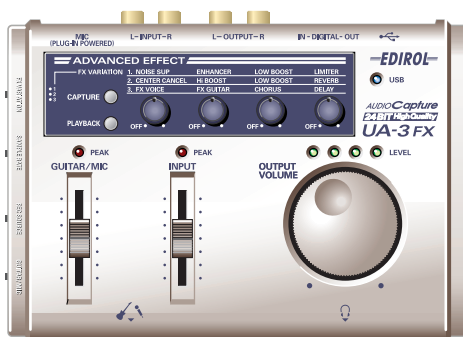


AUDIO Capture **24 BIT High Quality** **UA-3 FX**

Owner's Manual

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



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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 are 
 - Damp (e.g., baths, washrooms, on wet floors); or are 
 - Humid; or are
 - Exposed to rain; or are
 - Dusty; or are
 - Subject to high levels of vibration.

⚠ WARNING

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



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.

Maintenance

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

Additional Precautions

- Unfortunately, it may be impossible to restore the contents of data that was stored on a storage device (e.g., hard disk) 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.
- Unauthorized duplication, reproduction, hiring, and lending prohibited.
- 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.
- 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.

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.
- * 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 and Macintosh are registered trademark of Apple Computer, Inc.
- * MacOS is a trademark of Apple Computer, Inc.
- * All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

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Features of the UA-3FX

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.
- 32 kHz / 44.1 kHz / 48 kHz 24-bit high-quality sound
AF (Adaptive Focus) technology allows high-quality recording, with even greater sonic detail for delicate piano sounds and even more powerful impact for dynamic orchestral sounds.
- Digital (optical) input/output jacks support sampling frequencies of 32 kHz / 44.1 kHz / 48 kHz
You can capture audio signals from CD, MD, or DAT with no loss in quality.
- * *You will need to use Windows XP or Mac OS X in order to utilize 24-bit audio.*
- * *If you install the dedicated UA-3FX driver that is included, you will also be able to use 24-bit audio with other operating systems.*

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

- 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-3FX transforms your computer into an AV processor! The Center Cancel effect lets your computer work as a karaoke system!
- The UA-3FX is ideal for recording guitar or vocals. Performance audio processing includes seven types of FX Voice effects that can transform your vocals. FX Guitar effects carefully selected from the BOSS line of processors used by guitarists everywhere let you add anything from tasteful tones to aggressive distortion, as well as effects such as chorus and delay.

Compact size, ideal for desktop use or portability

The UA-3FX 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-3FX 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 Intervideo Corporation's WinDVD Version 5 or later, sold separately.*

Check the contents of the package

The UA-3FX comes with the following items. When you open the package, check that you have all of these items. If any are missing, contact the dealer where you purchased the UA-3FX.

■ **UA-3FX**



■ **USB cable**

Use this to connect the UA-3FX's USB connector to the USB connector of your computer. For details on connections, refer to **"Getting Connected and Installing Drivers"** (Windows → p. 14/Macintosh → p. 26).

You must use the included USB cable.

■ CD-ROM

The CD-ROM also contains a driver for using the UA-3FX in Advanced mode.

- * You must read the separate license agreements before opening the included CD-ROM.
- * Do not touch the underside (the data side) of the disc or allow it to be scratched. Doing so may make the data unreadable. If the disc gets dirty, use a commercially available CD cleaner to clean it.
- * You must read the various Readme files on the CD-ROM. The most recent supplementary information will be included in the Readme files.
- * Do not play back the CD-ROM in a conventional audio CD player. Doing so will produce a loud noise that may damage your hearing and your speakers.

■ Owner's manual

This is the manual you are reading. When using the UA-3FX, keep this at hand for reference.

■ License agreements

These license agreements grant you permission to use certain software whose copyrights are the property of Roland Corporation. You must read these before opening the CD-ROM package. The terms of the license may also be displayed in the course of installing the software; you must read these as well.

You will need to provide the following items yourself

External amp, speakers, headphones, and mic are not included

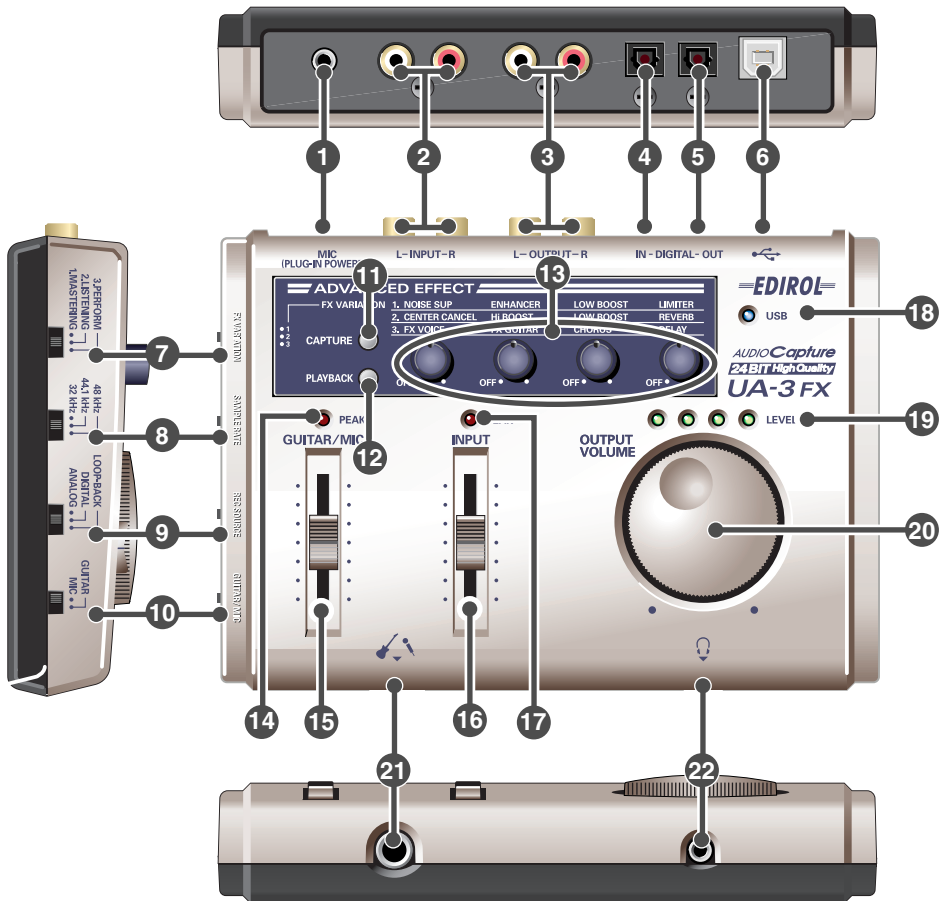
You will need an external amp/speaker system or headphones in order to hear the sound that is output from the UA-3FX; these items are not included. You will also need to connect a mic to the UA-3FX in order to input audio; this too must be provided separately.

MD or DAT recorder, and cables for digital input/output are not included

You can use a digital recorder (e.g., MD or DAT) to make digital recordings, but the digital recorder and the necessary cables are not included; you will need to obtain them separately.

Names of things and what they do

Panel



1 Mic input jack (plug-in powered mic)

A miniature condenser mic that requires a power supply can be connected to this jack. You must use a mic that supports plug-in power. This jack provides a 3.3 V power supply. Use the **guitar/mic input adjustment slider** (15) to adjust the volume.

2 Line input jacks

Connect these when you want to input audio from an audio device or MIDI sound module. Use the **line input adjustment slider** (16) to adjust the volume.

3 Line output jacks

Connect these jacks to your audio system, such as amplified speakers or a stereo set. Use the **line output volume** (20) control to adjust the volume that is output from these jacks.

4 Digital input connector (optical)

Connect this when you want to input digital audio from an audio device such as a CD/MD/DAT. Use an optical digital cable for connection.

5 Digital output connector (optical)

Connect this when you want to output audio to a digital device such as an MD or DAT, or to a Dolby Digital or DTS format decoder amp. Use an optical digital cable for connection.

6 USB connector

Use the included USB cable to connect this to your computer so that audio signals can be transferred.

7 Effect variation switch

This selects the type of effect (1. MASTERING / 2. LISTENING / 3. PERFORM). For details, refer to “Applying effects” (p. 43).

8 Sampling frequency select switch

This selects the sampling frequency for recording/playing audio data. After you switch the sampling frequency, you will need to disconnect and then reconnect the USB cable that connects the UA-3FX to your computer.

9 Recording source select switch

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

ANALOG	The analog audio signal from the mic input jack or line input jacks will be sent to your computer.
DIGITAL	The signal from the digital input connector will be sent to your computer. * If DIGITAL is selected, you will not hear the sound from your computer. * If DIGITAL is selected but no signal is being input from the digital input connector, the UA-3FX will operate as if ANALOG was selected.
LOOP-BACK	The audio signal output from your computer via USB will be sent through the UA-3FX and returned to your computer.

10 Input select switch

Set this according to the device that you connect to the **guitar/mic input jack** (21). Set the switch to **GUITAR** if you connect a guitar, or to **MIC** if you connect a mic.

* Turn down the volume of your connected equipment before changing the position of this switch.

11 Capture button (Record effect)

If you want to apply effects to the audio signal being recorded on your computer, press the **capture button** to turn it on (lit red).

When the **capture button** is lit in red, pressing it turns off the effect and extinguishes the indicator. When the effect is off, the sound unprocessed by the effect will be recorded. (Refer to → "Applying effects to the recording" (p. 44))

12 Playback button (Playback effect)

If you want to apply effects to the audio signal being played back by your computer, press the **playback button** to turn it on (lit red).

You will hear the effect applied to the audio signal that was input, but the effect is not applied to the recorded audio signal. If you want to record the sound processed by the effect, turn on the capture button.

When the **playback button** is lit in red, pressing it turns off the effect and extinguishes the indicator. When the effect is off, you will hear the playback "as-is"; i.e., unprocessed by the effect.

(Refer to → "Applying effects to the playback" (p. 44))

13 Effect knobs

These adjust the depth of the effects.

For details, refer to "Applying effects" (p. 45).

14 Guitar/mic input peak indicator

This will light in red if the sound being input from the **mic input jack** (plug-in powered mic) (1) or the **guitar/mic input jack** (21) is too loud. If this indicator lights in red, adjust the volume by lowering the **guitar/mic input adjustment slider** (15).

15 Guitar/mic input adjustment slider

This adjusts the volume that is input from the **mic input jack** (plug-in powered mic) (1) or the **guitar/mic input jack** (21).

16 Line input adjustment slider

This adjusts the volume that is input from the **line input jacks** (2).

17 Line input peak indicator

This will light in red if the sound being input from the **line input jacks** (2) is too loud. If this indicator lights in red, adjust the volume by lowering the **line input adjustment slider** (16).

18 USB indicator

This will light in blue if the UA-3FX is connected to your computer via the USB cable and the computer has recognized the UA-3FX correctly.

19 Output level indicators

These indicate the audio output status. The number of LEDs that light will depend on the volume that is output from the **digital output connector** (5).

* Turning the **line output volume** (20) toward the left to lower the volume will not change the number of LEDs that light.

20 Line output volume

This adjusts the volume that is output from the **headphone jack** (22) and the **line output jacks** (3). Turn this toward the left to decrease the volume, or toward the right to increase the volume.

21 Guitar/mic input jack

You can connect a guitar or mic here.

Use the **guitar/mic input adjustment slider** (15) to adjust the volume.

22 Headphone jack

You can connect headphones here.

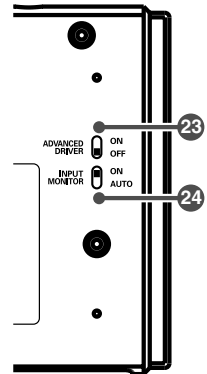
Even if headphones are connected, sound will still be output from the **line output jacks** (3).

23 ADVANCED (mode select) switch

This switches the driver mode.

