ESOTERIC

N-05XD

Network DAC/Preamp

IMPORTANT SAFETY INSTRUCTIONS

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
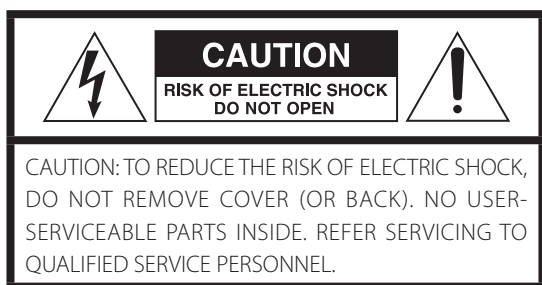
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION

- DO NOT REMOVE THE EXTERNAL CASES OR CABINETS TO EXPOSE THE ELECTRONICS. NO USER SERVICEABLE PARTS ARE INSIDE.
- IF YOU ARE EXPERIENCING PROBLEMS WITH THIS PRODUCT, CONTACT THE STORE WHERE YOU PURCHASED THE UNIT FOR A SERVICE REFERRAL. DO NOT USE THE PRODUCT UNTIL IT HAS BEEN REPAIRED.
- USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

- The apparatus draws nominal non-operating power from the AC outlet with its POWER or STANDBY/ON switch not in the ON position.
- The mains plug is used as the disconnect device; the disconnect device shall remain readily operable.
- Caution should be taken when using earphones or headphones with the product because excessive sound pressure (volume) from earphones or headphones can cause hearing loss.

WARNING

Products with Class $\mathbf{I}$ construction are equipped with a power supply cord that has a grounding plug. The cord of such a product must be plugged into an AC outlet that has a protective grounding connection.

IN USA/CANADA, USE ONLY ON 120V SUPPLY.

CAUTION

- Do not expose this apparatus to drips or splashes.
- Do not place any objects filled with liquids, such as vases, on the apparatus.
- Do not install this apparatus in a confined space such as a book case or similar unit.
- The apparatus should be located close enough to the AC outlet so that you can easily reach the power cord plug at any time.
- If the product uses batteries (including a battery pack or installed batteries), they should not be exposed to sunshine, fire or excessive heat.
- CAUTION for products that use replaceable lithium batteries: there is danger of explosion if a battery is replaced with an incorrect type of battery. Replace only with the same or equivalent type.

⚠ Precautions concerning batteries

Misuse of batteries could cause them to rupture or leak leading to fire, injury or the staining of nearby things. Please read and observe the following precautions carefully.

- Be sure to insert the batteries with correct positive (⊕) and negative (⊖) orientations.
- Use batteries of the same type. Never use different types of batteries together.
- If the remote control is not used for a long time (more than a month), remove the batteries to prevent them from leaking.
- If the batteries leak, wipe away the leakage inside the battery compartment and replace the batteries with new ones.
- Do not use batteries of types other than those specified. Do not mix new batteries with old ones or use different types of batteries together.
- Do not heat or disassemble batteries. Never throw batteries into fire or water.
- Do not carry or store batteries with other metallic objects. The batteries could short circuit, leak or explode.
- Never recharge a battery unless it is confirmed to be a rechargeable type.
- Do not expose batteries to extremely low air pressure as it could result in an explosion or leakage of flammable liquids or gases.

Supplier's Declaration of Conformity

Model number: N-05XD
Trade name: ESOTERIC
Responsible party:
Pioneer & Onkyo U.S.A. Corporation
Address: 22828 Lockness Avenue, Torrance, CA 90501 U.S.A.
Telephone number: 1-201-785-2600
This device complies with Part.15 of FCC Rules.
Operation is subject to the following two conditions:

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

Information

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 equipment and/or 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.

CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Model for Canada

Innovation, Science and Economic Development Canada's Compliance Statement:
This Class B digital apparatus complies with Canadian ICES-003.

For European Customers

Disposal of electrical and electronic equipment and batteries and/or accumulators

a) All electrical/electronic equipment and waste batteries/accumulators should be disposed of separately from the municipal waste stream via collection facilities designated by the government or local authorities.

b) By disposing of electrical/electronic equipment and waste batteries/accumulators correctly, you will help save valuable resources and prevent any potential negative effects on human health and the environment.

c) Improper disposal of waste electrical/electronic equipment and batteries/accumulators can have serious effects on the environment and human health because of the presence of hazardous substances in the equipment.

d) The Waste Electrical and Electronic Equipment (WEEE) symbols, which show wheeled bins that have been crossed out, indicate that electrical/electronic equipment and batteries/accumulators must be collected and disposed of separately from household waste.
If a battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) as defined in the Battery Directive (2006/66/EC, 2013/56/EU), then the chemical symbols **Pb, Hg, Cd** for those elements will be indicated beneath the WEEE symbol.

e) Return and collection systems are available to end users. For more detailed information about the disposal of old electrical/electronic equipment and waste batteries/accumulators, please contact your city office, waste disposal service or the shop where you purchased the equipment.

Compliance of radio transmitter and interference

This product has the function of broadband transmitter using 2.4GHz Band.

Use frequency range: 2402 MHz – 2480 MHz
Maximum output power: Bluetooth® Class 2 (less than 2.5 mW)

Please use only in the country where you purchased the product. Depending on the country, restrictions on the use of Bluetooth wireless technology might exist.

Model for USA

Labeling of authorization
FCC ID: XEG-N05XD

Model for Canada

Compliance of radio transmitter
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1) This device may not cause interference.

2) This device must accept any interference, including interference that may cause undesired operation of the device.

Labeling of authorization
IC: 1559C-N05XD

Model for EEA (European Economic Area)

CE — Hereby, TEAC Corporation declares that the radio equipment type is in compliance with Directive 2014/53/EU., and the other Directives, and Commission Regulations.

The full text of the EU declaration of conformity is available at the following internet address. Please contact us by e-mail.
https://www.teac-audio.eu/en/

TEAC Corporation
1-47 Ochiai, Tama-shi, Tokyo, 206-8530, Japan

Radiation Exposure requirements

This equipment meets the regulation, which is recognized internationally, for the case of human exposure to radio waves generated by the transmitter.

Statement of compliance

Model for USA/Canada

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20 cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

Model for EEA (European Economic Area)

This equipment complies with EN.62479; Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields; the harmonised standard of DIRECTIVE 2014/53/EU.

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Contents

Thank you for purchasing this ESOTERIC product.
Read this manual carefully to get the best performance from this product. After reading it, keep it in a safe place with the warranty card for future reference.

The Owner's Manual can be downloaded from the ESOTERIC website (https://www.esoteric.jp/en/).

To use this unit, you must also use a tablet or smartphone that has the dedicated app (free) installed and connect it to the same network as the unit.

ATTENTION

This unit only outputs signals from the one selected type of analog audio output (LINE OUT) connector.

Set the analog output before use.

Before use

Included accessories

Check to be sure the box includes all the supplied accessories shown below. Please contact the store where you purchased this product if any of these accessories are missing or have been damaged during transportation.

Power cord × 1
Remote control (RC-1334) × 1
Batteries for remote control (AA) × 2
Felt pads × 3
Owner's manual (this document) × 1
Warranty card × 1

Note about pinpoint feet

High-precision metal pinpoint feet are attached to the bottom plate of this unit.

The pinpoint feet and their stands are loose, but when the unit is placed in position, it is supported by these pinpoint feet, which effectively disperse vibrations

Chassis
After placement
Foot-stand (metal)
Pinpoint foot (metal)
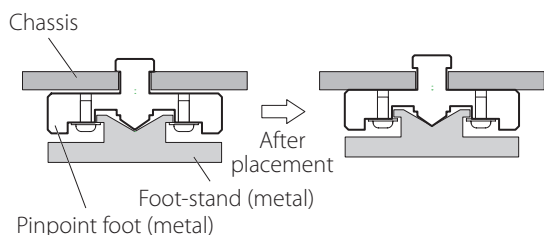
● Apply the included felt pads to the bottoms of the foot-stands to avoid scratching the surface where the unit is placed.

Precautions for use

● This unit is very heavy, so take care to avoid injury during installation.

● Do not place anything on top of the unit.

● Do not install this unit in a location that could become hot. This includes places that are exposed to direct sunlight or near a radiator, heater, stove or other heating equipment. Moreover, do not place it on top of an amplifier or other equipment that generates heat. Doing so could cause discoloration, deformation or malfunction.

● In order to enable good heat dissipation, leave at least 20 cm (8″) between this unit and walls and other equipment when installing it. If you put it in a rack, for example, leave at least 5 cm (2″) open above and 10 cm (4″) open behind it.
Failure to provide these gaps could cause heat to build up inside and result in fire.

● Place the unit in a stable location.

● Do not move the unit during use.

● Be careful to avoid injury when moving the unit due to its weight. Have someone help you move it if necessary.

● The voltage supplied to the unit should match the voltage as printed on its back. If you are in any doubt regarding this matter, consult an electrician.

● Do not open the body of the unit as this might result in damage to the circuitry or cause electric shock. If a foreign object should get into the unit, contact your dealer.

● When removing the power plug from the wall outlet, always pull directly on the plug; never yank on the cord.

Connecting with amplifiers

⚠ Precautions when making connections

- After completing all other connections, plug the power plug into a power outlet.
- Read the owner's manuals of all devices that will be connected, and follow their instructions.

The polarity of the XLR connectors can be set so that either 2 or 3 is HOT (page 26).

When connected to an amplifier capable of volume adjustment, set the analog audio output level setting (L_VOL>) of the unit to FIX, and use the amplifier to adjust the volume (page 29).

Connect using a set of only one type.

A

RCA cables

XLR cables

XLR cables

R   L   R   L
**Analog input
(LINE IN, etc.)**

R   L
**ES-LINK Analog (ESL-A)
input connectors**

Stereo amplifier

**Power amplifier
that supports
ES-LINK Analog**

A Analog audio output (LINE OUT) connectors

These output 2-channel analog audio. Connect the XLR or RCA connectors to an amplifier.

Use commercially-available cables for connections.
ESL-A/XLR, ESL-A PRE OUT: XLR cables
RCA: RCA cables

Connect an R connector on this unit to an R connector on the amplifier, and connect the corresponding unit L connector to the corresponding amp L connector.

Change the analog audio output connector setting (page 26) and analog audio output level setting (page 29) according to the connectors being used.

- The analog audio output connector setting can be set to XLR (polarity HOT for pin 2 or 3), RCA or ESLA (page 26).

- When connecting this unit with an amplifier that has ES-LINK Analog (ESL-A) connectors, we recommend connecting the analog audio output (ESL-A) connectors on this unit to the ES-LINK Analog (ESL-A) connectors on the amplifier (page 9).

ATTENTION

The ESL-A PRE OUT output connectors of this unit are female-type connectors to prevent accidental connection with XLR output connectors.

Connecting using ES-LINK Analog

ES-LINK Analog overview

The unique Esoteric ES-LINK Analog transmission method utilizes the performance of HCLD buffer circuits, which feature the ability to supply strong current at high speed. This suppresses the impact of impedance on signal paths, enabling pure and powerful transmission of signals.

● Ordinary balanced cables (with XLR connectors) are used for connection. These connectors can only be used with compatible devices, however, because the transmission format is unique.

