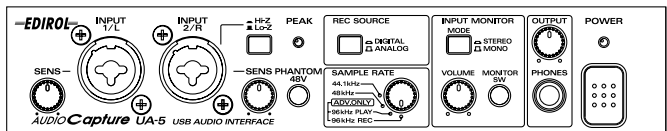


*AUDIO Capture*  
**UA-5**  
**24BIT 96kHz**  
**USB AUDIO INTERFACE**

# Getting Started

Thank you for purchasing the UA-5 USB Audio Interface.

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (Getting Started p. 2- p.4). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Getting Started should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.







Copyright © 2001 ROLAND CORPORATION

All rights reserved. No part of this publication may be reproduced in any form without the written permission of ROLAND CORPORATION.







# USING THE UNIT SAFELY

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

About  WARNING and  CAUTION Notices






 <b>WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 <b>CAUTION</b>	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 Roland Service Center, or an authorized 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.

#### WARNING

- 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. 
- 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/ampères) 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 plug or the body of the AC adaptor when plugging into, or unplugging from, an outlet or this unit.
- 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 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 2-3, 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.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- 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

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

## 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.

# CONTENTS

<b>USING THE UNIT SAFELY .....</b>	<b>2</b>
<b>IMPORTANT NOTES .....</b>	<b>4</b>
<b>Features of the UA-5 .....</b>	<b>6</b>
<b>Check the contents of the package .....</b>	<b>8</b>
<b>Names of things and what they do .....</b>	<b>10</b>
Front panel.....	10
Rear panel .....	13
Block diagram.....	14
<b>Getting Connected and Installing Drivers (Windows).....</b>	<b>15</b>
What is a driver?.....	15
Advanced mode and Standard mode.....	15
Installing the special driver.....	16
Installing the OS-standard driver.....	25
Settings and checking.....	30
<b>Getting Connected and Installing Drivers (Macintosh).....</b>	<b>34</b>
What is a driver? .....	34
Advanced mode and Standard mode.....	34
Installing the special driver .....	35
Installing the OS-standard driver.....	38
<b>UA-5 application guide.....</b>	<b>42</b>
Basic use .....	42
Recording a guitar or bass.....	43
Recording from a mic.....	44
Recording from a keyboard.....	45
Recording from the AUX input .....	46
Digitally recording from a CD/MD/DAT.....	47
Digitally recording the output of the UA-5 on an MD.....	48
Adjusting the audio latency .....	49
Using ASIO Direct Monitor.....	50
<b>Troubleshooting .....</b>	<b>52</b>
Problems related to the USB driver.....	52
Problems when using the UA-5.....	56
Deleting the special driver.....	63
<b>Main Specifications .....</b>	<b>66</b>

- \* Microsoft and Windows are registered trademarks of Microsoft Corporation.
- \* Screen shots in this documents are reprinted with permission from Microsoft Corporation.
- \* Windows® 98 is known officially as: “Microsoft® Windows® 98 operating system.”
- \* Windows® 2000 is known officially as: “Microsoft® Windows® 2000 operating system.”
- \* Windows® Me is known officially as: “Microsoft® Windows® Millennium Edition operating system.”
- \* Apple and Macintosh are registered trademark of Apple Computer, Inc.
- \* MacOS is a trademark of Apple Computer, Inc.
- \* All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

# Features of the UA-5

## 24bit/96kHz processing High Quality Sound

---

The UA-5 offers a complete digital recording and playback, ready to use on both desktop and laptop computers, with professional quality audio resolution up to 24-bit/96 kHz. \*

- \* 24-bit/96 kHz processing only when using ASIO or WDM driver
- \* Simultaneous recording/playback is 48 kHz

## Wide variety of input/output connectors

---

UA-5 provides a wide range of input connectors (both XLR/standard type), including Hi-Z Guitar preamp, dynamic microphone, phantom-powered condenser MIC's, optical & coaxial S/P DIF I/O.

## Hardware Direct Monitoring function

---

Its unique Hardware Direct Monitoring function enables zero latency monitoring of input signals through headphones or analog output. Built-in hardware switch to turn on/off the monitoring function with ASIO 2.0 compatible software applications.

## ASIO 2.0 /WDM compatible driver

---

Dedicated drivers are compatible with WDM (Windows 2000) and ASIO 2.0 (Win/Mac), application allowing high performance with music software such as SONAR(TM), Cubase(TM), Logic(TM).

- \* *Roland will provide no guarantee or support regarding operation with sequencer software or audio editing software made by another manufacturer. 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.

## **SCMS on the UA-5**

On the UA-5, SCMS will affect operation only for digital signals input from an external device. If a digital audio signal containing SCMS data is input from a MD or other media that was digitally copied from a commercial music CD, the UA-5 will operate as follows.

When inputting from the UA-5's digital input connector:

The UA-5 cannot record this signal on your computer.

Nor will the sound be output from the analog output (master output jacks, headphone jack) or digital output connector. If the input is valid, the Power indicator will blink.

When inputting from the UA-5's analog inputs (line in jacks):

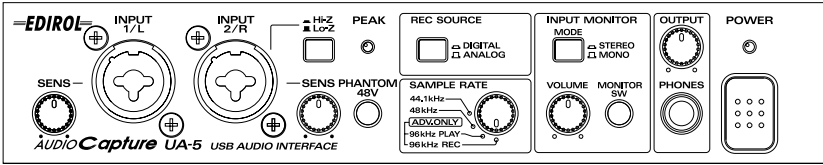
Recording can be performed as usual.

## **A note regarding copyright**

- \* *Unauthorized recording, public performance, broadcast, sale, or distribution of a work (CD recording, video, broadcast, etc.) whose copyright is owned by a third party is forbidden by law. Any infringement on the rights of a third party you may commit using the UA-5 is solely your own responsibility, and no responsibility shall be born by the manufacturer of the UA-5. Unauthorized duplication, even for purposes of personal use, of a copyrighted work belonging to a third party by circumventing technical means of protection such as SCMS constitutes infringement of the copyright of that third party, and is forbidden by law.*

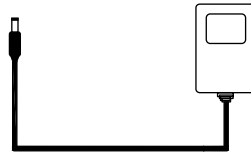
# Check the contents of the package

## ● UA-5



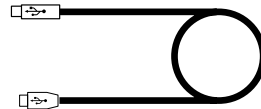
## ● AC adaptor

This is the only AC adaptor you should use with the UA-5. Do not use any AC adaptor other than the supplied one, since doing so may cause malfunction.



## ● USB cable

Use this to connect the USB connector of your computer with the USB connector of the UA-5. For details on connections and driver installation, refer to Windows-> p. 15 or Macintosh-> p. 34.



\* 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.

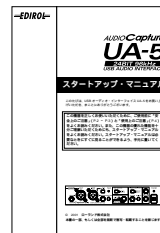
## ● UA-5 Driver CD-ROM

This contains the driver required in order to use the UA-5.



## ● Getting Started

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

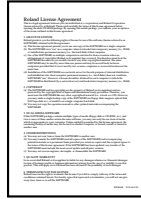




## ● Roland software license agreement

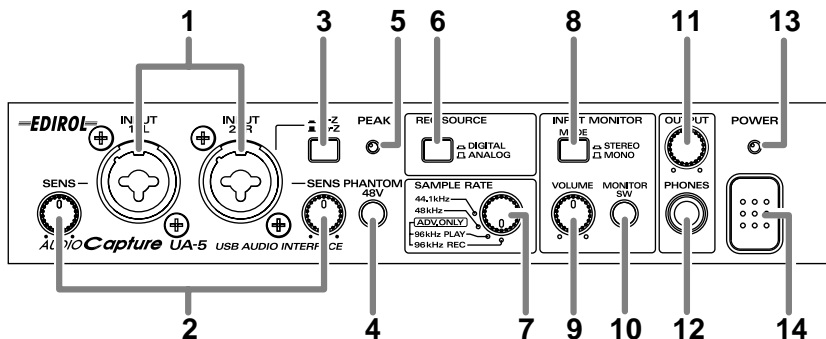
This is the license agreement governing the use of the included software.

This license agreement permits you to use certain software, the copyright of which is owned by Roland. You must read this before opening the CD-ROM package.

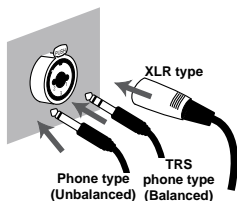


# Names of things and what they do

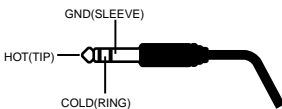
## Front panel



### 1. Input jacks 1, 2



These are input jacks for analog audio signals. These are combination XLR and phone jacks, allowing you to connect either type of plug. Both balanced and unbalanced devices can be connected. The XLR-type connections support 48 V phantom power, allowing phantom powered condenser mics to be connected. In this case, turn the **Phantom power switch on (lit)**.



The UA-5 has balanced (XLR/TRS) type input jacks. The pin connections of connectors are shown below. Before making connections, please check the pin connections of the device you are connecting.

\* Unless condenser mics requiring phantom power are connected, you must be sure to turn the Phantom power switch **off (dark)**. Supplying phantom power to a dynamic mic or audio playback device will cause malfunction. For details on your type of mic, refer to the manual that came with your mic. (The phantom power supply of the UA-5 is DC 48V, maximum 10mA.)

### 2. Input sensitivity knobs

These adjust the sensitivity of **Input jacks 1 and 2**. The jack will be at mic level (-50 dBv) when the knob is turned fully right, and at line level (0 dBv) when turned fully left.

### 3. Input impedance select switch

Depending on the device connected to **Input jack 2**, use this switch to select either high impedance (Hi-Z) or low impedance (Lo-Z). If you are connecting a guitar or bass to **Input jack 2**, set this switch to the high impedance setting (Hi-Z).

### 4. Phantom power switch

This is an on/off switch for the phantom power that is supplied to XLR-type **Input jacks 1 and 2**.


\* *If devices that do not require phantom power are connected to the XLR jacks, you must turn the Phantom power switch **off** to prevent malfunction.*

### 5. Peak indicator


This indicator allows you to avoid distorting the audio sources connected to **Input jacks 1 and 2** and the **Input jacks 3 and 4**. The **Peak indicator** will light in red at the level at which the sound begins to distort (-3 dB). Adjust the Input sensitivity knobs so that the **Peak indicator** does not light.

