Roland




# A-300PRO A-500PRO A-800PRO

## MIDI KEYBOARD CONTROLLER

Owner's Manual

# Contents of the Package

The package of the A-300PRO/500PRO/800PRO (which we'll subsequently refer to as the A-PRO) contains the following items. When you open the package, first make sure that all items are included. If any are missing, contact the dealer where you purchased the A-PRO.

## MIDI keyboard controller A-PRO



* The photo show the A-500PRO.

## A-PRO CD-ROM

This contains the A-PRO drivers.

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

### ⚠WARNING

Do not attempt to play back a CD-ROM or DVD-ROM in 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.

## USB cable

Use this cable to connect the A-PRO to the USB connector of your computer. For details on connections, refer to "Installing the Driver" (p. 12).

* Please use only the included USB cable. If you require a replacement for the supplied USB cable (for example due to damage or loss), please contact the nearest Roland Service Center, or an authorized Roland distributor, as listed on the separate sheet titled "Information."

## Owner's manual

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

## Ableton Live Lite Serial Number Card

The Ableton Live Lite serial number card contains a serial number that you will need when you install Ableton Live Lite. This serial number cannot be reissued. Please take care not to lose it.

For details on the installation procedure and other information, refer to **http://roland.cm/livelite**. Please be aware that Roland does not provide support for Ableton Live Lite.

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**Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (p. 3; p. 5). 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.<br>* Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well 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 open (or modify in any way) the unit or its AC adaptor.



- 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 separate sheet titled "Information."



- 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.



**⚠WARNING**

- Never install the unit in any of the following 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.





- Use only the specified AC adaptor (sold separately), and make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.



**⚠WARNING**

- Use only the attached power-supply cord. Also, the supplied power cord must not be used with any other device.



- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!



- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.





- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the separate sheet titled "Information" when:
  - The AC adaptor, the power-supply cord, or the plug has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; 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.



- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.



**⚠WARNING**

- Immediately turn the power off, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the separate sheet titled "Information" when:
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; 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.



- Protect the unit from strong impact. (Do not drop it!)



- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.



- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the separate sheet titled "Information."



- Do not attempt to play back a CD-ROM or DVD-ROM in a conventional audio CD player. Damage to speakers or other system components may result.



**⚠CAUTION**

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.



- Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit.



- At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.



- 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.



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



- Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.



- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.



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



**⚠CAUTION**

- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet.



- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.



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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, Macintosh, and Mac OS are registered trademarks of Apple Inc.

* All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

* 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.

# IMPORTANT NOTES

## Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

## Placement

- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- 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.

## 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 the unit's memory may be lost when the unit is sent for repairs. Important data should always be backed up in your computer, or written down on paper (when possible). During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland assumes no liability concerning such loss of data.

## 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. To protect yourself against the risk of losing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory in your computer.
- Unfortunately, it may be impossible to restore the contents of data that was stored in your computer once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- 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.
- Never strike or apply strong pressure to the display.
- When connecting / 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 your neighbors, try to keep the unit's volume at reasonable levels (especially when it is late at night).
- 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 or EV-7; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

## CD-ROM and DVD-ROM handling

- Do not touch the data surface (the unprinted surface) of the disc, or allow it to be scratched. Doing so may make the data unreadable. If the disc gets dirty, clean it using a commercially available disc cleaner.

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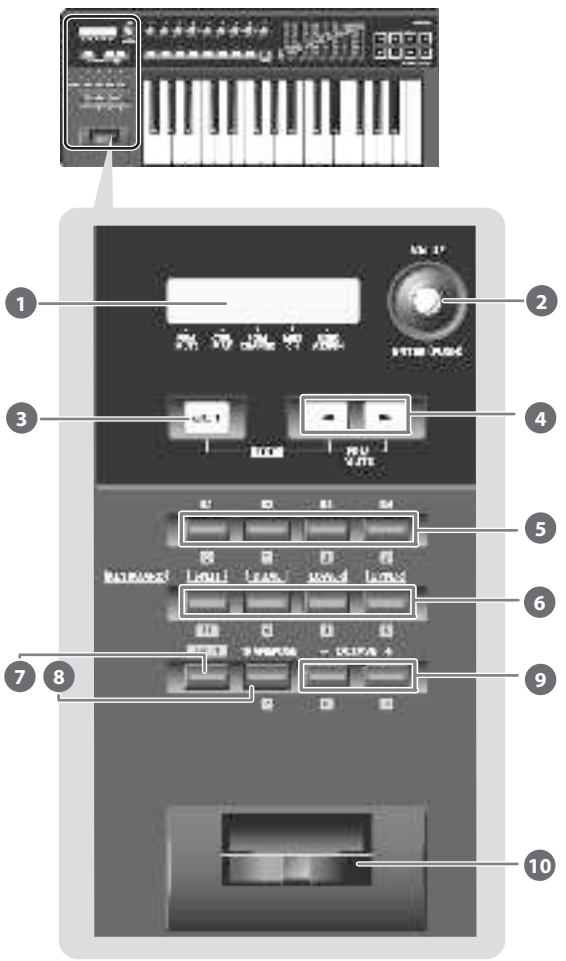
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# Names of Things and What They Do

## 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 shown for a certain duration. Information such as the MIDI channel and program change is also shown. |
| PRM MUTE | When the cursor is located here, moving a controller will not transmit MIDI messages (p. 47). |
| CTRL MAP | When the cursor is located here, you can turn the [VALUE] knob 2 to switch between control maps stored in the A-PRO (p. 21). |
| PGM CHANGE | When the cursor is located here, you can turn the [VALUE] knob 2 to transmit a program change on the current channel (p. 43). |
| MIDI CH | When the cursor is located here, you can turn the [VALUE] knob 2 to change the MIDI channel on which the keyboard or bender lever will transmit (p. 42). |
| USER ASSIGN | When the cursor is located here, you can turn the [VALUE] knob 2 to change the value of a user-assigned parameter (p. 68). |

### 2 [VALUE] knob, [ENTER] button

You can turn the [VALUE] knob to change the MIDI channel, switch program changes or control maps, or change the value of a user-specified parameter.
In EDIT mode, use the [VALUE] knob to select an item or edit its value.
When this knob is pressed, it functions as the [ENTER] button.

### 3 [ACT] button

Press the [ACT] button if you're using SONAR or software compatible with ACT (Active Controller Technology) (p. 21).
You can use controllers [B1]–[B4], [R1]–[R9], [L1]–[L9], [S1]–[S9], and [A1]–[A8] to operate SONAR or your ACT-compatible software.

### 4 [ ◄ ] button, [ ► ] button

You can use the [ ◄ ] [ ► ] buttons to move the cursor that is shown at CTRL MAP, PGM CHANGE, MIDI CH, or USER ASSIGN in the display.

### 5 Controllers [B1]–[B4] (button)

You can assign any desired MIDI messages to these buttons.
→ "Assigning MIDI Messages" (p. 29)

### 6 [SPLIT] button, [DUAL] button, [LOWER] button, [UPPER] button

**[SPLIT] button**
Use this button to split the keyboard into right (UPPER) and left (LOWER) areas so that you can play a different sound in each area.

**[DUAL] button**
Use this button to play two sounds layered.

**[LOWER] button**
Use this button to play the LOWER part.

**[UPPER] button**
Use this button to play the UPPER part.

### 7 [SHIFT] button

When you're in PLAY mode (p. 41), you can hold down the [SHIFT] button and use controllers [B1]–[B4], the [DUAL]/[LOWER]/[UPPER] buttons, the [TRANSPOSE] button, and the OCTAVE [–] [+] buttons as a numeric keypad. Hold down the [SHIFT] button and press the [SPLIT] button for backspace.

### 8 [TRANSPOSE] button

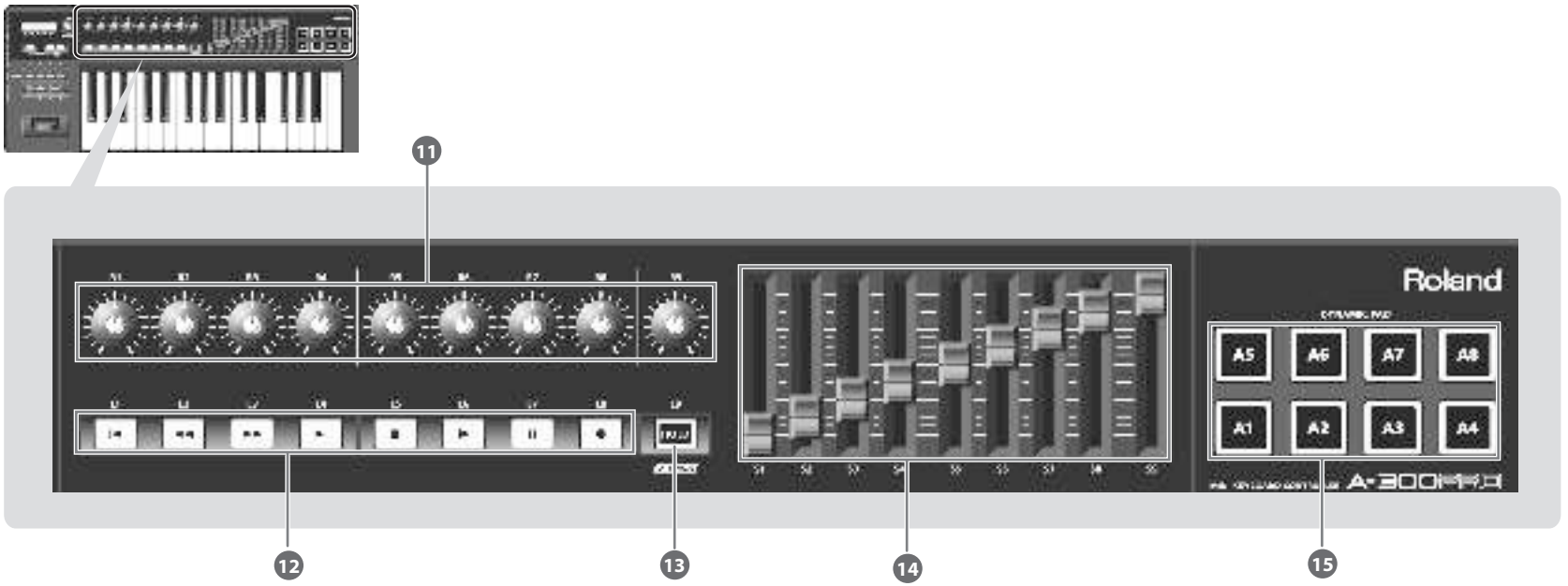
This button lets you shift the pitch of the keyboard up or down in steps of a semitone.
→ "TRANSPOSE" (p. 62)

### 9 OCTAVE [–] [+] buttons

These buttons let you shift the pitch of the keyboard up or down in steps of one octave.

### 10 Bender lever

Use this to change the pitch or apply vibrato.
You can also assign a desired MIDI message to this lever as a controller.
→ "Assigning MIDI Messages" (p. 29)




### 11 Controllers [R1]–[R9] (knobs)

You can assign the desired MIDI messages to these knobs.
→ "Assigning MIDI Messages" (p. 29)

### 12 Controllers [L1]–[L8] (button)

You can assign the desired MIDI messages to these buttons.
→ "Assigning MIDI Messages" (p. 29)

### 13 [HOLD] button

This button turns Hold on/off (a function that sustains the note even after you release the [A1]–[A8] pad).
Alternatively, you can assign a desired MIDI message to this button or use it to turn V-LINK on/off instead of using it as Hold.
→ "L9 FUNCTION" (p. 69)

**V-LINK**
V-LINK ( V-LINK ) 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.

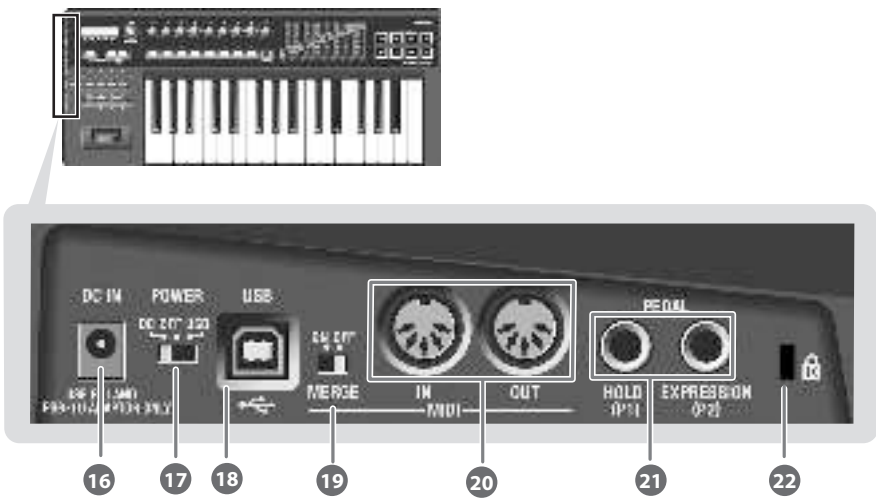
### 14 Controllers [S1]–[S9] (sliders)

You can assign the desired MIDI messages to these sliders.
→ "Assigning MIDI Messages" (p. 29)

### 15 Controllers [A1]–[A8] (pads)

You can assign the desired MIDI messages to these pads.
→ "Assigning MIDI Messages" (p. 29)
These pads can transmit velocity values that correspond to the force with which you pressed the pad, or aftertouch values.

# Side Panel




## 16 DC IN jack

You can connect a separately sold AC adaptor here. If you want to purchase an AC adaptor, contact the retailer from whom you purchased the product, or the nearest Roland Service Center.

## 17 [Power] switch

| | |
|---|---|
| **DC** | Power on using the AC adaptor |
| **OFF** | Power off |
| **USB** | Power on with the USB cable connected<br>USB (i.e., bus power) can be used when the A-PRO is connected to your computer via a USB cable. The power is supplied from the computer via the USB cable.<br>* The A-PRO might not operate on bus power with some computers. In this case, please use the separately sold AC adaptor. |

- When not connected to a computer, the unit will automatically be switched off four hours after you stop playing or operating it (AUTO OFF function).
  If you do not want the power to be turned off automatically, disengage the AUTO OFF function (p. 70).

  * Any settings that you are in the process of editing will be lost when the power is turned off. If you have any settings that you want to keep, you should save them beforehand.
  * To restore power, turn the power on again.

## 18 USB connector

Use this to connect the A-PRO to your computer via a USB cable.

## 19 [MIDI MERGE] switch

This switch turns the Merge function on/off for messages from MIDI IN.
→ "MIDI MERGE DESTINATION" (p. 67)

## 20 MIDI IN/OUT connectors

You can connect these connectors to the MIDI connectors of other MIDI equipment to transmit and receive MIDI messages.
→ "MIDI-related Settings" (p. 66)

## 21 HOLD (P1) jack, EXPRESSION (P2) jack

Connect the appropriate type of pedal to each of these connectors.

| | |
|---|---|
| **HOLD** | Connect a pedal switch (DP-2, DP-10; sold separately) here and use it as a Hold pedal. |
| **EXPRESSION** | Connect an expression pedal (EV-5, EV-7; sold separately) here and use it to control the sound or volume in real time. |

You can also assign any desired MIDI message to these controllers.
→ "Assigning MIDI Messages" (p. 29)

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

## 22 Security slot ( )

http://www.kensington.com/

# Installing the Driver

A driver is software that transfers data between the A-PRO and the application software on your computer when the A-PRO is connected to your computer.

Refer to the Roland website for the latest drivers and information about compatibility with the latest operating system versions.
**http://www.roland.com/support/**

The procedure for installation and checking will depend on your system. Perform the following two steps to install and check the driver.

| | Windows 8 / Windows 7 / Windows Vista | Windows XP | Mac OS X |
|---|---|---|---|
| 1. Install driver | P. 12 | P. 15 | P. 17 |
| 2. Check | P. 19 | P. 19 | P. 20 |

## Windows 8/Windows 7/Windows Vista Users

Steps to be performed on the A-PRO keyboard itself are marked by a

Operation of the A-PRO symbol. Don't connect the A-PRO to your computer until you are told to do so.

* The example screen shots included here are taken from Windows 7.

**1 With the A-PRO disconnected, start up Windows.**

Disconnect all USB cables from your computer, with the exception of those for a USB keyboard and USB mouse (if used).

**Windows 8 users**
Switch to the "Desktop."

**2 Close all currently running software.**

**3 Insert the included A-PRO CD-ROM into your CD-ROM drive.**

**4 In the [Driver] folder within the CD-ROM, double-click the [Setup] icon to start up the installer.**

**Windows 8/Windows 7 users**
Open "Control Panel," click "System and Security," and then click [System].
If the Control Panel shows the icon view, click [System].

### To open the Control Panel — Windows 8 users

1. **On the Start screen, click the Desktop.**
2. **Move the mouse pointer to the upper right or lower right corner of the screen to display the charms.**
   * On touch-enabled PCs, swipe from the right side of the screen to display the charms.
3. **Click [Settings] and display the "Settings charms."**
4. **In "Settings charms," click [Control Panel] to open the "Control Panel."**

**Windows Vista users**
Open "Control Panel," click [System and Maintenance], and then click [System].
If the Control Panel shows the classic view, double-click the "System" icon.

**5 A user account control confirmation screen will appear. Click [Yes] or [Continue].**



**6 The screen will indicate "A-PRO Driver will be installed on your computer." Click [Next].**

If any other message appears, proceed as directed by the message.

**7 To begin the installation, click [Next] once again. Installation will begin.**



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

**8** Operation of the A-PRO **Turn the A-PRO's [POWER] switch OFF.**

**9** Operation of the A-PRO **When the screen indicates "Ready to install the driver," use a USB cable to connect the A-PRO to your computer.**



If any other message appears, proceed as directed by the message.

**10** Operation of the A-PRO **Set the A-PRO's [POWER] switch to USB.**

The driver will be installed automatically.

**11 When the installation is completed, the “A-PRO Driver Setup” dialog box will indicate “Installation has been completed.” Click [Close] to close the “A-PRO Driver Setup” dialog box.**

If the “System Settings Change” dialog box appears, click [Yes]. Windows will automatically restart.

Now let’s check to make sure that installation was successful.

→ “Checking with a SONAR Soft Synths (Windows)” (p. 19)

# Windows XP Users

Steps to be performed on the A-PRO keyboard itself are marked by a Operation of the A-PRO symbol. Don't connect the A-PRO to your computer until you are told to do so.

**1 With the A-PRO disconnected, start up Windows.**

Disconnect all USB cables from your computer, with the exception of those for a USB keyboard and USB mouse (if used).

**2 Close all currently running software.**

**3 Insert the included A-PRO CD-ROM into your CD-ROM drive.**

**4 On the CD-ROM, open the [Driver] folder and double-click the [Setup] icon.**

If you get a message saying "The operating system you are using is not supported" or saying that the application is invalid, check the version of your operating system.

