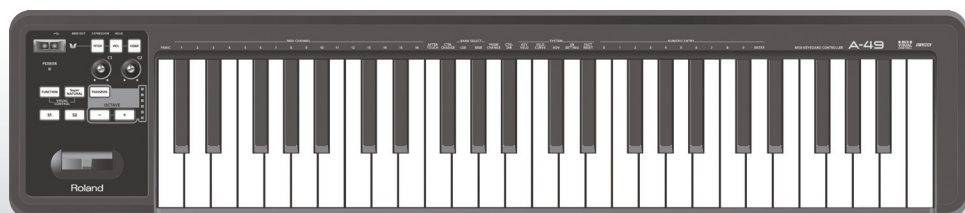# Roland

A-49

MIDI KEYBOARD CONTROLLER

Owner's Manual

For the following languages, a PDF version of the Owner's Manual can be found on the CD-ROM.

Deutsch, Français, Italiano, Español, Português, Nederlands

What is MIDI?

MIDI is an internationally recognized standard for exchanging performance information between electronic musical instruments and computers.

For example, in the illustration below, a MIDI signal meaning "the 'C' key on the MIDI keyboard was pressed" passes through the A-49 and is received by the computer's software sound module, and then the software sound module plays the note "C."

MIDI signal

Information meaning "the 'C' key was pressed"

"C" is played

Software sound module
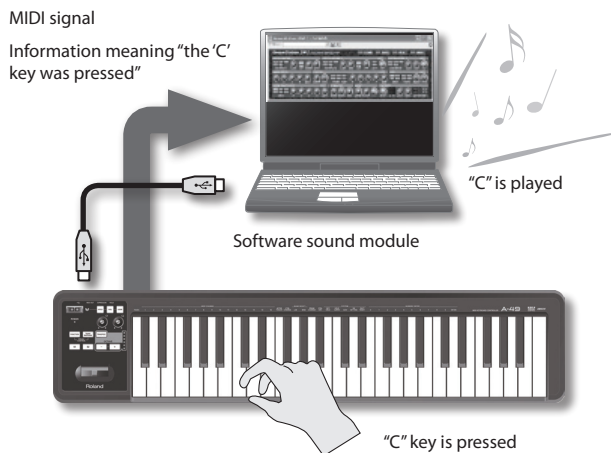
"C" key is pressed

In this way, MIDI is used to send performance information to other instruments; for example "the 'C' key was pressed with a certain amount of force," "the instrument was changed to a violin sound," "the volume was raised/lowered," "the pitch was raised/lowered," etc. In other words, MIDI is the "language of musical instruments."

MIDI signals are merely performance instructions, therefore a MIDI sound module, such as a software sound module, is required to produce sound.

All software sound modules and DAW (Digital Audio Workstation) software support MIDI.

MEMO

DAW software is a term that refers to music production software, such as SONAR.

Note

Do not connect the A-49 to the computer until the driver has been installed (p. 13).

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" (p. 3) and "IMPORTANT NOTES" (p. 4). These sections 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.

USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠ WARNING and ⚠CAUTION Notices

⚠**WARNING**	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠ **CAUTION**	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well as to domestic animals or pets.

About the Symbols

⚠	The △symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
🚫	The ⊘symbol alerts the user to items that must never be carried out (are forbidden).The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
●	The ●symbol alerts the user to things that must be carried out.The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

-------------------------------- **ALWAYS OBSERVE THE FOLLOWING** --------------------------------

⚠ WARNING

Do not disassemble or modify by yourself

Do not open or perform any internal modifications on the unit.

Do not repair or replace parts by yourself

Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

Do not use or store in the following types of locations

Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are

- Damp (e.g., baths, washrooms, on wet floors); or are
- Exposed to steam or smoke; or are
- Subject to salt exposure; or are
- Humid; or are
- Exposed to rain; or are
- Dusty or sandy; or are
- Subject to high levels of vibration and shakiness.

⚠ WARNING

Do not place in an unstable location

Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.

Don't allow foreign objects or liquids to enter unit; never place containers with liquid on unit

Do not place containers containing liquid on this product. Never allow foreign objects (e.g., flammable objects, coins, wires) or liquids (e.g., water or juice) to enter this product. Doing so may cause short circuits, faulty operation, or other malfunctions.

Turn off the unit if an abnormality or malfunction occurs

Immediately disconnect the USB cable, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:

- Objects have fallen into, or liquid has been spilled onto the unit; or
- If smoke or unusual odor occurs; or
- The unit has been exposed to rain (or otherwise has become wet); or
- The unit does not appear to operate normally or exhibits a marked change in performance.

IMPORTANT NOTES

⚠ WARNING

Adults must provide supervision in places where children are present

When using the unit in locations where children are present, be careful so no mishandling of the unit can take place. An adult should always be on hand to provide supervision and guidance.

Do not drop or subject to strong impact

Protect the unit from strong impact.

(Do not drop it!)

Do not use a CD-ROM in an audio CD player or DVD player

DO NOT play a CD-ROM disc on a conventional audio CD player. The resulting sound may be of a level that could cause permanent hearing loss. Damage to speakers or other system components may result.

⚠ CAUTION

Manage cables for safety

Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

Avoid climbing on top of the unit, or placing heavy objects on it

Never climb on top of, nor place heavy objects on the unit.

Disconnect everything before moving the unit

Disconnect all cords coming from external devices before moving the unit.

▌IMPORTANT NOTES

Power Supply

- To prevent malfunction and equipment failure, always make sure to turn off the power on all your equipment before you make any connections.

Placement

- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.

- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.

- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.

- Do not allow objects to remain on top of the keyboard. This can be the cause of malfunction, such as keys ceasing to produce sound.

- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.
  You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.

- Do not put anything that contains water on this unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.

- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and Data

- Please be aware that all data contained in this unit's memory will be initialized when it is sent for repairs. Roland assumes no liability concerning such loss of data, nor any obligation to recover it.

Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit.

- Roland assumes no liability concerning such loss of data, nor any obligation to recover it.

- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.

- When disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.

- To avoid disturbing others nearby, try to keep the unit's volume at reasonable levels.

- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

- Use only the specified expression pedal (EV-5, EV-7; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

- The usable range of D-BEAM controller will become extremely small when used under strong direct sunlight. Please be aware of this when using the D-BEAM controller outside.

Handling CDs / DVDs

- Avoid touching or scratching the shiny underside (encoded surface) of the disc. Damaged or dirty CD/DVD discs may not be read properly. Keep your discs clean using a commercially available CD/DVD cleaner.

Copyrights/Licences/Trademarks

- Before you open the included CD-ROM or DVD-ROM, you must read the "license agreement." Opening the CD-ROM or DVD-ROM will be taken to mean your acceptance of the license agreement.

- MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture, which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL Group.

- Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.

- Roland, SuperNATURAL are either registered trademarks or trademarks of Roland Corporation in the United States and/or other countries.

- Cakewalk is a registered trademark of Cakewalk, Inc. in the United States.

- Sonar is a trademark of Cakewalk, Inc.

- Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners.

Quick Page Reference Table

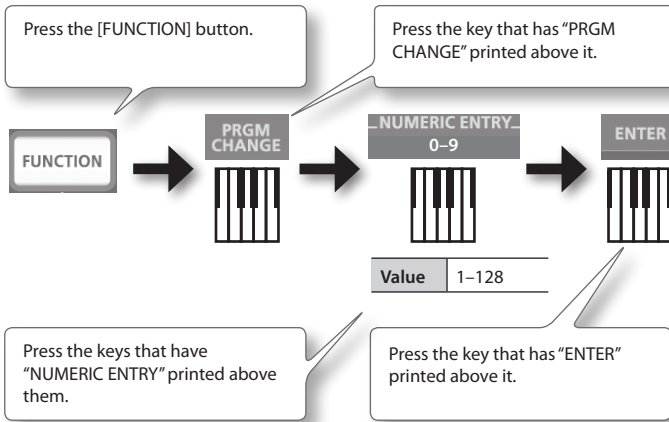|		
Performing	Switching the operating mode (PLAY/FUNCTION/SuperNATURAL/MIDI Visual Control)	p. 22
	Setting the MIDI transmit channel (MIDI CHANNEL)	p. 26
	Switching sounds ([S1][S2] knobs)	p. 26
	Performing	—
	Octave Shift, Transpose	p. 28
	Pitch Bend, Modulation	p. 29
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	[C1][C2] knobs	p. 31
	Hold, Expression	p. 32
	Aftertouch	p. 33
	Halting stuck notes	p. 33
	Performing with a SuperNATURAL sound module	p. 24
	Controlling MIDI Visual Control-compatible video equipment	p. 25
Changing the A-49's Settings	Changing the velocity curve (VELO CURVE)	p. 35
	Specifying the keyboard velocity value (KEY VELO)	p. 36
	Assigning functions to the knobs, buttons, and jacks	p. 37
	Switching the function of the [C2] knob in SuperNATURAL mode (SN SETTING)	p. 36
	Changing the direction of value increases for the knobs, D-BEAM controller, buttons, and pedals (CTRL DIR)	p. 40
	Selecting the dedicated driver or the generic driver	p. 40
	Restoring the factory settings (FACT RESET)	p. 41

Contents

How to read the procedural explanations

Press the [FUNCTION] button.

