EDIROL

COSM

AUDIO Capture UA-700

24 BIT 96 kHz

USB AUDIO INTERFACE

Owner's Manual

Thank you for purchasing the UA-700 USB Audio Interface.

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (Owner's manual pp. 2--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. * 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

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.

- 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 EDIROL / Roland Service Center, or an authorized EDIROL / Roland distributor, as listed on the "Information" page.

- Never use or store the unit in places that are:
  - 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
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.

- 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

- Be sure to use only the AC adaptor supplied with the unit. Also, 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.

- 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!

- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.

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

⚠ WARNING

- 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 "Information" page when:
  - The AC adaptor or the power-supply cord has been damaged; or
  - 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.

- 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 "Information" page.

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

⚠ CAUTION

- 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 output plug or the body of the AC adaptor when plugging into, or unplugging from, this unit or an outlet.

- Whenever the unit is to remain unused for an extended period of time, disconnect the AC adaptor.

- 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 body, or its output 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.

- 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.

- Should you remove the optical connector caps, make sure to put them in a safe place out of children's reach, so there is no chance of them being swallowed accidentally.

IMPORTANT NOTES

In addition to the items listed under "USING THE UNIT SAFELY" on page 2 and 3, please read and observe the following:

Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- 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

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- 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.
- To avoid possible breakdown, do not use the unit in a wet area, such as an area exposed to rain or other moisture.

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.

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 loosing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory in another MIDI device (e.g., a sequencer).
- Unfortunately, it may be impossible to restore the contents of data that was stored in another MIDI device (e.g., a sequencer) 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.
- 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. You may prefer to use headphones, so you do not need to be concerned about those around you (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 a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
  - Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.

Handling CD-ROMs

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

Copyright

- Unauthorized recording, distribution, sale, lending, public performance, broadcasting, or the like, in whole or in part, of a work (musical composition, video, broadcast, public performance, or the like) whose copyright is held by a third party is prohibited by law.
- When exchanging audio signals through a digital connection with an external instrument, this unit can perform recording without being subject to the restrictions of the Serial Copy Management System (SCMS). This is because the unit is intended solely for musical production, and is designed not to be subject to restrictions as long as it is used to record works (such as your own compositions) that do not infringe on the copyrights of others. (SCMS is a feature that prohibits second-generation and later copying through a digital connection. It is built into MD recorders and other consumer digital-audio equipment as a copyright-protection feature.)
- Do not use this unit for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this unit.

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Features of the UA-700

Thank you, and congratulations on your choice of the UA-700. The UA-700 is an audio interface that can be connected to your computer via a USB cable, allowing you to digitally record and play back high-quality audio data.

Built-in COSM effects

The UA-700 features the same COSM engine that has won acclaim with the BOSS GP-20 and GT-6. From the heavy distortion of a tube amp, to a lightly distorted crunch sound, or the clean sound typical of a JC-120, these effects deliver the powerful tones of a guitar amp, faithfully simulating even the subtle impact of picking and volume.

24-bit/96 kHz data for pristine audio quality

You can enjoy high-quality digital recording/playback on your computer using 24-bit/96 kHz* data.

* Your application must support 24-bit/96 kHz data.
* Simultaneous recording and playback at 96 kHz is not possible.

Wide variety of input/output jacks

Two combo-type jacks, which provide both XLR balanced (with phantom power) and TRS balanced inputs, are provided. One input provides a high-impedance (Hi-Z) connection for directly connecting your guitar or bass. The UA-700 also provides RCA phono-type inputs and outputs, phone outputs, and digital input/output jacks (coaxial and optical), making it possible for you to readily connect almost any kind of device.

Direct Monitor function

The Direct Monitor function lets you monitor the input signal directly from headphones or the analog outputs without passing the audio through your computer application. You can also switch the monitor function on/off from an ASIO™ 2.0 compatible application.

WDM/ASIO 2.0 drivers included

You can enjoy high performance with WDM compatible applications such as SONAR™, and ASIO compatible applications such as Cubase™ and Logic™. Of course you can also use applications that support MME (Windows®) or Sound Manager (Mac OS®).

* Roland provides no guarantee or support regarding the operation of sequencer software or audio editing software made by other companies. Please contact the manufacturer of the software you are using.

What is USB?

USB stands for Universal Serial Bus. It is a new interface used to connect various peripheral devices to a computer.

USB allows more than one peripheral device to be connected via a single USB cable, and also allows data to be transmitted more rapidly than conventional serial ports.

Peripherals can also be connected or disconnected with the power turned on, and the computer will automatically recognize the peripheral that has been plugged in. (Some peripherals may require settings or other operations to be performed.)

About SCMS

SCMS (Serial Copy Management System) is a function that protects the rights of the copyright owner by prohibiting second-generation or later copying via a digital connection to a consumer digital audio device such as a DAT recorder or MD recorder. When a recording is made via a digital connection on a digital recorder that has this function, SCMS data will be recorded along with the digital audio signal. A digital audio signal containing this SCMS data cannot be recorded again via a digital connection.

Contents of the package

● UA-700

● AC adaptor

This is the only AC adaptor you should use with the UA-700. Do not use any AC adaptor other than the supplied one, since doing so may cause malfunction.

The ferrite core attached to the cable of the AC adaptor is for the purpose of preventing electromagnetic interference. Do not remove it. (However, the ACI-120C AC adaptor does not come with a ferrite core, since it is unnecessary.)

* *If you require a replacement due to loss or damage, please contact a "EDIROL/Roland Service Center" listed in the "Information" section at the end of this manual. If you purchase a new AC adaptor, please specify the special AC adaptor with ferrite core designed for the UA-700.*

● USB cable

Use this to connect the USB connector of your computer with the USB connector of the UA-700. For details on connections and driver installation, refer to **Getting Connected and Installing Drivers** (Windows → p. 12 or Macintosh → p. 38).

* *Please use only the included USB cable. If you require a replacement due to loss or damage, please contact a "EDIROL/Roland Service Center" listed in the "Information" section at the end of this manual.*

● CD-ROM

This contains the driver required in order to use the UA-700.

● Owner's Manual

This is the manual you are reading. Please keep it on hand for reference.

Setup

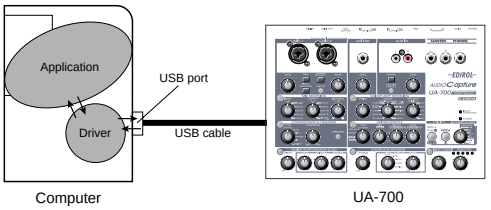
This section explains how to install the drivers needed for connecting the UA-700 to a computer, and make the necessary settings.

Getting Connected and Installing Drivers (Windows)

If you are using a Macintosh computer, please proceed to **Getting Connected and Installing Drivers (Macintosh)** (p. 38).

What is a driver?

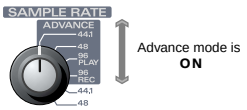
A "driver" is software that transfers data between the UA-700 and application software running on your computer, when your computer and the UA-700 are connected by a USB cable. The driver sends data from your application to the UA-700, and from the UA-700 to your application.



Advanced mode and Standard driver mode

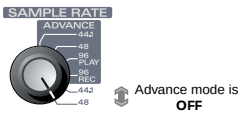
The UA-700 has two operating modes, **Advanced mode** and **Standard driver mode**, and a different driver is used by each mode.

■ Advanced mode



The UA-700 will operate in this mode when the **ADVANCE mode** is turned **ON**. (→Refer to **ADVANCE (mode select) switch** (p. 65))
The special driver included on the CD-ROM will be used, allowing audio to be recorded / played / edited with high quality and stable timing.
In Advanced mode, audio signals can be transferred between the UA-700 and the computer at a resolution of **24 bits** and sampling frequencies of **44.1 / 48 / 96 kHz**. Select this mode if you are using an application that allows high-quality audio recording / playback / editing, such as an application that supports **24 bit audio** (e.g., the Cakewalk series or Cool Edit) or an **ASIO-compatible application** (e.g., Cubase VST or Logic Audio).
(→ **Installing the special driver** (p. 13))

■ Standard driver mode



The UA-700 will operate in this mode when the **ADVANCE mode** is turned **OFF**. (→Refer to **ADVANCE (mode select) switch** (p. 65))
The standard USB audio driver included with Windows will be used. In standard driver mode, audio signals are transferred between the UA-700 and the computer at a resolution of **16 bits** and sampling frequencies of **44.1 kHz**. Select this mode if you are using an application that uses Window's own functionality, such as an application that uses the computer's CD-ROM drive to play back CD-audio, or an application that uses the software synthesizer included with Windows.
The standard driver that is included with Windows does not support ASIO.
(→ **Installing the OS-standard driver** (p. 27))

* *If you want to use MIDI, use Advanced mode.*

* *The standard driver included with Windows does not support ASIO.*

Switching between Advanced mode and Standard driver mode

If you first install both the special driver and the standard driver, you will be able to switch between Advance and Standard driver modes by operating the UA-700's **ADVANCE (mode select) switch**.

* *In order for the setting of the **ADVANCE (mode select) switch** to take effect, you must exit all sequencer software and other applications that use the UA-700, switch off the UA-700, then turn it back on again.*

Installing the special driver

The installation procedure will differ depending on your system.
Please proceed to one of the following sections, depending on the system you use.

- Windows XP / 2000 users .....(p. 13)
- Windows Me / 98 users.....(p. 25)

■ Windows XP/2000 users

The **CD-ROM** contains two types of driver for Windows XP / 2000 (WDM driver and MME driver). Normally, you should use the **WDM driver**.

WDM driver

You should use this driver if you have specified WDM driver mode for SONAR or a similar application. This will provide the highest-quality audio performance.

* *If you are using Windows 2000, it is not possible to use 24-bit audio with applications that do not support a WDM driver mode, such as Cool Edit or Media Player.*

MME driver

This driver allows you to use 24-bit audio even from applications that do not have a WDM driver mode, such as Cool Edit. It is not possible to use the MME driver from WDM driver mode of an application such as SONAR.

It is not possible to install both the WDM driver and the MME driver. You must select one beforehand, and install only that driver. If after installing one of these drivers you decide to change drivers, you must first delete the already-installed driver and then install the new driver.
(→ **Deleting the special driver** (p. 106))

* *The WDM driver and the MME driver can be installed using the same procedure.*

Windows XP users

1

With the UA-700 disconnected, start up Windows.

Disconnect all USB cables except for a USB keyboard and USB mouse (if used).

2

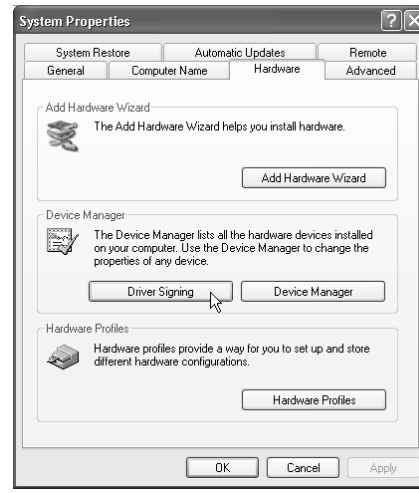
Open the **System Properties** dialog box.

1. Click the Windows **start** menu, and from the menu, select **Control Panel**.
2. In " **Pick a category**," click "**Performance and Maintenance**."
3. In "**or pick a Control Panel icon**," click the **System** icon.

4

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

Open the **Driver Signing Options** dialog box.



5

Make sure that "**What action do you want Windows to take?**" is set to "**Ignore**."

If it is set to "**Ignore**", simply click **[OK]**.

If it is not set to "**Ignore**", make a note of the current setting ("Warn" or "Block"). Then change the setting to "**Ignore**" and click **[OK]**.

After installing the driver, restore the original setting.

(→ **If you changed "What action do you want Windows to take?"** (p. 19))

NOTE

If you are using Windows XP Professional, you must log on using a user name with an administrative account type (e.g., Administrator). For details on user accounts, please consult the system administrator of your computer.

MEMO

Depending on how your system is set up, the **System** icon may be displayed directly in the **Control Panel** (the Classic view). In this case, double-click the **System** icon.

MEMO

If you changed "**What action do you want Windows to take?**" in **step 4**, you must restore the previous setting after you have installed the driver. (→ **If you changed "What action do you want Windows to take?"** (p. 19))

6

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

7

Exit all currently running software (applications).

Also close any open windows. If you are using virus checking or similar software, be sure to exit it as well.

8

Prepare the CD-ROM.

Insert the CD-ROM into the CD-ROM drive of your computer.

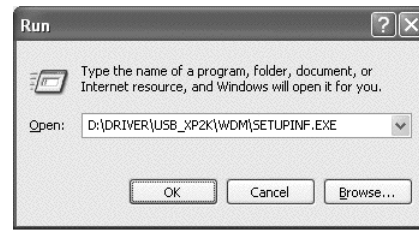
9

Click the Windows **start** button. From the menu that appears, select "**Run...**"

Open the "**Run...**" dialog box.

10

In the dialog box that appears, input the following into the "**Open**" field, and click **[OK]**.



D:\Driver\USB_XP2K\WDM\SETUPINF.EXE

The drive name "***D:***" may be different for your system. Specify the drive name of your CD-ROM drive.

11

The **SetupInf** dialog box will appear.

You are now ready to install the driver.

MEMO

If you are using the **MME driver**, input **MME** instead of **WDM**.

MEMO

In this manual, the location of folders and files is given in terms of the file path, using **** as the delimiter. For example, **USB_XP2K\SETUPINF.EXE** indicates the **SETUPINF.EXE** file found in the **USB_XP2K** folder.

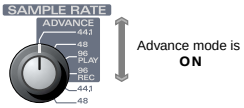
12

Use the **USB cable** to connect the **UA-700** to your **computer**.

1. With the power switch turned **OFF**, connect the **AC adaptor** to the **UA-700**.
2. Connect the **AC adaptor** to an electrical outlet.
3. Use the **USB cable** to connect the **UA-700** to your **computer**.

13

Set the UA-700's **ADVANCE (mode select) switch** to the **ON** position.



14

Set the UA-700's **power switch** to the **ON** position.

Near the task bar, your computer will indicate "**Found New Hardware**". Please wait.

15

The **Found New Hardware Wizard** will appear.

Make sure that the screen indicates "**EDIROL UA-700 (WDM)**," select "**Install from a list or specific location (Advanced)**," and click **[Next]**.

16

The screen will indicate "**Please choose your search and installation options**."

Select "**Don't search. I will choose the driver to install**," and click **[Next]**.

MEMO

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and / or damage to speakers and other devices.

MEMO

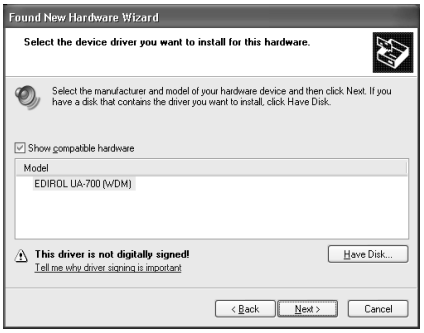
This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

MEMO

In the case of the MME driver, make sure that "EDIROL UA-700 (MME)" is displayed.

17

Make sure that the "**Model**" field indicates "**EDIROL UA-700 (WDM)**," and click **[Next]**. Driver installation will begin.



MEMO

In the case of the MME driver, make sure that "EDIROL UA-700 (MME)" is displayed.

If the "**What action do you want Windows to take**?" setting was not set to "**Ignore**", a "**Hardware Installation**" dialog box will appear.

If "What action do you want Windows to take?" is set to "Warn,"

1. Click **[Continue Anyway]**.
2. Continue the installation.

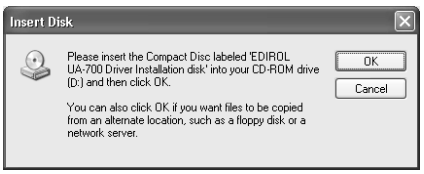
If "What action do you want Windows to take?" is set to "Block"

1. Click **[OK]**.
2. When the "**Found New Hardware Wizard**" appears, click **[Finish]**.
3. Perform the installation as described in the "**Troubleshooting**" section on **Device Manager shows "?", "!", or "USB Composite Device"** (p. 95).

18

The **Insert Disk** dialog box will appear.

Click **[OK]**.



MEMO

The **Insert Disk** dialog may not appear. In that case, proceed to **step 17**.

19

The **Files Needed** dialog box will appear. Input the following into the "**Copy files from**" field, and click **[OK]**.

D:\Driver\USB_XP2K\WDM

* *The drive name "**D:**" may be different for your system. Specify the drive name of your CD-ROM drive.*

If the "**What action do you want Windows to take**?" setting was not set to "**Ignore**", a "**Hardware Installation**" dialog box will appear.

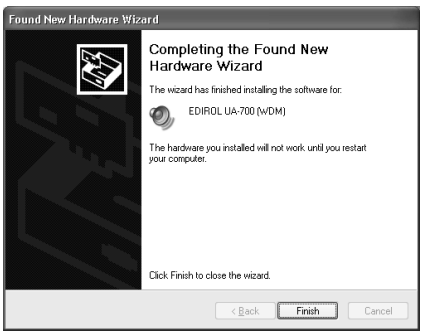
If "What action do you want Windows to take?" is set to "Warn,"

1. Click **[Continue Anyway]**.
2. Continue the installation.

20

The **Found New Hardware Wizard** will appear.

Verify that **"EDIROL UA-700 (WDM)"** or **"EDIROL UA-700 (MME)"** is displayed, and click **[Finish]**. Wait until "**Found New Hardware**" appears near the taskbar.



21

When driver installation has been completed, the **System Settings Change** dialog box will appear.

Click **[Yes]**. Windows will restart automatically.

MEMO

If you are using the MME driver, input MME instead of WDM.

If you changed “What action do you want Windows to take?”

If you changed the **What action do you want Windows to take?** setting, restore the original setting after Windows restarts.

1. If you are using **Windows XP Professional**, log on to Windows using the user name of an **administrative account** (e.g., Administrator).
2. Click the Windows **start** menu, and from the menu, select **Control Panel**.
3. In "**Pick a category**," click "**Performance and Maintenance**."

* *Depending on how your system is set up, the **System** icon may be displayed directly in the **Control Panel** (classic view). In this case, double-click the **System** icon.*

4. In "**or pick a Control Panel icon**," click the **System** icon. The System Properties dialog box will appear.
5. Click the **Hardware** tab, and then click **[Driver Signing]**. The **Driver Signing Options** dialog box will appear.
6. Return the **What action do you want Windows to take?** setting to the original setting (either “Warn” or “Block”), and click **[OK]**.
7. Click **[OK]**. The **System properties** dialog box will close.

Next, you need to make the driver settings.
(→ **Settings and checking** (p. 32))

Windows 2000 users

1

With the UA-700 disconnected, start up Windows.

Disconnect all USB cables except for a USB keyboard and USB mouse (if used).

2

Log on to Windows as a user with administrative privileges (such as Administrator).

3

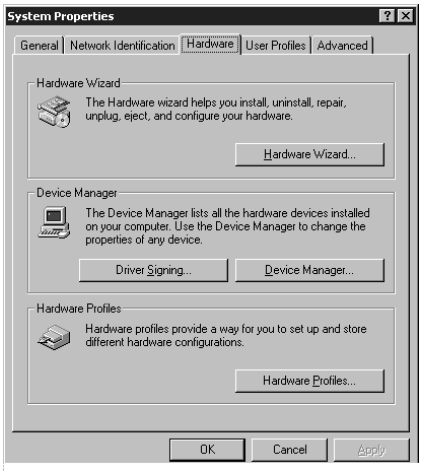
Open the **System Properties** dialog box.

Click the Windows **Start** button, and from the menu that appears, select **Settings | Control Panel**. In **Control Panel**, double-click the **System** icon.

4

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

Open the **Driver Signing Options** dialog box.



5

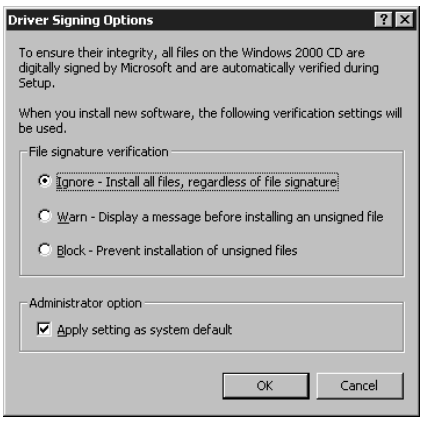
Make sure that "**File signature verification**" is set to "Ignore."

If it is set to **"Ignore"**, simply click **[OK]**.

If it is not set to **"Ignore"**, make a note of the current setting ("Warn" or "Block"). Then change the setting to **"Ignore"** and click **[OK]**.

After installing the driver, restore the original setting.

(→ **If you changed "File signature verification"** (p. 24))



NOTE

If the UA-700 is already connected to your computer and a message of "**Add New Hardware Wizard"** is displayed, go to the included **CD-ROM** folder named **DRIVER\USB_XP2K\WDM** or **DRIVER\USB_XP2K\MME**, open the file Readme_e.htm, and read the "**Troubleshooting**" section entitled "**You attempted to install using the above procedure, but were not able to."**

MEMO

If you changed "**File signature verification**" in **step 5**, you must restore the previous setting after you have installed the driver. (–> **If you changed "File signature verification"** (p. 24))

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

7 Exit all currently running software (applications).

Also close any open windows. If you are using virus checking or similar software, be sure to exit it as well.

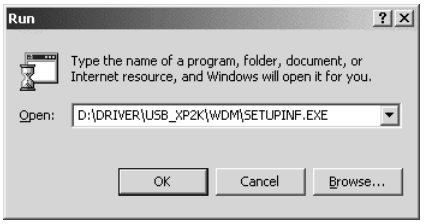
8 Insert the CD-ROM.

Insert the CD-ROM into the CD-ROM drive of your computer.

9 Click the Windows **Start** button. From the menu that appears, select "**Run...**"

Open the "**Run...**" dialog box.

10 In the dialog box that appears, input the following into the "**Open**" field, and click **[OK]**.

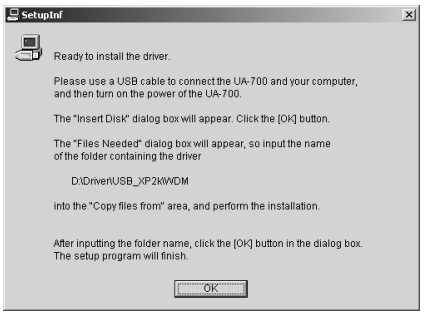


D:\DRIVER\USB_XP2K\WDM\SETUPINF.EXE

* *The drive name **"D:"** may be different for your system. Specify the drive name of your CD-ROM drive.*

11 The **SetupInf** dialog box will appear.

You are now ready to install the driver.



12 Use the **USB cable** to connect the **UA-700** to your **computer**.

1. With the power switch turned **OFF**, connect the **AC adaptor** to the **UA-700**.
2. Connect the **AC adaptor** to an electrical outlet.
3. Use the **USB cable** to connect the **UA-700** to your **computer**.

MEMO

In this manual, the location of folders and files is given in terms of the file path, using **** as the delimiter. For example, **WDM\SETUPINF.EXE** indicates the **SETUPINF.EXE** file found in the **WDM** folder.

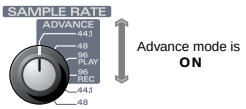
MEMO

If you are using the **MME driver**, input **MME** instead of **WDM**.

MEMO

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and / or damage to speakers and other devices.

4 Set the UA-700's **ADVANCE (mode select) switch** to the **ON** position.



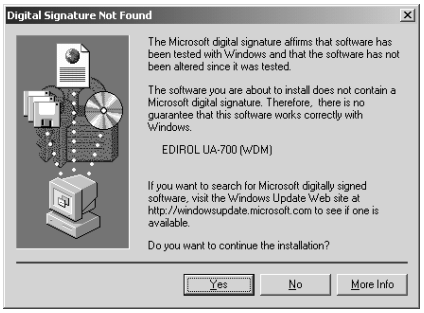
5 Set the UA-700's **power switch** to the **ON** position.

Near the task bar, your computer will indicate "**Found New Hardware**". Please wait.

If the "**File signature verification**" setting was not set to "**Ignore**", a "**Digital Signature Not Found**" dialog box will appear.

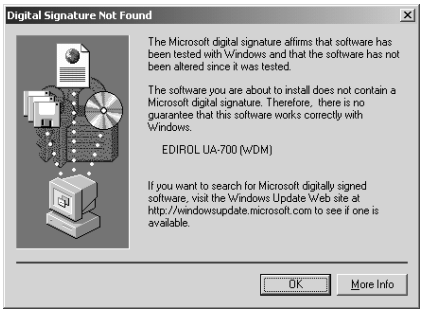
If "File signature verification" is set to "Warn,"

1. Click **[Yes]**.
2. Continue the installation.



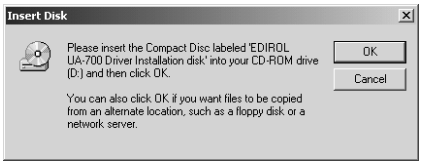
If "File signature verification" is set to "Block"

1. Click **[OK]**.
2. When the "**Found New Hardware Wizard**" appears, click **[Finish]**.
3. Perform the installation as described in the "**Troubleshooting**" section on **Device Manager shows "?", "!", or "USB Composite Device"** (p. 95).



6 The **Insert Disk** dialog box will appear.

Click **[OK]**.



MEMO

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

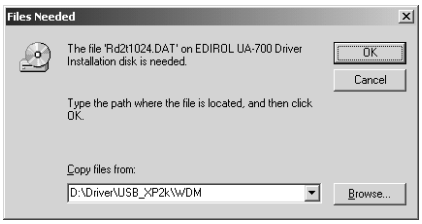
NOTE

If the **Insert Disk** dialog box does not appear, please read **The "Insert Disk" dialog box does not appear** (p. 95)

7

The **Files Needed** dialog box will appear.

In the **Copy files from** field, type the folder name that is shown in the dialog box, and click **[OK]**.



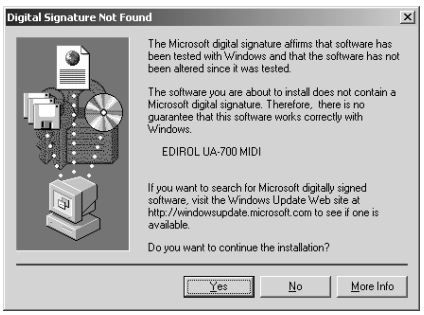
D:\DRIVER\USB_XP2K\WDM

* *The drive name **"D:"** may be different for your system. Specify the drive name of your CD-ROM drive.*

If the "**File signature verification**" setting was not set to "**Ignore**", a "**Digital Signature Not Found**" dialog box will appear.

If "File signature verification" is set to "Warn,"

1. Click **[Yes]**.
2. Continue the installation.

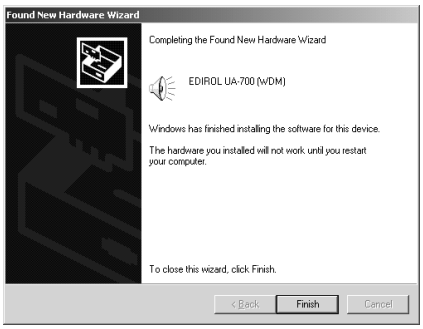


8

The "**Find New Hardware Wizard**" may be displayed.

Verify that **"EDIROL UA-700 (WDM)"** or **"EDIROL UA-700 (MME)"** is displayed, and click **[Finish]**.

If the **"Find New Hardware Wizard"** dialog box is not displayed, proceed to **step 18.**

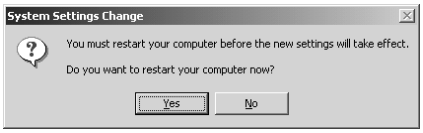


9

The **System Settings Change** dialog box may appear.

Click **[Yes]**. Windows will restart automatically.

If the **System Settings Change** dialog box does not appear, restart Windows from the Start menu.



MEMO

If you are using the **MME driver**, input **MME** instead of **WDM**.

If you changed “File signature verification”

If you changed the **“File signature verification”** setting in **step 5**, restore the original setting after Windows restarts.