If the "Install Program As Other User" dialog box appears, click [Cancel] to terminate the installation, log on to Windows using an administrator account, and perform the installation once again.

**5 The screen will indicate "A-PRO Driver will be installed on your computer." Click [Next].**

If any other message appears, proceed as directed by the message.

**6 To begin the installation, click [Next].**



If the "Software Installation" dialog box appears, click [Continue Anyway] to continue the installation.

If you are unable to proceed, click [OK] in the dialog box to terminate the installation. Then change the setting as described in "Driver signing options setting (Windows XP)" (p. 80), and perform the installation once again.

**7 Operation of the A-PRO Set the A-PRO's [POWER] switch to OFF.**

**8 Operation of the A-PRO When the "Ready to install the driver" message appears, use a USB cable to connect the A-PRO to your computer.**



If any other message appears, proceed as directed by the message.

**9 Operation of the A-PRO Set the A-PRO's [POWER] switch to USB.**

The indication "Found New Hardware" will appear in the lower right corner of your screen.

* It may take between ten seconds to several minutes for the "Found New Hardware Wizard" to appear.

**10 If you are asked whether you want to connect to Windows Update, choose [No, not this time] and click [Next].**



**11 Choose [Install the software automatically (Recommended)], and click [Next].**



**12 If the "Hardware Installation" dialog box appears, click [Continue Anyway] to continue the installation.**



If you are unable to proceed, click [OK] in the dialog box to terminate the installation. Then change the setting as described in "Driver signing options setting (Windows XP)" (p. 80), and perform the installation once again.

**13 The screen will indicate "Completing the Found New Hardware Wizard." Click [Finish].**

**14 When installation is complete, the "A-PRO Driver Setup" dialog box will indicate "Installation has been completed." Click [Close] to close the "A-PRO Driver Setup" dialog box.**

If the "System Settings Change" dialog box appears, click [Yes] to restart Windows.

Now let's check to make sure that installation was successful.
This completes driver installation and settings.
→ "Checking with a SONAR Soft Synths (Windows)" (p. 19)

# Mac OS X Users

Steps to be performed on the A-PRO keyboard itself are marked by a Operation of the A-PRO symbol. Don't connect the A-PRO to your computer until you are told to do so.

* If a dialog box requesting a password appears during installation, enter a computer administrator's user name and password and click the [Install Software] button or [OK] button.
* What you actually see on the screen may differ depending on your system.

**1 With the A-PRO disconnected, start up your computer.**

Disconnect all USB cables from your computer, with the exception of those for a USB keyboard and USB mouse.

**2 Close all currently running software.**

**3 Insert the included A-PRO CD-ROM into your CD-ROM drive.**

**4 On the CD-ROM, open the [Driver] folder and double-click the [APRO_USBDriver] icon to start the installer.**

A message concerned with checking whether installation is possible may appear. If so, click [Continue].

If a message indicating that installation is not possible appears, check the operating system you're using, and perform step 4.

**5 The screen will indicate "Welcome to the A-PRO Driver Installer." Click [Continue].**



**6 If the screen asks you to select a destination, click your start-up disk to select it, and then click [Continue].**

**7 When the display asks you to select the type of installation, click [Install] or [Upgrade].**

**8 In the next screen, click [Continue Installation].**

**9 When installation is completed, click [Restart] to restart your computer.**

* It may take some time for your computer to restart.

**10** Operation of the A-PRO **Set the A-PRO's [POWER] switch to OFF.**

**11** Operation of the A-PRO **When your computer has restarted, use a USB cable to connect the A-PRO to your computer.**

**12** Operation of the A-PRO **Set the A-PRO's [POWER] switch to USB.**

**13 Double-click [Audio MIDI Settings] (/Applications/Utility) to start it up.**

**14 Access the dialog box.**

**Mac OS X 10.6 or later**
From the [Window] menu, choose [Show MIDI Window] to open "MIDI Studio"

**Mac OS X 10.5 or earlier**
Click the [MIDI Devices] tab.

**15 Verify that [A-PRO] is shown in the "MIDI Studio" or "Audio MIDI Settings" dialog box.**



If the A-PRO is not shown or is grayed-out, the A-PRO has not been recognized correctly. Try clicking [Rescan MIDI]. You can also try disconnecting the USB cable connected to the A-PRO, then re-connecting it.

**16 Click [Add Device] five times.**



Five [New Device] items will appear.

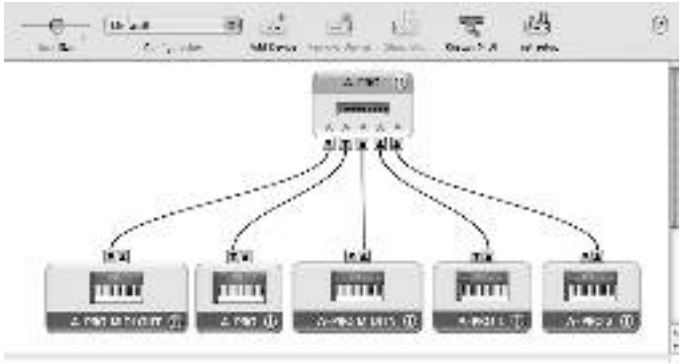
**17 Specify the device name for each [New Device].**

1. **Select the [New Device] you added, and click [Show Info].**
2. **Enter the name in the [Device Name] field. For each [New Device], enter the following names.**



| New Device | Device Name |
|---|---|
| First | A-PRO MIDI OUT |
| Second | A-PRO |
| Third | A-PRO MIDI IN |
| Fourth | A-PRO 1 |
| Fifth | A-PRO 2 |

**18 Use the mouse to drag between the ▲ and ▼ symbols (representing input and output, respectively) of [A-PRO] and each [New Device] so that they are connected as shown in the illustration below.**



**19 Close the "MIDI Studio" dialog box or "Audio MIDI Setup" dialog box.**

Now let's check to make sure that installation was successful.
→ "Checking in GarageBand (Mac OS X)" (p. 20)

# Verifying that Installation was Successful

Proceed as follows 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.

**1 Start up SONAR LE.**

**2 From the [EDIT] menu, click [Preferences...], and from the left menu click [Devices] in the MIDI field.**

The screen in which MIDI input/output devices are selected appears.

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

| Inputs | Outputs |
|---|---|
| A-PRO MIDI IN<br>A-PRO 1<br>A-PRO 2 | A-PRO<br>A-PRO MIDI OUT |

If you're unable to select A-PRO as an input/output device, it may be that a problem has occurred.
Refer to "Problems with Settings" in the Troubleshooting section (p. 76).

**4 Click [Apply], then [Close] to close the Preferences 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].**

**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-PRO's keyboard.**

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

## 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-PRO's keyboard.**

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

If you don't hear sound, check the following points.

- 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 with setup" in the Troubleshooting section (p. 76).
- 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 have an audio interface that's connected to your computer, refer to the owner's manual of your device to make sure that your audio interface is connected correctly.

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-PRO MIDI IN<br>A-PRO 1<br>A-PRO 2 | A-PRO<br>A-PRO MIDI OUT |

# Look what You Can Do with the A-PRO

## Play

When playing the A-PRO's keyboard, you can select sounds in your sound module from the A-PRO. You can also play two sounds together (DUAL) or separately (SPLIT).

For details, refer to "Performing (Play Mode)" (p. 41).

## Use ACT

If you're using SONAR, you can use the A-PRO as a controller for SONAR simply by pressing the A-PRO's [ACT] button to turn it on.

### What is ACT?

ACT (Active Controller Technology) is functionality that lets you control SONAR from an external device such as the A-PRO. This lets you control the plug-in effect or plug-in synthesizer that's active in SONAR without having to make time-consuming settings.

For details, refer to SONAR's online help.

## Use Control Maps

### About Control Maps

A Control Map is an object that describes how MIDI settings are assigned to the various controllers.
By using Control Maps, you can easily switch to the settings you need for a particular environment, making it easier for you to use a variety of different software programs.

The A-PRO provides 19 control maps, and you can control a variety of software simply by switching between them.

For details, refer to the separate Control Map Guide.

## Create Your Own Settings

The A-PRO provides 44 controllers; you can freely assign a MIDI message to each controller.

For details, refer to "Using A-PRO Editor" (p. 22).

# Using A-PRO Editor

A-PRO Editor is software that lets you create control maps (p. 21) for the A-PRO series on your computer, and make settings for the keyboard. The graphical screen makes it easy to edit the values (settings).



The A-PRO has a total of 44 controllers: [B1]–[B4], [R1]–[R9], [L1]–[L9], [S1]–[S9], [A1]–[A8], HOLD (P1), EXPRESSION (P2), BENDER, MODULATION, and AFTERTOUCH. You can freely assign any MIDI message to be controlled by each controller.
The 44 message assignments for these controllers are collectively called a "control map."
Simple assignments of MIDI messages can be made on the A-PRO keyboard itself without using the editor software. However, A-PRO Editor also allows you to transfer control map data in and out of the A-PRO keyboard, to edit control map data, and also to save or load control map settings as SMF format data.
→ "Assigning a MIDI Message on the A-PRO Keyboard" (p. 48)

## Installing A-PRO Editor

### Windows Users

1. **Insert the included A-PRO CD-ROM into your CD-ROM drive.**
2. **On the CD-ROM, open the [EDITOR] folder and double-click [SETUP] to start the installer.**
3. **The screen "Welcome to the InstallShield Wizard for A-PRO Editor Setup" will appear. Click [Next].**
4. **When the "Please Read" screen appears, read the contents, and if you consent, click [Yes].**
   You cannot install A-PRO Editor unless you consent to the terms.
5. **A dialog box will allow you to specify the installation location. Simply click [Next].**
6. **Verify the contents of the "Confirmation of installation" screen, and then click [Next].**
   Copying of the files will begin.
7. **When copying is completed, click [Finish].**
   This completes installation of the A-PRO Editor.

### Mac OS X Users

1. **Insert the included A-PRO CD-ROM into your CD-ROM drive.**
2. **From the CD-ROM's [Editor] folder, drag the [A-PRO Editor] folder and drop it into your Mac's [Applications] folder to copy it.**

This completes installation of the A-PRO Editor.

# MIDI Port Assignments

In order to transfer control maps between A-PRO Editor and the A-PRO keyboard, you'll need to specify the MIDI ports used by A-PRO Editor.

* If the A-PRO is connected via USB, the ports will be as follows. If you're using a MIDI connection, specify the MIDI input port and MIDI output port of the MIDI device to which the A-PRO is connected, instead of "A-PRO 2" and "A-PRO."

## What is a MIDI port?

A MIDI port is a port used to transfer MIDI messages between your computer and the A-PRO.

### Input ports

| Input port | Explanation |
|---|---|
| A-PRO MIDI IN | Receives data that's input via the A-PRO's MIDI IN connector. |
| A-PRO 1 | Receives data from A-PRO sliders, knobs, or buttons that are assigned to "PORT 1." |
| A-PRO 2 | Receives data from A-PRO sliders, knobs, or buttons that are assigned to "PORT 2."<br>When receiving bulk data from the A-PRO, choose [A-PRO 2] as the input port. |

The output destination of the MIDI messages transmitted when you operate the A-PRO's sliders, knobs, and buttons can be specified separately for each controller. For details, refer to "Two MIDI Ports" (p. 71).

### Output ports

| Output port | Explanation |
|---|---|
| A-PRO MIDI OUT | Transmits MIDI messages to MIDI devices connected to the A-PRO's MIDI OUT connector. |
| A-PRO | Transmits MIDI messages to the A-PRO.<br>When transmitting bulk data from the A-PRO, choose [A-PRO] as the output port. |

In order to transmit a control map created using A-PRO Editor to the A-PRO, you must choose [A-PRO] as the output port.

## Windows Users

1. **Use a USB cable to connect the A-PRO to your computer, then switch on the A-PRO's power.**
2. **Click the Windows [Start], then successively click [All Programs], [A-PRO Editor], and [A-PRO Editor] to start up A-PRO Editor.**
3. **In A-PRO Editor, click the [Options] menu item [MIDI Devices].**
4. **In the MIDI Devices dialog box, specify the MIDI devices as shown in the illustration.**



5. **Click [OK] to close the dialog box.**

## Mac OS X Users

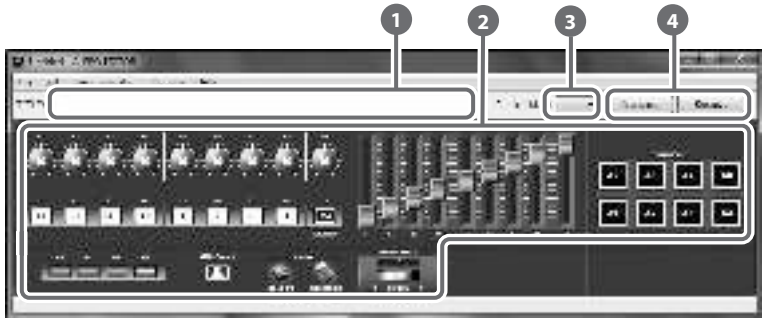
1. **Use a USB cable to connect the A-PRO to your computer, then switch on the A-PRO's power.**
2. **Double-click [A-PRO Editor] (/Applications/A-PRO Editor/) to start up A-PRO Editor.**
3. **In A-PRO Editor, click the [Options] menu command [MIDI Devices].**
4. **In the MIDI Devices dialog box, specify the MIDI devices as follows.**

| | |
|---|---|
| **Input port** | A-PRO 2 |
| **Output port** | A-PRO |

5. **Click [OK] to close the dialog box.**

# Items in the Windows

## Main Window




### 1 Title

You can assign a name to the control map you're editing. Only single-byte alphanumeric characters can be entered for the control map name. The name you enter here is shown as the title of the HTML file that's exported by the [File] menu command [Export Assign List].

### 2 Controllers

Here you can click to select the controller to which you want to assign a MIDI message. When you move the mouse over a controller (a clickable area), the mouse cursor will change to a . Now you can click the controller to open the Assign Message window.

### 3 [Control Map] dropdown list

Here's where you select the number of the control map that you want to edit.
For details, refer to "Receiving a Control Map from the A-PRO" (p. 31), and "Transmitting a Control Map to the A-PRO" (p. 31).

### 4 [Transmit], [Receive]

Click [Transmit] to save a control map to the A-PRO, overwriting existing content. Click [Receive] to load a control map from the A-PRO.

## Message Assignment Window




* The items in the window will differ depending on the controller and on the type of message being assigned.

### 1 Controller name

This shows the name of the controller you're editing.

### 2 Assign Message selection list

Here you can select the type of MIDI message to be assigned to the controller.

| Menu | Explanation |
|---|---|
| NO ASSIGN | No MIDI message will be assigned |
| Channel Message | Channel messages (CC, note, etc.) |
| System Realtime/F6 | System realtime message or F6 (Tune Request) |
| System Ex. | System exclusive message of up to 24 bytes |
| Free Message | Any MIDI message of up to 24 bytes (multiple messages are allowed) |
| Tempo | Tempo control |

### 3 Message assignment area

Here you can specify the value of various parameters for the MIDI message you selected in the Assign Message selection list 2.
For details on the parameters of each MIDI message, refer to "Message Parameters" (p. 33)

### 4 Output Port

This specifies the USB port from which the MIDI messages will be transmitted to a USB-connected computer.

| Port | Explanation |
|---|---|
| Port 1 | MIDI messages will be transmitted to "A-PRO 1." |
| Port 2 | MIDI messages will be transmitted to "A-PRO 2." |
| Port 1+2 | MIDI messages will be transmitted to both "A-PRO 1" and "A-PRO 2." |

### 5 Button Mode

If the controller is a button, this specifies the button mode.

| Mode | Explanation |
|---|---|
| Unlatch | Turns on when you press the button; turns off when you release it. |
| Latch | Alternately turns on/off each time you press the button. |
| Increase | Each time you press the button, the value will be incremented by one (or decremented by one if the maximum value is below the minimum value). When the value reaches the maximum value (minimum value), it will jump back to the minimum value (maximum value).<br>* This cannot be selected if the message type is Note. |

### 6 Aftertouch mode (AFT Mode)

If the controller you're editing is [A1]–[A8], you can specify the aftertouch setting.

| Mode | Explanation |
|---|---|
| OFF | No aftertouch |
| Channel Pressure | Transmitted as channel pressure messages |
| Polyphonic Key Pressure | Transmitted as polyphonic key pressure messages. |

### 7 Name

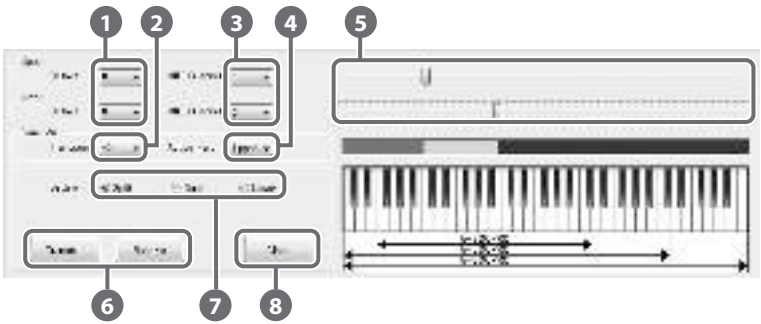
You can enter a name to describe the function you've assigned to the controller; this name is shown in the A-PRO's display. Up to sixteen single-byte alphanumeric characters can be entered. The name you enter here is shown in the "PARAMETER" field of the HTML file exported by the [File] menu command [Export Assign List].

### 8 Virtual Center Click

If the controller you're editing is [R1]–[R9] or [S1]–[S9], you can make virtual center click settings (p. 55).
This broadens the range in which the center value is transmitted.

| Mode | Explanation |
|---|---|
| OFF | No insensitive range in the center |
| ON | Insensitive range in the center |

## Keyboard Set Window




### What is a Keyboard Set?

Keyboard-related settings such as the MIDI channel and split point for the UPPER and LOWER parts, and the octave settings, are collectively called a "keyboard set."
You can use A-PRO Editor to make keyboard set settings and store them to the [SPLIT]/[DUAL]/[LOWER] buttons.

* Keyboard sets cannot be stored on your computer.

### 1 Octave shift

Specifies the octave of the UPPER and LOWER parts.

### 2 Transpose

Specifies the transposition of the keyboard.

### 3 MIDI Channel

Specifies the MIDI channel of the UPPER and LOWER parts.

### 4 Active Part

Specifies the part(s) to which the [VALUE] knob, BENDER, MODULATION, AFTERTOUCH, HOLD, or EXPRESSION will apply.

### 5 Keyboard range settings

Specify the lower limit of the UPPER part and the upper limit of the LOWER part.

