

The logo consists of the word "miniwatt" in a white, lowercase, sans-serif font, centered within a dark gray square.

miniwatt

# miniwatt n4

## User Manual

version 1.0

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Congratulations and thank you for choosing miniwatt!

miniwatt n4

You are now the owner of one of the world's most advanced and innovative USB2.0 D/A Convertor and Headphone Amplifier. Device with good care can provide you many years of listening pleasure.

Here's wishing you many happy hours of musical pleasure!

Derek Shek

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## DESCRIPTION OF THE miniwatt n4

A minimalistic design, the best USB2.0 All-in-One DAC headamp ever.

Sound and design are not mutually exclusive, and we believe minimal, sleek and elegant design, excellent craftsmanship, high quality raw materials, and every single detail (Stitched Leather, CNC, Laser Etching, Stainless-steel screws, Aluminum body coated with Leather designed and made with an unprecedented level of precision) and audiophile-quality sound define the new standard of USB2.0 audio device – miniwatt n4.

The most advanced USB2.0 audio technology delivers highest-resolution Asynchronous USB to S/PDIF conversion (480 Mbit/s) and then converts the digital signal via 32bit DAC (32bits/192Khz, 123dB dynamic range) to analogue high-current headphone and lineout outputs. n4 is a state of art computer USB audio device for headphile, home or professional.

The miniwatt n4 192kHz-32 bit USB DAC is designed to be the heart of your system. It is a digital signal converter designed for transforming and playback of high-resolution digital audio recordings via the more common USB ports found on computers.

N4 accept digital stream till 192kHz-32bit is all you need to connect any existing digital media in your hi-fi system, and allows you to connect it to your laptop computer, to stream audio via a USB cable through your headphone or stereo system. This remarkable DAC includes a high-current and professional-tuned stereo integrated headphone amp with a digital volume control to deliver accurate and balanced outputs, and also it has line analogue RCA outputs so you can listen music in your HiFi system. Sampling rates can be up converted to as high as 192 kHz for high-resolution playback from your PC or other sources.

- USB 2.0 Async Mode (480 Mbits/sec), support 32bits/192k
- USB Audio Interface for High-resolution audio file from PC/Mac
- Support any sampling frequency to be up convert to 192 kHz
- Electrical Noise Immunity via USB Digital Link
- PCM1795 DAC with 32bits/192k 123dB Dynamic Range
- LM4562 High Performance, High Fidelity Audio Operational Amplifier at analogue filter and driver
- Independent L and R channel circuit at output stage
- Digital Attenuation to deliver balance volume out (Digital Attenuation: 0 dB to – 120 dB, 0.5db/Step)
- USB-powered, no external power supply required
- Dimensions: 115mm (L) x 74mm (W) x 20mm (H)
- Finish: CNC Silver Powder Coated Aluminum Panel with Laser Etching + Stitched Leather Extrusion

## 2. SAFETY INSTRUCTIONS

Before using the miniwatt n4 for the first time, pls check our website [www.miniwatt.com.hk](http://www.miniwatt.com.hk) to download the USB drivers if you're using Windows PC.

Do not open the case

There are high currents and voltages inside this equipment. To avoid the risk of electric shock, never allow anyone except qualified personnel to open the case.

Servicing and maintenance

For reasons of safety, please ensure that servicing, repairs and other modifications to miniwatt equipment are carried out only by a qualified technician. If your amplifier requires servicing, please ship or take your equipment directly to miniwatt to one of our authorized dealers/distributors.

Modifications to miniwatt equipment

The modification will invalidate the warranty.

