

Technical Specifications

TL-TP40-HDC2

Features at a Glance

- EDID pass through
- HDCP2.2 compliant
- 4K/60 at 4:4:4 over Cat 6 up to 40m
- 1080p over Cat 5e/6 up to 70m
- Bi-directional IR, RS232



The TL-TP40-HDC2 is an ultra-thin extender set consisting of a transmitter (TL-TP40-HDC2-T) and a receiver (TL-TP40-HDC2-R). Using HDBaseT technology, the set transmits an HDMI signal to the receiver up to 70m distance via a Cat5e/Cat6A cable. The embedded VLC compression chipset allows 4K/60 at 4:4:4 video to reach distances up to 40m over a single Category 6 cable with no visual artifacts. Featuring bi-directional IR and RS232, you can control your display or source using included accessories. With bi-directional PoE power, you only need to connect the power supply on one end.

Specifications

I/O Connections	
HDMI	HDMI Type A Receptacle
Twisted Pair	8P8C port (Shielded RJ45)
IR Input	3.5mm TRS Jack
IR Output	3.5mm TS Jack
RS232	3pin phoenix socket
24V DC Power	5.5 mm Outside Diameter, 2.1 mm Inside Diameter Barrel (Locking)
Supported Video and Audio	
Maximum Video Compatibility	70 m: Deep Color 36/30/24 Bit at 1080p 40 m: Deep Color 48 Bit at 1080p, 3D, and 4k x 2k (UHD) up to 30 Hz: RGB, YCbCr 4:4:4, YCbCr 4:2:2; up to 60 Hz: YCbCr 4:2:0
Video Compliance	HDMI, HDCP 2.2, and CEC (Consumer Electronics Control)
Embedded Audio	Up to PCM 8 channel, Dolby Digital TrueHD, and DTS-HD Master Audio
Input DDC Signal	5.0 volts p-p (TTL)
Input Video Signal	0.5 to 1.0 volts p-p
IR Carrier Frequency Range	33-55kHz at 5 volts

HDBaseT Signal Characteristics	
Maximum Distance	70 m: Deep Color 36/30/24 Bit at 1080p 40 m: Deep Color 48 Bit at 1080p, 3D, and 4k x 2k (UHD) up to 60 Hz: RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Cable Requirements	Solid core shielded Category 5e, Category 6 or greater with TIA/EIA-568B crimp pattern
Bandwidth	10.2 Gbps
Signal Compression	1.8:1 Maximum; Compression starts when video signal >9 Gbps
Chassis and Environmental	
Enclosure	Painted aluminum
Dimensions	115mm x 84mm x 16mm
Shipping Weight	0.71Kg (1.55 lbs) (Tx+Rx)
Operating Temperature (Environment)	-10° to +40° C
Operating Temperature (Chassis)	45° C
Operating Humidity (Environment)	10% ~ 90%
Storage Temperature (Environment)	-15° to +70° C
Storage Humidity (Environment)	0%~55%
Power, ESD, Regulatory	
Maximum Power Consumption	4.4W(TX), 6.7W(RX)
Power Supply	24V DC
ESD Protection	15KV
Regulatory	HDBaseT, CE, FCC
Other	
Standard Warranty	3 Year
Diagnostic Indicators	Power LEDs
RS232/Firmware Switch	3-position Slider
Included Items	Installation Guide, power supply, US power cord, mounting "L" brackets (4 ea), mounting screws (4 ea), IR Transmitter, IR Receiver

Dimensional Drawings

