



U2 USB-to-SPDIF Converter

Operating Manual



Thank You

Thank you for choosing the Anedio U2 USB-to-SPDIF Converter!

The U2 USB-to-SPDIF converter makes it possible for you to enjoy the highest level of sonic clarity and musicality from your computer. With the U2, the unnatural, brittle characteristics of conventional USB interfaces completely disappear, and all that remains is the beauty and wonder of music. We hope you will experience many years of joy and pleasure in listening to music.

Package Contents

- U2 USB-to-SPDIF Converter
- BNC (M) to RCA (F) adapter
- BNC (M) to RCA (M) adapter
- BNC (M) to BNC (M) adapter
- Windows Driver Installation CD
- User Manual

Driver Installation (Windows Only)

Before connecting the U2 to your computer, please install the Windows driver first.

On Mac OS X, there is no need for driver installation since the USB 2.0 audio is supported natively.

- (1) Insert the Anedio USB Driver CD into your PC.

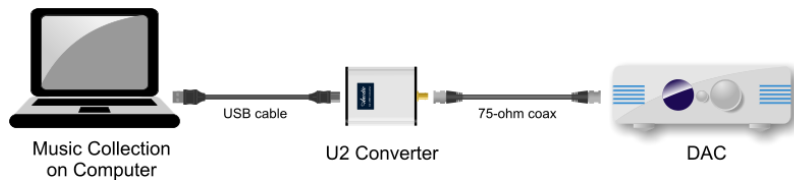
If the installer does not launch automatically, then click `ausbaudio_v1.22.0.exe` in the CD directory.

Some USB devices might interfere with the installation of the U2, and it is better to disconnect all other USB devices attached to your computer.

- (2) Follow the onscreen directions. Please allow 1 – 2 minutes for the installer to complete. On older computers, it may take longer.
- (3) When instructed to plug in the device, simply connect the U2 to the PC using a USB cable.

Connecting the U2 to Your Audio System

When plugging the USB cable into the U2 converter, be sure to apply sufficient force so that the plug is inserted promptly without hesitation.



Cables and Connectors

You may bypass the cable between the U2 and the DAC completely by using the supplied BNC/RCA adapter.

If possible, use an RG-59 (75-ohm) cable with BNC plugs since it is better at preserving the fidelity of the SPDIF signal than a typical digital cable with RCA plugs.

If your DAC does not have a BNC digital input, use the supplied BNC to RCA adapter.

You do not need expensive audiophile digital cables to achieve the best possible sound. Use ones with: (a) low shield (outer conductor) resistance; (b) robust mechanical design for reliable electrical contact. Good quality RG-59 cables with BNC plugs, such as TPI, can be obtained from many sources.

Extending Beyond USB's 5 m (16 ft) Limit

The maximum length of the USB cable is approximately 5 m (16 ft), determined by the timing requirement for communication between the computer and the USB device. This length can be extended simply by using a long coax cable at the SPDIF output. Our measurements with RG-59 cables show no degradation in jitter even with a 7.6 (25 ft) cable, which makes the total length from computer to the DAC about 12.6 m (41 ft).

Setting up Media Players for Bit-transparent Playback

The Anedio U2 Converter is a bit-perfect device, passing on the audio data without any alteration. However, to ensure bit transparency all the way from music files to the DAC, you still need to set up the media player software properly.

Please see our website (under "Technology") for detailed examples on how to setup media players for your operating system (Windows 7/Vista, XP, or Mac OS X).

In summary, regardless of the media player you are using, be sure to:

- Set the software volume control to the maximum (0.0 dB).
- Turn off automatic gain adjustments, such as replay gain.
- Disable all DSP plugins.
- Ensure that CPU-intensive applications are not running as they may interrupt the streaming of audio data.

In addition, we recommend the following output mode depending on the operating system:

- Windows 7/Vista: WASAPI exclusive
- Windows XP: ASIO
- Mac OS X: exclusive access

Again, please see our website (under "Technology") for detailed instructions on setting up media players.