### 6 [Transmit], [Receive]

Click [Transmit] if you want to save a keyboard set on the A-PRO. Click [Receive] if you want to load a keyboard set from the A-PRO.

### 7 Setting buttons

Specify the button ([SPLIT]/[DUAL]/[LOWER]) for which you are assigning a keyboard set.

### 8 [Close]

Closes the Keyboard Set window.

# Menus

## File Menu

| Menu | Explanation |
|---|---|
| New | Creates a new control map.<br>The new control map will have no MIDI messages assigned to any of the controllers. |
| Open | Loads a control map that was saved in SMF format. For details, refer to "Loading a Control Map that was Saved on Your Computer" (p. 32). |
| Save | Saves the control map currently being edited by overwriting the SMF. |
| Save As | Saves the control map currently being edited in SMF format with the name you specify. For details, refer to "Loading a Control Map that was Saved on Your Computer" (p. 32). |
| Export Assign List | Exports an HTML-format list of the messages assigned to each controller of the control map currently being edited.<br>* The HTML file created by this command cannot be loaded by means of the [File] menu command [Open]. |
| View Assign list | Displays the assigned MIDI messages in your Web browser. |
| Recently Used Files | Shows the names of the recently used files. |

## Edit Menu

| Menu | Explanation |
|---|---|
| Copy | 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 MIDI assignment of the selected controller to No Assign. |

## Options Menu

| Menu | Explanation |
|---|---|
| Show Keyboard Panel | Changes the settings of the [LOWER], [DUAL], or [SPLIT] keyboard set. |
| MIDI Devices | Specifies the MIDI ports used to communicate with the A-PRO keyboard.<br>For details, refer to "MIDI Port Assignments" (p. 23). |
| Show Messages | Shows the MIDI message settings assigned to each controller in the main window of A-PRO Editor. For details, refer to "Checking the Assigned MIDI Messages" (p. 30). |

## Help Menu

| Menu | Explanation |
|---|---|
| About | Displays the version of A-PRO Editor. |

# Keyboard Shortcuts

You can use the following keyboard shortcuts with A-PRO Editor.

| Command | Key (Windows) | Key (Mac OS X) |
|---|---|---|
| [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 |

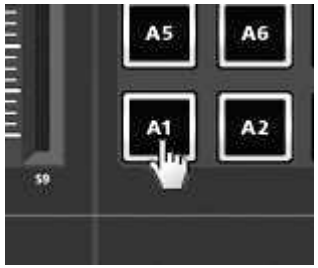
In text boxes such as the Title field of the main window, keyboard shortcuts for the [Edit] menu commands [Copy] and [Paste] can be used on the text.

# Using Control Maps

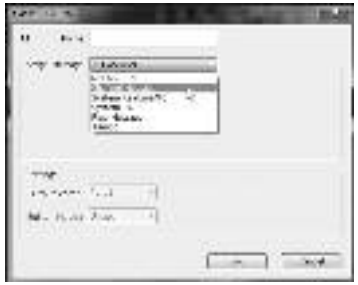
## Assigning MIDI Messages

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.**




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



3 **According to the type of MIDI message you selected, use the fields of the message assignment area to specify the parameters.**
For details on the parameters, refer to "Message Parameters" (p. 33).



4 **In the Output Port field, specify the MIDI output port.**

5 **If desired, enter a name in the Name field.**

6 **Click [OK].**



## Checking the Assigned MIDI Messages

You can use either of the following two methods to check the MIDI messages that are assigned.

### Viewing an assignment list

If you want to use your Web browser to view an assignment list of the current control map, choose the [File] menu command [View Assign List].
This is a convenient way to view all of the control map's settings.
If you want to save the assignment list as an HTML file, choose the [File] menu command [Export Assign List...]. When the "Save As" dialog box appears, specify the location, assign a file name, and then click [Save].

### Viewing the assigned messages

If you want to see the current settings for each controller in the main window, choose the [Options] menu command [Show Messages], and select the [Show Assigned Messages] check box.
The current assignments will be shown in simplified form as follows.



| Indication | 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 | Tempo |

The display color indicates the output port setting.

| Display color | Output Port |
|---|---|
| Yellow | Port 1 |
| Light blue | Port 2 |
| Light green | Port 1 + 2 |
| Pink | NO ASSIGN |

## Receiving a Control Map from the A-PRO

If you want to edit the control map settings of the A-PRO keyboard in A-PRO Editor, use the following procedure to receive control map data from the A-PRO keyboard so that it can be edited.

**1** **From the numbers displayed in the [Control Map] dropdown list, select the number of the control map that you want to edit.**

**2** **Click [Receive].**



**3** **In the confirmation dialog box, click [Continue].**



**4** **A reception progress dialog box will appear.**

When the dialog box disappears, reception has been completed.



## Transmitting a Control Map to the A-PRO

If you want to use the control map settings created in A-PRO Editor on the A-PRO keyboard, use the following procedure to transmit the edited control map to the A-PRO keyboard.

**1** **In the [Control Map] dropdown list, specify the number at which you want to save your control map.**

**2** **Click [Transmit].**



**3** **In the confirmation dialog box, click [Continue].**



**4** **A transmission progress dialog box will appear.**

When the dialog box disappears, transmission has been completed.



## Saving a Control Map on Your Computer

Control map settings you've edited in A-PRO Editor can not only be transferred directly between the A-PRO keyboard and your computer, they can also be saved on your computer as an SMF format file.
To save an SMF file, proceed as follows.

**1 Choose the [File] menu command [Save As].**

If you want to overwrite the most recently opened file, choose the [File] menu command [Save].

**2 Enter a file name and click [Save].**

## Loading a Control Map that was Saved on Your Computer

Control map data that was saved on your computer in SMF format can be loaded into A-PRO Editor.
To load an SMF file, proceed as follows.

**1 Choose the [File] menu command [Open].**

**2 Specify the SMF file that you want to load, and click [Open].**

* An SMF file that does not contain A-PRO control map data cannot be opened. The SMF must contain settings for all controllers.
* The contents of the Name field can be loaded only from an SMF that was saved by A-PRO Editor.
* It is not possible to load control maps from the PCR-300/500/800 or memory sets from an earlier PCR series unit.

# Message Parameters

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.
For details on the Settings field, refer to "Message Assignment Window" (p. 24).

## NO ASSIGN

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



There are no parameters to set.

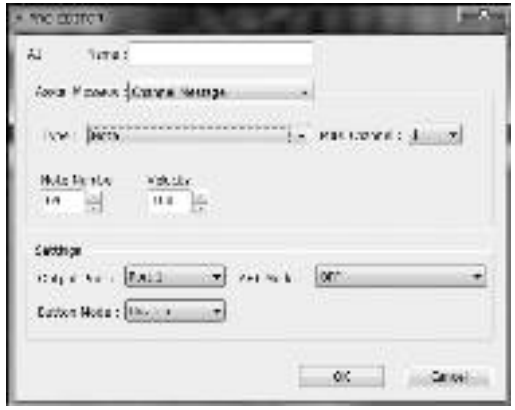
* If HOLD, EXPRESSION, BENDER, MODULATION, or AFTERTOUCH settings are set to NO ASSIGN, the corresponding controller will control its own original function. In this case, the current channel will be used as the MIDI transmit channel.

## 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

Assign a note message.

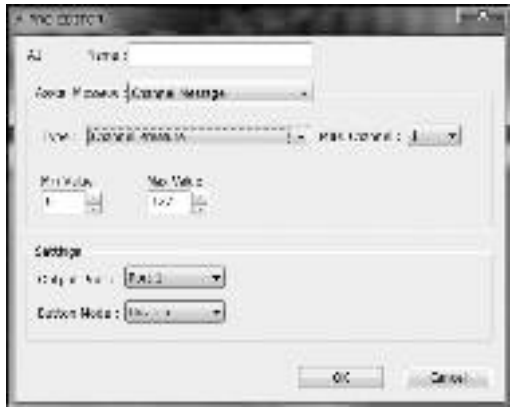


Specify the following parameters.

| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| Note Number | Note number |
| Velocity | Velocity |

### Channel Pressure

Assign a channel pressure message.



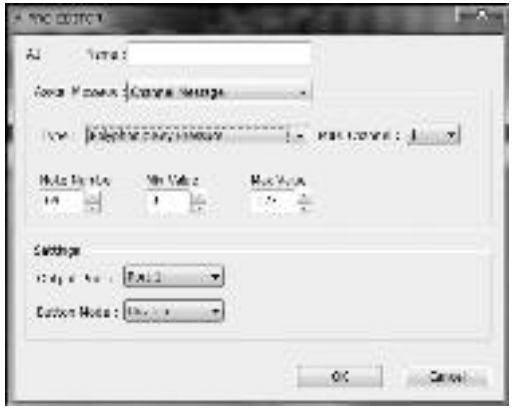
Specify the following parameters.

| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| Min Value | Lower value of channel pressure |
| Max Value | Upper value of channel pressure |

## Channel Message

### Polyphonic Key Pressure

Assign a polyphonic key pressure message.

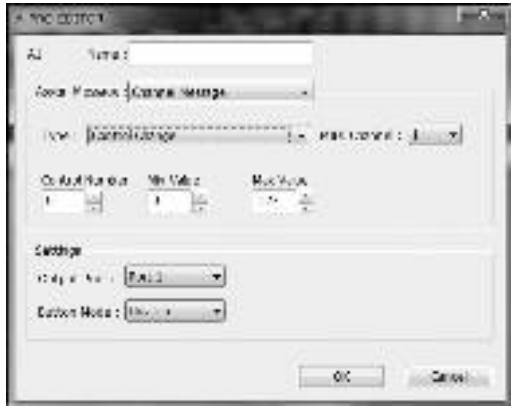


Specify the following parameters.

| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| Note Number | Note number |
| Min Value | Lower value of key pressure |
| Max Value | Upper value of key pressure |

### Control Change

Assign a control change message.

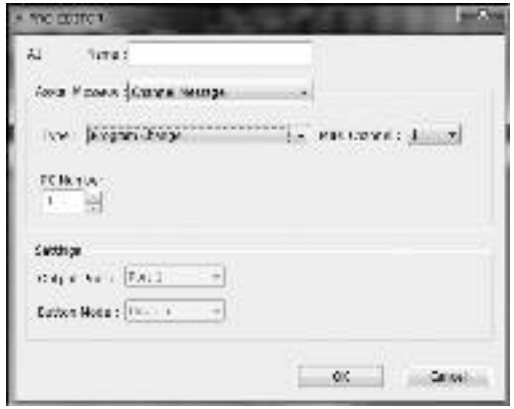


Specify the following parameters.

| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| Control Number | Control number |
| Min Value | Lower limit of the control value |
| Max Value | Upper limit of the control value |

### Program Change

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



Specify the following parameters.

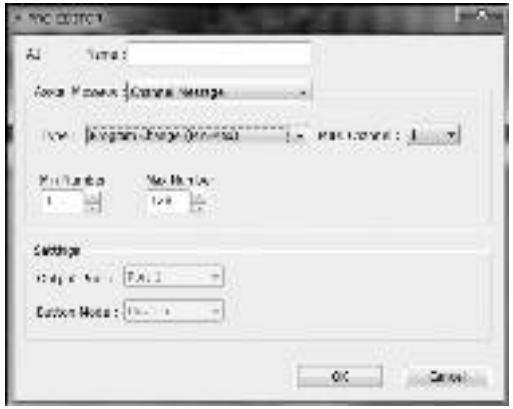
| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| PC Number | Program number |

* The range of the program number is 1–128.

## Channel Message

### Program Change (Min-Max)

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



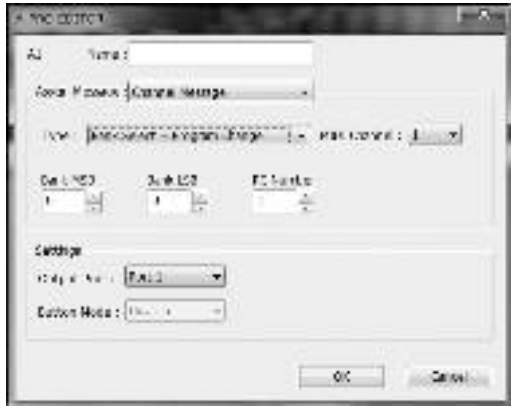
Specify the following parameters.

| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| Min Number | Lower limit of the program number. |
| Max Number | Upper limit of the program number. |

* The range of the program number is 1–128.

### Bank Select + Program Change

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



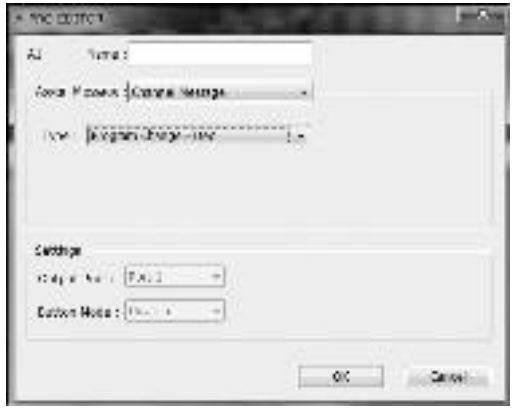
Specify the following parameters.

| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| Bank MSB | Bank number MSB |
| Bank LSB | Bank number LSB |
| PC Number | Program number |

* The range of the program number is 1–128.

### Program Change – Dec

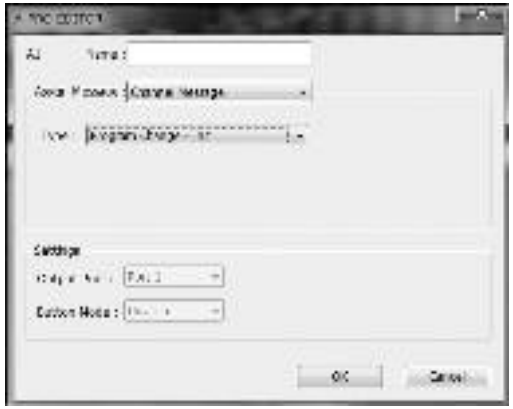
Assign the program change decrement function (PC DEC).
This will transmit a program change number that is one less than the program change number most recently transmitted in the A-PRO's program change mode.



## Channel Message

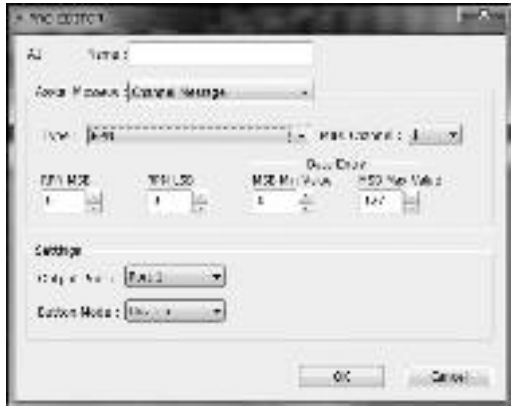
### Program Change – Inc

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 A-PRO's program change mode.



### RPN

Assign a registered parameter number.



Specify the following parameters.

| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| RPN MSB | RPN parameter number MSB |
| RPN LSB | RPN parameter number LSB |
| MSB Min Value | Lower limit of data entry MSB |
| MSB Max Value | Upper limit of data entry MSB |

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

### NRPN

Assign a non-registered parameter number.



Specify the following parameters.

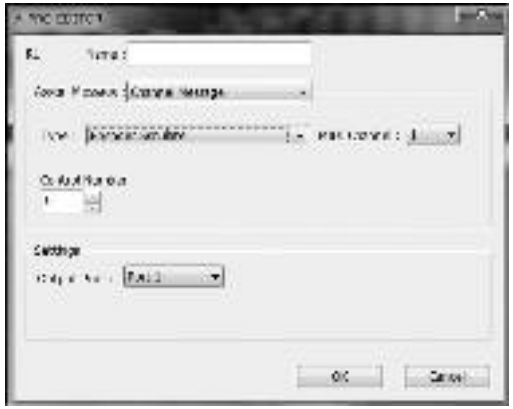
| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| NRPN MSB | NRPN parameter number MSB |
| NRPN LSB | NRPN parameter number LSB |
| MSB Min Value | Lower limit of data entry MSB |
| MSB Max Value | Upper limit of data entry MSB |

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

## Channel Message

### Encoder Simulate

Assign a function that simulates a rotary encoder.



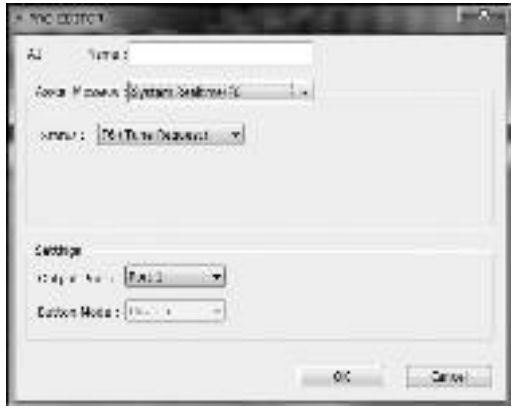
Specify the following parameters.

| Item | Content |
|---|---|
| MIDI Channel | MIDI channel |
| Control Number | Controller number |

* This can be assigned to a button, but will not do anything.

## System Realtime/F6

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

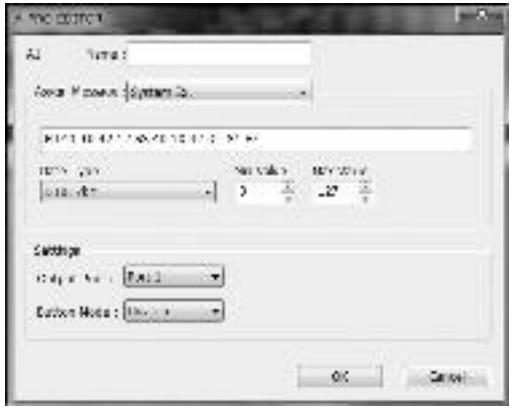


For System Realtime/F6, use the Status field to choose the message you want to assign.

