vintage EP
42	Brass Ens1
43	Coco
44	Parker Gt
45	Full Pipes
46	Slap It
47	VocalChoir
48	MiniODLead
49	Gamelan
50	Universe X
51	Piano Pad
52	FlugelHorn
53	SynMallet
54	Mr. Clean
55	60's Organ
56	Dance Bass
57	Quick Bows
58	Fresh Air
59	VoodooSong
60	Antartica
61	PowerPiano
62	AvantGarde
63	DreamWorld
64	TubeCrunch
65	Mixture
66	NuFretless
67	Aggiatato
68	Split Sync
69	[KrazyKit]
70	LandingPad
71	NightTines
72	SalsaHorns
73	Up We Go
74	TheRipper
75	DanceOrgan
76	FatRezBass
77	ViolinSect
78	Pulsator
79	DreamBells
80	In The Pad
81	LA Layer
82	Big Band
83	Stereo Hit
84	Funk Clav
85	Polka Box
86	Ultra Rez
87	Light Pizz
88	AT Rsonanz
89	[Jet star]
90	Fragments
91	SuperTines
92	Trombones
93	CyberTrash
94	Mandolin
95	BX3 Medium
96	ChromeBass
97	SopranoVox
98	Syn Brass
99	Logs&Bells

PrgB

Bank Select MSB=82, LSB=Ignored

PC	Name
0	LostWrldMS
1	Studio
2	AltoBreath
3	DanceReMix
4	BriteNylon
5	Distortion
6	ParkerBass
7	Legato Str
8	EtherBells
9	ProducrKit
10	Transforms
11	EP&Strings
12	Brass Ens2
13	Break It Up
14	12StringGt
15	Organomics
16	Heavy Pick
17	Humm Vox
18	Square
19	Mark Tree
20	Sputnik
21	HarmonicEP
22	Arabesque
23	50's SciFi
24	Follow Me
25	Warm Organ
26	SquareBass
27	AnalogPad
28	Residue
29	[Manimals]
30	BellShower
31	Elec.Grand
32	TB&TP
33	RoboticRez
34	StereoClav
35	Velo Organ
36	Stein Bass
37	OrchDivisi
38	Fatfilterz
39	SFX1
40	Wire Pad
41	Whirly EP
42	BrassSwell
43	SynTronic
44	Stratified
45	Principal
46	Super Bass
47	Full Choir
48	EOEknobSqr
49	Orch Perc
50	Fish Pad
51	MagicPiano
52	Soft Horns
53	New Era
54	Rock Mutes
55	CX-3 Organ
56	Deep House
57	OrchString
58	PowerLayer
59	PipeDreams
60	Ravel Pad
61	M1PianoL&R
62	Bag Pipes
63	!!!Bang!!!
64	FeedbackGt
65	Vox Organ
66	Roto Bass
67	Cello Ens
68	SyncNoEvil
69	Total Kit
70	SlowSunset
71	Motion EP
72	PowerHorns
73	TimeWarper
74	RockGuitar
75	Key Click
76	JackSlide
77	Wide Bows
78	Total Synth
79	JewelryBox
80	Dustette
81	Wave Piano
82	Fanfare
83	MachineAge
84	D6 Clav
85	Fisa 8'
86	Super Rez
87	HarpString
88	03R/WPulse
89	Waterphone
90	Spectrum
91	Dream EP
92	StereoHorn
93	[Down Low]
94	Sitars
95	Super BX-3
96	Velo Pick
97	FilmVoices
98	Analogist
99	OldKalimba

PrgC

Bank Select MSB=83, LSB=Ignored

PC	Name
0	Introspect
1	Concert
2	Air Shaku
3	[Mr. Gong]
4	NylonDream
5	Knife Edge
6	Stand Up
7	DynoString
8	Super->Stab
9	Modern Kit
10	GlideSynth
11	PianoHaven
12	BrassFalls
13	Glass Hit
14	Guitar L+R
15	RotorNoise
16	FingerBass
17	RealVoices
18	EOEknobSaw
19	Asian Jung
20	Motion
21	Syn Piano
22	Synth Fife
23	Heartbeat
24	Harmonics
25	ComboOrgan
26	AnaSQ-Bass
27	AnaStrings
28	Chester
29	MalletLoop
30	WaveSweep
31	Piano & EP
32	Trumpets
33	Chrome Rez
34	MadlinTrem
35	Classic"B"
36	Rap Bass
37	Underscore
38	Composure
39	SFX2
40	Pulse Pad
41	Stage Tine
42	Brass Band
43	Repeater
44	Clean Funk
45	MediumPipe
46	Thumb&Slap
47	Vox Angels
48	AnalogSync
49	Flutter
50	Soft Pad
51	MIDI Grand
52	Woodwinds
53	Industrial
54	R&R Guitar
55	Drawbars
56	Bass Zap
57	VoxStrings
58	CompThing!
59	CicadaBugs
60	Wavetables
61	M1 Piano
62	SmokyTenor
63	Space Pets
64	Rock On!!!
65	Tube Organ
66	Fat Fretty
67	StringSect
68	Busy Boy
69	Zulu Kit
70	Polysix
71	Velo Stage
72	MutedBrass
73	Multi Rez
74	MonsterWah
75	Gospel Org
76	SynthBass3
77	SilkString
78	Sawtooth
79	Ice Bell
80	Mind Scan
81	Maxi Tines
82	Sfz Brass
83	UnderWater
84	Wah Clav
85	Velo Perc
86	Rez Bass
87	Velo Orch
88	Reso Waves
89	Wind Storm
90	Warm Glow
91	Warm Tines
92	Horn Ens
93	Power Play
94	Tamboura
95	Green Eyes
96	Stick Bass
97	WhisperVox
98	AnalogHorn
99	Lore

CmbU (N1)

Bank Select MSB=88, LSB=Ignored

PC	Name
0	Alignment
1	Zinger EP
2	Acappella
3	Rain Dance
4	Blue Bass
5	Fast Perc
6	VoxD'House
7	Midnight
8	Pulse:Mod
9	FilmDrama
10	Moonrise
11	PianoMagic
12	12ToneBelz
13	Afro/Cuban
14	CrankItUp!
15	SwingHorns
16	Hip House
17	Sweeteners
18	Mega Pulse
19	Wild Rave
20	Flangesty
21	Dynamite
22	Goodbyes
23	Indian Jam
24	FolkGuitar
25	Mr. "BX-3"
26	Dyno Split
27	Pizz A Pie
28	DroidRoad
29	DJ*ToolBox
30	Futurist
31	Cyclic EP
32	Vox Bells
33	NightTrain
34	Tune Smith
35	16 Horns
36	Rezzo Rave
37	LegatoReed
38	CanyonView
39	UnderWorld
40	Dizzying
41	Vox King
42	IceClimber
43	Zen Garden
44	Iron Layer
45	GreatOrgan
46	ForceField
47	The Loner
48	New Rave
49	Stereo Kit

PC	Name
50	Chem Lab
51	Beefy EP
52	Wordless
53	Discovery
54	Gtr/Flute
55	Fanfare
56	Virtuals
57	5000 BC
58	TheModKnob
59	Borg Space
60	DreamPulse
61	InYourEyes
62	The Light
63	Big Ben
64	Mr. Metal
65	N1JazzMan
66	Split Bass
67	Strings
68	PureAnalog
69	Invaders
70	Luminous
71	Ballad EP
72	Nashville
73	Witch Hunt
74	WaveGuitar
75	Trpt&Bones
76	BS&StPiano
77	Heavy Bows
78	TheLastOne
79	Beam Me Up
80	Generators
81	ProStageEP
82	Child Song
83	Instanbul
84	RezStakBS
85	OverLoad!
86	Latin Band
87	FreshRosin
88	GlassPipes
89	Elements
90	PowderSnow
91	Mouth Harp
92	Sea Horses
93	Trinidad
94	AtTheFeast
95	Eruption
96	CelticBand
97	HarpString
98	Unison
99	MotherShip

CmbU (N5)

Bank Select MSB=88, LSB=Ignored

PC	Name
0	From Above
1	ZingerKeys
2	Acappella
3	Rain Dance
4	Blue Bass
5	Fast Perc
6	VoxD'House
7	Midnight
8	Pulse:Mod
9	FilmDrama
10	Moonrise
11	PianoMagic
12	12ToneBelz
13	Afro/Cuban
14	CrankItUp!
15	SwingHorns
16	Hip House
17	Sweeteners
18	Mega Pulse
19	Wild Rave
20	Flangesty
21	Dynamite
22	Goodbyes
23	Indian Jam
24	FolkGuitar
25	Mr. "BX-3"
26	Split Keys
27	Pizz A Pie
28	DroidRoad
29	DJ*ToolBox
30	Futurist
31	Cyclic EP
32	Vox Bells
33	NightTrain
34	Tune Smith
35	16 Horns
36	Rezzo Rave
37	LegatoReed
38	CanyonView
39	UnderWorld
40	Dizzying
41	Vox King
42	IceClimber
43	Zen Garden
44	Iron Keys
45	GreatOrgan
46	ForceField
47	The Loner
48	New Rave
49	Stereo Kit

PC	Name
50	Chem Lab
51	Beefy EP
52	Wordless
53	Discovery
54	Gtr/Flute
55	Fanfare
56	Virtuals
57	5000 BC
58	TheModKnob
59	Borg Space
60	DreamPulse
61	InYourEyes
62	The Light
63	Big Ben
64	Mr. Metal
65	TheJazzMan
66	Split Bass
67	Strings
68	PureAnalog
69	Invaders
70	Luminous
71	Ballad EP
72	Nashville
73	Witch Hunt
74	WaveGuitar
75	Trpt&Bones
76	Bass/Piano
77	Heavy Bows
78	TheLastOne
79	Beam Me Up
80	Generators
81	ProStageEP
82	Child Song
83	Instanbul
84	RezStakBS
85	OverLoad!
86	Latin Band
87	FreshRosin
88	GlassPipes
89	Elements
90	PowderSnow
91	Mouth Harp
92	Sea Horses
93	Trinidad
94	AtTheFeast
95	Eruption
96	CelticBand
97	HarpString
98	Unison
99	MotherShip

CmbA

Bank Select MSB=89, LSB=Ignored

PC	Name
0	Megatron
1	Rock Piano
2	Boys Choir
3	SongOfLife
4	StickSplit
5	Stax Organ
6	NeuroFunk
7	NightMusic
8	Hard Sync
9	Slammin'
10	Melotronic
11	Power Comp
12	TheRedSun
13	Ethnetic
14	Guitar Man
15	MutedHorns
16	Euroman
17	BigStrings
18	SkyCatLead
19	HouseOfSki
20	Warriors
21	Velo EP
22	Dreaming
23	IndianOrch
24	12 String
25	Deep Organ
26	SplitOrgan
27	Pizz & Bow
28	ODriveLead
29	PowerHouse
30	FreeTime
31	Emmabama
32	VoxGamelan
33	EastAfrica
34	Fat Pluck
35	Big Band
36	RezzoSplit
37	Sonata
38	Maxi Stab
39	Sea Storm
40	Vectoring
41	The Gospel
42	LunarBells
43	Sting&Wind
44	Slap & Pop
45	WeddingDay
46	Type Aline
47	DelayedHit
48	Have Fun
49	Wild Drums
50	Mast World
51	FunkySpice
52	Voices2Men
53	TheGamelan
54	Chorus Gtr
55	Full Brass
56	Orch Split
57	The Finale
58	CymbalLife
59	HeadHunter
60	L.F.O.City
61	Power Keys
62	Aquarium
63	Ice Bells
64	Oh-La-La !
65	Super Jazz
66	MasterFunk
67	ChamberStr
68	LayerSynth
69	Space Port
70	Uni Verse
71	Stak'oMidi
72	Airiana
73	Wet Lands
74	Guitar&Pad
75	Trombhorns
76	Bass&Vibes
77	Double Bow
78	Sophism
79	Dagobar
80	TheyAppear
81	Piano Pad
82	Milagro
83	RhythmPipe
84	DynamoBass
85	Rock Organ
86	Osaka Jazz
87	Leti Theme
88	Pad+Alpha
89	<N> File
90	Fade Away
91	Accordion
92	Moon Stone
93	Morocco
94	Dulcimer
95	FullManual
96	GiantSplit
97	Bolshoi
98	Synth Fat
99	TimeTunnel

CmbB

Bank Select MSB=90, LSB=Ignored

PC	Name
0	Pollenesk
1	Fat Pianos
2	TheSingers
3	NeverLand
4	World Bass
5	L'ilBit O'
6	House Mix
7	Allegro
8	Rezzo Funk
9	Dance Trak
10	SunOfTron
11	EP&String
12	AlienSings
13	Hot Salsa
14	InTheArena
15	SmokyHorn
16	PhaseTwins
17	AnaStrings
18	Sync Home
19	EtherScape
20	Star*Burst
21	Super EP
22	Star Lense
23	Calcutta
24	Malaguena
25	O.D. Organ
26	Bass/Horn
27	Nutcracker
28	PowerStack
29	Rave Hits
30	First*Snow
31	SamAntic
32	SilkRoad33
33	AfricaMood
34	12 Stereo
35	PhantomSax
36	BiggerIdea
37	Serenade
38	Ruff&Ready
39	Worm Hole
40	Galaxia
41	Two In One
42	Bell Come!
43	TheOldWest
44	Slappin'
45	Mixture
46	BreakADish
47	WoodSector
48	Multi Rez
49	RapToolKit
50	StormOf'97
51	ChorusClav
52	Goldmine
53	<The East>
54	HeartBreak
55	BrassSwell
56	Cool Duet
57	Overture
58	HitTheDust
59	Wild Split
60	N:Wave:Seq
61	M-1LayerEP
62	DeathStars
63	Java Bells
64	Maya Dance
65	The Legend
66	X-Voxsplit
67	ChamberOrc
68	Emmalog
69	AlienProbe
70	Nebulae
71	Digi Piano
72	VeloVoices
73	Botswana
74	Prog Split
75	Trpt.Brass
76	Bass/Brass
77	Bows&Brass
78	TheSweeper
79	TheDentist
80	Rezolution
81	Dreamy P
82	Echo Suite
83	Blues Harp
84	Split Bass
85	Cathedral
86	Jazz Duet
87	Philarmony
88	Enose Horn
89	Bug Forest
90	InTheMaze
91	MasterFisa
92	ProxiMidi
93	SugarBells
94	Bavaria
95	BigDrawbar
96	There&Back
97	HornMelody
98	Lead &Pad
99	<<<Hell>>>

CmbC

Bank Select MSB=91, LSB=Ignored

PC	Name
0	The Abyss
1	StereoKeys
2	<<Heaven>>
3	Pacifica
4	Slap Stick
5	Grinding B
6	Green Rave
7	Delicato
8	Big Swell
9	RagaTrance
10	QuarkSpark
11	PianoSings
12	New Worlds
13	Percolator
14	Velo Chord
15	SweetMutes
16	Asidic
17	StringsAtk
18	Rezzo Comp
19	HouseParty
20	Vaporizer
21	MIDIEP-Pad
22	Lassie&Tim
23	Ghame Jana
24	Folk Picks
25	Hippy's
26	Piano&Str
27	Velo-Pizz
28	PolyChords
29	TheBigBang
30	SolarFlare
31	LayerPiano
32	PizzoSynth
33	The Sphinx
34	ShoeString
35	MillerTime
36	Anna Split
37	WoodWinds
38	AnalogKing
39	RainForest
40	Beach Walk
41	Satellite
42	Rain Chime
43	Sir Robin
44	Acid Tools
45	PipeOrgan
46	Busy Split
47	Madrigal
48	ChrisTall
49	Marching
50	Encounters
51	Harpsicord
52	AngelChoir
53	<The West>
54	Dole Bee
55	Horn Stabs
56	Str/Oboe
57	Ensembled
58	Centrefold
59	THE Deep
60	FlutterPad
61	Layer Cake
62	HumanBeam
63	ChinaBell
64	Mr. Tone
65	Ultra Perc
66	WaveJammer
67	EthnicOrch
68	OctaveLead
69	Max Impact
70	HereItComz
71	Tiny&Tiny
72	Sing To Me
73	Lost Tribe
74	Power Band
75	Real Horns
76	Bs/EP&Str
77	Bows/Trpt
78	Blade Runs
79	Half Moons
80	Alienesque
81	DynoPiano
82	Rave Vox
83	Ethno Geo
84	Fret-Not!
85	Full Pipe
86	Bass&Piano
87	Grandioso
88	Torquemada
89	GABBA
90	FirstLight
91	Mazurca
92	VeloVoxBel
93	Javanese
94	Warm Koto
95	Super Perc
96	ChiffSplit
97	OrchDivisi
98	Midi Winds
99	Bad Dream

Drumkit

	0 STANDARD			1 ROOM			2 POWER			3 ELECTRONIC		
	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl
C1		------	OFF		------	OFF		------	OFF		------	OFF
C#1	29	RollSnare1	OFF	29	RollSnare1	OFF	29	RollSnare1	OFF	29	RollSnare1	OFF
D1	121	FingerSnap	OFF	121	FingerSnap	OFF	121	FingerSnap	OFF	121	FingerSnap	OFF
D#1	152	Zap 1	OFF	152	Zap 1	OFF	152	Zap 1	OFF	152	Zap 1	OFF
E1	278	Gun Shot 1	OFF	278	Gun Shot 1	OFF	278	Gun Shot 1	OFF	278	Gun Shot 1	OFF
F1	154	Scratch Hi	7	154	Scratch Hi	7	154	Scratch Hi	7	155	Scratch Lo	7
F#1	155	Scratch Lo	7	155	Scratch Lo	7	155	Scratch Lo	7	154	Scratch Hi	7
G1	40	Stick Hit	OFF	40	Stick Hit	OFF	40	Stick Hit	OFF	40	Stick Hit	OFF
G#1	122	Snap	OFF	122	Snap	OFF	122	Snap	OFF	122	Snap	OFF
A1	284	Metronome1	OFF	284	Metronome1	OFF	284	Metronome1	OFF	284	Metronome1	OFF
A#1	215	Tubular 3	OFF	215	Tubular 3	OFF	215	Tubular 3	OFF	215	Tubular 3	OFF
B1	6	Real Kick	OFF	2	Ambi.Kick	OFF	9	Metal Kick	OFF	10	Dance Kick	OFF
C2	1	Rock Kick	OFF	2	Ambi.Kick	OFF	7	Gated Kick	OFF	14	Syn Kick 4	OFF
C#2	41	Side Stick	OFF	41	Side Stick	OFF	41	Side Stick	OFF	41	Side Stick	OFF
D2	26	Rock Snare	OFF	27	GatedSnare	OFF	27	GatedSnare	OFF	68	OilDrum	OFF
D#2	130	Hand Claps	OFF	130	Hand Claps	OFF	130	Hand Claps	OFF	130	Hand Claps	OFF
E2	22	Light Snare	OFF	25	Ambi.Snare	OFF	26	Rock Snare	OFF	27	GatedSnare	OFF
F2	62	Tom 1 Lo	OFF	65	Tom 2 Lo	OFF	67	ProcessTom	OFF	69	Syn Tom 1	OFF
F#2	52	Close HH	1	52	Close HH	1	52	Close HH	1	52	Close HH	1
G2	62	Tom 1 Lo	OFF	65	Tom 2 Lo	OFF	67	ProcessTom	OFF	69	Syn Tom 1	OFF
G#2	54	Pedal HH	1	54	Pedal HH	1	54	Pedal HH	1	54	Pedal HH	1
A2	62	Tom 1 Lo	OFF	65	Tom 2 Lo	OFF	67	ProcessTom	OFF	69	Syn Tom 1	OFF
A#2	53	Open HH	1	53	Open HH	1	53	Open HH	1	53	Open HH	1
B2	61	Tom 1 Hi	OFF	63	Tom 2 Hi	OFF	67	ProcessTom	OFF	69	Syn Tom 1	OFF
C3	61	Tom 1 Hi	OFF	63	Tom 2 Hi	OFF	67	ProcessTom	OFF	69	Syn Tom 1	OFF
C#3	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF
D3	61	Tom 1 Hi	OFF	63	Tom 2 Hi	OFF	67	ProcessTom	OFF	69	Syn Tom 1	OFF
D#3	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF
E3	45	China Cym	OFF	45	China Cym	OFF	45	China Cym	OFF	180	Rev.Cymbal	OFF
F3	58	Ride Cup	OFF	58	Ride Cup	OFF	58	Ride Cup	OFF	58	Ride Cup	OFF
F#3	100	Tambourine	OFF	100	Tambourine	OFF	100	Tambourine	OFF	100	Tambourine	OFF
G3	47	Splash Cym	OFF	47	Splash Cym	OFF	47	Splash Cym	OFF	47	Splash Cym	OFF
G#3	108	Cowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF
A3	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF
A#3	123	Viblaslap	OFF	123	Viblaslap	OFF	123	Viblaslap	OFF	123	Viblaslap	OFF
B3	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF
C4	79	Hi Bongo	OFF	79	Hi Bongo	OFF	79	Hi Bongo	OFF	79	Hi Bongo	OFF
C#4	78	Lo Bongo	OFF	78	Lo Bongo	OFF	78	Lo Bongo	OFF	78	Lo Bongo	OFF
D4	84	Palm Conga	OFF	84	Palm Conga	OFF	84	Palm Conga	OFF	84	Palm Conga	OFF
D#4	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF
E4	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF
F4	111	Hi Timbal	OFF	111	Hi Timbal	OFF	111	Hi Timbal	OFF	111	Hi Timbal	OFF
F#4	112	Lo Timbal	OFF	112	Lo Timbal	OFF	112	Lo Timbal	OFF	112	Lo Timbal	OFF
G4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF
G#4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF
A4	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF
A#4	96	Maracas	OFF	96	Maracas	OFF	96	Maracas	OFF	96	Maracas	OFF
B4	128	Whistle S	2	128	Whistle S	2	128	Whistle S	2	128	Whistle S	2
C5	129	Whistle L	2	129	Whistle L	2	129	Whistle L	2	129	Whistle L	2
C#5	124	Guiro S	3	124	Guiro S	3	124	Guiro S	3	124	Guiro S	3
D5	125	Guiro L	3	125	Guiro L	3	125	Guiro L	3	125	Guiro L	3
D#5	117	Claves	OFF	117	Claves	OFF	117	Claves	OFF	117	Claves	OFF
E5	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF
F5	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF
F#5	94	Mute Cuica	4	94	Mute Cuica	4	94	Mute Cuica	4	94	Mute Cuica	4
G5	95	Open Cuica	4	95	Open Cuica	4	95	Open Cuica	4	95	Open Cuica	4
G#5	104	MuteTriang	5	104	MuteTriang	5	104	MuteTriang	5	104	MuteTriang	5
A5	105	OpenTriang	5	105	OpenTriang	5	105	OpenTriang	5	105	OpenTriang	5
A#5	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF
B5	101	JingleBell	OFF	101	JingleBell	OFF	101	JingleBell	OFF	101	JingleBell	OFF
C6	102	MarcTree 1	OFF	102	MarcTree 1	OFF	102	MarcTree 1	OFF	102	MarcTree 1	OFF
C#6	119	Castanet	OFF	119	Castanet	OFF	119	Castanet	OFF	119	Castanet	OFF
D6	77	Taiko Lo	6	77	Taiko Lo	6	77	Taiko Lo	6	77	Taiko Lo	6
D#6	77	Taiko Lo	6	77	Taiko Lo	6	77	Taiko Lo	6	77	Taiko Lo	6
E6		------	OFF		------	OFF		------	OFF		------	OFF
F6		------	OFF		------	OFF		------	OFF		------	OFF
F#6		------	OFF		------	OFF		------	OFF		------	OFF
G6		------	OFF		------	OFF		------	OFF		------	OFF
G#6		------	OFF		------	OFF		------	OFF		------	OFF
A6		------	OFF		------	OFF		------	OFF		------	OFF
A#6		------	OFF		------	OFF		------	OFF		------	OFF
B6		------	OFF		------	OFF		------	OFF		------	OFF
C7		------	OFF		------	OFF		------	OFF		------	OFF
C#7		------	OFF		------	OFF		------	OFF		------	OFF
D7		------	OFF		------	OFF		------	OFF		------	OFF
D#7		------	OFF		------	OFF		------	OFF		------	OFF
E7		------	OFF		------	OFF		------	OFF		------	OFF
F7		------	OFF		------	OFF		------	OFF		------	OFF
F#7		------	OFF		------	OFF		------	OFF		------	OFF
G7		------	OFF		------	OFF		------	OFF		------	OFF
G#7		------	OFF		------	OFF		------	OFF		------	OFF
A7		------	OFF		------	OFF		------	OFF		------	OFF
A#7		------	OFF		------	OFF		------	OFF		------	OFF
B7		------	OFF		------	OFF		------	OFF		------	OFF
C8		------	OFF		------	OFF		------	OFF		------	OFF