### 6. Recording source select switch

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

DIGITAL-> 

The input of the **Digital input connector** (coaxial or optical) will be sent to the computer. Use the **Digital input selector select** to select the jack that will be used for digital input.

ANALOG-> 

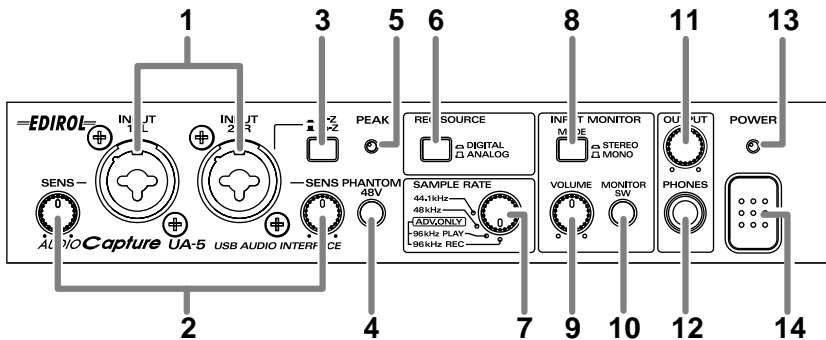
The analog audio signals being input to **Input jacks 1 and 2** and the **Input jacks 3 and 4** will be sent to the computer. The audio signals from **Input jacks 1 and 2** that have passed through the **Input sensitivity knob**, together with the analog audio signals from the **Input jacks 3 and 4** that have passed through the **Input jacks 3 and 4 adjustment volume**, will be sent as audio data to the computer. For details refer to the **Block diagram** (p. 14).

### 7. Sampling frequency select switch

This selects the Sampling frequency at which audio signals will be recorded and played back. In order for this setting to take effect, you must exit all applications, then switch the UA-5's power off, then on again.

#### About the Sampling frequency select switch setting

- The UA-5's Sampling frequency select switch must be set to match the sampling frequency of the application you are using.
- **96 kHz REC** and **96 kHz PLAY** are valid only in Advanced mode (when the **Mode select switch** is **ON**).
- When the **Sampling frequency select switch** is in the **96 kHz REC** position, you will not hear the playback sound from your application.
- When the **Sampling frequency select switch** is in the **96 kHz PLAY** position, the sound from the instrument or audio device connected to the UA-5 cannot be recorded by your application.



### 8. Input monitor stereo/mono select button

This button selects whether the input signal from the **Input jacks 1 and 2**, **Input jacks 3 and 4**, and the **Digital input connector** will be monitored in stereo or in **MONO**. You should also set this to **MONO** when you are connecting a guitar to only **Input jack 2**.

Even when this is set to Mono, the audio signal sent via USB to the computer will be stereo.

### 9. Input monitor volume

This adjusts the volume at which the input signal from **Input jacks 1/2**, **Input jacks 3/4**, and the **Digital input connector** will be output to the **Headphone jack** and **Master output jacks**. When this is turned all the way to the right, the volume will be the same as the volume of the recorded signal.

### 10. Input monitor switch

This button selects whether the input signal from the **Input jacks 1 and 2**, **Input jacks 3 and 4**, and the **Digital input connector** will be sent without change from the **Headphone jack** and the **Master output jack**. When this is **on**, the input signal will be output. When this is **off**, the input signal will not be output. Turn this button **off** (dark) if the audio data is being “thru-ed” within your computer, or if a mixer is connected and the input signal is being output directly from the mixer for monitoring.

\* *Input monitor switches can also be controlled directly from an ASIO 2.0-compatible application such as Cubase.*

### 11. Master volume

This adjusts the volume that is output from the **Headphone jack** and the **Master output jacks**.

### 12. Headphone jack

A set of headphones can be connected here. The **Headphone jack** will output the same sound as that of the **Master output jacks**. Sound will be output from the **Master output jacks** even when headphones are connected.

### 13. Power indicator

This will light in red when the power is **on**.

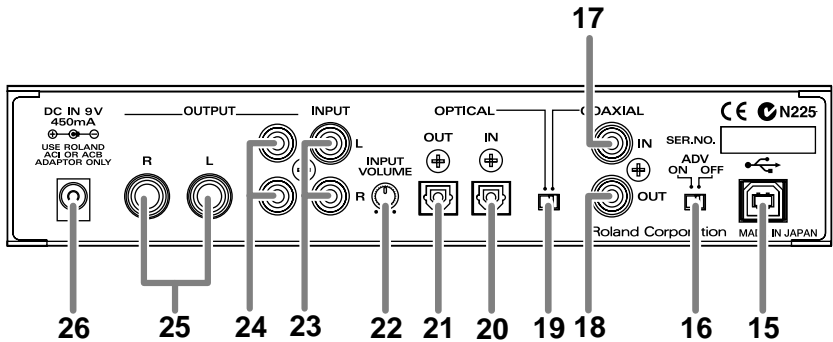
If SCMS-flagged signals are being input from a **Digital input connector** (optical/coaxial), this will blink.

If the **ADVANCE (mode select) switch** is **OFF**, this will blink if the sampling frequency select switch is set to **96 kHz PLAY/96 kHz REC**.

### 14. Power switch

Press this switch to turn the power on/off.

## Rear panel



### 15. USB connector

Connect your computer here via a USB cable. Do not connect or disconnect the USB cable while an audio playback application is recording or playing. Doing so may cause the application to hang up.

### 16. ADVANCE (mode select) switch

This switches the operating mode.

In order for the settings to take effect, you must exit all applications and turn on the power of the UA-5 once again.

#### On (Advanced mode)

The driver included with the UA-5 will be used to record/play/edit audio on sequencer software or waveform editing software with high audio quality and stable timing.

#### Off (Standard Driver mode)

Select this mode when using applications that use the audio driver included with your operating system, and utilize functionality specific to your operating system. For details on the operating mode, refer to **Advanced mode and Standard Driver mode** (Windows-> p. 15 / Macintosh-> p. 34).

### 17. Digital input connector (coaxial)

Connect a coaxial cable here when you want to digitally input an audio signal from a device such as a CD/MD/DAT.

### 18. Digital output connector (coaxial)

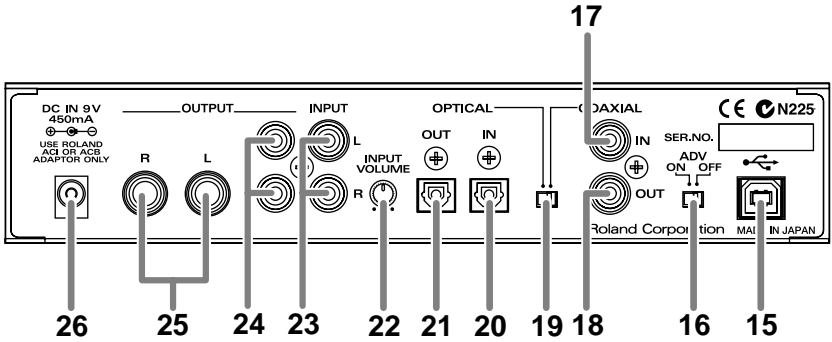
Connect a coaxial cable here when you want to digitally output an audio signal to a digital recorder such as an MD or DAT.

### 19. Digital input select switch

This selects whether the coaxial or optical connector will be used for digital input.

### 20. Digital input connector (optical)

Connect an optical cable here when you want to digitally input an audio signal from a device such as a CD/MD/DAT.



**21. Digital output connector (optical)**

Connect a coaxial cable here when you want to digitally output an audio signal to a digital recorder such as an MD or DAT.

**22. Input jacks 3 and 4 adjustment volume**

Adjusts the Input level of Input jacks 3 and 4.

**23. Input jacks 3, 4**

Make connections here when you want to input audio signals from an audio device or MIDI sound generator.

**24. Master output jacks (RCA phono type)**

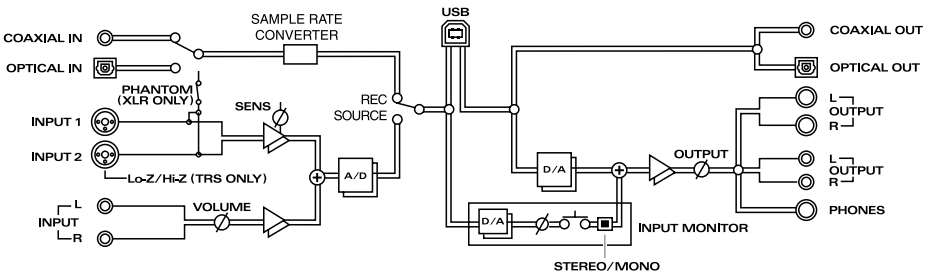
**25. Master output jacks (phone type)**

These are output jacks for analog audio signals. The same sound is output from the RCA phono-type jacks and the phone-type jacks. Use the jacks appropriate for the connected device or type of cable.

**26. AC adaptor jack**

Connect the included AC adaptor to this jack.

## Block diagram

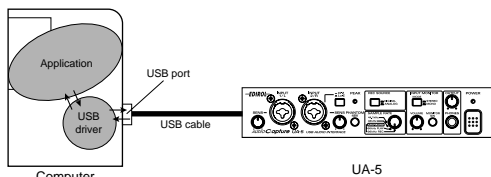


# Getting Connected and Installing Drivers (Windows)

If you are using a Macintosh computer, please proceed to "Getting Connected and Installing Drivers (Macintosh)" (p. 34).

## What is a driver?

A "driver" is software that transfers data between the UA-5 and application software running on your computer, when your computer and the UA-5 are connected by a USB cable. The driver sends data from your application to the UA-5, and from the UA-5 to your application.



## Advanced mode and Standard driver mode

The UA-5 has two operating modes, **Advanced mode** and **Standard mode**, and a different driver is used by each mode.

### ■ Advanced mode

The UA-5 will operate in this mode when the rear panel **Mode select switch** is turned **ON**. The special driver included on the UA-5 Driver 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-5 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, Logic Audio, or SingerSongWriter).

