

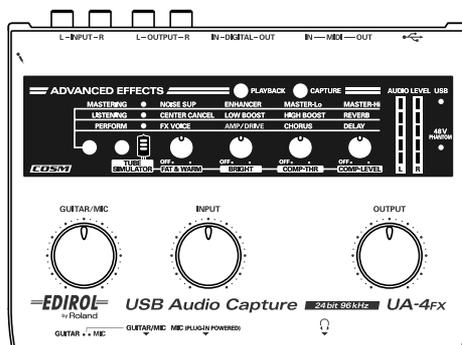
USB Audio Capture

24 bit 96 kHz

UA-4FX

Advanced operation

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (pp. 2-5). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.



Copyright © 2005 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

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

About the Symbols

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

ALWAYS OBSERVE THE FOLLOWING

⚠ WARNING

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

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

- 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 
 - 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. 

- 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, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the “Information” page when:
 - If smoke or unusual odor occurs
 - Objects have fallen into, or liquid has been spilled onto the unit; or
 - The unit has been exposed to rain (or otherwise has become wet); or
 - The unit does not appear to operate normally or exhibits a marked change in performance.

- 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 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

- 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.

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

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



(This instrument's phantom power: 48 V DC, 5 mA Max)

IMPORTANT NOTES

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

Power Supply

- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.

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

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and Data

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

Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of losing important data, we recommend that you periodically write down important data you have stored in the unit's memory on paper.
- Unfortunately, it may be impossible to restore the contents of data that was stored in the unit's memory once it has been lost. Roland Corporation assumes no liability concerning such loss of data.

- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
 - Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.
- 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.

Copyright

- Unauthorized recording, distribution, sale, lending, public performance, broadcasting, or the like, in whole or in part, of a work (musical composition, video, broadcast, public performance, or the like) whose copyright is held by a third party is prohibited by law.
- When exchanging audio signals through a digital connection with an external instrument, this unit can perform recording without being subjected to some of the restrictions of the Serial Copy Management System (SCMS). This is because the unit is intended solely for musical production, and is designed not to be subject to restrictions as long as it is used to record works (such as your own compositions) that do not infringe on the copyrights of others. (SCMS is a feature that prohibits second-generation and later copying through a digital connection. It is built into MD recorders and other consumer digital-audio equipment as a copyright-protection feature.)
- Do not use this unit for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this unit.
- * Microsoft and Windows are registered trademarks of Microsoft Corporation.
- * The screen shots in this document are used in compliance with the guidelines of the Microsoft Corporation.
- * Windows® is known officially as: "Microsoft® Windows® operating system."
- * Apple, Macintosh, and iTunes are registered trademarks of Apple Computer, Inc.
- * Mac OS is a trademark of Apple Computer, Inc.
- * Pentium is a registered trademark of Intel Corporation.
- * OMS is a registered trademark of Opcode Systems, Inc.
- * FreeMIDI is a trademark of Mark of the Unicorn, Inc.
- * All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

Contents

Features of the UA-4FX	8
Connections for various setups	9
Recording a cassette tape or LP into your computer.....	9
Recording sound from your computer onto MD or DAT	11
Recording the digital output from a CD/MD/DAT into your computer	12
Recording a guitar or mic.....	13
Recording with a phantom-powered condenser mic.....	15
Recording Internet radio or other computer sound	17
Playing back 5.1 ch surround from your computer.....	18
Applying effects	19
Advanced effects (three features).....	19
Applying effects.....	22
Using effects	23
APPENDIX	35
Driver settings (ADVANCED switch ON)	36
Driver installation and settings (Mac OS 9)	39
Giving priority to background services	44
Driver Signing Options setting	46
Standard driver mode (ADVANCED switch OFF)	47
Software installation	48
Troubleshooting	53
Specifications	65
UA-4FX Block Diagram	66
INDEX	67

Features of the UA-4FX	p. 8
Connections for various setups	p. 9
Applying effects	p. 19
Software installation	p. 48

Features of the UA-4FX

Awesome 24-bit audio quality, and input/output support for a variety of audio formats in both digital and analog

- Capture analog source material (such as records and cassette tapes) into your computer with astounding sound quality.
- 44.1 kHz / 48 kHz / 96 kHz 24-bit high-quality sound
- Digital (optical) input/output jacks support sampling frequencies of 44.1 kHz / 48 kHz / 96 kHz. You can capture audio signals from CD, MD, or DAT with no loss in quality.

Advanced Effect audio processor delivers 24-bit quality effects for recording and playback with simple one-touch operation

- The vacuum tube amp simulator lets you transform sound from a digital source such as an MP3 file or Internet radio, giving it the fat and warm tone that's characteristic of vacuum tubes. Even analog sources can be captured with the distinctively warm tone of vacuum tubes so you preserve the analog character of the sound.
- With a simple operation you can remove hiss noise from an analog source, and restore lost tone or presence to make the sound richer and more brilliant.
- A full range of audio processing for playback is also provided. Clear highs, powerful lows, and deeper reverb for a more spacious sound. The UA-4FX transforms your computer into an AV processor! The Center Cancel effect lets your computer work as a karaoke system!
- The UA-4FX is ideal for recording guitar or vocals. In addition to an audio processor designed for performance, and an FX voice effect that lets you transform the sound into a different vocal character, you can use a variety of effects (such as AMP/DRIVE) to obtain a range of sounds, from natural-sounding guitar amp distortion to aggressive distortion, as well as chorus and delay, all carefully selected from the BOSS effects processors acclaimed by guitarists everywhere.

Compact size, ideal for desktop use or portability

The UA-4FX is USB bus-powered, taking its power supply from the computer. Since there's no need to connect an AC adaptor, it's ideal for use with a notebook computer.

Powerful impact for game sound playback

The UA-4FX is an ideal way to greatly enhance your computer's audio environment.

Support for Dolby Digital 5.1 channel playback

You can connect an AV amp and enjoy the dynamic sound of a movie theater.

- * *Supported only on Windows XP.*
- * *5.1 channel playback requires Intertec Corporation's WinDVD Version 5 or later, sold separately.*

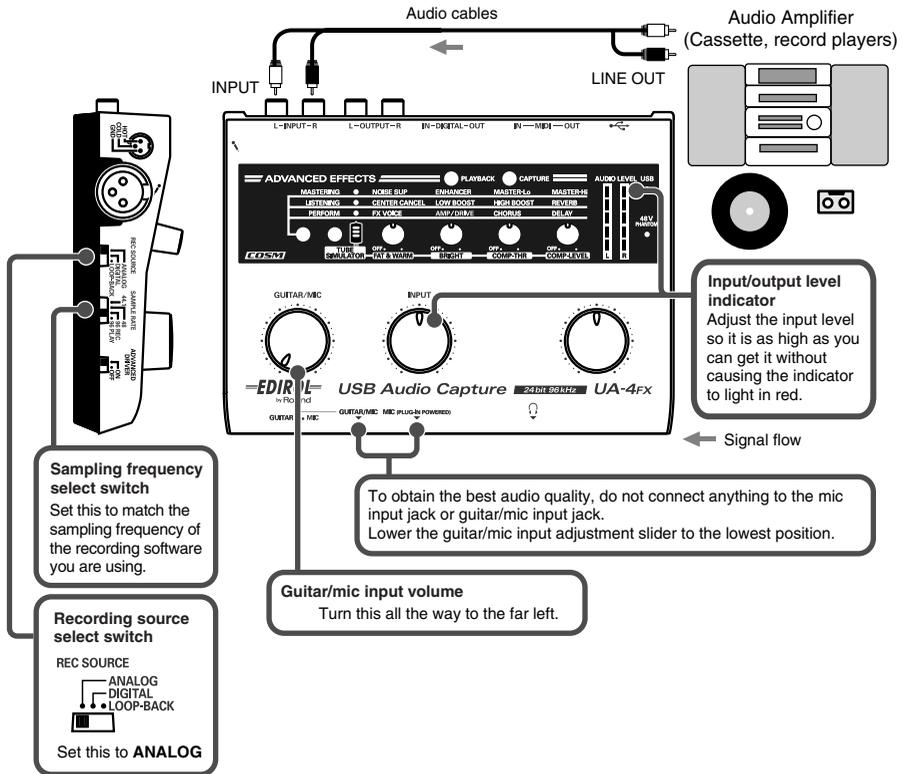
Connections for various setups

This chapter explains how you can connect the UA-4FX for various setups.

- * To avoid speaker damage and/or malfunction, you must turn down the volume on all your audio equipment before making connections with the UA-4FX.

Recording a cassette tape or LP into your computer

Here's how you can record the analog output of an audio device such as a cassette tape or LP (vinyl record) into your computer.



● Sampling frequency select switch

Set this to the sampling frequency that is selected in your recording software. After you change the position of the sampling frequency select switch, you will need to disconnect and reconnect the USB cable.

● **Recording source select switch**

Set this to **ANALOG**.

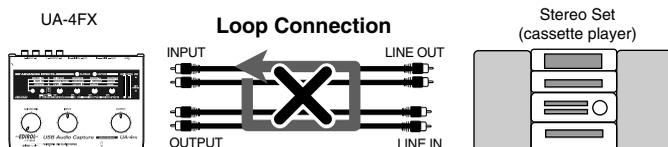
Turn down the volume of your connected monitor speakers (or similar equipment) before you change the setting of the **recording source select switch**.

● **Input/output level indicator**

Use this to adjust the input level.

To obtain the best-quality recording, use the input volume knob to adjust the level until it is as high as you can get it without causing the **input/output level indicator** to light in red.

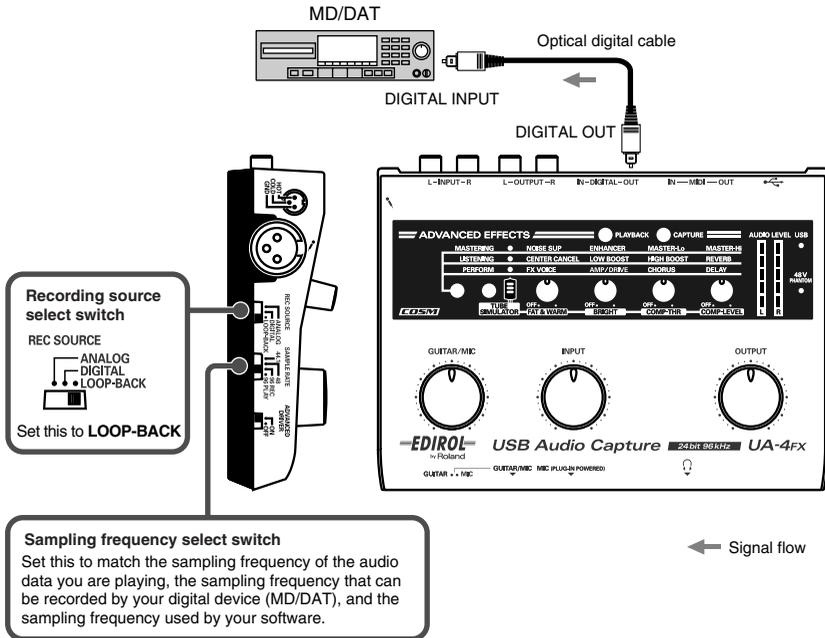
Be careful of looped connections



If you connect the UA-4FX as shown in the above diagram with another device that passes the input audio back to the output (e.g., a MD/DAT in recording mode), the sound will loop between the UA-4FX and the other device, causing oscillation and producing an unexpected high volume. Be aware that such connections can cause malfunctions or damage your speakers.

Recording sound from your computer onto MD or DAT

Here's how you can record audio data from your computer onto a digital device such as MD or DAT.



● Sampling frequency select switch

Set this to the sampling frequency of the audio data you are playing and the sampling frequency of your recording software.

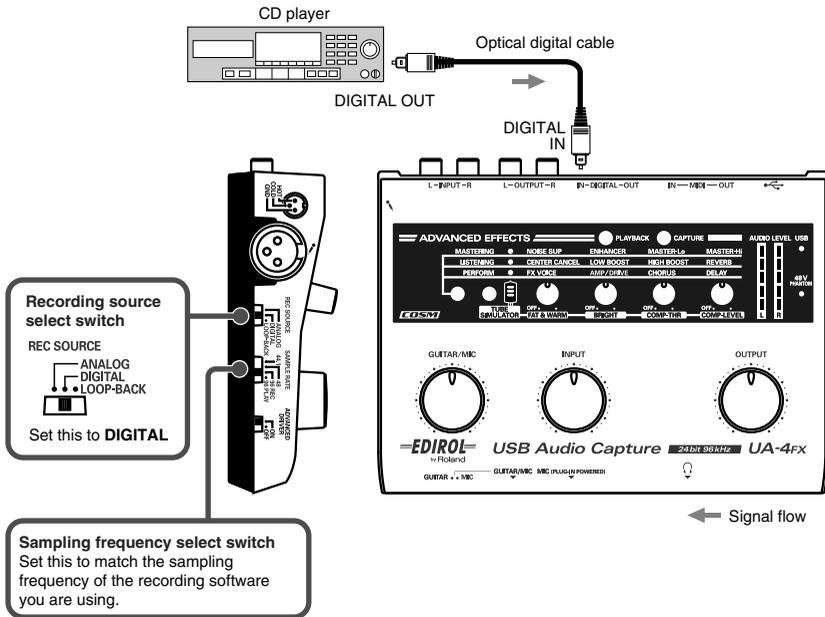
After you change the position of the sampling frequency select switch, you will need to disconnect and reconnect the USB cable.

● Recording source select switch

Set this to **LOOP-BACK**.