Specifications

Resolution:	Up to 24 Bits
Sample Rates:	44.1K, 48K, 88.2K, 96K, 176.4K, 192KHz
Period Jitter:	20 ps rms
Asynchronous Mode:	Yes
Two Independent Master Clocks:	Yes
Processor:	XMOS 500 MHz real-time processor
Galvanic Isolation:	Yes, using an ultra high-speed transformer
Transformer Bandwidth:	115 MHz
SPDIF Output Rise Time:	6 ns
Power:	USB bus powered (no external power supply needed)
USB Input Connector:	Type B
USB Cable Maximum Length:	15 feet 5 meters
SPDIF Output Connector:	75-ohm BNC, gold plated RCA adapter included
Recommended Coax Cable:	RG-59, 75 ohms (not included)
USB Audio Class:	2.0
Operating System Requirement:	Windows 7, Vista, XP Apple Mac OS X
Driver:	Thesycon driver for Windows No driver installation for Apple OS X
Dimensions (W x H x D):	2.8 x 0.9 x 4.1 inches (71 x 23 x 104 mm)
Weight:	4 oz (0.12 Kg)
In the Box:	U2 USB-to-SPDIF Converter BNC (M) to RCA (F) adapter BNC (M) to RCA (M) adapter BNC (M) to BNC (M) adapter Driver installation CD Manual

Trouble Shooting

Symptoms	Remedy
Installation fails (Windows only)	<ul style="list-style-type: none"> Some USB devices might interfere with the installation of the U2. Disconnect other USB devices attached to your computer and check if it affects the installation. When plugging the USB cable into the U2 converter, be sure to apply sufficient force so that the plug is inserted promptly without hesitation.
"Anedio USB Audio" does not appear in the audio device property.	<ul style="list-style-type: none"> When plugging the USB cable into the U2 converter, be sure to apply sufficient force so that the plug is inserted promptly without hesitation. For Windows computers, ensure that the driver is installed correctly. If the above steps do not solve the problem, unplug the USB cable, wait 10 seconds, and plug it back.
No sound through USB	<ul style="list-style-type: none"> Ensure that the USB cable is plugged in fully and seated properly. In your media player, ensure that "Anedio USB Audio" is selected as the device for playback. If the above steps do not solve the problem, unplug the USB cable, wait 10 seconds, and plug it back.

If the problem persists, please contact Anedio via the "Contact" page at www.anedio.com.

CE Compliance

This equipment has been found to comply with the requirements of the EN 55022 and EN 61000-6 standards.



WARNING: Repairs are to be performed by qualified service personnel only. Please do not disassemble the U2 as doing so might damage the EMI shield.

Warranty & Repair

One-Year Limited Warranty

Anedio warrants this product to be free from defects in materials and workmanship, subject to the terms set forth below, for periods up to one year from the date of original purchase. The warranty includes parts and labor.

Anedio will remedy the problem by repair or replacement, as we deem necessary, to restore the product to full performance. Anedio will pay the shipping cost one way (the return portion).

This warranty does not cover cosmetic damage or damage due to accident, misuse, abuse, negligence while in the possession of the customer.

Tampering by persons other than factory-authorized service personnel or failure to fully comply with the operating instructions specified in the manual will void the warranty. Any unauthorized disassembly, component replacement, or modifications performed to the product will void the warranty.

The warranty is transferable from the original owner to a subsequent owner as long as a copy of the bill-of-sale from Anedio accompanies the re-sale.

Repair

In the event of a defect or malfunction, contact Anedio for return authorization (via the Contact page at www.anedio.com). Unauthorized returns will not be accepted.

Products must be returned using *original packaging material only*. Anedio is not responsible for damages incurred during transit if the original factory packaging is not used. The packaging material may be purchased from Anedio if necessary.