Press the key that has "PRGM CHANGE" printed above it.

FUNCTION → PRGM CHANGE → NUMERIC ENTRY 0–9 → ENTER

Value	1–128

Press the keys that have "NUMERIC ENTRY" printed above them.

Press the key that has "ENTER" printed above it.

Using NUMERIC ENTRY to enter a value

NUMERIC ENTRY 0–9 → ENTER

Value	0–127
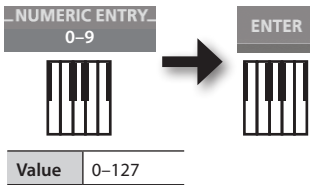
NUMERIC ENTRY keys pressed in this order	This value is entered
6, 4, ENTER	64
1, 2, 7, ENTER	127
1, 2, 8, ENTER	28
9, 3, 5, 7, ENTER	57

* If you attempt to enter a value that's outside the acceptable range, the two numbers pressed immediately before ENTER will be used.

Explanation of the icons

Icon	Explanation
	Rotate a knob.
	Step on the pedal switch.
	Raise or lower the expression pedal.

Contents of the Package

After you open the package, please check that all items are present.

(If any accessories are missing, please contact the place of purchase.)

☐ A-49

☐ A-Series Keyboard CD-ROM

This contains the USB driver and PDF files of the owner's manual.

☐ Cakewalk SONAR LE DVD-ROM ⟨ Windows ⟩

DAW software allows you to record or play audio data on a computer.

For details on using SONAR LE, user registration, and obtaining a registration code, refer to the installation guide (included on the DVD-ROM), or to the Help function of the software.

* Avoid touching or scratching the shiny underside (encoded surface) of a disc. Damaged or dirty discs may not be read properly. Use a commercially available CD-ROM/DVD-ROM cleaner to keep your disc clean.

* You need DAW software for Mac OS X.

☐ Cakewalk SONAR LE installation guide ⟨ Windows ⟩

This explains the installation and user registration process for the software included on the Cakewalk SONAR LE DVD-ROM. Unless you complete the user registration and obtain a registration code as directed in this guide, you won't be able to use the software for more than thirty days after installation.

☐ USB cable

Use this cable to connect the A-49 to the USB connector of your computer.

* Please use only the included USB cable. If you require a replacement due to loss or damage, please contact the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

☑ Owner's Manual

This is the document you're reading. Keep it at hand for reference when needed.

Panel Descriptions

Panel

D-BEAM (p. 30)

D-BEAM controller

Move your hand above this to apply various effects to the sound.

[PITCH] button

If this is turned on, the D-BEAM controller will control the pitch.

[VOL] button

If this is turned on, the D-BEAM controller will control the volume.

[ASSIGN] button

If this is turned on, the D-BEAM controller will control the function you've assigned. (Factory setting: aftertouch)

POWER indicator

This will light if the A-49 is connected to your computer via USB.

[C1][C2] knobs

Turn this knob to use the function you've assigned (p. 31).

[FUNCTION] button

If you press this button so it's lit, you can change the MIDI channel or transmit a program change by pressing the appropriate keys (p. 23).
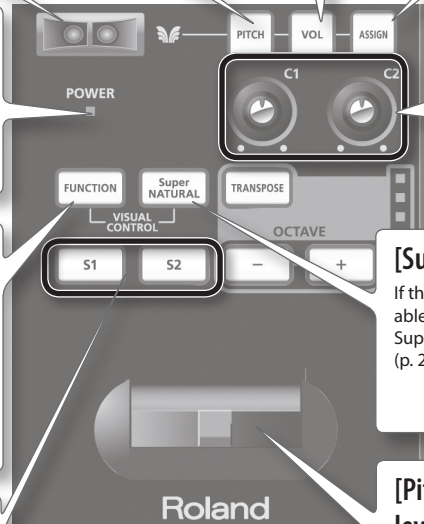
[SuperNATURAL] button

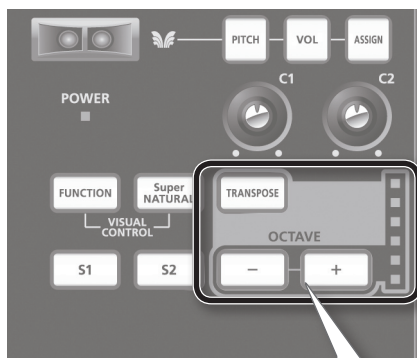If this is turned on, you'll be able to control a connected SuperNATURAL sound module (p. 24).

[S1][S2] buttons

You can switch sounds by pressing these buttons (p. 26).

[Pitch Bend/Modulation] lever

Use this lever to vary the pitch or to apply vibrato (p. 29).

[TRANSPOSE] button, OCTAVE/TRANSPOSE indicator, [+][−] buttons

In PLAY mode (p. 22), you can press the [TRANSPOSE] button to switch the function of the OCTAVE/TRANSPOSE indicator and the [+] [−] buttons.

When the [TRANSPOSE] button is turned on, the transposition setting is enabled. When the [TRANSPOSE] button is turned off, the transposition setting is disabled.

Button	Function	OCTAVE/TRANSPOSE indicator
[+][−] **buttons**	Change the octave setting (p. 28)	Indicates the octave setting
[TRANSPOSE] + [+][−] **buttons**	Change the transpose setting(p. 28)	Indicates the transpose setting

The OCTAVE/TRANSPOSE indicator and the setting it shows

11
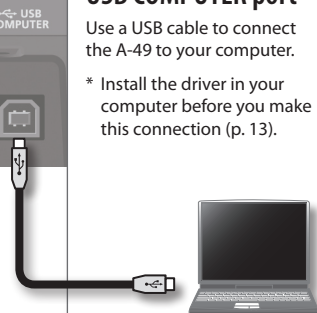
Panel Descriptions
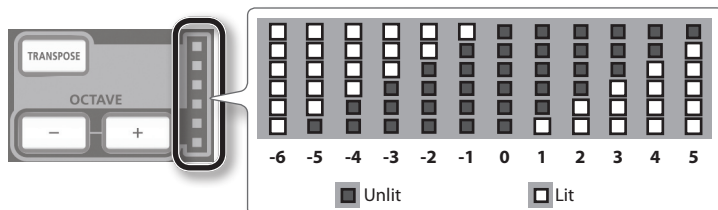
Rear Panel

HOLD jack

You can connect a pedal switch (DP-2, DP-10; available separately) here and use it as a hold pedal (p. 32).

HOLD   EXPRESSION   MIDI OUT   USB COMPUTER

USB COMPUTER port

Use a USB cable to connect the A-49 to your computer.

* Install the driver in your computer before you make this connection (p. 13).

EXPRESSION jack

You can connect an expression pedal (EV-5, EV-7; available separately) here and use it to control various parameters and functions (p. 32).

* Use only the specified expression pedal (EV-5, EV-7; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

MIDI OUT connector

You can connect this to the MIDI IN connector of another MIDI device so that the A-49 can transmit MIDI messages to it.

* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

Driver Installation

Windows / Mac OS X

Note

Do not connect the A-49 to the computer until you are directed to do so.

A "driver" is software that transfers data between the A-49 and application software running on your computer when your computer and the A-49 are connected.

1. Start up the computer without the A-49 connected.

Disconnect all USB cables other than those for a USB keyboard and/or USB mouse (if used).

Windows

Log on to the computer with a user account that has administrator privileges.

2. Exit all applications that are running.

3. Insert the included CD-ROM into the CD-ROM drive.

Windows 7/Windows Vista

If the AutoPlay dialog box appears, click [Open folder to view files].

4. Of the following, double-click the relevant file on the included CD-ROM to start the installer.

Operating System	File
Windows	[Setup] in the [WinDriver] folder
Mac OS X	[A-SeriesKeyboard_USBDriver.mpkg] in the [MacDriver] folder

Refer to the Roland website for information about drivers and compatibility with the latest operating system versions.

http://www.roland.com/

Driver Installation

Windows

5. When a confirmation screen regarding user account control appears, click [Yes] or [Continue].

6. When "The A-Series Keyboard Driver will be installed on your computer" appears, click [Next].

7. Click [Next] again.

Windows 7/Windows Vista

If a dialog box regarding Windows security appears, click [Install].

Windows XP

If the "Software Install" dialog box appears, click [Continue] to proceed with the installation.

If you cannot proceed, click [OK] to cancel the installation. Change the settings as described in "Driver Signing Options Setting (Windows XP)" (p. 46) and try installing again.

8. When "Ready to install the driver." appears, connect the USB cable of the A-49 to the computer.

* Turn down the volume on any peripheral devices before connecting the USB cable.

* This unit is equipped with a protection circuit. A brief interval (a few seconds) after turning the unit on is required before it will operate normally.