If this is set to **LOOP-BACK**, signals will no longer be received from the various analog input jacks. This means that only the sound from your computer will be sent to the digital output connector, so that noise or undesired sound will not be present. Turn down the volume of your connected monitor speakers (or similar equipment) before you change the setting of the **recording source select switch**.

Recording the digital output from a CD/MD/DAT into your computer



● Sampling frequency select switch

Set this to the sampling frequency of your recording software.

Normally, you will select 48 kHz or 44.1 kHz for DAT, and 44.1 kHz for MD or CD. For details, refer to the owner's manual for your digital audio device and software.

After you change the position of the sampling frequency select switch, you will need to disconnect and reconnect the USB cable.

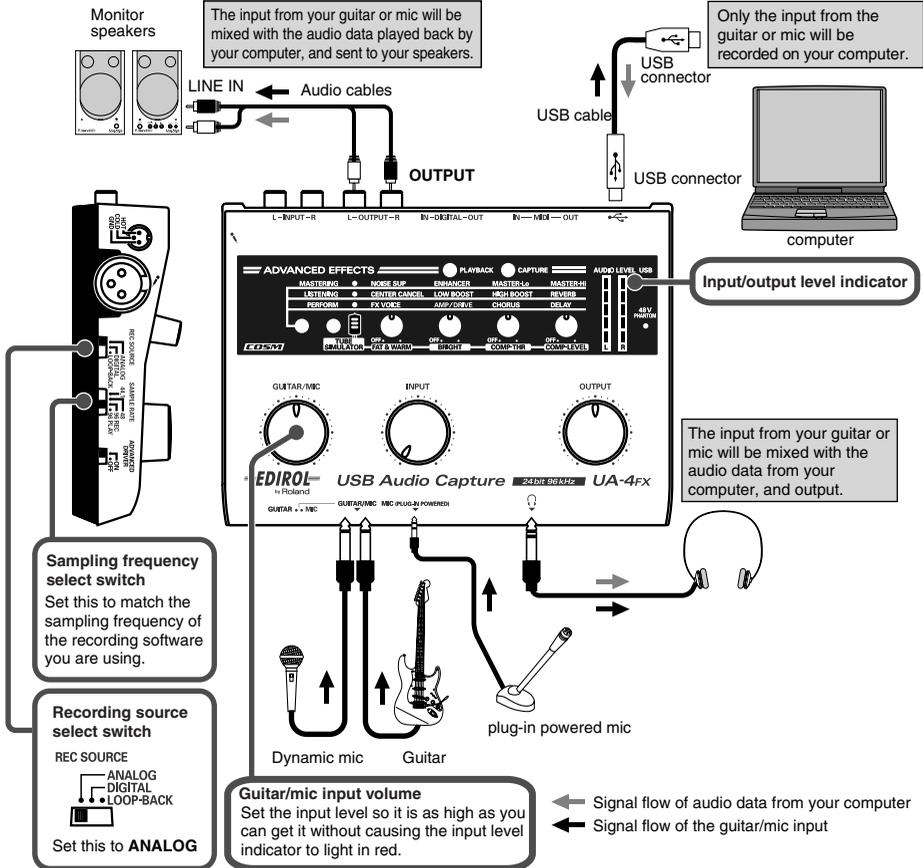
● Recording source select switch

Set this to **DIGITAL**. Turn down the volume of your connected monitor speakers (or similar equipment) before you change the setting of the **recording source select switch**.

- * The UA-4FX complies with SCMS. If the audio data that is input from the digital audio input connector contains copy-prohibit flags (as will be the case if you recorded an MD from a CD), the UA-4FX will not allow this data to be recorded on your computer. (The sound will be output from the line output jacks and headphone jack.)
- * The signal from the line input jacks or mic input jack, the signal from the guitar/mic input jack, and the signal from the digital input connector cannot be mixed and recorded together.
- * If no signal is being received from the digital input connector even though the **recording source select switch** is set to **DIGITAL**, the UA-4FX will operate in the same way as when the switch is set to **ANALOG**.

Recording a guitar or mic

Here's how you can play your guitar or sing along with audio data played back from your computer, and use your sequencer or other software to record just the sound of the guitar or mic.



● Sampling frequency select switch

Set this to the sampling frequency that is selected on your recording software.

After you change the position of the sampling frequency select switch, you will need to disconnect and reconnect the USB cable.

- * The available frequencies will depend on the software you are using. For details, refer to the owner's manual of your application. The available frequencies will also depend on the operating system of your computer.

● **Recording source select switch**

Set this to **ANALOG**. Turn down the volume of your connected monitor speakers (or similar equipment) before you change the setting of the recording source select switch.

● **Input select switch**

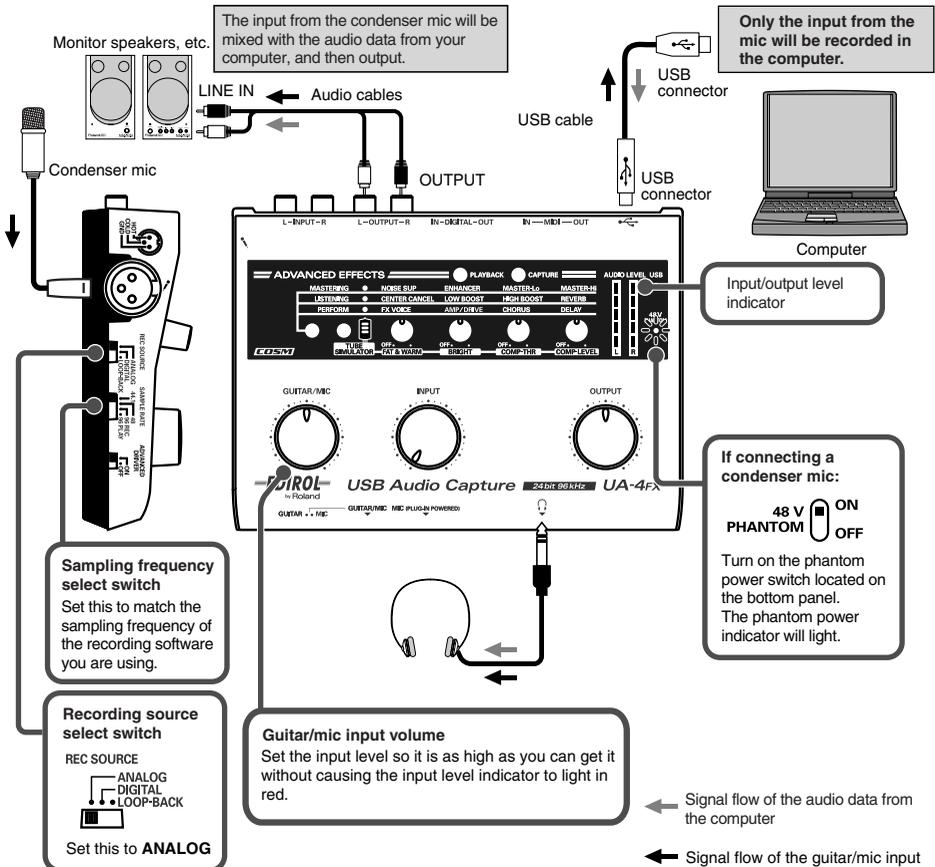
Set this to **MIC** if you connect a mic, or to **GUITAR** if you connect a guitar.

● **Guitar/mic input volume**

Use this to adjust the input level. If the input/output level indicator is lit red, use this volume control to lower the input level. To obtain the best-quality recording, use this knob to adjust the level so it is as high as you can get it without causing the indicator to light.

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

Recording with a phantom-powered condenser mic



● Sampling frequency select switch

Set this to the sampling frequency that is selected in your recording software. After you change the position of the sampling frequency select switch, you will need to disconnect and reconnect the USB cable.

* The frequencies you can select will depend on the software you're using. For details, refer to the owner's manual of the application you're using. The selectable frequencies will also depend on your operating system.

● Recording source select switch

Set this to **ANALOG**. Turn down the volume of your connected monitor speakers (or similar equipment) before you change the setting of the recording source select switch.

● **Phantom power switch**

Turn ON.

The **phantom power indicator** on the front panel will light.

● **Guitar/mic input volume**

Use this to adjust the input level. If the input/output level indicator is lit red, use this volume control to lower the input level. To obtain the best-quality recording, use this knob to adjust the level so it is as high as you can get it without causing the indicator to light.

* *Howling could be produced depending on the location of microphones relative to speakers.*

This can be remedied by:

1. *Changing the orientation of the microphone(s).*
2. *Relocating microphone(s) at a greater distance from speakers.*
3. *Lowering volume levels.*

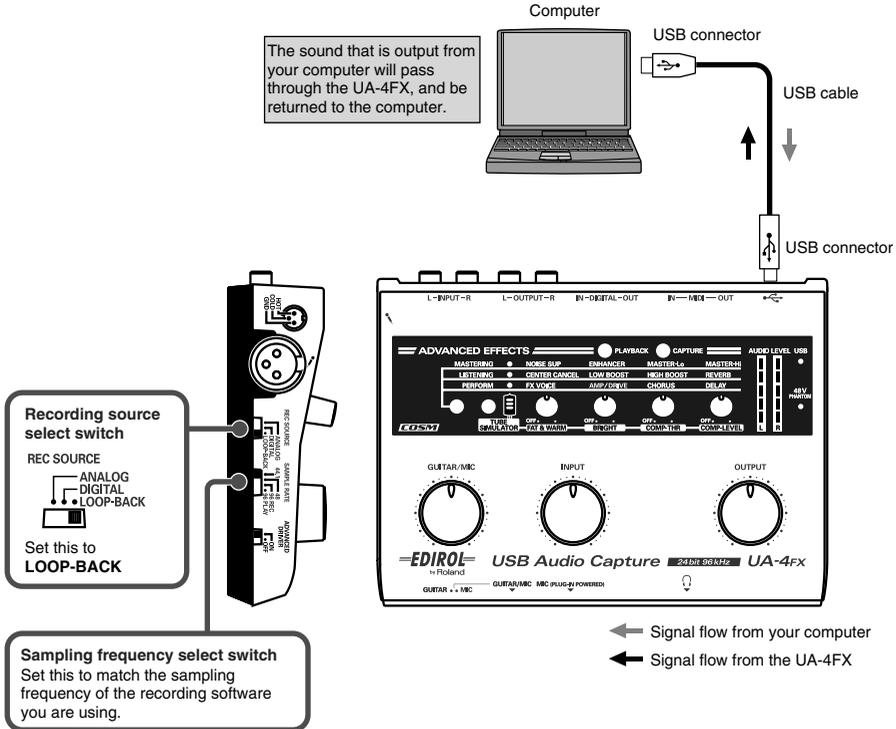
● **Types of mic**

Most mics are either dynamic mics or condenser mics; either type of mic can be connected to the UA-4FX. The UA-4FX also supports “plug-in powered mics,” which are small monaural condenser mics designed for connection to the mic input of a computer.

Only a monaural mic that supports plug-in power may be connected to the mic input jack (plug-in powered mic). Connecting any other type of mic or a conventional stereo mini-type plug to this jack may damage the circuitry.

Recording Internet radio or other computer sound

Here's how you can use your computer to record Internet radio or other sound from your computer.



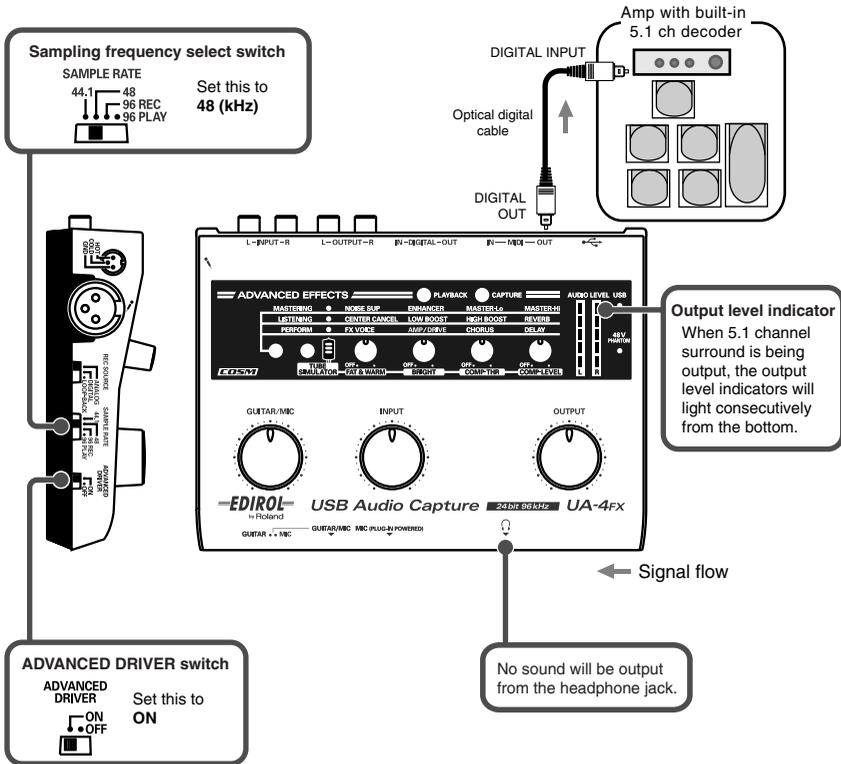
● Sampling frequency select switch

Set this to the sampling frequency that is selected on your recording software. After you change the position of the sampling frequency select switch, you will need to disconnect and reconnect the USB cable.

● Recording source select switch

Set this to **LOOP-BACK**. Turn down the volume of your connected monitor speakers (or similar equipment) before you change the setting of the **recording source select switch**.