Drumkit

	4 ANALOG			5 DANCE			6 JAZZ			7 BRUSH		
	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl
C1		------	OFF		------	OFF		------	OFF		------	OFF
C#1	29	RollSnare1	OFF	29	RollSnare1	OFF	29	RollSnare1	OFF	29	RollSnare1	OFF
D1	121	FingerSnap	OFF	121	FingerSnap	OFF	121	FingerSnap	OFF	121	FingerSnap	OFF
D#1	152	Zap 1	OFF	152	Zap 1	OFF	152	Zap 1	OFF	152	Zap 1	OFF
E1	278	Gun Shot 1	OFF	278	Gun Shot 1	OFF	278	Gun Shot 1	OFF	278	Gun Shot 1	OFF
F1	155	Scratch Lo	7	155	Scratch Lo	7	154	Scratch Hi	7	154	Scratch Hi	7
F#1	154	Scratch Hi	7	154	Scratch Hi	7	155	Scratch Lo	7	155	Scratch Lo	7
G1	40	Stick Hit	OFF	40	Stick Hit	OFF	40	Stick Hit	OFF	40	Stick Hit	OFF
G#1	122	Snap	OFF	122	Snap	OFF	122	Snap	OFF	122	Snap	OFF
A1	284	Metronome1	OFF	284	Metronome1	OFF	284	Metronome1	OFF	284	Metronome1	OFF
A#1	215	Tubular 3	OFF	215	Tubular 3	OFF	215	Tubular 3	OFF	215	Tubular 3	OFF
B1	13	Syn Kick 3	OFF	11	Syn Kick 1	OFF	4	Punch Kick	OFF	5	Dry Kick	OFF
C2	13	Syn Kick 3	OFF	10	Dance Kick	OFF	6	Real Kick	OFF	6	Real Kick	OFF
C#2	42	Syn Rim	OFF	41	Side Stick	OFF	41	Side Stick	OFF	41	Side Stick	OFF
D2	31	SynSnare 1	OFF	27	GatedSnare	OFF	23	Dry Snare	OFF	37	Brush Tap	OFF
D#2	130	Hand Claps	OFF	130	Hand Claps	OFF	130	Hand Claps	OFF	36	Brush Slap	OFF
E2	32	SynSnare 2	OFF	25	Ambi.Snare	OFF	22	LightSnare	OFF	38	BrushSwish	OFF
F2	71	SynTom2 Lo	OFF	69	Syn Tom 1	OFF	62	Tom 1 Lo	OFF	73	Brush Tom	OFF
F#2	55	CloseSynHH	1	55	CloseSynHH	1	52	Close HH	1	52	Close HH	1
G2	71	SynTom2 Lo	OFF	69	Syn Tom 1	OFF	62	Tom 1 Lo	OFF	73	Brush Tom	OFF
G#2	55	CloseSynHH	1	55	CloseSynHH	1	54	Pedal HH	1	54	Pedal HH	1
A2	71	SynTom2 Lo	OFF	69	Syn Tom 1	OFF	62	Tom 1 Lo	OFF	73	Brush Tom	OFF
A#2	56	OpenSyn HH	1	56	OpenSyn HH	1	53	Open HH	1	53	Open HH	1
B2	70	SynTom2 Hi	OFF	69	Syn Tom 1	OFF	61	Tom 1 Hi	OFF	73	Brush Tom	OFF
C3	70	SynTom2 Hi	OFF	69	Syn Tom 1	OFF	61	Tom 1 Hi	OFF	73	Brush Tom	OFF
C#3	56	OpenSyn HH	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF
D3	70	SynTom2 Hi	OFF	69	Syn Tom 1	OFF	61	Tom 1 Hi	OFF	73	Brush Tom	OFF
D#3	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF
E3	45	China Cym	OFF	180	Rev.Cymbal	OFF	45	China Cym	OFF	45	China Cym	OFF
F3	58	Ride Cup	OFF	58	Ride Cup	OFF	58	Ride Cup	OFF	58	Ride Cup	OFF
F#3	100	Tambourine	OFF	100	Tambourine	OFF	100	Tambourine	OFF	100	Tambourine	OFF
G3	47	Splash Cym	OFF	47	Splash Cym	OFF	47	Splash Cym	OFF	47	Splash Cym	OFF
G#3	109	SynCowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF
A3	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF
A#3	123	Viblaslap	OFF	123	Viblaslap	OFF	123	Viblaslap	OFF	123	Viblaslap	OFF
B3	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF
C4	79	Hi Bongo	OFF	79	Hi Bongo	OFF	79	Hi Bongo	OFF	79	Hi Bongo	OFF
C#4	78	Lo Bongo	OFF	78	Lo Bongo	OFF	78	Lo Bongo	OFF	78	Lo Bongo	OFF
D4	70	SynTom2 Hi	OFF	84	Palm Conga	OFF	84	Palm Conga	OFF	84	Palm Conga	OFF
D#4	70	SynTom2 Hi	OFF	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF
E4	70	SynTom2 Hi	OFF	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF
F4	111	Hi Timbal	OFF	111	Hi Timbal	OFF	111	Hi Timbal	OFF	111	Hi Timbal	OFF
F#4	112	Lo Timbal	OFF	112	Lo Timbal	OFF	112	Lo Timbal	OFF	112	Lo Timbal	OFF
G4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF
G#4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF
A4	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF
A#4	98	SynMaracas	OFF	96	Maracas	OFF	96	Maracas	OFF	96	Maracas	OFF
B4	128	Whistle S	2	128	Whistle S	2	128	Whistle S	2	128	Whistle S	2
C5	129	Whistle L	2	129	Whistle L	2	129	Whistle L	2	129	Whistle L	2
C#5	124	Guiro S	3	124	Guiro S	3	124	Guiro S	3	124	Guiro S	3
D5	125	Guiro L	3	125	Guiro L	3	125	Guiro L	3	125	Guiro L	3
D#5	118	Syn Claves	OFF	117	Claves	OFF	117	Claves	OFF	117	Claves	OFF
E5	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF
F5	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF
F#5	94	Mute Cuica	4	94	Mute Cuica	4	94	Mute Cuica	4	94	Mute Cuica	4
G5	95	Open Cuica	4	94	Mute Cuica	4	95	Open Cuica	4	95	Open Cuica	4
G#5	104	MuteTriang	5	207	BrightBell	5	104	MuteTriang	5	104	MuteTriang	5
A5	105	OpenTriang	5	207	BrightBell	5	105	OpenTriang	5	105	OpenTriang	5
A#5	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF
B5	101	JingleBell	OFF	101	JingleBell	OFF	101	JingleBell	OFF	101	JingleBell	OFF
C6	102	MarcTree 1	OFF	102	MarcTree 1	OFF	102	MarcTree 1	OFF	102	MarcTree 1	OFF
C#6	119	Castanet	OFF	119	Castanet	OFF	119	Castanet	OFF	119	Castanet	OFF
D6	77	Taiko Lo	6	77	Taiko Lo	6	77	Taiko Lo	6	77	Taiko Lo	6
D#6	77	Taiko Lo	6	77	Taiko Lo	6	77	Taiko Lo	6	77	Taiko Lo	6
E6		------	OFF		------	OFF		------	OFF		------	OFF
F6		------	OFF		------	OFF		------	OFF		------	OFF
F#6		------	OFF		------	OFF		------	OFF		------	OFF
G6		------	OFF		------	OFF		------	OFF		------	OFF
G#6		------	OFF		------	OFF		------	OFF		------	OFF
A6		------	OFF		------	OFF		------	OFF		------	OFF
A#6		------	OFF		------	OFF		------	OFF		------	OFF
B6		------	OFF		------	OFF		------	OFF		------	OFF
C7		------	OFF		------	OFF		------	OFF		------	OFF
C#7		------	OFF		------	OFF		------	OFF		------	OFF
D7		------	OFF		------	OFF		------	OFF		------	OFF
D#7		------	OFF		------	OFF		------	OFF		------	OFF
E7		------	OFF		------	OFF		------	OFF		------	OFF
F7		------	OFF		------	OFF		------	OFF		------	OFF
F#7		------	OFF		------	OFF		------	OFF		------	OFF
G7		------	OFF		------	OFF		------	OFF		------	OFF
G#7		------	OFF		------	OFF		------	OFF		------	OFF
A7		------	OFF		------	OFF		------	OFF		------	OFF
A#7		------	OFF		------	OFF		------	OFF		------	OFF
B7		------	OFF		------	OFF		------	OFF		------	OFF
C8		------	OFF		------	OFF		------	OFF		------	OFF

Drumkit

	8 ORCHESTRA			9 ETHNIC			10 KICK&SNARE			11 SFX		
	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl
C1		------	OFF		------	OFF		------	OFF		------	OFF
C#1	29	RollSnare1	OFF	121	FingerSnap	OFF		------	OFF		------	OFF
D1	121	FingerSnap	OFF	100	Tambourine	OFF		------	OFF		------	OFF
D#1	52	Close HH	1	119	Castanet	OFF		------	OFF		------	OFF
E1	54	Pedal HH	1	43	Crash Cym	OFF		------	OFF		------	OFF
F1	53	Open HH	1	29	RollSnare1	OFF		------	OFF		------	OFF
F#1	57	Ride Edge	OFF	21	Soft Snare	OFF		------	OFF		------	OFF
G1	40	Stick Hit	OFF	49	Orch Cym	OFF		------	OFF	155	Scratch Lo	1
G#1	122	Snap	OFF	15	Orch B.Drm	OFF		------	OFF	154	Scratch Hi	1
A1	284	Metronome1	OFF	101	JingleBell	OFF		------	OFF	136	GtCutNois1	OFF
A#1	215	Tubular 3	OFF	102	MarcTree 1	OFF		------	OFF	137	GtCutNois2	OFF
B1	6	Real Kick	OFF	103	MarcTree 2	OFF		------	OFF	139	Chic 2	OFF
C2	15	Orch B.Drm	OFF	77	Taiko Lo	OFF		------	OFF	138	Chic 1	OFF
C#2	41	Side Stick	OFF	41	Side Stick	OFF		------	OFF	140	Bass Slide	OFF
D2	21	Soft Snare	OFF	81	Tsuzumi	OFF		------	OFF	134	Gt Scratch	OFF
D#2	119	Castanet	OFF	214	Tubular 2	OFF		------	OFF	152	Zap 1	OFF
E2	21	Soft Snare	OFF	117	Claves	OFF	4	Punch Kick	OFF	278	Gun Shot 1	OFF
F2	75	Timpani	OFF	40	Stick Hit	OFF	6	Real Kick	OFF	154	Scratch Hi	7
F#2	75	Timpani	OFF	81	Tsuzumi	OFF	0	Fat Kick	OFF	155	Scratch Lo	7
G2	75	Timpani	OFF	61	Tom 1 Hi	OFF	0	Fat Kick	OFF	40	Stick Hit	OFF
G#2	75	Timpani	OFF	41	Side Stick	OFF	3	Crisp Kick	OFF	122	Snap	OFF
A2	75	Timpani	OFF	218	Gong Lo	OFF	6	Real Kick	OFF	284	Metronome1	OFF
A#2	75	Timpani	OFF	218	Gong Lo	OFF	4	Punch Kick	OFF	215	Tubular 3	OFF
B2	75	Timpani	OFF	217	Gong Hi	OFF	6	Real Kick	OFF	135	Gtr Slide	OFF
C3	75	Timpani	OFF	209	Gamelan 1	OFF	5	Dry Kick	OFF	136	GtCutNois1	OFF
C#3	75	Timpani	OFF	208	Metal Bell	OFF	15	Orch B.Drm	OFF	137	GtCutNois2	OFF
D3	75	Timpani	OFF	209	Gamelan 1	OFF	2	Ambi.Kick	OFF	141	StringSlap	OFF
D#3	75	Timpani	OFF	91	Udu	1	2	Ambi.Kick	OFF	121	FingerSnap	OFF
E3	75	Timpani	OFF	91	Udu	1	7	Gated Kick	OFF	258	Laughing V	OFF
F3	75	Timpani	OFF	110	R-Timbal	OFF	9	Metal Kick	OFF	259	Scream	OFF
F#3	100	Tambourine	OFF	112	Lo Timbal	OFF	14	Syn Kick 4	OFF	260	Punch	OFF
G3	47	Splash Cym	OFF	112	Lo Timbal	OFF	10	Dance Kick	OFF	261	Hart Beat	OFF
G#3	108	Cowbell	OFF	100	Tambourine	OFF	12	Syn Kick 2	OFF	263	Footstep 2	OFF
A3	43	Crash Cym	OFF	89	Tabla 2	7	13	Syn Kick 3	OFF	262	Footstep 1	OFF
A#3	123	Viblaslap	OFF	88	Tabla 1	7	13	Syn Kick 3	OFF	264	Applause 1	OFF
B3	49	Orch Cym	OFF	90	Tabla 3	7	11	Syn Kick 1	OFF	268	Door Creak	OFF
C4	79	Hi Bongo	OFF	87	Baya 2	8	16	Snare 1	OFF	269	Door Slam	OFF
C#4	78	Lo Bongo	OFF	86	Baya 1	8	20	PicloSnare	OFF	159	Scratch c	OFF
D4	84	Palm Conga	OFF	61	Tom 1 Hi	OFF	18	Snare 3	OFF	103	MarcTree 2	OFF
D#4	82	Open Conga	OFF	61	Tom 1 Hi	OFF	24	TightSnare	OFF	270	Car Engine	OFF
E4	82	Open Conga	OFF	96	Maracas	OFF	16	Snare 1	OFF	271	Car Stop	OFF
F4	111	Hi Timbal	OFF	92	Djembe	OFF	21	Soft Snare	OFF	272	Car Pass	OFF
F#4	112	Lo Timbal	OFF	112	Lo Timbal	OFF	23	Dry Snare	OFF	273	Car Crash	OFF
G4	107	Agogo	OFF	112	Lo Timbal	OFF	22	LightSnare	OFF	275	Siren	OFF
G#4	107	Agogo	OFF	113	Timbales	OFF	27	GatedSnare	OFF	276	Train	OFF
A4	97	Cabasa	OFF	111	Hi Timbal	OFF	25	Ambi.Snare	OFF	227	WhiteNoise	OFF
A#4	96	Maracas	OFF	108	Cowbell	OFF	27	GatedSnare	OFF	277	Helicopter	OFF
B4	128	Whistle S	2	79	Hi Bongo	OFF	26	Rock Snare	OFF	228	Jetstar	OFF
C5	129	Whistle L	2	78	Lo Bongo	OFF	27	GatedSnare	OFF	279	Gun Shot 2	OFF
C#5	124	Guiro S	3	84	Palm Conga	OFF	27	GatedSnare	OFF	280	MachineGun	OFF
D5	125	Guiro L	3	82	Open Conga	OFF	25	Ambi.Snare	OFF	281	Laser Gun	OFF
D#5	117	Claves	OFF	85	Mute Conga	OFF	28	PowerSnare	OFF	282	Explosion	OFF
E5	116	WoodBlockL	OFF	83	Slap Conga	OFF	27	GatedSnare	OFF	254	Dog	OFF
F5	116	WoodBlockL	OFF	82	Open Conga	OFF	17	Snare 2	OFF	256	Gallop	OFF
F#5	94	Mute Cuica	4	82	Open Conga	OFF	68	OilDrum	OFF	251	Bird 1	OFF
G5	95	Open Cuica	4	100	Tambourine	OFF	32	SynSnare 2	OFF	244	Rain	OFF
G#5	104	MuteTriang	5	82	Open Conga	OFF	31	SynSnare 1	OFF	245	Thunder	OFF
A5	105	OpenTriang	5	77	Taiko Lo	2	31	SynSnare 1	OFF	246	Wind	OFF
A#5	97	Cabasa	OFF	77	Taiko Lo	2	32	SynSnare 2	OFF	248	Seashore V	OFF
B5	101	JingleBell	OFF	79	Hi Bongo	OFF	32	SynSnare 2	OFF	249	Stream	OFF
C6	102	MarcTree 1	OFF	107	Agogo	OFF	37	Brush Tap	OFF	250	Bubble	OFF
C#6	119	Castanet	OFF	107	Agogo	OFF	37	Brush Tap	OFF	253	Kitty	OFF
D6	77	Taiko Lo	6	98	SynMaracas	OFF	36	Brush Slap	OFF	252	Bird 2	OFF
D#6	77	Taiko Lo	6	129	Whistle L	3	36	Brush Slap	OFF	255	Growl 2	OFF
E6	264	Applause 1	OFF	129	Whistle L	3	36	Brush Slap	OFF	225	Stadium	OFF
F6		------	OFF	94	Mute Cuica	4	38	BrushSwish	OFF	266	Telephone1	OFF
F#6		------	OFF	95	Open Cuica	4	38	BrushSwish	OFF	267	Telephone2	OFF
G6		------	OFF	104	MuteTriang	5	39	BrushSwirl	OFF		------	OFF
G#6		------	OFF	105	OpenTriang	5		------	OFF		------	OFF
A6		------	OFF	124	Guiro S	6		------	OFF		------	OFF
A#6		------	OFF	125	Guiro L	6		------	OFF		------	OFF
B6		------	OFF	97	Cabasa	OFF		------	OFF		------	OFF
C7		------	OFF	97	Cabasa	OFF		------	OFF		------	OFF
C#7		------	OFF	117	Claves	OFF		------	OFF		------	OFF
D7		------	OFF	116	WoodBlockL	OFF		------	OFF		------	OFF
D#7		------	OFF	116	WoodBlockL	OFF		------	OFF		------	OFF
E7		------	OFF		------	OFF		------	OFF		------	OFF
F7		------	OFF		------	OFF		------	OFF		------	OFF
F#7		------	OFF		------	OFF		------	OFF		------	OFF
G7		------	OFF		------	OFF		------	OFF		------	OFF
G#7		------	OFF		------	OFF		------	OFF		------	OFF
A7		------	OFF		------	OFF		------	OFF		------	OFF
A#7		------	OFF		------	OFF		------	OFF		------	OFF
B7		------	OFF		------	OFF		------	OFF		------	OFF
C8		------	OFF		------	OFF		------	OFF		------	OFF