Connecting to an integrated amplifier using ES-LINK Analog

ESL-A/XLR connectors

XLR cables

R   L

ES-LINK Analog input (ESL-A) connectors
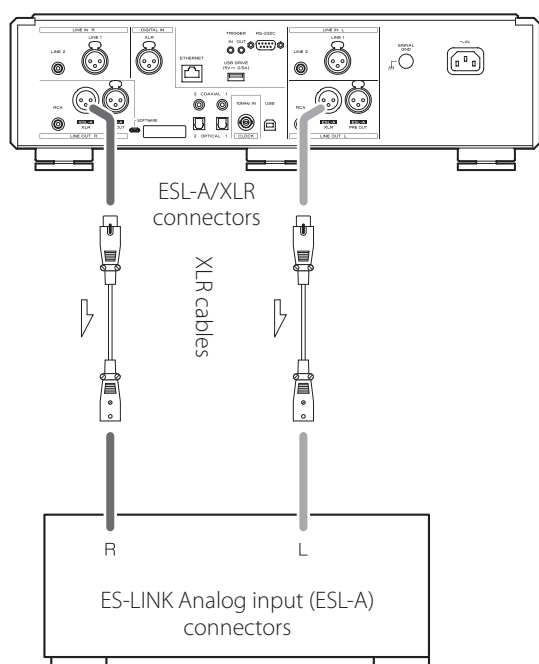
Integrated amplifier that supports ES-LINK Analog

Use XLR cables to connect the analog audio output (ESL-A XLR) connectors on this unit to the ES-LINK Analog input (ESL-A) connectors on the integrated amplifier.

● Set this unit's analog audio output connector setting (LOUT>) to ESLA (page 29).

● Set the integrated amplifier input selector to ESLA.

● Set the analog audio output level setting (L_VOL>) of the unit to FIX, and use the integrated amplifier to adjust the volume.

NOTE

Normal XLR and RCA connections are also possible. Select the connection type that provides the audio quality you prefer.

Connecting to a power amplifier using ES-LINK Analog
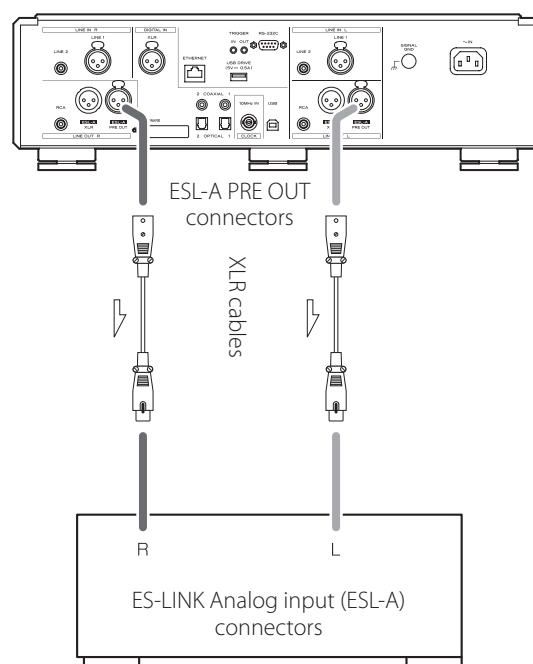
ESL-A PRE OUT connectors

XLR cables

R   L

ES-LINK Analog input (ESL-A) connectors

Power amplifier that supports ES-LINK Analog

Use XLR cables to connect the analog audio output (ESL-A PRE OUT) connectors on this unit to the ES-LINK Analog input (ESL-A) connectors on the power amplifier.

● Set the power amplifier input selector to ESLA.

● Use the VOLUME knob on this unit to adjust the volume.

● Set this unit's analog audio output level setting (L_VOL>) to ON (page 29).

ATTENTION

The ESL-A PRE OUT output connectors of this unit are female-type connectors to prevent accidental connection with XLR output connectors.

Equipment with digital audio output

DIGITAL OUT (XLR)

Super Audio CD player, etc.

AUDIO OUT

R L R L

B

XLR digital cable

C

Connect using a set of only one type.

RCA cables

XLR cables

D **E**

F

E IN R
LINE 1
LINE 2

DIGITAL IN
XLR

TRIGGER
IN OUT

RS-232C

ETHERNET

USB DRIVE
(5V ⎓ 0.5A)

LINE IN L
LINE 1
LINE 2

SIGNAL
GND

~IN

2 COAXIAL 1

RCA

ESL-A
XLR

ESL-A
PRE OUT

SOFTWARE

LINE OUT R

2 OPTICAL 1

10MHz IN

CLOCK

USB

RCA

ESL-A
XLR

ESL-A
PRE OUT

LINE OUT L

RCA coaxial cable

B

Optical digital cable

G

BNC coaxial cable

DIGITAL OUT (COAXIAL)

DIGITAL OUT (OPTICAL)

10MHz OUT

Equipment with digital audio output

Equipment with digital audio output

Device that outputs clock signal (G-02X, etc.)

B Digital audio input (DIGITAL IN) connectors

Use these to input digital audio.
They can be connected to the digital output connectors of appropriate audio devices.

Use commercially-available cables for the following connections.

XLR: XLR digital cable
RCA: RCA coaxial digital cable
OPTICAL: optical digital cable (TOS)

● They can receive signals that are 32–192 kHz and 16/24-bit.

C Analog audio input (LINE IN) connectors

Connect the analog audio output connectors of Super Audio CD players, DVD players, cassette decks, tuners and other equipment to these connectors.
Connect an R connector on this unit to the right (R) connector of an output device and the corresponding unit L connector to the corresponding left (L) connector of the output device.

Use commercially-available cables for the following connections.

XLR: XLR cables
RCA:　RCA cables

D TRIGGER connectors

These connectors are for controlling power.
Do not connect anything to these connectors when not using them.

E Remote control input (RS-232C) connector

This control connector is for use by professionals (custom installers).

F SIGNAL GND grounding terminal

The audio quality might be improved by connecting this grounding terminal to an amplifier or other device that is connected to this unit.

● This is not a safety grounding terminal.

G 10MHz IN CLOCK connector

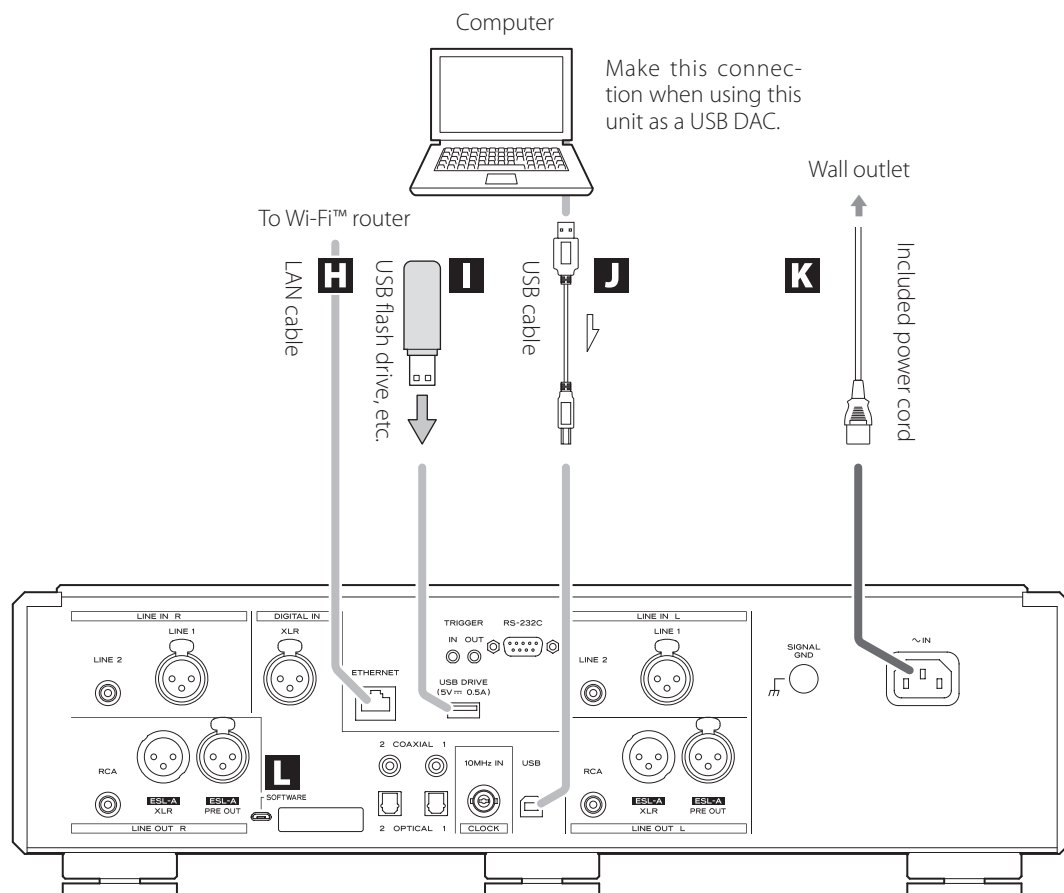Input 10MHz clock synchronization signals through the 10MHz IN CLOCK connector.
To use clock synchronization, connect the clock output connector of the device outputting the clock signal to the 10MHz IN CLOCK connector on this unit. Then, set the clock (CLK>) setting to IN (page 25).

Use a commercially-available BNC coaxial cable for connection.

● BNC coaxial cables with 50Ω or 75Ω impedance can be used.

English

Connecting to networks and USB devices

Computer

Make this connection when using this unit as a USB DAC.

Wall outlet

To Wi-Fi™ router

LAN cable **H** USB flash drive, etc. **I** USB cable **J** **K** Included power cord

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H ETHERNET port

Use a LAN cable to connect to a network.

Use a commercially-available LAN cable for connection.

I USB drive port (USB DRIVE)

Connect, for example, USB flash drives that contain audio files here.

- This port can only be used to play audio files contained on the connected USB flash drive or other device.
- To play audio files on a USB flash drive or other device connected to the USB DRIVE port, set the input source to NET and use an app for playback (page 14).

J USB port

Use this to input digital audio from a computer. Connect it to a computer's USB port.

Use a commercially-available USB cable for connection.

- Before connecting, read pages 22 to page 23.

K AC power inlet (~IN)

Connect the supplied power cord to this AC inlet.
After completing all other connections, plug the power plug into a power outlet.

⚠ **Use only a genuine ESOTERIC power cord. Use of other power cords could result in fire or electric shock.**

⚠ **Disconnect the power plug from the outlet if you will not use the unit for a long time.**

L SOFTWARE maintenance port

This is used for maintenance. Do not connect anything to this port unless instructed to do so by our service department.

