



PCR-300/500/800

**Owner's Manual** 

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Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (separate sheet). They provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

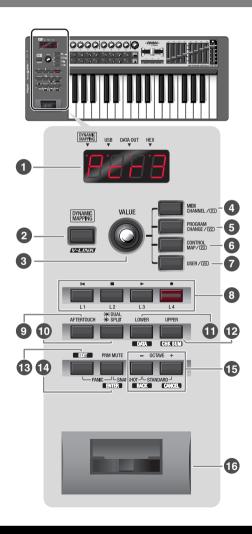
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# Names of things and what they do

### **Panel**



#### 1 Display

This shows a variety of information, such as the current state.

Indication	Summary	
Alphanumeric characters	When you operate a controller, the value of the parameter assigned to that controller is briefly displayed. Information such as MIDI channels and program changes are also displayed.	
DYNAMIC MAPPING	This will light when DYNAMIC MAPPING is active.	
USB	This will light when the PCR is connected to your computer via USB.	
DATA OUT	This will blink when a MIDI message is transmitted from USB or MIDI OUT.	
HEX	This will light when the value shown in the display is a hexa- decimal value.	

- \* The display will dim if you leave the PCR without operating it for several seconds.
- \* The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system, so what you actually see in the display may not always match what appears in the manual.

### [DYNAMIC MAPPING] button, [V-LINK] button

When you press the [DYNAMIC MAPPING] button, "DYNAMIC MAPPING" or "V-LINK" will turn on.

The function of the [DYNAMIC MAPPING] button is specified by the System setting DYNAMIC MAPPING/V-LINK (p. 81).

#### DYNAMIC MAPPING

Dynamic Mapping is an extended function for future use. For details, refer to the Roland website.

#### V-LINK

V-LINK ( \*\*PANCE\*\*) is a function that allows music and images to be performed together. By using MIDI to connect two or more V-LINK compatible devices, you can easily enjoy a wide range of visual effects that are linked to the expressive elements of a music performance.

#### **3** VALUE knob

By turning the VALUE knob you can change the value of the MIDI CHANNEL, PROGRAM CHANGE, CONTROL MAP, or USER.

In Edit mode, use this knob to select the item that you want to edit.

#### 4 [MIDI CHANNEL] button

After pressing the [MIDI CHANNEL] button so it's lit, you can turn the VALUE knob to specify the channel on which the keyboard and bender will transmit messages. (-> Selecting the current channel (MIDI transmit channel) (p. 33))

#### **⑤** [PROGRAM CHANGE] button

After pressing the [PROGRAM CHANGE] button so it's lit, you can turn the VALUE knob to transmit a program change message on the current channel. (-> Selecting sounds (Program Change/Bank) (p. 34))

#### 6 [CONTROL MAP] button

After pressing the [CONTROL MAP] button so it's lit, you can turn the VALUE knob to switch among control maps stored in the PCR. (-> **Switching control maps** (p. 9))

#### [USER] button

After pressing the [USER] button so it's lit, you can turn the VALUE knob to change the value of a user-assigned parameter. (-> VALUE knob settings (p. 80))

#### 8 Controllers [L1]-[L4] (buttons)

You can assign the desired MIDI messages to these buttons. (-> **Assigning a MIDI message** (p. 20))

#### **9** [AFTERTOUCH] button

This specifies whether the keyboard will (ON) or will not (OFF) transmit aftertouch messages.

#### 10 [DUAL/SPLIT] button

This switches between Dual mode and Split mode.

- (-> Layering two sounds (Dual) (p. 37))
- (-> Playing two sounds in combination (Split) (p. 37))

### [LOWER] button, [DATA] button

Use this button when you want to play or make settings for the Lower part. If the [LOWER] button is lit, the keyboard (notes and aftertouch), bender lever (pitch bend, modulation), foot pedal messages, and program change messages will be transmitted on the current channel specified for the Lower part. (-> Selecting the Lower and Upper sounds (p. 36))

#### [UPPER] button, [CHK SUM] button

Use this button when you want to play or make settings for the Upper part. If the [UPPER] button is lit, the keyboard (notes and aftertouch), bender lever (pitch bend, modulation), foot pedal messages, and program change messages will be transmitted on the current channel specified for the Upper part. (-> Selecting the Lower and Upper sounds (p. 36))

#### (EDIT) button

Use this button to assign MIDI messages to the controllers or to make system settings.

- (-> Assigning MIDI messages on the PCR keyboard (p. 41))
- (-> System settings (p. 68))

#### [PRM MUTE] button, [ENTER] button

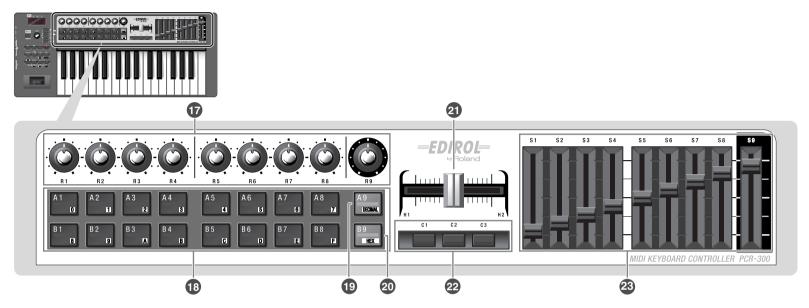
Use this to mute controller message output.
When you're not in Play mode, you can use this as the [ENTER] button.

# OCTAVE [-]/[+] buttons, [BACK] button, [CANCEL] button

Use these buttons to raise or lower the octave of the keyboard. When you're not in Play mode, you can use these as the [BACK] button, which returns you to the previous setting, and the [CANCEL] button, which cancels the setting.

### Bender lever, [BEND] and [MOD] controller

You can use this to modify the pitch or to apply vibrato. You can also assign the desired MIDI messages to this controller. (-> **Assigning MIDI messages on the PCR keyboard** (p. 41))



#### Controllers [R1]-[R9] (knobs)

You can assign the desired MIDI messages to these knobs. (-> Assigning a MIDI message (p. 20))

#### (Ballets [A1]-[A9], [B1]-[B9] (pads)

You can assign the desired MIDI messages to these pads.

(-> Assigning a MIDI message (p. 20))

The force with which you press these controllers can be used to transmit a corresponding velocity value or aftertouch value.

When you're not in Play mode, you can use these buttons as [0]–[9] and [A]–[F] buttons to enter numeric values.

#### 19 [DECIMAL] button

When you're not in Play mode, you can press this button to switch to decimal input mode (p. 64).

When you're in Play mode, this button will function as a conventional controller [A9].

#### 20 [HEX] button

When you're not in Play mode, you can press this button to switch to hexadecimal input mode (p. 64).

When you're in Play mode (p. 32), this button will function as a conventional controller [B9].

#### 21 Controllers [H1], [H2] (crossfader)

You can assign the desired MIDI messages to this crossfader. (-> **Assigning a MIDI message** (p. 20))

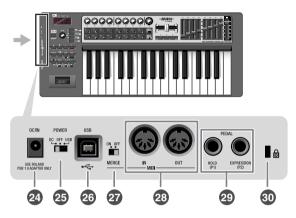
#### Controllers [C1]-[C3] (buttons)

You can assign the desired MIDI messages to these buttons. (-> **Assigning a MIDI message** (p. 20))

### Controllers [S1]-[S9] (sliders)

You can assign the desired MIDI messages to these sliders. (-> **Assigning a MIDI message** (p. 20))

# Side panel



#### **24** DC IN jack

You can connect a separately available AC adaptor (p. 92) to this jack. If you wish to purchase an AC adaptor, please contact your dealer.

#### 25 Power switch

DC	Power turned on when using the AC adaptor		
OFF	Power switched off		
USB	Power turned on when a USB cable is connected You can use the USB (i.e., bus power) setting if the PCR-300/500/800 is connected to your computer via a USB cable. The power will be supplied from the computer via the USB cable. If you want to use the PCR on bus power, set the power switch to the USB position.  * With some computers, the PCR may not operate on bus power. If so, you'll need to use the separately available AC adaptor (p. 92).		

#### 26 USB connector

Use this if you're connecting the PCR to your computer via a USB cable.

#### MIDI MERGE switch

This switches the MIDI IN message Merge function on/off. (-> MIDI Merge Destination (p. 77))

#### 28 MIDI IN/OUT connectors

You can connect these to the MIDI connectors of other MIDI devices in order to transmit and receive MIDI messages.

(-> MIDI settings (p. 76))

#### Controllers [P1], [P2] (foot pedals)

You can connect suitable pedals to these jacks and use them as controllers.

HOLD You can connect a separately available pedal switch (D FS-5U) here and use it as a hold pedal.	
EXPRESSION	You can connect a separately available expression pedal (EV-5, EV-7) here and use it to control the tone or volume in real time.

You can assign the desired MIDI messages to these controllers.

(-> Assigning a MIDI message (p. 20))

\* Use only the specified expression pedal. By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

# 30 Security slot (11)

http://www.kensington.com

# Using control maps

## What is a control map?

The PCR-300/500/800 have fifty fully assignable controllers; you can freely assign any MIDI message to each of these controllers.

The MIDI settings assigned to the controllers are collectively called a "control map." This is the same as what was called a "memory set" on previous models of the PCR series.



For details on how to assign MIDI messages to controllers, refer to **Using PCR Editor** (p. 14) or **Assigning MIDI messages on the PCR keyboard** (p. 41).

MIDI settings that are assigned to the controllers (i.e., the control map) can be stored in the PCR's own memory or in DAW software on your computer. Simply by switching control maps, you can control a wide range of applications.

You can also download the latest control maps from the Roland website and load them into the PCR.

#### **Memory Sets and Control Maps**

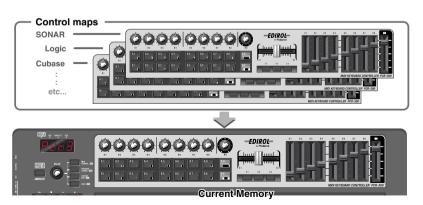
The "memory sets" in earlier models of the PCR series are now called "control maps" on the PCR-300/500/800.

Using the PCR Editor version 2 software included with this product, you can import "memory sets" and use them as "control maps."

For details, refer to Using PCR Editor (p. 14).

# Control maps and the current memory

#### About the PCR's memory



The PCR-300/500/800 holds sixteen control maps in its internal memory. In order to use a control map, you must copy it into a location called "the current memory." Any changes you make to the contents of the current memory will be lost when you turn off the power. If you want to keep the changes you've made to the current memory, refer to Saving a control map (p. 9).



You can use the **Startup Memory** (p. 79) to specify which control map should be loaded into **current memory** when the power is turned on.

## **Switching control maps**

When the PCR-300/500/800 is shipped from the factory, it contains sixteen control maps. By switching among these control maps, you can quickly select control maps that are suitable for a wide variety of software. For details on the memory numbers of these control maps and their factory settings, refer to **Control map list** (p. 90).

- 1 Press the [CONTROL MAP] button. The [CONTROL MAP] button will light. The display will indicate the currently selected memory number.
- 2 Turn the [VALUE] dial to select the memory number you want to call up.



You can also switch control maps using the following method.

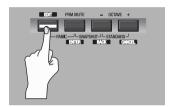
- 1. Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- Press the [CONTROL MAP] button. It will light, and the display will indicate the currently selected memory number.
- **3.** Use controllers [A1]–[A8], [B1]–[B8], or the VALUE knob to specify the memory number you want to call up.
- 4. Press the [ENTER] button.

### Saving a control map

If you want to keep the changes you've made to the current memory, use the following procedure to save the control map.

You can save the control map in memory numbers 1–F. You can't save to memory number 0.

- \* If you've changed the settings of the current memory, be sure to "SAVE" if you want to keep your changes.
- 1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



2 Turn the VALUE knob to make the display indicate "SAVE."



3 Press the [ENTER] button.



\* If the display indicates "PTC," the Protect setting is ON, and you'll be unable to save the memory. Turn the Protect setting OFF, and repeat the procedure from step 1.

(-> Protecting the control maps (p. 13))

- 4 Use the VALUE knob or controllers [A1]-[A8] and [B1]-[B8] to specify the memory number "1"-"F" in which you want to save the control map. The specified memory number will blink in the display.
- **5** Press [ENTER] to save the control map.
  - \* If you press another button instead of the [ENTER] button, the Save operation will be cancelled.

# Receiving a control map from your computer (Bulk Receive)

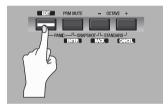
The PCR-300/500/800 can receive control map data in the form of a bulk dump. If you want control map data you've created using PCR Editor to be received into the PCR's current memory, you'll need to make settings in PCR Editor so that the PCR will be ready to receive a bulk dump. If you want the PCR to receive this data as messages from your DAW software, you'll need to make settings on the PCR keyboard so that it will be ready to receive a bulk dump.

Here we'll explain how to make settings on the PCR keyboard so that it will be able to receive a bulk dump.



For more about PCR Editor, refer to **Using PCR Editor** (p. 14). For details on how to receive a control map from PCR Editor, refer to **Transferring data between PCR Editor and the PCR** (p. 22).

Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



2 Turn the VALUE knob to make the display indicate "BULK."



3 Press the [ENTER] button.
"BLR" will blink in the display (Bulk Receive).



4 Verify that the display indicates "BLR" (Bulk Receive), and then press the [ENTER] button.

(MEMO)

If the display indicates "BLT" (Bulk Transmit), use the VALUE knob to make it indicate "BLR" (Bulk Receive).

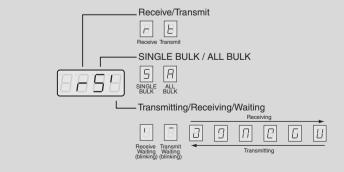
**5** Use the VALUE knob or the controllers to choose the reception method. Choose the method that's appropriate for the data you'll be receiving.

Controller	Item	Display	Explanation
[A1 (O)]	SINGLE BULK	8888	One control map will be received. The received data will overwrite the current memory. Memories 1–F will not be affected.
[A2 (1)]	ALL BULK	8888	Data for all fifteen control maps will be received. The received data will overwrite internal memories 1–F.

6 Verify that the display indicates the correct choice, and press the [ENTER] button. The rightmost digit of the display will blink, and the PCR will wait for bulk data to arrive.







7 Operate PCR Editor or your DAW software to transmit the control map data.



Select "EDIROL PCR" as the MIDI output device for PCR Editor or your DAW software. For details on how to make this setting in your DAW software, refer to the owner's manual for the DAW software you're using.

**8** When the PCR has finished receiving the control map data, the display will indicate "END." Press the [ENTER] button to complete the operation.



#### **Error** indication



If the data was not received correctly, "ERR" will be blinking in the display. If this occurs, press the [CANCEL] button and perform the procedure again from step 1.



Control map data received as Single Bulk will be loaded into the current memory, meaning that it will be lost when you turn off the power. However, if you save this control map into one of the internal memories, you won't need to re-transmit it to the PCR. Refer to **Saving a control map** (p. 9).

# Saving control map data on your computer (Bulk Transmit)

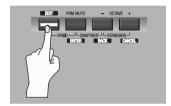
The PCR-300/500/800 can transmit control map data to your DAW software in the form of a bulk dump.

In order to transmit a control map you've edited on the PCR keyboard to PCR Editor or other software you're using, you'll need to make settings on the PCR to make it transmit the bulk data.



For more about PCR Editor, refer to **Using PCR Editor** (p. 14). For details on how to transmit a control map from PCR Editor, refer to **Transferring data between PCR Editor and the PCR** (p. 22).

1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



2 Turn the VALUE knob to make the display indicate "BULK."



3 Press the [ENTER] button.
"BLR" will blink in the display (Bulk Receive).



**4** Turn the VALUE knob to make the display indicate "BLT" (Bulk Transmit).



Alternatively, you can press controller [A2 (1)] instead of using the VALUE knob.

Controller	Item	Display	Explanation
[A1 (O)]	BULK RECEIVE	8888	Receive bulk data
[A2 (1)]	BULK TRANSMIT	8888	Transmit bulk data

- **5** Press the [ENTER] button.
- **6** Use the VALUE knob or controllers to choose the type of transmission. Choose the type of data you want to transmit.

Controller	Item	Display	Explanation
[A1 (O)]	SINGLE BULK	8888	The control map data of the current memory will be transmitted.
[A2 (1)]	ALL BULK	8888	Data for all fifteen control maps in internal memory (memories 1–F) will be transmitted.

7 Check the indication in the display, then press the [ENTER] button. The rightmost digit of the display will blink, and the PCR will wait to transmit bulk data.



**8** Put PCR Editor or your DAW software in recording mode, and then press the PCR's [ENTER] button. Data transmission will begin.



Choose "EDIROL PCR 2" as the MIDI input port for PCR Editor or your DAW software. For details on how to make this setting in your DAW software, refer to the owner's manual for the software you're using.

When the PCR has finished transmitting the control map data, the display will indicate "END." Press the [ENTER] button to complete the operation. You'll also need to stop recording on your DAW software



# **Protecting the control maps**

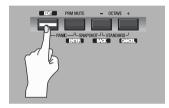
By turning the Protect setting on, you can protect the control map data from being accidentally overwritten.

This will disable All Bulk reception (p. 10) and Save (p. 9) operations, protecting your valuable data from being overwritten.



The Protect on/off setting is remembered even when the PCR is powered off.

**1** Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



2 Turn the VALUE knob to make the display indicate "PTC."



**3** Check the indication in the display, then press the [ENTER] button. The display will indicate the current protect status.

