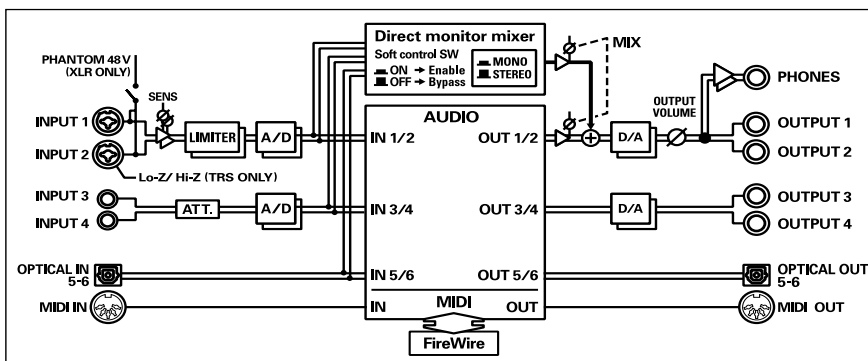


**EDIROL**

# FireWire AudioCapture **FA-66**

## OWNER'S MANUAL

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (p. 3–p. 6). 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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For the U.K.

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

BLUE: NEUTRAL  
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

For EU Countries



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

For the USA

## FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

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

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

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

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

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

## NOTICE

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

## AVIS

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

For the USA

## DECLARATION OF CONFORMITY Compliance Information Statement

Model Name : FA-66  
Type of Equipment : FireWire Audio Interface  
Responsible Party : Roland Corporation U.S.  
Address : 5100 S. Eastern Avenue Los Angeles, CA 90040-2938  
Telephone : (323) 890 3700

# USING THE UNIT SAFELY

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

About ⚠ WARNING and ⚠ CAUTION Notices

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

About the Symbols

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

### ALWAYS OBSERVE THE FOLLOWING

#### ⚠ WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.
- Do not open (or modify in any way) the unit or its AC adaptor.
- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.
- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.
- 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.
- Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.

#### ⚠ WARNING

- Use only the attached power-supply cord. Also, the supplied power cord must not be used with any other device.
- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!
- 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.
- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The AC adaptor, the power-supply cord, or the plug has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.

## **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 force the unit’s power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord’s outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.
- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the “Information” page.
- DO NOT play a CD-ROM disc on a conventional audio CD player. The resulting sound may be of a level that could cause permanent hearing loss. Damage to speakers or other system components may result.

## **CAUTION**

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.
- Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit.
- At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.
- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.
- Never climb on top of, nor place heavy objects on the unit.
- Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.
- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.
- Disconnect all cords coming from external devices before moving the unit.
- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet.
- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.
- Should you remove the ground terminal screw, keep them in a safe place out of children’s reach, so there is no chance of them being swallowed accidentally.
- Always turn the phantom power off when connecting any device other than condenser microphones that require phantom power. You risk causing damage if you mistakenly supply phantom power to dynamic microphones, audio playback devices, or other devices that don’t require such power. Be sure to check the specifications of any microphone you intend to use by referring to the manual that came with it.  
(This instrument’s phantom power:  
48 V DC, 20 mA Max)

# IMPORTANT NOTES

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

## Power Supply

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

## Placement

- 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.

- 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

- 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.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).

- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
  - Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.

## Handling CD-ROMs

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

## Copyright

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

\* 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 trademarks of Apple Computer, Inc.

\* Mac OS is a trademark of Apple Computer, Inc.

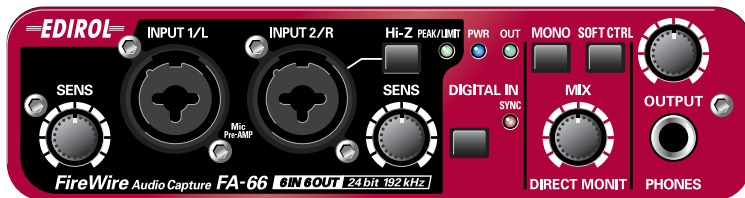
\* All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

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# Contents of the package

## ■ FA-66



## ■ AC adaptor

This is the dedicated AC adaptor for the FA-66. Use only the supplied AC adaptor.

## ■ FireWire (IEEE 1394) cables

(one 6-pin ↔ 6-pin cable, one 6-pin ↔ 4-pin cable)

Use one of these cables to connect the FA-66 to the IEEE 1394 connector (FireWire connector, iLink connector, DV connector) of your computer.



The 6-pin ↔ 4-pin cable cannot supply bus power.

\* Use only the FireWire (IEEE 1394) cables. If the supplied FireWire (IEEE 1394) cable becomes damaged or lost and you need a replacement, please contact the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

## ■ Owner's manual

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

## ■ CD-ROM

This contains Windows drivers for the FA-66 and demo songs.

\* Be careful not to touch or scratch the recorded surface (unprinted surface) of the disc. Doing so may render the disc unreadable. If the disc gets dirty, use a commercially available CD cleaner to clean it.



## CAUTION

Do not play back the CD-ROM in a conventional audio CD player. Doing so may produce high-volume sound that can damage your hearing and/or speakers.





