Manuals+ — User Manuals Simplified.

NEO iDSD Balanced USB and Bluetooth DAC or Amplifier User Manual

NEO iDSD Balanced USB and Bluetooth DAC or Amplifier User Manual

Thank you for purchasing the iDSD from Neo series. The NEO iDSD is a balanced USB and Bluetooth DAC/amplier.

Contents

FEATURES

1. First DAC to support all Hi-Res: DSD512, PCM768, MQA384kHz and Bluetooth 96kHz.

2. Completely purist design without any DSP.

   TM 3. Bluetooth 5.0 (aptx, aptX HD, aptX Adaptive, aptX LL, LDAC, HWA/LHDC, AAC and SBC) up to 24/96kHz.

3. Fully-balanced differential DAC/amplier with >1,040mW output.

4. Ultra-fast USB interface with 16 logic cores and up to 2000MIPS 512KB SRAM.

5. Audiophile-grade components designed to reproduce music without any distortion or colouration.

6. Native DSD/PCM Burr-Brown® 4-channel DAC chipset.

7. Perfectly natural sound pleasing even the most demanding audio connoisseurs with the built-in MQA le decoding.

8. Extremely low THD: <0.0015 % and ultra-high SNR: >120 dB

9. Digital inputs: USB3.0 B (USB2.0 compatible)/S-PDIF (coaxial/optical)/Bluetooth 5.0 TM .
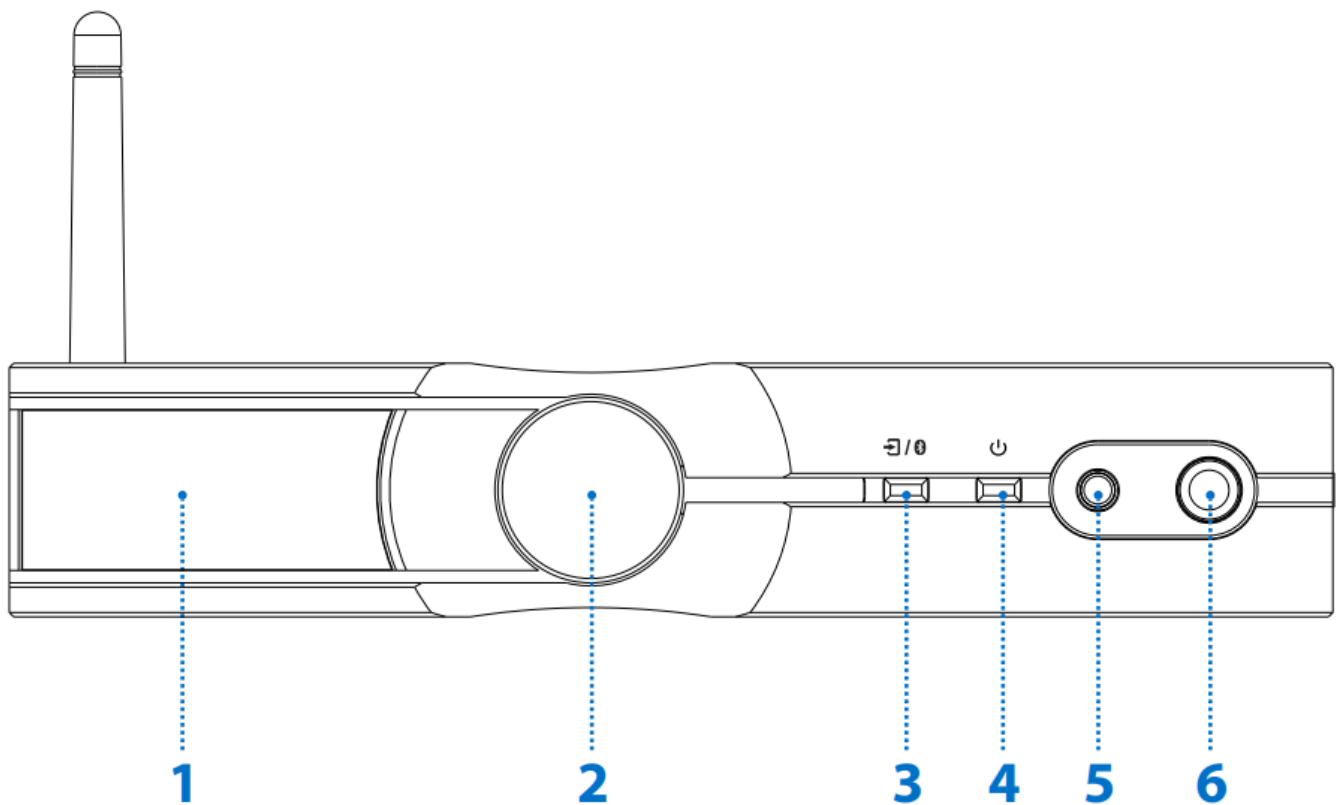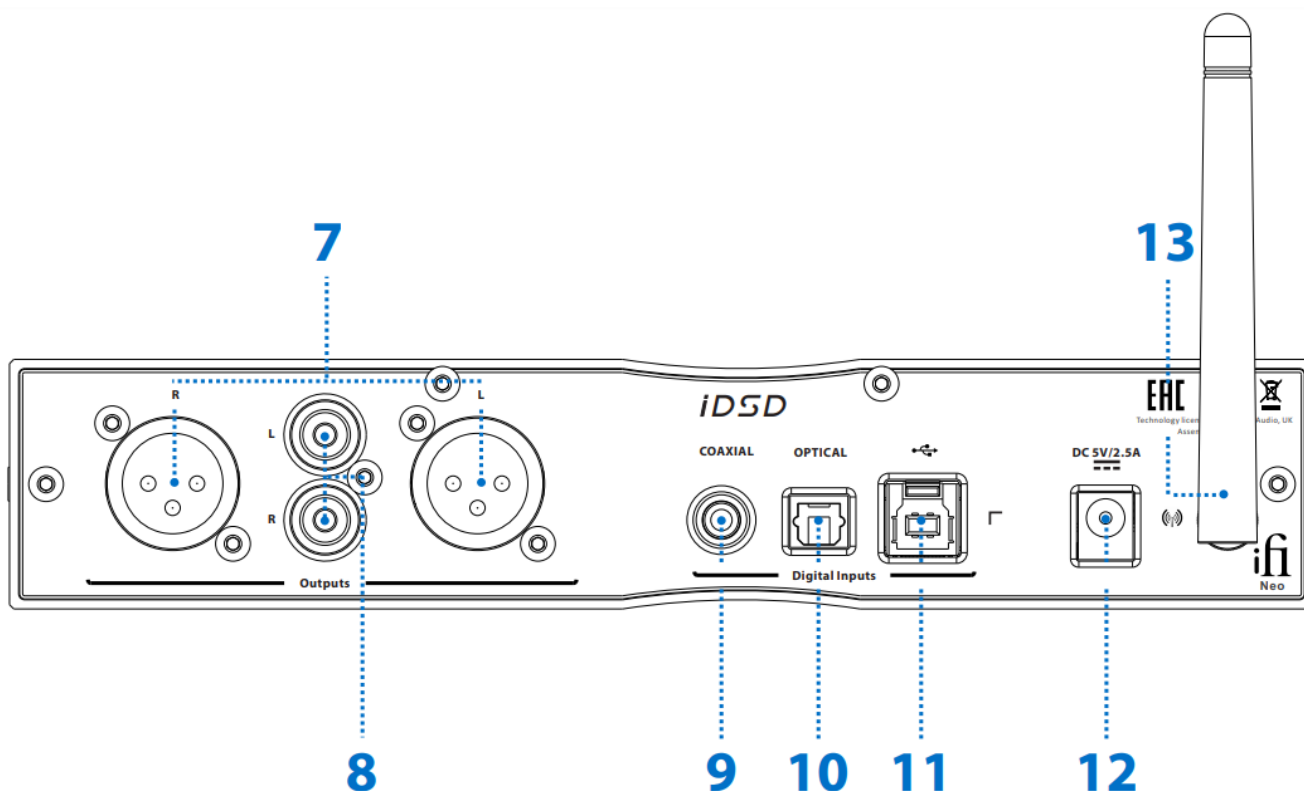