A-49 rear panel
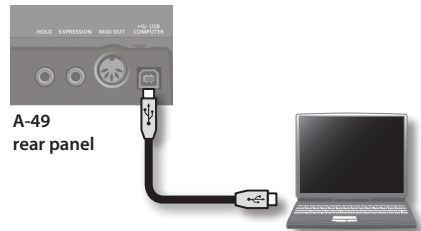
It may take several minutes for the driver to be installed.

Windows 7/Windows Vista

If other messages appear, follow the instructions on the screen. The driver will be installed automatically.

Windows XP

"Found new hardware" will appear in the lower-right corner of the screen.

Windows 7/Windows Vista

Windows XP

Windows 7/Windows Vista

9. **When "Installation has been completed." appears, click [Close].**
Close the "A-Series Keyboard Driver Setup" dialog box.
If the "Change System Settings" dialog box appears, click [Yes] to restart Windows.

Windows XP

9. **If a dialog box that asks whether you want to connect to Windows Update appears, select [No, not this time] and click [Next].**

10. **Select [Install the software automatically (Recommended)] and click [Next].**

11. **If the "Hardware Installation" dialog box appears, click [Continue Anyway] to proceed with installation.**

12. **When "Completing the Found New Hardware Wizard" appears, click [Finish].**

13. **When "Installation has been completed." appears, click [Close].**
Close the "A-Series Keyboard Driver Setup dialog box.
If the "System Settings Change" dialog box appears, click [Yes] to restart Windows.

Driver Installation

<div align="center">

Mac OS X

</div>

If the "Authenticate" or "Installer requires that you type your password" dialog box appears during the installation, enter an administrator password and click [OK].

5. **When "Welcome to the A-Series Keyboard Driver installer" appears, click [Continue].**

6. **If the screen for selecting the installation destination appears, select the startup disk and click [Continue].**

7. **When the installation type appears, click [Install] or [Upgrade].**

8. **Click [Continue Installation] in the next screen.**

9. **When installation has finished, click [Restart] to restart the Mac.**

It may take some time for the computer to restart.

10. **After the Mac restarts, connect the USB cable of the A-49 to the Mac.**

    * Turn down the volume on any peripheral devices before connecting the USB cable.

    * This unit is equipped with a protection circuit. A brief interval (a few seconds) after turning the unit on is required before it will operate normally.

A-49 rear panel
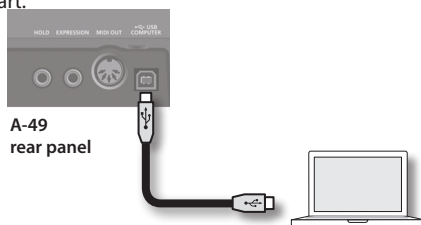
11. **Open the [Applications] folder and then the [Utilities] folder, and then double-click [Audio MIDI Setup].**

The "Audio MIDI Setup" dialog box will appear.

12. **Open the MIDI device settings dialog box.**

Operating System	Operation
Mac OS X v10.6 or later	Select [Show MIDI Window] in the [Window] menu. (The "MIDI Studio" window will appear.)
Mac OS X v10.5 or earlier	Click the [MIDI Devices] tab.

13. **Confirm that [A-Series Keyboard] appears in the "MIDI Studio" window or the "Audio MIDI Settings" dialog box.**

If [A-Series Keyboard] does not appear or if it is grayed out, it means that the A-49 is not being detected properly. Click [Rescan MIDI]. Also try disconnecting and reconnecting the A-49's USB cable.

14. **Click [Add Device] two time.**

Two [New Device] items will appear.

15. **Specify device names for the newly added [New Device].**

1. **Click each newly added [New Device] to select it, and then click [Show Info].**

2. **Enter the desired name in the [Device Name] field, and then click [Apply]. Enter the following for each [New Device].**

New Device	Device Name
First	Keyboard
Second	MIDI OUT

Driver Installation
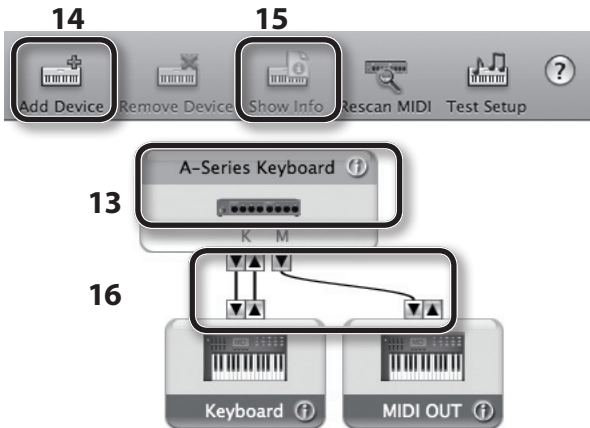
16. Using your mouse, drag and connect the ▲ and ▼ (which represent the input/ output ports of each device) of the [A-Series Keyboard] and each [New Device] that you added so that they are connected as shown in the figure.
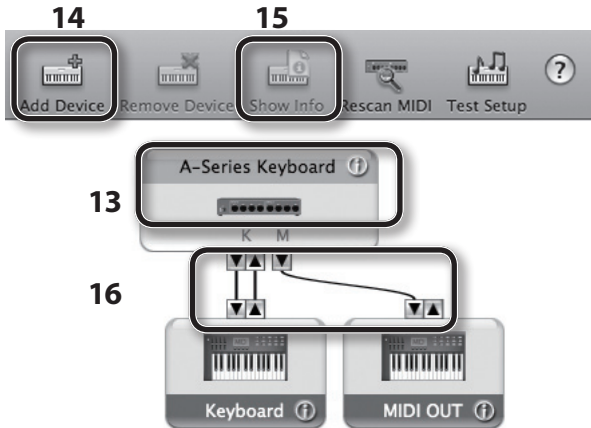
17. Close the "MIDI Studio" window or the "Audio MIDI Setup" dialog box.

Verify That You Can Hear Sound

After you've installed the driver, check to verify that the driver was installed correctly.

We will use SONAR LE as an example for Windows, and GarageBand as an example for Mac OS X.

Checking with a SONAR Soft Synths (Windows)

Here's an example using a plug-in synth included with SONAR LE. The procedure or screens may differ if you're using a different version.

For details on installing and setting up SONAR LE, refer to the SONAR LE Installation Guide.

1. Start up SONAR LE.

2. In the [Edit] menu, click [Preferences]; then in the menu at left, click [Devices] in the MIDI area.

The "Select MIDI input and output devices" dialog box will appear.

3. Choose the following MIDI devices in the [Inputs] and [Outputs] fields.

Input device	Output device
A-Series Keyboard	A-Series Keyboard MIDI OUT

If you're unable to select A-Series Keyboard as an input/output device, it may be that a problem has occurred. Refer to "Problems When Using the Unit" (p. 43).

4. Click [Apply] and then [Close] to close the "Select MIDI input and output devices" dialog box.

5. In the [File] menu, click [New].

The "New Project File" dialog box will appear.

6. In the "Template" area, choose [Normal]; then enter a project name in the "Name" field and click [OK].
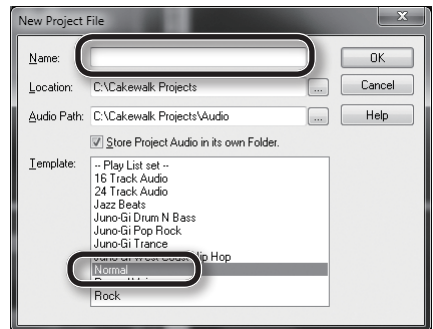
7. In the [Insert] menu, choose [Soft Synths] and then [Square I].

Driver Installation

8. In the "Insert Soft Synth Options" dialog box, select the [Synth Property Page] option in the "Open These Windows" area, and click [OK].

9. Play the A-49's keyboard.

If the MIDI monitor in the taskbar responds and you hear the sound of the synth, the A-49 is correctly connected to your computer.

This completes the necessary settings. Now you can proceed to "Using the A-49" (p. 22).

Checking in GarageBand (Mac OS X)

GarageBand is software that is included with Apple's iLife.

Here, the explanation assumes that you're using GarageBand '11. The steps or screens may be different if you're using a different version.

1. In the [Applications] folder, double-click [GarageBand].

2. When GarageBand has started up, click the [File] menu item [New].

3. In the "New Project" screen, assign a name and click [Create].

4. Play the A-49's keyboard.

If you hear the Grand Piano sound that's assigned to the GarageBand track, the A-49 is correctly connected to your computer.

This completes the necessary settings. Now you can proceed to "Using the A-49" (p. 22)!

If you don't hear sound

- From the [GarageBand] menu, click [Preferences]. If MIDI input is not detected in the [Audio/MIDI] tab's "MIDI Status" field, it may be that a problem has occurred. Please refer to "Problems When Using the Unit" (p. 43).

- In "System Preferences," choose the [Sound]-[Output] tab. Make sure that your computer's main volume is not turned down or muted. Also make sure that internal audio is selected.

- If you're using headphones, make sure that they are correctly connected to your computer's headphone jack.

