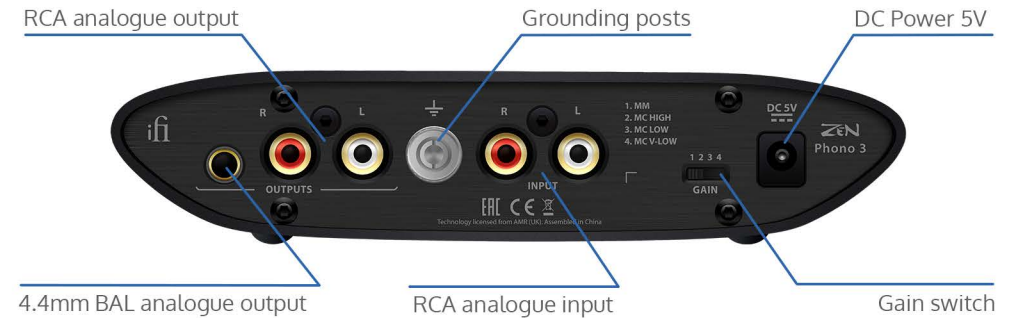


# ZEN Phono

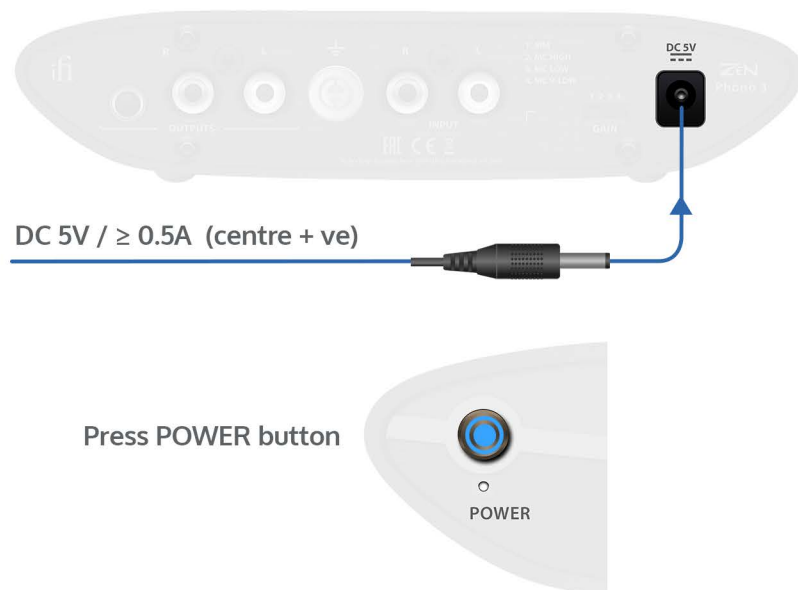
## Quick Start Guide



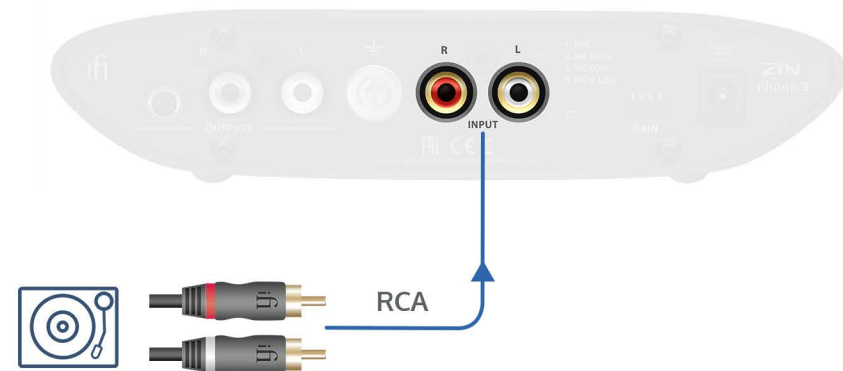
Set-Up video



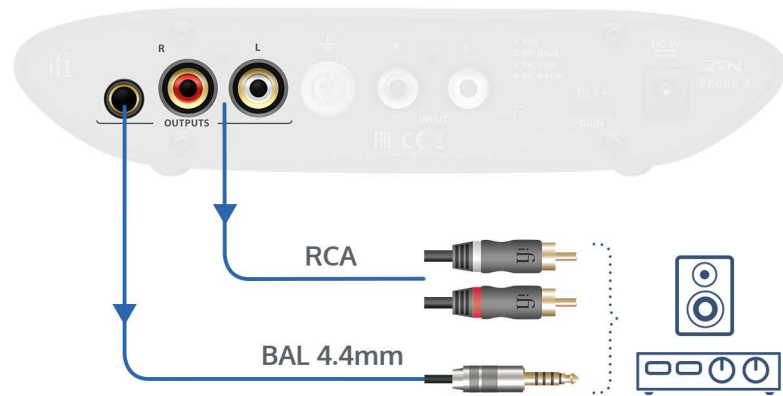
### 1 Power



### 2 Input



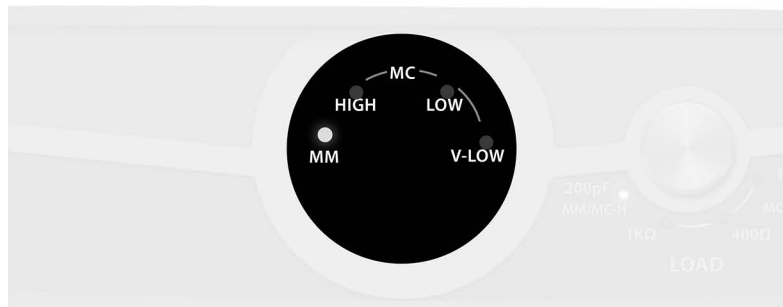
### 3 Output



### 4 Gain

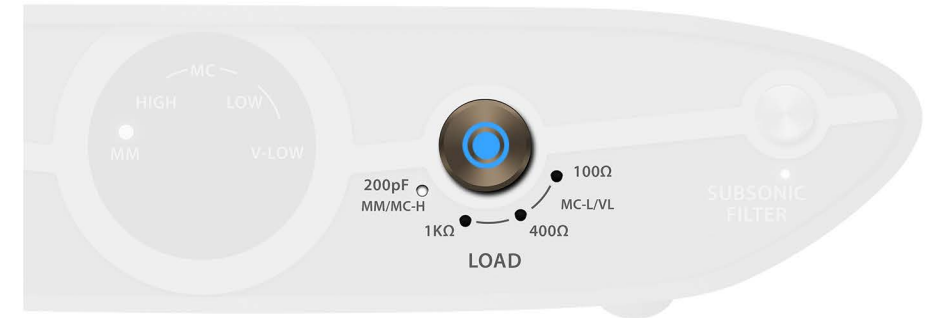


MM	36dB
MC HIGH	48dB
MC LOW	60dB
MC V-LOW	72dB

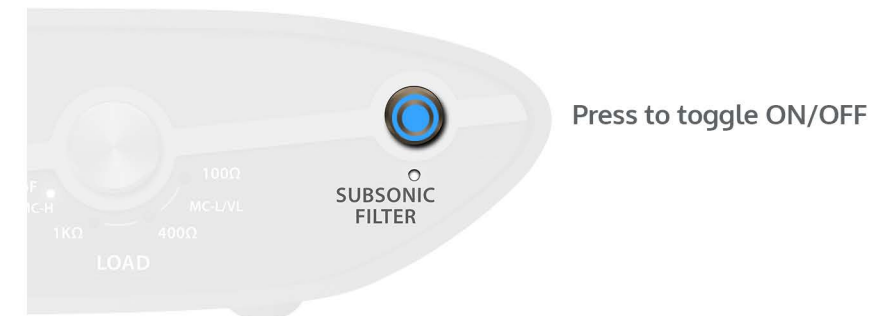


### 5 Load

Check the cartridge datasheet and select your closest load value



### 6 Subsonic filter



# ZEN Phono 3 User Manual\_Ver1.01



ZEN Phono

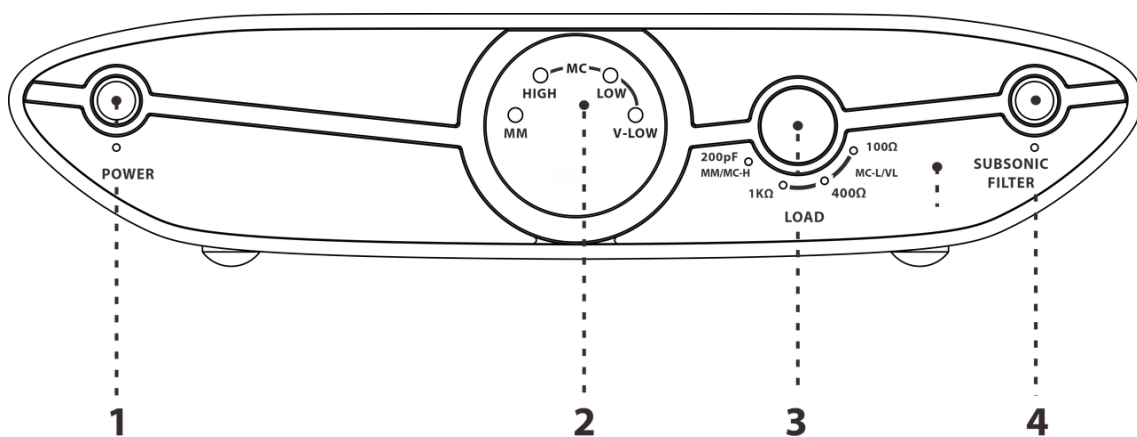
User Manuals

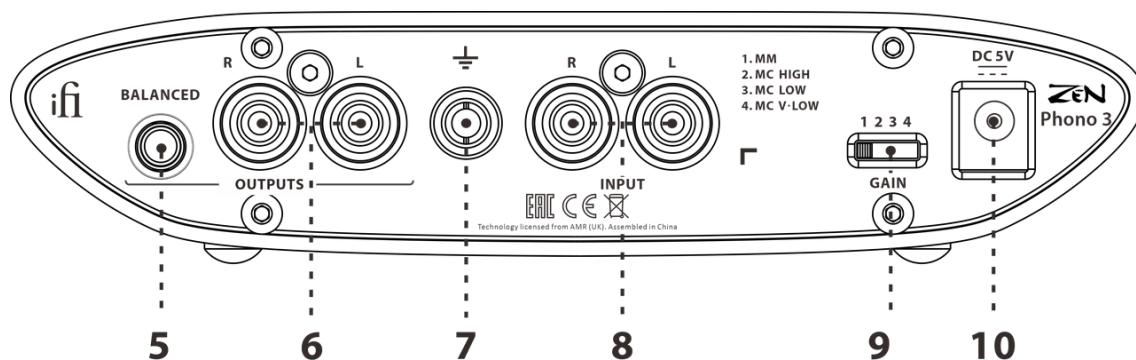
**Thank you for purchasing the Phono from the ZEN series.** The Phono 3 is a balanced MM/MC phono stage.

Unleash the full potential of your favourite vinyl records with the ZEN Phono 3. It boasts an intelligent subsonic filter that transforms the sound of your warped vinyl records, a noise floor quieter than some Class A+ phono stages, providing greater dynamic range and supports four MC/MM gain selections to ensure compatibility with a wide range of cartridges. The ZEN Phono 3 creates a serene listening experience that allows every musical detail to shine through.