12 C/M

	No.	Sample Name	Excl
C1		------	OFF
C#1		------	OFF
D1		------	OFF
D#1		------	OFF
E1		------	OFF
F1		------	OFF
F#1		------	OFF
G1		------	OFF
G#1		------	OFF
A1		------	OFF
A#1		------	OFF
B1		------	OFF
C2		------	OFF
C#2	41	Side Stick	OFF
D2	16	Snare 1	OFF
D#2	131	Syn Claps	OFF
E2	69	Syn Tom 1	OFF
F2	62	Tom 1 Lo	OFF
F#2	52	Close HH	1
G2	62	Tom 1 Lo	OFF
G#2	53	Open HH	OFF
A2	62	Tom 1 Lo	OFF
A#2	53	Open HH	1
B2	62	Tom 1 Lo	OFF
C3	61	Tom 1 Hi	OFF
C#3	43	Crash Cym	OFF
D3	61	Tom 1 Hi	OFF
D#3	57	Ride Edge	OFF
E3		------	OFF
F3		------	OFF
F#3	100	Tambourine	OFF
G3		------	OFF
G#3	108	Cowbell	OFF
A3		------	OFF
A#3		------	OFF
B3		------	OFF
C4	79	Hi Bongo	OFF
C#4	78	Lo Bongo	OFF
D4	84	Palm Conga	OFF
D#4	82	Open Conga	OFF
E4	82	Open Conga	OFF
F4	111	Hi Timbal	OFF
F#4	112	Lo Timbal	OFF
G4	107	Agogo	OFF
G#4	107	Agogo	OFF
A4	97	Cabasa	OFF
A#4	96	Maracas	OFF
B4	128	Whistle S	OFF
C5	129	Whistle L	OFF
C#5	123	Viblaslap	OFF
D5	0	Fat Kick	OFF
D#5	117	Claves	OFF
E5	258	Laughing V	OFF
F5	259	Scream	OFF
F#5	260	Punch	OFF
G5	261	Hart Beat	OFF
G#5	263	Footstep 2	OFF
A5	262	Footstep 1	OFF
A#5	264	Applause 1	OFF
B5	268	Door Creak	OFF
C6	269	Door Slam	OFF
C#6	155	Scratch Lo	OFF
D6	102	MarcTree 1	OFF
D#6	270	Car Engine	OFF
E6	271	Car Stop	OFF
F6	272	Car Pass	OFF
F#6	273	Car Crash	OFF
G6	275	Siren	OFF
G#6	276	Train	OFF
A6	227	WhiteNoise	OFF
A#6	277	Helicopter	OFF
B6	228	Jetstar	OFF
C7	279	Gun Shot 2	OFF
C#7	280	MachineGun	OFF
D7	281	Laser Gun	OFF
D#7	282	Explosion	OFF
E7	254	Dog	OFF
F7	256	Gallop	OFF
F#7	251	Bird 1	OFF
G7	244	Rain	OFF
G#7	245	Thunder	OFF
A7	246	Wind	OFF
A#7	248	Seashore V	OFF
B7	249	Stream	OFF
C8	250	Bubble	OFF

13 Standard

	No.	Sample Name	Excl
C0	0	------	OFF
C#0	77	Taiko Lo	3
D0	77	Taiko Lo	3
D#0	153	Zap 2	OFF
E0	113	Timbales	OFF
F0	158	Scratch b	4
F#0	158	Scratch b	4
G0	121	FingerSnap	OFF
G#0	122	Snap	OFF
A0	285	Metronome2	OFF
A#0	215	Tubular 3	OFF
B0	108	Cowbell	OFF
C1	108	Cowbell	OFF
C#1	37	Brush Tap	OFF
D1	39	BrushSwirl	OFF
D#1	36	Brush Slap	OFF
E1	39	BrushSwirl	OFF
F1	29	RollSnare1	OFF
F#1	119	Castanet	OFF
G1	21	Soft Snare	OFF
G#1	40	Stick Hit	OFF
A1	1	Rock Kick	OFF
A#1	24	TightSnare	OFF
B1	6	Real Kick	OFF
C2	0	Fat Kick	OFF
C#2	41	Side Stick	OFF
D2	16	Snare 1	OFF
D#2	131	Syn Claps	OFF
E2	22	LightSnare	OFF
F2	62	Tom 1 Lo	OFF
F#2	52	Close HH	1
G2	62	Tom 1 Lo	OFF
G#2	54	Pedal HH	1
A2	62	Tom 1 Lo	OFF
A#2	53	Open HH	1
B2	61	Tom 1 Hi	OFF
C3	61	Tom 1 Hi	OFF
C#3	43	Crash Cym	OFF
D3	61	Tom 1 Hi	OFF
D#3	57	Ride Edge	OFF
E3	45	China Cym	OFF
F3	58	Ride Cup	OFF
F#3	100	Tambourine	OFF
G3	47	Splash Cym	OFF
G#3	108	Cowbell	OFF
A3	43	Crash Cym	OFF
A#3	123	Viblaslap	OFF
B3	57	Ride Edge	OFF
C4	79	Hi Bongo	OFF
C#4	78	Lo Bongo	OFF
D4	85	Mute Conga	OFF
D#4	82	Open Conga	OFF
E4	82	Open Conga	OFF
F4	111	Hi Timbal	OFF
F#4	112	Lo Timbal	OFF
G4	107	Agogo	OFF
G#4	107	Agogo	OFF
A4	98	SynMaracas	OFF
A#4	96	Maracas	OFF
B4	129	Whistle L	OFF
C5	129	Whistle L	OFF
C#5	124	Guiro S	OFF
D5	125	Guiro L	OFF
D#5	117	Claves	OFF
E5	115	WoodBlockM	OFF
F5	115	WoodBlockM	OFF
F#5	94	Mute Cuica	OFF
G5	95	Open Cuica	OFF
G#5	104	MuteTriang	2
A5	105	OpenTriang	2
A#5	97	Cabasa	OFF
B5	101	JingleBell	OFF
C6	102	MarcTree 1	OFF
C#6		------	OFF
D6		------	OFF
D#6		------	OFF
E6		------	OFF
F6		------	OFF
F#6		------	OFF
G6		------	OFF
G#6		------	OFF
A6		------	OFF
A#6		------	OFF
B6		------	OFF
C7		------	OFF

14 Room

No.	Sample Name	Excl
	------	OFF
77	Taiko Lo	3
77	Taiko Lo	3
153	Zap 2	OFF
113	Timbales	OFF
158	Scratch b	4
158	Scratch b	4
121	FingerSnap	OFF
122	Snap	OFF
285	Metronome2	OFF
215	Tubular 3	OFF
108	Cowbell	OFF
108	Cowbell	OFF
37	Brush Tap	OFF
39	BrushSwirl	OFF
36	Brush Slap	OFF
39	BrushSwirl	OFF
29	RollSnare1	OFF
119	Castanet	OFF
21	Soft Snare	OFF
40	Stick Hit	OFF
1	Rock Kick	OFF
24	TightSnare	OFF
6	Real Kick	OFF
6	Real Kick	OFF
41	Side Stick	OFF
16	Snare 1	OFF
131	Syn Claps	OFF
22	LightSnare	OFF
67	ProcessT om	OFF
52	Close HH	1
67	ProcessTom	OFF
54	Pedal HH	1
67	ProcessTom	OFF
53	Open HH	1
67	ProcessTom	OFF
67	ProcessTom	OFF
43	Crash Cym	OFF
67	ProcessTom	OFF
57	Ride Edge	OFF
45	China Cym	OFF
58	Ride Cup	OFF
100	Tambourine	OFF
47	Splash Cym	OFF
108	Cowbell	OFF
43	Crash Cym	OFF
123	Viblaslap	OFF
57	Ride Edge	OFF
79	Hi Bongo	OFF
78	Lo Bongo	OFF
85	Mute Conga	OFF
82	Open Conga	OFF
82	Open Conga	OFF
111	Hi Timbal	OFF
112	Lo Timbal	OFF
107	Agogo	OFF
107	Agogo	OFF
98	SynMaracas	OFF
96	Maracas	OFF
129	Whistle L	OFF
129	Whistle L	OFF
124	Guiro S	OFF
125	Guiro L	OFF
117	Claves	OFF
115	WoodBlockM	OFF
115	WoodBlockM	OFF
94	Mute Cuica	OFF
95	Open Cuica	OFF
104	MuteTriang	2
105	OpenTriang	2
97	Cabasa	OFF
101	JingleBell	OFF
102	MarcTree 1	OFF
	------	OFF
	------	OFF
	------	OFF
	------	OFF
	------	OFF
	------	OFF
	------	OFF
	------	OFF
	------	OFF
	------	OFF
	------	OFF
	------	OFF

	15 Rock			16 Electro			17 Analog			18 Jazz		
	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl
C0		------	OFF		------	OFF		------	OFF		------	OFF
C#0	77	Taiko Lo	3	77	Taiko Lo	3	77	Taiko Lo	3	77	Taiko Lo	3
D0	77	Taiko Lo	3	77	Taiko Lo	3	77	Taiko Lo	3	77	Taiko Lo	3
D#0	153	Zap 2	OFF	153	Zap 2	OFF	153	Zap 2	OFF	153	Zap 2	OFF
E0	113	Timbales	OFF	113	Timbales	OFF	113	Timbales	OFF	113	Timbales	OFF
F0	158	Scratch b	4	158	Scratch b	4	158	Scratch b	4	158	Scratch b	4
F#0	158	Scratch b	4	158	Scratch b	4	158	Scratch b	4	158	Scratch b	4
G0	121	FingerSnap	OFF	121	FingerSnap	OFF	121	FingerSnap	OFF	121	FingerSnap	OFF
G#0	122	Snap	OFF	122	Snap	OFF	122	Snap	OFF	122	Snap	OFF
A0	285	Metronome2	OFF	285	Metronome2	OFF	285	Metronome2	OFF	285	Metronome2	OFF
A#0	215	Tubular 3	OFF	215	Tubular 3	OFF	215	Tubular 3	OFF	215	Tubular 3	OFF
B0	108	Cowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF
C1	108	Cowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF
C#1	37	Brush Tap	OFF	37	Brush Tap	OFF	37	Brush Tap	OFF	37	Brush Tap	OFF
D1	39	BrushSwirl	OFF	39	BrushSwirl	OFF	39	BrushSwirl	OFF	39	BrushSwirl	OFF
D#1	36	Brush Slap	OFF	36	Brush Slap	OFF	36	Brush Slap	OFF	36	Brush Slap	OFF
E1	39	BrushSwirl	OFF	180	Rev.Cymbal	OFF	180	Rev.Cymbal	OFF	39	BrushSwirl	OFF
F1	29	RollSnare1	OFF	29	RollSnare1	OFF	29	RollSnare1	OFF	29	RollSnare1	OFF
F#1	119	Castanet	OFF	153	Zap 2	OFF	153	Zap 2	OFF	119	Castanet	OFF
G1	28	PowerSnare	OFF	26	Rock Snare	OFF	28	PowerSnare	OFF	21	Soft Snare	OFF
G#1	40	Stick Hit	OFF	40	Stick Hit	OFF	40	Stick Hit	OFF	40	Stick Hit	OFF
A1	8	ProcesKick	OFF	5	Dry Kick	OFF	0	Fat Kick	OFF	1	Rock Kick	OFF
A#1	24	TightSnare	OFF	24	TightSnare	OFF	24	TightSnare	OFF	24	TightSnare	OFF
B1	6	Real Kick	OFF	10	Dance Kick	OFF	11	Syn Kick 1	OFF	6	Real Kick	OFF
C2	2	Ambi.Kick	OFF	2	Ambi.Kick	OFF	11	Syn Kick 1	OFF	1	Rock Kick	OFF
C#2	41	Side Stick	OFF	41	Side Stick	OFF	42	Syn Rim	OFF	41	Side Stick	OFF
D2	26	Rock Snare	OFF	28	PowerSnare	OFF	31	SynSnare 1	OFF	16	Snare 1	OFF
D#2	131	Syn Claps	OFF	131	Syn Claps	OFF	131	Syn Claps	OFF	131	Syn Claps	OFF
E2	27	GatedSnare	OFF	28	PowerSnare	OFF	32	SynSnare 2	OFF	22	LightSnare	OFF
F2	67	ProcessTom	OFF	69	Syn Tom 1	OFF	71	SynTom2 Lo	OFF	62	Tom 1 Lo	OFF
F#2	52	Close HH	1	52	Close HH	1	55	CloseSynHH	1	52	Close HH	1
G2	67	ProcessTom	OFF	69	Syn Tom 1	OFF	71	SynTom2 Lo	OFF	62	Tom 1 Lo	OFF
G#2	54	Pedal HH	1	54	Pedal HH	1	55	CloseSynHH	1	54	Pedal HH	1
A2	67	ProcessTom	OFF	69	Syn Tom 1	OFF	71	SynTom2 Lo	OFF	62	Tom 1 Lo	OFF
A#2	53	Open HH	1	53	Open HH	1	56	OpenSyn HH	1	53	Open HH	1
B2	67	ProcessTom	OFF	69	Syn Tom 1	OFF	71	SynTom2 Lo	OFF	61	Tom 1 Hi	OFF
C3	67	ProcessTom	OFF	69	Syn Tom 1	OFF	71	SynTom2 Lo	OFF	61	Tom 1 Hi	OFF
C#3	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF
D3	67	ProcessTom	OFF	69	Syn Tom 1	OFF	71	SynTom2 Lo	OFF	61	Tom 1 Hi	OFF
D#3	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF
E3	45	China Cym	OFF	45	China Cym	OFF	45	China Cym	OFF	45	China Cym	OFF
F3	58	Ride Cup	OFF	58	Ride Cup	OFF	58	Ride Cup	OFF	58	Ride Cup	OFF
F#3	100	Tambourine	OFF	100	Tambourine	OFF	100	Tambourine	OFF	100	Tambourine	OFF
G3	47	Splash Cym	OFF	47	Splash Cym	OFF	47	Splash Cym	OFF	47	Splash Cym	OFF
G#3	108	Cowbell	OFF	108	Cowbell	OFF	109	SynCowbell	OFF	108	Cowbell	OFF
A3	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF
A#3	123	Viblaslap	OFF	123	Viblaslap	OFF	123	Viblaslap	OFF	123	Viblaslap	OFF
B3	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF
C4	79	Hi Bongo	OFF	79	Hi Bongo	OFF	79	Hi Bongo	OFF	79	Hi Bongo	OFF
C#4	78	Lo Bongo	OFF	78	Lo Bongo	OFF	78	Lo Bongo	OFF	78	Lo Bongo	OFF
D4	85	Mute Conga	OFF	85	Mute Conga	OFF	70	SynTom2 Hi	OFF	85	Mute Conga	OFF
D#4	82	Open Conga	OFF	82	Open Conga	OFF	70	SynTom2 Hi	OFF	82	Open Conga	OFF
E4	82	Open Conga	OFF	82	Open Conga	OFF	70	SynTom2 Hi	OFF	82	Open Conga	OFF
F4	111	Hi Timbal	OFF	111	Hi Timbal	OFF	111	Hi Timbal	OFF	111	Hi Timbal	OFF
F#4	112	Lo Timbal	OFF	112	Lo Timbal	OFF	112	Lo Timbal	OFF	112	Lo Timbal	OFF
G4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF
G#4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF
A4	98	SynMaracas	OFF	98	SynMaracas	OFF	98	SynMaracas	OFF	98	SynMaracas	OFF
A#4	96	Maracas	OFF	96	Maracas	OFF	98	SynMaracas	OFF	96	Maracas	OFF
B4	129	Whistle L	OFF	129	Whistle L	OFF	129	Whistle L	OFF	129	Whistle L	OFF
C5	129	Whistle L	OFF	129	Whistle L	OFF	129	Whistle L	OFF	129	Whistle L	OFF
C#5	124	Guiro S	OFF	124	Guiro S	OFF	124	Guiro S	OFF	124	Guiro S	OFF
D5	125	Guiro L	OFF	125	Guiro L	OFF	125	Guiro L	OFF	125	Guiro L	OFF
D#5	117	Claves	OFF	117	Claves	OFF	118	Syn Claves	OFF	117	Claves	OFF
E5	115	WoodBlockM	OFF	115	WoodBlockM	OFF	115	WoodBlockM	OFF	115	WoodBlockM	OFF
F5	115	WoodBlockM	OFF	115	WoodBlockM	OFF	115	WoodBlockM	OFF	115	WoodBlockM	OFF
F#5	94	Mute Cuica	OFF	158	Scratch b	OFF	158	Scratch b	OFF	94	Mute Cuica	OFF
G5	95	Open Cuica	OFF	158	Scratch b	OFF	158	Scratch b	OFF	95	Open Cuica	OFF
G#5	104	MuteTriang	2	104	MuteTriang	2	104	MuteTriang	2	104	MuteTriang	2
A5	105	OpenTriang	2	105	OpenTriang	2	105	OpenTriang	2	105	OpenTriang	2
A#5	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF
B5	101	JingleBell	OFF	101	JingleBell	OFF	101	JingleBell	OFF	101	JingleBell	OFF
C6	102	MarcTree 1	OFF	102	MarcTree 1	OFF	102	MarcTree 1	OFF	102	MarcTree 1	OFF
C#6		------	OFF		------	OFF		------	OFF		------	OFF
D6		------	OFF		------	OFF		------	OFF		------	OFF
D#6		------	OFF		------	OFF		------	OFF		------	OFF
E6		------	OFF		------	OFF		------	OFF		------	OFF
F6		------	OFF		------	OFF		------	OFF		------	OFF
F#6		------	OFF		------	OFF		------	OFF		------	OFF
G6		------	OFF		------	OFF		------	OFF		------	OFF
G#6		------	OFF		------	OFF		------	OFF		------	OFF
A6		------	OFF		------	OFF		------	OFF		------	OFF
A#6		------	OFF		------	OFF		------	OFF		------	OFF
B6		------	OFF		------	OFF		------	OFF		------	OFF
C7		------	OFF		------	OFF		------	OFF		------	OFF

