iFi micro

Signature iDSD

1. Single-ended 6.3mm output

For connecting single-ended 6.3mm headphones. With single-ended 3.5mm headphones, connect with a 3.5mm to 6.3mm adapter.

Tip: With a new pair of IEMs/Headphones, ALWAYS start with the volume no higher than 9 o'clock and with the Power Mode set to 'Eco'.

2. S-Balanced 4.4mm analogue output

Connect balanced 4.4mm headphones.

Tip: As the micro iDSD Signature is balanced, we recommend the 4.4mm output.

3. XBass+®

XBass+® (On/Off) was uniquely designed to extend bass response to suit different headphones. It is a pure analogue signal circuit.

4. 3D+®

The 3D+® (on/off) recreates a holographic sound field. It is a pure analogue signal processing circuit designed for listening to headphones as if one was listening to speakers. This addresses the 'music inside the head' sensation, which makes for unsettling listening.

Tip: Sonically-hindering DSP is NOT used in our XBass+ or 3D+ technologies. They use the highest-quality discrete components and operate purely in the analogue domain. This means all the clarity and resolution of the original music is retained.

5. Audio Format LED (kHz)

The LED colour scheme indicates the audio format and sampling frequency received by the micro iDSD Signature from the music source.

LED	Mode
Green	PCM 44/48/88/96kHz
Yellow	PCM 176/192/352/384kHz
White	PCM 768kHz
Cyan	DSD64/DSD128
Blue	DSD256
Red	DSD512
Magenta	MQA

6. ON/OFF and Analogue Volume Control

The analogue volume control in the micro iDSD Signature is superior to any digital volume control.

Warning: Due to the high power of the micro iDSD Signature, always start off at a low volume level so that there is no risk of damage to your headphones or your hearing. iFi audio is not responsible for any hearing or equipment damage from misuse.

**Power ON.**   **Power OFF.**

Step 1 ON   **Step 2** OFF

Tip: For Apple iOS and Android devices, please use battery power, otherwise you may receive error messages from your device.

Tip: For connection to Apple devices, an Apple Lightning to a USB Camera Adapter is required. For connection to Android devices, a USB On-The-Go (OTG) cable and appropriate OS support are required.

For more information, please refer to www.ifi-audio.com.
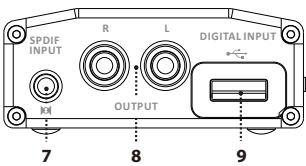
7. S/PDIF 3.5mm Coaxial/Optical input

When USB is not used, connect to a Coaxial/Optical cable (through a Toslink Mini-Plug).

Tip: a Toslink Mini-Plug to Toslink adaptor is included for connecting a Toslink optical cable.

Tip: The S/PDIF standard supports PCM only up to 192kHz.

8. RCA analogue output

This is an analogue output.

9. USB3.0 'Type A' input port

For data transfer only. Connect your phone to the micro iDSD Signature with a Lightning to a USB Camera Adapter (Apple) or USB On-The-Go (OTG) cable (Android). When using other audio sources, please connect with a USB cable.

Tip: It is preferable to use a USB 3.0 over using a USB 2.0 port on the PC.

Tip: The micro iDSD Signature comes with a pre-installed firmware optimised for MQA. This version also handles up to PCM384/DSD256.

Tip: For firmware optimised to run PCM768/DSD512(non-MQA) please install corres ponding firmware.

Tip: For all latest firmware updates please refer to our website here: www.ifi-audio.com/downloads/
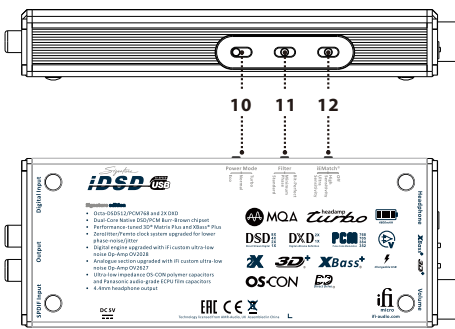
10. Power Mode

There are 3 different types of power output levels to drive different headphones from the ultra-sensitive in-ear monitors to the most demanding over-ear headphones .

