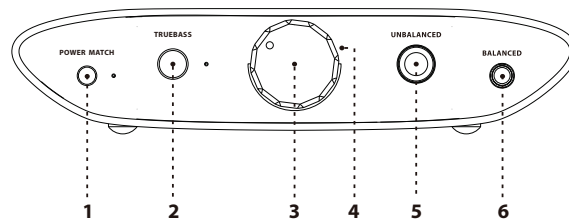# iFi

ZEN DAC

Thank you for purchasing the DAC from ZEN series. The DAC is a balanced USB-audio DAC amplifier.

1. PowerMatch (high/low)

PowerMatch setting should be on low for IEMs and on high for on/over headphones.

Warning: Due to the high power of ZEN DAC, before changing the PowerMatch setting, always start off at a low volume level so that there is no risk of damage to your headphones, speakers or your hearing. iFi audio is not responsible for any hearing or equipment damage from misuse.

2. TrueBass (high/low)

Many headphones lack the correct bass response. TrueBass is an analogue circuit designed to 'add back' the lost bass response for the most accurate playback.

Tip: Open-back headphones and some IEMs usually sound better with TrueBass set high. Adjust to suit.

3. Analogue Volume control

The analogue volume control in ZEN DAC is superior to any digital volume control. It can be used to control the headphone volume or the pre-amplifier volume (when set to 'Variable'). If the output at the rear is set to 'Fixed' the volume control is bypassed.

4. Audio Format LED (kHz)

The LED colour scheme indicates the audio format and sampling frequency received by ZEN DAC from the music source.

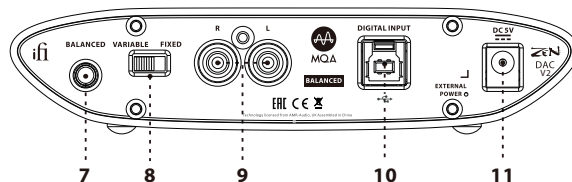| LED	Mode
Yellow	PCM 44.1/48kHz
White	PCM 88.2/96/176.4/192/352.8/384kHz
Cyan	DSD 64/128
Red	DSD 256
Green	MQA
Blue	MQA Studio
Magenta	Original Sample Rate*

*MQB

5. Single-ended 6.3mm output

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

6. Balanced 4.4mm analogue output

Connect balanced 4.4mm headphones.

Tip: As ZEN DAC is balanced, we recommend the 4.4mm output.

7. Balanced 4.4mm analogue output

This is an analogue output via 4.4mm > XLR or other balanced interconnects. You could use this for an active speaker or an amplifier.

Tip: As ZEN DAC is balanced, this is the recommended output.

8. Variable/Fixed switch

When the rear UnBAL/BAL analogue outputs are used, this switch will determine whether or not ZEN DAC analogue volume control is used.

9. RCA analogue output

10. USB-audio and power input

This is a USB input. It connects ZEN DAC to the computer audio source and provides the power supply.

11. DC 5V power

ZEN DAC is powered by 5 volts, either via the enclosed USB cable (for connection to laptop or PC) or DC power supply (not included).

Tip: For best performance upgrade the USB power supply to a super-low noise power adapter such as iFi iPower or iPower X.

Note: For use with PC it is necessary to download drivers.

Tip: For all latest firmware updates please refer to our website here: www.ifiaudio.com/downloads/

Specification

Input:	USB3.0 B Socket (USB2.0 compatible)
Formats:	44.1/48/88.2/96/176.4/192/352.8/384kHz PCM 2.8/3.1/5.6/6.2/11.2/12.4MHz DSD 353/384KHz DXD MQA
DAC:	Bit-Perfect DSD & DXD DAC by Burr Brown

Line Section

Output:		
Balanced 4.4mm:	2V / 6.2V max. (variable)	4.2V fixed
UnBAL RCA:	1V / 3.3V max. (variable)	2.1V fixed