1. After Windows restarts, log in to Windows as a user with **administrative privileges**, (such as **Administrator**).
2. In the Windows desktop, right-click the **My Computer** icon, and from the menu that appears, select **Properties**. The **System Properties** dialog box will appear.
3. Click the **Hardware** tab, and then click **[Driver signature]**. The **Driver Signing Options** dialog box will appear.
4. Return the **“File signature verification”** setting to the original setting (either **“Warn”** or **“Block”**), and click **[OK]**.
5. Click **[OK]**. The **System Properties** dialog box will close.

Next, you need to make the driver settings.
(→ **Settings and checking** (p. 32)

■ Windows Me/98 users

1

With the UA-700 disconnected, start up Windows.

Disconnect all USB cables other than those for a USB keyboard or USB mouse.

2

Exit all currently running software (applications).

Also, close any open windows. If you are using a virus checker or similar software, be sure to exit this as well.

3

Prepare the CD-ROM.

Insert the CD-ROM into the CD-ROM drive of your computer.

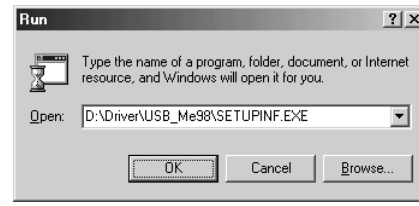
4

Click the Windows **Start** button. From the menu that appears, select **Run...**.

Open the **Run...** dialog box.

5

In the dialog box that appears, input the following into the "**Open**" field, and click **[OK]**.



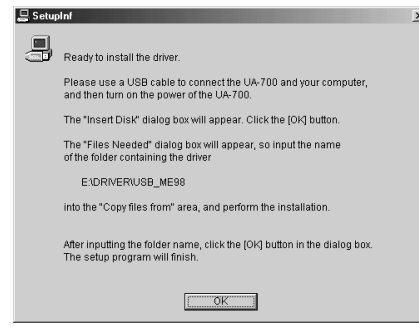
D:\DRIVER\USB_ME98\SETUPINF.EXE

* *The drive name **"D:"** may be different depending on your system. Type the name of your CD-ROM drive.*

6

Open the **SetupInf** dialog box.

You are now ready to install the driver.



NOTE

If the UA-700 is already connected to your computer and a message of "**Add New Hardware Wizard**" is displayed, go to the CD-ROM folder named **DRIVER\USB_ME98**, open the file Readme_e.htm, and read the "**Troubleshooting**" section entitled "**You attempted to install using the above procedure, but were not able to.**".

MEMO

In this manual, the location of folders and files is given in terms of the file path, using **** as the delimiter. For example, **USB_ME98\SETUPINF.EXE** indicates that the **SETUPINF.EXE** file is located in the **USB_ME98** folder.

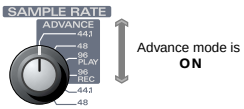
7

Use the **USB cable** to connect the **UA-700** to your **computer**.

1. With the power switch turned **OFF**, connect the **AC adaptor** to the **UA-700**.
2. Connect the **AC adaptor** to an electrical outlet.
3. Use the **USB cable** to connect the **UA-700** to your **computer**.

8

Set the UA-700's **ADVANCE (mode select) switch** to the **ON** position.



9

Set the UA-700's **power switch** to the **ON** position.

Near the task bar, your computer will indicate "**Found New Hardware**". Please wait.

10

If you are using Windows 98, an **Insert disk** dialog box will appear.

Click **[OK]**.

11

The **New Hardware Found** dialog box will appear.

In the **Copy files from** field, type the folder name that is shown in the **SetupInf** dialog box, and click **[OK]**.

D:\DRIVER\USB_ME98

* *The drive name **"D:"** may be different depending on your system. Type the name of your CD-ROM drive.*

12

Once the driver has been installed, the **New Hardware Found** dialog box will close.

In the **SetupInf** dialog box, click **[OK]**. The **SetupInf** dialog box will close.

Next, you need to make the driver settings.
(→ **Settings and checking** (p. 32))

MEMO

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and / or damage to speakers and other devices.

MEMO

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

NOTE

If you are using Windows 98 and the **Insert disk** dialog box dose not appear, please read **The "Insert Disk" dialog box does not appear** (p. 95).

NOTE

If the **New Hardware Found** dialog box does not appear, re-install the driver using the same procedure as described in **The "Insert Disk" dialog box does not appear** (p. 95).

Installing the OS-standard driver

The procedure for installation and settings will depend on your system.
Proceed to the appropriate section as follows.

- Windows XP / 2000 users ..... (p. 27)
- Windows Me users ..... (p. 28)
- Windows 98 users ..... (p. 29)

■ Windows XP/2000 users

1

With the UA-700 disconnected, start up Windows.

Disconnect all USB cables except for a USB keyboard and USB mouse (if used).

2

Exit all currently running software (applications).

If you are using a virus checker or similar software, be sure to exit it as well.

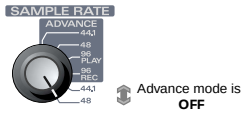
3

Use the **USB cable** to connect the **UA-700** to your **computer**.

1. With the power switch turned **OFF**, connect the **AC adaptor** to the **UA-700**.
2. Connect the **AC adaptor** to an electrical outlet.
3. Use the **USB cable** to connect the **UA-700** to your **computer**.

4

Place the UA-700's **ADVANCE (mode select) switch** in the **OFF** position.



5

Set the UA-700's **power switch** to the **ON** position.

The UA-700 will be detected automatically, and the driver will be installed.

6

When installation is complete, restart Windows.

Next, you will need to make the driver settings.
(→ **Settings and checking** (p. 32))

MEMO

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and / or damage to speakers and other devices.

MEMO

If you are using Windows XP, the installation has been completed when the message near the taskbar saying that "**Found New Hardware**" has disappeared.

MEMO

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

■ Windows Me users

1

With the UA-700 disconnected, start up Windows.

Disconnect all USB cables except for a USB keyboard and USB mouse (if used).

2

Exit all currently running software (applications).

If you are using a virus checker or similar software, be sure to exit it as well.

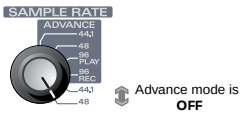
3

Use the **USB cable** to connect the **UA-700** to your **computer**.

1. With the power switch turned **OFF**, connect the **AC adaptor** to the **UA-700**.
2. Connect the **AC adaptor** to an electrical outlet.
3. Use the **USB cable** to connect the **UA-700** to your **computer**.

4

Place the UA-700's **ADVANCE (mode select) switch** in the **OFF** position.



5

Set the UA-700's **power switch** to the **ON** position.

6

Windows will detect the UA-700, and the **"Add New Hardware Wizard"** dialog box will appear.

Make sure that **Automatic search for a better driver (Recommended)** is selected, and click **[Next]**.

7

Driver detection will begin.

8

When the driver has been found, driver installation will begin.

MEMO

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and / or damage to speakers and other devices.

MEMO

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

NOTE

Depending on your system, a certain amount of time may be required for the device to be

9 Once the driver has been installed, a dialog box will inform you of this.

Click **[Finish]**.

10 Restart Windows.

Next, you will need to make the driver settings.
(→ **Settings and checking** (p. 32))

■ Windows 98 users

The **USB composite device** driver is installed first, then the **USB audio device** driver is installed. Use the following procedure to install the drivers.

1 With the UA-700 disconnected, start up Windows.

Disconnect all USB cables except for a USB keyboard and USB mouse (if used).

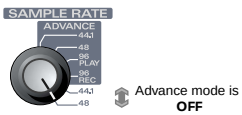
2 Exit all currently running software (applications).

If you are using a virus checker or similar software, be sure to exit it as well.

3 Use the **USB cable** to connect the **UA-700** to your **computer**.

1. With the power switch turned **OFF**, connect the **AC adaptor** to the **UA-700**.
2. Connect the **AC adaptor** to an electrical outlet.
3. Use the **USB cable** to connect the **UA-700** to your **computer**.

4 Place the UA-700's **ADVANCE (mode select) switch** in the **OFF** position.



5 Set the UA-700's **power switch** to the **ON** position.

MEMO

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and / or damage to speakers and other devices.

MEMO

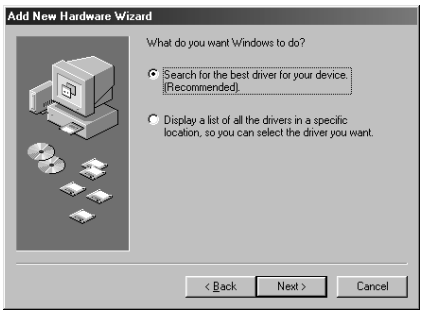
This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

6

USB composite device will be detected automatically, and the "**Add New Hardware Wizard**" dialog box will appear. Click **[Next]**.

7

When **"What do you want Windows to do?"** appears, select **"Search for the best driver for your device (Recommended)"**, and click **[Next]**.



8

A dialog box like the one shown will appear.

Check **CD-ROM drive**, and click **[Next]**

9

A dialog box like the one shown will appear.

Click **[Next]**.

10

File (driver) copying will begin.

MEMO

If this dialog box does not appear, refer to **"Find new hardware wizard" does not execute automatically** (p. 94)

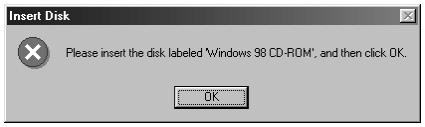
MEMO

If the display indicates "**Can't find an updated driver for this device**," check "**Updated driver,**" and click **[Next]**.

NOTE

Depending on your system, the **Driver location** may differ from the illustration, but this is not a problem.

If the Windows CD-ROM is not inserted in the CD-ROM drive, a **"Insert Disk"** dialog box may appear. In this case, insert the Windows CD-ROM into the CD-ROM drive and click **[OK]**.



11

When installation of the **USB Composite Device** driver is completed, a dialog box like the one shown here will appear.

Click **[Finish]**.

12

Next, the **USB audio device** will be detected automatically, and the **"Add New Hardware Wizard"** dialog box will appear.

Click **[Next]**, and proceed with the installation in the same way as in **steps 8–11** (p. 30).

13

When installation of the **USB audio device** driver is complete, a dialog box like the one shown here will appear.

Click **[Finish]**.

14

Installation of the **USB composite device** driver and **USB audio device** driver has been completed.

Restart Windows.

Next, you will need to make the driver settings.
(→ **Settings and checking** (p. 32))

Settings and checking

■ Specifying the audio and MIDI input/output destination

Windows XP/2000/Me users

1

Open **Control Panel**.

Click the Windows **Start** button, and from the menu that appears, select **Settings | Control Panel**.

Windows XP
Click the Windows **start** button, and from the menu that appears, select **Control Panel**.

2

Open the **Sounds and Audio Devices Properties** dialog box (or in Windows 2000 / Me, **Sounds and Multimedia Properties**).

Windows XP
In "**Pick a category**," click "**Sound, Speech, and Audio Devices**." Next, in "**or pick a Control Panel icon**," click the **sounds and Audio Devices** icon.

Windows 2000/Me
In **Control Panel**, double-click the **Sounds and Multimedia** icon to open the "**Sounds and Multimedia Properties**" dialog box.

3

Click the **Audio** tab.

4

For **MIDI music playback**, click the ▼ located at the right of **[Default device]** (or in Windows 2000 / Me, **[Preferred device]**), and select the following from the list that appears.

	Advanced mode	Standard driver mode
Sound playback	EDIROL UA-700 OUT	EDIROL UA-700 (Windows XP) USB Audio Device (Windows 2000 / Me)
Sound recording	EDIROL UA-700 IN	EDIROL UA-700 (Windows XP) USB Audio Device (Windows 2000 / Me)
MIDI music playback	EDIROL UA-700 MIDI OUT	MIDI cannot be handled when using Standard Driver mode.

MEMO

Depending on how your system is set up, the **Sounds and Audio Devices** icon may be displayed directly in the **Control Panel** (the Classic view). In this case, double-click the **Sounds and Audio Devices** icon.

MEMO

If the **Sound and Multimedia** icon is not displayed, click "**Show all control panel options**" in the frame at the left.

MEMO

For details on **Advanced mode** and **Standard Driver mode**, refer to **Advanced mode and Standard driver mode** (p. 12).

5

Close the **Sounds and Audio Devices Properties** dialog box.
Click **OK** to complete the settings.

Proceed to the next section.
→ **Volume Control setting** (p. 35)

Windows 98 users

1

Open **Control Panel**.

Click the Windows **Start** button, and from the menu that appears, select* **Settings | Control Panel**.

2

Open the **Multimedia Properties** dialog box.

In **Control Panel**, double-click the **Multimedia** icon to open the "**Multimedia Properties**" dialog box.

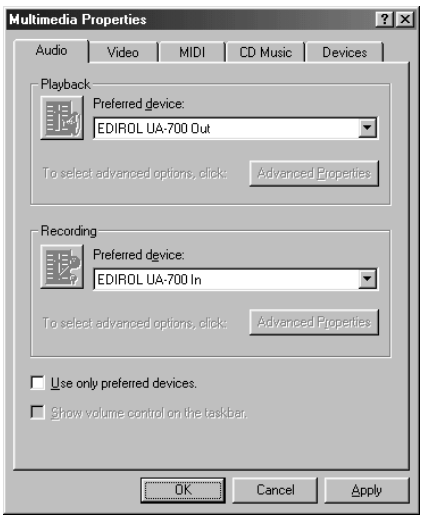
3

Click the **Audio** tab.

4

Specify the "**Preferred device**."

Click the **Playback** field and **Recording** field, make the following selections from the list that appears, and click **[Apply]**.



	Advanced mode	Standard driver mode
Playback	EDIROL UA-700 Out	USB Audio Device
Recording	EDIROL UA-700 In	USB Audio Device

5

Click the **MIDI** tab.

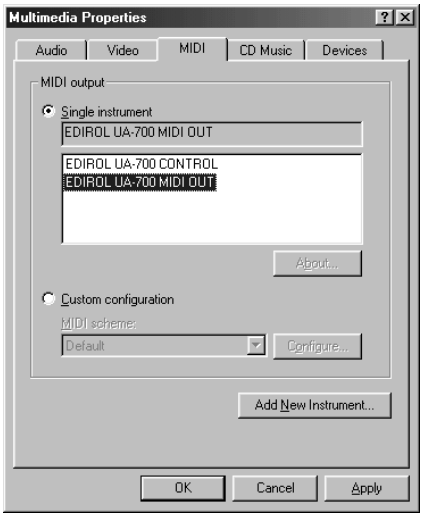
MEMO

For details on **Advanced mode** and **Standard Driver mode**, refer to **Advanced mode and Standard driver mode** (p. 12).

6

Set "**MIDI output**."

Select **[Single instrument]**, and choose one of the following from the list that appears, and click **[Apply]**.



	Advanced mode	Standard driver mode
MIDI output	EDIROL UA-700 MIDI OUT	MIDI cannot be handled when using Standard Driver mode.

7

Close the **Multimedia Properties** dialog box.

Click **[OK]** to complete the settings.

This completes MIDI and audio input/output destination settings. If you installed the standard Windows driver, make settings for the Windows volume control.
Proceed to the next section. → **Volume Control setting** (p. 35)

MEMO

For details on **Advanced mode** and **Standard Driver mode**, refer to **Advanced mode and Standard driver mode** (p. 12).

■ Volume Control setting

If you installed the standard Windows driver, set the Windows volume control.

1

Open the **Volume Control**.

Click the Windows **Start** button, and select **Programs | Accessories | Entertainment | Volume Control**.

2

Raise or lower the slider to adjust the volume of the UA-700.

If you have installed the Standard driver, the UA-700 can use the Windows **volume control** to adjust the output volume.

Items that can be set

CD Player (CD Audio)	Controls the volume of "audio CDs" on the internal CD-ROM drive of the computer. (*1)
WAVE	Controls the volume of sound output from the "EDIROL UA-700" audio output device. Digital output and analog output will change.
Synthesizer SW Synth	Controls the volume of the software synthesizer built into Windows.

* *1*

If the CD playback volume does not change when you adjust this control, then change the WAVE volume. If you are using Windows 2000 and the ***CD Player*** *is not displayed, check* ***"Enable digital music CDs for this CD playback device"*** *in* ***Digital CD Playback****.*

→ **When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-700 to play game music (Standard driver mode only)** (p. 36)

NOTE

If the Volume Control is not installed on your computer, use the **Control Panel** icon **Add or Remove Programs** to install it. For details on installation, refer to the Windows manual or Help.

MEMO

You will be able to use the UA-700 at the best audio quality if you set the Volume Control volume to the maximum setting.

NOTE

If Mute is checked or if the slider is lowered all the way, no sound will be output from the UA-700.

When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-700 to play game music (Standard driver mode only)

Windows XP/2000 users:

1. Open the **System Properties** dialog box.
   Select **Start | Settings | Control Panel**, and in the **Control Panel**, double-click the **System** icon.
   (**Windows XP–** Click the Windows **start** button, and from the menu that appears, select **Control Panel**.)
2. Open the **Device Manager**.
   Click the **Hardware** tab, and click the **Device Manager** button.
3. Open the CD-ROM drive's **Properties**.
   In CD-ROM drive, double-click the **CD-ROM drive** that you are using. In **Digital CD Playback**, check the **"Enable digital CD audio for this CD-ROM device"** item.

Windows Me users:

1. Open **System Properties**.
   Select **Start | Settings | Control Panel**, and in **Control Panel**, double-click the **System** icon.
2. Open the CD-ROM drive's **Properties**.
   Double-click the **CD-ROM** icon, and then double-click the CD-ROM drive that you are using.
3. Click the **Properties** tab, and in **Digital CD Playback**, check the **"Enable digital CD audio for this CD-ROM device"** item.

Windows 98 users:

1. Open the **Multimedia Properties** dialog box.
   Select **Start | Settings | Control Panel**, and in **Control Panel**, double-click the **Multimedia** icon.
2. Click the **Music CD** tab, and check the **"Enable digital CD audio for this CD-ROM device"** item.

* *Depending on your system, playback may still not be possible. For details, please contact the manufacturer of your computer. If you are using a PC-card (PCMCIA) type CD-ROM drive, playing back WAVE data from a CD-ROM or playing an audio CD may cause interrupted sound, or possibly no sound at all.*

Check whether there is sound

Now we will play back the sample data to check whether connections are correct.

Playing back the sample data

Here we will use standard Windows functionality to play back the sample data. The sample data is found on the CD-ROM.

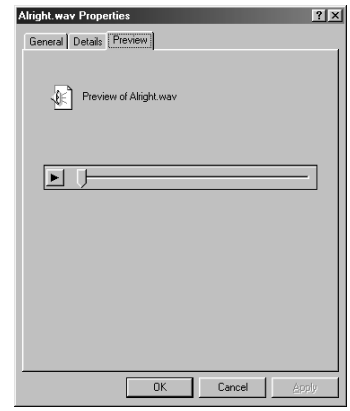
1 Insert the CD-ROM into the CD-ROM drive of your computer.

2 From the **Sample** folder of the CD-ROM, drag **Alright(.wav)** to your desktop, copying it.

3 Right-click the copied file **Alright(.wav)**, and select **Properties** (**Play** for Windows XP / 2000 / Me).

4 Play back the sample data.

Click the **Preview** tab, and then click the ▶ button.



Was the sample data played back?

If it was played back correctly, this means that the computer and the UA-700 are connected correctly, and that the drivers have been installed correctly.

MEMO

In order to hear the sample data, you will need approximately 30 MB of free space on the hard disk in which Windows is installed.

MEMO

Use of the song data supplied with this product for any purpose other than private, personal enjoyment without the permission of the copyright holder is prohibited by law. Additionally, this data must not be copied, nor used in a secondary copyrighted work without the permission of the copyright holder.

MEMO

What you actually see on your computer screen may be different depending on your computing environment and the operating system your using.

MEMO

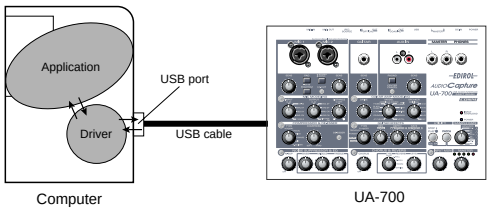
If it did not play back correctly, refer to **"Troubleshooting"** (p. 93) to determine the reason. This section contains information on how to solve problems such as no sound, or failure to play back correctly.

Getting Connected and Installing Drivers (Macintosh)

If you are using a Windows computer, please proceed to **Getting Connected and Installing Drivers (Windows)** (p. 12).

What is a driver?

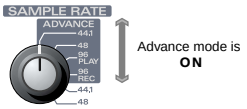
A "driver" is software that transfers data between the UA-700 and application software running on your computer, when your computer and the UA-700 are connected by a USB cable. The driver sends data from your application to the UA-700, and from the UA-700 to your application.



Advanced mode and Standard driver mode

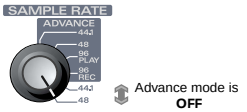
The UA-700 has two operating modes, **Advanced mode** and **Standard driver mode**, and a different driver is used by each mode.

■ Advanced mode



The UA-700 will operate in this mode when the **ADVANCE mode** is turned **ON**. (→Refer to **ADVANCE (mode select) switch** (p. 65))
The special driver included on the CD-ROM will be used, allowing audio to be recorded / played / edited with high quality and stable timing.
In Advanced mode, audio signals can be transferred between the UA-700 and the computer at a resolution of **24 bits** and sampling frequencies of **44.1 / 48 / 96 kHz**. Select **Advanced mode** if you are using an application that is able to record / playback / edit high-quality audio, such as a **24 bit audio application** or an **ASIO-compatible application** such as Cubase VST, Logic Audio, and Metro.
In Advanced mode, the UA-700 cannot play back audio data (audio CDs or warning sounds) from the Macintosh sound manager.
(→ **Installing the special driver** (p. 40))

■ Standard driver mode



The UA-700 will operate in this mode when the **ADVANCE mode** is turned **OFF**. (→Refer to **ADVANCE (mode select) switch** (p. 65))
The standard USB audio driver included with MacOS will be used. In standard driver mode, audio signals are transferred between the UA-700 and the computer at a resolution of **16 bits** and sampling frequencies of **44.1 / 48 kHz**. Select this mode if you are using an application that uses MacOS's own functionality, such as an application that uses the computer's CD-ROM drive to play back CD-audio, or an application that uses the software synthesizer included with MacOS. The standard driver included with MacOS does not support ASIO.
Note also that the use of Mac OS 8.6 is not supported.
(→ **Installing the OS-standard driver** (p. 49))

Switching between Advanced mode and Standard driver mode

If you first install both the special driver and the standard driver, you will be able to switch between Advance and Standard driver modes by operating the UA-700's **ADVANCE (mode select) switch**.

* *In order for the setting of the **ADVANCE (mode select) switch** to take effect, you must exit all sequencer software and other applications that use the UA-700, switch off the UA-700, then turn it back on again.*

Installing the special driver

You must install the MIDI driver even if you will be using only audio on the UA-700. **Be sure to install the MIDI driver.**

Use either OMS or FreeMIDI as the MIDI driver.

If you are using OMS ..... (p. 40)
If you are using FreeMIDI ..... (p. 45)

* *Either **OMS** or **FreeMIDI** must be installed in your Macintosh, as appropriate for the sequencer software you are using.*

* *If the power of the UA-700 is turned on, a message like the following will appear when the Macintosh is started up. Perform the steps described below as appropriate for the message that is displayed.*

If the screen indicates:

"Driver required for USB device 'unknown device' is not available. Search for driver on the Internet?"

→ click **[Cancel]**.

If the screen indicates:

"Software required for using device 'unknown device' cannot be found. Please refer to the manual included with the device, and install the necessary software."

→ click **[OK]**.

■ Installing the UA-700 driver (OMS)

Use the following procedure to install the UA-700 driver.
The included **UA-700 OMS driver** is an add-on module for using the UA-700 with OMS. In order for you to use it, **OMS must already be installed on the hard disk from which you started up**.

If you would like to learn more about **OMS**, refer to **OMS_2.3_Mac.pdf** in the **OMS Driver** folder within the **Driver E** folder of the CD-ROM. You will need the Adobe Acrobat Reader in order to view **OMS_2.3_Mac.pdf**.

* *Disconnect the UA-700 from the Macintosh before you perform the installation.*

1

Exit all currently running software (applications).

If you are using a virus checker or similar software, be sure to exit this as well.

2

Prepare the CD-ROM.

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

MEMO

OMS can be found in the **OMS Driver** folder within the **Driver E** folder of the CD-ROM.

3 Double-click the **UA-700 OMS Driver-E Installer** icon (found in the **Driver E** folder of the CD-ROM) to start up the installer.

4 Verify the **Install Location**, and click **[Install]**.

5 If a message like the following is displayed, click **[Continue]**.

The other currently running applications will exit, and installation will continue.

6 A dialog box will indicate **Installation completed**.

Click **[Restart]** to restart your Macintosh.

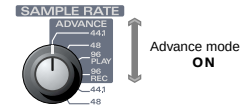
OMS settings

To check the OMS settings, you will first need to connect a MIDI sound module to the UA-700's MIDI OUT connector.
For details on connecting a MIDI sound module, refer to the owner's manual for your MIDI sound module.

1 Use the **USB cable** to connect the **UA-700** to your **computer**.

1. With the power switch turned **OFF**, connect the **AC adaptor** to the **UA-700**.
2. Connect the **AC adaptor** to an electrical outlet.
3. Use the **USB cable** to connect the **UA-700** to your **computer**.

2 Set the UA-700's **ADVANCE (mode select) switch** to the **ON** position.



3 Set the UA-700's **power switch** to the **ON** position.

4 From the CD-ROM, drag the **Driver E–OMS Setting** folder into the **Opcode–OMS** folder on the hard disk of your Macintosh to copy it there.

NOTE

The indication for the installation location will differ depending on your system. Make sure that the startup disk for the system you are using is selected.

MEMO

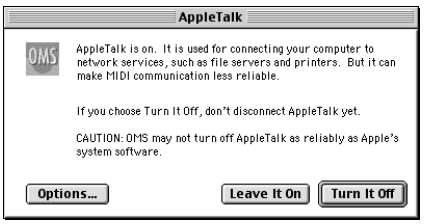
Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and / or damage to speakers and other devices.

MEMO

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

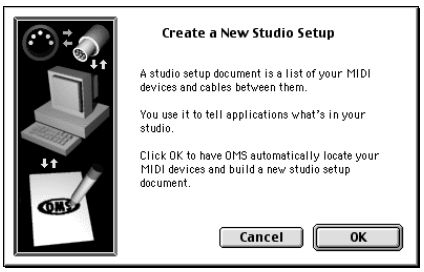
5 In the **Opcode-OMS Application** folder where you installed OMS, double-click **OMS Setup** to start it up.

6 If a dialog box like the one shown here appears, click **[Turn It Off]**. A confirmation dialog box will then appear, so click **[OK]**.



7 The **Create a New Studio Setup** dialog box will appear.

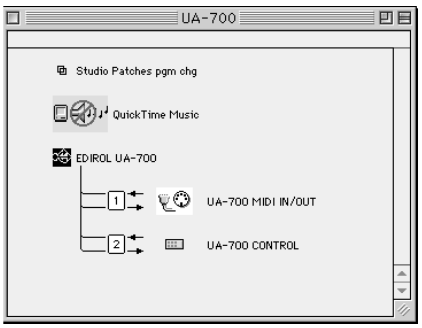
Click **[Cancel]**. If you accidentally clicked OK, click **[Cancel]** in the next screen.



8 Choose "**Open**" from the **File** menu.

From the **OMS Setting** folder that you copied in **step 4**, select the **UA-700 USB** file, and click **[Open]**.

A screen like the one shown here will appear.



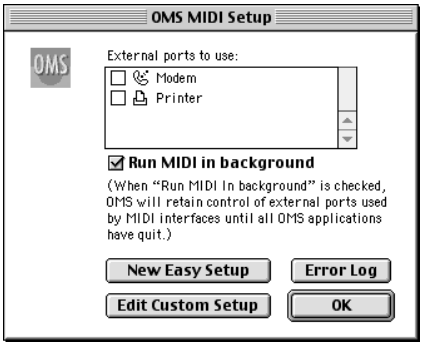
MEMO

We recommend that you turn off **AppleTalk**, by selecting **Chooser** from the Apple menu.