Connection example
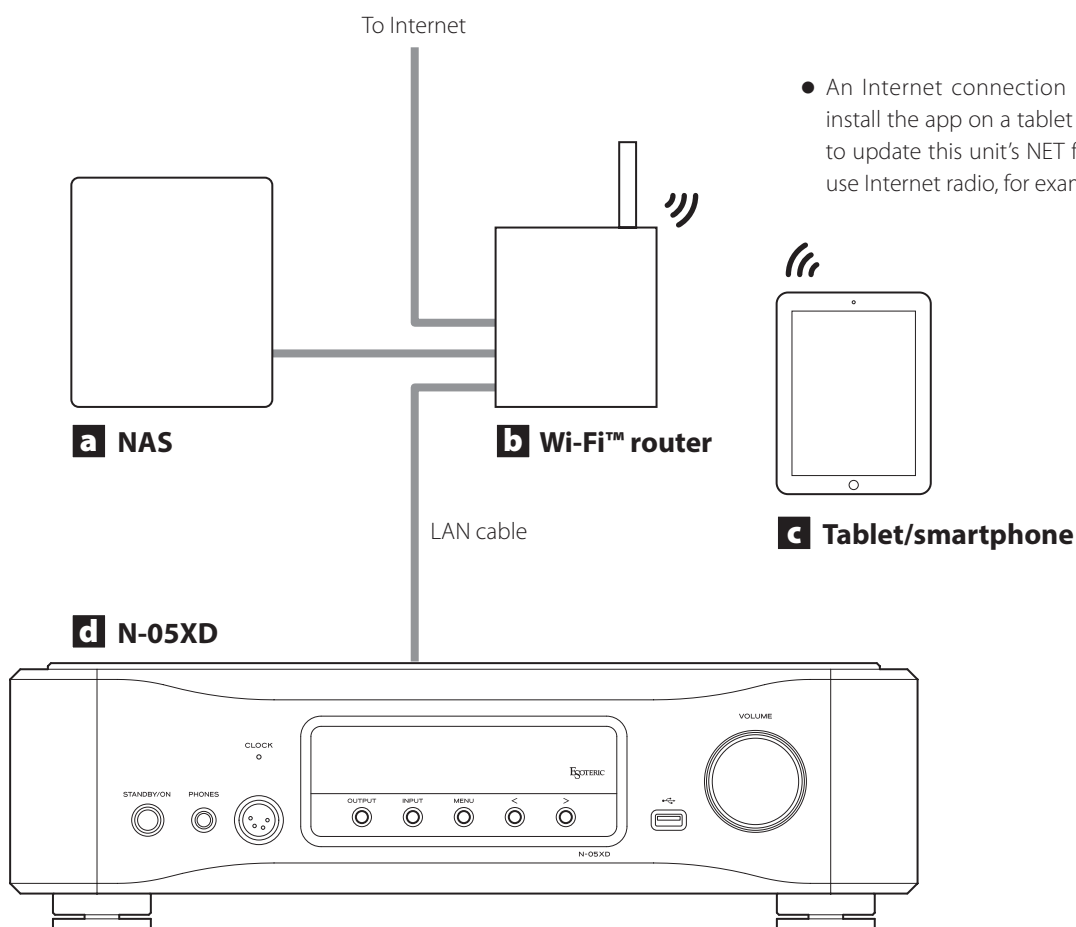
To Internet

● An Internet connection is necessary to install the app on a tablet or smartphone, to update this unit's NET firmware and to use Internet radio, for example.

a **NAS**

b **Wi-Fi™ router**

LAN cable

c **Tablet/smartphone**

d **N-05XD**

---

a **NAS (network-attached storage)**

Use this to store audio files.
Operation as a UPnP server is necessary to use it as a media server.

Instead of using an NAS, audio files can also be put on a USB flash drive or other USB storage device and that device connected to a USB drive port on this unit. Then, those files can be played back using the media server function of the N-05XD (page 14).

b **Wi-Fi™ router**

Use Wi-Fi to connect the tablet or smartphone to this unit and the NAS.

c **Tablet/smartphone**

Install the app to control this unit.

d **N-05XD**

This unit

ATTENTION

By default, the ETHERNET port LED (LanLED>) setting is OFF (page 27).

Downloading the remote app

To use the ETHERNET port or USB drive (USB DRIVE and ⌁) ports, you must also use a tablet or smartphone that has the dedicated app (free) installed and connect it to the same network as the unit.

By installing the app on a tablet or smartphone, you can use it over a wireless network to operate the unit.

● You can download and use the app for free.

Finding the tablet/smartphone app
Search for "ESOTERIC Sound Stream" in the App Store or Google Play Store.

Playing audio files on a USB flash drive or other device connected to a USB drive port

1) Put audio files on the USB flash drive or other USB storage device and connect it to a USB drive port.

2) Follow the procedures in "Getting started" of the ESOTERIC Sound Stream User's Manual to open the Setup menu.

3) In the Music Player section, select ESOTERIC N-05XD.

4) Select Music Library, and then select ESOTERIC N-05XD USB Music Server.

   ● Refreshing the music library could take several minutes if it has many audio files.

This completes preparation for playing audio files on a USB flash drive or other device connected to the USB drive port.
Refer to the ESOTERIC Sound Stream User's Manual to prepare playlists and play audio files.

| NOTE |

Network module firmware is updated through ESOTERIC Sound Stream. We recommend that you regularly select this unit in ESOTERIC Sound Stream, and update it with the latest firmware.
A pop-up window recommending a firmware update will appear if one is available.

Connecting headphones

⚠ CAUTION

While wearing headphones, do not connect or disconnect them or turn the unit on or put it into standby.
Doing so could result in a sudden loud noise that could harm your hearing.

Before putting headphones on, always set the volume to minimum (display should show "0" when set to "STEP (0-100)" or "−∞ dB" when set to "dB") (page 19).

UNBALANCED
Connect headphones with a standard 6.3mm (1/4″) stereo plug here.
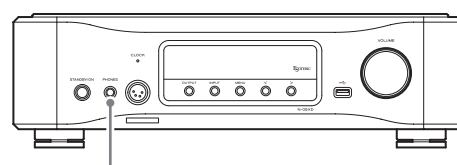
PHONES
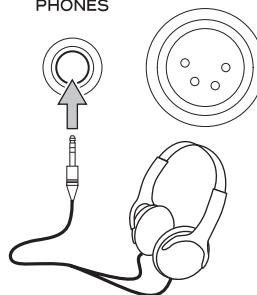
BALANCED
Connect headphones with a 4-pin XLR plug here.

PHONES

PIN assignments of this unit

4   1

3   2

1: L+, 2: L-
3: R+, 4: R-
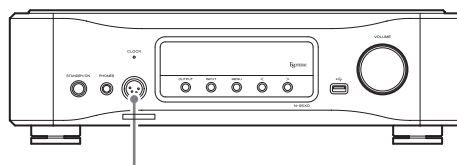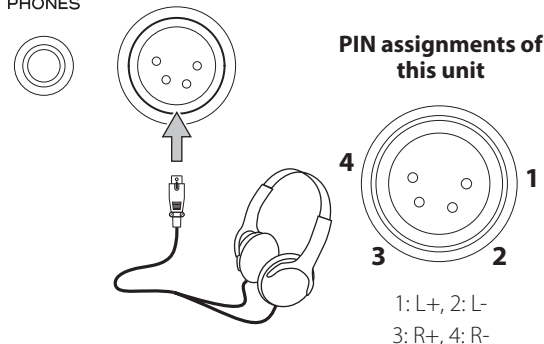
Notes about the remote control

Precautions when using the remote control

● When using the remote control, point it toward the remote control signal receiver on the main unit from a distance of 7 m (23 ft) or less. Do not place obstructions between the main unit and the remote control.

● The remote control might not work if the remote control signal receiver is exposed to direct sunlight or bright light.

● Beware that use of this remote control could cause the unintentional operation of other devices that can be controlled by infrared rays.

Installing batteries

1 **Slide the bottom end of the remote control as shown in the illustration, and pull out the battery holder.**
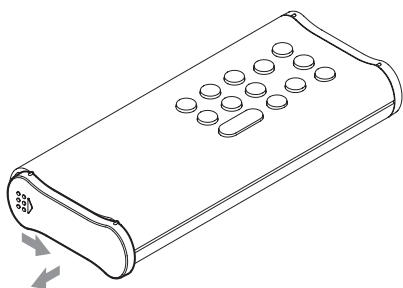
2 **Insert two AA batteries with ⊕ and ⊖ oriented as shown in the holder, and put the holder in again.**
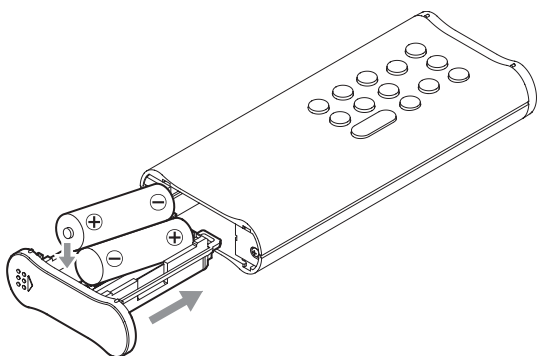
3 **Slide the bottom end of the remote control as shown in the illustration to close the battery holder.**
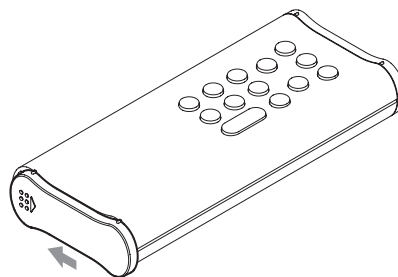
When to replace batteries

If the distance required between the remote and the main unit decreases or if the main unit stops responding to the remote buttons, replace both batteries with new ones.
Dispose of the used batteries according to the instructions on them or requirements set by your local municipality.

⚠ **Precautions concerning batteries**
Misuse of batteries could cause them to rupture or leak, which might result in fire, injury or the staining of nearby materials. Please read and observe the precautions on page 4 carefully.

English

a ON button

Press this to turn the unit on.

b STANDBY button

Press this to put the unit into standby mode.

c DIMMER button

Press this to adjust the brightness of the main unit's display (page 17).

NETWORK/DAC section

d INPUT button

Press this to select the input source. If no digital signal is input when the input source is digital, the input source name will blink.

● Press this when a setting is shown to complete the setting and return to ordinary display (page 24).

e MENU button

Press this to enter setting mode (page 24).

f Setting adjustment (〈/〉) buttons

Use these to change parameters when in setting mode.
Use these also for operations when pairing with another Bluetooth device (page 21).

The following buttons can be used when the input source is NET or Bluetooth.

g Play (▶) button

Press this to start disc playback.

h Stop (■) button

Press this to stop playback.

i Skip (I◀◀ / ▶▶I) buttons

Use these to skip to the previous or next track.

j Pause (II) button

Press this to pause playback.

ATTENTION

During Bluetooth input, the play, stop, skip and pause buttons might not be supported by some apps on the Bluetooth source device.

When the main unit and the remote control both have buttons with the same functions, this manual explains how to use one of the buttons. The other corresponding button can be used in the same manner.

AMP section

When the remote control AMP button setting (AMPRM>) is ON, the k–n buttons in the AMP section will be enabled (page 30).

● When using an ESOTERIC integrated amplifier or preamp, set the remote control AMP button setting (AMPRM>) to OFF (page 30).

k INPUT (〈/〉) buttons

Use these to switch between input sources. Select the connector type that is connected to the desired audio output device.
Use these when changing L/R balance (BAL>) and input gain (LVL>) settings (page 25).

l SETUP button

Use these when changing L/R balance (BAL>) and input gain (LVL>) settings (page 25).

m VOLUME (+/−) buttons

Use these to adjust the volume. Press the + button to increase the volume and the − button to decrease it.

● When "THRU" appears on the display, the volume cannot be adjusted on this remote control (page 29).

n MUTE button

Press this to temporarily mute the sound. Press this again to restore the volume setting.

● When muted, "MUTE" blinks on the screen.

● The buttons not explained here do not function with this product.