## FEATURES:

- Supports four MC/MM gain selections from 36dB to 72dB and four input impedance settings, ensuring compatibility with a wide range of cartridges
- Features intelligent subsonic filter to intelligently remove only the ultra-low frequencies caused by warps, not by the music, unlike typical bass-reducing filters
- With an EIN (Equivalent Input Noise) of -151dBV, this phono stage surpasses some Class A+ models by 20dBV, ensuring a super-silent noise floor
- Precise RIAA with balanced output, performance matches that of a \$1,000 phono stage
- Internal high-tech 1.2MHz clean power supply, rivalling classic tube amplifiers' LC filtering circuits

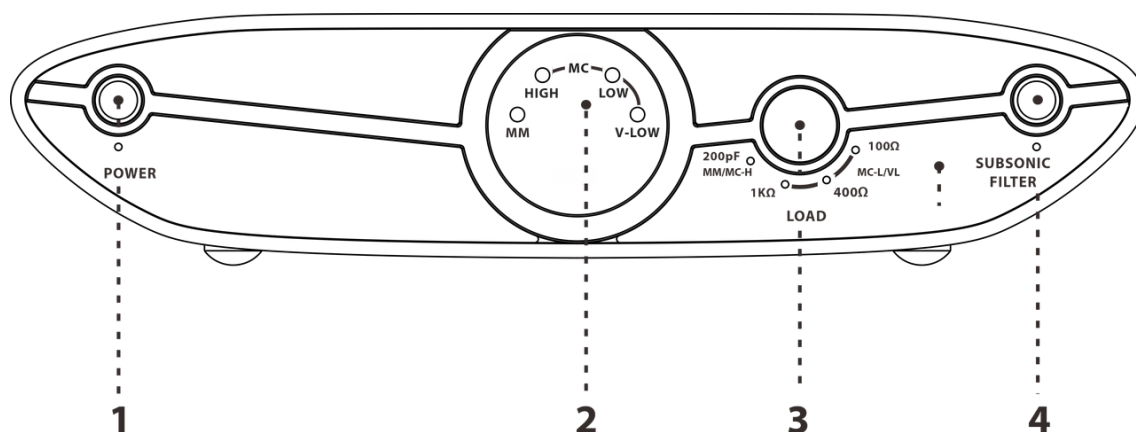




## Contents

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1. Power switch
2. 2. MM and MC gain channel display LED
3. Load Mode Selector Switch
4. SUBSONIC Filter ON/OFF
5. Balanced 4.4mm analogue line output
6. RCA analogue line output
7. Ground
8. RCA analogue line input
9. Gain channel switch
10. DC 5V Power Supply Connection



## 1. Power switch

Power switch, short press to switch on/off.