9

From the **Edit** menu, select **OMS MIDI Setup**.

In the **OMS MIDI Setup** dialog box that appears, check **Run MIDI in background**, and click **[OK]**.

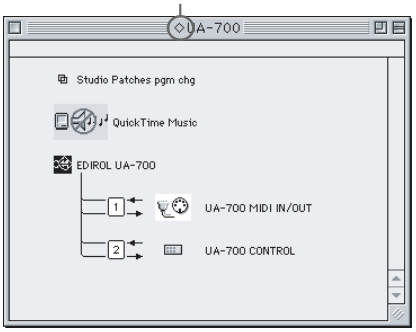


10

From the **File** menu, choose **Make Current**.

If you are unable to select **Make Current**, it has already been applied, and you may continue to the next step.

A diamond mark (◇) indicated the settings are enabled.



11

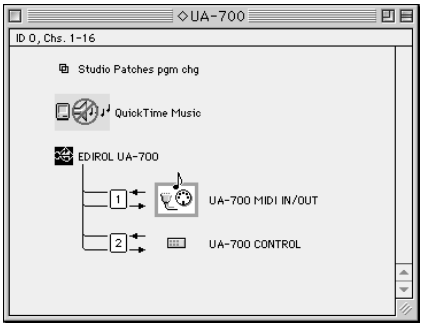
Verify that MIDI transmission and reception can be performed correctly.

From the **Studio** menu, choose **Test Studio**.

12

When you move the mouse cursor near the sound generator icon, the cursor will change to a ♪ shape.

Click on the icon of each port in the diagram at right. If sound is heard from the sound module connected to the UA-700, the settings are correct.



13

Exit **OMS Setup**.

From the **File** menu, choose **[Quit]**. If the **AppleTalk confirmation** dialog box appears, click **[OK]** to close the dialog box.

This completes connections for the UA-700 and Macintosh, and installation of the MIDI driver.

Next, you need to install the ASIO driver.
(→ **Installing the ASIO driver** (p. 48)

■ Installing the UA-700 driver (FreeMIDI)

Use the following procedure to install the UA-700 driver. The included **UA-700 FreeMIDI driver** is an add-on module for using the UA-700 with FreeMIDI. In order to use it, **FreeMIDI must be installed on the hard disk from which you started up**.

* *Disconnect the UA-700 from the Macintosh before beginning the installation.*

1 Exit all currently running software (applications).

If you are using a virus checker or similar software, be sure to exit this as well.

2 Prepare the CD-ROM.

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

3 Double-click the **UA-700 FM Driver - E Installer** icon (found in the **Driver E** folder of the CD-ROM) to start up the installer.

4 Verify the **Install Location**, and click **[Install]**.

5 If a message like the following is displayed, click **[Continue]**.

The other currently running applications will exit, and installation will continue.

6 A dialog box will indicate **Installation completed**. Click **[Restart]** to restart your Macintosh.

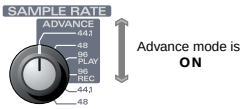
FreeMIDI settings

To check the FreeMIDI settings, you will first need to connect a MIDI sound module to the UA-700's MIDI OUT connector.
For details on connecting a MIDI sound module, refer to the owner's manual for your MIDI sound module.

1 Use the **USB cable** to connect the **UA-700** to your **computer**.

1. With the power switch turned **OFF**, connect the **AC adaptor** to the **UA-700**.
2. Connect the **AC adaptor** to an electrical outlet.
3. Use the **USB cable** to connect the **UA-700** to your **computer**.

2 Set the UA-700's **ADVANCE (mode select) switch** to the **ON** position.



3 Set the UA-700's **power switch** to the **ON** position.

4 From the CD-ROM, copy the **Driver E - FreeMIDI Driver - Settings** folder onto the hard disk of your Macintosh.

5 Open the **FreeMIDI Applications** folder from the location into which you installed FreeMIDI, and double-click the **FreeMIDI Setup** icon to start it up.

6 When **"OMS is installed on this computer..."** appears, click **[FreeMIDI]**.

7 The first time the software is started up, a dialog box saying "**Welcome to FreeMIDI!**" will appear.

Click **[Continue]**.

8 When the **FreeMIDI Preferences** dialog box appears, click **[Cancel]**.

9 When the **About Quick Setup** dialog box appears, click **[Cancel]**.

10 From the **File** menu, choose **Open**.

11 Select **UA-700 USB** from the **Settings** folder you copied in **step 3**, and click **[Open]**.

MEMO

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and / or damage to speakers and other devices.

MEMO

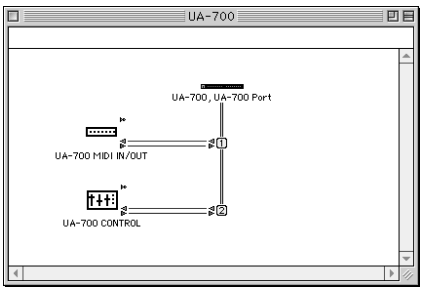
This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

12 Verify that MIDI transmission and reception occur correctly.

13 From the **MIDI** menu, choose **Check Connections**.

14 The mouse cursor will change to the shape of a keyboard. Click on the icon of each port in the diagram at right.

If sound is heard from the sound module connected to the UA-700, the settings are correct.



15 Once again choose the **MIDI** menu command **Check Connections** to end the test.

16 From the **File** menu, choose **Quit** to exit **FreeMIDI Setup**.

This completes connections for the UA-700 and Macintosh, and installation of the MIDI driver.

Next you will install the ASIO driver.
(→ **Installing the ASIO driver** (p. 48)

Installing the ASIO driver

You must install the MIDI driver even if you will be using only audio on the UA-700. **Be sure to install the MIDI driver** before you install the ASIO driver.
This section explains how to install the ASIO driver that allows the UA-700 to be used by your sequencer software or audio editing software. For details on installation and settings of the ASIO driver, be sure to also read the **Driver E–ASIO Driver–Setting ASIO Driver-E.HTM** document on the **CD-ROM**.

In Advanced mode, the UA-700 cannot play back audio data from the Macintosh's sound manager (such as audio CDs and alert sounds).

The ASIO driver of the UA-700 supports the following audio input / output channels.

- Audio input ..... 24 / 16 bit1 stereo ch. (2 monaural chs.)
- Audio output ..... 24 / 16 bit1 stereo ch. (2 monaural chs.)

Here we will explain how to install the ASIO 1.0 16 bit-compatible driver.

If your ASIO-compatible software supports ASIO 2.0 or recording / playback of 24 bit audio data, using the following drivers will provide a higher quality environment.

ASIO-compatible software		Driver to use
ASIO2.0-compatible	24 bit compatible	
×	×	UA-700 ASIO 1.0 16 bit
×	❍	UA-700 ASIO 1.0 24 bit
❍	×	UA-700 ASIO 2.0 16 bit
❍	❍	UA-700 ASIO 2.0 24 bit

1

From the **Driver E–ASIO Driver** folder of the CD-ROM, copy **[UA-700 ASIO1.0 16bit]** to the **[ASIO Drivers]** folder within the **ASIO Drivers** folder of the ASIO-compatible software you are using (e.g., Cubase VST, Logic Audio, Digital Performer, Metro, or SPARK LE).

2

Start up your ASIO-compatible software (e.g., Cubase VST, Logic Audio, Digital Performer, Metro, or SPARK LE).

3

Open the Audio setting dialog box of your ASIO-compatible software, and select **[UA-700 ASIO 16bit]** as the **ASIO Device**.

MEMO

ASIO (Steinberg Audio Stream In / Out Interface) This is an audio interface standard promoted by the Steinberg Corporation. When the UA-700 is used with ASIO-compatible software, the synchronization precision will be improved, allowing a more sophisticated music production environment.

MEMO

The Audio setting dialog box will be named differently depending on your software. For details refer to the manual of your software.

Installing the OS-standard driver

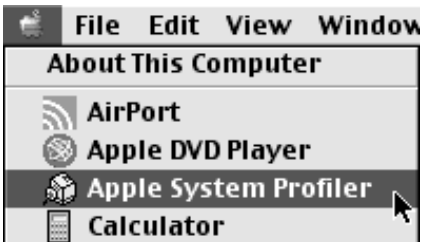
1 With the UA-700 disconnected, start up Mac OS.

2 Exit all currently running software (applications).

If you are using a virus checker or similar software, be sure to exit it as well.

3 After starting up Mac OS, select Apple System Profiler from the Apple menu.

The **"Apple System Profiler"** dialog box will appear.

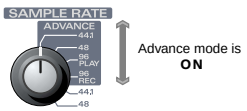


4 Click the **Devices and Volumes** tab.

5 Use the **USB cable** to connect the **UA-700** to your **computer**.

1. With the power switch turned **OFF**, connect the **AC adaptor** to the **UA-700**.
2. Connect the **AC adaptor** to an electrical outlet.
3. Use the **USB cable** to connect the **UA-700** to your **computer**.

6 Set the UA-700's **ADVANCE (mode select) switch** to the **ON** position.



7 Set the UA-700's **power switch** to the **ON** position.

8 Wait for approximately five seconds.

The UA-700 will use the driver included with Mac OS.
While you are waiting, the screen display will not change, but the UA-700 is being detected. Do not touch the mouse or keyboard.

MEMO

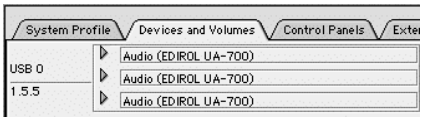
Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and / or damage to speakers and other devices.

MEMO

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

9

In order to check that detection has been completed, once again go to "**Apple System Profiler**," and select "**Update all information**" from the **Commands** menu.



In the **USB** area, three audio devices will be displayed.

If these are displayed correctly, driver installation has succeeded. In the **File** menu, click **Quit** to close **"Apple System Profiler"**.
If they are not displayed correctly, disconnect the UA-700, wait for about ten seconds, and then repeat the procedure from **step 2**.

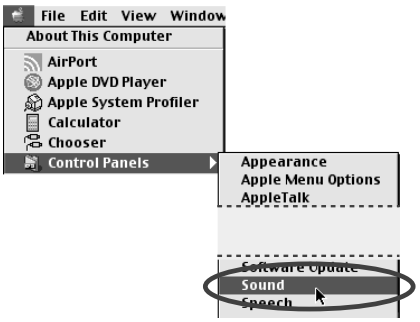
Next, you will need to make the driver settings.

■ Settings the sound input/output

1

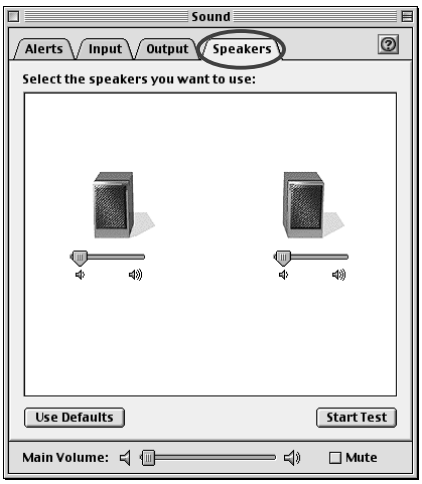
From the **Apple** menu, select **Control Panel** – **Sound**.

The **Sound** dialog box will appear.



2

Click the **Speakers** tab or **Speaker Settings**.



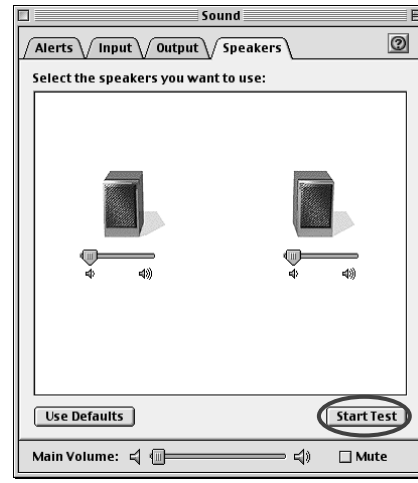
NOTE

The main volume slider will not move.

3

With the volume turned down on the **UA-700** and on your peripheral audio equipment, click **[Start Test]**.

Test signals will be output from the UA-700; left first, then right, as indicated in the screen.

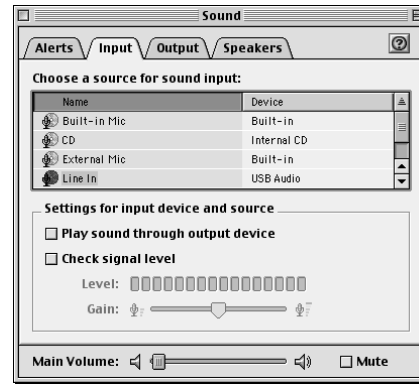


4

In the **Sound** dialog box, click the **Input** tab.

In **Choose a source for sound input (Device)**, select **USB audio**.

* *Do not check **"Play sound through output device"**.*



5

When you are finished making settings, close the **Sound** dialog box.

From the **File** menu, select **Quit**.

NOTE

The output volume of the UA-700 cannot be adjusted with the Mac OS sound dialog box. Make volume adjustments through other means, such as on the speaker system you are using.

NOTE

If **USB audio** is not displayed, close the **"Sound"** dialog box, and disconnect the UA-700's USB cable from the Macintosh. Perform the driver installation (p. 49) once again.

MEMO

Operation

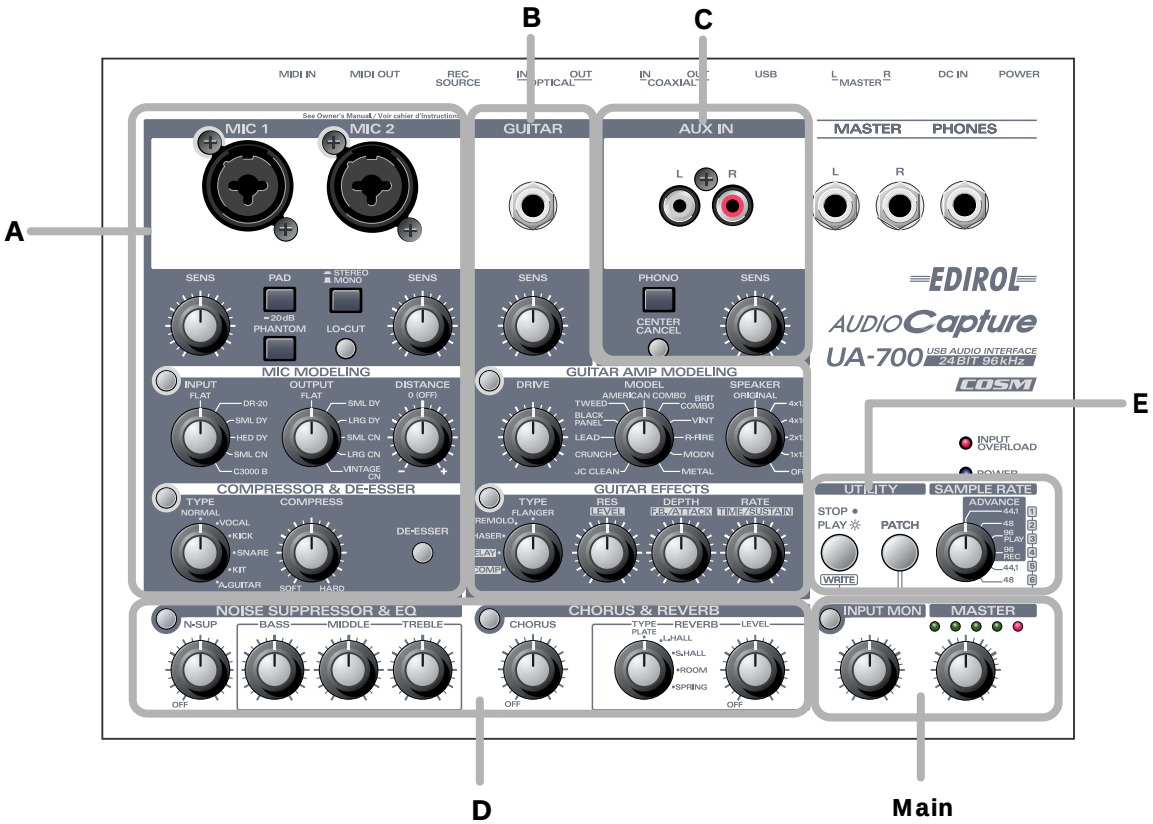
This section explains the function and use for each part of the UA-700.

Names of things and what they do

The following introduces the various knobs, switches, etc., and explains what they do.

Panel

The UA-700 can be divided into the main control section, and four control sections for specific purposes. The explanation here is organized by these control sections, and explains the names and functions of each section.



- **Main.** Main control ..... (p. 55)
- **A.** Mic control ..... (p. 56)
- **B.** Guitar control ..... (p. 59)
- **C.** Line control ..... (p. 62)
- **D.** System Effect control ..... (p. 63)
- **E.** Utility ..... (p. 65)

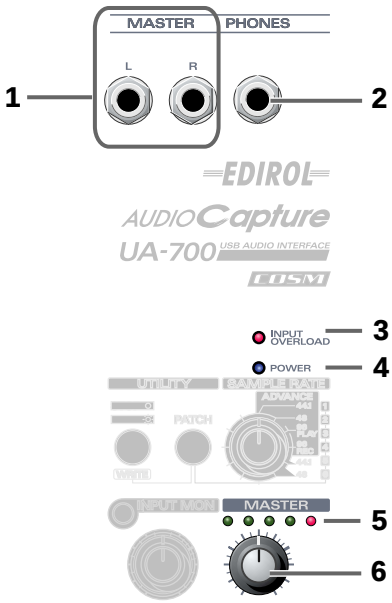
▼Only one at a time!

Effects cannot be simultaneously applied to Mic control, Guitar control, and Line control. However, **System Effect control** can be used to apply an effect to all inputs. (→ see **Block diagram** (p. 87))

▼Not available at 96 kHz!

If you are using **96 kHz**, you cannot apply effects other than COMPRESSOR & DE-ESSER and NOISE SUPPRESSOR & EQ.

Main control



1. Master output jacks (phone type)

These are analog audio output jacks. They output the same sound as the **master output jacks** on the rear panel (RCA phono type). Use the set of jacks that is appropriate for the device you are connecting or the cables you are using.

2. Headphones jack

You can connect a set of headphones to this jack. The **headphones jack** will output the same sound as the **master output jacks**, the **coaxial digital output jack**, and the **optical digital output jacks**. Even if headphones are connected, sound will still be output from the **master output jacks**.

3. Input peak indicator

This lets you check whether distortion is occurring in the sound that is input from the **mic input jacks**, **guitar input jack**, or **line input jacks**. Adjust the input sensitivity knobs for each input so that the **peak indicator** does not light.

4. Power indicator

When you turn on the power switch, this indicator will blink for several seconds, and then remain lit.

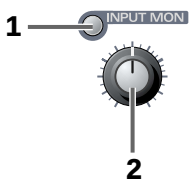
5. Output level indicator

The number of LEDs that blink changes in accord with the output level, adjusted using the **MASTER knob**. If the red LED at the far right lights, use the **master knob** to lower the volume.

6. Master knob (MASTER)

This adjusts the final overall volume. It controls the volume of the **digital output jacks**, **headphone jack**, **master output jacks (phone type)**, **master output jacks (RCA phono type)**, **coaxial digital output jacks**, and **optical digital output jacks**.

■ Input monitor section



1. Input monitor switch

This switches whether the input signal from the **mic input jacks**, **guitar input jack**, **line input jacks**, and **digital input jack** will be output from the **headphone jack**, **master output jacks**, and **digital output jacks**.

If this switch is on, the input signal will be output. If this switch is off, the input signal will not be output. Turn this off (dark) if the audio data is being "thru-ed" within your computer, or if you have connected a mixer and are outputting the input signal directly from your mixer for monitoring. The volume you adjust here will not affect the recording level.

* *The input monitoring on/off state can be controlled directly from an ASIO 2.0 compatible application such as Cubase.*

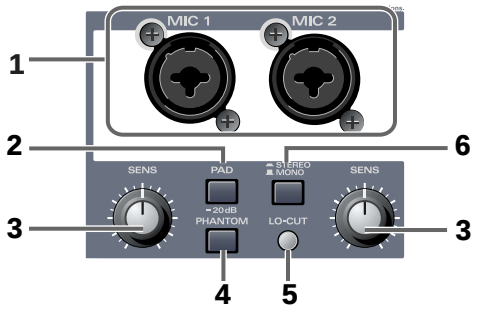
2. Input monitor volume

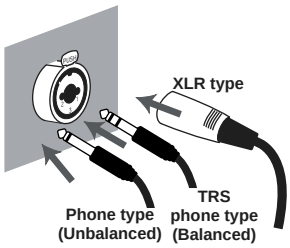
This knob adjusts the volume of the input signal from the **mic input jacks**, **guitar input jack**, **line input jacks**, and **digital input jacks** that is output from the **headphone jack** or **master output jacks**.

If this knob is set to the  position, the volume will be the same as the signal being recorded.

A. Mic control

■ Mic input section

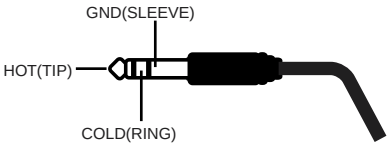




1. Mic input jacks (MIC1, MIC2)

These are input jacks for analog audio signals. You can use either **XLR type** or **phone type** connectors, depending on the device you are connecting. Either balanced or unbalanced connections may be used. 48V phantom power can be supplied to the XLR type connector, allowing you to use phantom-powered condenser mics. In this case, turn **on** the **Phantom power switch**.

* *This instrument is equipped with balanced (XLR/TRS) type input jacks. Wiring diagrams for these jacks are shown at right. Make connections after first checking the wiring diagrams of other equipment you intend to connect.*



* *Always turn the* **phantom power off** *when connecting any device other than condenser microphones that require phantom power. You risk causing damage if you mistakenly supply phantom power to dynamic microphones, audio playback devices, or other devices that don't require such power. Be sure to check the specifications of any microphone you intend to use by referring to the manual that came with it.*

(This instrument's phantom power: 48 V DC, 10 mA Max)

2. Gain select switch (PAD -20 dB)

This switches the input level of the **Mic input jacks**.
Turn this **off** if you have connected a device that has low output gain.

3. Input sensitivity knobs

These adjust the input level of the **mic input jacks**.

4. Phantom power switch (PHANTOM 48V)

This is an on / off switch for the phantom power that is supplied to the XLR type mic input jacks.

* *You must switch this* **off** *if a device not using* **phantom power** *is connected to the XLR type jacks, since supplying phantom power to such a device will cause malfunction.*

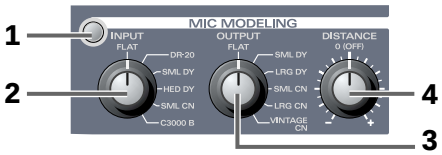
5. LO-CUT switch

This lets you make a clearer recording by cutting pop noise (which can occur when a performer blows on the mic) and unwanted low-frequency "rumble."

6. STEREO/MONO select switch

This selects whether the input from the **Mic input jacks** will be handled as stereo or monaural. If you select stereo mode, **MIC 1** will be recorded on the left channel, and **MIC 2** on the right channel. If you select monaural mode, **MIC 1** and **MIC 2** will be mixed, and the same signal will be recorded on the left channel and right channel.

■ Mic effect section/Mic modeling



This section can transform the character of an inexpensive general-purpose mic into the character of an expensive studio mic (microphone -> microphone conversion).
Similar transformations can be applied to change the type of mic and apparent distance from the audio source. You can also add the character of a specific type of mic to an instrument that you are recording from line input (line -> microphone conversion).

1. Mic modeling switch

Switches mic modeling on / off. If this is off, mic modeling will be bypassed.

2. Input mic type selector knob

Selects the type of mic you are using for recording.

FLAT	Line input
DR-20	Roland DR-20 (a dynamic mic manufactured by Roland)
SML DY	A small dynamic mic used for instruments and vocals
HED DY	A headset-type dynamic mic
SML CN	An ultra-compact condenser mic
C3000 B	AKG C3000B (a condenser mic manufactured by AKG)

3. Output mic type selector knob

Selects the type of mic you want to simulate.

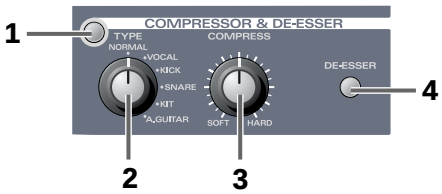
FLAT	A mic with a flat frequency response. Use this when you want to eliminate the idiosyncrasies of the mic used for recording.
SLM DY	A dynamic mic widely used for instruments and vocals. Ideal for a guitar amp or snare drum.
LRG DY	A dynamic mic with an extended low-frequency range. Suitable for bass drum or toms.
SML CN	A condenser mic for instruments, characterized by a bright-sounding upper range. Suitable for metallic percussion and acoustic guitar.
LRG CN	A condenser mic with a flat response. Suitable for vocals, narrations, and acoustic instruments.
VINTAGE CN	A vintage condenser mic. Suitable for vocals and acoustic instruments.

* *If you select a condenser-type mic model for OUT, the low-frequency range will be extended, which may cause low-frequency rumble transmitted through the mic stand to be emphasized. In such cases, either use the* ***LO-CUT switch*** *to cut the unwanted low-frequency range, or attach an isolation mount (a mic holder that uses rubber bands to absorb vibration) to your mic stand when you record.*

4. Distance knob

This knob models the distance from the audio source to the mic. The simulated distance will be closer as you turn the knob toward the right (+), or farther if you move it toward the left (-).

■ Mic effect section/Compressor & De-esser



A compressor is an effect that makes the volume more consistent by compressing high input levels and boosting low input levels.
A de-esser is an effect that cuts the sibilants from a vocal, producing a softer tone.

1. Compressor/De-esser switch

Switches the compressor / de-esser on / off. The effects will be bypassed if this is off.

2. Compressor type select knob

Selects the type of compressor that is most suitable for the source you are recording.

* *If you want to adjust the parameters with greater precision, refer to* ***Compressor/De-esser section*** *(p. 80), under "****Advanced applications****."*

NORMAL	**Light compression suitable for recording most instruments or vocals on a demo tape.**	
	Ratio	medium (2.8 : 1)
	Attack	medium
	Release	very fast

VOCAL	**Heavier compression suitable for recording a powerful vocal.**	
	Ratio	extremely high (∞ : 1)
	Attack	extremely fast
	Release	slow

KICK	**Compression suitable for recording a bass drum. Produces a percussive sound with a strong sense of attack.**	
	Ratio	extremely high (16 : 1)
	Attack	slow
	Release	medium

SNARE	**Compression suitable for recording a snare drum. Produces a powerful and heavy sound.**	
	Ratio	high (8 : 1)
	Attack	fast
	Release	fast

KIT	**Compression suitable for recording an entire drum kit.**	
	Ratio	medium (4 : 1)
	Attack	medium
	Release	medium

A.GUITAR	**Compression suitable for recording an acoustic guitar. Smoothly controls the sound, producing a natural effect when reverb or chorus are applied.**	
	Ratio	low (2 : 1)
	Attack	fast
	Release	medium

Attack	The time from when the input level exceeds the threshold level until the effect is applied.
Release	The time from when the input level falls below the threshold level until the effect ceases to be applied.
Ratio	The ratio by which the level is compressed when the signal exceeds the threshold level. High ratio settings will produce sharp compression, and low settings will produce gentle compression.

3. Compressor level knob

Controls the depth of compression. Turning this toward HARD will produce a stronger effect. This knob controls the threshold level (the level at which the effect begins to be applied) and the compressor output level.

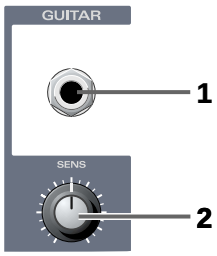
4. De-esser switch

Switches the de-esser on / off.

