iFi nano

BLACK LABEL
iDSD USB

2   3   1

1. Input. USB2.0 type A 'OTG' socket (with iPurifier® technology built-in)

Connect the USB cable from the host (PC, iPhone/iPad or Android etc). We recommend the enclosed USB3.0.

For mobile devices, you must separately purchase the correct respective Apple (Camera Connection Kit) or Android (USB On-The-Go) cable to connect directly to the nano iDSD Black Label.
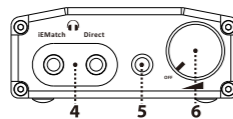
Ordinary 'charging' cables cannot be used for connection. This USB input is also used for battery-charging. See later for more details.

2. Output. 3.5mm Line Out

For line out to connect to line input devices with their own volume control (e.g. Active Speaker, HiFi System, Aux Input, Headphone Amplifier).

3. 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 instead.

4   5   6

4. Output. 3.5mm headphone jack

For connection to Headphones/In-Ear-Monitors. The nano iDSD Black Label is equipped with a Headphone Amplifier that is approx. ten times more powerful than a common Smartphone. It can drive most headphones that are poorly-driven directly from Smartphones and similar devices. In order to maximise compatibility with headphones and IEMs optimised for low output sources, we have integrated the iFi ground-breaking iEMatch® system.

Direct – for regular-sensitivity headphones.
iEMatch – matches high-sensitivity IEMs/headphones for reduced background noise and matched gain.

Tip: Try both headphone outputs and see which is preferred. We normally recommend starting with the iEMatch® output as most modern Headphones/IEMs are very sensitive (go very loud with very little input). If the iEMatch® connection does not allow satisfactory volume levels simply switch to the Direct output. The correct choice will maximize dynamic range and sound quality and provide a comfortable adjustment range on the volume control.

Note: Only ONE headphone should be connected at any one time.

5. LED for audio format/battery status

The LED colour scheme indicates the sampling frequency received by the nano iDSD Black Label from the source.

When the BL is switched off and a 5v USB power supply is detected, the LED will turn blue to show it is charging. With IEMs, a fully-charged battery offers approx. 10 hours of music enjoyment.

Power ON

LED colour:	Mode
Blue:	DSD 256
Cyan:	DSD 128/DSD 64
White:	DXD PCM 352.6/384kHz
Yellow:	PCM 176.4/192kHz
Green:	PCM 44.11/48/88.2/96kHz
Magenta:	MQA (all sample rates)
Green (flashing):	Waiting for USB connection
Red alternating with: any of the above	Battery is fully discharged, USB power is being used to play music but battery is NOT being charged
Red:	Battery is < 10% and requires charge
No LED:	Battery empty

Power OFF

Blue:	Charging

6. ON/OFF & Analogue Volume Control

USB power

On/Off and Analogue Volume Control

Step 1   **Step 2 → ON**

Battery Power

Turn ON the power first, then connect to the computer.

Step 1 → ON   **Step 2**

Tip: In Battery Power mode, the nano iDSD Black Label will continue to use battery power even if the USB cable is connected afterwards. For Apple iPhone/iPad/iPod Touch, Android devices, please use Battery Power, otherwise you may receive error messages from your device.

For more information, please refer to www.ifi-audio.com.

7. 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.

Features/Specifications:

General

Input (rear):	USB2.0 type A "OTG" Socket (with iPurifier® technology built-in)
Output (rear):	1 x Audio fixed line out L+R 3.5mm
Digital Filter:	2 positions, 2 filters
Outputs (front):	2 x Headphone Audio 3.5mm one direct and one with iFi iEMatch® integrated