● This remote control can also be used for other ESOTERIC products.
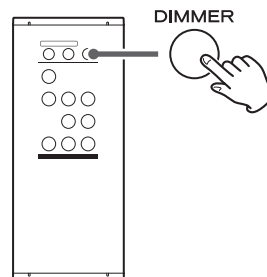
This can be used to adjust the brightness of the main unit's display.

DIMMER 3
⬇
DIMMER 2   (normal brightness)
⬇
DIMMER 1
⬇
off
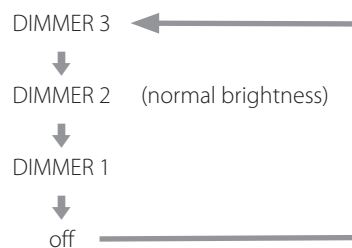
● Even when the dimmer is set to off, the display will light at normal brightness for about three seconds when you press the play (▶) or another button.

● Even when set to DIMMER 1 or off, setting menus and error messages will be shown with normal brightness (DIMMER 2).

● Pressing and holding the button will set the brightness to DIMMER 2 (normal brightness).

English

Main unit parts and functions
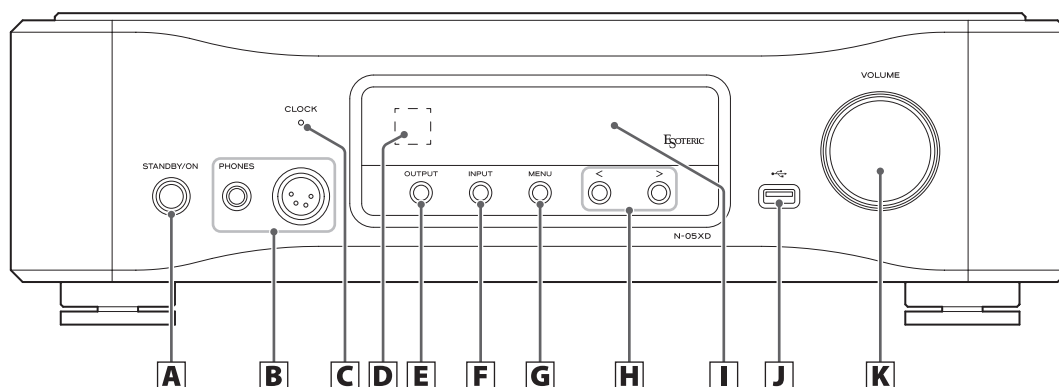
A STANDBY/ON button

Press this to turn the unit on or put it into standby mode.
When the unit is on, the ring around the button lights.
When the unit is off, it is unlit.

When not using the unit, turn it off.

B PHONES jacks

Connect headphones plugs (standard 6.3mm (1/4″) stereo or 4-pin XLR) here (page 14).

C CLOCK indicator

This shows the clock synchronization status.
This indicator blinks during clock synchronization and lights when synchronization completes.
This lights green when the input source is USB or NET and the unit is operating using the internal clock.

D Remote control signal receiver

This receives signals from the remote control. When using the remote control, point the end of it toward this receiver panel.

E OUTPUT button

Press this to switch which connector outputs analog audio.

PHONES jacks

BALANCED ➡ UNBALANCED
Analog audio output
(LINE OUT) connectors*
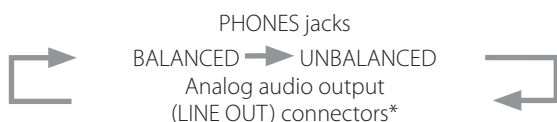
*Connectors set using the analog audio output connector setting (LOUT>).

F INPUT button

Press this to select the input source. If no digital signal is input when the input source is digital, the input source name will blink.

G MENU button

Press this to enter setting mode.

H Setting adjustment (〈/〉) buttons

Use these to change parameters when in setting mode.
These can be used for playback and song selection when the input source is NET or Bluetooth.

● Use these also for operations when pairing with another Bluetooth device (page 21).

● When the input source is NET or Bluetooth, press the 〉 button once to start playback and again to skip to the next track. During playback, press the 〈 button to skip to the previous track and press and hold it to stop.

I Display

This shows various information, including the volume and the sampling frequency of the input source.

J USB drive port (⠿)

Connect USB flash drives that contain audio files, for example, here.

● This port can only be used to play audio files contained on the connected USB flash drive or other device.

● To play audio files on a USB flash drive or other device connected to the USB drive port, set the input source to NET and use an app for playbackpage 14).

K VOLUME knob

Use this to adjust the volume.
Turn this knob clockwise to increase the volume and counter-clockwise to decrease it.

Basic operation

1 Press the STANDBY/ON button to turn the unit on.

STANDBY/ON
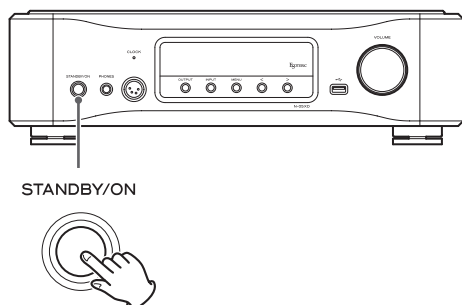
- If an amplifier is connected to this unit, always turn the amplifier on very last.

2 Minimize the volume.

Minimize the volume on the device used to control the volume (either this unit or the amplifier or other equipment connected to this unit).

3 Press the OUTPUT button to select the connector type used to output analog audio.

OUTPUT
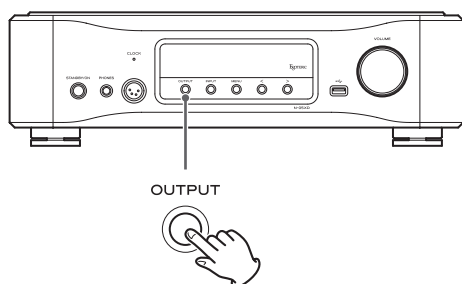
4 Press the INPUT button to select the source.
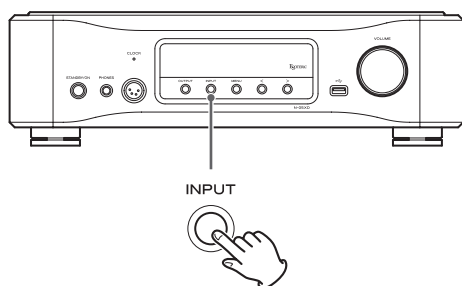
INPUT

The selected source appears on the display.

- If the input signal is not a digital audio signal or is an audio signal format that is not supported by this unit, such as Dolby Digital or DTS, no audio will be output. Set the digital output of the connected device to PCM audio output.
- To play back audio files when this unit is set to USB, you must first install a dedicated driver on the computer before connecting them (page 22).
- DSD data can only be played back when the input source is USB or NET (including USB flash drives) or when using DoP format digital signals.
- To use NET or a USB DRIVE port (front or back), install ESOTERIC Sound Stream (free) on a smartphone or tablet, and connect it to the same network as the unit.
- To use a Bluetooth device, refer to "Bluetooth® wireless technology" on page 20 and pair it with the unit.

5 Operate the audio output device.

When the input source is NET, use a smartphone or tablet that has ESOTERIC Sound Stream installed.

When the input source is USB, use ESOTERIC HR Audio Player or other audio playback software on the computer connected to the unit (page 23).

For other input sources, refer to the operation manuals of the connected devices.

6 Adjust the volume.

When using the line outputs

When the analog audio output level setting (L_VOL>) (page 29) is set to ON, use the VOLUME knob on this unit to adjust the volume.

When set to FIX, the volume cannot be adjusted using this unit, so adjust volume on the stereo amplifier or other equipment connected to this unit.

When headphones are connected to this unit

Turn this unit's VOLUME knob to adjust the volume.

- When this unit's VOLUME knob is enabled, the volume setting will be shown.

NOTE

- Automatic power saving (APS>) is set to OFF when shipped new from the factory (page 26).
- When the automatic display dimming setting (DPaOFF>) is set to ON, the display will turn off during audio output (page 26).

English

Bluetooth® notes

When using this unit with a mobile phone or other Bluetooth devices, they should be no more than about 10 m (33 ft) apart.
Depending on the circumstances of use, however, the effective transmission distance might be shorter.
Wireless communication with every device that supports Bluetooth wireless technology is not guaranteed.
To determine the compatibility between this unit and another device that supports Bluetooth wireless technology, refer to that device's operation manual or contact the shop where you purchased it.

Profiles

This unit supports the following Bluetooth profiles.

● A2DP (Advanced Audio Distribution Profile)

● AVRCP (Audio/Video Remote Control Profile)

In order to transfer audio using Bluetooth wireless transmission, the Bluetooth device must support A2DP.
In order to control playback on the Bluetooth device, it must support AVRCP.
Even if a Bluetooth device supports the same profiles, though, its functions might differ according to its specifications.

Codecs

This unit supports the following codecs. It will automatically select one of them during audio transfer.

● LDAC

● LHDC

● Qualcomm® aptX™ HD audio

● Qualcomm® aptX™ audio

● AAC

● SBC

The unit will select the appropriate codec to use according to the codec compatibility of the other Bluetooth device and communication conditions.

> LDAC is an audio coding technology developed by Sony that enables the transmission of High-Resolution (Hi-Res) Audio content, even over a Bluetooth connection.
> Unlike other Bluetooth compatible coding technologies such as SBC, it operates without any down-conversion of the Hi-Res Audio content*, and allows approximately three times more data** than those other technologies to be transmitted over a Bluetooth wireless network with unprecedented sound quality, by means of efficient coding and optimized packetization.
>
> * excluding DSD format contents
> ** in comparison with SBC (Subband Coding) when the bitrate of 990 kbps (96/48 kHz) or 909 kbps (88.2/44.1 kHz) is selected

NOTE

● You cannot select the codec to be used by pressing a button, for example.

● Due to the characteristics of Bluetooth wireless technology, compared to audio output from the Bluetooth device, output through this unit will be slightly delayed.

Content protection

This unit supports SCMS-T as a form of content protection when transmitting audio, so it can play protected audio.

Transmission security

This unit supports security functions during Bluetooth wireless transmission in accordance with the Bluetooth standard specifications, but it does not guarantee the privacy of such transmissions.
TEAC CORPORATION will bear no responsibility should an information leak occur during Bluetooth wireless transmission.

Pairing with another Bluetooth device

Pairing this unit with another Bluetooth device is necessary the first time it is used and when connecting to a different Bluetooth device for the first time.

1 Use the INPUT button to select Bluetooth.

2 Enable Bluetooth transmission on the other Bluetooth device.

3 Press and hold the 〉 setting adjustment button to enter pairing mode.

"Pairing" appears on the display while pairing.

4 On the other Bluetooth device, select "N-05XD" (this unit).

After this unit enters pairing mode, pair with it from the other Bluetooth device.
For details, refer to the operation manual of that Bluetooth device.
After connection, the display will show the name of the connected device.

> **NOTE**
>
> Press the 〈 setting adjustment button to cancel pairing.

Outputting audio from a Bluetooth device

- Pair this unit the first time you use it and when you want to connect it with a different Bluetooth device for the first time.
- When pairing or connecting with another Bluetooth device, they should be within a few meters of each other. If they are too far apart, pairing and connection afterwards might become impossible.

1 Use an INPUT button to select Bluetooth.

2 Enable Bluetooth transmission on the other Bluetooth device.

Operate the Bluetooth device to enable connection with the unit.