If you don't hear sound in software other than GarageBand, you'll need to make MIDI and audio input/output settings.

Make the following settings for MIDI input/output.

Input device	Output device
A-Series Keyboard	A-Series Keyboard MIDI OUT

MIDI Signal Flow

The illustration below shows the MIDI signal flow.

MIDI messages from the keyboard, lever, pedals, D-BEAM controller, knobs and buttons are input here.

MIDI messages from the keyboard, lever, pedals, D-BEAM controller, knobs and buttons are transmitted from here.
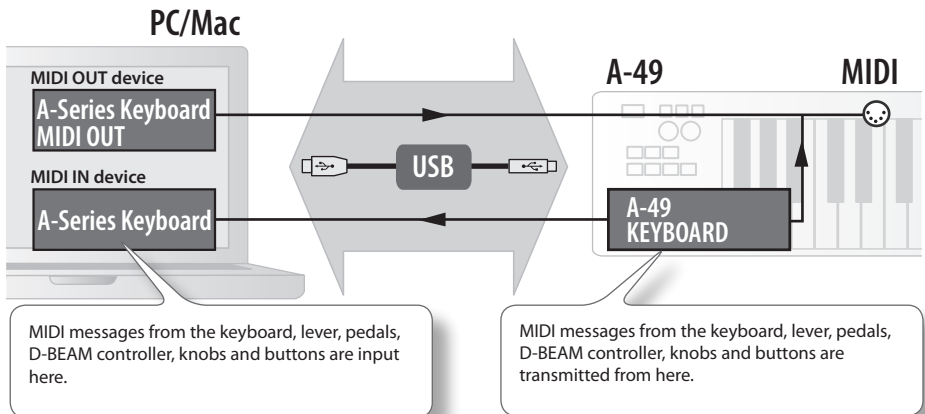
About the Operating Modes

Switching the Operating Mode

The A-49 has four modes.

When you turn on the power, the A-49 will automatically start up in PLAY mode.

You can switch the operating mode by pressing the following buttons.

PLAY mode page 22

FUNCTION ↕ FUNCTION or when you've finished making settings

Super NATURAL ↕

FUNCTION + Super NATURAL ↕

FUNCTION mode page 23

SuperNATURAL mode page 24

MIDI Visual Control mode page 25
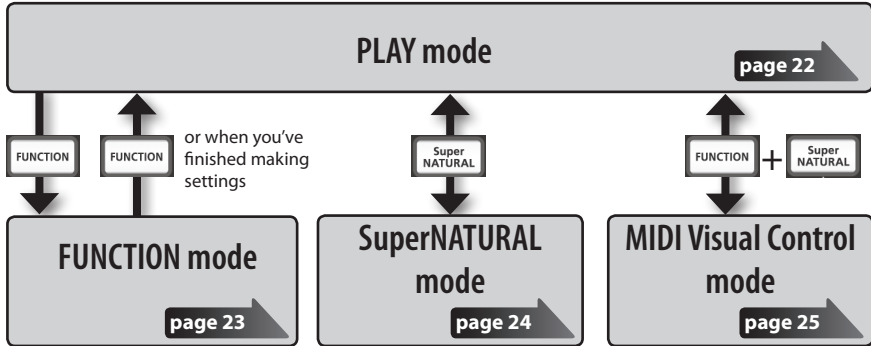
PLAY Mode

What is PLAY mode?

This is the mode that's used when performing. When you play the keyboard, note messages will be transmitted, causing your MIDI device to produce sound.

In PLAY mode you can use the keyboard to play a connected sound module. You can also use functions such as the [Pitch Bend/Modulation] lever to change the pitch of the currently sounding notes (Pitch Bend) or apply a vibrato effect (Modulation), and change the octave (Octave Shift).

Functionality in PLAY mode

Performing	You can transmit MIDI messages by operating the keyboard, [Pitch Bend/Modulation] lever, [C1] [C2] knobs, [S1] [S2] buttons, D-BEAM controller, hold pedal, and expression pedal.	p. 26

FUNCTION Mode

What is FUNCTION mode?

This is the mode that lets you transmit specific control messages or make settings for the A-49 itself.

In FUNCTION mode, the keyboard is used to select the function that you want to set (You won't be able to perform by playing the keyboard).

Functionality in FUNCTION mode

Specify the MIDI transmit channel	You can specify the transmit channel for the keyboard, [Pitch Bend/Modulation] lever, [C1] [C2] knobs, [S1] [S2] buttons, D-BEAM controller, hold pedal, and expression pedal.	p. 26
Transmit program change messages	You can transmit program change messages.	p. 28
Transmit Bank Select LSB	You can switch banks by transmitting Bank Select LSB (CC#32) messages.	p. 27
Transmit Bank Select MSB	You can switch banks by transmitting Bank Select MSB (CC#00) messages.	p. 27
Transmit aftertouch messages	You can transmit aftertouch messages.	p. 33
Transmit reset messages	If "stuck notes" occur on the connected MIDI sound module, or if there's something wrong with the sound, you can transmit reset messages (All Sound Off, All Notes Off, Reset All Controllers) to solve the problem.	p. 33
Change the keyboard settings	You can adjust the velocity sensitivity or specify the velocity value that is transmitted when you play the keyboard.	p. 35 / p. 36
Change the functions that are assigned to the knobs, buttons and pedals	You can change the function (CC#) of the functions assigned to the [C1] [C2] knobs, [S1] [S2] buttons, [ASSIGN] button, HOLD jack, and EXPRESSION jack.	p. 37
Change the directionality of the knobs, D-BEAM controller, buttons, and pedals	You can change the directionality of the [C1] [C2] knobs, D-BEAM controller, [S1] [S2] buttons, HOLD jack, and EXPRESSION jack to specify the direction in which the value will increase.	p. 40
Change the function of the [C2] knob in SuperNATURAL mode	You can change the function that the [C2] knob will have in SuperNATURAL mode.	p. 36
Switch the driver that's used	You can choose whether to use the dedicated driver or the driver provided by the operating system.	p. 40
Restoring the factory settings	You can return all of the A-49's settings to the factory-set state.	p. 41

SuperNATURAL Mode

What is SuperNATURAL mode?

This is the mode that lets you control a SuperNATURAL sound module.

You can control the SuperNATURAL sound module that's connected to the A-49 via a MIDI cable.

What are SuperNATURAL Tones?

SuperNATURAL

Taking advantage of Behavior Modeling Technology, SuperNATURAL is Roland's exclusive sound set that achieves a new level of realism and expression that were difficult to realize with previous sound generators.

Behavior Modeling Technology

Not only physical modeling of the instruments, Roland takes it a step further by modeling the instrument's distinctive behavior that responds to how the performer plays, resulting in true-to-life, expressive sounds in realtime.

Functionality in SuperNATURAL mode

Buttons, knobs, etc.	Function
[PITCH] button	The same functionality as in PLAY mode.
[VOL] button	
[ASSIGN] button	General purpose controller 3 (CC#18)
[FUNCTION] button	Not in use.
[S1] button	General purpose controller 5 (CC#80)
[S2] button	General purpose controller 6 (CC#81)
[C1] knob	General purpose controller 1 (CC#16)
[C2] knob	General purpose controller 2 (CC#17) Operates as a general purpose controller 4 (CC#19) according to the SN SETTING (p. 36).
[Pitch Bend/Modulation] lever	The same functionality as in PLAY mode.
[TRANSPOSE] button	
[+][–] buttons	
HOLD jack	You can use the same functionality as in PLAY mode.
EXPRESSION jack	

* The effect that's applied will depend on the sound module. For details, refer to the owner's manual of your sound module.

MIDI Visual Control Mode

What is MIDI Visual Control mode?

This is the mode that lets you control a video device that supports MIDI Visual Control (MVC).

You can control images on the Visual Control device that's connected to the A-49 via a MIDI cable.

When you select MIDI Visual Control mode and play the keyboard of the A-49, images will be controlled in synchronization with your performance.

What is MIDI Visual Control?

MIDI Visual Control is an internationally-used recommended practice that was added to the MIDI specification so that visual expression could be linked with musical performance. Video equipment that is compatible with MIDI Visual Control can be connected to electronic musical instruments via MIDI in order to control video equipment in tandem with a performance.

Functionality in MIDI Visual Control mode

Buttons, knobs, etc.	Function
[PITCH] button	The same functionality as in PLAY mode.
[VOL] button	
[ASSIGN] button	Attack time (CC#73)
[FUNCTION] button	Not in use.
[S1] button	You can use the same functionality as in PLAY mode.
[S2] button	
[C1] knob	Cutoff (CC#74)
[C2] knob	Resonance (CC#71)
[Pitch Bend/Modulation] lever	The same functionality as in PLAY mode.
[TRANSPOSE] button	
[+][−] buttons	
HOLD jack	You can use the same functionality as in PLAY mode.
EXPRESSION jack	

* The effect that's applied will depend on the sound module. For details, refer to the owner's manual of your sound module.

Performing

When the A-49's power is turned on, it will automatically start up in PLAY mode (p. 22).

