ifi

x series

xDSD

3 2 7   1   4   5 6

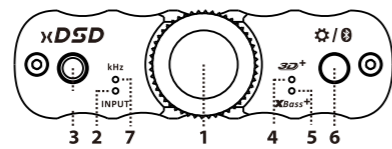## 1. ON/OFF, Analogue Volume Rotary with LED

Power ON (with mode selection)
Press and hold the rotary knob until LEDs light up. The LEDs (rotary knob, kHz & INPUT) on the front faceplate will light-up corresponding to the last mode used. Either release for the last mode or hold the rotary knob to cycle through the two modes. Release to accept that mode.

LED	Mode
Green	Wired (USB or S/PDIF)
Blue	Wireless (Bluetooth)

The xDSD allows you to cycle through the selections twice (approx. 20 seconds) before powering off.

Power OFF
Push and HOLD the rotary knob for several seconds until all the LEDs change to White then release to power off.

Wired/Wireless mode switching
The xDSD must be switched off to allow mode selection after powering on. See Power ON (with mode selection).

Mute
Press the rotary knob to mute. To unmute press it again OR turn the rotary to unmute.

Rotary knob/Volume:

LED	Volume	
Red	-9 to 0 dB	(100%-91%)
Yellow	-27 to -10 dB	(90%-73%)
Green	-45 to -28 dB	(72%-55%)
Cyan	-63 to -46 dB	(54%-37%)
Magenta	-81 to -64 dB	(36%-19%)
Blue	-101 to -82 dB	(18%-0%)
Off	Mute	
White	Line Output mode (2V)	

Note: The xDSD uses ONLY a pure analogue volume control.

Note: With no signal xDSD will go into the mute mode and the volume LED will be off.

2. INPUT LED

LED	INPUT
White	USB
Green	S/PDIF
Blue	Wireless Bluetooth (Connected)
Blue (flashing)	Wireless Bluetooth (Awaiting connection)
Blue/Red (flashing)	Wireless Bluetooth (Pairing)

3. Mode Selection
Based on the music source and your preference, choose between the Headphone and Line Output modes.

S-Balanced headphone 3.5mm/Line Output Headphone Mode
This is a dual-mono headphone amplifier section with S-Balanced 3.5mm TRRS/TRS connection. This special headphone circuit is of most benefit to 'Balanced' headphones, but also elevates the performance of 'non-balanced' headphones.

Wired Mode (USB or S/PDIF)
This mode allows you to connect the xDSD with a DAP, phone, laptop or any other device via a Lightning to USB Camera Adapter (Apple) or USB On-The-Go (OTG) cable (Android).

When the xDSD is off, hold the rotary knob (1) until it turns green and then release.

The selection between USB and S/PDiF is automatic. The USB singal has priority over S/PDiF. To enter S/PDiF mode, please make sure there is no signal going through the USB input.

Wireless Mode (Bluetooth)
This mode allows you to connect the xDSD to a DAP, phone or any other music source with Bluetooth wirelessly.

When the xDSD is off, hold the rotary knob (1) until it turns blue and then release. The xDSD will 'blink' blue for 15 seconds whilst searching for devices to pair with. Already paired devices will connect automatically. New devices will enter pairing mode with the rotary knob blinking (1) Blue/Red. The xDSD is able to store up to 8 paired Bluetooth devices otherwise hold the settings button (6) to force pair.

Line Output Mode
The 3.5mm jack can also be used as a fixed-level line out with all the headphone specific sonic controls disabled and the volume control bypassed.

Warning: In Line Output mode, do NOT have headphones inserted as damage to product/hearing may ensue.

Enabling Line-Output
When the unit is OFF, HOLD the 'Settings' button (✿/ 🅱) THEN press the rotary to switch ON. Once the xDSD powers up, release the rotary whilst still holding the 'Settings' button (✿/ 🅱) for 3 seconds. Once released, the rotary LED should indicate White.