If you are playing back 5.1 channel audio, or using WDM or ASIO compatible software such as SONAR, Cubase, or Logic Audio that is able to record/play/edit high-quality audio, turn this switch ON. In order to use “**Advanced mode**” (p. 14), you will need to install the UA-3FX's dedicated driver from the included CD-ROM. (→ “**Advanced mode and Standard driver mode**” (Windows → p. 14/Macintosh → p. 26))

If you change the setting of this switch, you will need to disconnect and then reconnect the USB cable that connects the UA-3FX to your computer.



24 Input monitor switch

This selects whether or not the audio signals that are input through the **mic input jack** (plug-in powered mic) (1), **digital input connector** (4), **guitar/mic input jack** (21), and **line input jacks** (2) will be output to the **headphone jack** (22) and **line output jacks** (3).

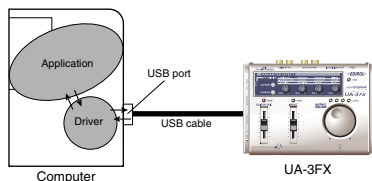
If this switch is ON, the input signals will be output. If you are using the ASIO driver in Advanced mode, you can set this switch to AUTO so that your software can switch input monitoring on/off. (→ “**Using ASIO Direct Monitor**” (p. 41))

If you are not using the ASIO driver, this will be off; the input signals will not be output. Normally, you should leave this ON.

Getting Connected and Installing Drivers (Windows)

If you are using a Macintosh computer, please proceed to “**Getting Connected and Installing Drivers (Macintosh)**” (p. 26).

What is a driver?



A “driver” is software that transfers data between the UA-3FX and application software running on your computer, when your computer and the UA-3FX are connected by a USB cable. The driver sends data from your application to the UA-3FX, and from the UA-3FX to your application.

Advanced mode and Standard driver mode

The UA-3FX has two operating modes, **Advanced mode** and **Standard driver mode**, and a different driver is used by each mode.

■ Advanced mode

The UA-3FX will operate in this mode when the **ADVANCED** mode is turned **ON**. (→ Refer to “**ADVANCED (mode select) switch**” (p.



13)) The special driver included on the CD-ROM will be used,

allowing audio to be recorded/played/edited with high quality and stable timing.

In Advanced mode, audio signals can be transferred between the UA-3FX and the computer at a resolution of **16 / 24 bits** and sampling frequencies of **32 / 44.1 / 48 kHz**. Select this mode if you are using an application that allows high-quality audio recording/playback/editing, such as an application that supports **24 bit audio** or an **ASIO-compatible application** (e.g., Cubase VST, Logic Audio, or Digital Performer).

(→ “**Installing the special driver**” (p. 16))

ASIO (Steinberg Audio Stream In/Out Interface)

This is an audio interface protocol promoted by the Steinberg Corporation. If the UA-3FX is used with ASIO-compatible software, the audio synchronization will be more accurate, allowing you to utilize a more sophisticated music production environment.

■ Standard driver mode

The UA-3FX will operate in this mode when the **ADVANCED mode** is turned **OFF**. (→Refer to “**ADVANCED (mode select) switch**” (p. 13)) The standard USB audio driver included with Windows will be used. In standard driver mode, audio signals are transferred between the UA-3FX and the computer at a resolution of **16 / 24 bits** and sampling frequencies of **32 / 44.1 / 48 kHz**. Select this mode if you are using an application that uses Window’s own functionality, such as an application that uses the computer’s CD-ROM drive to play back CD-audio, or an application that uses the software synthesizer included with Windows.
(→ “**Installing the OS-standard driver**” (p. 54))



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

Switching between Advanced mode and Standard driver mode

If you first install both the special driver and the standard driver, you will be able to switch between Advanced and Standard driver modes by operating the UA-3FX’s **ADVANCED (mode select) switch**.

* *In order for the setting of the **ADVANCED (mode select) switch** to take effect, you must exit all sequencer software and other applications that use the UA-3FX, and re-connect the UA-3FX.*

Installing the special driver

The installation procedure will differ depending on your system.

Please proceed to one of the following sections, depending on the system you use.

- Windows XP users(p. 16)
- Windows 2000 users(p. 19)
- Windows Me/98 users.....(p. 21)

■ Windows XP users

1

With the UA-3FX disconnected, start up Windows.

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

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

2

Open the **System Properties** dialog box.

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

MEMO

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

3

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

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

4

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

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

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

After installing the driver, restore the original setting.

5

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

6

Exit all currently running software (applications).

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

7

Prepare the CD-ROM.

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

8

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

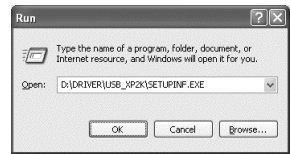
Open the “**Run...**” dialog box.

9

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

D:\Driver\USB_XP2K\SETUPINF.EXE

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

**10**

The **SetupInf** dialog box will appear.

You are now ready to install the driver.

11

Set the UA-3FX's **ADVANCED (mode select) switch** to the **ON** position.

12

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

MEMO

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

13

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

Make sure that the screen indicates “**EDIROL UA-3FX**”, select “**Install from a list or specific location (Advanced)**”, and click [Next].

14

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

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

15

Make sure that the “**Model**” field indicates “**EDIROL UA-3FX**”, and click **[Next]**.

Driver installation will begin.

- * If the “**Driver Signing Options**” setting is not set to “**Ignore**” in step 4, the **Install Hardware** dialog box will appear. If the **[Continue Anyway]** button is displayed, click **[Continue Anyway]** to continue the installation. If you are unable to continue, click **[STOP Installation]** or **[OK]**, and try the driver installation once again from step 1.

16

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

Click **[OK]**.



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

17

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

D:\Driver\USB_XP2K\WDM

- * The drive name “**D:**” may be different for your system. Specify the drive name of your CD-ROM drive.
- * If the “**Driver Signing Options**” setting is not set to “**Ignore**” in step 4, the **Install Hardware** dialog box will appear. Click **[Continue Anyway]** to continue the installation.

18

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

Verify that “**EDIROL UA-3FX**” is displayed, and click **[Finish]**.

19

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

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

Next, you need to make the driver settings.

(→ “**Settings and checking**” (p. 22))

■ Windows 2000 users

1

With the UA-3FX disconnected, start up Windows.

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

2

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

3

Open the **System Properties** dialog box.

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

4

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

Open the Driver Signing Options dialog box.

5

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

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

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

After installing the driver, restore the original setting.

6

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

7

Exit all currently running software (applications).

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

8

Insert the CD-ROM.

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

9

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

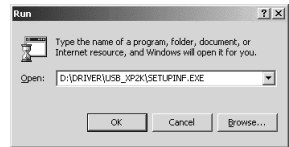
Open the “**Run...**” dialog box.

10

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

D:\DRIVER\USB_XP2K\SETUPINF.EXE

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

**11**

The **SetupInf** dialog box will appear.

You are now ready to install the driver.

12

Set the UA-3FX’s **ADVANCED (mode select) switch** to the **ON** position.

13

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

MEMO

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

- * If the “**File signature verification**” setting was not set to “**Ignore**” in step 5, a dialog box will inform you that the digital signature was not found. If the **[Yes]** button is displayed, click **[Yes]** to continue installation. If you are unable to continue, click **[No]** or **[OK]**, and try the driver installation once again from step 1.

14

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

Click **[OK]**.

MEMO

The **Insert Disk** dialog box may not appear. In that case, proceed to **step 15**.

15

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

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

D:\DRIVER\USB_XP2K

- * The drive name “**D:**” may be different for your system. Specify the drive name of your CD-ROM drive.
- * If the “**File signature verification**” setting was not set to “**Ignore**” in step 5, a dialog box will inform you that the digital signature was not found. Click **[Yes]** to continue installation.

16

The “**Find New Hardware Wizard**” may be displayed.

Verify that “**EDIROL UA-3FX**” is displayed, and click [**Finish**].

If the “**Find New Hardware Wizard**” dialog box is not displayed, proceed to **step 17**.

17

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

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

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

Next, you need to make the driver settings.

(→ “**Settings and checking**” (p. 22))

■ Windows Me/98 users

1

With the UA-3FX disconnected, start up Windows.

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

2

Exit all currently running software (applications).

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

3

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

4

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

5

In the “**Run...**” dialog box, input the following into the “**Open**” field, and click [**OK**].

D:\DRIVER\USB_ME98\SETUPINF.EXE

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

6

The **SetupInf** dialog box will appear.

You are now ready to install the driver.

7

Set the UA-3FX's **ADVANCED (mode select) switch** to the **ON** position.

8

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

9

The driver will be installed automatically.

10

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

* *If a message recommends that you restart Windows, restart Windows as directed.*

Next, you need to make the driver settings.
(→ “**Settings and checking**” (p. 22))

Settings and checking

■ Specifying the audio input/output destination

Windows XP/2000/Me users

1

Open **Control Panel**.

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

Windows XP

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

2

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

Windows XP

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

MEMO

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

Windows 2000/Me

In **Control Panel**, double-click the **Sounds and Multimedia** icon to open the “**Sounds and Multimedia Properties**” dialog box.


MEMO

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

3

Click the **Audio** tab.

4

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

MEMO

For details on **Advanced mode** and **Standard Driver mode**, refer to “**Advanced mode and Standard driver mode**” (p. 14).

	Advanced mode
Sound playback	EDIROL UA-3FX
Sound recording	EDIROL UA-3FX

5

Close the **Sounds and Audio Devices Properties** dialog box.

Click **OK** to complete the settings.

This completes audio input/output destination settings.

Windows 98 users

1

Open **Control Panel**.

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

2

Open the **Multimedia Properties** dialog box.

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

3

Click the **Audio** tab.

4

Specify the “**Preferred device**”.

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

	Advanced mode
Playback	EDIROL UA-3FX
Recording	EDIROL UA-3FX

MEMO

For details on **Advanced mode** and **Standard Driver mode**, refer to “**Advanced mode and Standard driver mode**” (p. 14).

5

Close the **Multimedia Properties** dialog box.

Click **OK** to complete the settings.

This completes audio input/output destination settings.

Check whether there is sound

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

Playing back the sample data

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

MEMO

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

1

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

2

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

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

3

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


MEMO

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



4

Play back the sample data.

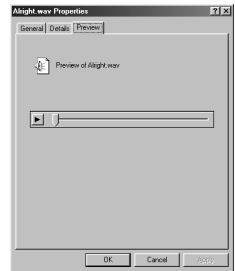
Click the **Preview** tab, and then click the  button.

MEMO

If it did not play back correctly, refer to “**Troubleshooting**” (p. 60) to determine the reason. This section contains information on how to solve problems such as no sound, or failure to play back correctly.

NOTE

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



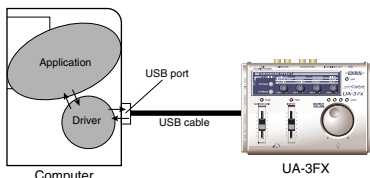
Was the sample data played back?

If it was played back correctly, this means that the computer and the UA-3FX are connected correctly, and that the drivers have been installed correctly.

Getting Connected and Installing Drivers (Macintosh)

If you are using a Windows computer, please proceed to "**Getting Connected and Installing Drivers (Windows)**" (p. 14).

What is a driver?



A “driver” is software that transfers data between the UA-3FX and application software running on your computer, when your computer and the UA-3FX are connected by a USB cable. The driver sends data from your application to the UA-3FX, and from the UA-3FX to your application.

Advanced mode and Standard driver mode

The UA-3FX has two operating modes, **Advanced mode** and **Standard driver mode**, and a different driver is used by each mode.

■ Advanced mode

The UA-3FX will operate in this mode when the **ADVANCED mode** is turned **ON**. (→ Refer to "**ADVANCED (mode select) switch**" (p. 13))

ADVANCED DRIVER  **ON**
OFF

The special driver included on the CD-ROM will be used, allowing audio to be recorded/played/edited with high quality and stable timing.

In Advanced mode, audio signals can be transferred between the UA-3FX and the computer at a resolution of **16 / 24 bits** and sampling frequencies of **32 / 44.1 / 48 kHz**. Select **Advanced mode** if you are using an application that is able to record/playback/edit high-quality audio, such as a **24 bit audio application** or an **ASIO-compatible application** such as Cubase VST, Logic Audio, and Metro.