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

## System Ex.

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



Specify the following parameters.

| Item | Content |
|---|---|
| Message entry field | 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.<br><br>The following limitations apply to the input.<br>* The message must begin with "F0" and end with "F7."<br>* You cannot include more than one exclusive message.<br>* You cannot include messages other than an exclusive message.<br><br>You can enter variable data or a checksum using the special characters described in "Table 1: Special characters used in the message entry field" (p. 38). 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" (p. 38). |
| 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

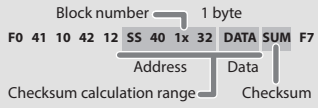
| Special character | Explanation | Details |
|---|---|---|
| DT | Data insertion location | The data specified by Data Type will be inserted. |
| SS | Beginning of checksum calculation | If you use the automatic checksum calculation function, use this special character to specify the point at which checksum calculation is to begin. |
| S1/S2 | 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.<br>S1: The most common type, used by Roland and other manufacturers.<br>S2: Choose this if a method other than S1 is used. |
| ?n | 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 A-PRO will be inserted in the channel section. |
| ?x | Block number (? is any value between 0–7) | If you want a GS block 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 A-PRO will converted into the block number and inserted. |

### 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 |
|---|---|---|
| DT0: 7-bit | 1 byte | Specifies a range from 0 to 127 (0–127) |
| DT1: 4-bit/4-bit | 2 bytes | Specifies the range of the first byte (0–15)<br>* 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)<br>* The LSB is fixed at 0–127 |
| DT3: 7-bit/7-bit (LSB/MSB) | 2 bytes | Specifies the range of the MSB (0–127)<br>* 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

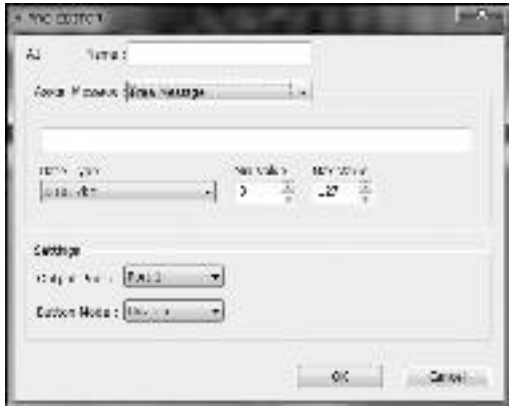
1. **Enter the following in the message entry field.**
   **F0 41 10 42 12 SS 40 1X 32 DT S1 F7**
2. **In the Data Type field, choose "DT0." Specify the Min Value as "0" and the Max Value as "127."**



## Free Message

Assign a MIDI message.

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

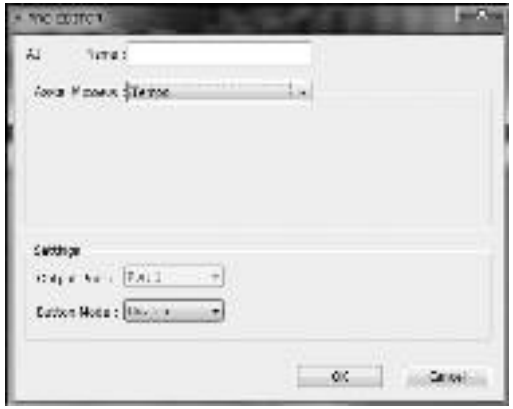


Specify the following parameters.

| Item | Content |
|---|---|
| Message entry field | 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.<br><br>The following limitations apply to the input.<br>* You can't use a checksum.<br>* You can't use a special character as the first byte.<br><br>You can also enter variable data using the special characters described in "Table 1: Special characters used in the message entry field" (p. 38). 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" (p. 38). |
| 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.

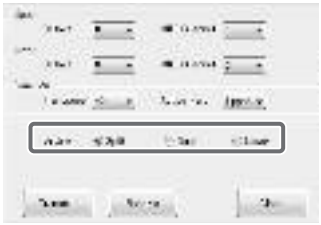
* This will not function if assigned to a button.

# Using Keyboard Sets

## Receiving a Keyboard Set

If you want to edit a keyboard set, use the following procedure to load the keyboard map data from the A-PRO, so that it can be edited.

**1 Use the [SPLIT]/[DUAL]/[LOWER] buttons to select the keyboard set that you want to edit.**



**2 Click [Receive].**



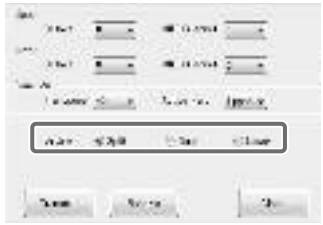
**3 In the confirmation box, click [Continue].**

**4 A reception progress dialog box will appear.**
When the dialog box disappears, reception is complete.

## Transmitting a Keyboard Set

If you want to use a keyboard set created in A-PRO Editor on the A-PRO keyboard, proceed as follows to transmit it.

**1 Use the [SPLIT]/[DUAL]/[LOWER] buttons to select the keyboard set that you want to edit.**



**2 Click [Transmit].**



**3 In the confirmation box, click [Continue].**

**4 A transmission progress dialog box will appear.**
When the dialog box disappears, transmission is complete.

# Performing (Play Mode)

Use Play mode when you want to play the A-PRO's keyboard or use its controllers to control your software or sound modules.
Broadly speaking, the A-PRO has the following two modes.

| Mode | Explanation | To select |
|---|---|---|
| Play mode | This is the mode in which you play the keyboard and operate the controllers.<br>MIDI messages will be transmitted by each controller. | 1. Turn on the power.<br>2. Exit EDIT mode. |
| Edit mode<br>(p. 48, p. 57) | This is the mode in which you assign MIDI messages to each controller, or make system settings. | 1. From PLAY mode, press the [ACT] button and [ ◄ ] button simultaneously. |

When you turn on the power, the A-PRO will start up in Play mode.
To return from Edit mode to Play mode, you can either press the [ACT] button and [ ◄ ] button simultaneously, or hold down the [SHIFT] button and press the [SPLIT] button ([BS] button). In this case, the settings you were in the process of making will be discarded.
When you play the keyboard in Play mode, note messages will be transmitted, causing your sound module to produce sound.

## Playing the Keyboard

**1 Specify the A-PRO's current channel (MIDI transmit channel).**

Set the A-PRO's MIDI transmit channel to match the MIDI receive channel of your sound module.
Setting the MIDI transmit channel is explained in "Specifying the Current Channel (MIDI Transmit Channel)" (p. 42).

**2 Use the A-PRO to select a sound on your sound module.**

Selecting a sound on your sound module is explained in "Selecting Sounds (PROGRAM CHANGE/BANK)" (p. 43).

**3 Play the A-PRO's keyboard.**

When you've finished making settings, play the keyboard in Play mode; MIDI messages will be transmitted to your application.

* Since the A-PRO keyboard does not contain a sound generator, it cannot produce sound on its own.

## Convenient Performance Functions

Here are some of the functions you will find convenient when you're performing.

| Function | Explanation |
|---|---|
| Changing the pitch of a sounding note (Pitch Bend) | Moving the bender lever to the left or right will transmit pitch bend messages, causing the pitch to change slightly.<br>* 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.<br>* The way in which the sound changes will depend on the settings of your sound module. |
| Switching the octave (Octave Shift) | You can use the OCTAVE [–] [+] buttons to raise or lower the keyboard's pitch range in steps of an octave (Octave Shift). Use this when you want to shift the keyboard's pitch range upward or downward.<br>Pressing the OCTAVE [–] button once will lower the pitch by one octave. Pressing it again will lower the pitch by another octave. You can adjust this setting in a range of -4–5 octaves. Depending on the current octave shift setting, the OCTAVE [–] or OCTAVE [+] button will light. By pressing the OCTAVE [–] and OCTAVE [+] buttons simultaneously, you can reset the octave shift value to 0, restoring the keyboard to its original pitch. |
| Changing the pitch (Transpose) | If you press the [TRANSPOSE] button to turn it on, the pitch will be shifted by the number of semitone steps you specified using the EDIT mode TRANSPOSE setting (p. 62). |

MEMO

Moving the bender 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.



Pitch bend effect



Modulation effect

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

* If you assign a MIDI message to the bender lever, the pitch bend effect and modulation effect will be disabled.

# Specifying the Current Channel (MIDI Transmit Channel)

Here's how to specify the current channel on which performance data from the keyboard will be transmitted.

### What is the current channel?

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

* Each controller can have its own separate transmit channel. However if "OMNI" is ON, messages will be transmitted on the current channel specified for OMNI.

## MIDI Channel

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

**1 Use the [ ◄ ] or [ ► ] button to move the cursor in the display to "MIDI CH."**

The display will indicate the current channel.

**2 Use the [VALUE] knob to specify the desired channel number.**

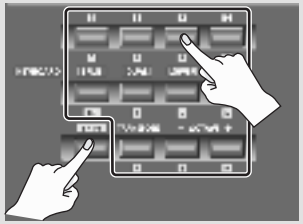
You have now specified the current channel.

Here's another way to change the current channel.

1. **Hold down the [SHIFT] button and use the following buttons to enter a numerical value.**

   Controllers [B1]–[B4], [SPLIT]/[DUAL]/[LOWER]/[UPPER] buttons, OCTAVE [–] [+] buttons

2. **Press the [ENTER] button.**
   With this, the numerical value you entered is confirmed.



### What is OMNI?

If you turn OMNI on, all controllers will transmit on the current channel regardless of their assigned MIDI transmit channel. If you want the MIDI transmit channel of the controllers to also change when you switch the current channel, turn OMNI on as follows.

1. **Press the [ACT] button and [ ◄ ] button simultaneously to enter Edit mode.**
   The display will indicate "LCD CONTRAST."
2. **Turn the [VALUE] knob until "SYSTEM SETTING" appears in the display.**
   Press the [ENTER] button.
3. **Turn the [VALUE] knob until "OMNI" appears in the display.**
   Press the [ENTER] button.
4. **The display will show the current setting.**




| Item | Explanation |
|---|---|
| OMNI OFF | Messages will be transmitted using the channel and port assigned for each controller. |
| OMNI ON | Messages will be transmitted using the current channel and the KEYBOARD PORT, regardless of the channel and port assigned for each controller. |

5. **Use the [VALUE] knob to select "ON" or "OFF."**
6. **Press the [ENTER] button.**
   You'll be returned to Play mode.

# Selecting Sounds (PROGRAM CHANGE/BANK)

You can transmit program changes to select sounds on your sound module from the A-PRO. If you want to select a sound from a different bank, first use bank mode to transmit a bank select message that will 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

By using program change messages in conjunction with bank select messages, MIDI allows you to select among more than 128 sounds.

To switch to a sound that has the same bank number as the currently selected sound, simply transmit a program change message.

To switch to a sound that has a different bank number, you'll need to transmit a bank number and a program number. The bank number is transmitted using two MIDI messages: control change 0 (MSB) and control change 32 (LSB). To actually switch sounds, transmit the bank number (MSB), bank number (LSB), and finally the program number, in that order.

## PROGRAM CHANGE

Here's how to transmit a program change message on the current channel (p. 42).

**1 Use the [ ◄ ] [ ► ] buttons to move the cursor to "PGM CHANGE" in the display.**

The display will show the program change number that was transmitted most recently.

**2 Use the [VALUE] knob to specify the desired program change number.**

The program change message will be transmitted.

## Bank Select (BANK)

If you want to use the [VALUE] knob to switch the bank number, set the System setting "FUNCTION" to "BANK LSB" or "BANK MSB."

* For details, refer to "[VALUE] knob Settings" (p. 68).

Here's how to transmit bank select (MSB, LSB) messages.

**1 Use the [ ◄ ] [ ► ] buttons to move the cursor to "USER ASSIGN" in the display.**

The display will show the bank select number that was transmitted most recently.

**2 Use the [VALUE] knob to specify the desired bank select number.**

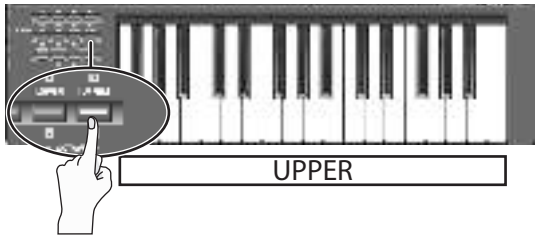
Bank select (MSB, LSB) messages will be transmitted.

# Selecting the UPPER and LOWER Sounds

The A-PRO's keyboard provides two parts, UPPER and LOWER, and you can assign a different sound to each.

## Selecting the UPPER Sound

The entire keyboard will play the UPPER sound.




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

**2 Use the [ ◄ ] [ ► ] buttons to move the cursor to "PGM CHANGE" in the display.**

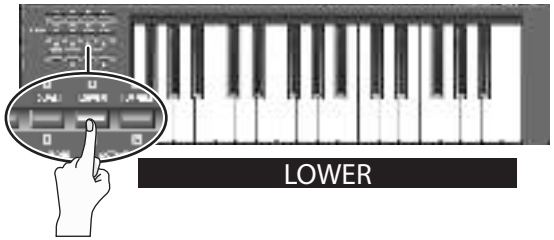
**3 Turn the [VALUE] knob.**

The UPPER sound will change. When you play the keyboard, you'll hear the sound specified for UPPER.

* The [UPPER] button will be lit when you turn on the power.

## Selecting the LOWER Sound

The entire keyboard will play the LOWER sound.




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

**2 Use the [ ◄ ] [ ► ] buttons to move the cursor to "PGM CHANGE" in the display.**

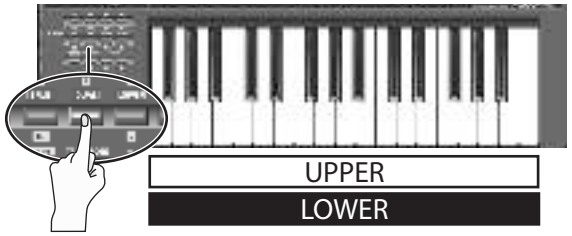
**3 Turn the [VALUE] knob.**

The LOWER sound will change. When you play the keyboard, you'll hear the sound specified for LOWER.

* The assignment of the [LOWER] button can be changed in A-PRO Editor's keyboard set window (p. 26).

## Layering Two Sounds (DUAL)

The DUAL button lets you simultaneously play both the LOWER and UPPER sounds from the entire keyboard.

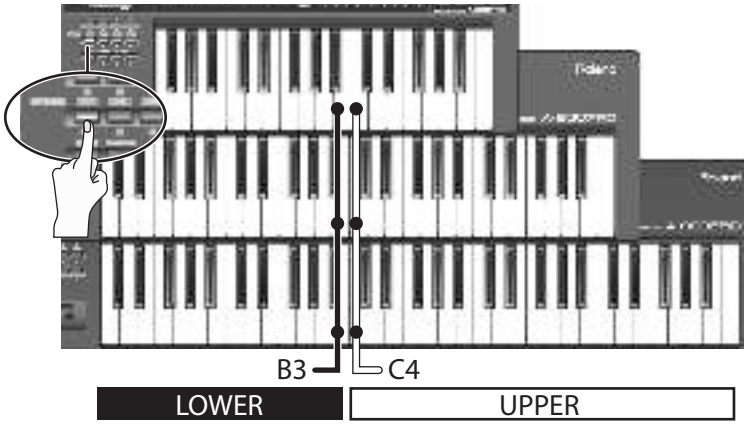



**1 Press the [DUAL] button so it's lit.**

* If the cursor is at "PGM CHANGE" in the display, turning the [VALUE] knob will change the UPPER sound.
* To change the LOWER sound, set ACTIVE PART (p. 62) to LOWER. Then move the cursor to "PGM CHANGE" and turn the [VALUE] knob.
* The assignment of the [DUAL] button can be changed in A-PRO Editor's keyboard set window (p. 26).

## Playing Two Sounds Separately (SPLIT)

The SPLIT button lets you play the UPPER sound in the range of C4 and above, while playing the LOWER sound in the range of B3 and below.




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

* If the cursor is at "PGM CHANGE" in the display, turning the [VALUE] knob will change the UPPER sound.
* To change the LOWER sound, set Active Part (p. 62) to LOWER. Then move the cursor to "PGM CHANGE" and turn the [VALUE] knob.
* The assignment of the [SPLIT] button can be changed in A-PRO Editor's keyboard set window (p. 26).

# Adjusting the Playing Dynamics (VELOCITY)

Normally, note messages are transmitted with a velocity value that corresponds to the force with which you play the keyboard.
If desired, the A-PRO can also transmit notes with a fixed velocity value, regardless of your playing dynamics.

MEMO

This is convenient when you want to record notes into your DAW software at a fixed velocity.
You can also adjust the sensitivity of the keyboard and change the velocity curve
(the way in which velocity responds to your dynamics).

## Specifying a Fixed Velocity (KEY VELOCITY)

The system "FUNCTION" setting "KEY VELOCITY" lets you specify a fixed velocity.

* You can use the following method, or refer to "[VALUE] knob Settings" (p. 68).

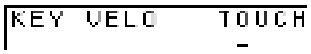
If "KEY VELOCITY" is assigned to the [VALUE] knob, you can also use the following procedure to specify the velocity.

**1 Use the [ ◄ ] [ ► ] buttons to move the cursor to "USER ASSIGN" in the display.**

The display will indicate the velocity value that was transmitted most recently.

**2 Use the [VALUE] knob to specify the desired velocity value (TOUCH, 1–127).**

If the display indicates "TOUCH," the transmitted velocity value will correspond to the force with which you play the keyboard.




## Changing the Keyboard Touch (VELOCITY CURVE)

Refer to the system setting "KEYBOARD VELOCITY CURVE" (p. 60).

### [VALUE] knob assignment

Here's how to assign "KEY VELOCITY" as the "FUNCTION."

1. **Press the [ACT] button and [ ◄ ] button simultaneously to enter Edit mode.**
2. **Turn the [VALUE] knob until "FUNCTION" appears in the display.**
   Press the [ENTER] button.
3. **Use the [VALUE] knob to select "KEY VELOCITY," and then press the [ENTER] button.**
   This completes the settings and takes you back to Play mode.
   For more about FUNCTION, refer to "FUNCTION" (p. 68).



# Muting the Controller Values (PRM MUTE)

You can mute all controllers so that MIDI messages will not be transmitted when you move a controller.

MEMO

This is useful in situations such as when a parameter value is far away from the position of the controller; you can use the [PRM MUTE] button to mute the controller, and then move the controller near the parameter value to match the knob position with the parameter value before you perform.

## PRM MUTE

**1 Press the [ ◄ ] [ ► ] buttons simultaneously.**

The "PRM MUTE" cursor will light in the display.

**2 Operate a controller.**

MIDI messages will not be transmitted even when you operate a controller.

**3 Once again, press the [ ◄ ] [ ► ] buttons simultaneously.**

The "PRM MUTE" cursor in the display will go dark.
Now MIDI messages will once again be transmitted when you move a controller.

# Assigning MIDI Messages (EDIT Mode)

The A-PRO allows you to assign MIDI messages to each of its 44 controllers: [B1]–[B4], [R1]–[R9], [L1]–[L9], [S1]–[S9], [A1]–[A8], HOLD (P1), EXPRESSION (P2), BENDER, MODULATION, and AFTERTOUCH. Edit mode is used to make MIDI message assignments. This section of the manual explains how to assign MIDI messages to the controllers using only the A-PRO keyboard. You can also use A-PRO Editor to make assignments. For details, refer to "Using A-PRO Editor" (p. 22).