Warranty

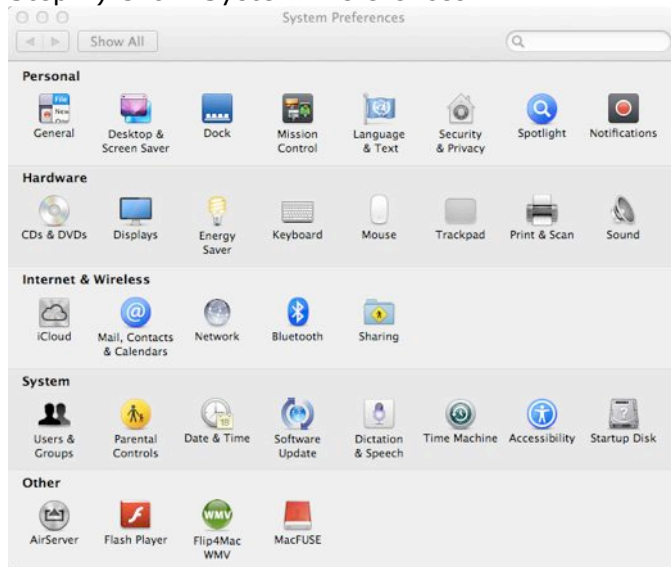
miniwatt can only guarantee the safety, reliability and performance of this unit if modifications and repairs are carried out by specialized personnel and when the amplifier is operated in accordance with the instructions contained in this manual

## 3. GETTING STARTED

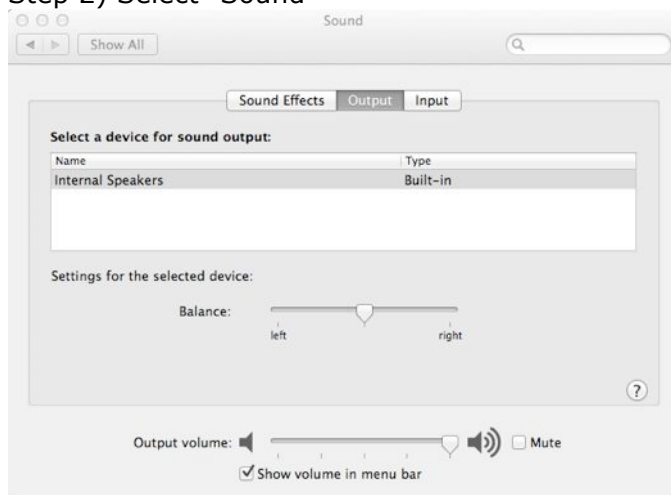
### 3.1. Mac OS – Headphone Output

NOTE: Pls close all your music players in your Mac.

Step 1) Click "System Preferences"

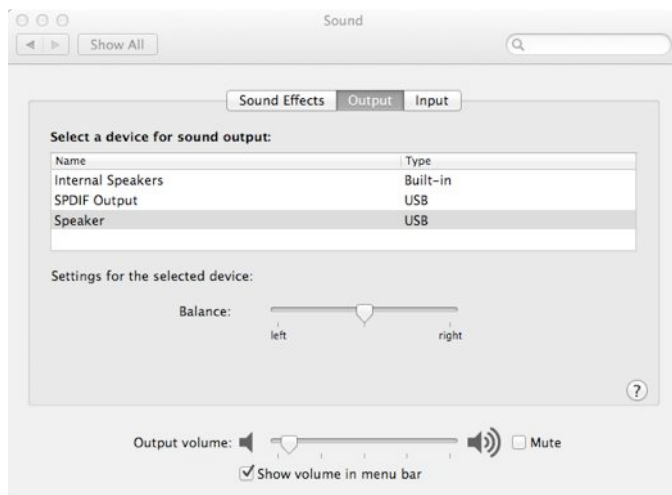


Step 2) Select "Sound"

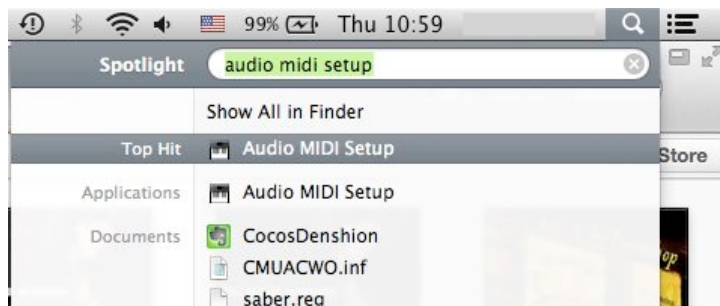


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Step 3) Connect miniwatt n4 to you Mac with the stock USB cable, and select "Speaker USB"



Step 4) Type "Audio Midi Setup" in the Spotlight (You can drag it to your desktop)

