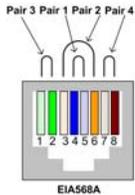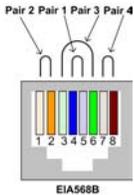# Specifications

Environment	HDMI 1.3a
Devices	DVD, plasma, projectors, monitors, TV, PC, laptops, servers supporting HDMI. *Compatible with MuxLab p/n 500401.*
Transmission	Transparent to the user
Bandwidth	225MHz
Signals	HDMI 1.3a protocol
Connectors	HDMI receptacle. Two (2) RJ45S for Cat5 unshielded or shielded twisted pair. *HDMI cables not included.*
Power Switch	Switch on rear panel to select between Power or No-Power. Factory setting: Power
Max. Distance* **Based on a maximum length of 6.6 ft (2m) of HDMI cable per end*	480i/p: Cat5e: 300 ft (90 m) Cat6: 300 ft (90 m) 720p, 1080i: Cat5e: 200 ft (60 m) Cat6: 250 ft (76 m) 1080p 8-bit: Cat5e: 150 ft (45 m) Cat6: 200 ft (60 m) 1080p 12-bit Deep Color: not specified Cat6: 90 ft (27 m) "No Power" Mode: Cat5e: 100 ft (30m) Cat6: 100 ft (30m) When installed in an electrically noisy environment, STP cable must be used. Also, cross-connection reduces the effective distance depending on the grade of twisted cable used. Patch panels are not recommended with 1080p Deep Color.
RJ45 Pin Configuration *Reverse Polarity Sensitive Use EIA/TIA 568 A or B, straight-through wiring.*	RJ45 A (Video) Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) RJ45 B (DDC) Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T)
Cable	Two (2) Category 5e or better twisted pair cables required.
Power Supply	One (1) 110-240V/12VDC power supply with interchangeable blades
Power Consumption	3W
Temperature	Operating: 0º to 55º C. Storage: -20º to 85º C. Humidity: up to 95% non-condensing.
Enclosure	ABS fire retardant plastic
Dimensions	86 mm x 86 mm x 36 mm. Choose 40-mm deep back box to allow for Cat 5E/6 wiring connection.
Weight	1.6 LB/0.7 Kg
Mounting	Velcro pads included.
Compliance	Regulatory: FCC, CE, RoHS, Decora® faceplate. Flammability: 94V0
Warranty	2 years
Order Information	500401-WP-UK HDMI Wall Plate Extender Kit UPC: 6-27699-91401-4

94-000691-B   SE-000691-B

HDMI Wall Plate Extender Kit (500401-WP-UK)

Quick Installation Guide

Overview

The HDMI Wall Plate Extender Kit Wall Plate (500401-WP-UK) allows HDMI equipment to be connected up to 200 ft (60m) @ 1080i via two (2) Cat5e unshielded twisted pair cables in a point-to-point configuration. The product also supports 1080p Deep Color up to 90 ft (27m) via Cat6 cable. The kit comes with one (1) Transmitter and one (1) Receiver. The receiver balun features a switch that allows the device to function without a PSU connected. Applications include; commercial and residential AV systems, classroom projector systems, digital signage, boardroom systems, collaborative PC systems, medical information systems.

Pre-Installation Check

Identify the connectors on the Transmitter (Source side) and Receiver (Display side). The Source side has an HDMI In connector. The Display side has an HDMI Out connector, two LED indicators for Power and Sync, and a Power Supply connector.

Installation

Verify that the distance between the HDMI Transmitter and Receiver are within MuxLab specifications (see Specifications table).

If the receiver is being used without a PSU then the switch must be set to "No-Power" and if the receiver is being used with PSU, then the switch must be set to "Power" (factory setting)
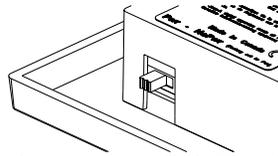
Identify the pin configuration of the baluns. Two (2) Cat5e or better are required. The pin configuration follows the EIA/TIA 568A/B standard. The HDMI Wall Plate Extender Kit is reverse polarity sensitive. Please ensure that wiring is straight through (Ring to Ring, Tip to Tip).

