

***Pioneer***

Operating Instructions

USB D/A Converter

U-05-S

## Information for users on collection and disposal of old equipment and used batteries

(Symbol for equipment)



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation.

(Symbol examples for batteries)



By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

**These symbols are only valid in the European Union.**

**For countries outside the European Union:**

If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.



K058a\_A1\_En

## CAUTION

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

D3-4-2-1-B1\_En

## WARNING

This equipment is not waterproof. To prevent a fire or shock hazard, do not place any container filled with liquid near this equipment (such as a vase or flower pot) or expose it to dripping, splashing, rain or moisture.

D3-4-2-1-3\_A1\_En

## WARNING

To prevent a fire hazard, do not place any naked flame sources (such as a lighted candle) on the equipment.

D3-4-2-1-7a\_A1\_En

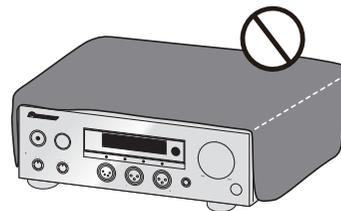
## VENTILATION CAUTION

When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 10 cm at top, 5 cm at rear, and 5 cm at each side).

## WARNING

Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product, and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered with items (such as newspapers, table-cloths, curtains) or by operating the equipment on thick carpet or a bed.

D3-4-2-1-7b\*\_A1\_En



## Operating Environment

Operating environment temperature and humidity:  
+5 °C to +35 °C (+41 °F to +95 °F); less than 85 %RH  
(cooling vents not blocked)

Do not install this unit in a poorly ventilated area, or in locations exposed to high humidity or direct sunlight (or strong artificial light).

D3-4-2-1-7c\*\_A2\_En

## POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

5002\*\_A1\_En

## CAUTION

The **⏻/I** **STANDBY/ON** switch on this unit will not completely shut off all power from the AC outlet. Since the power cord serves as the main disconnect device for the unit, you will need to unplug it from the AC outlet to shut down all power. Therefore, make sure the unit has been installed so that the power cord can be easily unplugged from the AC outlet in case of an accident. To avoid fire hazard, the power cord should also be unplugged from the AC outlet when left unused for a long period of time (for example, when on vacation).

D3-4-2-2-2a\*\_A1\_En

This product is for general household purposes. Any failure due to use for other than household purposes (such as long-term use for business purposes in a restaurant or use in a car or ship) and which requires repair will be charged for even during the warranty period.

K041\_A1\_En

## WARNING

Store small parts out of the reach of children and infants. If accidentally swallowed, contact a doctor immediately.

D41-6-4\_A1\_En

Thank you for buying this Pioneer product. Please read through these operating instructions so that you will know how to operate your model properly. After you have finished reading the instructions, put them in a safe place for future reference.

 **Note**

- The illustrations used in these operating instructions may appear somewhat different from the actual product.

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# Before you start

## What's in the box

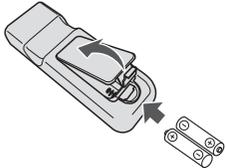
- Remote control x 1
- Type AAA manganese batteries x 2
- Power cord
- CD-ROM (Operating Instructions)
- Quick start guide
- Safety Brochure
- Warranty card

## Before using the remote control

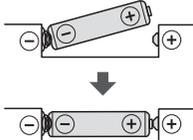
### Loading batteries in the remote control

The remote control uses two type AAA batteries.

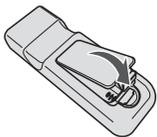
- 1 **Open the battery compartment cover, and load two AAA batteries, taking care to match the battery polarity with the illustration inside the battery compartment.**



Insert the minus (-) pole of the battery first.



- 2 **Replace the battery compartment cover.**



## Warning

- Do not use or store batteries in direct sunlight or other excessively hot place, such as inside a car or near a heater. This can cause batteries to leak, overheat, explode or catch fire. It can also reduce the life or performance of batteries.
- Store small parts out of the reach of children and infants. If accidentally swallowed, contact a doctor immediately.

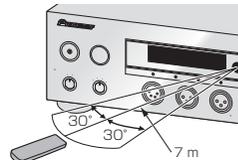
## Caution

- Be careful when loading batteries, being sure to match the battery polarity (+, -) with the markings inside the battery compartment.
- When inserting the batteries, make sure not to damage the springs on the battery's (-) terminals. This can cause batteries to leak or overheat.
- Do not mix old and new batteries.
- Different brands of battery may produce different voltages even when of the same nominal type. As a result, batteries of different brands should not be used together.
- When not using the remote control for extended periods (a month or more), the batteries should be removed to prevent damage from potential leakage of battery fluid. If battery leakage does occur while the battery is loaded in the remote control, wipe the fluid away carefully with a cloth, then install new batteries.
- Do not attempt to disassemble batteries, expose them to excessive heat or dispose of in fire or water.
- When disposing of used batteries, please comply with governmental regulations or environmental public institution's rules that apply in your country/area.
- The batteries supplied with this unit are for testing purposes and may exhibit short lifetimes.