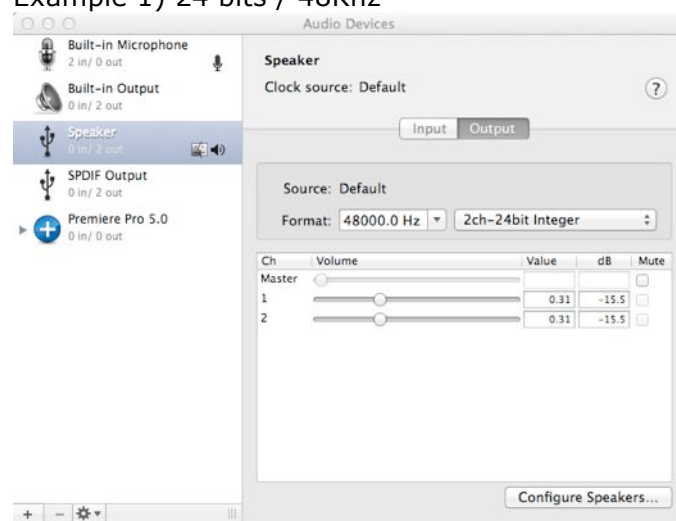


Step 5) Adjust the bitrate and sampling frequency, and launch your music player to enjoy and hear the differences ☺

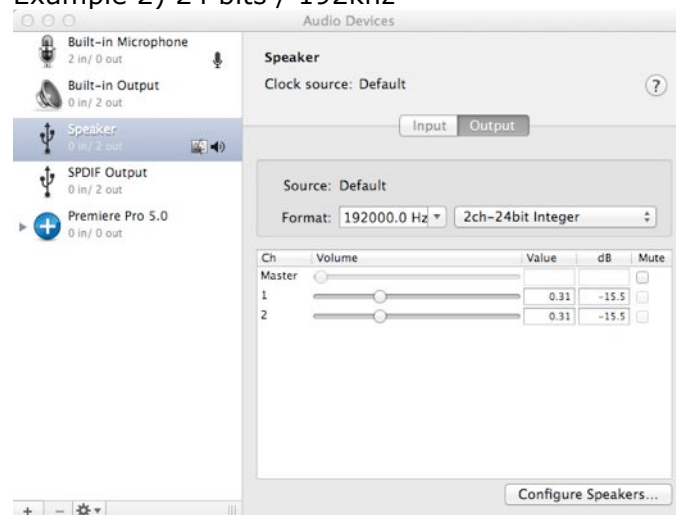
Bit Rate: 16 or 24 bits

Sampling Frequency: 44.1Khz – 192Khz

Example 1) 24 bits / 48Khz

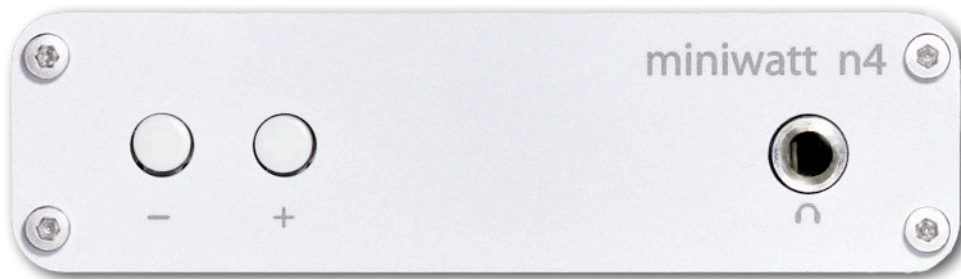


Example 2) 24 bits / 192khz



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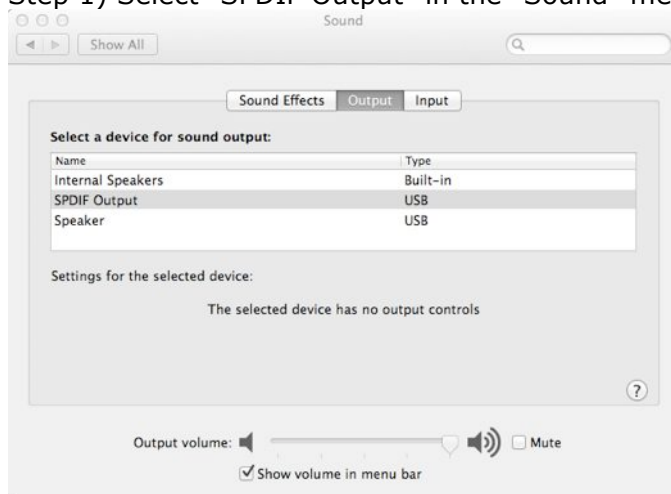
Step 6) Adjust the volume, you can use the "+" "-" to control the Mac volume output.