## Assigning a MIDI Message on the A-PRO Keyboard

You can assign one of the following functions to each controller.

| Function | See page |
|---|---|
| **NOTE** | p. 49 |
| **AFTERTOUCH** | p. 50 |
| **CONTROL CHANGE** | p. 51 |
| **PROGRAM CHANGE** | p. 52 |
| **RPN** | p. 53 |
| **NRPN** | p. 53 |
| **TEMPO** | p. 54 |
| **NO ASSIGN** | p. 56 |

- If you want to assign a MIDI message to AFTERTOUCH, hold down the [ACT] button and [ ◄ ] button simultaneously, and then apply strong pressure to the keyboard.
- When you edit the assignment of a controller, the assignment is saved automatically.
- You can copy an assigned message to another controller, or cancel an assignment. For details, refer to "Copying an Assignment" (p. 56) or "Clearing an Assignment (NO ASSIGN)" (p. 56).

* If you want to assign a system exclusive, a 1-byte system message (system realtime messages, tune request), or any desired message of up to 24 bytes, you'll need to use A-PRO Editor.

## Note Assignments

Here's how to assign a note message to a controller. In addition to their use in performance, note messages can also be used to control DAW software.

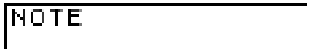
| MIDI transmit channel | Note number | Velocity | Port | Button mode | Aftertouch |
|---|---|---|---|---|---|
| 1–16 | 0–127 (00–7FH) | 100 (64H) (fixed) | PORT1 (fixed) | UNLATCH, LATCH | OFF (fixed) |

**1 Press the [ACT] button and [ ◄ ] button simultaneously.**

**2 Slightly move the controller to which you want to assign a note message.**
If the controller is a button, press it.
The number of the selected controller will blink in the display.

**3 Verify that the display, and press the [ENTER] button.**

**4 Turn the [VALUE] knob until "NOTE" appears in the display.**




**5 Press the [ENTER] button.**
The display will indicate the currently specified MIDI transmit channel.




**6 Use the [VALUE] knob to specify the desired MIDI transmit channel.**

**7 Press the [ENTER] button.**
The display will indicate the currently specified note number.




**8 Use the [VALUE] knob to select the desired note number.**

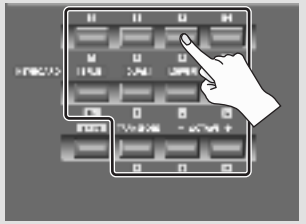
**9 Press the [ENTER] button.**

**10 If the controller is [B1]–[B4], [L1]–[L9], [A1]–[A8], or HOLD (P1), specify the desired "Button mode setting" (p. 55).**

* If you assign a note message to [R1]–[R9], [S1]–[S9], or EXPRESSION (P2), setting the controller to the maximum position will transmit a note message with the specified velocity value. When you slightly lower the controller from its maximum position, a note message with a velocity value of 0 will be transmitted.
* If you assign a note message to [B1]–[B4], [L1]–[L9], or HOLD (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.
* If you assign a note message to [A1]–[A8], the velocity will change depending on the force with which you strike the pad.

You can also use the following method to change the note number.

In Edit mode, you can enter a numeric value by pressing the following buttons. Controllers [B1]–[B4], [SPLIT]/[DUAL]/[LOWER]/[UPPER] buttons, OCTAVE [–] [+] buttons



## Aftertouch Assignment

Here's how to assign an aftertouch message to a controller.
A-PRO Editor lets you assign aftertouch messages for individual notes (Polyphonic Key Pressure) as well as channel aftertouch (Channel Pressure) (p. 34).

| MIDI transmit channel | Value range | Port | Button mode |
|---|---|---|---|
| 1–16 | 0–127 (00–7FH) | PORT1 (fixed) | UNLATCH, LATCH, INCREASE |

**1 Press the [ACT] button and [ ◄ ] button simultaneously.**

**2 Slightly move the controller to which you want to assign aftertouch.**

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

**3 Verify that the display, and press the [ENTER] button.**

**4 Turn the [VALUE] knob until "AFTERTOUCH" appears in the display.**




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

The display will indicate the currently specified MIDI transmit channel.




**6 Use the [VALUE] knob to specify the desired MIDI transmit channel.**

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

**8 Specify the "Button mode setting" (p. 55) as appropriate for the controller type.**

## Control Change Assignment

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

| MIDI transmit channel | Control change number | Port | Button mode |
|---|---|---|---|
| 1–16 | 0–127 (00–7FH) | PORT1 (fixed) | UNLATCH, LATCH, INCREASE |

1 **Press the [ACT] button and [ ◄ ] button simultaneously.**

2 **Slightly move the controller to which you want to assign a control change message.**
If the controller is a button, press it.
The number of the selected controller will blink in the display.

3 **Verify that the display, and press the [ENTER] button.**

4 **Turn the [VALUE] knob until "CONTROL CHANGE" appears in the display.**




5 **Press the [ENTER] button.**
The display will indicate the currently specified MIDI transmit channel.




6 **Use the [VALUE] knob to specify the desired MIDI transmit channel.**

7 **Press the [ENTER] button.**
The display will indicate the currently specified control change number.




8 **Use the [VALUE] knob to select the desired control change number.**

9 **Press the [ENTER] button.**
The display will indicate the currently specified control change number.

10 **As appropriate for the type of controller, specify the desired "Button mode setting" (p. 55) or "Virtual center click setting" (p. 55).**

## Program Change Assignment

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

| MIDI transmit channel | BANK MSB | BANK LSB | Program number | Port |
|---|---|---|---|---|
| 1–16 | X | X | 0–127 (00–7FH) | PORT1 (fixed) |

**1 Press the [ACT] button and [ ◄ ] button simultaneously.**

**2 Slightly move the controller to which you want to assign a control change message.**

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

**3 Verify that the display, and press the [ENTER] button.**

**4 Turn the [VALUE] knob until "PROGRAM CHANGE" appears in the display.**




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

The display will indicate the currently specified MIDI transmit channel.




**6 Use the [VALUE] knob to specify the desired MIDI transmit channel.**

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

The display will indicate the currently specified program change number.




**8 Use the [VALUE] knob to select the desired program change number.**

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

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

## RPN/NRPN Assignment

Here's how to assign an RPN or NRPN to a controller.

| Data entry MSB (CC#6) range | Data entry LSB (CC#38) range | Port |
|---|---|---|
| 0–127 (00–7FH) | not transmitted | PORT1 |

**1 Press the [ACT] button and [ ◄ ] button simultaneously.**

**2 Slightly move the controller to which you want to assign a control change message.**

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

**3 Verify that the display, then press the [ENTER] button.**

**4 Turn the [VALUE] knob until "RPN" appears in the display.**




* If you want to assign an NRPN message, get "NRPN" to appear in the display. The rest of the procedure is the same as for RPN.

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

The display will indicate the currently specified MIDI transmit channel.




**6 Use the [VALUE] knob to specify the desired MIDI transmit channel.**

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

**8 Use the [VALUE] knob to select the desired RPN MSB (CC#101) or NRPN MSB (CC#99).**




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

**10 Use the [VALUE] knob to select the desired RPN LSB (CC#100) or NRPN LSB (CC#98).**

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

**12 As appropriate for the controller type, specify the desired "Button mode setting" (p. 55) or "Virtual center click setting" (p. 55).**

## Tempo Assignment

You can assign the MIDI CLOCK speed (20–250) to a controller.
In order to transmit MIDI CLOCK, the MIDI CLOCK setting must be “ON.”
→ “MIDI CLOCK ON/OFF” (p. 64)

**1 Press the [ACT] button and [ ◄ ] button simultaneously.**

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

**3 Verify that the display, and press the [ENTER] button.**

**4 Turn the [VALUE] knob until “TEMPO” appears in the display.**




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

* If the controller is a button, the tempo will be maximum (250) when on, and minimum (20) when off.

## Button mode setting

In Edit mode, when you assign a message to a button as described in "Assigning a MIDI Message on the A-PRO Keyboard" (p. 48), you can specify how the button will operate (the "button mode").
If a button is assigned as a controller, the maximum value will be transmitted when the button is turned on, and the minimum value will be transmitted when the button is turned off.

**1 Use the [VALUE] knob to select either UNLATCH, LATCH, or INCREASE.**

| Mode | Explanation |
|---|---|
| UNLATCH | Pressing the button turns the function on; releasing the button turns the function off. The button will light while held down. |
| LATCH | The function will alternately turn on/off each time you press the button. The button will light when an On message is transmitted, and will go out when an Off message is transmitted. |
| INCREASE | Each time you press the button, the value will be incremented by one (or decremented by one if the minimum value is lower than the maximum value). When the value reaches the maximum value (minimum value), it will wrap around to the minimum value (maximum value). The button will light only while held down. |

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

## Virtual center click setting

In Edit mode, when you assign a message to a knob [R1]–[R9] or a slider [S1]–[S9] as described in "Assigning a MIDI Message on the A-PRO Keyboard" (p. 48), you can turn the Virtual Center Click setting on or off.

**1 Turn the [VALUE] knob to choose On or Off.**

| Mode | Explanation |
|---|---|
| Off | The value will change smoothly between minimum and maximum values. |
| On | The value will remain at the center value (64) in the middle region of the controller. |




The A-PRO's knobs and sliders do not have a center click. However if you turn the Virtual Center Click function on, they will be given a "virtual" center click so that a broader range in the center of the controller's range of motion will produce the center value.

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

# Convenient Functions

## Copying an Assignment

By using this function, a message assigned to a controller can be copied to a different controller.

For example, if you want to assign similar messages to multiple controllers, assign the desired MIDI message to one of the controllers, and then use this function to copy that message to the assignment of the other controllers.

* Unexpected results may occur if you copy an assigned message between controllers of different types (e.g., between a button and a knob).
For example, if a note message assigned to a pad is copied to a knob, the result will not be as you expect.
If a rotary encoder simulation assigned to a knob is copied to a button, it will not operate.
When copying an assigned message, please be aware of the controller types and the content of the message.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

**2 Choose the copy-destination controller, and move it slightly.**
If it's a button, press it. The controller number will appear in the display.

**3 Make sure that the display indicates and press the [ENTER] button.**

**4 Slightly move the copy-source controller. If it's a button, press it.**
The display will indicate the copy-source and copy-destination controller numbers.




**5 Verify in the display, and press the [ENTER] button.**

## Clearing an Assignment (NO ASSIGN)

Here's how to clear the MIDI message assigned to a controller. No MIDI message will be transmitted when you move a controller whose assignment was cleared.

MEMO

If you clear the assignment for bender, modulation, aftertouch (AFTERTOUCH), HOLD (P1), or EXPRESSION (P2), the respective controller will control its own original function. In this case, it will use the current channel as its MIDI transmit channel.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

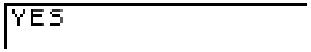
**2 Choose the controller whose assignment you want to clear, and move it slightly.**
If it's a button, press it. The controller number will appear in the display.

**3 Verify that the correct controller number is shown in the display, and press the [ENTER] button.**

**4 Turn the [VALUE] knob until "NO ASSIGN" appears in the display, then press the [ENTER] button.**




**5 The indication "YES" will blink in the display; press the [ENTER] button once again.**



# System Settings (EDIT Mode)

This section explains how to make system settings for the A-PRO.
System settings include the following items.

| Category | Item | Contents | Factory setting | See page |
|---|---|---|---|---|
| LCD | LCD CONTRAST | Adjusts the LCD contrast. | 5 | p. 59 |
| Keyboard | KEYBOARD VELOCITY CURVE | Specifies how velocity will change in response to keyboard dynamics (velocity curve). | 1-MEDIUM | p. 60 |
| | KEYBOARD AFTERTOUCH CURVE | Specifies how keyboard aftertouch will respond. | 1 | p. 61 |
| | KEYBOARD PORT SET | Specifies the port from which the keyboard and bender lever will transmit performance data. | PORT 1 | p. 61 |
| | KEYBOARD ACTIVE PART | Specifies the part(s) that will be affected by the [VALUE] knob, BENDER, MODULATION, AFTERTOUCH, HOLD, and EXPRESSION controllers. | UPPER | p. 62 |
| | TRANSPOSE | Specifies how the keyboard will be transposed when you turn on the [TRANSPOSE] button. | 2 | p. 62 |
| | SHIFT KEY LATCH | Specifies whether the [SHIFT] button will operate in Unlatched mode (turning on when pressed, turning off when released) or in Latched mode (alternately turning on/off each time it is pressed). | UNLATCH | p. 62 |
| Pads | PAD VELOCITY CURVE | Specifies how the velocity value transmitted when you strike a pad controller [A1]–[A8] will correspond to the force with which you strike (velocity curve). | 1 | p. 63 |
| | PAD AFTERTOUCH CURVE | Specifies how the pad controllers [A1]–[A8] will respond to aftertouch. | 1 | p. 63 |
| Clock | MIDI CLOCK ON/OFF | Specifies whether MIDI CLOCK will be transmitted. | OFF | p. 64 |
| | MIDI CLOCK DEFAULT TEMPO | Specifies the initial MIDI CLOCK value when “MIDI CLOCK ON/OFF” is On. After the power is turned on, this tempo will be output until you move the [VALUE] knob to which TEMPO is assigned. | 120 | p. 64 |
| | MIDI CLOCK OUTPUT PORT | When “MIDI CLOCK ON/OFF” is On, this specifies the port from which MIDI CLOCK is transmitted. | PORT 1 | p. 64 |
| USB | ADVANCED DRIVER MODE | Switches the driver mode. | ON | p. 65 |
| MIDI | MIDI I/F SWITCH | Specifies whether the MIDI connectors will be used as a MIDI interface. | ON | p. 66 |
| | MIDI MERGE DESTINATION | Specifies the port that will be merged when the [MIDI MERGE] switch is On. | PORT 1 | p. 67 |
| Control map | STARTUP MEMORY | Specifies which control map is to be called up when the power is turned on. | CTL MAP 0 | p. 68 |
| Controller | FUNCTION | Specifies the parameter that will be transmitted by the [VALUE] knob. | KEY VELOCITY | p. 68 |

| Category | Item | Contents | Factory setting | See page |
|---|---|---|---|---|
| Other | H-ACTIVITY ON/OFF | Turn this on when using specific applications (such as Pro Tools LE). If this is On, the message “90 00 7F” will be transmitted from “A-PRO 2” at intervals of approximately 500 ms. | OFF | p. 69 |
| | L9 FUNCTION | Specifies the function of the [HOLD] button. | HOLD | p. 69 |
| | OMNI | If OMNI is On, all controllers will always transmit on the current channel, regardless of the MIDI transmit channel setting that is assigned to the controller. | OFF | p. 42 |
| | FACTORY RESET | Returns the A-PRO to the factory-set condition. | – | p. 70 |
| | AUTO OFF | When not connected to a computer, the unit will automatically be switched off four hours after you stop playing or operating it. | ON | p. 70 |

# LCD Contrast Setting

## LCD CONTRAST

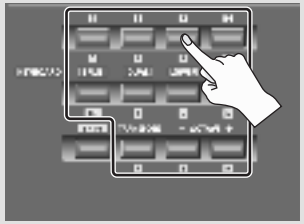
If you find the text in the display difficult to read, you can adjust the contrast as follows. The brightness of the screen may be affected by environmental conditions such as temperature.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "LCD CONTRAST," and press the [ENTER] button.**
3. **Use the [VALUE] knob to adjust the contrast.**
   This setting has a range of 1–10. Higher values make the display brighter.
4. **Press the [ENTER] button to return to Play mode.**

You can also change the LCD contrast in the following way.

In Edit mode, press the following buttons to enter a numerical value.

Controllers [B1]–[B4], [SPLIT]/[DUAL]/[LOWER]/[UPPER] buttons, OCTAVE [–] [+] buttons



# Keyboard-related Settings

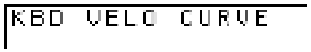
## KEYBOARD VELOCITY CURVE

Here's how to change the velocity curve, which specifies how the transmitted velocity value will correspond to your keyboard playing dynamics.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

**2 Use the [VALUE] knob to select "KEYBOARD/PAD," and press the [ENTER] button.**

**3 Use the [VALUE] knob to select "KBD VELO CURVE," and press the [ENTER] button.**




**4 Use the [VALUE] knob to select the desired KEYBOARD VELOCITY CURVE.**

The name of the selected setting is shown in the display.

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

| Number | Setting | Type of curve | Keyboard sensitivity |
|---|---|---|---|
| 1 | 1-LIGHT |  **1** These are the most typical settings. Your keyboard playing dynamics will produce the most natural volume change. | Higher velocity values (volume) can be produced even if you play softly. |
| 2 | 1-MEDIUM | | Keyboard sensitivity will be typical. |
| 3 | 1-HEAVY | | Higher velocity values (volume) will not be produced unless you play strongly. |
| 4 | 2-LIGHT |  **2** Compared to curve 1, these curves allow greater volume change without having to play very strongly. | Higher velocity values (volume) can be produced even if you play softly. |
| 5 | 2-MEDIUM | | Keyboard sensitivity will be typical. |
| 6 | 2-HEAVY | | Higher velocity values (volume) will not be produced unless you play strongly. |
| 7 | 3-LIGHT |  **3** These curves make it easy to play consistently, with minimal change produced by your playing dynamics. | Higher velocity values (volume) can be produced even if you play softly. |
| 8 | 3-MEDIUM | | Keyboard sensitivity will be typical. |
| 9 | 3-HEAVY | | Higher velocity values (volume) will not be produced unless you play strongly. |
| 10 | 4-LIGHT |  **4** Compared to curve 1, these curves produce greater volume change when you play strongly. | Higher velocity values (volume) can be produced even if you play softly. |
| 11 | 4-MEDIUM | | Keyboard sensitivity will be typical. |
| 12 | 4-HEAVY | | Higher velocity values (volume) will not be produced unless you play strongly. |

## KEYBOARD AFTERTOUCH CURVE

Here's how to specify the way that keyboard aftertouch will respond.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

**2 Use the [VALUE] knob to select "KEYBOARD/PAD," and press the [ENTER] button.**

**3 Use the [VALUE] knob to select "KBD AFTCH CURVE," and press the [ENTER] button.**




**4 Use the [VALUE] knob to select the desired KEYBOARD AFTERTOUCH CURVE.**

The value of the selected setting is shown in the display.

| Number | Curve type | Explanation |
|---|---|---|
| 1 |  | This is the most typical curve. The pressure you apply to the keyboard and the resulting aftertouch effect will correspond in the most natural way. |
| 2 |  | Compared with curve 1, higher aftertouch values will be transmitted even when you apply light pressure to the keyboard. |
| 3 |  | There will be little change in aftertouch when you apply pressure to the keyboard, making it easier for you to perform. |
| 4 |  | Compared with curve 1, aftertouch will be applied when you apply greater pressure to the keyboard. |

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

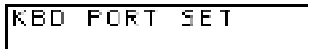
## KEYBOARD PORT SET

Here's how to specify the port from which performance data for the keyboard and bender lever will be transmitted.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

**2 Use the [VALUE] knob to select "KEYBOARD/PAD," and press the [ENTER] button.**

**3 Use the [VALUE] knob to select "KBD PORT SET," and press the [ENTER] button.**




**4 Use the [VALUE] knob to select the desired KEYBOARD PORT.**

The value of the selected setting is shown in the display.

| Number | Setting | Explanation |
|---|---|---|
| 1 | PORT 1 | Messages will be transmitted to "A-PRO 1." |
| 2 | PORT 2 | Messages will be transmitted to "A-PRO 2." |
| 3 | PORT 1+2 | Messages will be transmitted to "A-PRO 1" and "A-PRO 2." |

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

## KEYBOARD ACTIVE PART

Here's how to specify the part that will be affected by the [VALUE] knob, BENDER, MODULATION, AFTERTOUCH, HOLD, and EXPRESSION controllers.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "KEYBOARD/PAD," and press the [ENTER] button.**
3. **Use the [VALUE] knob to select "KBD ACTIVE PART," and press the [ENTER] button.**




4. **Use the [VALUE] knob to select "UPPER" or "LOWER."**




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

## TRANSPOSE

Here's how to specify the amount by which the keyboard will be transposed when you press the [TRANSPOSE] button to turn it on.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "KEYBOARD/PAD," and press the [ENTER] button.**
3. **Use the [VALUE] knob to select "TRANSPOSE," and press the [ENTER] button.**




4. **Use the [VALUE] knob to specify the transposition value.**
   You can specify a value in the range of -6 to 5 (semitones).