Playing back 5.1 ch surround from your computer



The UA-4FX's 5.1 channel digital output can be played back by an amp that has a built-in 5.1 channel decoder.

- You cannot record audio signals during 5.1 channel playback.

This functionality is available only in Windows. In order to use this in Windows, you will need DVD playback software such as WinDVD. You will need to obtain this separately.

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

* We recommend that you use WinDVD 5 or later.

Applying effects

The UA-4FX's **advanced effects** provide an easy way to change the character of the sound, and are a great convenience for audio editing. Four types of digital effect are provided, and these can be applied while you play back sound or record from a mic or guitar. You can use the four knobs to easily adjust the character of the effect that is applied to the mic, guitar, or the sound from the line inputs or digital input.

Before you continue, make connections and basic settings as described in “**Connections for various setups**” (p. 9).

Advanced effects (three features)

Advanced 1 Four ways to use

1. Vacuum tube (TUBE) amp simulator

This is a COSM effect that simulates a vacuum tube amp. It creates the fat, warm sound that is typical of vacuum tubes.

2. MASTERING

Old analog sources such as cassette tape will be given new life by digital technology.

3. LISTENING

This setting is ideal for listening. Your computer becomes an AV processor, allowing you to enjoy karaoke.

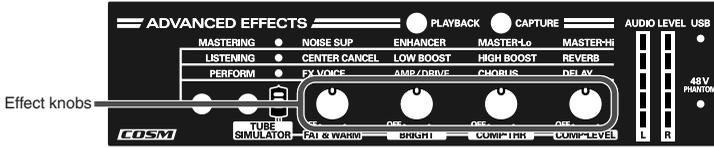
4. PERFORM

Enjoy powerful guitar sounds, and seven types of narration voice.



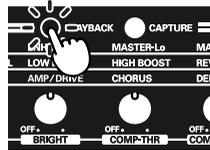
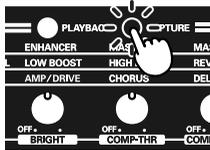
Advanced 2

Using the four effect knobs to adjust the sound

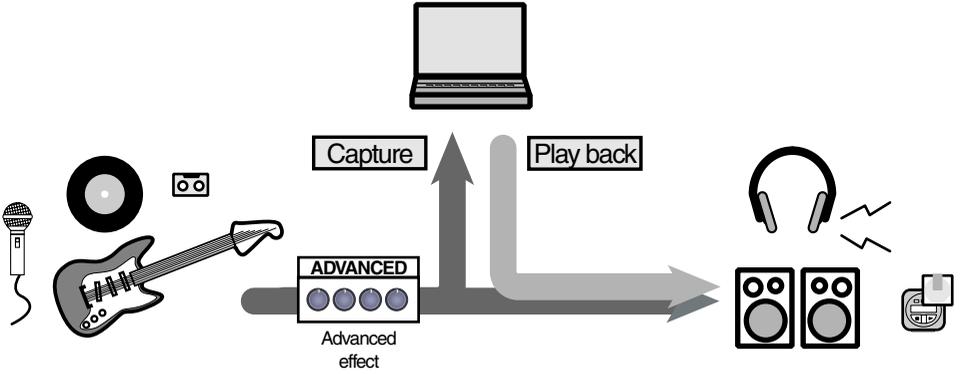
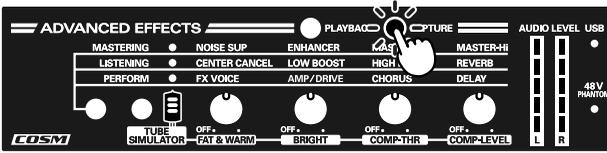


Advanced 3

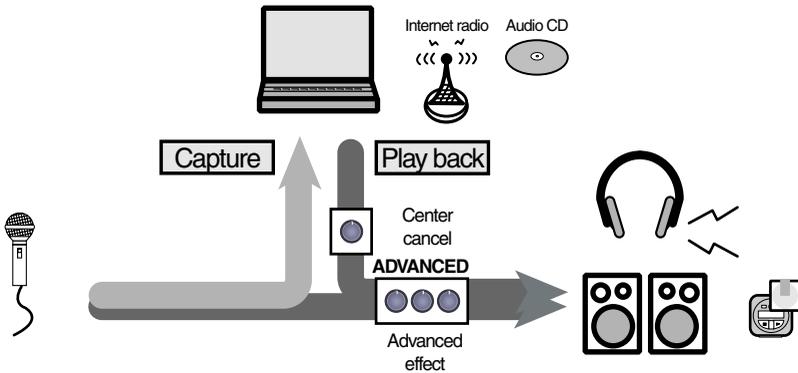
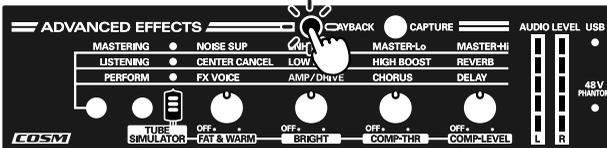
Applying effects to the recording (capture) or playback



Applying effects to the recording



Applying effects to the playback

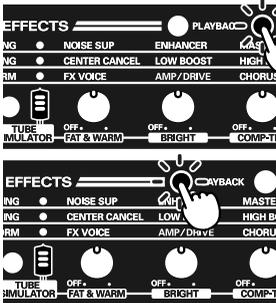


Applying effects

- 1 Press the **capture button** or the **playback button**.

NOTE

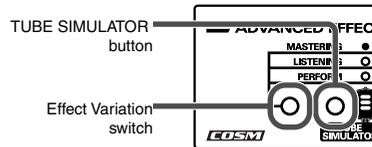
No effect will be applied if neither the capture button or the playback button are turned on (lit). You cannot turn both buttons on simultaneously.



If you want to apply effects to the sound being recording, turn on the capture button.

If you want to apply effects to the sound being played back, turn on the playback button.

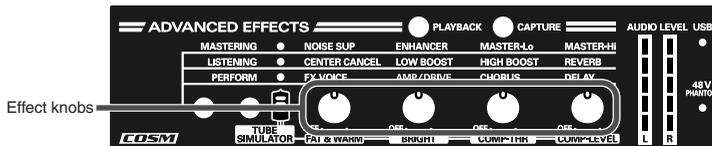
- 2 Use the **Tube simulator button** or **Effect variation button** to select the desired effect.



- 3 Use the **effect knobs** to adjust the character of the effect.

If an **effect knob** is set to the **OFF** position, that effect will not be applied. Gradually turn the **effect knob** toward the right to adjust the setting to your taste.

* The fat sound produced by the tube simulator will still remain even if the effect knob is turned off.

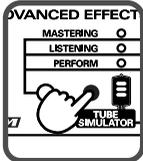


* In some cases, applying the effect too strongly may cause the sound to distort. If this occurs, lower the input level. Alternatively, turn the effect knobs toward the left to reduce the depth of the effect.

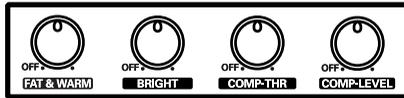
Using effects

Tube simulator

Press the
TUBE SIMULATOR button



This is a COSM effect that simulates a vacuum tube amp. It simulates the fat, warm sound that is typical of vacuum tubes.

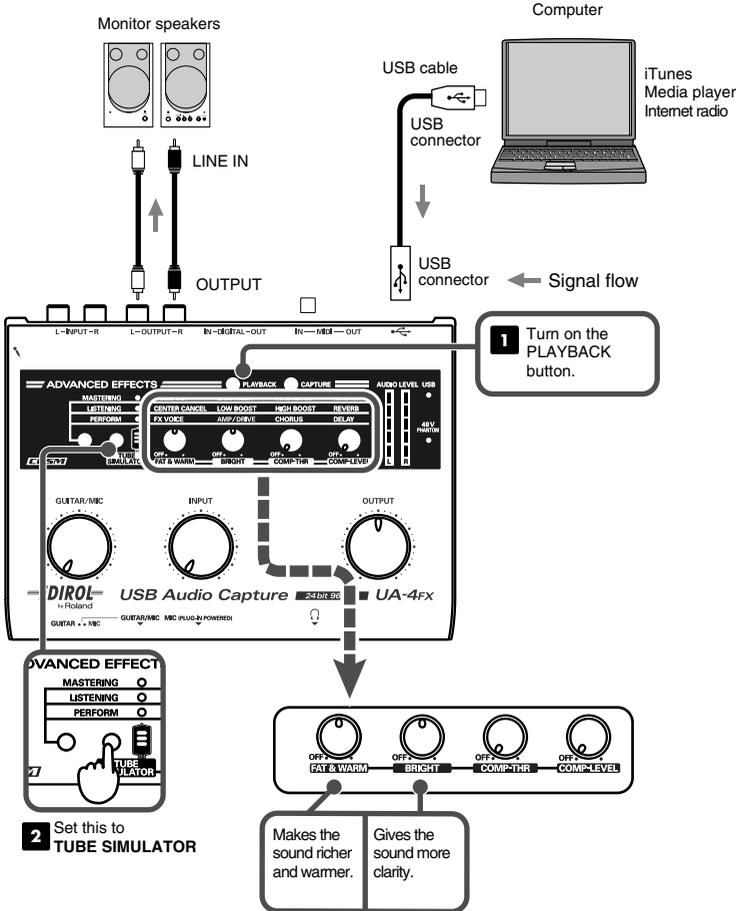


Effect	Explanation
Fatness (FAT & WARM)	Simulates the warm, fat sound that is typical of vacuum tubes.
Brightness (BRIGHT)	Simulates a clear and bright vacuum tube sound.
Compressor depth (COMP-THR)	Specifies the level at which the compressor will begin operating. As you turn this knob toward the right, the compressor will be applied more deeply, producing a thicker sound.
Compressor volume (COMP-LEVEL)	Adjusts the output level of the compressor. Turning this knob toward the right will raise the level.

* If you increase an effect (turn the knob toward the right) excessively, the sound may distort. If this occurs, you can try lowering the level of the input signal, the volume of the external audio playback device, or the volume of your computer.

Using the tube simulator (2)

Here's how you can enjoy sound from your computer, enhanced by the warmth of a vacuum tube amp.

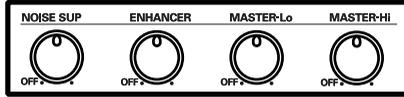


Mastering effect (MASTERING)

Set this to
LISTENING



When capturing audio from a cassette tape or LP (vinyl record), you can use this effect to improve the quality of the audio file that is captured on your computer.

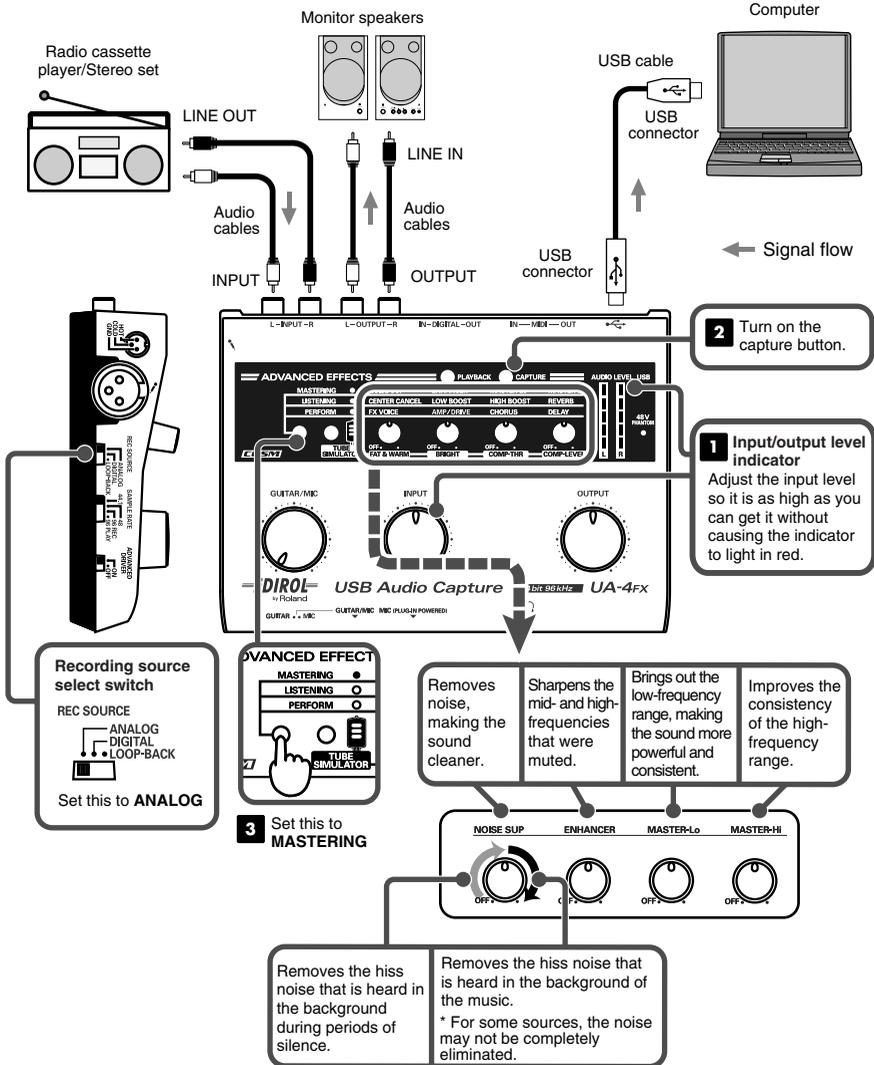


Effect	Explanation
Removing noise (NOISE SUP)	This removes low-level sounds or noise that remain in the background during periods of silence, and removes the noise from an analog source. This will make the sound clearer. * If this effect is applied to an input signal whose volume is extremely low, you may hear no sound at all.
Sharpening the sound (ENHANCER)	This sharpens the sound, boosting the high-frequency range to improve the clarity.
Boosting the low range (MASTER-Lo)	This suppresses distortion to the low-frequency range (below 220 Hz), making the sound powerful and solid.
Boosting the high range (MASTER-Hi)	This suppresses distortion to the high-frequency range (above 2 kHz), making the sound more powerful.

