HEX70SL-KIT

Quick Reference Guide



Introduction

Our HEX70SL-KIT 4K HDBaseT[™] extender set offers market leading features in a slimline chassis. The product delivers HDMI, Bi-directional IR and Bi-directional PoC up to lengths of 70m.

FEATURES:

- Advanced HDBaseT[™] technology offering uncompressed video and audio with zero latency
- Extends HDMI 1080p up to a distance of 70m over a single CAT cable
- Supports 4K UHD video up to 40m (3840 x 2160 @30Hz 4:4:4, 4096 x 2160 @24Hz 4:4:4, and 4K @60Hz 4:2:0)
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K
- Enhanced slimline chassis
- Supports all known HDMI audio formats including Dolby TrueHD, Dolby Atmos, Dolby Digital Plus and DTS-HD Master Audio transmission
- Bi-directional IR pass-through
- Supplied with Blustream IR receiver and emitter
- Supports bi-directional PoC (Power over Cable) to power extenders from either transmitter or receiver end
- Smart EDID function automatically limits EDID to within HDBaseT™ specification to improve compatibility
- HDCP 2.2 compliant

TX Panel Descriptions





- EDID Selection Button Cycle through the EDID modes see below
- 2 HDMI Input Connect to HDMI source device
- 3 HDMI Signal Link Indicator
- IR Input Connect to Blustream 5V 3.5mm IR receiver
- 6 IR Output Connect to Blustream 5V 3.5mm IR emitter
- 6 HDBaseT™ Output
- Power over Cable (PoC) Switch (ON / OFF) To enable / disable PoC being sent from the transmitter
- B 12V/1A DC Power Input screw type connector
- 9 Power Status Indicator

RX Panel Descriptions



- HDMI Output Connect to HDMI display
- 2 HDMI Signal Link Indicator
- 3 IR Input Connect to Blustream 5V 3.5mm IR receiver
- IR Output Connect to Blustream 5V 3.5mm IR emitter
- 6 HDBaseT™ Input
- ⁶ Power over Cable (PoC) Switch (ON / OFF) To enable or disable PoC being sent from the receiver
- 12V/1A DC Power Input screw type connector
- 8 Power Status Indicator

EDID Management

HDBaseT[™] has a ceiling data rate limit that allows for a maximum HDMI data rate of 10.2Gbps to pass over the link. With many HDMI 2.0 source devices allowing for HDMI data rates that exceed the threshold of HDBaseT[™] to be exceeded, the smart EDID functionality of the HEX70SL-KIT reduces the potential of a 'no signal' handshake occurring. By default, the HEX70SL-KIT does not terminate the EDID handshake, so the source device connected to the transmitter will think there is only a HDMI cable connected to the sink device. This may mean that a data rate signal that exceeds the HDBaseT[™] threshold is output from the source. Pressing the EDID button selects a 4K 60Hz 4:2:0 EDID (on first press), to a 4K 30Hz 4:4:4 EDID (on second press), subsequent presses cycle between these two EDID modes.



Terminating the Interconnecting HDBaseT™ CAT Cable

It is important that the interconnecting CAT cable between the Blustream HDBaseT products is terminated using the correct RJ45 pin configuration. The link CAT cable **MUST** be a 'straight' (pin-to-pin) CAT cable and it is advised that this is wired to the T568B wiring standard as this format is less prone to EMI (Electro-Magnetic Interference).

When installing CAT cables it is advised that you use the best possible CAT cable quality possible. HDMI distribution products will only work if used with CAT5e standard cable or above. Blustream recommends using a CAT6 (or better) cable for your installations, especially when running over longer distances, in areas of high EMI, or for 4K signal distribution.



Understanding the HDBaseT™ Signal Status Lights

The Blustream HDBaseT[™] extender solutions include status LED indicators on both the Transmitter and Receiver products to show all connections are active and to help diagnose possible problems.

