Overview

The Video Wall over IP Extender Kit with PoE allows HDMI equipment 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. The transmitter unit can be connected using a LAN switch (PoE or non-PoE), with maximum distances of 330ft (100m) of Cat 5e/6 cable between equipment.

The MuxLab Pro Digital Network Controller (500811) is available to simplify configuration and control and allows for third party smartphone and tablet management.

The transmitter (500754-TX) and receiver (500754-RX) also support PoE (PD) if used with a PoE (PSE) Ethernet switch. The kit comes with one (1) transmitter and one (1) receiver. 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 and IGMP communications protocol. MuxLab recommends using the Cisco SG300 Series Managed Switches.

Key Features

- Configure a Video Wall array with 100's of displays, depending on network bandwidth
- HDMI 1.3
- Supports up to 1080p resolutions
- Visually lossless video (1 frame latency)
- Supports point-to-point, point-to-multipoint and multipoint-to-multipoint applications
- Transmission up to 330ft (100m) over Cat5e/6
- Transmission up to 390ft (120m) between one (1) TX and one (1) RX when no LAN switch is used in a point-to-point scenario
- Supports RS232 and IR transmission for remote control
- PoE powered
- Control via any web device (mobile, tablet) with use of model 500811 (Pro Digital Network Controller)

Specification Chart

Environment	HDMI 1.3a
Devices	DVD, plasma, projectors, monitors, TV, PC, laptops, servers supporting HDMI.
Video Wall	NxM video wall capabilities
Max. configuration	100's of transmitters and receivers, depending on network bandwidth.
Compatibility	Compatible to 500752 and 500753
Transmission	Transparent to the user
Video Bandwidth	225MHz
Signals	HDMI 1.3a protocol
Connectors	One (1) HDMI receptacle. One (1) RJ45S for Cat 5e/6 unshielded or shielded twisted pair. One (1) 3.5mm jacks for IR emitter/sensor. One (1) DB9 Serial Port Connector Four (4) DIP Switches for device ID addressing. *Note: HDMI cables not included.*
Maximum Distance *Based on a maximum length of 6.6ft (2m) of HDMI cable per end.*	Cat5e/6: 330ft (100m) up to 1080p *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	One (1) Frame
Compression	Motion JPEG
Network Bandwidth	60Mbps
Network Requirement	100BaseT for Point to Point; 1000BaseT for other configuration
IR Frequency	38 to 56KHz
Cable	One (1) Cat 5e/6 or better twisted pair cables required

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)
Power Supply	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 (500992) may be purchased separately.
PoE	IEEE 802.3af
Power Consumption	Transmitter: 2.9Watt Receiver: 1.8Watt
Temperature	Operating: 0° to 40°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing
Enclosure	Metal black
Dimensions	4.40" x 3.00" x 1.00" (11.2 x 7.6 x 2.5cm)
Weight	1.1lbs (0.5kg)
Compliance	Regulatory: FCC, CE, RoHS
Warranty	3 years
Order Information	500754 Video Wall over IP Extender Kit with PoE (UPC: 627699007549) 500754-TX Video Wall over IP Extender TX with PoE (UPC: 627699907542) 500754-RX Video Wall over IP Extender RX with PoE (UPC: 627699807545)
Network Controller	500811 ProDigital Network Controller (supports Video Wall over IP)
Accessories (These items are sold separately)	500905 3-Port Rackmount Transceiver Chassis 500920 Rackmount Transceiver Chassis 16-Port 500917 Wall Mount Transceiver Bracket Kit 500990 IR Emitter, and 500991 IR Sensor 500992 Univ. Power Supply 5VDC/1.2A US/UK/EU Blade

Typical Application Schematic

Transmitter (500754-TX)

Receiver (500754-RX)