In Advanced mode, the UA-3FX cannot play back audio data (audio CDs or warning sounds) from the Macintosh sound manager.

(→ "**Installing the special driver**" (Windows p. 16, Macintosh p. 28))

ASIO (Steinberg Audio Stream In/Out Interface)

This is an audio interface protocol promoted by the Steinberg Corporation. If the UA-3FX is used with ASIO-compatible software, the audio synchronization will be more accurate, allowing you to utilize a more sophisticated music production environment.

■ Standard driver mode

The UA-3FX will operate in this mode when the **ADVANCED mode** is turned **OFF**. (→ Refer to "**ADVANCED (mode select) switch**" (p. 13))



The standard USB audio driver included with MacOS will be used. In standard driver mode, audio signals are transferred between the UA-3FX and the computer at a resolution of **16 / 24 bits** and sampling frequencies of **32 / 44.1 / 48 kHz**. Select this mode if you are using an application that uses MacOS's own functionality, such as an application that uses the computer's CD-ROM drive to play back CD-audio, or an application that uses the software synthesizer included with MacOS. The standard driver included with MacOS does not support ASIO.

(→ "**Installing the OS-standard driver**" (p. 54))

Switching between Advanced mode and Standard driver mode

If you first install both the special driver and the standard driver, you will be able to switch between Advanced and Standard driver modes by operating the UA-3FX's **ADVANCED (mode select) switch**.

** In order for the setting of the **ADVANCED (mode select) switch** to take effect, you must exit all sequencer software and other applications that use the UA-3FX, and re-connect the UA-3FX.*

The installation procedure will differ depending on your system.

Please proceed to one of the following sections, depending on the system you use.

- Mac OS X users(p. 28)
- Mac OS 9 users.....(p. 31)

Mac OS X users

■ Installing the special driver

1

Disconnect all USB cables other than those for your keyboard and mouse, and restart your Macintosh.

2

Prepare the CD-ROM.

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

3

In the **Driver (Mac OS X)** folder of the CD-ROM, double-click **UA3FXUSBDriver.pkg**.

4

In the **Authenticate** dialog box, input the password and click **[OK]**.

5

The display will indicate “**Welcome to the EDIROL UA-3FX USB Driver Installer**”.

Click **[Continue]**.

6

The display will indicate “**Select a Destination**”.

Click the drive in which the operating system is installed to select it, and then click **[Continue]**.

7

The display will indicate “**Easy Install**”.

Click **Install** or **Upgrade**.

8

The display will indicate “**Installing this software requires you to restart your computer when the installation is done**”.

Click **[Continue Installation]**.

9

The display will indicate “**The software was successfully installed**”.

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

This completes installation of the UA-3FX driver.

■ Setting the audio device

1

Set the UA-3FX's **ADVANCED (mode select) switch** to the **ON** position.

2

Use the USB cable to connect the UA-3FX to your Macintosh.

3

Open **“System Preferences”** and click **“Sound”**.

MEMO

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

4

In the **Sound Effects** tab, set **“Play alerts and sound effects through”** to **“EDIROL UA-3FX 44.1kHz”**.

MEMO

Although **“44.1 kHz”** is used for the purpose of explanation within this document, this changes depending on the actual setting of the **sampling frequency** select switch on your UA-3FX.

5

In the **Output** tab, set **“Choose a device for sound output”** to **“EDIROL UA-3FX 44.1kHz”**.

6

In the **Input** tab, set **“Choose a device for sound input”** to **“EDIROL UA-3FX 44.1kHz”**.

When you have finished making settings, close the dialog box.

MEMO

Once set this way, all sounds from your Macintosh (including audio alerts) will be output only through the UA-3FX, not from the speakers of your Macintosh.

■ When using the UA-3FX with your software

Please note the following points

Before using the UA-3FX with your software, please note the following points.

- * *Connect the UA-3FX to your computer via a USB cable before you start up your sequencer or other software.*
- * *Do not disconnect the UA-3FX's USB cable while your sequencer or other software is running.*
- * *Exit your sequencer software before you unplug the UA-3FX's USB cable.*
- * *Leave the Sleep function of your Macintosh turned off.*
- * *The UA-3FX will not work in the Classic environment of Mac OS X. Use the UA-3FX when the Classic environment is not running.*

Select **"EDIROL UA-3FX 44.1kHz"** in the audio driver setting of your software.
For details, refer to the manual that came with your software.



Although **"44.1 kHz"** is used for the purpose of explanation within this document, this changes depending on the actual setting of the **sampling frequency select switch** on your UA-3FX.

Mac OS 9 users

■ Installing the UA-3FX driver

1

With the UA-3FX 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 a virus checker or similar software, be sure to exit this as well.

3

Prepare the CD-ROM.

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

4

Double-click the **UA-3FX 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]**.

NOTE

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.

8

Use a USB cable to connect the UA-3FX to your computer before you start up your software.

9

If your software allows you to make audio input/output settings, choose **UA-3FX**.

■ Installing the ASIO driver

This section explains how to install the ASIO driver that allows the UA-3FX to be used by your sequencer software or audio editing software.

The UA-3FX cannot play back audio data from the Macintosh's sound manager (such as audio CDs and alert sounds).

The ASIO driver of the UA-3FX 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.)

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

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

ASIO-compatible software		Driver to use
ASIO2.0-compatible	24 bit compatible	
X	X	UA-3FX ASIO 1.0 16 bit
X	O	UA-3FX ASIO 1.0 24 bit
O	X	UA-3FX ASIO 2.0 16 bit
O	O	UA-3FX ASIO 2.0 24 bit

1

From the **Driver E (Mac OS 9) - ASIO** folder of the CD-ROM, copy [**UA-3FX 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-3FX ASIO1.0 16bit**] as the **ASIO Device**.



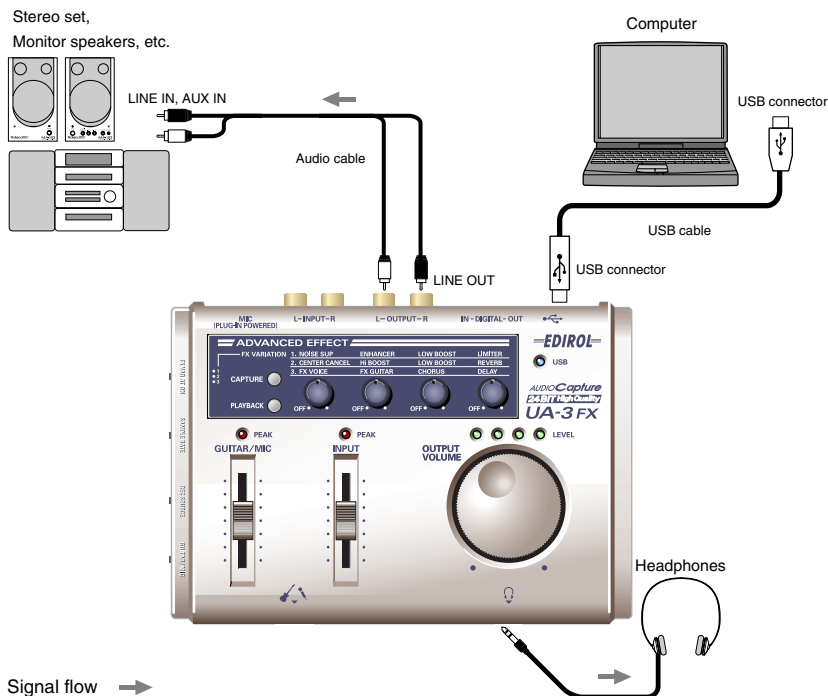
The Audio setting dialog box will be named differently depending on your software. For details refer to the manual of your software.

Basic use

This chapter explains various ways in which you can connect and use the UA-3FX.

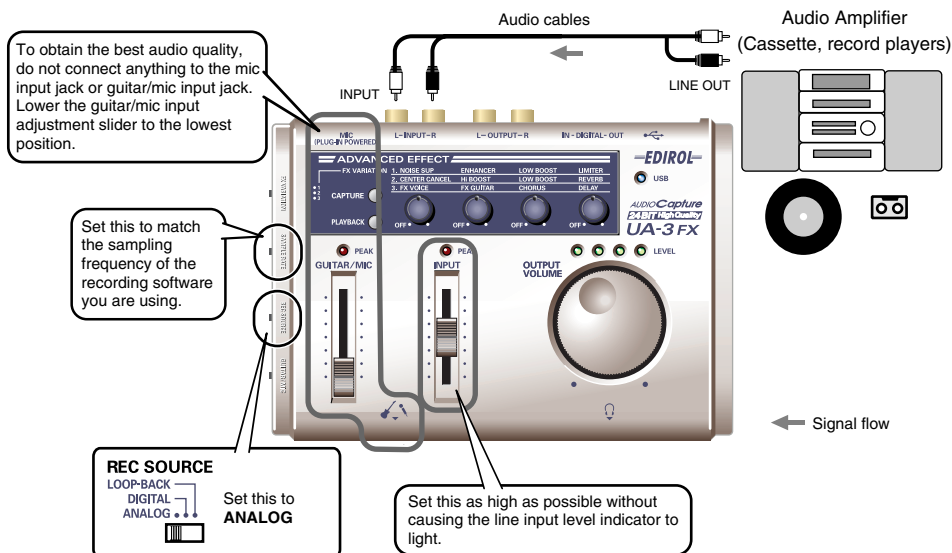
- * To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before disconnecting the USB cable.

You can connect headphones and/or monitor speakers as shown in the diagram, and monitor the playback of your application, or the sound of instruments or audio devices connected to the UA-3FX.



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**.

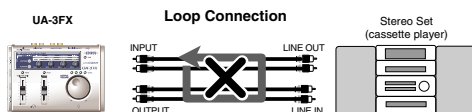
Turn down the volume of your connected monitor speakers (or similar equipment) before you change the setting of the **recording source select switch**.

Line input adjustment slider

Use this to adjust the input level.

In order to obtain the best audio quality, raise the slider until the level is as high as you can get it without causing the LED located above the slider to light in red.

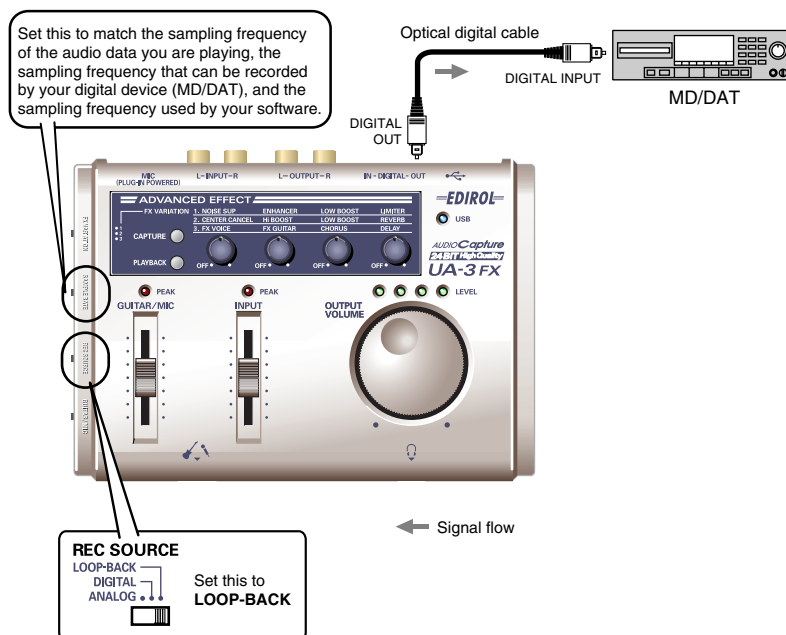
Be careful of looped connections



If you connect the UA-3FX 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-3FX 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**. With the LOOP-BACK setting, audio signals will not be input from the various analog inputs. This means that only the sound from the computer will be output from the digital output connector, and no noise will enter the output.

