

# CH-2605TXV

## UHD+ HDMI over HDBaseT Transmitter with HDR/ARC

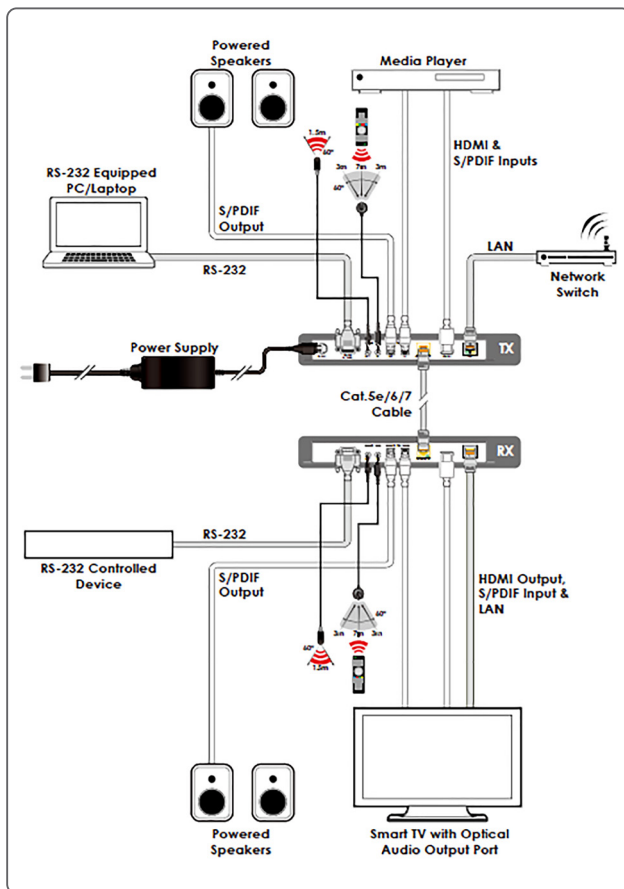


This HDBaseT 2.0 Transmitter provides for the extension of 4K video with HDR and high bitrate audio over a single Cat.6a/7 cable at distances of up to 100m (328 feet). This Transmitter complies with the advanced HDCP 2.2 and HDMI 2.0 standards, as well as supporting the legacy HDCP 1.x and HDMI 1.x standards. Despite HDBaseT's 10.2Gbps 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. This Transmitter can also pass RS-232, IR, Ethernet, and multiple audio streams across the same cable that carries the video signal. The bi-directional optical audio feature allows optical audio to be exchanged bi-directionally between the Transmitter and Receiver. Rounding out the feature set is automatic HDBaseT clock stretching and TMDS re-clocking support. This Transmitter is powered directly by the connected Receiver, via 48V PoH (Power over HDBaseT), eliminating the need for a separate power supply for the Transmitter.

### PANELS



### DIAGRAM



### FEATURES

- Supports CEC bypass
- HDBaseT output transmits video, audio and data over a single Cat.5e/6/7 cable and can reach distances up to 100m/328ft at 4K when using Cat.6a/7
- HDBaseT feature support: HD Video and Audio, 100BaseT Ethernet, 48V PoH (PD), bi-directional optical audio and Control (bi-directional 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)
- Bi-directional optical audio extension support
- 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
- Powered via 48V PoH from Receiver to Transmitter  
Note: A compatible PSE Receiver providing 48V PoH is required to power this Transmitter. Receivers from other brands may not be compatible.

### SPECIFICATIONS

#### Interfaces

**Input Port** 1 HDMI (Type-A)  
1 S/PDIF (TOSLINK)

**Output Port** 1 HDBaseT (RJ-45)  
1 S/PDIF (TOSLINK)

**Pass-through Ports** 1 IR Extender (3.5mm)  
1 IR Blaster (3.5mm)  
1 RS-232 (DE-9)  
1 LAN (RJ-45)

**Service/Control Port** 1 USB (Mini-B)

#### Video

**HDMI Compliance** HDMI 2.0 (DVI 1.0)

**HDCP Compliance** 2.x

**Input Signal Type** 4K@60 8bit YUV 4:4:4, HDR 12

**Output Signal Type** 4K@60 8bit YUV 4:4:4, HDR 12

#### Resolutions

**Maximum Input** HDMI 4096×2160p@60

**Maximum Output** HDBaseT 4096×2160p@60

#### Power

**Power Supply** 48V PoH (US/EU standards, CE/FCC/UL certified)

**Power Consumption** 5W

#### Enclosure

**Chassis Material** Metal (Steel)

**Chassis Color** Black

**Dimensions (W×H×D)** 231.5mm×25mm×108mm [Case Only]  
231.5mm×25mm×115mm [All Inclusive]

**Weight** 640g

#### Field Firmware Update

#### USB Flash Drive

### ORDERING INFORMATION

Model No. Product Description

**CH-2605TXV** UHD+ HDMI over HDBaseT Transmitter with HDR/ARC

**CH-2605RXV** UHD+ HDMI over HDBaseT Receiver with HDR/ARC