### ■ Standard driver mode

The UA-5 will operate in this mode when the rear panel **Mode select switch** is turned **OFF**. The standard USB audio driver included with Windows will be used. In standard driver mode, audio signals are transferred between the UA-5 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 Windows'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.

If you want to use the UA-5 in Advanced mode, proceed to **Installing the special driver** (p. 16). If you want to use OS-standard driver mode, proceed to **Installing the OS-standard driver** (p. 25).

### **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-5'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-5, switch off the UA-5, 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 2000 users.....(p. 16)
- Windows Me/98 users.....(p. 22)

### **■ Windows 2000 users**

#### **WDM driver and Legacy driver**

The **UA-5 Driver CD-ROM** contains two types of driver for Windows 2000.

Before you install the driver, select the driver that will be appropriate for the application you want to use.

##### **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.

It is not possible to use 24 bit audio with applications that do not support WDM, such as Cool Edit or Media Player.

##### **Legacy driver**

This driver allows you to use 24 bit audio even from applications that do not support WDM, 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 Legacy 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. 63))



## Installing the driver

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

1

**With the UA-5 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

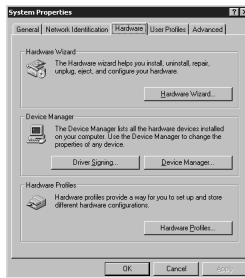
**Open the System Properties dialog box.**

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

4

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

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



5

**Make sure that “Check file signature” 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]**.



## NOTE

If the UA-5 is already connected to your computer and a message of “**Add NewHardware Wizard**” is displayed, go to the **UA-5 Driver CD-ROM** folder named **Driver\Win2000 WDM** or **Driver\Win2000\WME**, open the file **Readme\_e.htm**, and read the “**Troubleshooting**” section entitled “**You attempted to install using the above procedure, but were notable to.**”

## MEMO

If you changed “Check file signature” in **step 5**, you must restore the previous setting after you have installed the driver. (→ **If you changed “Check file signature”** (p. 21))

**6**

**Open the System Properties dialog box.**

Click [OK].

**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**

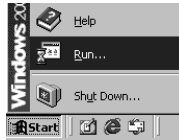
**Insert the CD-ROM.**

Insert the **UA-5 Driver CD-ROM** into the CD-ROM drive of your computer.

**9**

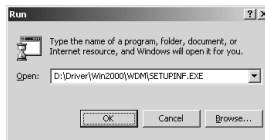
**Open the “Run...” dialog box.**

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



**10**

**In the dialog box that appears, input the following into the “Name” field, and click [OK].**



**If installing the WDM driver**

D:\Driver\Win2000\WDM\Setupinf.exe

**If installing the legacy driver**

D:\Driver\Win2000\Legacy\Setupinf.exe

### 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.

### NOTE

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.

Drag the title bar to move the **SETUPINF** dialog box into the upper part of the screen.



\* Do not click [OK] at this time.

12

## With the power turned off, use a USB cable to connect the UA-5 to your computer.

13

## Set the UA-5's mode select switch to the ON position.

14

## Turn on the power of the UA-5.

Connect the AC adaptor to the UA-5's AC adaptor jack, and insert the AC adaptor's plug into an AC power outlet. Then, turn on the power of the UA-5.

If in step 5 the “**Check file signature**” setting was not set to “**Ignore**”, a “**Digital signature not found**” dialog box will appear.



If “**Check file signature**” is set to “**Warn**,”

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

If “**Check file signature**” is set to “**Block**”

1. Click [OK].
2. When the “**New hardware detection wizard**” appears, click [Finish].
3. Perform the installation as described in the “**Troubleshooting**” section on **Device Manager shows “?”, “!”, or “USB Composite Device”** (p. 55).

MEMO

If a message of “**The driver is already installed**” appears, you can connect the UA-5 to your computer and use it.

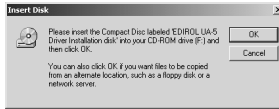
MEMO

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.

15

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

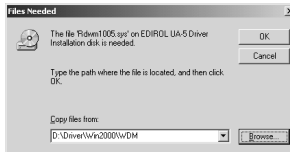
Click [OK].



16

The **File is needed** dialog box will appear.

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



17

The **"Find new hardware wizard"** may be displayed.

Verify that **"EDIROL UA-5 (WDM)"** or **"EDIROL UA-5 (MME)"** is displayed, and click [Finish].

If the **"Find new hardware wizard"** dialog box is not displayed, proceed to **step 18**.



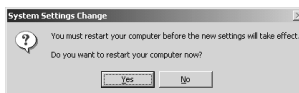
18

**Restart Windows.**

The **Change system settings** dialog box may appear. Click [Yes].

Windows will restart automatically.

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



If the **Insert disk** dialog box does not appear, please read **The "Insert Disk" dialog box does not appear** (p. 55)

**If you changed “Check file signature”**

If you changed the “**Check file signature**” 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 signature options** dialog box will appear.
4. Return the “**Check file signature**” 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. 30))

## ■ Windows Me/98 users

### Installing the driver

1

#### With the UA-5 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 **UA-5 Driver CD-ROM** into the CD-ROM drive of your computer.

4

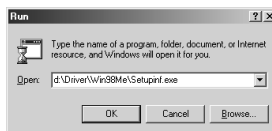
#### Open the Run... dialog box.

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



5

In the "Name" field of the dialog box that appears, type "D:\Driver\Win98Me\Setupinf.exe" and click [OK].



### NOTE

If the UA-5 is already connected to your computer and a message of "Add NewHardware Wizard" is displayed, go to the UA-5 Driver CD-ROM folder named **DriverWin98Me**, 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, **Win98Me\Setupinf.exe** indicates that the **Setupinf.exe** file is located in the **Win98Me** folder.

### NOTE

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.

Drag the title bar to move the **SETUPINF** dialog box into the upper part of the screen.

\* *Do not click [OK] at this time.*



7

### With the power turned off, use a USB cable to connect the UA-5 to your computer.

8

### Set the UA-5's mode select switch to the ON position.

9

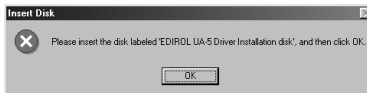
### Turn on the power of the UA-5.

Connect the AC adaptor to the UA-5's AC adaptor jack, and insert the AC adaptor's plug into an AC power outlet. Then, turn on the power of the UA-5.

10

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

Click [OK].



### MEMO

If a message of **"The driver is already installed"** appears, you can connect the UA-5 to your computer and use it.

### 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.

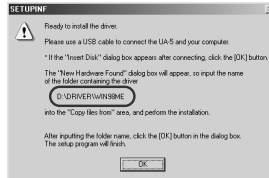
### NOTE

If you are using Windows 98 and the **Insert disk** dialog box does not appear, please read "The 'Insert Disk' dialog box does not appear" (p. 55).

11

The New Hardware dialog box will appear.

In the **File copy source** field, type the folder name that is shown in the **SETUPINF** dialog box, and click **[OK]**.



12

Once the driver has been installed, the New hardware 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. 30))



If the New Hardware 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. 55).



# Installing the OS-standard driver

The procedure for installation and settings will depend on your system.

Proceed to the appropriate section as follows.

- Windows 2000 users..... (p. 25)
- Windows Me users..... (p. 26)
- Windows 98 users..... (p. 27)

## ■ Windows 2000 users

**1**

**Start up Windows.**

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

**4**

**Place the UA-5's mode select switch in the OFF position.**

**5**

**Turn on the power of the UA-5.**

Connect the AC adaptor to the UA-5's AC adaptor jack, and insert the AC adaptor's plug into an AC power outlet. Then, turn on the power of the UA-5.

The UA-5 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. 30))

### 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

Start up Windows.

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 a USB cable to connect the UA-5 to your computer.

4

Place the UA-5's mode select switch in the OFF position.

5

Turn on the power of UA-5.

Connect the AC adaptor to the UA-5's AC adaptor jack, and insert the AC adaptor's plug into an AC power outlet. Then, turn on the power of the UA-5.

6

Windows will detect the UA-5, and the "Add new hardware wizard" dialog box will appear.

Make sure that **Automatically search for the appropriate driver (Recommended)** is selected, and click **[Next]**.



7

Driver detection will begin.

8

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

9

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

Click **[Finish]**.



## 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.

**10****Restart Windows.**

Next, you will need to make the driver settings.  
 (-> **Settings and checking** (p. 30))



Depending on your system, a certain amount of time may be required for the device to be detected after the driver has been installed.

## ■ 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****Start up Windows.****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****Insert the Windows CD-ROM into the CD-ROM drive.****4****Use a USB cable to connect the UA-5 to your computer.****5****Set the UA-5's mode select switch to the OFF position.****6****Turn on the power of the UA-5.**

Connect the AC adaptor to the UA-5's AC adaptor jack, and insert the AC adaptor's plug into an AC power outlet. Then, turn on the power of the UA-5.



Some computers are sold with the contents of the Windows CD-ROM already on the hard disk, and may not come with a Windows CD-ROM. In this case, you will be able to install the drivers even without the Windows CD-ROM.



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.

7

USB-compatible devices will be detected automatically, and the “Add new hardware wizard” dialog box will appear. Click [Next].



8

When “Select the search method.” appears, select “Find the best driver for the currently used device (Recommended)”, and click [Next].



9

A dialog box like the one shown will appear.

Check CD-ROM drive, and click [Next]



10

A dialog box like the one shown will appear.

Click [Next].



11

File (driver) copying will begin.

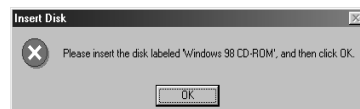
## MEMO

If this dialog box does not appear, refer to “Find new hardware wizard” does not execute automatically (p. 52)

## 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 disc” dialog box may appear. In this case, insert the Windows CD-ROM into the CD-ROM drive and click [OK].



**12**

When installation of the USB composite device driver is completed, a dialog box like the one shown here will appear.

Click **[Finish]**.

**13**

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. 28).

**14**

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

Click **[Finish]**.