Controller	Item	Display	Explanation
[A1 (O)]	PROTECT OFF	8888	Control map data in internal memory can be rewritten.
[A2 (1)]	PROTECT ON	8888	Control map data in internal memory cannot be rewritten.

4 Use the VALUE knob to choose the desired setting, and press the [ENTER] button.

# **Using PCR Editor**

PCR Editor Ver. 2 is an application that lets you use your computer to create control maps (called "memory sets" on earlier models of the PCR series) for the EDIROL PCR series.



The PCR-300/500/800 has a total of fifty controllers: [R1]–[R9], [S1]–[S9], [A1]–[A9], [B1]–[B9], [C1]–[C3], [L1]–[L4], [H1]–[H2], [P1]–[P2], [BEND], [MOD], and [AFTERTOUCH]. You can freely assign the MIDI message that will be transmitted by each of these controllers.

Although it is possible to make MIDI message assignments on the PCR itself (-> **Assigning MIDI messages on the PCR keyboard** (p. 41)), it's easiest to use PCR Editor, since this allows you to easily assign messages in a graphical screen that resembles the PCR's panel.

The fifty messages assigned to the controllers are collectively called a "control map." PCR Editor Ver. 2 lets you edit control map data and transfer it between the PCR and your computer, and also save or load control map settings as SMF data.

# **Setting the MIDI ports**

In order to transfer control maps between PCR Editor and the PCR, you'll need to specify the MIDI ports that PCR Editor is to use.

\* The explanation that follows is for when the PCR is connected via USB. If you're using a MIDI connection, specify the MIDI input port and MIDI output to which your PCR is MIDI-connected instead of "EDIROL PCR 2" and "EDIROL PCR."

#### What are MIDI ports?

#### Input ports

Input port	Explanation
EDIROL PCR MIDI IN	Receives data that arrives at the PCR's MIDI IN connector.
EDIROL PCR 1	Receives data from the PCR's sliders, knobs, and buttons that are assigned to "PORT 1."
EDIROL PCR 2	Receives data from the PCR's sliders, knobs, and buttons that are assigned to "PORT 2."  If you're receiving bulk data from the PCR, choose "PCR 2" as the input port.

The output destination for the MIDI messages sent when you operate the PCR's sliders, knobs, and buttons can be specified independently for each controller. For details, refer to **Two MIDI ports** (p. 88).

#### **Output ports**

Output port	Explanation
EDIROL PCR MIDI OUT	Transmits MIDI messages to the device connected to the PCR's MIDI OUT connector.
EDIROL PCR	Transmits MIDI messages to the PCR. If you're sending bulk data to the PCR, choose "PCR" as the output port.

In order to send a control map you've created in PCR Editor to the PCR so that it can be used, you'll need to select "PCR" as the output port.

#### Windows users



If you have not yet installed PCR Editor in your computer, install it now as described in the included setup guide.

- 1 Use a USB cable to connect the PCR to your computer, then switch on the PCR's power.
- 2 In Windows, choose [Start]-[All Programs]-[PCR Editor V2]-[PCR Editor 2] to start up PCR Editor.
- 3 In PCR Editor, choose [Options]-[MIDI Devices].
- **4** In the MIDI Devices dialog box, make the MIDI device settings shown in the illustration.
- **5** Click [OK] to close the dialog box.



#### Mac OS X users



If you have not yet installed PCR Editor in your computer, install it now as described in the included setup guide.

- 1 Use a USB cable to connect the PCR to your Mac, then switch on the PCR's power.
- 2 From the Mac Finder, open the [Applications]-[PCR Editor V2] folder, and double-click PCR Editor V2 to start up PCR Editor.
- 3 In PCR Editor, choose [Options]-[MIDI Devices].
- **4** In the MIDI Devices dialog box, make the MIDI device settings shown in the illustration.
- **5** Click [OK] to close the dialog box.



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- \* The screen shots in this document are used in compliance with the guidelines of the Microsoft Corporation.
- \* Windows® is known officially as: "Microsoft® Windows® operating system."

- \* Apple and Macintosh are registered trademarks of Apple Computer, Inc.
- \* Mac OS is a trademark of Apple Computer, Inc.

# **Explanation of the menus**

### File menu

Menu	Explanation
New	Creates a new control map. In the new control map, all controllers will be set to "NO AS-SIGN."
Open	Loads a control map that was saved in SMF format. For details, refer to <b>Loading a control map</b> (p. 23).
Save	Saves the control map currently being edited by overwriting the original SMF.
Save As	Saves the control map currently being edited in SMF format with the name you specify. For details, refer to <b>Saving a control map on your computer</b> (p. 23).
Import Memory Set	Loads a memory set created in PCR Editor version 1 as a version 2 control map.
Export Assign List	Exports an HTML-format list of the messages assigned to each controller of the control map currently being edited.  * The HTML file created by this command cannot be loaded by means of [File]-[Open].
View Assign List	Displays an HTML-format list of the messages assigned to each controller of the control map currently being edited.

### **Edit menu**

Menu	Explanation
Сору	Copies the setting of the selected controller to the clipboard.
Paste	Pastes the setting from the clipboard to the selected controller.
NO ASSIGN	Sets the assignment of the selected controller to "NO ASSIGN."

# **Communication menu**

Menu	Explanation
Transmit	Transmits the control map currently being edited to the current memory of the PCR keyboard. For details, refer to <b>Transferring data between PCR Editor and the PCR</b> (p. 22).
Receive	Receives the current memory of the PCR into PCR Editor. For details, refer to <b>Transferring data between PCR Editor and the</b> <b>PCR</b> (p. 22).

# **Options** menu

Menu	Explanation
MIDI Devices	Specifies the MIDI ports used to communicate with the PCR keyboard. For details, refer to <b>Setting the MIDI ports</b> (p. 14).
Show Messages	Shows the MIDI message settings assigned to each controller in the main window of PCR Editor. For details, refer to <b>Viewing the assigned MIDI messages</b> (p. 21).

# Help menu

Menu	Explanation
PCR Editor Help	Opens the online manual.

# Keyboard shortcuts

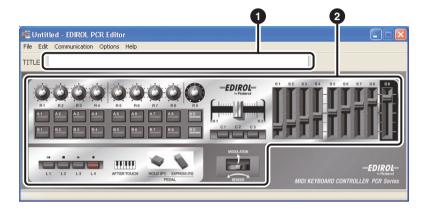
You can use the following keyboard shortcuts in PCR Editor.

Command	Windows	Macintosh
[File]–[New]	Ctrl + N	Command + N
[File]-[Open]	Ctrl + O	Command + O
[File]-[Save]	Ctrl + S	Command + S
[File]–[Save As]	Ctrl + Shift + S	Command + Shift + S
[File]–[Exit]	Alt + F4	Command + Q
[Edit]–[Copy]	Ctrl + C	Command + C
[Edit]–[Paste]	Ctrl + V	Command + V
[Edit]-[NO ASSIGN]	Del	Del
Next controller	Ctrl + F	Command + F
Previous controller	Ctrl + B	Command + B

<sup>\*</sup> In some text boxes, such as the main window's Title field, the [Edit]-[Copy] and [Edit]-[Paste] commands are used for text editing.

# **Explanation of each window**

#### Main window



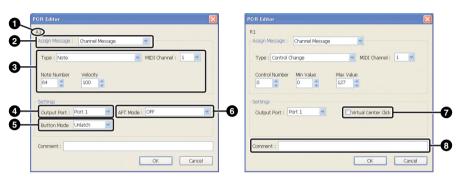
#### 1 Title

You can enter a name for the control map currently being edited. Only single-byte alphanumeric characters can be entered as the control map name. The name you enter here is displayed as the title of the HTML file produced by the [File]-[Export Assign List] command.

#### 2 Controllers

Click the controller to which you want to assign a MIDI message. When you move the mouse over a controller (i.e., over the clickable area of a controller), the mouse cursor will change to the shape. A message assignment window will open when you click the controller in this state.

### Message assignment window



\* The available items will depend on the controller and on the type of message you assign.

#### Controller name

Shows the name of the controller you're editing.

#### 2 Assign Message

Lets you select the type of MIDI message to assign to the controller.

Menu	Explanation
NO ASSIGN	Cancels the MIDI message assignment
Channel Message	Assigns a channel message (CC, note, etc.)
System Realtime/F6	Assigns a system realtime message or F6 (Tune Request)
System Ex	Assigns a system exclusive message of up to twenty-four bytes
Free Message	Assigns a MIDI message of up to twenty-four bytes (multiple messages are allowed)
Тетро	Assigns tempo control

#### Message assignment fields

Here you can specify the value for each parameter of the MIDI message you've selected in the Assign Message list 2.

For details on the parameters of each MIDI message, refer to **Parameter setting items** (p. 24).

#### **4** Output Port

This specifies the USB port on the USB-connected computer to which the MIDI message will be sent.

Port	Explanation
Port 1	The message will be sent to "EDIROL PCR 1."
Port 2	The message will be sent to "EDIROL PCR 2."
Port 1+2	The message will be sent to both "EDIROL PCR 1" and "EDIROL PCR 2."

#### **5** Button Mode

For a button-type controller, this specifies the button's mode.

Mode	Explanation
Unlatch	Switched on when button is pressed; switched off when button is released.
Latch	Button acts as a toggle, switching on or off each time it's pressed.
Increase	Each time you press the button, the value will increment by 1 (or decrement by 1 if the minimum value is higher than the maximum value). When the value has reached the maximum (minimum) value, it will "wrap around" to the minimum (maximum) value.  * You can't select this if the message type is NOTE.

#### 6 Aftertouch Mode

If the controller currently being edited is [A1]-[A9] or [B1]-[B9], this specifies the aftertouch setting.

Mode	Explanation
OFF	No aftertouch.
Channel Pressure	Channel aftertouch will be applied to the specified channel.
Polyphonic Key Pressure	Polyphonic aftertouch will be applied to an individual note number.

#### Virtual Center Click

If the controller currently being edited is [R1]–[R9] or [S1]–[S9], this specifies a virtual center click (p. 65).

Mode	Explanation	
OFF	No "dead zone" near the center.	
ON	"Dead zone" near the center.	

#### 8 Comment

You can enter a comment for the assigned message. Only single-byte alphanumeric characters can be used when entering the comment. The comment you enter here is shown in the "PARAMETER" column of the HTML file produced by the [File]-[Export Assign List] command.

\* Comments can be loaded only from an SMF file saved by PCR Editor.

# Using PCR Editor to assign MIDI messages

### Assigning a MIDI message

Here's how to assign a MIDI message to each controller.

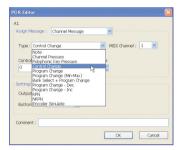
1 In the main window, click the controller to which you want to assign a MIDI message.



In the message assignment window, use the Assign Message field to select the type of MIDI message that you want to assign.



3 According to the type of MIDI message you've selected, set the various parameters in the message assignment area.
For details on the parameters, refer to
Parameter setting items (p. 24).



- **4** In the Output Port field, specify the MIDI output port.
- **5** If desired, use the Comment field to add a comment.
- 6 Click [OK].



### Viewing the assigned MIDI messages

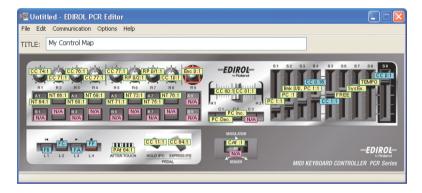
You can use either of the following two methods to view the MIDI messages you've assigned.

#### **Assignment list**

If you want to use your browser to view a list of the assignments for the current control map, choose [File]-[View Assign List]. This method is convenient when you want to see the control map settings at a glance. If you want to save the assignment list as an HTML file, choose [File]-[Export Assign List]. The "Save As" dialog box will appear; specify the save destination, assign a file name, and click [Save].

#### Viewing the assigned messages

If you want the current settings to be shown on each controller in the main window, choose [Options]-[Show Messages], and add a check mark next to [Show Messages]. This method shows the current settings in simplified form as follows.



Display	Meaning
N/A	NO ASSIGN
NT 64:1	Note
CAf :1	Channel Pressure
PAf 64:1	Polyphonic Key Pressure
CC 0:1	Control Change
PC 1:1	Program Change
PC :1	Program Change (Min-Max)
Bnk 0/0, PC 1:1	Bank Select + Program Change
PC Dec.	Program Change - Dec
PC Inc.	Program Change - Inc
RP 0/0:1	RPN
NP 0/0:1	NRPN
Enc 0:1	Encoder Simulate
F6	System Realtime/F6
SysEx.	System Ex.
FREE	Free Message
TEMPO	Тетро

The color of the indication shows the Output Port setting.

Color	Output Port
Yellow	Port 1
Light blue	Port 2
Light green	Ports 1+2
Pink	NO ASSIGN

# Transferring data between PCR Editor and the PCR

### **Sending**

If you've used PCR Editor to create control map settings and want to use them on the PCR keyboard, you'll need to send the control map currently being edited to the PCR's current memory as described below.

- \* When you send this data, the PCR's current memory will be overwritten. If you want to preserve the settings of the PCR's current memory, you must save them as one of the internal control maps. (-> Saving a control map (p. 9))
- 1 From the menu bar, choose [Communication]-[Transmit].
- **2** A confirmation dialog box will appear. Click [Continue].

- 3 The Transmit Control Map dialog box will appear.
  As instructed by the dialog box, set the PCR to wait for bulk data to be received.
- **4** When you're ready, click [Continue].
- **5** A dialog box will indicate that the data is being transferred.
  - When the dialog box disappears, transmission has been completed.
- 6 The PCR's display will indicate "END." Press the PCR's [ENTER] button to return to Play mode.









### Receiving

If you want to use PCR Editor to edit a control map that's currently in the PCR keyboard, you'll need to load the control map from the PCR's current memory into PCR Editor so that it can be edited. Proceed as follows:

- 1 From the menu bar, choose [Communication]-[Receive].
- **2** A confirmation dialog box will appear. Click [Continue].



Untitled - EDIROL PCR Editor

3 The Receive Control Map dialog box will appear. As instructed by the dialog box, transmit bulk data from the PCR.



- 4 A dialog box will indicate that the data is being transferred.
  - When the dialog box disappears, reception has been completed.
- **5** The PCR's display will indicate "END." Press the PCR's [ENTER] button to return to Play mode.



# Saving a control map on your computer

A control map that you edit using PCR Editor can be saved as an SMF-format file on your computer, as well as being transferred to or from the PCR keyboard.

\* The comments that have been entered for the controllers are also saved in the SMF.

To save a control map as an SMF file, proceed as follows.

- 1 From the menu bar, choose [File]-[Save As].
  If you want to save the settings while overwriting the file that was most recently opened, choose [File]-[Save].
- 2 Specify a file name and click [Save].

# Loading a control map

You can load control map data that was saved in SMF format.

- \* You can't load an SMF that does not include PCR control map data. The SMF must contain settings for all controllers.
- \* The contents of the comment field can be loaded only from an SMF file that was saved by PCR Editor.

Here's how to load a control map from an SMF file.

- 1 From the menu bar, choose [File]-[Open].
- **2** Specify the SMF file that you want to load, and click [Open].

# Loading a memory set as a control map

A "memory set (SMF file)" created for an earlier model in the PCR series can be loaded as a "control map" for the PCR-300/500/800.

### Importing a memory set

Controllers that do not exist on earlier models of the PCR series will be set to "NO ASSIGN."

\* You can't load an SMF that does not contain memory set data for an earlier model of the PCR series. The SMF must contain settings for all controllers of the earlier PCR series model.

Here's how to import a memory set.

- 1 From the menu bar, choose [File]-[Import Memory Set].
- 2 Specify the file that you want to load, and click [Open].

# Parameter setting items

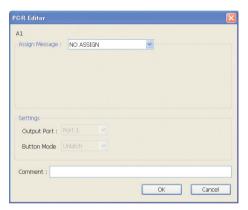
The setting items shown in the message assign window will depend on the MIDI message you've selected. This section explains the setting items for each MIDI message. Values for parameters are specified in decimal.

\* Within the explanation, values in square brackets [] are in hexadecimal.

#### **NO ASSIGN**

Clears any message assignment.

No message will be sent even if you operate a controller that's set to NO ASSIGN.



NO ASSIGN has no parameters to set.

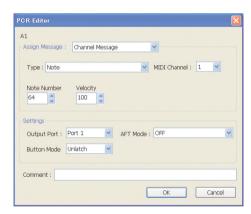
### **Channel Message**

Assigns a channel message.

Use the Type field to select the type of message you want to assign. According to the message you've selected, set the following parameters.

#### Note [9n kk vv]

Assign a note message.

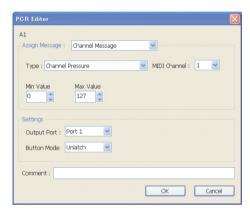


You can specify the following parameters for Note.

Item	Content
MIDI Channel	MIDI channel [n]
Note Number	Note number [kk]
Velocity	Velocity [vv]
AFT Mode	Aftertouch

#### Channel Pressure [Dn vv]

Assign a channel pressure message.

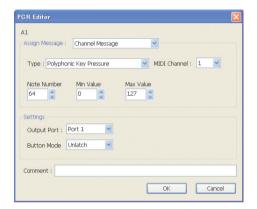


You can specify the following parameters for Channel Pressure.