* If you increase an effect (turn the knob toward the right) excessively, the sound may distort. If this occurs, you can try lowering the level of the input signal, the volume of the external audio playback device, or the volume of your computer. Alternatively, you can turn the effect knob toward the left to decrease the effect.

Using the mastering effect

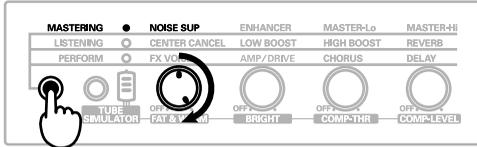
Here's how you can enhance the sound from a cassette tape to make it sound more like a CD before saving it on your computer.



Examples of effect settings

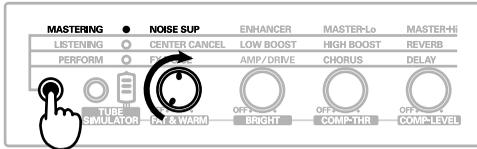
Removing noise from a cassette tape

MASTERING



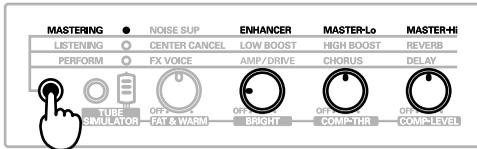
Recording without including extraneous noises from the surroundings

MASTERING



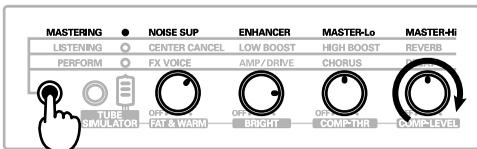
Sharpening the sound from a mic that lacks clarity

MASTERING



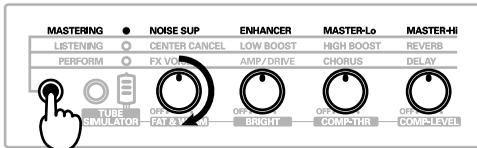
Making a live sound crisper and cleaner

MASTERING



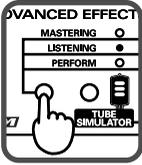
Clarifying the sound of a low-quality MP3

MASTERING

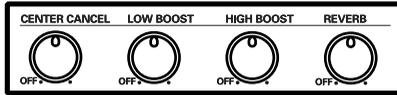


Listening effect (LISTENING)

Set this to
LISTENING



You can apply this effect to the playback of a CD, internet radio, or MP3 to enhance the sound in various ways.

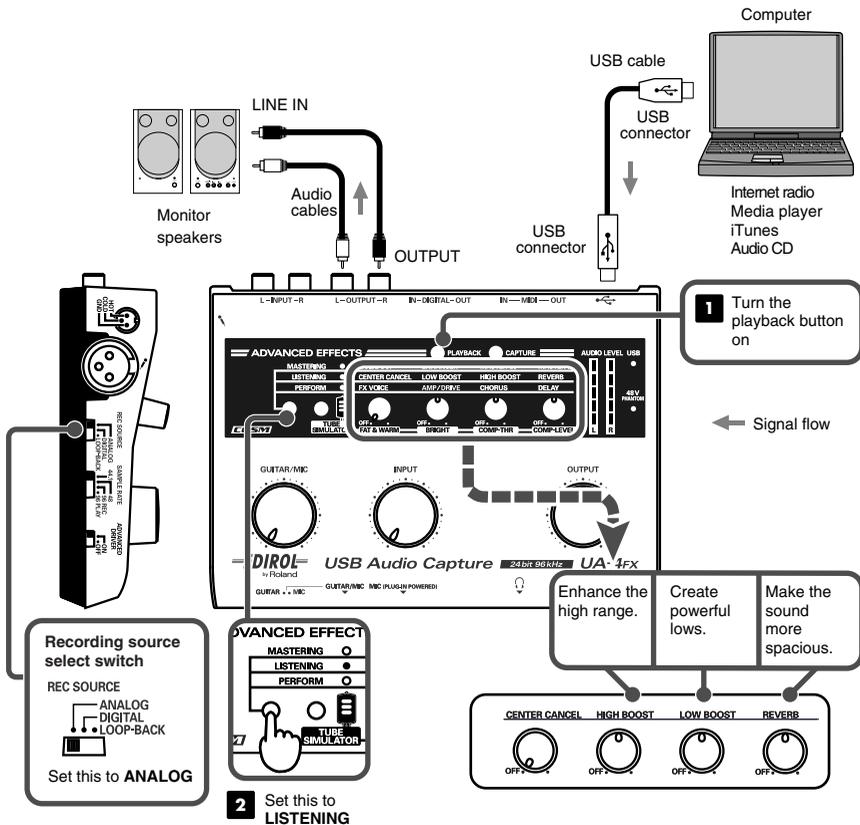


Effect	Explanation
CENTER CANCEL	<p>When you input a stereo source such as a CD, this lets you eliminate sounds that are located in the center of the stereo image, creating a karaoke version.</p> <p>As you turn the effect knob from the OFF position toward the right (maximum), a greater portion of the center will be eliminated.</p> <p>* Applying this to a monaural sound may result in your hearing no sound at all.</p> <p>* If the playback button is on, this center cancel effect will not apply to the input.</p>
LOW BOOST	Boosts the low range of the sound, adding impact.
HIGH BOOST	Boosts the high range of the sound, adding clarity.
REVERB	Adds reverb to create a more spacious sound.

* If you increase an effect (turn the knob toward the right) excessively, the sound may distort. In this case, try lowering the volume of the application you're using. Also try turning the effect knob toward the left to reduce the depth of the effect.

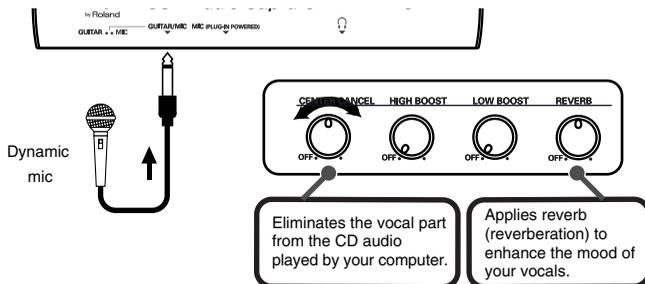
Using the Listening effect

Here's how you can transform your computer into a karaoke system. You can apply effects to the sound from Internet radio, media player or iTunes.



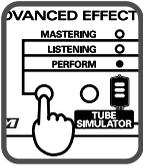
Enjoying karaoke

Center canceling will apply only to the sound played back from your computer.

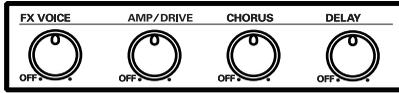


Performance effect

Set this to
PERFORM

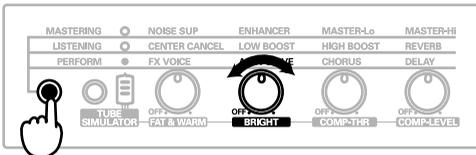


It is useful to apply this effect when you are recording a mic or guitar.



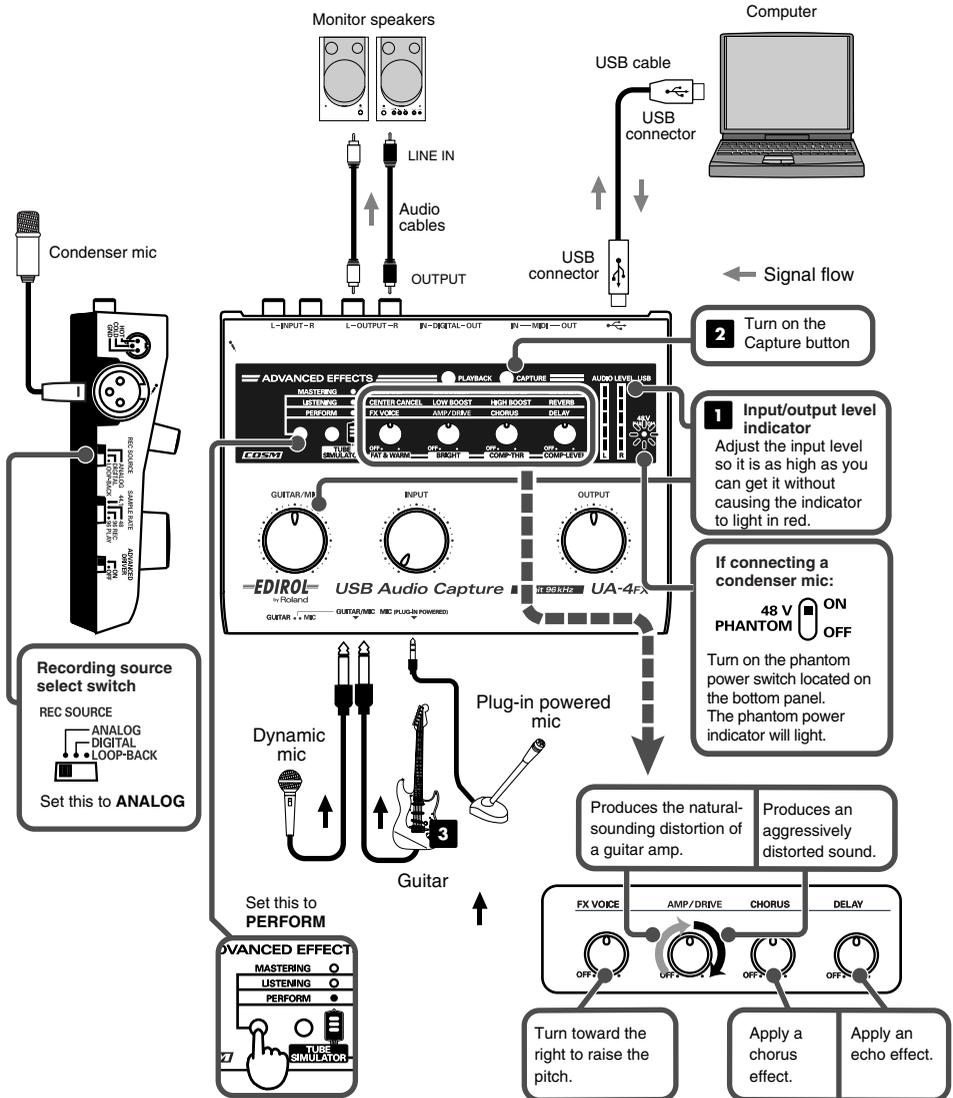
Effect	Explanation
FX VOICE	Modifies the pitch, giving the sound a completely different character. As you turn the effect knob from OFF toward the maximum (far right), the pitch will rise.
AMP/DRIVE	Distorts the sound to create guitar tones ranging from tasteful to extreme. Turning the effect knob from OFF toward the center position will produce a mild overdriven sound. Turning the knob from the center toward the maximum (far right) will produce more extreme distortion.
CHORUS	Adds depth and spaciousness to the sound, creating a rich sense of stereo.
DELAY	Adds repeated delays to give the sound more depth, or produce an echo-like effect.

- * If you increase an effect (turn the knob toward the right) excessively, the sound may distort. If this occurs, you can try lowering the level of the input signal, the volume of the external audio playback device, or the volume of your computer. Also try turning the effect knob toward the left to reduce the depth of the effect.
- * When you turn on a performance effect, a noise suppressor will be activated to reduce the noise from your guitar or mic. You can adjust the level of the noise suppressor by holding down the effect variation button and turning the AMP/DRIVE knob. Turning the knob toward the left will lower the level.



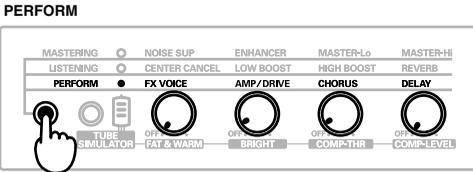
Adding variation to your sound

Here's how you can apply effects to the sound from your guitar or mic.

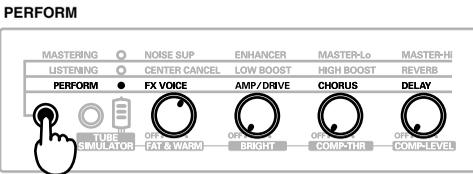


Examples of effect settings

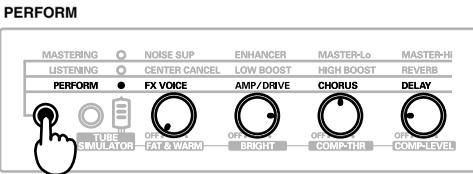
A slightly distorted sound, as if you were speaking through a megaphone



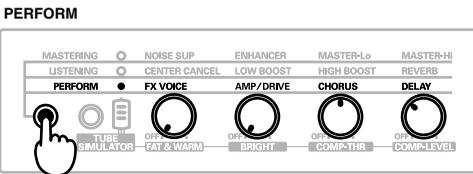
Disguises the voice; useful for anonymous interviews



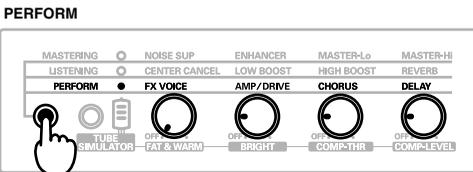
A nice setting for a guitar solo



A nice setting for clean guitar



A nice setting for blues guitar



MEMO

APPENDIX

Driver settings (ADVANCED switch ON)	P.36
Driver installation and settings (Mac OS 9).....	P.39
Giving priority to background services.....	P.44
Driver Signing Options setting.....	P.46
Standard driver mode (ADVANCED switch OFF)	P.47
Software installation.....	P.48
Troubleshooting	P.53
Specifications	P.65
UA-4FX Block Diagram.....	P.66

Driver settings (ADVANCED switch ON)

Adjusting the audio latency

When using the UA-4FX 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 sequencer software plays back audio data until the sound is actually heard from an audio device such as the UA-4FX.