**15**

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. 30))

# Settings and checking

## Specifying the audio input/output destination

1

Open Control Panel.

Click the Windows **Start** button, and select **Settings - Control Panel**.

2

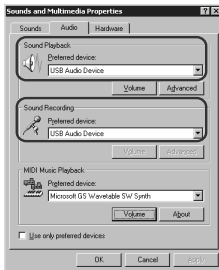
Double-click the **Sound and Multimedia** (Multimedia in Windows 98) icon.

3

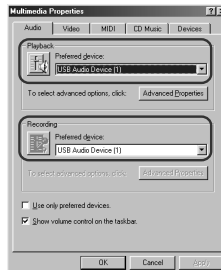
Click the **Audio** tab.

Set the **Preferred device** for **Playback** and the **Preferred device** for **Recording** as follows, according to the operating mode of the UA-5.

**Windows Me/2000 users**



**Windows 98 users**



If the **Sound and Multimedia** icon does not appear, click **Display all control panel options** in the frame at the left side.

	Advanced mode	Standard driver mode
Playback	EDIROL UA-5 OUT	USB audio device
Recording	EDIROL UA-5 IN	USB audio device

4

Click **OK**.

This completes audio input/output destination settings.  
 If you installed the special driver, proceed to **Check whether there is sound** (p. 32)  
 If you installed the standard Windows driver, set the Windows volume control. Proceed to **step 5**.

**5****Open the volume control.**

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

**6****Raise or lower the slider to adjust the volume of the UA-5.**

If you have installed the Standard driver, the UA-5 can use the Windows volume control to adjust the output volume.

**Items that can be set**

<b>CD Player</b>	Controls the volume of "music CDs" on the internal CD-ROM drive of the computer. (*1)
<b>WAVE</b>	Controls the volume of sound output from the "USB audio device" audio output device. Digital output and analog output will change.
<b>SW Synth</b>	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 the Volume Control is not installed on your computer, use the **Control Panel** icon **Add or remove an application** to install it. For details on installation, refer to the Windows manual or Help.



You will be able to use the UA-5 at the best audio quality if you set the Volume Control volume to the maximum setting.



If Mute is checked or if the slider is lowered all the way, no sound will be output from the UA-5.



If you are using Windows 2000 and **CD Player** is not displayed, check the **Digital CD Playback** item "Allow digital music CDs to be used with this CD playback device". -> **When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-5 to play game music** (p. 33)

## 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 **UA-5 Driver CD-ROM**.

1

#### Prepare the CD-ROM.

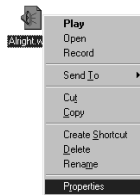
Insert the **UA-5 Driver CD-ROM** into the CD-ROM drive of your computer.

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 (Playback for Windows 2000)**.



4

#### Play back the sample data.

Click the **Test** 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-5 are connected correctly, and that the drivers have been installed correctly.



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.



If it did not play back correctly, refer to “**Troubleshooting**” (p. 52) to determine the reason. This section contains information on how to solve problems such as no sound, or failure to play back correctly.



Unauthorized use of the song data included with this product for any purpose other than personal enjoyment is forbidden by law. You may not duplicate this data or use it in a derivative work without the permission of the copyright holder.



## About the included song data

### It's gonna be alright

Composed & Programmed by Mitsuru) Sakaue

Vocal: Tahirih Walker, Fumiyo Kawazoe

Guitar: Katsuhisa Fujimoto, Idecs, Inc.

## When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-5 to play game music

### Windows 2000 users:

1. Open the **System Properties** dialog box.  
Select **Start | Settings | Control Panel**, and in the **Control Panel**, double-click the **System** icon.
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 "Allow digital music CDs 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 "Allow digital music CDs to be used with 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 "Allow digital music CDs to be used with this CD-ROM device" item.

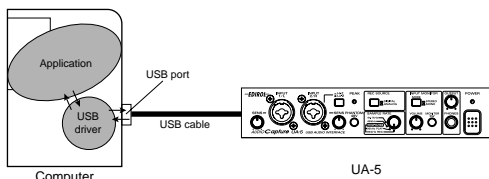
\* *Depending on your system, playback may still not be possible. For details, please contact the manufacturer of your computer. If you are using a PC-card (PCMCIA) type CD-ROM drive, playing back WAVE data from a CD-ROM or playing an audio CD may cause interrupted sound, or possibly no sound at all.*

# Getting Connected and Installing Drivers (Macintosh)

If you are using a Windows computer, please proceed to **Getting Connected and Installing Drivers (Windows)** (p. 15).

## What is a driver?

A “driver” is software that transfers data between the UA-5 and application software running on your computer, when your computer and the UA-5 are connected by a USB cable. The driver sends data from your application to the UA-5, and from the UA-5 to your application.



## Advanced mode and Standard driver mode

The UA-5 has two operating modes, **Advanced mode** and **Standard mode**, and a different driver is used by each mode.

### ■ Advanced mode

The UA-5 will operate in this mode when the rear panel **Mode select switch** is turned **ON**. The special driver included on the UA-5 Driver CD-ROM will be used, allowing audio to be recorded/played/edited with high quality and stable timing. 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 SingerSongWriter. In Advanced mode, the UA-5 cannot play back audio data (audio CDs or warning sounds) from the Macintosh sound manager.

### ■ Standard driver mode

The UA-5 will operate in this mode when the rear panel **Mode select switch** is turned **OFF**. The standard USB audio driver included with Windows will be used. In standard driver mode, audio signals are transferred between the UA-5 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 Mac OS does not support ASIO. Note also that the use of Mac OS 8.6 is not supported.

If you want to use the UA-5 in Advanced mode, proceed to **Installing the special driver** (p. 35). If you want to use Standard driver mode, proceed to **Installing the OS-standard driver** (p. 38).

### **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-5'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-5, switch off the UA-5, then turn it back on again*

## Installing the special driver

### **Installing the audio driver**

**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 **UA-5 Driver CD-ROM** into the CD-ROM drive.

**3**

**In the CD-ROM, double-click the UA-5 USB Installer E icon.**



UA - 5 USB Installer E

**4**

**Verify the installation location, and click [Install].**



### **NOTE**

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

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.

7

Set the UA-5's ADVANCE (mode select) switch to the ON position.

8

Switch ON the UA-5's Power switch.

Connect the AC adaptor to the UA-5's AC adaptor jack, and insert the AC adaptor's plug into an AC power outlet. Then, turn on the power of the UA-5.

### Installing the ASIO driver

This section explains how to install the ASIO driver that allows the UA-5 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 **English-ASIO-Setting ASIO Driver-E** document on the **UA-5 Driver CD-ROM**.

The ASIO driver of the UA-5 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.)

### 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

**ASIO** (Steinberg Audio Stream In/Out Interface)

This is an audio interface standard promoted by the Steinberg Corporation. When the UA-5 is used with ASIO-compatible software, the synchronization precision will be improved, allowing a more sophisticated music production environment.

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	
X	X	UA-5 ASIO 1.0 16 bit
X	○	UA-5 ASIO 1.0 24 bit
○	X	UA-5 ASIO 2.0 16 bit
○	○	UA-5 ASIO 2.0 24 bit

1

From the [Driver]-[ASIO] folder of the CD-ROM, copy [UA-5 ASIO1.0 16bit] to the [ASIO Drivers] folder within the folder of the ASIO-compatible software you are using (e.g., Cubase VST, Logic Audio, Digital Performer, or Metro).



2

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

3

Open the Audio setting dialog box of your ASIO-compatible software, and select [UA-5 ASIO 16bit] as the ASIO Device.

### 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-5 disconnected, start up Mac OS.

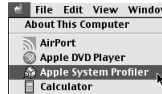
2

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 a **USB** cable to connect the **UA-5** to your **Macintosh**.

6

Place the **UA-5’s ADVANCE** (mode select) switch in the **OFF** position.

7

With the power turned off, use a **USB** cable to connect the **UA-5** to your computer.

8

Switch **ON** the **UA-5’s Power** switch.

Connect the AC adaptor to the UA-5's AC adaptor jack, and insert the AC adaptor's plug into an AC power outlet. Then, turn on the power of the UA-5.

9

Wait for approximately five seconds.

The UA-5 will use the driver included with Mac OS. While you are waiting, the screen display will not change, but the UA-5 is being detected. Do not touch the mouse or keyboard.

### 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.

10

In order to check that detection has been completed, once again go to “Apple System Profiler,” and select “Update all information” from the Command 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 **Exit** to close “Apple System Profiler”.

If they are not displayed correctly, disconnect the UA-5, wait for about ten seconds, and then repeat the procedure from **step 2**.

Next, you will need to make the driver settings.

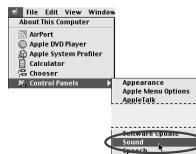
## ■ Settings and checking

### Adjusting the sound input/output

1

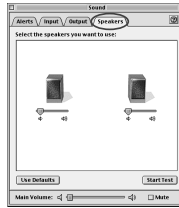
From the Apple menu, select **Control Panel – Sound**.

The **Sound** dialog box will appear.



2

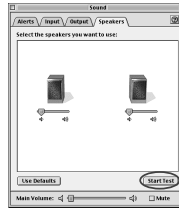
Click the **Speaker** tab or **Speaker Settings**.



3

With the volume turned down on the UA-5 and on your peripheral audio equipment, click **Start test**.

Test signals will be output from the UA-5; left first, then right, as indicated in the screen.



4

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

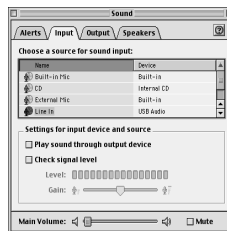
In **Select sound input source (device)**, select **USB audio**.

\* Do not check **“Play back sound via output device”**.

5

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

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



**NOTE**

Audio data from the computer cannot be played back if the **Recording source select switch** is set to **DIGITAL**. Set the switch to **ANALOG**.

**NOTE**

If **USB audio** is not displayed, close the **“Sound”** dialog box, and disconnect the UA-5’s USB cable from the Macintosh. Perform the driver installation (p. 38) once again.



## 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 Macintosh functionality to play back the sample data. The sample data is found on the **UA-5 Driver CD-ROM**.