> **ATTENTION**
>
> If you are unable to connect it successfully, refer to the operation manual of the Bluetooth device.

> **NOTE**
>
> If the Bluetooth module standby setting (BTstby>) is ON, connection is possible without switching the input to Bluetooth. Outputting audio from a connected Bluetooth device will cause the input to automatically switch to Bluetooth.

3 Start audio output on the other Bluetooth device.

- Confirm that the volume is turned up on the other Bluetooth device. If the volume of the audio being output is not turned up, no sound might be heard from this unit.

English

Supported operating systems

This unit can be connected by USB and used with a computer running one of the following operating systems.
Operation with other operating systems cannot be assured
(as of March 2021).

When using Mac

OS X Yosemite (10.10)
OS X El Capitan (10.11)
macOS Sierra (10.12)
macOS High Sierra (10.13)
macOS Mojave (10.14)
macOS Catalina (10.15)
macOS Big Sur (11.0)

When using Windows

Windows 7 (32/64-bit)
Windows 8 (32/64-bit)
Windows 8.1 (32/64-bit)
Windows 10 (32/64-bit)

Installing the driver

When using Mac

This unit can be operated with the standard OS driver, so there is no need to install a driver.
A dedicated driver must be installed on the computer, however, to use Bulk Pet.

When using Windows

To use this unit for playback of files on a computer, install the dedicated driver on the computer.

IMPORTANT NOTICE

You must install the dedicated driver software before connecting this unit with a computer using a USB cable.
If you connect the unit to the computer by USB before installing the driver, it will not function properly.

Depending on the composition of the computer hardware and software, operation might not be possible even with the above operating systems.

Installing the driver on a computer

Install the dedicated driver software on the computer after downloading it from the following URL.
For details about installation and OS setting procedures, see the ESOTERIC ASIO USB DRIVER Installation Guide included with the driver.

https://www.esoteric.jp/en/product/n-05xd/download

Note about transmission modes

This unit connects using Isochronous or Bulk Pet mode.
The sampling frequencies that can be transmitted are 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz, 352.8 kHz and 384 kHz. 2.8MHz, 5.6MHz, 11.2MHz and 22.5MHz DSD are also supported.

- 22.5MHz DSD is only supported with DSD Native playback. It is not supported with DoP (DSD Audio over PCM Frames) playback.

When connected correctly, you will be able to select "ESOTERIC USB AUDIO DEVICE" as the audio output for the operating system.
Audio data sent from the computer will be processed using this unit's clock during data transmission, enabling reduction of jitter.

Downloading playback application ESOTERIC HR Audio Player

You can use ESOTERIC HR Audio Player to play audio files on a computer.
Please download this free application from the following URL.

https://www.esoteric.jp/en/product/hr_audio_player

ESOTERIC HR Audio Player is a software audio player for Windows and Mac that supports high-quality playback of high-resolution audio sources. You can use it to enjoy the high-quality playback of high-resolution audio sources, including DSD, without needing to make complicated settings.

ESOTERIC HR Audio Player setting note

To play 22.5MHz DSD recordings with ESOTERIC HR Audio Player, open the Configure window and set the "Decode mode" to "DSD Native."

To play formats other than 22.5MHz DSD, you can set this to either "DSD over PCM" or "DSD Native" as you like.

For details, see "Selecting DSD decoding mode" in the ESOTERIC HR Audio Player Owner's Manual.

Playing audio files

1 Connect this unit to the computer using a USB cable.

Use a commercially-available USB cable with a connector that matches that of this unit.

USB cable

LINE IN R
LINE 1
LINE 2
RCA
XLR
XLR
PRE OUT
SOFTWARE
LINE OUT R

DIGITAL IN
XLR
ETHERNET

TRIGGER   RS-232C
IN OUT
USB DRIVE
(5V ⎓ 0.5A)

2 COAXIAL 1
10MHz IN   USB
2 OPTICAL 1   CLOCK

LINE IN
LINE
LINE 2
RCA
XLR
LINE OUT
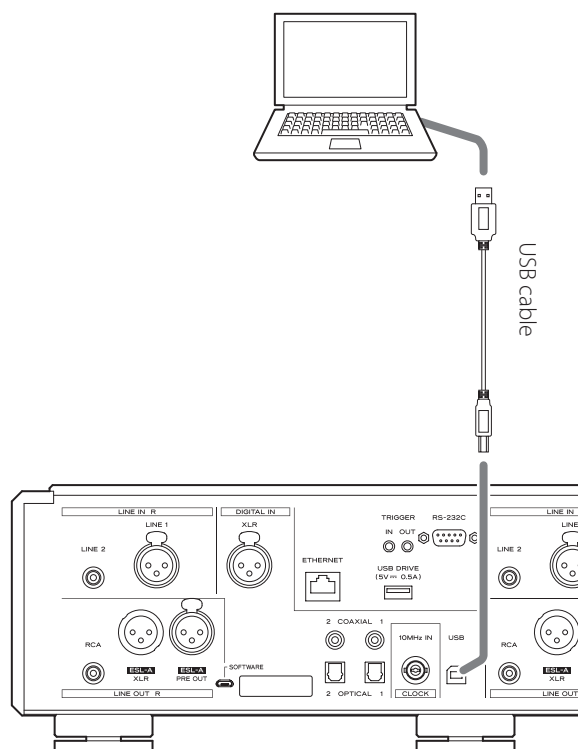
2 Turn the computer on.

Confirm that the operating system has started properly.

3 Press the STANDBY/ON button to turn the unit on.

STANDBY/ON

4 Press the INPUT button repeatedly to select USB.

INPUT

5 Start playback of an audio file on the computer.

For better audio quality, set the computer volume to its maximum and adjust the volume of the amplifier connected to this unit. Set the amplifier volume to the minimum when you start playback and gradually increase it.

Adjust the volume on this unit when using connected headphones or power amplifiers.

- The computer cannot be used to control this unit, nor can this unit be used to control the computer.

- This unit cannot transmit audio files to the computer by USB.

- Do not do any of the following when playing back audio files over the USB connection. Doing so could cause the computer to malfunction. Always quit the audio playback software before conducting any of these operations.

  - Unplug the USB cable

  - Put the unit into standby

  - Change the input

- Computer operation sounds will also be transmitted when playing back audio files over the USB connection. To avoid outputting these sounds, make the necessary settings on your computer.

- If you start the audio playback software before connecting this unit with the computer or before setting the input to USB, audio files might not play back properly. If this occurs, restart the audio playback software or restart the computer.

English

Setting mode

The settings for this unit are divided into three groups: MENU 1, MENU 2 and MENU 3.
MENU 1, MENU 2 or MENU 3 settings will be shown depending on how the MENU button is pressed.
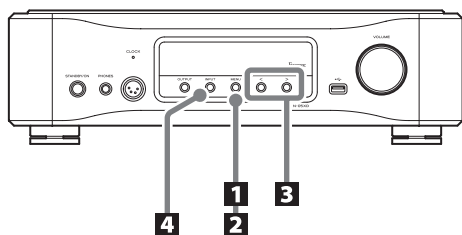
Changing settings

1 When stopped or during output, press the MENU button.

MENU

MENU 1 will be shown.

To show MENU 2, press and hold the MENU button.

To show MENU 3, press and hold the 〉 setting adjustment button while gotoMENU3 is shown in MENU 2.

2 Press the MENU button repeatedly to select the item to change.

Each time you press the MENU button, the item shown on the display changes as follows.

MENU 1	MENU 2	MENU 3
BAL>	PCMF>	L_VOL>
LVL>	PCMΔΣ>	THRU>
CLK>	AFIR>	MTLV>
VOLDP>	LanLED>	AMPRM>
LOUT>	NETin>	RS232C>
DPaOFF>	BTstby>	TRIG_O>
APS>	F/W ver.	
	gotoMENU3	
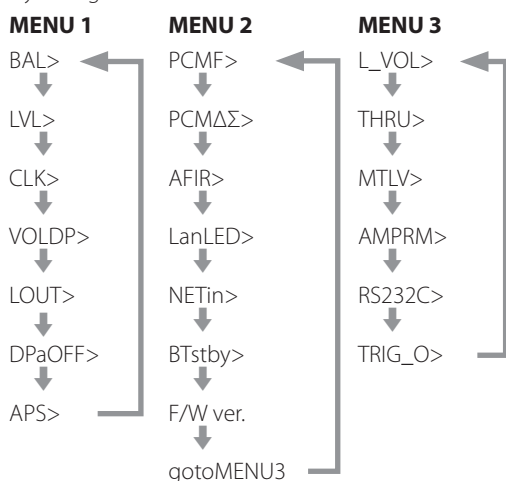
- If you do nothing for ten or more seconds, setting mode will end and ordinary display will resume.
- Depending on the selected source and operation status, some items might not appear.

3 Use the setting adjustment (〈/〉) buttons to change the settings.

< 　　　　 >

To change multiple items, repeat steps 2 and 3.

- Press the 〉 setting adjustment button when "F/W ver." is shown to check the versions of other firmware.
  Press the 〉 setting adjustment button when the FPGA version is shown to return to showing F/W ver.

4 Press the INPUT button to end setting mode.

INPUT
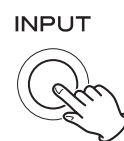
Setting mode will also end and the ordinary display will reappear if nothing is done for ten or more seconds.

- Settings are retained even if the power plug is disconnected.

When the remote control AMP button setting (AMPRM>) is ON

L/R balance (BAL>) and input gain (LVL>) adjustments will not be shown in MENU 1.
Follow these procedures to change these settings.

- The buttons in the AMP section on the remote control must be used (page 17)

1 Press the SETUP button to show the setting to be changed.

Pressing the SETUP button switches between showing BAL> and LVL>.

2 Use the INPUT (〈/〉) buttons to change the setting.

3 Press the SETUP button several times to return to ordinary display and complete the setting.

- The INPUT button on the unit can also be pressed to complete the setting.

MENU 1

Adjusting the L/R balance

BAL>***
Adjust the left-right balance.
This can be set to values between L 6.0 dB and R 6.0 dB in 0.5dB increments. This can also be set so that just one channel is muted.

- By default, the setting is 0.0 dB (no balance adjustment).

- This setting can be made for each input.

- When the remote control AMP button setting (AMPRM>) is ON, this setting (BAL>) will not be shown in MENU 1. Use the buttons in the AMP section on the remote control to set it (page 24).

Muting just one channel
> Press the 〉 button to select "BAL>R-only" to output only the right channel.
> Likewise, press the 〈 button to select "BAL>L-only" to output only the left channel.

Adjusting the input gain

LVL>***
Adjust the input gain for the selected input connector type.
This can be set to values between −18.0 dB and +18.0 dB in 0.5dB increments.

- By default, the setting is 0.0 dB.

- This setting can be made for each input.

- When the remote control AMP button setting (AMPRM>) is ON, this setting (LVL>) will not be shown in MENU 1. Use the buttons in the AMP section on the remote control to set it (page 24).

Note about settings and sound quality
BAL (left-right balance) and LVL (input gain adjustment) are both settings related to volume. This unit's microcomputer comprehensively analyzes these settings and the VOLUME knob setting to conduct unified control with a volume control amplifier in one place.
For this reason, unlike ordinary amplifiers that pass audio signals through multiple circuits, these settings will not degrade the audio quality.