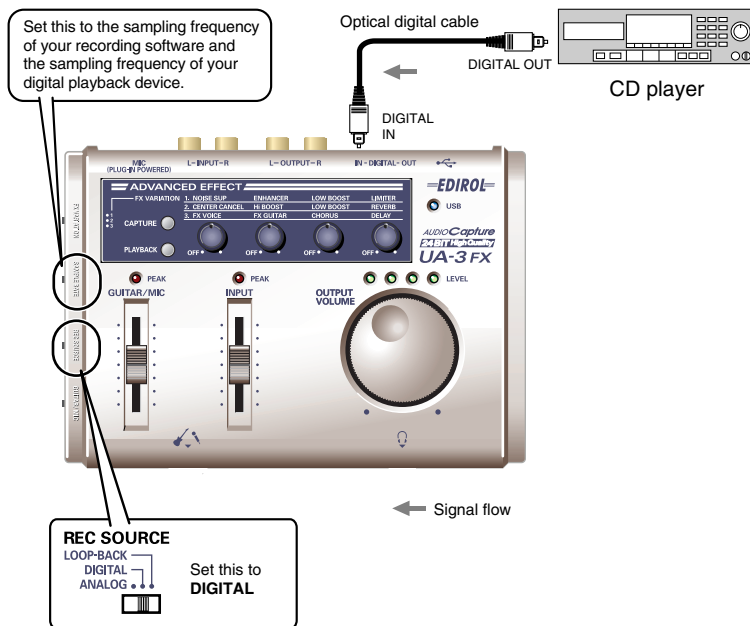
Turn down the volume of your connected monitor speakers (or similar equipment) before you change the setting of the **recording source select switch**.

Other notes

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

- * The UA-3FX does not support professional digital audio device formats.
- * The UA-3FX cannot mix the input signals from the various input jacks with the input signal from the digital input jack and output them from the digital output jack.

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.

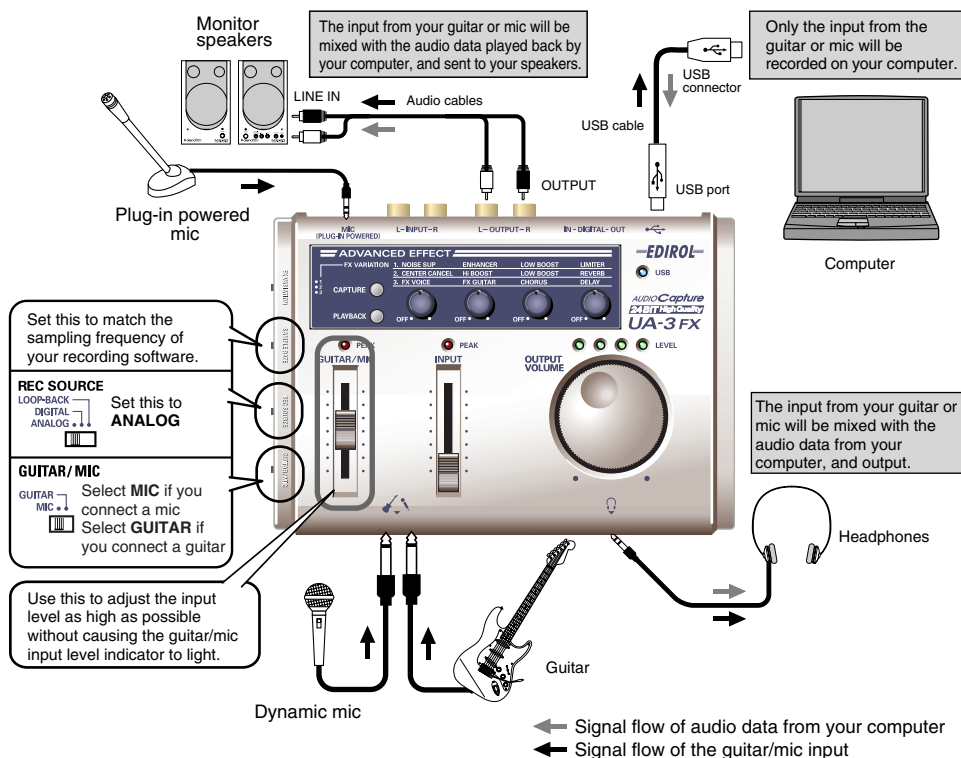
Recording source select switch

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-3FX 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-3FX will not allow this data to be recorded on your computer. (The sound will be output from the line output jacks and headphone jack.)
- * If you want to input sound from the line input jacks or the guitar/mic input jack, refer to "Recording a cassette tape or LP into your computer" (p. 32). The UA-3FX cannot mix the sounds from these inputs with the input from the digital input connector for recording.
- * If no signal is being received from the digital input connector even though the recording source select switch is set to DIGITAL, the UA-3FX 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 adjustment slider

Use this to adjust the input level. If the LED located above the slider lights in red, use the slider to lower the input level. To obtain the best audio quality, raise the slider as high as possible without causing the LED 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.

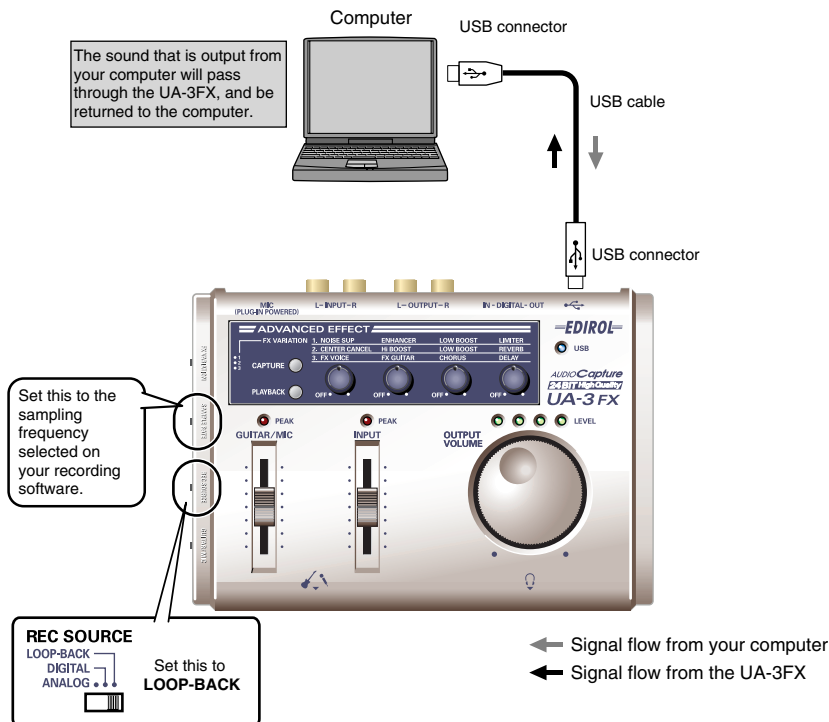
Types of mic

Most mics are either dynamic mics or condenser mics; either type of mic can be connected to the UA-3FX. The UA-3FX also supports “plug-in powered mics,” a type of miniature condenser mic designed for connection to the mic input of a computer or the recording jack of an MD (Mini Disc) recorder.

Only a 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

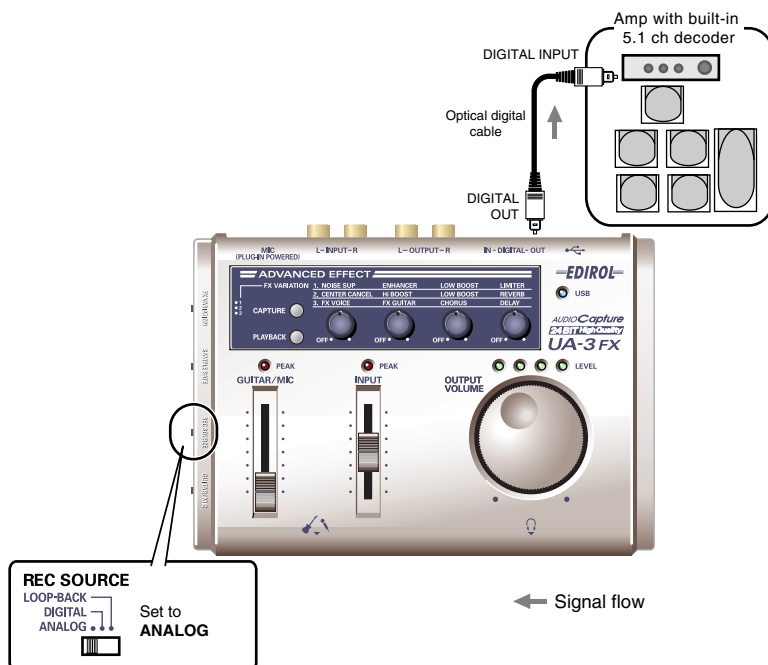
Set this to **LOOP-BACK**.

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

Before you continue, make settings for Advanced mode.

For details on Advanced mode, refer to “**Advanced mode**” (p. 14).



The UA-3FX's 5.1 channel digital output can be played back by an amp that has a built-in 5.1 channel decoder.

- During 5.1 channel playback, the output level indicators will light successively from the left.
- 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.

Adjusting the audio latency

When using the UA-3FX 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.

1. As described in “**Opening the special driver settings dialog box**” (p. 42), open the “Driver Settings” dialog box.
2. Adjust the driver buffer size.

The following setting will produce the shortest latency.

Windows:

Set “**Audio Buffer Size**” to the far left (Min).

Macintosh:

Set “**Buffer Size**” to the far left (Min).

3. Click [OK] to close the driver settings dialog box.
4. Restart the application that is using the UA-3FX.

If you are using an application that has a function for testing audio devices, get it to perform its tests.

5. Play back audio data on your application.

If interruptions occur in the sound, repeat this procedure, and gradually increase the **buffer size** specified in **step 2** until interruptions no longer occur.

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

Using ASIO Direct Monitor

If you are using the UA-3FX in **Advanced mode** from an ASIO 2.0 compatible application, the UA-3FX’s **Input Monitor switch** can be controlled from your ASIO 2.0 compatible application.

1. As described in “**Opening the special driver settings dialog box**” (p. 42), open the “**Driver Settings**” dialog box.
2. Make the following settings.
Check the “**Use ASIO Direct Monitor**” check box.
3. Click [OK] to close the driver settings dialog box.

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

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

Opening the special driver settings dialog box

If using Windows:

1. Open the “Control Panel” and double-click “**EDIROL UA-3FX**”.
2. The “**EDIROL UA-3FX Driver Settings**” dialog box will appear.
 - * In Windows XP, click “**Switch to classic view**” to switch the display to the classic view. **EDIROL UA-3FX** will not be displayed unless the classic view is selected.
 - * In Windows Me, click “**View all Control Panel options**”.

If using Macintosh:

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

*

Applying effects

The UA-3FX's effects provide an easy way to change the character of the sound, and are a great convenience for audio editing. Three 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 “**Basic use**” (p. 33).

Advanced effects

■ Advanced 1 Three ways to use

1. MASTERING

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

2. LISTENING

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

3. PERFORM

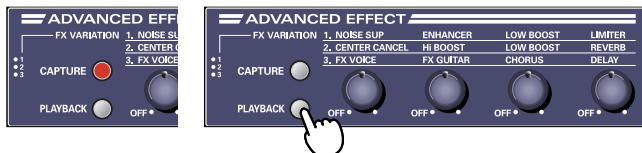
Enjoy powerful guitar sounds, and seven types of narration voice.