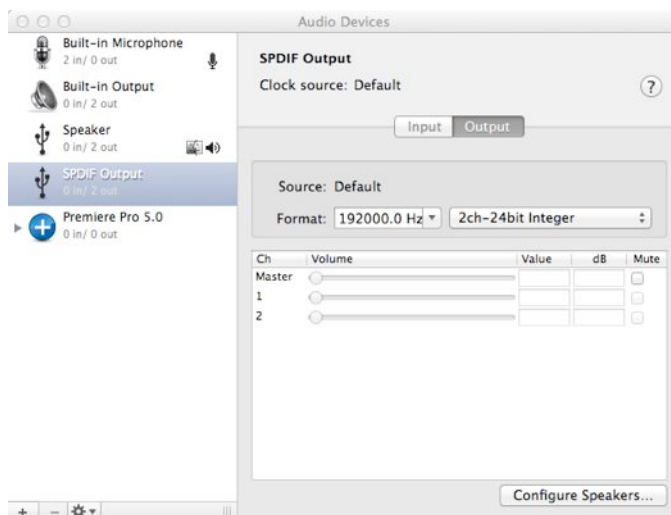
## 3.2. Mac OS – SDPIF Output

Step 1) Select "SPDIF Output" in the "Sound" menu



Step 2) Goto "Audi Mini Setup" and Select the bit rate and frequency. Again, pls let us know which combination sounds the best in your system ☺

Bit Rate: 16 bits / 24 bits / Encoded Digital Audio  
Sampling Frequency: 44.1Khz – 192Khz