* *The effect will depend on the compressor type. The strongest effect is obtained with* ***VOCAL****.*

B. Guitar control

■ Guitar input section



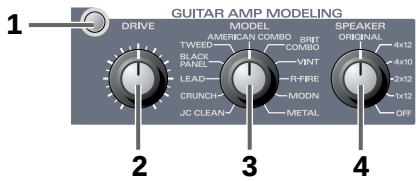
1. Guitar input jack

This is a high-impedance input jack for guitar. You can connect a guitar or bass directly to this jack.

2. Input sensitivity knob

This knob adjusts the input level.

■ Guitar Amp Modeling section



Using COSM technology, the **Model knob** simulates characteristics of a guitar amp, and the **Speaker knob** simulates the speaker size and cabinet configuration.

1. Guitar Amp Modeling switch

Switches the Guitar Amp Modeling on / off. The effect is bypassed if this switch is off.

2. Drive knob (DRIVE)

Adjusts the degree of distortion. Turning this knob clockwise will produce stronger distortion.

As desired, you can also modify the tone in other ways. (➔ **Advanced applications** (p. 79))

3. Model knob (MODEL)

Selects the type of guitar amp.

Type	Character
JC CLEAN	The sound of a Roland JC-120.
CRUNCH	A naturally distorted crunch sound.
LEAD	Powerful, high-gain metal sound.
BLACK PANEL	Models a Fender Twin Reverb.
TWEED	Models a Fender Bassman 4 x 10" combo.
AMERICAN COMBO	Models a MESA / Boogie combo amp.
BRIT COMBO	Models the lead sound of a VOX AC-30TB.
VINT (VINTAGE STACK)	Models the input 1 sound of a Marshall 1959.
R-FIRE (R-FIRE STACK)	Models the RED channel of a MESA / Boogie DUAL Rectifier.
MODN (MODERN STACK)	Models a Soldano SLO-100.
METAL (METAL STACK)	Models the lead channel of a Peavey EVH5150.

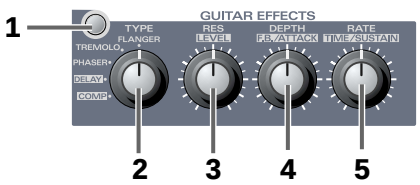
4. Speaker cabinet knob (SPEAKER)

Selects the type of speaker cabinet.

If you select **ORIGINAL**, the most suitable type of speaker cabinet for the selected type of guitar amp will be chosen automatically.

Type	Character
ORIGINAL	The speaker(s) provided by the amp you selected in MODEL
4 x 12"	A sealed speaker cabinet with four 12-inch speakers, ideal for large amps
4 x 10"	An open-back speaker cabinet with four 10-inch speakers, with a unique sound
2 x 12"	A typical open-back speaker cabinet with two 12-inch speakers
1 x 12"	A small open-back speaker cabinet with one 12-inch speaker
OFF	Speaker cabinet modeling will not be performed.

■ Guitar effect section



1. Guitar effect switch

Switches the guitar effect on / off.

2. Effect type select knob

Select either **Flanger**, **Tremolo**, **Phaser**, **Delay**, or **Compressor**.

The function of **Effect control knobs 1, 2, and 3** will depend on the effect you choose.

Immediately after you select an effect, the parameters of that effect will be set to the factory settings.

If you want to adjust the effect, use the **Effect control knobs** described below.

3. Effect control knob 1 (RES)

4. Effect control knob 2 (DEPTH)

5. Effect control knob 3 (RATE)

Flanger

Produces a flanging effect which gives a "**twisting**" character to the sound.

Effect control knob 1	Resonance	Adjusts the amount of resonance (amount of feedback). Turning the knob clockwise produces a stronger and more distinctive effect.
Effect control knob 2	Depth	Adjusts the depth of modulation.
Effect control knob 3	Rate	Adjusts the speed of modulation.

Tremolo

An effect that cyclically varies the volume.

Effect control knob 1	Phase	Spreads the tremolo to left and right. Turning this knob clockwise will produce a greater spread between left and right.
Effect control knob 2	Depth	Adjusts the depth of the effect.
Effect control knob 3	Rate	Adjusts the rate of modulation.

Phaser

An effect that adds a phase-shifted sound to the direct sound, creating a phaser effect that produces a sense of rotation.

Effect control knob 1	Resonance	Adjusts the amount of resonance (amount of feedback). Increasing this value will produce a strong and more distinctive effect.
Effect control knob 2	Depth	Adjusts the depth of rotation.
Effect control knob 3	Rate	Adjusts the rate of rotation.

Delay

Adds a delayed sound to the direct sound, creating a sense of greater depth.

Effect control knob 1	Level	Adjusts the volume of the delayed sound.
Effect control knob 2	Feedback	Adjusts the amount of delayed sound that is returned to the input of the delay. Turning this knob clockwise will increase the number of delay repeats.
Effect control knob 3	Delay time	Adjusts the delay time.

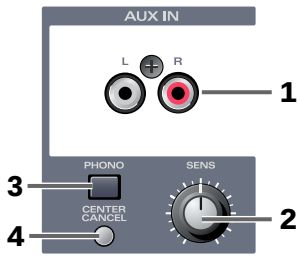
Compressor

This is an effect that makes the level more consistent by compressing loud sounds and boosting soft sounds, sustaining the sound without distorting it.

Effect control knob 1	Level	Adjusts the volume.
Effect control knob 2	Attack	Adjusts the strength of the picking attack. Turning this knob clockwise will sharpen the attack, producing a crisper sound.
Effect control knob 3	Sustain	Specify the range (time) for which low-level signals will be boosted to a fixed volume. Turning this knob clockwise will produce longer sustain.

C. Line control

■ Line input section



1. Line input jacks

Use these jacks to input audio signals from an audio device or MIDI sound module.

2. Input sensitivity knob

Adjusts the input level.

3. Phono equalizer switch

This switch turns on the built-in **phono equalizer**. This allows you to directly connect a record player. If you are using a record player with a built-in equalizer, leave this switch turned off.

* *Depending on your system, this may be affected by noise from your computer.*

- Connect the UA-700's grounding terminal (p. 68) to the grounding terminal of your record player.
- Connect your computer and the UA-700 to separate electrical outlets.
- Correctly ground your computer. (Refer to the owner's manual for your computer.)

4. Center cancel switch

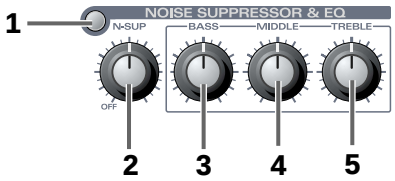
This switch erases the signals localized at the center of the stereo signal that is input. This function is useful when you are creating karaoke data.

* *In some cases, such as when effects have been applied to the signal, it may not be possible to erase the center signal.*

* *Since this processing avoids canceling the bass drum and bass guitar, it may not be possible to erase the vocal from the song if it contains a large amount of low-frequency components.*

D. System effect control section

■ Noise Suppressor/Equalizer section



1. Noise Suppressor/Equalizer switch

Switches the noise suppressor / equalizer on / off. The effects are bypassed when this switch is off.

Noise suppressor

This effect suppresses the hum and noise that are picked up by a guitar pickup or microphone. Since the noise is reduced according to the envelope (volume change) of the input sound, a natural effect is obtained with virtually no change to the input sound.

2. Noise suppressor sensitivity knob

Adjusts the threshold level according to the level of the noise. If the noise is loud, turn this knob clockwise. Adjust the knob so that the decays of the input signal will sound natural.

* *High settings of the threshold control may cause the beginning or end of notes to sound unnatural, and you may hear no sound at all if the volume control of your guitar is turned down.*

Equalizer/Tone controls

These adjust the tonal character.

3. Bass knob (BASS)

Adjusts mainly the lower range.

4. Middle knob (MIDDLE)

Adjusts mainly the midrange.

5. Treble knob (TREBLE)

Adjusts mainly the upper range.

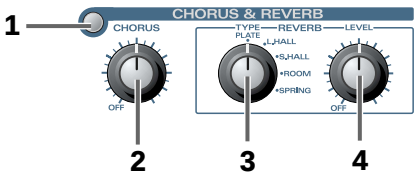
■ Chorus/Reverb section

Chorus

This effect adds a slightly modulated sound to the direct sound, creating beautiful spaciousness and depth.

Reverb

This effect adds the reverberation that is characteristic of performing in a concert hall.



1. Chorus/Reverb switch

Switches chorus / reverb on / off. The effects are bypassed when this switch is off.

2. Chorus level knob

Adjusts the volume of the effect sound.

3. Reverb Type select switch

Selects the type of reverb. A variety of acoustical spaces can be simulated, depending on the knob's setting.

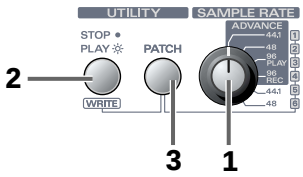
Type	Character
Plate (PLATE)	Simulates a plate reverb unit. (A reverb device that uses the vibrations of a metal plate.) This is characterized by a metallic resonance with an extended high-frequency range.
Large Hall (L. HALL)	Simulates the reverberation of a concert hall. This produces a mild and spacious reverberation.
Small Hall (S. HALL)	Simulates the reverberation of a small concert hall. This produces a soft and clear reverberation.
Room (ROOM)	Simulates the reverberation of a room. This produces bright-sounding reverberation typical of a large room.
Spring (SPRING)	Simulates the spring reverb unit that is built into some guitar amps.

4. Reverb Level knob

Adjusts the volume of the reverb sound.

E. Utility section

■ Sample rate/Patch select



1. Sample rate select switch

This selects the sample rate (sampling frequency) that is used when recording or playing audio signals. In order for this setting to take effect, you must exit all applications, switch off the UA-700, then turn it on again.

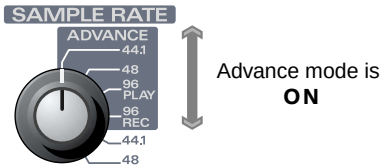
(➔ **Using the sample rate select switch** (p. 69))

ADVANCE (mode select) switch

The **sample rate select switch** is also used as the **ADVANCE (mode select) switch** that specifies the operating mode when the UA-700 is connected to your computer.

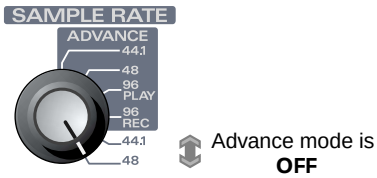
ADVANCE ON (Advanced mode)

Set the switch to the ADVANCE 44.1, 48, 96 PLAY, or 96 REC position.



ADVANCE OFF (Standard driver mode)

Set the switch to the 44.1 or 48 position. Advance mode is OFF



For details on the driver, refer to **Getting Connected and Installing Drivers (Windows)** (p. 12), or **Getting Connected and Installing Drivers (Macintosh)** (p. 38).

2. Sequencer control switch

This switch controls the playback of your sequencer. If you press this switch when it is dark, the switch will light and your sequencer will begin playing. If you press this switch when it is lit, it will go dark and your sequencer will stop.

In order to enable this switch, you will need to make settings on your sequencer.

(➔ refer to **Sequencer control switch settings** (p. 84))

* *The method of making these settings will depend on the version of your sequencer. Also, some sequencers may not support remote control. For details, check the manual of your sequencer.*

3. Patch Mode switch

The UA-700 lets you save the current state of the effect settings into one of six patches, and load them at any time. This switch is used in conjunction with the **Sequencer control switch** and the **Sample rate select switch** to save and load patches.

Sample rate select switch ..... specifies the patch number
Sequencer control switch ..... saves the patch

●Loading a patch●

On the UA-700, the settings of the mic modeling section, compressor & de-esser section, guitar amp modeling section, guitar effect section, noise suppressor & equalizer section, reverb & chorus section, LO-CUT switch, and center cancel switch settings can be loaded from one of six patches.

* *After a patch has been read, the settings will not match the positions of the panel knobs. Be aware of this when continuing to adjust the settings.*

1. Press the **Patch Mode switch**.
   The **Patch Mode switch** will blink, and the UA-700 will be ready to load a patch.
2. Turn the **Sample rate/patch select switch** to select the patch (number) that you want to load.
   If you press any switch other than the Patch Mode switch, the Patch Mode switch will go dark. You will exit Patch mode and return to the previous state; i.e., the state prior to beginning the patch loading process.
3. Press the **Patch Mode switch**.
   The Patch Mode switch will blink more rapidly, and will go dark when the patch has been loaded.

When you load a patch, all parameters of the patch will be transmitted to your computer in the form of a bulk dump. You can record this bulk dump into your sequencer software in order to save UA-700 patch parameters on your computer. In your sequencer software, select **[EDIROL UA-700 CONTROL]** as the MIDI port.

●Saving a patch●

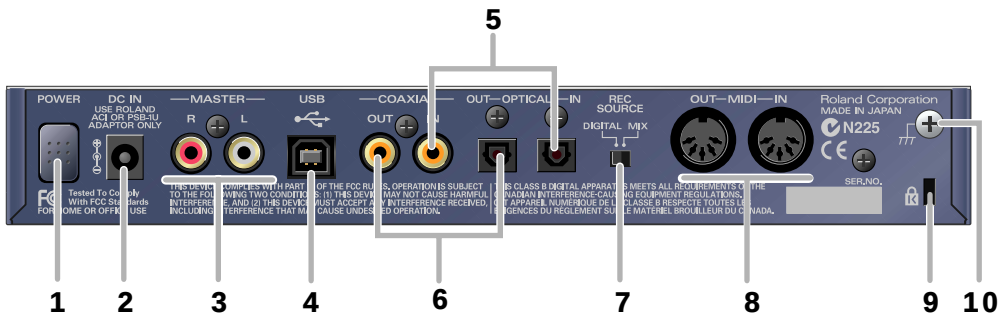
On the UA-700, the settings of the mic modeling section, compressor & de-esser section, guitar amp modeling section, guitar effect section, noise suppressor & equalizer section, reverb & chorus section, Lo-Cut switch, and center cancel switch settings can be saved into one of six patches.

1. Use the knobs of each section to create the desired sound.
2. Hold down the **Patch Mode switch**, and press the **Sequencer Control switch**.
   The **Patch Mode switch** will light, and the **Sequencer Control switch** will blink, indicating that the UA-700 is ready to save a patch. The current settings of the panel knobs and switches can now be saved.
3. Turn the **Sample Rate/Patch Select knob** to select the patch (number) that you want to save.

* *If you press any switch other than the Sequencer Control switch, the Patch Save operation will be cancelled. The Patch Mode switch will go dark, and you will exit Patch mode.*

4. Press the **Sequencer Control switch.**
   The **Sequencer Control switch** will blink more rapidly, and will go dark when the patch has been saved.

Rear panel



1. Power switch

Press this switch to turn the power on / off. The power is on when the switch is pressed inward.

2. AC adaptor jack

Connect the included AC adaptor to this jack. Insert the plug firmly so it won't get unplugged accidentally.

3. Master output jacks (RCA phono type)

These are output jacks for analog audio signals. They output the same sound as the **Master output jacks (phone type)** located on the panel. Use the set of jacks that is appropriate for the device or cable you are using.

4. USB connector

Use a USB cable to connect this to your computer.

* *Do not connect or disconnect the USB cable while an audio playback application is running. Doing so may cause the application to hang up.*

5. Coaxial digital input jack/Optical digital input jack

Use these jacks for digital input from a CD / MD / DAT. If a digital device is connected to the **Optical digital input jack**, the **Optical digital input jack** will take priority, and no signal will be input from the **Coaxial digital input jack**.

6. Coaxial digital output jack/Optical digital output jack

Use these jacks for digital connections to a digital audio device such as a DAT or MD.

7. Recording source select switch

This switch selects the input signal that will be sent via USB to your computer as the recording source.

DIGITAL	Only the input from the digital input jack (coaxial or optical) will be sent to the computer. * *Use the DIGITAL setting if you want to input digital data from a CD or MD. In this case, the various effect settings will be ignored, and only the original data will be input, without any possibility for noise to be added.*
MIX	The input from all inputs (including the digital input jack) will be sent to the computer.

8. MIDI IN/OUT connectors

Connect these to the MIDI connectors of other MIDI devices to allow MIDI messages to be exchanged with your computer.

9. Security Slot ( )

http://www.kensington.com/

10. Grounding terminal

Depending on the conditions under which you use the UA-700, noise may appear in the audio signal. If this occurs, you may be able to solve the problem by connecting this terminal to an external ground connection.

● Unsuitable places for connection

- Water pipes (may result in shock or electrocution)
- Gas pipes (may result in fire or explosion)
- Telephone-line ground or lightning rod (may be dangerous in the event of lightning)

Noise may also appear in the sound when a record player is connected. If this occurs, connect this terminal to the grounding terminal of your record player. For details, refer to **Line input section** (p. 62).

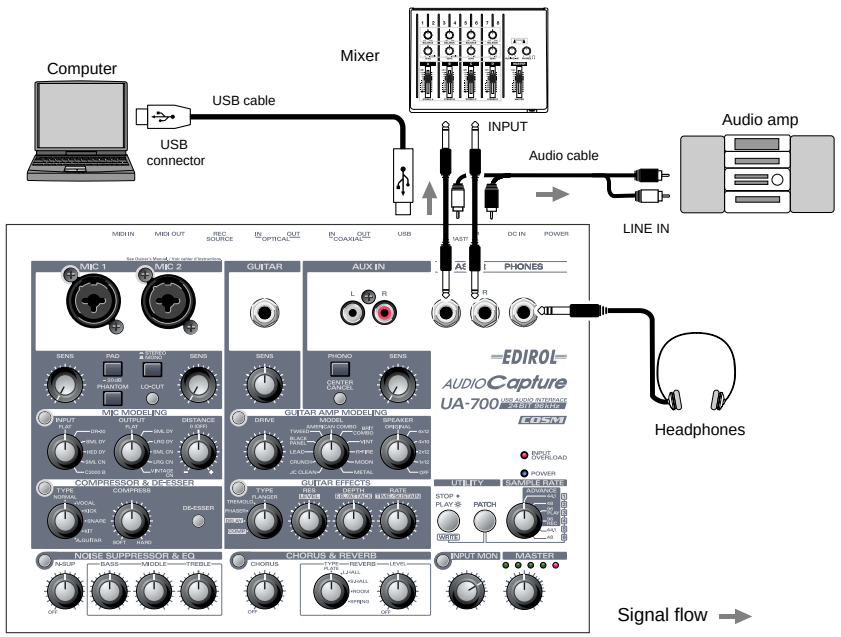
Application guide

This chapter explains various ways in which you can connect and use the UA-700.

* *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.*

Basic use

You can connect headphones and / or monitor speakers as shown in the diagram, and monitor the playback of your application, or the sound of instruments or audio devices connected to the UA-700.

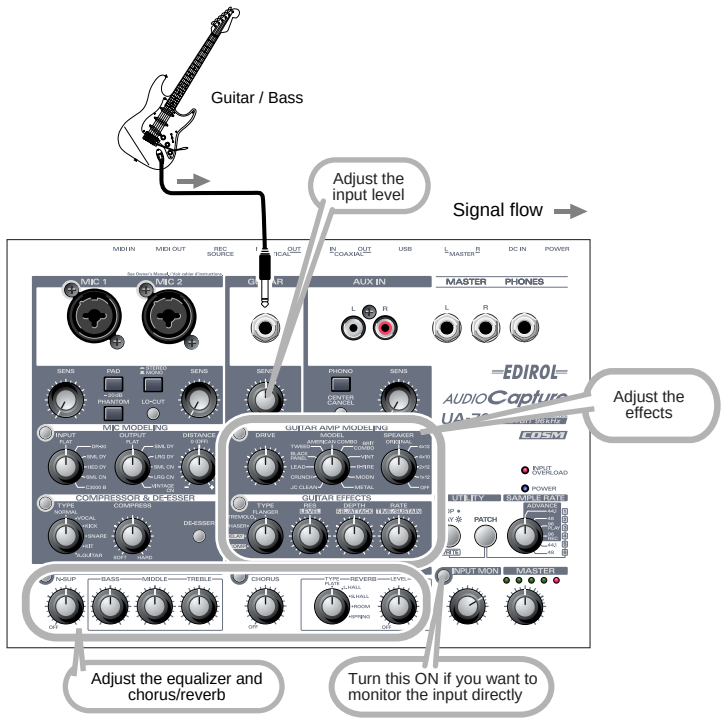


Using the sample rate select switch

- You must set the UA-700's **sample rate select switch** to match the sampling frequency used by your application.
- If the **sample rate select switch** is set to **96 kHz REC**, you will not hear the sound that is played back by your application.
- If the **sample rate select switch** is set to **96 kHz PLAY**, the sound of instruments or audio devices connected to the UA-700 cannot be recorded by your application.

Recording a guitar or bass

With these connections and settings, only the guitar sound will be recorded on your computer when you record into your sequencer application by playing your guitar along with the audio data from your computer.



The sound of the device connected to the **Guitar input jack** will be recorded on both the L channel and R channel on your computer. It will also be output directly from the digital output jack.

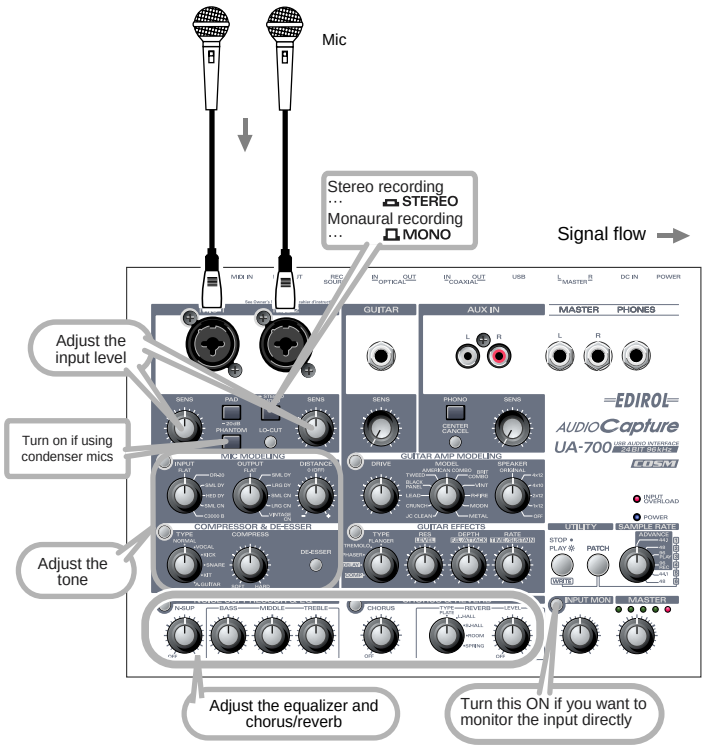
Use the **Input sensitivity knob** to adjust the input level. For the best-quality recording, use the input sensitivity knob to adjust the level until it is as high as you can get it without causing the **input peak indicator** to light.

Turn on the **Input monitor switch**, and use the **Input monitor knob** to adjust the monitor volume of your guitar or bass. This will not affect the recording level.

Do not connect anything to the input jacks that you are not using.

* *Guitar effects cannot be applied if you are using **96 kHz PLAY/REC**. In this case, only COMPRESSOR & DE-ESSER and NOISE SUPPRESSOR & EQ can be applied.*

Recording from mics



If you are using condenser mics, turn on the **Phantom power switch**.
The sound will also be output directly from the digital output jack.

* *If a device that does not use phantom power is connected to the XLR type jacks, you must turn phantom power off, since supplying phantom power to such a device may cause malfunction.*

The sound of the device connected to **MIC 1** will be recorded on the left channel, and the sound of the device connected to **MIC 2** will be recorded on the right channel.
Use the **Input sensitivity knobs** to adjust the input level. For the best-quality recording, use the input sensitivity knobs to adjust the level until it is as high as you can get it without causing the **Input peak indicator** to light.

Turn on the **Input monitor switch**, and use the **Input monitor knob** to adjust the monitor volume of the mic inputs.

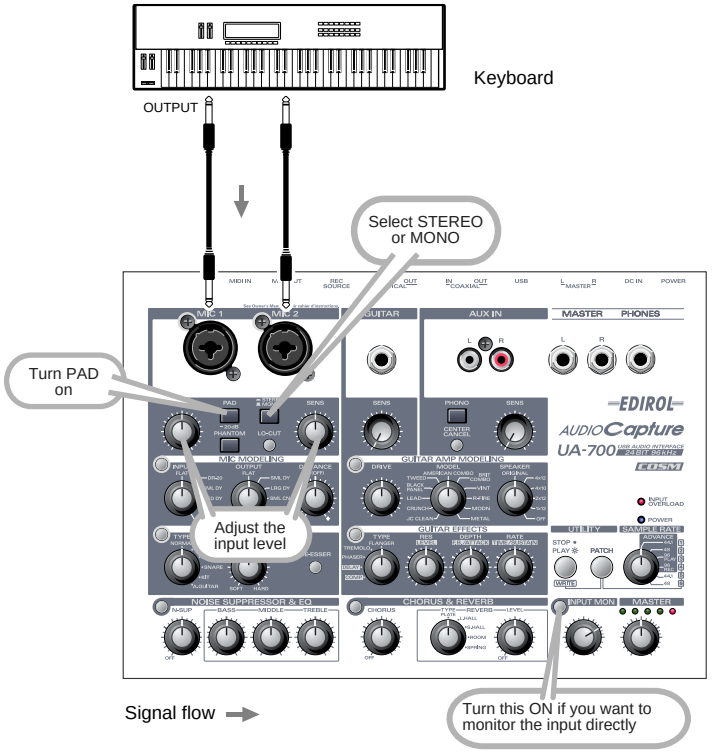
Do not connect anything to the input jacks that you are not using.

* *If you are using **96 kHz PLAY/REC**, only the COMPRESSOR & DE-ESSER and NOISE SUPPRESSOR & EQ effects can be applied.*

* *Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:*
1.Changing the orientation of the microphone(s).
2.Relocating microphone(s) at a greater distance from speakers.
3.Lowering volume levels.

Recording a keyboard

Here's how your keyboard performance can be sent to the computer as audio data. The audio data can be recorded on your sequencer software.



You can use phone plug cables to connect your keyboard (or other device) to the **Mic input jacks**. If you set the **STEREO/MONO select switch** to the **STEREO** position, the sound that is input from **MIC 1** will be recorded on the left channel, and the sound from **MIC 2** will be recorded on the right channel.
If you set this to the **MONO** position, the recording will be monaural.

Use the **Input sensitivity knobs** to adjust the input level. For the best-quality recording, use the input sensitivity knobs to adjust the level until it is as high as you can get it without causing the **Input peak indicator** to light.

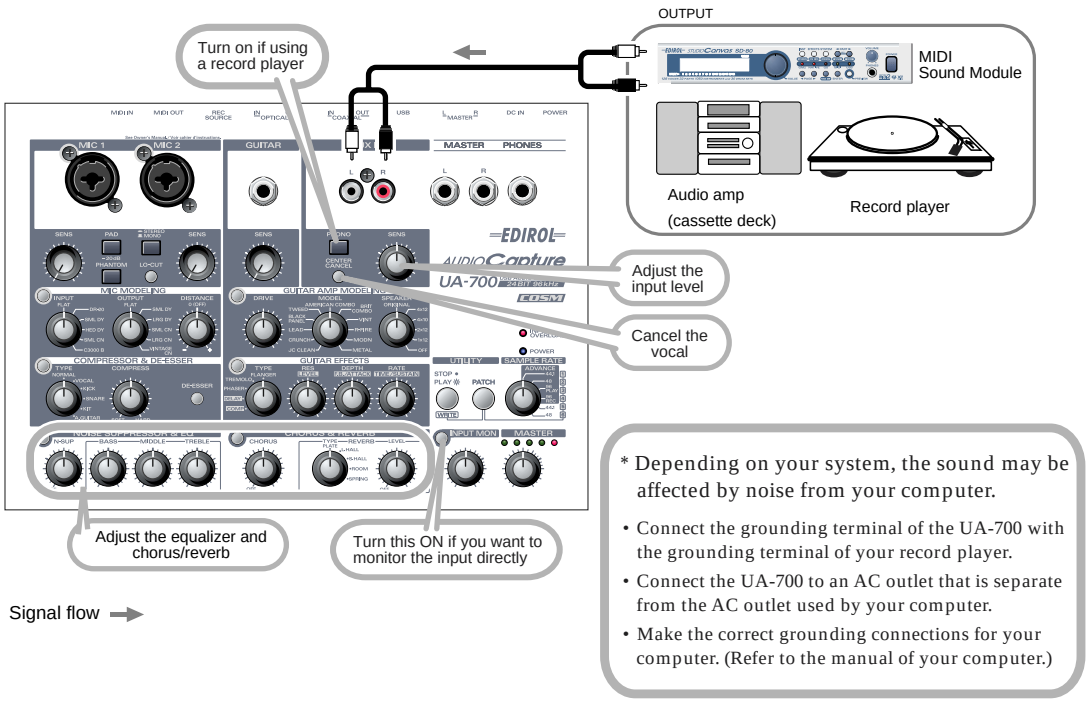
Turn **on** the **Input monitor switch**, and use the **Input monitor knob** to adjust the monitor volume.