1

### Prepare the CD-ROM.

Insert the **AUDIO Capture CD-ROM** into the CD-ROM drive of your computer.

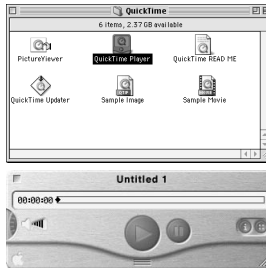
2

### From the Sample folder of the CD-ROM, drag **Alright** onto the desktop to copy it.

3

### Start up the QuickTime Player that is included with the Mac OS.

QuickTime Player is normally located in **QuickTime** within the **Application** folder of the hard disk.



4

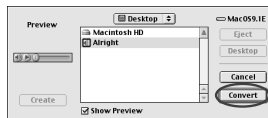
### Open the sample data.

From the **File** menu, select **Open movie**. Then select the **Alright** file you copied, and click **[Convert]**.

5

### Play back the sample data.

Click the Play button.



### Was the sample data played back?

If it was played back correctly, this means that the computer and the UA-5 are connected correctly, and that the drivers have been installed correctly.



In order to hear the sample data, you will need approximately 30 MB of free space on the hard disk that contains the system.



If it did not play back correctly, refer to **“Troubleshooting”** (p. 52) to determine the reason. This section contains information on how to solve problems such as no sound, or failure to play back correctly.



If the **Recording source select switch** is set to **DIGITAL**, it will not be possible to play back audio data from your computer. Set the switch to **ANALOG**.

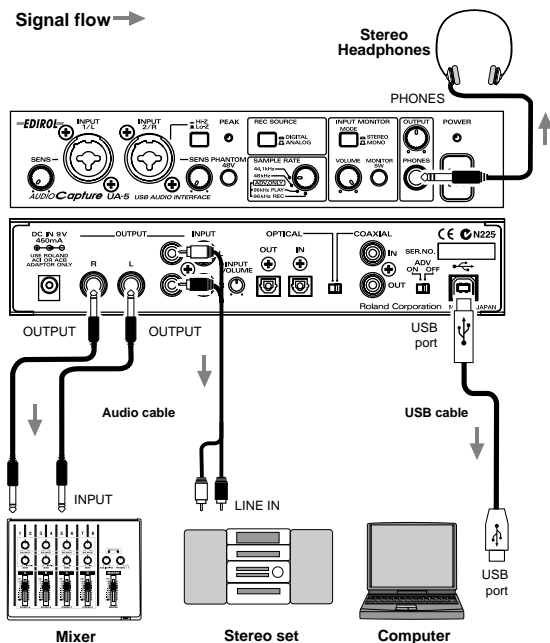
# UA-5 application guide

This chapter explains the various ways the UA-5 can be connected, and introduces some of its applications.

- \* Before connecting to other devices, you must turn down the volume and turn off the power to avoid malfunction or speaker damage.

## Basic use

As shown in the diagram, you can connect headphones or monitor speakers, and monitor the playback sound from your application or the sound from the instrument or audio device to which the UA-5 is connected.

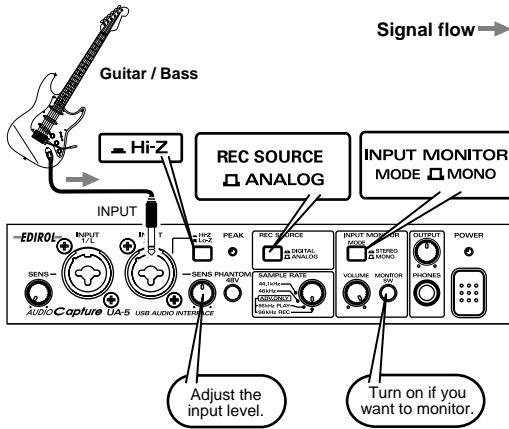


### About the Sampling frequency select switch setting

- The UA-5's Sampling frequency select switch must be set to match the sampling frequency of the application you are using.
- 96 kHz REC and 96 kHz PLAY are valid only in Advanced mode (**ADVANCE (mode select) switch ON**).
- The playback sound from your application will not be heard if the **Sampling frequency select switch** is set to 96 kHz REC.
- It will not be possible for your application to record the sound from an instrument or audio device connected to the UA-5 if the **Sampling frequency select switch** is set to 96 kHz PLAY.

## Recording a guitar or bass

When you play your guitar along with audio data from your computer to record your performance on a sequencer, only the guitar will be recorded on the computer.



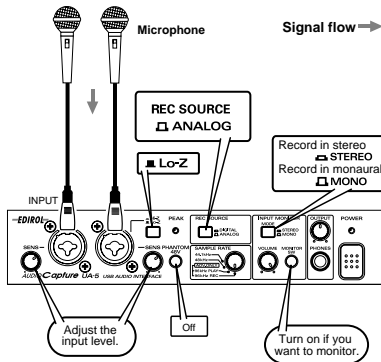
The sound of the device connected to **Input jack 2** will be recorded only on the right channel on your computer. Make settings within your application for monaural recording, so the sound of the right channel will be recorded on a track.

Use the **Input sensitivity knob** to adjust the input level. For optimum recording quality, adjust the input sensitivity knob so it is as high as you can get it without causing the **Peak indicator** to light.

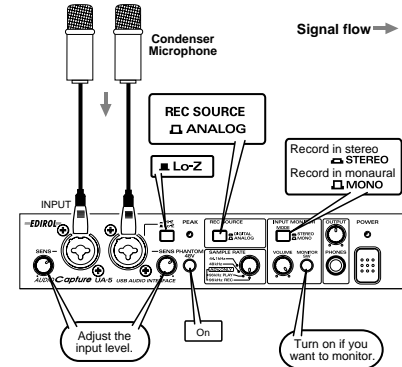
Turn on the **Input monitor switch**, and use the **Input monitor volume** to adjust the monitoring volume of your guitar or bass. If you set the **Input monitor stereo/mono select button** to **MONO**, the guitar or bass monitoring sound will be heard from the center.

# Recording from a mic

## Dynamic Mic



## Condenser Mic



When using a condenser mic, turn on the **Phantom power switch**.

\* *If a device that does not require phantom power is connected to the XLR jacks, you must turn off the Phantom power switch to avoid malfunction.*

The sound of the device connected to **Input jack 1** will be recorded on the left channel, and the sound of the device connected to **Input jack 2** will be recorded on the right channel.

Use the **Input sensitivity knob** to adjust the input level. For optimum recording quality, adjust the input sensitivity knob so it is as high as you can get it without causing the **Peak indicator** to light.

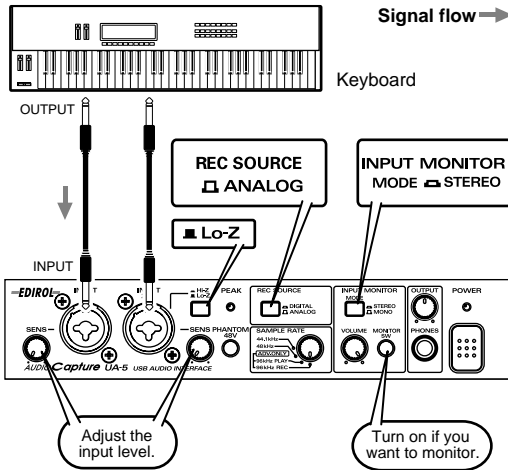
Turn on the **Input monitor switch**, and use the **Input monitor volume button** to adjust the monitor volume of the mic input. You can use the **Input monitor stereo/mono select button** to switch the monitoring of the mic input between **STEREO/MONO**.

\* *When recording from a microphone, acoustic feedback (a whining or howling sound) may occur, depending on the position of the microphone relative to the speakers. If this occurs, you can take the following measures.*

1. Change the angle of the microphone
2. Move the microphone away from the speakers
3. Lower the volume

## Recording from a keyboard

Here's how you can send a keyboard performance as audio data to your computer, and record it on sequencer software.

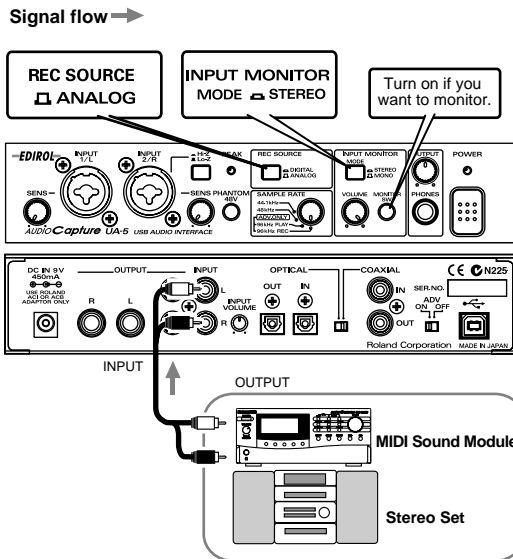


The sound that is input to **Input jack 1** will be recorded on the left channel, and the sound that is input to **Input jack 2** will be recorded on the right channel.

Use the **Input sensitivity knob** to adjust the input level. For optimum recording quality, adjust the **Input sensitivity knob** so it is as high as you can get it without causing the **Peak indicator** to light.

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

# Recording from the AUX input



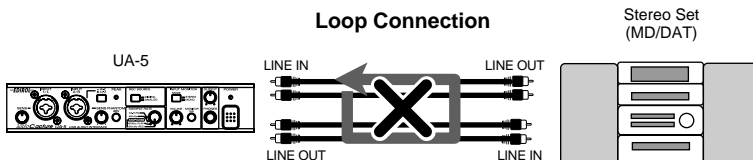
Use the **Input jacks 3 and 4 adjustment volume** to adjust the input level. For optimum recording quality, use the AUX input adjustment volume to raise the level so it is as high as you can get it before causing the **Peak indicator** to light.

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

Turn down the **Input sensitivity knob** all the way to the left. Do not connect anything to **Input jacks 1 and 2**.