1. OLED display
2. Multi-function knob
3. Input channel selector/Bluetooth pairing button
4. Power On/Off
5. Balanced 4.4mm analogue output
6. Single-ended 6.3mm analogue output

7. XLR balanced analogue output

8. RCA single-ended analogue output

9. Coaxial digital input

10. Optical digital input

11. USB audio input

12. DC 5V power input

13. Antenna

OLED display

The OLED display shows the audio format, sampling rate, volume and input mode.

Multi-function knob

This knob controls:

- Variable/Fixed mode (use with power button)
- Analogue volume control (turn)
- Mute (short press)
- Brightness (long press)

Variable/Fixed mode selection

This mode will determine whether or not the NEO iDSD analogue volume control is used.

The NEO iDSD must rst be switched off to allow mode selection when powering on.

Hold down the knob rst, and then press the power button to enter the Variable/Fixed mode selection.

Turn the knob to cycle between the two modes. Release to accept.

Tip: If no mode is selected the NEO iDSD will automatically select the previously used mode.

Analogue volume control

The analogue volume control in the NEO iDSD is superior to any digital volume control. When set to 'Variable', it can be used to control the headphone or the pre-amplier volume. If the mode is set to 'Fixed', the volume control is bypassed.

Note: The NEO iDSD uses ONLY a pure analogue volume control.

Mute

Press the rotary knob to mute. To unmute, press it again or turn the rotary knob.

Brightness

Press and hold the knob (3 seconds) to enter brightness selection. Rotate the knob to cycle through the three brightness modes and press to accept.

Note: With the 'high' and 'low' brightness modes, the OLED will remain on. With the brightness mode 'off', if no operation is performed, the OLED will go to sleep after three seconds.

Input channel selector/Bluetooth pairing

This button cycles through 4 inputs:

Coaxial   Optical   USB   Bluetooth
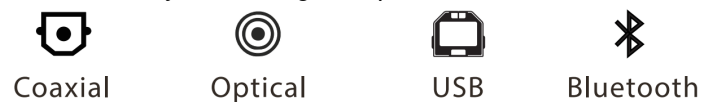
The NEO iDSD receives Bluetooth signals via aptX, aptX HD, aptX Adaptive, aptX LL, LDAC, LHDC/HWA, AAC and SBC.

Bluetooth pairing

From selecting the Bluetooth input, the NEO iDSD's OLED will ash searching for the previously paired device. If it cannot nd the stored device, it will automatically enter pairing mode and ash.

To enter pairing mode, press and hold the button (for three seconds) until the Bluetooth icon ashes. To pair, nd the iFi Hi-Res Audio Bluetooth device from the nearby devices list on your phone.

The NEO iDSD can store up to 8 paired Bluetooth devices.

Power On/Off
Press the power switch to power on/off the NEO iDSD.

Balanced 4.4mm analogue output
Connect balanced 4.4mm headphones.
Tip: As the NEO iDSD is a balanced design, we recommend the 4.4mm balanced output.

Single-ended 6.3mm analogue output
Connect single-ended 6.3mm headphones. With single-ended 3.5mm headphones, connect using a 3.5mm to 6.3mm adapter.

XLR balanced analogue output
Balanced analogue signal output to an amplier

RCA unbalanced analogue output
Single-ended signal output to an amplier.

Coaxial Digital input
Connect an S/PDIF source such as Apple TV, Google Chromecast, PS4, Xbox, a high-end CD transport, etc.

Optical Digital input
Connect an S/PDIF source such as Apple TV, Google Chromecast, PS4, Xbox, a high-end CD transport, etc.

USB audio input
This is a USB 3.0 B input (USB2.0 compatible). For a superior connection to a computer, use the enclosed USB3.0 cable. It connects the NEO iDSD to the computer audio source.