1. As described in “**Opening the dedicated driver settings dialog box**” (p. 36), open the **Driver Settings** dialog box.
2. Adjust the buffer size.
The following settings will produce the shortest latency.
Windows users: Set “**Audio Buffer Size**” to the far left (Min).
Mac OS X users: Set “**Audio Buffer Size**” to the far left (Min).
Mac OS 9 users: Set “**Buffer Size**” to the far left (Min).
3. Click [OK] (or in Mac OS X, [Apply]) to close the dialog box.
4. Restart the sequencer software that is using the UA-4FX.
* If you are using a sequencer software that has a function for testing audio devices, get it to perform its tests.
5. Play back audio data on your sequencer software.
If interruptions occur in the sound, repeat this procedure, and gradually increase the **buffer size** in step 2 until interruptions no longer occur.
* Depending on the sequencer software you are using, there may be a **buffer size** or **latency** adjustment function among the audio settings of the sequencer software as well. For details, refer to the operation manual for your sequencer software.

Opening the dedicated driver settings dialog box

Windows users:

1. Click the Windows **Start** menu, and from the menu that appears, select **Settings** | **Control Panel**. (**Windows XP:** Click the Windows **start** menu, and from the menu, select **Control Panel**.)

2. In **Control Panel**, double-click the “**EDIROL UA-4FX**” icon.
The “**Edirol UA-4FX Driver Settings**” dialog box will appear.

* In Windows XP, click “**Switch to Classic View**” to select Classic View on your computer. If you’re not in Classic View, the EDIROL UA-4FX icon won’t be shown.

* In Windows Me, click “**View all Control Panel options.**”

Mac OS X users: Open “**System Preferences**” and click the “**UA-4FX**” icon.
“**Edirol UA-4FX Driver Settings**” dialog box will appear.

Mac OS 9 users: Open the **ASIO Control Panel** from the **Audio Settings** dialog box of your ASIO-compatible software.

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

Decreasing the ASIO Buffer Size (Windows)

If you're using the UA-4FX from ASIO-compatible software, you'll be able to reduce the buffer size further. If clicks or pops occur, uncheck this check box.

* **“Adjusting the audio latency”** (p. 36) must be performed with this check box unchecked.

1. As described in **“Opening the dedicated driver settings dialog box”** (p. 36), open the **“Edirol UA-4FX Driver Settings”** dialog box.
2. Check the **“Use Smaller ASIO Buffer Size”** check box.
3. Click **[OK]** to close the **“Edirol UA-4FX Driver Settings”** dialog box.

Using ASIO Direct Monitor (Windows/Mac OS 9)

If you're using the UA-4FX in **Advanced mode**, the UA-4FX's **Direct monitor on/off** setting can be controlled from your **ASIO 2.0** compatible software.

1. Set the **Input monitor select switch** located on the bottom panel of the UA-4FX to the **AUTO** position.
 
2. As described in **“Opening the dedicated driver settings dialog box”** (p. 36), open the **“Driver Settings”** dialog box (or in Mac OS 9, **“ASIO Control Panel”**).
3. Make the following settings.
Check the **“Use ASIO Direct Monitor”** check box.
4. Click **[OK]** to close the driver settings dialog box.

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

* When using ASIO Direct Monitor, monitoring may switch on/off at unexpected times, depending on the sequencer software settings and on the recording procedure. If this occurs, uncheck the check box in step **3** to disable ASIO Direct Monitor.

Deleting the driver (Windows)

1. With the UA-4FX disconnected, start up Windows.
Disconnect all USB cables except for a USB keyboard and USB mouse (if used).
2. Insert the CD-ROM into the CD-ROM drive of your computer.
3. Click the Windows **Start** button. From the menu that appears, select “**Run....**”
In the “**Run...**” dialog box, input the following into the “**Open**” field, and click [OK].
Windows XP/2000 users: D:\DriverXP2k\Uninstal.EXE
Windows Me/98 users: D:\DriverMe98\Uninstal.EXE
** The drive name **D:** may be different on your system. Use the drive name for your CD-ROM drive.*
4. Follow the on-screen instructions to uninstall the driver.
** When you uninstall, both the standard USB audio device driver included with Windows and the dedicated driver will be uninstalled.*

Deleting the driver (Mac OS X)

1. With the UA-4FX disconnected, start up Macintosh.
** Disconnect all USB cables except for a USB keyboard and USB mouse (if used).*
2. Exit all currently running software (applications).
If you are using virus checking or similar software, be sure to exit it as well.
3. Prepare the CD-ROM.
Insert the CD-ROM into the CD-ROM drive of your Macintosh.
4. In the **Driver (Mac OS X)** folder of the CD-ROM, double-click “**UA4FX_Uninstaller.**”
5. The display will indicate “**This uninstalls EDIROL UA-4FX driver from this Macintosh.**”, click [Uninstall].
6. The display will indicate “**Are you sure to uninstall the driver?**”, click [OK].
7. The “**Authenticate**” dialog box will appear, enter the password and click [OK].
8. The display will indicate “**Uninstillation is completed.**”, click [Restart].
Your Macintosh will then restart.

Driver installation and settings (Mac OS 9)

Installing the UA-4FX driver

Use either OMS or FreeMIDI as the MIDI driver.

The included **UA-4FX driver** is an add-on module for using the UA-4FX with OMS or FreeMIDI.

OMS can be found in the **OMS 2.3.8 E** folder within the **OMS (Mac OS 9)** folder of the CD-ROM. If you would like to know more about OMS, refer to **OMS_2.3_Mac.pdf** which can be found in the same folder.

- * Either **OMS or FreeMIDI** must be installed in your Macintosh, as appropriate for the sequencer software you are using.
- * If you install OMS or FreeMIDI after installing the UA-4FX driver, you must install the UA-4FX driver once again.

If a UA-4FX is already connected to your Macintosh when you install the driver, a message like the following will appear when the Macintosh is started up. Perform the steps described below as appropriate for the message that is displayed.

If the screen indicates:

“Software needed for the USB device “UA-4FX” is not available. Would you like to look for the software on the Internet?”

→ click **[Cancel]**.

Use the following procedure to install the UA-4FX driver.

1. With the UA-4FX disconnected, start up Macintosh.
 - * *Disconnect all USB cables except for a USB keyboard and USB mouse (if used).*
2. Exit all currently running software (applications).
3. Prepare the CD-ROM. Insert the CD-ROM into the CD-ROM drive.
4. Double-click the **UA-4FX Driver-E Installer** icon (found in the **Driver E (Mac OS 9)** folder of the CD-ROM) to start up the installer.
5. Verify the **Install Location**, and click **[Install]**.

The installation location will be shown differently depending on your system. Make sure that you have selected the startup disk for the system you are currently using.

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

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



This installation requires your computer to restart after installing this software. Click **Continue** to automatically quit all other running applications. Click **Cancel** to leave your disks untouched.

Cancel

Continue

7. A dialog box will indicate **Installation was successful**.

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

Next, you need to make the driver settings.

- If you're using OMS..... p. 40
- If you're using FreeMIDI p. 42

OMS settings

If you're using FreeMIDI, proceed to **"FreeMIDI settings"** (p. 42).

1. **Operation of the UA-4FX** Set the UA-4FX **ADVANCE (mode select) switch** to the **ON** position.
2. **Operation of the UA-4FX** Use the **USB cable** to connect the **UA-4FX** to your **computer**.

* *Connect the UA-4FX to a USB connector on the Macintosh itself. Don't connect it to the USB connector of the keyboard.*

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

3. From the CD-ROM, drag the **Driver E (Mac OS 9) - OMS Setting** folder into the **Opcode - OMS Applications** folder on the hard disk of your Macintosh to copy it there.

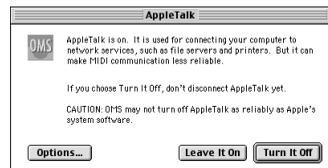


4. In the **Opcode - OMS Applications** folder where you installed OMS, double-click **OMS Setup** to start it up.



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

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



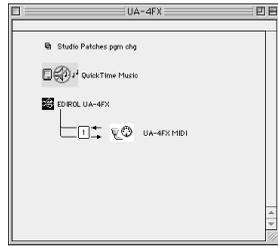
6. The **Create a New Studio Setup** dialog box will appear. Click **[Cancel]**.

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



7. Choose “Open” from the **File** menu.

From the **OMS Setting** folder that you copied in **step 3**, select the **UA-4FX** file, and click **[Open]**.
A screen like the one shown here will appear.



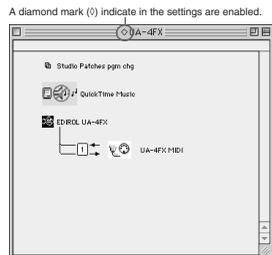
8. From the **Edit** menu, select **OMS MIDI Setup**.

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



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

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



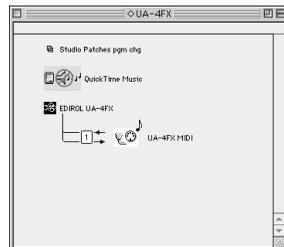
10. Verify that MIDI transmission and reception can be performed correctly.

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

11. When you move the mouse cursor near the MIDI connector icon, the cursor will change to a musical note shape.

Click on the icon for the MIDI connector in the diagram.

If a sound module is connected to the UA-4FX's MIDI OUT connector, and you hear sound from the sound module, the settings were made correctly.



12. Exit **OMS Setup**.

From the **File** menu, choose **[Exit]**.

If the **AppleTalk confirmation** dialog box appears, click **[OK]** to close the dialog box.

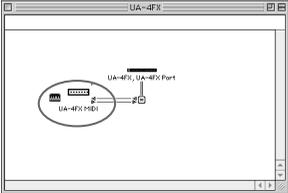
FreeMIDI settings

1. **Operation of the UA-4FX** Set the UA-4FX **ADVANCE (mode select) switch** to the **ON** position.
 2. **Operation of the UA-4FX** Use the **USB cable** to connect the **UA-4FX** to your Macintosh.
 - * *Connect the UA-4FX to a USB connector on the Macintosh itself. Don't connect it to the USB connector of the keyboard.*
 - * *This unit is equipped with a protection circuit. A brief interval (a few seconds) after connecting the USB cable is required before the unit will operate normally.*
 3. From the CD-ROM, drag the **Driver E (Mac OS 9) - FreeMIDI Setting** folder into the **FreeMIDI Applications** folder on the hard disk of your Macintosh to copy it there.
 4. Open the **FreeMIDI Applications** folder from the location into which you installed **FreeMIDI**, and double-click the **FreeMIDI Setup** icon to start it up.
 - * *When "OMS is installed on this computer..." appears, click **[FreeMIDI]**.*
 5. The first time you start up, use the following procedure.
 1. A dialog box saying "**Welcome to FreeMIDI!**" will appear. Click **[Continue]**.
 2. The **FreeMIDI Preferences** dialog box will appear. Click **[Cancel]**.
 3. The **About Quick Setup** dialog box will appear. Click **[Cancel]**.
 6. From the **File** menu, choose **Open**.

If you are unable to select **Open**, make settings as follows, and return to step 4 to continue the procedure.

 1. From the **File** menu, choose **FreeMIDI Preference**.
 2. Uncheck "**Use OMS when available.**"
 3. Close FreeMIDI.
 7. Select **UA-4FX** from the **FreeMIDI Setting** folder you copied in **step 3**, and click **[Open]**.
 8. Verify that MIDI transmission and reception occur correctly.

From the **MIDI** menu, choose **Check Connections**.
 9. Try mouse cursor will change to the shape of a keyboard.

If a sound module is connected to the UA-4FX's MIDI OUT connector, and you hear sound from the sound module, the settings were made correctly.
- 
10. Once again choose the **MIDI** menu command **Check Connections** to end the test.
 11. From the **File** menu, choose **Quit** to exit **FreeMIDI Setup**.

Installing the ASIO driver

You must install the UA-4FX driver even if you're using the UA-4FX only for audio. You must install the UA-4FX driver before you install the ASIO driver (p. 39).

This section explains how to install the ASIO driver so that you can use the UA-4FX with your sequencer software or audio editing software.

For details on ASIO driver installation and settings, be sure to also read **Readme_E.htm** located in the **Driver E (Mac OS 9)** folder of the CD-ROM.

ASIO

Using the UA-4FX with your ASIO-compatible software will improve the timing precision of the audio, giving you a sophisticated music production environment.



CAUTION

The UA-4FX cannot play back audio data from the Macintosh's sound manager (such as audio CDs and alert sounds).

The ASIO driver of the UA-4FX supports the following audio input/output channels.