Item	Content
MIDI Channel	MIDI channel [n]
Min Value	Lower value [vv] of channel pressure
Max Value	Upper value [vv] of channel pressure

#### Polyphonic Key Pressure [An kk vv]

Assign a polyphonic key pressure message.

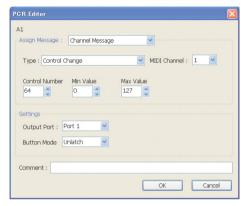


You can specify the following parameters for Polyphonic Key Pressure.

Item	Content
MIDI Channel	MIDI channel [n]
Note Number	Note number [kk]
Min Value	Lower value [vv] of key pressure
Max Value	Upper value [vv] of key pressure

#### Control Change [Bn cc vv]

Assign a control change message.

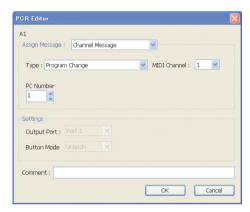


You can specify the following parameters for Control Change.

Item	Content
MIDI Channel	MIDI channel [n]
Control Number	Control number [cc]
Min Value	Lower limit of the control value [vv]
Max Value	Upper limit of the control value [vv]

#### Program Change [Cn pp]

Assign a program change message (with a fixed program number).



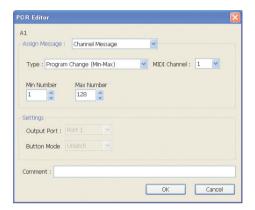
You can specify the following parameters for Program Change.

Item	Content
MIDI Channel	MIDI channel [n]
PC Number	Program number [pp]

\* The range of the program number [pp] is 1–128.

#### Program Change (Min-Max) [Cn pp]

Assign a program change message (with a variable program number).



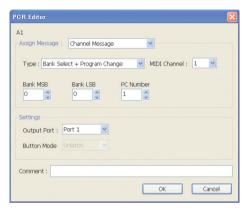
You can specify the following parameters for Program Change (Min-Max).

Item	Content
MIDI Channel	MIDI channel [n]
Min Number	Lower limit of the program number [pp].
Max Number	Upper limit of the program number [pp].

<sup>\*</sup> The range of the program number [pp] is 1–128.

#### Bank Select + Program Change [Bn 00 mm Bn 20 || Cn pp]

Assign a bank select message and program change message (all values fixed).



You can specify the following parameters for Bank Select + Program Change.

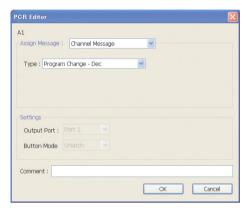
Item	Content
MIDI Channel	MIDI channel [n]
Bank MSB	Bank number MSB [mm]
Bank LSB	Bank number LSB [II]
PC Number	Program number [pp]

<sup>\*</sup> The range of the program number [pp] is 1–128.

#### **Program Change - Dec**

Assign the program change decrement function (PC DEC).

This will transmit a program change number that is one less than the program change number most recently transmitted in the PCR's program change mode.

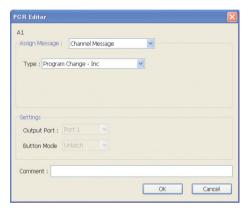


There are no parameters to specify for Program Change – Dec.

#### **Program Change - Inc**

Assign the program change increment function (PC INC).

This will transmit a program change number that is one greater than the program change number most recently transmitted in the PCR's program change mode.

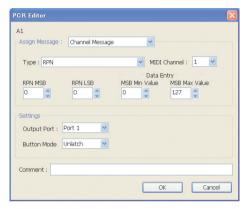


There are no parameters to specify for Program Change – Inc.

#### **RPN**

#### [Bn 65 mm Bn 64 ll Bn 06 dm Bn 26 dl]

Assign a registered parameter number.



You can specify the following parameters for RPN.

Item	Content
MIDI Channel	MIDI channel [n]
RPN MSB	RPN parameter number MSB [mm]
RPN LSB	RPN parameter number LSB [II]
MSB Min Value	Lower limit of data entry MSB [dm]
MSB Max Value	Upper limit of data entry MSB [dm]

\* The range for the data entry LSB [dl] is fixed at 0–127 and cannot be changed.

#### **NRPN**

#### [Bn 63 mm Bn 62 ll Bn 06 dm Bn 26 dl]

Assign a non-registered parameter number.



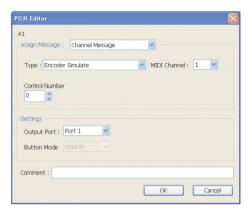
You can specify the following parameters for NRPN.

Item	Content
MIDI Channel	MIDI channel [n]
NRPN MSB	NRPN parameter number MSB [mm]
NRPN LSB	NRPN parameter number LSB [II]
MSB Min Value	Lower limit of data entry MSB [dm]
MSB Max Value	Upper limit of data entry MSB [dm]

\* The range for the data entry LSB [dl] is fixed at 0–127 and cannot be changed.

#### Encoder Simulate [Bn cc 41] - [Bn cc 01]

Assign a function that simulates a rotary encoder.



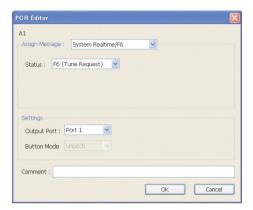
You can specify the following parameters for Encoder Simulate.

Item	Content	
MIDI Channel	MIDI channel [n]	
Control Number	Controller number [cc]	

<sup>\*</sup> This can be assigned to a button, but will not do anything.

## System Realtime/F6 [F6/F8/FA/FB/FC/FF]

Assign a system realtime message or F6 (Tune Request).

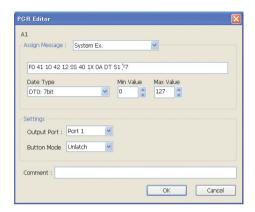


For System Realtime/F6, use the Status field to choose the message you want to assign.

Item	Content
F6	Tune request
F8	Timing clock
FA	Start
FB	Continue
FC	Stop
FF	System reset

### System Ex. [F0...F7]

Assign a system exclusive message (System Ex.). You can enter up to twenty-four bytes.



You can specify the following parameters for System Ex.

İtem	Content	
	You can enter a system exclusive message of up to twenty-four bytes. Enter each byte as a hexadecimal value separated by a single-byte space.	
Message entry field	The following limitations apply to the input.  * The message must begin with "FO" and end with "F7."  * You cannot include more than one exclusive message.  * You cannot include messages other than an exclusive message.	
	You can enter variable data or a checksum using the special characters described in <b>Table 1: Special characters used in the message entry field</b> . If you use the special character "DT," use the Data Type field to specify the type of data.	
Data Type	If you've used the special character "DT" in the message entry field, use this to specify the type of data to be inserted at that location. For the types of data that can be specified, refer to Table 2: Types of data you can specify in the Data Type field.	
Min Value	Lower limit of the data value	
Max Value	Upper limit of the data value	

Table 1: Special characters used in the message entry field

	•		
Special character	Explanation	Details	
DT	Data insertion location		
SS	Beginning of check- sum calculation	If you use the automatic checksum calculation function, use this special character to specify the point at which checksum calculation is to begin.	
\$1/\$2	Checksum insertion location and type	If you use the automatic checksum calculation function, use this special character to specify the point at which the checksum is to be inserted, and its type.  S1: The most common type, used by Roland and other manufacturers.  S2: Choose this if a method other than S1 is used.	
ş <sub>n</sub>	Channel (? is any value between 0–7)	If you want a channel number to be inserted in the exclusive message, use this special character to specify its location and the upper four bits (a fixed value of 0–7). The current channel of the PCR will be inserted in the channel section.	
ŝ×	Block number (? is any value between 0–7)	If you want a GS block number to be inserted in the exclus message, use this special character to specify its location of the upper four bits (a fixed value of 0–7). The current chan of the PCR will converted into the block number and insert	

#### Table 2: Types of data you can specify in the Data Type field

Data type	Data length	Target of the specified Min Value / Max Value		
DTO: 7-bit	1 byte	Specifies the range of the data itself (0–127)		
DT1: 4-bit/4-bit	2 bytes	Specifies the range of the first byte (0-15)  * The second byte is fixed at 0-15		
DT2: 7-bit/7-bit (MSB/LSB)	2 bytes	Specifies the range of the MSB (0–127)  * The LSB is fixed at 0–127		
DT3: 7-bit/7-bit (LSB/MSB)	2 bytes	Specifies the range of the MSB (0–127)  * The LSB is fixed at 0–127		
DT4: 4-bit/ 4-bit/4-bit/4-bit	4 bytes	Specifies the range of change (0–255) between the negative direction (Min) and the positive direction (Max), centered on 8000h.		

#### **Example of input**

#### **Roland GS TVF CUTOFF FREQ**



- **1.** Enter the following in the message entry field. FO 41 10 42 12 SS 40 1X 32 DT S1 F7
- 2. In the Data Type field, choose "DTO." Specify the Min Value as "O" and the Max Value as "127."

# Free Message [...]

Assign a MIDI message.

You can enter up to twenty-four bytes. You may assign more than one MIDI message if desired.

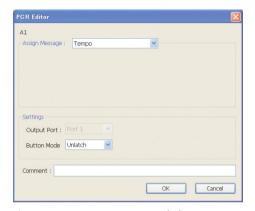


You can specify the following parameters for Free Message.

Item	Content	
	You can enter a MIDI message of up to twenty-four bytes. Enter each byte as a hexadecimal value separated by a single-byte space.	
Message entry field	The following limitations apply to the input.  * You can't use a checksum.	
	* You can't use a criecksom:  * You can't use a special character as the first byte.	
	You can also enter variable data using the special characters described in <b>Table 1: Special characters used in the message entry field</b> (p. 29). If you use the special character "DT," use the Data Type field to specify the type of data.	
Data Type	If you've used the special character "DT" in the message entry field, use this to specify the type of data to be inserted at that location. For the types of data that can be specified, refer to <b>Table 2: Types of data you can specify in the Data Type field</b> (p. 29).	
Min Value	Lower limit of the data value	
Max Value	Upper limit of the data value	

## **Tempo**

Assign tempo control for transmitting MIDI Clock messages.



There are no parameters to specify for Tempo.

# Playing (Play mode)

Use Play mode when you want to play the PCR's keyboard or use its controllers to control your software or sound module.

Broadly speaking, the PCR has two modes.

Mode	Overview	How selected
Play mode	This is the mode in which you play the key- board and operate the controllers. MIDI messages will be transmitted by each con- troller.	When you turn on the power When you exit Edit mode
Edit mode (p. 41)	This is the mode in which you assign MIDI messages to each controller, send or receive bulk data, or make system settings.	When you press the Edit button

When you turn on the power, the PCR-300/500/800 will start up in Play mode. To return from Edit mode (p. 41) back to Play mode, press the [EDIT] button or the [CANCEL] button. In this case, any setting you had not completed will be discarded. When you play the keyboard in Play mode, note messages will be transmitted, causing your sound module to produce sound.

# Go ahead and play

- **1** Set the PCR's current channel (MIDI transmit channel).
  - Set the PCR's MIDI transmit channel to match the MIDI receive channel of your sound module.
  - You can set the MIDI transmit channel setting as described in **Selecting the current channel (MIDI transmit channel)** (p. 33).
- 2 From the PCR, select a sound on your sound module.
  You can select sounds as described in Selecting sounds (Program Change/Bank) (p. 34).
- **3** Play the PCR's keyboard.
  - When you've finished making settings, play the keyboard in Play mode; MIDI messages will be sent to your application.
  - \* Since the PCR keyboard does not contain a sound generator, it can't produce sound by itself.

### **Convenient performance functions**

Here we'll explain some typical functions that are convenient for performance.

Purpose	Description	
Modify the pitch of the currently sounding note (Pitch Bend)	When you move the bender lever to left or right, pitch bend messages will be transmitted, causing the currently sounding note to vary its pitch.  * The range of the pitch bend depends on the settings of the sound module.	
Apply change to the cur- rently sounding note (Modulation)	When you push the bender lever away from yourself, modulation messages (CC#01) will be transmitted, causing a vibrato effect to be applied to the sound  * The change that occurs in the sound depends on the settings of the sound module.	
Switch the octave (Octave Shift)	You can press [OCTAVE -] or [OCTAVE +] to lower or raise the pitch of the keyboard in one-octave steps (Octave Shift). Use the when you want to shift the range of the keyboard upward or downward.  When you press [OCTAVE -] once, the pitch will shift downward by one octave. When you press it again, the pitch will shift downward by an additional octave. You can shift the octave in a range of 4 (down) to 5 (up). Depending on the current octave shift statt [OCTAVE -] or [OCTAVE +] will light. If you press [OCTAVE -] a [OCTAVE +] simultaneously, the octave shift setting will be reset 0, and the keyboard will return to its normal pitch range.	



While playing the keyboard, you can move the bender lever toward the left to lower the pitch, or toward the right to raise the pitch. This is called the pitch bend effect. Pushing the lever away from yourself will apply vibrato. This is called the modulation effect.

If you move the lever toward the left or right while pushing it away from yourself, both effects will be applied simultaneously.



Pitch bend effect



Modulation effect

- The pitch bend range will depend on the settings of the sound module.
- If you assign different MIDI messages to the bender lever, the pitch bend effect and modulation effect will not be applied.

# Selecting the current channel (MIDI transmit channel)

Here's how to specify the current channel, which will be used to transmit data produced by playing the keyboard as well as other performance data.

#### What is the current channel?

The current channel is the MIDI transmit channel for the keyboard and bender lever.

\* Each controller can have an independent transmit channel setting. However, if "OMNI" is on, all messages will be transmitted on the current channel.

#### **MIDI** channel

Here's how to change the current channel (MIDI transmit channel).

- 1 Press the [MIDI CHANNEL] button. The [MIDI CHANNEL] button will light. The display will indicate the current channel.
- **2** Use the VALUE knob to specify the desired channel number.

This completes the current channel setting.



You can also change the current channel in the following way.

- Press the [EDIT] button to make the [EDIT] button light. The display will indicate "EDIT."
- 2. Press the [MIDI CHANNEL] button. The [MIDI CHANNEL] button will light, and the display will indicate the current channel setting.
- **3.** Use controllers [A1]–[A8] or [B1]–[B2], or the VALUE knob to specify the desired channel number
- 4. Press the [ENTER] button.

#### What is OMNI?

When you turn the OMNI setting on, all controllers will always transmit on the current channel, regardless of the MIDI transmit channel that's specified for each individual controller.

Use the following procedure to turn OMNI on if you want changes in the current channel to switch the MIDI transmit channel for the controllers as well.

1. Press the [EDIT] button so it's lit.



2. Turn the VALUE knob to make the display indicate "OMNI."



**3.** Press the [ENTER] button. The display will indicate the current setting.

Controller	Item	Display	Explanation
[A1 (O)]	OMNI OFF	8888	Messages will be transmitted to the channel and port specified for each controller.
[A2 (1)]	OMNI ON	8888	Messages will be transmitted to the KEYBOARD PORT on the current channel, regardless of the channel and part settings of each controller.

- **4.** Use the VALUE knob or controllers [A1 (0)]–[A2 (1)] to select On or Off as the setting.
- Press the [ENTER] button.
   The [EDIT] button will go out, and you will return to Play mode.

# Selecting sounds (Program Change/Bank)

You can select sounds on your sound module from the PCR by transmitting Program Changes.

To select sounds in a different bank, you must first use Bank mode to transmit a Bank Select message to switch the bank. Then transmit a Program Change message. The bank select message must be transmitted before the program change.

#### **Program Change and Bank Select**

MIDI allows you to combine program change and bank select messages to access more than 128 sounds.

If you want to select a different sound within the same bank as the currently selected sound, you can switch sounds simply by sending a program change message alone.

If you want to select a sound from a different bank, you'll need to send the appropriate bank number and program number. The bank number is sent using two MIDI messages; control change 0 (MSB) and control change 32 (LSB). To make the sound actually change, you must send messages in the order of the bank number (MSB), the bank number (LSB), and finally the program number.

### **Program Change**

Here's how to transmit a program change message on the current channel (p. 33).

- 1 Press the [PROGRAM CHANGE] button. The [PROGRAM CHANGE] button will light. The display will indicate the program change number that was transmitted most recently.
- 2 Use the VALUE knob to specify the program change number that you want to send.
  The program change message has now been sent.



You can also send a program change in the following way.

- 1. Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- Press the [PROGRAM CHANGE] button. It will light, and the display will indicate the program change number that was transmitted most recently.
- **3.** Use controllers [A1]–[A8], [B1]–[B8], or the VALUE knob to specify the program change number that you want to send.
- 4. Press the [ENTER] button.

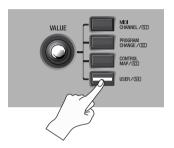
#### **Bank Select**

In order to switch the bank number, you'll need to make system settings for "Value Encoder" so that [USER] is assigned to "BANK SELECT LSB" or "BANK SELECT MSB."

\* For details on how to make this setting, refer to this page or **VALUE knob settings** (p. 80).

If "BANK SELECT LSB" or "BANK SELECT MSB" is assigned to the VALUE knob, you'll be able to transmit bank select (MSB, LSB) messages using the following procedure.

- 1 Press the [USER] button.
  The [USER] button will light. The display will indicate the bank select number that was most recently transmitted.
- **2** Use the VALUE knob to specify the bank select number that you want to send.
  - The bank select (MSB, LSB) data has now been transmitted.



#### **Assignments for the VALUE knob**

Here's how to assign "BANK SELECT LSB" or "BANK SELECT MSB" to the [USER] button of the VALUE knob.