## Using the remote control

When using the remote control to operate this unit, the remote control should be pointed at the unit's remote control sensor within the conditions noted below.

- The remote control may not operate correctly if any obstacle is present between the remote control and the unit's remote control sensor, or if the remote control is pointed at the sensor outside the angle noted.
- The remote control may not operate properly if the sensor is exposed to direct sunlight or strong fluorescent light. In such cases, change the installation location or remove the source of fluorescent light.
- Malfunctions may result if the remote control is operated near another device that also emits infrared radiation, or if another remote control using infrared radiation is operated near this unit. Alternately, if this unit's remote control is used near another component also controlled by an infrared remote control, that component may be caused to malfunction.
- If the effective range of remote control operation becomes noticeably shortened, the batteries have reached their lifetime and should be replaced.



## Installation

Install the unit on a surface that is level and secure.

- Do not install the unit in the following kinds of location:
  - On top of a television set (the television images may be distorted).
  - On top of a cassette deck or other device emitting magnetism (audio quality may be adversely affected).
  - In locations exposed to direct sunlight.
  - In locations exposed to high humidity.
  - In locations exposed to direct contact with water.
  - In locations exposed to very high or very low temperatures.
  - In locations exposed to vibration.
  - In locations exposed to much dust or cigarette smoke.
  - In kitchens or other locations exposed to oil or smoke.
- If the unit is installed on a sofa or other sound-absorbing surface, it may fail to produce correct sound quality.

# Connections

## Rear panel

### Caution

- When making or changing connections, be sure to turn off the power switch and disconnect the power cord from its AC power outlet.
- Do not connect the power cord until all component and device connections are completed.

### AES/EBU input connector

This digital input supports AES/EBU signals in PCM format (up to 192 kHz/24 bits).

### DIGITAL IN connectors

These connectors support PCM format signals (up to 192 kHz/24 bits).