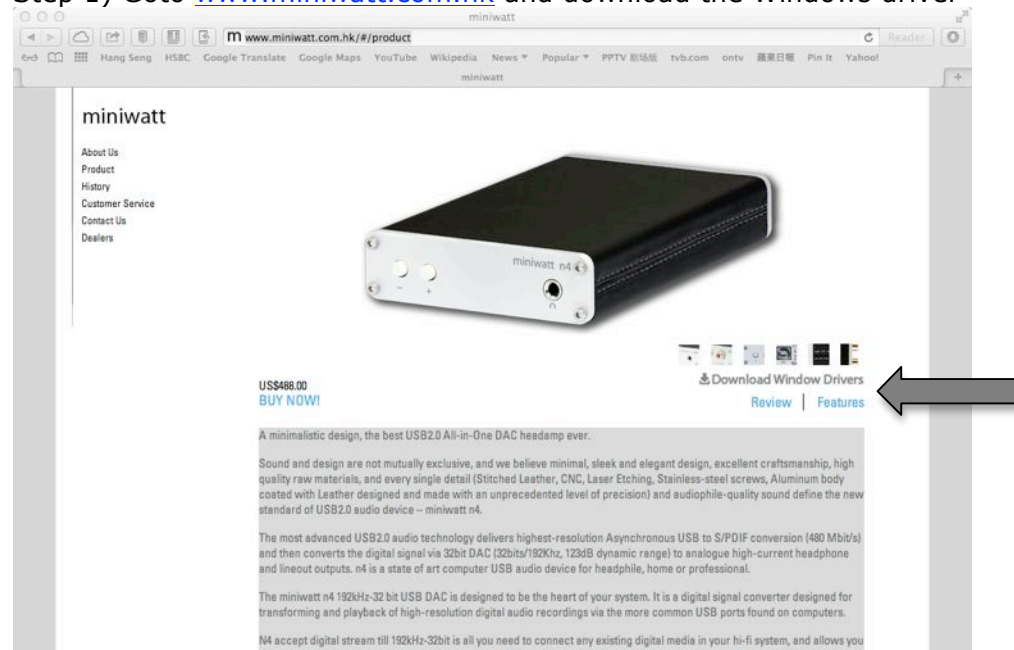


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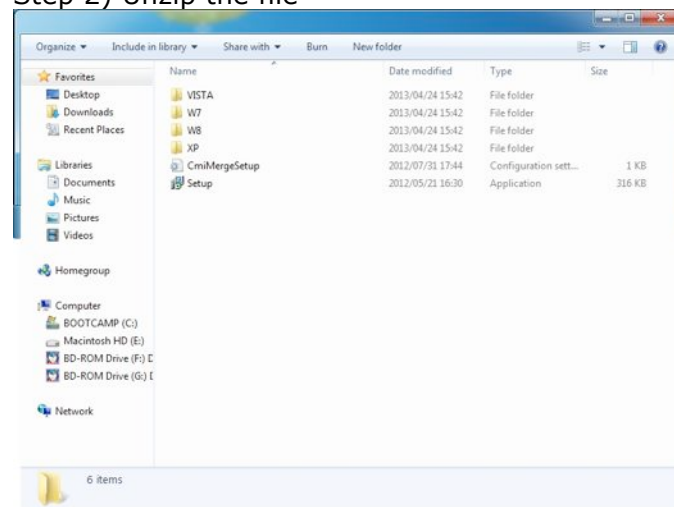
### 3.3. Windows OS – Driver Installation

NOTE: Pls close all your music players in your Windows.

Step 1) Goto [www.miniwatt.com.hk](http://www.miniwatt.com.hk) and download the Windows driver



Step 2) Unzip the file

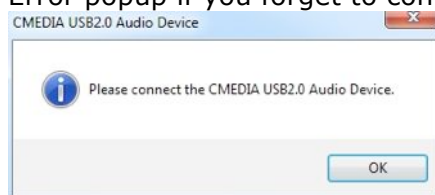


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Step 3) Connect miniwatt n4 to your Windows PC with the stock USB Cable, and Click "Setup.exe", and follow the procedures to install the drivers.

Note: You MUST connect miniwatt n4 to your Windows PC before you start the driver installation.

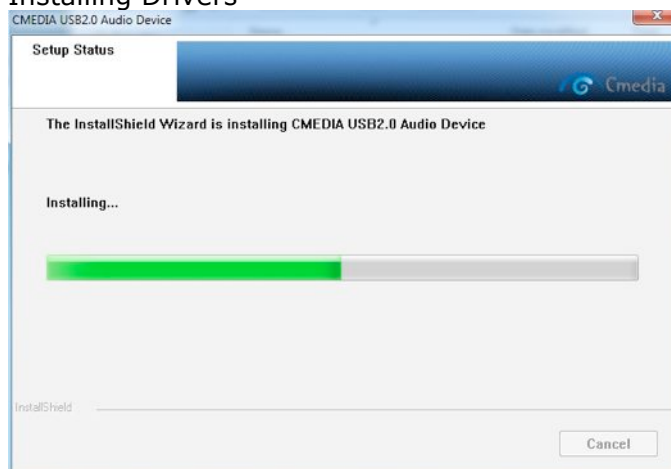
Error popup if you forget to connect miniwatt n4 to you PC



Start installation wizard



Installing Drivers



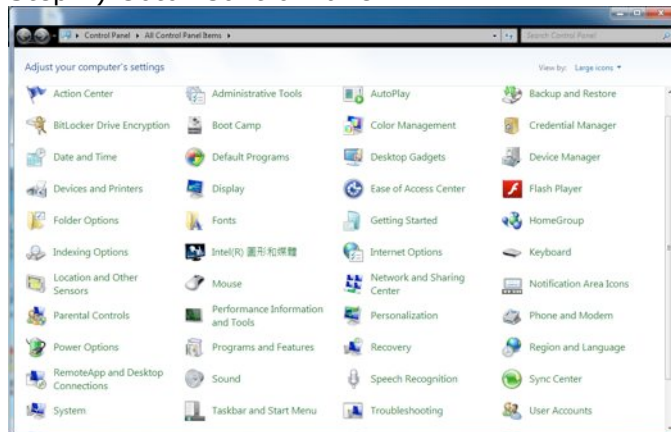
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Step 4) Follow the procedures to install the drivers, and then restart the computer.

