



PUV-1082-PRO

10x10 Full 4K HDMI HDBase1 with AVLC Matrix with OAR, Audio I/O Zones & Full Audio Matrix



The PUV-1082-PRO is designed for the Professional AV Installer based on the hugely successful PUV-1082-4K22. The Matrix supports the transmission of video (resolutions up to 4K UHD 10/12-bit HDR & Dolby Vision, HDCP 2.2, HDMI2.0) and multi-channel digital audio from 10 HDMI sources to 8 HDBaseT™ outputs and 2 independent HDMI2.0 outputs (18Gbps). Despite the 10.2Gbps limitation of HDBaseT technology, this ground breaking product enables data rates of up to 18Gbps to be transmitted using AVLC (Adaptive Visually Lossless Compression) Technology. The transmitter enables 4KUHD sources up to and including 4K@60Hz (4:4:4 8-bit) as well as 10/12 bit sources with HDR (Including Dolby Vision) to be extended to a compatible receiver. The result is a perfect 4K 6G visually lossless image delivered to the display screen.

The PUV-1082-PRO supports independent video output scaling on all of the HDBaseT and HDMI outputs. This is particularly useful when transmitting a 4KHDR image from the matrix to a standard 1080p HD display within an AV setup.

This matrix supports high resolution digital audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus, Dolby Atmos and DTS-HD Master Audio as well as 3D video content.

The PUV-1082-PRO incorporates an independent audio matrix with 14 audio outputs and 10 audio inputs. These outputs and inputs can also be used for de-embedding HDMI audio to the audio outputs and embedding audio to the HDBaseT and HDMI outputs. The audio CAT connections, along with compatible bi-directional audio modules (PU-305BD-RX & PU-305BDA-RX) allow integration with remote sources and remote audio zones. In addition, volume, mute, treble, bass and audio lip-sync correction control are available on all direct audio outputs. Optical Audio Return (OAR) Technology allows the optical input on the PUV-1830RX-AVLC receiver to be routed back to the audio matrix.

LAN connectivity provides a 100BaseT network for smart TVs or games consoles in every zone. The matrix has a built-in pattern generator which can be used to verify the video signal on any of its 10 output ports. The Power over HDBaseT (PoH) function provides power to compatible receivers.

Control is via manual selection buttons, IR, RS-232, Telnet or Web GUI. CYP provide control drivers for all the major control systems. This unit also supports RS232 pass-through to the receivers. The PUV-1082-PRO is designed to be used with PUV-1830RX-AVLC or PUV-1810RX-AVLC receivers that utilise the PoH and LAN capabilities of the matrix.