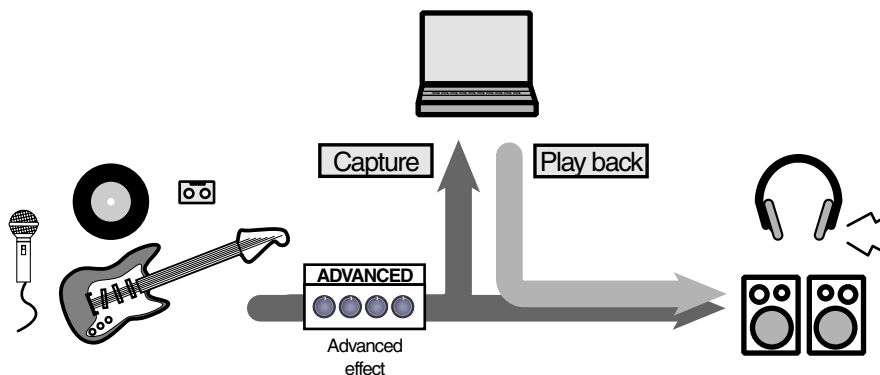
■ Advanced 2 Use the four effect knobs to adjust the sound



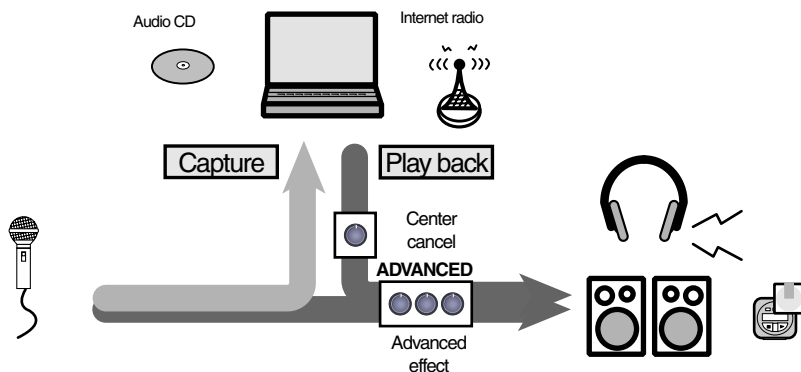
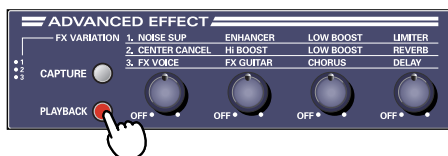
■ Advanced 3 Apply effects to the recording or playback



Applying effects to the recording



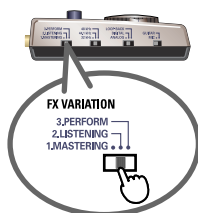
Applying effects to the playback



Applying effects

1

Use the **effect variation switch** to select the desired effect.



2

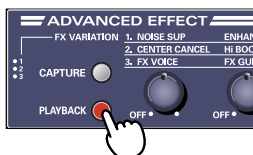
Press the **capture button** or the **playback button**.

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.

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.

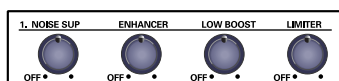


* In some cases, applying the effect too strongly may cause the sound to distort. If this occurs, lower the input level. Alternatively, turn the effect knob toward the left to reduce the depth of the effect.

Using effects

■ Mastering effect (MASTERING)

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.

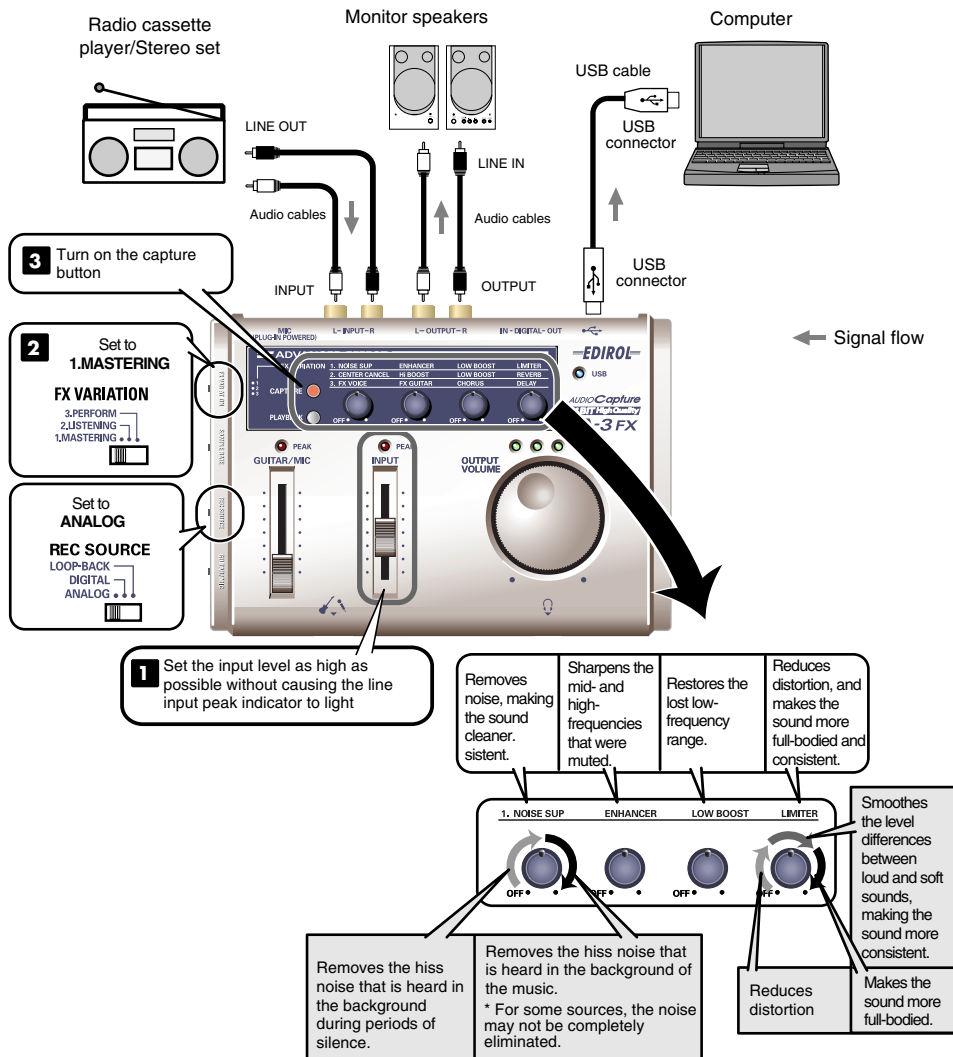


Effect	Explanation
NOISE SUP	This removes low-level sounds or noise that remain in the background during periods of silence, and removes the hiss noise from an analog source. This will make the sound clearer. * If this effect is applied to an input signal whose volume is extremely low, you may hear no sound at all.
ENHANCER	This sharpens the sound, boosting the high-frequency range to improve the clarity.
LOW BOOST	This makes the low-frequency range more powerful.
LIMITER	This reduces distortion by lowering the input signal level when loud sounds are input, and also makes the overall sound more consistent by smoothing out differences between high and low volume levels.

* 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.

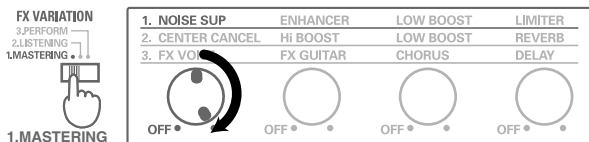
Using the mastering effect

Here's how you can archive a favorite cassette tape onto a CD

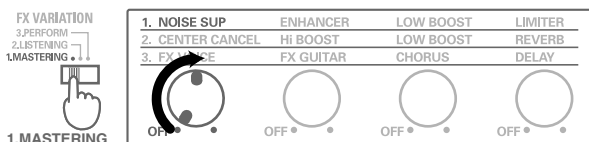


Examples of effect settings

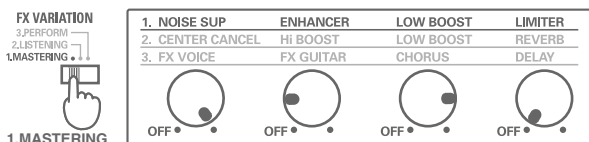
Removing noise from a cassette tape



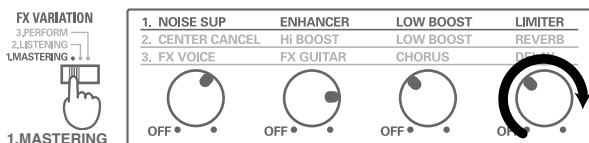
Recording without including extraneous noises from the surroundings



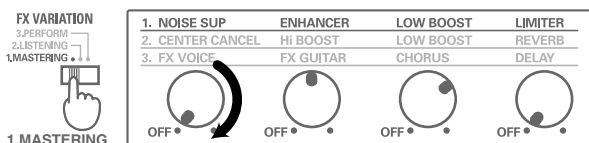
Sharpening the sound from a mic that lacks clarity



Making a live voice sound crisper and cleaner

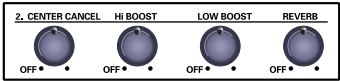


Clarifying the sound of a low-quality MP3



■ Listening effect (LISTENING)

You can apply this effect to the playback of a CD to enhance the sound in various ways.

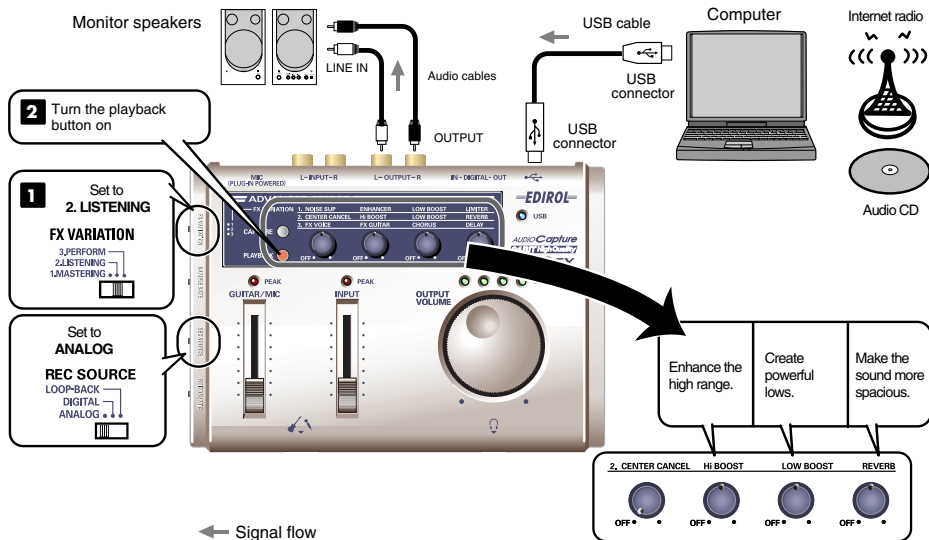


Effect	Explanation
CENTER CANCEL	When you input a stereo source such as a CD, this lets you eliminate sounds that are located in the center of the stereo image, creating a karaoke version without vocals. As you turn the effect knob from the OFF position toward the right (maximum), a greater portion of the center will be eliminated. * Applying this to a monaural sound may result in your hearing no sound at all.
HIGH BOOST	Boosts the high range of the sound, adding clarity.
LOW BOOST	Boosts the low range of the sound, adding impact.
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. 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.

