MuxLab

Overview:

The HDMI 4K over IP PoE Extender allows HDMI equipment supporting up to 4K @ 30Hz (4:4:4) and 4K @ 60Hz (4:2:0) resolution to be connected and extended to create a Video Wall of user configurable size (X by Y) supporting 100's of screens, depending on network bandwidth, utilizing one Receiver for each display in the array. Each Transmitter and Receiver can be connected via Cat5e/6 cable up to 330ft (100m) from an Ethernet Switch. Supports HDR10 at up to 4K @ 30Hz (4:2:2).

The Transmitters and Receivers support PoE (PD) and may be powered by a PoE (PSE) Ethernet Switch. The IR Emitter and IR Sensor, if required, may be purchased separately for IR based remote control applications.
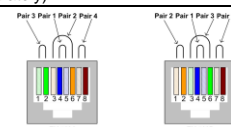
For the point-to-multipoint and multipoint-to-multipoint configuration the Ethernet switch must have Gigabit ports, DHCP server capability, support IGMP and Jumbo Frames.

The MuxLab Pro Digital Network Controller (500811) and MuxControl App are available to simplify configuration and management of this and other MuxLab AV over IP networked devices via Smartphone and Tablet.

MuxLab PRODIGITAL™

4K UHD COMPATIBLE

Key Features:

- Supports up to 4K @ 30Hz (4:4:4), 4K @ 60Hz (4:2:0) and HDR10 at 4K @ 30Hz (4:2:2)
- Supports Video Walls
- Supports point-to-point, point-to-multipoint and multipoint-to-multipoint applications
- Transmission up to 330ft (100m) over Cat5e/6
- Audio pass thru up to 8 CH LPCM, Dolby Atmos and DTS:X
- Supports audio insert (TX) & audio extract (RX)
- CEC, RS232 and Directional IR for remote control of end-devices
- PoE powered
- Managed via Pro Digital Network Controller (500811), MuxControl App and 3rd Party Control Apps

Specifications	
Environment	HDMI 2.0b
Devices	Blu-Ray, projectors, monitors, TV, PC, laptops, servers supporting HDMI.
Bandwidth	300MHz
Signals	HDMI 2.0b, HDR10 and HDCP 2.2
Connectors _Note: Cables not included._	One (1) HDMI receptacle. One (1) RJ45S for Cat 5e/6 unshielded or shielded twisted pair. One (1) 3.5mm jack for Directional IR (IR emitter or IR sensor). Two (2) 3.5mm jacks for audio insert (on TX)/audio extract (on RX). One (1) DB9 for the RS232 Four (4) DIP Switches for device ID addressing.
Maximum Distance _Based on a maximum length of 6.6ft (2m) of HDMI cable per end._	Cat5e/6: 330ft (100m) up to 4K @ 30Hz (4:4:4) and 4K @ 60Hz (4:2:0) _Note: When installed in an electrically noisy environment, an STP cable must be used. Also, cross-connection reduces the effective distance depending on the grade of twisted cable used._
Latency	Typical one (1) Frame (16ms), maximum 2 frames (33ms)
Compression	JPG2000
Bandwidth	Up to 500Mbps
Network Requirement	1 Gbps Ethernet network supporting IGMP, Jumbo Frames and PoE
IR Frequency	38 to 56KHz (IR Emitter and IR Sensor sold separately)
RJ45 Pin Configuration _Reverse Polarity Sensitive. Use EIA/TIA 568A or 586B straight-through wiring._	**RJ45 Link** Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) EIA568A EIA568B
Cable	One (1) Cat 5e/6 or better twisted pair cables required
Power Source	This device supports PoE (PD), an external power supply is not included. It is intended to be powered via a PoE (PSE) Ethernet Switch. If required, an optional power supply (500993) may be purchased separately.
PoE	IEEE 802.3af
Power Consumption	Transmitter: 6 W Receiver: 6 W
Temperature	Operating: 0° to 40°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing
Dimensions	4.40" x 5.08" x 1.00" (112mm x 129mm x 25mm)
Weight	1.5lbs (0.68kg)
Compliance	Regulatory: FCC, CE, RoHS Flammability: 94V0
Warranty	3 years
Order Information	500759-TX HDMI 4K over IP PoE Transmitter (UPC: 627699907597) 500759-RX HDMI 4K over IP PoE Receiver (UPC: 627699807590)
Accessories (These items are sold separately)	500920 16-Port Rackmount Transceiver Chassis 500917 Wall Mount Transceiver Bracket Kit 500990 IR Emitter, and 500991 IR Sensor 500993 Univ. Locking Power Supply 5VDC/2.6A US/UK/EU Blade

Typical Application

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