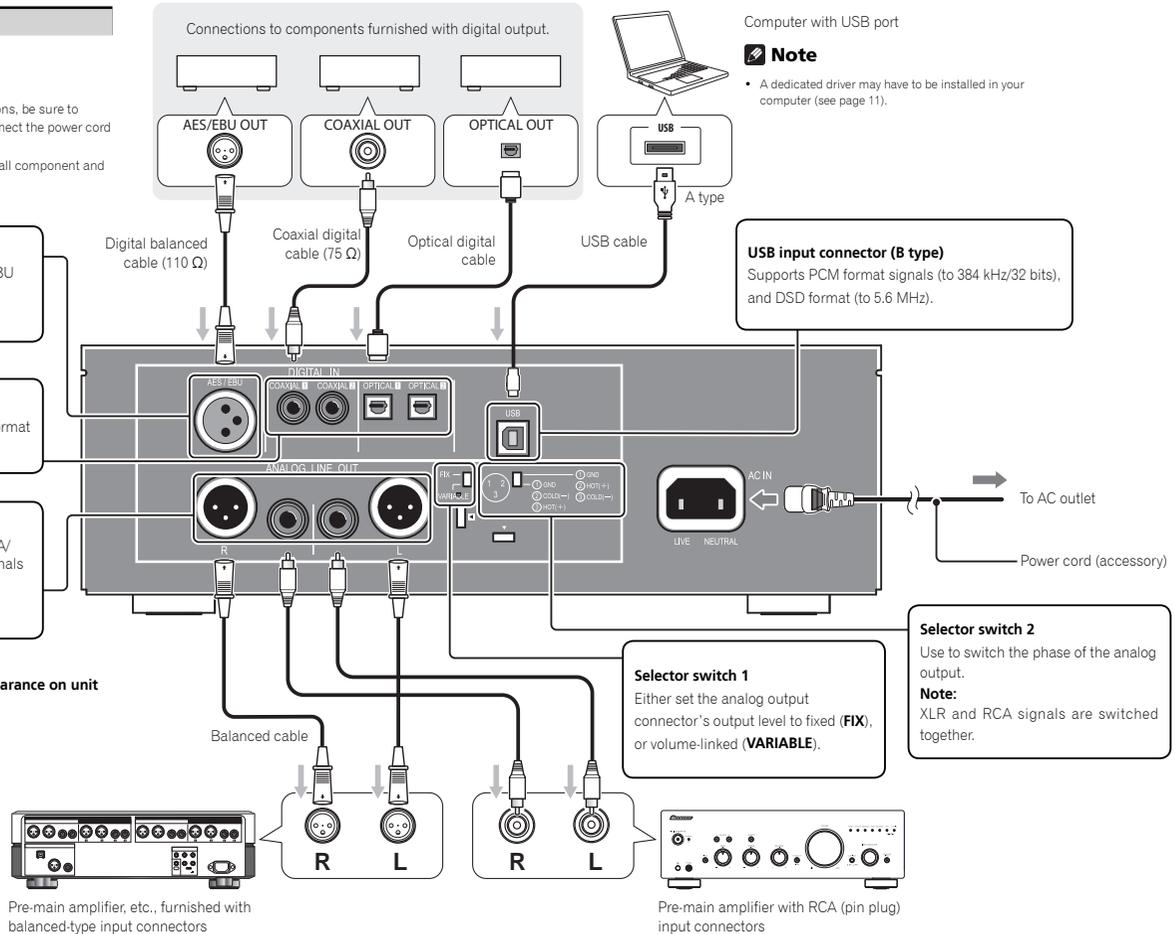
### ANALOG LINE OUT connectors

These two output connectors (RCA/XLR) simultaneously generate signals selected with the **INPUT** knob. Signals are output when "LINE" is selected with the **OUTPUT** knob.

### Balanced output connector (appearance on unit side; equivalent to XLR-3-31)



If a power amplifier is connected, when selector switch 1 is set for linked volume (**VARIABLE**), sound volume can be controlled by the unit.



Computer with USB port

### Note

- A dedicated driver may have to be installed in your computer (see page 11).

### USB input connector (B type)

Supports PCM format signals (to 384 kHz/32 bits), and DSD format (to 5.6 MHz).

### Selector switch 1

Either set the analog output connector's output level to fixed (**FIX**), or volume-linked (**VARIABLE**).

### Selector switch 2

Use to switch the phase of the analog output.

**Note:**  
XLR and RCA signals are switched together.

Pre-main amplifier, etc., furnished with balanced-type input connectors

Pre-main amplifier with RCA (pin plug) input connectors

# Connections

## Front panel

### Balanced headphone output connector (XLR4) (PHONES 1)

Connect an XLR 4-pin headphone connector here. Supported headphones impedance 16 Ω to 600 Ω.

Terminal leads for the 4-pin balanced output are as follows:

- ① Lch HOT
- ② Lch COLD
- ③ Rch HOT
- ④ Rch COLD

#### Balanced output connector (appearance on unit side)



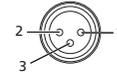
### Balanced headphone output connector (XLR3) (PHONES 2)

Connect an XLR 3-pin headphone connector here. Supported headphones impedance 16 Ω to 600 Ω.

Terminal leads for the 3-pin balanced output are as follows:

- ① GND
- ② HOT
- ③ COLD

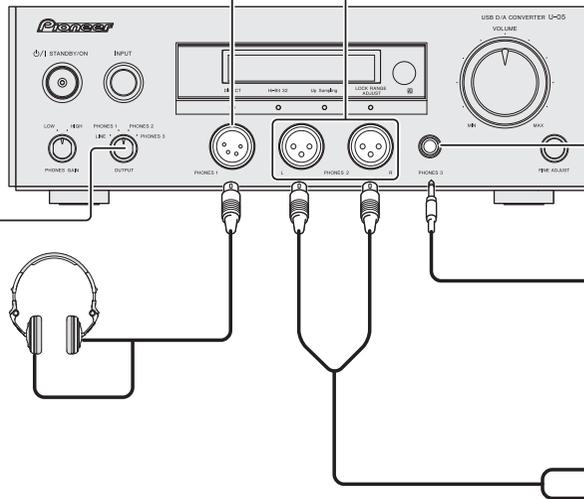
#### Balanced output connector (appearance on unit side)



### Headphone jack (unbalanced) (PHONES 3)

Use this jack to connect a standard headphones plug. Supported headphones impedance 16 Ω to 600 Ω.

Rotate the **OUTPUT** knob to the desired headphone position before beginning playback.

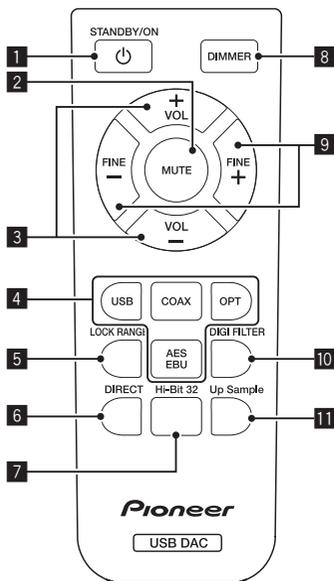


### Caution

- Take care when connecting input/output and headphones connectors to be sure the pins are aligned properly.