Zout:	
Balanced:	<= 200Ω
UnBAL:	<= 100Ω

SNR:	<-116dB(A) @ 0dBFS (UnBAL/BAL)
DNR:	>116dB(A) @ -60dBFS (UnBAL/BAL)
THD+N:	<0.0015% @ 0dBFS (UnBAL/BAL)

Headphone Section

Output:		
Balanced 4.4mm:	2V / 6.2V max.	12Ω - 600Ω
UnBAL 6.3mm:	1V / 3.3V max.	12Ω - 300Ω

Output Power:	
Balanced:	>380mW @ 50Ω; >70mW @ 600Ω
UnBAL:	>280mW @ 32Ω; >36mW @ 300Ω

Output Impedance:	<1Ω (UnBAL/BAL)
THD+N:	<0.005% (125mW @ 32Ω)
SNR:	>113dBA (3.3V UnBAL / 6.2V BAL)
Power consumption:	No Signal ~0.5W Max Signal ~2.5W
Dimensions:	158 x 117 x 35 mm 6.2" x 4.6" x 1.4"
Weight:	491 g (1.08 lbs)
Warranty period:	12 months

Specifications are subject to change without notice.

ZeN DAC V2

CONNECTION GUIDE

SE HP - 6.3mm

Balanced HP - 4.4mm

Balanced Output
4.4mm

RCA Output

USB Input
Phone/PC

Power input
DC 5V*

iFi
ifi-audio.com

*Do not use a power supply higher than 5V

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 (electronic tube warranty for 6 months) 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.

After-Sales

3 Easy Steps...

Step 1	Step 2	Step 3
Access the web site	Complete name/system details	Provide as much system information as possible
support.ifi-audio.com		

Dear iFi customer: Thank you for purchasing this iFi product.

Please do not hesitate to contact us if you have any questions surrounding our products/support.

http: //support.ifi-audio.com/

MQA Setup

(where applicable)

For MQA computer setup, please scan this QR code or type 'ifi audio' into YouTube search.

You will find two setup videos:

- MQA Decoder – eg Pro iDSD
- MQA Renderer – eg nano iDSD BL

Just select the correct video setup for your device.

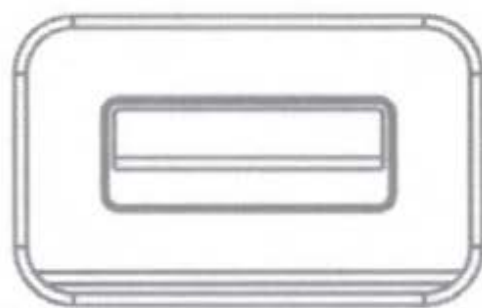Any queries, please search the FAQs or open a support ticket here:

(https://support.ifi-audio.com/)

TIDAL

Type A Connect

(where applicable)

This iFi device with a USB type A male port

Type A

was designed for direct connection to mobile devices to extract the digital signal.
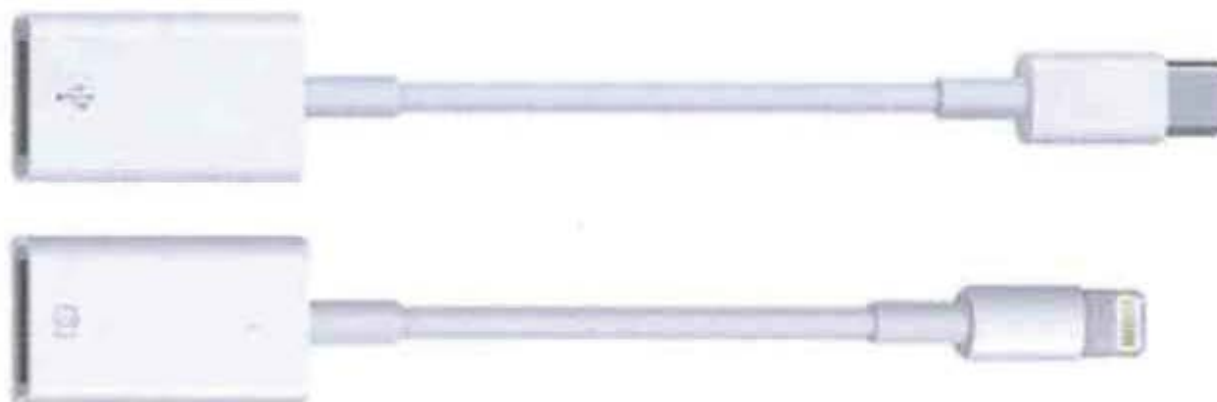
Phone Connections