Do not connect anything to the input jacks that you are not using.

* *Mic effects cannot be applied if you are using* **96 kHz PLAY/REC**.
Only the COMPRESSOR & DE-ESSER and NOISE SUPPRESSOR & EQ effects can be applied.

Analog recording from an audio device

Make connections as shown in the diagram.



* Depending on your system, the sound may be affected by noise from your computer.

- Connect the grounding terminal of the UA-700 with the grounding terminal of your record player.
- Connect the UA-700 to an AC outlet that is separate from the AC outlet used by your computer.
- Make the correct grounding connections for your computer. (Refer to the manual of your computer.)

Normally, when connecting a record player, you should turn on the **Phono equalizer switch**. If your record player includes an equalizer, turn this switch off.

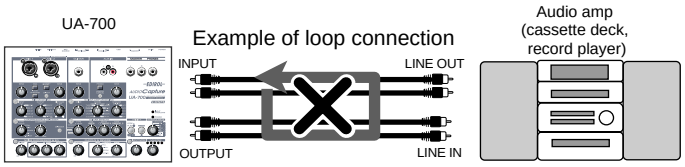
Use the **Input sensitivity knobs** to adjust the input level. For the best-quality recording, use the input sensitivity knobs to adjust the level until it is as high as you can get it without causing the **Input peak indicator** to light.

Turn **on** the **Input monitor switch**, and use the **Input monitor knob** to adjust the monitor volume.

Do not connect anything to the input jacks that you are not using.

* *If you are using* **96 kHz PLAY/REC**, *you cannot apply the center canceller effect.*

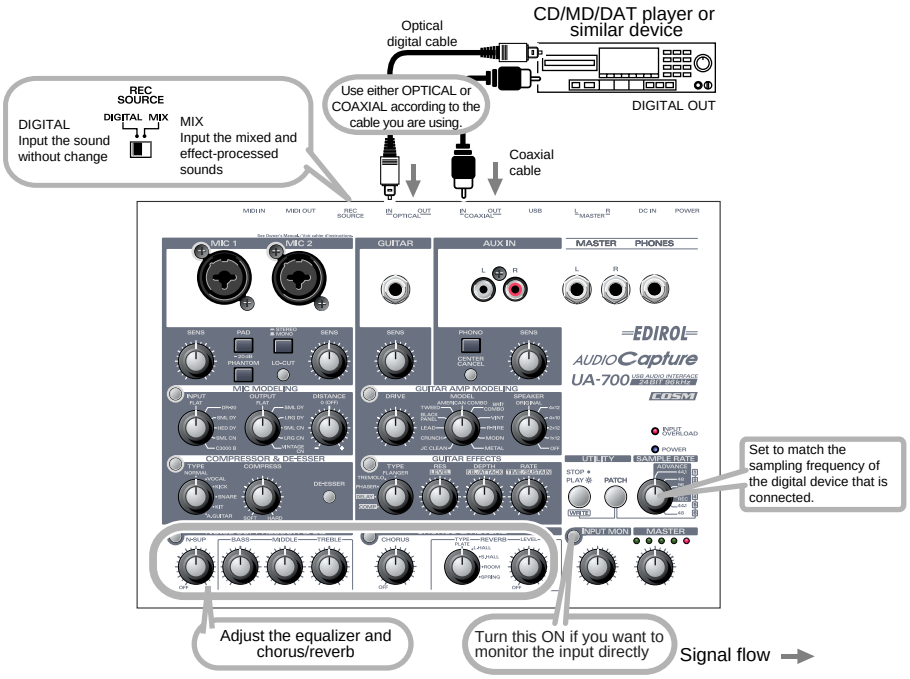
Avoid loop connections



If the UA-700 is connected as shown in the above diagram to a device that passes the input audio through to the output, and if the **Input Monitor switch** is turned on, the sound will loop between the UA-700 and that device, producing oscillation at an unexpectedly high volume. Be careful to avoid such connections, since this can cause malfunction or speaker damage.

Input audio from a CD/MD/DAT to your computer

Make connections as shown in the diagram.



Set the rear panel **Record Source select switch** to **MIX** if you want to mix the input from the **Mic input jacks** or **Guitar input jack** together with the input signal from the **Digital input jack** and record the mix. With this setting, you will be able to apply equalizer and chorus / reverb.
Set the rear panel **Record Source select switch** to **DIGITAL** if you want to directly input the signal from the digital input jack without processing it. With this setting, the digital signal will be input at its original high quality. You will not be able to apply equalizer or chorus / reverb. Nor will you be able to record guitar or mic along with the digital input.

* *The UA-700 does not support the audio formats of professional digital audio devices.*

Do not connect anything to the input jacks you are not using.

Built-in sample rate converter

The UA-700 can perform realtime sampling rate conversion of the signal that is input from the digital input jack.

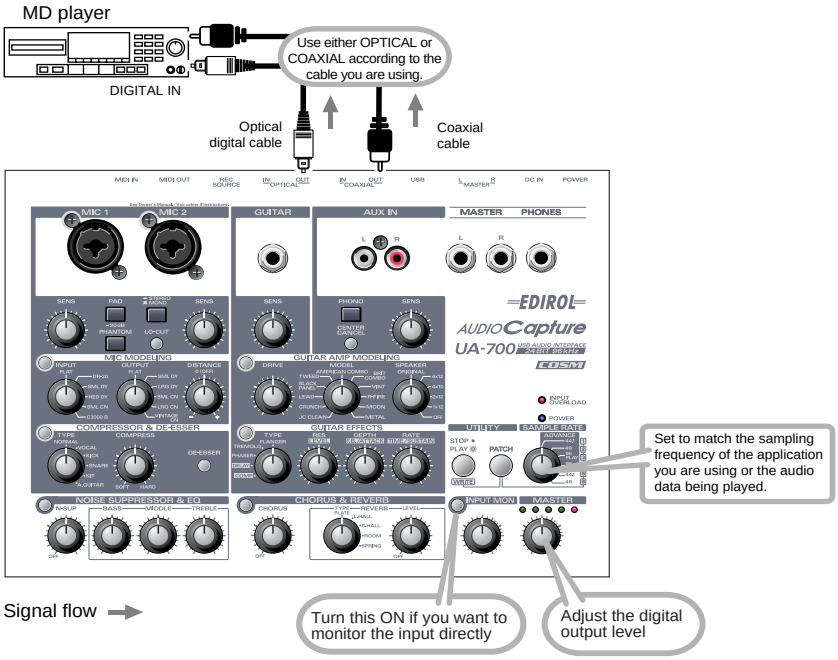
<Example>
48 kHz -> 44.1 kHz
32 kHz -> 48 kHz

The digital signal will be converted into the frequency specified by the **Sample rate select switch** before it is recorded by your application.

Even when recording the digital output of a satellite receiver whose frequency switches automatically, you can obtain high-quality digital recordings without changing the settings of the UA-700 or of your application.

Digitally recording the UA-700's output to an MD

Make connections as shown in the diagram.



Set the **Sample rate select switch** of the UA-700 to a sampling frequency that your recording device (e.g., MD) is able to record. Please also note that the application you are using must also be set to the same sampling frequency.

* *The UA-700 does not support the audio formats of professional digital audio devices.*

The input signals from the various input jacks and digital input jack of the UA-700 can be output directly from the digital output jack.

Do not connect anything to the input jacks you are not using.

Adjusting the audio latency

When using the UA-700 in **Advanced mode**, you can change the driver settings to adjust the **latency** of the audio. To adjust the latency, change the **Buffer Size** in the driver settings dialog box.

* ***Latency*** *is the time delay from when an application plays back audio data until the sound is actually heard from an audio device such as the UA-700.*

1. As described in **Opening the special driver settings dialog box** (p. 78), open the "Driver Settings" dialog box.

2. Adjust the driver buffer size.
The following setting will produce the shortest latency.

Windows:
Set **"Audio Buffer Size"** to the far left (Min).

Macintosh:
Set **"Buffer Size"** to the far left (Min).

3. Click **[OK]** to close the driver settings dialog box.

4. Restart the application that is using the UA-700.
If you are using an application that has a function for testing audio devices, get it to perform its tests.

5. Play back audio data on your application.
If interruptions occur in the sound, repeat this procedure, and gradually increase the **buffer size** specified in **step 2** until interruptions no longer occur.

* *Depending on the application you are using, there may be a* ***buffer size*** *or* ***latency*** *adjustment function among the audio settings of the application as well. For details, refer to the operation manual for your application.*

Using ASIO Direct Monitor

If you are using the UA-700 in **Advanced mode** from an ASIO 2.0 compatible application, the UA-700's **Input Monitor select switch** can be controlled from your ASIO 2.0 compatible application.

1. As described in **Opening the special driver settings dialog box** (p. 78), open the "**Driver Settings**" dialog box.
2. Make the following settings.
   Check the "**Use ASIO Direct Monitor**" check box.
3. Click **[OK]** to close the driver settings dialog box.

* *Depending on your application, there may also be an ASIO Direct Monitor setting among the audio settings of your application. For details, refer to the operation manual for your application.*

* *When using ASIO Direct Monitor, monitoring may switch on/off at unexpected times, depending on the application settings and on the recording procedure. If this occurs, uncheck the check box in **step 2** to disable **ASIO Direct Monitor**.*

Opening the special driver settings dialog box

If using the WDM driver on Windows XP/2000:

1. Open the "**Control Panel**" and double-click "**EDIROL UA-700**."
2. The "**EDIROL UA-700 Driver Settings**" dialog box will appear.

* *In Windows XP, click "**Switch to classic view**" to switch the display to the classic view. **EDIROL UA-700** will not be displayed unless the classic view is selected.*

If using the MME driver on Windows XP/2000:

1. Open the "**Control Panel**," and double-click "**System**."

* *If you are using Windows XP and cannot find **System**, click "**Switch to classic view**" to select the Classic view.*

2. Click the "**Hardware**" tab, and click the **[Device Manager]** button.
3. Double-click "**Sound, Video, and Game Controllers**."
4. Double-click "**EDIROL UA-700**."
5. Click the "**Properties**" tab, and in the "**Multimedia Devices**" area, double-click "**Audio Devices**."
6. Select "**EDIROL UA-700**," and click the **[Properties]** button.
7. Click the **[Settings]** button, and the "**EDIROL UA-700 Driver Settings**" dialog box will appear.

If using Windows Me/98:

1. Open the "**Control Panel**," and double-click "**Sound and Multimedia**." (In the case of Windows 98, double-click "**Multimedia**.")
2. Click the "**Devices**" tab, and double-click "**Audio Devices**."
3. Select "**EDIROL UA-700 Audio**," and then click the **[Properties]** button to open **Properties**.
4. Click the **[Settings]** button, and the "**EDIROL UA-700 Driver Settings**" dialog box will appear.

If using Macintosh:

Open the **ASIO Control Panel** from the **Audio Settings** dialog box of your ASIO-compatible application. The name of the Audio Settings dialog box and the procedure for opening the ASIO Control Panel will differ depending on your application. For details, refer to the operation manual

Advanced applications

Customizing the effects

You can make additional detailed adjustments to the settings of each effect unit. These parameters are called **"Custom parameters."**

* ***Custom parameters*** *can be controlled using the* ***switches of each section*** *and the* ***effect control knobs*** *of the* ***Guitar Effects section****.*

Guitar Amp Modeling section (p. 80)

Level	Adjusts the volume.
Pre drive	Adds natural and warm distortion.
Edge	Adds crispness, and emphasizes the nuances of your picking.

Compressor/De-esser section (p. 80)

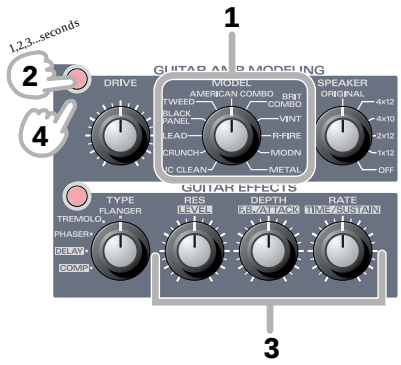
Level	Adjusts the volume.
Attack Time	Adjusts the strength of the attack. Raising this value will sharpen the attacks of the sound, making it crisper.
Release Time	Adjusts the time from when the signal falls below the threshold until it returns to its original uncompressed state.

Chorus/Reverb section (p. 81)

Chorus/Pre-Delay	Adjusts the time from when the direct sound is output until the effect sound is output. Lengthening the pre-delay will create a sensation of multiple sounds being played together (a doubling effect).
Chorus Depth	Adjusts the depth of the chorus effect. Set this to "0" if you are using this as a doubling effect.
Chorus Rate	Adjusts the speed of the chorus effect.

■ Guitar Amp Modeling section

◆Procedure◆



1. Turn the **Model knob** to select the guitar amp that you want to adjust.
2. Press and hold the **Guitar Amp Modeling switch** for at least three seconds.
   The **Guitar Amp Modeling switch** and the **Guitar Effects switch** will blink, and the UA-700 will enter a mode that lets you adjust the Guitar Amp Modeling custom parameters.
3. With the indicators of the **Guitar Amp Modeling switch** and **Guitar Effects switch** both blinking, turn the Guitar Effects section **Effect control knobs 1–3** (p. 60) to adjust each custom parameter.

Effect control knob 1	**Level**
Effect control knob 2	**Pre-drive**
Effect control knob 3	**Edge**

4. Press the **Guitar Amp Modeling switch** once again to make it light.
   The **Guitar Effect Switch** will stop blinking, and you will exit the **custom parameter adjustment mode**.

* *The custom parameters you adjusted will return to the factory settings when the power is turned off.*

* *You can make independent settings for each of the eleven different guitar amp models.*

■ Compressor/De-esser section

◆Procedure◆

1. Turn the **Compressor type select knob** to select the compressor type that you want to adjust.
2. Press and hold the **Compressor/De-esser switch** for at least three seconds.

   The **Compressor/De-esser switch** and the **Guitar Effects switch** will blink, and the UA-700 will enter a mode that lets you adjust the Compressor's custom parameters.

3. With the indicators of the **Compressor/De-esser switch** and **Guitar Effects switch** both blinking, turn the Guitar Effects section **Effect control knobs 1–3** (p. 60) to adjust each custom parameter.

Effect control knob 1	**Level**
Effect control knob 2	**Attack time**
Effect control knob 3	**Release time**

4. Press the **Compressor/De-Esser switch** once again to make it light.
The **Guitar Effect Switch** will stop blinking, and you will exit the **custom parameter adjustment mode**.

* *The custom parameters you adjusted will return to the factory settings when the power is turned off.*

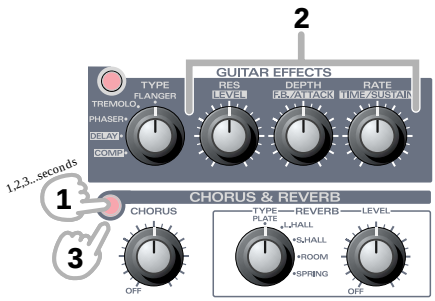
* *You can make independent settings for each of the six different compressor types.*

■ Chorus/Reverb section

◆Procedure◆

1. Press and hold the **Chorus/Reverb switch** for at least three seconds.
The **Chorus/Reverb switch** and the **Guitar Effects switch** will blink, and the UA-700 will enter a mode that lets you adjust the Chorus / Reverb custom parameters.

2. With the indicators of the **Chorus/Reverb switch** and **Guitar Effects switch** both blinking, turn the Guitar Effects section **Effect control knobs 1–3** (p. 60) to adjust each custom parameter.



Effect control knob 1	**Chorus pre-delay**
Effect control knob 2	**Chorus depth**
Effect control knob 3	**Chorus rate**

3. Press the **Chorus/Reverb switch** once again to make it light.
The **Guitar Effect Switch** will stop blinking, and you will exit the **Custom parameter adjustment mode**.

* *The custom parameters you adjusted will return to the factory settings when the power is turned off.*

Adjusting the volume of the effects

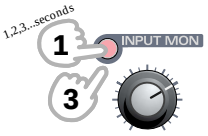
In some cases, the sound may become distorted during recording or playback when delay, reverb, or other effect sound is added. If this occurs, use the following procedure to adjust the level appropriately.

◆Procedure◆

1. Press and hold the **Input Monitor switch** for at least three seconds.
   The **Input Monitor switch** and **Guitar Effects switch** will blink, and the UA-700 will enter a mode that lets you adjust the **Effect output level**.

2. While listening to the sound, turn **Effect control knob 1** (p. 60) until the sound is no longer distorted.
   During recording, adjust this so that the **Input level indicator** of your sequencer software does not reach the maximum.

   If effect control knob 1 is set to the  position, the volume will be at unity gain.
   [Bypassed ... input:output are in a 1:1 ratio (0 dB)]



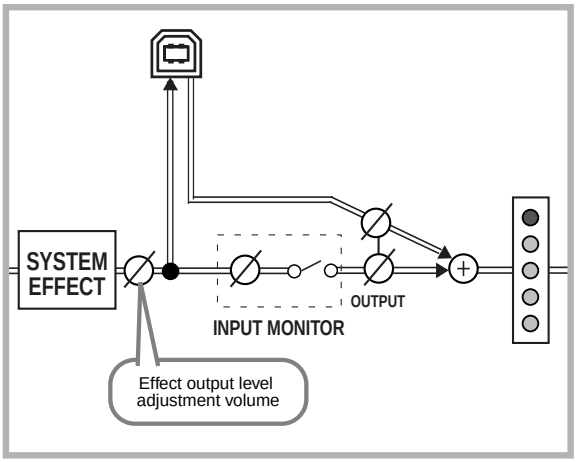
* *If you leave the Input Monitor knob and the Master Volume knob at the*  *position (0 dB), the recorded volume will be the same as the output volume. This is convenient when adjusting the effect volume.*

3. When you press the **Input Monitor switch**, it will stop blinking, and you will exit the **Effect output level adjustment mode**.

* *The setting you adjusted will return to the factory setting when the power is turned off. (0 dB = input:output ratio of 1:1)*

* *The setting you adjusted can be stored in a patch.*

Block diagram



Switching patches from an external device

■ Switching patches from a sequencer

Here's how the six patches stored in the UA-700 can be selected from your sequencer software.

1. Select **[EDIROL UA-700 CONTROL]** as the output destination for a MIDI track in your sequencer software that contains MIDI data for switching patches.

2. When you transmit a **program change (PC)** message from your sequencer, the UA-700 will switch patches.
   Program changes and UA-700 patches correspond as follows.
   PC #0 → patch 1
   PC #1 → patch 2
   PC #2 → patch 3
   PC #3 → patch 4
   PC #4 → patch 5
   PC #5 → patch 6

* *Program changes are received on all channels.*

■ Switching patches from an external MIDI device

Even if the UA-700 is not connected via USB, you can use a MIDI foot controller such as the Roland GFC-50 to switch UA-700 patches.

1. Connect your MIDI foot controller to the UA-700's MIDI IN connector.

2. When you transmit a **program change (PC)** message from your foot controller, the UA-700 patch will change.
   PC #0 → patch 1
   PC #1 → patch 2
   PC #2 → patch 3
   PC #3 → patch 4
   PC #4 → patch 5
   PC #5 → patch 6

Sequencer control switch settings

You can use the UA-700's sequencer control switch to start/stop playback or recording on your sequencer.

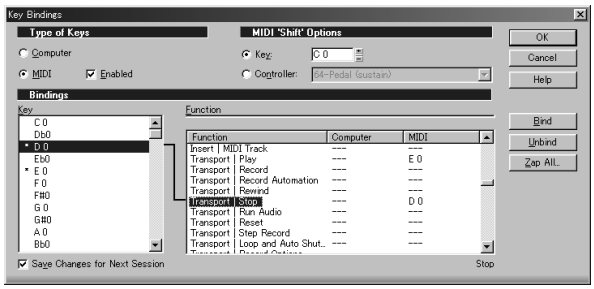
Settings for SONAR 1.0

1. From the **Options** menu, choose **MIDI Devices**.
   In the **MIDI Devices** dialog box, select **[EDIROL UA-700 CONTROL]** as both the **Inputs** and **Outputs**.

2. From the **Options** menu, choose **Key Bindings**.
   Make the following settings in the **Key Bindings** dialog box.

[Type of Keys]
Check "**MIDI**" and "**Enable**"

[MIDI 'Shift' Options]
Check "**Key**," and input "**C 0**"



◆ Stopping the sequencer

3. In the **[Bindings]** area, set **[Key]** to **[D 0]**.

4. In the **[Function]** area, select **[Transport | Stop]**.

5. Click the **[Bind]** button.
   The **[Key] [D 0]** will be connected to the **[Function]** area **[Transport | Stop]**.
   If you also want to assign the UA-700's **PLAY** button (Sequencer Control switch) to **start recording** on your sequencer, proceed to **step 6**. If you want to assign the **PLAY** button (Sequencer Control switch) to **start playback** on your sequencer, proceed to **step 10**. If you have now finished making settings, click the **[OK]** button. The **Shortcut Key** dialog box will close, and the settings will be completed.

◆ Starting recording

6. In the **[Bindings]** area, set **[Key]** to **[D 0]**.

7. In the **[Function]** area, select **[Transport | Record]**.

8. Click the **[Bind]** button.
   The **[Key] [D 0]** will be connected to the **[Function]** area **[Transport | Record]**.

9. Click **[OK]** to close the **Key Bindings** dialog box and complete the setting.

◆ Starting playback

10. In the **[Bindings]** area, set **[Key]** to **[E 0]**.

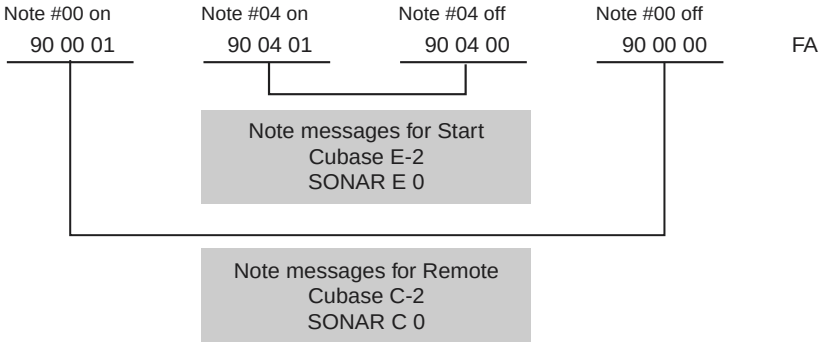
11. In the **[Function]** area, select **[Transport | Play]**.

12. Click the **[Bind]** button.
    The **[Key] [E 0]** will be connected to the **[Function]** area **[Transport | Play]**.

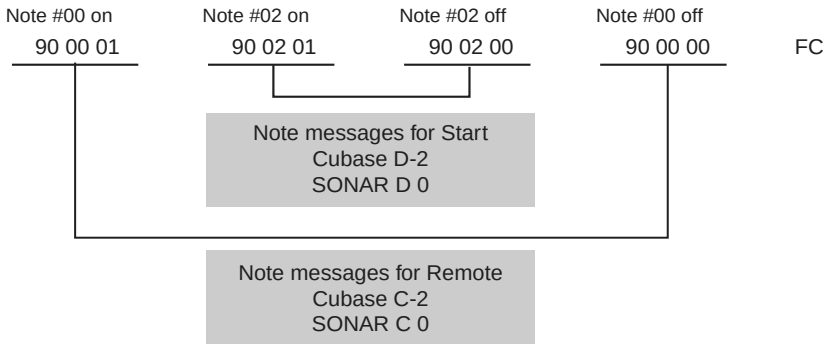
13. Click **[OK]** to close the **Key Bindings** dialog box and complete the setting.

If you are using another sequencer

If you press the **Sequencer control switch** when the button is **dark**, the following messages will be transmitted from the UA-700 to the MIDI port **[EDIROL UA-700 CONTROL]** of your computer.



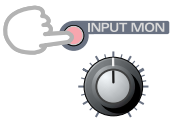
If you press the **Sequencer Control switch** when the button is **lit**, the following messages will be transmitted from the UA-700 to the MIDI port **[EDIROL UA-700 CONTROL]** of your computer.



Send/Return mode

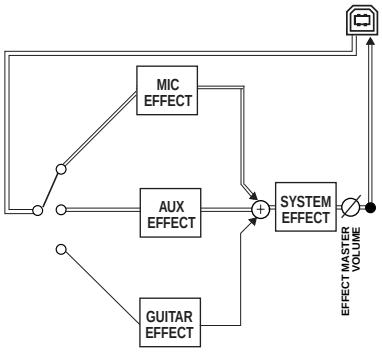
The UA-700 provides a mode that lets you apply effects to the audio data played back by your computer, and then re-record it on your computer. (See the block diagram.)
Use this when you want to apply effects to existing audio data.

1. Turn on the power while holding down the **Input Monitor switch**.



To cancel **Send/Return mode**, turn on the power once again without holding down the **Input Monitor switch**.

* *External input from a guitar or mic is not possible in this mode.*



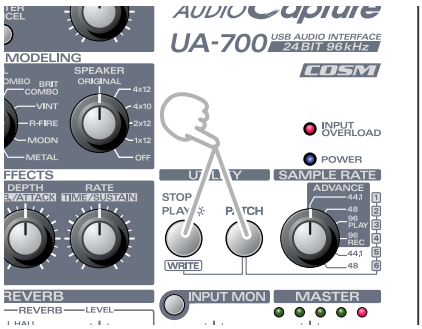
Restoring the factory settings

1. Turn on the power while holding down the **Patch Mode switch** and **Sequencer Control switch**.

2. All of the panel buttons will blink several times.

The factory settings have been restored.

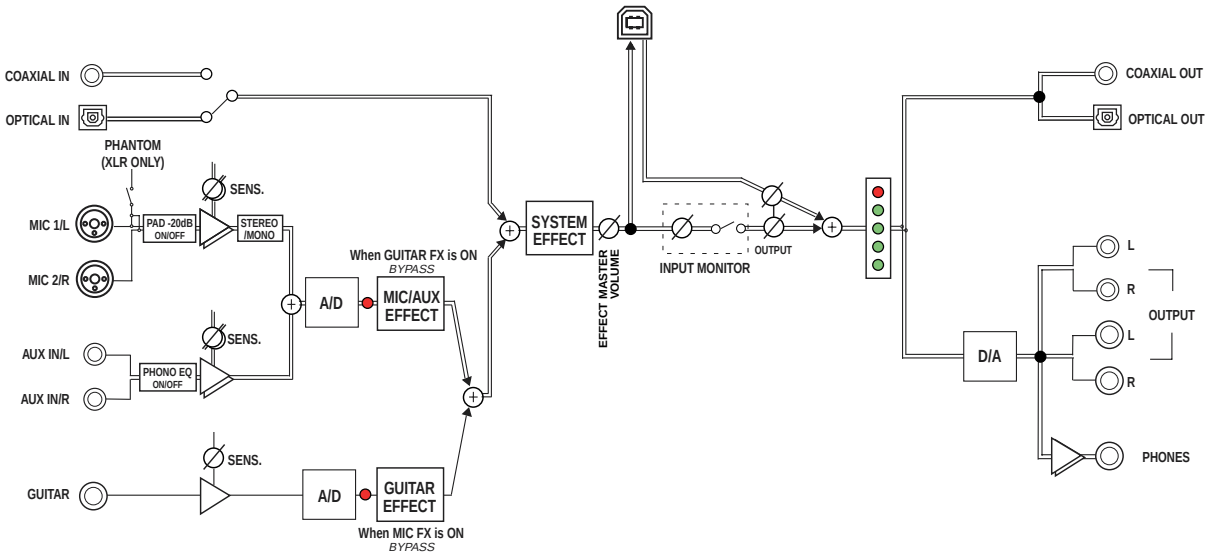
* *Patch data will return to the factory settings.*



Limitations at 96 kHz

- Only the Noise Suppressor & Equalizer section and the Compressor & De-Esser section will function at 96 kHz.
- You cannot record and play back simultaneously.