*Note: If the device has been switched on for a period of time ( $\geq 10$  min), you need to shut off the unit twice to turn it off. It only happens if the unit is on for a while. This is because the MCU will have switched out of the signal path so you get to enjoy the best sonics!*

## 2. MM and MC gain channel display LED

The LEDs indicate the currently selected gain mode (see item 9).

LED	Gain mode (9)	Output Voltage
MM	1 MM	$> 2\text{mV}$
HIGH	2 MC HIGH	$\leq 2\text{mV}$
LOW	3 MC LOW	$\leq 0.5\text{mV}$
V-LOW	4 MC V-LOW	$\leq 0.25\text{mV}$

*Tips: ZEN Phono3 automatically enters the lock state after working for  $\geq 10$  minutes, it can not be adjusted after locking, you need to press the intelligent subsonic filter switch (4) briefly to unlock it, and it can be adjusted normally after unlocking.*

### 3. Load Mode Selector Switch

This button cycles between 4 load levels:

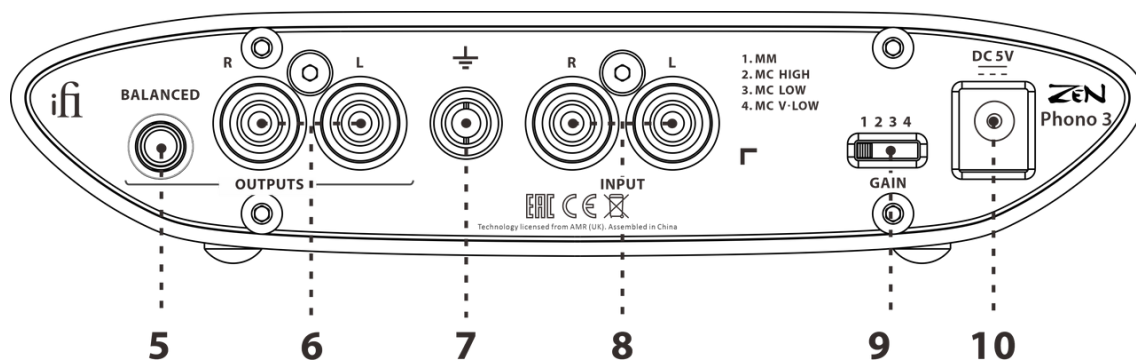
Load	Mode
200pF (Default is 100pF)	MM/MC HIGH
1kΩ/400Ω/100Ω	MC LOW/MC V-LOW

*Tips: ZEN Phono3 automatically enters the lock state after working for  $\geq 10$  minutes, it can not be adjusted after locking, you need to press the intelligent subsonic filter switch (4) briefly to unlock it, and it can be adjusted normally after unlocking.*

### 4. SUBSONIC Filter ON/OFF

This is the SUBSONIC filter switch.

The iFi-designed subsonic filter will intelligently detect whether a subsonic frequency is a warp or a bass note. It will eliminate the warps and let all the bass and mid-range frequencies pass through untouched. Therefore, it will not affect the sound quality.



## 5. Balanced 4.4mm analogue line output

This is an analogue output via 4.4mm > XLR or other balanced interconnects. You can use this to connect to active speakers or amplifiers that have a volume control.

*Tip: As ZEN Phono 3 is balanced, this is the recommended output.*

## 6. RCA analogue line output

This is an analogue output via RCA > RCA or other single-ended interconnects. You can use this to connect to active speakers or amplifiers that have a volume control.

## 7. Ground

This is the ZEN Phono 3's ground, please connect it to the turntable's grounding wire.

## 8. RCA analogue line input

This is an analogue input. Connect your turntable to the ZEN Phono 3 here.



## 9. Gain channel switch

This switch switching between 4 gain levels:

Gain Channel	Corresponds Gain
1. corresponds to MM	(>2mV)
2. corresponds to MC HIGH	(≤2mV)
3. corresponds to MC LOW	(≤0.5mV)
4. corresponds to MC V-LOW	(≤0.25mV)

*Please adjust the gain channel switch in accordance with your preference and your turntable's specifications.*

## 10. DC 5V Power Supply Connection

The ZEN Phono 3 is powered by a 5V supply only. Please connect the ZEN Phono 3 to the enclosed power supply.

*Tip: For best performance upgrade the enclosed power supply to a super-low noise power adapter such as iPower2 5V or iPower X 5V.*

## SPECIFICATIONS:

<b>Analogue Input:</b>	RCA L/R
<b>Analogue Output:</b>	Balanced 4.4mm
	RCA L/R

<b>Max.^ Output Voltage RMS:</b>	
Balanced	$\leq 19.98\text{V RMS } 100\text{k}\Omega$ (THD + N <1%)
	$\leq 12.75\text{V RMS } 600\Omega$ (THD + N <1%)
Single-Ended	$\leq 10.07\text{V RMS } 100\text{k}\Omega$ (THD + N <1%)
	$\leq 7.94\text{V RMS } 600\Omega$ (THD + N <1%)
<b>Output impedance:</b>	
Balanced	$\leq 200\Omega$
Single-Ended	$\leq 100\Omega$
<b>Input impedance:</b>	
MM/MC HIGH	47k $\Omega$ 100pF or 200pF (optional)
MC LOW/MC MC V-LOW	1k $\Omega$ or 400 $\Omega$ or 100 $\Omega$ (optional)
<b>Gain settings</b>	
MM	36dB ( $\pm 1\text{dB}$ )
MC HIGH	48dB ( $\pm 1\text{dB}$ )
MC LOW	60dB ( $\pm 1\text{dB}$ )
MC V-LOW	72dB ( $\pm 1\text{dB}$ )
<b>SNR:</b>	(All 2V Balanced/1V Single-Ended)
MM	91dB (A-weighted)
	82dB (unweighted 80kHz BW)
MC HIGH	81dB (A-weighted)