- 1. Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2.** Press the [USER] button. It will light, and the display will indicate the currently assigned parameter.
- **3.** Use controllers [A2], [A3] or the VALUE knob to select either "LSB" or "MSB," and then press the [ENTER] button.



The  $\left[ \mathsf{EDIT} \right]$  button will go out, and you will return to Play mode.

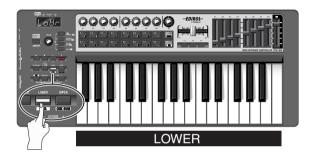


# Selecting the Lower and Upper sounds

The PCR-300/500/800's keyboard has two parts—Lower and Upper—and you can select different sounds for each part.

### **Selecting the Lower sound**

The entire keyboard will play the Lower sound.



- 1 Press the [LOWER] button so it's lit.
- Press the [PROGRAM CHANGE] button, and turn the VALUE knob. The Lower sound will change.

When you play the keyboard, you'll hear the sound you selected for the Lower part.

#### **Lower and Upper**

Use the [UPPER] button and [LOWER] button to switch between the Upper part and Lower part.

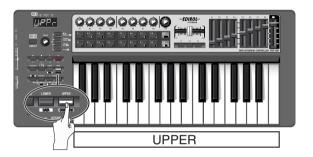
When the [UPPER] button is lit, performance data from the keyboard (notes and aftertouch), bender lever (pitch and modulation), and foot pedal, as well as program change messages, will be transmitted on the current channel specified for the Upper part.

Octave Shift settings can be made independently for each part, and will be remembered while you're performing.

 If MIDI messages are assigned to aftertouch or the bender lever, they will be transmitted on the assigned MIDI channel, not on the current channel.

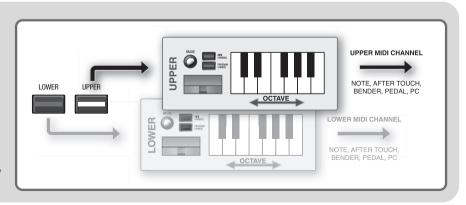
### Selecting the Upper sound

The entire keyboard will play the Upper sound.



- 1 Press the [UPPER] button so it's lit.
- Press the [PROGRAM CHANGE] button, and turn the VALUE knob. The Upper sound will change.

When you play the keyboard, you'll hear the sound you selected for the Upper part.

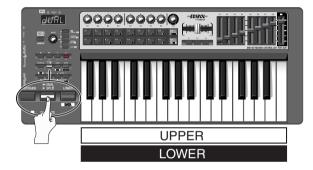


## Layering two sounds (Dual)

Dual lets you play both the Lower sound and Upper sound from the entire keyboard.

## Dual

The entire keyboard will play both the Lower and Upper sounds.



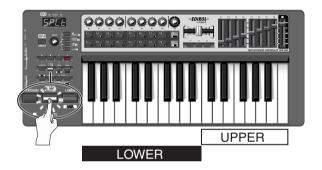
- 1 Press the [DUAL/SPLIT] button several times to make it light.
  - \* If you want to change the Upper sound, press the [UPPER] button.

## Playing two sounds in combination (Split)

Split lets you specify a boundary between the Upper region and Lower region, and play the Upper and Lower sounds separately using your right and left hands.

## **Split**

Here's how to specify the ranges for the Lower sound and Upper sound so that you can play them separately using your left and right hands.



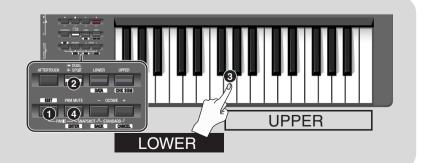
- 1 Press the [DUAL/SPLIT] button several times to make it blink.
  - \* If you want to change the Upper sound, press the [UPPER] button.

#### **Setting the Split point**

Here's how to specify the Split point at which the Upper and Lower regions will be divided.

- 1. Press the [EDIT] button so it's lit.
- 2. Press the [SPLIT] button so it's lit.
- Press the key that you want to be the leftmost key in the Upper region. The display will indicate the key that you pressed.
- 4. Press the [ENTER] button.

This completes the split point setting.



## **Employing performance dynamics (Velocity)**

Normally, the velocity value of the transmitted notes will vary depending on how strongly you play the keyboard. If desired, you can also specify a fixed velocity at which all notes will be transmitted regardless of how strongly you play the keyboard.



This is convenient when you want to record into your DAW software at a fixed velocity. You can also adjust the sensitivity or velocity curve as desired.

## Specifying a fixed velocity (Key Velocity)

If you want to use a fixed velocity, you'll need to set the "VALUE ENCODER" system setting for [USER] to "Key Velocity."

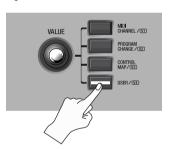
\* For details on how to make this setting, refer to the bottom of this page or to **VALUE knob settings** (p. 80).

If "KEY VELOCITY" is assigned to the VALUE encoder, you can use the following procedure to transmit bank select (MSB, LSB) messages.

1 Press the [USER] button.

The [USER] button will light. The display will indicate the most recently transmitted velocity value.

2 Use the VALUE knob to specify the velocity value (tch, 1–127) that you want to transmit.



 If the display indicates "tch," the transmitted velocity will depend on how strongly you play the keyboard.



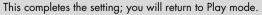
## Changing the keyboard touch (Velocity Curve)

Refer to the system setting **Keyboard Velocity Curve** (p. 72).

#### **Assigning the VALUE knob**

Here's how to change the VALUE knob's [USER] button assignment to "Key Velocity."

- Press the [EDIT] button so it's lit.
   The display will indicate "EDIT."
- 2. Press the [USER] button. It will light, and the display will indicate the currently assigned parameter.
- Use the VALUE knob to select "VEL," and press the [ENTER] button.





# Sending the current value of all controllers (Snapshot)

You can set the controllers to the desired positions and then transmit their state as a "snapshot."

The snapshot function will transmit the current values of the controllers [R1]–[R9], [S1]–[S9], and [H1]–[H2] in a single operation.



This is a convenient way to send control data to your DAW software. You can use this to record initial values at the beginning of your song.

# Muting the controller values (PRM MUTE)

You can mute all controllers so that they will not transmit MIDI messages even if they are moved.

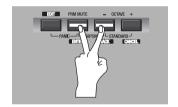


If a parameter value is distant from the current physical position of a controller, you can avoid an unwanted sudden jump in the value by using the [PRM MUTE] button to mute the controllers before moving the controller to a position that's close to the current value.

## Snapshot

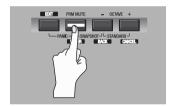
- 1 Simultaneously press the [PRM MUTE] button and OCTAVE [-] button.
  The [PRM MUTE] ([ENTER]) button will blink.
- Press the [ENTER] button.
  The [PRM MUTE] button will blink several times.

This completes transmission of the snapshot.

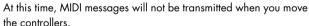


## **PRM MUTE**

1 Press the [PRM MUTE] button.
The [PRM MUTE] button will light, and the display will indicate "P ON."



**2** Operate the controllers.





**3** Press the [PRM MUTE] button once again.

The [PRM MUTE] button will go out, and the display will indicate "POFF."



Now, when you move the controllers, MIDI messages will once again be transmitted.

## When "stuck notes" occur (Panic)

If you experience problems during operation such as notes on your sound module that fail to turn off, or if something is wrong with the sound, you can use the Panic function to fix the problem.

The Panic function will transmit All Sound Off, All Notes Off, and Reset All Controllers messages on all channels.

## **Panic**

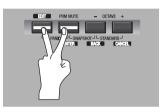
**1** Simultaneously press the [EDIT] button and [PRM MUTE] button.

The [PRM MUTE] ([ENTER]) button will blink.

2 Press the [ENTER] button.

The [EDIT] button and [PRM MUTE] button will blink several times.

This completes execution of the Panic function.



## **Settings (Edit mode)**

The PCR-300/500/800 has a total of fifty controllers: [R1]–[R9], [S1]–[S9], [A1]–[A9], [B1]–[B9], [C1]–[C3], [L1]–[L4], [H1]–[H2], [P1]–[P2], [BEND], [MOD], and [AFTERTOUCH]. You can freely assign the MIDI message that will be transmitted by each of these controllers. You need to use Edit mode to make MIDI message assignments. This section explains how to assign MIDI messages to the controllers using the PCR keyboard.

Alternatively, you can make these assignments using PCR Editor. For details, refer to Using PCR Editor (p. 14).

## Assigning MIDI messages on the PCR keyboard

The following functions can be assigned to controllers.

Function	Display	Refer to
Note	8888	Note assign (p. 42)
Aftertouch	8888	Aftertouch assign (p. 44)
Control change	8888	Control change assign (p. 46)
Program change	8888	Program change assign (p. 48)
RPN	8888	RPN/NRPN assign (p. 53)
NRPN	8888	RPN/NRPN assign (p. 53)
System exclusive (Sys Ex.)	8888	System exclusive assign (p. 55)
Тетро	8888	Tempo assign (p. 52)
No Assign	888	Canceling an assignment (NO ASSIGN) (p. 67)

- If you want to assign a MIDI message to [AFTERTOUCH], press the [EDIT] button and then press down strongly on the keyboard or press the [AFTERTOUCH] button.
- If you've changed the controller settings, save the control map if you want to keep your changes. If you turn off the power without saving, your changes will be lost.
   (-> Saving a control map (p. 9))
- You can copy an assigned message to another controller, or cancel the assignment. For details, refer to Copy assignment (p. 66) or Canceling an assignment (NO ASSIGN) (p. 67).
- \* If you want to assign a single-byte system message (system realtime message, tune request) or a freely specified message of up to twenty-four bytes, refer to **System exclusive assign** (p. 55).

## **About Basic Editing and Advanced Editing**

For assignments other than Tempo and No Assign, the PCR provides basic editing and advanced editing. You can choose either basic or advanced editing as appropriate for your needs.

#### **Basic editing:**

You can easily assign MIDI messages with the minimum of steps.

#### Advanced editing:

More steps will be required, but you'll be able to specify more parameters to assign more sophisticated MIDI messages.

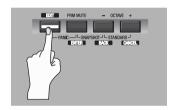
## Note assign

Here's how to assign a note message to a controller. Note messages are used in a performance, and can also be used to control DAW software.

Editing	Controller	Display	MIDI transmit channel	Note number	Velocity	Port	Button mode	Aftertouch
Basic editing	[A1 (O)]	8888	1–16	0–127 (00–7FH)	100 (64H) (fixed)	PORT1 (fixed)	Unlatch/Latch	OFF (fixed)
Advanced editing	[A2 (1)]	8888	1–16	0–127 (00–7FH)	0–127 (00–7FH)	PORT1, PORT2, PORT1+2	Unlatch/Latch	OFF, Channel Pressure, Polyphonic Key Pressure

## Basic editing (-> Advanced editing 1 (p. 43))

1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



2 Slightly move the controller to which you want to assign a note message.



If the controller is a button, press it.

The display will indicate the number of the selected controller.

- **3** Check the indication in the display, then press the [ENTER] button.
- 4 Turn the VALUE knob to make the display indicate "NT" (Note assign).



**5** Press the [ENTER] button.

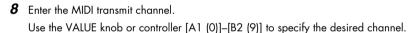
**6** Turn the VALUE knob or press controller [A1 (0)] to get the "NTO" indication for basic editing.



7 Press the [ENTER] button.

The display will indicate "CH- -."

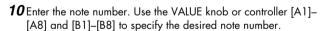




**9** Press the [ENTER] button.

The display will indicate "N- -."

\* The - - portion shows the currently specified value.



- 11 Press the [ENTER] button.
- **12** If the controller is [A1]–[A9], [B1]–[B9], [C1]–[C3], [L1]–[L4], or [P1], specify the button mode (p. 64).

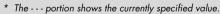
#### **Advanced editing 1**

In Note Assign advanced editing 1, you can also specify the velocity value in addition to the items in basic editing.

- 1. Press the [EDIT] button so it's lit.
- 2. Slightly move the controller to which you want to assign a note message.

If the controller is a button, press it.
The display will indicate the number of the selected controller.

- 3. Check the indication in the display, then press the [ENTER] button.
- **4.** Make the display indicate "NT" (Note assign).
- **5.** Press the [ENTER] button.
- **6.** Turn the VALUE knob or press controller [A2 (1)] to make the display indicate "NT1."
- **7.** Press the [ENTER] button. The display will indicate "CH--."
  - \* The - portion shows the currently specified value.
- **8.** Enter the MIDI transmit channel.
- **9.** Press the [ENTER] button. The display will indicate "N--."
  - \* The - portion shows the currently specified value.
- 10. Enter the note number.
- **11.** Press the [ENTER] button. The display will indicate "V---."





- 12. Enter the velocity value.

  If the controller is [A1]–[A9] or [B1]–[B9], selecting "tch" will transmit a velocity value that corresponds to the force with which you pressed the pad.
- 13. Press the [ENTER] button.
  The display will indicate "P--" (MIDI output port).

  \* The -- portion shows the currently specified value.



- **14.** Specify the MIDI output port. (-> **Port setting** (p. 65))
- **15.** If the controller is [A1]–[A9], [B1]–[B9], [C1]–[C3], [L1]–[L4], or [P1], specify the button mode (p. 64).
- **16.** If the controller is [A1]–[A9] or [B1]–[B9], specify the aftertouch setting.

AFTERTOUCH OFF	[8888]	Aftertouch output will be disabled.		
CHANNEL PRESSURE	8888	Channel pressure messages will be transmitted.		
POLYPHONIC KEY PRESSURE	8889	Polyphonic key pressure messages will be transmitted.		

<sup>\*</sup> If you assign a note message to [S1]-[S9], [R1]-[R9], or [P2], moving the controller to the maximum position will transmit a note message with the specified velocity value. Slightly lowering the controller from the maximum position will transmit a note message with a velocity of 0.

<sup>\*</sup> If you assign a note message to [A1]-[A9], [B1]-[B9], [C1]-[C3], [L1]-[L4], or [P1], turning the controller on will transmit a note message with the specified velocity value. Turning the controller off will transmit a note message with a velocity value of 0.

## Aftertouch assign

Here's how to assign an aftertouch message to a controller.

Edit	Controller	Display	Content	MIDI transmit channel	Value range	Port	Button mode
Basic editing	[A1 (O)]	888	Channel Pressure	1–16	0–127 (00–7FH)	PORT1 (fixed)	Unlatch, Latch, Increase
Advanced editing 1	[A2 (1)]	8888	Channel Pressure	1–16	You can specify an upper and lower limit	PORT1, PORT2, PORT1+2	Unlatch, Latch, Increase
Advanced editing 2	[A3 (2)]	8888	Polyphonic Key Pressure	1–16	0–127 (00–7FH)	PORT1 (fixed)	Unlatch, Latch, Increase
Advanced editing 3	[A4 (3)]	8888	Polyphonic Key Pressure	1–16	You can specify an upper and lower limit	PORT1, PORT2, PORT1+2	Unlatch, Latch, Increase

## Basic editing (-> Advanced editing 1-3 (p. 45))

1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



- 2 Slightly move the controller to which you want to assign aftertouch. If the controller is a button, press it. The display will indicate the controller number you selected.
- **3** Check the indication in the display, then press the [ENTER] button.
- 4 Turn the VALUE knob to make the display indicate "AT."
- **5** Press the [ENTER] button.



6 Turn the VALUE knob or press controller [A1 (0)] to get the "ATO" indication (basic editing).



7 Press the [ENTER] button. The display will indicate "CH- -."



- \* The - portion shows the currently specified value.
- 8 Enter the channel. Use the VALUE knob or controllers [A1 (0)]-[B2 (9)] to specify the desired channel.
- **9** Press the [ENTER] button.
- **10** As appropriate for the controller type, specify the button mode (p. 64).

#### Advanced editing 1-3

In Aftertouch Assign advanced editing 1, you can specify an upper and lower limit for the aftertouch data as well as edit the basic editing items. In advanced editing 2 and 3, you can also specify note aftertouch data (Polyphonic Key Pressure) instead of a channel.

- 1. Press the [EDIT] button so it's lit.
- Slightly move the controller to which you want to assign aftertouch. If the controller is a button, press it. The display will indicate the controller number you selected.
- **3.** Check the indication in the display, then press the [ENTER] button.
- **4.** Turn the VALUE knob to make the display indicate "AT."
- **5.** Press the [ENTER] button.
- **6.** Turn the VALUE knob or press controller [A2 (1)]–[A4 (3)] to make the display indicate "AT1," "AT2," or "AT3."
- **7.** Press the [ENTER] button.
- **8.** Enter the channel.
- **9.** Press the [ENTER] button.
- **10.** If you're using advanced editing 2 or advanced editing 3, enter a note number and press the [ENTER] button.
- 11. If you're using advanced editing 1 or 3, specify an upper limit and lower limit as described in Specifying the value range (upper/lower limits) (p. 45).
- **12.** If you're using advanced editing 1 or 3, specify the output port. (-> **Port setting** (p. 65))
- 13. According to the controller type, set the button mode (p. 64).

## Specifying the value range (upper/lower limits)

If you're using the PCR keyboard to assign MIDI messages (p. 41) in Edit mode, and you've selected a mode that allows you to specify the range of the value, you'll need to set the maximum and minimum value.

1. The readout should be as shown.

- 8888
- Use the VALUE knob or controllers [A1]-[A8] and [B1]-[B8] to specify the upper value limit.
- 3. Press the [ENTER] button.
- 4. The readout should be as shown.