**You will need to provide these items yourself**

**An external amp, speakers, headphones, and mic are not included**

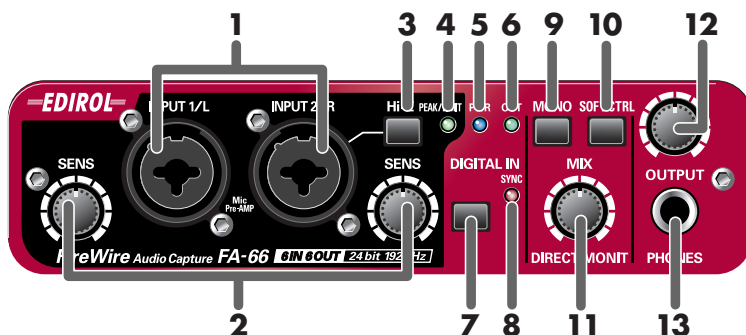
The external amp, speakers, or headphones you'll need to hear the sound output from the FA-66 and the cables you'll need to connect these items are not included. Nor is a mic included, which you will need to connect to the FA-66 in order to input audio. You will need to obtain these items yourself.

**An MD or DAT recorder and digital input/output cables are not included**

You can use an MD or DAT digital recorder to record, but the cables needed to connect these devices to the FA-66 are not included. You will need to obtain these items yourself.

# Front and rear panel

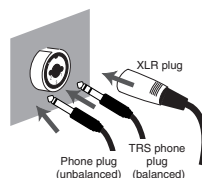
## Front panel



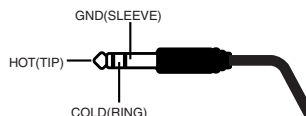
### 1. Combo input jacks

These are analog audio input jacks with mic preamps. They accommodate either XLR or phone plugs, allowing you to connect a variety of equipment. Either balanced or unbalanced signals may be connected.

Phantom power (48 V) is provided for XLR type connections, allowing you to connect condenser mics that require phantom power. In this case, turn on the **phantom power switch (19)** located on the rear panel.



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



### 2. Input sensitivity knobs

These adjust the input level of the signals input to the front panel **combo input jacks (1)**.



### 3. Input impedance select switch

This switch selects either high impedance (Hi-Z) or low impedance (Lo-Z) as the type of device connected to the **INPUT 2** phone jack of the **combo input jacks (1)**. If you have connected a guitar or bass to this jack, select the high impedance (Hi-Z) setting; if you have connected a mic, select the low impedance (Lo-Z) setting.

*\* Combo input jack INPUT 1 is fixed at low impedance (Lo-Z).*

4. Peak/Limiter indicator

This indicates whether the signal being input via the **combo input jacks (1)** is distorting, or whether the limiter is operating.

Limiter switch	Status
Limiter on 	The indicator will function as a limiter indicator. When the input signal exceeds a certain level, the limiter will operate and the indicator will light green.
Limiter off 	The indicator will function as a peak indicator. Use the input sensitivity knobs for each input jack to adjust the input level so that the peak indicator does not light red. The red LED will light if the sound distorts.

5. Power indicator

Lights when the power is on.

6. Output indicator

This will light green if signals are being sent from the computer’s audio output ports 1 and 2 (OUT 1/2).  
(see block diagram → front cover)

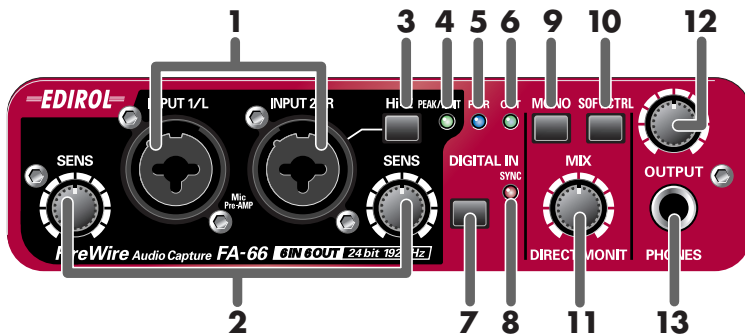
7. Digital input switch

If you want to record a digital input, turn this on (↓ pressed inward). This lets the FA-66 synchronize to an external digital device connected to the **digital input connector (25)**

8. Sync indicator

When the **digital input switch (7)** is on, this indicator shows the status of synchronization with a digital device connected to the **digital input connector (25)**. (external synchronization mode)

Lit	Synchronized correctly.
Blinking	Not synchronized. Check that your digital device is correctly connected to the digital input connector. Also make sure that the connected digital device is set to the same sampling frequency as that selected by the FA-66’s <b>sample rate select switch (18)</b> .



### 9. STEREO/MONO select switch (direct monitor section)

This selects whether the input signal is to be monitored in stereo (STEREO) or in monaural (MONO). Turn this on (⏏ pressed inward) if you want to monitor in monaural.

For example, if you've connected a guitar only to INPUT 2/R, you would use the monaural setting (⏏ inward position). Even with the monaural (MONO) setting, the audio signal being sent via FireWire (IEEE 1394) to the computer will be stereo.