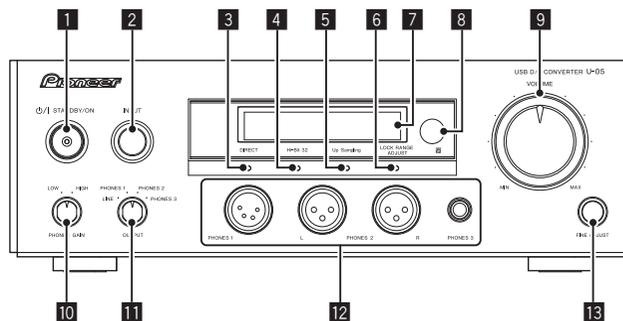
# Parts names and functions

## Remote control



- 1** **⏻ STANDBY/ON**  
Use to alternate power status between ON and STANDBY modes.
- 2** **MUTE button**  
During playback, press to temporarily mute the sound.
- 3** **VOL +/- buttons**  
Press these buttons to raise/lower the sound volume.
- 4** **Direct input selector buttons**  
Press one of the USB/COAX/OPT/AES EBU buttons to select the desired source.
- 5** **LOCK RANGE button**  
Press to adjust the DAC locking range.
- 6** **DIRECT button**  
Press this button to output the input signal as is, without passing through the DSP.
- 7** **Hi-Bit 32 button**  
Press to change the Hi-Bit 32 setting.
- 8** **DIMMER button**  
Press to adjust the display's brightness.
- 9** **FINE +/- buttons**  
Use to finely adjust the headphone volume (this adjustment affects only the headphone output).
- 10** **DIGI FILTER button**  
Press to change the type of digital filter used.
- 11** **Up Sample button**  
Press to change the Up Sampling setting.

## Front panel



- 1** **⏻/STANDBY/ON**  
Use to alternate power status between ON and STANDBY modes.  
When the unit's power is ON, the power indicator in the center of the button will light.
- 2** **INPUT knob**  
Use to select the input source.  
The selected source will appear in the display window.
- 3** **DIRECT indicator**  
See page 9, "Direct setting".
- 4** **Hi-Bit 32 indicator**  
See page 9, "Hi-Bit 32 setting".
- 5** **Up Sampling indicator**  
See page 9, "Up Sampling setting".
- 6** **LOCK RANGE ADJUST indicator**  
See page 10, "Adjust the DAC locking range".
- 7** **Display window**
- 8** **Remote control sensor**
- 9** **VOLUME knob**  
In order to control the sound volume of a component connected to the unit's analog output connector, **Selector switch 1** (on unit's rear panel) must be set to **VARIABLE**.
- 10** **PHONES GAIN knob**  
Use to adjust the headphones gain.
- 11** **OUTPUT knob**  
Use to select the type of output, including LINE, and PHONES 1 to PHONES 3.
- 12** **Headphones connectors (PHONES 1, 2, 3)**  
Use to connect headphones.
- 13** **FINE ADJUST knob**  
Use to finely adjust the headphone volume (this adjustment affects only the headphone output).

# Operation

## Basic operation

### 1 Turn power ON.

Press the front-panel **⏻/I STANDBY/ON** button.

- The power indicator in the center of the button will light.

### 2 Select the desired output connector.

Rotate the front-panel **OUTPUT** knob.

Set to **LINE** to select the analog output connector.

### 3 Select the desired input source.

Rotate the front-panel **INPUT** knob, or press the corresponding **direct input selector** button on the remote control.

- The selected input will appear in the display window.
- DSD data can be played only when using the USB connection.

### 4 Operate the playback device.

For details, consult the operating instructions for your playback device.

### 5 Adjust the sound volume.

Rotate the unit's front-panel **VOLUME** knob, or use the **VOL +/-** buttons on the remote control.

## Using headphones

### 1 Connect your headphones.

Connect your headphones to the appropriate front-panel connectors (PHONES 1 to 3).

### 2 Select the headphones output.

Use the front-panel **OUTPUT** knob to select the connector to which you have attached the headphones.

### 3 Adjust the headphone gain.

The front-panel **PHONES GAIN** knob can be used select **LOW** or **HIGH** gain.

Under normal conditions, **HIGH** gain should be selected. If the sound is distorted when the volume is low, however, **LOW** gain can be selected to equalize the acoustic quality.

