Overview

The HDMI/RS232 100m Extender Kit, HDBT, 4K/60 (500459-100) allows HDMI equipment to be connected up to 230ft (70m) at 4K/60 (4:4:4) resolution, or 330ft (100m) at resolutions up to 1080p via one (1) Cat 5e/6 unshielded twisted pair cable in a point-to-point configuration. The unit is HDCP 2.2 compliant and supports HDR, as well as RS232 and bidirectional IR pass through transmission for end device remote control. This product supports PoC, allowing the transmitter to power the receiver, or the receiver to power the transmitter. The kit includes one (1) transmitter, one (1) receiver, one (1) IR Emitter, one (1) IR sensor and one (1) power supply.

Applications

Digital signage, commercial AV systems, classroom projector systems, boardroom systems, collaborative PC systems, medical information systems.

Key Features

- Supports 4K @ 24/25/30/60Hz (4:4:4) to distances of up to 230ft (70m) over single Cat5e/6
- Supports 1080p and full 3D to distances of up to 330ft (100m) over single Cat5e/6
- Uses visually lossless light compression at 4K/60 (4:4:4)
- HDCP 2.2 Compliant
- Supports HDR
- Supports RS232 and Bi-directional IR pass through
- Supports all digital audio modes
- Includes IR emitter and IR sensor (carrier-wave)
- Supports PoC

Specification Chart

| Environment | HDMI 2.0 |
| Devices | DVDs, Blu-ray players, projectors, monitors, TVs, PCs, laptops, servers supporting HDMI. |
| Transmission | Transparent to the user |
| Signals | HDMI 2.0 protocol |
| Connectors | One (1) HDMI receptacle. |
| | One (1) RJ45S for Cat5e/6 unshielded or shielded twisted pair. |
| | One (1) 3-Position Terminal Block for RS232. |
| | Two (2) 3.5mm sockets for IR Sensor & Emitter (carrier-wave). |
| | One (1) 2.1mm locking power connector. |
| Max. Distance* | 4K/60 (4:4:4): Cat 5e/6: 230ft (70m) |
| | 1080p/60: Cat 5e/6: 330ft (100m) |

*Based on a maximum length of 6.6 ft (2m) of HDMI cable per end

When installed in an electrically noisy environment, STP cable must be used. Also, cross-connection reduces the effective distance depending on the grade of twisted cable used.

RJ45 Pin Configuration

Reverse Polarity Sensitive
Use EIA/TIA 568 A or B, straight-through wiring.

<table>
<thead>
<tr>
<th>Pin</th>
<th>1 (R)</th>
<th>2 (T)</th>
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<tbody>
<tr>
<td>Pin 1 (R)</td>
<td>Pin 2 (T)</td>
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<tr>
<td>Pin 3 (R)</td>
<td>Pin 6 (T)</td>
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<td>Pin 4 (R)</td>
<td>Pin 5 (T)</td>
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<tr>
<td>Pin 7 (R)</td>
<td>Pin 8 (T)</td>
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Cable

One (1) Category 5e or better twisted pair cable required.

Power Supply

One (1) 110-240V/12VDC @ 2A power supply with interchangeable blades.

Power Consumption

Transmitter: 10.44 Watts Receiver: 10.44 Watts

Temperature

Operating: 0° to 40° C. Storage:-20° to 85° C. Humidity: up to 95% non-condensing.

Enclosure

Metal

Dimensions

4.72” x 2.87” x 1.00” (12.0 x 7.3 x 2.5 cm)

Weight

1.75 lbs (0.79 kg)

Compliance

Regulatory: FCC, CE, RoHS

Warranty

2 years

Order Information

500459-100 HDMI/RS232 100m Extender Kit, HDBT, 4K/60 (UPC: 627699014592)

Accessories

500905 Rackmount Transceiver Chassis 3 Port
500920 Rackmount Transceiver Chassis 16 Port
Typical Application Schematic