(where applicable)

For connection via

Apple (iOS) use Apple USB-to-USB-C/Lightning:

Android* use On-The-Go (USB-C/USB-micro):

For further support FAQs and Support Ticket System: https://support.ifi-audio.com/ .

*Please ensure your Android is USB host mode compatible.
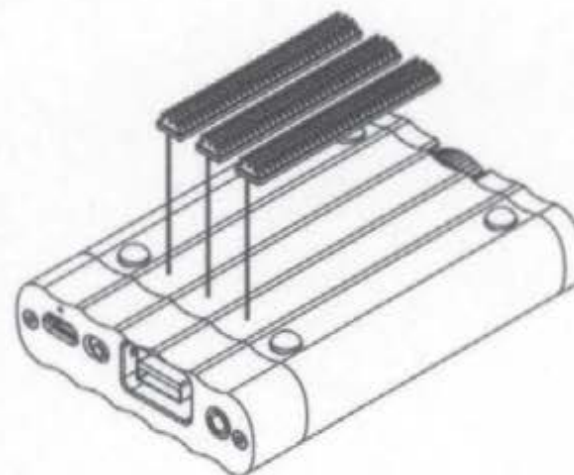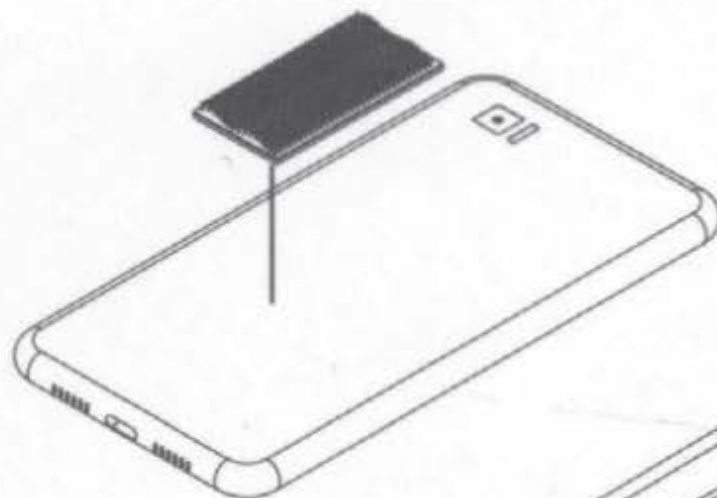
Note for Charging

(where applicable)

1. If the LED is BLUE when you first switch ON the machine, it means that it is sufficiently charged. If the LED is RED, please turn OFF the machine and charge until no LED is lit.

2. If you cannot power ON or if there is no LED light, please insert a USB cable with USB power 3-5 times, then the LED should be BLUE. It should stay like this for a few hours (depending upon how flat the battery is). If not, please re-insert the USB cable (with USB power) 3-5 times again, and once the LED is BLUE, leave for at least 6 hours.

3. After a long period on inactivity (say 3-6 months), please fully charge the machine again. Ideally, repeat this process once every 3 months.

4. If you encounter any issues, please contact our technical support department at: http://support.ifi-audio.com/

Dual Lock Fasteners

(where applicable)

① ②