Block diagram

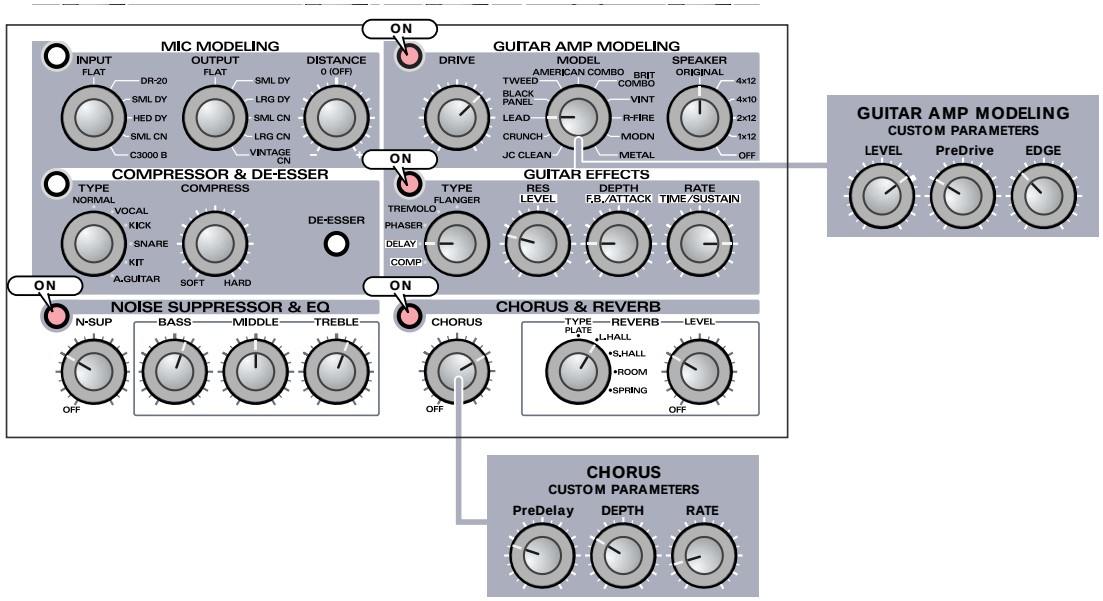


Examples of effect settings

When the UA-700 is shipped from the factory, the settings described below are set for the six patches. You can recall these patches by turning the SAMPLE RATE select switch to a number from 1 through 6. Even if you have modified these patches, you can recover these six patch settings by restoring the factory settings. (➔ **Restoring the factory settings** (p. 86))

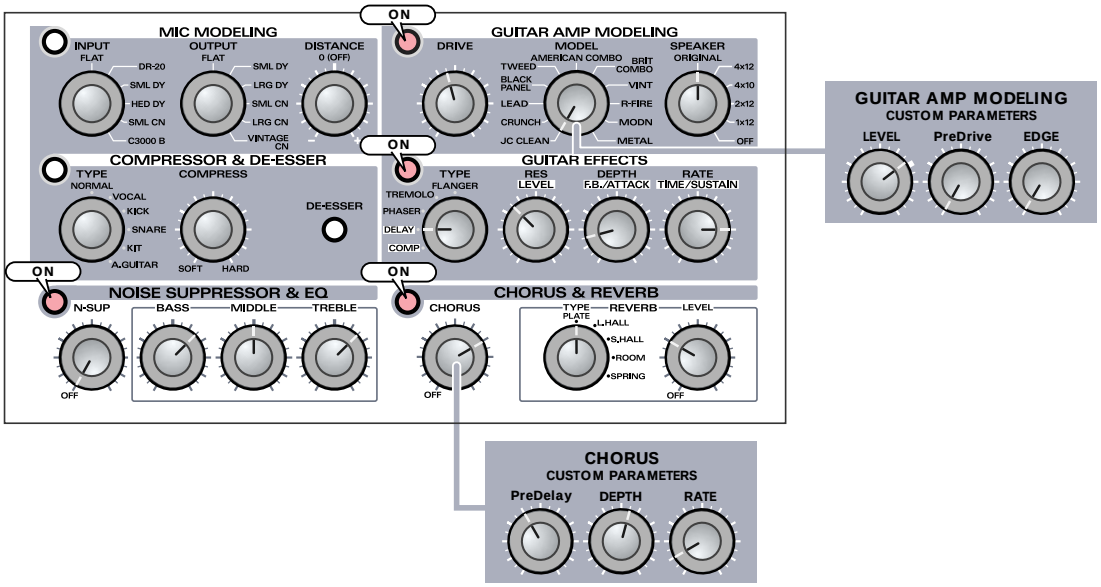
■ High-gain lead sound (PATCH: 1)

Ideal for flashy soloing.



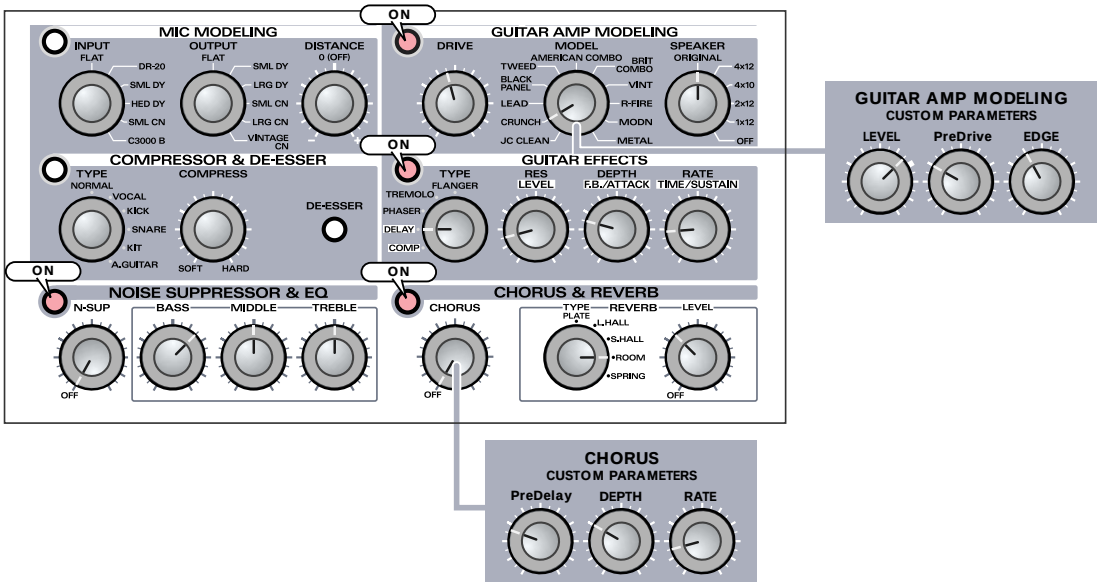
■ Clean sound using JC CLEAN (PATCH: 2)

Ideal for accompanying ballads.



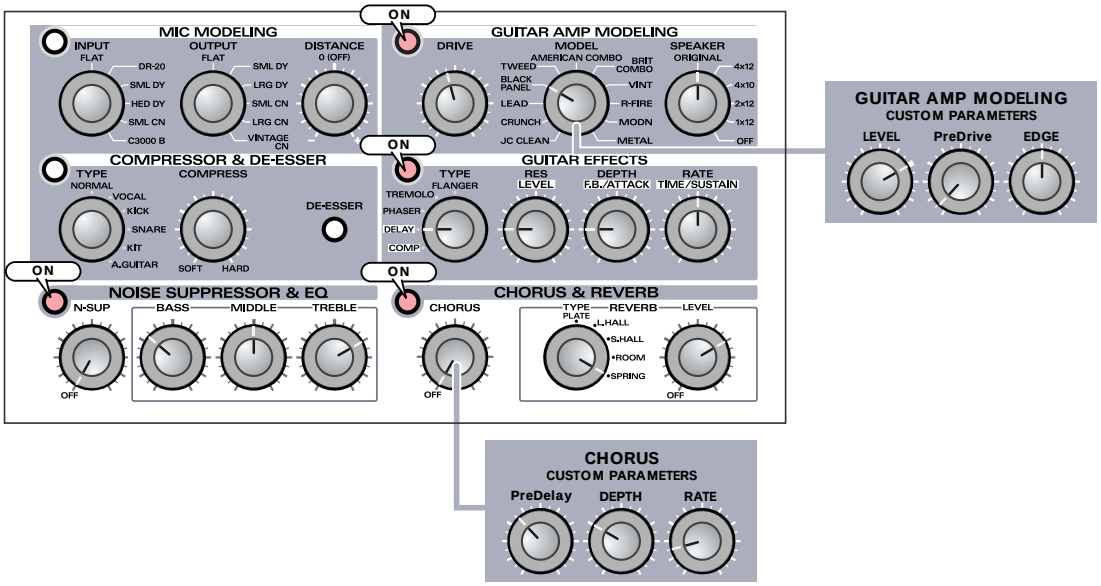
■ Crunch sound (PATCH: 3)

Ideal for rock'n'roll backing.



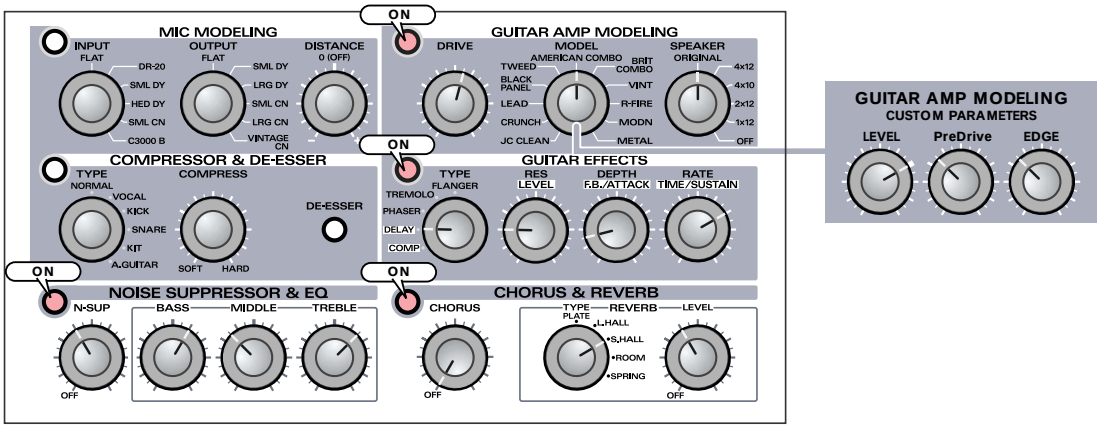
■ Electric guitar sound (PATCH: 4)

A nostalgic electric guitar sound.



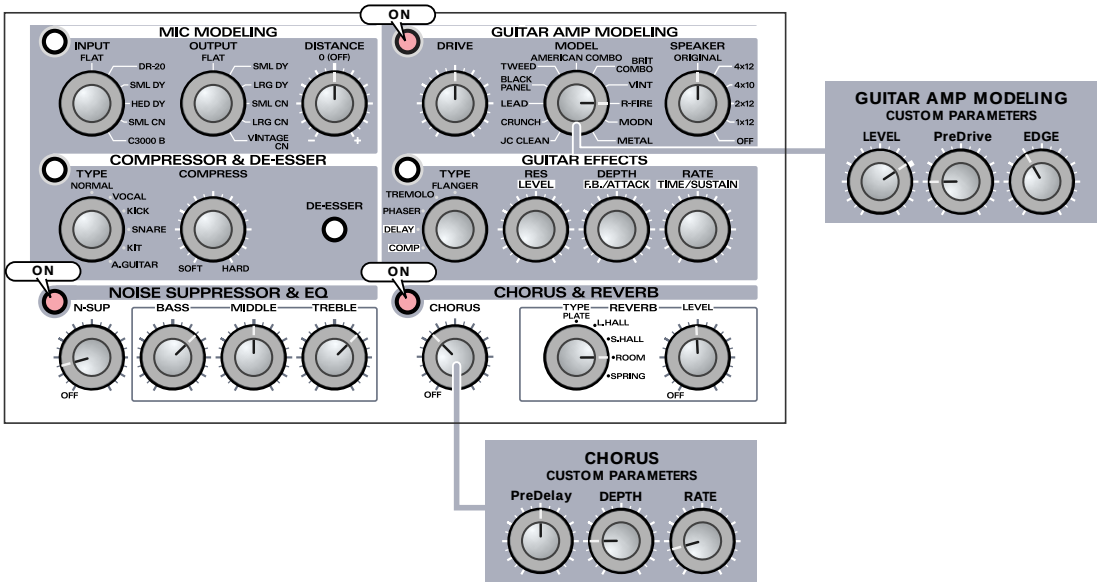
■ Tube distortion sound (PATCH: 5)

Warm distortion distinctive of vacuum tube amps.



■ Heavy rock sound (PATCH: 6)

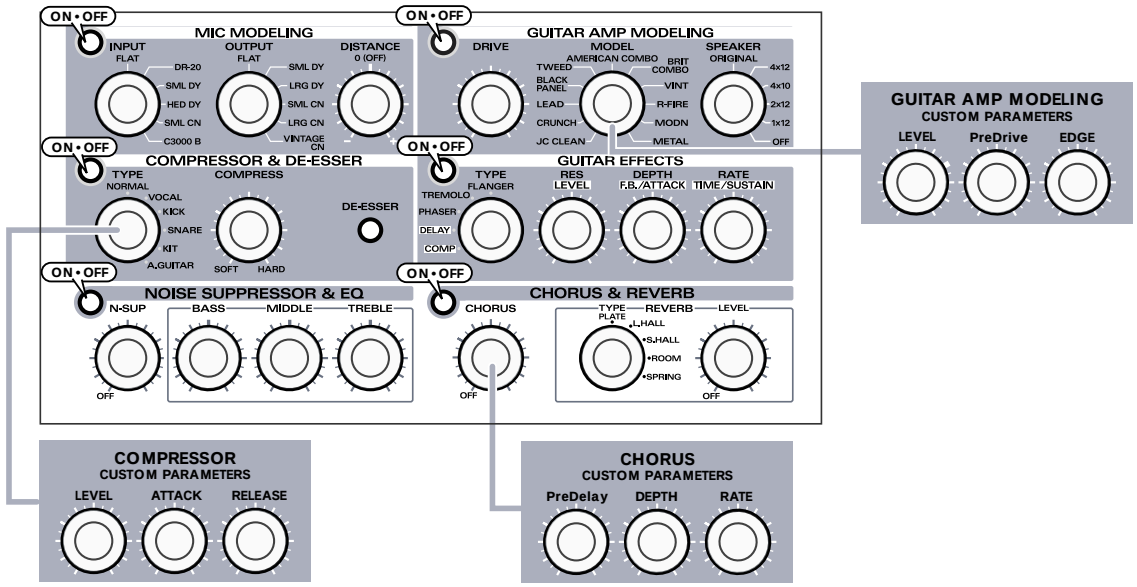
Hard and powerful sound of the 1990s.



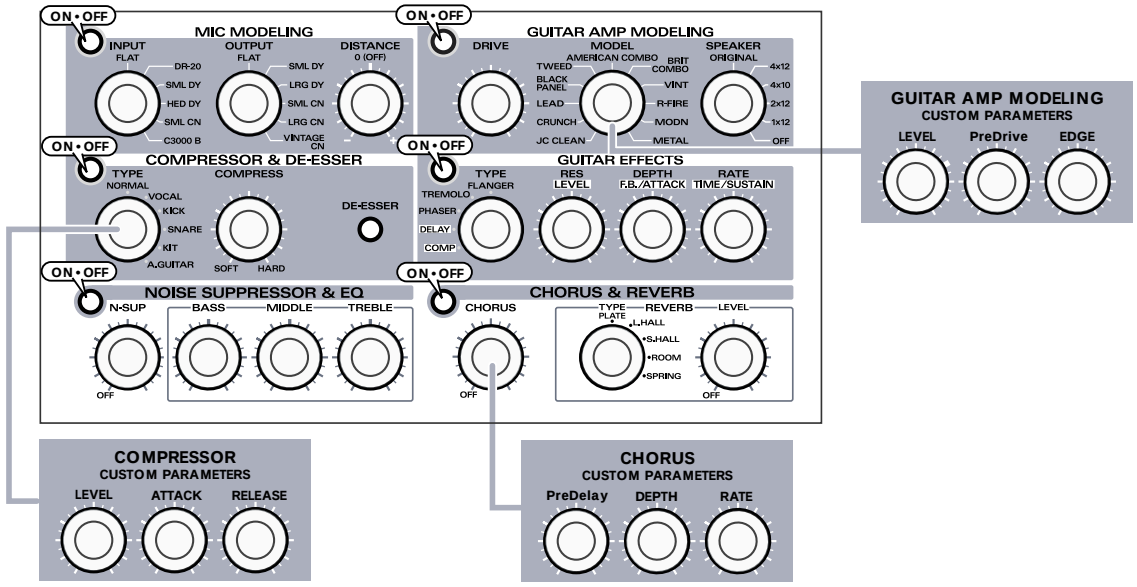
Settings chart

You can use this chart to write down your favorite settings.

■ ( )



■ ( )



Troubleshooting

If an unexpected problem occurs while using the SD-80, read this chapter first. It contains numerous tips for resolving problems.

If you are using Windows or Macintosh for the first time, and as a result find it difficult to follow the procedural explanations, please refer to the manuals that came with your computer or operating system.

Windows Macintosh Problems common to Windows and Macintosh

Windows Problems occurring only in Windows

Macintosh Problems occurring only in Macintosh

Problems related to the USB driver

Windows An “Unknown driver found” dialog box appears, and you are unable to install the driver

Windows “Find new hardware wizard” does not execute automatically

Windows “Find new hardware wizard” ends before the process is completed

- **It may take about 15 seconds (or more) after the USB cable is connected for the UA-700 to be detected.**
- **Is the USB cable connected correctly?**
  Make sure that the UA-700 and your computer are correctly connected via a USB cable.
- **Is USB enabled on your computer?**
  Refer to the operation manual for your computer, and make sure that USB is enabled.
- **It has been found that in some cases, not all of the Windows 98 files required to support audio via USB are installed when a computer is shipped.**
  Please contact the manufacturer of your computer.
- **Does your computer meet the USB specifications?**
  If you are using a computer that does not fulfill the electrical requirements of the USB specifications, operation may be unstable. In this case, you may be able to solve the problem by connecting a USB hub.
- **Does “Unknown device” appear for “Other device” or “Universal serial bus controller”?**
  Use the following procedure to delete “Other device” (Universal Serial Bus Controller) “Unknown device,” and then restart your computer.

  1. In the Windows **Control Panel**, double-click **System**. The **System Properties** dialog box will appear.
  2. Click the **Device Manager** tab.
  3. Double-click **“Other device”** or **“Universal Serial Bus Controller”** to display a list of devices.
  4. From the list, select the unknown device and click **[Delete]**.
  5. In the dialog box that asks you to confirm the deletion, click **[OK]**.
  6. Verify that **“Other device”** or **“Unknown device”** is not displayed in the list, and click **[Close]** to close the dialog box.

Windows "Found unknown device" appears even though you installed the driver

If your computer or USB hub has two or more USB connectors, and you connect the UA-700 to a USB connector to which the UA-700 has never been connected before, the **"Unknown device"** dialog box may appear even on a computer onto which you have already installed the driver.
Refer to **Getting Connected and Installing Drivers (Windows)** (p. 12), and install the driver once again. This is not a malfunction.

Windows Driver is not installed correctly

As described in **Deleting the special driver** (p. 106), delete the USB audio device driver that is installed in your computer, and then install the UA-700 driver once again as described in **Getting Connected and Installing Drivers (Windows)** (p. 12). Also check whether there is an **"Unknown device"** in **"Other devices"** or **"Universal Serial Bus Controller."**
If you find one, delete it.

Windows Can't install/delete/use the driver in Windows XP/2000

- **Did you log on to Windows as a user with administrative privileges?**
  In order to install / delete / re-install the driver in Windows XP / 2000, you must be logged into Windows as a user with administrative privileges, such as Administrator. For details, please contact the system administrator for your computer system.
- **Did you make "Driver Signing Options"?**
  In order to install / re-install the driver, you must make "**Driver Signing Options**."
  (**Windows XP** → p. 14, **Windows 2000** → p. 20)

Windows Windows XP/2000 displays a "Hardware Installation" or "Digital Signature Not Found" dialog box

- **Did you make "Driver Signing Options"?**
  In order to install / re-install the driver, you must make the settings described in "**Driver Signing Options**." (**Windows XP** → p. 14, **Windows 2000** → p. 20)

Windows Device Manager shows "?", "!", or "USB Composite Device"

Windows The "Insert Disk" dialog box does not appear

Use the following procedure to re-install the driver.

1. Turn off the power of your computer, and start up Windows with all USB cables disconnected (except for keyboard and mouse).
2. After Windows restarts, use a USB cable to connect the UA-700 to your computer.
3. Click the Windows **[Start]** button, and from the menu that appears, choose **Settings** | **Control Panel**.

4. Double-click the **System** icon. The **System Properties** dialog box will appear.
5. Click the **Device Manager** tab.
6. Check whether you can see an indication of "**?Composite USB Device**," "**?USB Device**," "**!USB Device**," or "**USB composite device**" displayed below "**Sound, Video, and Game Controllers,**" "**Other Devices**," or "**Universal Serial Bus Controller**." If you find any such indication, select it and click **[Delete]**.
7. A dialog box will ask you to confirm deletion of the device. Verify the contents of the dialog box, and then click **[OK]**. In the same way, delete all indications of "**?Composite USB Device**," "**?USB Device**," "**USB Device**," and "**USB composite device**" that you find.
8. If you find **EDIROL UA-700** with a yellow "**!**" or a red "**?**" displayed beside it, delete this in the same way.
9. When you have finished deleting the unwanted devices, click **[OK]** in the **System Properties** dialog box.
10. Turn off the power of the UA-700, then delete the driver. (→**Deleting the special driver** (p. 106))
11. Restart Windows. Then install the driver once again. (→ **Getting Connected and Installing Drivers (Windows)** (p. 12)).

* *If the problem still occurs after you have taken the above measures, please refer also to the Readme file for the USB driver. The Readme file is on the CD-ROM.*

Macintosh A dialog box says "Can't use driver required by USB device 'EDIROL UA-700.'"

- **[Special driver mode] Are you using only audio?**
  You must install the MIDI driver even if you are using the UA-700 only with audio. Please install the UA-700 driver for OMS or FreeMIDI.
  (→**Installing the special driver** (p. 40))

Problems when using the UA-700

Windows Macintosh Operating system becomes unstable

- **Operation becomes unstable when the computer is started up with the UA-700 already connected**
  Please start up your computer with the UA-700 disconnected, and then connect the UA-700. On a computer that uses a USB keyboard, starting up the computer with the UA-700 already connected may cause operation to become unstable. In this case, start up the computer with the UA-700 disconnected, and then connect the UA-700.

Windows Macintosh Can't hear sound from the computer

- **Is the Sampling frequency select switch set to "96 kHz REC"?**
  If the sampling frequency is **96 kHz**, the **Sampling frequency select switch** must be set differently, depending on whether you are recording or playing back. When playing back at 96 kHz, set the front panel **Sampling frequency select switch** to **96 kHz PLAY**.
  In order for the setting to take effect, you must exit all applications, switch off the UA-700, then turn it back on again. (**1. Sample rate select switch** (p. 65))
- **Is it possible that the UA-700's Master volume has been placed at 0 (turned fully counterclockwise)?**
- **The UA-700's Sampling frequency select switch may have been set to "96 kHz REC."**
  With this setting, only recording is possible. Sound from the computer cannot be played back.
- **Have you specified the audio and MIDI data output destination for your operating system?**
  You must specify the **UA-700** as the audio data output destination for your computer.For details on how to make this setting, refer to **Settings and checking**.
  (Windows, **Settings and checking** (p. 32) / Macintosh, **OMS settings** (p. 41), **FreeMIDI settings** (p. 46))
- **In your playback software, have you specified the audio data output destination?**
  For some software, such as Cool Edit Pro LE, you will need to specify the **UA-700** as the output destination for audio data. For details on the procedure for making settings, refer to the owner's manual for your software.
- **Are you running multiple applications?**
  If multiple applications are running simultaneously, an error message may appear. If this occurs, click **[OK]** and exit the other applications.
  Even if an application window is closed, it is still running if it appears in the taskbar. Be sure to exit unneeded applications displayed.
- **Was the driver installed correctly?**
  In order for you to play back audio data via the UA-700, the driver must be installed. For installation and settings, refer to "**Getting Connected and Installing Drivers**" (**Windows**, p. 12 / **Macintosh**, p. 38).
- **Is your computer in Suspend or Sleep mode?**
  If so, get your computer to resume normal operation, then exit all applications that are using the UA-700. Next, turn the UA-700's power off, then switch it on again.
- **Did you plug in the USB cable, or unplug it while an application was running?**
  Exit all applications that are using the UA-700, and exit all applications that are using the UA-700, and re-connect the UA-700.

- **Have you selected "Game compatible device" or "Voice modem" as the output for the audio track?**
  If game compatible device or voice modem (the actual name will depend on the computer you are using) is selected for the audio track of your software, the audio track may not play back. Do not select these devices as the port.
- **Has your computer been set to enter Sleep mode?**
  If your computer enters Sleep mode, exit the software you are using, and then restart your computer. We recommend that you set your computer to not use Sleep mode.

Windows

- **[Standard driver mode] Are you attempting to play back an audio CD using your computer's CD player?**
  If you want to play an audio CD from your computer's internal CD-ROM drive, refer to **When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-700 to play game music (Standard driver mode only)** (p. 36)
- **[Standard driver mode / Windows XP/2000 WDM driver] Are the volume control faders raised?**
  Adjust the volume of the faders as described in **Volume Control setting** (p. 35).

Can't play back / record MIDI

Windows

- **Has the MIDI device you are using been set correctly?**
  In order to record / play MIDI tracks using the UA-700, you must correctly install the UA-700 driver (**Getting Connected and Installing Drivers (Windows)** (p. 12)).
  Also make sure that the input port and output port are set as follows in your software.

INPUT port	OUTPUT port
EDIROL UA-700 MIDI IN	EDIROL UA-700 MIDI OUT

Macintosh

- **Has the MIDI device you are using been selected correctly?**
  Select **[UA-700 MIDI IN/OUT]** as the **MIDI output device**.

Windows Macintosh

- **Are the track outputs set correctly?**
  MIDI tracks to which no MIDI playback device is assigned will not be heard. If you want to play back a MIDI track, you must make sure that the MIDI device you want to use is displayed in your software as the MIDI output port. For details, refer to the owner's manual for your software.

Macintosh

- **Is OMS/FreeMIDI set correctly?**
  As described in **OMS settings** (p. 41) or **FreeMIDI settings** (p. 46), check the OMS or FreeMIDI settings. Also make sure that the device for MIDI IN / OUT is correctly selected in the MIDI settings of your MIDI sequencer software.

Macintosh

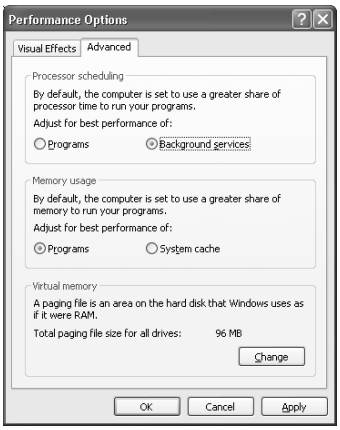
- **Is the OMS setup enabled?**
  If a diamond-shaped symbol is not displayed at the left edge of the title area in the OMS setup window, the setup is not enabled. From the OMS File menu, choose "Make Current." (**OMS settings** (p. 41))

Interrupted notes or delays occur during MIDI playback

Windows

- Make Windows XP settings to enable background processing**.**
  Make the following settings so that MIDI processing will occur smoothly.

