

## Overview

The HDMI over IP PoE Extender 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 SG350 Series Managed Switches.

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.
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	Cat5e/6: 330ft (100m) up to 1080p
Based on a maximum	Note: When installed in an electrically
length of 6.6ft (2m) of	noisy environment, an STP cable must be
HDMI cable per end.	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	100BaseT for Point to Point; 1000BaseT
Requirement	for other configuration
IR Frequency	38 to 56KHz
Cable	One (1) Cat 5e/6 or better twisted pair
	cables required



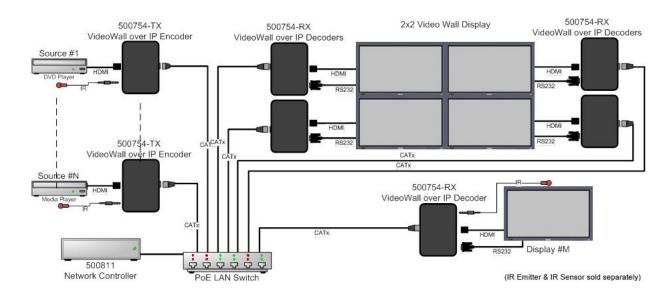
## **Key Features**

- 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 multipointto-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)

RJ45 Pin	RJ45 Link Pair 3 Pair 1 Pair 2 Pair 4 Pair 2 Pair 1 Pair 3 Pair 4
Configuration	Pin 1 (R) Pin 2 (T)
Reverse Polarity	Pin 3 (R) Pin 6 (T)
Sensitive. Use EIA/TIA	Pin 4 (R) Pin 5 (T)
568A or 586B straight-	Pin 7 (R) Pin 8 (T)
through wiring.	FIASGRA FIASGR
Power Supply	This device supports PoE (PD), an external power
Fower Supply	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-TX HDMI over IP PoE Transmitter
	(UPC: 627699907542)
	500754-RX HDMI over IP PoE Receiver
	(UPC: 627699807545)
Accessories	500905 3-Port Rackmount Transceiver Chassis
(These items are sold	500920 Rackmount Transceiver Chassis 16-Port
separately)	500917 Wall Mount Transceiver Bracket Kit
	500990 IR Emitter, and 500991 IR Sensor
	500992 Univ. Power Supply 5VDC/1.2A
	US/UK/EU Blade

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## **Typical Application Schematic**





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