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

## SHIFT KEY LATCH

This specifies whether the [SHIFT] button will operate in Unlatch mode (On when held down, Off when released), or in Latch mode (turns On/Off each time the button is pressed).

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "KEYBOARD/PAD," and press the [ENTER] button.**
3. **Use the [VALUE] knob to select "SHIFT KEY LATCH," and press the [ENTER] button.**




4. **Use the [VALUE] knob to choose "OFF" or "ON."**




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

# Pad-related Settings

## PAD VELOCITY CURVE

Here's how to specify the way in which the force of your strike on the controller pads [A1]–[A8] will affect the velocity that is transmitted.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

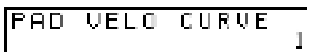
**2 Use the [VALUE] knob to select "KEYBOARD/PAD," and press the [ENTER] button.**

**3 Use the [VALUE] knob to select "PAD VELO CURVE," and press the [ENTER] button.**




**4 Use the [VALUE] knob to select the desired PAD VELOCITY CURVE.**

The number of the selected setting is shown in the display.




| Number | Type of curve | Result |
|---|---|---|
| 1 |  | This is the most typical curve. The force with which you strike the pad will correspond to the volume in the most natural way. |
| 2 |  | Compared to curve 1, there will be greater volume change for softer strikes on the pad. |
| 3 |  | Pad playing dynamics will produce little change in velocity, making it easier for you to perform at a consistent volume. |
| 4 |  | Compared with curve 1, striking the pads more strongly will produce greater change in velocity. |

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

## PAD AFTERTOUCH CURVE

Here's how to specify the way in which the pressure you apply to the pads will correspond to the aftertouch data that is produced.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

**2 Use the [VALUE] knob to select "KEYBOARD/PAD," and press the [ENTER] button.**

**3 Use the [VALUE] knob to select "PAD AFTCH CURVE," and press the [ENTER] button.**




**4 Use the [VALUE] knob to select the desired PAD AFTERTOUCH CURVE.**

The number of the selected setting is shown in the display.




| Number | Type of curve | Result |
|---|---|---|
| 1 |  | This is the most typical curve. The pressure you apply to the pad will correspond to the aftertouch value in the most natural way. |
| 2 |  | Compared to curve 1, there will be more change in the aftertouch value starting with softer pressure on the pad. |
| 3 |  | Pressure applied to the pad will produce little change in aftertouch value, making it easier for you to produce consistent aftertouch effects. |
| 4 |  | Compared with curve 1, you will need to apply stronger pressure on the pad in order to produce aftertouch. |

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

# Clock-related Settings

## MIDI CLOCK ON/OFF

Here's how to specify whether MIDI CLOCK will be transmitted.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "MIDI CLOCK," and press the [ENTER] button.**
3. **Use the [VALUE] knob to select "MIDI CLK ON/OFF," and press the [ENTER] button.**
4. **Use the [VALUE] knob to select "ON" or "OFF."**
5. **Press the [ENTER] button to return to Play mode.**

## MIDI CLOCK DEFAULT TEMPO

This setting specifies the default MIDI clock value when "MIDI CLOCK ON/OFF" is On. After you turn on the power, this tempo will be output until you move the VALUE controller to which Tempo is assigned.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "MIDI CLOCK," and press the [ENTER] button.**
3. **Use the [VALUE] knob to select "DEFAULT TEMPO," and press the [ENTER] button.**
4. **Use the [VALUE] knob to specify the MIDI CLOCK DEFAULT TEMPO value in a range of 20–250.**
   The display will indicate the value you specified.
5. **Press the [ENTER] button to return to Play mode.**

## MIDI CLOCK OUTPUT PORT

This setting specifies the port from which MIDI clock will be output when "MIDI CLOCK ON/OFF" is On.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "MIDI CLOCK," and press the [ENTER] button.**
3. **Use the [VALUE] knob to select "CLK OUTPUT PORT," and press the [ENTER] button.**




4. **Use the [VALUE] knob to specify the MIDI CLOCK OUTPUT PORT.**
   The display will indicate the port you specified.




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

| Number | Setting | Explanation |
|---|---|---|
| 1 | PORT 1 | MIDI CLOCK will be transmitted from "A-PRO 1." |
| 2 | PORT 2 | MIDI CLOCK will be transmitted from "A-PRO 2." |
| 3 | 1AND2 | MIDI CLOCK will be transmitted from "A-PRO 1" and "A-PRO 2." |

# USB-related Settings

## ADVANCED DRIVER MODE

Here's how to turn ADVANCED DRIVER MODE on/off.
We recommend that you normally leave this On.
If you change this setting, the new setting will take force after you've turned the power off, then on again.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

**2 Use the [VALUE] knob to select "USB SETTING," and press the [ENTER] button.**

**3 Use the [VALUE] knob to select "USB ADV DRIVER," and press the [ENTER] button.**

**4 Use the [VALUE] knob to specify the USB MIDI driver type.**

| Setting | Explanation |
|---|---|
| OFF | Choose this if you want to use the standard MIDI driver provided by your operating system (p. 73). (Standard driver mode) |
| ON | This setting uses FPT technology to allow high-speed MIDI communication. Choose this if you've installed the driver as described in p. 12 and following. |

* FPT = Fast Processing Technology of MIDI Transmission
This takes full advantage of the USB bandwidth to process MIDI data in an optimal way at all times, depending on the amount of MIDI data to be transmitted.

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

# MIDI-related Settings

## MIDI I/F SWITCH

This setting specifies whether the MIDI connectors will be used as a MIDI interface.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

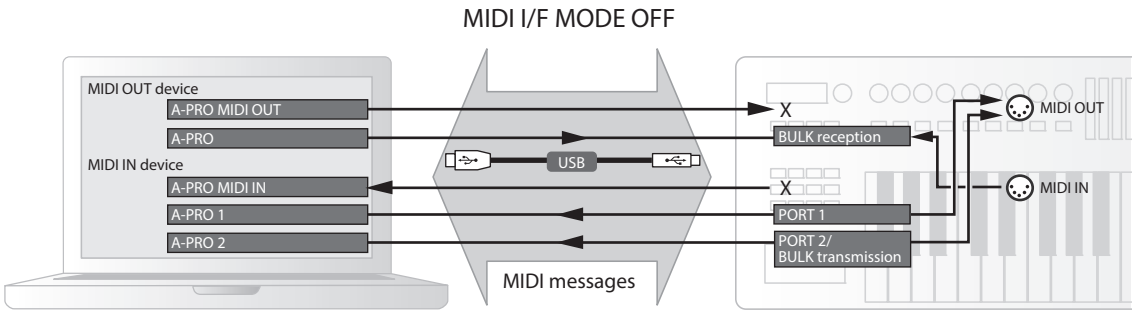
**2 Use the [VALUE] knob to select "MIDI SETTING," and press the [ENTER] button.**

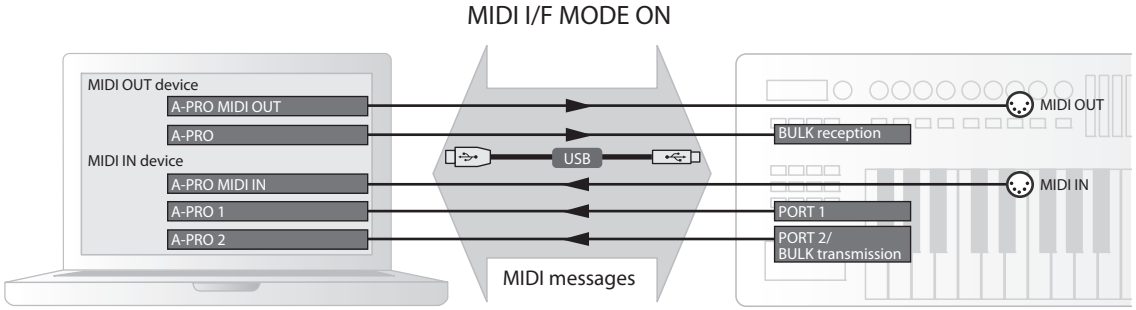
**3 Use the [VALUE] knob to select "MIDI I/F SWITCH," and press the [ENTER] button.**

**4 Use the [VALUE] knob to specify the MIDI I/F setting.**
The display will indicate the value you selected.

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

| Setting | Explanation |
|---|---|
| OFF | MIDI messages received by the A-PRO keyboard will not be transmitted from the A-PRO. MIDI messages will be exchanged between the A-PRO and the computer, and between the A-PRO and the external MIDI device. |
| ON | The A-PRO keyboard's MIDI connectors will operate as a MIDI interface. MIDI messages from the computer connected via USB to the A-PRO will be transmitted to a sound module connected to the A-PRO's MIDI OUT connector. MIDI messages from a MIDI device connected to the A-PRO's MIDI IN connector will be sent to the computer. |



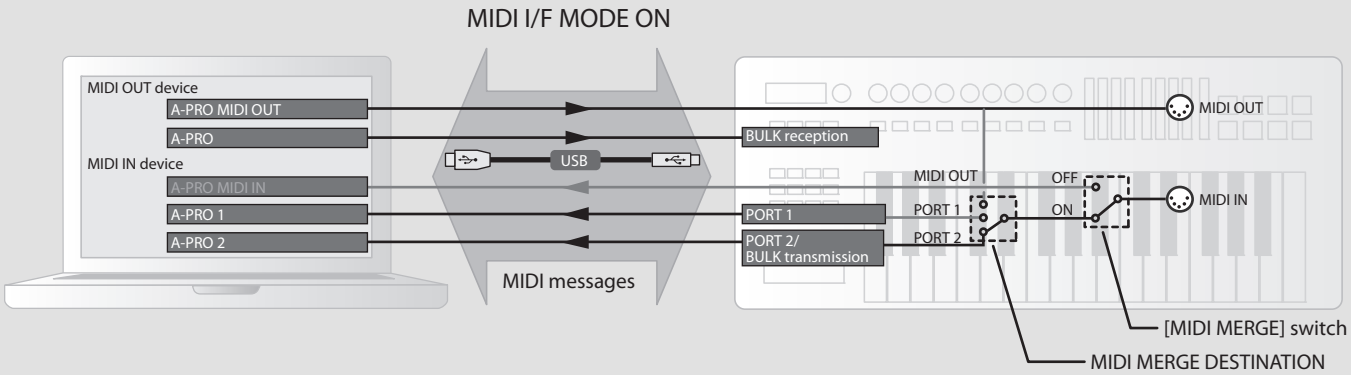
## MIDI MERGE DESTINATION

The A-PRO provides a [MIDI MERGE] switch (p. 11). Here's how to specify the port that will be merged as the MIDI MERGE DESTINATION when the [MIDI MERGE] switch is On.
The MIDI MERGE function is convenient when an external MIDI controller other than the A-PRO is connected to the A-PRO's MIDI IN connector.
For example, you might connect a second A-PRO unit, and use one A-PRO to play a software synthesizer while using the other A-PRO unit to control your DAW software.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "MIDI SETTING," and press the [ENTER] button.**
3. **Use the [VALUE] knob to select "MIDI MERGE DEST," and press the [ENTER] button.**
4. **Use the [VALUE] knob to specify the desired MIDI merge destination.**
   The display will indicate the value you selected.
5. **Press the [ENTER] button to return to Play mode.**

| Number | Setting | Explanation |
|---|---|---|
| 1 | PORT1 | Messages received at MIDI IN will be merged into the A-PRO's PORT 1. |
| 2 | PORT2 | Messages received at MIDI IN will be merged into the A-PRO's PORT 2. |
| 3 | MIDI OUT | Messages received at MIDI IN will be merged into the A-PRO's MIDI OUT. |

### MIDI MERGE switch and MIDI MERGE DESTINATION




In this illustration, the [MIDI MERGE] switch is On and the MIDI MERGE DESTINATION is set to Port 2, so that messages received at MIDI IN are merged with the messages of Port 2 and sent to the computer.

* If you turn the [MIDI MERGE] switch On, no messages will arrive even if you've selected A-PRO MIDI IN as the MIDI IN device on your computer.

# Control Map Settings

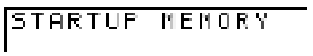
## STARTUP MEMORY

Here you can specify which control map is to be called up when the A-PRO is powered up.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

**2 Use the [VALUE] knob to select "SYSTEM SETTING," and press the [ENTER] button.**

**3 Use the [VALUE] knob to select "STARTUP MEMORY," and press the [ENTER] button.**




**4 Use the [VALUE] knob to choose "CTL MAP 0" or "LAST ACC MAP."**




| Setting | Explanation |
|---|---|
| CTL MAP 0 | Control map number 0 will be selected at start-up. |
| LAST ACC MAP | The control map that was last selected and saved will be called up upon start-up. |

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

# [VALUE] knob Settings

## FUNCTION

Here you can specify the function that is to be controlled by the [VALUE] knob when the cursor is located at USER ASSIGN.

**1 Simultaneously press the [ACT] button and the [ ◄ ] button.**

**2 Use the [VALUE] knob to select "FUNCTION," and press the [ENTER] button.**

**3 Use the [VALUE] knob to choose the parameter that will be assigned to the [VALUE] knob.**




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

**5 If you selected "CONTROL CHANGE" as the parameter, use the [VALUE] knob to specify the desired control change number.**

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

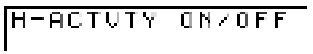
| Value | Setting | Explanation | Value range |
|---|---|---|---|
| 1 | KEY VELOCITY | Fixes the key velocity value. The A-PRO detects the force with which you play the keyboard, and transmits this as the velocity value; however, this setting causes a fixed velocity to be transmitted regardless of how strongly you strike the keyboard. Use this if you don't want your playing dynamics to have an effect. | TOUCH, 1–127 * If you choose TOUCH, the transmitted velocity value will depend on your keyboard playing strength. |
| 2 | BANK LSB | Specifies the bank select LSB (CC#32). | 0–127 |
| 3 | BANK MSB | Specifies the bank select MSB (CC#00). | 0–127 |
| 4 | CONTROL CHANGE | Specifies a control change. | 0–127 |
| 5 | TEMPO | Specifies the MIDI CLOCK tempo. | 20–250 |

# Other Settings

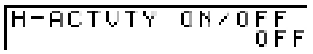
## H-ACTIVITY ON/OFF

Turn this On when using certain applications (such as Pro Tools LE). If this is On, the message "90 00 7F" will be transmitted to "A-PRO 2" at intervals of approximately 500 ms.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "SYSTEM SETTING," and press the [ENTER] button.**
3. **Use the [VALUE] knob to choose "H-ACTVTY ON/OFF," and press the [ENTER] button.**




4. **Use the [VALUE] knob to specify either "ON" or "OFF."**




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

## L9 FUNCTION

This specifies the function of the [HOLD] button.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "SYSTEM SETTING," and press the [ENTER] button.**
3. **Use the [VALUE] knob to choose "L9 FUNCTION," and press the [ENTER] button.**




4. **Use the [VALUE] knob to specify the function of [HOLD] button.**




| Value | Setting | Explanation |
|---|---|---|
| 1 | L9 | Any desired MIDI message can be assigned to the button. |
| 2 | HOLD | The button will allow the sound to continue even after you take your hand off the pad. |
| 3 | VLINK | The button will operate as a V-LINK ON/OFF button. |

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

## OMNI

Refer to "What is OMNI?" (p. 42).

## FACTORY RESET

This will return the A-PRO to its factory-set condition.

1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "FACTORY RESET," and press the [ENTER] button.**
   "SURE?" will appear, blinking, in the display.
3. **If you are sure that you want to execute the factory reset operation, press the [ENTER] button.**




"FACTORY RESET" will appear, blinking, in the display while the factory reset operation is being carried out.
Once the factory reset is complete, "COMPLETE!" will appear in the display. You'll then be returned to Play mode.

## Making the Power Automatically Turn Off After a Time (AUTO OFF)

When not connected to a computer, the unit will automatically be switched off four hours after you stop playing or operating it (if the factory settings have been unmodified). If you don't want the unit to turn off automatically, change the "AUTO OFF" setting to "OFF" as described below.