	71dB (unweighted 80kHz BW)
MC LOW	89.6dB (A-weighted)
	80dB (unweighted 80kHz BW)
MC V-LOW	78.6dB (A-weighted)
	69dB (unweighted 80kHz BW)
<b>Ein (equivalent input noise):</b>	(All 2V Balanced/1V Single-Ended)
MM 8.9nV/√Hz (unweighted)	-127dBV (A-weighted)
	-118dBV (unweighted)
MC HIGH 7.95nV/√Hz (unweighted)	-129dBV (A-weighted)
	-119dBV (unweighted)
MC LOW 0.7nV/√Hz (unweighted)	-149.6dBV (A-weighted)
	-140dBV (unweighted)
MC V-LOW 0.63nV/√Hz (unweighted)	-150.6dBV (A-weighted)
	-141dBV (unweighted)
Total Harmonic Distortion:	(All 2V Balanced/1V Single-Ended @ 600Ω)
MM	<-91dB/0.0027%
MC HIGH	<-80dB/0.0095%
MC LOW	<-70dB/0.031%

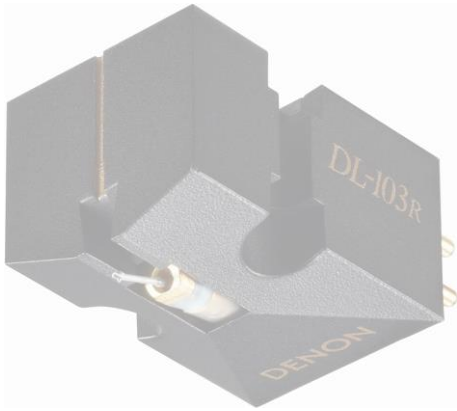
MC V-LOW	<-73dB/0.022%
<b>Channel Separation:</b>	>75dB (1kHz all modes)
<b>Frequency Response:</b>	
Balanced	20Hz - 20kHz ( $\pm 0.15$ dB)
Single-Ended	20Hz - 80kHz ( $\pm 3$ dB)
<b>Power supply requirement:</b>	DC 5V/0.5A (centre +ve)
<b>Power consumption:</b>	
No Signal	~1.5W
Max Signal	~1.8W
<b>Dimensions:</b>	158 x 115 x 35 mm (6.2" x 4.6" x 1.4")
<b>Net Weight:</b>	456 g (1.0 lbs)
<b>Limited Warranty:</b>	12 months*
<i>*12 months typical or as permitted/required by local reseller laws.</i>	
<i>**Specifications are subject to change without notice.</i>	
<i>^See FAQ at <a href="http://ifi-audio.com">ifi-audio.com</a> for more information.</i>	

# ZEN Phono 3 Tech Lowdown



ZEN Phono

# A Perfect Match for Your Cartridges



**72dB**



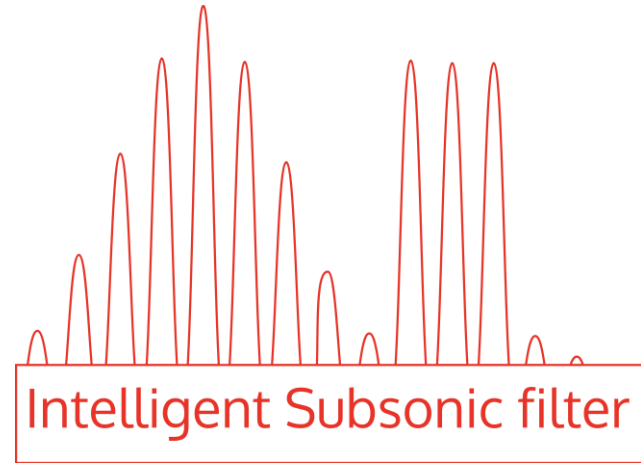
Supports four MM/MC gain selections from 36-72dB and four input impedance settings, ensuring optimum compatibility with a **wide range of cartridges**.

MM/MC-High: **47k $\Omega$ , 100/200pF**

MC-Low/V-Low: **100/400/1k $\Omega$**

# Combats Warped Records Intelligently

Features an **intelligent subsonic filter** designed to effectively remove ultra-low frequencies caused by warps, unlike typical bass-reducing filters.