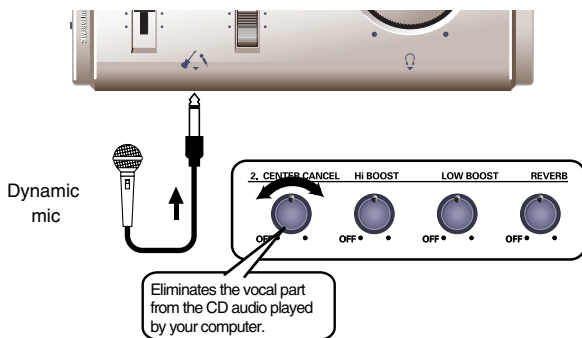
Using the Listening effect

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



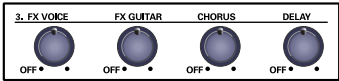
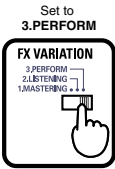
Enjoying karaoke

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



■ Performance effect

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

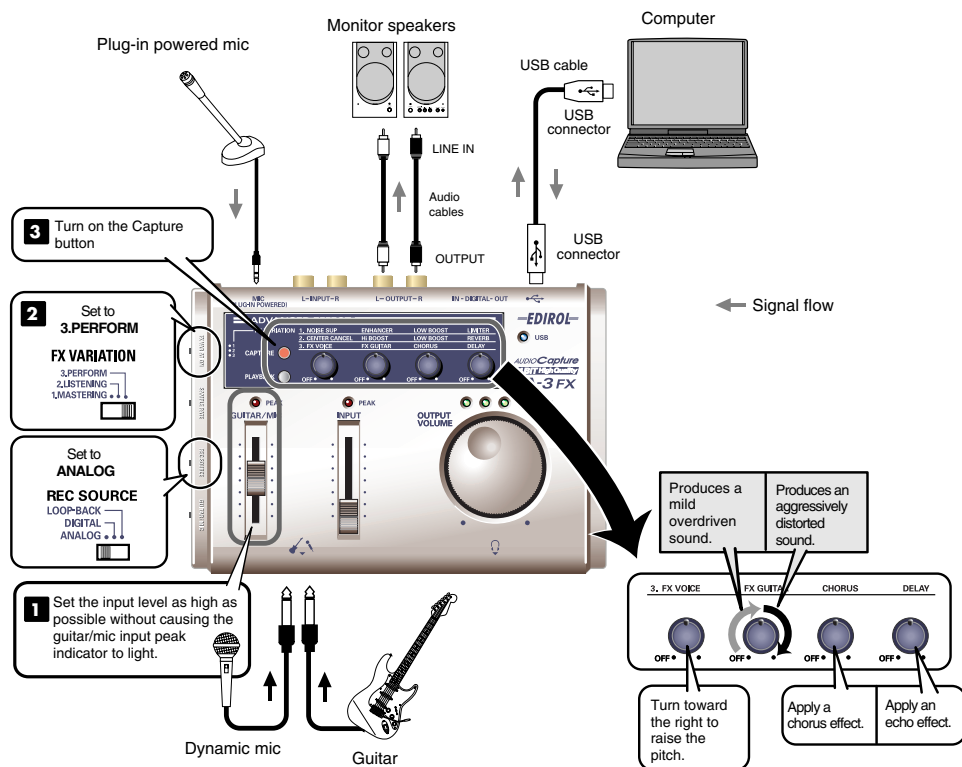


Effect	Explanation
FX VOICE	Modifies the pitch, giving the sound a completely different character. As you turn the effect knob from OFF toward the maximum (far right), the pitch will rise.
FX GUITAR	Distorts the sound to create guitar tones ranging from tasteful to extreme. Turning the effect knob from 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. Alternatively, you can turn the effect knob toward the left to decrease the effect.

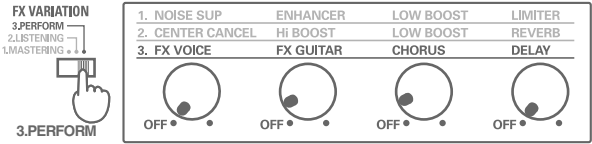
Adding variation to your sound

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

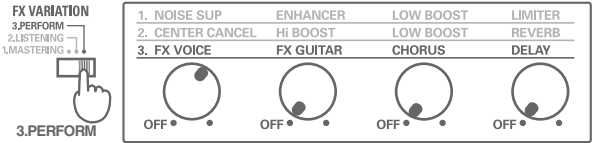


Examples of effect settings

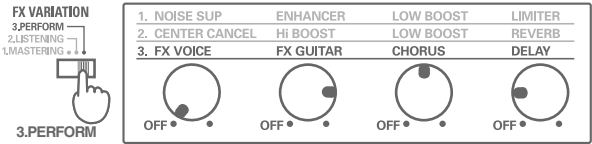
A slightly distorted sound, as if you were speaking through a megaphone



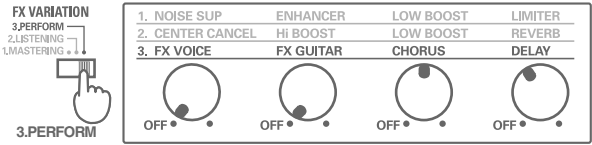
Disguises the voice; useful for anonymous interviews



A nice setting for a guitar solo



A nice setting for clean guitar



Installing the OS-standard driver

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

- Windows XP/2000 users(p. 54)
- Windows Me users(p. 54)
- Windows 98 users.....(p. 55)
- Mac OS X Users.....(p. 58)
- Mac OS 9 Users(p. 58)

■ Windows XP/2000 users

1. With the UA-3FX disconnected, start up Windows.
Disconnect all USB cables except for a USB keyboard and USB mouse (if used).
2. Exit all currently running software (applications).
If you are using a virus checker or similar software, be sure to exit it as well.
3. Place the UA-3FX's **ADVANCED (mode select)** switch in the **OFF** position.
4. Use the **USB cable** to connect the **UA-3FX** to your **computer**.
The UA-3FX will be detected automatically, and the driver will be installed.

MEMO

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

MEMO

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

5. Set the **Default Device** for **Sound Recording** and **Playback** as follows.
UA-3FX
(refer to →"**Settings and checking**" (p. 22)

■ Windows Me users

1. With the UA-3FX disconnected, start up Windows.
Disconnect all USB cables except for a USB keyboard and USB mouse (if used).
2. Exit all currently running software (applications).
If you are using a virus checker or similar software, be sure to exit it as well.
3. Place the UA-3FX's **ADVANCED (mode select)** switch in the **OFF** position.
4. Use the **USB cable** to connect the **UA-3FX** to your **computer**.

MEMO

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

5. Windows will detect the UA-3FX, and the "**Add New Hardware Wizard**" dialog box will appear.
Make sure that **Automatic search for a better driver (Recommended)** is selected, and click **[Next]**.
6. Driver detection will begin.

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

7. When the driver has been found, driver installation will begin.
8. Once the driver has been installed, a dialog box will inform you of this. Click **[Finish]**.
9. Restart Windows.
10. Set the **Default Device for Sound Recording and Playback** as follows.
USB Audio Device
(refer to →“Settings and checking” (p. 22))

■ Windows 98 users

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

1. With the UA-3FX disconnected, start up Windows.
Disconnect all USB cables except for a USB keyboard and USB mouse (if used).
2. Exit all currently running software (applications).
If you are using a virus checker or similar software, be sure to exit it as well.
3. Place the UA-3FX's **ADVANCED (mode select) switch** in the **OFF** position.
4. Use the **USB cable** to connect the **UA-3FX** to your **computer**.

MEMO

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

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

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



7. A dialog box like the one shown will appear.
Check **CD-ROM drive**, and click **[Next]**.

MEMO

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



8. A dialog box like the one shown will appear.
Click **[Next]**.

NOTE

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

9. File (driver) copying will begin.

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

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



11. Next, the **USB audio device** will be detected automatically, and the “**Add New Hardware Wizard**” dialog box will appear. Click **[Next]**, and proceed with the installation in the same way as in steps 8-11 (p. 55).

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



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

13. Set the **Default Device** for **Sound Recording and Playback** as follows.
USB Audio Device
(refer to →“**Settings and checking**” (p. 22))

■ Volume Control setting

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



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



If Mute is checked or if the slider is lowered all the way, no sound will be output from the UA-3FX.

1. Open the **Volume Control**.
Click the Windows **Start** button, and select **Programs | Accessories | Entertainment | Volume Control**.
2. Raise or lower the slider to adjust the volume of the UA-3FX.



You will be able to use the UA-3FX at the best audio quality if you set the Volume Control volume to the maximum setting.

Items that can be set

CD Player (CD Audio)	Controls the volume of “audio CDs” on the internal CD-ROM drive of the computer. (*1)
WAVE	Controls the volume of sound output from the “EDIROL UA-3FX” audio output device. Digital output and analog output will change.
Synthesizer SW Synth	Controls the volume of the software synthesizer built into Windows.

* 1

If the CD playback volume does not change when you adjust this control, then change the WAVE volume.

When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-3FX to play game music (Standard driver mode only)

Windows XP/2000 users:

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

Windows Me users:

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

Windows 98 users:

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

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

■ Mac OS X Users

1. With the UA-3FX disconnected, start up the 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. Place the UA-3FX's **ADVANCED (mode select)** switch in the **OFF** position.
4. Use a USB cable to connect the UA-3FX to your Macintosh.
5. Open the **System Preference** dialog box and click **Sound**.
6. In the **Sound Effects** tab, click **Play alerts and sound effects through** and choose **UA-3FX** as the playback device for sound effects.



If no sound is output from the speaker (internal speaker) of the Macintosh, choose "**Built-in audio controller**" in the Input tab and Output tab.

7. Click the **Output** tab, and choose **UA-3FX** as the device that will output sound.
8. If the **Input** tab is displayed, choose **UA-3FX** as the device for inputting sounds.



The output volume of the UA-3FX cannot be adjusted with the Mac OS sound dialog box. Make volume adjustments through other means, such as on the speaker system you are using.

Known issues: UA-3FX

Caution

Please check the following before you use your software.

- If your software allows you to make audio input/output settings, choose **UA-3FX**. For details, refer to the owner's manual of the software you are using.
- Use a USB cable to connect the UA-3FX to your computer before you start up your software.
- Do not disconnect the UA-3FX's USB cable while your software is running.
- Exit your software before you disconnect the UA-3FX's USB cable.
- Turn off the Sleep settings of your Macintosh.
- The UA-3FX will not operate in the Mac OS X Classic environment. You can not use it if the Classic environment is running.

■ Mac OS 9 Users

To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before disconnecting the USB cable. It is not necessary to turn off the power of your computer. Use a USB cable to connect the UA-3FX to your computer before turning on the power of your audio equipment.

1. With the UA-3FX disconnected, start up the 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. After starting up Mac OS, select **Apple System Profiler** from the **Apple** menu. The “**Apple System Profiler**” dialog box will appear.
4. Click the **Devices and Volumes** tab.
5. Choose **Update all information** from the **Commands** menu.
6. Place the UA-3FX’s **ADVANCED (mode select)** switch in the **OFF** position.
7. Use a USB cable to connect the UA-3FX to your computer.

MEMO

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

8. Wait for approximately five seconds. UA-3FX uses a driver included with Mac OS.
While you are waiting, the screen display will not change, but the UA-3FX is being detected. Do not touch the mouse or keyboard.
9. In order to check that detection has been completed, once again go to **Apple System Profiler**, and select **Update all information** from the **Commands** menu. In the USB area, three audio devices will be displayed.

If these are displayed correctly, driver installation has succeeded. In the **File** menu, click **Quit** to close “**Apple System Profiler**.”

If they are not displayed correctly, disconnect the UA-3FX, wait for about ten seconds, and then repeat the procedure from **step 2**.

Adjusting the Sound Input/Output

1. From the **Apple** menu, select **Control Panels - Sound** to open the **Sound** dialog.
2. Click the **Speakers** tab or **Speaker Settings**.
3. Turn down the volume on the UA-3FX, and on your audio equipment, then click **[Start Test]**.
4. Use the **[Main Volume]** bar to adjust the volume. When you are finished, click **[Stop Test]**.
Test sounds are output from left to right, along with what appears on the screen.
5. In the **Sound** dialog box, click the **Input** tab.
In **Choose a source for sound input**, select **USB audio**.
* Do not check “**Play sound through output device**.”

NOTE

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

6. When you are finished making settings, close the “**Sound**” dialog box. Select **Quit** from the **File** menu.

Troubleshooting

If an unexpected problem occurs while using the UA-3FX, please read this chapter first. It provides numerous hints that will help you solve problems.

The problems covered in the troubleshooting section are organized according to the operating system on which the problem might be encountered.

If you are using computer for the first time, or do not understand the explanation of a procedure, refer to the owner's manuals for your computer or for OS.



Problems common to both Windows and Macintosh



Problems that occur only on Windows



Problems that occur only on Macintosh

Problems related to the USB driver



“Add New Hardware Wizard” does not start up automatically



“Add New Hardware Wizard” terminates before completion

- **When the USB cable is connected or disconnected, approximately 15 seconds (or more) may be required for the UA-3FX to be recognized.**
- **Is the USB cable connected correctly?**

Make sure that the UA-3FX and computer are connected correctly by the USB cable.

- **Can USB be used on your computer?**

Refer to the owner's manual for your computer, and make sure that it is able to use USB.

- **Does your computer or USB hub have sufficient power supply capacity?**

The UA-3FX cannot be connected if insufficient power is supplied to it. Check whether one of the following cases apply.