### 10. Direct monitor soft control switch (direct monitor mixer section)

Turn this on (⏏ pressed inward) if you want to control the direct monitor mixer (see block diagram → front cover) from your ASIO 2.0 compatible software. If this is on, your software will be able to control the monitor volume, pan, and on/off status of each input jack.

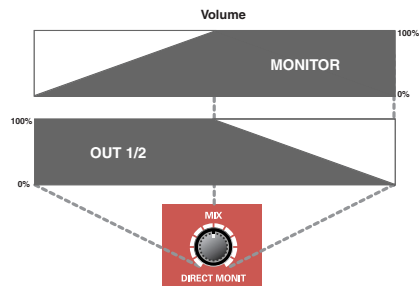
If this is off, all settings of the direct monitor mixer will be ignored (= bypassed), allowing you to monitor the input signals from all input jacks. This is convenient if you want to check the connections while temporarily ignoring the software settings.

*\* This function is available only on Windows.*

### 11. Direct monitor volume (direct monitor section)

This adjusts the monitor volume.

Turning this knob toward the left (OUT1/2) will decrease the level of the sound being input through the input jacks. Turning the knob toward the right (MONITOR) will decrease the level of the sound being output from your computer. At the center position, the sound being output from your computer and the sound being input via the input jacks will both be at 100% of their level.



## **12. Output volume**

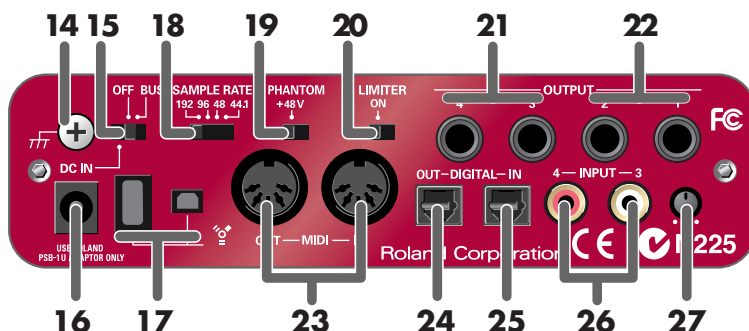
This adjusts the volume that is output from the **headphone jack (13)** and **Main output jacks (22)**.

## **13. Headphone jack**

This jack outputs the mixed sound being input via the input jacks and the sound being output from the computer (WAVE OUT 1/2 (in the case of WDM, EDIROL FA-66 Out 1→ see p. 31)). The balance of these two is adjusted by the **direct monitor volume (11)**.

Even if headphones are connected, the sound being sent from the rear panel's **main output jacks (MAIN OUT) (22)** will not be cut off.

# Rear panel



## 14. Grounding terminal

Depending on the circumstances of a particular setup, you may experience a discomforting sensation, or perceive that the surface feels gritty to the touch when you touch this device, or microphones connected to it, or the metal portions of other objects, such as guitars. This is due to an infinitesimal electrical charge, which is absolutely harmless. However, if you are concerned about this, connect the ground terminal (see figure) with an external ground. When the unit is grounded, a slight hum may occur, depending on the particulars of your installation. If you are unsure of the connection method, contact the nearest Roland Service Center, or an authorized Roland distributor, as listed on the “Information” page.

### Unsuitable places for connection

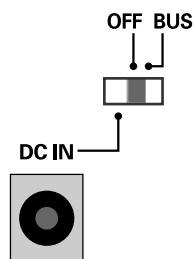
- Water pipes (may result in shock or electrocution)
- Gas pipes (may result in fire or explosion)
- Telephone-line ground or lightning rod (may be dangerous in the event of lightning)

## 15. Power switch

Used to switch the power on (DC IN) or off (OFF), and for switching to bus power (BUS).

### BUS

The FA-66 can operate on bus power if it's connected to your computer via a 6-pin ↔ 6-pin FireWire (IEEE 1394) cable. In this case, power is supplied from your computer via the FireWire (IEEE 1394) cable. If you want to use bus power, set the power switch to the BUS position.



### • 6-pin type

You can use bus power if your computer has a 6-pin IEEE 1394 connector (FireWire connector, iLink connector, DV connector).

\* With some computers, the FA-66 may not operate on bus power. If so, connect the included AC adaptor to an AC outlet and use it to supply power to the FA-66. In this case, the power will be on when you set the power switch to the DC IN position.

### • 4-pin type

If your computer has a 4-pin FireWire (IEEE 1394) connector, you cannot use bus power. Connect the included AC adaptor to the AC adaptor jack, and set the power switch to DC IN.



## 16. AC adaptor jack

Connect the included AC adaptor to this jack.

\* *Never use any AC adaptor other than the supplied unit; doing so may cause malfunction.*

## 17. FireWire (IEEE 1394) connectors

Use a FireWire (IEEE 1394) cable to connect these to your computer.

We recommend that you use a 6-pin cable to connect the FA-66 to your computer, and a 4-pin cable to connect the FA-66 to any peripheral device you may be using.