	19 Brush			20 Classic			21 SFX 1			22 SFX 2		
	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl
C0		------	OFF		------	OFF		------	OFF		------	OFF
C#0	77	Taiko Lo	3	77	Taiko Lo	3		------	OFF		------	OFF
D0	77	Taiko Lo	3	77	Taiko Lo	3		------	OFF		------	OFF
D#0	153	Zap 2	OFF	153	Zap 2	OFF		------	OFF		------	OFF
E0	113	Timbales	OFF	113	Timbales	OFF		------	OFF		------	OFF
F0	158	Scratch b	4	158	Scratch b	4		------	OFF		------	OFF
F#0	158	Scratch b	4	158	Scratch b	4		------	OFF		------	OFF
G0	121	FingerSnap	OFF	121	FingerSnap	OFF		------	OFF		------	OFF
G#0	122	Snap	OFF	122	Snap	OFF		------	OFF		------	OFF
A0	285	Metronome2	OFF	285	Metronome2	OFF		------	OFF		------	OFF
A#0	215	Tubular 3	OFF	215	Tubular 3	OFF		------	OFF		------	OFF
B0	108	Cowbell	OFF	108	Cowbell	OFF		------	OFF		------	OFF
C1	108	Cowbell	OFF	108	Cowbell	OFF		------	OFF		------	OFF
C#1	37	Brush Tap	OFF	37	Brush Tap	OFF		------	OFF		------	OFF
D1	39	BrushSwirl	OFF	39	BrushSwirl	OFF		------	OFF		------	OFF
D#1	36	Brush Slap	OFF	36	Brush Slap	OFF		------	OFF		------	OFF
E1	39	BrushSwirl	OFF	39	BrushSwirl	OFF		------	OFF		------	OFF
F1	29	RollSnare1	OFF	29	RollSnare1	OFF		------	OFF		------	OFF
F#1	119	Castanet	OFF	119	Castanet	OFF		------	OFF		------	OFF
G1	36	Brush Slap	OFF	21	Soft Snare	OFF		------	OFF		------	OFF
G#1	40	Stick Hit	OFF	40	Stick Hit	OFF		------	OFF		------	OFF
A1	1	Rock Kick	OFF	1	Rock Kick	OFF		------	OFF		------	OFF
A#1	24	TightSnare	OFF	24	TightSnare	OFF		------	OFF		------	OFF
B1	6	Real Kick	OFF	15	Orch B.Drm	OFF		------	OFF		------	OFF
C2	4	Punch Kick	OFF	15	Orch B.Drm	OFF	137	GtCutNois2	OFF	267	Telephone2	OFF
C#2	41	Side Stick	OFF	41	Side Stick	OFF	136	GtCutNois1	OFF	268	Door Creak	OFF
D2	36	Brush Slap	OFF	21	Soft Snare	OFF	138	Chic 1	OFF	269	Door Slam	OFF
D#2	131	Syn Claps	OFF	131	Syn Claps	OFF	141	StringSlap	OFF	156	ScratchDbl	OFF
E2	37	Brush Tap	OFF	21	Soft Snare	OFF	140	Bass Slide	OFF	158	Scratch b	OFF
F2	73	Brush Tom	OFF	62	Tom 1 Lo	OFF	134	Gt Scratch	OFF	102	MarcTree 1	OFF
F#2	52	Close HH	1	52	Close HH	1		------	OFF	267	Telephone2	OFF
G2	73	Brush Tom	OFF	62	Tom 1 Lo	OFF		------	OFF		------	OFF
G#2	54	Pedal HH	1	54	Pedal HH	1		------	OFF		------	OFF
A2	73	Brush Tom	OFF	62	Tom 1 Lo	OFF		------	OFF		------	OFF
A#2	53	Open HH	1	53	Open HH	1		------	OFF		------	OFF
B2	73	Brush Tom	OFF	61	Tom 1 Hi	OFF		------	OFF		------	OFF
C3	73	Brush Tom	OFF	61	Tom 1 Hi	OFF		------	OFF		------	OFF
C#3	43	Crash Cym	OFF	49	Orch Cym	OFF		------	OFF		------	OFF
D3	73	Brush Tom	OFF	61	Tom 1 Hi	OFF		------	OFF		------	OFF
D#3	57	Ride Edge	OFF	49	Orch Cym	OFF		------	OFF		------	OFF
E3	45	China Cym	OFF	45	China Cym	OFF	285	Metronome2	OFF	270	Car Engine	OFF
F3	58	Ride Cup	OFF	58	Ride Cup	OFF		------	OFF	271	Car Stop	OFF
F#3	100	Tambourine	OFF	100	Tambourine	OFF		------	OFF	272	Car Pass	OFF
G3	47	Splash Cym	OFF	47	Splash Cym	OFF		------	OFF	273	Car Crash	OFF
G#3	108	Cowbell	OFF	108	Cowbell	OFF		------	OFF	275	Siren	OFF
A3	43	Crash Cym	OFF	49	Orch Cym	OFF		------	OFF	276	Train	OFF
A#3	123	Viblaslap	OFF	123	Viblaslap	OFF		------	OFF	228	Jetstar	OFF
B3	57	Ride Edge	OFF	49	Orch Cym	OFF		------	OFF	277	Helicopter	OFF
C4	79	Hi Bongo	OFF	79	Hi Bongo	OFF		------	OFF	283	HandDrill	OFF
C#4	78	Lo Bongo	OFF	78	Lo Bongo	OFF		------	OFF	133	MetalHitLo	OFF
D4	85	Mute Conga	OFF	85	Mute Conga	OFF		------	OFF	274	GlassBreak	OFF
D#4	82	Open Conga	OFF	82	Open Conga	OFF		------	OFF		------	OFF
E4	82	Open Conga	OFF	82	Open Conga	OFF		------	OFF		------	OFF
F4	111	Hi Timbal	OFF	111	Hi Timbal	OFF		------	OFF		------	OFF
F#4	112	Lo Timbal	OFF	112	Lo Timbal	OFF		------	OFF		------	OFF
G4	107	Agogo	OFF	107	Agogo	OFF		------	OFF		------	OFF
G#4	107	Agogo	OFF	107	Agogo	OFF	244	Rain	OFF	258	Laughing V	OFF
A4	98	SynMaracas	OFF	98	SynMaracas	OFF	245	Thunder	OFF	259	Scream	OFF
A#4	96	Maracas	OFF	96	Maracas	OFF	246	Wind	OFF	260	Punch	OFF
B4	129	Whistle L	OFF	129	Whistle L	OFF	249	Stream	OFF	261	Hart Beat	OFF
C5	129	Whistle L	OFF	129	Whistle L	OFF	250	Bubble	OFF	262	Footstep 1	OFF
C#5	124	Guiro S	OFF	124	Guiro S	OFF	247	Seashore	OFF	265	Applause 2	OFF
D5	125	Guiro L	OFF	125	Guiro L	OFF		------	OFF		------	OFF
D#5	117	Claves	OFF	117	Claves	OFF		------	OFF		------	OFF
E5	115	WoodBlockM	OFF	115	WoodBlockM	OFF		------	OFF		------	OFF
F5	115	WoodBlockM	OFF	115	WoodBlockM	OFF		------	OFF		------	OFF
F#5	94	Mute Cuica	OFF	94	Mute Cuica	OFF		------	OFF		------	OFF
G5	95	Open Cuica	OFF	95	Open Cuica	OFF		------	OFF		------	OFF
G#5	104	MuteTriang	2	104	MuteTriang	2		------	OFF		------	OFF
A5	105	OpenTriang	2	105	OpenTriang	2		------	OFF		------	OFF
A#5	97	Cabasa	OFF	97	Cabasa	OFF		------	OFF		------	OFF
B5	101	JingleBell	OFF	101	JingleBell	OFF		------	OFF		------	OFF
C6	102	MarcTree 1	OFF	102	MarcTree 1	OFF	254	Dog	OFF	280	MachineGun	OFF
C#6		------	OFF		------	OFF	256	Gallop	OFF	281	Laser Gun	OFF
D6		------	OFF		------	OFF	252	Bird 2	OFF	282	Explosion	OFF
D#6		------	OFF		------	OFF	253	Kitty	OFF	279	Gun Shot 2	OFF
E6		------	OFF		------	OFF	255	Growl 2	OFF		------	OFF
F6		------	OFF		------	OFF	251	Bird 1	OFF		------	OFF
F#6		------	OFF		------	OFF	174	Monkey 2	OFF		------	OFF
G6		------	OFF		------	OFF	172	Growl 1	OFF		------	OFF
G#6		------	OFF		------	OFF		------	OFF		------	OFF
A6		------	OFF		------	OFF		------	OFF		------	OFF
A#6		------	OFF		------	OFF		------	OFF		------	OFF
B6		------	OFF		------	OFF		------	OFF		------	OFF
C7		------	OFF		------	OFF		------	OFF		------	OFF

	23 K-GM Kit			24 Power Kit			25 Dance Kit			26 Analog Kit		
	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl
C0		------	OFF		------	OFF		------	OFF		------	OFF
C#0		------	OFF		------	OFF		------	OFF		------	OFF
D0		------	OFF		------	OFF		------	OFF		------	OFF
D#0		------	OFF		------	OFF		------	OFF		------	OFF
E0		------	OFF		------	OFF		------	OFF		------	OFF
F0		------	OFF		------	OFF		------	OFF		------	OFF
F#0		------	OFF		------	OFF		------	OFF		------	OFF
G0		------	OFF		------	OFF		------	OFF		------	OFF
G#0		------	OFF		------	OFF		------	OFF		------	OFF
A0		------	OFF		------	OFF		------	OFF		------	OFF
A#0		------	OFF		------	OFF		------	OFF		------	OFF
B0		------	OFF		------	OFF		------	OFF		------	OFF
C1	1	Rock Kick	OFF	2	Ambi.Kick	OFF	3	Crisp Kick	OFF	13	Syn Kick 3	OFF
C#1	1	Rock Kick	OFF	2	Ambi.Kick	OFF	3	Crisp Kick	OFF	13	Syn Kick 3	OFF
D1	1	Rock Kick	OFF	2	Ambi.Kick	OFF	3	Crisp Kick	OFF	13	Syn Kick 3	OFF
D#1	1	Rock Kick	OFF	2	Ambi.Kick	OFF	3	Crisp Kick	OFF	13	Syn Kick 3	OFF
E1	1	Rock Kick	OFF	2	Ambi.Kick	OFF	3	Crisp Kick	OFF	13	Syn Kick 3	OFF
F1	18	Snare 3	OFF	26	Rock Snare	OFF	20	PicloSnare	OFF	32	SynSnare 2	OFF
F#1	53	Open HH	1	53	Open HH	1	53	Open HH	1	56	OpenSyn HH	1
G1	0	Fat Kick	OFF	7	Gated Kick	OFF	12	Syn Kick 2	OFF	10	Dance Kick	OFF
G#1	113	Timbales	OFF	113	Timbales	OFF	41	Side Stick	OFF	113	Timbales	OFF
A1	16	Snare 1	6	24	TightSnare	OFF	24	TightSnare	OFF	25	Ambi.Snare	OFF
A#1	29	RollSnare1	6	177	Rev.Snare1	OFF	177	Rev.Snare1	OFF	177	Rev.Snare1	OFF
B1	6	Real Kick	OFF	7	Gated Kick	OFF	2	Ambi.Kick	OFF	3	Crisp Kick	OFF
C2	8	ProcesKick	OFF	9	Metal Kick	OFF	10	Dance Kick	OFF	11	Syn Kick 1	OFF
C#2	41	Side Stick	OFF	41	Side Stick	OFF	41	Side Stick	OFF	42	Syn Rim	OFF
D2	26	Rock Snare	OFF	28	PowerSnare	OFF	32	SynSnare 2	OFF	31	SynSnare 1	OFF
D#2	130	Hand Claps	OFF	130	Hand Claps	OFF	130	Hand Claps	OFF	131	Syn Claps	OFF
E2	22	LightSnare	OFF	27	GatedSnare	OFF	25	Ambi.Snare	OFF	22	LightSnare	OFF
F2	62	Tom 1 Lo	OFF	67	ProcessTom	OFF	67	ProcessTom	OFF	71	SynTom2 Lo	OFF
F#2	51	Tite HH	1	51	Tite HH	1	51	Tite HH	1	55	CloseSynHH	1
G2	62	Tom 1 Lo	OFF	67	ProcessTom	OFF	67	ProcessTom	OFF	71	SynTom2 Lo	OFF
G#2	54	Pedal HH	1	54	Pedal HH	1	54	Pedal HH	1	55	CloseSynHH	1
A2	62	Tom 1 Lo	OFF	67	ProcessTom	OFF	67	ProcessTom	OFF	71	SynTom2 Lo	OFF
A#2	53	Open HH	1	53	Open HH	1	53	Open HH	1	56	OpenSyn HH	1
B2	61	Tom 1 Hi	OFF	67	ProcessTom	OFF	67	ProcessTom	OFF	71	SynTom2 Lo	OFF
C3	61	Tom 1 Hi	OFF	67	ProcessTm	OFF	67	ProcessTom	OFF	71	SynTom2 Lo	OFF
C#3	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF	56	OpenSyn HH	OFF
D3	61	Tom 1 Hi	OFF	67	ProcessTom	OFF	67	ProcessTom	OFF	71	SynTom2 Lo	OFF
D#3	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF	57	Ride Edge	OFF
E3	45	China Cym	OFF	45	China Cym	OFF	45	China Cym	OFF	45	China Cym	OFF
F3	58	Ride Cup	OFF	58	Ride Cup	OFF	58	Ride Cup	OFF	58	Ride Cup	OFF
F#3	100	Tambourine	OFF	100	Tambourine	OFF	100	Tambourine	OFF	100	Tambourine	OFF
G3	47	Splash Cym	OFF	47	Splash Cym	OFF	47	Splash Cym	OFF	47	Splash Cym	OFF
G#3	108	Cowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF	109	SynCowbell	OFF
A3	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF
A#3	123	Viblaslap	OFF	123	Viblaslap	OFF	123	Viblaslap	OFF	123	Viblaslap	OFF
B3	59	Ride Cym 1	OFF	59	Ride Cym 1	OFF	57	Ride Edge	OFF	59	Ride Cym 1	OFF
C4	79	Hi Bongo	OFF	79	Hi Bongo	OFF	79	Hi Bongo	OFF	79	Hi Bongo	OFF
C#4	78	Lo Bongo	OFF	78	Lo Bongo	OFF	78	Lo Bongo	OFF	78	Lo Bongo	OFF
D4	85	Mute Conga	OFF	85	Mute Conga	OFF	85	Mute Conga	OFF	70	SynTom2 Hi	OFF
D#4	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF	70	SynTom2 Hi	OFF
E4	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF	70	SynTom2 Hi	OFF
F4	111	Hi Timbal	OFF	111	Hi Timbal	OFF	111	Hi Timbal	OFF	111	Hi Timbal	OFF
F#4	112	Lo Timbal	OFF	112	Lo Timbal	OFF	112	Lo Timbal	OFF	112	Lo Timbal	OFF
G4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF
G#4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF
A4	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF
A#4	96	Maracas	OFF	96	Maracas	OFF	96	Maracas	OFF	98	SynMaracas	OFF
B4	128	Whistle S	2	128	Whistle S	2	128	Whistle S	2	128	Whistle S	2
C5	129	Whistle L	2	129	Whistle L	2	129	Whistle L	2	129	Whistle L	2
C#5	124	Guiro S	3	124	Guiro S	3	124	Guiro S	3	124	Guiro S	3
D5	125	Guiro L	3	125	Guiro L	3	125	Guiro L	3	125	Guiro L	3
D#5	117	Claves	OFF	117	Claves	OFF	117	Claves	OFF	118	Syn Claves	OFF
E5	115	WoodBlockM	OFF	115	WoodBlockM	OFF	115	WoodBlockM	OFF	115	WoodBlockM	OFF
F5	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF
F#5	94	Mute Cuica	4	94	Mute Cuica	4	94	Mute Cuica	4	94	Mute Cuica	4
G5	95	Open Cuica	4	95	Open Cuica	4	95	Open Cuica	4	95	Open Cuica	4
G#5	104	MuteTriang	5	104	MuteTriang	5	104	MuteTriang	5	104	MuteTriang	5
A5	105	OpenTriang	5	105	OpenTriang	5	105	OpenTriang	5	105	OpenTriang	5
A#5	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF
B5	101	JingleBell	OFF	101	JingleBell	OFF	101	JingleBell	OFF	101	JingleBell	OFF
C6	102	MarcTree 1	OFF	102	MarcTree 1	OFF	102	MarcTree 1	OFF	102	MarcTree 1	OFF
C#6	119	Castanet	OFF	119	Castanet	OFF	119	Castanet	OFF	119	Castanet	OFF
D6	41	Side Stick	OFF	41	Side Stick	OFF	41	Side Stick	OFF	41	Side Stick	OFF
D#6	77	Taiko Lo	OFF	77	Taiko Lo	OFF	77	Taiko Lo	OFF	77	Taiko Lo	OFF
E6		------	OFF		------	OFF		------	OFF		------	OFF
F6		------	OFF		------	OFF		------	OFF		------	OFF
F#6		------	OFF		------	OFF		------	OFF		------	OFF
G6		------	OFF		------	OFF		------	OFF		------	OFF
G#6		------	OFF		------	OFF		------	OFF		------	OFF
A6		------	OFF		------	OFF		------	OFF		------	OFF
A#6		------	OFF		------	OFF		------	OFF		------	OFF
B6		------	OFF		------	OFF		------	OFF		------	OFF
C7		------	OFF		------	OFF		------	OFF		------	OFF

	27 Jazz Kit			28 Brush Kit			29 Orch Kit			30 Perc Kit		
	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl
C1	3	Crisp Kick	OFF	3	Crisp Kick	OFF	51	Tite HH	OFF	79	Hi Bongo	OFF
C#1	3	Crisp Kick	OFF	3	Crisp Kick	OFF	51	Tite HH	OFF	79	Hi Bongo	OFF
D1	3	Crisp Kick	OFF	3	Crisp Kick	OFF	51	Tite HH	OFF	79	Hi Bongo	OFF
D#1	3	Crisp Kick	OFF	3	Crisp Kick	OFF	51	Tite HH	1	79	Hi Bongo	OFF
E1	3	Crisp Kick	OFF	3	Crisp Kick	OFF	54	Pedal HH	1	79	Hi Bongo	OFF
F1	19	Snare 4	OFF	121	FingerSnap	OFF	53	Open HH	1	78	Lo Bongo	OFF
F#1	53	Open HH	1	53	Open HH	1	57	Ride Edge	OFF	100	Tambourine	OFF
G1	2	Ambi.Kick	OFF	2	Ambi.Kick	OFF	6	Real Kick	OFF	107	Agogo	OFF
G#1	113	Timbales	OFF	113	Timbales	OFF	6	Real Kick	OFF	33	VocalSnr 1	OFF
A1	30	RollSnare2	6	36	Brush Slap	6	6	Real Kick	OFF	107	Agogo	OFF
A#1	29	RollSnare1	6	29	RollSnare1	6	6	Real Kick	OFF	80	Slap Bongo	OFF
B1	4	Punch Kick	OFF	4	Punch Kick	OFF	6	Real Kick	OFF	116	WoodBlockL	OFF
C2	1	Rock Kick	OFF	1	Rock Kick	OFF	75	Timpani	OFF	117	Claves	OFF
C#2	41	Side Stick	OFF	41	Side Stick	OFF	41	Side Stick	OFF	115	WoodBlockM	OFF
D2	21	Soft Snare	OFF	37	Brush Tap	OFF	30	RollSnare2	OFF	108	Cowbell	OFF
D#2	130	Hand Claps	OFF	36	Brush Slap	OFF	119	Castanet	OFF	114	WoodBlockH	OFF
E2	17	Snare 2	OFF	38	BrushSwish	OFF	30	RollSnare2	OFF	119	Castanet	OFF
F2	62	Tom 1 Lo	OFF	73	Brush Tom	OFF	75	Timpani	OFF	87	Baya 2	OFF
F#2	51	Tite HH	1	51	Tite HH	1	75	Timpani	OFF	97	Cabasa	OFF
G2	62	Tom 1 Lo	OFF	73	Brush Tom	OFF	75	Timpani	OFF	86	Baya 1	OFF
G#2	54	Pedal HH	1	54	Pedal HH	1	75	Timpani	OFF	96	Maracas	OFF
A2	62	Tom 1 Lo	OFF	73	Brush Tom	OFF	75	Timpani	OFF	87	Baya 2	OFF
A#2	53	Open HH	1	53	Open HH	1	75	Timpani	OFF	97	Cabasa	OFF
B2	61	Tom 1 Hi	OFF	73	Brush Tom	OFF	75	Timpani	OFF	90	Tabla 3	1
C3	61	Tom 1 Hi	OFF	73	Brush Tom	OFF	75	Timpani	OFF	89	Tabla 2	1
C#3	43	Crash Cym	OFF	43	Crash Cym	OFF	75	Timpani	OFF	123	Viblaslap	OFF
D3	61	Tom 1 Hi	OFF	73	Brush Tom	OFF	75	Timpani	OFF	88	Tabla 1	1
D#3	60	Ride Cym 2	OFF	60	Ride Cym 2	OFF	75	Timpani	OFF	104	MuteTriang	3
E3	45	China Cym	OFF	45	China Cym	OFF	75	Timpani	OFF	66	Tom 2 Lo V	OFF
F3	59	Ride Cym 1	OFF	59	Ride Cym 1	OFF	75	Timpani	OFF	105	OpenTriang	3
F#3	100	Tambourine	OFF	100	Tambourine	OFF	100	Tambourine	OFF	124	Guiro S	2
G3	47	Splash Cym	OFF	47	Splash Cym	OFF	47	Splash Cym	OFF	101	JingleBell	OFF
G#3	108	Cowbell	OFF	108	Cowbell	OFF	108	Cowbell	OFF	125	Guiro L	2
A3	43	Crash Cym	OFF	43	Crash Cym	OFF	43	Crash Cym	OFF	102	MarcTree 1	OFF
A#3	123	Viblaslap	OFF	123	Viblaslap	OFF	123	Viblaslap	OFF	229	Thing	OFF
B3	57	Ride Edge	OFF	57	Ride Edge	OFF	49	Orch Cym	OFF	96	Maracas	OFF
C4	79	Hi Bongo	OFF	79	Hi Bongo	OFF	79	Hi Bongo	OFF	130	Hand Claps	OFF
C#4	78	Lo Bongo	OFF	78	Lo Bongo	OFF	78	Lo Bongo	OFF	131	Syn Claps	OFF
D4	85	Mute Conga	OFF	85	Mute Conga	OFF	85	Mute Conga	OFF	155	Scratch Lo	OFF
D#4	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF	154	Scratch Hi	OFF
E4	82	Open Conga	OFF	82	Open Conga	OFF	82	Open Conga	OFF	156	ScratchDbl	OFF
F4	111	Hi Timbal	OFF	111	Hi Timbal	OFF	111	Hi Timbal	OFF	128	Whistle S	4
F#4	112	Lo Timbal	OFF	112	Lo Timbal	OFF	112	Lo Timbal	OFF	129	Whistle L	4
G4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	83	Slap Conga	OFF
G#4	107	Agogo	OFF	107	Agogo	OFF	107	Agogo	OFF	85	Mute Conga	OFF
A4	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF	82	Open Conga	OFF
A#4	96	Maracas	OFF	96	Maracas	OFF	96	Maracas	OFF	82	Open Conga	OFF
B4	128	Whistle S	2	128	Whistle S	2	128	Whistle S	2	94	Mute Cuica	OFF
C5	129	Whistle L	2	129	Whistle L	2	129	Whistle L	2	95	Open Cuica	OFF
C#5	124	Guiro S	3	124	Guiro S	3	124	Guiro S	3	113	Timbales	OFF
D5	125	Guiro L	3	125	Guiro L	3	125	Guiro L	3	110	R-Timbal	OFF
D#5	117	Claves	OFF	117	Claves	OFF	117	Claves	OFF	111	Hi Timbal	OFF
E5	115	WoodBlockM	OFF	115	WoodBlockM	OFF	115	WoodBlockM	OFF	112	Lo Timbal	OFF
F5	116	WoodBlockL	OFF	116	WoodBlockL	OFF	116	WoodBlockL	OFF	118	Syn Claves	OFF
F#5	94	Mute Cuica	4	94	Mute Cuica	4	94	Mute Cuica	4	109	SynCowbell	OFF
G5	95	Open Cuica	4	95	Open Cuica	4	95	Open Cuica	4	121	FingerSnap	OFF
G#5	104	MuteTriang	5	104	MuteTriang	5	104	MuteTriang	5	76	Taiko Hi	OFF
A5	105	OpenTriang	5	105	OpenTriang	5	105	OpenTriang	5	77	Taiko Lo	OFF
A#5	97	Cabasa	OFF	97	Cabasa	OFF	97	Cabasa	OFF	153	Zap 2	OFF
B5	101	JingleBell	OFF	101	JingleBell	OFF	101	JingleBell	OFF	29	RollSnare1	5
C6	102	MarcTree 1	OFF	102	MarcTree 1	OFF	102	MarcTree 1	OFF	30	RollSnare2	5
C#6	119	Castanet	OFF	119	Castanet	OFF	119	Castanet	OFF	49	Orch Cym	6
D6	41	Side Stick	OFF	41	Side Stick	OFF	41	Side Stick	OFF	49	Orch Cym	6
D#6	77	Taiko Lo	OFF	77	Taiko Lo	OFF	77	Taiko Lo	OFF	142	Orch Hit	OFF
E6		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
F6		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
F#6		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
G6		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
G#6		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
A6		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
A#6		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
B6		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
C7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
C#7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
D7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
D#7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
E7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
F7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
F#7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
G7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
G#7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
A7		------	OFF		------	OFF		------	OFF	142	Orch Hit	OFF
A#7		------	OFF		------	OFF		------	OFF		------	OFF
B7		------	OFF		------	OFF		------	OFF		------	OFF
C8		------	OFF		------	OFF		------	OFF		------	OFF

