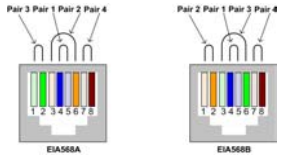


# Specifications

<b>Environment</b>	SDI single link: SD, HD & 3G.										
<b>Devices</b>	Monitors or any equipment supporting SDI single link.										
<b>Standard supported</b>	SMPTE 259M (270Mb/s), SMPTE 292M & SMPTE 424M.										
<b>Bit rates</b>	270Mb/s, 1.485Gb/s & 2.97 Gb/s (automatic selection).										
<b>Format tested</b>	SD: 525i, 59.94 Hz & 625i, 50 Hz HD: 1035i, 60 Hz & 1080i, 50 Hz & 1080p, 30 Hz & 1080i, 60 Hz & 1080p, 25 Hz & 1080i, 50 Hz & 1080p, 24 Hz & 720p, 60 Hz 3G: 1080p, 4:2:2, 10b, 60Hz & 1080p, 4:2:2, 10b, 50Hz & 720p, 4:4:4:4, 10b, 60Hz & 720p, 4:4:4:4, 10b, 50Hz & 1080p, 4:4:4:4, 10b, 30Hz & 720p, 4:4:4:4, 10b, 30Hz & 1080p, 4:4:4:4, 10b, 25Hz & 720p, 4:4:4:4, 10b, 25Hz & 1080p, 4:4:4:4, 10b, 24Hz & 720p, 4:4:4:4, 10b, 24Hz & 1080i, 4:4:4:4, 10b, 30Hz & 1080i, 4:4:4:4, 10b, 25Hz & 1080p, 4:4:4, 12b, 30Hz & 1080p, 4:4:4, 12b, 25Hz & 1080p, 4:4:4, 12b, 24Hz & 1080i, 4:4:4, 12b, 30Hz & 1080i, 4:4:4, 12b, 25Hz & 1080p, 4:2:2, 12b, 30Hz & 1080p, 4:2:2, 12b, 25Hz & 1080i, 4:2:2, 12b, 30Hz & 1080i, 4:2:2, 12b, 25Hz										
<b>Indicators</b>	Power SDI Sync RJ45 Link										
<b>Connectors</b> <i>On each unit</i>	One BNC 75 ohm female. One RJ45S for Cat5e/6 unshielded twisted pair. One power connector, 2mm.										
<b>Maximum Distance</b>	UTP Cat 5e: 330 ft (100 m). UTP Cat 6: 400 ft (122 m) Maximum distance applies for all formats and speed between boxes. On the SDI side, the use of an equalizer at input and a clock regenerator at output allow to reach the maximum distance on coax.										
<b>RJ45 Pin Configuration</b> <i>Reverse Polarity Sensitive. Use EIA/TIA 568A or 586B straight-through wiring.</i>	<table border="0"> <tr> <td><b>RJ45 Link</b></td> <td></td> </tr> <tr> <td>Pin 1 (R)</td> <td>Pin 2 (T)</td> </tr> <tr> <td>Pin 3 (R)</td> <td>Pin 6 (T)</td> </tr> <tr> <td>Pin 4 (R)</td> <td>Pin 5 (T)</td> </tr> <tr> <td>Pin 7 (R)</td> <td>Pin 8 (T)</td> </tr> </table> 	<b>RJ45 Link</b>		Pin 1 (R)	Pin 2 (T)	Pin 3 (R)	Pin 6 (T)	Pin 4 (R)	Pin 5 (T)	Pin 7 (R)	Pin 8 (T)
<b>RJ45 Link</b>											
Pin 1 (R)	Pin 2 (T)										
Pin 3 (R)	Pin 6 (T)										
Pin 4 (R)	Pin 5 (T)										
Pin 7 (R)	Pin 8 (T)										
<b>Cables</b> <i>(Not included)</i>	One straight Cat 5e/6 twisted pair cables required. Two 75 ohm coaxial cables with 75 ohm BNC required.										
<b>Power Supply</b> <i>(Included)</i>	Two 100-240V/12VDC 1.25A power supplies with interchangeable blades for NA, Europe and UK.										
<b>Power Consumption</b>	Transmitter: 4 Watts      Receiver: 8 Watts										
<b>Temperature</b>	Operating: 0° to 40°C      Storage: -20° to 85°C Humidity: Up to 95% non-condensing										
<b>Enclosure</b>	6061 Aluminum alloy										
<b>Dimensions</b>	4.50" x 3.00" x 1.25" (11.4 x 7.6 x 3.2 cm)										
<b>Weight</b>	2.5 lb. (1.1 kg)										
<b>Compliance</b>	Regulatory: FCC, CE, RoHS      Flammability: 94V0										
<b>Warranty</b>	2 years										
<b>Order Information</b>	500700      HD-SDI Extender Kit										



## HD-SDI Extender Kit

500700

## Quick Installation Guide

### Overview

The HD-SDI Extender Kit allows HD-SDI to be transmitted up to 330 ft (100m) via Cat5e cable in a point-to-point configuration at all specified bit rates. The HD-SDI Extender Kit supports transmission of up to 2.97/3.0 Gbps uncompressed, un-encrypted digital video (optionally including embedded Audio and/or Time Code) within television facilities and between professional video equipment.

### Applications

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

# MuxLab

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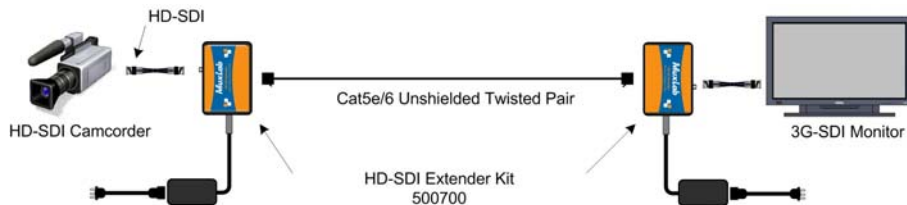
E-mail: [videoease@muxlab.com](mailto:videoease@muxlab.com)      URL: [www.muxlab.com](http://www.muxlab.com)

# Installation

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



2. Verify that the distance between the HDMI 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 SDI display equipment with a BNC 75 ohm 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. **Note: The receiver becomes hot (44 degrees Celsius at room temperature).**
5. Connect a 12 VDC 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 and the SDI Sync led should flashed. 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 Sync LED should stop flashing.
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 HD-SDI 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	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.

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).