



Wall Plate 4K HDBaseT Transmitter

TRI-AVC-DET-5021



Product Overview

TRI-AVC-DET-5021, a 4K60 HDMI/USB-C HDBT wall-plate transmitter, supports one HDMI input and one USB-C input within a standard 86 mm × 86 mm wall box. It can transmit HDMI high-definition signal, bidirectional IR control signal, bidirectional RS-232 control signal, and USB 2.0 signal over CAT6 to a distance of up to 328 ft/100 m (HBT mode) or 492 ft/150 m (LRM mode). Video resolution is up to 4K2K@60Hz (4:4:4). It also supports the POC function with the POC control switch.

The Extender can be widely used in other fields such as video conference system, multimedia signal broadcasting, HDMI signal extension, etc.



Key Features

- HDMI 2.0b, HDCP 2.2/1.x and DP 1.2a compliant
- HDMI input supports 18Gbps video bandwidth
- USB input supports 5.4Gbps video bandwidth
- Support video resolution up to 4K2K@60Hz (4:4:4)
- Up to 7.1 channels HD audio
- Input signal source selection supports button switching
- Built-in mode DIP switch for selecting the HBT mode or LRM mode

HBT mode:

Audio and video signals can be transmitted up to 328ft/100m for 4K60/4K30/1080P

LRM mode:

Audio and video signals can be transmitted up to 492ft/150m for 4K30/1080P

- Built-in EDID DIP switch supports intelligent EDID management
- Built-in audio DIP switch supports analog audio embedding
- Built-in POC switches, when both POC switches of TX and RX are turned on, the Extender supports bidirectional 24V POC function, that is, either TX or RX is powered by 24V1A power supply, the another does not need power supply from the DC jack
- Transmit bidirectional Infrared control signal together with the HDMI signal
- IR IN is a 5V power supply level
- Transmit bidirectional RS-232 control signal together with the HDMI signal
- The Receiver supports USB 2.0 signal transmission
- Fit standard 86mm × 86mm wall box

Connection Diagram



Product specification

HDMI Compliance

HDMI 2.0b

HDCP Compliance

HDCP 2.2

Video Bandwidth

HDMI: 18Gbps; USB-C: 5.4Gbps

HDMI Video Resolution

Up to 4K2K@60Hz 4:4:4

Color Space

RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0

Color Depth

8/10/12bit

HDMI Audio Formats

LPCM 7.1CH, Dolby TrueHD and DTS-HD Master (Full format)

Analog Audio Embedding

48kHz

Transmission Distance

LRM mode: 492ft / 150m (4K30 / 1080P)

STD-HBT mode: 328ft / 100m (4K60 / 4K30 / 1080P)

ESD Protection

Human body model: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

Interface

Input:

1 x HDMI IN (Type A, 19-pin female)
1 x USB-C IN (USB Type-C)
1 x AUDIO IN (3.5mm Stereo Mini-jack)

Output:

1 x HDBaseT OUT (RJ45)

Control:

1 x TO PC USB Type-B
1 x RS-232 (3-pin-3.81mm Phoenix connector)
1 x IR IN (3-pin-3.81mm Phoenix connector)
1 x IR OUT (2-pin-3.81mm Phoenix connector)

Color

Front panel: White

Dimensions

86mm (W) x 86mm (D) x 38.5mm (H)

Weight

234g

Power Consumption (Max)

12.48W (Max)

Power Supply

24V / 1A (supporting bidirectional POC power supply)

Operating Temperature

32 – 104°F / 0 – 40°C

Storage Temperature

-4 – 140°F / -20 – 60°C

Relative Humidity

20 – 90% RH (no condensation)