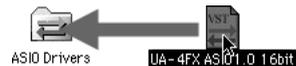
- Audio input
24/16 bit 1 stereo ch. (2 monaural chs.)
- Audio output
24/16 bit 1 stereo ch. (2 monaural chs.)

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-4FX ASIO 1.0 16 bit
X	O	UA-4FX ASIO 1.0 24 bit
O	X	UA-4FX ASIO 2.0 16 bit
O	O	UA-4FX ASIO 2.0 24 bit

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

1. From the **Driver E (Mac OS 9) - ASIO** folder of the CD-ROM, copy **[UA-4FX ASIO1.0 16bit]** to the **ASIO Drivers** folder of the ASIO-compatible software you are using (e.g., Cubase VST, Logic Audio, Digital Performer, Metro, or SPARK LE).
2. Start up your ASIO-compatible software (e.g., Cubase VST, Logic Audio, Digital Performer, Metro, or SPARK LE).
3. Open the Audio setting dialog box of your ASIO-compatible software, and select **[UA-4FX ASIO1.0 16bit]** as the **ASIO Device**.



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

Giving priority to background services

To ensure that audio and MIDI are processed smoothly, make the setting as follows.

Windows XP users:

1. Open the **System Properties** dialog box.

1. From the Windows **start** menu, choose **Control Panel**.
2. In “**Pick a category**,” click “**Performance and Maintenance**”.
3. In “**or Pick a Control Panel icon**,” click the **System** icon.

Depending on your system, the **System** icon may be displayed directly in the **Control Panel** (Classic view). If so, double-click the **System** icon.

2. Click the **Advanced** tab.

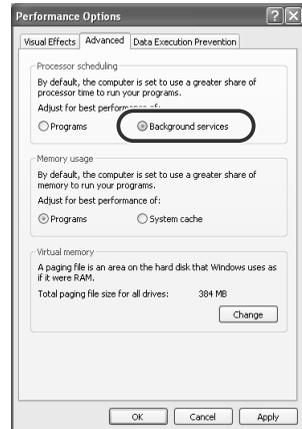
3. Click **[Settings]** located at the right of the **Performance** area.

The **Performance Options** dialog box appears.



4. Click the **Advanced** tab.

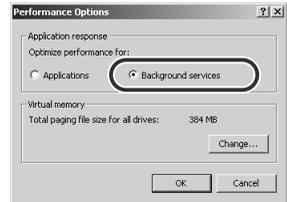
5. In **Processor Scheduling**, choose “**Background services**,” and click **[OK]**.



6. In the **System Properties** dialog box, click **[OK]**. The **System Properties** dialog box closes.

Windows 2000 users:

1. Click the Windows **Start** button, and from the menu that appears, select **Settings | Control Panel**.
2. In **Control Panel**, double-click the **System** icon.
3. Click the **Advanced** tab.
4. At the right of the **Performance** field, click [**Performance Options**].
The **Performance Options** dialog box will appear.
5. In the **Application response** field, choose “**Background services**” and click [**OK**].



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

Driver Signing Options setting

If you're using Windows XP/2000, you may be unable to install the driver depending on the "Driver Signing Options" setting. Proceed as follows to change this setting.

1. Open the **System Properties** dialog box.

Windows XP users:

1. Click the Windows **start** menu, and from the menu, select **Control Panel**.
2. In "**Pick a category,**" click "**Performance and Maintenance.**"
3. In "**or pick a Control Panel icon,**" click the **System** icon.
Depending on your setup, the **System** icon may appear directly in the **Control Panel** (Classic view). If so, double-click the **System** icon.

Windows 2000 users:

1. Click the Windows **Start** menu, and from the menu that appears, select **Settings | Control Panel**.
2. In **Control Panel**, double-click the **System** icon.
2. Click the **Hardware** tab, then click **[Driver Signing]**.
The **Driver Signing Options** dialog box will open.
3. In the **Driver Signing Options** dialog box, select "**Ignore,**" then click **[OK]**.
If you were unable to complete the installation because a dialog box regarding the driver signing options appeared while you attempted to install the driver, choose the "Ignore" setting here, and then change the setting back to its previous state when you've finished installing the driver.
4. Click **[OK]** to close the **System Properties** dialog box.

Standard driver mode (ADVANCED switch OFF)

The UA-4FX has two operating modes: **advanced mode** and **standard driver mode**. You can use the **ADVANCED switch** located on the side panel of the UA-4FX to select the desired mode.

Normally, you should use Advanced mode, but if you choose the **standard driver mode** (the ADVANCED switch turned OFF), you'll be able to use the UA-4FX simply by plugging it into your computer, without having to install the driver. In this case, the following limitations will apply.

- The sample rate will be fixed at 44.1 kHz/16 bit regardless of the setting of the UA-4FX's sample rate select switch.
 - The MIDI IN/OUT connectors are not available when using Standard driver mode.
- * *If you change the setting of this switch, you will need to disconnect and then reconnect the USB cable that connects the UA-4FX to your computer.*

Software installation

Virtual Sound Canvas DXi

Virtual Sound Canvas DXi (VSC DXi) is a software synthesizer that's compatible with DirectX Instrument (DXi). With it, you can easily use a rich array of high-quality Virtual Sound Canvas sounds with your DXi-compatible programs.

* *Only a Windows version of Virtual Sound Canvas DXi is included.*

Features

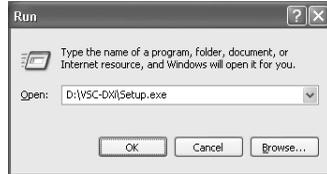
- VSC DXi is compatible with GM2 System, as well as GS Format, a form of music files conforming to specifications for Roland sound modules.
- VSC DXi is a multitimbral sound module featuring 16 parts, for a maximum of 128 voices. In addition, VSC comes with 902 sounds and 26 drum sets built in, making spectacular ensemble performances possible.
- Internal reverb, chorus, and delay effects lend greater musical expression to your performances.
- In the VSC Panel, you can easily switch sounds (instruments), adjust volume levels, and change parts in other ways, as well as mute parts.
- You can display each part's level and monitor the polyphony on the screen, allowing you to confirm the status of performances and check performance data that you have created.

Installing Virtual Sound Canvas DXi

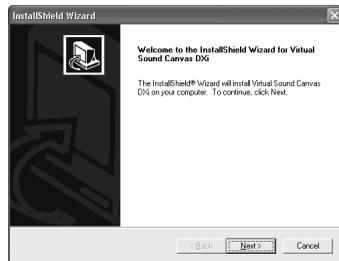
1. Insert the CD-ROM into the CD-ROM drive of your computer.
2. Click the Windows **start** button. From the menu that appears, select “**Run...**”
3. In the “**Run...**” dialog box, input the following into the “**Open**” field, and click [OK].

D:\VSC-DXi\Setup.exe

- * *The drive name **D:** may be different on your system. Use the drive name for your CD-ROM drive.*



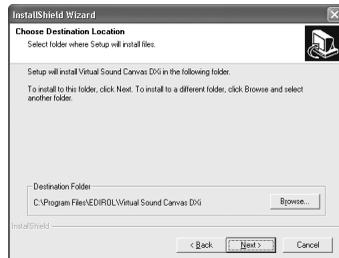
4. The installer will start, and the “**Welcome to the InstallShield Wizard for Virtual Sound Canvas DXi**” screen will appear. Click [Next].
5. You will be asked whether you consent to the terms of the license agreement. Read the license agreement, and click [Yes] if you agree. If you click [No], the installation will be halted.



6. A dialog box will appear, allowing you to select the installation location. To accept the suggested location, click [Next].
If you want to change the installation folder, click [Browse] and specify the desired folder.
7. Verify the current settings of the Confirmation of installation screen.

After verifying the settings, click [Next].
If you want to re-specify the installation location, click [Back].

8. When the files have been copied, the InstallShield Wizard Complete screen will appear. Click [Finish].



This completes installation of Virtual Sound Canvas DXi.

SONAR LE

For details on operating SONAR LE, refer to the online help for SONAR LE.

Installing

Insert the SONAR LE CD-ROM into the CD-ROM drive of your computer.
For the installation procedure, refer to the SONAR LE CD-ROM package.

Settings

You will need to make audio and MIDI device settings.



You must make the following settings if you have switched the UA-4FX's sample rate or have changed the buffer size in the UA-4FX Driver settings dialog box.

1. Power up the UA-4FX, and then start up SONAR.
2. From SONAR's **Options** menu, choose **Audio** to open the **Audio Options** dialog box.
3. Click the **Advanced** tab.

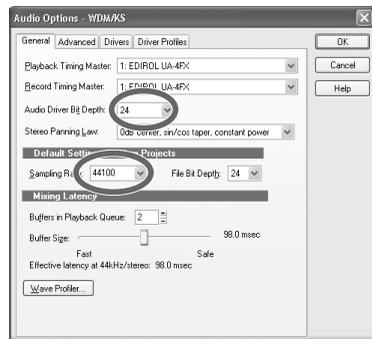
In the **Playback and Recording** area, verify that **Driver Mode** is set to **WDM/KS**.

* If you change this setting, click **[OK]** and restart SONAR. Restart SONAR, and from the **Options** menu, choose **Audio** to open the **Audio Options** dialog box.

4. In the **General** tab, set **Audio Driver Bit Depth** to **24**.

Set the **Sampling Rate** to the same setting as the UA-4FX's sample rate select switch.

If you change this setting, click **[OK]** and exit SONAR.



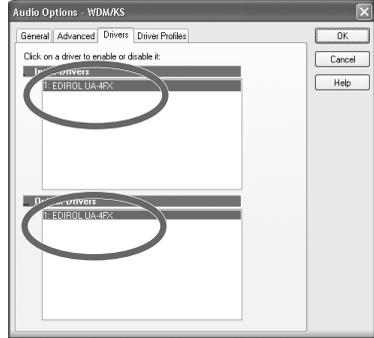
* If the **Audio Driver Error** dialog box appears, click **[Use Anyway]**. If you click **[Disable]**, the setting will be discarded.



- Restart SONAR, and from SONAR's **Options** menu, choose **Audio** to open the **Audio Options** dialog box.
- In the **General** tab, click **Wave Profiler**.
When **Wave Profiler** is finished, click **[Close]**.
- Click the **Drivers** tab.

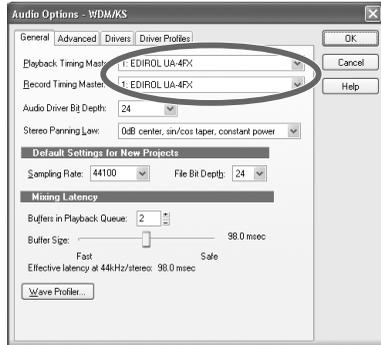
In the lists of **Input Drivers** and **Output Drivers**, click the following devices to highlight them (white characters on blue background), and un-highlight all other devices. Click **[OK]**.

Input devices	Output devices
EDIROL UA-4FX	EDIROL UA-4FX



- Restart SONAR, and from SONAR's **Options** menu, choose **Audio** to open the **Audio Options** dialog box.

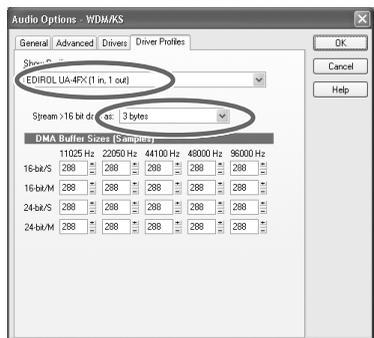
- In the **General** tab, make sure that **Playback Timing Master** is set to **EDIROL UA-4FX**, and **Record Timing Master** is set to **EDIROL UA-4FX**.



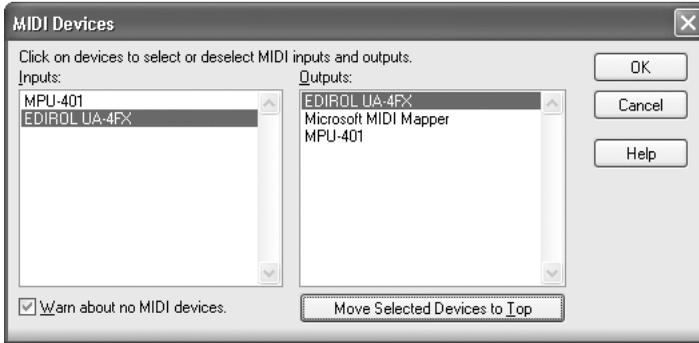
- Click the **Driver Profiles** tab.

Select **EDIROL UA-4FX (1 in, 1 out)** as the setting for **“Show Profile for,”** and then select **“3 bytes”** as the setting for **“Stream > 16 bit data as.”**

- Click **[OK]** to close the **Audio Options** dialog box.



12. From SONAR's **Options** menu, choose **MIDI Devices** to open the **MIDI Devices** dialog box.
13. In the **MIDI Devices** dialog box, choose the UA-4FX in the **Inputs** area and the **Outputs** area, and then click **[Move Selected Devices to Top]**.



14. Click **[OK]**.
15. Restart SONAR.
16. Open the **Audio Options** dialog box once again as described in step 2. Verify that the audio device settings are correct.

Insert VSC DXi

In order to assign the output of a SONAR LE MIDI track to the VSC DXi (p. 48), you'll need to perform the following procedure.

1. From SONAR's **Insert** menu, choose **DXi Synth** and then select **EDIROL VSC**. Open the **Insert DXi Synth Options** dialog box.



Troubleshooting

If you experience problems, read this chapter first/ It contains tips for solving most problems.



Problems that occur only on Windows



Problems that occur only on Macintosh

Driver-related problems

Can't install the driver correctly

Is the **ADVANCED** switch set correctly?

