



PUV-2100-AVLC-KIT

HDBaseT Full 4K AVLC Series Kit with LAN, PoH & Audio/ARC Pathway



The PUV-2100-AVLC-KIT is a HDBaseT 2.0 Transmitter and Receiver Kit capable of transmitting and receiving 4K video with HDR and high bitrate audio over a single Cat.6a/7 cable at distances of up to 100m (328 feet). This Kit 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 sent and processed using AVLC (Adaptive Visually Lossless Compression) technology. This Kit can also support RS-232, IR, Ethernet, and multiple audio streams across the same cable that carries the video signal.

The selectable Audio Return Channel (ARC)/bi-directional optical audio feature allows audio generated by an ARC-enabled TV to be sent back to the Transmitter from the receiver and output over the optical output for local playback, or for optical audio to be exchanged bi-directionally between the Transmitter and Receiver. The Receiver can be powered directly by the connected Transmitter, via 48V PoH (Power over HDBaseT), eliminating the need for a separate power supply.

PANELS

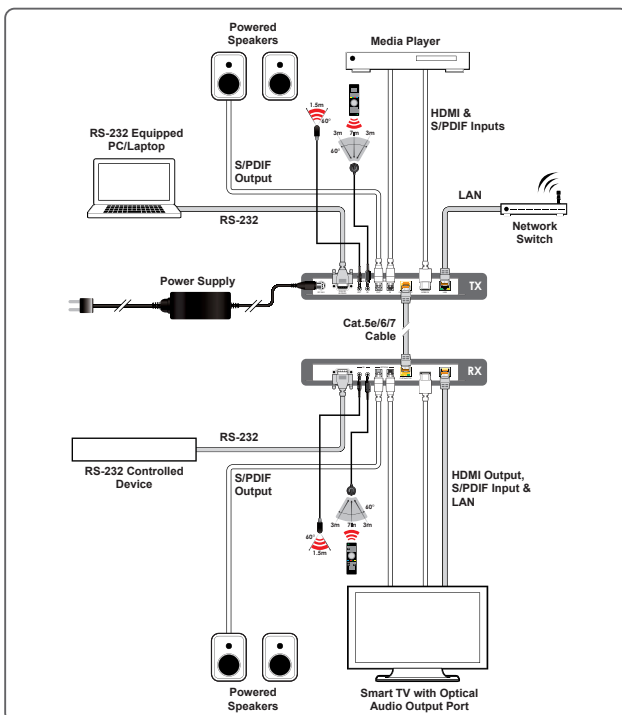
TX



RX



DIAGRAM



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 Colour input and output up to 12-bit
- Supports 10-bit and 12-bit HDR (High Dynamic Range) input/output
- 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 (PSE), 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 source compatibility
- Performs TMDs re-clocking and signal re-generation for improved signal integrity
- Supports standard 48V PoH from Transmitter to Receiver (compatible Receivers only)

SPECIFICATIONS

Interfaces

TX

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)

RX

Input Port	1 HDBaseT (RJ-45) 1 S/PDIF (TOSLINK)
Output Port	1 HDMI (Type-A) 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
Output Signal Type	4K@60 8bit YUV 4:4:4, HDR

Resolutions

Maximum Input	HDMI	4096×2160p@60
Maximum Output	HDBaseT	4096×2160p@60

Power

Power Supply	[TX] 24V/2.7A DC (US/EU standards, CE/FCC/UL certified) [RX] 48V PoH
Power Consumption	[TX] 5W, [RX] 8W

Enclosure

Chassis Material	Metal (Steel)
Chassis Colour	Black
Dimensions (W×H×D)	231.5mm×25mm×108mm [Case Only] 231.5mm×25mm×115mm [All Inclusive]
Weight	[TX] 640g, [RX] 660g

Field Firmware Update

PC

ORDERING INFORMATION

Model No.	Product Description
PUV-2100-AVLC-KIT	UHD ⁺ HDMI over HDBaseT Transmitter with HDR/ARC