Approximate listening time (in Battery mode with typical headphones):

Power Mode
- Turbo = for the most demanding headphones (~6 hours).
- Normal = for medium-sensitivity headphones (~9 hours).
- Eco = for high-sensitivity IEMs (~12 hours).

11. Digital Filter

The following are user-selectable:

Filter
- Bit-Perfect
- Minimum Phase
- Standard

DSD: Extreme/Extended/ Standard Range (analogue) filters

PCM: Bit-Perfect/Minimum-Phase/Standard (digital) filters

DXD: Bit-Perfect Processing (fixed) analogue filter

Tip: For PCM we recommend 'Bit-Perfect' for listening and 'Standard' for measurements. For DSD, select Extreme/Extended/Standard to find the one that sounds best for listening and 'Standard Range' for measurements.

12. iEMatch® switch

With the iEMatch®, even the most sensitive In-Ear-Monitors (IEMs) can be matched to the micro iDSD Signature.

iEMatch®
- Off = off
- High Sensitivity = For High Sensitivity IEMs.
- UltraSensitivity = For Ultra Sensitivity IEMs.

13. USB-C (5V) battery charge input

For charging only. Due to the very high powered nature of the micro iDSD Signature, a full recharge with a high-powered or standard charger would take ~ 3 hours and ~ 12 hours respectively.

14. LED for Battery Status

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

*Battery LED will flash when it is charging.

Technologies

- Octa-DSD512/PCM768 and 2X DXD.
- Dual-Core Native DSD/PCM Burr-Brown® chipset.
- S-Balanced 4.4mm output with (4,100mW).
- Performance boosting Direct-Drive® and Headamp Turbo®.
- Zero Jitter/Femto clock system upgraded for lower phase-noise/jitter.
- Digital engine upgraded with iFi custom ultra-low noise Op-Amp Ov2028.
- Analogue section upgraded with iFi custom ultra-low noise Op-Amp Ov2627.
- Ultra-low impedance OS-CON polymer capacitors and Panasonic audio-grade ECPU film capacitors.
- Performance-tuned 3D+® and XBass+®.
- Turbo/Normal/Eco modes.

Specifications

Digital Inputs:	USB 3.0 type A "OTG" Socket (USB2.0 compatible/ with iPurifier technology built-in)/ S-PDIF (3.5mm coaxial/optical)
Output:	
S-Balanced	4.4mm
S-E:	6.3mm/RCA
DAC section	
DAC:	Bit-Perfect DSD & DXD, PCM DAC by Dual-core Burr Brown
Clock:	Ultra low jitter GMT Femtosecond Clock
Formats:	DSD 512 / 22.6MHz
	PCM 768kHz
	MQA Full Decoder
Filters:	
DSD	Extreme/Extended/Standard Bandwidth
PCM	Bit-Perfect/Minimum-Phase/Standard
DXD	Bit-Perfect Processing
Line Output	
DNR:	>117db(A)
THD + N:	<0.003% @ 0dBFS
Output Voltage:	>2V
Output Impedance:	<240Ω
Jitter (correlated):	Below AP2 test set limit
Headamp Section	
Headphone Power Output	
Turbo mode	
Power (max)	10.0V/4,100 mW
Power (continuous)	>1,560 mW @ 64Ω
	>166 mW @ 600Ω
Normal mode	
Power (max)	5.5V/1,900 mW
Power (continuous)	>100 mW @ 300Ω
	>950 mW @ 32Ω
Eco mode	
Power (max)	2.0V/500 mW @ 8Ω
Power (continuous)	>250 mW @ 16Ω
DNR:	>115dB(A) (Eco Mode, 2V Out)
THD + N:	< 0.008% @ 500mW/16Ω
Output Voltage:	>10V (Turbo Mode)
Output Impedance:	<1Ω (iEMatch not engaged)
Maximum Output Power:	4,100 mW @ 16Ω Load
Continuous Output Power:	1,000 mW @ 64Ω Load
Battery:	Lithium-polymer 4800mAh
Power System:	Charging via USB-C, BC V1.2 compliant up to 1500mA charging current
Dimensions:	172 x 65 x 27 mm (6.8" x 2.6" x 1.1")
Net weights:	295 g (0.65 lbs)
Limited Warranty:	24 months*

*24 months typical or as permitted/required by local reseller laws.
**Specifications are subject to change without notice.