Set the USB mode select switch appropriately for the USB mode you're using.

You attempted to install as described in Read this first! "You must install the driver first" (p. 2), but did not succeed.

Install the UA-4FX driver once again as described in **Read this first! "You must install the driver first"** (p. 2). Also check the Device Manager to see whether "Other device," "Unknown device," "?," "!", or "x" is shown for any device. If you see such a device, delete it.



Does the Device Manager show "Other device," "Unknown device," or any device marked with "?," "!", or "x"?

If driver installation did not end successfully, the installed driver may remain in an incomplete state.

Install the UA-4FX driver once again as described in **Read this first! "You must install the driver first"** (p. 2).

Is the **UA-4FX** connected correctly?

Make sure that you have used a USB cable to correctly connect the UA-4FX to the USB connector of your computer.

Could other applications or resident software (such as an anti-virus program) be running?

Installation may not occur correctly if other programs are running. Be sure to close all other programs before installing.

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

You cannot install from a networked CD-ROM drive.

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

If the CD-ROM or the lens of your CD-ROM drive are dirty, the installer may not work correctly. Use a commercially available CD cleaner or lens cleaner to clean the CD-ROM and/or lens.

Are the power conservation settings of your computer turned off?

If power conservation settings are turned on for your computer, disable these settings. (For details on how to disable them, refer to the owner's manual of your computer.)

Is there enough free space on your hard disk?

Delete unneeded files to increase the amount of free space.
After deleting the file(s), empty the recycling bin.

Is the USB connector enabled on your computer?

Refer to the owner's manual for your computer, and verify that the USB connector of your computer is enabled. The driver cannot be installed unless the USB connector is enabled.

Does your computer meet the USB specification?

Operation may be unstable if you are using a computer that does not electrically meet the USB specification. If so, you may be able to solve the problem by connecting a USB repeater hub that has its own power supply.

Can't install/uninstall the driver



Did you log onto Windows as a user with administrative privileges?

In order to install/uninstall/reinstall the UA-4FX driver in Windows, you must log onto Windows as a user with administrative privileges, such as Administrator.

Can't record or play back audio or MIDI

No sound

Is the UA-4FX's Recording source select switch set to "ANALOG"?

When the **Recording source select switch** is set to "DIGITAL," the audio signals input to the digital Input connector are output. The computer's audio data is not output.

Are the volume controls of the UA-4FX set appropriately?

Adjust the output volume and input volume of the UA-4FX.

Could the sample rate select switch be set to "96 kHz REC"?

If the sample rate select switch is set to "96 kHz REC," audio data from your computer will not be output. Set this switch to "96 kHz PLAY," or select a different sample rate.

Is your audio playback system (e.g., stereo) connected correctly?

Make sure that the UA-4FX's output jacks are correctly connected using audio cables to the input jacks of your audio playback system.

Refer to:Read this first! "Basic connections for the UA-4FX" (p. 12)

Did you connect/disconnect the USB cable to the UA-4FX while your software was running?

Close all software that is using the UA-4FX, and then reconnect the UA-4FX.

Could your computer have entered Standby (Suspend) or Sleep mode?

After your computer resumes operation, close all software that is using the UA-4FX, and then reconnect the UA-4FX.

Is the driver installed correctly?

You'll need to install a driver in order to play back audio/MIDI data via the UA-4FX.

Refer to:Read this first! "You must install the driver first" (p. 2)

Are you running numerous software programs?

An error message may appear if numerous software programs are running simultaneously. If this occurs, close the software you are not using.

In Windows, a program is still running if it remains in the taskbar even after you close its window; close any unneeded software shown in the taskbar.

Are your input/output devices connected correctly?

In order to play back audio/MIDI using the UA-4FX, you must make the appropriate input/output device settings. For details on making these settings, refer to **Read this first! "Driver settings"** (Windows p. 6, Macintosh p. 10).

Could the UA-4FX have been connected when you started up the computer?

Start up the computer with the UA-4FX disconnected, and then connect the UA-4FX.

Depending on the type of computer you are using, starting up the computer when the UA-4FX is already connected may cause operation to be unstable.

A device connected to the input jacks can't be heard through headphones

Is the input and output volume set appropriately?

Turn the knobs toward the right to adjust the volume.

Could the input monitor select switch (located on the bottom of the UA-4FX) be set to "AUTO"?

Either turn the input monitor select switch "ON," or turn on the monitor switch of the application you're using.

Could equipment be connected simultaneously to the mic input jack (XLR type, plug-in powered mic) and to the guitar/mic input jack?

Connect your equipment only to the jack you're using.

Recording produces a silent file

Did you specify the correct audio data input source within the operating system?

Depending on the software you are using, you may need to specify the UA-4FX as the audio data input source for your computer.

Refer to:Read this first! "Driver settings" (Windows p. 6, Macintosh p. 10)

If you are digitally recording the audio output of your computer:

Is the **recording source select switch** set to **LOOP-BACK**?

Set this to **LOOP-BACK**.

Could the sample rate select switch to set to "96 kHz PLAY"?

Audio data cannot be recorded if the sample rate select switch is set to "96 kHz PLAY." Set the switch to "96 kHz REC" or choose a different sample rate.

Can't record from a digital connection

If you are capturing audio from a CD or MD into your computer:

Is the **recording source select switch** set to **DIGITAL**?
Set this to **DIGITAL**.

Does the sampling frequency setting in your software match the sampling frequency of the digital device connected to the digital input connector?

Set these to the same sampling frequency.

You will become unable to record if you switch the sampling frequency (e.g., switch between digital broadcast mode A and mode B) of your digital device while it is still connected to the digital input jack.

If you switch the sampling frequency, reconnect the digital cable.

You cannot record digital data that is of a format not normally used by consumer-use digital audio devices.

Data recorded with SCMS flags cannot be recorded digitally.

The UA-4FX complies with **SCMS**, meaning that if data containing SCMS flags (such as an MD that was digitally copied from a commercial music CD) is input via the digital input connector, the UA-4FX will not allow you to record this on your computer. (The sound will be output from the line output jacks and the headphone jack.)

Can't record/play 24-bit audio data

Does your software support 24-bit audio data?

You will need to use software that supports 24-bit audio data.

Can't record/play MIDI

Have you made the correct settings for the MIDI device you're using?

In order to record/play MIDI via the UA-4FX, you must install the UA-4FX driver correctly.

In addition, you must also make settings in your software to specify the MIDI device you want to use.

Refer to: Read this first! "You must install the driver first" (p. 2)

Is the **ADVANCED switch turned "ON"?**

You can't record or play back MIDI if the **ADVANCED** switch is "OFF."

Noise or pops are heard when recording/ playing on your computer

Noise is heard during audio playback

Pops/clicks occur during audio playback

Noise is heard in the recorded sound



In Windows, did you make the setting described in “Giving priority to background services”?

In order to ensure that audio/MIDI processing occurs smoothly, make the setting described in “Giving priority to background services.”

Refer to: “Giving priority to background services” (p. 44)



In Macintosh, check the Energy Saver settings.

In the Mac OS X **System Setup**, set **Energy Saver** as follows.

Click the **Sleep** tab.

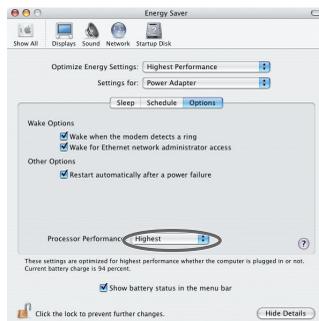
Set “**Put the computer to sleep when it is inactive for:**” to **Never**.

Set “**Put the display to sleep when the computer is inactive for:**” to **Never**.



Click the **Options** tab.

If there is a **Processor Performance** setting, set it to **Highest**.





In Windows, Power Management settings in the Control Panel may cause clicks or pops to occur in the audio playback.

The power management properties that appear when you double-click Power Management will differ depending on your computer system. The explanation that follows is for a typical situation, but you should refer to the owner's manual for your computer to verify these settings.

Some computers may not have the following items.

1. In the Windows **Control Panel**, double-click the **System** icon. The **System Properties** dialog box will appear.
2. Click the **Hardware** tab.
3. Click **Device Manager** to see the list of devices.
4. From the list, choose **Advanced Power Management Support**, and click **Properties**.
The **Advanced Power Management Support Properties** dialog box will appear.
5. Click the **Settings** tab, and in **Troubleshooting**, check the “**Don't Poll Power Supply Status**” check box. Then click [OK].
6. In the **System Properties** dialog box, click [OK].
7. Restart Windows.

Are you using a USB device in addition to the UA-4FX?

Try switching off USB audio devices other than the UA-4FX.

You may be able to solve the problem by adjusting the buffer size in the UA-4FX Driver Settings dialog box.

Adjust the buffer size as described in “**Adjusting the audio latency**” (p. 36).

* *After changing the buffer size, you must restart any software that uses the UA-4FX.*

If your software has an audio device test function, execute the test function.

Are numerous software programs running?

Playback may be interrupted if numerous software programs are running at the same time, or when you start up another software program. Close any unneeded software, and try again. If this does not solve the problem, try restarting your computer.

Clicks or pops may occur in the sound if a LAN is operating.

Try disabling the LAN in the Device Manager. If this eliminates the clicks or pops, you may be able to solve the problem by updating your LAN driver or BIOS.

Is the sample rate setting in your software the same as the UA-4FX's sample rate select switch setting?

Set your software and the UA-4FX to the same sample rate.

If you change the sample rate of the UA-4FX, you will need to reconnect the UA-4FX in order for the setting to take effect.

Try adding memory.

Adding memory will improve the processing capability of your computer. For details on how to add memory, refer to the owner's manual of your computer.

Is the UA-4FX connected to a USB hub?

Try connecting the UA-4FX directly to the USB connector of your computer itself.

Are you using the included USB cable?

You must use the included USB cable when using the UA-4FX. Some commercially available USB cables do not meet the requirements of the USB standard, and this may prevent the UA-4FX from operating correctly.

Sound is distorted

Could you be applying effects?

Some types of effect may cause the sound to distort if applied too strongly. If this occurs, try lowering the input level using the input volume or the guitar/mic input volume. Alternatively, turn the effect knob toward the left to lessen the effect.

Playback/recording stops midway, and subsequent playback/recording is not possible

While you were using the UA-4FX, could your computer have performed a task with a heavy processing load, such as accessing a CD-ROM drive or network?

If a heavy processing load occurs while the UA-4FX is being used, it may not work correctly. In this case, stop playback/recording, and then start playback/recording once again. If you are still unable to play/record correctly, close all software that had been using the UA-4FX, and re-connect the UA-4FX.

Digitally recorded sound has distortion, the wrong pitch, or contains noise

Is the sample rate setting in your software the same as the sample rate of the digital device connected to the digital input connector?

Set your software and the UA-4FX to the same sample rate.

If you switch the UA-4FX's sample rate, you must re-connect the UA-4FX.

Can't use 5.1 ch surround playback

5.1 surround playback is supported only in Windows XP.

Are you using Advanced mode?

You must use Advanced mode in order to enjoy 5.1 ch surround playback. To do so, you will need to turn the UA-4FX's ADVANCED (mode select) switch ON, and install the driver.

Is the sample rate select switch at 48 kHz?

Set the sample rate select switch to 48 kHz.

Are you using WinDVD 5 or later?

Please use WinDVD 5 or a later version. We recommend that you install the most recent update.

Have you set the audio input/output destination settings correctly?

Specify the UA-4FX as the audio input/output destination.

Refer to: Read this first! "Driver settings" (p. 6)

You hear distortion or noise other than the playback sound from your computer

The sound is too weak

Noise is heard in the sound

Has a mic or guitar been left connected?

If a mic or guitar is connected to the UA-4FX, disconnect the mic or guitar and turn the input volume all the way toward the left (lowering the input level).

Have you connected the grounding terminal?

Connecting the chassis of your computer or the grounding terminal of your computer's AC power cord to an electrical ground may solve the problem. Also, make sure that a device that produces a strong magnetic field, such as a television or microwave oven, is not located nearby.

Could numerous audio devices be connected?

Noise may occur if numerous audio devices are connected. Do not connect audio devices you are not using.

Sound of a device connected to the input jacks is distorted

Insufficient volume from a device connected to the audio input/output jacks

Could the input/output level indicator be lit red?

If you're inputting sound via the guitar/mic input jack or the mic input jack (plug-in powered mic or XLR type), use the UA-4FX's GUITAR/MIC input volume control to decrease the input level.

If you're inputting sound via the line input jacks, use the INPUT volume control to decrease the input level.

If you're inputting sound via the guitar/mic input jack, you should also check the setting of the input select switch.

Noise may be entering via the line inputs or mic inputs.

If a MIDI sound module with a USB connector is connected via USB to the same computer as the UA-4FX, and the output of the MIDI sound module is connected to the input jacks of the UA-4FX, noise from the computer may be heard via the MIDI sound module from the UA-4FX. In this case, you can either connect the MIDI sound module and UA-4FX in parallel via a self-powered hub, or connect the MIDI sound module in series or via a MIDI.

Could two or more audio devices (such as the UA-4FX and a mixer) be connected to your computer?

Try connecting only one UA-4FX to your computer. Check whether the noise disappears when only one UA-4FX is connected. In some cases, noise may occur if you connect numerous audio devices to your computer. If so, connect only the UA-4FX to your computer.

A substantial amount of noise is present in the guitar sound

Does the noise decrease when you turn down the volume of your guitar?

If the noise decreases when you turn down the volume of your guitar, the guitar pickup may be affected by noise from your computer or display. Try locating the guitar as far away from the computer as possible.