Clock setting

CLK>***
Use this to set synchronization with an external clock.

- By default, the setting is OFF.

- This setting can be made for each input.

- Set this to OFF when connected to a source device, other than NET or USB input, that does not support clock synchronization.

- Nothing will be shown when set to Bluetooth, LINE 1 or LINE 2.

OFF
> Clock synchronization is not used. The unit will operate with the clock of the input digital signal.
> During NET and USB input, the internal oscillator will be used and the CLOCK indicator will light green.

IN
> In this mode, the unit is synchronized with the 10MHz clock signal input through its 10MHz IN CLOCK connector from a clock generator.
>
> The CLOCK indicator lights. The CLOCK indicator blinks when in the process of synchronizing or unable to synchronize.

- The clock frequency that can be input is 10 MHz. The input audio signal and the input clock signal must be synchronized.

- Be aware that during music playback, if the clock generator is turned off or the BNC coaxial cable that is supplying the 10MHz clock signal is disconnected, causing the clock signal to stop, a loud noise could be emitted from the speakers.

Volume display setting

VOLDP>***

This sets the units used to show the volume on the display.

STEP

This shows the volume in steps.
This can be adjusted from 0 to 100 in 0.5 steps.

dB1

This shows the volume in decibels.
This can be set to −∞ and −95.0 to +24.0 dB in 0.5dB increments.

dB2

This shows the volume in decibels.
This can be set to −∞ and −95.0 to 0.0 dB in 0.5dB increments.

Analog audio output connector setting

LOUT>***

Use this to select the analog audio output (LINE OUT) connectors to be used.

● By default, the setting is XLR2.

ESLA

Analog audio signals are output as ES-LINK Analog (ESL-A) through the XLR connectors.

● These connections use ordinary XLR cables, but the signals are transmitted in a unique format, so this setting should only be used with compatible devices.

● See page 9 for more about ES-LINK Analog (ESL-A).

XLR2

Analog audio signals are output through the XLR connectors with pin 2 HOT.

XLR3

Analog audio signals are output through the XLR connectors with pin 3 HOT.

RCA

Analog audio signals are output through the RCA connectors.

Automatic display dimming setting

DPaOFF>***

Use this to set the display to darken automatically.

● By default, the setting is ON.

● If the OEL display is left on with the same indication for a long time, brightness irregularities can occur. For this reason, we recommend that you set the automatic display dimming function to ON.

ON

If no operation is conducted for ten minutes, the display automatically turns off.

OFF

The display will not turn off automatically.

● If no operation is conducted for ten minutes, the display will dim to DIMMER 1 brightness to protect it from excessive wear.

Automatic power saving setting

APS>***

If there is no input from the selected input source for the set time, the unit will enter standby mode automatically.

● By default, the setting is OFF.

● The input sources that are not selected have no effect on automatic power saving.

OFF

The automatic power saving function is disabled.

30m

30 minutes

60 m

60 minutes

90 m

90 minutes

120 m

120 minutes

MENU 2

Digital filter setting during PCM playback

PCMF>***
Use this to set the digital filter during PCM playback.
Set it as desired.

● By default, the setting is OFF.

OFF
The digital filter is not used during PCM playback.

FIR
The FIR digital filter features a slow roll-off without pre-echo.

RDOT
This digital filter features a slow roll-off that uses a unique analog interpolation technique with a fluency function.

ΔΣ frequency setting during PCM playback

PCMΔΣ>***
The ΔΣ modulator operation frequency during PCM playback can be set to 64, 128, 256 or 512.
Select the sound setting you prefer.

● By default, the setting is 512.

This sets the operation of the ΔΣ modulator as a frequency multiple of 32, 44.1 or 48 kHz.
Example:
When 512 is selected with a 96kHz audio source, the ΔΣ modulator operates at 24.576 MHz (48 kHz × 512).

Analog FIR filter setting

AFIR>***
Use this to set the analog FIR filter.
Set it as desired.

● By default, the setting is OFF.

OFF
The analog FIR filter is not used.

ON
The analog FIR filter is used.

ETHERNET port LED setting

LanLED>***
Use this to set the ETHERNET port LED. When set to OFF, the ETHERNET port LED will not light, reducing the impact on audio quality.

● By default, the setting is OFF.

● Even when set to OFF, the LED will blink immediately after a LAN cable is connected and while the unit is initializing after being turned on (while "Initialize" displayed).

OFF
The ETHERNET port LED stays unlit.

ON
Lighting and blinking of the ETHERNET port LED are enabled.

Network input circuit power supply setting

NETin>***

Use this to turn the network input circuit power supply on and off.

● By default, the setting is ON.

ON

This turns the network input circuit power supply on and plays audio files from the network.

OFF

This turns the network input circuit power supply off, stopping operation of the network input circuit.
NET will not be shown as an input source option.

Bluetooth module standby setting

BTstby>***

● By default, the setting is OFF.

ON

The Bluetooth module power is always on.

● When audio output starts on a connected Bluetooth device, the input source will automatically switch to Bluetooth.

OFF

The Bluetooth module power is on only when the input source is Bluetooth.

Showing firmware versions

F/W ver.

Press the 〉 setting adjustment button when "F/W ver." is shown to check the versions of other firmware.

I/F

User interface firmware

NET

Network firmware

BT

Bluetooth firmware

M

MQA decoder firmware

FPGA

D/A conversion digital process FPGA firmware

Open Settings MENU 3

gotoMENU3

Press and hold the 〉 setting adjustment button to show MENU 3.

Analog audio output level setting

L_VOL>***

Use this to set the audio level output from the analog audio output (LINE OUT) connectors.

● By default, the setting is ON.

ON

This will enable adjustment of the analog output level using this unit's VOLUME knob. Select this if you want to adjust the volume using this unit.

● Set this to ON when the analog audio output (LINE OUT) connectors are connected to a power amplifier.

FIX

Select this if you want to adjust the volume using an amplifier.

● Set this to FIX when connected to an integrated amplifier or other amplifier that is capable of volume adjustment.

Through output setting

THRU>***

Set whether to use the input connectors as signal through connectors.

● By default, the setting is OFF.

OFF

No through inputs are set.

LINE1
LINE2

Signals are output without volume being adjusted by the unit.

⚠ **If you select inputs connected to an ordinary line-level device, signals that are too strong could be output to the speakers, resulting in damage to them.**

"THRU" appears on the display instead of the volume level set by using the VOLUME knob.

For example, the speakers connected to a power amplifier connected to this unit can be shared as the front speakers of the AV amplifier if the pre-out connectors (for example, FRONT L/R) of the AV amplifier are connected to this unit's LINE 2 connectors and LINE2 is set to THRU. (The AV amplifier controls volume adjustment when the input source is set to "LINE2".)

● The volume cannot be adjusted for input connectors set to THRU, but fine adjustments can be made using BAL and LVL settings.

⚠ **Always connect a device that has a volume control to the input connectors set to THRU. Use that device to minimize the volume before switching the input source, and then gradually raise the volume level.**

English

Mute level setting

MTLV>***

This sets the volume when it is muted.

● By default, the setting is −∞dB.

−∞dB

The volume becomes −∞ dB when muted.

−20dB

The volume is reduced 20 dB from the set level when muted.

Remote control AMP button setting

AMPRM>***

Set whether the remote control AMP section buttons are enabled or disabled.

● By default, the setting is ON.

● When using this unit connected to an ESOTERIC integrated amplifier or preamp, set this to OFF.

ON

This enables the INPUT (⟨/⟩), SETUP, VOLUME (+/−) and MUTE buttons in the AMP section of the remote control.

● Use the above SETUP and INPUT (⟨/⟩) buttons to set the L/R balance (BAL>) and input gain (LVL>) (page 24).

OFF

This disables the INPUT (⟨/⟩), SETUP, VOLUME (+/−) and MUTE buttons in the AMP section of the remote control.

● Use MENU 1 to change L/R balance (BAL>) and input gain (LVL>) settings.

Remote control input (RS-232C) connector setting

RS232C>***

Set this to ON only when using the remote control input (RS-232C) connector.

● By default, the setting is OFF.

OFF

The remote control input (RS-232C) connector cannot be used.

ON

The remote control input (RS-232C) connector can be used.

Trigger signal output setting

TRIG_O>***

● By default, the setting is OFF.

OFF

Do not output trigger signals.

ON

Output trigger signals.

MQA (Master Quality Authenticated)

MQA is an award-winning British technology that delivers the sound of the original master recording. The master MQA file is fully authenticated and is small enough to stream or download.
Visit mqa.co.uk for more information.
The N-05XD includes MQA technology, which enables you to play back MQA audio files and streams, delivering the sound of the original master recording.

'MQA' or 'MQA.' indicates that the product is decoding and playing an MQA stream or file, and denotes provenance to ensure that the sound is identical to that of the source material. "MQA." indicates it is playing an MQA Studio file, which has either been approved in the studio by the artist/producer or has been verified by the copyright owner.

Maintenance

Use a soft dry cloth to wipe the surface of the unit clean.
For stubborn smudges, use a damp cloth that has been thoroughly wrung out to remove excess moisture.

● Never spray liquid directly on this unit.

● Do not wipe with chemical cleaning cloths, thinner or other chemical agents. Doing so could damage the surface.

● Avoid allowing rubber or plastic materials to touch the unit for long periods of time because they could damage the cabinet.

⚠ **For safety, disconnect the power plug from the outlet before cleaning.**

English

Troubleshooting

If you experience a problem with this product, please take a moment to review the following information before requesting service. Moreover, the problem might be caused by something other than this unit. Please also check the operation of the connected units.
If this product still does not operate correctly, contact the retailer where you purchased it.

General

The unit does not turn on.

➜ Insert the power plug into an outlet.

➜ Check the connection of the power cord to this unit.

➜ Confirm that power is being supplied to the outlet to which the power cord is connected by, for example, connecting another device to it.

Standby mode starts automatically.

➜ The automatic power saving function is operating to put the unit into standby.
Press the STANDBY/ON button on the main unit to turn it on.
Change the automatic power saving setting if necessary (page 26).

The unit does not respond when buttons are pressed.

➜ Multiple button presses without pause can cause the unit to stop responding. After pressing a button, wait momentarily for the unit to respond.

Noise occurs.

➜ Place the unit as far away as possible from TVs and other devices that have strong magnetism.

No sound is output from the speakers. The sound is distorted.

➜ Check the connections with the amplifier and the speakers.

➜ Adjust the volume of the amplifier and other devices.

➜ No sound is output when playback is paused. Use the app to resume ordinary playback.

➜ Check the analog audio output connector setting (page 26).

Clock sync

The CLOCK indicator does not stop blinking.

➜ Set CLK> to OFF when not using clock sync.

➜ A clock signal to which the unit cannot synchronize might be being input. Check the connection of the CLOCK IN (10MHz) connector and the settings of the connected device.

A cyclical noise is being output.

➜ If a cyclical noise is being output when the unit is in clock sync mode, the connected source device might not also be in clock sync mode. Check the connection of the CLOCK IN (10MHz) connector and the clock synchronization setting of the connected device.

Network playback

NET is not shown as an input source option.

➜ Set the network input circuit power supply setting (NETin>) to ON.

An audio file cannot be played back (correctly).

➜ Different media servers (NAS) support different types of files. Check the specifications of the media server (NAS), too.

The sound breaks up during playback.

