


Digital Audio DAC with Downmix and S/PDIF Bypass

EXP-CON-DAC-D v2

 WyreStorm recommends reading through this document in its entirety to become familiar with the product's features prior to starting the installation process.



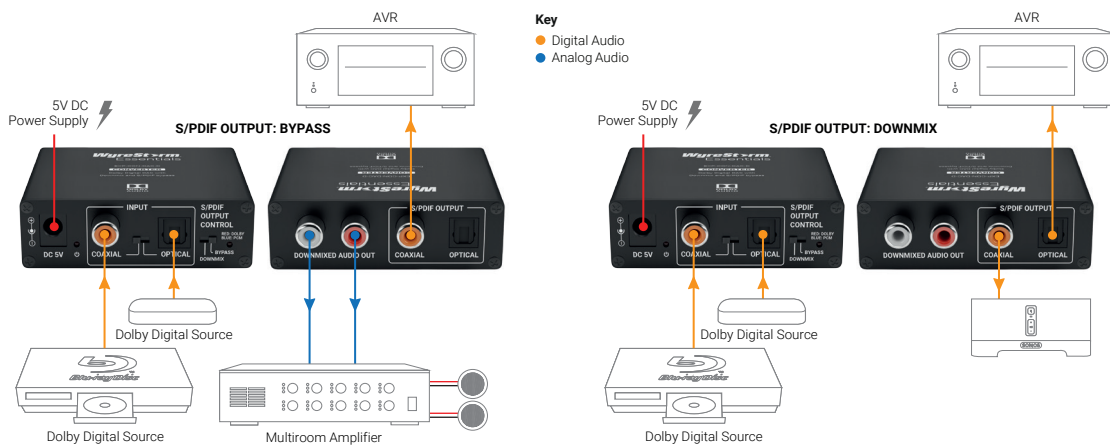
IMPORTANT! Installation Requirements

- This product was released in 2 different versions which contain different chassis designs and feature sets.
- See Identifying Product Versions for details.
- Visit the product page to download the latest documentation.
- Read through the [Wiring and Connections](#) section for important wiring guidelines before creating or choosing premade cables.

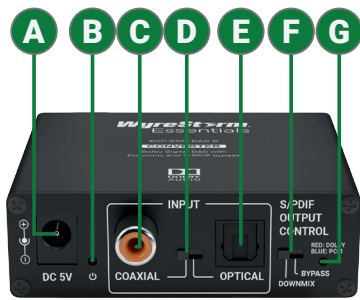
In the Box

- 1x EXP-CON-DAC-D Converter
- 1x 5V DC 1A Power Supply with Wall Adapters
- 1x USB-DC Power Cable

Basic Wiring Diagram

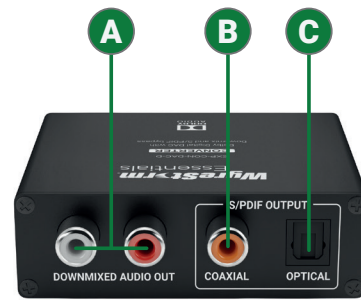


Front Panel



A Power In	2.1mm DC Jack Input Connect to the included 5V DC 1A power supply.
B Power LED	Solid: The unit is powered On Off: The unit is powered Off
C Coaxial In	RCA (Phono) port Connect to S/PDIF output of AV device
D Input Switch	Switch between Coaxial input and Optical input
E Optical Input	Optical (Toslink) port Connect to S/PDIF output of AV device
F S/PDIF Output Control Switch	Switch between bypass and downmix audio modes (S/PDIF output only)
G Dolby Audio Status	Red: Dolby Audio Active Blue: PCM Audio Active

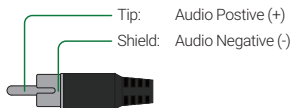
Rear Panel



A Downmixed Audio	2 x RCA (L/R Phono) Ports Connect to analogue audio input of pre-amplifier, AVR or audio system
B Coaxial Output	RCA (Phono) port Connect to digital audio input of pre-amplifier, AVR or audio system
C Optical Output	Toslink optical port Connect to digital audio input of pre-amplifier, AVR or audio system

Audio Connections

Analog Audio Out



Frequently Asked Questions

- Can I use a USB "service" port to power the unit?**
We do not recommend connecting to a port that is only designed to pass data (ie. USB service ports). The EXP-CON-DAC-D requires a USB port supplying at least 500mA to function correctly. We recommend using the included PSU.
- Can I connect more than one device to the input?**
Yes, however they will have to be manually switched using the selection switch
- Can I connect more than one device to the output?**
Yes, the output of the unit is mirrored, allowing both Coaxial, Toslink and stereo RCAs to be used concurrently
- Does the output selection switch control the stereo RCA output?**
No, the switch only controls the output of the S/PDIF ports. The stereo RCA outputs are constantly downmixed, regardless of the switch setting.
- Can I use uncompressed 6ch audio?**
Yes, the device will also downmix uncompressed LPCM audio to stereo
- Can I use the device to convert to Dolby Digital?**
No, the device is not an encoder, it only operates one-way: Bitstream/ LPCM in > downmix out
- Is it compatible with lossless audio formats?**
No, S/PDIF ports are limited to 8 channels of audio (PCM or compressed)

Specifications

Audio and Video	
Inputs	1x Coaxial: S/PDIF Digital Coaxial 1x Optical: TOSLINK Digital Optical
Outputs	1x L/R Audio: RCA Stereo 1x Coaxial: S/PDIF Digital Coaxial 1x Optical: TOSLINK Digital Optical
Audio Formats	2ch PCM (24bit/96kHz max) Dolby Digital 5.1
Output Impedance	552Ω
Output Voltage	2.0V RMS @ Max Input (0dBFS)
Frequency Response	20Hz~20kHz <+/-0.5dB
Signal to Noise Ratio	> 90dB (20Hz~ 20kHz)
THD + Noise (floor)	0.006%~0.042% (1kHz at 2V RMS)
Power	
Power Supply	5V DC 1A
Max Power Consumption	0.48W
Environmental	
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing
Storage Temperature	-20 to +70°C (-4 to + 158 °F), 10% to 90%, non-condensing
Maximum BTU	1.6 BTU/hr
Dimensions and Weight	
Rack Units/Wall Box	<1U
Height	24mm/0.94in
Width	80mm/3.15in
Depth	76mm/2.99in
Weight	0.11kg/0.24lbs
Regulatory	
Safety and Emission	CE FCC RoHS
Accessories	
What's included?	1 x WyreStorm EXP-CON-DAC-D Analog audio converter 1 x Universal 5V DC/1A power supply

Note: WyreStorm reserves the right to change product specification, appearance or dimensions of this product at any time without prior notice.

Warranty Information

WyreStorm Technologies LLC warrants that its products to be free from defects in material and workmanship under normal use for a period of two (2) years from the date of purchase. Refer to the Product Warranty page on wyrestorm.com for more details on our limited product warranty.