### 4 Make fine adjustments to the headphones volume.

Use the front-panel **FINE ADJUST** knob or the remote control's **FINE +/-** buttons to make fine adjustments.



- Adjustments are possible within  $\pm 6$  steps of the reference value.
- Settings are retained even after using the **VOL +/-** button or **VOLUME** knob.

## Settings

### Direct setting

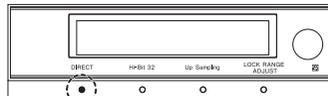
Input signals are output directly, without passing through the DSP.

This makes it possible to achieve audio output loyal to the original input signal.

- Factory default setting: ON

#### 1 Change the setting.

- Each time the remote control's **DIRECT** button is pressed, the setting alternates between ON and OFF.
- When the function is set to ON, the front-panel **DIRECT** indicator lights.



### Hi-Bit 32 setting

This setting increases the dynamic range of digital audio signals.

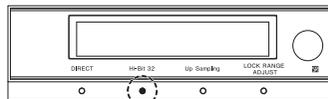
Audio signals between 16 bit and 24 bit are quantized to 32-bit signals, making possible musical expression that is smoother and more finely graded.

**This setting is supported when the Direct setting is OFF**, and has effect only on linear PCM signals.

- Factory default setting: ON

#### 1 Change the setting.

- Each time the remote control's **Hi-Bit 32** button is pressed, the setting alternates between ON and OFF.
- When the function is set to ON, the front-panel **Hi-Bit 32** indicator lights.



## Up Sampling setting

This function raises the sampling frequency for playback, making possible clear, highly transparent audio playback.

**This setting is supported when the Direct setting is OFF**, and has effect only on linear PCM signals.

- Factory default setting: **LOW**

#### 1 Change the setting.

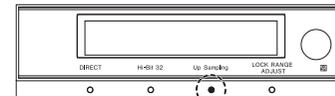
- Each time the remote control's **Up Sample** button is pressed, the function cycles through the following: **LOW** → **HIGH** → **OFF**

OPTICAL 1  
Up Sample LOW

OPTICAL 1  
Up Sample HIGH

OPTICAL 1  
Up Sample OFF

- When set to **LOW** or **HIGH**, the unit's front-panel **Up Sampling** indicator lights.



- At the various settings, playback is performed with sampling frequencies raised as indicated in the accompanying chart.

Sampling frequencies (kHz)		OFF	LOW	HIGH
PCM	32	32	32	32
	44.1	44.1	176.4	352.8
	48	48	192	384
	88.2	88.2	176.4	352.8
	96	96	192	384
	176.4	176.4	176.4	352.8
	192	192	192	384
	352.8	352.8	352.8	352.8
384	384	384	384	

# Operation

## Changing digital filters

Individual settings can be made for PCM and DSD input signals.

### 1 Change the setting.

#### Settings for digital inputs, or settings when playing PCM data from a USB connection.

Each time the remote control's **DIGI FILTER** button is pressed, the function cycles in the order SHARP → SLOW → SHORT. Select the value desired.

OPTICAL 1  
D. FILTER SHARP

OPTICAL 1  
D. FILTER SLOW

OPTICAL 1  
D. FILTER SHORT

- SHARP: Produces a somewhat hard-edged sound.
- SLOW: Produces a softer, gentler sound.
- SHORT: Produces more aggressive sound with rapid uptake.

- Factory default setting: SHARP

#### Settings for DSD data playback from USB input.

Each time the remote control's **DIGI FILTER** button is pressed, the function cycles in the order MODE 1 → MODE 2 → MODE 3. Select the value desired.

USB  
D. FILTER MODE 1

USB  
D. FILTER MODE 2

USB  
D. FILTER MODE 3

When set to MODE 1 → MODE 2 → MODE 3, produces progressively reduced attenuation of high-range sounds beyond the audible spectrum.

- Factory default setting: MODE 1

## Adjust the DAC locking range

This function allows adjustment for those times when the ultimate in high fidelity sound quality is demanded.

Even with the same jitter clock input, by narrowing the locking range, collateral sounds and overtones can be reduced, thus raising the quality of the sound.

However, if the locking range is narrowed excessively, input signals with a high level of jitter may cause the lock to slip, producing interruptions or dropouts in the sound. In such cases, adjust the locking range to a slightly wider value while listening to the sound, until the sound returns to normal.

Signal dropout when the locking range is narrowed (other than at normal times) falls outside warranted operating conditions. In such cases, widen the locking range setting until the dropout stops.

This unit records the adjusted locking range set for each individual input source.