- **5.** Use the VALUE knob or controllers [A1]–[A8] and [B1]– [B8] to specify the lower value limit.
- **6.** Press the [ENTER] button.

## Control change assign

Here's how to assign a control change message to a controller.

Edit	Controller	Display	MIDI transmit channel	Control number	Control number Value range		Button mode
Basic editing	[A1 (O)]	8888	1–16	0–127 (00–7FH)	0–127 (00–7FH)	PORT1 (fixed)	Unlatch, Latch, Increase
Advanced editing 1	[A2 (1)]	8888	1–16	0–127 (00–7FH)	You can specify an upper and lower limit	PORT1, PORT2, PORT1+2	Unlatch, Latch, Increase
Advanced editing 2	[A3 (2)]	8888	1–16	0–127 (00–7FH)	Simulates a rotary encoder	PORT1, PORT2, PORT1+2	_

## Basic editing (-> Advanced editing (p. 47))

1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



- 2 Slightly move the controller to which you want to assign a control change message.
  - If the controller is a button, press it.

The display will indicate the number of the controller you selected.

- ${m 3}$  Check the indication in the display, then press the [ENTER] button.
- **4** Turn the VALUE knob to make "CC" appear.
- **5** Press the [ENTER] button.



**6** Turn the VALUE knob or press controller [A1 (0)] to select the basic editing "CCO" indication.



**7** Press the [ENTER] button.

The display will indicate "CH- -."

\* The -- portion shows the currently specified value.



- 8 Enter the channel.
  Use the VALUE knob or controllers [A1 (0)]–[B2 (9)] to specify the desired channel.
- **9** Press the [ENTER] button.

The display will indicate "N- - -."



- \* The --- portion shows the currently specified value.
- **10** Enter the control change number.

Use the VALUE knob or controllers [A1]–[A8] and [B1]–[B8] to specify the desired control number.

- 11 Press the [ENTER] button.
- 12 As appropriate for the type of controller, make button mode settings (p. 64) or virtual center click settings (p. 65).

#### **Advanced editing 1**

In control change assign advanced editing 1, you can specify an upper and lower limit for the control change data, in addition to setting the items available in basic editing.

- 1. Press the [EDIT] button so it's lit.
- Slightly move the controller to which you're assigning a control change message. If the controller is a button, press it.
   The display will indicate the controller number.
- **3.** Check the indication in the display, then press the [ENTER] button.
- 4. Turn the VALUE knob to make the display indicate "CC."
- 5. Press the [ENTER] button.
- **6.** Turn the VALUE knob or press controller [A2 (1)] to make "CC1" appear.
- **7.** Press the [ENTER] button.
- 8. Enter the channel.
- 9. Press the [ENTER] button.
- **10.** Enter the control change number.
- 11. Press the [ENTER] button.
- **12.** Specify the range of values. (-> Specifying the value range (upper/lower limits) (p. 45))
- **13.** Specify the output port. (-> **Port setting** (p. 65))
- **14.** According to the type of controller, make button mode settings (p. 64) or virtual center click settings (p. 65).

#### **Advanced editing 2**

In advanced editing 2, you can simulate the operation of a typical rotary encoder. If this is assigned to a controller, moving the controller to the right of (or above) the center position will produce the same result as turning the encoder clockwise. Similarly, moving it to the left of (or below) the center position will produce the same result as turning the encoder counterclockwise. As the controller position moves farther away from the center, the result will be the same as turning the rotary encoder more rapidly.

NOTE

You can assign this advanced editing 2 function to a button, but it will not operate.

- 1. Press the [EDIT] button so it's lit.
- Slightly move the controller to which you're assigning a control change message. If the controller is a button, press it.
  The display will indicate the controller number.
- 3. Check the indication in the display, then press the [ENTER] button.
- **4.** Turn the VALUE knob to make the display indicate "CC."
- 5. Press the [ENTER] button.
- **6.** Turn the VALUE knob or press controller [A3 (2)] to make "CC2" appear.
- 7. Press the [ENTER] button.
- **8.** Enter the channel.
- **9.** Press the [ENTER] button.
- **10.** Enter the control change number.
- 11. Press the [ENTER] button.
- 12. Specify the output port. (-> Port setting (p. 65))

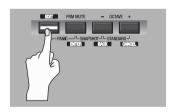
## Program change assign

Here's how to assign a program change message to a controller.

Edit	Controller	Display	MIDI transmit channel	Bank MSB	Bank LSB	Value range	Port
Basic editing	[A1 (O)]	8888	1–16	_	_	0–127 (00–7FH)	PORT 1 (fixed)
Advanced editing 1	[A2 (1)]	8888	1–16			You can specify an upper and lower limit	PORT 1 (fixed)
Advanced editing 2	[A3 (2)]	8882	1–16	0–127 (00–7FH)	0–127 (00–7FH)	0–127 (00–7FH)	PORT 1, PORT 2, PORT 1+2
Advanced editing 3	[A4 (3)]	8888	Current channel			PC DEC	PORT 1 (fixed)
Advanced editing 4	[A5 (4)]	8888	Current channel	_	_	PC INC	PORT 1 (fixed)

## Basic editing (-> Advanced editing 1, 2 (p. 50), Advanced editing 3 and 4 (p. 51))

1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



- 2 Slightly move the controller to which you want to assign a program change message.
  - If the controller is a button, press it.
  - The display will indicate the number of the controller you selected.
- **3** Check the indication in the display, then press the [ENTER] button.

- 4 Turn the VALUE knob to make "PC" appear.
- **5** Press the [ENTER] button.
- **6** Turn the VALUE knob or press controller [A1 (0)] to select the basic editing "PCO" indication.



- 7 Press the [ENTER] button.
  The display will indicate "CH--."
  - \* The - portion shows the currently specified value.
- 8 Enter the channel. Use the VALUE knob or controller [A1 (0)]-[B2 (9)] to specify the desired channel.

**9** Press the [ENTER] button.

The display will indicate "N--."



- \* The - portion shows the currently specified value.
- 10 Use the VALUE knob or controllers [A1]–[A8] and [B1]–[B8] to specify the desired program number.
- 11 Press the [ENTER] button.

If you've assigned this basic editing function to [R1]–[R9], [S1]–[S9], or [P2], moving the controller to the maximum position will transmit the specified program change message.

#### Advanced editing 1, 2

Program Change Assign advanced editing 1 lets you specify an upper limit and lower limit for the program change message. Advanced editing 2 lets you transmit Bank LSB/LSB settings along with the program change.

- 1. Press the [EDIT] button so it's lit.
- 2. Slightly move the controller to which you want to assign a program change message. If the controller is a button, press it.

  The display will indicate the number of the controller you selected.
- **3.** Check the indication in the display, then press the [ENTER] button.
- **4.** Turn the VALUE knob to make "PC" appear.
- **5.** Press the [ENTER] button.

#### Advanced editing 1 —Specifying the value range—

- **6.** Turn the VALUE knob or press controller [A2 (1)] to select the advanced editing "PC1" indication.
- **7.** Press the [ENTER] button.
- **8.** Enter the channel.
- 9. Press the [ENTER] button.
- Specify the range of values.
   Specifying the value range (upper/lower limits) (p. 45))

#### Advanced editing 2 —Transmitting a bank select—

- **6.** Turn the VALUE knob or press controller [A3 (2)] to select the advanced editing "PC2" indication.
- 7. Press the [ENTER] button.
- Enter the channel.
- **9.** Press the [ENTER] button.
- 10. Enter the bank select MSB (CC#00). Use the VALUE knob or controllers [A1]–[A8] and [B1]–[B8] to specify the desired MSB.



- $^{\star}$  The - portion shows the currently specified value.
- 11. Press the [ENTER] button.
- **12.** Enter the bank select LSB (CC#32). Use the VALUE knob or controllers [A1]–[A8] and [B1]–[B8] to specify the desired LSB.



- \* The - portion shows the currently specified value.
- 13. Press the [ENTER] button.
- **14.** Enter the program number.
- **15.** Press the [ENTER] button.
- 16. Specify the output port. (-> Port setting (p. 65))

#### Advanced editing 3 and 4

Advanced editing 3 lets you assign the program change decrement function (PC DEC) to a controller.

Advanced editing 4 lets you assign the program change increment function (PC INC) to a controller.

- 1. Press the [EDIT] button so it's lit.
- Slightly move the controller to which you want to assign PC DEC or PC INC. If the controller is a button, press it.
  The display will indicate the number of the controller you selected.
- **3.** Check the indication in the display, then press the [ENTER] button.
- **4.** Turn the VALUE knob to make "PC" appear.
- 5. Press the [ENTER] button.
- **6.** Turn the VALUE knob or press controller [A4 (3)] or [A5 (4)] to get "PC3" or "PC4" to appear in the display.
- **7.** Press the [ENTER] button.

## Program change decrement function (PC DEC)

This lets you transmit a program change that is one less than the most recently transmitted program change number.

#### Program change increment function (PC INC)

This lets you transmit a program change that is one greater than the most recently transmitted program change number.

The PC DEC and PC INC are transmitted on the current channel (p. 33) in the same way as the program change (p. 34). The display will show the value that is actually transmitted.

- \* By "most recently transmitted program change number," we mean the value that was last transmitted by the advanced editing 3 and 4 or program change functions (p. 34).
- \* Program changes transmitted by the basic editing or advanced editing 1 and 2 functions have no effect on PC DEC or PC INC.

## Tempo assign

You can assign a controller to adjust the speed of the F8 clock (20–250).

\* In order to transmit F8 clock, the F8 clock setting must be "ON." (-> F8 Clock On/Off (p. 70))

1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



2 Slightly move the controller to which you want to assign Tempo.
If the controller is a button, press it.
The display will indicate the number of the controller you selected.



- **3** Check the indication in the display, then press the [ENTER] button.
- 4 Turn the VALUE knob to make "TMP" appear.



- **5** Press the [ENTER] button.
- 6 Set the button mode (p. 64) as appropriate for the type of controller.
  - \* For a button, the On position specifies the maximum value (250) and the Off position specifies the minimum value (20).

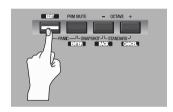
## **RPN/NRPN** assign

You can assign an RPN or NRPN to a controller.

Edit	Controller	Display	Range of data entry MSB (CC#6)	Range of data entry LSB (CC#38)	Port
Basic editing	[A1 (O)]	8888	0–127 (00–7FH)	Not transmitted	PORT 1
Advanced editing	[A2 (1)]	888	You can specify the upper and lower limits	0–127 (00–7FH)	PORT 1, PORT 2, PORT 1+2

## Basic editing (-> Advanced editing 1 (p. 54))

1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



- 2 Slightly move the controller to which you want to assign an RPN or NRPN message.
  - If the controller is a button, press it.

The display will indicate the number of the controller you selected.

- **3** Check the indication in the display, then press the [ENTER] button.
- 4 Turn the VALUE knob to make "RP" appear.
  - \* If you want to assign an NRPN, make "NP" appear. The rest of the procedure is the same as for RPN.



**6** Turn the VALUE knob or press controller [A1 (0)] to select the basic editing "RPO" indication.



- **7** Press the [ENTER] button.
  - "CH--" will be blinking in the display.
  - \* The - portion shows the currently specified value.



- 8 Enter the channel. Use the VALUE knob or controllers [A1 (0)]-[B2 (9)] to specify the desired channel.
- **9** Press the [ENTER] button.
- 10 Use the VALUE knob or controllers [A1 (0)]–[B2 (9)] to specify the desired RPN MSB (CC#101) or NRPN MSB (CC#99).



- \* The - portion shows the currently specified value.
- 11 Press the [ENTER] button.
- 12 Use the VALUE knob or controllers [A1 (0)]–[B2 (9)] to specify the desired RPN LSB (CC#100) or NRPN LSB (CC#98).



- \* The -- portion shows the currently specified value.
- 13 Press the [ENTER] button.
- **14** As appropriate for the type of controller, set the button mode (p. 64) or make virtual center click settings (p. 65).

#### Advanced editing 1

RPN/NRPN advanced editing 1 lets you specify the upper limit and lower limit for the data entry MSB (CC#6) of the transmitted RPN/NRPN message, in addition to allowing you to make the settings described in basic editing.

- 1. Press the [EDIT] button so it's lit.
- Slightly move the controller to which you want to assign an RPN or NRPN
  message. If the controller is a button, press it. The display will indicate the
  number of the controller you selected.
- **3.** Check the indication in the display, then press the [ENTER] button.
- **4.** Turn the VALUE knob to make "RP" appear.
  - \* If you want to assign an NRPN, make "NP" appear. The rest of the procedure is the same as for RPN.
- 5. Press the [ENTER] button.
- Turn the VALUE knob or press controller [A2 (1)] to select the "RP1" indication.
- **7.** Press the [ENTER] button.
- **8.** Enter the channel.
- 9. Press the [ENTER] button.
- 10. Use the VALUE knob or controllers [A1]–[A8] and [B1]–[B8] to specify the RPN MSB (CC#101) (or the NRPN MSB (CC#99)).
- 11. Press the [ENTER] button.
- 12. Use the VALUE knob or controllers [A1]-[A8] and [B1]-[B8] to specify the RPN LSB (CC#100) (or the NRPN LSB (CC#98)).
- **13.** Press the [ENTER] button.
- 14. Specify the range of the data entry MSB (CC#6). (-> Specifying the value range (upper/lower limits) (p. 45))
- **15.** Specify the output port. (-> **Port setting** (p. 65))
- **16.** As appropriate for the type of controller, set the button mode (p. 64) or make virtual center click settings (p. 65).

## System exclusive assign

You can assign a system exclusive message to a controller.

Advanced editing 2 lets you assign a single-byte system message (system realtime message, tune request).

Advanced editing 3 and 4 let you freely assign a message of up to twenty-four bytes.

Edit	Controller	Display	Content	Value range	Ending condition	Remarks/Limitations	
Basic editing	[A1 (O)]	8588	Sys Ex. message	Range of initial settings	Enter F7	First byte fixed at FO	
Advanced editing 1	[A2 (1)]	8588	Sys Ex. message	Can be specified	Enter F7	First byte fixed at FO	
Advanced editing 2	[A3 (2)]	8888	1-byte system message	_	_	[0–5, 7, 9, D, E], [DATA], and [CHECKSUM] buttons are unavailable	
Advanced editing 3	[A4 (3)]	8588	Any MIDI message	Range of initial settings	Specified number of bytes	[CHECKSUM] button is unavailable	
Advanced editing 4	[A5 (4)]	8588	Any MIDI message	Can be specified	Specified number of bytes	[CHECKSUM] button is unavailable	

System exclusive assign lets you automatically calculate the checksum, or insert variable data or a channel/block number into the message. For system exclusive assign, the input mode (p. 64) will be Hexadecimal.

## System exclusive assignment procedure

1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



2 Slightly move the controller to which you want to assign a system exclusive message.



If the controller is a button, press it.

The display will indicate the number of the controller you selected.

- **3** Check the indication in the display, then press the [ENTER] button.
- 4 Turn the VALUE knob to make "SE" appear.



- **5** Press the [ENTER] button.
- **6** Turn the VALUE knob or press controller [A1 (0)] to display the basic editing "SEO" indication.



- \* If you want to select advanced editing, press a controller [A2 (1)]-[A5 (4)] to display the "SE1"-"SE4" indication.
- **7** Press the [ENTER] button.

Now you can proceed to the basic editing/advanced editing 1 procedure. For details on the actual assignments, refer to **System exclusive message assignment examples** (p. 58).

#### Using basic editing or advanced editing 1

The first byte "FO" of the system exclusive message (the beginning status) will blink. (This "FO" byte cannot be changed.)



- **8** Verify that the display is correct, and press the [ENTER] button.
- 9 Use the VALUE knob or controllers [A1]-[A8] and [B1]-[B8] to enter the second byte.
- **10** Check the indication in the display, then press the [ENTER] button.
- 11 Enter the third and subsequent bytes in the same way.
- **12** When you've finished entering the message, use the controllers to enter "F" and "7" as the final "F7" status (End Of Exclusive).
- 13 Press the [ENTER] button. If you're using advanced editing 1, specify the upper and lower value limits.
  - (-> Specifying the value range (upper/lower limits) (p. 45))
- **14** Specify the output port.
  - (-> Port setting (p. 65))
- 15 As appropriate for the type of controller, set the button mode (p. 64) or the virtual center click setting (p. 65).

#### Using advanced editing 2

The display will indicate "F-."

\* The - portion shows the currently specified value.

- 8888
- Use the VALUE knob or controllers [A7 (6)], [B1 (8)], [B3 (A)]-[B5 (C)], and [B8 (F)] to specify the system exclusive message.
- **9** Press the [ENTER] button.
- **10** Specify the output port.

(-> Port setting (p. 65))

#### Using advanced editing 3 or 4

The display will indicate "L- - -."

\* The - - - portion shows the currently specified value.



- **8** Use controllers [A1]–[A8] and [B1]–[B2] to enter the number of bytes you'll be entering, as a decimal number.
- 9 Press the [ENTER] button.
- 10 Use controllers [A1]-[A8] and [B1]-[B8] to enter the first byte.
- 11 Press the [ENTER] button.
- 12 Enter the second and subsequent bytes in the same way.
- 13 When you've entered the number of bytes you specified in step 8, the message you entered will be checked to see whether it is a valid MIDI message. If there is a problem, the display will indicate "ERR."