If you are using the UA-3FX with a notebook computer that is running on its battery, operation may be unreliable with some models of computer. If this is the case, connect the AC adaptor to your notebook computer.

The power conservation mode of your computer may limit the power that is supplied to USB. Check the settings of your computer.

In some cases, the UA-3FX cannot be used with a bus-powered hub (a hub that does not contain a power supply). Please use a self-powered hub (a hub that contains a power supply).

- **Does your computer meet the USB specifications?**

If you are using a computer that does not meet the USB specifications (such as a homemade computer), operation may be unstable. In such cases, you may be able to solve the problem by connecting a USB hub that contains a power supply.

- Is “Unknown Device” displayed for “Other devices” or “Universal Serial Bus controllers”?

Use the following procedure to delete “Unknown Device” from “Other devices” (Universal serial bus controller), and re-start your computer.

1. In the Windows **Control Panel**, double-click **System** to open the **System Properties** dialog box. The **System Properties** dialog box will appear.
2. Click the **Device Manager** tab.
3. Double-click **Other devices** (Universal Serial Bus controllers) to see the list of devices.
4. From the list, select the unknown device and click **Delete**.
 - * In order to check whether or not the “Unknown Device” is the UA-3FX, disconnect the USB cable of the UA-3FX, and verify that “Unknown Device” has disappeared. Then connect the UA-3FX once again, and delete “Unknown Device.”
5. In the **Confirm Device Removal** dialog box, click [OK].
6. Verify that “Other device” or “Unknown device” is not displayed in the list, and click [Close] to close the dialog box.
7. Re-start your computer.



The “Add New Hardware Wizard” dialog box appears even though you installed the drivers

If your computer or USB hub has two or more USB connectors, connecting the UA-3FX to a USB connector to which the UA-3FX has never before been connected may cause the Add New Hardware Wizard dialog box will appear even though the drivers have already been installed.

Install the drivers once again as described in “**Getting Connected and Installing Drivers (Windows)**” (p. 14). This is not a malfunction.



The UA-3FX Driver Is Not Installed Correctly.

Use the procedure described in “**Deleting the special driver**” (p. 70) to delete the USB Audio Device driver installed in your computer, and install the UA-3FX drivers once again as described in “**Getting Connected and Installing Drivers (Windows)**” (p. 14).

Check whether there is an item named “Unknown Device” in “Other devices” or in “Universal Serial Bus controllers.” If you find “Unknown Device,” delete it.

Problems when using the UA-3FX



OS becomes unstable

- **Starting up a computer when the UA-3FX is already connected may cause the computer to become unstable.**

If this occurs, start up the computer with the UA-3FX disconnected, and then connect the UA-3FX. On a computer that uses a USB keyboard, starting up the computer with the UA-3FX already connected may cause operation to become unstable. In this case, start up the computer with the UA-3FX disconnected, and then connect the UA-3FX.

No sound



- **Is the UA-3FX'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 you attempting to use the CD player of your computer to play an audio CD?**

If you wish to play an audio CD on the CD-ROM drive of your computer, refer to "**When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-3FX to play game music (Standard driver mode only)**" (p. 57).



- **Are you running multiple applications?**

If multiple applications are running simultaneously, an error message may appear. If this occurs, click **[OK]**, and close the other applications. Even if an application window is closed, it is still running if it remains in the taskbar, so be sure to quit any unneeded applications shown in the taskbar.



- **Have you specified the audio data output destination for your operating system?**

You must specify the **UA-3FX** as the audio data output destination for your computer.



- **Have you specified the audio data output destination for your playback software?**

For some software such as Cool Edit Pro LE, you must set the audio data output destination as **UA-3FX**. For details on this setting, refer to the owner's manual for the software.



- **Have the drivers been installed correctly?**

In order to playback audio data using the UA-3FX, the **USB Audio Device driver** must be installed. For details on installation and settings, refer to **Getting Connected and Installing Drivers (Windows)** (Windows p. 14, Macintosh p. 26).



- **Are the faders of the Volume Control raised?**

Adjust the volume of each fader as described in "**Volume Control setting**" (p. 56).



- **Are the faders of the Macintosh volume control raised?**

Adjust the volume as described in "**Adjusting the Sound Input/Output**" (p. 59).

If you are using Mac OS X, some system sound input/output settings may cause there to be no sound from the Macintosh speakers. Select the internal speakers in the Output tab and Input tab.



Sound is distorted

- **Could the peak indicator be lighting in red?**

If you are inputting sound from the line input jack, use the UA-3FX's line input adjustment slider to lower the input level. If you are inputting sound from a guitar or mic, use the UA-3FX's guitar/mic input adjustment slider to lower the input level. The number of guitar/mic input peak indicator LEDs that light will depend on the UA-3FX's output level. If the red LED lights, use the line output volume control to lower the volume.

- **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 line input adjustment slider or the guitar/mic input adjustment slider. Alternatively, turn the effect knob toward the left to lessen the effect.



Insufficient volume from a device connected to the line input jacks

- **Could you be using a cable that contains a resistor?**

Use a cable that does not contain a resistor (such as one from the Roland PCS series).

- **Is the line input adjustment slider raised appropriately?**

Raise the slider as high as possible without causing the line input peak indicator to light.



Can't use 5.1 ch surround playback

5.1 surround playback is supported only in Windows.

- **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-3FX's ADVANCED (mode select) switch ON, and install the driver.

- **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-3FX as the audio input/output destination.

(→ “Specifying the audio input/output destination” (p. 22))

Noise is heard when playing back audio



• Is a mic still connected?

If a mic is connected to the UA-3FX, use the Guitar/Mic input adjustment slider to lower the input level.



• Could there be a connection loop?

On some computers, if a USB-connected MIDI sound module and the UA-3FX are connected to the same computer via USB, and the output of the MIDI sound module is connected to the UA-3FX's line input jacks, noise from the computer may be heard from the UA-3FX via the MIDI sound module. If this occurs, you can either use a self-powered hub to connect the MIDI sound module and the UA-3FX in parallel, or connect the MIDI sound module via a serial connection or a MIDI interface.



• This problem may be solved by properly grounding the chassis of your computer, or the ground prong of the plug on the AC power cord that was supplied with your computer. Also, make sure that there are no devices nearby that emit a strong magnetic field, such as a television or a microwave oven.



• Are a large number of audio devices connected?

If a large number of audio devices are connected, noise may occur. Do not connect audio devices that you are not using.



• If the sound is interrupted during audio playback, you may hear a soft “pop” noise.

Also refer to the following section, “Sound is interrupted during audio playback.”

Sound is interrupted during audio playback



• Graphic accelerators may cause noise to be heard during audio playback.

Use the following procedure to set graphic acceleration to “None.”

1. In the Windows **Control Panel**, double-click Display to open the **Display Properties** dialog box, and click the **Settings** tab.
2. Click **Advanced** to open **properties**, and click the **Performance** tab.
3. In the **Graphics** section, set the **Hardware acceleration** slider to **None**, and then click [OK].
4. In the **Display Properties** dialog box, click [OK] to close the dialog box.
5. Then restart your computer.



• The sound may be interrupted if a wireless LAN is operating.

Try disabling the wireless LAN in the Device Manager. If this solved the problem of sound being interrupted, you may be able to solve the problem of interrupted sound by updating the driver or BIOS.



• Are many applications running on your computer?

If you use numerous applications during playback, or start up another application, the playback may be interrupted depending on your computer system. Exit all unneeded applications, and try again. If this does not resolve the problem, try restarting your computer.



• **Try making the following changes to the disk drive settings.**

Some computers may not have the following settings.

1. In the Windows **Control Panel**, double-click **System**.
2. Click the **Device Manager** tab.
3. Double-click **Disk Drives** to see the list of devices.
4. From the list, select **GENERIC IDE DISK TYPE??**, and click **Properties** to access the **GENERIC IDE DISK TYPE?? Properties** dialog box.
 - * *In the ?? field of **GENERIC IDE DISK TYPE??**, there will be a number that differs depending on your computing environment.*
5. Click the **Settings** tab, place a check mark in the check box for the **DMA** option, and click **[OK]** to close the dialog box.
 - * *Depending on your system, a dialog box for DMA settings may appear. Verify the contents of the dialog box, and click **[OK]** or **[Cancel]**.*
6. In System Properties dialog box, click **[OK]** to close the dialog box.
7. Restart your computer so that the above settings will take effect.



• **Try increasing the memory**

You can increase the processing power of your computer by adding more memory. For details on how to install more memory, refer to the operation manual for your computer.



• **Does your computer meet the USB specifications?**

The audio may be interrupted if you are using a computer that does not electrically meet the USB specifications. In such cases, you may be able to solve the problem by connecting a USB hub that contains a power supply.



• **On some computers, the Power Management settings in the Control Panel may cause audio playback to stop.**

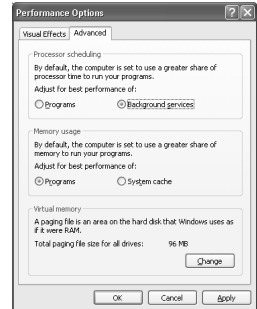
The Power Management Properties that are displayed when you double-click Power Management will differ depending on your computer system. One example is given below, but you should consult the owner's manual for your computer as well. Some computers may not have the following settings.

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



• Make Windows XP settings to enable background processing.

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



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

- Does the sampling frequency setting in the application match the sampling frequency of the digital device connected to the digital input connector?
- When using digital recording, it is not possible to record in monaural. Set your recording software to the “**stereo**” setting.



Noise is present in the recorded sound

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

- **[Mac OS 9] In Chooser of the Apple menu, set AppleTalk to “Inactive.”**
(This setting is not changed as a result of turning off AppleTalk, as requested by OMS when sequencer software is started up. You must change the setting yourself using the “Chooser.”)
- **[Mac OS 9] In the “Memory” Control Panel, set Virtual Memory to “Off.”**
- **Depending on the way in which you connect to the Internet, use the UA-3FX**
with the following settings.

If you connect to the Internet via a LAN cable

Use while the LAN cable is connected.

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

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

After you have made the settings, restart your Macintosh.

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

- In the SimpleSound application that is included with MacOS, noise will be heard in the sound if it is played back immediately after being digitally recorded. Save the sound first, then try playing it back.

- **[Mac OS 9] If the USB audio driver provided by the OS is 1.0.4 or lower, please update Mac OS.**

The driver can be downloaded from the Apple web site.

Checking the USB audio driver

1. Connect the UA-3FX to the computer.
2. Click the **Apple menu**, and select **Apple System Profiler**.
3. Click the **Devices and Volumes** tab control.
4. In the USB section, the screen will indicate **"Audio (UA-3FX USB Audio Device)."** Click the arrow at the left of this text.
5. The number displayed to the right of **"Driver version"** is the version of the USB audio driver.

A blank (silent) file is created when you record



- **Data that contains the SCMS flag cannot be recorded digitally.**

The UA-3FX supports **SCMS**, so that if SCMS-flagged data (such as data from an MD that was digitally copied from a commercial music CD) is input to the digital connector, the UA-3FX will not be able to record this on the computer.

(The sound will be output from the line output jacks and the headphone jack.)



Can't record digitally

- **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.
- **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.
- **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.**



Game background music does not sound

- **Is the Background Music for the Game on an Audio CD?**
If the game uses an audio CD for background music, refer to **"When playing audio CDs from the computer's internal CD-ROM drive, or using the UA-3FX to play game music (Standard driver mode only)"** (p. 57).



The volume changed when you resumed from Suspend or Hibernation status

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

Start up the Mixer application as described in “**Volume Control setting**” (p. 56), and adjust the **USB Audio (Speaker)** slider.

Problems common to software in general



Can't install

- **Is the included CD-ROM inserted into the CD-ROM drive of your computer?**
During installation, were the CD-ROM drive name and the installation file name input correctly?
- **Is there sufficient space on your hard disk?**
Increase the free space on your hard disk. Delete unneeded files (move them to the Recycle Bin), and then right-click on the Recycle Bin and select **Empty Recycle Bin**. Alternatively, install an additional hard disk.
- **Were other applications running when you performed the installation?**
Exit all applications, and perform the installation again.



