VigilLink

VLEX-ACT300-TR

Digital Audio over Cat Extender 300m

User Manual

VER 1.0

Thank you for purchasing this product

Please read these instructions carefully for optimum performance and safety before connecting, operating, or adjusting this product. Please keep this manual for future reference.

A surge protection device is recommended.

This product contains sensitive electrical components that electrical spikes may damage, surges, electric shocks, lightning strikes, etc. The use of surge protection systems is highly recommended to protect and extend the life of your equipment.

Table of Contents

1. Introduction

This Audio over Cat 5e/6 Extender can transmit digital optical and coaxial signals concurrently up to a distance of 300m (48kHz), 150m (96kHz), or 100m (192kHZ). The receiver's built-in DAC converts digital (coax/Toslink optical) signals to a 2CH analog stereo audio output. Support one-way PoC function (the receiver will power the transmitter over the Catcable).

This is a fantastic plug-and-play solution for sending optical audio from an HDTV back to an amplifier, AVR, or multi-room audio system, which requiresan analog stereo audio input signal.

2. Features

☆ Extend optical and coaxial digital audio signals up to a distance of 300m (48kHz), 150m (96kHz) or 100m (192kHZ) over a single Cat cable

☆ Optical and coaxial digital signals can be distributed at the same time

☆ Built-in DAC (Digital to Analog Converter) converts either optical or coaxial digital (selectable) to analog stereo left/correct audio output (PCM only)

☆ Support sample rates 32 kHz, 44.1 kHz, 48 kHz, 96 kHz, and 192 kHz up to a 24-bit resolution

☆ Support LPCM, DTS, Dolby Digital an

3. Package Contents

① 1 × Audio over Cat 5e/6 Extender (Transmitter)
② 1 × Audio over Cat 5e/6 Extender (Receiver)
③ 1 × 5V/1A Power Supply
④ 4 × Mounting Ears
⑤ 1 × User Manual

4. Specifications

| Technical	
Bitrate over Distance	192kHz - 100m, 96kHz - 150m, 48kHz - 300m
Supported Audio Formats	LPCM, DTS, Dolby Digital, and Dolby Digital Plus when used as a straight digital in/digital out extender.
Sample Rates	32 kHz, 44.1 kHz, 48 kHz, 96 kHz and 192 kHz up to 24-bit resolution
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4KV (Contact discharge)
Connection	
Transmitter	Input ports: 1 × Optical (Toslink) 　　　　　　1 × Coaxial SPDIF RCA Output port: 1x RJ45
Receiver	Input port: 1x RJ45 Output ports: 1 × Optical (Toslink) 　　　　　　　1 × Coaxial SPDIF RCA 　　　　　　　1x Analog Stereo 3.5mm Audio jack
Mechanical	
Housing	Metal Enclosure
Color	Black
Casing-Dimensions	69mm(W) × 64mm(H) × 24mm(D)
Dimensions-with connections	76mm(W) × 64mm(H) × 28mm(D)
Weight	0.4Kg
Power Supply	5V/1A DC
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

5. Operation Controls and Functions

5.1 Transmitter
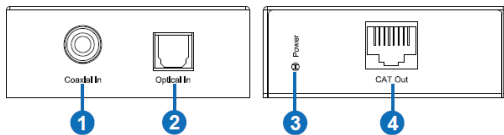
No.	Name	Function Description
1	Coaxial In	Coaxial audio input port. Connect to a Coaxial RCA digital audio source device with an RCA cable.
2	Optical In	Fiber Optical audio input port. Connect to an Optical digital audio source device with an Optical Toslink cable.
3	Power LED	When the transmitter is powered on, the power LED will be on.
4	Cat Out	Connect to the Cat in the receiver's port with Cat 5e/6 cable.

5.2 Receiver
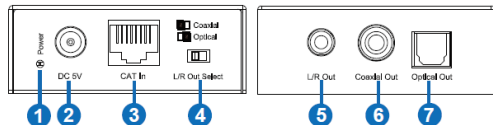
No.	Name	Function Description
1	Power LED	When the receiver is powered on, the power LED will be on.
2	DC 5V	DC 5V/1A power input port.
3	Cat In	Connect to the Cat Out port of the transmitter.
4	DAC Input Selection Switch	Switch to the required Optical or Coaxial signal you would like to convert to the Analog stereo L/R audio output.
5	L/R Out	3.5mm Analog stereo audio output port.
6	Coaxial Out	Coaxial audio output port. Connect to amplifier or speaker with RCA cable.
7	Optical Out	Fiber Optical audio output port. Connect to amplifier or speaker with Optical Toslink cable.

6. Application Example

Coaxial Out   Optical In

CAT Out

DVD or Blu-ray Player

DVD or Blu-ray Player

CAT 5e/6 Cable

Left Out   Coaxial Out   Optical Out

Coaxial
Optical

DC 5V   CAT In   L/R Out Select

Headphone

Amplifier

Power Supply

Speaker

Color Legend

LAN Connection
Fiber Connection
Cooper Cable
Audio
USB
HDMI
DisplayPort
Control