## Be careful of looped connections

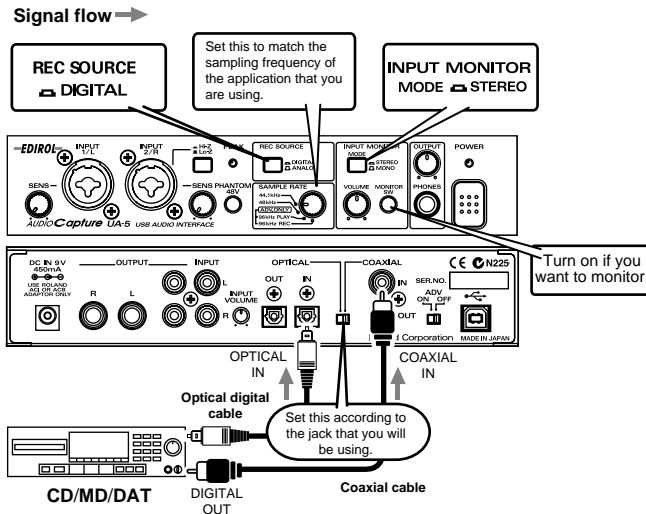
Looped connections



If the UA-5 is connected as shown above to a device that outputs (“thru-s”) the input audio (such as an MD or DAT that is in record mode), turning on the **Input monitor switch** will cause the sound to loop between the UA-5 and the other device, causing oscillation and producing an unexpectedly high volume. Be aware that such connections may cause the system to malfunction, or your speakers to be damaged.

# Digitally recording from a CD/MD/DAT

Make connections as shown in the diagram.



Since the UA-5 implements **SCMS**, a song containing copy-prohibit flags (such as a song digitally copied from CD to MD) that is input via the **Digital input connector** cannot be recorded on your computer or output from the Master output jacks or Headphone jack.

\* *The UA-5 does not support audio formats of professional digital devices.*

It is not possible for the inputs from **Input jacks 1 and 2** or the **Input jacks 3 and 4** to be mixed with the input signals from the **Digital input connector** and recorded.

## Built-in sample rate converter

The UA-5 is able to convert the sampling frequency of an incoming digital signal in real time. (See the block diagram on p. 14.)

### < Example >

48 kHz -> 44.1 kHz

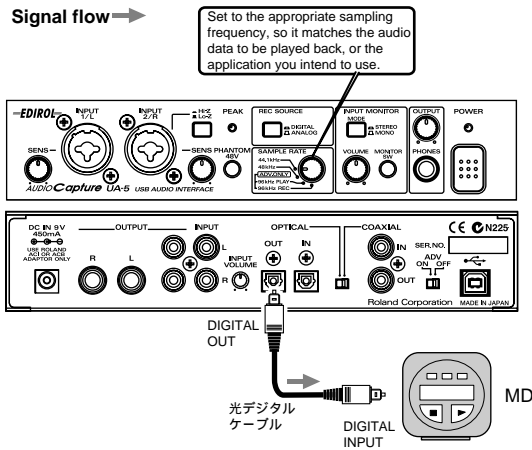
32 kHz -> 48 kHz

The digital signal will be converted into the sampling frequency specified by the sampling frequency select switch, and recorded.

This also the digital output of a BS (Broadcast Satellite) tuner whose frequency changes automatically to be digitally recorded with high quality, without having to change the settings of the UA-5 or your application.

# Digitally recording the output of the UA-5 on an MD

Make connections as shown in the diagram.



Set the UA-5's **Sampling frequency select switch** to match the sampling frequency that can be recorded on your recording device (e.g., MD). However, be aware that the sampling frequency setting of your application must also be set to the same setting.

\* *The UA-5 does not support audio formats of professional digital devices.*

On the UA-5, the input from the input jacks or the input signal from the Digital input connector cannot be output directly to the Digital output connector. The Digital output connector will always output only the audio signal from the computer.



# Adjusting the audio latency

---

When using the UA-5 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-5.

**1**

As described in “Opening the special driver settings dialog box (p. 51)”, 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-5.**

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-5 from an ASIO2.0-compatible application in **Advanced mode**, the UA-5's **Input monitor switch** can be controlled automatically from the application.

**1**

As described in “Opening the special driver settings dialog box (p. 51)”, 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 2000:**

Open the “**Control Panel**” and double-click “**EDIROL UA-5**.” The “**EDIROL UA-5 Driver Settings**” dialog box will appear.

### **If using the MME driver on Windows 2000:**

1. Open the “**Control Panel**,” and double-click “**System**.”
2. Click the “**Hardware**” tab, and click the [Device Manager] button.
3. Double-click “**Sound, Video, and Game Controllers**.”
4. Double-click “**EDIROL UA-5**.”
5. Click the “**Properties**” tab, and in the “**Multimedia Devices**” area, double-click “**Audio Devices**.”
6. Select “**EDIROL UA-5**,” and click the [Properties] button.
7. Click the [Settings] button, and the “EDIROL UA-5 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-5 Audio,” and then click the [Properties] button to open Properties.
4. Click the [Settings] button, and the “EDIROL UA-5 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 for your application.

# Troubleshooting

If an unexpected problem occurs while using the UA-5, read this chapter first. It contains numerous tips for resolving problems.

First see whether Troubleshooting explains how to solve your problem.

Troubleshooting is organized according to different operating systems. Refer to the icon(s) at the left of the title to find the items you need.



Problems common to Windows and Macintosh



Problems occurring only in Windows



Problems occurring only in Macintosh

## Troubleshooting

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.

If the UA-5 does not perform as you expect, check the various points addressed in this chapter.

## Problems related to the USB driver

---



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



**”Find new hardware wizard” does not execute automatically**



**”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-5 to be detected.
- Is the USB cable connected correctly?

Make sure that the UA-5 and your computer are correctly connected via a USB cable.

- The ADVANCE (mode select) switch may have been turned OFF when the Sampling frequency select switch is set to 96 kHz.  
If you are using the UA-5 at **96 kHz**, turn the **ADVANCE (mode select) switch ON**.
- 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.



## ”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-5 to a USB connector to which the UA-5 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. 15), and install the driver once again. This is not a malfunction.

## Driver is not installed correctly



- The Power indicator may be blinking.
- The ADVANCE (mode select) switch may have been turned OFF when the Sampling frequency select switch is set to 96 kHz.

If you are using the UA-5 at **96 kHz**, turn the **ADVANCE (mode select) switch ON**.



As described in **Deleting the special driver** (p. 63), delete the USB audio device driver that is installed in your computer, and then install the UA-5 driver once again as described in **Getting Connected and Installing Drivers (Windows)** (p. 15). Also check whether there is an “**Unknown device**” in “**Other devices**” or “**Universal Serial Bus Controller.**”

If you find one, delete it.



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

- Did you log on to Windows as a user with administrative privileges?  
In order to install/delete/re-install the special driver in Windows 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 signature settings”?  
In order to install/re-install the driver, you must make “**File signature settings.**” Make settings as described in **Installing the special driver** (p. 16).



### Windows 2000 displays a “Digital signature was not found” dialog box

- Did you perform the steps in “Make file signature settings”?  
In order to install/re-install the driver, you must make the settings described in “File signature settings.” Use the following procedure to check the settings.
  1. Open the **Control Panel**, and double-click **System**.
  2. Click the **Hardware** tab, and then click [**Driver signature**] button. The “**Driver signature options**” dialog box will appear.
  3. Make sure that the “**Check file signature**” setting is “**Ignore.**” If it is set to “**Ignore,**” click the [**OK**] button. If not, make a note of the current setting, change it to “**Ignore,**” and then click the [**OK**] button.



## Device Manager shows “?”, “!”, or “USB Composite Device”



### 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-5 to your computer.
3. Turn on the power of UA-5.
4. Click the Windows **[Start]** button, and from the menu that appears, choose **Settings -> Control Panel**.
5. Double-click the **System** icon. The **System Properties** dialog box will appear.
6. Click the **Device Manager** tab.
7. 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]**.
8. 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.
9. If you find **EDIROL UA-5** USB Driver with a yellow “!” or a red “?” displayed beside it, delete this in the same way.
10. When you have finished deleting the unwanted devices, click **[OK]** in the **System Properties** dialog box.
11. Turn off the power of the UA-5, then delete the driver. (**Deleting the special driver** (p. 63))
12. Restart Windows. Then install the driver once again. (**Getting Connected and Installing Drivers (Windows)** (p. 15)).

## Problems when using the UA-5

---



### Operating system becomes unstable

- Operation becomes unstable when the computer is started up with the UA-5 already connected  
Please start up your computer with the UA-5 disconnected, and then connect the UA-5. On a computer that uses a USB keyboard, starting up the computer with the UA-5 already connected may cause operation to become unstable. In this case, start up the computer with the UA-5 disconnected, and then connect the UA-5.

## 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-5, then turn it back on again. (**About the Sampling frequency select switch setting** (p. 11))



- Is it possible that the UA-5's Master volume has been placed at 0 (turned fully counterclockwise)?
- The UA-5'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 data output destination for your operating system?  
You must specify the **UA-5** as the audio data output destination for your computer. For details on how to make this setting, refer to **Settings and checking** (Windows, p. 30/ Macintosh, p. 39) .



- Have you specified the audio data output destination for your playback software?  
For some software such as Cool Edit Pro LE, you must specify the UA-5 as the audio data output destination. For details on this setting, refer to the operation manual for your application.



## Windows

- Are you trying to play back an audio CD played by your computer's CD Player?  
[Standard driver mode]

If you want to use the CD-ROM drive of your computer to play an audio CD, refer to **When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-5 to play game music** (p. 33).

Windows  
Macintosh

- Are you running multiple applications?

If multiple applications are running simultaneously, an error message may be displayed. 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 in the taskbar.

Windows  
Macintosh

- Was the driver installed correctly?

In order for you to play back audio data via the UA-5, the driver must be installed. For installation and settings, refer to **Getting Connected and Installing Drivers** (Windows, p. 15/ Macintosh, p. 34) .

## Windows

- Are the faders of the Volume Control raised?  
[Standard driver mode / Windows 2000 WDM driver]  
Adjust the volume of each fader as described in the explanation for **Settings and checking** (p. 30).