1. To install the HDMI Transmitter or Receiver in a single back box, choose a back box with a depth of 40 mm or more or a mud ring. Connect the RJ45 plug into the rear of the extender. Secure the extender with the 2 front screws.
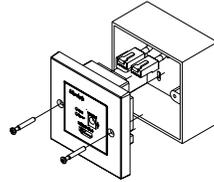
In order to install the Transmitter, please follow the steps below:

2. Connect the Transmitter to the HDMI video source with an HDMI compliant cable.

3. Connect two (2) lengths of Cat5e (or higher) grade UTP cables to the Video and DDC OUT connectors on Transmitter.

In order to install the Receiver, please follow the steps below:

4. Connect the Receiver to the HDMI display equipment with an HDMI compliant cable.

5. Connect the two (2) Cat5e cables to the Video and DDC IN connectors of the Receiver.

    Note: Verify that the cables are connected straight-through (i.e. Video to Video, DDC to DDC) and not inverted.

6. Connect the 12 VDC power supply first to the Receiver and then plug the power supply into an AC power outlet. If power is present, then the green power LED will be ON.

    Note: Power the HDMI Wall Plate Extender Balun only after all connections are made.

7. Power on the HDMI equipment and verify the image quality.

8. The following diagram shows the final configuration.
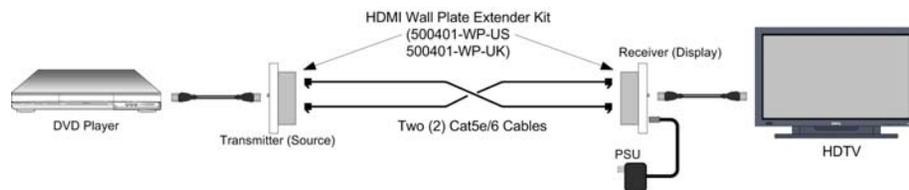
9. To mount the wall plate balun in a gang plate, you must first remove the rear 4 screws, then remove the balun. Then unclip the balun front plastic panel.
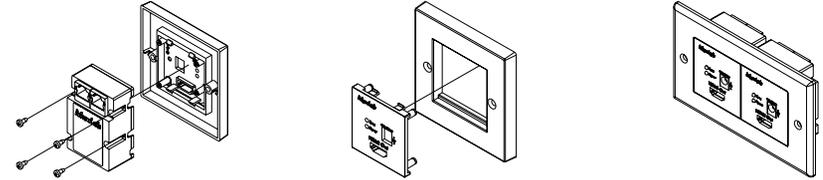
10. Clip the front plastic panel to a standard gang plate and secure the balun using its 4 screws. Multiple wall baluns can be mounted side by side on a gang plate.
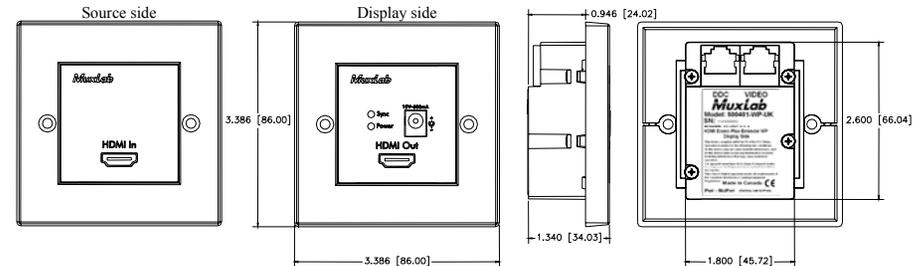
Troubleshooting

The following tables describe some of the symptoms, probable causes and possible solutions in respect to the installation of the HDMI Wall Plate Extender Kit Wall Plate. If you still cannot diagnose the problem, please call MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).

Picture/ Sound	Power LED	Sync LED	Probable Cause	Possible Solution
No Image	OFF	OFF	No power	Check power connections
No Image	OFF or ON	OFF	No power or not enough power	Check to make sure power switch is in correct position.
No Image	ON	OFF	Wiring	Check continuity Check correct wiring Verify that Video and DDC Cat5 cables are not inverted.
No Image	ON	ON	Synchronization	Power off the source and the display. Cycle power of the HDMI Extender and power on the devices.
Flickering Image	ON	ON	Synchronization	Check cable length
Choppy Sound	ON	ON	Synchronization	Check cable length
Noise in image	ON	ON	Weak signal	Check cable length Verify that the HDMI cables are certified HDMI 1.3a for 1080p Deep Color.
Green or pink hue	ON	ON	DDC cable	Cycle power of the HDMI Extender. Check DDC cable and replace.
Image Flicker when powering up equipment nearby	ON	ON	Interference	Use STP cables.