Press the [ENTER] button and you'll return to step 8. Enter the values once again.

- 14 If you're using advanced editing 4, specify the upper and lower value limits.

  (-> Specifying the value range (upper/lower limits) (p. 45))
- 15 Specify the output port. (-> Port setting (p. 65))
- **16** As appropriate for the type of controller, set the button mode (p. 64) or the virtual center click setting (p. 65).

## System exclusive message assignment examples

- Specifying a checksum (p. 58)
- Specifying the location of the data (p. 59)
- Entering channel/block data (p. 60)

## Specifying a checksum

The PCR-300/500/800 can automatically calculate a checksum within a system exclusive message and insert the result of this calculation into the message. To use this function, use the following procedure to specify the location at which the checksum calculation should be inserted. You can also select the type of checksum. For a specific example, refer to system exclusive assign **Bend Pitch Control** (p. 63).

**1** Press the [CHK SUM] (checksum) button before you enter the byte that will begin the checksum calculation.



The display will indicate "CSS" (checksum start).

If you press the [CHK SUM] button once again, "CSS" will be cancelled.

- 2 Press the [ENTER] button.
- 3 Continue entering data.
- 4 Press the [CHK SUM] button at the location at which the checksum should be inserted.



The display will indicate "CS1" (checksum type 1).

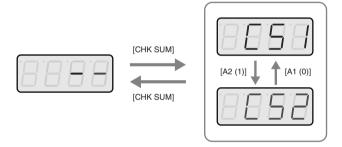
**5** Press the [ENTER] button.

#### **Checksum types**

There are two types of checksums, as follows

Controller	Display	Item	Summary		
[A1 (O)]	888	CHECK SUM TYPE 1	The method used by Roland and most other manufacturers		
[A2 (1)]	8888	CHECK SUM TYPE2	Methods other than Type 1		

## Switching the type



If you want to switch to Type 2, press controller [A2] after pressing the [CHK SUM] button in step 4.

If you want to return to Type 1, press controller [A1]. You can also switch the setting by turning the VALUE knob.

#### Specifying the location of the data

As described below, you can specify the location and type of the variable data to be inserted in the system exclusive message.

For basic editing and advanced editing 3, the range of data values will be the default range. For advanced editing 1 and advanced editing 4, it will be the range specified by the user.

For basic editing and advanced editing 3, the range of data values will be the default range. For advanced editing 1 and advanced editing 4, it will be the range specified by the user For a specific example, refer to **Master Volume** (p. 62).

- **1** Press the [DATA] button at the location where you want the variable data to be inserted. The display will indicate "DTO."
- **2** Use pads [0]-[4] to select the type of data.

Data number	Data type	Default range	Target of range setting	Example (specified minimum and maximum value)
DT0	7bit	00H–7FH	Specify the data range (00H–7FH)	04–45 (minimum 4H, maximum 45H)
DT1	4bit/4bit	OH/OH_FH/FH	Specify the range of the first byte (OH–FH). Second byte is fixed at O–FH.	O/O-D/F (minimum OH, maximum DH)
DT2	7bit/7bit (MSB/LSB)	00H/00H-7FH/7FH	Specify the range of the MSB (00H–7FH). LSB is fixed at 00H–7FH.	23/00-68/7F (minimum 23H, maximum 68H)
DT3	7bit/7bit (LSB/MSB)	00H/00H-7FH/7FH	Specify the range of the MSB (00H–7FH). LSB is fixed at 00H–7FH.	00/23-7F/68 (minimum 23H, maximum 68H)
DT4	4bit/4bit/4bit/4bit	7H/FH/0H/1H-8H/0H/FH/FH	Specify the range of negative and positive as 00H-FFH centered at 8000H.	7/F/0/2-8/0/5/0 (minimum FEH, maximum 50H)

<sup>\*</sup> In the case of DT1-DT4 (data that occupies two or more bytes), a data area will automatically be allocated for the following byte(s), and the display will indicate "-DT." (This cannot be changed.)

- 3 Press the [ENTER] button.
  If you selected DT1 through DT4, the display will indicate "-DT."
- 4 Press the [ENTER] button.

#### **Entering channel/block data**

If the system exclusive message contains a channel or GS block number, use the following procedure to specify the type and the value of the upper bits. A channel or block number corresponding to the current channel (p. 33) will be inserted into the lower bits.

The block number is not actually a channel; it corresponds to the "part" of a GS sound module. On the PCR, it corresponds to the channel for the sake of convenience.

For a specific example, refer to system exclusive assign Bend Pitch Control (p. 63).

current channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
СН	0	1	2	3	4	5	6	7	8	9	Α	В	С	D	E	F
BL	1	2	3	4	5	6	7	8	9	0	Α	В	С	D	Е	F

1 At the location where you want the channel/block number to be inserted, press the [DATA] button several times to select "OCH" for the channel or "OBL" for the block.



- \* The - portion shows the currently specified value.
- **2** Use controllers [A1]–[A8] to enter the value of the upper four bits. The "0" in the display will change to the number you enter.
- **3** Press the [ENTER] button.

## **Examples of system exclusive message assignments**

- GM2 System On (p. 61)
- Master Volume (p. 62)
- Bend Pitch Control (p. 63)

Here are some specific examples of system exclusive messages.

## GM2 System On "F0 7E 7F 09 03 F7"

Let's use basic editing mode to enter a GM2 System On system exclusive message.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- 2 Slightly move the controller to which you want to assign the system exclusive message. If the controller is a button, press it.
  The display will indicate the number of the controller you selected.
- 3 Check the indication in the display, then press the [ENTER] button.
- 4 Turn the VALUE knob to make "SE" appear.
- **5** Press the [ENTER] button.
- 6 Turn the VALUE knob to make "SEO" appear.
- 7 Check the indication in the display, then press the [ENTER] button.
  The display will show the first byte "FO" (beginning status) of the system exclusive message. (This cannot be changed.)
- 8 Check the indication in the display, then press the [ENTER] button.
- **9** Use controllers [A8 (7)] and [B7 (E)] to enter the second byte "7E." You can also use the VALUE knob to change the value.
- 10 Check the indication in the display, then press the [ENTER] button.
- **11** Use controllers [A8 (7)] and [B8 (F)] to enter the third byte "7F." You can also use the VALUE knob to change the value.

- **12** Check the indication in the display, then press the [ENTER] button. In the same way, enter the fourth byte "09" and fifth byte "03."
- 13 Finally, use controllers [B8 (F)] and [A8 (7)] to enter the ending status "F7." You can also use the VALUE knob to change the value.
- 14 Check the indication in the display, then press the [ENTER] button.
- 15 Specify the output port. (-> Port setting (p. 65))
- **16** As appropriate for the type of controller, set the button mode (p. 64) or the virtual center click setting (p. 65).

This completes the steps necessary to assign the GM2 System On message.

## **Master Volume**

#### "FO 7F 7F 04 01 vL vM F7"

Since the data range of the Master Volume message is 00 00–7F 7F and there's no need to specify this range, you can choose basic editing. Since the data format is two bytes in the order of LSB MSB, choose "DT3" (p. 59) when inserting the data.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- 2 Slightly move the controller to which you want to assign the system exclusive message. If the controller is a button, press it.
  The display will indicate the number of the controller you selected.
- 3 Check the indication in the display, then press the [ENTER] button.
- **4** Turn the VALUE knob to make "SE" appear.
- **5** Press the [ENTER] button.
- 6 Turn the VALUE knob to make "SEO" appear.
- 7 Verify that the display is correct, then press the [ENTER] button.
  The display will show the first byte "FO" (beginning status) of the system exclusive message. (This cannot be changed.)
- 8 Check the indication in the display, then press the [ENTER] button.
- 9 Use controllers [A8 (7)] and [B8 (F)] to enter the second byte "7F."
- **10** Check the indication in the display, then press the [ENTER] button.
- 11 In the same way, enter the third byte "7F," fourth byte "04," and fifth byte "01."
- 12 Since the sixth byte is the data area, press the [DATA] button and then press controller [A4 (3)].

The display will indicate "DT3."

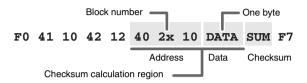
13 Check the indication in the display, then press the [ENTER] button.

- 14 Because you selected "DT3" at the sixth byte, the seventh byte is automatically allocated as the data area, and cannot be edited.
  The display will indicate "-DT."
- 15 Check the indication in the display, then press the [ENTER] button.
- 16 Use controllers [B8 (F)] and [A8 (7)] to enter the ending status "F7."
- 17 Check the indication in the display, then press the [ENTER] button.
- 18 Specify the output port. (-> Port setting (p. 65))
- **19** As appropriate for the type of controller, set the button mode (p. 64) or the virtual center click setting (p. 65).

This completes the steps necessary to assign the Master Volume message.

#### **Bend Pitch Control**

The GS message Bend Pitch Control has a data range of 40H–58H (0–24 semitones), so you should choose advanced editing 1, which lets you specify the region. Since the data format is one byte, you should choose "DTO" (p. 59) when inserting the data.



- 1 Press the [ENTER] button.
  The display will indicate "EDIT."
- 2 Slightly move the controller to which you want to assign the system exclusive message. If the controller is a button, press it.
  The display will indicate the number of the controller you selected.
- 3 Check the indication in the display, then press the [ENTER] button.
- 4 Turn the VALUE knob to make "SE" appear.
- **5** Press the [ENTER] button.
- 6 Turn the VALUE knob to make "SE1" appear.
- 7 Verify that the display is correct, then press the [ENTER] button.
  The display will show the first byte "FO" (beginning status) of the system exclusive message. (This cannot be changed.)
- 8 Check the indication in the display, then press the [ENTER] button.
- **9** Use controllers [A5 (4)] and [A2 (1)] to enter the second byte "41." Alternatively, you can use the VALUE knob to change the value.
- ${f 10}$  Check the indication in the display, then press the [ENTER] button.
- 11 In the same way, enter the third byte, fourth byte, and fifth byte.
- 12 Since the checksum calculation region begins at the sixth byte, press the [CHK SUM] button to specify the beginning of the checksum calculation region. "CSS" (checksum start) will be blinking in the display.

- 13 Check the indication in the display, then press the [ENTER] button.
- 14 Next, enter the sixth byte.
- 15 Since the seventh byte will have "2" as the upper bits and the block number as the lower bits, press [DATA] three times.
  The display will indicate "OBL."
- **16** Press pad [2] to specify "2" as the upper bits.

  The display will indicate "2BL."
- 17 Check the indication in the display, then press the [ENTER] button.
- 18 Next, enter the eighth byte.
- 19 Since the ninth byte is the data area, press the [DATA] button.
  The display will indicate "DTO."
- **20** Check the indication in the display, then press the [ENTER] button.
- **21** Since the checksum will be inserted at the tenth byte, press the [CHK SUM] button to specify the location at which the checksum will be inserted. "CS1" (checksum type 1) will be blinking in the display.
- **22** Check the indication in the display, then press the [ENTER] button.
- 23 Use controllers [B8 (F)] and [A8 (7)] to enter the ending status of "F7."
- **24** Check the indication in the display, then press the [ENTER] button.
- 25 Next, specify "58" as the upper limit of the data area.
- 26 Press the [ENTER] button.
- 27 Specify "40" as the lower limit of the data area.
- 28 Press the [ENTER] button.
- 29 Specify the output port. (-> Port setting (p. 65))
- **30** As appropriate for the type of controller, set the button mode (p. 64) or the virtual center click setting (p. 65).

This completes the steps necessary to assign the GS Bend Pitch Control message.

## Input mode setting

When entering numeric values in modes other than Play mode, you can use either Decimal input mode or Hexadecimal input mode.

Press the [DECIMAL] button if you want to use decimal input mode, or press the [HEX] button if you want to use hexadecimal input mode.

\* When you turn on the power, the PCR will start up in decimal input mode.

Decimal and hexadecimal values correspond as follows.

Decimal: 0–127 Hexadecimal: 00–7F

However, for MIDI channels and program changes, the correspondence is as follows.

	Decimal	Hexadecimal
MIDI channel	1–16	00–0F
Program change	1–128	00–7F

#### **Button mode setting**

When using edit mode to assign MIDI messages on the PCR keyboard (p. 41), and you're assigning a message to a button, you'll need to specify the way in which the button is to operate (the button mode).

When you use a button as a controller, the maximum specified value will be transmitted when you turn the button on, and the minimum value will be transmitted when you turn the button off.

1. Turn the [VALUE] dial to select either Unlatch, Latch, or Increase mode.

Mode	Display	Summary	
Unlatch	8888	The button will turn on when pressed, and off when released. The button will be lit while you hold it down.	
Latch	8888	The button will alternately turn on or off each time you press it. The button will light when an On signal is transmitted, and will go out when an Off signal is transmitted.	
Increase	8882	Each time you press the button, the value will increase by one. (If the minimum value is below the maximum value, it will decrease by one.) When the value reaches the maximum (or minimum), it will "wrap around" to the minimum (or maximum) value. The button will be lit only while you're pressing it.	

2. Press the [ENTER] button.

#### Virtual center click setting

When using edit mode to assign MIDI messages on the PCR keyboard (p. 41), and you're assigning a message to a knob [R1]–[R9] or slider [S1]–[S8], you'll need to specify whether the virtual center click will be on or off.

1. Turn the VALUE knob to select On or Off.

Mode	Display	Summary	
Off	8888	The value will change smoothly from the minimum to maximum.	
On	8888	The value will remain at the center value (64) near the middle of the controller's range.	



The PCR's knobs and sliders do not have a "physical" center click. However, by turning on the virtual center click, you can broaden the region in the middle of the controller's range for which the center value will be produced.

**2.** Press the [ENTER] button.

## Port setting

When using edit mode to assign MIDI messages on the PCR keyboard (p. 41), and you've selected advanced editing, you'll need to specify the USB port from which the message assigned to the controller will be transmitted when using a USB connection.

1. Turn the VALUE knob to select the port.

Port	Display	Summary
PORT 1	8888	Messages will be sent to "EDIROL PCR 1."
PORT 2	8882	Messages will be sent to "EDIROL PCR 2."
PORT 1+2	8888	Messages will be sent to "EDIROL PCR 1" and "EDIROL PCR 2."

- 2. Press the [ENTER] button.
- \* For more about the ports, refer to What are MIDI ports? (p. 14).
- \* If you're using the PCR with a MIDI connection, this setting is ignored.

## **Convenient functions**

## **Copy assignment**

A message assigned to a controller can be copied to another controller.

For example, if you want to assign similar functions to more than one controller, you can assign the desired MIDI message to one controller and copy the assignment to other controllers for greater efficiency.

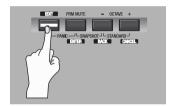


If you copy an assigned message between controllers of differing types (for example between a button and a knob), the results may be unexpected. For example, if a note message assigned to a pad is copied to a knob, you won't get the expected result.

If a rotary encoder simulation assigned to a knob is copied to a button, it will not operate.

Please be aware of the controller type and content of the message when copying MIDI message assignments.

1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



2 Select the copy-destination controller, and move it slightly. If it's a button, press it.



The display will indicate the controller number.

- **3** Check the indication in the display, then press the [ENTER] button.
- **4** Slightly move the copy-source controller. If it's a button, press it. "COPY" will be blinking in the display.



**5** Press the [ENTER] button.

The copy-source controller number will be blinking in the display.

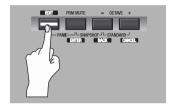


**6** Check the indication in the display, then press the [ENTER] button.

## Canceling an assignment (NO ASSIGN)

Here's how to cancel the MIDI message assigned to a controller. If you've cancelled the assignment, moving that controller will not transmit any MIDI message.

- \* If you cancel the MIDI message assignment for bender, modulation, aftertouch, hold (P1), or expression (P2), these controllers will revert to controlling their original function. In such cases, the current channel will be used as the MIDI transmit channel.
- 1 Press the [EDIT] button so it's lit.



The display will indicate "EDIT."



2 Select the controller whose message assignment you want to cancel, and move it slightly. If it's a button, press it.
The display will indicate the controller number.



- **3** Check the indication in the display, then press the [ENTER] button.
- 4 Turn the VALUE knob to get the "NOA" indication.



- **5** Press the [ENTER] button.
- **6** "YES" will be blinking in the display; press the [ENTER] button once again.



## **System settings**

Here's how to make system settings for the PCR-300/500/800. The system setting items are listed below.

