
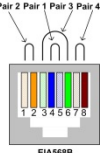


# Specifications

<b>Environment</b>	HDMI 1.4a (3D)
<b>Devices</b>	DVD, plasma, projectors, monitors, TV, PC, laptops, servers supporting HDMI.
<b>Transmission</b>	Transparent to the user
<b>Bandwidth</b>	340MHz
<b>Signals</b>	HDMI 1.4a protocol
<b>Connectors</b>	HDMI receptacle. One (1) RJ45S for Cat5e/6 unshielded or shielded twisted pair. <i>HDMI cables not included.</i>
<b>Max. Distance*</b>	Cat 5e/6: 200 ft (60 m) up to 1080P Deep Color 131 ft (40 m) for 4K; 3840 x 2160/24, 25 & 30 Hz. <i>*Based on a maximum length of 6.6 ft (2m) of HDMI cable per end. 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.</i>
<b>RJ45 Pin Configuration</b> <i>Reverse Polarity Sensitive Use EIA/TIA 568 A or B, straight-through wiring.</i>	RJ45  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>EIA568A</p> </div> <div style="text-align: center;">  <p>EIA568B</p> </div> </div> <p>Pin 1 (R)    Pin 2 (T) Pin 3 (R)    Pin 6 (T) Pin 4 (R)    Pin 5 (T) Pin 7 (R)    Pin 8 (T)</p>
<b>Cable</b>	One (1) Category 5e or better twisted pair cables required.
<b>Power Supply</b>	One (1) 110-240V/5VDC power supply with interchangeable blades
<b>Power Consumption</b>	6W
<b>Temperature</b>	Operating: 0° to 40° C. Storage: -20° to 85° C. Humidity: up to 95% non-condensing.
<b>Enclosure</b>	Metal Wall-Plate one gang
<b>Dimensions</b>	4.5" x 2.80" x 1.50" (115 x 71 x 38 mm). Choose 1.97" (50 mm) deep back box to allow for Cat 5E/6 wiring connection.
<b>Weight</b>	1.6 LB (0.7 Kg)
<b>Mounting</b>	Scews included
<b>Compliance</b>	Regulatory: FCC, CE, RoHS
<b>Warranty</b>	2 years
<b>Order Information</b>	500451-WP-KIT    HDMI Wall-Plate Extender Kit, HDBT Lite, UHD-4K 500451-WP-RX    HDMI Wall-Plate Receiver, HDBT Lite, UHD-4K 500451-WP-TX    HDMI Wall-Plate Transmitter, HDBT Lite, UHD-4K



8495 Dalton Road, Mount Royal, Quebec, Canada. H4T 1V5  
Tel: (514) 905-0588 Fax: (514) 905-0589  
Toll Free (North America): (877) 689-5228  
E-mail: [videoease@muxlab.com](mailto:videoease@muxlab.com) URL: [www.muxlab.com](http://www.muxlab.com)



## HDMI Wall-Plate Extender Kit (500451-WP-KIT)

### Quick Installation Guide

## Overview

The HDMI Wall-Plate Extender Kit (500451-WP-KIT) allows HDMI equipment to be connected up to 200 ft (60m) @ 1080P via one (1) Cat5e/6 unshielded twisted pair cables in a point-to-point configuration. The kit comes with one (1) Transmitter and one (1) Receiver.

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. Both products have two LED indicators for Power and RJ45 Sync, IR Sensor and Emitter and a Power Supply connector.

# Installation

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

1. Identify the pin configuration of the baluns. 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).
2. To install the HDMI Transmitter or Receiver in a single back box, choose a back box with a depth of 1.97" (50 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:

3. Connect the Transmitter to the HDMI video source with an HDMI compliant cable.
4. Connect the Cat5e (or higher) grade UTP cables to the RJ45 Link connectors on Transmitter.
5. Connect the Receiver to the HDMI display equipment with an HDMI compliant cable.
6. Connect the Cat5e (or higher) grade UTP cables to the RJ45 Link connectors of the Receiver.
7. Connect the 5 VDC power supply first to the Receiver first and then plug the power supply into an AC power outlet. Connect the 5 VDC power supply first to the Transmitter first and then plug the power supply into an AC power outlet. If power is present, then the green power LED of the Transmitter and Receiver will be ON.

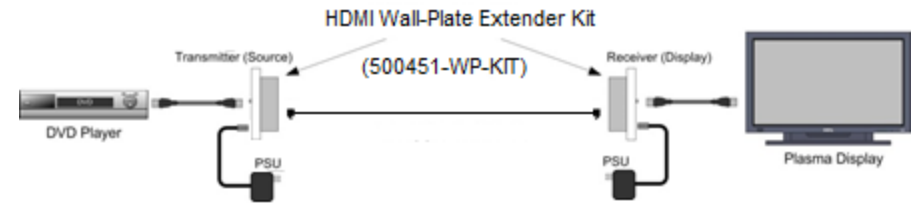
**Note: Power the HDMI Wall-Plate Extender Balun only after all connections are made.**

8. Power on the HDMI equipment and verify the image quality
9. This product support bidirectional IR Control.

**Note: You can differentiate the IR Sensor and the IR Emitter by looking at the 3.5 mm plug. The IR Sensor is using a Stereo Plug (3 Contacts) and the IR Emitter a mono plug (2 Contacts).**

10. Position the IR Sensor so that it is directed to the hand-held remote control. For a clear IR signal reception, aim the hand-held remote control to the top of the IR Sensor enclosure.
11. Position the IR Emitter as close as possible to the source's IR Sensor (i.e. DVD player). For a clear IR signal reception, the IR Emitter can be glued on the source's IR Sensor. The IR Emitter's signal is transmitted from the side of the enclosure.

12. The following diagram shows the final configuration.



# 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.

Picture/Sound	Power LED	Sync LED	Probable Cause	Possible Solution
No Image	OFF	OFF	No power	Check power connections
No Image	ON	OFF	Wiring	Check continuity Check correct wiring
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
Image Flicker when powering up equipment nearby	ON	ON	Interference	Use STP cables.
IR not functioning	ON	ON	Remote control not directed to the IR Sensor or IR Emitter not directed to the source.	Make sure the IR Sensor is directed towards the remote and the IR Emitter to the equipment
IR not functioning	ON	ON	Interference from sunlight, Fluorescent, Neon or Halogen lights	Place the IR equipment away for the interfering light
IR not functioning	ON	ON	Interference from RF radiation from the TV	Place the IR equipment away for the RF radiation

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).