In PLAY mode, playing the keyboard will transmit note messages, causing your MIDI device to produce sound.

1. **Set the A-49's MIDI transmit channel to match the MIDI receive channel of your MIDI device (or software) (p. 26).**

2. **Select a sound (p. 26).**

3. **Play the keyboard.**

When you play the keyboard, MIDI messages will be transmitted.

> * Since the A-49 itself does not contain a built-in sound generator, you can't play the A-49 on its own.

Setting the MIDI Transmit Channel (MIDI CHANNEL)

In order to play sounds on your MIDI sound module, the A-49's MIDI transmit channel must match your MIDI sound module's MIDI receive channel.
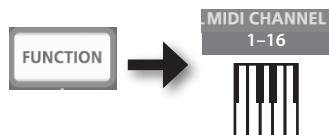
MEMO

For details on how to set the transmit channel of your external MIDI device, refer to its owner's manual.

Switching Sounds

To switch sounds on your MIDI sound module, transmit a program change message.

Pressing the [S1] [S2] buttons will transmit program changes, causing your sound module to switch sounds.

Button	Function
[S1] button	Decrement the program change number
[S2] button	Increment the program change number

* Program change numbers have a range of 1–128.

MEMO

You can change the functions that are assigned to the [S1] [S2] buttons. For details, refer to "Assigning Functions to the Knobs, Buttons, and Jacks" (p. 37).

To select sounds from a different bank, first transmit a Bank Select message, and then transmit a Program Change message.

* Simply transmitting a Bank Select message will not make the sound change.

* The Bank Select message must be sent before the Program Change message.

What is a bank?

MIDI sound modules organize their numerous sounds in various groups according to the category of sound. These groups are called "banks."

"Program change messages can only select sounds within the same bank, but by using these in conjunction with bank select messages, you can select different variations of sound.

* The way in which sounds are organized will differ for each sound module. For details, refer to the owner's manual of the sound module you are using.

Transmitting the Bank Select MSB

Value	0–127	For details on this value, refer to p. 8.

Transmitting the Bank Select LSB
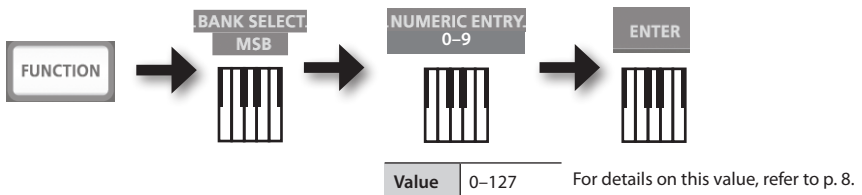
Value	0–127	For details on this value, refer to p. 8.
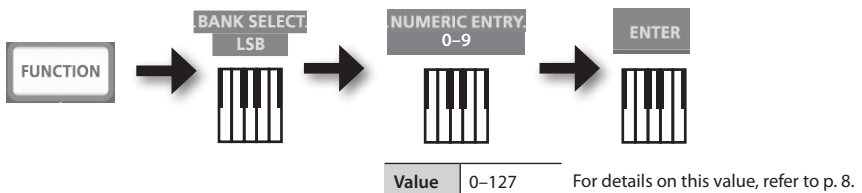
Transmitting a Program Change number (PRGM CHANGE)
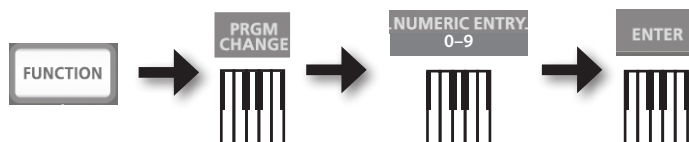
| Value | 0–127 | For details on this value, refer to p. 8. |

Shifting the Pitch of the Keyboard

Changing the octave (Octave Shift)

You can raise or lower the pitch range of the keyboard (Octave Shift) by using the [+] [–] buttons.

You can change this setting in the range of -4 to 5 octaves.

The OCTAVE/TRANSPOSE indicator will light to indicate the current octave shift setting (p. 11).

If you press the [+] button and [–] button simultaneously, this setting will be reset to 0.

Changing the pitch (Transpose)

You can transpose the pitch in semitone step by using the [+] [–] buttons while holding down the [TRANSPOSE] button.

You can change this setting in the range of -6 to 5.

The OCTAVE/TRANSPOSE indicator will light to indicate the current transpose setting (p. 11).

When the [TRANSPOSE] button is turned on, the transposition setting is enabled. When the [TRANSPOSE] button is turned off, the transposition setting is disabled.

If you press the [TRANSPOSE] button, the [+] button, and the [–] button simultaneously, this setting will be reset to 0.
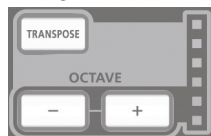
Using the Lever to Modify the Sound

Changing the pitch of a sounding note (Pitch Bend)

Moving the [Pitch Bend/Modulation] lever to the left or right will transmit pitch bend messages, causing the pitch to change slightly.

* The range of the pitch change ("bend range") will depend on the settings of your sound module.

Applying modulation to a sounding note (Modulation)

Moving the bender lever away from yourself will transmit modulation messages (CC#01), applying a vibrato effect to the sound.

* The way in which the sound changes will depend on the settings of your sound module.

MEMO

Moving the lever toward the left while you play will lower the pitch, and moving it toward the right will raise the pitch. This effect is called "pitch bend."

Moving the lever away from yourself will apply vibrato. This effect is called "modulation."

If you move the lever to left or right and simultaneously move it away from yourself, both effects will apply at the same time.

* The amount of pitch change (bend range) depends on the settings of your sound module.

Pitch bend effect
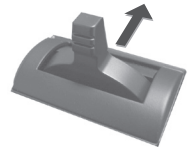
Modulation effect

Performing

Using the D-BEAM to Modify the Sound

You use the D-BEAM controller simply by moving your hand above it. By assigning different functions to it, you can control the sound in various ways.

1. **Press the D-BEAM [PITCH], [VOL], or [ASSIGN] button to turn the D-BEAM controller on.**

Button	Function
[PITCH] button	The pitch will change as you move your hand above the D-BEAM controller.
[VOL] button	The volume will change, allowing you to add expression to your performance.
[ASSIGN] button	The function assigned to the D-BEAM controller will be controlled. (Factory setting: aftertouch)

* The effect that's applied will depend on the sound module. For details, refer to the owner's manual of your sound module.

MEMO

You can change the function that's assigned to the [ASSIGN] button. For details, refer to "Assigning Functions to the Knobs, Buttons, and Jacks" (p. 37).

2. **While playing the keyboard to produce sound, position your hand above the D-BEAM controller and slowly move it up and down.**

3. **To turn off the D-BEAM controller, once again press the button you pressed in step 1 (the button will go out).**

Effective range of the D-BEAM controller

This illustration shows the effective range of the D-BEAM controller. No effect will be obtained if you position your hand outside the effective range.

NOTE

The effective range of the D-BEAM controller will change depending on the lighting conditions.
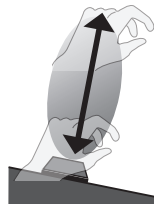
Using the Knobs to Modify the Sound

You can modify the sound by turning the [C1] [C2] knobs.
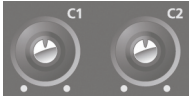
Knob	Function
[C1] knob	Transmits a Cutoff (CC#74) message.
[C2] knob	Transmits a Resonance (CC#71) message.

* The effect that's applied will depend on the sound module. For details, refer to the owner's manual of your sound module.

MEMO

You can change the functions that are assigned to the [C1] [C2] knobs. For details, refer to "Assigning Functions to the Knobs, Buttons, and Jacks" (p. 37).

Performing

Using the Pedals to Modify the Sound

The A-49 supports the use of a hold pedal (DP-2, DP-10; available separately) and an expression pedal (EV-5, EV-7; available separately).

Jack	Function	Pedal
HOLD jack	Hold (CC#64)	Hold pedal
EXPRESSION jack	Expression (CC#11)	Expression pedal

* The effect that's applied will depend on the sound module. For details, refer to the owner's manual of your sound module.

MEMO

You can change the functions that are assigned to the HOLD jack and the EXPRESSION jack. For details, refer to "Assigning Functions to the Knobs, Buttons, and Jacks" (p. 37).

Sustaining the notes (Hold Pedal)

While playing the keyboard, step on the pedal switch.

You can hold (sustain) the notes by stepping on the pedal switch.

Adding expression to your performance (Expression Pedal)

While playing the keyboard, raise or lower the expression pedal.

You can make your performance more expressive by varying the volume.

* Use only the specified expression pedal (EV-5, EV-7; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

Using Aftertouch to Modify the Sound

Aftertouch is a function that lets you modify the sound by applying additional pressure to the key after playing a note.

On the A-49, applying further pressure to a key after playing a note will not affect the sound, turning on the [ASSIGN] button and moving your hand above the D-BEAM controller will cause Aftertouch messages to be transmitted.