### 1 Select lock range setting mode.

Press the remote control's **LOCK RANGE** button and enter the setting mode.

LOCK RANGE  
| - - - - >

Normal setting (factory default)

LOCK RANGE  
| - >

Narrowest locking range

### 2 Change the setting.

Press the remote control's **FINE +/-** buttons to change the locking range. Each time one of the buttons is pressed, the set value changes (4 steps), as follows.

**FINE (-) button (pressed once):**  
narrows locking range

LOCK RANGE  
| - - - >

**FINE (+) button (pressed once):**  
widens the locking range

LOCK RANGE  
| - - - - >

- If the setting is changed to any value other than the default "normal", the front-panel **LOCK RANGE ADJUST** indicator will light.
- If any button on the remote control other than **FINE +/-** is pressed, the display window will change to show the current input source.

### ■ For advanced users

If the **LOCK RANGE** button is held depressed for five seconds or more, the ability to narrow the lock range will be extended by three additional steps. However, as noted in the "Caution" note below, users should be aware that using these extended steps will produce a very delicate mode easily subject to dropouts.

LOCK RANGE  
| - - - - - >

Lock range setting can be extended by 3 steps.

Normal settings

### ⚠ Caution

- Even more delicate sound quality adjustments are possible, but the frequency of dropouts greatly increases, with the result that these steps should not be taken except by advanced users. In particular, when two tracks with differing sampling frequencies and bit rates are played consecutively, the playback may demonstrate a high propensity for dropouts.
- Even if Up Sampling has been set and the sampling frequency raised, sound will still be prone to dropouts.
- If signal dropout occurs, try readjusting the lock range to a wider value so that the sound appears normal. Narrowing the width of the lock range setting (other than in normal conditions) is considered outside the range of warranted operation as regards signal dropout. In such cases, widen the lock range setting until dropouts do not occur.
- To return the lock range to the standard 4 steps, return the setting to factory defaults (see page 11: To return settings to factory defaults).

## Setting auto power down

This function automatically turns off the power if no input signal (including silence) or other user operation is detected for a period of 15 minutes.

- Factory default setting: ON

### 1 Set auto power down.

With the power set to OFF, hold the front-panel **⏻/STANDBY/ON** button depressed for 5 seconds or more until power turns ON.

Use the same procedure to turn the auto power down setting OFF.

USB  
A. P. D ON

### 🔍 Note

- If even an inaudible level of signal is detected, the unit will consider it a valid signal, thus preventing the auto power down function from operating.

## Adjusting the level of illumination (DIMMER) in the display window and indicators

Adjust illumination in the display window.

When set to OFF, the display window and indicators are turned off. By disconnecting power to the display window, minute amounts of electronic noise can be reduced.

- Factory default setting: 4 (brightest)

### 1 Adjust the dimmer.

Repeatedly pressing the remote control's **DIMMER** button cycles the display illumination through 4 levels and OFF (4 → 3 → 2 → 1 → OFF).

USB  
DIMMER 4

## Operation

### To return settings to factory defaults

Perform this operation to return the unit's settings to factory default values.

- 1 With the unit in **STANDBY** mode, hold the remote control's Up Sample button depressed and then press the main unit's front-panel **0/STANDBY/ON**.

RESET ?

- 2 Press the remote control's **DIRECT** button.  
The display will ask for final confirmation.

RESET ?  
OK ?

- 3 To confirm the reset operation, press the remote control's **DIGI FILTER** button. All settings will be returned to their factory default values.

OK !

## Using the USB DAC function

### Install the driver

- Music files located on a computer can be played by this unit through a USB connection between the computer and this unit. In order to play files in this way, however, a special driver may need to be installed on your computer. For more information, please consult the Pioneer website, where you can find instructions regarding driver installation and computer settings.

### Playing music files located on a computer

By using a USB cable to connect this unit to your computer, the computer's audio playback software can be used to play the computer's music files through this unit.

### Playing music files located on a computer

- 1 Use a **USB** cable to connect this unit to your computer.
- 2 Turn on power to the computer.
- 3 Turn on power to this unit.
- 4 Select the proper output connector.  
Rotate the front panel **OUTPUT** knob to select the output.  
When the output is from the analog output connector, select **LINE**.
- 5 Set the input selector to **USB**.  
Rotate the unit's front-panel **INPUT** knob, or press the remote control's **USB** button.
- 6 Play the desired music file located on the computer.