Can't start up an application

- **Are numerous applications running?**
It may be that there is not enough memory to start up another application. Close all unneeded applications, and then start up the new application. If an error is still displayed, try restarting your computer.



An error is displayed when you start up an application

- **If multiple applications are started up simultaneously, an error message may appear.**
If this occurs, click **[OK]**, and close all unnecessary applications.
Even if an application window has been closed, the application is still running if it remains in the taskbar. Be sure to close any unnecessary application that appears in the taskbar.
- **If you are using Cakewalk, you must be sure that the sampling frequency of Cakewalk is set to the same sampling frequency.**

Installing software in Windows XP/2000

In order to install software in Windows 2000/XP, you must log on as a user who has administrative privileges (e.g., Administrator).

In addition, you must use the following procedure to check the drive signature option settings.

■ Windows XP users

1. Start up Windows.
If you are using Windows XP Professional, log on with a user name whose **Account type** is **Computer administrator**; e.g., Administrator.
2. Click the Windows **Start** button, and from the menu that appears, select **Settings | Control Panel**.
3. From **Pick a category**, select **Performance and Maintenance**.
If the **System** icon is displayed, click **System** and then proceed to **Step 5**.
4. In **or pick a Control Panel** icon, click **System**.
5. Click the **Hardware** tab, and then click the **[Driver Signing]** button to open the “**Driver Signing Options**” dialog box.
6. Make sure that “**What action do you want Windows to take?**” is set to “**Ignore**”.
If it is set to “Ignore”, simply click [OK]. If it is not set to “Ignore”, make a note of the current setting (“Warn” or “Block”). Then change the setting to “**Ignore**” and click [OK].
7. Click [OK] to close the [System Properties] dialog box.

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



■ Windows 2000 users

1. Start up Windows, and log on to Windows as a user with **administrative privileges** (such as Administrator).
2. In the Windows **Control Panel**, double-click **System** to open the **System Properties** dialog box, and click the **Device Manager** tab.
3. In **Control Panel**, double-click **System** to open the **System Properties** dialog.
4. Click the **Hardware** tab, and then click the **[Driver Signing]** button to open the “**Driver Signing Options**” dialog box.
5. Confirm that the “**File Signature Verification**” setting is set to “**Ignore**”.
If it is set to “Ignore”, simply click [OK]. If it is not set to “Ignore”, make a note of the current setting (“Warn” or “Block”). Then change the setting to “**Ignore**” and click [OK].
6. In the **System Properties** dialog box, click [OK] to close the dialog box.

* If you change the **Check File Signature** setting, you must restore the original setting after you have finished installing the software and have restarted Windows.



Deleting the special driver

If you were unable to install the driver according to the procedure given, the UA-3FX may not be recognized correctly by the computer. In this case, use the following procedure to delete the driver, and then follow the procedure in “**Getting Connected and Installing Drivers**” (**Windows** (p. 14), **Macintosh** (p. 26)) to install the driver once again.

■ Windows users

1. With the UA-3FX disconnected, start up Windows.
Disconnect all USB cables except for a USB keyboard and USB mouse (if used).
* *If you are using Windows XP Professional/2000, you must log on using a user name with an administrative account type (e.g., Administrator).*
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:\DRIVER\USB_XP2K\Uninstal.EXE

Windows Me/98 users

D:\DRIVER\USB_ME98\Uninstal.EXE

- * *The drive name “D:” may be different for your system. Specify the drive name of your CD-ROM drive.*
4. Perform the installation as directed by the dialog boxes that appear.

■ Macintosh users

Mac OS 9 users

1. Disconnect the USB cable (by which the UA-3FX is connected) from your Macintosh.
2. Drag “**USB UA-3FX Driver**” from the **Extensions** folder into the **Trash** to delete them.
3. Drag the ASIO driver that you installed in **Installing the ASIO driver** (p. 32) into the **Trash** to delete it.
4. Restart the Macintosh.

Deleting the USB Audio Device driver

- **If re-installing the USB Audio Device driver**
- **If installation of the USB Audio Device driver was terminated before completion**
Use the following procedure to delete the driver that is already installed.
Depending on your computer, some of the folder names may be different.
 1. Use a USB cable to connect the UA-3FX to your computer.
 2. Delete the USB Audio Device driver. Click the Windows **Start** button, and select **Settings - Control Panel**.
 3. In **Control Panel**, double-click **System** to open the “**System Properties**” dialog.
 4. Click the **Device Manager** tab.
 5. Double-click **Sound, video and game controllers** to see a list of the devices.
 6. From the list, select **USB Audio Device**, and click **Remove**. In the **Confirm Device Removal** dialog box, click [OK]. If **USB Audio Device** is not displayed, proceed to **step 8**.
 - * *If a dialog box suggesting that you restart Windows appears at this point, follow the suggestion and restart your computer.*
 7. Make sure that **USB Audio Device** is not in the **Sound, video and game controllers** list, and click [Close] to close the **System Properties** dialog.
 8. Follow the **steps 1.-4.** again, and double-click **Universal Serial Bus controllers** to display the list of devices.

If ① is displayed for the USB-compatible device icon:

Select the [USB Composite Device] icon, and click [Remove]. In the **Confirm Device Removal** dialog box, click [OK]. As in the **step 7.**, close **System Properties**.

If there is no USB-compatible device icon, or if ① is not displayed:

Simply close **System Properties**.

If you are using Windows Me and ② is displayed:

Simply close **System Properties**.

9. Disconnect the USB cable from your computer, and restart Windows.

Specifications

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

Record: 1 pair of stereo
Playback: 1 pair of stereo
Full duplex

- **Signal Processing**

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

- **Sampling Frequency**

Digital output: 32/44.1/48 kHz
Digital input: 32/44.1/48 kHz
AD/DA Conversion: 32/44.1/48 kHz

** When you record audio digitally from a digital device, UA-3FX does not support the switching function of the sampling rate of the digital device.
If you want to switch the sampling rate, you have to reconnect the digital cable.*

- **Frequency Response**

48.0 kHz : 20 Hz to 22 kHz (+0 dB/-2 dB)
44.1 kHz : 20 Hz to 20 kHz (+0 dB/-2 dB)
32 kHz : 20 Hz to 14 kHz (+0 dB/-2 dB)

- **Nominal Input Level**

Line Input Jacks: -10 dBu
MIC Input Jack: -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.)
Output Jack -112 dBu (SN ratio 102dB)

- **Interface**

USB
Digital input/output: Optical type
(conforms to IEC60958 consumer format)

- **Effect**

- 1. **Mastering**

Noise Suppressor/Enhancer/Low boost/
Limiter

- 2. **Listening**

Center Cancel/High boost/Low boost/Reverb

- 3. **Performance**

FX Voice/FX Guitar/Chorus/Delay

- **Connectors**

Line Input Jacks (RCA phono type) x 2
MIC Input Jack (Miniature phone type)
GUITAR/MIC Input Jack (1/4 inch phone type)
Line Output Jacks (RCA phono type) x 2
Headphones Jack (Stereo miniature phone type)
Digital Input Connector (Optical type)
Digital Output Connector (Optical type)

USB Connector (USB Type B)

- **Power Supply**

Supplied from the computer

- **Current Draw**

250 mA

- **Dimensions**

175 (W) x 125.5 (D) x 42.6 (H) mm
6-15/16 (W) x 5 (D) x 1-11/16 (H) inches

- **Weight**

305 g/ 11 oz

- **Accessories**

Owner's Manual
USB cable
CD-ROM

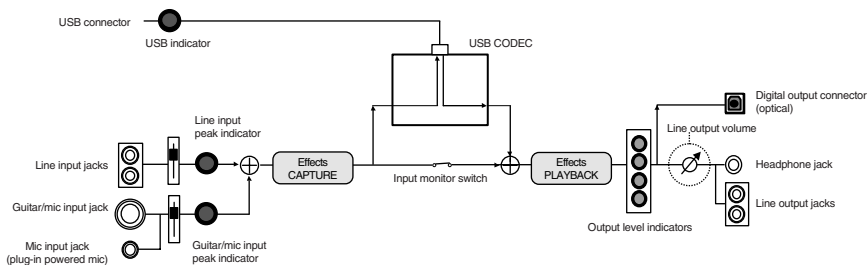
(0 dBu = 0.775 V rms)

** This product has been test studied on representative computers that meet the system requirements printed on the package, but we cannot guarantee that it will operate on any computer that meets these requirements. Please be aware that even under the same conditions, differences in the operating environment may produce differences in processing capability.*

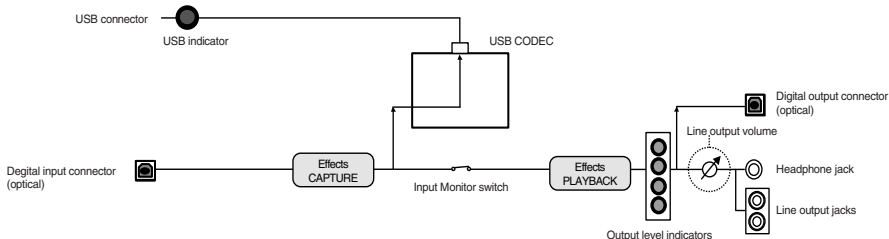
** In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.*

UA-3FX Block Diagram

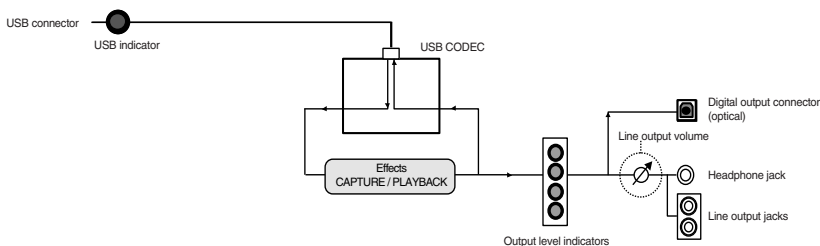
■ When the recording source select switch is set to ANALOG



■ When the recording source select switch is set to DIGITAL



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



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USB indicator 12



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

For EU Countries

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

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

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Tested To Comply With FCC Standards

FOR HOME OR OFFICE USE

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For the USA

NOTICE

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

AVIS

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

For Canada

DECLARATION OF CONFORMITY Compliance Information Statement

Model Name : UA-3FX
Type of Equipment : USB Audio Interface
Responsible Party : Edirol Corporation North America
Address : 425 Sequoia Drive, Suite 114, Bellingham, WA 98226
Telephone : (360) 594-4276

For the USA

Information

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

EDIROL

EUROPE

EDIROL (Europe) Ltd.
Studio 3.4 114 Power Road
London W4 5PY
U. K.
TEL: +44 (0)20 8747 5949
FAX:+44 (0)20 8747 5948
http://www.edirol.com/europe

Deutschland
TEL: 0700 33 47 65 20
France
TEL: 0810 000 371
Italia
TEL: 02 93778329

Roland

NORTH AMERICA

CANADA

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

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

U. S. A.

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

AFRICA

EGYPT

Al Fanny Trading Office
9, EBN Hagar Al 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 97 491
Ste Clotilde Cedex,
REUNION ISLAND
TEL: (0262) 218-429

SOUTH AFRICA

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

ASIA

CHINA

Roland Shanghai Electronics Co.,Ltd.
5F, No.1500 Pingliang Road
Shanghai 200090, CHINA
TEL: (021) 5580-0800

Roland Shanghai Electronics Co.,Ltd.
(BEIJING OFFICE)
10F, No.18 3 Section Anhuaxili
Chaoyang District Beijing
100011 CHINA
TEL: (010) 6426-5050

Roland Shanghai Electronics Co.,Ltd.
(GUANGZHOU OFFICE)
2/F., No.30 Si You Nan Er Jie
Yi Xiang, Wu Yang Xin Cheng,
Guangzhou 510600, CHINA
TEL: (020) 8736-0428

HONG KONG

Parsons Music Ltd.
8th Floor, Railway Plaza, 39
Chatham Road South, T.S.T,
Kowloon, HONG KONG
TEL: 2333 1863

INDIA

Rivera Digitec (India) Pvt. Ltd.
409, Nirman Kendra
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