	31 Total Kit			32 ProducrKit			33 Krazy Kit			34 Combo Kit		
	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl	No.	Sample Name	Excl
C1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
C#1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
D1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
D#1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
E1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
F1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
F#1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
G1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
G#1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
A1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
A#1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
B1	49	Orch Cym	OFF	4	Punch Kick	OFF	172	Growl 1	OFF	49	Orch Cym	OFF
C2	0	Fat Kick	OFF	4	Punch Kick	OFF	0	Fat Kick	OFF	0	Fat Kick	OFF
C#2	6	Real Kick	OFF	3	Crisp Kick	OFF	163	BOOFN	1	1	Rock Kick	OFF
D2	2	Ambi.Kick	OFF	0	Fat Kick	OFF	17	Snare 2	OFF	2	Ambi.Kick	OFF
D#2	13	Syn Kick 3	OFF	6	Real Kick	OFF	169	POOM	1	13	Syn Kick 3	OFF
E2	7	Gated Kick	OFF	1	Rock Kick	OFF	167	COUGH	1	7	Gated Kick	OFF
F2	20	PicloSnare	OFF	2	Ambi.Kick	OFF	162	BISS	1	20	PicloSnare	OFF
F#2	21	Soft Snare	OFF	7	Gated Kick	OFF	126	Pull 1	OFF	21	Soft Snare	OFF
G2	27	GatedSnare	OFF	9	Metal Kick	OFF	168	ISSH	1	27	GatedSnare	OFF
G#2	31	SynSnare 1	OFF	8	ProcesKick	OFF	161	Drop	OFF	31	SynSnare 1	OFF
A2	16	Snare 1	OFF	10	Dance Kick	OFF	166	COOSH	1	16	Snare 1	OFF
A#2	41	Side Stick	OFF	13	Syn Kick 3	OFF	127	Pull 2	OFF	41	Side Stick	OFF
B2	26	Rock Snare	OFF	11	Syn Kick 1	OFF	165	CHLACK	1	26	Rock Snare	OFF
C3	62	Tom 1 Lo	OFF	12	Syn Kick 2	OFF	164	BOOGETA	1	62	Tom 1 Lo	OFF
C#3	67	ProcessTom	OFF	66	Tom 2 Lo V	OFF	274	GlassBreak	OFF	67	ProcessTom	OFF
D3	62	Tom 1 Lo	OFF	16	Snare 1	OFF	274	GlassBreak	OFF	62	Tom 1 Lo	OFF
D#3	67	ProcessTom	OFF	21	Soft Snare	OFF	274	GlassBreak	OFF	67	ProcessTom	OFF
E3	61	Tom 1 Hi	OFF	17	Snare 2	OFF	172	Growl 1	OFF	62	Tom 1 Lo	OFF
F3	51	Tite HH	1	20	PicloSnare	OFF	172	Growl 1	OFF	51	Tite HH	1
F#3	55	CloseSynHH	3	19	Snare 4	OFF	160	Sword	OFF	67	ProcessTom	OFF
G3	51	Tite HH	1	18	Snare 3	OFF	160	Sword	OFF	52	Close HH	1
G#3	56	OpenSyn HH	3	22	LightSnare	OFF	35	Fist	2	67	ProcessTom	OFF
A3	53	Open HH	1	27	GatedSnare	OFF	35	Fist	3	53	Open HH	1
A#3	100	Tambourine	OFF	24	TightSnare	OFF	238	Tron Up	2	100	Tambourine	OFF
B3	54	Pedal HH	1	28	PowerSnare	OFF	238	Tron Up	3	54	Pedal HH	1
C4	43	Crash Cym	OFF	25	Ambi.Snare	OFF	93	CorkPop	OFF	43	Crash Cym	OFF
C#4	43	Crash Cym	OFF	177	Rev.Snare1	OFF	93	CorkPop	OFF	43	Crash Cym	OFF
D4	57	Ride Edge	OFF	26	Rock Snare	OFF	283	HandDrill	OFF	57	Ride Edge	OFF
D#4	58	Ride Cup	OFF	29	RollSnare1	4	283	HandDrill	OFF	58	Ride Cup	OFF
E4	98	SynMaracas	OFF	30	RollSnare2	4	170	Uhhh!	OFF	98	SynMaracas	OFF
F4	97	Cabasa	OFF	41	Side Stick	OFF	170	Uhhh!	OFF	97	Cabasa	OFF
F#4	130	Hand Claps	OFF	31	SynSnare 1	OFF	171	Samurai!	OFF	130	Hand Claps	OFF
G4	78	Lo Bongo	OFF	32	SynSnare 2	OFF	171	Samurai!	OFF	78	Lo Bongo	OFF
G#4	80	Slap Bongo	OFF	278	Gun Shot 1	OFF	228	Jetstar	OFF	80	Slap Bongo	OFF
A4	79	Hi Bongo	OFF	33	VocalSnr 1	OFF	228	Jetstar	OFF	79	Hi Bongo	OFF
A#4	108	Cowbell	OFF	38	BrushSwish	OFF	219	MouthHarp1	4	108	Cowbell	OFF
B4	82	Open Conga	OFF	39	BrushSwirl	1	221	MouthHarp2	4	82	Open Conga	OFF
C5	82	Open Conga	OFF	37	Brush Tap	1	220	MouthHrp1A	4	82	Open Conga	OFF
C#5	112	Lo Timbal	OFF	36	Brush Slap	1	227	WhiteNoise	OFF	112	Lo Timbal	OFF
D5	104	MuteTriang	4	51	Tite HH	2	278	Gun Shot 1	OFF	104	MuteTriang	2
D#5	111	Hi Timbal	OFF	53	Open HH	2	152	Zap 1	OFF	111	Hi Timbal	OFF
E5	105	OpenTriang	4	54	Pedal HH	2	153	Zap 2	OFF	105	OpenTriang	2
F5	154	Scratch Hi	2	55	CloseSynHH	3	173	Monkey 1	OFF	59	Ride Cym 1	OFF
F#5	155	Scratch Lo	2	56	OpenSyn HH	3	174	Monkey 2	OFF	60	Ride Cym 2	OFF
G5	156	ScratchDbl	2	43	Crash Cym	OFF	133	MetalHitLo	OFF	45	China Cym	OFF
G#5	177	Rev.Snare1	5	47	Splash Cym	OFF	132	MetalHitHi	OFF	177	Rev.Snare1	3
A5	25	Ambi.Snare	5	45	China Cym	OFF	134	Gt Scratch	OFF	25	Ambi.Snare	3
A#5	29	RollSnare1	6	57	Ride Edge	OFF	218	Gong Lo	OFF	29	RollSnare1	4
B5	30	RollSnare2	6	58	Ride Cup	OFF	234	Cast Roll	5	30	RollSnare2	4
C6	211	Pole	OFF	59	Ride Cym 1	OFF	119	Castanet	5	47	Splash Cym	OFF
C#6	32	SynSnare 2	OFF	60	Ride Cym 2	OFF	68	OilDrum	OFF	40	Stick Hit	OFF
D6	131	Syn Claps	OFF	62	Tom 1 Lo	OFF	72	SolidHit	OFF	131	Syn Claps	OFF
D#6	118	Syn Claves	OFF	62	Tom 1 Lo	OFF	229	Thing	OFF	118	Syn Claves	OFF
E6	71	SynTom2 Lo	OFF	61	Tom 1 Hi	OFF	212	FingCymbal	OFF	71	SynTom2 Lo	OFF
F6	71	SynTom2 Lo	OFF	67	ProcessTom	OFF	159	Scratch c	6	71	SynTom2 Lo	OFF
F#6	42	Syn Rim	OFF	67	ProcessTom	OFF	157	Scratch a	6	42	Syn Rim	OFF
G6	69	Syn Tom 1	OFF	71	SynTom2 Lo	OFF	158	Scratch b	6	99	Sagat	OFF
G#6	69	Syn Tom 1	OFF	70	SynTom2 Hi	OFF	154	Scratch Hi	6	229	Thing	OFF
A6	69	Syn Tom 1	OFF	69	Syn Tom 1	OFF	155	Scratch Lo	6	102	MarcTree 1	OFF
A#6	69	Syn Tom 1	OFF	69	Syn Tom 1	OFF	156	ScratchDbl	6	102	MarcTree 1	OFF
B6	69	Syn Tom 1	OFF	73	Brush Tom	OFF	142	Orch Hit	OFF	102	MarcTree 1	OFF
C7	102	MarcTree 1	OFF	73	Brush Tom	OFF	142	Orch Hit	OFF	102	MarcTree 1	OFF
C#7		------	OFF		------	OFF		------	OFF		------	OFF
D7		------	OFF		------	OFF		------	OFF		------	OFF
D#7		------	OFF		------	OFF		------	OFF		------	OFF
E7		------	OFF		------	OFF		------	OFF		------	OFF
F7		------	OFF		------	OFF		------	OFF		------	OFF
F#7		------	OFF		------	OFF		------	OFF		------	OFF
G7		------	OFF		------	OFF		------	OFF		------	OFF
G#7		------	OFF		------	OFF		------	OFF		------	OFF
A7		------	OFF		------	OFF		------	OFF		------	OFF
A#7		------	OFF		------	OFF		------	OFF		------	OFF
B7		------	OFF		------	OFF		------	OFF		------	OFF
C8		------	OFF		------	OFF		------	OFF		------	OFF

	35 Zulu Kit			36 Modern Kit		
	No.	Sample Name	Excl	No.	Sample Name	Excl
C1	3	Crisp Kick	OFF	2	Ambi.Kick	OFF
C#1	3	Crisp Kick	OFF	2	Ambi.Kick	OFF
D1	3	Crisp Kick	OFF	2	Ambi.Kick	OFF
D#1	3	Crisp Kick	OFF	2	Ambi.Kick	OFF
E1	3	Crisp Kick	OFF	2	Ambi.Kick	OFF
F1	3	Crisp Kick	OFF	26	Rock Snare	OFF
F#1	3	Crisp Kick	OFF	0	Fat Kick	OFF
G1	3	Crisp Kick	OFF	32	SynSnare 2	OFF
G#1	3	Crisp Kick	OFF	11	Syn Kick 1	OFF
A1	3	Crisp Kick	OFF	24	TightSnare	OFF
A#1	3	Crisp Kick	OFF	177	Rev.Snare1	OFF
B1	3	Crisp Kick	OFF	12	Syn Kick 2	OFF
C2	3	Crisp Kick	OFF	1	Rock Kick	OFF
C#2	11	Syn Kick 1	OFF	41	Side Stick	OFF
D2	2	Ambi.Kick	OFF	278	Gun Shot 1	OFF
D#2	7	Gated Kick	OFF	130	Hand Claps	OFF
E2	10	Dance Kick	OFF	25	Ambi.Snare	OFF
F2	6	Real Kick	OFF	67	ProcessTom	OFF
F#2	13	Syn Kick 3	OFF	51	Tite HH	1
G2	32	SynSnare 2	OFF	67	ProcessTom	OFF
G#2	28	PowerSnare	OFF	54	Pedal HH	1
A2	31	SynSnare 1	OFF	67	ProcessTom	OFF
A#2	21	Soft Snare	OFF	53	Open HH	1
B2	24	TightSnare	OFF	67	ProcessTom	OFF
C3	22	LightSnare	OFF	67	ProcessTom	OFF
C#3	25	Ambi.Snare	OFF	43	Crash Cym	OFF
D3	17	Snare 2	OFF	67	ProcessTom	OFF
D#3	278	Gun Shot 1	OFF	57	Ride Edge	OFF
E3	131	Syn Claps	OFF	43	Crash Cym	OFF
F3	108	Cowbell	OFF	58	Ride Cup	OFF
F#3	51	Tite HH	1	100	Tambourine	OFF
G3	55	CloseSynHH	2	47	Splash Cym	OFF
G#3	54	Pedal HH	1	108	Cowbell	OFF
A3	56	OpenSyn HH	2	43	Crash Cym	OFF
A#3	53	Open HH	1	123	Viblaslap	OFF
B3	105	OpenTriang	OFF	59	Ride Cym 1	OFF
C4	43	Crash Cym	OFF	79	Hi Bongo	OFF
C#4	47	Splash Cym	OFF	78	Lo Bongo	OFF
D4	105	OpenTriang	OFF	85	Mute Conga	OFF
D#4	100	Tambourine	OFF	82	Open Conga	OFF
E4	104	MuteTriang	OFF	82	Open Conga	OFF
F4	82	Open Conga	OFF	111	Hi Timbal	OFF
F#4	82	Open Conga	OFF	112	Lo Timbal	OFF
G4	83	Slap Conga	OFF	107	Agogo	OFF
G#4	83	Slap Conga	OFF	107	Agogo	OFF
A4	85	Mute Conga	OFF	97	Cabasa	OFF
A#4	85	Mute Conga	OFF	96	Maracas	OFF
B4	84	Palm Conga	OFF	128	Whistle S	2
C5	78	Lo Bongo	OFF	129	Whistle L	2
C#5	187	Log Drum 1	OFF	124	Guiro S	3
D5	188	Log Drum 2	OFF	125	Guiro L	3
D#5	189	Log Drum 3	OFF	117	Claves	OFF
E5	190	Log Drum 4	OFF	115	WoodBlockM	OFF
F5	226	BrushNoise	OFF	62	Tom 1 Lo	OFF
F#5	121	FingerSnap	OFF	51	Tite HH	4
G5	162	BISS	OFF	62	Tom 1 Lo	OFF
G#5	163	BOOFN	OFF	53	Open HH	4
A5	164	BOOGETA	OFF	61	Tom 1 Hi	OFF
A#5	165	CHLACK	OFF	50	OrchCym LP	4
B5	173	Monkey 1	OFF	101	JingleBell	OFF
C6	94	Mute Cuica	OFF	102	MarcTree 1	OFF
C#6	95	Open Cuica	OFF	105	OpenTriang	5
D6	220	MouthHrp1A	OFF	105	OpenTriang	5
D#6	221	MouthHarp2	OFF	104	MuteTriang	5
E6	222	MouthHrp2A	OFF		------	OFF
F6	243	MalletLoop	OFF		------	OFF
F#6	236	Waterphone	OFF		------	OFF
G6	243	MalletLoop	OFF		------	OFF
G#6	102	MarcTree 1	OFF		------	OFF
A6	221	MouthHarp2	OFF		------	OFF
A#6	135	Gtr Slide	OFF		------	OFF
B6	135	Gtr Slide	OFF		------	OFF
C7	242	Jung Gliss	OFF		------	OFF
C#7		------	OFF		------	OFF
D7		------	OFF		------	OFF
D#7		------	OFF		------	OFF
E7		------	OFF		------	OFF
F7		------	OFF		------	OFF
F#7		------	OFF		------	OFF
G7		------	OFF		------	OFF
G#7		------	OFF		------	OFF
A7		------	OFF		------	OFF
A#7		------	OFF		------	OFF
B7		------	OFF		------	OFF
C8		------	OFF		------	OFF

MultiSample

0	A.Piano1
1	A.Piano1w
2	A.Piano1LP
3	A.Piano2
4	A.Piano2w
5	M1Piano
6	M1Pianow
7	GrandEP
8	E.Piano1
9	E.Piano1w
10	E.Piano1LP
11	E.Piano2
12	E.Piano2w
13	E.Piano2LP
14	SoftEP
15	SoftEPLP
16	HardEP
17	HardEPw
18	HardEPLP
19	StageEP
20	StageEPw
21	PianoPad1
22	PianoPad2
23	Clav
24	Clavw
25	ClavLP
26	Harpsicord
27	Harpsicdw
28	HarpsicdLP
29	PercOrgan1
30	PercOrg1LP
31	PercOrgan2
32	PercOrg2LP
33	Organ1
34	Organ1LP
35	Organ2
36	Organ2LP
37	Organ3
38	Organ4
39	Organ5
40	Organ6
41	Organ6LP
42	VoxOrgan1
43	VoxOrgan2
44	VoxOrgan3
45	RotaryOrg1
46	Rotary1LP
47	RotaryOrg2
48	SuperBX-3
49	SuperBX3LP
50	Dist.Organ
51	Dist.OrgLP
52	PipeOrgan1
53	PipeOrg1LP
54	PipeOrgan2
55	PipeOrg2LP
56	PipeOrgan3
57	PipeOrg3LP
58	CheeseOrg
59	Musette
60	MusetteV
61	Bandneon
62	BandneonLP
63	Accordion
64	AcordionLP
65	Harmonica
66	G.Guitar
67	G.GuitarLP
68	F.Guitar1
69	F.Gtr1LP
70	F.Guitar1V
71	F.Guitar2
72	A.GtrHarm
73	E.Guitar1
74	E.Guitr1V
75	E.Guitar2
76	E.Guitar3
77	MuteGuitar
78	FunkyGtr
79	FunkyGtrV
80	E.GtrHarm
81	E.GtrHramV
82	DistGuitar
83	DistGtrLP
84	DistGuitrV
85	OverDrive
86	OverDrvLP
87	OverDrvF4
88	MuteDstGtr
89	MtDstGtrV
90	DstGtrHarm
91	PowerChord
92	PowerChdV
93	OverDvChrd
94	PowerGtr
95	PowerGtrV
96	GtScratch
97	GtrSlide
98	GtCutNois1
99	GtCutNois2
100	Chic1
101	Chic2
102	Stick
103	Sitar1
104	Sitar2
105	Sitar2LP
106	Tambura
107	TamburaLP
108	Santur
109	Bouzouki
110	BouzoukiLP
111	Mandolin
112	Banjo
113	Shamisen
114	Koto
115	Uood
116	Harp
117	Ukulele
118	MandlinTrm
119	A.Bass1
120	A.Bass1LP
121	A.Bass2
122	A.Bass2LP
123	E.Bass1
124	E.Bass1LP
125	E.Bass2
126	E.Bass2LP
127	PickBass1
128	PicBass1LP
129	PickBass2
130	PickBass3
131	Fretless
132	FretlessLP
133	SlapBass1
134	SlapBass2
135	SlpBass2LP
136	SlapBass3
137	SynthBass1
138	SynBass1LP
139	SynthBass2
140	SynBass2LP
141	SynthBass3
142	RezBass1
143	RezBass2
144	RezBass3
145	RezBass3LP
146	MiniBass
147	HouseBass
148	FMBass
149	FMBassLP
150	BassSlide
151	StringSlap
152	Kalimba
153	MusicBox
154	MusicBoxLP
155	LogDrum
156	Marimba
157	Marimbaw
158	Xylophone
159	SynMallet
160	Vibe
161	Vibew
162	Celesta
163	Glocken1
164	Glocken2
165	BrightBell
166	B.BellLP
167	MetalBell
168	M.BellLP
169	Gamelan
170	Pole
171	PoleLP
172	Tubular
173	ChurchBell
174	FingCymbal
175	FingCymbNT
176	Gong
177	GongLP
178	SplitDrum
179	SplitBell
180	Flute
181	TinFlute
182	TinFluteLP
183	PanFlute
184	PanFluteLP
185	Shakuhachi
186	ShakhachiV
187	ShakhachLP
188	Bottle
189	Recorder
190	Ocarina
191	Oboe
192	EnglishHrn
193	Eng.HornLP
194	BasoonOboe
195	BsonOboeLP
196	Clarinet
197	ClarinetLP
198	Bari.Sax
199	Bari.SaxLP
200	TenorSax
201	T.SaxLP
202	AltoSax
203	A.SaxLP
204	SopranoSax
205	S.SaxLP
206	BagPipe
207	Tuba
208	TubaLP
209	Horn
210	BrightHorn
211	FlugelHorn
212	Trombone1
213	Trombone2
214	Trumpet
215	TrumpetLP
216	MuteTP
217	MuteTPLP
218	Brass1
219	Brass1LP
220	Brass2
221	Brass2LP
222	BrassFall
223	StringEns.
224	StrEns.V1
225	StrEns.V2
226	StrEns.V3
227	AnaStrings
228	AnaStr.V1
229	AnaStr.V2
230	AnaStr.V3
231	PWM
232	Violin
233	Viola
234	Cello
235	CelloLP
236	CBs.&Cello
237	Pizzicato
238	Voice
239	Choir
240	SoftChoir
241	AirVox
242	DooVoice
243	DooVoiceLP
244	SynVox
245	SynVoxLP
246	GlassVox
247	WhitePad
248	EtherBell
249	E.BellLP
250	Ghostly
251	MegaPad
252	SynthPad
253	SynthPadA
254	Spectrum1
255	Spectrum2
256	WaveSweep
257	WaveSweepA
258	WaveSweepB
259	MouthHarp1
260	MouthHrp1A
261	MouthHarp2
262	MouthHrp2A
263	MouthHarps
264	ChromRes
265	WahFuzz
266	Applause
267	Stadium
268	BrushNoise
269	BruNoiseNT
270	WhiteNoise
271	WhiteNoiNT
272	Jetstar
273	JetstarLP
274	JetstrLPNT
275	BrushSwirl
276	Thing
277	ThingNT
278	MarcTree1
279	MrcTree1NT
280	MarcTree1V
281	MrcTre1VNT
282	MarcTree2
283	MrcTree2NT
284	MarcTree2V
285	MrcTre2VNT
286	TriRoll
287	TriRollNT
288	TriRollV
289	TriRollVNT
290	Clicker
291	ClickerNT
292	CastRoll
293	CastRollNT
294	Lore
295	LoreNT
296	Waterphone
297	Crickets1
298	Crickts1NT
299	Crickets2
300	Crickts2NT
301	MagicBell
302	TronUp
303	TronUpLP
304	TronUpNT
305	FluteFX
306	FluteFXLP
307	Flutter
308	FlutterLP
309	HarpUp
310	HarpUpLP
311	JungGliss
312	JungGlisLP
313	MalletLoop
314	MalletLpNT
315	Boogeta
316	Sporing
317	Rattle
318	Kava
319	Fever1
320	Fever2
321	Scratchar
322	Zappers1
323	Zappers2
324	Bugs
325	Surfy
326	SleighBell
327	Sagatty
328	SagattyNT
329	ElecBeat
330	Idling
331	EthnicBeat
332	Tap-A
333	Tap-B
334	Tap-C
335	Mini1a
336	Digital1
337	VS102
338	VS48
339	VS52
340	VS58
341	VS71
342	VS72