### • 6-pin connector

If the IEEE 1394 connector (FireWire connector, iLink connector, DV connector) of your computer is a 6-pin type, use the included 6-pin ↔ 6-pin cable.

The FA-66 will be able to operate on bus power. Normally you should use this method of connection.



If the IEEE 1394 connector (FireWire connector, iLink connector, DV connector) of your computer is a 4-pin type, use the included 6-pin ↔ 4-pin cable. However, in this case, the FA-66 will not operate on bus power.

### • 4-pin connector

Normally, the 4-pin connector is used when connecting the FA-66 to a peripheral device.



## 18. Sample rate select switch

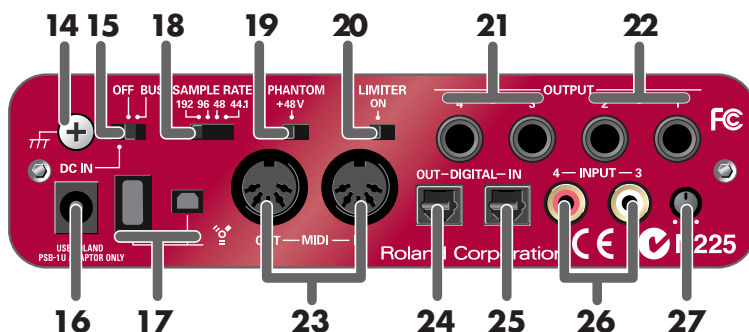
This specifies the sampling frequency at which audio data will be recorded and played back. In order to get this setting to take effect, you must exit all of your software, then cycle the power to the FA-66 (switch it off, then back on again).

\* *If you are using Macintosh and want to change the sampling frequency, you must first power down the FA-66. Then, access the Mac OS **System Preferences - Sound**, and verify that **EDIROL FA-66** has disappeared from the **Input and Output** panes. Then, power up the FA-66 again. For information on how to display the Mac OS System Preferences - Sound, refer to “**Audio settings**” (p. 19).*

You must set the **sample rate select switch** to match the sampling frequency selected in the software you are using. If you use external synchronization mode (i.e., the DIGITAL IN switch turned on), the external device's sampling frequency must also be the same.

### [ Limitations when using the FA-66 at 192 kHz ]

- You will not be able to use the digital input connector or digital output connector.



### 19. Phantom power switch

This is an on/off switch for the phantom power supplied to the XLR connectors of the **combo input jacks (1)** on the front panel.

\* *You must leave the phantom power turned off (right position) unless condenser mics requiring phantom power are connected to the XLR jacks. Supplying phantom power to a dynamic mic or an audio playback device may cause malfunction. For details on the requirements of your mic, refer to its owner's manual.*

*(The FA-66's phantom power supply: DC 48 V, 20 mA maximum)*

### 20. Limiter switch

This turns the FA-66's hardware limiter on/off.

If a sudden, high-volume sound is input to the **combo input jacks (1)**, the limiter applies mild compression to prevent clipping from occurring at the AD converter.

\* *Clipping noise will be heard if the input signal exceeds the capacity of the limiter.*

### 21. Output jacks 3, 4 (Nominal output: +4 dBu)

These jacks output analog audio signals. Balanced output is supported.

### 22. Main output jacks (output jacks 1, 2) (Nominal output: +4 dBu)

These output the mixed sound that is being input via the input jacks and being output from the computer. You can use the **output volume control (12)** to adjust the volume.

### 23. MIDI IN/OUT connectors

You can connect these to the MIDI connectors of your MIDI equipment to send and receive MIDI messages.

### 24. Digital output connector (optical)

Use this when you want to digitally connect an audio device, such as an MD or DAT unit.

The signals sent from **OUTPUT 5** and **6** (if using WDM, EDIROL FA-66 OUT 3 → see p. 31) are output to the **digital output connector**.



## 25. Digital input connector (optical)

Use this when you want to input a digital audio signal from a CD/MD/DAT or similar device.

The signal input to the **digital input connector** is input as **INPUT 5 and 6** (in the case of WDM, EDIROL FA-66 In 3 → see p. 31).

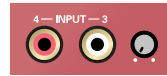
If you want to record this digital input signal, turn on the **digital input switch (7)**.

You must input a signal of the same sampling frequency as that selected by the **sample rate select switch (18)**.

## 26. Input jacks 3-4

**Input jacks 3 and 4** are designed with a higher gain so that you can connect them to audio devices that have a lower output level, such as CD players or MIDI sound modules. If you connect these inputs to a device that has a higher output level, such as a mixer, use this **input level adjustment knob (27)** to adjust the level.

If no device is connected to the **Input jacks 3 and 4**, turn the **input level adjustment knob (27)** all the way toward the left.



## 27. Input level adjustment knob

This adjusts the level of the sound that is input at **input jacks 3 and 4 (26)**.

# Before you begin using the FA-66 with your Macintosh (Mac OS X users)

If you are using the FA-66 with Windows, please read “**Installing the driver (Windows)**” (p. 24).

If you’re using the FA-66 with Mac OS X, you don’t need to install a driver.

Simply connect the FA-66 to your Macintosh as described below.