As an alternative to using the D-BEAM controller, you can also directly enter a specific aftertouch value by using the keyboard.

| Value | 0–127 |

For details on this value, refer to p. 8.
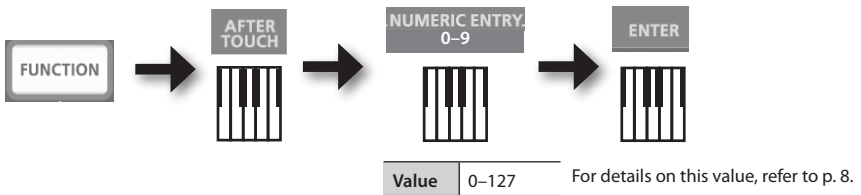
* If you specify an aftertouch value other than 0, the change will continue to be applied to the sound. Return the value to 0 if you don't need this.

MEMO
- The A-49 is only able to transmit the variety of aftertouch called "channel pressure"; it cannot transmit "polyphonic key pressure" messages.
- You can assign aftertouch to the [C1] [C2] knobs or to the EXPRESSION jack. For details, refer to "Assigning Functions to the Knobs, Buttons, and Jacks" (p. 37).

Halting Stuck Notes (PANIC)

If you experience "stuck notes" on the connected MIDI sound module, or if there's something else wrong with the sound, you can transmit reset messages (the PANIC function) to fix the problem.

This function will transmit the reset messages All Sounds Off, All Notes Off, and Reset All Controllers for all channels.

33
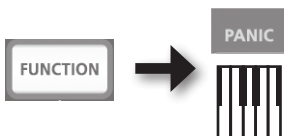
Changing the A-49 Settings

To change settings for the A-49, you need to be in FUNCTION mode.

Parameter	Factory setting	Explanation	Page
VELO CURVE	1-MEDIUM	When you play the A-49's keyboard, the transmitted note message will include a velocity value (volume data) corresponding to the force of your strike. The VELO CURVE setting lets you choose the curve by which the velocity value will change.	p. 35
KEY VELO	TOUCH	Specifies the velocity value of the keys you play.	p. 36
SN SETTING	MODE 0	Switches the function of the [C2] knob in SuperNATURAL mode.	p. 36
[C1] knob	Cutoff (CC#74)	Switches the functions assigned to the knobs, buttons, and jacks.	p. 37
[C2] knob	Resonance (CC#71)		
[ASSIGN] button	Aftertouch		
[S1] button	Switches the sound (decrements the program change number)		
[S2] button	Switches the sound (increments the program change number)		
HOLD jack	Hold (CC#64)		
EXPRESSION jack	Expression (CC#11)		
CTRL DIR	Positive direction	Specifies whether turning the knob toward the right will transmit successively higher, or successively lower values. The same setting can be made for the D-BEAM controller, buttons, and pedals.	p. 40
ADV	ADVANCED	Specifies whether the A-49 will use the dedicated driver described in "Driver Installation" (p. 13) (ADVANCED), or the standard driver provided by the operating system (GENERIC).	p. 40
FACT RESET	—	Returns all of the A-49's settings to their factory-set state.	p. 41

Changing the Velocity Curve (VELO CURVE)

| FUNCTION | ➡ | VELO CURVE | ➡ | NUMERIC ENTRY 0–9 | ➡ | ENTER |

| Value | 0–11 |
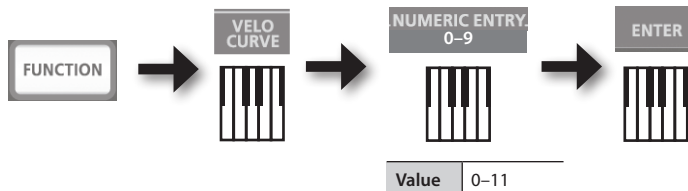
For details on this value, refer to p. 8.

* Values outside the acceptable range (12–)
  will not be entered.

Value	Setting	Keyboard sensitivity	Type of curve	
0	1-LIGHT	Higher velocity values (volume) can be produced even if you play softly.	These are the most typical settings. Your keyboard playing dynamics will produce the most natural volume change.	1
1	1-MEDIUM (default)	Keyboard sensitivity will be typical.		
2	1-HEAVY	Higher velocity values (volume) will not be produced unless you play strongly.		
3	2-LIGHT	Higher velocity values (volume) can be produced even if you play softly.	Compared to curve 1, these curves allow greater volume change without having to play very strongly.	2
4	2-MEDIUM	Keyboard sensitivity will be typical.		
5	2-HEAVY	Higher velocity values (volume) will not be produced unless you play strongly.		
6	3-LIGHT	Higher velocity values (volume) can be produced even if you play softly.	These curves make it easy to play consistently, with minimal change produced by your playing dynamics.	3
7	3-MEDIUM	Keyboard sensitivity will be typical.		
8	3-HEAVY	Higher velocity values (volume) will not be produced unless you play strongly.		
9	4-LIGHT	Higher velocity values (volume) can be produced even if you play softly.	Compared to curve 1, these curves produce greater volume change when you play strongly.	4
10	4-MEDIUM	Keyboard sensitivity will be typical.		
11	4-HEAVY	Higher velocity values (volume) will not be produced unless you play strongly.		

Specifying the Keyboard Velocity Value (KEY VELO)

| Value | 0–127 | For details on this value, refer to p. 8. |
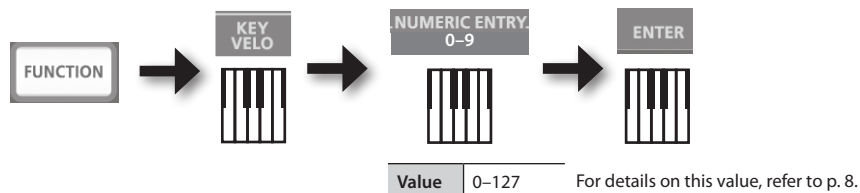
Value	Setting	Explanation
0	**TOUCH** (default)	The velocity value that's transmitted will depend on the keyboard sensitivity and change curve you specify in "Changing the Velocity Curve (VELO CURVE)" (p. 35).
1–127	FIXED VALUE	The velocity value you specify here will be transmitted regardless of how strongly you play the keyboard.

Switching the Function of the [C2] Knob in SuperNATURAL Mode (SN SETTING)
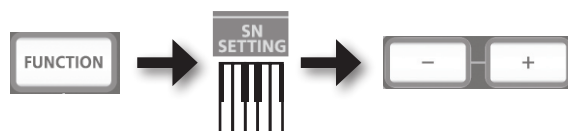
Button	Setting	Explanation
[+] **button**	MODE 1	General purpose controller 4 (CC#19) will be assigned to the [C2] knob.
[–] **button**	**MODE 0** (default)	General purpose controller 2 (CC#17) will be assigned to the [C2] knob.

* The effect that's applied will depend on the sound module. For details, refer to the owner's manual of your sound module.

# Assigning Functions to the Knobs, Buttons, and Jacks

Assigning a Program Change Message (PRGM CHANGE)

[S1] [S2] buttons
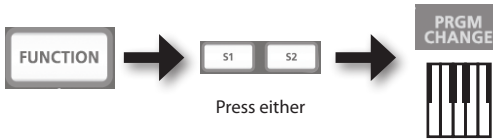
Press either

Button	Function
[S1] **button**	Decrement the program change number
[S2] **button**	Increment the program change number

Other controllers

Operate either
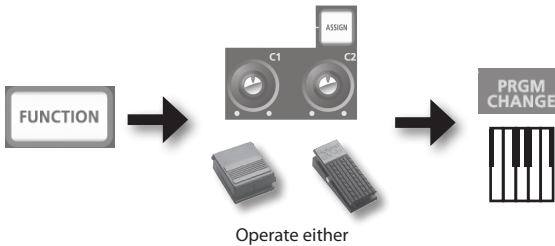
Assigning Aftertouch

Operate either
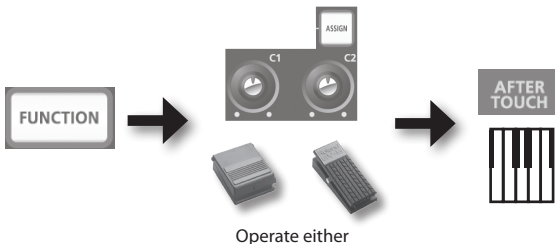
Assigning a Control Change Number (CC#)

[S1] [S2] buttons

```
FUNCTION  ➡  [ S1 ][ S2 ]  ➡  CTRL CHANGE  ➡  NUMERIC ENTRY 0–9  ➡  [ − ][ + ]
               Press either                                          Momentary / Latched
```

Value	0–127
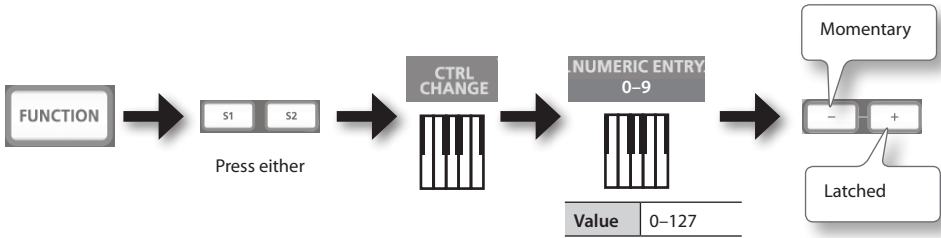
For details on this value, refer to p. 8.

