Overview:

The HDMI 8x8 Matrix Switch, HDBT, 4K/60 allows up to eight (8) different HDMI sources to be connected and/or distributed to up to eight (8) + two (2) HDMI displays. The unit supports eight (8) HDBT outputs, plus the first two (2) outputs also include two (2) HDMI outputs for local connectivity. The HDMI 8x8 Matrix Switch, HDBT, 4K/60 is compatible with the MuxLab 500454-PoE-RX HDBT Receivers, and supports distances up to 70m at 1080p and 40m at 4K via Cat5e/6 cable. Management functions include front panel pushbutton, IR, RS232 and IP. The unit supports software updates in order to remain current.

Applications:

- Commercial and residential AV systems
- Classroom training systems
- Digital signage
- Boardroom systems
- Collaborative PC systems
- Medical information systems

Key Features:

- 8x8 Matrix supporting 8 HDMI inputs, 8 HDBT outputs and two of the outputs also support 2 HDMI outputs.
- Supports HDMI 2.0 (4K/60 4:2:0) & HDCP 2.2
- Compatible with 500454-PoE-RX HDBT PoE Receiver
- HDBT outputs support distances up to 70m at 1080p and 40m at 4K
- Supports PoH to power HDBT Receivers
- Supports 8 audio out channels of 2CH, 5.1 Dolby, and DTS
- Supports an independent IR matrix to manage end devices
- Powerful EDID management
- Controllable via front panel, RS232, IR and TCP/IP
- Built-in GUI web interface

Typical Application
## Specifications

<table>
<thead>
<tr>
<th>Environment</th>
<th>HDMI 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devices</td>
<td>Ultra HD Blu-Ray, media players/streamers, projectors, monitors, TV, PC, laptops.</td>
</tr>
<tr>
<td>Transmission</td>
<td>Transparent to the user.</td>
</tr>
<tr>
<td>Video Bandwidth</td>
<td>10.2Gbps (HDBT), 594Gbps (HDMI)</td>
</tr>
<tr>
<td>Maximum Pixel Clock</td>
<td>297MHz (HDBT), 594MHz (HDMI)</td>
</tr>
</tbody>
</table>

### Signals and video resolution
HDMI 2.0 (4K/60 4:4:4 for HDMI outputs & 4K/60 4:2:0 for HDBT outputs) and HDCP 1.4 & 2.2

### Connectors
- Ten (10) HDMI connectors, including eight (8) inputs and two (2) outputs.
- Nine (9) RJ45 shielded connectors, including eight (8) for HDBT Out, and one (1) for Ethernet unit management.
- Sixteen (16) 3.5mm Jacks; for eight (8) IR Sensor & eight (8) IR Emitters to manage end devices.
- Nine (9) 3-pin phoenix connectors, including eight (8) for RS232 to control end devices, and one (1) RS232 for unit management.
- Eight (8) RCA connectors for digital Audio Output (2CH LPCM, 5.1 Dolby and DTS).
- One (1) 2-pin phoenix connector for PoH 48VDC power supply.
- One (1) 2-pin power connector for unit 48VDC power supply.

### Audio
Digital Audio: PCM, Dolby TrueHD, DTS-HD Master Audio.

### Cable
HDMI cable of appropriate length for video resolution selected.
Cat 5e/5 or better twisted pair cable required.

### Maximum Distance
Based on a maximum length of 6.6ft. (2m) of HDMI cable per end. Cables not included.

- Cat 5e/5: Up to 230ft (70 m) @ 1080p
- Up to 131ft (40m) @ 4K/30 (4:4:4), or 4K/60 (4:2:0)
- (also supports 4K/60 4:4:4 on the two HDMI outputs for local connectivity)

**Note:** When installed in an electrically noisy environment, an STP cable must be used. Also, cross-connections reduce the effective distance depending on the twisted pair cable used.

### Compatible Receiver
500454-PoE-RX

### Power Supply
Two (2) 110-240VAC to 48VDC power supplies.

### Temperature
- Operating: 0° to 40°C
- Storage: -20° to 80°C
- Humidity: Up to 90% non-condensing

### Enclosure
Metal enclosure.

### Bracket
Includes rack and wall mount bracket.

### Dimensions
500413 Matrix Switch: 17.5” x 3.7” x 9” (444.5mm x 94mm x 229mm)

### Shipping Weight
13.8 lbs (6.25 kg)

### Compliance
Regulatory: FCC, CE, RoHS

### Warranty
2 years

### Order Information
- 500413-US HDMI 8x8 Matrix Switch, HDBT, 4K/60, US (UPC: 627699014134)
- 500413-UK HDMI 8x8 Matrix Switch, HDBT, 4K/60, UK (UPC: 627699914137)
- 500413-EU HDMI 8x8 Matrix Switch, HDBT, 4K/60, EU (UPC: 627699814130)