CH-1529TXV

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

INTRODUCTION

This Transmitter is a great solution for extending HD audio and video as well as Ethernet and control via a single run of Cat.5e/6/7 cable over distances of up to 100 meters. Multiple data and control interfaces are provided, including IR, RS-232 and LAN connections. This Transmitter 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.

Beyond video, data, and control this unit also contains useful audio features. The Optical Audio Return (OAR) feature supports transmitting optical audio back from a compatible Receiver for local playback. Rounding out the feature set is robust EDID management as well as automatic HDBaseT clock stretching and TMDS re-clocking support. This Transmitter (PSE) can provide 48V PoH (Power over HDBaseT) to a compatible Receiver (PD), allowing for greater flexibility within different installation scenarios.

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.5e/6/7 cable up to 100m/328ft at 1080p and 70m/230ft at 4K
- HDBaseT feature support: HD Video and Audio, 100BaseT Ethernet, 48V PoH, 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 Optical Audio Return (OAR) function to transmit optical audio from a compatible Receiver to the Transmitter
- Comprehensive EDID management support including 6 pre-defined EDIDs, 9 user EDIDs and an EDID bypass mode
- PC-based EDID management software allows for the uploading of customized user EDIDs via USB
- 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
- Ultra-thin wall mount design (16mm thickness) for convenient installation
- Supports standard 48V PoH from Transmitter (PSE) to Receiver (PD) (compatible Receivers only)

HDCP	4K60	HDR	AVLC	PSE	OAR
2.2	4:4:4	4K	4K 70m	48V PoH	Optical Audio Return

HDBaseT 1.0 Extenders Introducing AVLC & OAR Technologies

SPECIFICATIONS	CH-1529TXV	CH-1529TXPLV	CH-1529RXV	CH-1529RXPLV
Input Ports	1×HDMI	1×HDMI	1×HDBaseT (RJ45) 1×S/PDIF (TOSLINK)	1×HDBaseT (RJ45) 1×S/PDIF (TOSLINK)
Output Ports	1×HDBaseT (RJ45) 1×S/PDIF (TOSLINK)	1×HDBaseT (RJ45) 1×S/PDIF (TOSLINK)	1×HDMI	1×HDMI
Pass-through Ports	1×IR Extender (3.5mm) 1×IR Blaster (3.5mm) 1×RS-232 (Terminal Block) 1×LAN (RJ45)	1×IR Extender (3.5mm) 1×IR Blaster (3.5mm) 1×RS-232 (Terminal Block)	1×IR Extender (3.5mm) 1×IR Blaster (3.5mm) 1×RS-232 (Terminal Block) 1×LAN (RJ45)	1×IR Extender (3.5mm) 1×IR Blaster (3.5mm) 1×RS-232 (Terminal Block)
Control Port	1×USB (Mini-B)	1×USB (Mini-B)	N/A	N/A
Power Supply	48V/0.83A	48V/0.83A	PoH	PoH
Dimensions	163mm×16mm×78mm (W×H×D) [Case Only] 183mm×16mm×81mm (W×H×D) [All Inclusive]	163mm×16mm×78mm (W×H×D) [Case Only] 183mm×16mm×81mm (W×H×D) [All Inclusive]	163mm×16mm×78mm (W×H×D) [Case Only] 183mm×16mm×81mm (W×H×D) [All Inclusive]	163mm×16mm×78mm (W×H×D) [Case Only] 183mm×16mm×81mm (W×H×D) [All Inclusive]
Weight	370g	370g	370g	370g

Product Selection Guide

HDBaseT FEATURES	CH-1529TXV	CH-1529TXPLV	CH-1529RXV	CH-1529RXPLV
HD Video & Audio	✓	✓	✓	✓
IR/RS-232 pass-through	✓	✓	✓	✓
LAN pass-through	✓	–	✓	–
Send power to Receiver	✓	✓	–	–
Accept power from Receiver	–	–	–	–
Send power to Transmitter	–	–	–	–
Accept power from Transmitter	–	–	✓	✓
Cat.5e/6 Cable Length	100m@1080p 70m@4K HDR	70m@1080p 35m@4K HDR	100m@1080p 70m@4K HDR	70m@1080p 35m@4K HDR

A/V, ETHERNET, CONTROL & POWER

OVER A SINGLE CAT. CABLE

The specifications and features listed for pre-release hardware is subject to change.