Button	[S1][S2] buttons
[+] **button**	The button will alternately transmit ON (127) and OFF (0) each time you press it (Latched operation)
[−] **button**	The button will transmit ON (127) when you press it, and OFF (0) when you release it (Momentary operation)

Other controllers

```
FUNCTION  ➡  ASSIGN  C1 C2  ➡  CTRL CHANGE  ➡  NUMERIC ENTRY 0–9  ➡  ENTER
              Operate either
```

Value	0–127
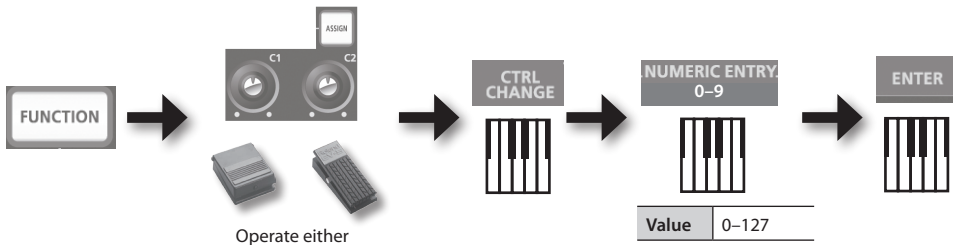
For details on this value, refer to p. 8.

* You can't assign CC#0 (Bank Select MSB) or CC#32 (Bank select LSB).

Frequently used CC#

CC#	Function	Factory assignments
1	Modulation	Modulation of [Pitch Bend/Modulation] lever
5	Portamento time	—
7	Volume	[VOL] button
10	Panpot	—
11	Expression	EXPRESSION jack
64	Hold	HOLD jack
65	Portamento	—
66	Sostenuto	—
67	Soft	—
71	Resonance	[C2] knob
72	Release time	—
73	Attack time	—
74	Cutoff	[C1] knob
75	Decay time	—
76	Vibrato rate	—
77	Vibrato depth	—
78	Vibrato delay	—
84	Portamento control	—
91	General purpose effect 1 (Reverb send level)	—
93	General purpose effect 3 (Chorus send level)	—

* The effect that's applied will depend on the sound module. For details, refer to the owner's manual of your sound module.

Changing the A-49 Settings

Changing the Direction of Value Increases for the Knobs, D-BEAM Controller, Buttons, and Pedals (CTRL DIR)

Operate either
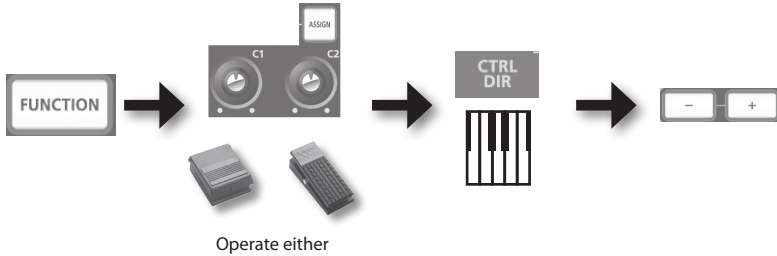
Button	Setting	Explanation
[+] **button**	**POSITIVE** (default)	Moving the knob toward the right will increase the value. Moving your hand closer to the D-BEAM controller will increase the value, and moving it away from the D-BEAM controller will decrease the value. Pressing a button will increase the value. Pressing a pedal will increase the value.
[–] **button**	REVERSED	The opposite will occur.

Selecting the Dedicated Driver or the Generic Driver
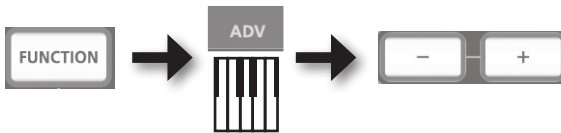
Normally, you can leave this set to "ADVANCED."

Button	Setting	Explanation
[+] **button**	**ADVANCED** (default)	The dedicated driver described in "Driver Installation" (p. 13) will be used.
[–] **button**	GENERIC	The generic driver provided by the operating system will be used. This is convenient if you don't have the dedicated driver, or if you're unable to install the dedicated driver.

* After changing the setting, disconnect the unit's USB cable, and then reconnect it to reflect setting.

Restoring the Factory Settings (FACT RESET)
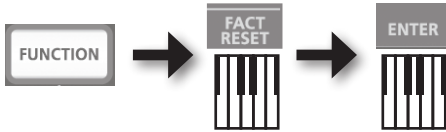
Troubleshooting

If you experience problems, read this chapter first. It contains tips for solving most problems. If this chapter cannot help you solve a problem, please refer to the support section of our website. If the problem is not resolved, refer to the contact information listed at the end of this manual.

Roland support website: http://www.roland.com/

Problems When Installing the Driver

Problem	Confirmation	Resolution
Installer does not start	Are you attempting to install from a networked DVD-ROM drive?	Put the CD-ROM to DVD-ROM drive connected to your computer, and install.
Cannot install	Are you logged on with a user account that does not have administrator privileges?	Log on to the computer with a user account that has administrator privileges. For details, consult the administrator for your computer system.
	Windows XP Is the "Driver Signing Options" setting set to [Block]?	Change the "Driver Signing Options" setting (p. 46).
	Are other programs or resident programs (such as antivirus programs) running?	Be sure to exit all other programs before installation.
Windows **Warning or error appears during installation**	In the "Device Manager," do you see "Other device," "Unknown device," or a device for which "?," "!," or "x" is displayed?	Reinstall the driver (p. 48).
Installer does not exit	Is your computer running on battery power?	Connect the power cord to the computer.
	Other than a mouse and keyboard, are any USB devices connected?	Make sure that there are no USB devices connected to the computer (other than a mouse and keyboard) during installation.
	Is the unit connected to a USB hub that is not connected to a power supply?	Use a USB hub that connects to a power supply.
Windows XP **"Found New Hardware Wizard" appears again after driver was installed**	Did you connect the unit to a different USB connector than the one you used when installing the driver?	If you change the USB connector to which the unit is connected, the "Found New Hardware Wizard" may appear again even if the driver has already been installed on the computer. Follow step 9 of the driver installation procedure (p. 15) and install the driver.
Windows **Numeral such as "2-" appears at the beginning of a device name**	Did you connect the unit to a different USB connector than the one you used when installing the driver?	If you connect the unit to a different USB connector than the one you used when installing the driver, a numeral may appear with the device name. To have the device name appear without the numeral, connect the unit to the same USB connector used during installation, or reinstall the driver (p. 48).

Problems When Using the Unit

Problem	Confirmation	Resolution
Cannot select or use unit device	Is the driver installed?	Install the driver (p. 13).
	Is the POWER indicator off?	Make sure that the unit is connected to the computer correctly.
		If the problem is not resolved, reinstall the driver (p. 48).
	Is the unit's device name displayed?	Exit all programs that are using the unit, disconnect the unit's USB cable, and then reconnect it.
	Is another program using the unit?	If the problem is not resolved, reinstall the driver (p. 48).
	Did the computer enter standby (suspend) mode, hibernate mode, or sleep mode while the unit was connected?	Exit all programs that are using the unit, disconnect the unit's USB cable, and then reconnect it.
	Did you disconnect and reconnect the USB cable while using the unit?	If the problem is not resolved, restart the computer.
	Was the unit connected to the computer while the computer was starting up?	Connect the unit after the computer has started up.
		With some computers, the unit cannot be used if it is connected to the computer while the computer is starting up.
	Windows 7/Windows Vista Are you using the Media Player included with Windows?	Use different software.
		MIDI devices cannot be selected in Media Player.
	Mac OS X Have you configured "Audio MIDI Setup"?	Configure Audio MIDI Setup (p. 16).
No sound	Is the POWER indicator off?	Make sure that the unit is connected to the computer correctly.
	Could you have operated the pedal or D-BEAM controller to lower the volume?	Try pressing the pedal or moving your hand above the D-BEAM controller.