Insufficient volume from your guitar

Is the Input select switch set correctly?

Set the input impedance select switch to **GUITAR**.

The volume changed when you resumed from Suspend or Hibernation status



When Windows 2000 resumes from Suspend or Hibernation, there is a case that the output volume setting is changed due to a problem of Windows.

Start up the Mixer application and adjust the **USB Audio (Speaker)** slider.

The volume level of the instrument connected to the line input is too low.

Could you be using a connection cable that contains a resistor?

Use a connection cable that does not contain a resistor.

Others

Can't start the Cubase

Are you using the UA-4FX for the first time with Cubase?

If you are using the UA-4FX for the first time with Cubase, set the UA-4FX's sample rate select switch to 44.1 kHz.

If this switch is not set to 44.1 kHz, it may be impossible to start Cubase.

Specifications

- **Number of Audio Record/Playback Channels**

Record: 1 pair of stereo
Playback: 1 pair of stereo
Full duplex (Except 96 kHz)

- **Signal Processing**

PC Interface 24 bits
AD/DA Conversion 24 bits (linear)
Internal Processing 32 bits (Effect processing)

- **Sampling Frequency**

Digital Output 44.1/48/96 kHz
Digital Input 44.1/48/96 kHz
AD/DA Conversion 44.1/48/96 kHz

* ADVANCE SWITCH = OFF: 44.1 kHz only

- **Frequency Response**

96.0 kHz 20 Hz to 40 kHz (+1 dB/-2 dB)
48.0 kHz 20 Hz to 22 kHz (+1 dB/-1 dB)
44.1 kHz 20 Hz to 20 kHz (+1 dB/-1 dB)

- **Nominal Input Level**

Line Input Jacks -10 dBu
MIC Input Jack (XLR) -45 to -12 dBu
MIC Input Jack (except XLR) -45 dBu
GUITAR Input Jack -30 dBu

- **Nominal Output Level**

Line Output Jacks -10 dBu

- **Residual Noise Level**

(input terminated with 1 k ohms, MAIN VOLUME: 0 dB, Monitor: OFF, IHF-A typ.)
-105 dBu or less (SN ratio: 108 dB, typ.)

- **Interface**

USB
Digital Input/Output: Optical type
conforms to IEC60958 consumer format:
PCM/AC3

- **Effects**

- 1. **Mastering**

Noise Suppressor/Enhancer/Multi-band Compressor-Limiter

- 2. **Listening**

Center Cancel/High Boost/Low Boost/Reverb

- 3. **Performance**

Compressor/Amp-Simulator and Distortion/Chorus/Delay

- 4. **Tube-amp simulator**

Tube-Amp-Simulator/Multi-band Compressor-Limiter

- **Connectors**

Line Input Jacks (L, R) (RCA phono type)
MIC Input Jack (XLR type, balanced, phantom power +48 V)
MIC Input Jack (Miniature phone type, plug-in powered)
GUITAR/MIC Input Jack (1/4 inch phone type)
Line Output Jacks (L, R) (RCA phono type)
Headphones Jack (Stereo 1/4 inch phone type)
Digital Input Connector (Optical type)
Digital Output Connector (Optical type)
USB Connector (USB Type B)
MIDI Connector (IN/Out)

- **Power Supply**

Supplied from the computer

- **Current Draw**

360 mA

- **Dimensions**

171.0 (W) x 126.8 (D) x 43.6 (H) mm
6-3/4 (W) x 5 (D) x 1-3/4 (H) inches

- **Weight**

335 g / 12 oz

- **Accessories**

Startup Manual
USB cable
Driver CD-ROM
SONAR LE CD-ROM

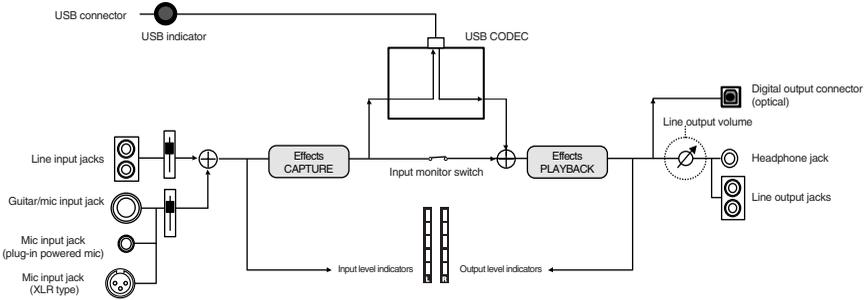
(0 dBu = 0.775 V rms)

* *The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system (e.g., includes newer sounds), so what you actually see in the display may not always match what appears in the manual.*

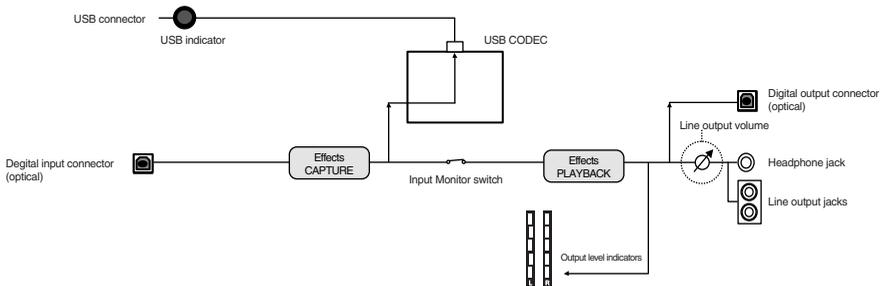
* *In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.*

UA-4FX Block Diagram

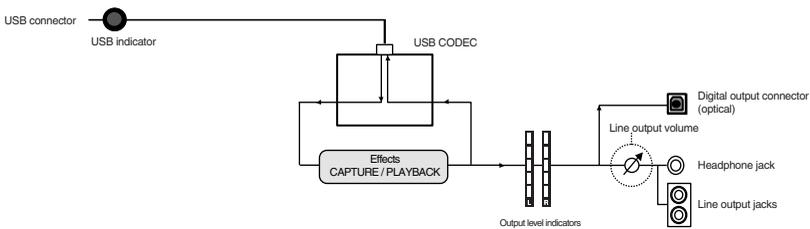
When the recording source select switch is set to ANALOG



When the recording source select switch is set to DIGITAL



When the recording source select switch is set to LOOP-BACK



INDEX

- A**
AMP/DRIVE 31
AppleTalk 40–41
ASIO 37, 43
ASIO direct monitor 37
- B**
background services 44
Block Diagram 66
BRIGHT 23
Buffer Size 36–37
- C**
CENTER CANCEL 29
CHORUS 31
COMP-LEVEL 23
COMP-THR 23
COSM 23
- D**
DELAY 31
Driver Signing Options 46
- E**
effect knob 22
Effect variation button 22
effects 19, 22
ENHANCER 26
- F**
FAT & WARM 23
FreeMIDI 42
FX VOICE 31
- G**
Guitar/mic input volume 14, 16
- H**
HIGH BOOST 29
- I**
Input select switch 14
Input/output level indicator 10
- L**
latency 36
LISTENING 19, 29
LOW BOOST 29
- M**
MASTER 26
MASTER-Hi 26
MASTERING 19, 26
MASTER-Lo 26
- N**
NOISE SUP 26
- O**
OMS 40
- P**
PERFORM 19
Performance 31
Phantom power switch 16
playback 21
- R**
recording 21
Recording source select switch
..... 10, 12, 14–15, 17
REVERB 29
- S**
Sampling frequency select switch
..... 9, 11–13, 15, 17
SONAR LE 50
- T**
Tube simulator button 22
- V**
Vacuum tube (TUBE) amp simulator 19
Virtual Sound Canvas DXi 48

MEMO

MEMO

MEMO



This product complies with the requirements of European Directive 89/336/EEC.

For EU Countries

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

For the USA

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.

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.

NOTICE

For Canada

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.

DECLARATION OF CONFORMITY Compliance Information Statement

For the USA

Model Name : UA-4FX
Type of Equipment : USB Audio Capture
Responsible Party : Roland Corporation U.S.
Address : 5100 S. Eastern Avenue Los Angeles, CA 90040-2938
Telephone : (323) 890 3700

Information

When you need repair service, call your nearest EDIROL/Roland Service Centre or authorized EDIROL/Roland representative in your country as shown below.

EDIROL

EUROPE

EDIROL (Europe) Ltd.
Studio 3.4 114 Powder 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 100 621

Italia
TEL: 02 93778329

Roland

NORTH AMERICA

CANADA

Roland Canada Music Ltd.
(Head Office)
480 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 90040-2958,
U. S. A.
TEL: (323) 890 3700

AFRICA

EGYPT

Al Fanny Trading Office
9, EBN Hagar Al Askalany
Street,
ARD El Golf, Heliopolis,
Cairo 11341, EGYPT
TEL: 20-2-417-1828

REUNION

Maison FO - YAM Marcel
25 Rue Jules Hermann,
Chaudron - BP79 971
Sic Clotilde Cedex,
REUNION ISLAND
TEL: (0262) 218-429

SOUTH AFRICA

Paul BothnerPTY.Ltd.
Royal Cape Park, Unit 24
Londondray Road, Ottery 7800
Cape Town, SOUTH AFRICA
TEL: (021) 799 4900

ASIA

CHINA

Roland Shanghai Electronics Co.Ltd.
5F, No.1500 Pingliang Road
Shanghai 20090, 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 Park, 39
Chatham Road South, T.S.T.
Kowloon, HONG KONG
TEL: 2333 1863

INDIA

Ravera Digitech (India) Pvt. Ltd.
409, Niranjan Kenna
Mahalaxmi Flats Compound
Off. Dr. Edwin Moses Road,
Mumbai-400011, INDIA
TEL: (022) 2493 9051

INDONESIA

PT Citra Inti Rama
Jl. Cideng Timur No. 151-150
Jakarta Pusat
INDONESIA
TEL: (021) 6324170

KOREA

Cosmos Corporation
1461-9, Seocho-Dong,
Secho 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. Yungapog & Co. Inc.
339 Gil J. Puyat Avenue
Makati, Metro Manila 1200,
PHILIPPINES
TEL: (02) 899 9801

TAIWAN

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

THAILAND

Thera Music Co., Ltd.
330 Verg Nakorn-Kameng, Soi
2, Bangkok 10100, THAILAND
TEL: (02) 2248821

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
Wildey, 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 Fany II S.A.
Rut.: 96.919.420-1
Nataliel Cox #739, 4th Floor
Santiago - Centro, CHILE
TEL: (02) 688-9540

COLOMBIA

Centro Musical Ltda.
Cra 43 B No.25 A 41 Bodegosa 9
Medellin, Colombia
TEL: (574) 8312529

CURACAO

Zaeldania Music Center Inc.
Orionweg 30
Curacao, Netherland Antilles
TEL: (593)5928666

DOMINICAN REPUBLIC

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

ECUADOR

Mus Musica
Rumichaca 822 y Zurama
Guayaquil - Ecuador
TEL:(593-4)203264

GUATEMALA

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

HONDURAS

Almeida Pajano 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 Lamuntin
Martinique F.W.I.
TEL: 596 596 426860

Gigamusik S.A.R.L

10 Rue De La Folie
97200 Fort De France
Martinique F.W.I.
TEL: 596 596 715222

MEXICO

Casa Veerkamp, s.a. de cv.
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)277-2587

PERU

Audionet
Distribuciones Musicales S.A.C
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 ed'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 Centre Europe N.V.
Houstraat 3, B-2260, Cevel
(Westerlo) BELGIUM
TEL: (045) 93 493 91 00

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 6200

FINLAND

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

GERMANY

Roland Elektronische Musikinstrumente HmbH.
Obstrasse 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 Tokobalint,
HUNGARY
TEL: (23) 511011

IRELAND

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

ITALY

Roland Italy S.p. A.
Viale delle Industrie 8,
20020 Aresse, 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.
U. L. 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 Georgheni,
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: (093) 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 Hingen,
SWITZERLAND
TEL: (061) 927-8383

UKRAINE

TIC-TAC
Mira Str, 19/108
P.O. Box 180
295400 Munkachevo,
UKRAINE
TEL: (0331) 414-40

UNITED KINGDOM

Roland (UK) Ltd.
Atlantic Close, Swansea
Enterprise Park, SWANSEA
SA7 9PJ,
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, Diagorou Street, Nicosia,
CYPRUS
TEL: (022) 66-9426

IRAN

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

ISRAEL

Haliit P. Greenspoon & Sons Ltd.
8 Retzif Ha'alya Hashnyia St.
Tel-Aviv-Yafa ISRAEL
TEL: (03) 6823666

JORDAN

MUSIC HOUSE CO. LTD.
FREDDY FOR MUSIC
P. O. Box 922846
Amman 11192 JORDAN
TEL: (06) 5692646

KUWAIT

EKASA HUSAIN AL-YOUSIFI & SONS CO.
Abdullah Salem Street,
Safa, KUWAIT
TEL: 243-6399

LEBANON

Chabine S.A.L.
Gerge Zeidan St, Chabine
Bldg., Achrafieh, P.O.Box: 16-
5857
Beirut, LEBANON
TEL: (01) 20-1441

OMAN

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

QATAR

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

SAUDI ARABIA

adwiah Universal Electronics APL
Corniche Road, AlDassary
Bldg., 1st Floor, Alkhobar,
SAUDI ARABIA
P.O.Box 2154, Alkhobar 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

ZUHAI 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.
Zabel Road, Al Sherooq Bldg.,
No. 14, Grand Floor, Dubai,
U.A.E.
TEL: (04) 3360715