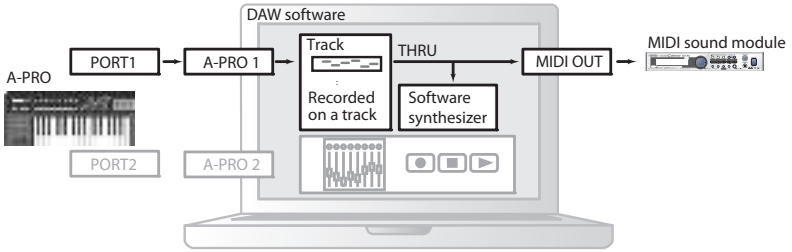
1. **Simultaneously press the [ACT] button and the [ ◄ ] button.**
2. **Use the [VALUE] knob to select "SYSTEM SETTING," and press the [ENTER] button.**
3. **Use the [VALUE] knob to select "AUTO OFF," and press the [ENTER] button.**
4. **Use the [VALUE] knob to select "ON" or "OFF."**

| Value | Explanation |
|---|---|
| OFF | The power will not turn off automatically. |
| ON (default) | When not connected to a computer, the unit will automatically be switched off four hours after you stop playing or operating it. |

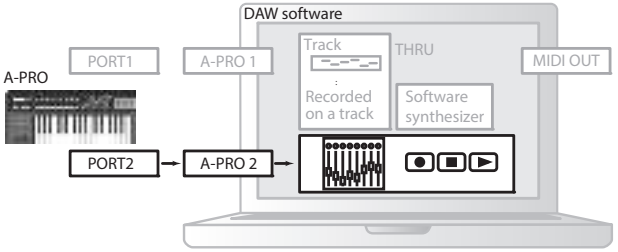
5. **Press the [ENTER] button to return to Play mode.**

## Two MIDI Ports

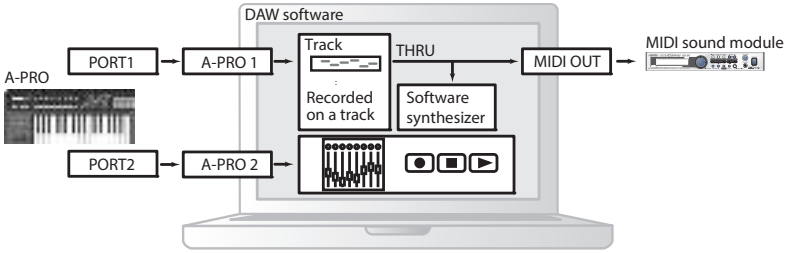
If the A-PRO is connected to your computer via USB, the A-PRO will be able to use two MIDI output ports (PORT 1 and PORT 2). Each controller of the A-PRO can be assigned to send its MIDI messages to either port.
For details on how to make this assignment, refer to "Using Control Maps" (p. 29) or "Assigning a MIDI Message on the A-PRO Keyboard" (p. 48).




If you're using DAW software, and you're simply controlling the sound module for the part that's producing the sound, the A-PRO's controllers can use the same MIDI output port as the keyboard. When the A-PRO is in the default state, the A-PRO'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 A-PRO 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 A-PRO's [A1]–[A8] 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.

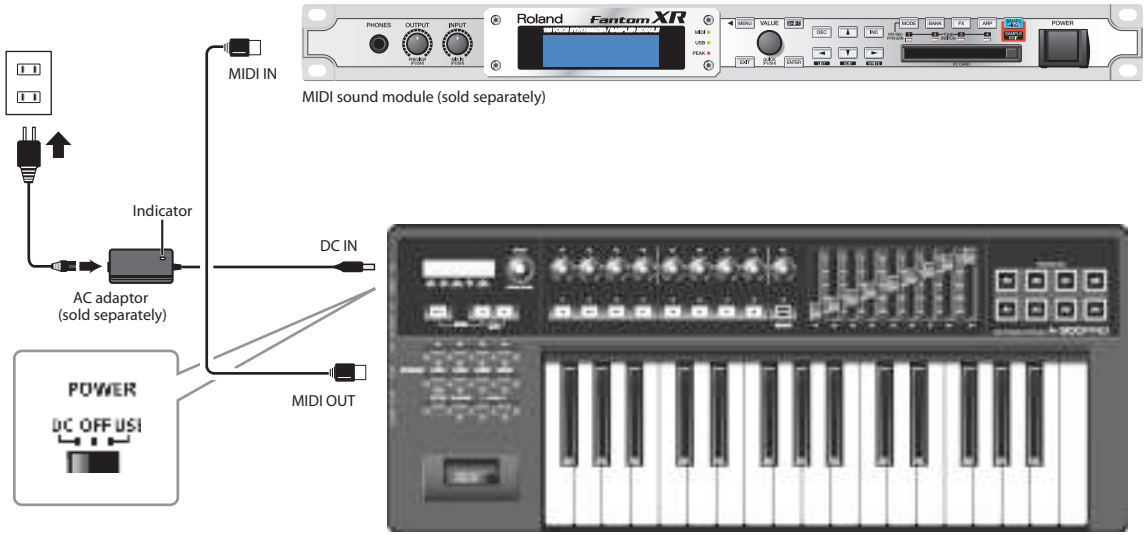
[A1]–[A8] buttons: PORT 1
[S1]–[S9] sliders: PORT 2

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

# Connecting the A-PRO Directly to a Sound Module

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

**NOTE** If you're not connecting the A-PRO to your computer via USB, you'll need to use a separately available AC adaptor. You can purchase the appropriate AC adaptor from your dealer.




* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

* Place the AC adaptor (sold separately) so the side with the indicator (see illustration) faces upwards and the side with textual information faces downwards.The indicator will light when you plug the AC adaptor into an AC outlet.

1. **Use a MIDI cable to connect the A-PRO's MIDI OUT connector to the MIDI IN connector of your MIDI sound module.**
2. **Connect the AC adaptor to the A-PRO's DC IN jack.**
3. **Set the A-PRO's [POWER] switch to "DC" to turn on the power.**
   Also, switch on the power to your MIDI sound module.
4. **Set the A-PRO'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.**

# About Standard Driver Mode

Use this mode if you want to use the standard driver provided by your operating system.

## Installing the Standard Driver

1. **Switch off "ADVANCED DRIVER MODE" (p. 65).**
2. **Close all currently running software.**
3. **Turn the A-PRO's [POWER] switch off, then on again.**
   The driver will be installed automatically.

## Input/output Device Settings

In order to use the A-PRO with your software, you'll need to choose the A-PRO as the MIDI input/output device.
For details on how to make this setting, refer to the documentation of your software.

### Windows 8/Windows 7/Windows Vista users

| | |
|---|---|
| **MIDI output device** | A-PRO<br>MIDIOUT2 (A-PRO) |
| **MIDI input device** | A-PRO<br>MIDIIN2 (A-PRO)<br>MIDIIN3 (A-PRO) |

* The A-PRO's MIDI input/output device cannot be used by the Media Player included with Windows 8/Windows 7/Vista.

### Windows XP users

| | |
|---|---|
| **MIDI output device** | USB audio device<br>USB audio device [2] |
| **MIDI input device** | USB audio device<br>USB audio device [2]<br>USB audio device [3] |

### Mac OS X users

To specify the MIDI input/output settings for Mac OS X, perform the Audio MIDI settings described in step 13 and following of "Mac OS X Users" (p. 17).

# Troubleshooting

If you experience problems, read this chapter first. It contains information that will help you solve the problem.

* For help with Windows or Mac OS X operation, refer to the documentation for your computer or operating system.

## Problems when Installing the Driver

### Can't start up the installer

**Is the CD-ROM inserted correctly in your CD-ROM drive?**

Make sure that the CD-ROM is correctly inserted in the CD-ROM drive.

**Could the CD-ROM itself or the lens of your CD-ROM drive be dirty?**

The installer may not operate correctly if the CD-ROM or the lens of your CD-ROM drive is dirty. Use a commercially available CD cleaner or lens cleaner to clean the disc or lens.

**Are you attempting to install from a networked CD-ROM drive?**

The driver cannot be installed from a CD-ROM drive on the network.

### A warning or error appears during the installation (Windows)

**Could you have connected the A-PRO to your computer before installing the driver?**

If you connect the A-PRO to your computer before installing the driver, an error message may appear when you begin the installation.
Reinstall the A-PRO driver as described in "Reinstalling the driver" (p. 80).

**Are there any devices labeled "Other," "Unknown," or "?/!/X" in the Device Manager?**

If driver installation was not completed successfully, the partially installed driver may remain in an incomplete state.
Reinstall the A-PRO driver as described in "Reinstalling the driver" (p. 80).

### Can't install the driver according to the procedure

**Did you log on to Windows with the appropriate user privileges?**

You must log onto Windows using one of the following user names.

- A user name belonging to the Administrators group, such as Administrator
- A user name whose account type is Computer Administrator

* For details, ask the system administrator for your computer.

**In some cases, you may be unable to install the driver because of the "Driver signing option" settings.**

Refer to "Driver signing options setting (Windows XP)" (p. 80) and make the appropriate settings.

**Could other software be running, perhaps in the background (such as anti-virus software)?**

The installation may not occur correctly if other software is running.
Be sure to close all other software before you perform the installation.

## Installation is not successfully completed when you connect the A-PRO

### Could the A-PRO's ADVANCED DRIVER mode switch be OFF?

Refer to "ADVANCED DRIVER MODE" (p. 65) and set the A-PRO's ADVANCED DRIVER MODE to ON. Then, install the driver again.

### After you connect the A-PRO, it may take several tens of seconds or several minutes before it is recognized by your computer.

This is not a malfunction.
Please wait until the Found New Hardware Wizard appears.

### Is the A-PRO connected?

Make sure that the A-PRO is correctly connected to your computer.

### Could your computer be operating on its battery?

Operation may be unstable if your computer is operating on battery power.
Please use your computer with its power supply connected.

### Could you be using a bus-powered USB hub (a hub that does not require a power supply)?

The A-PRO cannot be used with a bus-powered USB hub (a hub that does not need a separate power supply). Use it with a self-powered USB hub (a hub that has an internal power supply or AC adaptor).

### Could a USB device other than a mouse or keyboard be connected?

Disconnect all USB devices (other than a mouse and keyboard, if used) from your computer before performing the installation.

### Check the power management settings of your computer.

Your computer's power management settings may be limiting the power that is supplied to USB.
Take a look at your computer's power management settings.
→ "Power management settings" (p. 81)

### Does your computer meet the requirements of the USB specification?

Operation may be unstable if your computer does not meet the electrical requirements of the USB specification.
In this case, you may be able to solve the problem by connecting a self-powered USB hub (a USB hub that has an internal power supply or an AC adaptor).

## "Found New Hardware Wizard" appears even though you've installed the driver (Windows XP)

### Could you have connected the A-PRO to a different USB connector than the one you used when installing the driver?

If your computer or USB hub has two or more USB connectors, connecting the A-PRO to a different USB connector may cause your computer to ask for the driver file even though the driver has already been installed.
This behavior does not indicate a malfunction.
Install the driver as described in step 9 of Installing the Driver (p. 15).

## A number such as "2-" appears at the beginning of the device name (Windows)

### Could you have connected the A-PRO to a different USB port?

If you connect the A-PRO to a different USB port, some operating systems may automatically add a number to the beginning of the device name, but this should not be a problem when using the A-PRO. If you want to return to the device name that does not have this number, you can either connect the A-PRO to the same USB port as when you installed it, or install the driver once again.
→ "Reinstalling the driver" (p. 80)

# Problems with Settings

## Can’t select/use the A-PRO within software or in system settings

### Could the A-PRO be in use by other software?

Close all software you currently have running. Next, switch off the A-PRO’s power, then turn it back on again.
If this does not solve the problem, reinstall the driver.
→ “Reinstalling the driver” (p. 80)

### Is the driver installed correctly?

Driver installation may have failed. Please reinstall the driver.
→ “Reinstalling the driver” (p. 80)

### Is the A-PRO device name shown?

If the device name is not displayed, it may be that the driver installation failed. Please reinstall the driver.
→ “Reinstalling the driver” (p. 80)

### Could the computer to which the A-PRO is connected have entered standby (suspend) mode, hibernate mode, or sleep mode?

Close all software that’s using the A-PRO. Next, switch off the A-PRO’s power, then turn it back on again.
If this does not solve the problem, restart your computer.

### Could you have disconnected and reconnected the USB cable while using the A-PRO?

Close all software that’s using the A-PRO. Next, switch off the A-PRO’s power, then turn it back on again.
If this does not solve the problem, restart your computer.

### Could the A-PRO have been connected when the computer started up?

On some computers, the A-PRO may be unusable if it is already connected when the computer starts up.
Start up your computer, and then connect the A-PRO.

### Are you using the Media Player included with Windows? (Windows 8/Windows 7/ Windows Vista)

Use different software.
MIDI devices cannot be selected in Media Player.

### Have you made “Audio MIDI Settings”? (Mac OS X)

Make the appropriate Audio MIDI Settings as described in “Mac OS X Users” (p. 17).

# Problems when Playing

## Playback contains clicks, dropouts, or other problems

### Check the power management settings

You may be able to eliminate clicks and pops by changing your system's power management settings.
→ "Power management settings" (p. 81)

### Try updating the driver of your display adaptor (Windows)

You may be able to eliminate clicks and pops by updating the driver for the display adaptor installed in your computer.

### Could other software programs be running?

Close software that you're not using.
If the window of a Windows program has been closed but it is still shown in the taskbar, that program is still running. Close all unneeded software that's shown in the taskbar.

### Have you tried Windows Update or Microsoft Update? (Windows)

Try using Windows Update or Microsoft Update (provided by the Microsoft Corporation) to update your system to the latest version.

### In the driver settings dialog box, try selecting the "Light Load" check box

To change or check this setting, proceed as directed in "Lightening the MIDI load (Windows)" (p. 80).
Changes to this setting will take effect after you turn the A-PRO's power off, then on again. Unless you are experiencing problems, you should leave this check box cleared (the default state).

### Try disabling the LAN

In your computer's Device Manager, try disabling LAN (wired/wireless).
If this eliminates the clicks and pops, it may be that updating your LAN driver or BIOS may solve the problem. Check whether updated software is available.

### Could you have connected the A-PRO to a USB hub?

Try connecting the A-PRO directly to a USB connector on your computer.

### Are you using the included USB cable?

You must use the included USB cable when using the A-PRO. Some commercially available USB cables do not meet the requirements of the USB standard, and this may prevent the A-PRO from operating correctly.

### Could you have updated the Mac OS X software while A-PRO was connected?

It has been found that clicks or pops can occur if you performed a Mac OS X software update while the A-PRO was connected. If so, install the driver once again.

## Can't play

### Was the driver installed correctly?

Driver installation may have failed. Reinstall the driver.
→ "Reinstalling the driver" (p. 80)

### Did you make input/output device settings for your software?

Refer to the owner's manual of your software and to the following pages, and select the A-PRO as the input/output device.

- Windows : → "Checking with a SONAR Soft Synths (Windows)" (p. 19)
- Mac OSX: → "Checking in GarageBand (Mac OS X)" (p. 20)

### Could the A-PRO be in use by other software?

Close all software you currently have running. Next, switch off the A-PRO's power, then turn it back on again.
If this does not solve the problem, reinstall the driver.
→ "Reinstalling the driver" (p. 80)

### Could the computer to which the A-PRO is connected have entered standby (suspend) mode, hibernate mode, or sleep mode?

Close all software that's using the A-PRO. Next, switch off the A-PRO's power, then turn it back on again.
If this does not solve the problem, restart your computer.

### Could you have disconnected and reconnected the USB cable while using the A-PRO?

Close all software that's using the A-PRO. Next, switch off the A-PRO's power, then turn it back on again.
If this does not solve the problem, restart your computer.

### Could the A-PRO have been connected when the computer started up?

On some computers, the A-PRO may be unusable if it is already connected when the computer starts up.
Start up your computer, and then connect the A-PRO.

## There is a time lag between playing the keyboard and hearing the software synthesizer

A software synthesizer produces its sounds via the sound card of your computer. There will be a time lag ("latency") before the sound of the software synthesizer can be heard as actual sound from the sound card.
Regardless of the combination of software synthesizer and sound card, there will always be some latency, but by using the appropriate combination of software and sound card together with the correct settings, it is often possible to shorten latency to the point that it causes no problems in practice.
In general, the following settings will be effective in shortening the latency.

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

For details on these settings, refer to the owner's manual for your software and sound card.

## When using the A-PRO 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 A-PRO 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 "Clearing an Assignment (NO ASSIGN)" (p. 56).

## Aftertouch not applied

The A-PRO 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 "Clearing an Assignment (NO ASSIGN)" (p. 56).

# Other Problems

## Deleting the Driver

If the computer does not detect the A-PRO correctly, use the following procedure to delete the driver, and then install the driver again as described in "Installing the Driver" (p. 12).

### Windows users

1. **Start up the computer without the A-PRO 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 CD-ROM drive.**
4. **Double-click the [Uninstal] icon in [Driver] 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-PRO 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] and restart the computer.**

### Mac OS X users

1. **Start up the computer without the A-PRO 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 CD-ROM drive.**
3. **Double-click the [Uninstaller] in [Driver] folder on the included CD-ROM.**
4. **When "This uninstalls A-PRO driver from this Macintosh." 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].**
6. **The authentication dialog box or the message "Uninstaller requires that you type your password" will appear.**
   **Enter the password and click [OK].**
7. **When "Uninstallation is completed." appears, click [Restart] and restart the computer.**
   It may take some time for the computer to restart.

## Reinstalling the driver

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

1. **Delete the A-PRO's driver.**
2. **Install the driver again as described in "Installing the Driver" (p. 12).**

## Lightening the MIDI load (Windows)

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

1. **Exit all programs that are using the A-PRO.**
2. **Open the "Control Panel" and set the display mode as follows.**
   - Windows 8/Windows 7: Icon view
   - Windows Vista/Windows XP: Classic view
3. **Double-click the A-PRO icon.**
   The "A-PRO Driver Settings" dialog box will appear.
4. **Place a check in the [Lighten Load] check box.**
5. **Click [OK].**

## 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're using the 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 the procedure for "Installing the Driver" (p. 12).**
   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 8/Windows 7/Windows Vista users

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 8/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 8/Windows 7, click [Show additional plans].
4. **Click [Change settings that are currently unavailable].**
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 users

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 the "Power Schemes" to [Always On].**
3. **Click [OK] to close the "Power Options Properties" window.**

### Mac OS X users

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].**

# MIDI Implementation Chart

Model: A-300PRO/500PRO/800PRO

Date : Jan. 16, 2010 Version : 1.00

| Function... | | Transmitted | Recognized | Remarks |
|---|---|---|---|---|
| Basic Channel | Default<br>Changed | 1<br>1–16 | X<br>X | |
| Mode | Default<br>Messages<br>Altered | Mode 3<br>OMNI ON/OFF, MONO, POLY<br>********** | X<br>X<br>X | |
| Note Number | : True Voice | 0–127<br>********** | X<br>X | |
| Velocity | Note ON<br>Note OFF | O (9n v=1–127)<br>O (8n v=1–127), (9n v=0) | X<br>X | |
| Aftertouch | Key's<br>Ch's | O<br>O | X<br>X | Keybord's aftertouch is not supported. |
| Pitch Bend | | O | X | |
| Control Change | | O | X | |
| Program Change | : True # | O (0–127)<br>********** | X<br>X | |
| System Exclusive | | O | O | |
| System Common | : Song Pos<br>: Song Sel<br>: Tune | O<br>O (0–127)<br>O | X<br>X<br>X | |
| System Real Time | : Clock<br>: Command | O<br>O | X<br>X | |
| Aux Message | : All Sound Off<br>: Reset All Controller<br>: Local control<br>: All Notes Off<br>: Active Sense<br>: Reset | O *1 (120)<br>O *1 (121)<br>O<br>O *1 (123)<br>O<br>O | X<br>X<br>X<br>X<br>X<br>X | |
| Notes | | *1 Transmits When the Panic function is executed. | | |

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

# Main Specifications

## A-300PRO/500PRO/800PRO: MIDI KEYBOARD CONTROLLER

### Keyboard

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

### Controllers

Pads: [A1]–[A8]
Buttons: [B1]–[B4], [L1]–[L9]
Knobs: [R1]–[R9]
Sliders: [S1]–[S9]
Foot Pedals: HOLD (P1), EXPRESSION (P2)
Bender Lever: BENDER, MODULATION
Keyboard Aftertouch: AFTERTOUCH
[VALUE] knob

### Buttons

[ACT] button, [ ◄ ] button, [ ► ] button, [DUAL] button, [SPLIT] button, [UPPER] button, [LOWER] button, [SHIFT] button, [TRANSPOSE] button, OCTAVE [–] [+] button

### Display

16 characters, 2 lines LCD (with Backlight)

### Side Panel

[POWER] Switch (USB/OFF/DC IN)
[MIDI MERGE] Switch (ON/OFF)

### Connectors

HOLD (P1) Pedal Jack: 1/4 inch phone type
EXPRESSION (P2) 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

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

### Dimensions

A-300PRO: 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
A-500PRO: 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
A-800PRO: 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

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

### Accessories

A-PRO CD-ROM
Ableton Live Lite Serial Number Card
USB Cable
Owner's Manual
License agreement

### Options

Pedal Switch: DP-2/DP-10
Expression Pedal: EV-5/EV-7
AC Adaptor (Please contact the retailer from whom you purchased the product, or the nearest Roland Service Center.)