Windows  
Macintosh

## Distortion occurs in the sound from devices connected to the input jacks

- Is the Peak indicator lit in red?  
If you are inputting audio from **Input jacks 3 and 4**, use the UA-5 **Input jack 3/4 adjustment volume** to reduce the input level. If you are inputting audio from **Input jacks 1/2**, use the **Input sensitivity knobs** to reduce the input level.

Windows  
Macintosh

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

- Are the Input monitor volumeutton and Input sensitivity knobs set appropriately?  
Turn the knobs clockwise to adjust the volume. (p. 10)
- Is the Input monitor switch turned on (lit)?
- Is the Recording source select switch set correctly?



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

- Are you using a cable that has a built-in resistor?  
Use a cable without a built-in resistor (e.g., Roland PCS series).
- Are the Input sensitivity knobs raised appropriately?  
Turn the knobs clockwise to adjust the volume. (p. 10)



## **Guitar sound is too weak**

- Connect your guitar to input jack 2.
- Set the Input impedance select switch to Hi-Z (on).



## **You connected a mic or guitar to an input jack, but the sound is heard from only one speaker (or one side of the headphones).**

- Set the Input monitor stereo/mono select button to MONO.

## **Noise is heard during audio playback**



- Is a mic or guitar still connected?  
If a mic or guitar is connected to the UA-5, 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-5 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-5, noise from your computer may be heard via the MIDI sound module from the UA-5, depending on the computer you are using. If this occurs, you can either connect the MIDI sound module and the UA-5 in parallel using a self-powered hub, or connect the MIDI sound module via its serial or MIDI interface.



- 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.”

## Sound is interrupted during audio playback



- 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.



- 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 the **Screen Properties** dialog box, and click the **Settings** tab.
  2. Click **Details**, and in the properties that appear, click the **Performance** tab.
  3. In the graphic, set the **Hardware accelerator** slider to **None**, and click **[OK]**.
  4. In the **Screen Properties** dialog box, click **[OK]** to close the dialog box. Then restart your computer.



- 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.



- 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.



- 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.



- 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.



- If you are using the special driver, you can solve this problem in the "EDIROL UA-5 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 "UA-5 Driver 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-5 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

## **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-5's sampling frequency switch?

## Macintosh

## **Noise is heard in recorded sound**

- [When the ADVANCE (mode select) switch is OFF]

If the USB audio driver included with your operating system is 1.0.4 or earlier, please upgrade to 1.0.5f4.

The North American version of this can be downloaded from the following address:

[http://download.info.apple.com/Apple\\_Support\\_Area/Apple\\_Software\\_Updates/English-North\\_American/Macintosh/Display-Peripheral/Video/Multimedia\\_Update\\_1.0.smi.bin](http://download.info.apple.com/Apple_Support_Area/Apple_Software_Updates/English-North_American/Macintosh/Display-Peripheral/Video/Multimedia_Update_1.0.smi.bin)(This URL may change without notice.)

### **Checking the USB audio driver**

1. Connect the UA-5.
2. Click the **Apple** menu, and select **Apple System Profiler**.
3. Click the **Devices and Volumes** tab.
4. Below the USB section you will see "**Audio (UA-5 USB Audio Device)**." Click the arrow at the left of this text.
5. Several lines will be displayed, but the number displayed at the right of "**Driver version**" is the version of the USB Audio Driver.



## Playback or recording halts midway through, and then becomes impossible

- Was a heavy processing load experienced while using the UA-5, such as accessing the CD-ROM drive or a network?

If an operation involving a heavy processing load is performed while the UA-5 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-5, switch off the UA-5, then turn it on again.



## 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-5’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**.”



## Can’t record digitally

- Data containing SCMS flags cannot be recorded digitally.  
The UA-5 implements **SCMS** (p. 7), so when data containing SCMS flags (e.g., data that’s been digitally copied from a commercial music CD to an MD or other medium) is input via the digital input connector, the UA-5 will not permit this to be recorded on the computer.  
At this time, the Power indicator will blink.
- Is the “Recording source select switch” set to “DIGITAL”?
- Does the sampling frequency setting of your application match the sampling frequency of the UA-5?
- Digital data that is not of the consumer digital audio device format cannot be recorded.



## 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-5 to play game music** (p. 33).

## Deleting the special driver

---

If you were unable to install the special driver according to the procedure given, the UA-5 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. 16; Macintosh, p. 35) to install the driver once again.

### Windows 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. Turn on the UA-5's ADVANCE (mode select) switch.
4. After connecting the UA-5 to your computer via a USB cable, turn on the power of the UA-5.
5. Exit all applications before deleting the driver.
6. Open the **Control Panel**, and double-click **System**.
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-5 (WDM)**” or “**EDIROL UA-5 (MMX)**” to select it. Then right-click, and from the menu that appears, select “**Delete**.”
  - \* If “**EDIROL UA-5 (WDM)**” or “**EDIROL UA-5 (MMX)**” does not appear in the list, refer to the “**Can't install/delete/use the special driver in Windows 2000**” section (p. 54) 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-5.
13. Restart Windows.

## Windows Me/98 users

1. With all USB cables disconnected, start up Windows. (USB keyboard and USB mouse excepted)
2. Turn on the UA-5's ADVANCE (mode select) switch.
3. After connecting the UA-5 to your computer via a USB cable, turn on the power of the UA-5.
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-5**" to select it, and click **[Delete]**.
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-5.
12. In **Control Panel**, click **Folder Options** and then click the **Display** tab. (In Windows 98, click **Start -> Settings->Folder Options**)
13. In **Detailed Settings** of the **Display** tab, remove the check mark for "**Don't display extensions of associated files**," click "**Show all 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 "**\*0005.\***" and click **[Begin search]**.
16. Of the files that are found, delete the five files **Rdas0005.DLL**, **Rddp0005.dat**, **Rddv0005.driv**, **Rdvx0005.vxd**, and **Rdwm0005.sys**. If the list shows **Rdif0005.inf** or **RolandRDIF0005.INF**, delete these files as well.
  - \* *Never delete any file other than the files specified here.*
17. Restart Windows.



## Macintosh users

1. Turn off the power of the UA-5. Also disconnect the USB cable (by which the UA-5 is connected) from your Macintosh.
2. From the **system extensions** folder, drag “**USB UA-5 Driver**” into the trash to delete it.
3. Drag the ASIO driver that you installed in “**Installing the ASIO driver**” (p. 36) into the trash to delete it.

# Main Specifications

## UA-5: 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 \*

\* *Real-time*

*hardware*

*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)

Input1/2: -50 -- +0 dBu,

Input3/4: -10 dBu

### ● Input Impedance

Input1/2: 22 k ohm

Input2 (Hi-Z): 500 k ohm

Input3/4: 12 k ohm

### ● Nominal Output Level

Master Out: 0 dBu

### ● Output Impedance

Master Out: 1 k ohm

Headphones: 50 ohm

### ● Residual Noise Level

(input terminated with 1 k ohm,

INPUT SENS = min.,

INPUT MONITOR = min., IHF-A, typ.)

Master Out: -95 dBu or less

### ● Interface

USB

Digital input/output

Coaxial type

Optical type

(conforms to S/P DIF)

### ● Connectors

Input Jack 1/2 (XLR type (phantom power),  
1/4 inch TRS phone type)

Input Jack 3/4 (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 Out Jack L/R

(1/4 inch phone type, RCA pin type)

### ● Power Supply

AC adaptor

### ● Current Draw

450 mA

### ● Dimensions

218 (W) x 137 (D) x 46.5 (H) mm

8-5/8 (W) x 5-7/16 (D) x 1-7/8 (H) inches

### ● Weight

710 g / 1 lb 10 oz

### ● Accessories

AC adaptor

Getting Started

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.*



For EU Countries

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-5  
Type of Equipment : USB Audio Interface  
Responsible Party : Edinol 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 Al Asakalany  
Street,  
ARD El Golf, Heliopolis,  
Cairo 11341, EGYPT  
TEL: 20-2-417-1828

#### REUNION

**Maison FO - YAM Marcel**  
25 Rue Jules Hermann,  
Chaudron - BP79 97 491  
Ste Clothilde 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, Nirmam Kendra  
Mahalaxmi Flats Compound  
Off. Dr. Edwin Moses Road,  
Mumbai-400011, INDIA  
TEL: (022) 2493 9051

#### INDONESIA

**PT Citra IntiRama**  
Jl. Cideng Timur No. 15J-150  
Jakarta Pusat  
INDONESIA  
TEL: (021) 6324170

#### KOREA

**Cosmos Corporation**  
1461-9, Seocho-Dong,  
Seocho Ku, Seoul, KOREA  
TEL: (02) 3486-8855

#### MALAYSIA/ SINGAPORE

**Roland Asia Pacific Sdn. Bhd.**  
45-1, Block C2, Jalan PJU 1/39,  
Dataran Prima, 47301 Petaling  
Jaya, Selangor, MALAYSIA  
TEL: (03) 7805-3263

#### PHILIPPINES

**G.A. Yupangco & Co. Inc.**  
339 Gil J. Puyat Avenue  
Makati, Metro Manila 1200,  
PHILIPPINES  
TEL: (02) 899 9801

#### TAIWAN

**ROLAND TAIWAN  
ENTERPRISE CO., LTD.**  
Room 5, 9fl. No. 112 Chung  
Shan N.Road Sec.2, Taipei,  
TAIWAN, R.O.C.  
TEL: (02) 2561 3339

#### THAILAND

**Theera Music Co., Ltd.**  
330 Soi Verng NakornKasem,  
New Road, Sumpantawongse,  
Bangkok 10100, THAILAND  
TEL: (02) 224-8821

#### VIETNAM

**SAIGON MUSIC  
DISTRIBUTOR  
(TAN DINH MUSIC)**  
138 Tran Quang Khai Street  
Dist. 1, Ho Chi Minh City  
VIETNAM  
TEL: (08) 848-4068