Disabling Line-Output
Turn the unit off and HOLD the 'Settings' button (✿/ 🅱) THEN press the rotary to switch ON. Once the xDSD has powered-up, keep the rotary pushed in to cycle as per normal through the two modes and release to select the desired mode. The Line-Output mode deactivation will be disabled by the rotary being blank (i.e., not lit White).

4. 3D+® Matrix LED
3D+® Matrix (on/off) recreates a holographic sound field like listening to a pair of speakers. It is a pure analogue signal processing circuit.

5. XBass+® LED
Many headphones lack the correct bass response. XBass+® is an analogue circuit designed to 'add back' the lost bass response for a more accurate reproduction of the original music.

6. Settings ✿/ 🅱
This button cycles between:

Off
3D+®
XBass+®
XBass+® & 3D+®
Pairing (Bluetooth, Hold)

7. Audio Format LED (kHz)
The LED colour scheme indicates the audio format and sampling frequency received by the xDSD from the music source.

LED	Mode
Green	PCM 44/48/88/96kHz
Yellow	PCM 176/192/384kHz
White	PCM 768kHz
Cyan	DSD64/DSD128
Blue	DSD256
Red	DSD512
Magenta	MQA
Off	No valid Signal

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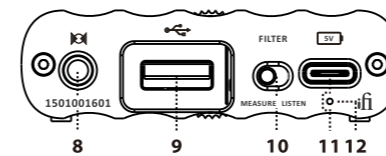
8. S/PDIF Input
The USB singal has priority over S/PDiF. To enter S/PDiF mode, please make sure there is no signal going through the USB input.

9. USB Input Type A
To connect with the xDSD you can use a Lightning to USB Camera Adapter (Apple) or USB On-The-Go (OTG) cable (Android). Ordinary 'charging' cables cannot be used.

For connection to a computer, use the enclosed USB3.0 cable for a superior connection (over USB2.0).

10. Digital Filter
Different digital filters are available for PCM & DSD. For listening enjoyment, we recommend the transient optimized minimum-phase 'Listen' filter but feel free to choose the frequency response optimised 'Measure' filter.

11. Type-C USB charging port
The USB-C type port is or charging ONLY.

Please only use a USB-A to USB-C cable to recharge the xDSD (as a USB-C to USB-C setup will not be detected).

When the xDSD is off and a 5V USB power supply is detected, the LED will change colour to show the various states of charge (see next section).

We advise to charge the xDSD switched off.

You can listen to music while charging, but it may take longer to be fully-charged, depending on the volume level and the headphones used.

The xDSD may be slightly warm to touch when it is simultaneously in use and being charged.

12. LED for Battery Status

LED	Status
White*	> 75%
Green*	> 25%
Red*	> 10%
Red (flashing)	≤ 10%

Battery LED will flash when it is charging

With IEMs, a fully-charged battery offers approx 6-8 hours of music enjoyment.

It is pre-installed with firmware v5.30 which has been optimised for MQA. This version also handles up to PCM384/DSD256.

For firmware optimised to run PCM768/DSD5 12(non-MQA) please install firmware v5.20.

For all downloads: www.ifi-audio.com

Specifications

USB Input:	up to PCM768kHz & DSD512 (24.6/22.6MHz)
S/PDIF Coaxial and Optical Inputs:	up to 192kHz/24Bit
Dynamic Range:	> 113dB (A)
Volume Control:	-101dB...0dB in 1dB steps
Output power:	> 2.82V/500 mW @ 16 Ohm
	> 3.7V/270mW @ 50 Ohm
	> 3.8V/48 mW @ 300 Ohm
	> 3.8V/24 mW @ 600 Ohm
Line out Level:	> 2.1V @ 0dBFS (& 0dB Volume)
THD &N (1V/16R):	< 0.005%
Output Impedance:	< 1
Battery:	3.8V/2200mAh
Dimensions:	95 (l) x66.5 (w) x19 (h) mm
Weight:	127g (0.28 lbs)
Warranty period:	12 months

Specifications are subject to change without notice.