Troubleshooting

Problem	Confirmation	Resolution
Cannot play back or record	Is the driver installed?	Install the driver (p. 13).
	Are the software's input device and output device configured?	Select the A-49 as the input and output device (p. 19).
	Is the unit's POWER indicator off?	Make sure that the unit is connected to the computer correctly. If the problem is not resolved, reinstall the driver (p. 48).
	Is the sound module connected to the MIDI OUT cable receiving MIDI signals?	Confirm the settings of the sound module.
	Is there another program using the unit?	Exit all programs that are using the unit, disconnect the unit's USB cable, and then reconnect it. If the problem is not resolved, reinstall the driver (p. 48).
	Did the computer enter standby (suspend) mode, hibernate mode, or sleep mode while the unit was connected?	Exit all programs that are using the unit, disconnect the unit's USB cable, and then reconnect it.
	Did you disconnect and reconnect the USB cable while using the unit?	If the problem is not resolved, restart the computer.
	Was the unit connected to the computer while the computer was starting up?	Connect the unit after the computer has started up. With some computers, the unit cannot be used if it is connected to the computer while the computer is starting up.
	Did the computer perform a processor-intensive task while you were using the unit?	Stop playback or recording, and then try playing back or recording again. If the problem is not resolved, exit all programs that are using the unit, disconnect the unit's USB cable, and then reconnect it.
	Windows 7/Windows Vista Are you using the Media Player included with Windows?	Use different software. MIDI devices cannot be selected in Media Player.
Duplicate notes sound	Is the sound module set to Local On? Is the software's THRU function turned on?	Configure as follows. Sound module: Local Off Software's THRU function: Off For details, refer to the owner's manual for the equipment you are using.

Problem	Confirmation	Resolution
Sound is interrupted during playback or recording, sound drops out	Are multiple programs running?	Exit programs that are not in use.
	Is the system software up to date?	Run Windows Update or Microsoft Update and make sure the system software is up to date.
	Have you used Mac OS X Software Update?	Run Software Update and make sure the system software is up to date.
	Are the drivers for the computer's internal chipset and graphics card up to date?	Update to the latest drivers, as necessary.
	Are the drivers for the computer's LAN hardware (wired and wireless) up to date?	Install the latest LAN hardware drivers. If the problem is not resolved, disable the LAN.
	Is the computer's power management setting set to economy mode?	Check the power management setting and make the appropriate setting (p. 46).
	Is the unit connected to a USB hub?	Connect the unit directly to one of the computer's USB connectors.
	Windows Is the driver's [Lighten Load] setting turned off?	Place a check in the [Lighten Load] check box (p. 49).
	Did you try to play back or record immediately after the computer started up or after it woke up from sleep mode?	Wait a while before attempting playback or recording.
There's a time lag from when you play the keyboard until your software sound generator produces sound	Have you lowered (decreased) the audio buffer size of your software sound generator? Have you lowered (decreased) the buffer size for your sound card?	A software sound generator produces sound using your computer's sound card. Before the sound from the software sound generator is actually heard from the sound card as sound, there will be a time lag referred to as "latency." Regardless of the combination of sound generator and sound card you use, there will always be some latency. Usually, however, the latency can be kept to an acceptable amount by using the right combination of sound generator and card, and by making the appropriate settings. For details on how to make these settings, refer to the owner's manuals for your software and sound card.

Changing Computer Settings to Avoid Problems

Changing these computer settings can help you avoid the problems described in "Problems When Installing the Driver" (p. 42) and "Problems When Using the Unit" (p. 43).

Driver Signing Options Setting (Windows XP)

If the "Driver Signing Options" setting is set to [Block], you cannot install the driver. Configure as follows.

1. **Open the "Control Panel," click [Performance and Maintenance], and then click the [System] icon.**

If you have selected Classic view, double-click [System].

2. **Click the [Hardware] tab, and then click [Driver Signing].**

The "Driver Signing Options" dialog box will open.

3. **In the "Driver Signing Options" dialog box, select [Warn] or [Ignore], and then click [OK].**

4. **Click [OK] to close the "System Properties" dialog box.**

5. **Install the driver as described in "Driver Installation" (p. 13).**

When you have completed the installation, return the "Driver Signing Options" setting to its original setting.

Power Management Settings

If the sound is interrupted during a performance or if sounds are missing, you may be able to resolve the problem by changing the computer's power management settings.

Windows 7/Windows Vista

1. **Open the "Control Panel," click [System and Security] or [System and Maintenance], and then click [Power Options].**

• If you have selected Icon view in Windows 7, double-click the [Power Options] icon.

• If you have selected Classic view in Windows Vista, double-click the [Power Options] icon.

2. **When "Select a power plan" appears, select [High performance].**

3. **Click [Change plan settings] next to [High performance].**

If "High performance" is not displayed in Windows 7, click [Show additional plans].

4. **Click [Change advanced power settings].**

5. In the [Advanced settings] tab of the "Power Options" control panel, click the [+] mark next to "Hard disk," and then click the [+] mark next to "Turn off hard disk after."

6. Click [Setting], click the down arrow, and then select [Never].

7. Click [OK] to close the "Power Options" window.

8. Close the "Edit plan settings" screen.

Windows XP

1. Open the "Control Panel," click [Performance and Maintenance], and then click [Power Options].
If you have selected Classic view, double-click [Power Options].

2. Click the [Power Schemes] tab, and set "Power schemes" to [Always On].

3. Click [OK] to close "Power Options Properties."

Mac OS X

This setting is not available on certain versions of Mac OS X.

1. Open "System Preferences" and click [Energy Saver].

2. Click [Options].

3. Set "Processor Performance" to [Highest].

Reinstalling the Driver

If you experience problems installing the driver, use the following procedure and reinstall the driver.

1. **Delete the driver.**

2. **Install the driver again as described in "Driver Installation" (p. 13).**

Deleting the Driver

If the computer does not detect the unit correctly, use the following procedure to delete the driver, and then install the driver again as described in "Driver Installation" (p. 13).

Windows

1. **Start up the computer without the unit connected.**

Disconnect all USB cables other than those for a USB keyboard and/or USB mouse (if used).

2. **Log on to the computer with a user account that has administrator privileges.**

3. **Insert the included CD-ROM into the computer's DVD-ROM drive.**

4. **Double-click the [Uninstall] icon in the [WinDriver] folder on the included CD-ROM.**

5. **When a confirmation screen regarding user account control appears, click [Yes] or [Continue].**

6. **When "The installed A-Series Keyboard driver will be uninstalled." appears, click [OK].**

If other messages appear, follow the instructions on the screen.

7. **When "Uninstallation was completed." appears, click [OK] to restart the computer.**

Mac OS X

1. **Start up the Mac without the unit connected.**

Disconnect all USB cables other than those for a USB keyboard and/or USB mouse (if used).

2. **Insert the included CD-ROM into the computer's DVD-ROM drive.**

3. **Double-click [Uninstaller] in the [MacDriver] folder on the included CD-ROM.**

4. **When "This uninstalls A-Series Keyboard driver from this Mac." appears, click [Uninstall].**

If other messages appear, follow the instructions on the screen.

5. **When "Are you sure you want to uninstall the driver?" appears, click [OK].**

The authentication dialog box or the message "Uninstaller requires that you type your password" will appear.

6. **Enter the password and click [OK].**

7. **When "Uninstallation is completed." appears, click [Restart] to restart the Mac.**

It may take some time for the Mac to restart.

Lightening the MIDI Load (Windows)

The MIDI load can be lightened in the driver setting dialog box.

1. **Exit all programs that are using the unit.**

2. **Open the "Control Panel" and set the display mode as follows.**

Windows 7 : Icon view

Windows Vista/Windows XP : Classic view

3. **Double-click the A-Series Keyboard icon.**

The "A-Series Keyboard Driver Settings" dialog box will appear.

4. **Place a check in the [Lighten Load] check box.**

5. **Click [OK].**

Main Specifications

Roland A-49: MIDI Keyboard Controller

Keyboard	49 keys (with velocity)
Controllers	Buttons: [S1] [S2] (Assignable) Knobs: [C1] [C2] (Assignable) Foot Pedals: HOLD, EXPRESSION [Pitch Bend/Modulation] lever D-BEAM controller
Buttons	[FUNCTION] button [SuperNATURAL] button [+][–] buttons [TRANSPOSE] button
Display	POWER indicator LED OCTAVE/TRANSPOSE indicator LED
Connectors	HOLD jack: 1/4-inch phone type EXPRESSION jack: 1/4-inch TRS phone type MIDI OUT connector USB COMPUTER port (USB Type B)
Power Supply	Supplied from the computer via USB COMPUTER port
Current Draw	98 mA
Dimensions	836 (W) x 182 (D) x 84 (H) mm 32-15/16 (W) x 7-3/16 (D) x 3-5/16 (H) inches
Weight	2.5 kg / 5 lbs 9 oz
Accessories	Owner's Manual A-Series Keyboard CD-ROM USB cable SONAR LE DVD-ROM (Windows) SONAR LE installation guide (Windows)
Options (sold separately)	Pedal Switch (DP-2/DP-10) Expression Pedal (EV-5/EV-7)

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

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Alkhobar 31952,
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TEL: (0212) 249 85 10

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U.A.E.
TEL: (04) 3360715

NORTH AMERICA

CANADA
Roland Canada Ltd.
(Head Office)
5480 Parkwood Way Richmond B.
C., V6V 2M4, CANADA
TEL: (604) 270 6626

Roland Canada Ltd.
(Toronto Office)
170 Admiral Boulevard
Mississauga On L5T 2N6,
CANADA
TEL: (905) 362 9707

U. S. A.
Roland Corporation U.S.
5100 S. Eastern Avenue
Los Angeles, CA 90040-2938,
U. S. A.
TEL: (323) 890 3700

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