343	VS88
344	VS89
345	13-35
346	DWGSOrgan1
347	DWGSOrgan2
348	DWGSE.P.
349	Saw
350	Square
351	Ramp
352	Pulse25%
353	Pulse8%
354	Pulse4%
355	SynSine
356	Sine
357	OrchHit
358	ImpactHitL
359	ImpactHitR
360	RaveHitL
361	RaveHitR
362	PhillyHit
363	PowerSnare
364	SynSnare
365	SnareRl/Ht
366	Fist
367	StickHit
368	SideStick
369	SideStikNT
370	TimbleSide
371	TimblSidNT
372	Indust
373	TaikoHit
374	SynRim
375	SynRimNT
376	Click
377	CrashCym
378	CrashCymLP
379	CrashLPNT
380	ChinaCym
381	ChinaCymLP
382	SplashCym
383	OrchCrash
384	TiteHH
385	TiteHHNT
386	OpenHH
387	CloseSynHH
388	OpenSynHH
389	BellRide
390	PingRide
391	OrchB.Drm
392	Tom1
393	Tom2Hi
394	Tom2Lo
395	ProccesTom
396	OilDrum
397	SynTom1
398	SynTom2
399	VocalSnare
400	SolidHit
401	SteelDrum
402	SteelDrmLP
403	Timapni
404	TimpaniLP
405	Taiko
406	Tsuzumi
407	LowBongo
408	SlapBongo
409	OpenConga
410	SlapConga
411	PalmConga

412	MuteConga
413	Baya
414	Tabla1
415	Tabla2
416	Djembe
417	Maracas
418	SynMaracas
419	SynMarcsNT
420	Cabasa
421	CabasaNT
422	Sagat
423	SagatNT
424	Tambourine
425	JingleBell
426	MuteTriang
427	OpenTriang
428	Agogo
429	CowBell
430	Timbale
431	WoodBlock1
432	WoodBlock2
433	WoodBlock3
434	Claves
435	SynClaves
436	Castanet
437	CastanetNT
438	CastanetV
439	FingerSnap
440	FingSnapNT
441	Snap
442	SnapNT
443	Drop
444	CorkPop
445	Vibraslap
446	Guiro
447	GuiroLP
448	HandClap
449	HandClapNT
450	GunShot1
451	GlassBreak
452	MetalHit
453	Pull1
454	Pull1NT
455	Pull2
456	Pull2NT
457	HandDrill
458	HandDrilNT
459	Zap1
460	Zap2
461	FretZap1
462	FretZap2
463	ScratchHi
464	ScratcHiNT
465	ScratchLo
466	ScratcLoNT
467	ScratchDbl
468	ScratDblNT
469	Scratcha
470	Rev.Kick
471	Rev.ConBD
472	RevSnare1
473	Rev.Snare2
474	Rev.Snare3
475	Rev.Cymbal
476	Rev.Tom1
477	Rev.Tom2
478	Samurai!
479	Growl1
480	Growl1NT

481	Monkey1
482	Monkey2
483	Rain
484	Thunder
485	Wind
486	Seashore
487	SeashoreV
488	Stream
489	Bubble
490	Bird1
491	Bird2
492	Kitty
493	Dog
494	Growl2
495	Gallop
496	Laughing
497	LaughingV
498	Scream
499	Punch
500	HartBeat
501	Footstep1
502	Footstep2
503	Telephone1
504	Telephone2
505	DoorCreak
506	DoorSlam
507	CarEngine
508	CarEnginLP
509	CarStop
510	CarPass
511	CarCrash
512	Siren
513	Train
514	Helicopter
515	GunShot2
516	MachineGun
517	LaserGun
518	Explosion
519	DJKit1
520	DJKit2
521	Scratches
522	OrchPerc
523	Loopey
524	ClockWorks
525	MusicaLoop
526	Manimals
527	DownLo

MultiSample: N1 only

528	St.Piano L
529	St.Piano R
530	A.Piano 3
531	A.Piano 3w
532	Grand EP 2
533	Grand EP2w
534	E.Piano 3
535	E.Piano 3w
536	E.Piano3LP
537	Stage EP 2
538	Stage EP2w
539	StageEP2LP
540	Dyno EP 1
541	Dyno EP 1w
542	DynoEP1 LP
543	Dyno EP 2
544	Dyno EP 2w
545	DynoEP2 LP
546	Wurly EP
547	Wurly EP w
548	WurlyEP LP
549	PianoPad 3
550	P.Pad 3 LP
551	Clav 2
552	Clav 2 w
553	Clav 2 LP
554	Organ 7
555	Organ 7 LP
556	Organ 8
557	Organ 8 LP
558	DWGS EP 2
559	DWGS EP 3
560	DWGS EP 4
561	DWGS EP 5
562	DWGS EP 6

DrumSample

0	FatKick
1	RockKick
2	Ambi.Kick
3	CrispKick
4	PunchKick
5	DryKick
6	RealKick
7	GatedKick
8	ProcesKick
9	MetalKick
10	DanceKick
11	SynKick1
12	SynKick2
13	SynKick3
14	SynKick4
15	OrchB.Drm
16	Snare1
17	Snare2
18	Snare3
19	Snare4
20	PicloSnare
21	SoftSnare
22	LightSnare
23	DrySnare
24	TightSnare
25	Ambi.Snare
26	RockSnare
27	GatedSnare
28	PowerSnare
29	RollSnare1
30	RollSnare2
31	SynSnare1
32	SynSnare2
33	VocalSnr1
34	VocalSnr2
35	Fist
36	BrushSlap
37	BrushTap
38	BrushSwish
39	BrushSwirl
40	StickHit
41	SideStick
42	SynRim
43	CrashCym
44	CrashLP
45	ChinaCym
46	ChinaLP
47	SplashCym
48	SplashLP
49	OrchCym
50	OrchCymLP
51	TiteHH
52	CloseHH
53	OpenHH
54	PedalHH
55	CloseSynHH
56	OpenSynHH
57	RideEdge
58	RideCup
59	RideCym1
60	RideCym2
61	Tom1Hi
62	Tom1Lo
63	Tom2Hi
64	Tom2HiV
65	Tom2Lo
66	Tom2LoV
67	ProcessTom
68	OilDrum
69	SynTom1
70	SynTom2Hi
71	SynTom2Lo
72	SolidHit
73	BrushTom
74	BrushTomV
75	Timpani
76	TaikoHi
77	TaikoLo
78	LoBongo
79	HiBongo
80	SlapBongo
81	Tsuzumi
82	OpenConga
83	SlapConga
84	PalmConga
85	MuteConga
86	Baya1
87	Baya2
88	Tabla1
89	Tabla2
90	Tabla3
91	Udu
92	Djembe
93	CorkPop
94	MuteCuica
95	OpenCuica
96	Maracas
97	Cabasa
98	SynMaracas
99	Sagat
100	Tambourine
101	JingleBell
102	MarcTree1
103	MarcTree2
104	MuteTriang
105	OpenTriang
106	Flexatone
107	Agogo
108	Cowbell
109	SynCowbell
110	R-Timbal
111	HiTimbal
112	LoTimbal
113	Timbales
114	WoodBlockH
115	WoodBlockM
116	WoodBlockL
117	Claves
118	SynClaves
119	Castanet
120	CastanetV
121	FingerSnap
122	Snap
123	Viblaslap
124	GuiroS
125	GuiroL
126	Pull1
127	Pull2
128	WhistleS
129	WhistleL
130	HandClaps
131	SynClaps
132	MetalHitHi
133	MetalHitLo
134	GtScratch
135	GtrSlide
136	GtCutNois1
137	GtCutNois2
138	Chic1
139	Chic2
140	BassSlide
141	StringSlap
142	OrchHit
143	ImpactHitL
144	ImpactHitR
145	RaveHitL
146	RaveHitR
147	PhillyHit
148	BrassFall1
149	BrassFall2
150	BrassFall3
151	BrassFall4
152	Zap1
153	Zap2
154	ScratchHi
155	ScratchLo
156	ScratchDbl
157	Scratcha
158	Scratchb
159	Scratchc
160	Sword
161	Drop
162	BISS
163	BOOFN
164	BOOGETA
165	CHLACK
166	COOSH
167	COUGH
168	ISSH
169	POOM
170	Uhhh!
171	Samurai!
172	Growl1???
173	Monkey1
174	Monkey2
175	Rev.Kick
176	Rev.ConBD
177	Rev.Snare1
178	Rev.Snare2
179	Rev.Snare3
180	Rev.Cymbal
181	Rev.Tom1
182	Rev.Tom2
183	Kalimba1
184	Kalimba2
185	MusicBox1
186	MusicBox2
187	LogDrum1
188	LogDrum2
189	LogDrum3
190	LogDrum4
191	LogDrum5
192	Marimba1
193	Marimba2
194	Marimba3
195	Marimba4
196	Xylofon1
197	Xylofon2
198	Xylofon3
199	Vibe1
200	Vibe2
201	Vibe3
202	Vibe4
203	Celeste
204	Glocken1
205	Glocken2
206	Glocken3
207	BrightBell
208	MetalBell
209	Gamelan1
210	Gamelan2
211	Pole
212	FingCymbal
213	Tubular1
214	Tubular2
215	Tubular3
216	ChurchBell
217	GongHi
218	GongLo
219	MouthHarp1
220	MouthHrp1A
221	MouthHarp2
222	MouthHrp2A
223	Spectrum1
224	Spectrum2
225	Stadium
226	BrushNoise
227	WhiteNoise
228	Jetstar
229	Thing
230	TriRoll
231	Clicker1
232	Clicker2
233	Clicker3
234	CastRoll
235	Lore
236	Waterphone
237	Crickets
238	TronUp
239	FluteFX
240	Flutter
241	HarpUp
242	JungGliss
243	MalletLoop
244	Rain
245	Thunder
246	Wind
247	Seashore
248	SeashoreV
249	Stream
250	Bubble
251	Bird1
252	Bird2
253	Kitty
254	Dog
255	Growl2
256	Gallop
257	Laughing
258	LaughingV
259	Scream
260	Punch
261	HartBeat
262	Footstep1
263	Footstep2
264	Applause1
265	Applause2
266	Telephone1
267	Telephone2
268	DoorCreak
269	DoorSlam
270	CarEngine
271	CarStop
272	CarPass
273	CarCrash
274	GlassBreak
275	Siren
276	Train
277	Helicopter
278	GunShot1
279	GunShot2
280	MachineGun
281	LaserGun
282	Explosion
283	HandDrill
284	Metronome1
285	Metronome2

*The sounds processed by INFINITY™.

INFINITY
LOOPS BY JUPITER SYSTEMS

Troubleshooting

I pressed the POWER switch but the LCD does not light up!

- Is the AC/AC power supply connected?

No sound!

- Are the amp, mixer or headphones connected to the correct jacks?

  (Can you hear the demo songs? If so, connections are OK.)
- Is the power of your amp and mixer turned on, and are their controls set correctly?
- Is the [VOLUME] slider of the N1/N5 raised?
- Is the Global mode <Local Control> setting ON? (p.64)
- Have Split settings been made so that you are playing an area of the keyboard which does not sound? (Performance p.27, Combination p.29)

Sound does not stop!

- Is the Arpeggiator <Latch/Key Sync> setting LATCH or L&KS?

  (Either turn this parameter OFF, or stop the arpeggiator.) (p.25)

Sound or operation is different than during editing!

- Did you Write the data after editing? (p.22)

  After using the Realtime Controller to edit, you need to write the performance.
- Has the program selected in a Performance or Combination been edited subsequently?

Can't control via MIDI!

- Is the MIDI cable or special cable connected correctly?

When controlling the N1/N5 from an external device

- Is the N1/N5 set to receive data on the MIDI channel which is being transmitted by the transmitting device? (p.57)
- In the Global mode <MIDI Channel To Port> setting, is the channel you wish to use set to either A or B? (p.66)
- Is the Global mode <MIDI Filter> set appropriately? (p.65)
- In the case of a Combination sound, is the Combination Edit mode <Receive Note On> parameter OFF? (p.29) Are there problems with the other combination parameter settings?

When controlling an external device from the N1/N5

- Is the MIDI channel of the receiving device the same as the MIDI channel as the N1/N5? (p.57)

Cannot control from a computer!

- Is the special cable connected correctly?
- Is the Global mode <BPS Select> setting set appropriately for your computer? (p.64, p.67–p.68)
- Has the MIDI port of the MIDI interface connected to the N1/N5, and the port of the Korg MIDI Driver, been specified correctly in your computer?

Can't write programs etc.!

- Is the Global mode <Write Protect> setting turned on? (p.65)

The keyboard doesn't play the correct drum sounds!

- Is the Global mode <Master Key Shift> other than 00? (p.63)
- Is the Program Edit mode <Octave Select> other than 8'? (p.32)

Can't use MIDI program change messages to select programs or combinations!

- Is the Global mode <MIDI Filter> PRG set to X? (p.65)
- Does the program bank for the desired program match the MIDI bank select message?

Can't select VDF2 or VDA2 parameters!

- Is the <Oscillator Mode> of the currently-selected program set to double mode? (p.31)

GM-compatible song data is not played back correctly!

- Is the song data GM-compatible?
- Have the Multi parts been initialized for GM operation? (p.62)
- Are the Global mode settings correct?
- If volume or pan are incorrect, are these messages being disabled by the filter of the Korg MIDI Driver?

Master Key Shift is not correctly transmitted/received!

- Is the Global mode <Key Shift Position> setting correct? (p.63)

Arpeggiator does not play correctly!

- If the Global mode <Clock Source> is set to MIDI or PC IF, are Clock messages being transmitted to the N1/N5?

Cannot change the Part/Receive MIDI channel/Performance Number!

- Are you holding down a note?

Program/Combination sound bank list

Bank Map List	
Bank Name	Bank Select (MSB:LSB)
GM-a	00:00(GS/XG) 00:01(GS)
r:01	01:xx
r:02	02:xx
r:03	03:xx
r:04	04:xx
r:05	05:xx
r:06	06:xx
r:07	07:xx
r:08	08:xx
r:09	09:xx
r:10	0A:xx
r:11	0B:xx
r:16	10:xx
r:17	11:xx
r:18	12:xx
r:19	13:xx
r:24	18:xx
r:25	19:xx
r:26	1A:xx
r:32	20:xx
r:33	21:xx
r:40	28:xx
r:CM	7D:xx 7F:xx(GS)
y:01	00:01(XG)
y:03	00:03
y:06	00:06
y:08	00:08
y:12	00:0C
y:14	00:0E
y:16	00:10

Bank Map List	
Bank Name	Bank Select (MSB:LSB)
y:17	00:11
y:18	00:12
y:19	00:13
y:20	00:14
y:24	00:18
y:25	00:19
y:27	00:1B
y:28	00:1C
y:32	00:20
y:33	00:21
y:34	00:22
y:35	00:23
y:36	00:24
y:37	00:25
y:38	00:26
y:39	00:27
y:40	00:28
y:41	00:29
y:42	00:2A
y:43	00:2B
y:45	00:2D
y:64	00:40
y:65	00:41
y:66	00:42
y:67	00:43
y:68	00:44
y:69	00:45
y:70	00:46
y:71	00:47
y:72	00:48

Bank Map List	
Bank Name	Bank Select (MSB:LSB)
y:96	00:60
y:97	00:61
y:98	00:62
y:99	00:63
y100	00:64
y101	00:65
ySFX	40:xx
GM-b	38:00 39:00
PrgU	50:xx 00:00(05)
PrgA	51:xx
PrgB	52:xx
PrgC	53:xx
CmbU	58:xx
CmbA	59:xx
CmbB	5A:xx
CmbC	5B:xx
yDr1	7E:xx
yDr2	7F:xx(XG) 78:xx(XG)
rDrm	3D:xx 78:xx(GS)
kDrm	3E:xx 78:xx(05)
****	3F:xx

* (GS) : after GS Reset
* (XG) : after XG System ON
* (05) : 05R/W Map

'yDr2' Bank (Bank MSB=7Fh)

Drum Kit List (Drum Bank)	
Program No. (PC# xxh)	Drum Kit Name
1 (00h)	Standard
2 (01h)	Standard
9 (08h)	Room
17 (10h)	Rock
25 (18h)	Electro
26 (19h)	Analog
33 (20h)	Jazz
41 (28h)	Brush
49 (30h)	Classic

'yDr1' Bank (Bank MSB=7Eh)

Drum Kit List (Drum Bank)	
Program No. (PC# xxh)	Drum Kit Name
1 (00h)	SFX 1
2 (01h)	SFX 2

'rDrm' Bank (Bank MSB=3Dh)

Drum Kit List (Drum Bank)	
Program No. (PC# xxh)	Drum Kit Name
1 (00h)	STANDARD
2 (01h)	STANDARD
9 (08h)	ROOM
17 (10h)	POWER
25 (18h)	ELECTRONIC
26 (19h)	ANALOG
27 (1Ah)	DANCE
33 (20h)	JAZZ
41 (28h)	BRUSH
49 (30h)	ORCHESTRA
50 (31h)	ETHNIC
51 (32h)	KICK&SNARE
57 (38h)	SFX
128 (7Fh)	C/M

'kDrm' Bank (Bank MSB=3Eh)

Drum Kit List (Drum Bank)	
Program No. (PC# xxh)	Drum Kit Name
1(00h)...16(0Eh)	GM Kit
17(10h)...24(17h)	Power Kit
25(18h)	Dance Kit
26(19h)	Analog Kit
27(1Ah)...32(1Fh)	Dance Kit
33(20h)...40(27h)	Jazz Kit
41(28h)...48(2Fh)	Brush Kit
49(30h)...56(37h)	Orch Kit
57(38h)...64(3Fh)	GM Kit
65(40h)...72(47h)	Perc Kit
73(48h)	User Kit 1
74(49h)	User Kit 2
75(4Ah)..128(7Fh)	GM Kit

For an explanation of each bank, refer to the table on p.6.