- 1** With the FA-66 disconnected, start up your Macintosh.
- 2** Use a FireWire (IEEE 1394) cable to connect the FA-66 to your Macintosh.
  - 1.** With the FA-66’s power switch off, connect the power cord to it.
  - 2.** Plug the AC adaptor cable into an AC outlet.
  - 3.** Use a FireWire (IEEE 1394) cable to connect the FA-66 to your Macintosh.
- 3** Turn on the FA-66’s **power switch**.

The driver will be installed automatically.

Next, you need to make audio device and MIDI device settings.

## NOTE

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

## NOTE

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

## NOTE

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

## Audio and MIDI settings

### Audio settings

If you want to use the FA-66 with the iTunes software included with your Macintosh, specify the input/output devices as follows.

The procedure for making device settings differs depending on the software you are using. For details, refer to the owner's manual for your software.

- 1** From the **Apple** menu, choose the **System Preferences** dialog box, and click **Sound**.
- 2** Click the **Sound Effects** tab, and choose **EDIROL FA-66** for the “**Play alerts and sound effects through**” setting.
- 3** Click the **Output** tab, and choose **EDIROL FA-66** for the “**Choose a device for sound output**” setting.
- 4** If the **Input** tab is shown, choose **EDIROL FA-66** for the “**Choose a device for sound output**” setting.



If you want sound to be played from the internal speakers of your Macintosh, choose “**Internal speakers**” in the **Output** tab. If you don't want alerts to be played through the FA-66, choose “**Internal speakers**” for the “**Play alerts and sound effects through**” setting.

### Cautions for use

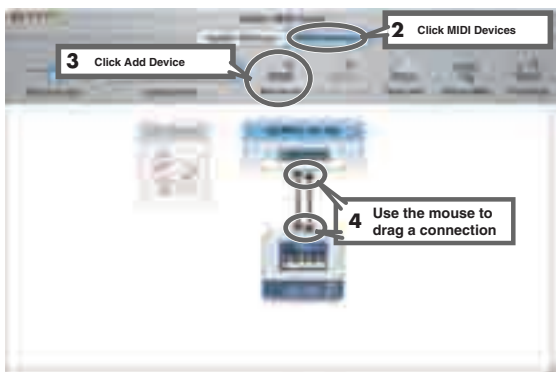
Before you use your software with the FA-66, please note the following.

- Before you start up your software, use a FireWire (IEEE 1394) cable to connect the FA-66 with your computer, and turn on the power.
- Do not disconnect the FA-66's FireWire (IEEE 1394) cable or switch off the power to the FA-66 while your software is running.
- Close your software before you switch off the FA-66's power.
- Turn off the Sleep setting of your Macintosh.
- The FA-66 will not work in the Classic environment of Mac OS X. Use it when the Classic environment is not running.
- Turn off the energy conservation settings of your Macintosh.
- If the Options pane of the **Energy Saver** preferences on your Macintosh has a **Processor Performance** setting, choose the “**Highest**” setting.

- \* *Depending on the model of Macintosh you are using, starting up the Macintosh when the FA-66 is connected may cause operation to become unstable. In this case, start up the Macintosh and then connect the FA-66.*
- \* *If you want to change the FA-66's sample rate, turn the FA-66 off, change the sample rate, and then turn the FA-66 on again. If, in the Mac OS System Preferences - Sound - Output, the EDIROL FA-66 is not shown in the "Choose a device for sound output" setting, this means that the FA-66 is completely powered down.*

## MIDI settings

- 1 Open the **Applications** folder of your Macintosh hard disk. In the **Utilities** folder, double-click **Audio MIDI Setup** to open the **Audio MIDI Setup**.



- 2 Click the **MIDI Devices** tab.
- 3 Click **Add Device**.  
New external device will appear.
- 4 Connect the t and s symbols (which signify the outputs and inputs) of the EDIROL FA-66 icon to those of the New External Device icon by using the mouse to drag between them.  
*\* Change icons and set other items according to the MIDI devices that are connected to the FA-66's MIDI connectors. If you double-click new external device, the new external device Properties dialog box will appear, allowing you to specify a variety of things, such as the device name.*
- 5 Close the **Audio MIDI Setup** dialog box to complete the procedure.


## Checking that you hear sound

Now, let's play back the sample data to verify that the connections and settings are correct. We will use iTunes to play back the sample data provided on the included CD-ROM.

Before you continue, connect headphones or monitor speakers to the FA-66 as described in **"Basic connections"** (p. 35).

- 1 Set the FA-66's sample rate select switch to 48 kHz. You'll need to cycle the power to the FA-66 after changing the sampling rate.
- 2 Start up **iTunes** (included with Mac OS).  
**iTunes** is normally located in the **Applications** folder on the hard disk.
- 3 Insert the included CD-ROM into the CD-ROM drive of your Macintosh.



- 4 From the **SampleSong** folder of the CD-ROM, drag **TTears(.mp3)** into the iTunes window.
- 5 Select **TTears(.mp3)** in the song list, and click  .  
Alternatively, you can start playback by pressing the space bar on your computer keyboard.

If the sample data plays correctly, the FA-66 is correctly connected to your Macintosh.

