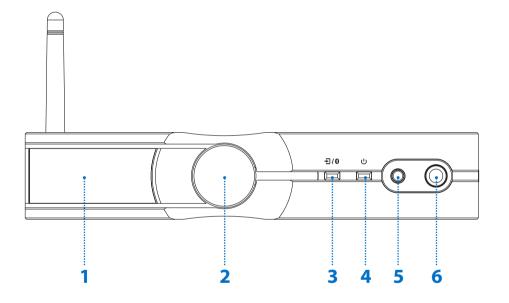


NEOiDSD - User Manual

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

FEATURES:

- 1. First DAC to support all Hi-Res: DSD512, PCM768, MQA384kHz and Bluetooth 96kHz.
- 2. Completely purist design without any DSP.
- 3. Bluetooth 5.0[™] (aptx, aptX HD, aptX Adaptive, aptX LL, LDAC, HWA/LHDC, AAC and SBC) up to 24/96kHz.
- 4. Fully-balanced differential DAC/amplifier with >1,040mW output.
- 5. Ultra-fast USB interface with 16 logic cores and up to 2000MIPS 512KB SRAM.
- 6. Audiophile-grade components designed to reproduce music without any distortion or colouration.
- 7. Native DSD/PCM Burr-Brown® 4-channel DAC chipset.
- 8. Perfectly natural sound pleasing even the most demanding audio connoisseurs with the built-in MQA file decoding.
- 9. Extremely low THD: <0.0015 % and ultra-high SNR: >120 dB.
- 10. Digital inputs: USB3.0 B (USB2.0 compatible)/S-PDIF (coaxial/optical)/Bluetooth 5.0[™].

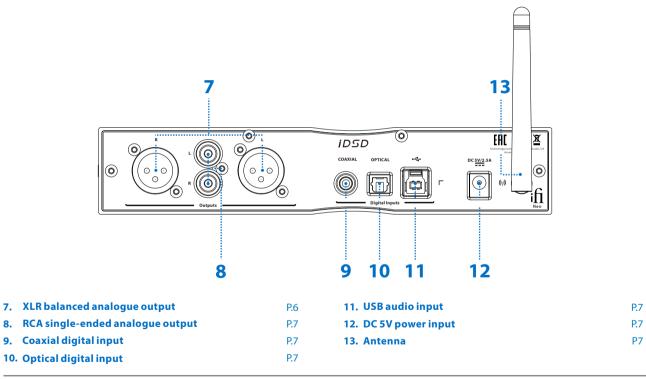


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1. OLED display

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

2. Multi-function knob

This knob controls:

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

I) Variable/Fixed mode selection

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

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

Hold down the knob first, 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.

ii) 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-amplifier volume. If the mode is set to 'Fixed', the volume control is bypassed.

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

iii) Mute

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

iv) 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.

3. Input channel selector/Bluetooth pairing

This button cycles through 4 inputs:



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 flash searching for the previously paired device. If it cannot find the stored device, it will automatically enter pairing mode and flash.

To enter pairing mode, press and hold the button (for three seconds) until the Bluetooth icon flashes. To pair, find 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.

4. Power On/Off

Press the power switch to power on/off the NEO iDSD.

5. 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.

6. 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.

7. XLR balanced analogue output

Balanced analogue signal output to an amplifier.

8. RCA unbalanced analogue output

Single-ended signal output to an amplifier.

9. Coaxial Digital input

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

10. Optical Digital input

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

11. 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.

12. 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.

13. 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 files and streams, delivering the sound of the original master recording.



The NEO iDSD includes MQA technology, which enables you to play back MQA audio files and streams. '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.

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

* MQA

1) Listen to MQA (Master Quality Authenticated) files 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 fixed		
UnBAL RCA:	3.2V / 3.9V max. (variable)	2.2V fixed		
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 :		12Ω - 300Ω Headphone		
Output Power:				
Balanced:	>6.4V/68.6 mW (@ 600Ω)			
	>5.77V/1040 m\	Ν (@ 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 ~2.5	W		
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.				

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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.





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