➜ If files that use lossy compression, including MP3s, and files at 44.1 kHz and other low bit rates play back normally, but the sounds of files at 384 kHz and other high bit rates as well as FLAC and other files that use lossless compression break up, the ETHERNET speed might be too slow.
The audio data is transmitted from the NAS through the router. For this reason, using LAN cables to connect the NAS to the router and the router to this unit is preferable.

USB connections with a computer

Computer does not recognize this unit.

➜ See page 22 for information about supported operating systems. Operation with unsupported operating systems is not guaranteed.

Noise occurs.

➜ Starting other applications during playback of an audio file may interrupt playback or cause noise. Do not start other applications during playback.

➜ When the unit is connected to a computer via a USB hub, for example, noise might be heard. If this occurs, connect the unit directly to the computer.

Audio files cannot be played back.

➜ Connect the computer with this unit and switch to USB before starting the audio playback software and audio file playback. Audio data might not play back correctly if you connect this unit with the computer or change its input to USB after starting the audio playback software.

Bluetooth connection

Cannot show device name.

➡ This unit does not support the display of symbols or double-byte characters, including Japanese and Chinese.
Use only English letters and numbers for the names of Bluetooth devices connected to this unit.

Cannot change connected Bluetooth device.

➡ This unit cannot have Bluetooth connections to multiple Bluetooth devices at the same time.
To change the device connected with this unit by Bluetooth, end the connection with the currently connected Bluetooth device before connecting to another Bluetooth device.

Sound is not output, or the volume is low.

➡ Confirm that the volume is turned up on the other Bluetooth device. If the volume of the audio being output is not turned up, no sound might be heard from this unit.

Since this unit uses a microcontroller, external noise and other interference can cause the unit to malfunction. If this occurs, turn the unit off and wait about one minute before restarting operation from the beginning.

Note about condensation

If this unit is brought from a cold outdoor environment into a warm room, or the heater has just been turned on in the room where it is located, for example, condensation might occur, resulting in improper operation. If this occurs, leave the unit on and wait 1–2 hours. This should enable normal operation.

Restoring factory settings
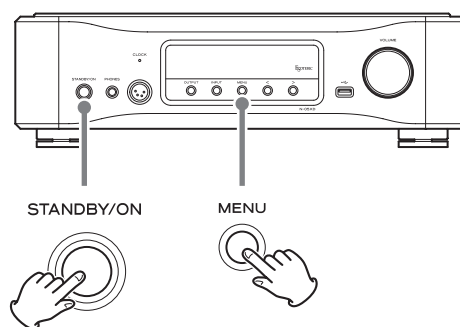
STANDBY/ON   MENU

Settings are retained even if the power plug is disconnected.
Follow these procedures to restore the factory default settings and erase all changes in memory.

1 Put the unit into standby.

If the unit is on, press the STANDBY/ON button to put it into standby.

2 Press the STANDBY/ON button while holding down the MENU button.

When "Setup CLR" (settings cleared) appears on the display, release the MENU button.

English

Specifications

Digital audio inputs

XLR. 1
    Input level. . . . . 5.0 Vpp
    Input impedance. . . . . 110 Ω
    Input signal formats
        Linear PCM (AES/EBU)
                32–192 kHz, 16-bit, 24-bit
        DSD (ES-LINK1, ES-LINK2, DoP)
                2.8 MHz

RCA 2
    Input level . . . . 0.5 Vpp
    Input impedance . . . . 75 Ω
    Input signal formats
        Linear PCM (IEC 60958)
                32–192 kHz, 16-bit, 24-bit
        DSD (DoP) . . . . 2.8 MHz

Optical digital 2
    Input level . . . . −24.0 dBm to −14.5 dBm peak
    Input signal formats
        Linear PCM (IEC 60958)
                32–192 kHz, 16-bit, 24-bit
        DSD (DoP) . . . . 2.8 MHz

USB . . . . 1 (Type B)
                USB 2.0 or higher recommended
    Input signal formats
        Linear PCM. . . . . 44.1–384 kHz
                16-bit, 24-bit, 32-bit
        DSD
                2.8 MHz, 5.6 MHz, 11.2 MHz, 22.5 MHz

ETHERNET 1
                (1000BASE-T)
    Input signal formats
        Linear PCM. . . . . 44.1–384 kHz (stereo)
                16-bit, 24-bit, 32-bit
      ● Only files with integer formats can be played.
        DSD. . . . . 2.8 MHz, 5.6 MHz, 11.2 MHz, 22.5 MHz (stereo)
    Supported file formats
        PCM lossless . . . . . FLAC, Apple Lossless (ALAC), WAV, AIFF, MQA
        DSD lossless. . . . . DSF, DSDIFF (DFF), DoP
        Compressed audio . . . . MP3, AAC (m4a container)

USB drive ports 2
    Supported file systems
                FAT32, exFAT and NTFS
                Single partition
                USB 2.0 or higher recommended
    Maximum current supply. . . . . 0.5 A
    Input signal formats
        Linear PCM. . . . . 44.1–384 kHz (stereo)
                16-bit, 24-bit, 32-bit
      ● Only files with integer formats can be played.
        DSD. . . . . 2.8 MHz, 5.6 MHz, 11.2 MHz, 22.5 MHz (stereo)
    Supported file formats
        PCM lossless . . . . . FLAC, Apple Lossless (ALAC), WAV, AIFF, MQA
        DSD lossless. . . . . DSF, DSDIFF (DFF), DoP
        Compressed audio . . . . MP3, AAC (m4a container)

Analog audio inputs

XLR. . . . . 1 pair (L/R)
    Input impedance. . . . . 50 kΩ
    Maximum permissible input voltage. . . . . 8 Vrms
RCA . . . . 1 pair (L/R)
    Input impedance. . . . . 25 kΩ
    Maximum permissible input voltage. . . . . 4 Vrms

Clock input

BNC 1
Frequencies that can be input (±10 ppm). . . . . 10 MHz
Input impedance . . . . 50 Ω
Input level
    Rectangle wave . . . . TTL level equivalent
    Sine wave . . . . 0.5 to 1.0 Vrms

Analog audio outputs

XLR/ESL-A . . . . 1 pair (L/R)
RCA . . . . 1 pair (L/R)
Output impedance
    XLR. . . . . 220 Ω
    RCA . . . . 60 Ω
Maximum output level (when analog audio output level setting is FIX)
    XLR. . . . . 4 Vrms
    RCA . . . . 2 Vrms
Frequency response . . . . 5 Hz to 75 kHz (−3 dB)
S/N ratio. . . . . 110 dB
Distortion . . . . 0.003% (1 kHz)

Headphones outputs

Standard 6.3mm (1/4″) stereo jack 1

4-Pin XLR jack. 1

Maximum effective output

    UNBALANCED. . . . . 1000 mW + 1000 mW (into 32 Ω)

    BALANCED . . . . 1500 mW + 1500 mW (into 32 Ω)

Applicable load impedance. . . . . 16–600 Ω

Bluetooth function

Bluetooth version. 4.2

Output class . . . . Class 2

(transmission distance without obstructions* . . . . 10 m)

Supported profiles. . . . . A2DP, AVRCP

Supported A2DP codecs. . . . . LDAC, LHDC,
Qualcomm®aptX™ HD audio,
Qualcomm® aptX™ audio, AAC, SBC

Supported A2DP content protection. . . . . SCMS-T

Maximum number of stored pairings 8

*The transmission distance is approximate. The transmission distance could vary depending on the surrounding environment and electromagnetic waves.

External controls

RS-232C 1

Trigger input . . . . 1 (3.5mm mono mini jack)

    Input level. . . . . 12 V, 1 mA

Trigger output. . . . . 1 (3.5mm mono mini jack)

    Output level. . . . . 12 V, 100 mA max

General

Power supply

    Model for Europe. . . . . AC 220–240 V, 50/60 Hz

    Model for USA/Canada . . . . AC 120 V, 60 Hz

    Model for Korea . . . . AC 220 V, 60 Hz

    Model for Hong Kong . . . . AC 230 V, 50 Hz

Power consumption . . . . 38 W

    In standby

        Remote control input (RS-232C) connector setting OFF . . . 0.3 W

        Remote control input (RS-232C) connector setting ON . . . 0.7 W

External dimensions (W × H × D, including protrusions)
             445 × 131 × 377 mm (17 5/8″ × 5 1/4″ × 14 7/8″)

Weight . . . . 13.8 kg (30 1/2 lb)

Operating temperature range . . . . +5℃ to +35℃

Operating humidity range . . . . 5% to 85% (no condensation)

Storage temperature range . . . . −20℃ to +55℃

Included accessories

    Power cord × 1
    Remote control (RC-1334) × 1
    Batteries for remote control (AA) × 2
    Felt pads × 3
    Owner's manual (this document) × 1
    Warranty card × 1

- Specifications and appearance are subject to change without notice.
- Weight and dimensions are approximate.
- Illustrations in this manual might differ slightly from production models.

Dimensional drawings

445

131

377
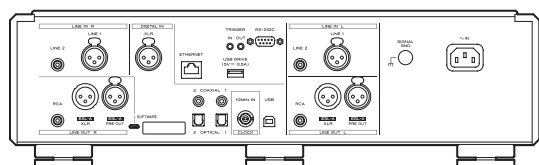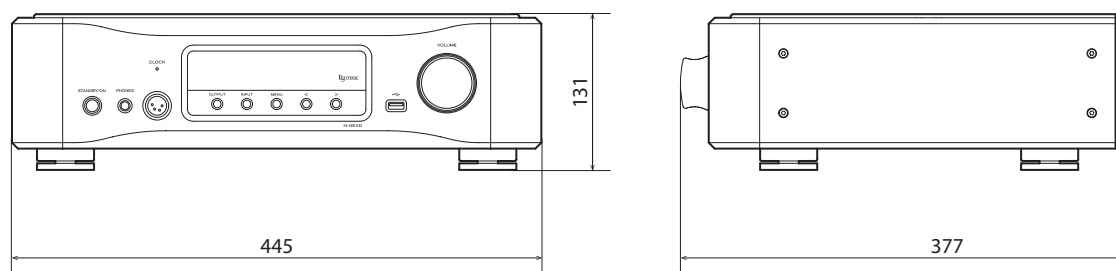
Foot placement diagram

171.5

267.5

4-Ø48*

67

307

403
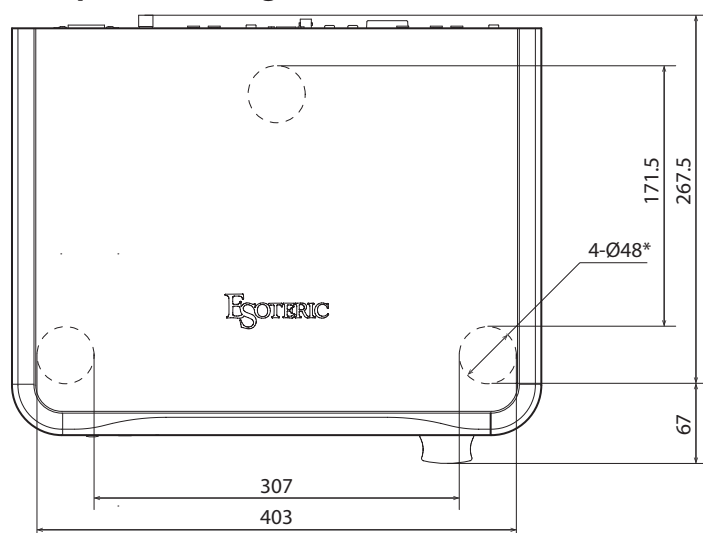
Dimensions in millimeters (mm)

*48mm diameter feet × 3

INSTRUCTIONS DE SÉCURITÉ IMPORTANTES

```
        ⚡  CAUTION          !
            RISK OF ELECTRIC SHOCK
            DO NOT OPEN
```

ATTENTION : POUR RÉDUIRE LE RISQUE D'ÉLECTROCUTION, NE RETIREZ PAS LE CAPOT (OU L'ARRIÈRE). AUCUNE PIÈCE INTERNE N'EST RÉPARABLE PAR L'UTILISATEUR. CONFIEZ TOUTE RÉPARATION À UN SERVICE APRÈS-VENTE QUALIFIÉ.

