Specifications

Environment	HDMI 1.3a and DVI-D
Devices	DVD, plasma, projectors, monitors, TV, PC, laptops, servers supporting HDMI.
Transmission	Unidirectional. Transparent to the user
Bandwidth	340 MHz
Signals	HDMI 1.3a protocol
Copy Protection	Do NOT Support HDCP protected content.
Connectors	TX Side: One (1) HDMI receptacle. One (1) LC Fiber connector (output only). One (1) 2.1mm power connector. TX Side: One (1) HDMI receptacle. One (1) LC Fiber connector (input only). One (1) 2.1mm power connector. *Note: HDMI and Fiber cables not included.*
Maximum Distance *Based on a maximum length of 6.6 ft (2 m) of HDMI cable per end.*	480i/p: 984ft (300m) 720p, 1080i: 984ft (300m) 1080p 8-bit: 984ft (300m) 1080p 12-bit deep-color: 984ft (300m) 4K @ 24,25, 30Hz 984ft (300m)
Cable	One (1) Multimode fiber 50/125 µm OM3 cable required
Power Supply	Two (2) 110-240V/5VDC power supply with interchangeable blades
Power Consumption	Transmitter: 1.35 Watt Receiver: 1.15 Watt
Temperature	Operating: 0° to 55°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing
Enclosure	Aluminium
Dimensions	3.27" x 1.97" x 0.75" (83 x 50 x 19 mm)
Weight	1.0 lb (0.45 kg)
Compliance	Regulatory: FCC Class A, CE, RoHS
Warranty	2 years
Order Information	500462 HDMI Optical Isolator Kit

94-000776-A   SE-000776-A

HDMI Optical Isolator Kit
500462
Quick Installation Guide

Overview

The HDMI Optical Isolator (500462) allows HDMI equipment to be completely isolated and connected up to 984ft (300m), while allowing a unidirectional communication (with no return signaling) via one (1) LC 50/125 µm OM3 multimode fiber cable in a point-to-point configuration at 1080p resolution.

The HDMI Optical Isolator establishes a high separation between the source computer and the display devices preventing any potential leakage between the source and the peripheral equipment; removing the vulnerability of shared display equipment to cyber-attacks.

The kit comes with one (1) Transmitter, one (1) Receiver and two (2) power supply.

Applications

Commercial and residential AV systems, classroom projector systems, digital signage, boardroom systems, collaborative PC systems, and medical information systems, high security applications.

Key Features

- Complete optical isolation between source and display.
- Unidirectional HDMI communication.
- No return signaling.
- Fixed EDID configuration.
- Up to 984ft (300m) @ 1080p via one (1) LC multimode fiber.
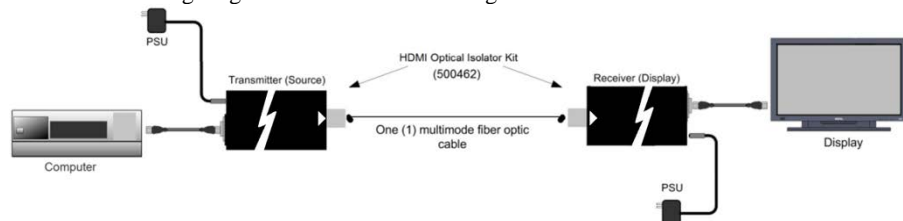
Installation

1. Identify the connectors on the Transmitter and Receiver as indicated on the product labels.

2. Verify that the distance between the HDMI Optical Isolator Transmitter and Receiver is within MuxLab specifications (see Specifications table).

3. To install the Transmitter:

   3a. Connect the Transmitter to the HDMI video source with an HDMI compliant cable.

   3b. Connect one (1) length of multi-mode fiber cable to the LC Fiber connector on the Transmitter.

4. To install the Receiver:

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

   4b. Connect the one (1) length of multi-mode fiber cable to the LC Fiber connector on the Receiver.

5. Connect the 5 VDC power supply to the Receiver first, and then plug the power supply into an AC power outlet. Connect the 5 VDC power supply to the Transmitter first, and then plug the power supply into an AC power outlet.

   Note: Power the HDMI Optical Isolator only after all connections are made.

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

7. The following diagram shows the final configuration.

Troubleshooting

The following table describes some of the symptoms, probable causes and possible solutions in respect to the installation of the HDMI Optical Isolator Kit:

Symptom	Probable Cause	Possible Solutions
No Image	No power	• Check power connections
No Image	Fiber Cable	• Check the Fiber cables.
No Image	HDMI Cable	• Check the HDMI Cable.
No Image	Synchronization	• Check cable length.
Flickering Image	Synchronization	• Check cable length • Check the HDMI Cable Quality.
Choppy sound	Synchronization	• Check cable length • Check the HDMI Cable Quality.
Green or pink hue	DDC communication	• Cycle power of the HDMI Optical Isolator.
Image flickers when powering up nearby equipment	Interference	• Move HDMI Optical Isolator away from the source of the interference.

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).