10x10 HDMI HDBaseT™ Matrix

with Audio Matricing (4K, HDCP2.2, HDMI2.0, PoH, LAN, OAR, 100m)

PUV-1082-4K22





The PUV-1082-4K22 HDMI/HDBaseT Matrix supports the transmission of video (resolutions up to 4K2K@60Hz, HDCP 2.2, HDMI2.0) and multi-channel digital audio from 10 HDMI sources to 8 HDBaseT outputs and 2 independent HDMI2.0 outputs. HDBaseT outputs allow transmission via a single CAT5e/6/7 cable up to 100m, whilst the independent HDMI outputs support cable lengths of up to 10m. 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.

This matrix 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-1530RX 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-1082-4K22 is designed to be used with PUV-1530RX or PUV-1510RX receivers that can utilise the PoH and LAN capabilities of the matrix.





FEATURES

- · HDMI 2.0, HDCP1.4 and HDCP2.2 compliant
- Routes ten HDMI sources to ten displays using eight HDBaseT outputs and two independent or mirrored 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)
- Supported HDBaseT resolutions: VGA~WUXGA, 480i~1080p, 4K UHD@24/25/30Hz (RGB 4:4:4 & YUV 4:4:4), 4K UHD@ 60Hz (YUV 4:2:0), dependent upon the output display's EDID settings
- Supports resolutions up to 4K@60 (YUV 4:4:4) on HDMI output ports
- Supports automatic 4K@60 YUV 4:4:4 to YUV 4:2:0 conversion for HDBaseT outputs
- 4K/2K & 4K UHD signals can be transmitted up to 70m via CAT5e/6 and 100m via CAT6a/7
- 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, DTS-HD Master Audio and DTS X
- Supports audio matrix functionality enabling full audio management of the system including HDBaseT audio zone selection, fully independent audio only zones and HDMI audio embedding and de-embedding

- 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
- HDBaseT outputs with Optical Audio Return (OAR) system
- Audio mixer function
- 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)
- · Bi-directional IR support over HDBaseT
- Control is via RS-232, remote control, on-panel control and IP Control (Telnet & Web GUI)
- 2U rack mounted design
 Note: Audio break away functions support PCM format only

SPECIFICATIONS

Input: 10x HDMI (10x HDMI - Uncompressed AV and Data)

8x RCA (4x Configurable Analogue Audio - Stereo (L/R))

2x Toslink (2x Configurable Digital Audio - 2 Channel LPCM / DTS / Dolby Digital) 2x RCA (2x Configurable Digital Audio - 2 Channel LPCM / DTS / Dolby Digital)

2x RJ45 (2x Bi-directional Audio plus Propriety Data) 9x 3.5mm Stereo mini-jack (9x Infra Red Receiver)

1x RJ45 (1x IP Control / LAN Serving) 1x 9pin Dsub (1x RS-232 Data)

Output: 8x RJ45 (8x HDBaseT - HDMI & Propriety Data)

16x RCA (8x Mirrored HDBaseT audio - Stereo (L/R)) 8x RCA (4x Extended Audio only zones - Stereo (L/R)) 11x 3.5mm Stereo mini-jack (11x Infra Red Emitter)

Power: 24V/6.25A DC (US/EU standards, CE/FCC/UL certified)
PoH Power: 24V/6.25A DC (US/EU standards, CE/FCC/UL certified)

Dimensions: 316mm (W) x 438mm (D) x 96mm (H)

Gross Weight: 8500g **Net. Weight:** 6500g

Compatible HDBaseT Receivers (RX)

PUV-1530RX PUV-1510RX
See Page 75 for See Page 79 for specification specification