Category	Controller	Display	Item	Contents	Factory setting	Procedure
	[A1 (O)]	5888	F8 CLOCK ON/OFF	Specifies whether F8 Clock will be transmitted.	OFF	p. 70
Clock	[A2 (1)]	5900	F8 CLOCK DEFAULT TEMPO	If "F8 Clock On/Off" is on, this specifies the default tempo of the F8 clock. After the power is turned on, this tempo will be output until you move the VALUE encoder to which TEMPO is assigned.	120	p. 70
	[A3 (2)]	5882	F8 CLOCK PORT SET	Specifies the port from which F8 Clock is transmitted when "F8 Clock On/Off" is on.	PORT 1	p. 71
	[A4 (3)]	5888	KEYBOARD VELOCITY CURVE	Specifies the response curve for the velocity that is transmitted when you play the keyboard.	1-MEDIUM	p. 72
Keyboard	[A5 (4)]	5888	KEYBOARD PORT SET	Specifies the port from which the keyboard and bender lever will transmit performance data.	PORT 1	p. 74
	[A6 (5)]	5885	KEYBOARD AFTERTOUCH CURVE	Specifies the response curve for keyboard aftertouch.	1	p. 74
Pads	[A7 (6)]	5808	PAD VELOCITY CURVE	Specifies the response curve for the velocity that is transmitted when you strike a pad controller [A1]–[A9] or [B1]–[B9].	1	p. 75
i dus	[A8 (7)]	5888	PAD AFTERTOUCH CURVE	Specifies the response curve for the aftertouch that is transmitted when you press a pad controller [A1]–[A9] or [B1]–[B9].	1	p. 75

Category	Controller	Display	Item	Contents	Factory setting	Procedure
-	[B1 (8)]	5888	MIDI I/F SWITCH	Specifies whether the MIDI connectors will be used as a MIDI interface.	ON	p. 76
	[B2 (9)]	5888	MIDI MERGE DESTINATION	Specifies the port that will be merged when the "MIDI MERGE" switch is On.	PORT 1	p. <i>77</i>
MIDI	[A2 (1)] + [A1 (0)]	5910	ADVANCED DRIVER SWITCH	Switches the driver operation mode.  * If you change this setting, the change will take effect the next time you turn on the power.	ON	p. 78
	[A2 (1)] + [A2 (1)]	5911	USB UNIT NUMBER	This setting is for future expanded functionality. It is not currently used.	0	_
Control map	[A2 (1)] + [A3 (2)]	5888	STARTUP MEMORY	Specifies which control map will be loaded at startup when the PCR is powered up.	CONTROL MAP No. 0	p. 79
Controller	[A2 (1)] + [A5 (4)]	5989	VALUE ENCODER	Specifies the parameter that the VALUE knob will transmit.	KEY VELOCITY	p. 80
Confroller	[A2 (1)] + [A6 (5)]	5985	DYNAMIC MAPPING/ V-LINK	Specifies the function of the DYNAMIC MAPPING/V-LINK switch.	DYNAMIC MAPPING 0	p. 81
Other	[A2 (1)] + [A4 (3)]	5988	H-ACTIVITY ON/OFF	Turn this on if you're using the PCR with certain applications (such as Pro Tools LE). If this is On, "90 00 7F" will be transmitted from "PCR 2" at intervals of approximately 500 ms.	OFF	p. 81
	[A2 (1)] + [A7 (6)]	5988	FACTORY RESET	Returns the PCR-300/500/800's settings to the factory-set condition.	_	p. 81

## **Clock settings**

## F8 Clock On/Off

Here's how to specify whether F8 Clock will be transmitted.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- 2 Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY00," and press the [ENTER] button.
- **4** Use the VALUE knob or controllers [A1] and [A2] to turn F8 Clock on or off. The display will indicate "ON" or "OFF."
- **5** Press the [ENTER] button to return to Play mode.

## **F8 Clock Default Tempo**

Here's how to specify the initial tempo of the F8 Clock when "F8 Clock" is On. After you turn on the power, this tempo will be transmitted until you move the VALUE knob to which Tempo is assigned. (-> **Tempo assign** (p. 52))

- **1** Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY01," and press the [ENTER] button.
- 4 Use the VALUE knob to set the F8 Clock Default Tempo to a value within the 20-250 range.
  - The display will indicate the value you specify.
- **5** Press the [ENTER] button to return to Play mode.

## **F8 Clock Port Set**

Here's how to specify the port from which F8 Clock will be sent when "F8 Clock On/Off" is On.

- 1 Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY02," and press the [ENTER] button.
- **4** Use the VALUE knob or controllers [A1]–[A3] to specify the F8 Clock Port. The display will indicate the port you specify.
- **5** Press the [ENTER] button to return to Play mode.

Controller	Indication Setting		Summary	
[A1 (O)]	8888	PORT 1	The clock will be sent to "EDIROL PCR 1."	
[A2 (1)]	8882	PORT 2	The clock will be sent to "EDIROL PCR 2."	
[A3 (2)]	8888	PORT 1+2	The clock will be sent to "EDIROL PCR 1" and "EDIROL PCR 2."	

## **Keyboard settings**

## **Keyboard Velocity Curve**

Here's how to specify how the velocity transmitted when you play the keyboard will respond to your playing strength.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.

- **3** Use the VALUE knob to select "SY03," and press the [ENTER] button.
- 4 Use the VALUE knob or controllers [A1]–[A8] and [B1]–[B4] to specify the desired Keyboard Velocity Curve.
  The display will indicate the curve you specify.
- **5** Press the [ENTER] button to return to Play mode.

Controller	Indication	Setting	Type of curve	Keyboard sensitivity
[A1 (O)]	8888	1-LIGHT		You can produce high velocity values (volumes) even by playing the keyboard softly.
[A2 (1)]	8888	1-MEDIUM	1 These are the most typical velocity curves. The volume will correspond to your key-	The keyboard sensitivity will be normal.
[A3 (2)]	8888	1-HEAVY	board playing strength in the most natural way.	You will need to play strongly in order to produce high velocity values (volumes).
[A4 (3)]	888	2-LIGHT	1	You can produce high velocity values (volumes) even by playing the keyboard softly.
[A5 (4)]	888	2-MEDIUM	2 Compared to curve 1, these curves produce	The keyboard sensitivity will be normal.
[A6 (5)]	8888	2-HEAVY	greater volume change across the softly played range of notes.	You will need to play strongly in order to produce high velocity values (volumes).

Controller	Indication	Setting	Type of curve	Keyboard sensitivity
[A7 (6)]	8888	3-LIGHT		You can produce high velocity values (volumes) even by playing the keyboard softly.
[A8 (7)]	8888	3-MEDIUM	3 These velocity curves produce less change in response to variations in your playing	The keyboard sensitivity will be normal.
[B1 (8)]	8888	3-HEAVY	strength, making it easier for you to main- tain a consistent playing volume.	You will need to play strongly in order to produce high velocity values (volumes).
[B2 (9)]	888	4-LIGHT	† <i>J</i>	You can produce high velocity values (volumes) even by playing the keyboard softly.
[B3 (A)]	8988	4-MEDIUM	4 Compared to curve 1, these curves produce	The keyboard sensitivity will be normal.
[B4 (B)]	8888	4-HEAVY	greater volume change across the strongly played range of notes.	You will need to play strongly in order to produce high velocity values (volumes).

#### **Keyboard Port Set**

Here's how to specify the port that will transmit performance data from the keyboard and bender lever.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- 2 Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SYO4," and press the [ENTER] button.
- **4** Use the VALUE knob or controllers [A1]–[A3] to specify the desired Keyboard Port.

The display will show the setting you specified.

**5** Press the [ENTER] button to return to Play mode.

Controller	Indication	Setting	Summary
[A1 (O)]	8888	PORT 1	Messages will be sent to "EDIROL PCR 1."
[A2 (1)]	8882	PORT 2	Messages will be sent to "EDIROL PCR 2."
[A3 (2)]	8888	PORT 1+2	Messages will be sent to "EDIROL PCR 1" and "EDIROL PCR 2."

#### **Keyboard Aftertouch Curve**

Here's how to specify the aftertouch response of the keyboard.

- 1 Press the [EDIT] button so it's lit.
  The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY05," and press the [ENTER] button.
- **4** Use the VALUE knob or controllers [A1]–[A4] to specify the desired Keyboard Aftertouch Curve.

The display will show the setting you specified.

**5** Press the [ENTER] button to return to Play mode.

Controller	Indication	Setting	Curve type	Effect
[A1 (O)]		1	1	This is the most typical set- ting. It will produce the most natural correspondence be- tween the pressure you apply to the keyboard and the af- tertouch data that is pro- duced.
[A2 (1)]	8888	2	2	Compared to curve 1, this allows aftertouch to be produced even with light pressure on the keyboard.
[A3 (2)]	8888	3	3	This curve produces less af- tertouch change in response to pressure on the keyboard, making it easier to perform consistently.
[A4 (3)]	8888	4	4	Compared to curve 1, this will produce aftertouch in response to strong pressure on the keyboard.

### Pad settings

#### **Pad Velocity Curve**

Here's how to specify how the velocity transmitted when you play the pad controllers [A1]–[A9] and [B1]–[B9] will respond to your playing strength.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SYO6," and press the [ENTER] button.
- 4 Use the VALUE knob or controllers [A1]-[A4] to specify the desired Pad Velocity Curve.

The display will indicate the curve you specify.

**5** Press the [ENTER] button to return to Play mode.

Controller	Indication	Setting	Curve type	Effect
[A1 (O)]	8888	1	1	This is the most typical set- ting. It will produce the most natural correspondence be- tween the force of your pad strike and the change in vol- ume.
[A2 (1)]	8888	2	2	Compared to curve 1, this allows more volume change to be produced in the softer range of pad strikes.
[A3 (2)]	[8888]	3	3	This curve produces less vol- ume change in response to your pad strikes, making it easier to maintain a consis- tent volume.
[A4 (3)]	8888	4	4	Compared to curve 1, this produces more volume change in the stronger range of pad strikes.

#### **Pad Aftertouch Curve**

Here's how to specify the aftertouch response of the pads.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- 2 Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY07," and press the [ENTER] button.
- 4 Use the VALUE knob or controllers [A1]–[A4] to specify the desired Pad Aftertouch Curve.

The display will show the setting you specified.

**5** Press the [ENTER] button to return to Play mode.

Controller	Indication	Setting	Curve type	Effect
[A1 (0)]	8888	1	1	This is the most typical set- ting. It will produce the most natural correspondence be- tween the pressure you apply to the pad and the aftertouch data that is produced.
[A2 (1)]	8888	2	2	Compared to curve 1, this allows aftertouch to be produced even with light pressure on the pad.
[A3 (2)]	8888	3	3	This curve produces less af- tertouch change in response to pressure on the pad, mak- ing it easier to perform con- sistently.
[A4 (3)]	888	4	4	Compared to curve 1, this will produce aftertouch in response to strong pressure on the pad.

### **MIDI** settings

#### MIDI I/F Switch

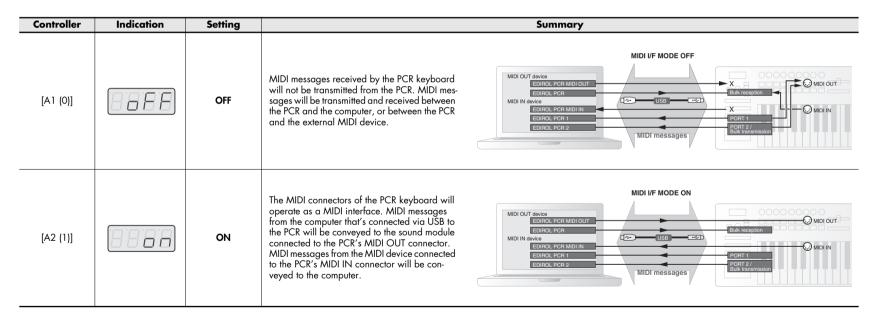
Here's how to specify whether the MIDI connectors will be used as a MIDI interface.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.

- **3** Use the VALUE knob to select "SY08," and press the [ENTER] button.
- **4** Use the VALUE knob or controllers [A1] or [A2] to specify the desired MIDI I/F setting.

The display will show the setting you specified.

**5** Press the [ENTER] button to return to Play mode.



#### **MIDI Merge Destination**

The PCR-300/500/800 has a MIDI MERGE switch. The MIDI Merge Destination setting specifies the port that will be merged when the MIDI MERGE switch is ON.



The MIDI Merge function is convenient when you've connected an external MIDI controller other than the PCR to the PCR's MIDI IN connector. For example, you could connect another PCR, and use one PCR to control your software synthesizer while using the other PCR to control your DAW software.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- 2 Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY09," and press the [ENTER] button.
- **4** Use the VALUE knob or controllers [A1]–[A3] to specify the desired MIDI merge destination.

The display will show the setting you specified.

**5** Press the [ENTER] button to return to Play mode.

Controller	Indication	Setting	Summary
[A1 (O)]	888	PORT 1	Messages from MIDI IN will be merged with the PCR's PORT 1.
[A2 (1)]	8888	PORT 2	Messages from MIDI IN will be merged with the PCR's PORT 2.
[A3 (2)]	888	MIDI OUT	Messages from MIDI IN will be merged with the PCR's MIDI OUT.

MIDI MERGE switch

MIDI MERGE DESTINATION

#### The MIDI MERGE switch and the MIDI Merge Destination

# MIDI OUT device EDIROL PCR MIDI OUT EDIROL PCR MIDI IN device X EDIROL PCR MIDI IN EDIROL PCR 1 EDIROL PCR 2 MIDI messages MIDI messages

In this diagram, the MIDI MERGE switch is ON, and the MIDI Merge Destination is set to PORT 2, so the messages received at MIDI IN will be merged with the messages of PORT 2 and sent to the computer.

\* If you turn the MIDI MERGE switch ON, no messages will be received if you've selected EDIROL PCR MIDI IN as the MIDI IN device on your computer.

MIDI I/F MODE ON

#### **Advanced Driver Switch**

Here's how to switch ADVANCED DRIVER ON/OFF.

Normally, we recommend that you use **ON**.

- \* Changes you make to this setting will take effect the next time you turn on the power.
- **1** Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- 2 Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY10," and press the [ENTER] button.
- 4 Use the VALUE knob or controllers [A1] or [A2] to specify the desired USB MIDI driver type.

Controller	Indication	Setting	Summary
[A1 (O)]	8888	OFF	Choose this setting if you want to use the standard MIDI driver provided by your operating system.
[A2 (1)]	8888	ON	Choose this setting if you want to use FPT technology to allow high-speed MIDI transmission. We recommend that you normally use this setting.

- \* FPT = Fast Processing Technology of MIDI Transmission
  This makes effective use of the USB bandwidth depending on the amount of MIDI data being sent, ensuring that MIDI data handling will always occur optimally.
- **5** Press the [ENTER] button to return to Play mode.

## **Control map settings**

#### **Startup Memory**

Here's how to specify the control map that will be selected when you turn on the power.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY12," and press the [ENTER] button.
- **4** Use the VALUE knob or controllers [A1] or [A2] to choose CONTROL MAP No. 0 or LAST ACCESS MEMORY.

Controller	Indication	Setting	Summary
[A1 (O)]	8888	CONTROL MAP No. 0	Control map number 0 will be loaded into current memory (p. 8) when the PCR starts up.
[A2 (1)]	8888	LAST ACCESS MEMORY	The control map that you most recently called up or saved will be loaded into current memory (p. 8) when the PCR starts up.

**5** Press the [ENTER] button.

## **VALUE** knob settings

#### **VALUE** encoder

Here's how to specify the function that will be controlled by the VALUE knob when you press the [USER] button.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.

- **3** Use the VALUE knob to select "SY14," and press the [ENTER] button.
- **4** Use the VALUE knob or controllers [A1]–[A5] to choose the parameter that the VALUE knob will transmit.
- **5** Press the [ENTER] button.

Controller	Indication	Setting	Summary	Value range
[A1 (0)]	8888	KEY VELOCITY	The VALUE knob will specify the fixed velocity value. The PCR detects the force with which you play the keyboard, and transmits this as the velocity, but if you use this function, the velocity will be transmitted as the fixed value specified by the VALUE knob regardless of how strongly you play the keyboard. Use this in cases where you want to eliminate dynamics from your playing.	tch, 1–127  * If you specify "tch," velocity values corresponding to your keyboard playing strength will be transmitted.
[A2 (1)]	8858	BANK LSB	The VALUE knob will specify the bank select LSB (CC#32).	0–127
[A3 (2)]	8856	BANK MSB	The VALUE knob will specify the bank select MSB (CC#00).	0–127
[A4 (3)]	8888	CONTROL CHANGE	The VALUE knob will specify a control change.	0–127
[A5 (4)]	8888	TEMPO	The VALUE knob will specify the tempo of the F8 clock.	20–250

As an alternate to the procedure described above, you can make this setting using the procedure below.

- 1. Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- 2. Press the [USER] button. It will light, and the display will indicate the currently assigned parameter.
- 3. Use the VALUE knob to select the parameter you want to transmit.
- 4. Press the [ENTER] button.

This completes the setting.

### Other settings

#### **Dynamic Mapping/V-LINK**

Here's how to specify the function of the DYNAMIC MAPPING/V-LINK button.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY15," and press the [ENTER] button.
- 4 Use the VALUE knob or controllers [A1] or [A2] to choose Dynamic Mapping or V-LINK.

Controller	Indication	Setting	Summary
[A1 (O)]	8888	DYNAMIC MAPPING 0	The button will act as a DYNAMIC MAPPING on/off button.
[A2 (1)]	8888	DYNAMIC MAPPING 1	The button will act as a DYNAMIC MAPPING on/off button.
:	:	:	:
[A2 (1)] + [A6 (5)]	8885	DYNAMIC MAPPING 15	The button will act as a DYNAMIC MAPPING on/off button.
[A2 (1)] + [A7 (6)]	8888	V-LINK	The button will act as the V-LINK on/off button.

#### \* DYNAMIC MAPPING

Dynamic Mapping is an extended function for future use. For details, refer to the Roland website.

**5** Press the [ENTER] button.

#### H-activity On/Off

Turn this on if you're using certain applications (such as Pro Tools LE). If this is on, "90 00 7F" will be transmitted from "PCR 2" at intervals of approximately 500 ms.

- Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- 2 Use the VALUE knob to select "SYS," and press the [ENTER] button.
- 3 Use the VALUE knob to select "SY13," and press the [ENTER] button.
- 4 Use the VALUE knob to turn H-activity on or off. The display will indicate "ON" or "OFF."
- **5** Press the [ENTER] button.

