### Specifications

<table>
<thead>
<tr>
<th>Environment</th>
<th>SDI single link: SD, HD &amp; 3G.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devices</td>
<td>Monitors supporting the original SDI rate only.</td>
</tr>
<tr>
<td>Standard supported</td>
<td>SMPTE 259M (270Mb/s), SMPTE 292M &amp; SMPTE 424M.</td>
</tr>
<tr>
<td>Bit rates</td>
<td>270Mb/s, 1.485Gb/s &amp; 2.97 Gb/s (automatic selection).</td>
</tr>
</tbody>
</table>
| 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) for 500715  
UTP Cat 5e: 500 ft (150 m) UTP Cat 6: 500 ft (150 m) for 500716  
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 | 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-SDI to HDMI Extender Kit  
500716 LongReach HD-SDI to HDMI Extender Kit |

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**HD-SDI to HDMI Extender Kit**

**500715, 500716**

**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 (500715) or up to 500 ft / 150m (500716) for the LongReach version 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.

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E-mail: videoease@muxlab.com  
URL: 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 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:

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

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).