* 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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# Controlling SONAR or SONAR LE from the A-PRO Series

The A-PRO series is compatible with SONAR or software in the SONAR LE series (hereafter collectively referred to simply as "SONAR").
After installing the A-PRO control surface plug-in, you'll be able to use a keyboard from the A-PRO series for controlling SONAR, using the ACT function.

## Installation Procedure

### SONAR X1 or later/SONAR LE

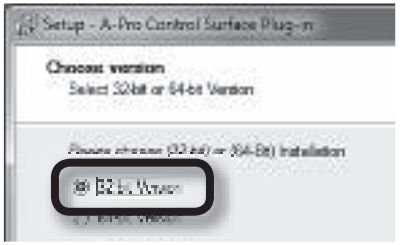
When you install SONAR X1 or SONAR X1 LE, the A-PRO control surface plug-in is installed together with it.

### SONAR 8.5 or earlier

**1 Insert the supplied A-PRO CD-ROM into the CD drive.**

**2 Open the folder A-PRO_CSP on the A-PRO CD-ROM, then double-click "Setup.exe."**

**3 Follow the instructions presented by the installer to perform the installation.**




**NOTE**

When the following two conditions are applicable, make sure that you select "32-bit Version" in the "Choose version" dialog box.

- 64-bit OS installed
- SONAR LE or SONAR 32-bit version installed

## Making the Settings for SONAR

**1 Launch SONAR.**

**2 Access the control surface screen.**

**SONAR X1 or later/SONAR LE**

From the SONAR menu, click [Edit] - [Preferences]; then from the menu at left, click the control surface.

**SONAR 8.5 or earlier**

From SONAR's menus, click [Options] - [Controllers/Surfaces].

**3 Click [ ].**

**4 Make the following settings in the dialog box that appears, then click [OK].**

The [ACT] button on the A-PRO keyboard will light, and communication between the A-PRO keyboard and SONAR will begin.

| Parameter | Setting |
|---|---|
| Controller/Surface | A-PRO |
| Input Port | A-PRO 2 |
| Output Port | A-PRO |

**5 Close the dialog box.**

**MEMO**

Once you've made these settings, the A-PRO instrument and SONAR will communicate with each other each time you open a project. Please be aware that such communications can take a considerable amount of time; however, this does not indicate a malfunction.

# Procedure

**1 Access the A-PRO control surface plug-in screen.**

**SONAR X1 or later/SONAR LE**

From the SONAR menu, click [Utilities] - [A-PRO-1].

**SONAR 8.5 or earlier**

From SONAR's menus, click [Tools] - [A-PRO-1].

**2 Click the [ENABLE] button on the A-PRO control surface plug-in.**




The parameters in the front most window (active window) are assigned to the A-PRO keyboard's controllers.
Whenever you change the active window, the parameters assigned to the A-PRO will change at the same time.

MEMO

For details on how to use the software, select the A-PRO control surface plug-in screen, and view the help file that's displayed when you press the F1 key.

# Troubleshooting

## A change in a parameter other than the one intended occurs when one of the controllers on the A-PRO series keyboard is operated.

ACT is a function that allows all parameters in the Active Window that can be controlled to be assigned to the A-PRO keyboard. For this reason, it is possible for some parameters to be assigned to controllers even though you didn't intend to assign them.
The ACT map, which describes which parameters are assigned to which controllers, can be modified by following the steps below.

1. **Click [ACT], located in the upper right corner of the Active Window.**
2. **Using your mouse, manipulate the parameter that you wish to control.**
3. **Operate the controller on the A-PRO keyboard for which you wish to have the assignment be made.**
   If you want to assign parameters to other controllers, repeat steps 2 and 3.
4. **Click [ACT] in the upper right corner of the Active Window.**
   You'll be presented with this message: "* Parameters and * Controls were touched. Do you want to keep these assignments?"
5. **Click [Yes].**

MEMO

For detailed explanations on how to make the settings, refer to the User's Guide that came with SONAR and the online help.

## Even though the Active Window is switched, parameters are not assigned to the controllers (cannot make the change).

Depending on the plug-ins you use and the window you want to control, you may find that the use of ACT is not supported.
In such cases, you should prepare a control map (file) beforehand, then assign the parameters to the controllers using SONAR's Remote Control feature.

MEMO

For detailed instructions on how to use control maps, refer to p. 22, or the separate Control Map Guide.
For instructions on how to use the remote control feature, refer to the User's Guide that came with SONAR, or the online help.

# Using an A-PRO Series Unit to Control Logic Pro/Express or GarageBand

The A-PRO series is compatible with music production software from Apple, including Logic Pro/Express and GarageBand.
After installing the relevant A-PRO control surface plug-in (either the one for Logic Pro/Express or the one for GarageBand) in your Mac, you'll conveniently and easily be able to control Logic Pro/Express or GarageBand from your A-PRO series unit.

**MEMO**

This document provides a simple explanation of how to install and use the plug-ins.
For more detailed information, refer to Readme_E.pdf which can be found in the A-PRO_CSP folder on the A-PRO CD-ROM.

## Operating Requirements

- Operating system: Mac OS X 10.5 Leopard or later
- Software version: Logic Pro/Express 8 or later, GarageBand '09 or later

## Installation

**NOTE**

You must install the A-PRO driver before you install the A-PRO Control Surface Plug-in. For information on how to install the driver, refer to the owner's manual that was supplied with your A-PRO series keyboard.

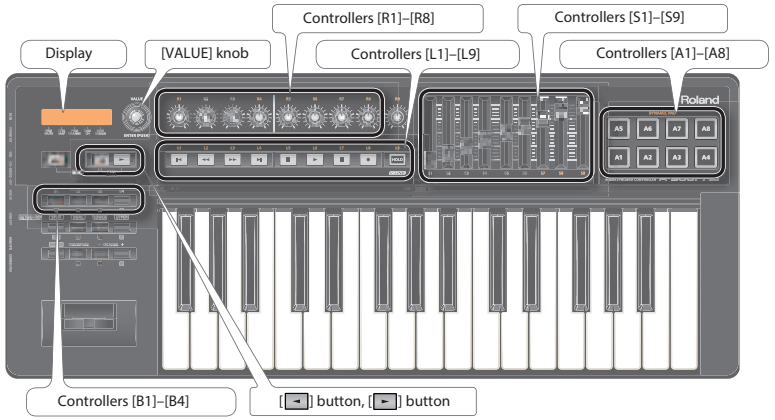
1. **Insert the A-PRO CD-ROM into your CD drive.**
2. **If Logic Pro/Express or GarageBand is running, quit such software first.**
3. **Open the A-PRO_CSP folder, which can be found on the A-PRO CD-ROM, and double-click "APROControlSurfacePlugin.pkg."**
4. **Perform the installation by following the instructions that appear onscreen.**

## Usage

First, switch on the A-PRO's power, then start up Logic Pro/Express or GarageBand.
You do not need to set anything in Logic Pro/Express or GarageBand.

## A-PRO Panel Descriptions

On the A-PRO series instrument, you can use the controllers shown below.



# Parameters that can be Controlled Using the A-PRO

After installing the relevant A-PRO control surface plug-in (either the one for Logic Pro/Express or the one for GarageBand) in your Mac, you'll be able to control the following parameters.

MEMO

For more detailed information, refer to Readme_E.pdf which can be found in the A-PRO_CSP folder on the A-PRO CD-ROM.

| Parameter that's controlled | Controller on A-PRO |
|---|---|
| Pan of each track | Controllers [R1]–[R8] |
| Volume of each track | Controllers [S1]–[S8] |
| Master volume | Controller [S9] |
| Selection of the various tracks | Controllers [A1]–[A8] |
| Switching individual tracks between SOLO/MUTE; controlling recording standby, playback, stop, recording, etc. | Controllers [L1]–[L8] |
| FLIP | Controller [L9] |
| Switching Track Banks | [ ◄ ] button, [ ► ] button |
| Moving along TIME BAR | [VALUE] knob |

# MEMO

**For the U.K.**

**IMPORTANT:** THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

**For the USA**

## DECLARATION OF CONFORMITY
## Compliance Information Statement

Model Name : A-300PRO_R/A-500PRO_R/A-800PRO_R
Type of Equipment : MIDI Keyboard Controller
Responsible Party : Roland Corporation U.S.
Address : 5100 S. Eastern Avenue, Los Angeles, CA 90040-2938
Telephone : (323) 890-3700

**For C.A. US (Proposition 65)**

## WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

**For EU Countries**

This product complies with the requirements of EMC Directive 2004/108/EC.

**For the USA**

## FEDERAL COMMUNICATIONS COMMISSION
## RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

---

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

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This equipment requires shielded interface cables in order to meet FCC class B limit.
Any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**For Canada**

## NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

## AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

**For EU Countries**



**UK** This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.

**DE** Dieses Symbol bedeutet, dass dieses Produkt in EU-Ländern getrennt vom Hausmüll gesammelt werden muss gemäß den regionalen Bestimmungen. Mit diesem Symbol gekennzeichnete Produkte dürfen nicht zusammen mit den Hausmüll entsorgt werden.

**FR** Ce symbole indique que dans les pays de l'Union européenne, ce produit doit être collecté séparément des ordures ménagères selon les directives en vigueur dans chacun de ces pays. Les produits portant ce symbole ne doivent pas être mis au rebut avec les ordures ménagères.

**IT** Questo simbolo indica che nei paesi della Comunità europea questo prodotto deve essere smaltito separatamente dai normali rifiuti domestici, secondo la legislazione in vigore in ciascun paese. I prodotti che riportano questo simbolo non devono essere smaltiti insieme ai rifiuti domestici. Ai sensi dell'art. 13 del D.Lgs. 25 luglio 2005 n. 151.

**ES** Este símbolo indica que en los países de la Unión Europea este producto debe recogerse aparte de los residuos domésticos, tal como esté regulado en cada zona. Los productos con este símbolo no se deben depositar con los residuos domésticos.

**PT** Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.

**NL** Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.

**DK** Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.

**NO** Dette symbolet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symbolet, må ikke kastes sammen med vanlig husholdningsavfall.

**SE** Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.

**FI** Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.

**HU** Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbólummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.

**PL** Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, w krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.

**CZ** Tento symbol udává, že v zemích EU musí být tento výrobek sbírán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácím odpadem.

**SK** Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhadzovať spolu s domovým odpadom.

**EE** See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooteid ei tohi ära visata koos olmeprügiga.

**LT** Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekviename regione. Šiuo simboliu paženklinti produktai neturi būti išmetami kartu su buitinėmis atliekomis.

**LV** Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimniecības atkritumiem, kā noteikts katrā reģionā. Produktus ar šo simbolu nedrīkst izmest kopā ar mājsaimniecības atkritumiem.

**SI** Ta simbol označuje, da je treba proizvod v državah EU zbirati ločeno od gospodinjskih odpadkov, tako kot je določeno v vsaki regiji. Proizvoda s tem znakom ni dovoljeno odlagati skupaj z gospodinjskimi odpadki.

**GR** Το σύμβολο αυτό υποδηλώνει ότι στις χώρες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.

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本资料就本公司产品中所含的特定有害物质及其安全性予以说明。
本资料适用于 2007 年 3 月 1 日以后本公司所制造的产品。

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此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人身、财产造成严重的不良影响。
环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。
不当的使用，将会导致有害物质泄漏的危险。

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| 部件名称 | 有毒有害物质或元素 | | | | | |
|---|---|---|---|---|---|---|
| | 铅(Pb) | 汞(Hg) | 镉(Cd) | 六价铬(Cr(VI)) | 多溴联苯(PBB) | 多溴二苯醚(PBDE) |
| 外壳（壳体） | × | ○ | ○ | ○ | ○ | ○ |
| 电子部件（印刷电路板等） | × | ○ | × | ○ | ○ | ○ |
| 附件（电源线、交流适配器等） | × | ○ | ○ | ○ | ○ | ○ |

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。
×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。
因根据现有的技术水平，还没有什么物质能够代替它。

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BOSNIA AND HERZEGOVINA
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**EUROMUSIC AGENCY**
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Vanha Nurmijarventie 62
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### GERMANY/AUSTRIA
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Adam-Opel-Strasse 4, 64569
Nauheim, GERMANY
TEL: 6152 95546-00

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**Music Sound Light**
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Patras 26442, GREECE
TEL: 2610 435400

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**Roland East Europe Ltd.**
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HUNGARY
TEL: (23) 511 011

### IRELAND
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Republic of IRELAND
TEL: (01) 4294444

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20020 Arese, Milano, ITALY
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### MACEDONIA
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### MONTENEGRO
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Przno, Kamenovo bb
86000 Budva, MONTENEGRO
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### NORWAY
**Roland Scandinavia Avd. Kontor Norge**
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Lilleaker N-0216 Oslo,
NORWAY
TEL: 2273 0074

### POLAND
**ROLAND POLSKA SP. Z O.O.**
ul. Katy Grodziskie 16B
03-289 Warszawa, POLAND
TEL: (022) 678 9512

### PORTUGAL
**Roland Iberia SL.**
**Branch Office Porto**
Edificio Tower Plaza
Rotunda Eng. Edgar Cardoso 23,
4-B
4400-676 Vila Nova de Gaia,
PORTUGAL
TEL: (+351) 22 608 00 60

### ROMANIA
**Pro Music Concept SRL**
440221 Satu Mare
B-dul Independentei nr. 14/a.,
ROMANIA
TEL: (0361) 807-333

### RUSSIA
**Roland Music LLC**
Dorozhnaya ul.3,korp.6
117 545 Moscow, RUSSIA
TEL: (495) 981-4967

### SERBIA
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Sutjeska br. 5 XS - 24413 PALIC,
SERBIA
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Povazská 18.
SK - 940 01 Nové Zámky,
SLOVAKIA
TEL: (035) 6424 330

### SPAIN
**Roland Systems Group EMEA, S.L.**
Paseo García Faria, 33-35
08005 Barcelona, SPAIN
TEL: 93 493 91 00

### SWEDEN
**Roland Scandinavia A/S**
**SWEDISH SALES OFFICE**
Mårbackagatan 31, 4 tr.
SE-123 43 Farsta, SWEDEN
TEL: (0) 8 683 04 30

### SWITZERLAND
**Roland (Switzerland) AG**
Landstrasse 5, Postfach,
CH-4452 Itingen, SWITZERLAND
TEL: (061) 975-9987

### TURKEY
**ZUHAL DIS TICARET A.S.**
Galip Dede Cad. No.33
Beyoglu, Istanbul, TURKEY
TEL: (0212) 249 85 10

### UKRAINE
**EURHYTHMICS Ltd.**
P.O.Box: 37-a.
Nedecey Str. 30
UA - 89600 Mukachevo, UKRAINE
TEL: (03131) 314-40

### UNITED KINGDOM
**Roland (U.K.) Ltd.**
Atlantic Close, SWANSEA SA7 9FJ,
UNITED KINGDOM
TEL: (01792) 702701

## MIDDLE EAST

### BAHRAIN
**Moon Stores**
No.1231&1249 Rumaytha Building
Road 3931,
Manama 339, BAHRAIN
TEL: 17 813 942

### EGYPT
**Al Fanny Trading Office**
9, EBN Hagar Al Askalany Street,
ARD E1 Golf, Heliopolis,
Cairo 11341, EGYPT
TEL: (022)-417-1828

### IRAN
**MOCO INC.**
Jadeh Makhsous Karaj (K-9),
Nakhe Zarin Ave.
Jalal Street, Reza Alley No.4 Tehran
1389716791, IRAN
TEL: (021)-44545370-5

### ISRAEL
**Halilit P. Greenspoon & Sons Ltd.**
8 Retzif Ha'alia Hashnia St.
Tel-Aviv-Yafo ISRAEL
TEL: (03) 6823666

### JORDAN
**MUSIC HOUSE CO. LTD.**
**FREDDY FOR MUSIC**
P. O. Box 922846
Amman 11192, JORDAN
TEL: (06) 5692696

### KUWAIT
**EASA HUSAIN AL-YOUSIFI & SONS CO.**
Al-Yousifi Service Center
P.O.Box 126 (Safat) 13002,
KUWAIT
TEL: 00 965 802929

### LEBANON
**Chahine S.A.L.**
George Zeidan St., Chahine Bldg.,
Achrafieh, P.O.Box: 16-5857 Beirut,
LEBANON
TEL: (01) 20-1441

### OMAN
**TALENTZ CENTRE L.L.C.**
Malatan House No.1
Al Noor Street, Ruwi
SULTANATE OF OMAN
TEL: 2478 3443

### QATAR
**AL-EMADI TRADING & CONTRACTING CO.**
P.O. Box 62, Doha, QATAR
TEL: 4423-554

### SAUDI ARABIA
**Adawliah Universal Electronics APL**
Behind Pizza Inn
Prince Turkey Street
Adawliah Building,
PO BOX 2154,
Al Khobar 31952,
SAUDI ARABIA
TEL: (03) 8643601

### SYRIA
**Technical Light & Sound Center**
PO Box 13520 Bldg No.49
Khaled Abn Alwalid St.
Damascus, SYRIA
TEL: (011) 223-5384

### U.A.E.
**Adawliah Universal Electronics APL**
Omar bin alkhattab street, fish
round about, nayef area, deira,
Dubai, U.A.E.
TEL: (04) 2340442

## 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

As of Nov. 1, 2013 (ROLAND)

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