DC 5V power input
Please connect the NEO iDSD to the enclosed power supply, the super-silent iPower. The NEO iDSD must ONLY be powered by 5 volts.

Tip: For best performance upgrade iPower to an ultra-low noise iPower X 5V power supply.

Antenna
Please attach the enclosed antenna for maximum reception quality.

MQA

The NEO iDSD includes MQA(*) technology, which enables you to play back MQA(*) audio les and streams, delivering the sound of the original master recording

The NEO iDSD includes MQA technology, which enables you to play back MQA audio les and streams. 'MQA' or 'MQA.' indicates that the product is decoding and playing an MQA stream or le, and denotes provenance to ensure that the sound is identical to that of the source material.
'MQA.' indicates it is playing an MQA Studio le, which has either been approved in the studio by the artist/producer or has been veried by the copyright owner.

MQA and the Sound Wave Device are registered trade marks of MQA Limited.© 2016

MQA

1. Listen to MQA (Master Quality Authenticated) les straight out of the box.

2. For MQA tracks, simply connect to Tidal and check the options to stream MQA.

3. Visit **mqa.co.uk** for more information.

Specifications

Digital Inputs:
USB3.0 B (USB2.0 compatible)/S-PDIF (coaxial/optical)/
Bluetooth 5.0 (AAC, SBC, aptX, aptX HD, aptX Adaptive, aptX LL, LDAC, LHDC/HWA Codec)

Formats:
DSD512/256/128/64, Octa/Quad/Double/Single-Speed DSD
DXD (768/705.6/384/352.8kHz), Double/Single-Speed DXD
PCM (768/705.6/384/352.8/192/176.4/96/88.2/48/44.1kHz)
MQA
Bluetooth 96kHz

Line Section Outputs:
Balanced XLR: 6.3V / 7.7V max. (variable) 4.4V xed
UnBAL RCA: 3.2V / 3.9V max. (variable) 2.2V xed

Zout:
Balanced: <= 100Ω
UnBAL:: <= 50Ω

SNR:
-112dB(A) @ 0dBFS (UnBAL/BAL)

DNR:
>116dB(A) @ -60dBFS (UnBAL/BAL)

THD + N:
<0.0015% @ 0dBFS (UnBAL/BAL)

Headphone Section

Output:
Balanced: 2V / 6.2V max. 12Ω – 600Ω Headphone
UnBAL : 1V / 3.3V max. 12Ω – 300Ω Headphone

Output Power:
Balanced:
>6.4V/68.6 mW (@ 600Ω)
>5.77V/1040 mW (@ 32Ω)
UnBAL:
>3.25V/17.6 mW (@ 600Ω)
>3V/295 mW (@ 32Ω)

Output Impedance:
<1Ω (UnBAL/BAL)

SNR:
-112dBA (3.3V UnBAL/6.2V BAL)

DNR:
-120dB(A)

THD + N:
<0.0015% (125mW @ 32Ω)
Power consumption: No Signal ~0.5W
Max Signal ~2.5W

Input voltage:
DC 5V/2.5A, AC 100 -240V, 50/60Hz (with iPower)

Dimensions:
214 x146 x 41 mm
8.4″ x 5.7″ x 1.6″

Weight:
970 g (2.14 lbs)

Warranty period:
12months

- Specifications are subject to change without notice

FCC COMPLIANCE STATEMENT:

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

1. This device may not cause harmful interference, and
2. this device must accept any interference received,

   including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Warning: Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement
This equipment complied with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

ifi

NEO iDSD

Documents / Resources

ifi NEO iDSD —— User Manual ——	**ifi NEO iDSD Balanced USB and Bluetooth DAC or Amplifier** [pdf] User Manual NEOIDSD, 2A5QJNEOIDSD, NEO iDSD, Balanced USB and Bluetooth DAC or Amplifier, NEO i DSD Balanced USB and Bluetooth DAC or Amplifier

References

- ꧁ **Homepage | Experience the best sound with MQA | MQA**