#### **Factory Reset**

Here's how to restore the settings of the PCR keyboard to the state they were in when the product shipped from the factory.

- **1** Press the [EDIT] button so it's lit. The display will indicate "EDIT."
- **2** Use the VALUE knob to select "SYS," and press the [ENTER] button.
- **3** Use the VALUE knob to select "SY16," and press the [ENTER] button.
- **4** "RST" will be blinking in the display; press the [ENTER] button.
- **5** "YES" will be blinking in the display; press the [ENTER] button.

## **Troubleshooting**

If you experience problems, read this chapter first. It contains tips for resolving problems.

#### **Problems with connections**

#### No sound

#### • Is the PCR connected correctly?

Make sure that the PCR is connected to the USB connector of your computer via a USB cable. After making the USB connection, it may take fifteen seconds or more for your computer to detect the PCR.

#### • Is the PCR's power switch set correctly?

Make sure that the PCR's power switch is set to "USB" if you're using USB bus power, or to "DC" if you're using an AC adaptor.

(-> Power switch (p. 7))

#### • Is sufficient power being supplied to your computer or USB hub?

The connection cannot be established if insufficient power is being supplied to the PCR. Make sure that none of the following cases apply.

- If you're using a notebook computer that's running on its battery, operation may
  be unstable in the case of some computers. In this case, connect an AC adaptor to
  your computer.
- The power management settings of your computer may be limiting the power that is supplied to USB. Check the settings on your computer.
- In some cases, the PCR cannot be used with bus-powered hubs (USB hubs that do not contain a power supply). Please use a self-powered hub (a hub that contains a power supply).

#### Can't install the driver

#### Could another USB device be connected?

All USB devices other than a mouse and keyboard must be disconnected from your computer before you install the driver.

#### Could other applications or resident software (such as antivirus programs) be running?

Installation may not occur correctly if other programs are running. Be sure to close all other programs before you install the driver.

#### • Is power management turned off for your computer?

If power management or energy-saving settings are enabled on your computer, turn them off. For details on how to do this, refer to your computer's owner's manual.

#### • Is there sufficient space on your hard disk?

Delete unneeded files to increase the amount of free space. After deleting the unneeded files, empty the Recycle Bin.

## ● Does the Device Manager show "Other Device," "Unknown Device," or a device marked with "?/!/x"?

If the driver was not installed correctly, the installed driver may remain in an incomplete state. Delete the driver as described in **Deleting the USB driver** (p. 84), and then install the PCR driver once again as described in "Setup guide."

## You are asked for the driver file even though you've already installed the driver

• Could you have connected the PCR to a USB connector that's different than the one used when you installed the driver?

The USB driver must be installed for each USB connector to which you connect the PCR. If you have a USB hub or a computer that has more than one USB connector, you should normally connect the PCR to the USB connector for which you installed the driver. If you want to connect the PCR to a USB connector other than the one for which you installed the driver, you'll need to install the USB driver as follows.

1 Connect the PCR to your computer.

#### Windows XP users:

- The Found New Hardware Wizard dialog box will appear. If you are asked whether you want to connect to Windows Update, choose "No, ..." and click [Next].
- **2.** Choose "Install the software automatically (recommended)" and click [Next]. If a dialog box with a "!" or "X" symbol appears, click [Continue] to proceed with installation. If you are unable to proceed, click [OK] and re-install the driver.

#### Windows 2000 users:

If a dialog box that says "Unable to find digital signature" appears, click [Yes] to proceed with installation. If you are unable to proceed, click [OK] and re-install the driver.

- 2 The "Found New Hardware Wizard Completed" dialog box will appear. Click [Finish].
- 3 If the Change System Settings dialog box appears, click [Yes]. Windows will restart automatically.

If you are unable to complete the installation using the above procedure, re-install the driver.



Separate sheet: Setup Guide

### **Deleting the USB driver**

If you were unable to install the USB driver using the procedure given, it is possible that your computer did not recognize the PCR's USB driver correctly. In this case, you'll need to delete the incorrectly installed USB driver. Follow the procedure below to delete the USB driver, and then re-install it.

#### Windows users

- 1 Disconnect all USB cables from your computer except for your USB keyboard and USB mouse (if used). Also disconnect the PCR. Start up your computer, and log on using a user account that has administrative privileges.
- 2 Insert the CD-ROM into your computer's CD-ROM drive.
- 3 Choose [Start]-[My Computer], and select the [DVD/CD-ROM Drive].
- 4 Select the [DRIVER]-[XP2K] folder.
- **5** Double-click the [UNINSTAL] icon.
- **6** Proceed with the uninstallation as directed by the instructions that appear.

#### Mac OS X users

- 1 Start up your Mac with the PCR disconnected.
  Make sure that all USB cables, except those for a USB keyboard and USB mouse, are disconnected.
- 2 Insert the CD-ROM into your Mac's CD-ROM drive.
- 3 In the Driver folder of the CD-ROM, double-click "PCR Uninstaller."
- **4** The display will indicate "EDIROL PCR Driver will be deleted." Click [Uninstall]. If a different message is displayed, proceed as directed by the message.
- **5** The display will ask "OK to delete the driver?", so click [OK].
- **6** An "Authentication" dialog box will appear. Enter the password and click [OK].
- 7 The display will indicate "Uninstallation completed," so click [Restart] to restart your Mac.

## Problems while using the PCR

#### Sound is interrupted during MIDI playback

• In Windows XP/2000, have you made settings to "give priority to background processing"?

To ensure that MIDI processing occurs smoothly, make settings to "give priority to background processing."

cf.

Separate sheet: Setup Guide

• Could you have disconnected and reconnected the USB cable?

Try closing all DAW software that's using the PCR, and then turn the PCR's power off, then on again. If you're using bus power, reconnect the PCR.

• Could your computer have entered standby (suspend) mode or sleep mode?

After your computer resumes operation, close all DAW software that's using the PCR, and then reconnect the PCR.

• Have you specified the output destination for MIDI data in your operating system?

Some software requires you to specify the MIDI data output destination on your computer. For details, refer to the owner's manual for your software.

• Is the driver installed correctly?

The driver must be installed in order to use the PCR.

cf.

Separate sheet: Setup Guide

• Could you be running multiple items of software?

Error messages may appear if you are running multiple items of software at the same time. If so, close the software you're not using. If the software is still shown in the Windows taskbar after you've closed the window, the software is still running. Close all unneeded software shown in the taskbar.

## Playback or recording halts midway, and subsequent playback or recording is not possible

• Could a heavy processing load have occurred while using the PCR, such as accessing the CD-ROM drive or network?

If a heavy processing load occurs while using the PCR, it may stop operating correctly. If so, stop playback or recording, and then start playback or recording again. If you are still unable to play back or record normally, close all software that's using the PCR, and then reconnect the PCR.

#### The operating system becomes unstable

• Could you have started up your computer with the PCR connected?

Start up your computer with the PCR disconnected, and then connect the PCR. On a computer that uses a USB keyboard, starting up the computer with the PCR connected may cause the system to become unstable.

## There is a time lag after playing the keyboard before your software synthesizer produces sound

By its nature, a software synthesizer produces sound via the sound card of your computer. There will be a time lag before the sound of the software synthesizer is actually played back from the sound card, and this is known as the "latency." There will always be some latency for any combination of software synthesizer and sound card, but by using the appropriate combination of sound card and sequencer software settings, it is possible to reduce the latency to the point where it is not a problem for actual use.

The following settings are generally effective ways to reduce the latency.

- Decrease the audio buffer size of your DAW software
- Decrease the buffer size for your sound card

In either case, refer to the owner's manual for your sequencer software or sound card for the specific procedure.

## When using the PCR with DAW software, you're unable to send system exclusive messages to an external sound module

You'll need to make settings in your DAW software to enable the function that passes system exclusive messages through to your sound module. For details on how to enable this, refer to the owner's manual for your software.

## Bender lever does not apply pitch bend or modulation

The PCR lets you assign MIDI messages to the bender and modulation controllers of the bender lever. If such assignments have been made, the lever won't produce pitch bend or modulation.

Set the bender and modulation to NO ASSIGN as described in **Canceling an assignment (NO ASSIGN)** (p. 67).

#### Aftertouch not applied

(p. 67).

The PCR lets you assign a MIDI message to the aftertouch controller. If such an assignment has been made, aftertouch will not be applied.

Set aftertouch to No Assign as described in **Canceling an assignment (NO ASSIGN)** 

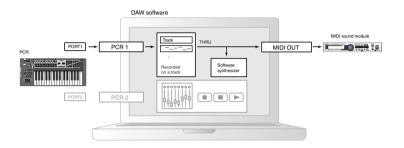
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## **Appendix**

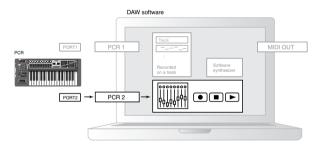
## Two MIDI ports

If the PCR is connected to your computer via USB, the PCR will be able to use two MIDI output ports (PORT 1 and PORT 2). Each controller of the PCR can be assigned to send its MIDI messages to either port.

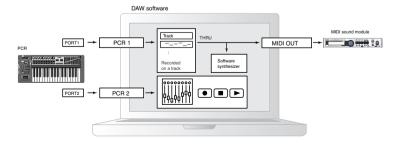
For details on how to make this assignment, refer to Using PCR Editor to assign MIDI messages (p. 20) or Assigning MIDI messages on the PCR keyboard (p. 41).



If you're using DAW software, and you're simply controlling the sound module for the part that's producing the sound, the PCR's controllers can use the same MIDI output port as the keyboard. When the PCR is in the default state, the PCR's keyboard performance data will also be sent from PORT 1, so you can assign the controllers to PORT 1 as well.



Some DAW software has an input port used to control the mixer section of the DAW software. Since the PCR has two MIDI output ports, you can use one port to play sounds and control the sound module, while using the other port to control your DAW software.



For example, if you want to use the PCR's [A1]–[A9] and [B1]–[B9] buttons to switch sounds on your sound module, and use the [S1]–[S9] sliders to control the volume faders of your DAW software's mixer, you could assign the controllers to MIDI output ports as follows.

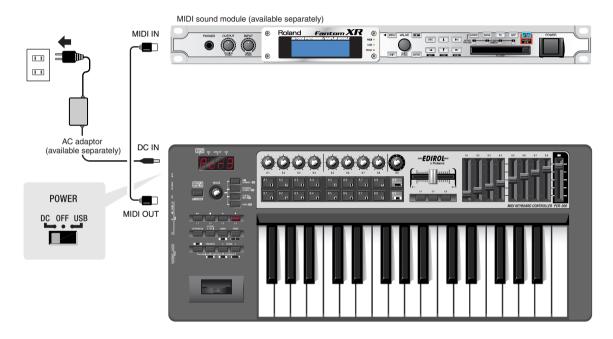
[A1]–[A9] and [B1]–[B9] buttons: PORT 1 [S1]–[S9] sliders: PORT 2

\* For details on how to control your DAW software, refer to the owner's manual for the DAW software you're using.

## Connecting the PCR directly to a sound module

You can connect the PCR connected directly to a MIDI sound module, and use it to play and control the sound module.

NOTE If you're not connecting the PCR to your computer via USB, you'll need to use a separately available AC adaptor (p. 92). You can purchase the appropriate AC adaptor from your dealer.



NOTE

Make sure that the power is turned off when connecting your equipment.

- 1 Use a MIDI cable to connect the PCR's MIDI OUT connector to the MIDI IN connector of your MIDI sound module.
- **2** Connect the AC adaptor to the PCR's DC IN jack.
- **3** Set the PCR's power switch to "DC" to turn on the power. Also, switch on the power to your MIDI sound module.
- 4 Set the PCR's current channel to match the MIDI receive channel of your MIDI sound module.
- **5** When you play the keyboard, your MIDI sound module will produce sound.

## **Control map list**

When the PCR-300/500/800 is shipped from the factory, it contains sixteen control maps. By switching among these control maps, you can quickly select control maps that are suitable for a wide variety of software. Refer to **Using control maps** (p. 8).

You can also download the latest control maps from the Roland website and load them into the PCR.

Memory Number	Factory Setting
0	DYNAMIC MAPPING 0
1	SONAER LEÅASONAR 5 (MCR-8 Mode3)
2	GarageBand
3	Cubase 3 SX (MCR-8 Mode4)
4	Logic 7
5	Logic 7
6	Logic 7
7	Logic 7
8	Logic 7
9	Logic 7
10	Logic 7
11	B4 II
12	B4 II
13	B4 II
14	GM
15	motion dive .tokyo

## **MIDI** implementation chart

Model: PCR-300/500/800 Date : Jan. 01, 2007 Version : 1.00

	Function	Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1 1–16	X X	
Mode	Default Messages Altered	Mode 3 OMNI ON/OFF, MONO, POLY	X X X	
Note Number	: True Voice	0–127 ********	X X	
Velocity	Note ON Note OFF	O (9n v=1–127) O (8n v=1–127), (9n v=0)	X X	
Aftertouch	Key's Ch's	0 0	X X	
Pitch Bend		0	Х	
Control Change	0–119	0	Х	
Program Change	: True #	O (0–127)	X X	
System Exclusiv	re	0	0	
System Common	: Song Pos : Song Sel : Tune	O O (0–127)	X X X	
System Real Time	: Clock : Command	0 0	X X	
Aux Message	: All Sound Off : Reset All Controller : Local control : All Notes Off : Active Sense : Reset	O *1 (120) O *1 (121) O O *1 (123) O	X X X X X	
Notes		*1 Transmits When the Panic for	unction is executed.	

Mode 1 : OMNI ON, POLY Mode 3 : OMNI OFF, POLY Mode 2 : OMNI ON, MONO Mode 4 : OMNI OFF, MONO O : Yes X : No

## Main specifications

#### PCR-300/500/800: MIDI KEYBOARD CONTROLLER

#### **Keyboard**

PCR-300: 32 keys (with velocity and channel aftertouch) PCR-500: 49 keys (with velocity and channel aftertouch) PCR-800: 61 keys (with velocity and channel aftertouch)

#### **Controllers**

Pads: [A1]-[A9], [B1]-[B9] Buttons: [L1]-[L4], [C1]-[C3]

Knobs: [R1]–[R9] Sliders: [S1]–[S9] Crossfader: [H1]–[H2] Foot Pedals: [P1], [P2]

Bender Lever: [BEND], [MOD]
Keyboard Aftertouch: [AFTERTOUCH]

#### Display

7 segments, 4 characters (LED)

#### **Side Panel**

Power Switch (USB Bus/OFF/DC IN)
MIDI Merge Switch (ON/OFF)

#### **Connectors**

Hold Pedal Jack: 1/4 inch phone type Expression Pedal Jack: 1/4 inch TRS phone type MIDI Connectors (IN, OUT) USB Connector DC IN Jack

#### **Power Supply**

DC 9 V (AC Adaptor) or USB Bus Power

#### **Current Draw**

300mA (AC Adaptor) 300mA (USB Bus Power)

#### **Dimensions**

PCR-300: 605.9 (W) x 250.8 (D) x 91.4 (H) mm 23-7/8 (W) x 9-7/8 (D) x 3-5/8 (H) inches PCR-500: 838.9 (W) x 250.8 (D) x 91.4 (H) mm 33-1/16 (W) x 9-7/8 (D) x 3-5/8 (H) inches PCR-800: 1001.9 (W) x 250.8 (D) x 91.4 (H) mm 39-1/2 (W) x 9-7/8 (D) x 3-5/8 (H) inches

#### Weight

PCR-300: 2.9 kg / 6 lbs 7 oz PCR-500: 3.8 kg / 8 lbs 7 oz PCR-800: 4.5 kg / 9 lbs 15 oz

#### Accessories

PCR-300/500/800 CD-ROM USB Cable Setup Guide Owner's Manual Roland Software License Agreement

#### **Options**

AC Adaptor: PSB-120/PSB-230EU/PSB-230UK/PSB-240A

Pedal Switch: DP-2/DP-6 Expression Pedal: EV-5/EV-7

\* PSB-\*\* is a set consisting of the PSB-1U AC adaptor and its power cord.

\* In the interest of product improvement, the specifications, appearance, and/or contents of this unit are subject to change without prior notice.

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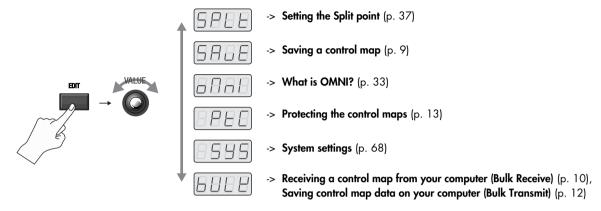
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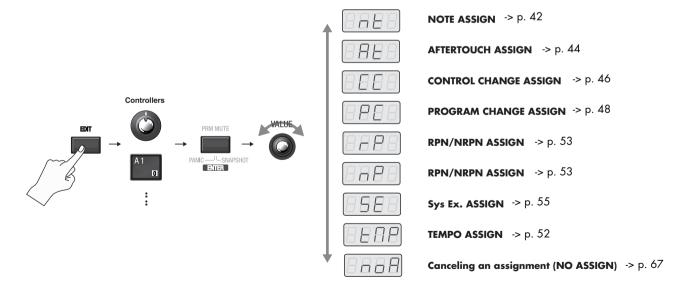
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#### **PCR** keyboard settings



#### **Edit mode**



## Memo

#### Information

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