Understanding the Status Lights:

Receiver:

- The HDMI signal link light will be off when there is no connection with a display / sink
- The HDMI link light will be on when there is an active connection with a display
- The orange HDBaseT[™] link light will be off when there is no CAT cable / active HDBaseT[™] connection on the RJ45 HDBaseT[™] output
- The orange HDBaseT[™] link light will blink if there is an unstable connection between the Transmitter / Matrix and Receiver
- The orange HDBaseT[™] link light will be lit when a CAT cable is connected to the HDBaseT[™] RJ45 output on the Transmitter and an active connection is achieved with the Receiver / Matrix
- The green HDBaseT[™] HDCP light will be off when no video signal is received
- The green HDBaseT[™] HDCP light will flash when there is video signal without HDCP being received
- The green HDBaseT[™] HDCP light will be on when there is video signal with HDCP being received
- The power link light will be off when no power is connected to the receiver, or to the connected Transmitter unit
- The power link light will be on when power is connected directly to the receiver or is being received from the Transmitter unit

Transmitter:

- The HDMI signal link light will be off when there is no connection with a source device
- The HDMI link light will be on when there is an active connection with a source device
- The orange HDBaseT[™] link light will be off when there is no CAT cable / active HDBaseT[™] connection on the RJ45 HDBaseT[™] output
- The orange HDBaseT[™] link light will blink if there is an unstable connection between the Transmitter / Matrix and Receiver
- The orange HDBaseT[™] link light will be lit when a CAT cable is connected to the HDBaseT[™] RJ45 output on the Transmitter and an active connection is achieved with the Receiver / Matrix
- The green HDBaseT[™] HDCP light will be off when no video signal is transmitted
- The green HDBaseT[™] HDCP light will flash when there is video signal without HDCP being transmitted
- The green HDBaseT[™] HDCP light will be on when there is video signal with HDCP being transmitted
- The power link light will be off when no power is connected to the Transmitter, or to the connected Receiver unit
- The power link light will be on when power is connected directly to the Transmitter or is being received from the Receiver unit

Specifications

HEX70SL-TX

- Video Input Connectors: 1 x HDMI Type A, female
- Video Output Connectors: 1 x HDBaseT™ RJ45 connector
- IR Input Port: 1 x 3.5mm stereo jack
- IR Output Port: 1 x 3.5mm stereo jack
- Casing Dimensions (W x D x H): 107 x 16 x 73mm
- Power Supply: 12V/1A DC, screw type connector

HEX70SL-KIT

- Box Dimensions (W x D x H): 250 x 150 x 105mm
- Shipping Weight: 0.75kg
- Operating Temperature: 32°F to 104°F (-5°C to +55°C)
- **Storage Temperature:** -4°F to 140°F (-25°C to +70°C)

HEX70SL-RX

- Video Input Connectors: 1 x HDBaseT™ RJ45 connector
- Video Output Connectors: 1 x HDMI Type A, female
- IR Input Port: 1 x 3.5mm stereo jack
- IR Output Port: 1 x 3.5mm stereo jack
- Casing Dimensions (W x D x H): 107 x 16 x 73mm
- Power Supply: 12V/1A DC, screw type connector

NOTE: Specifications are subject to change without notice. Weights and dimensions are approximate.

Package Contents

HEX70SL-KIT

- 1 x HEX70SL-TX and 1 x HEX70SL-RX
- 1 x 12V/1A DC Power Supply
- 1 x IR Emitter
- 1 x IR Receiver
- 2 x Mounting Bracket Sets
- 1 x Quick Reference Guide

HEX70SL-RX (when sold individually)

- 1 x HEX70SL-RX
- 1 x Mounting Bracket Set
- 1 x Quick Reference Guide

HEX70SL-TX (when sold individually)

- 1 x HEX70SL-TX
- 1 x Mounting Bracket Set
- 1 x Quick Reference Guide

Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

BLUSTREA

Certifications

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: • Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION - changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CANADA, INDUSTRY CANADA (IC) NOTICES

This Class B digital apparatus complies with Canadian ICES-003.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CORRECT DISPOSAL OF THIS PRODUCT

This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.

Installer Notes

Installer Notes



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