### NOTE

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

### MEMO

If the volume is too low, or if you don't hear sound at all, try turning the FA-66's **direct monitor volume knob** (p. 12) so it's positioned to the left of the MIX (center) position.

## About the demo songs

The SampleSong folder on the included CD-ROM contains the following demo songs. Please copy the demo songs to the hard disk of your Macintosh before listening to them.

\* *The demo songs were produced at 48 kHz. You must set the FA-66's sample rate to 48 kHz. You'll need to cycle the power to the FA-66 after changing the sampling rate.*

### for Cubase folder

This folder contains the demo songs as Cubase VST song files (.all) and Cubase SX project files (.cpr).

If you are using the Cubase SX demo version, the playback will not be correct since some functionality (such as effects) will not be available.

### for Logic folder

This folder contains the demo songs as Logic project files (.lso).

## Software settings

Before you start up your software, use a FireWire (IEEE 1394) cable to connect the FA-66 to your computer, and turn on the power of the FA-66.

If your software allows you to specify MIDI and audio input/output settings, choose **EDIROL FA-66**. For details, refer to the owner's manual for your software. Also refer to "Software settings" (p. 40).

If you have turned on software monitoring in your application, turn the FA-66's hardware monitoring (direct monitor) off to prevent double monitoring and to keep an audio feedback loop from occurring.



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# Installing the driver (Windows)

## What is a driver?

A driver is software that allows data to be transferred between the FA-66 and application software running on your computer when the FA-66 is connected to your computer via a FireWire (IEEE 1394) cable.

The driver sends data from your application software to the FA-66, and from the FA-66 to your application software. The driver is required in order for you to use the FA-66 while connected to your computer.

1

With the FA-66 disconnected, start up Windows.

\* You must log on to Windows with a user name whose account has administrative privileges (e.g., Administrator).

2

Open the System Properties dialog box.

1. From the Windows **start** menu, choose **Control Panel**.

2. In “**Pick a category**,” click “**Performance and Maintenance**”.

3. In “**or Pick a Control Panel icon**,” click the **System** icon.

3

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

The **Driver Signing Options** dialog box appears.



4

In the **Driver Signing Options** dialog box, make sure that “**Ignore**” is selected.

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

## MEMO

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

## MEMO

If you change the “**Driver Signing Options**” setting, change it back to the original setting after you’ve installed the driver.

## MEMO

If the screen indicates “**Windows can perform the same action each time you insert a disk or connect a device with this kind of file,**” click **[Cancel]**.



- 5 Click **[OK]** to close the **System Properties** dialog box.
- 6 Close all currently running software (applications).  
Also close all windows that are open. If you are using software such as antivirus programs, be sure to close these programs as well.
- 7 Find the included CD-ROM.  
Insert the CD-ROM into your computer's CD-ROM drive.
- 8 From the Windows **start** menu, choose "**Run...**"  
The "**Run**" dialog box will appear.
- 9 Input the name into the dialog box as shown, and click **[OK]**.



**(Drive name): \Driver\XP\_ENG\setup.exe**

\* The drive name is "D:" in the example shown here, but this may be different on your system. Specify the drive name for your CD-ROM drive.

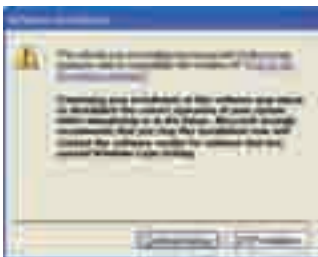
- 10 The **EDIROL FA-66 Driver Setup** dialog box appears.  
Click **[Install]**.

## MEMO

**Checking the name of your drive.** From the start menu, choose **My Computer**. In the window that appears, verify the name of the CD-ROM drive into which you inserted the CD-ROM in step 7. The (D:) or (E:) displayed by the CD-ROM drive icon is the drive name.

## MEMO

If you want to install the driver into a different hard disk, click **[Browse]** and specify the desired location.



If the setting in the **Driver Signing Options** dialog box is not set to **“Ignore,”** a dialog box like the following will appear. Click **[Continue Anyway]** to continue driver installation.

- 11** A dialog box entitled **“Setup is now ready to install the drivers”** appears.

Use a FireWire (IEEE 1394) cable to connect the FA-66 to your computer.

1. With the power switch turned off, connect the AC adaptor to the FA-66.
2. Plug the AC adaptor’s power cord into an AC outlet.
3. Use a FireWire (IEEE 1394) cable to connect the FA-66 to your computer.

- 12** Turn on the power switch of the FA-66.

The **“Found New Hardware”** message appears near the taskbar. Please wait.

- 13** A dialog box entitled **Welcome to the Found New Hardware Wizard** appears. Make sure that the box indicates **“EDIROL FA-66 Sub 1,”** choose **“Install the software automatically (Recommended),”** and click **[Next]**.

- 14** A dialog box entitled **“Completing the Found New Hardware Wizard”** appears.

Click **[Finish]**.

Once again, the **“Found New Hardware”** message appears near the taskbar. Please wait.