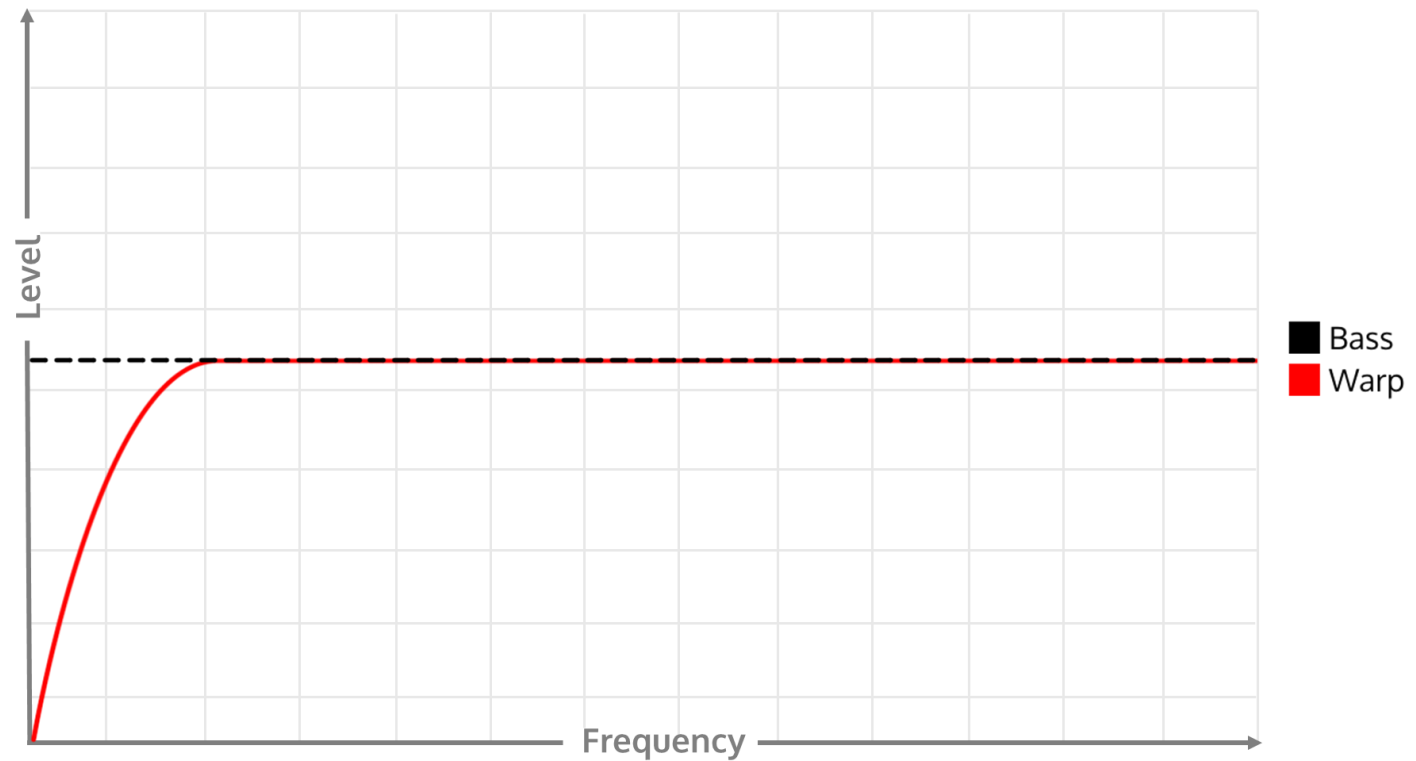


# Subsonic Filter Frequency Response

Normal subsonic filters aren't intelligent.

They're typically hated by audiophiles because they filter out the rumble from warped records – but also filter out the bass.

Our intelligent subsonic filter knows the difference between the two, and **only filters the warp**, leaving the song intact.





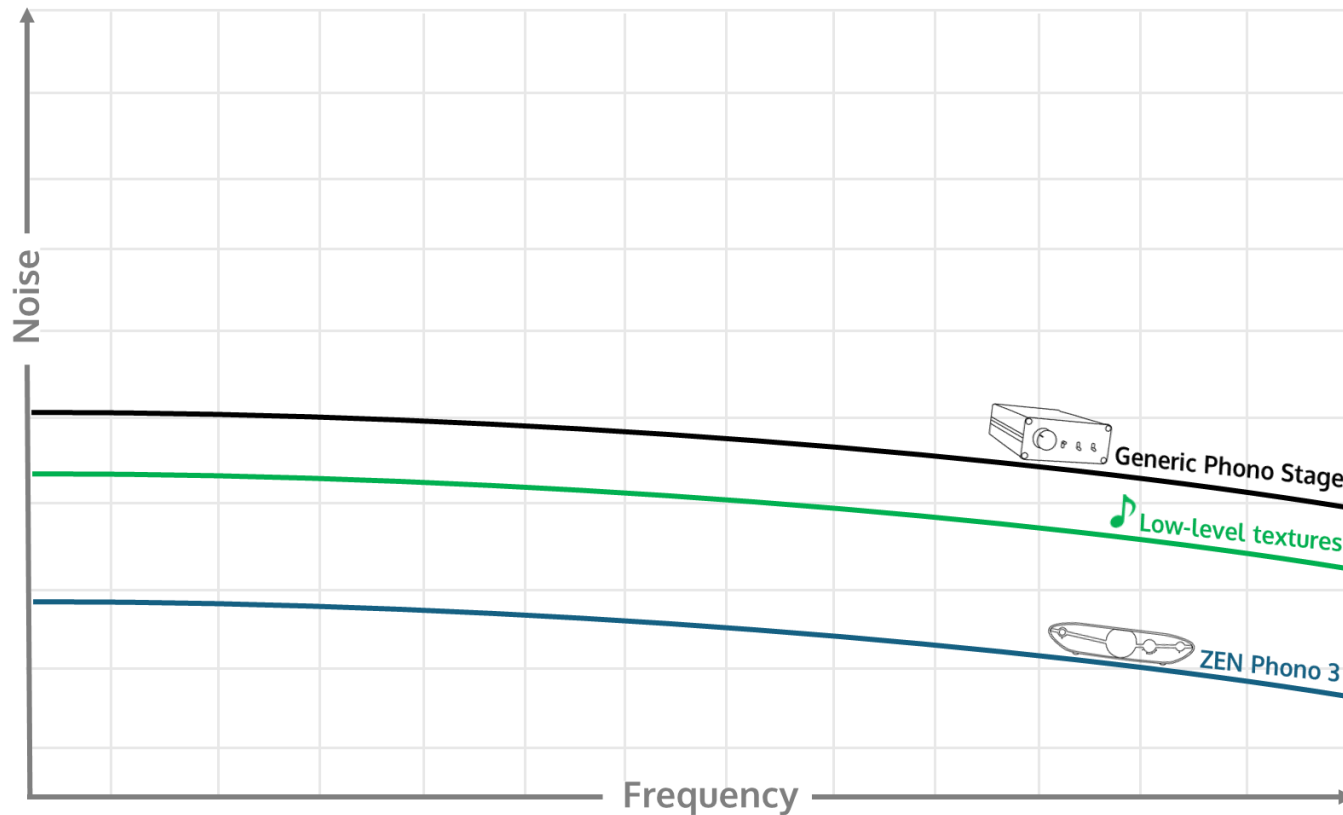
## Rivals \$1,000 Phono Amplifiers

**-151dBV**

**Equivalent Input Noise**

Boasting a super-silent noise floor with an EIN (Equivalent Input Noise) of -151dBV, ZEN Phono 3 surpasses some Class A+ models by 20dBV.

# Noise Floor Comparison Chart



The noise floor of a typical phono stage is noticeable. This is because it sits **above** the level of the low-level textures and detail of the music.

It gets in the way of the song.

The ZEN Phono 3 is **distinctly different**.