DAC

DAC:	DSD, DXD, PCM DAC by Burr Brown Bit-Perfect DSD processing, Bit-Perfect DXD processing
Clock:	Low-jitter crystal clock
Audio Formats:	DSD 256/128/64/12.4/11.2/6.2/5.6/3.1/2.8
	DXD 384/352.8kHz
	PCM 384/352.8/192/176.4/96/88.2/48 /44.1kHz
	MQA 88.2/96/176.4/192kHz filters
Filter – PCM:	Listen (transient optimised minimum phase)
	Measure (frequency response optmised)
– DSD:	Listen (extended bandwidth transient optimised)
	Measure (narrow bandwidth, low output band noise optimised)
– DXD:	Fixed Bit-Perfect Processing
– MQA:	Fixed MQA Filter

Note: for Windows drivers download: ifi-audio.com/downloads/

MQA: (Master Quality Authenticated)	nano iDSD Black Label includes MQA rendering technology, which enables you to play back MQA audio files and streams, delivering the sound of the original master recording.
	The LED glows magenta to indicate that the unit is rendering an MQA stream or file. This delivers the final unfold of the MQA file.

Headphone Amplifier

Amplifier:	Dual Mono 2 x 285mW Direct Drive, coupling capacitor free circuit for highest fidelity

Volume Control:	Analog 2 - Track Potentiometer w. power switch, < 2dB tracking error-40dB…0dB Attenuation
Headphone Connection:	3.5mm TRRS with Balanced compatible wiring
Dynamic Range: (including DAC)	> 109dB(A) @ 3v (Direct) > 107dB(A) @ 0.5V (iEMatch®)
THD &N (@ 125mW/30R):	< 0.005%
Max. Output (<10% THD):	> 3.5V @ 600Ω Load (Direct) (20mW/600Ω)
	> 2.9V @ 30Ω Load (Direct) (285mW/30Ω)
	> 1.7V @ 15Ω Load (Direct) (200mW/15Ω)
Output Impedance:	< = 1Ω (Direct)
	< = 4Ω (iEMatch®)
Channel Separation:	> 79dB @ 600Ω Load (Direct)
	> 79dB @ 15Ω Load (Direct) (1kHz, TRRS plug Balanced wiring)

Line Output

Dynamic Range (Line):	> 109dB(A)
THD & N (0dBFS Line):	< 0.004%
Output Voltage (Line):	2.15V (+/-0.05V)
Output Impedance:	< 240Ω
Channel Separation:	> 99dB (@ 1kHz)
Jitter (correlated):	Below test set limit
Dimensions:	96 (l) x64 (w) x25.5 (h) mm
Weight:	139g (0.31 lbs)
Warranty period:	12months

iFi

warranty

In order to activate the warranty for this iFi product, you must register with the iFi website.

Component :

Serial no:

Terms and Conditions

iFi guarantees that this iFi product shall be free from defects in materials and workmanship for a period of 1 year for parts and labour.

The warranty period begins at the date of retail sale by an authorized iFi distributor/dealer and is subject to the following requirements and understandings:

• It is the responsibility of the buyer within 30 days from the original sale, to register and activate the product warranty with the iFi website.

• The original invoice must be produced for authentication prior to any warranty claim.

• The iFi product must not have been modified in any manner whatsoever, or the warranty will immediately become void.

• The iFi warranty is only valid in the country of original sale and is not transferable.

• The product must not have been stored in a humid environment; nor subjected to weather, water, or saltwater spray.

• iFi shall not, under any circumstances, be liable for any incidental or consequential damages arising from the loss of property or other damage or losses due to the failure of an iFi product. iFi is not liable for loss of use or inconvenience caused by the failure of an iFi product. iFi is not liable for damage caused to other audio components because of the failure of an iFi product.

• During the warranty period, iFi will repair the product to working order, or, at iFi's discretion, replace the defective module with a similar available product.

• All repairs performed after expiry of the warranty period will be charged to the owner and will carry a 180-day warranty on parts and labour. The customer is responsible for shipping the unit to the iFi distributor in the original packaging. This includes the payment of any shipping charges and related taxes.

• Should any warranty issues arise, iFi's decision is full and final.

ifi-audio.com