### NOTE

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

### NOTE

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

### MEMO

If the **Found New Hardware Wizard** asks you whether you want to connect to Windows Update, choose **“No”** and then click **[Next]**.

**15**

A dialog box entitled **Welcome to the Found New Hardware Wizard** appears. Make sure that the box indicates “**EDIROL FA-66 Sub 2,**” choose “**Install the software automatically (Recommended),**” and click **[Next]**.

**16**

A dialog box entitled “**Completing the Found New Hardware Wizard**” appears.

Click **[Finish]**.

The “**Found New Hardware**” message appears near the taskbar.

**17**

In the **EDIROL FA-66 Driver Setup** dialog box that is already displayed, click **[I Completed the Above Steps]**.

The “**Found New Hardware**” message appears near the taskbar.

**18**

The **Welcome to the Found New Hardware Wizard** dialog box appears. Make sure that the box indicates “**EDIROL FA-66,**” choose “**Install the software automatically (Recommended),**” and click **[Next]**.

A dialog box like the following will appear if “**Driver Signing Options**” is not set to “Ignore.”

**If a dialog box with the “!” symbol appears...**

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

**If a dialog box with the “X” symbol appears...**

1. Click **[OK]**.
2. When the “**Found New Hardware Wizard**” appears, click **[Finish]**.
3. Return to **step 1** (p. 24), and re-install the driver from the beginning.

**19**

A dialog box entitled “**Completing the Found New Hardware Wizard**” appears. Click **[Finish]**.

Once again, the “**Found New Hardware**” message appears near the taskbar.

This completes driver installation.

If you changed the “Driver Signing Options” setting (p. 24, step 4), restore the setting to its previous state after restarting Windows.

1. Log on to Windows using the same user account as the one used when the driver was installed.
2. From the Windows **start** menu, choose **Control Panel**.
3. In “**Pick a category**,” click **Performance and Maintenance**.
4. In “**or Pick a Control Panel icon**,” click the **System** icon. The **System Properties** dialog box appears.  
*\* Depending on your system, the **System** icon may be shown directly in the **Control Panel** (Classic view). If so, double-click the **System** icon.*
5. Click the Hardware tab, and then click [**Driver Signing**]. The **Driver Signing Options** dialog box appears.
6. In **Driver Signing Options**, restore the previous setting (“Warn” or “Block”) and click [**OK**].
7. Click [**OK**]. The System Properties dialog box closes.

Next, you need to set your computer so priority is given to background services, which will help to assure that audio and MIDI processing occur smoothly.

(-> “**Giving priority to background services**” (p. 29))

# Giving priority to background services

Crackling may occur in the sound if you omit making this setting. To ensure that audio and MIDI are processed smoothly, make the setting as follows.

- 1 Open the **System Properties** dialog box.
  1. From the Windows start menu, choose **Control Panel**.
  2. In “**Pick a category**,” click “**Performance and Maintenance**”.
  3. In “**or Pick a Control Panel icon**,” click the **System** icon.
- 2 Click the **Advanced** tab.
- 3 Click [**Settings**] located at the right of the **Performance** area.  
The **Performance Options** dialog box appears.
- 4 Click the **Advanced** tab.
- 5 In **Processor Scheduling**, choose “**Background services**,” and click [**OK**].
- 6 In the System Properties dialog box, click [**OK**]. The System Properties dialog box closes.



Next, you need to make audio device and MIDI device settings.

(-> “**Driver settings**” (p. 30))



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

# Driver settings

## About the input and output devices

In order to get the best performance from the software you are using, you must choose the correct device settings. The FA-66's audio driver supports WDM and ASIO 2.0.

### Audio devices

Audio output device (WDM)	EDIROL FA-66 Out 1–3	Note 1
Audio input device (WDM)	EDIROL FA-66 In 1–3	Note 1
ASIO device	EDIROL FA-66	

Note 1: Refer to “How WDM ports correspond to FA-66 output jacks” (p. 31).

### MIDI devices

MIDI OUT	<b>EDIROL FA-66 MIDI OUT</b> If you specify EDIROL FA-66 as the output port for your sequencer software, etc., messages will be sent from the FA-66's MIDI OUT connector.
MIDI IN	<b>EDIROL FA-66 MIDI IN</b> If you specify EDIROL FA-66 as the input port for your sequencer software, etc., messages will be received from the FA-66's MIDI IN connector.

- \* For details on how to make settings for your software, you should also refer to the owner's manual for your software, as well as to “**Software settings**” (p. 40).
- \* If you are unable to select the FA-66 in the device settings of your software, it is possible that the FA-66 driver was not installed correctly. Please re-install the driver.

## WDM

Use this if you are using the FA-66 with the following applications or situations.

- Conventional applications such as Media Player  
(for the settings, refer to “**Input/output device settings**” (p. 32))
- WDM driver mode compatible applications such as SONAR
- DirectSound compatible applications

## ASIO

Use this if you are using the FA-66 with an ASIO-compatible application such as Cubase. In the ASIO settings of your application, choose “EDIROL FA-66.” You will be able to use ten inputs and ten outputs.