MIDI channel messages

* n : Channel 00h_0Fh 0_15
* vv : Value 00h_7Fh 0_127
* kk : Note No. 00h_7Fh 0_127 (C-1_G9)

Message	MIDI(Hex)	Description (Value)	
Note ON	9n kk vv	kk:C-1_G9 vv:1_127(velocity)	
Note OFF	9n kk 00	kk:C-1_G9	
Note OFF	8n kk 40	kk:C-1_G9	
Program Change	Cn vv	0_127	
Channel Pressure	Dn vv	0_127	
PitchBend Change	En mm ll	mm:ll= 0:0_64:0_127:127	
Poly Key Pressure	An kk vv	kk:C-1_G9 vv:1_127 (Receive Only)	
Control Changes			
Bank select(MSB)	Bn 00 vv	-> See ProgName list	
Bank select(LSB)	Bn 20 vv		
Balance	Bn 08 vv	0_64_127 Lower_Even_Upper LevelBalance	*1
Pitch Modulation	Bn 01 vv	0_127 Modulation Wheel	
Panpot	Bn 0A vv	0_64_127 L63_CNT_R63	
Volume	Bn 07 vv	0_127	
Expression	Bn 0B vv	0_127	
AssignableController1	Bn 10 vv	0_127 Assignable KNOB(MOD.2)	
AssignableController2	Bn 11 vv	0_127 Assignable Pedal(MOD.3)	
Hold1 ON/OFF(Damper)	Bn 40 vv	OFF:00_63, ON:64_127	
Sostenuto	Bn 42 vv	OFF:00_63, ON:64_127	
Soft Pedal	Bn 43 vv	OFF:00_63, ON:64_127	
Harmonic Content	Bn 47 vv	0_127 Color	
EG Release Time	Bn 48 vv	0_64_127 :-64_0_+63 (relative)	
EG Attack Time	Bn 49 vv	0_64_127 :-64_0_+63 (relative)	
Brightness	Bn 4A vv	0_127 Filter Cutoff	
Sound Contoroller 6	Bn 4B vv	0_127 EG Decay Time	
Reverb Send Level	Bn 5B vv	0_127 ('C' *send level*)	
Chorus Send Level	Bn 5D vv	0_127 ('D' send level)	
Effect1 Switch	Bn 5C vv	OFF:00_63, ON:64_127	
Effect2 Switch	Bn 5F vv	OFF:00_63, ON:64_127	
Effect1 Control	Bn 0C vv	0_127	*2
Portamento Switch	Bn 41 vv	0_63:OFF, 64_127:ON	
Portamento Time(MSB)	Bn 05 vv	0_127 : 0=short,127=long	
Portamento Control	Bn 54 kk	0_127 : C-1_G9 source Key	

*1: The volume balance between the Upper sound and the Lower sound for Layer or Split.
Transmitted/received on the MIDI channel of the Upper part.

*2: Applies the effect dynamic modulation effect.
Effect dynamic modulation will be applied regardless of the effect dynamic modulation source setting of the effect parameter.
If modulation is already being applied by an effect dynamic modulation source, the effect will be summed.
Received on the MIDI channel of the Upper part.
No effect is applied when the dynamic modulation intensity is +00.

Message	MIDI(Hex)	Description (Value)	
NRPN LSB	Bn 62 vv	vv -> See Table 1-2[NRPN]	
NRPN MSB	Bn 63 vv	vv -> See Table 1-2[NRPN]	
RPN LSB	Bn 64 vv	vv -> See Table 1-1[RPN]	
RPN MSB	Bn 65 vv	vv -> See Table 1-1[RPN]	
Data entry MSB	Bn 06 vv	0_127 RPN,NRPN value	
Data Increment	Bn 60 00	Data Increment MSB value	*3
Data Decrement	Bn 61 00	Data Decrement MSB value	*3
Channel Mode Message			
All Sound OFF	Bn 78 00		
Reset All Controllers	Bn 79 00	PitchBend Change = Center Pitch Modulation = 0 CutoffModulation = 0 AssignControl 1 = 0 AssignControl 2 = 0 Expression = 0 Portamento = 0 (OFF) Channel Pressure = 0 PolyKey Pressure = 0 (All Key) Hold1(Damper) = 0 (OFF) Sostenuto = 0 (OFF) Soft Pedal = 0 (OFF) NRPN = Null RPN = Null	
Local ON/OFF (PC/IF)	Bn 7A vv	00=ON(effective all part), 7F=OFF Receive if 'n'=EXCL channel	*4
Local ON/OFF (MIDI)	Bn 7A vv		
MONO mode ON	Bn 7E 0m	(m=1 only)	
POLY mode ON	Bn 7F 00		

*3: Increments (+1) or decrements (-) the upper byte (MSB) of the RPN parameter.
*4: Local on/off received from PC/IF will switch MIDI input on/off.
*5: Refer to p.XX TO HOST Interface Technical Chart.

Table 1: RPN/NRPN

< Table 1-1 : [RPN] >

Message	RPN Number MSB : LSB	Data (MSB)	vv (Hex)
Pitch Bend Sense	00 : 00	vv	0_64_127 -64_0_+63(relative)
Fine Tune	00 : 01	vv	0_64_127 -64_0_+63(relative)
Coarse Tune	00 : 02	vv	0_64_127 -64_0_+63(relative)
RPN Null	7F : 7F	--	

* value LSB has no effect

< Table 1-2 : [NRPN] >

Message	NRPN Number MSB : LSB	Data (MSB)	vv (Hex)	
Vibrato Rate	01 : 08	vv	0_64_127 -64_0_+63(relative)	
Vibrato Depth	01 : 09	vv	0_64_127 -64_0_+63(relative)	
Vibrato Delay	01 : 0A	vv	0_64_127 -64_0_+63(relative)	
Filt Cutoff	01 : 20	vv	0_64_127 -64_0_+63(relative)	
Color	01 : 21	vv	0_64_127 -64_0_+63(relative)	
EG Attack Time	01 : 63	vv	0_64_127 -64_0_+63(relative)	
EG Decay Time	01 : 64	vv	0_64_127 -64_0_+63(relative)	
EG Release Time	01 : 66	vv	0_64_127 -64_0_+63(relative)	
Drum Filt Cutoff	14 : kk	vv	0_64_127 -64_0_+63(relative)	*6
Drum Filt Color	15 : kk	vv	0_64_127 -64_0_+63(relative)	*6
Drum EG AttackTime	16 : kk	vv	0_64_127 -64_0_+63(relative)	*6
Drum EG Decay Time	17 : kk	vv	0_64_127 -64_0_+63(relative)	*6
Drum Coarse Tune	18 : kk	vv	0_64_127 -64_0_+63(relative)	*6
Drum Fine Tune	19 : kk	vv	0_64_127 -64_0_+63(relative)	*6
Drum Volume	1A : kk	vv	0_127 (absolute)	*6
Drum Panpot	1C : kk	vv	0, 1_64_127 (relative) (RND,L63_CNT_R63	*6
Drum Rev(C) Send	1D : kk	vv	0_127 (absolute)	*6
Drum Cho(D) Send	1E : kk	vv	0_127 (absolute)	*6

* Data Entry LSB value is ignored.
* kk: Drum Inst No. (0Ch_6Ch: 'C0' _ *C8*
* (relative): Added to the effect of the program parameter.
* (absolute): Multiplied by the effect of the program parameter.
With a setting of 127, the effect will be as specified by the program parameter.

*6: Valid when Part mode is Mdrm1_Mdrm4.

Universal exclusive messages

[Universal System Exclusive Message]

Device Inquiry	F0,7E,nn,06,01,F7		
GM Mode ON	F0,7E,nn,09,01,F7		
Master Volume	F0,7F,nn,04,01,ll,mm,F7	mm : 00h_7Fh	0_127
Master Balance	F0,7F,nn,04,02,ll,mm,F7	mm : 00h_40h_7Fh	0_64_127 (L63_Center_R63)

* nn : receive channel 00h_0Fh = Receive if EXCL channel (in Global Mode)
7Fh = Receive any Channel

* ll : value LSB has no effect

[Device Inquiry Reply]

Data(HEX)	Val(HEX)	Description	
F0h		Exclusive Status	
7Eh		Exclusive Non Realtime	
0nh	00h_0Fh	Exclusive Channel	(Global Parameter)
06h		Inquiry Message	
02h		Identity Reply	
42h		KORG ID	(MANUFACTURERS ID)
4Ch		N5/N1 ID	(FAMILY CODE LSB)
00h			(FAMILY CODE MSB)
**h	05h,0Fh	05h=N5, 0Fh=N1	(MEMBER CODE LSB)
00h			(MEMBER CODE MSB)
**h	00h_63h	SYSTEM Minor Version	(Minor Version LSB)
00h			(Minor Version MSB)
**h	00h_63h	*SYSTEM Major Version*	(Major Version *LSB*)
00h			(Major Version MSB)
F7h		End of Exclusive	

* Transmitted in response to a 'Device Inquiry' (F0, 7E, nn, 06, 01, F7) message.

Part Parameter Change

```
*************************************************************************
*  Part parameter change (only received)                                *
*      format: F0,42,3n,4C,12,a1,a2,a3,dd...,F7                         *
*      format: F0,42,3n,42,12,a1,a2,a3,dd...,F7 (same as KORG "NS5R")   *
*           n  = EXCL Channel (0_F)                                     *
*       a1_a3 = address                                                 *
*          dd = datas                                                   *
*************************************************************************
(N5 in the chart is the same as N1.)

N5   EXCL: F0,42,3n,4C,12,a1,a2,a3,dd...F7
NS5R EXCL: F0,42,3n,42,12,a1,a2,a3,dd...F7
 XG  EXCL: F0,43,1n,4C,a1,a2,a3...F7
 GS  EXCL: F0,41,1n,42,12,a1,a2,a3,dd...,ss,F7

n=  N5: EXCL channel (30h_3Fh)
    XG: Device No.   (10h_1Fh)
    GS: Device ID    (10h_1Fh)

a1=Address High
a2=Address Mid
a3=Address Low
dd...=Value
ss=check sum --> ((12+a1+a2+a3+dd+....+ss) & 7Fh)=00h

<Part Parameters>
```

[Adress High,Mid,Low] [N5]	[XG]	[GS]	[Value]	Org	[Description]
00,00,7C	00,00,7F		00	00	All Parameter Reset
00,00,7D	00,00,7D		00	00	Drum Setup Reset
00,00,7E	00,00,7E		00	00	XG System ON (N-Reset(Y))
00,00,7F		40,00,7F	00	00	GS Reset (N-Reset(R))
.....	.....	40,00,00	00	00	MasterTune (bit15-12) -100.0_0_+100.0[cent]
.....	.....	 01	00-07	04	MasterTune (bit11- 8) (0018..0400..07E8)
.....	.....	 02	00-0F	00	MasterTune (bit 7- 4)
.....	.....	 03	00-0F	00	MasterTune (bit 3- 0)
00,00,04	00,00,04	40,00,04	00-7F	7F	MasterVolume 0_127
00,00,05	00,00,06	40,00,05	28-40-58	40	MasterKeyShift -24_0_+24[semitone] (Before TG)
00,00,06		40,00,06	01-40-7F	40	MasterBalance L63_CNT_R63
00,00,07			00-7F	--	Effect Bank MSB (see **1)
.....			00-7F	00	Effect Bank LSB
.....			00-7F	00	Effect Number
00,00,0A			00	00	Performance Effect
00,01,00			00-02	00	MIDI Ch. 1 Select Port (A,B,C=EXT)
..... 01			00-02	00	MIDI Ch. 2 Select Port (A,B,C=EXT)
..... 02			00-02	00	MIDI Ch. 3 Select Port (A,B,C=EXT)
..... 03			00-02	00	MIDI Ch. 4 Select Port (A,B,C=EXT)
..... 04			00-02	00	MIDI Ch. 5 Select Port (A,B,C=EXT)
..... 0C			00-02	00	MIDI Ch. 13 Select Port (A,B,C=EXT)
..... 0D			00-02	00	MIDI Ch. 14 Select Port (A,B,C=EXT)
..... 0E			00-02	00	MIDI Ch. 15 Select Port (A,B,C=EXT)
..... 0F			00-02	00	MIDI Ch. 16 Select Port (A,B,C=EXT)
00,02,00			00-03	03	Program 1 Select Port (A,B,C=EXT,Ignore)
..... 01			00-03	03	Program 2 Select Port (A,B,C=EXT,Ignore)
..... 02			00-03	03	Program 3 Select Port (A,B,C=EXT,Ignore)
..... 03			00-03	03	Program 4 Select Port (A,B,C=EXT,Ignore)
..... 7C			00-03	03	Program 125 Select Port (A,B,C=EXT,Ignore)
..... 7D			00-03	03	Program 126 Select Port (A,B,C=EXT,Ignore)
..... 7E			00-03	03	Program 127 Select Port (A,B,C=EXT,Ignore)
..... 7F			00-03	03	Program 128 Select Port (A,B,C=EXT,Ignore)
01,nn,00	08,nn,01		00-7F	--	Bank Select MSB 0_127 CC#00
01,nn,01	08,nn,02		00-7F	--	Bank Select LSB 0_127 CC#32
01,nn,02	08,nn,03		00-7F	--	Program Change 1_128 (--> See ProgName list)
		40,1x,00	00-7F	--	Bank Select MSB
		.....	00-7F	--	Program Number 1_128 (--> See ProgName list)
01,nn,08			00-1F,20	--	Rx Channel 0_15=A1_A16,16_31=B1_B16, 32=OFF
	08,nn,04		00-1F,7F	--	Rx Channel 0_15=A1_A16,16_31=B1_B16,127=OFF
		40,1x,02	00-0F	--	Rx Channel 0_15=A1_A16
		50,1x,02	00-0F	--	Rx Channel 0_15=B1_B16
01,nn,09	08,nn,05	40,1x,13	00-01	01	MONO/POLY Assign 0=Mono, 1=Poly
01,nn,0A	08,nn,07		00-05	--	Part Mode 0=Normal,1=Drum, 2_5=MDrm1_4
		40,1x,15	00-02	--	Part Mode 0=Normal,1=MDrm1,MDrm2
		50,1x,15	00-02	--	Part Mode 0=Normal,1=MDrm3,MDrm4
01,nn,0B	08,nn,08	40,1x,16	28-40-58	40	Coarse Tune -24_0_+24 [semitone]
01,nn,0C	08,nn,09	40,1x,17	0-F(MSB)	8	FineTune(0:0_8:0_F:F) -128_0_127=-12.8[Hz]_+12.7[Hz]
.....	.....	.....	0-F(LSB)	0	
01,nn,10	08,nn,0B	40,1x,19	00-7F	64	Volume 0_127 CC#07
01,nn,11			00-7F	7F	Expression 0_127 CC#11
01,nn,12	08,nn,0C	40,1x,1A	00-40-7F	40	Vel. Sense Depth 0_64_127
01,nn,13	08,nn,0D	40,1x,1B	00-40-7F	40	Vel. Sense Offset 0_64_127
01,nn,14	08,nn,0E	40,1x,1C	00-40-7F	40	Panpot 0=RND,1_127=L63_R63 CC#10 (see **2)
01,nn,15	08,nn,0F	40,1x,1D	00-7F	00	Note Window Bottom 0_127 = C-1_G9
01,nn,16	08,nn,10	40,1x,1E	00-7F	7F	Note Window Top 0_127 = C-1_G9
01,nn,17	08,nn,12	40,1x,21	00-7F	00	Chorus Send 0_127 CC#93
01,nn,18	08,nn,13	40,1x,22	00-7F	28	Reverb Send 0_127 CC#91
01,nn,19	08,nn,15	40,1x,30	00-40-7F	40	Vibrato Frequency -64_+63 NRPN#1:08(MSB)
01,nn,1A	08,nn,16	40,1x,31	00-40-7F	40	Vibrato Intensity -64_+63 NRPN#1:09(MSB)
01,nn,1B	08,nn,17	40,1x,37	00-40-7F	40	Vibrato Delay -64_+63 NRPN#1:10(MSB)
01,nn,1C	08,nn,18	40,1x,32	00-40-7F	40	Filter Cutoff Freq -64_+63 NRPN#1:32(MSB)
01,nn,1D	08,nn,19	40,1x,33	00-40-7F	40	Color (Resonance) -64_+63 NRPN#1:33(MSB)
01,nn,1E	08,nn,1A	40,1x,34	00-40-7F	40	VDFA EG Attack Time -64_+63 NRPN#1:99(MSB)
01,nn,1F	08,nn,1B	40,1x,35	00-40-7F	40	VDFA EG Decay Time -64_+63 NRPN#1:100(MSB)
01,nn,20	08,nn,1C	40,1x,36	00-40-7F	40	VDFA EG ReleaseTime -64_+63 NRPN#1:102(MSB)
01,nn,21	08,nn,30	40,1x,03	00-01	01	Rx Pitch Bend SW 0=OFF, 1=ON
01,nn,22	08,nn,31	40,1x,04	00-01	01	Rx Channel After SW 0=OFF, 1=ON
01,nn,23	08,nn,32	40,1x,05	00-01	01	Rx Program ChangeSW 0=OFF, 1=ON
01,nn,24	08,nn,33	40,1x,06	00-01	01	Rx Control ChangeSW 0=OFF, 1=ON
01,nn,25	08,nn,34	40,1x,07	00-01	01	Rx Poly After SW 0=OFF, 1=ON
01,nn,26	08,nn,35	40,1x,08	00-01	01	Rx Note ON SW 0=OFF, 1=ON
01,nn,27	08,nn,36	40,1x,09	00-01	01	Rx RPN SW 0=OFF, 1=ON
01,nn,28	08,nn,37	40,1x,0A	00-01	01	Rx NRPN SW 0=OFF, 1=ON
01,nn,29	08,nn,38	40,1x,0B	00-01	01	Rx Modulation SW 0=OFF, 1=ON
01,nn,2A	08,nn,39	40,1x,0C	00-01	01	Rx Volume 0=OFF, 1=ON
01,nn,2B	08,nn,3A	40,1x,0D	00-01	01	Rx Panpot SW 0=OFF, 1=ON
01,nn,2C	08,nn,3B	40,1x,0E	00-01	01	Rx Expression SW 0=OFF, 1=ON
01,nn,2D	08,nn,3C	40,1x,0F	00-01	01	Rx Hold 1 SW 0=OFF, 1=ON
01,nn,2E	08,nn,3D	40,1x,10	00-01	01	Rx Portamento SW 0=OFF, 1=ON
01,nn,2F	08,nn,3E	40,1x,11	00-01	01	Rx Sostenuto SW 0=OFF, 1=ON
01,nn,30	08,nn,3F	40,1x,12	00-01	01	Rx Soft Pedal SW 0=OFF, 1=ON
01,nn,31	08,nn,40	40,1x,23	00-01	01	Rx BankSelect SW 0=OFF, 1=ON
01,nn,32	08,nn,41	40,1x,40	00-40-7F	40	Scale C -64..+63[cent]
01,nn,33	08,nn,42	 41	00-40-7F	40	Scale C# -64..+63[cent]
01,nn,34	08,nn,43	 42	00-40-7F	40	Scale D -64..+63[cent]
01,nn,35	08,nn,44	 43	00-40-7F	40	Scale D# -64..+63[cent]
01,nn,36	08,nn,45	 44	00-40-7F	40	Scale E -64..+63[cent]
01,nn,37	08,nn,46	 45	00-40-7F	40	Scale F -64..+63[cent]
01,nn,38	08,nn,47	 46	00-40-7F	40	Scale F# -64..+63[cent]
01,nn,39	08,nn,48	 47	00-40-7F	40	Scale G -64..+63[cent]
01,nn,3A	08,nn,49	 48	00-40-7F	40	Scale G# -64..+63[cent]
01,nn,3B	08,nn,4A	 49	00-40-7F	40	Scale A -64..+63[cent]
01,nn,3C	08,nn,4B	..... 4A	00-40-7F	40	Scale A# -64..+63[cent]
01,nn,3D	08,nn,4C	..... 4B	00-40-7F	40	Scale B -64..+63[cent]
01,nn,3E	08,nn,59	40,1x,1F	00-5F	10	AC1 Number CC#0_CC#95
01,nn,3F	08,nn,60	40,1x,20	00-5F	11	AC2 Number CC#0_CC#95
01,nn,40	08,nn,1D	40,2x,00	28-40-58	40	MOD Pitch Control -24_0_+24[semitone]
01,nn,41	08,nn,1E	40,2x,01	00-40-7F	40	MOD Filt Control -64_+63
01,nn,42	08,nn,1F	40,2x,02	00-40-7F	40	MOD Amp Control -64_+63
01,nn,43		40,2x,03	00-40-7F	40	MOD LFO Rate -64_+63
01,nn,44	08,nn,20	40,2x,04	00-7F	0A	MOD LFO Pitch Depth 0_127
01,nn,45	08,nn,21	40,2x,05	00-7F	00	MOD LFO VDF Depth 0_127
01,nn,46	08,nn,22	40,2x,06	00-7F	00	MOD LFO VDA Depth 0_127
01,nn,48	08,nn,23	40,2x,10	28-40-58	42	Bend Pitch Control -24_0_+24[semitone] RPN#0:0=0_24
01,nn,49	08,nn,24	40,2x,11	00-40-7F	40	Bend Filt Control -64_+63
01,nn,4A	08,nn,25	40,2x,12	00-40-7F	40	Bend Amp Control -64_+63
01,nn,4B		40,2x,13	00-40-7F	40	Bend LFO Rate -64_+63