PANELS



Front View

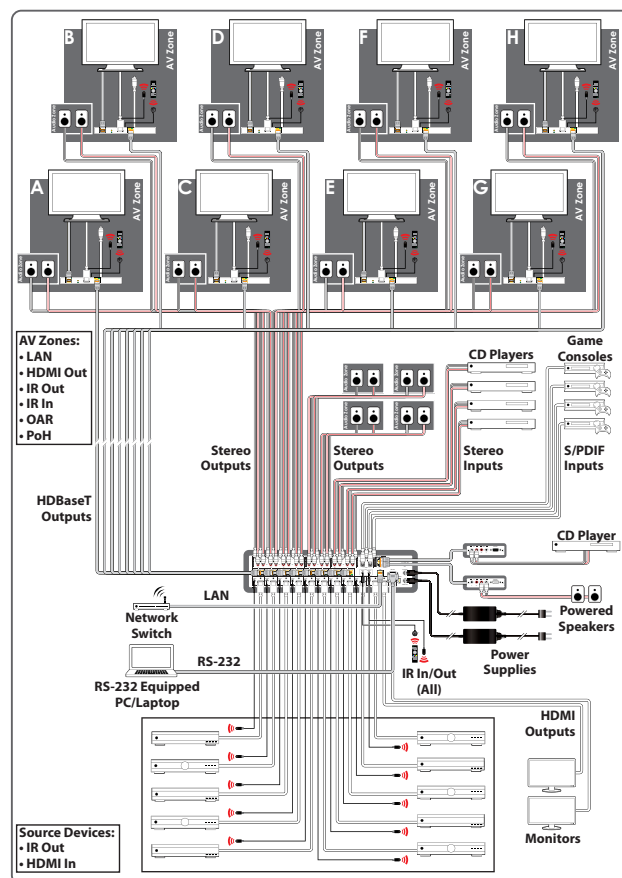


Rear View

FEATURES

- HDMI 2.0, HDCP1.4 and HDCP2.2 compliant
- Routes ten HDMI sources to ten displays using eight HDBaseT outputs and two independent HDMI outputs
- HDBaseT 5-Play™ convergence: High-Definition video and audio, 100BaseT Ethernet, PoH (Power over HDBaseT) and control (Bi-Directional IR & RS-232 pass through)
- Supports up-to 4K UHD (18Gbps, 4K @50/60Hz 4:4:4 8-bit) video input
- AVLC (Adaptive Visually Lossless Compression)
- Supports 10-bit and 12-bit HDR (High Dynamic Range)
- Supports output resolutions up to 4K @50/60Hz (4:4:4 8-bit)
- 4K 3G Timings and 1080p up-to 100 Metres, 4K 6G Timings up to 70 Metres
- Supports pass-through of HD audio formats: LPCM 2/5.1/7.1CH, Dolby Digital 2/5.1CH, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos and DTS-HD Master Audio
- Supports audio matrix functionality enabling full audio management of the system including HDBaseT audio zone selection, and fully independent audio only zones
- Supports Digital to Analogue Conversion (DAC) and Analogue to Digital Conversion (ADC) for audio integration
- Supports on-board audio over CAT inputs and outputs for transmission up to 150m
- Supports Volume, Mute, Treble, Bass, and Audio delay for lip-sync on direct audio outputs
- Optical Audio Return (OAR)
- Advanced internal and external EDID management with 4 sets of configurable EDID settings
- Internal test pattern generation for self-testing and sink device testing. (Internal test patterns up to and including 4K signals)
- Supports HDCP repeating and CEC functions
- Control is via RS-232, remote control, on-panel control and IP Control (Telnet & Web GUI)
- 2U rack mounted design

DIAGRAM





PUV-1082-PRO

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SPECIFICATIONS

Interfaces

Input Port	10 HDMI 2 Digital S/PDIF (TOSLINK) 2 Digital S/PDIF (RCA) 4 Analogue Stereo (3.5mm)
Output Port	2 HDMI 8 HDBaseT (RJ-45) 12 Analogue Stereo (24 RCA)
Bidirectional Port	2 Digital S/PDIF or Analogue Stereo (RJ-45)
Pass-through Port	11 IR Blaster (3.5mm) 9 IR Extender (3.5mm)
Control I/O	1 LAN (RJ 45)
Service Port	1 USB (Type-A)

Video

HDMI Compliance	HDMI 2.0 (DVI 1.0)
HDCP Compliance	2.2
Input Signal Type	4K@60 8-bit YUV 4:4:4, HDR10
Output Signal Type	4K@60 8-bit YUV 4:4:4, HDR10
Maximum Input Resolutions	HDMI 4096×2160p@50/60 YUV 4:4:4 HDBaseT 4096×2160p@50/60 YUV 4:4:4
Maximum Output Resolutions	HDMI 4096×2160p@50/60 YUV 4:4:4 HDBaseT 4096×2160p@50/60 YUV 4:2:0

Audio

HDMI	LPCM 8 Channels, Bitstream, HD Bitstream
S/PDIF	LPCM 2 Channels
Line Level	Frequency Response: < ±0.5dB (20Hz to 20kHz) THD: < 0.01% (20Hz to 20kHz) S/N Ratio: > 90dB (1kHz with 0dBFS) Crosstalk: < -90dB (10kHz, Vin=0dBFS)

Communications

Ethernet	10/100Mbps
Infrared	2-way device control
Serial	1-way device control
USB	Firmware update

Power

Power Supply	24V/6.25A DC
Power Consumption	236W

Enclosure

Chassis Material	Metal (Steel)
Chassis Colour	Black
Dimensions (W×H×D)	438mm×88mm×316mm [Case Only] 483mm×96mm×356mm [All Inclusive]
Weight	6,500g
Rackmount Size	2U

Field Firmware Update

USB Flash Drive, USB to PC, RS-232, WebGUI

ORDERING INFORMATION

Model No.	Product Description
PUV-1082-PRO	10 x 10 Full 4K HDMI HDBase1 with AVLC Matrix with OAR, Audio I/O Zones and full Audio Matrix
PUV-1530RX	HDBaseT1 Receiver with LAN, OAR & PoH