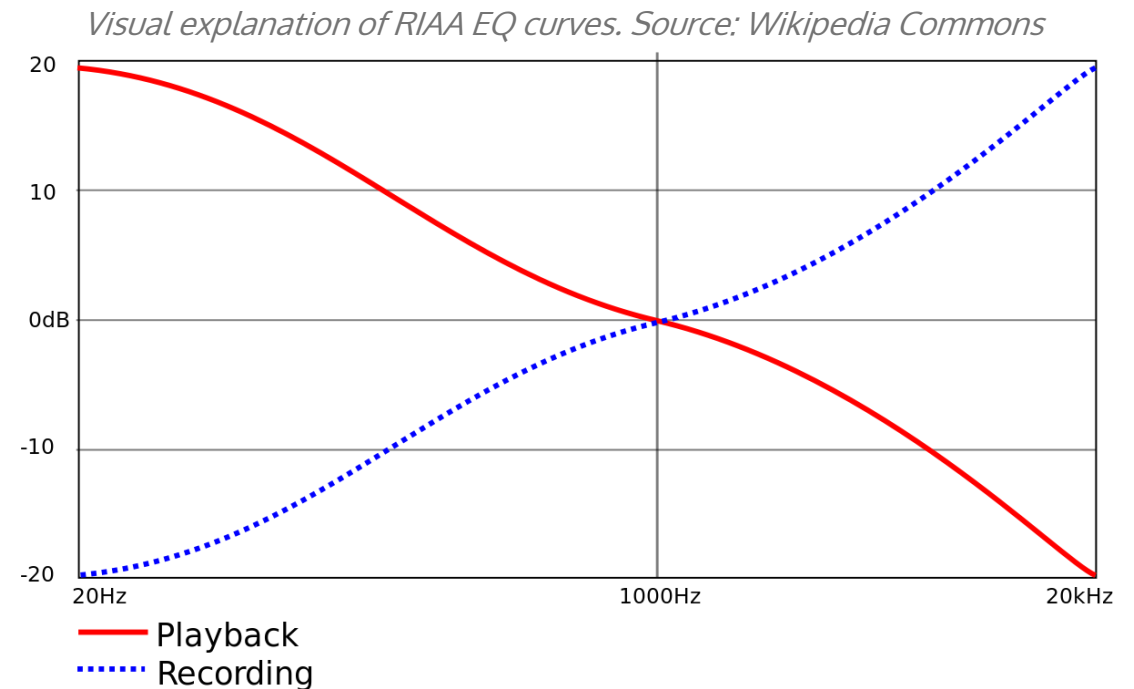
Hear your music as it was meant to be heard;- without the noise you associate with vinyl records.

# Exacting RIAA Equalisation

## Hear Your Record Properly

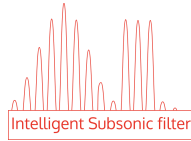
Most records are recorded with an Inverse RIAA (Recording) Equalisation that needs to be **undone** on playback.

ZEN Phono 3's RIAA playback equalisation curve is within a staggering  $\pm 0.15\text{dB}$  tolerance – allowing for **truthful, accurate music playback**.



# Key Features

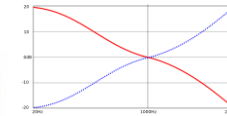
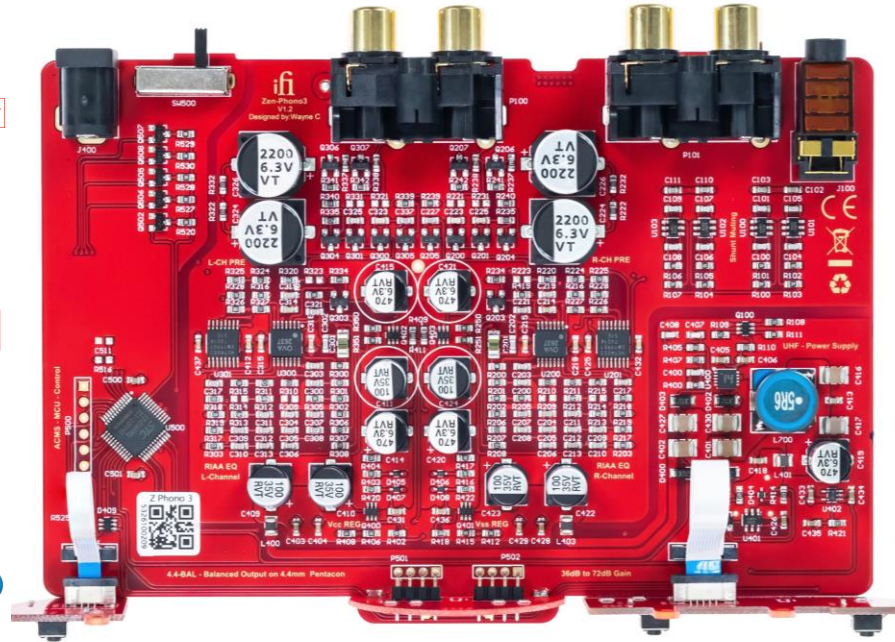
Intelligent subsonic filter that removes LP warp without removing low end



-151dBV measured **Equivalent Input Noise**. 20dBV quieter than some Stereophile Class A+

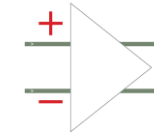
-151dBV

High precision, (1.2MHz) high-current power supply controller

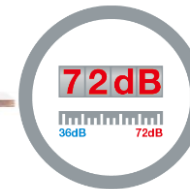


Precise RIAA EQ with  $\pm 0.15\text{dB}$  tolerance from 20Hz-20kHz

Balanced



4.4mm balanced and RCA line outputs



36-72dB gain range and load impedance adjustment button to support a range of cartridges