01,nn,4C	08,nn,26	40,2x,14	00-7F	00	Bend LFO PitchDepth 0_127
01,nn,4D	08,nn,27	40,2x,15	00-7F	00	Bend LFO VDF Depth 0_127
01,nn,4E	08,nn,28	40,2x,16	00-7F	00	Bend LFO VDA Depth 0_127
01,nn,50	08,nn,4D	40,2x,20	28-40-58	40	CAf Pitch Control -24_0_+24[semitone]
01,nn,51	08,nn,4E	40,2x,21	00-40-7F	40	CAf Filt Control -64_+63
01,nn,52	08,nn,4F	40,2x,22	00-40-7F	40	CAf Amp Control -64_+63
01,nn,53		40,2x,23	00-40-7F	40	CAf LFO Rate -64_+63
01,nn,54	08,nn,50	40,2x,24	00-7F	00	CAf LFO Pitch Depth 0_127
01,nn,55	08,nn,51	40,2x,25	00-7F	00	CAf LFO VDF Depth 0_127
01,nn,56	08,nn,52	40,2x,26	00-7F	00	CAf LFO VDA Depth 0_127
01,nn,58	08,nn,53	40,2x,30	28-40-58	40	PAf Pitch Control -24_0_+24[semitone]
01,nn,59	08,nn,54	40,2x,31	00-40-7F	40	PAf Filt Control -64_+63
01,nn,5A	08,nn,55	40,2x,32	00-40-7F	40	PAf Amp Control -64_+63
01,nn,5B		40,2x,33	00-40-7F	40	PAf LFO Rate -64_+63
01,nn,5C	08,nn,56	40,2x,34	00-7F	00	PAf LFO Pitch Depth 0_127
01,nn,5D	08,nn,57	40,2x,35	00-7F	00	PAf LFO VDF Depth 0_127
01,nn,5E	08,nn,58	40,2x,36	00-7F	00	PAf LFO VDA Depth 0_127
01,nn,60	08,nn,5A	40,2x,40	28-40-58	40	AC1 Pitch Control -24_0_+24[semitone]
01,nn,61	08,nn,5B	40,2x,41	00-40-7F	40	AC1 Filt Control -64_+63
01,nn,62	08,nn,5C	40,2x,42	00-40-7F	40	AC1 Amp Control -64_+63
01,nn,63		40,2x,43	00-40-7F	40	AC1 LFO Rate -64_+63
01,nn,64	08,nn,5D	40,2x,44	00-7F	00	AC1 LFO Pitch Depth 0_127
01,nn,65	08,nn,5E	40,2x,45	00-7F	00	AC1 LFO VDF Depth 0_127
01,nn,66	08,nn,5F	40,2x,46	00-7F	00	AC1 LFO VDA Depth 0_127
01,nn,68	08,nn,61	40,2x,50	28-40-58	40	AC2 Pitch Control -24_0_+24[semitone]
01,nn,69	08,nn,62	40,2x,51	00-40-7F	40	AC2 Filt Control -64_0_63
01,nn,6A	08,nn,63	40,2x,52	00-40-7F	40	AC2 Amp Control -64_0_63
01,nn,6B		40,2x,53	00-40-7F	40	AC2 LFO Rate -64_0_63
01,nn,6C	08,nn,64	40,2x,54	00-7F	00	AC2 LFO Pitch Depth 0_127
01,nn,6D	08,nn,65	40,2x,55	00=7F	00	AC2 LFO VDF Depth 0_127
01,nn,6E	08,nn,66	40,2x,56	00-7F	00	AC2 LFO VDA Depth 0_127
01,nn,70	08,nn,67		00-01	00	Portamento Switch 0=OFF, 1=ON
01,nn,71	08,nn,68		00-7F	00	Portamento Time 0_127 (fast_slow) CC#05
01,nn,72	08,nn,69		00-40-7F	40	Pitch EG Stt. Level -64_0_63
01,nn,73	08,nn,6A		00-40-7F	40	Pitch EG Att. Time -64_0_63
01,nn,74	08,nn,6B		00-40-7F	40	Pitch EG Rel. Level -64_0_63
01,nn,75	08,nn,6C		00-40-7F	40	Pitch EG Rel. Time -64_0_63
01,nn,76	08,nn,6D		01-7F	01	Vel. Window Bottom 1_127
01,nn,77	08,nn,6E		01-7F	7F	Vel. Window Top 1_127

nn = Part Number
00_1F = Part 01_Part 32

x = GS Block Number

Type [40,**,**]	Type [50,**,**]
0 = Part 10	0 = Part 26
1 = Part 1	1 = Part 17
2 = Part 2	2 = Part 18
.	.
.	.
9 = Part 9	9 = Part 32

* CAf = Channel After Touch
* PAf = Polyphonic After Touch
* AC1 = Assignable Controller 1 (MOD.2)
* AC2 = Assignable Controller 2 (MOD.3)
* "Org" item is the default value when a reset command such as GM ON is received.
"-" locations will differ in content depending on the part or the type of reset command.
* For address items of ".... xx" (xx=00_FF), the value section can be set consecutively.
Settings can also be started from a mid-point address.
Example: F0, 42, 30, 42, 12, 01, 00, 36, 3C, 3B, 3A, F7 Scale E, E#, F = -4, -5, -6
* For address items of "....", set the value portion consecutively.
Example: F0, 42, 30, 42, 1, 01, 00, 0C, 08, 00, F7

**1
Effect bank values and the selected bank are related as follows

EffectBankMSB	EffectBankName
$50 (PrgU)	'u'
$51 (PrgA)	'a'
$52 (PrgB)	'b'
$53 (PrgC)	'c'
$58 (CmbU)	'U'
$59 (CmbA)	'A'
$5A (CmbB)	'B'
$5B (CmbC)	'C'
Other	'G'

**2
To turn panpot "OFF," specify the value as the following two bytes.
F0,42,3n,4C(42),12,01,nn,14,ll,mm,F7 (ll=LSB,mm=MSB)

Panpot	ll	mm
Random	$00	$00
L63	$01	$00
.	.	.
Center	$40	$00
.	.	.
R63	$7F	$00
OFF	$00	$01

<Drum Parameters>

[N5]	[XG]	[GS]	[Value]	[Description]	
3n,rr,00	3n,rr,00		00-40-7F	Coarse Tune	-64_0_+63[semitone] NRPN#24:rr(MSB)
3n,rr,01	3n,rr,01		00-40-7F	Fine Tune	-64_0_+63[cent] NRPN#25:rr(MSB)
3n,rr,02	3n,rr,02	41,m2,rr	00-7F	Level	0_127 NRPN#26:rr(MSB)
3n,rr,03	3n,rr,03	41,m3,rr	00-7F	Excl Group	0=OFF,1_127
3n,rr,04	3n,rr,04	41,m4,rr	00-40-7F	Panpot	0,1_64_127 NRPN#28:rr(MSB) (RND,L63_CNT_R63)
3n,rr,05	3n,rr,05	41,m5,rr	00-7F	Reverb Send	0_127 NRPN#29:rr(MSB)
3n,rr,06	3n,rr,06	41,m6,rr	00-7F	Chorus Send	0_127 NRPN#30:rr(MSB)
3n,rr,08	3n,rr,08		00-01	Key Assign Mode	0=Single, 1=Multi
3n,rr,09	3n,rr,09	41,m7,rr	00-01	Receive Note OFF	0=OFF, 1=ON
3n,rr,0A	3n,rr,0A	41,m8,rr	00-01	Receive Note ON	0=OFF, 1=ON
3n,rr,0B	3n,rr,0B		00-40-7F	Cutoff	-64_0_+63 NRPN#20:rr(MSB)
3n,rr,0C	3n,rr,0C		00-40-7F	Color	-64_0_+63 NRPN#21:rr(MSB)
3n,rr,0D	3n,rr,0D		00-40-7F	Attack Time	-64_0_+63 NRPN#22:rr(MSB)
3n,rr,0E	3n,rr,0E		00-40-7F	Decay time	-64_0_+63 NRPN#23:rr(MSB)

* m=MDrm1_2(0_1)
* n=MDrm1_4(0_3)
* rr=note number(0Ch_6Ch='C0'_'C8')
* Default values will differ for each drumkit and each instrument.

<Display>
N5 EXCL: F0,42,3n,4C,12,a1,a2,a3,dd...F7
NS5R EXCL: F0,42,3n,42,12,a1,a2,a3,dd...F7
XG EXCL: F0,43,1n,4C,a1,a2,a3,dd...F7
GS EXCL: F0,41,1x,45,12,a1,a2,a3,dd...,ss,F7

[N5]	[XG]	[GS]	[Value]	[Description]	
08,00,00	06,00,00	10,00,00	20-7F	Display Letter 0	(max 32 chars)
..... 01	06,00,01	10,00,01	20-7F	Display Letter 1	
.	.	.	.	.	
.	.	.	.	.	
..... 1F	06,00,1F	10,00,1F	20-7F	Display Letter 31	
	07,00,00		00-7F	Display Bitmap Data 0	(16 x 16 dots)
	 01		00-7F	Display Bitmap Data 1	
	.		.	.	
	.		.	.	
	..... 2F		00-7F	Display Bitmap Data 47	
		10,0p,40	00-1F	Display Bitmap Data 0	(16 x 16 dots)
		 41	00-1F	Display Bitmap Data 1	
		.	.	.	
		.	.	.	
		..... 7F	00-1F	Display Bitmap Data 63	
08,00,20			00-7F	Display Bitmap Data 0	(32 x 16 dots)
..... 21			00-7F	Display Bitmap Data 1	
.			.	.	
.			.	.	
..... 6F			00-7F	Display Bitmap Data 79	

For Korg format display bitmap data, 32 x 16 pixels of screen data are displayed for a fixed time.
Bits 6-0 of each value correspond to pixels on the screen. Values and display locations correspond as follows.

bit	6-----0	6-----0	6-----0	6-----0	6--3
Adress	**$20**	**$30**	**$40**	**$50**	*$60*
Adress	**$21**	**$31**	**$41**	**$51**	*$61*
.	.	.	.	.	.
..	.	.	.	.	.
Adress	**$2E**	**$3E**	**$4E**	**$5E**	*$6E*
Adress	**$2F**	**$3F**	**$4F**	**$5F**	*$6F*

o Initialization by reception of GM ON, GS Reset and XG System ON

1. All control changes, all part parameters and all performance parameters will be initialized.
2. For parts 1-16, when a non-drumkit part is switched to a drumkit by a bank change + program change, the part mode will be Mdrm2.
   For parts 17-32, when a non-drumkit part is switched to a drumkit by a bank change + program change, the part mode will be Mdrm3. (Except when a 05R/W MultiSetup Dump is received.)

* When GS Reset, XG System ON or GM ON is received, the mode will be Multi mode.

o Settings produced when a N-Reset 'R' (GS Reset) is received

1. Default map will be selected.
   (Map condition is temporary, and will not be saved to Global.)
2. Effect will be 'A:001 Rev/Cho'.
3. Program changes for bank 00:00 (MSB:LSB) will select 'GM-a' bank sounds.
   Program changes for bank 00:01 (MSB:LSB) will select 'GM-a' bank sounds.
   Program changes for bank 7F:** (MSB:LSB) will select 'r:CM' bank sounds.
4. On this instrument, reception of GS SYSTEM MODE SET (Roland SC88) will have the same operation.
5. When the GS Exclusive message USE FOR RHYTHM PART (F0, 41, 10, 42, 12, 40, 1x, vv, sum, F7) is used to set a part to drums, that part will ignore bank changes (Rx BankSelect SW = OFF).

Settings for each part

	PartMode	Bank:Prog	Rx BankSelect
Part1	NORM	GM-a:001 Piano 1	ON
.	.	.	.
.	.	.	.
Part9	NORM	GM-a:001 Piano 1	ON
Part10	Mdrm1	rDrm:001 STANDARD	OFF
Part11	NORM	GM-a:001 Piano 1	ON
.	.	.	.
.	.	.	.
Part16	NORM	GM-a:001 Piano 1	ON
Part17	NORM	GM-a:001 Piano 1	ON
.	.	.	.
.	.	.	.
Part25	NORM	GM-a:001 Piano 1	ON
Part26	Mdrm3	rDrm:001 STANDARD	OFF
Part27	NORM	GM-a:001 Piano 1	ON
.	.	.	.
.	.	.	.
Part32	NORM	GM-a:001 Piano 1	ON

o Settings produced when a N-Reset 'Y' (XG System ON) is received

1. Default map will be selected. (Map condition is temporary, and will not be saved to Global.)
2. Effect will be 'A:001 Rev/Cho'.
3. Program changes for bank 00:00 (MSB:LSB) will select 'GM-a' bank sounds.
   Program changes for bank 00:01 (MSB:LSB) will select 'y:01' bank sounds.
   Program changes for bank 7F:** (MSB:LSB) will select 'yDr2' bank sounds.

Settings for each part

	PartMode	Bank:Prog	Rx BankSelect
Part1	NORM	GM-a:001 Piano 1	ON
.	.	.	.
.	.	.	.
Part9	NORM	GM-a:001 Piano 1	ON
Part10	Mdrm1	yDr2:001 Standard	ON
Part11	NORM	GM-a:001 Piano 1	ON
.	.	.	.
.	.	.	.
Part16	NORM	GM-a:001 Piano 1	ON
Part17	NORM	GM-a:001 Piano 1	ON
.	.	.	.
.	.	.	.
Part25	NORM	GM-a:001 Piano 1	ON
Part26	Mdrm3	yDr2:001 Standard	ON
Part27	NORM	GM-a:001 Piano 1	ON
.	.	.	.
.	.	.	.
Part32	NORM	GM-a:001 Piano 1	ON

o Settings produced when a GM Mode ON message is received
When GM mode ON is received, one of two types of reset will occur, depending on the state at that time.

1. If a GM Mode ON is received following a GS Reset, the state will be the same as for GS Reset.
2. If a GM Mode ON is received following an XG System ON, the state will be the same as for a XG System ON.

o 05R/W MAP state
The 05R/W map differs from the default map in the following ways.

1. Program changes for bank 00:00 (MSB:LSB) will select 'PrgU' sounds.
2. When a non-drumkit part is switched to a drumkit by a MIDI bank change + program change, the part mode will be 'Drum'.
3. When GM Mode ON is received,
   Part 10 and Part 26 = 'kDrm:001 GM Kit'
   other Parts = 'GM-b:001 Piano'

<Program changes for which the selected bank will differ depending on the status>

Bank:Prog	after GS Reset is received Bank Name	after XG System ON is received Bank Name	05R/W map Bank Name
00:00	GM-a	GM-a	PrgU
00:01	GM-a	y:01	<--depends on GS/XG state
7F:**	r:CM	yDr2	<--depends on GS/XG state
78:**	rDrm	yDr2	kDrm

o TO HOST interface technical chart

Baud rate setting (refer to Global mode)

PC/IF clock	Explanation
31.25 KBPS	Asynchronous 31.25 KBPS, 8 data bits, 1 stop bit, no parity bit
38.40 KBPS	Asynchronous 38.40 KBPS, 8 data bits, 1 stop bit, no parity bit

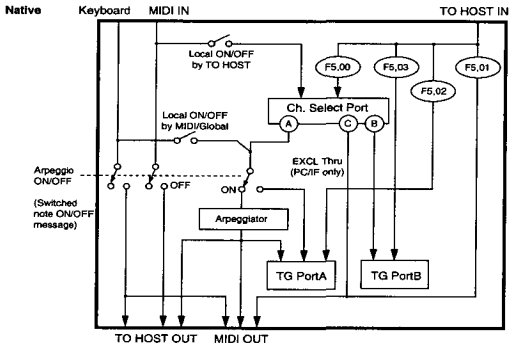
Local ON/OFF (refer to diagram)

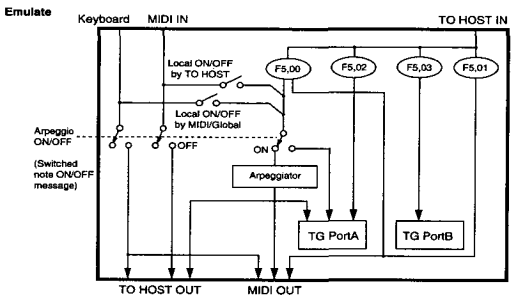
Data (hex)	Explanation
Bn 7A 00	Local OFF: MIDI IN and tone generator are disconnected
Bn 7A 7F	Local ON: MIDI IN and tone generator are connected

*n: MIDI ch (0 to F)

Port switching (refer to diagram)

Data (hex)	Explanation
F5 00	When PC/IF connection is Emulate. Subsequent channel messages will be sounded by the parts for MIDI ch. A01-A16. If Arpeggio OFF, transmitted from MIDI OUT. When PC/IF connection is Native. Subsequent channel messages will be input to MIDI Channel To Port, and assigned to each port. (Refer to Global mode)
F5 01	Subsequent channel messages will be output from MIDI OUT, but will not be sounded.
F5 02	Subsequent channel messages will be sounded by the parts of MIDI channels A01-A16. Will not be input to the arpeggiator.
F5 03	Subsequent channel messages will be sounded by the parts of MIDI channels B01-B16. Will not be input to the arpeggiator.
F5 F5	Output F5 (hex) from MIDI OUT.
F5 FF	Output FF (hex) from MIDI OUT.





Temperament data

Key of C, 0 cent note = A, units are cents

Temperament	C	•	D	•	E	F	•	G	•	A	•	B
1. Equal temperament	0	0	0	0	0	0	0	0	0	0	0	0
2. Pure temperament (Major)	+16	−14	+20	+31	+2	+14	−16	+18	−12	0	+33	+4
3. Pure temperament (Minor)	+16	+49	+20	+32	+2	+14	+47	+18	+30	0	+34	+4
4. Mean tone	+10	−14	+3	+20	−3	+14	−10	+7	−17	0	+17	−7
5. Pythagorean	−6	+8	−2	−12	+2	−8	+6	−4	+10	0	−10	+4
6. Werckmeister III	+12	+2	+4	+6	+2	+10	0	+8	+4	0	+8	+4
7. Kirnberger III	+10	+1	+3	+4	−3	+8	+1	+7	+2	0	+6	−2
8. Vallotti & Young	+6	0	+2	+4	−2	+8	−2	+4	+2	0	+6	−4
9. Arabian style tuning	−6	+45	−2	−12	−51	−8	+43	−4	+47	0	−10	−49

[64-voice Music Synthesizer]
N1/N5

MIDI Implementation Chart

OCT. 1997
version: 1.0

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1–16	1–16	Memorized
	Changed	1–16	1–16	
Mode	Default		3	
	Messages	X	X	
	Altered	**********		
Note Number:		0–127	0–127	
	True Voice	**********	0–127	
Velocity	Note On	O 9n, V=1–127	O 9n, V=1–127	
	Note Off	X	X	
Aftertouch	Polyphonic (Key)	X	O	
	Monophonic (Channel)	O	O	
Pitch Bend		O	O	
Control Change	0, 32	O	O	Bank Select (MSB, LSB)
	1, 5, 7	O	O	Modulation, Portamento Time, Volume
	8, 10, 11, 12	O	O	Balance, Panpot, Expression, Effect Control 1
	6, 38	X	O	Data Entry (MSB, LSB)
	16, 17, 64	O	O	General Purpose Controller 1, 2, Damper Pedal (Hold 1)
	65, 66, 67	O	O	Portamento, Sostenuto, Soft
	71, 72, 73, 75	O	O	Harmonic, EG Times (Release, Attack, Decay)
	74, 84	X	O	Brightness, Portamento Control
	91, 93	O	O	C send, D send
	92, 95	X	O	Effect Switch 1, 2
	96, 97	X	O	Data Increment, Decrement
	98, 99, 100, 101	X	O	NRPN (LSB, MSB), RPN (LSB, MSB)
	120, 121	X	O	All Sound Off, Reset All Controllers
Program Change		O 0 – 127	O 0 – 127	
	Variable Range	**********	0 – 127	
System Exclusive		O	O	
System Common	Song Position	X	X	
	Song Select	X	X	
	Tune	X	X	
System Real Time	Clock	O	O	*1
	Command	O	O	*1
Aux Messages	Local On/Off	X	O	
	All Notes Off	X	O 123 – 127	
	Active Sense	O	O	
	Reset	X	X	

Notes

*1: When Clock Source is Internal, transmitted and not received. (However, Continue is not transmitted). In the case of MIDI or PCIF, the opposite applies.

Mode 1:OMNI ON, POLY
Mode 2:OMNI ON, MONO
O: Yes
Mode 3:OMNI OFF, POLY
Mode 4:OMNI OFF, MONO
X: No

Consult your local Korg distributor for more infomation on MIDI IMPLEMENTATION.

Specifications

	N1	N5
Tone generator method	AI-squared synthesis system (full digital processing)	
Tone generator	64 voice, 64 oscillator (single mode) 32 voice, 32 oscillator (double mode)	
Keyboard	88 note	61 note
Waveform memory	PCM 18 Mbytes	PCM 12 Mbytes
Effects	Two digital multi-effect units	
Effect types	48 effects	
Programs	1269 (100 user, 1169 preset)	
Combinations	402 (100 user, 302 preset)	
Drumkits	39 (2 user, 37 preset)	
Arpeggiator	20 types, 40–240 (BPM)	
Control inputs	Assignable Pedal, Assignable Switch	
Outputs	1/L/MONO, 2/R, 3, 4	L/MONO, R
Headphone jack	Stereo phone jack	Stereo mini jack
MIDI connectors	IN, OUT, THRU	
Communication connector	TO HOST	
Display	144 × 40 pixel full graphic LCD (with two-color backlight)	
Power supply	AC 9V AC/AC power supply	
Power consumption	AC9 V 1.4A (Max)	
Dimensions	1,322 (W) × 392.5 (D) × 139.7 (H) mm	1,030 (W) × 300 (D) × 85.8 (H) mm
Weight	23.8 kg	6.5 kg
Included items	AC/AC power supply	

Options

AG-001B IBM-PC connection kit (connection cable, "Korg MIDI Driver" driver software)

AG-002B Macintosh connection kit (connection cable, "Korg MIDI Driver" driver software)

MIDI cables

PS-1/PS-2 foot switches, DS-1H damper pedal, EXP-2/XVP-10 expression pedals

NOTICE

KORG products are manufactured under strict specifications and voltages required by each country. These products are warranted by the KORG distributor only in each country. Any KORG product not sold with a warranty card or carrying a serial number disqualifies the product sold from the manufacturer's/distributor's warranty and liability. This requirement is for your own protection and safety.

KORG INC.
15 - 12, Shimotakaido 1 - chome, Suginami-ku, Tokyo, Japan.

1103 CTH *Printed in Japan*