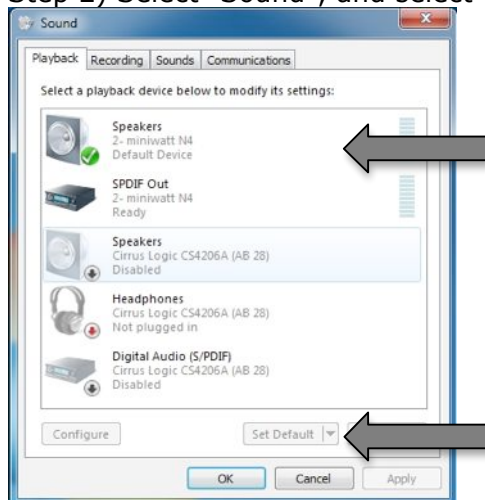


## 3.4. Windows OS – Headphone Output

### Step 1) Goto "Control Panel"



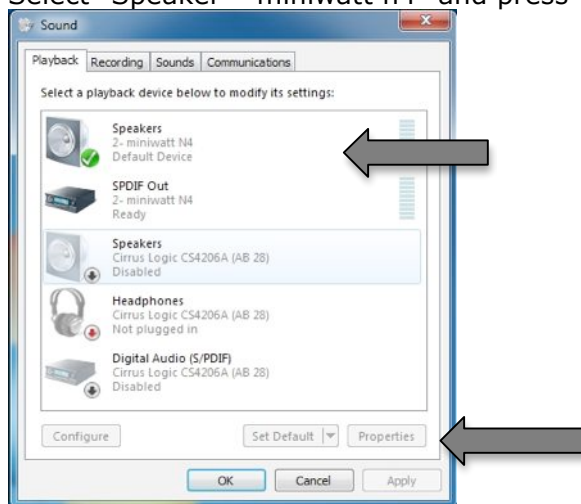
### Step 2) Select "Sound", and select "Speaker – miniwatt n4" and press "Set Default"



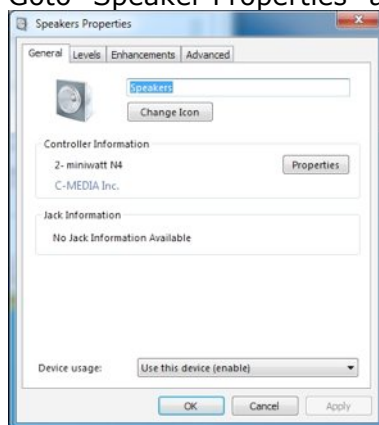
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Step 3) Select the bit rate and sampling frequency

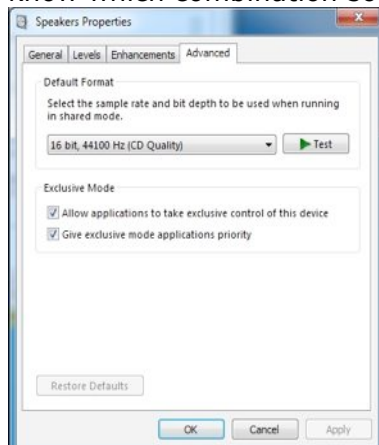
Select "Speaker – miniwatt n4" and press "Properties"



Goto "Speaker Properties" and select "Advanced"

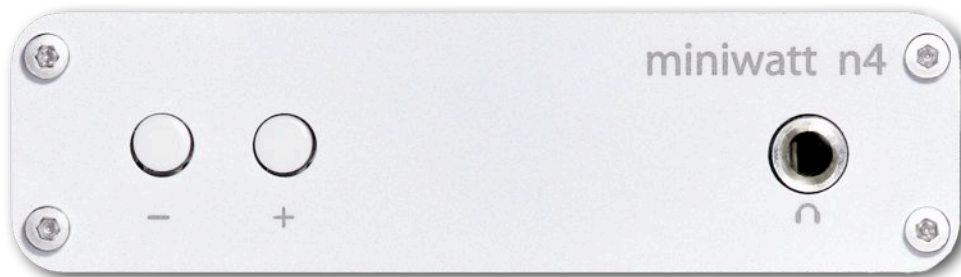


Select the bit rate and sampling frequency, and launch your music player and let us know which combination sounds the best in your system.