# ZEN Phono 3 vs. ZEN Phono Looks

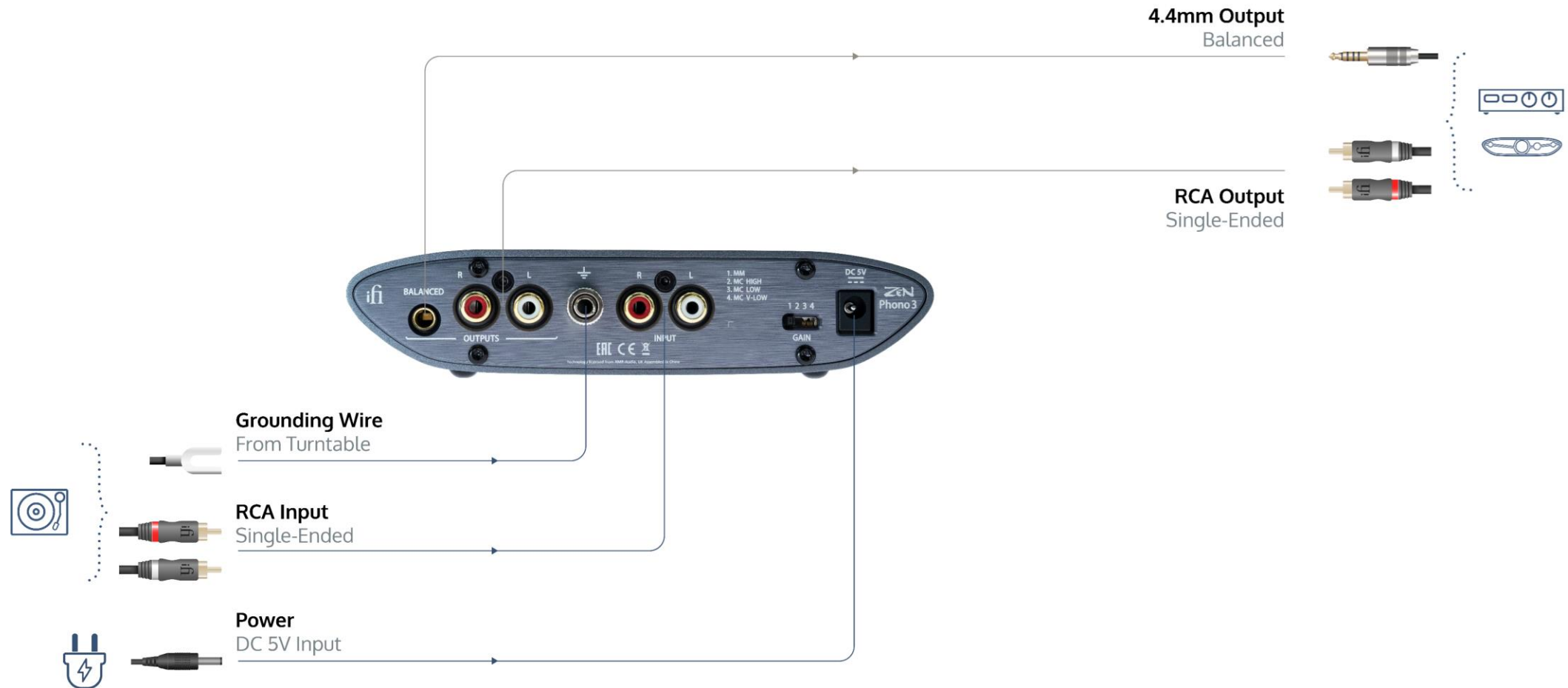


# ZEN Phono 3 vs. ZEN Phono Comparison

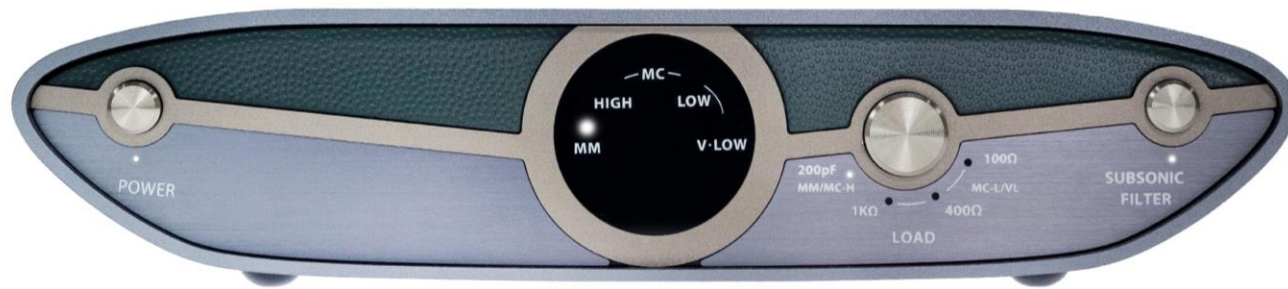


	ZEN Phono 3	ZEN Phono
Cartridge Support	MM, MC	MM, MC
Gain Settings (dB)	36, 48, 60 72	36, 48, 60 72
Load Adjustment	<a href="#">200pF/1kΩ/400Ω/100Ω</a>	-
Max Output Voltage	20v RMS @ 100k	20v RMS @ 100k
Output Impedance	200Ω Bal 100Ω SE	200Ω Bal 100Ω SE
Input Impedance	MM/MC High: 47kΩ (Load <a href="#">100/200pF</a> ) MC Low: <a href="#">1kΩ/400Ω/100Ω</a> MC V Low: <a href="#">1kΩ/400Ω/100Ω</a>	MM/MC High: 47kΩ (Load 110pF) MC Low: 1kΩ MC V Low: 110Ω
Frequency Response	20Hz-20kHz (+/- 0.15dB)	20Hz-20kHz (+/- 0.15dB)
Equivalent Input Noise	-151dB(A)	-151dB(A)
Harmonic Distortion	<a href="#">0.0027</a> % MM re 2V Bal / 1V SE	0.003% MM re 2V Bal / 1V SE
Net Weight	456g (1.00lbs)	515g (1.14 lbs)

# Connection Guide



# Box Contents





# Specifications

<b>Input</b>		RCA
<b>Gain Settings</b>	MM	36dB
	MC High	48dB
	MC Low	60dB
	MC V Low	72dB
<b>Line Output</b>		BAL 4.4mm/UnBAL RCA
<b>Output Power (RMS)</b>	Balanced	>19.98V @ 100k $\Omega$ (THD+N<1%)
	UnBAL	>10.07V @ 100k $\Omega$ (THD+N<1%)
<b>SNR</b>	MM	91dB(A)
	MC High	71dB(A)
	MC Low	89.6dB(A)
	MC V Low	78.6dB(A)
<b>Equivalent Input Noise</b>	MM	-127dBV(A)
	MC High	-129dBV(A)
	MC Low	-149.6dBV(A)
	MC V Low	-150.6dBV(A)
<b>Harmonic Distortion</b>	MM	< 0.0027% @ 600 $\Omega$
	MC High	< 0.0095% @ 600 $\Omega$
	MC Low	< 0.031% @ 600 $\Omega$
	MC V Low	< 0.022% @ 600 $\Omega$
<b>Output Impedance</b>		<200 $\Omega$ BAL; <100 $\Omega$ UnBAL
<b>Frequency Response</b>		20-80kHz (-3dB) BAL; 20-20kHz (-0.15dB) UnBAL
<b>Dimensions</b>		158x113x35mm (6.2" x 4.4" x 1.4")
<b>Weight</b>		456g (1.0 lbs)
<b>Warranty period</b>		12 months

# 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:



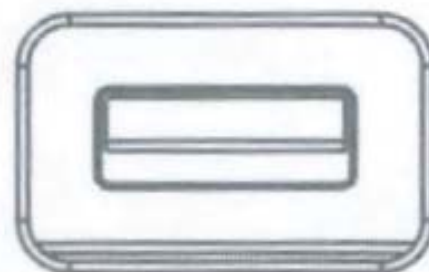
<https://support.ifi-audio.com/>



# Type A Connections

( where applicable )

This iFi device with a USB Type A male port was designed for direct connection to mobile devices to extract the digital signal.