### Note

- When using a USB connection from a computer to this unit for playing music, the following signal formats can be input to this unit from the computer:
  - Linear PCM
    - Quantization bits: 16 bit, 24 bit, 32 bit
    - Sampling rate: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz, 352.8 kHz, 384 kHz
  - DSD
    - Sampling rate: 2.8 MHz, 5.6 MHz
- Before disconnecting the USB cable, always be sure to stop the computer's playback first.
- If the computer's USB port does not conform to the USB 2.0 HS standard, playing music files may not be possible.
- When using a USB connection as described above, this unit's playback function cannot be used to play music files; playback must be performed with the computer's own playback software.

# Additional information

## Troubleshooting

If you think something is wrong with the unit, perform the checks listed here. Often, a minor error in operation may be mistaken for a malfunction. In addition, the symptom may have been caused by other nearby devices, so checks should also be made of components being used concurrently. If the following checks do not remedy the problem, consult the store where you purchased the unit, or your nearest Pioneer service station.

- Static electricity and other environmental factors may cause the unit to operate erratically. In such cases, the problem may be rectified by disconnecting the power plug, then plugging it in again. If this does not remedy the problem, consult the store where you purchased the unit, or your nearest Pioneer service station.

Symptom	Cause	Remedy
Power turns off by itself.	Auto power down is set (ON).	Set auto power down to OFF (see page 10).
No sound is produced even after selecting the input.	The input connection is wrong.	Check the input connection.
	The MUTE function has been enabled.	Press the remote control's <b>MUTE</b> button to disable the MUTE function.
	Sound is set too low.	Adjust the sound volume.
	The output selector has not been set.	Rotate the front-panel <b>OUTPUT</b> knob to change the output mode. If the output is from the analog output connector, choose LINE.
Noise is audible even when no input is connected.	Noise may result from the power source itself.	Check whether the unit is connected to the same extension cord used to power a computer or other digital appliance.
Sound is interrupted or has dropouts.	The lock range setting is too narrow.	Except under normal usage conditions, audio dropout caused by an excessively narrow lock range setting falls beyond the range of warranted operation. Widen the lock range setting until the dropouts cease (see page 10).
	Depending on the device connected, the sound may experience dropouts when Up Sampling is used to raise the sampling frequency.	Set the Up Sampling value to LOW; if dropouts continue, set to OFF (see page 9).
No sound is produced when using a digital input.	The digital connection is incorrect.	Check the digital connector and make sure it is connected properly.
	When connected to a CD player or other device equipped with a digital output adjustment function, the digital output is set too low.	Properly adjust the player's digital output setting.
	The output device's digital format is not supported.	If the output device is set for any signal format other than PCM (Dolby Digital, DTS, etc.), change the setting to PCM.
Digital inputs above 96 kHz produce no sound, or intermittent sound.	Some coaxial and optical digital cables may not transmit the output signal properly.	Try using a different coaxial or optical digital cable.
Remote control doesn't work.	<ul style="list-style-type: none"> <li>• The remote control's batteries are dead.</li> <li>• The distance between the unit and the remote control is too great.</li> <li>• The angle between the unit and remote control is too narrow.</li> <li>• A physical obstacle blocks the signal path to the unit.</li> <li>• A fluorescent lamp or other strong light source is shining into the unit's remote sensor.</li> </ul>	<ul style="list-style-type: none"> <li>• Change the batteries.</li> <li>• Operate the remote control within a distance no more than 7 meters from the unit, and at an angle within 30° to right or left of the unit's midline.</li> <li>• Remove the obstacle, or change the position from which you operate the remote control.</li> <li>• Move the lamp, or otherwise prevent strong light from striking the sensor.</li> </ul>

Symptom	Cause	Remedy
No sound is produced when using a USB input.	<ul style="list-style-type: none"> <li>• The device chosen in the computer's settings is wrong.</li> <li>• The MUTE setting has been selected in the computer.</li> </ul>	Check the computer's settings.
	<ul style="list-style-type: none"> <li>• Connections are not correct.</li> <li>• The computer does not detect this unit.</li> </ul>	<ul style="list-style-type: none"> <li>• If the unit is connected to the computer before switching this unit to USB input, the computer's sound settings may change to select a different device. In this case, try resetting to this unit.</li> <li>• Check connections.</li> </ul>
	File format, OS, or software is not supported.	Recheck the supported OS, software, and file sampling frequency.
	The required driver has not been installed on the computer.	A special driver may be required on the computer. For details, consult the Pioneer website.
The USB input sampling frequency always remains the same.	Depending on the computer settings, even if the playback files have different sampling frequencies, they may all be converted to the same frequency for output.	Check your computer settings.
Non-musical computer sounds from the USB input are audible.	Depending on the computer settings, the computer's boot signals and error beeps may be played by this unit.	Check your computer settings.
When using a source other than USB input, music files on the computer can't be played.	When using an input source other than USB, the computer does not recognize this unit.	Switch to USB input and use the computer sound settings to select this unit.
When using USB input, high fidelity music files (files exceeding 48 kHz/24 bit and DSD files) cannot be played.	The required driver has not been installed on the computer.	A special driver may be required on the computer. For details, consult the Pioneer website.
When using USB input, the computer playback operation produces no sound.	The sound volume for the OS or software application is set too low.	Raise the volume setting.
	The audio output for the OS has been set to MUTE.	Check the computer settings and be sure the MUTE setting has been disabled.
	Multiple applications are open at once.	Close all applications not in active use.
	The audio output settings for the OS or application have not been set properly.	Select "Pioneer USB D/A Converter" for the sound device.