### AUSTRALIA/ NEW ZEALAND

#### AUSTRALIA/ NEW ZEALAND

**Roland Corporation  
Australia Pty.,Ltd.**  
38 Campbell Avenue  
Dee Why West. NSW 2099  
AUSTRALIA

For Australia  
Tel: (02) 9982 8266  
For New Zealand  
Tel: (09) 3098 715

### CENTRAL/LATIN AMERICA

#### ARGENTINA

**Instrumentos Musicales S.A.**  
Av.Santa Fe 2055  
(1123) Buenos Aires  
ARGENTINA  
TEL: (011) 4508-2700

#### BARBADOS

**A&B Music Supplies LTD**  
12 Webster Industrial Park  
Wildley, St.Michael, Barbados  
TEL: (246)430-1100

#### BRAZIL

**Roland Brasil Ltda.**  
Rua San Jose, 780 Sala B  
Parque Industrial San Jose  
Cotia - Sao Paulo - SP, BRAZIL  
TEL: (011) 4615 5666

#### CHILE

**Comercial Fancy II S.A.**  
Rut.: 96.919.420-1  
Natanuel Cox #739, 4th Floor  
Santiago - Centro, CHILE  
TEL: (02) 688-9540

#### COLOMBIA

**Centro Musical Ltda.**  
Cra 43 B No 25 A 41 Bodeoga 9  
Medellin, Colombia  
TEL: (574)3812529

#### CURACAO

**Zeelandia Music Center Inc.**  
Orionweg 30  
Curacao, Netherland Antilles  
TEL:(305)5926866

#### DOMINICAN REPUBLIC

**Instrumentos Fernando Giraldez**  
Calle Proyecto Central No.3  
Ens.La Esperilla  
Santo Domingo,  
Dominican Republic  
TEL:(809) 683 0305

#### ECUADOR

**Mas Musica**  
Rumichaca 822 y Zaruma  
Guayaquil - Ecuador  
TEL:(593-4)2302364

#### GUATEMALA

**Casa Instrumental**  
Calzada Roosevelt 34-01,zona 11  
Ciudad de Guatemala  
Guatemala  
TEL:(502) 599-2888

#### HONDURAS

**Almacen Pajaro Azul S.A. de C.V.**  
BO.Paz Barahona  
3 Ave.11 Calle S.O  
San Pedro Sula, Honduras  
TEL: (504) 553-2029

#### MARTINIQUE

**Musique & Son**  
Z.I.Les Mangle  
97232 Le Lamantin  
Martinique F.W.I.  
TEL: 596 596 426860

**Gigamusik SARI**  
10 Rte De La Folie  
97200 Fort De France  
Martinique F.W.I.  
TEL: 596 596 715222

#### MEXICO

**Casa Veerkamp, s.a. de c.v.**  
Av. Toluca No. 323, Col. Olivar  
de los Padres 01780 Mexico  
D.F. MEXICO  
TEL: (55) 5668-6699

#### NICARAGUA

**Bansbach Instrumentos  
Musicales Nicaragua**  
Altamira D'Este Calle Principal  
de la Farmacia 5ta.Avenida  
1 Cuadra al Lago.#503  
Managua, Nicaragua  
TEL: (505)277-2557

#### PERU

**Audionet**  
Distribuciones Musicales SAC  
Juan Fanning 530  
Miraflores  
Lima - Peru  
TEL: (511) 4461388

#### TRINIDAD

**AMR Ltd**  
Ground Floor  
Maritime Plaza  
Barataria Trinidad W.I.  
TEL: (868)638 6385

#### URUGUAY

**Todo Musica S.A.**  
Francisco Acuna de Figueroa 1771  
C.P.: 11.800  
Montevideo, URUGUAY  
TEL: (02) 924-2335

#### VENEZUELA

**Instrumentos Musicales  
Allegro,C.A.**  
Av.las industrias edf.Guitar  
import  
#7 zona Industrial de Turumo  
Caracas, Venezuela  
TEL: (212) 244-1122

### EUROPE

#### AUSTRIA

**Roland Elektronische  
Musikinstrumente HmbH.  
Austrian Office**  
Eduard-Bodem-Gasse 8,  
A-6020 Innsbruck, AUSTRIA  
TEL: (0512) 26 44 260

#### BELGIUM/FRANCE/ HOLLAND/ LUXEMBOURG

**Roland Central Europe N.V.**  
Houtstraat 3, B-2260, Oevel  
(Westerlo) BELGIUM  
TEL: (014) 575811

#### CZECH REP.

**K-AUDIO**  
Kardasovska 626.  
CZ-198 00 Praha 9,  
CZECH REP.  
TEL: (2) 666 10529

#### DENMARK

**Roland Scandinavia A/S**  
Nordhavnsvej 7, Postbox 880,  
DK-2100 Copenhagen  
DENMARK  
TEL: 3916 2000

#### FINLAND

**Roland Scandinavia As, Filial  
Finland**  
Elannontie 5  
FIN-01510 Vantaa, FINLAND  
TEL: (09) 68 24 020

#### GERMANY

**Roland Elektronische  
Musikinstrumente HmbH.**  
Oststrasse 96, 22844  
Norderstedt, GERMANY  
TEL: (040) 52 60090

#### GREECE

**STOLLAS S.A.**  
Music Sound Light  
155, New National Road  
Patras 26442, GREECE  
TEL: 2610 435400

#### HUNGARY

**Roland East Europe Ltd.**  
Warehouse Area 'DEPO' Pf.83  
H-2046 Torokbalint,  
HUNGARY  
TEL: (23) 511011

#### IRELAND

**Roland Ireland**  
G2 Calmount Park, Calmount  
Avenue, Dublin 12  
Republic of IRELAND  
TEL: (01) 4294444

#### ITALY

**Roland Italy S. p. A.**  
Viale delle Industrie 8,  
20020 Arese, Milano, ITALY  
TEL: (02) 937-78300

#### NORWAY

**Roland Scandinavia Avd.  
Kontor Norge**  
Lilleakerveien 2 Postboks 95  
Lilleaker N-0216 Oslo  
NORWAY  
TEL: 2273 0074

#### POLAND

**MX MUSIC SP.Z.O.O.**  
UL. Gibraltarska 4.  
PL-03664 Warszawa POLAND  
TEL: (022) 679 44 19

#### PORTUGAL

**Roland Iberia, S.L.**  
Portugal Office  
Cais das Pedras, 8/9-1 Dto  
4050-465, Porto, PORTUGAL  
TEL: 22 608 00 60

#### ROMANIA

**FBS LINES**  
Piata Libertatii 1,  
535500 Gheorgheni,  
ROMANIA  
TEL: (266) 364 609

#### RUSSIA

**MuTek**  
Dorozhnaya ul.3,korp.6  
117 545 Moscow, RUSSIA  
TEL: (095) 981-4967

#### SPAIN

**Roland Iberia, S.L.**  
Paseo Garcia Faria, 33-35  
08005 Barcelona SPAIN  
TEL: 93 493 91 00

#### SWEDEN

**Roland Scandinavia A/S**  
SWEDISH SALES OFFICE  
Danvik Center 28, 2 tr.  
S-131 30 Nacka SWEDEN  
TEL: (08) 702 00 20

#### SWITZERLAND

**Roland (Switzerland) AG**  
Landstrasse 5, Postfach,  
CH-4452 Itingen,  
SWITZERLAND  
TEL: (061) 927-8383

#### UKRAINE

**TIC-TAC**  
Mira Str. 19/108  
P.O. Box 180  
295400 Munkachevo,  
UKRAINE  
TEL: (03131) 414-40

#### UNITED KINGDOM

**Roland (U.K.) Ltd.**  
Atlantic Close, Swansea  
Enterprise Park, SWANSEA  
SA7 9FJ,  
UNITED KINGDOM  
TEL: (01792) 702701

### MIDDLE EAST

#### BAHRAIN

**Moon Stores**  
No.16, Bab Al Bahrain Avenue,  
P.O.Box 247, Manama 304,  
State of BAHRAIN  
TEL: 17 211 005

#### CYPRUS

**Radex Sound Equipment Ltd.**  
17, Diagonou Street, Nicosia,  
CYPRUS  
TEL: (022) 66-9426

#### IRAN

**MOCO INC.**  
No.41 Nike St., Dr.Shariyati Ave.,  
Roboeroy Cerah Mirdamad  
Teheran, IRAN  
TEL: (021) 285-4169

#### ISRAEL

**Halilit P. Greenspoon & Sons  
Ltd.**  
8 Retzif Ha'aliya Hashnya St.  
Tel-Aviv-Yafo ISRAEL  
TEL: (03) 6823666

#### JORDAN

**MUSIC HOUSE CO. LTD.  
FREDDY FOR MUSIC**  
P. O. Box 922846  
Amman 11192 JORDAN  
TEL: (06) 5692696

#### KUWAIT

**EASA HUSAIN AL-YOUSIFI  
& SONS CO.**  
Abdullah Salem Street,  
Safat, KUWAIT  
TEL: 243-6399

#### LEBANON

**Chahine S.A.L.**  
Gerge Zeidan St., Chahine  
Malatan House No.1  
Al Noor Street, Ruwi  
SULTANATE OF OMAN  
TEL: 2478 3443

#### OMAN

**TALENTZ CENTRE L.L.C.**  
Malatan House No.1  
Al Noor Street, Ruwi  
SULTANATE OF OMAN  
TEL: 2478 3443

#### QATAR

**Badie Studio & Stores**  
P.O. Box 62,  
Doha, QATAR  
TEL: 423554

#### SAUDI ARABIA

**aDawlah Universal  
Electronics APL**  
Corniche Road, Aldossary  
Bldg., 1st Floor, Alkhorbar,  
SAUDI ARABIA

**P.O.Box 2154, Alkhorbar 31952  
SAUDI ARABIA  
TEL: (03) 898 2081**

#### SYRIA

**Technical Light & Sound  
Center**  
Rawda, Abdul Qader Jazairi St.  
Bldg. No. 21, P.O.BOX 13520,  
Damascus, SYRIA  
TEL: (011) 223-5384

#### TURKEY

**ZUHAL DIS TICARET A.S.**  
Galip Dede Cad. No.37  
Beyoglu - Istanbul / TURKEY  
TEL: (0212) 249 85 10

#### U.A.E.

**Zak Electronics & Musical  
Instruments Co. L.L.C.**  
Zabeel Road, Al Sherooq Bldg.,  
No. 14, Grand Floor, Dubai,  
U.A.E.  
TEL: (04) 3360715