*\* When using the FA-66 with ASIO, we recommend that you not set your application to use the Microsoft GS Wavetable SW Synth. (This will decrease the processing load, and make it easier to change the driver buffer size.)*

## How WDM ports correspond to FA-66 output jacks

WDM output port		FA-66 output jacks	WDM input port		FA-66 input jacks
EDIROL FA-66 OUT 1	L R	OUTPUT jack 1 OUTPUT jack 2	EDIROL FA-66 IN 1	L R	INPUT jack 1 INPUT jack 2
EDIROL FA-66 OUT 2	L R	OUTPUT jack 3 OUTPUT jack 4	EDIROL FA-66 IN 2	L R	INPUT jack 3 INPUT jack 4
EDIROL FA-66 OUT 3 * This port is not displayed when operating at 192 kHz.		Digital output connector	EDIROL FA-66 IN 3 * This port is not displayed when operating at 192 kHz.		Digital input connector

If you have turned on software monitoring in your application, turn the FA-66’s hardware monitoring (direct monitor) off to prevent double monitoring and to keep an audio feedback loop from occurring.



## Input/output device settings

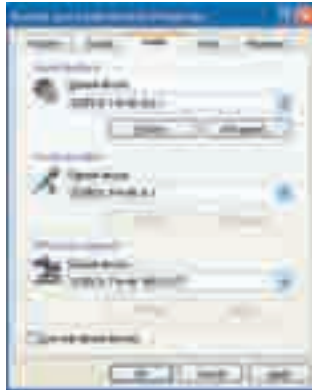
If you will be using the Windows Media Player application with the FA-66, specify the input/output devices as follows.

The method in which you make device settings will depend on the software you are using. For details, refer to the owner's manual for your software.

- 1 Open the **Sound, Speech, and Audio Devices Properties** dialog box.
  1. From the Windows **start** menu, choose **Control Panel**.
  2. In "**Pick a category,**" click **Sound, Speech, and Audio Devices**.
  3. In "**or Pick a Control Panel icon,**" click the **Sounds and Audio Devices** icon.

- 2 Click the **Audio** tab.

- 3 In the **Sound playback, Sound recording, and MIDI music playback** areas, click the **Default device** field. From the list that appears for each field, choose the device shown below.



<b>Sound playback</b>	EDIROL FA-66 Out 1
<b>Sound recording</b>	EDIROL FA-66 In 1
<b>MIDI music playback</b>	EDIROL FA-66 MIDI OUT

- 4 Click **[OK]** to close the **Sounds and Audio Devices Properties** dialog box.

This completes the audio and MIDI input/output settings.



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



If you are using sequencer software, you will need to make audio and MIDI device settings from within your software. For details, refer to the owner's manual for the software you are using.



If you are using the 192 kHz sample rate on Windows XP, the FA-66 may not appear in the Sounds tab of the Sounds and Audio Devices Properties dialog box. If so, please update your system to Windows XP Service Pack 1.



Each input/output device can only be used by one software application at a time; multiclient usage is not supported.



## Checking that you hear sound

Now, let's play back the sample data to verify that the connections and settings are correct. We will use standard Windows functionality to play back the sample data provided on the included CD-ROM.

Before you continue, connect headphones or monitor speakers to the FA-66 as described in **"Basic connections"** (p. 35).

- 1 Insert the CD-ROM into the CD-ROM drive of your computer.
- 2 From the **SampleSong** folder of the CD-ROM, drag **TTears(.mp3)** onto your desktop.
- 3 Set the FA-66's **sample rate select switch** to **48 kHz**.  
You'll need to cycle the power to the FA-66 after changing the sampling rate.
- 4 Right-click the **TTears(.mp3)** file you copied, and choose **Play** from the menu that appears.  
Playback begins.

If the sample data plays correctly, the FA-66 is correctly connected to your computer, and the driver has also been installed correctly.



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.



The contents of the menu that appears will depend on your system.



If the volume is too low, or if you don't hear sound at all, try turning the FA-66's **direct monitor volume knob** (p. 12) so it's positioned to the left of the MIX (center) position.

## About the demo songs

The SampleSong folder on the included CD-ROM contains the following demo songs. Please copy the demo songs to the hard disk of your computer before listening to them.

\* *The demo songs were produced at 48 kHz. You must set the FA-66's sample rate to 48 kHz. You'll need to cycle the power to the FA-66 after changing the sampling rate.*

### for Cubase folder

This folder contains the demo songs as Cubase VST song files (.all) and Cubase SX project files (.cpr).

If you are using the Cubase SX demo version, the playback will not be correct since some functionality (such as effects) will not be available.

### for SONAR folder

This folder contains the demo songs as SONAR project files (.cwb).

### Software settings

Before you start up your software, use a FireWire (IEEE 1394) cable to connect the FA-66 to your computer, and turn on the power of the FA-66.

If your software allows you to specify MIDI and audio input/output settings, choose **EDIROL FA-66**. For details, refer to the owner's manual for your software. Also refer to “**Software settings**” (p. 40).

If you have turned on software monitoring in your application, turn the FA-66's hardware monitoring (direct monitor) off to prevent double monitoring and to keep an audio feedback loop from occurring.



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