⚡ Le symbole d'éclair à tête de flèche dans un triangle équilatéral sert à prévenir l'utilisateur de la présence dans l'enceinte du produit d'une « tension dangereuse » non isolée d'une grandeur suffisante pour constituer un risque d'électrocution pour les personnes.

! Le point d'exclamation dans un triangle équilatéral sert à prévenir l'utilisateur de la présence d'instructions importantes de fonctionnement et de maintenance (entretien) dans les documents accompagnant l'appareil.

AVERTISSEMENT : POUR PRÉVENIR LES RISQUES D'INCENDIE ET D'ÉLECTROCUTION, N'EXPOSEZ PAS CET APPAREIL À LA PLUIE NI À L'HUMIDITÉ.

ATTENTION

- NE RETIREZ PAS LES CAPOTS EXTERNES OU BOÎTIERS POUR EXPOSER L'ÉLECTRONIQUE. AUCUNE PIÈCE INTERNE N'EST RÉPARABLE PAR L'UTILISATEUR.
- SI VOUS RENCONTREZ DES PROBLÈMES AVEC CE PRODUIT, CONTACTEZ LE MAGASIN OÙ VOUS AVEZ ACHETÉ L'UNITÉ. N'UTILISEZ PAS LE PRODUIT TANT QU'IL N'A PAS ÉTÉ RÉPARÉ.
- L'UTILISATION DE COMMANDES, DE RÉGLAGES OU LE SUIVI DE PROCÉDURES AUTRES QUE CE QUI EST DÉCRIT DANS CE DOCUMENT PEUT PROVOQUER UNE EXPOSITION À UN RAYONNEMENT DANGEREUX.

1) Lisez ces instructions.
2) Conservez ces instructions.
3) Tenez compte de tous les avertissements.
4) Suivez toutes les instructions.
5) N'utilisez pas cet appareil avec de l'eau à proximité.
6) Ne nettoyez l'appareil qu'avec un chiffon sec.
7) Ne bloquez aucune ouverture de ventilation. Installez-le conformément aux instructions du fabricant.
8) N'installez pas l'appareil près de sources de chaleur telles que des radiateurs, bouches de chauffage, poêles ou autres appareils (y compris des amplificateurs) dégageant de la chaleur.
9) Ne neutralisez pas la fonction de sécurité de la fiche polarisée ou de terre. Une fiche polarisée a deux broches, l'une plus large que l'autre. Une fiche de terre a deux broches identiques et une troisième broche pour la mise à la terre. La broche plus large ou la troisième broche servent à votre sécurité. Si la fiche fournie n'entre pas dans votre prise, consultez un électricien pour le remplacement de la prise obsolète.

10) Évitez de marcher sur le cordon d'alimentation et de le pincer, en particulier au niveau des fiches, des prises secteur, et du point de sortie de l'appareil.
11) N'utilisez que des fixations/accessoires spécifiés par le fabricant.
12) Utilisez-le uniquement avec des chariots, socles, trépieds, supports ou tables spécifiés par le fabricant ou vendus avec l'appareil. Si un chariot est utilisé, faites attention à ne pas être blessé par un renversement lors du déplacement de l'ensemble chariot/appareil.
13) Débranchez cet appareil en cas d'orage ou de non utilisation prolongée.
14) Confiez toute réparation à des techniciens de maintenance qualifiés. Une réparation est nécessaire si l'appareil a été endommagé d'une quelconque façon, par exemple si le cordon ou la fiche d'alimentation est endommagé, si du liquide a été renversé sur l'appareil ou si des objets sont tombés dedans, si l'appareil a été exposé à la pluie ou à l'humidité, s'il ne fonctionne pas normalement, ou s'il est tombé.

- L'appareil tire un courant nominal de veille de la prise secteur quand son interrupteur POWER ou STANDBY/ON n'est pas en position ON.
- La fiche secteur est utilisée comme dispositif de déconnexion et doit donc toujours rester disponible.
- Des précautions doivent être prises en cas d'utilisation d'écouteurs ou d'un casque avec le produit car une pression sonore excessive (volume trop fort) dans les écouteurs ou dans le casque peut causer une perte auditive.

AVERTISSEMENT

Les produits ayant une construction de Classe I sont équipés d'un cordon d'alimentation avec une fiche de terre. Le cordon d'un tel produit doit être branché dans une prise secteur avec terre de sécurité.

AUX USA/CANADA, UTILISEZ UNIQUEMENT UNE TENSION D'ALIMENTATION DE 120 V.

ATTENTION

- N'exposez pas cet appareil aux gouttes ni aux éclaboussures.
- Ne placez pas d'objet rempli de liquide sur l'appareil, comme par exemple un vase.
- N'installez pas cet appareil dans un espace confiné comme une bibliothèque ou un meuble similaire.
- L'appareil doit être placé suffisamment près de la prise de courant pour que vous puissiez à tout moment attraper facilement la fiche du cordon d'alimentation.
- Si le produit utilise des piles/batteries (y compris un pack de batteries ou des piles installées), elles ne doivent pas être exposées au soleil, au feu ou à une chaleur excessive.
- PRÉCAUTION pour les produits qui utilisent des batteries remplaçables au lithium : remplacer une batterie par un modèle incorrect entraîne un risque d'explosion. Remplacez-les uniquement par un type identique ou équivalent.

Français

⚠ Précautions concernant les piles

Un mauvais emploi des piles peut entraîner leur rupture ou leur fuite, avec pour conséquence un incendie, des blessures ou la salissure des objets proches. Veuillez lire et suivre attentivement les précautions suivantes.

- Veillez à insérer les piles avec leurs pôles positif (⊕) et négatif (⊖) correctement orientés.
- Utilisez des piles du même type. N'utilisez jamais des types de pile différents ensemble.
- Si la télécommande doit rester inutilisée durant une période prolongée (plus d'un mois), retirez ses piles pour éviter qu'elles ne coulent.
- Si les piles coulent, essuyez le liquide dans le compartiment des piles et remplacez les piles par des neuves.
- N'utilisez pas de piles d'un type autre que celui spécifié. Ne mélangez pas des piles neuves avec des anciennes et n'utilisez pas ensemble des types de pile différents.
- Ne chauffez pas et ne démontez pas les piles. Ne jetez jamais les piles dans un feu ou dans de l'eau.
- Ne conservez et ne transportez pas les piles avec d'autres objets métalliques. Les piles pourraient entrer en court-circuit, couler ou exploser.
- Ne rechargez jamais une batterie sans avoir vérifié qu'elle peut l'être.
- N'exposez pas les piles à une pression d'air extrêmement basse car cela pourrait entraîner une explosion ou une fuite de liquides ou de gaz inflammables.

Modèle pour le Canada

Déclaration de conformité d'Innovation, Sciences et Développement économique Canada :
CET APPAREIL NUMÉRIQUE DE LA CLASSE B EST CONFORME À LA NORME NMB-003 DU CANADA

Pour les consommateurs européens

Mise au rebut des équipements électriques et électroniques et des piles et/ou accumulateurs

a) Tout équipement électrique/électronique et pile/accumulateur hors d'usage doit être traité séparément de la collecte municipale d'ordures ménagères dans des points de collecte désignés par le gouvernement ou les autorités locales.

b) En vous débarrassant correctement des équipements électriques/électroniques et piles/accumulateurs hors d'usage, vous contribuerez à la sauvegarde de précieuses ressources et à la prévention de potentiels effets négatifs sur la santé humaine et l'environnement.

c) Le traitement incorrect des équipements électriques/électroniques et piles/accumulateurs hors d'usage peut avoir des effets graves sur l'environnement et la santé humaine en raison de la présence de substances dangereuses dans les équipements.

d) Le symbole de déchets d'équipements électriques et électroniques (DEEE), qui représente une poubelle à roulettes barrée d'une croix, indique que les équipements électriques/électroniques et piles/accumulateurs doivent être collectés et traités séparément des déchets ménagers.
Si une pile ou un accumulateur contient plus que les valeurs de plomb (Pb), mercure (Hg) et/ou cadmium (Cd) spécifiées dans la directive sur les piles et accumulateurs (2006/66/CE, 2013/56/UE), alors les **Pb, Hg, Cd** symboles chimiques de ces éléments seront indiqués sous le symbole DEEE.

e) Des systèmes de retour et de collecte sont disponibles pour l'utilisateur final. Pour des informations plus détaillées sur la mise au rebut des vieux équipements électriques/électroniques et piles/accumulateurs hors d'usage, veuillez contacter votre mairie, le service d'ordures ménagères ou le magasin dans lequel vous avez acquis l'équipement.

Conformité de l'émetteur radio et brouillage

Ce produit fait fonction d'émetteur large bande sur la bande des 2,4 GHz.

Plage de fréquences utilisée : 2402 MHz – 2480 MHz
Puissance maximale de sortie : Bluetooth® classe 2 (moins de 2,5 mW)

Veuillez n'utiliser cet appareil que dans le pays où il a été acheté. Selon le pays, des restrictions d'usage de la technologie sans fil Bluetooth peuvent exister.

Modèle pour le Canada

Conformité de l'émetteur radio
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1) L'appareil ne doit pas produire de brouillage;

2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Étiquetage d'autorisation
IC : 1559C-N05XD

Modèle pour l'EEE (Espace Économique Européen)

CE Par la présente, TEAC Corporation déclare que cet équipement radio est en conformité avec la directive 2014/53/UE ainsi qu'avec les autres directives et règlements de la Commission.

Le texte intégral de la déclaration de conformité pour l'UE est disponible à l'adresse internet suivante : veuillez nous contacter par e-mail.
https://www.teac-audio.eu/en/

TEAC Corporation
1-47 Ochiai, Tama-shi, Tokyo, 206-8530, Japon

Exigences pour l'exposition aux rayonnements

Cet équipement est conforme à la réglementation reconnue internationalement en matière d'exposition humaine aux ondes radio générées par l'émetteur.

Déclaration de conformité

Modèle pour le Canada

Cet équipement est conforme avec les limites d'exposition aux radiofréquences établies pour un environnement non contrôlé par le CNR-102 de l'IC.

Modèle pour l'EEE (Espace Économique Européen)

Cet équipement est conforme à la norme EN.62479 : Évaluation des équipements électroniques et électriques en relation avec les restrictions d'exposition humaine aux champs électromagnétiques ; la norme harmonisée de la Directive 2014/53/UE.

Français

ESOTERIC

0621·MA-3283A

This product has a serial number located on the rear panel. Please write it here and retain this for your records.

Model name: N-05XD   Serial number