**Type A**

## Phone 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*

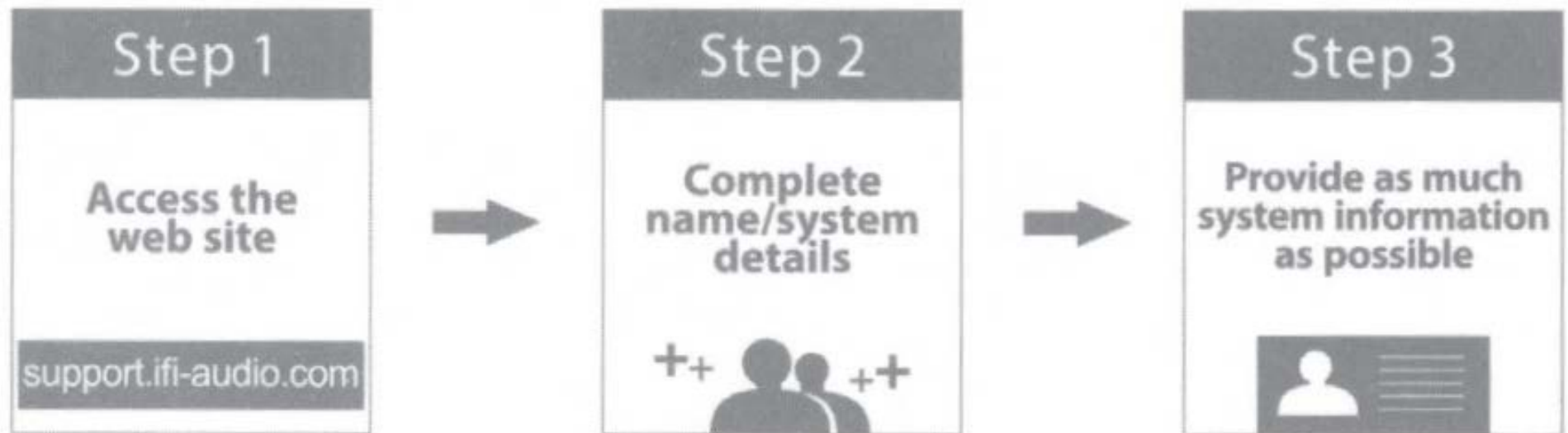
# Note for Charging

( where applicable )

- 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.
- 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.
- After a long period on inactivity (say 3-6 months), please fully charge the machine again. Ideally, repeat this process once every 3 months.
- If you encounter any issues, please contact our technical support department at: <https://support.ifi-audio.com/>

# After-Sales

## 3 Easy Steps...



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.

<https://support.ifi-audio.com/>





Review the *iFi Product Safety Guide* before using your iFi Product. View the guide at [ifi-audio.com/product-guides](http://ifi-audio.com/product-guides). Retain documentation for future reference.

**Safety and Handling** See "*iFi Product Safety Guide*" at [ifi-audio.com/product-guides](http://ifi-audio.com/product-guides).

**Avoid Hearing Damage** To prevent possible hearing damage, do not listen at high volume levels for long periods.

Always check the actual output volume on your earphone, headphone, or loudspeakers before playing audio, as many music player software and operating systems do not appropriately apply industrial standards governing volume control (e.g., USB Device Class Definition for Human Interface Devices). If in doubt, before playing any music, turn off CyberSync or any other volume synchronization feature on the iFi Product and bring the volume down to the lowest setting.



**WARNING:** To prevent possible hearing damage, do not listen at high volume levels for long periods.

**Medical Device Interference** iFi Product contains magnets that may interfere with medical devices. See "*iFi Product Safety Guide*" at [ifi-audio.com/product-guides](http://ifi-audio.com/product-guides).

**Prolonged Heat Exposure** Your iFi Product may become very warm during normal use. It is important to keep your iFi Product on a hard, stable, and well-ventilated work surface when in use or charging. Use common sense to avoid situations where your body is in prolonged contact with a device or its power adapter when it is operating or plugged into a power source, as sustained contact with warm surfaces may cause discomfort or injury. Take special care if you have a physical condition that affects your ability to detect heat against the body.

**Regulatory Information** Regulatory certification information is available at [ifi-audio.com/product-guides](http://ifi-audio.com/product-guides).

**FCC and ISED Canada Compliance** This device complies with part 15 of the FCC Rules and ISED Canada licence exempt RSS standard (s). 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.

**EU / UK Compliance** iFi hereby declares that this wireless device is in compliance with Directive 2014/53/EU and Radio Equipment Regulations 2017. A copy of the Declaration of Conformity is available at [ifi-audio.com/product-guides](http://ifi-audio.com/product-guides). iFi EU representative is Abbingdon EU BV, Mercatorweg 28 Arnhem 6827 DC Netherlands. iFi UK representative is Abbingdon Global Ltd., 79 Scarisbrick New Road, Southport, PR8 6LJ.



**Use Restriction (if applicable)** This device is restricted to indoor use when operating in the 5150 to 5350 MHz frequency range. This restriction applies in: AT, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, UA, UK(NI).

Frequency	Maximum Power
2.4GHz (Bluetooth/WLAN)	<100mW
5.150-5.350/5.470-5.725GHz	<200mW
5.725-5.875GHz	<25mW

**ENERGY STAR® Compliance**



As an ENERGY STAR partner, iFi has determined that standard configurations of this product meet the ENERGY STAR guidelines for energy efficiency. The ENERGY STAR program is a partnership with electronic equipment manufacturers to promote energy-efficient products. Reducing energy consumption of products saves money and helps conserve valuable resources.

#### Disposal and Recycling Information



The symbol above means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product and/or its battery at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

**Battery and Charging** Don't attempt to replace or remove the battery yourself—you may damage the battery, which could cause overheating, fire, and injury. The built-in battery should be replaced by iFi or an authorized service provider, and must be recycled or disposed of separately from household waste. Dispose of batteries according to your local environmental laws and guidelines. For information about charging, see "*iFi Product Safety Guide*" at [ifi-audio.com/product-guides](http://ifi-audio.com/product-guides).

**Software License Agreement** Use of iFi Product constitutes acceptance of the iFi and third-party software license terms found at [ifi-audio.com](http://ifi-audio.com).

**Accessories** Standard and/or non-standard 3rd party accessories may be included with the iFi product. Only iFi products are compatible with those accessories. All accessories are given "as is". iFi offers no other explicit or implied assurances, and expressly disclaims all implied warranties, including any promise of merchantability or fitness for a particular purpose.

**iFi Limited Warranty Summary** iFi warrants the included hardware product and accessories against defects in materials and workmanship for one year from the date of original retail purchase (unless otherwise provided by law). iFi does not warrant against normal wear and tear, nor damage caused by accident or abuse. To obtain service, call iFi or an iFi Authorized Service Provider—available service options are dependent on the country in which service is requested and may be restricted to the original country of sale. Call charges and international shipping charges may apply, depending on the location. Subject to the full terms and detailed information on obtaining service available at [ifi-audio.com](http://ifi-audio.com), if you submit a valid claim under this warranty, iFi will either repair, replace, or refund your product at its own discretion. Warranty benefits are in addition to rights provided under local consumer laws. You may be required to furnish proof of purchase details when making a claim under this warranty. For Australian consumers: Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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