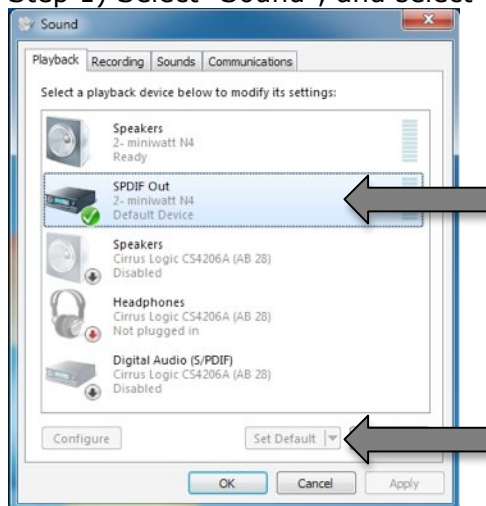
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Step 4) Adjust the volume, you can use the "+" "-" to control the Mac volume output.

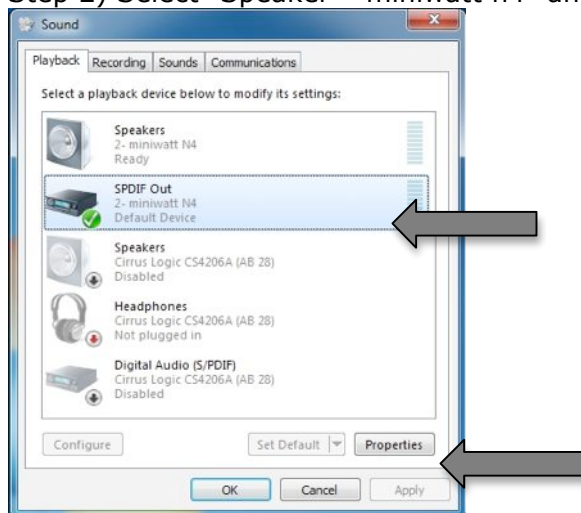


## 3.5. Windows OS – SPDIF Output

Step 1) Select "Sound", and select "SPDIF Out – miniwatt n4" and press "Set Default"



Step 2) Select "Speaker – miniwatt n4" and press "Properties"

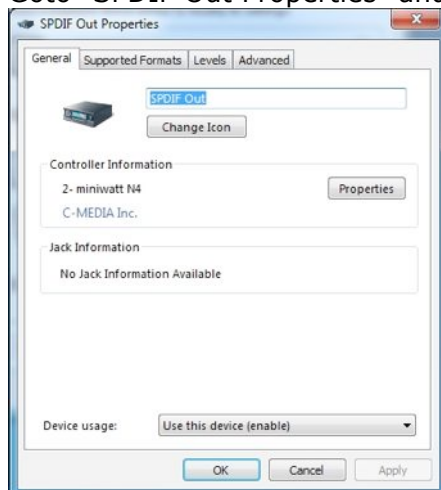




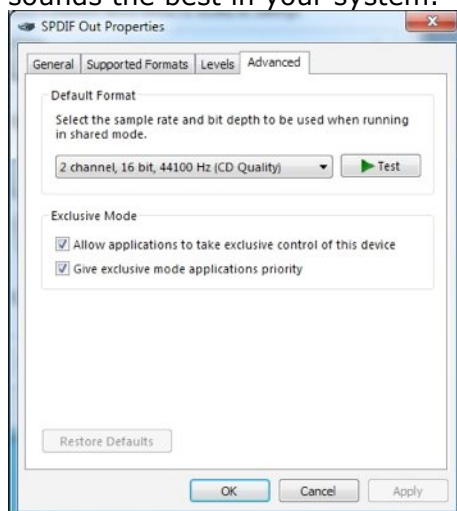
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Step 3) Select the bit rate and sampling frequency

Goto "SPDIF Out Properties" and select "Advanced"



Select the bit rate and sampling frequency, and let us know which combination sounds the best in your system.



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#### 4. Running in

All miniwatt equipment is subject to a 24-hour soak test at the factory to burn in.

New components can take up to three months to run in and start sounding their best. Daily use is beneficial in speeding up this process but is not mandatory.