

CH-1605TXV

NEW 4K HDR HDMI over HDBaseT Transmitter with IR, RS-232, PoH (PSE), LAN & ARC



INTRODUCTION

This HDBaseT 2.0 Transmitter and Receiver set provides for the extension of 4K video with HDR and high bitrate audio over a single Cat.6a/7 cable at distances of up to 100m (328 feet). This extender set complies with the advanced HDCP 2.2 and HDMI 2.0 standards, as well as supporting the legacy HDCP 1.x and HDMI 1.x standards. Despite HDBaseT's 10.Gbps bandwidth limitation, 4K UHD HDMI video sources, up to and including 4K@60Hz (4:4:4, 8-bit) as well as 10/12-bit sources with HDR, are able to be processed and extended by the use of AVLC (Adaptive Visually Lossless Compression) when connected to a compatible AVLC Receiver. These extenders can also pass RS-232, IR, Ethernet, and multiple audio streams across the same cable that carries the video signal.

The Audio Return Channel (ARC) channel feature allows audio generated by an ARC-enabled TV connected to the Receiver to be sent back to the Transmitter and output over the optical output for local playback. Rounding out the feature set is automatic HDBaseT clock stretching and TMDS re-clocking support. The 48V PoH (Power over HDBaseT) feature allows the Receiver (PD) to be powered directly by the Transmitter (PSE), eliminating the need for a separate power supply for the Receiver.



CH-1605RXV

NEW 4K HDR HDMI over HDBaseT Receiver with IR, RS-232, PoH (PD), LAN & ARC



FEATURES

- HDMI with HDR, 3D & 4K@60Hz support, DVI 1.0 compatible
- HDCP 2.2 and HDCP 1.x compliant
- Supports up to 4K UHD (18Gbps, 4K@50/60Hz 4:4:4, 8-bit) video input and output
- Supports Deep Color input and output up to 12-bit
- Supports 10-bit and 12-bit HDR (High Dynamic Range) input/output
- Supports CEC bypass
- Simultaneous transmission of uncompressed video, audio and data over a single Cat.6a/7 cable up to 100m/328ft at 4K
- HDBaseT feature support: HD Video and Audio, 100BaseT Ethernet, 48V PoH, bidirectional optical audio, and Control (bidirectional IR/RS-232 pass-through)
- Integrated AVLC (Adaptive Visually Lossless Compression) activates when the bandwidth requirements of the source are beyond 10.2Gbps (340MHz) allowing for sources up to 18Gbps (600MHz) to be sent to a compatible Receiver with no loss of visual quality
- The AVLC feature allows manual selection between High Quality Mode (Full bandwidth) and Standard Mode (Lower bandwidth, useful for longer cable runs with 4K sources)
- Supports the Audio Return Channel (ARC) function to transmit digital audio from an ARC-enabled TV connected to the Receiver back to the Transmitter
- Supports HDMI DDC bus clock stretching for improved compatibility with certain Blu-ray players
- Performs TMDS re-clocking and signal re-generation for improved signal integrity
- Supports standard 48V PoH from Transmitter (PSE) to Receiver (PD) (compatible Receivers only)



HDBaseT 2.0 Extenders Introducing AVLC/DSC Technologies



SPECIFICATIONS	CH-1605TXV	CH-1605RXV	CH-1604TXD	CH-1604RXD
Input Ports	1×HDMI 1×S/PDIF (TOSLINK)	1×HDBaseT (RJ45) 1×S/PDIF (TOSLINK)	1×HDMI 1×S/PDIF (TOSLINK) 1×Stereo (2×RCA)	1×HDBaseT (RJ45) 1×S/PDIF (TOSLINK)
Output Ports	1×HDBaseT (RJ45) 1×S/PDIF (TOSLINK)	1×HDMI 1×S/PDIF (TOSLINK)	1×HDBaseT (RJ45) 1×S/PDIF (TOSLINK)	1×HDMI 1×S/PDIF (TOSLINK) 1×Stereo (2×RCA)
Pass-through Ports	1×IR Extender (3.5mm) 1×IR Blaster (3.5mm) 1×RS-232 (DE-9) 1×LAN (RJ45)	1×IR Extender (3.5mm) 1×IR Blaster (3.5mm) 1×RS-232 (DE-9) 1×LAN (RJ45)	1×IR Extender (3.5mm) 1×IR Blaster (3.5mm) 1×RS-232 (DE-9) 2×LAN (RJ45) 1×USB (Mini-B) 2×USB (Type-A)	1×IR Extender (3.5mm) 1×IR Blaster (3.5mm) 1×RS-232 (DE-9) 2×LAN (RJ45) 1×USB (Mini-B) 2×USB (Type-A)
Power Supply	24V/2.7A	PoH	24V/2.7A	PoH
Dimensions	231.5mm×25mm×108mm (W×H×D) [Case Only] 231.5mm×25mm×110mm (W×H×D) [All Inclusive]	231.5mm×25mm×108mm (W×H×D) [Case Only] 231.5mm×25mm×110mm (W×H×D) [All Inclusive]	231.5mm×25mm×108mm (W×H×D) [Case Only] 231.5mm×25mm×120mm (W×H×D) [All Inclusive]	231.5mm×25mm×108mm (W×H×D) [Case Only] 231.5mm×25mm×120mm (W×H×D) [All Inclusive]
Weight	700g	700g	700g	700g

Product Selection Guide

HDBaseT FEATURES	CH-1605TXV	CH-1605RXV	CH-2605TXV	CH-2605RXV	CH-1604TXD	CH-1604RXD
HD Video & Audio	✓	✓	✓	✓	✓	✓
IR/RS-232 pass-through	✓	✓	✓	✓	✓	✓
LAN pass-through	✓	✓	✓	✓	✓	✓
USB 2.0 for KVM	–	–	–	–	✓	✓
Send power to Receiver	✓	–	–	–	✓	–
Accept power from Receiver	–	–	✓	–	–	–
Send power to Transmitter	–	–	–	✓	–	–
Accept power from Transmitter	–	✓	–	–	–	✓
Cat.6a/7 Cable Length	100m@4K HDR	100m@4K HDR	100m@4K HDR	100m@4K HDR	100m@4K HDR	100m@4K HDR

AV, ETHERNET,
CONTROL,
USB & POWER
OVER A SINGLE
CAT. CABLE