  1. Click the Windows **start** button, and from the menu that appears, select **Control Panel**.
  2. In "**Pick a category**," click "**Performance and Maintenance**."
  3. In "**or pick a Control Panel icon**," click the **System** icon.
  4. Click the **Advanced** tab.
  5. At the right of the **Performance** field, click **[Settings]**. The **Performance Options** dialog box will appear.
  6. Click the **Advanced** tab.
  7. In the **Processor Scheduling** field, select "**Background services**," and click **[OK]**.
  8. In the **System Properties** dialog box, click **[OK]**.
     The **System Properties** dialog box will close.



Sound from devices connected to the input jack is not heard in the headphones

Windows Macintosh

- **Is the headphone volume set appropriately?**
  Turn the knob clockwise to adjust the volume.
- **Is the input monitor switch turned on (lit)?**
  Turn it on (lit).
- **Is the recording source select switch set to MIX?**
  Set it to MIX.

Volume from a device connected to the input jacks is too low

Windows Macintosh

- **Are you using a cable that has a built-in resistor?**
  Use a cable without a built-in resistor (e.g., Roland PCS series).
- **Is the Input volume raised appropriately?**
  Turn the knob clockwise to adjust the volume.

The sound of a device connected to the input jack is distorted

Windows Macintosh

If you are inputting sound through the input jacks, use the **Input sensitivity knobs** of the UA-700 to lower the input level.

Windows Macintosh Noise is heard during audio playback

- **Is a mic or guitar still connected?**
  If a mic or guitar is connected to the UA-700, disconnect the mic or guitar, and turn the input sensitivity knob all the way to the left. Disconnect any audio devices you are not using.
- **Noise is sometimes heard in the line input or mic input.**
  If a USB-compatible MIDI sound module and the UA-700 are connected via USB to the same computer, and the outputs of the MIDI sound module are connected to the line input jacks of the UA-700, noise from your computer may be heard via the MIDI sound module from the UA-700, depending on the computer you are using. If this occurs, you can either connect the MIDI sound module and the UA-700 in parallel using a self-powered hub, or connect the MIDI sound module via its serial or MIDI interface.
- **Are two or more audio devices such as the UA-700 or a mixer connected to your computer?**
  Try connecting only a single UA-700 unit, and check whether the noise disappears. If numerous audio devices are connected to a computer, noise may occur depending on your system. In such cases, connect only the UA-700 to your computer.

Macintosh

- **Does your sequencer software support ASIO 2.0?**
  If your ASIO-compatible software does not support ASIO 2.0, it will not operate correctly if you use **[UA-700 ASIO2.0 16bit]** or **[UA-700 ASIO2.0 24bit]** as the ASIO driver.
  In this case, select either **[UA-700 ASIO1.0 16bit]** or **[UA-700 ASIO1.0 24bit]** as the ASIO driver.

Macintosh

- **Does your sequencer software support 24-bit audio?**
  If your ASIO-compatible software does not support 24-bit audio input/output, it will not operate correctly if you select **[UA-700 ASIO1.0 24bit]** or **[UA-700 ASIO2.0 24bit]** as the ASIO driver. In this case, select either **[UA-700 ASIO1.0 16bit]** or **[UA-700 ASIO2.0 16bit]** as the ASIO driver.

Macintosh

- **Is the UA-700 connected to a USB hub?**
  Try connecting the UA-700 directly to the USB connector of the Macintosh itself.

Macintosh

- **Are you using a USB device other than the UA-700?**
  Try turning off the power of all USB audio devices other than the UA-700.

Windows Macintosh

- **In some cases, you may also be able to solve this problem by grounding the chassis of your computer, or the grounding connector of the AC power supply plug of your computer. In addition, you can check whether any devices that produce a strong magnetic field are located nearby, such as a television or microwave oven.**

- **Also check the troubleshooting item Sound is interrupted during audio playback (p. 101)**

Sound is interrupted during audio playback

Windows Macintosh

- **Are many applications running on your computer?**
  If you use many applications or start up other applications during playback, playback may be interrupted, depending on your computer system. Please exit unneeded applications, and try again. If this does not resolve the problem, try restarting your computer.

Windows

- **Graphic accelerators may cause noise to be heard during audio playback.**
  Use the following procedure to turn the graphic accelerator "**Off**."

  1. In the Windows **Control Panel**, double-click **Display** to open the **Display Properties** dialog box, and click the **Settings** tab.
  2. Click **Advanced**, and in the properties that appear, click the **Performance** tab.
     For Windows XP, click **Advanced**, and then click the **Troubleshoot** tab.
     For Windows 2000, click **Advanced**, and then click the **Troubleshooting** tab.
  3. Set the **Hardware acceleration** slider to **None**, and click **[OK]**.
  4. In the **Display Properties** dialog box, click **[OK]** to close the dialog box. Then restart your computer.

Windows

- **In Windows XP, make the settings that enable background processing.**
  Make these settings so that audio processing can be performed smoothly.
  Make settings as described in **Make Windows XP settings to enable background processing.** (p. 99).

Windows

- **Try using the following procedure to change your disk drive settings.**
  The following setting item may not exist on some computers.

  1. In the Windows **Control Panel**, double-click **System**.
  2. Click the **Device Manager** tab.
  3. Double-click **Disk Drives** to see the list of devices.
  4. From the list, select **GENERIC IDE DISK TYPE??**, and click Properties to access the **GENERIC IDE DISK TYPE?? Properties** dialog box.

     * *In the **??** field of **GENERIC IDE DISK TYPE??**, there will be a number that differs depending on your computing environment.*

  5. Click the **Settings** tab, place a check mark in the check box for the **DMA** option, and click **[OK]** to close the dialog box.

     * *Depending on your system, a DMA Settings dialog box may appear. Check the contents, and click either **[OK]** or **[Cancel]**.*

  6. In the **System Properties** dialog box, click **[OK]** to close the dialog box. Then restart your computer.

Windows Macintosh

- **Try installing more memory.**
  Installing more memory will increase the performance of your computer. For details on how to install more memory, refer to the operation manual for your computer.

Windows Macintosh

- **Does your computer satisfy the requirements of the USB standard?**
  If you are using a computer (such as a computer that you yourself assembled) that does not satisfy the electrical requirements of the USB specifications, you may experience interruptions in the audio. If this occurs, you may be able to solve the problem by connecting a USB hub that contains its own power supply.

Windows

- **On some computers, audio playback may be interrupted due to the Power Management settings in the Control Panel.**
  The **Power Supply Properties** that you see when you double-click **Power Management** will differ depending on your computer system. One example is given below, but you should also refer to the operation manual for your computer. Some computers may not have all of the following setting items.

  1. Click the Windows **Start** button, and select **Settings** | **Control Panel** to open the **Control Panel**.
  2. In **Control Panel**, double-click **System** to open the **System Properties** dialog box.
  3. Click the **Device Manager** tab.
  4. Double-click **System Devices** to display the **list of devices**.
  5. From the list, select **Advanced Power Management Support**. Then click Properties to open the **Advanced Power Management Support Properties** dialog box.
  6. Click the **Settings** tab, and in **Troubleshooting**, place a check in the check box for **Don't Poll Power Supply Status.** Then click **[OK]**.
  7. In the System Properties dialog box, click **[OK]**.
  8. Restart Windows.

Windows

- **If you are using the special driver, you can solve this problem in the "EDIROL UA-700 Driver Settings" dialog box.**
  For details, refer to the section "Something is wrong with playback; sound is interrupted or notes are missing" within the Readme_e file located in the folder in which you installed the CD-ROM.

Windows

Depending on the virtual memory setting or network-related settings, noise may occur. Please make the following settings before use.

- **In Chooser of the Apple menu, set AppleTalk to "Inactive." (This setting is not changed as a result of turning off AppleTalk, as requested by OMS when sequencer software is started up. You must change the setting yourself using the "Chooser.")**
- **In the "Memory" Control Panel, set Virtual Memory to "Off."**
- **Depending on the way in which you connect to the Internet, use the UA-700 with the following settings.**

  If you connect to the Internet via a LAN cable

  Use while the LAN cable is connected.

  If you connect to the Internet via the internal modem port, or are not connected to the Internet

  In the "**TCP/IP**" **Control Panel**, set "**Connect via**" to "**PPP**."

  After you have made the settings, restart your Macintosh.

  * *Do not use software that accesses the network (such as a Web browser) at the same time that you are using sequencer software or audio editing software.*

Macintosh

- **Try increasing the Buffer Size in the ASIO Driver control panel.**
  The name of the settings dialog box will differ depending on your software.

  * *If you change the **buffer size**, you must exit the software and then restart it.*

  * *Roland can make no guarantee of, nor provide support regarding the operation of sequencer software and audio editing software made by another manufacturer. Please contact the manufacturer of the software you are using.*

Macintosh Digitally recorded sound is distorted, is at the wrong pitch, or contains noise

- **If you are using a long optical digital cable, noise may be produced when the cable is connected, or the sound may be distorted. We recommend that you use optical digital cables that are no longer than one meter in length.**
- **Does the sampling frequency setting of your application match the setting of the UA-700's sampling frequency switch?**

Windows Macintosh Playback or recording halts midway through, and then becomes impossible

- **Was a heavy processing load experienced while using the UA-700, such as accessing the CD-ROM drive or a network?**
  If an operation involving a heavy processing load is performed while the UA-700 is in use, it may not operate correctly. If this occurs, stop playback / recording, and then try resuming playback / recording. If you are still unable to play back / record, exit all applications that use the UA-700, switch off the UA-700, then turn it on again.

Macintosh Recording produces a silent (blank) file

- **Try setting the bit rate to "16 bit or higher."**
  If you are using Windows 98 Second Edition and your recording software is set to a bit rate setting of 8 bits, a silent file may be created, effectively making recording impossible. If this occurs, set the bit rate to "**16 bit or higher**," and you will be able to record normally.
- **Is the Recording source select switch set correctly?**
- **In your operating system, is the audio data input destination set correctly?**
- **On your recording software, is the audio data input destination set correctly?**
- **The UA-700's Sampling frequency select switch may have been set to "96 kHz PLAY."**
  When set to "**96 kHz PLAY**," **only playback** is possible. If you want to record the sound from your computer, choose a setting other than "**96 kHz PLAY**."

Windows Game background music does not play

- **Does the game use an audio CD for background music? (Standard driver mode)**
  If the game uses an audio CD for background music, refer to **When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-700 to play game music (Standard driver mode only)** (p. 36).

Windows Macintosh Effects are not applied

- **Are you using the UA-700 at 96 kHz?**
  If you are using the UA-700 at **96 kHz**, you cannot apply effects other than COMPRESSOR & DE-ESSER and NOISE SUPPRESSOR & EQ.

Windows Macintosh Sound becomes distorted or noisy when you apply an effect

Adjust the volume of the effect unit. (-> "Adjusting the volume of the effect unit" (p. 82))

Windows Macintosh Recorded sound is too soft

Adjust the volume of the effect unit. (-> "Adjusting the volume of the effect unit" (p. 82))

Windows Macintosh Noise is heard when you connect a record player

- **Have you connected the grounding terminal?**
  Depending on your system, the UA-700 may be affected by noise from your computer. Please ground the grounding terminals of the UA-700 and your computer.
  Sometimes this problem can be solved by grounding the chassis of your computer, or the grounding connector of your computer's AC power supply. You should also check whether there is a device nearby that produces a strong magnetic field, such as a television or a microwave oven. (p. 68)

Windows Macintosh A loud buzz is present in the guitar signal

- **Does the buzz decrease when you lower the volume of your guitar?**
  If the buzz decreases when you lower the volume of your guitar, it is possible that the pickup of your guitar is receiving noise from a computer or a display screen. Move as far away from the computer as possible.
  Sometimes this problem can be solved by grounding the chassis of your computer, or the grounding connector of your computer's AC power supply. You should also check whether there is a device nearby that produces a strong magnetic field, such as a television or a microwave oven. (p. 68)

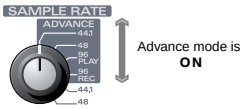
Deleting the special driver

If you were unable to install the special driver according to the procedure given, the UA-700 may not be recognized correctly by the computer. In this case, use the following procedure to delete the special driver, and then follow the procedure in **Getting Connected and Installing Drivers** (Windows, p. 12; Macintosh, p. 38) to install the driver once again.

Windows XP/2000 users

In order to delete (uninstall) the driver, a user with administrative privileges such as Administrator must be logged onto Windows. For details, contact the system administrator of your computer.

1. With all USB cables disconnected, start Windows. (USB keyboard and USB mouse excepted)
2. Log on to Windows under a user name belonging to the Administrator group, such as "**Administrator**."
3. Set the UA-700's **ADVANCE (mode select) switch** to the **ON** position.



4. After connecting the UA-700 to your computer via a USB cable, turn on the power of the UA-700.
5. Exit all applications before deleting the driver.
6. Open the **Control Panel**, and double-click **System**.

   * *In Windows XP, click "**Switch to classic view**" to switch the display to the classic view. **EDIROL UA-700** will not be displayed unless the classic view is selected.*

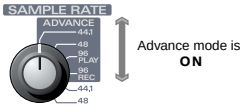
7. Click the **Hardware** tab, and in the "**Device Manager**" area, click **[Device Manager]**.
8. Double-click "**Sound, Video, and Game Controllers**" to view the list of devices.
9. From the list, click "**EDIROL UA-700 (WDM)**" or "**EDIROL UA-700 (MMX)**" to select it. Then right-click, and from the menu that appears, select "**Delete.**"

   * *If "**EDIROL UA-700** **(WDM)**" or "**EDIROL UA-700 (MMX)**" does not appear in the list, refer to the "**Can't install/delete/use the driver in Windows XP/2000**" section (p. 95) in "**Troubleshooting**."*

10. A dialog box will ask you to confirm that you want to delete the device. Verify the contents of the dialog box, and click **[OK]**.
11. Close the **Device Manager** window, and click **[OK]** in **System Properties**.
12. Disconnect the USB cable from the UA-700.
13. Restart Windows.

Windows Me/98 users

1. With all USB cables disconnected, start up Windows. (USB keyboard and USB mouse excepted)
2. Set the UA-700's **ADVANCE (mode select) switch** to the **ON** position.



3. After connecting the UA-700 to your computer via a USB cable, turn on the power of the UA-700.
4. Exit all applications before deleting the driver.
5. Open the **Control Panel**, and double-click **System**.

   * *Depending on the state of your computer, **System** may not appear in the **Control Panel**. In this case, click "**Show all control panel options**."*
6. Click the **Device Manager** tab.
7. Double-click "**Sound, video, and game controllers**" to see a list of devices.
8. From the list, click "**EDIROL UA-700**" to select it, and click **[Remove]**.
9. A dialog box will appear, asking you to confirm that you want to delete the driver. Verify the contents, and click **[OK]**.
10. Click **[Close]** to close **System Properties**.
11. Disconnect the USB cable from the UA-700.
12. In **Control Panel**, click **Folder Options** and then click the **Display** tab. (In Windows 98, click **Start → Settings→Folder Options**)
13. In **Advanced settings** of the **View** tab, remove the check mark for "**Hide protected operating system files (Recommended)**," click "**Show hidden files and folders**," and then click **[OK]**. (In Windows 98, this will be "**Show all files**.")
14. Click **Start → Find → Files or folders**.
15. In "**Search location**," select "**Local hard drive**." Then in "**Name of file or folder**," type "***0024.***" and click **[Begin search]**.
16. Of the files that are found, delete the five files **Rdas0024.DLL, Rddp0024.dat**, **Rddv0024.drv**, **Rdvx0024.vxd**, and **Rdwm0024.sys**. If the list shows **Rdif0024.inf** or **RolandRDIF0024.INF**, delete these files as well.

    * *Never delete any file other then the files specified here.*
17. Restart Windows.

Macintosh users

1. Disconnect the USB cable (by which the UA-700 is connected) from your Macintosh.
2. From the **system extensions** folder, drag "**USB UA-700 Driver**" into the trash to delete it.
3. Delete **UA-700** from the **OMS Folder** inside the System folder, or drag **UA-700 Driver** from the **FreeMIDI Folder** to the trash.
4. Drag the ASIO driver that you installed in **Installing the ASIO driver** (p. 48) into the trash to delete it.
5. Restart the Macintosh.

MIDI implementation

The operation of the UA-700 can be controlled by MIDI messages. The following MIDI messages are used for control.

❍When connected via USB

MIDI messages transmitted and received by the computer via the UA-700 Control port

❍When not connected via USB

MIDI messages transmitted and received via the UA-700's MIDI connectors

1. Data transmitted and received

■Channel voice messages

●Program changes (receive)

Status	Second byte
CnH	ppH

n = MIDI channel number: 0H--FH (ch. 1--16)
pp = program number: 00H--05H (prog. 1--6)

* These messages are used to recall patches.
* The operation will be the same for any MIDI channel number 0H--FH.

■System exclusive messages

●Data Request 1 (RQ1)

These messages request another device to "please send data."
The address and size indicate the type and size of data that is being requested.
If a data request message is received, and if that device is in a state in which it can transmit data, and the address and size are appropriate, the requested data will be transmitted as a "Data set 1 (DT1)" message. If not, nothing will be transmitted.

Status	Data byte	Status
F0H	41H, 10H, 00H, 58H, 11H, aaH, bbH, ccH, ddH, ssH, ttH, uuH, vvH, sum	F7H

Byte	Explanation
F0H	Exclusive status
41H	ID number (Roland)
10H	Device ID
00H	Model ID (UA-700)
58H	Model ID (UA-700)
11H	Command ID (RQ1)
aaH	Address MSB
bbH	Address
ccH	Address
ddH	Address LSB
ssH	Size MSB
ttH	Size
uuH	Size
vvH	Size LSB
sum	Checksum
F7H	EOX (End of Exclusive)

* MSB: upper byte of the starting address of the requested data
* LSB: lower byte of the starting address of the requested data

* The ID number is a manufacturer-specific ID. Roland's ID is 41H.
* The model ID is a model-specific ID. The model ID for the UA-700 is 00H and 58H.
* For details on the checksum, refer to the **Supplementary material** (p. 113)

●Data Set 1 (DT1)

These messages transmit the actual data, and are used to transfer data settings to a device.
Data requested by a Data Request (RQ1) is also returned in this format.

Status	Data byte	Status
F0H	41H, 10H, 00H, 58H, 12H, aaH, bbH, ccH, ddH, eeh,...ffH, sum	F7H

Byte	Explanation
F0H	Exclusive status
41H	ID number (Roland)
10H	Device ID
00H	Model ID #1 (UA-700)
58H	Model ID #1 (UA-700)
12H	Command ID (RQ1)
aaH	Address MSB
bbH	Address
ccH	Address
ddH	Address LSB
eeH	Data
:	
:	
:	
ffH	Data
sum	Checksum
F7H	EOX (End of Exclusive)

* The ID number is a manufacturer-specific ID. Roland's ID is 41H.
* The model ID is a model-specific ID. The model ID for the UA-700 is 00H and 58H.
* For details on the checksum, refer to the **Supplementary material** (p. 113).

2. Individual parameter transfer

Individual parameter transfer allows a single exclusive message (a “F0...F7” packet) to transmit (or request transmission of) data for a single parameter.
Use the addresses in the parameter address map listed below for individual parameter transfer.
On the UA-700, an individual parameter will be transmitted each time an internal parameter changes due to knob or switch operations. It is also possible to obtain the current state of a parameter by using a Data Request 1 (RQ1) to request it. In this case, the size value of the transmission request is fixed at “4.”

The data is using four-byte nibble, with offset 8000H (decimal 0 is 8000H).

■Parameter address map (Individual)

Parameter no.	Address	Parameter	Range	Default	Comment
1	00 20 00 11	Lo-Cut Sw	0 - +1	0	OFF / ON
2	00 20 00 15	Lo-Cut Frequency	0 - +15	4	20,40,50,63,80,100,125,160,200,250,315,400,500, 630,800,1000
3	00 20 00 19	Mic Modeling Sw	0 - +1	0	OFF / ON
4	00 20 00 1d	Mic Modeling Input	0 - +5	-	Flat / DR-20 / Sml.Dy / Hed.Dy / Sml.Cn / C3000B
5	00 20 00 21	Mic Modeling Output	0 - +5	-	Flat / Sml.Dy / Lrg.Dy / Sml.Cn / Lrg.Cn / Vnt.Cn
6	00 20 00 25	Mic Modeling Distance	-24 - 24	-	-
7	00 20 00 29	Mic Modeling Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
8	00 20 00 2d	Comp & De-Esser Sw	0 - +1	0	OFF / ON
9	00 20 00 31	Comp & De-Esser Type	0 - +5	-	Normal / Vocal / Kick / Snare / Kit / A.Guitar
10	00 20 00 35	Comp & De-Esser Compress	0 - +127	-	(Threshold & Gain)
11	00 20 00 39	Comp & De-Esser De-Esser Sw	0 - +1	0	OFF / ON
12	00 20 00 3d	Comp & De-Esser Normal Ratio	0 - +8	4	1.0:1 / 1.2:1 / 1.5:1 / 2.0:1 / 2.8:1 / 4.0:1 / 8.0:1 / 16.0:1 / inf:1
13	00 20 00 41	Comp & De-Esser Normal Attack	0 - +127	65	0.25 - 10.0ms - 100.0ms
14	00 20 00 45	Comp & De-Esser Normal Release	0 - +127	6	0.05s - 0.5s - 6.00s
15	00 20 00 49	Comp & De-Esser Normal Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
16	00 20 00 4d	Comp & De-Esser Vocal Ratio	0 - +8	8	1.0:1 / 1.2:1 / 1.5:1 / 2.0:1 / 2.8:1 / 4.0:1 / 8.0:1 / 16.0:1 / inf:1
17	00 20 00 51	Comp & De-Esser Vocal Attack	0 - +127	0	0.25 - 10.0ms - 100.0ms
18	00 20 00 55	Comp & De-Esser Vocal Release	0 - +127	27	0.05s - 0.5s - 6.00s
19	00 20 00 59	Comp & De-Esser Vocal Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
20	00 20 00 5d	Comp & De-Esser Kick Ratio	0 - +8	7	1.0:1 / 1.2:1 / 1.5:1 / 2.0:1 / 2.8:1 / 4.0:1 / 8.0:1 / 16.0:1 / inf:1
21	00 20 00 61	Comp & De-Esser Kick Attack	0 - +127	81	0.25 - 10.0ms - 100.0ms
22	00 20 00 65	Comp & De-Esser Kick Release	0 - +127	41	0.05s - 0.5s - 6.00s
23	00 20 00 69	Comp & De-Esser Kick Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
24	00 20 00 6d	Comp & De-Esser Snare Ratio	0 - +8	6	1.0:1 / 1.2:1 / 1.5:1 / 2.0:1 / 2.8:1 / 4.0:1 / 8.0:1 / 16.0:1 / inf:1
25	00 20 00 71	Comp & De-Esser Snare Attack	0 - +127	9	0.25 - 10.0ms - 100.0ms
26	00 20 00 75	Comp & De-Esser Snare Release	0 - +127	28	0.05s - 0.5s - 6.00s
27	00 20 00 79	Comp & De-Esser Snare Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
28	00 20 00 7d	Comp & De-Esser Kit Ratio	0 - +8	5	1.0:1 / 1.2:1 / 1.5:1 / 2.0:1 / 2.8:1 / 4.0:1 / 8.0:1 / 16.0:1 / inf:1
29	00 20 01 01	Comp & De-Esser Kit Attack	0 - +127	63	0.25 - 10.0ms - 100.0ms
30	00 20 01 05	Comp & De-Esser Kit Release	0 - +127	37	0.05s - 0.5s - 6.00s
31	00 20 01 09	Comp & De-Esser Kit Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
32	00 20 01 0d	Comp & De-Esser A.Guitar Ratio	0 - +8	3	1.0:1 / 1.2:1 / 1.5:1 / 2.0:1 / 2.8:1 / 4.0:1 / 8.0:1 / 16.0:1 / inf:1
33	00 20 01 11	Comp & De-Esser A.Guitar Attack	0 - +127	34	0.25 - 10.0ms - 100.0ms
34	00 20 01 15	Comp & De-Esser A.Guitar Release	0 - +127	39	0.05s - 0.5s - 6.00s
35	00 20 01 19	Comp & De-Esser A.Guitar Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
36	00 20 01 1d	Amp Modeling Sw	0 - +1	0	OFF / ON
37	00 20 01 21	Amp Modeling Drive	0 - +100	-	(Drive & Master)
38	00 20 01 25	Amp Modeling Model	0 - +10	-	JC Clean / Crunch / Lead / Black Panel / Tweed / American Combo / Brit Combo / Vintage Stack / R-Fire Stack / Modern Stack / Metal Stack
39	00 20 01 29	Amp Modeling Speaker	0 - +5	-	Original / 4x12 / 4x10 / 2x12 / 1x12 / Off
40	00 20 01 2d	Amp Modeling JC Clean Bass	-24 - 24	0	-
41	00 20 01 31	Amp Modeling JC Clean Middle	-24 - 24	0	-
42	00 20 01 35	Amp Modeling JC Clean Treble	-24 - 24	0	-
43	00 20 01 39	Amp Modeling JC Clean Presence	-24 - 24	-2	-
44	00 20 01 3d	Amp Modeling JC Clean Pre Drive	0 - +127	2	-
45	00 20 01 41	Amp Modeling JC Clean Pre Lowcut	-32 - 0	-1	-
46	00 20 01 45	Amp Modeling JC Clean Pre Highcut	-32 - 0	-4	-
47	00 20 01 49	Amp Modeling JC Clean Bottom	0 - +32	0	-
48	00 20 01 4d	Amp Modeling JC Clean Edge	0 - +32	10	-
49	00 20 01 51	Amp Modeling JC Clean Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
50	00 20 01 55	Amp Modeling Crunch Bass	-24 - 24	-6	-
51	00 20 01 59	Amp Modeling Crunch Middle	-24 - 24	0	-
52	00 20 01 5d	Amp Modeling Crunch Treble	-24 - 24	0	-
53	00 20 01 61	Amp Modeling Crunch Presence	-24 - 24	0	-
54	00 20 01 65	Amp Modeling Crunch Pre Drive	0 - +127	8	-
55	00 20 01 69	Amp Modeling Crunch Pre Lowcut	-32 - 0	0	-

