Specifications

Environment	HDMI 1.3a (Supports the 3D feature of HDMI 1.4)			
Devices	DVD, plasma, projectors, monitors, TV, PC, laptops, servers supporting HDMI.			
Transmission	Supports 1x1 point-to-point and up to 1x4 point-to-multipoint.			
	Transparent to the user.			
Bandwidth	165 MHz			
Signals	HDMI 1.3a protocol, HDCP			
Connectors	Two (2) HDMI receptacle (for TX unit).			
	One (1) HDMI receptacle (for RX unit).			
	One (1) 3.5mm jack for IR sensor (for RX unit).			
Note: HDMI cables not	One (1) 2.5mm jack for IR emitter (for TX unit).			
included.	One (1) Mini USB Power Connector.			
Switch	Push button for pairing.			
Latency	Less than 500msec			
Compression	H.264			
Bandwidth	Up to 15Mbps			
Maximum Distance Based on a maximum length of 6.6ft (2m) of HDMI cable	Wireless transmission up to 100ft (30m) maximum, with line of sight between TX & RX, at up to 1080p. Transmission through walls is possible with reduced distance performance depending on wall construction. For best performance avoid high density walls, such as concrete and metal walls, as they may not allow the signal to be			
per end.	transmitted through them, and place the TX & RX away from other interfering wireless devices.			
IR Frequency	Wideband 30KHz to 60KHz			
Power Supply	One (1) 110-240V to 5VDC, 1A Micro USB power supply with interchangeable blades per HDMI Wireless Extender unit.			
Power Consumption	Transmitter: 4.5 Watt (Max) Receiver: 3.5 Watt (Max)			
Temperature	Operating: 0° to 40°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing			
Enclosure	Plastic			
Dimensions	3.3" x 3.3" x 0.5" (84mm x 84mm x 13mm)			
Weight	11bs (0.45kg)			
Compliance	Regulatory: FCC, CE, RoHS Flammability: 94V0			
Warranty	2 years			
Order Information	100503 HDMI Wireless Extender Kit			



2321 Cohen St, Montreal, Quebec, Canada. H4R 2N7 Tel: (514) 905-0588 Fax: (514) 905-0589 Toll Free (North America): (877) 689-5228 E-mail: <u>info@muxlab.com</u> URL: <u>www.muxlab.com</u>



HDMI Wireless Extender Kit

100503

Quick Installation Guide

Overview

The HDMI Wireless Extender Kit (100503) allows HDMI equipment to be connected wirelessly up to 100ft (30m) maximum, with line of sight between TX & RX, at up to 1080p in a point-to-point configuration. In addition up to four Receivers may be paired with one Transmitter for point-to-multipoint applications (Receivers may be purchased separately). Transmission through walls is possible with reduced distance performance depending on wall construction. The Transmitter and Receiver form a private wireless network between both units, and do not require a customer's router based wireless network to operate. The kit comes with one (1) Transmitter and one (1) Receiver as well as an IR Emitter and an IR Sensor for remote control applications.

Applications

Applications include commercial and residential AV systems, classroom projector systems, digital signage, boardroom systems, collaborative PC systems, Home Theatre, Showroom, and hard to reach locations.

Installation

- 1. Identify the connectors on the Transmitter and Receiver as indicated on the product labels, refer to the product diagram above.
- 2. Verify that the distance between the Transmitter and Receiver is within MuxLab specifications (see Specifications table for more details). The Transmitter and Receiver form a private wireless network between both units, and do not require a customer's router based wireless network to operate. Up to four Receivers may be paired with one Transmitter. Note: The distance specification is for line of sight between TX & RX. Transmission through walls is possible with reduced distance performance depending on wall construction. For best performance avoid high density walls, such as concrete and metal walls, as they may not allow the signal to be transmitted through them, and place the TX & RX away from other interfering wireless devices.
- 3. To install the Transmitter:
 - 3a. Connect the Transmitter HDMI-IN port to the HDMI video source with an HDMI compliant cable.
 - 3b. Connect the Transmitter HDMI-OUT port to the local HDMI display equipment (optional) with an HDMI compliant cable.
- 4. To install the Receiver:

- 3a. Connect the Receiver HDMI-OUT port to the HDMI display equipment with an HDMI compliant cable.
- 5. Connect the 5 VDC power supply to the Receiver first, and then plug the power supply into an AC power outlet. Next connect the 5 VDC power supply to the Transmitter, and then plug the power supply into an AC power outlet. If power is present, the red power LED of the Transmitter and the Receiver will be illuminated.

Note: Power the HDMI Wireless Extender only after all connections are made.

- 6. Power the HDMI equipment, and pair the Transmitter and Receiver:
 - 6a. Press the "Pair" button of the Receiver. You will see the message "Connecting through Pairing..." on the screen.
 - 6b. Press the "Pair" button of the Transmitter. You will see the message "Connecting..." and then "Connected...". The connection is now made.
 - 6c. Verify the image quality.
- 7. This product supports unidirectional IR control. If infrared remote control is needed to control the Source equipment from the Display, connect the IR Sensor to the 3.5mm Stereo Jack of the Receiver and the IR Emitter to the 2.5mm Mono Jack of the Transmitter.

Note: You can differentiate the IR Sensor and the IR Emitter by looking at the 3.5mm and 2.5mm plugs. The IR Sensor is using a 3.5mm Stereo Plug (3 Contacts) and the IR Emitter a 2.5mm mono plug (2 Contacts).

- 8. 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 at the top of the IR Sensor enclosure.
- 9. 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.
- 10. Do not cover the TX or the RX devices as not to block air circulation.
- 11. The following diagram shows the final configuration.



Troubleshooting

The following table describes some of the symptoms, probable causes and possible solutions in regard to the installation of the HDMI Wireless Extender Kit:

Symptom	TX LED	RX LED	Probable Cause	Possible Solutions
No Image	OFF	OFF	No power	Check power connections
No Image	ON	OFF	No power	Check RX power connection
No Image	OFF	ON	No power	Check TX power connection
No Image	ON	ON	Wireless interference	• Move the TX and RX devices away from the wireless source.

Symptom	TX LED	RX LED	Probable Cause	Possible Solutions
No Image	ON	ON	HDMI Cable	Check the HDMI Cable.
No Image	ON	ON	Synchronization	• Check distance between TX and RX.
Flickering Image	ON	ON	Synchronization	 Check distance between TX and RX. Check the HDMI Cable Quality. Change the position of TX and/or RX to get a better reception.
No Sound	ON	ON	Display not properly set.	Adjust display volume.
Choppy sound	ON	ON	Synchronization	Check distance between TX and RX.Check the HDMI Cable Quality.
Green or pink hue	ON	ON	DDC communication	Cycle power of the HDMI Extenders.Check distance between TX and RX.
Image flickers when powering up nearby equipment	ON	ON	Interference	• Move the TX and RX devices away from the interfering source.
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 source equipment.
IR not functioning	ON	ON	Interference from sunlight, Fluorescent, Neon or Halogen lights.	Place the IR equipment away for the interfering light source.
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).

Statements

FCC and Industry Canada:

This device complies with FCC Part 15 and Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

Industry Canada:

This device complies with Health Canada's Safety Code. The installer of this device should ensure that RF radiation is not emitted in excess of the Health Canada's requirement.

Cet appareil est conforme avec Santé Canada Code de sécurité 6. L'installateur de cet appareil doit s'assurer que les rayonnements RF ne sont pas émis au-delà de l'exigence de Santé Canada.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Les changements ou modifications non expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à utiliser cet équipement.