Specifications

DVD, plasma, projectors, monitors, TV, PC, laptops, servers supporting HDMI. Not compatible with MuxLab p/n 500400. Transmission
Transmission Transparent to the user Bandwidth 225MHz Signals HDMI 1:ap protocol 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* 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: 200 ft (60 m) 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 ELATIA 568 A or B, Straight-through wiring. 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) RJ45 B (DDC) Pin 1 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) Cable HDMI 1:ap protocol Cat5e: 100 ft (30m) Cat6: 300 ft (90 m) Cat6: 250 ft (76 m) Cat6: 250 ft (76 m) Cat6: 250 ft (60 m) Cat6: 250 ft (76 m) Pin 2 (50 m) Pin 3 (8) Pin 6 (10 m) Pin 4 (R) Pin 2 (10 p) Pin 3 (R) Pin 6 (10 p) Pin 4 (R) Pin 5 (10 p) Pin 7 (R) Pin 8 (T)
Transmission Bandwidth 225MHz HDMI 1.3a protocol 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* 480i/p: 720p, 1080i: 1080p 8-bit: Cat5e: 200 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) Cat6: 200 ft (76 m) Cat6: 200 ft (60 m) Cat6: 200 ft (60 m) Cat6: 200 ft (70 m) Cat6: 200 ft (60 m) Cat6: 200 ft
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HDMI receptacle. Two (2) RJ45S for Cat5 unshielded or shielded twisted pair. HDMI cables not included.
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*Based on a maximum length of 6.6 ft (2m) of HDMI cable per end *Based on a maximum length of 6.6 ft (2m) of HDMI cable per end *Based on a maximum length of 6.6 ft (2m) of HDMI cable per end *Based on a maximum length of 6.6 ft (2m) of HDMI cable per end *Based on a maximum length of 6.6 ft (2m) of HDMI cable per end *Based on a maximum length of 6.6 ft (2m) of HDMI cable per end *Based on a maximum length of 6.6 ft (2m) of 1080p 12-bit Deep Color: *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. *Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) *Pair 3 Pair 1 Pair 2 Pair 4 *Pair 2 Pair 1 Pair 3 Pair 4
*Based on a maximum length of 6.6 ft (2m) of HDMI cable per end 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. Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) Pin 1 (R) Pin 5 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) Cable Cat6: 200 ft (60 m) Cat6: 100 ft (30m) Cat6: 100
of 6.6 ft (2m) of HDMI cable per end 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 B (DDC) Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) Cable Two (2) Category 5e or better twisted pair cables required.
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Reverse Polarity Sensitive Pin 1 (R) Pin 2 (T) Pair 3 Pair 1 Pair 2 Pair 4 Pair 2 Pair 1 Pair 3 Pair 4
Use EIA/TIA 568 A or B, straight-through wiring. 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 5 (T) Pin 7 (R) Pin 8 (T) Cable Two (2) Category 5e or better twisted pair cables required.
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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 RJ45 B (DDC) EIA568A EIA568B EIA568B EIA568B EIA568B EIA568B EIA568B
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.
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Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) Cable Two (2) Category 5e or better twisted pair cables required.
Pin 4 (K) Pin 5 (1) Pin 7 (R) Pin 8 (T) Cable Two (2) Category 5e or better twisted pair cables required.
Cable Two (2) Category 5e or better twisted pair cables required.
Power Consumption 3W
Temperature Operating: 0° to 55° C. Storage:-20° to 85° C. Humidity: up to 95% non-
condensing.
Enclosure ABS fire retardant plastic, Color white, Finish glossy.
Dimensions 4.1" (104 mm) x 1.8" (45.7 mm) x 1.44" (36.6 mm). Choose 1.6" (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, European Standard for 86 mm faceplate.
Flammability: 94V0
Warranty 2 years
Order Information 500401-WP-US HDMI Wall Plate Extender Kit
UPC: 6-27699-92401-3



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

Quick Installation Guide

Overview

The HDMI Wall Plate Extender Kit Wall Plate (500401-WP-US) 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

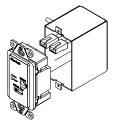
Identify the connectors on the Transmitter (Source side) and Receiver (Display side). The Source side has an HDMI In connector. The Display side has an HDMI Out connector, two LED indicators for Power and Sync, and a Power Supply connector.

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)

- 1. 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).
- 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.
- Place a Decora® faceplate (not included) and secure with the 2 front screws.



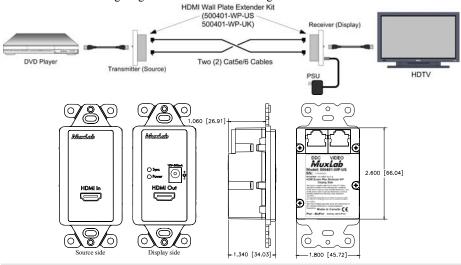
In order to install the Transmitter, please follow the steps below:

- Connect the Transmitter to the HDMI video source with an HDMI compliant cable.
- 5. 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:

- Connect the Receiver to the HDMI display equipment with an HDMI compliant cable.
- 7. 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.
- 8. 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.
- 9. Power on the HDMI equipment and verify the image quality

10. 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 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.

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