Parameter no.	Address	Parameter	Range	Default	Comment
56	00 20 01 6d	Amp Modeling Crunch Pre Highcut	-32 - 0	0	-
57	00 20 01 71	Amp Modeling Crunch Bottom	0 - +32	6	-
58	00 20 01 75	Amp Modeling Crunch Edge	0 - +32	8	-
59	00 20 01 79	Amp Modeling Crunch Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
60	00 20 01 7d	Amp Modeling Lead Bass	-24 - 24	4	-
61	00 20 02 01	Amp Modeling Lead Middle	-24 - 24	6	-
62	00 20 02 05	Amp Modeling Lead Treble	-24 - 24	0	-
63	00 20 02 09	Amp Modeling Lead Presence	-24 - 24	8	-
64	00 20 02 0d	Amp Modeling Lead Pre Drive	0 - +127	13	-
65	00 20 02 11	Amp Modeling Lead Pre Lowcut	-32 - 0	-11	-
66	00 20 02 15	Amp Modeling Lead Pre Highcut	-32 - 0	-8	-
67	00 20 02 19	Amp Modeling Lead Bottom	0 - +32	0	-
68	00 20 02 1d	Amp Modeling Lead Edge	0 - +32	14	-
69	00 20 02 21	Amp Modeling Lead Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
70	00 20 02 25	Amp Modeling Blk Panel Bass	-24 - 24	-9	-
71	00 20 02 29	Amp Modeling Blk Panel Middle	-24 - 24	4	-
72	00 20 02 2d	Amp Modeling Blk Panel Treble	-24 - 24	3	-
73	00 20 02 31	Amp Modeling Blk Panel Presence	-24 - 24	2	-
74	00 20 02 35	Amp Modeling Blk Panel Pre Drive	0 - +127	10	-
75	00 20 02 39	Amp Modeling Blk Panel Pre Lowcut	-32 - 0	-2	-
76	00 20 02 3d	Amp Modeling Blk Panel Pre Highcut	-32 - 0	-18	-
77	00 20 02 41	Amp Modeling Blk Panel Bottom	0 - +32	0	-
78	00 20 02 45	Amp Modeling Blk Panel Edge	0 - +32	16	-
79	00 20 02 49	Amp Modeling Blk Panel Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
80	00 20 02 4d	Amp Modeling Tweed Bass	-24 - 24	-6	-
81	00 20 02 51	Amp Modeling Tweed Middle	-24 - 24	9	-
82	00 20 02 55	Amp Modeling Tweed Treble	-24 - 24	5	-
83	00 20 02 59	Amp Modeling Tweed Presence	-24 - 24	5	-
84	00 20 02 5d	Amp Modeling Tweed Pre Drive	0 - +127	23	-
85	00 20 02 61	Amp Modeling Tweed Pre Lowcut	-32 - 0	-11	-
86	00 20 02 65	Amp Modeling Tweed Pre Highcut	-32 - 0	-14	-
87	00 20 02 69	Amp Modeling Tweed Bottom	0 - +32	7	-
88	00 20 02 6d	Amp Modeling Tweed Edge	0 - +32	10	-
89	00 20 02 71	Amp Modeling Tweed Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
90	00 20 02 75	Amp Modeling Ame Combo Bass	-24 - 24	-3	-
91	00 20 02 79	Amp Modeling Ame Combo Middle	-24 - 24	4	-
92	00 20 02 7d	Amp Modeling Ame Combo Treble	-24 - 24	5	-
93	00 20 03 01	Amp Modeling Ame Combo Presence	-24 - 24	9	-
94	00 20 03 05	Amp Modeling Ame Combo Pre Drive	0 - +127	24	-
95	00 20 03 09	Amp Modeling Ame Combo Pre Lowcut	-32 - 0	-4	-
96	00 20 03 0d	Amp Modeling Ame Combo Pre Highcut	-32 - 0	-26	-
97	00 20 03 11	Amp Modeling Ame Combo Bottom	0 - +32	12	-
98	00 20 03 15	Amp Modeling Ame Combo Edge	0 - +32	+11	-
99	00 20 03 19	Amp Modeling Ame Combo Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
100	00 20 03 1d	Amp Modeling Brit Combo Bass	-24 - 24	9	-
101	00 20 03 21	Amp Modeling Brit Combo Middle	-24 - 24	4	-
102	00 20 03 25	Amp Modeling Brit Combo Treble	-24 - 24	7	-
103	00 20 03 29	Amp Modeling Brit Combo Presence	-24 - 24	13	-
104	00 20 03 2d	Amp Modeling Brit Combo Pre Drive	0 - +127	20	-
105	00 20 03 31	Amp Modeling Brit Combo Pre Lowcut	-32 - 0	0	-
106	00 20 03 35	Amp Modeling Brit Combo Pre Highcut	-32 - 0	-10	-
107	00 20 03 39	Amp Modeling Brit Combo Bottom	0 - +32	3	-
108	00 20 03 3d	Amp Modeling Brit Combo Edge	0 - +32	10	-
109	00 20 03 41	Amp Modeling Brit Combo Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
110	00 20 03 45	Amp Modeling Vint Bass	-24 - 24	13	-
111	00 20 03 49	Amp Modeling Vint Middle	-24 - 24	14	-
112	00 20 03 4d	Amp Modeling Vint Treble	-24 - 24	12	-
113	00 20 03 51	Amp Modeling Vint Presence	-24 - 24	8	-
114	00 20 03 55	Amp Modeling Vint Pre Drive	0 - +127	25	-
115	00 20 03 59	Amp Modeling Vint Pre Lowcut	-32 - 0	-9	-
116	00 20 03 5d	Amp Modeling Vint Pre Highcut	-32 - 0	-6	-
117	00 20 03 61	Amp Modeling Vint Bottom	0 - +32	2	-
118	00 20 03 65	Amp Modeling Vint Edge	0 - +32	6	-
119	00 20 03 69	Amp Modeling Vint Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
120	00 20 03 6d	Amp Modeling R-Fire Bass	-24 - 24	5	-
121	00 20 03 71	Amp Modeling R-Fire Middle	-24 - 24	0	-
122	00 20 03 75	Amp Modeling R-Fire Treble	-24 - 24	11	-
123	00 20 03 79	Amp Modeling R-Fire Presence	-24 - 24	5	-

Parameter no.	Address	Parameter	Range	Default	Comment
124	00 20 03 7d	Amp Modeling R-Fire Pre Drive	0 - +127	19	-
125	00 20 04 01	Amp Modeling R-Fire Pre Lowcut	-32 - 0	-4	-
126	00 20 04 05	Amp Modeling R-Fire Pre Highcut	-32 - 0	-4	-
127	00 20 04 09	Amp Modeling R-Fire Bottom	0 - +32	6	-
128	00 20 04 0d	Amp Modeling R-Fire Edge	0 - +32	9	-
129	00 20 04 11	Amp Modeling R-Fire Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
130	00 20 04 15	Amp Modeling Modern Bass	-24 - 24	0	-
131	00 20 04 19	Amp Modeling Modern Middle	-24 - 24	-4	-
132	00 20 04 1d	Amp Modeling Modern Treble	-24 - 24	8	-
133	00 20 04 21	Amp Modeling Modern Presence	-24 - 24	8	-
134	00 20 04 25	Amp Modeling Modern Pre Drive	0 - +127	21	-
135	00 20 04 29	Amp Modeling Modern Pre Lowcut	-32 - 0	0	-
136	00 20 04 2d	Amp Modeling Modern Pre Highcut	-32 - 0	0	-
137	00 20 04 31	Amp Modeling Modern Bottom	0 - +32	0	-
138	00 20 04 35	Amp Modeling Modern Edge	0 - +32	7	-
139	00 20 04 39	Amp Modeling Modern Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
140	00 20 04 3d	Amp Modeling Metal Bass	-24 - 24	0	-
141	00 20 04 41	Amp Modeling Metal Middle	-24 - 24	0	-
142	00 20 04 45	Amp Modeling Metal Treble	-24 - 24	2	-
143	00 20 04 49	Amp Modeling Metal Presence	-24 - 24	6	-
144	00 20 04 4d	Amp Modeling Metal Pre Drive	0 - +127	5	-
145	00 20 04 51	Amp Modeling Metal Pre Lowcut	-32 - 0	-6	-
146	00 20 04 55	Amp Modeling Metal Pre Highcut	-32 - 0	-2	-
147	00 20 04 59	Amp Modeling Metal Bottom	0 - +32	0	-
148	00 20 04 5d	Amp Modeling Metal Edge	0 - +32	9	-
149	00 20 04 61	Amp Modeling Metal Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
150	00 20 04 65	Guitar Effect Sw	0 - +1	0	OFF / ON
151	00 20 04 69	Guitar Effect Type	0 - +4	-	Comp / Delay / Phaser / Tremolo / Flanger
152	00 20 04 6d	Guitar Effect Comp Sustain	0 - +127	100	-
153	00 20 04 71	Guitar Effect Comp Attack	0 - +127	30	-
154	00 20 04 75	Guitar Effect Comp Level	0 - +127	100	0=zero - 100=0dB - 127=+6dB
155	00 20 04 79	Guitar Effect Delay Time	1 - 420	150	1ms - 150ms - 420ms , step 1ms
156	00 20 04 7d	Guitar Effect Delay Feedback	0 - +98	32	0% - 98%
157	00 20 05 01	Guitar Effect Delay Level	0 - +127	32	0=zero - 100=0dB - 127=+6dB
158	00 20 05 05	Guitar Effect Phaser Rate	1 - 1000	100	0.01 - 10.0Hz, step 0.01Hz
159	00 20 05 09	Guitar Effect Phaser Depth	0 - +127	64	-
160	00 20 05 0d	Guitar Effect Phaser Resonance	0 - +98	70	0% - 98%
161	00 20 05 11	Guitar Effect Phaser Level	0 - +127	80	0=zero - 100=0dB - 127=+6dB
162	00 20 05 15	Guitar Effect Tremolo Rate	1 - 1000	500	0.01 - 10.0Hz, step 0.01Hz
163	00 20 05 19	Guitar Effect Tremolo Depth	0 - +127	90	-
164	00 20 05 1d	Guitar Effect Tremolo Phase	0 - +180	0	0deg - 180deg
165	00 20 05 21	Guitar Effect Flanger Manual	0 - +127	100	-
166	00 20 05 25	Guitar Effect Flanger Rate	1 - 1000	10	0.01 - 10.0Hz, step 0.01Hz
167	00 20 05 29	Guitar Effect Flanger Depth	0 - +127	64	-
168	00 20 05 2d	Guitar Effect Flanger Resonance	0 - +98	70	0% - 98%
169	00 20 05 31	Guitar Effect Flanger Level	0 - +127	80	0=zero - 100=0dB - 127=+6dB
170	00 20 05 35	Center Canceler Sw	0 - +1	0	OFF / ON
171	00 20 05 39	Noise Gate & EQ Sw	0 - +1	0	OFF / ON
172	00 20 05 3d	Noise Gate & EQ Noise Gate	0 - +127	-	Off=0 - 127
173	00 20 05 41	Noise Gate & EQ Bass	-24 - 24	-	-12dB - 0dB - +12dB, step 0.5dB
174	00 20 05 45	Noise Gate & EQ Middle	-24 - 24	-	-12dB - 0dB - +12dB, step 0.5dB
175	00 20 05 49	Noise Gate & EQ Treble	-24 - 24	-	-12dB - 0dB - +12dB, step 0.5dB
176	00 20 05 4d	Noise Gate & EQ Total Gain	-24 - 24	0	-12dB - 0dB - +12dB, step 0.5dB
177	00 20 05 51	Chorus & Reverb Sw	0 - +1	0	OFF / ON
178	00 20 05 55	Chorus & Reverb Chorus Pre Delay	1 - 300	76	0.1 - 30.0ms, step 0.1ms
179	00 20 05 59	Chorus & Reverb Chorus Rate	1 - 1000	80	0.01 - 10.0Hz, step 0.01Hz
180	00 20 05 5d	Chorus & Reverb Chorus Depth	0 - +127	36	-
181	00 20 05 61	Chorus & Reverb Chorus Mix	0 - +127	100	0=off - 127=E50:D50
182	00 20 05 65	Chorus & Reverb Reverb Type	0 - +4	0	Plate / Large Hall / Small Hall / Room / Spring
183	00 20 05 69	Chorus & Reverb Plate Time	1 - 100	22	0.1s - 10.0s, step 0.1s
184	00 20 05 6d	Chorus & Reverb Plate HF Damp	-10 - 0	0	-
185	00 20 05 71	Chorus & Reverb L.Hall Time	1 - 100	30	0.1s - 10.0s, step 0.1s
186	00 20 05 75	Chorus & Reverb L.Hall HF Damp	-10 - 0	-3	-
187	00 20 05 79	Chorus & Reverb S.Hall Time	1 - 100	15	0.1s - 10.0s, step 0.1s
188	00 20 05 7d	Chorus & Reverb S.Hall HF Damp	-10 - 0	-1	-
189	00 20 06 01	Chorus & Reverb Room Time	1 - 100	8	0.1s - 10.0s, step 0.1s
190	00 20 06 05	Chorus & Reverb Room HF Damp	-10 - 0	0	-
191	00 20 06 09	Chorus & Reverb Spring Time	1 - 100	30	0.1s - 10.0s, step 0.1s

Parameter no.	Address	Parameter	Range	Default	Comment
192	00 20 06 0d	Chorus & Reverb Spring HF Damp	-10 - 0	-7	-
193	00 20 06 11	Chorus & Reverb Reverb Mix	0 - +127	100	0=off - 127=E50:D50
194	00 20 06 15	Effect Master Volume	0 - +127	100	0=zero - 100=0dB - 127=+6dB

* An interval of at least 40 ms must be placed between each exclusive message.

3. Bulk dump

Use bulk dump messages when you want to transmit or receive a large amount of data in a single operation.
On the UA-700, all parameters will be transmitted in the form of a bulk dump when a patch is loaded.
The current state of all parameters can also be obtained by issuing a Data Request 1 (RQ1).
A bulk dump is divided into multiple exclusive messages for transmission.

The address map for a bulk dump is outlined below.
The address when requesting transmission is only the starting address (21 00 00), and the size value is fixed at “388” (request all parameters).

Request all parameters: F0 41 10 00 58 11 00 21 00 00 00 00 03 04 58 F7

The transmitted data is two-byte data with offset 2000H (decimal 0 is 2000H). The order of the parameters included in the data and their ranges are the same as for individual parameter transmission.

Parameter no.	Address	Parameter	Range	Default	Comment
1	00 21 00 00	Lo-Cut Sw	0 - +1	0	OFF / ON
2	00 21 00 02	Lo-Cut Frequency	0 - +15	4	20,40,50,63,80,100,125,160,200,250,315,400,500, 630,800,1000
3	00 21 00 04	Mic Modeling Sw	0 - +1	0	OFF / ON
4	00 21 00 06	Mic Modeling Input	0 - +5	-	Flat / DR-20 / Sml.Dy / Hed.Dy / Sml.Cn / C3000B
.					
.					
.					
.					
194	00 21 03 02	Effect Master Volume	0 - +127	100	0=zero - 100=0dB - 127=+6dB

* An interval of at least 40 ms must be left between each exclusive message.
* You must also leave an interval of at least 200 ms after transmitting one set of bulk dump data.

4. Supplementary material

●Decimal and Hexadecimal table

(An "H" is appended to the end of numbers in hexadecimal notation.)

In MIDI documentation, data values and addresses/sizes of Exclusive messages, etc. are expressed as hexadecimal values for each 7 bits.
The following table shows how these correspond to decimal numbers.

Dec.	Hex.	Dec.	Hex.	Dec.	Hex.	Dec.	Hex.
0	00H	32	20H	64	40H	96	60H
1	01H	33	21H	65	41H	97	61H
2	02H	34	22H	66	42H	98	62H
3	03H	35	23H	67	43H	99	63H
4	04H	36	24H	68	44H	100	64H
5	05H	37	25H	69	45H	101	65H
6	06H	38	26H	70	46H	102	66H
7	07H	39	27H	71	47H	103	67H
8	08H	40	28H	72	48H	104	68H
9	09H	41	29H	73	49H	105	69H
10	0AH	42	2AH	74	4AH	106	6AH
11	0BH	43	2BH	75	4BH	107	6BH
12	0CH	44	2CH	76	4CH	108	6CH
13	0DH	45	2DH	77	4DH	109	6DH
14	0EH	46	2EH	78	4EH	110	6EH
15	0FH	47	2FH	79	4FH	111	6FH
16	10H	48	30H	80	50H	112	70H
17	11H	49	31H	81	51H	113	71H
18	12H	50	32H	82	52H	114	72H
19	13H	51	33H	83	53H	115	73H
20	14H	52	34H	84	54H	116	74H
21	15H	53	35H	85	55H	117	75H
22	16H	54	36H	86	56H	118	76H
23	17H	55	37H	87	57H	119	77H
24	18H	56	38H	88	58H	120	78H
25	19H	57	39H	89	59H	121	79H
26	1AH	58	3AH	90	5AH	122	7AH
27	1BH	59	3BH	91	5BH	123	7BH
28	1CH	60	3CH	92	5CH	124	7CH
29	1DH	61	3DH	93	5DH	125	7DH
30	1EH	62	3EH	94	5EH	126	7EH
31	1FH	63	3FH	95	5FH	127	7FH

* The decimal expression of the MIDI channel, program change, etc., is one greater than the decimal value shown in the table above.

* The hexadecimal expression for each 7 bits allows a maximum of 128 steps (0--127) to be expressed by one byte of data. Multiple bytes are used if the data requires greater resolution than this. For example, a value expressed by two 7-bit bytes "aa" and "bbH" would be aa x 128 + bb.

* In the case of signed (+/-) data, 00H = -64, 40H = +/-0, and 7FH = +63; i.e., a value 64 less than the decimal value shown in the above table is used. In the case of a two-byte value, 00 00H = -8192, 40 00 = +/-0, and 7F 7F = +8191. For example, a value of "aa" and "bbH" would have a decimal expression of aa bbH - 40 00H = aa x 128 + bb - 64 x 128.

* In the case of data indicated as "use nibble data," hexadecimal expression in 4-bit units is used. A nibble-expressed value of the two bytes 0a and 0bH would have a value of a x 16 + b.

<Example1>
What is the decimal expression of 5AH?
From the preceding table, 5AH = 90.

<Example2>
What is the decimal expression of the 7-bit hexadecimal value 12 34H?
From the preceding table, 12H = 18, and 34H = 52.
Thus, this is 18 x 128 + 52 = 2356

<Example3>
What is the decimal expression of the nibble-expressed value 0A 03 09 0D?
From the preceding table, 0AH = 10, 03H = 3, 09H = 9, and 0DH = 13.
Thus, this is ((10 x 16 + 3) x 16 + 9) x 16 + 13 = 41885

<Example4> What is the nibble-expressed value of decimal 1258?
1258 ÷ 16 = 78 (quotient) ... 10 (remainder)
78 ÷ 16 = 4 (quotient) ... 14 (remainder)
4 ÷ 16 = 0 (quotient) ... 4 (remainder)
From the preceding table, 0 = 00H, 4 = 04H, 14 = 0EH, 10 = 0HA.
Thus, the nibble-expressed value is 00 04 0E 0AH

●Example of an actual MIDI message

<Example1> CE 04
CnH is the Program Change status. "n" is the MIDI channel number. EH = 14, and 04H = 04. Thus, this is a program change message on MIDI channel 15, for program number 05.

●Exclusive message examples and checksum calculation

In order to verify that the message was received correctly, Roland exclusive messages (RQ1, DT1) add a checksum following the end of the data (before the F7). The checksum value is determined by the address and data (or size) of the exclusive message that is transmitted.

❍Calculating the checksum
("H" has been added following hexadecimal values)

The checksum is a value that results in a lower 7 bits of 0 when the address, size, and checksum itself are added together.
Specifically, the calculation will be as follows when the exclusive message you want to transmit has an address of aa bb ccH and data or size of dd ee ffH.

aa + bb + cc + dd + ee + ff = total
total ÷ 128 = quotient ... remainder
128 - remainder = checksum

<Example1>
Using an Individual message to set Amp Modeling Drive to +20.
From the parameter address map, the address for Amp Modeling Drive is 00H 20H 10H 21H. If the parameter value is +20, this will be 14H + 8000H (offset) = 8014H, which is expressed as nibbles by the four bytes 08H 00H 01H 04H.

F0	41	10	00 58	12	00 20 01 21	08 00 01 04	??	F7
(1)	(2)	(3)	(4)	(5)	Address	Data	Checksum	(6)

(1) Exclusive status (2) ID number (Roland 41H)
(3) Device ID (10H) (4) Model MD (00H 58H)
(5) Command ID (DT1) (6) EOX

Next, we calculate the checksum.
00H+20H+01H+21H+08H+00H+01H+04H=32+1+33+8+1+4 =79 (sum)
115 (total) ÷ 128 = 0 (quotient) ... 79 (remainder)
Checksum = 128 - 79 (remainder) = 49 = 31H

Thus, F0 41 10 00 58 12 00 20 01 21 08 00 01 04 31 F7 is the message that is transmitted.

<Example2>
Using an Individual message to set the Noise Gate & EQ Noise Gate setting to +127.
From the parameter address map, the address for Chorus & Reverb Chorus Mix is 00H 20H 05H 3DH . The parameter value for +127 is 7FH + 8000H (offset) = 807FH, which is expressed as nibbles by the four bytes 08H 00H 07H 0FH.

F0	41	10	00 58	12	00 20 05 3D	08 00 07 0F	??	F7
(1)	(2)	(3)	(4)	(5)	Address	Data	Checksum	(6)

(1) Exclusive status (2) ID number (Roland 41H)
(3) Device ID (10H) (4) Model ID (00H 58H)
(5) Command ID (DT1) (6) EOX

Next, we calculate the checksum.
00H+20H+05H+3DH+08H+00H+07H+0FH=32+5+61+8+7+15 = 128 (sum)
128 (total) ÷ 128 = 1 (quotient) ... 0 (remainder)
Checksum = 128 - 0 (remainder) = 128 = 80H

However, as an exception, the checksum for a remainder of 0 is not 80H but rather 00H.
Thus, F0 41 10 00 58 12 00 20 05 3D 08 00 07 0F 00 F7 is the message that is transmitted.

USB AUDIO INTERFACE
Model: UA-700

MIDI Implementation Chart

Date : June 1, 2002
Version : 1.00

Function...		Transmitted	Recognized	Remarks
Basic	Default	X	1–16	
Channel	Changed	X	X	
Mode	Default	X	Mode 2	
	Messages	X	X	
	Altered	**********	X	
Note Number :	True Voice	X **********	X X	
Velocity	Note On	X	X	
	Note Off	X	X	
After Touch	Key's	X	X	
	Channel's	X	X	
Pitch Bend		X	X	
Control Change	0-120	X	X	
	121	X	X	
Program Change	: True Number	X **********	O 0–5	
System Exclusive		O	O	
System Common	: Song Position	X	X	
	: Song Select	X	X	
	: Tune Request	X	X	
System Real Time	: Clock	X	X	
	: Commands	X	X	
Aux Messages	: All Sound Off	X	X	
	: Reset All Controllers	X	X	
	: Local On/Off	X	X	
	: All Notes Off	X	X	
	: Active Sensing	O	X	
	: System Reset	X	X	
Notes				

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

O : Yes
X : No

Specifications

■ UA-700: USB Audio Interface

●Number of Audio Record/Playback Channels

Record: 1 pair of stereo
Playback: 1 pair of stereo
* *Full duplex (except for 96 kHz setting)*

●Signal Processing

AD / DA conversion: 24 bit linear
PC interface: 24 bit

●Sampling Frequency

Digital output: 44.1 / 48 / 96 kHz
Digital input: 32 / 44.1 / 48 / 96 kHz *
* *Built-in realtime sample rate converter*
AD / DA Conversion: 44.1 / 48 / 96 kHz

●Frequency Response

96.0 kHz: 20 Hz to 40 kHz (+0 dB / -2 dB)
48.0 kHz: 20 Hz to 22 kHz (+0 dB / -2 dB)
44.1 kHz: 20 Hz to 20 kHz (+0 dB / -2 dB)

●Nominal Input Level (variable)

Mic Input Jack 1, 2: -50 to -20 dBu (PAD OFF)
-30 to +0 dBu (PAD ON)
Guitar Input Jack: -30 to +0 dBu
AUX Input Jack: -24 to +0 dBu (PHONO OFF)
-55 to -30 dBu (PHONO ON)

●Nominal Output Level

Master Output Jack: 0 dBu

●Residual Noise Level

(Input terminated with 1 k ohm, MASTER VOLUME: 0 dB, INPUT SENS = min., INPUT MONITOR = min., IHF-A, typ.)
Master Output Jack: -95 dBu or less

●Interface

USB
Digital Input / Output
Coaxial type
Optical type (conforms to S / P DIF)
MIDI IN / OUT

●Effects

◆Guitar effects

Amp modeling

Modeling type: 11 types
JC CLEAN, CRUNCH, LEAD, BLACK PANEL, TWEED, AMERICAN COMBO, BRIT COMBO, VINTAGE STACK, R-FIRE STACK, MODERN STACK, METAL STACK

Speaker Cabinet type: 6 types
Original, 4 x 12", 4 x 10", 2 x 12", 1 x 12", OFF

Gitar effects: 5 types
Flanger, Tremolo, Phaser, Delay, Compressor

●MIC effects

MIC modeling

Reference Microphone: 6 types
DR-20, Small Dynamic, Head-worn Dynamic, Miniature Condenser, AKG C3000B, Flat

Modeling Microphone: 6 types
Small Dynamic, Large Dynamic, Small Condenser, Large Condenser, Vintage Condenser, Flat

Preset type compressor: 6 types
Normal, Vocal, Kick, Snare, Kit, Acoustic guitar

De-esser

●AUX effects

Center cancel

●System effects

3 band equalizer, Noise suppressor,
Reverb (5 types), Chorus

●Connectors

MIC Input Jack 1, 2
(XLR type (phantom power), 1/4 inch TRS phone type)
Guitar Input Jack
(Mono 1/4 inch phone type)
AUX Input Jack
(RCA phono type)
Digital In Connectors
(Coaxial type, Optical type)
Digital Out Connectors
(Coaxial type, Optical type)
Headphones Jack
(Stereo 1/4 inch phone type)
Master Output Jack L/R
(1/4 inch phone type, RCA phono type)

●Power Supply

AC adaptor

●Current Draw

780 mA

●Dimensions

257 (W) x 183.5 (D) x 58.3 (H) mm
10-1/8 (W) x 7-1/4 (D) x 2-5/16 (H) inches

●Weight

1.3 kg / 2 lbs 14 oz

●Accessories

AC adaptor
Owner's Manual
USB cable
CD-ROM

(0 dBu = 0.775 V rms)

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

Contents

S

T

U

V

W

X

MEMO

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 EU Countries

CE

This product complies with the requirements of European Directive 89/336/EEC.

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.

Tested To Comply With FCC Standards

FOR HOME OR OFFICE USE

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

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 the USA

DECLARATION OF CONFORMITY
Compliance Information Statement

Model Name :	UA-700
Type of Equipment :	USB Audio Interface
Responsible Party :	Edirol Corporation North America
Address :	425 Sequoia Drive, Suite 114, Bellingham, WA 98226
Telephone :	(360) 594-4276

Information

When you need repair service, call your nearest EDIROL/Roland Service Center or authorized EDIROL/Roland distributor in your country as shown below.

EDIROL

EUROPE

EDIROL (Europe) Ltd.
Studio 3.4 114 Power Road
London W4 5PY
U. K.
TEL: +44 (0)20 8747 5949
FAX:+44 (0)20 8747 5948
http://www.edirol.com/europe

Deutschland
TEL: 0700 33 47 65 20
France
TEL: 0810 000 371
Italia
TEL: 02 93778329

Roland

NORTH AMERICA

CANADA

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

Roland Canada Music 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

AFRICA

EGYPT

Al Fanny Trading Office
9, EBN Hagar A1 Askalany
Street,
ARD E1 Golf, Heliopolis,
Cairo 11341, EGYPT
TEL: 20-2-417-1828

REUNION

Maison FO - YAM Marcel
25 Rue Jules Hermann,
Chaudron - BP79 97 491
Ste Clotilde Cedex,
REUNION ISLAND
TEL: (0262) 218-429

SOUTH AFRICA

Paul Bothner(PTY)Ltd.
Royal Cape Park, Unit 24
Londonderry Road, Ottery 7800
Cape Town, SOUTH AFRICA
TEL: (021) 799 4900

ASIA

CHINA

Roland Shanghai Electronics Co,Ltd.
5F. No.1500 Pingliang Road
Shanghai 200090, CHINA
TEL: (021) 5580-0800

Roland Shanghai Electronics Co,Ltd.
(BEIJING OFFICE)
10F. No.18 3 Section Anhuaxili
Chaoyang District Beijing
100011 CHINA
TEL: (010) 6426-5050

Roland Shanghai Electronics Co,Ltd.
(GUANGZHOU OFFICE)
2/F., No.30 Si You Nan Er Jie
Yi Xiang, Wu Yang Xin Cheng,
Guangzhou 510600, CHINA
TEL: (020) 8736-0428

HONG KONG

Parsons Music Ltd.
8th Floor, Railway Plaza, 39
Chatham Road South, T.S.T,
Kowloon, HONG KONG
TEL: 2333 1863

INDIA

Rivera Digitec (India) Pvt. Ltd.
409, Nirman Kendra
Mahalaxmi Flats Compound
Off. Dr. Edwin Moses Road,
Mumbai-400011, INDIA
TEL: (022) 2493 9051

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