Specifications

Environment	SDI single link: SD, HD & 3G.
Devices	Monitors supporting the original SDI rate **only**.
Standard supported	SMPTE 259M (270Mb/s), SMPTE 292M & SMPTE 424M.
Bit rates	270Mb/s, 1.485Gb/s & 2.97 Gb/s (automatic selection).

Video format supported *(monitor must support the original SDI rate)*	SD: 525i, 59.94/60Hz & 625i, 50Hz
	HD: 720p @ 60Hz, 50Hz, 30Hz, 25Hz & 24Hz
	  1080i @ 60Hz & 50Hz
	  1080p @ 30Hz, 25Hz & 24Hz
	3G: 1080p @ 60Hz & 50Hz

Sound format supported	48kHz @ 24 bit, 20 bit & 16 bit.
Indicators	Power SDI Sync (on rx side only) RJ45 Sync Video (on tx side only) Sound (on tx side only) HDMI Sync (on rx side only)
Connectors *On each unit*	One BNC 75 ohm female on source side. One HDMI on receiver on receiver side One RJ45S for Cat5e/6 unshielded twisted pair. One power connector, 2mm.
Maximum Distance	UTP Cat 5e: 330 ft (100 m) UTP Cat 6: 400 ft (122 m) Maximum distance applies for all format and speed between boxes. On SDI side: 450 ft (140m). On HDMI side: 15 ft (5 m) typical.
RJ45 Pin Configuration *Use EIA/TIA 568A or 586B straight-through wiring only.*	**RJ45 Link** Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T)
Cables *(Not included)*	One straight Cat 5e/6 twisted pair cables required. One 75 ohm coaxial cables with 75 ohm BNC required. One HDMI cable.
Power Supply *(Included)*	Two 100-240V/5VDC 6W power supplies with interchangeable blades for NA, Europe and UK.
Power Consumption	Transmitter: 4 Watts Receiver: 6 Watts
Temperature	Operating: 0° to 40°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing
Enclosure	6061 Aluminum alloy
Dimensions	4.50" x 3.00" x 1.25" (11.4 x 7.6 x 3.2 cm)
Weight	2.5 lb. (1.1 kg)
Warranty	2 years
Order Information	500715 HD-SD to HDMI Extender Kit
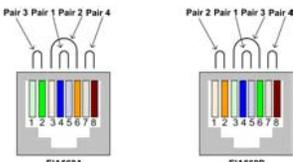
HD-SDI to HDMI Extender Kit
500715
Quick Installation Guide

Overview

The HD-SDI to HDMI Extender Kit allows a HD-SDI source to be converted to a HDMI signal and transmitted up to 330 ft (100m) via Cat5e cable in a point-to-point configuration to a HDMI monitor. The kit supports transmission of up to 2.97/3.0 Gbps uncompressed, digital video including digital sound within television facilities.

Applications

Applications include broadcast, commercial and residential AV systems, classroom projector systems, digital signage, boardroom systems, and medical information systems.
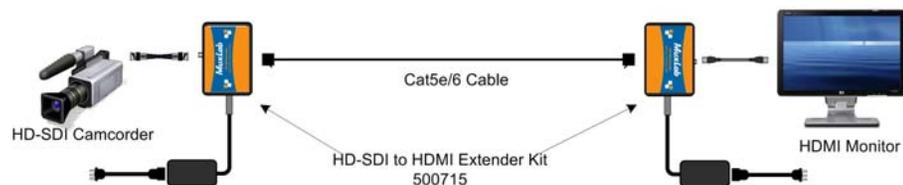
Installation

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

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

3. To install the Transmitter:

   3a. Connect the Transmitter to the SDI video source with a BNC 75-ohm coaxial cable.

   3b. Connect one (1) lengths of Cat 5e/6 (or higher) grade UTP cables to the RJ45 LINK connectors on the Transmitter. Use a straight-through cable only.

   3c. Install the unit in a location with adequate ventilation.

4. To install the Receiver:

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

   4b. Connect the one (1) Cat 5e/6 cables to the RJ45 LINK connectors on the Receiver.

   4c. Install the unit in a location with adequate ventilation.

5. Connect a power supply to each unit, and then plug the power supply into an AC power outlet. If power is present, the green Power led should be ON. If cable is correctly connected the RJ45 Sync led should be ON.

6. Power the equipment and verify the image quality. If signal is valid the RJ45 Sync LED should be ON and the SDI LED should be ON.

7. The following diagram shows the final configuration.

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Troubleshooting

The following table describes some of the symptoms, probable causes and possible solutions in respect to the installation of the HD-SDI to HDMI Extender Kit:

LEDS	Status	Possible cause	Action
PWR	OFF	No AC power or defective power supply.	Try swapping the two power supplies.
RJ45 SYNC	OFF	No functional link between the 2 units. Remote unit off or defective. UTP cable not connected. Bad UTP cable. Cable too long.	Turn on remote unit. Cable must be straight-through and not crossed. Cable must be Cat5e/6 or better. Length must be 330 ft (100m) or less.
SDI SYNC (on tx only)	OFF	No valid SDI signal, unsupported format or coax too long. No SDI signal or invalid signal.	Turn on SDI equipment. Try with a good short 75 ohm coax cable.
VIDEO (on tx only)	OFF FLASHING ON	No source Incompatible monitor. Video OK	- Change monitor for one that support the original format.
SOUND (on tx only)	OFF FLASHING ON	No sound present. Monitor does not supported sound or 48kHz rate. Sound OK	No sound in the SDI signal. Change monitor for one that support the sound.
HDMI (on rx only)	OFF FLASHING or ON	Monitor or cable in problem. Good.	Check cable or monitor. No power on monitor.

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).