## Important

- For more information, also consult the driver installation instructions found on the Pioneer website.

## Additional information

### Precautions

#### When moving this unit

When moving this unit, be sure to press the  $\odot$  STANDBY/ON button on either the remote control or the main unit's front panel to turn off the power. After confirming that the front-panel power indicator has gone out, disconnect the power cord.

After disconnecting the power cord, continue by disconnecting all connected components and devices. Attempting to move the unit with cords still attached to the connectors can result in accidental damage.

#### Installation location

- Choose a stable location close to the other devices that will be used with the unit.
- Avoid the following kinds of places:
  - Locations exposed to direct sunlight
  - Locations with high humidity or poor ventilation
  - Locations susceptible to direct contact with water
  - Locations exposed to extreme heat or cold
  - Locations exposed to vibration
  - Locations exposed to much dust
  - Locations exposed to oily smoke, steam, or heat (e.g., kitchens)

#### Do not place other objects on top of the unit

Do not place other objects on top of the unit.

#### Do not allow heat to collect in the unit

Do not use the unit when placed on a long-pile carpet, bed, or sofa, nor when wrapped in cloths, etc. Such conditions can contribute to the excessive concentration of heat in the unit, leading to malfunctions or damage.

#### Avoid heat

Do not install this unit on top of an amplifier or other heat-emitting device. When installing the unit in a rack, install the unit on a shelf lower than amplifiers, to avoid adverse influences from the amplifier(s) heat.

### Regular care and maintenance

- Dust the unit occasionally with a soft dry cloth. If required for severe soiling, soak a cleaning rag in a 1:6 mixture of mild detergent and water, then wring the rag well and wipe the unit clean. Afterwards, be sure to dry any moisture on the unit with a soft, dry cloth.
- Do not use alcohol, thinner, benzene, insecticide or other volatile compounds to clean the unit, since imprinting or coatings may peel from the unit. The cabinet may also be discolored or damaged from long exposure to rubber or vinyl products.
- Before wiping the unit with any chemical-impregnated cleaning cloths, carefully read the cautionary notices accompanying the cloth.
- Always unplug the power cord from its outlet before cleaning the unit.

### Specifications

#### Line output

Output Level	
RCA jack .....	2.4 V
XLR jack .....	4.4 V
Output impedance.....	100 $\Omega$
Frequency response .....	4 Hz to 100 kHz (–3 dB)
THD+N	
RCA jack .....	0.0012 %
XLR jack .....	0.0007 %
S/N ratio (A-weight)	
RCA jack .....	114 dB
XLR jack .....	117 dB
Dynamic range	
16 bit .....	96 dB
24 bit, 32 bit .....	118 dB

#### Headphones output

Output	
STD jack .....	180 mW + 180 mW (32 $\Omega$ )
XLR jack .....	300 mW + 300 mW (32 $\Omega$ )
Supported impedance.....	16 $\Omega$ to 600 $\Omega$
Frequency response.....	4 Hz to 80 kHz (–3 dB)
THD+N (output power –3 dB)	
STD jack .....	0.01 %
XLR jack .....	0.004 %

#### Digital input

Input impedance	
COAXIAL .....	75 $\Omega$
AES/EBU .....	110 $\Omega$
USB connector.....	USB2.0 compliant (type B)

#### Miscellaneous

Power requirements.....	220 V to 230 V, 50 Hz/60 Hz
Power consumption .....	35 W
Power consumption (standby mode).....	0.27 W
External dimensions (W x H x L)	
.....	296 mm x 101 mm x 271 mm
Weight .....	6.3 kg

#### Accessories

Remote control .....	1
Type AAA manganese batteries .....	2
Power cord	
CD-ROM (Operating Instructions)	
Quick start guide	
Safety Brochure	
Warranty card	

#### Note

- These specifications and appearance recorded here may be changed without notice.
- Corporate and product names listed here are the trademarks or registered trademarks of their respective owners.

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