

▶ [HEX70ED-RX/TX](#) User Manual

Thank you for purchasing this product.

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.



Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Safety And Performance Notice

The transmission distances of HDMI over UTP cables are measured using TE CONNECTIVITY 1427071-6

EIA/TIA-568-B termination (T568B) of cables is recommended for optimal performance.

To minimize interference of the unshielded twisted pairs in the CAT5e/6 cable do not run the HDBaseT / Cat5e/6/6a cabling with or in close parallel proximity to mains power cables.

Do not substitute or use any other power supply other than the enclosed unit, or a Blustream approved replacement.

Do not disassemble either the Transmitter or Receiver units for any reason. Doing so will void the manufacturer's warranty.

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Introduction

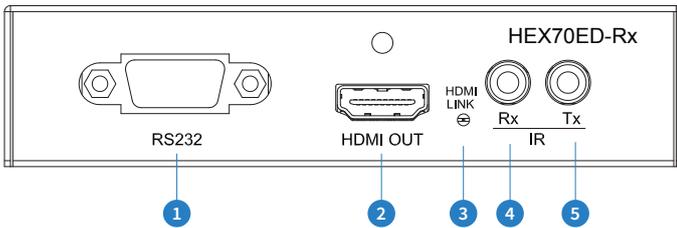
Our HEX70ED-KIT 4K HDBaseT™ extender set offers market leading features and outstanding value. The product supports HDMI, RS-232, Bi-directional IR and Bi-directional PoH (PoE) up to lengths of 70m.

FEATURES:

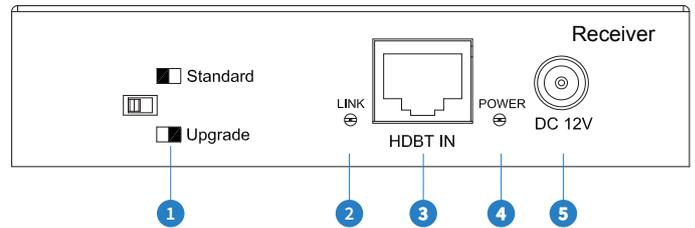
- Extends HDMI up to distances of 70m over single CAT cable
- Supports 4K UHD video up to 40m (3840 x 2160 @30Hz 4:4:4, 4096 x 2160 @24Hz 4:4:4, and 4K @60Hz 4:2:0)
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K
- Supports 3D signal display
- Supports all known HDMI audio formats including Dolby TrueHD, Dolby Atmos, Dolby Digital Plus and DTS-HD Master Audio transmission
- Supports bi-directional RS-232 pass through
- Supports bi-directional IR from all input and output locations
- Supplied with Blustream IR receiver and emitter
- Advanced EDID management
- HDCP compliant
- 1. Standard/Upgrade mode switch*

Note: The POH function is designed for powering compatible transmitter or receiver units from Blustream only.

Panel Description HEX70ED-RX



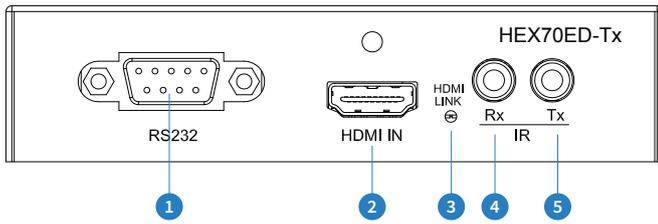
- 1 RS232 connector
- 2 HDMI output
- 3 HDMI link indicator
- 4 IR RX jack (To IR sensor)
- 5 IR TX jack (To IR emitter)



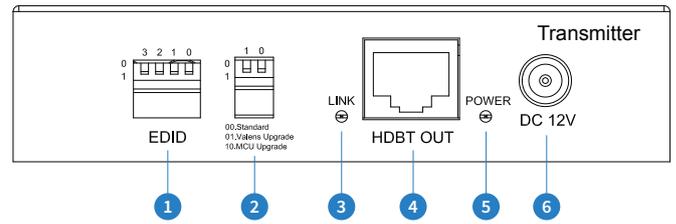
- 1 Standard/Upgrade mode switch
- 2 Signal Link indicator
- 3 HDBT input
- 4 Power status indicator
- 5 DC 12V screw type connector

*Switch is associated with the RS232 connection of the unit. When in Standard mode the RS232 port is used for the intended distribution of an RS232 signal. When in Upgrade mode the RS232 connection is used to upgrade firmware on the unit.

Panel Description HEX70ED-TX



- 1 RS232 connector
- 2 HDMI input (Source input)
- 3 HDMI link indicator
- 4 IR RX jack (For IR sensor)
- 5 IR TX jack (For IR emitter)



- 1 EDID DIP switch (UP=0, DOWN=1)
- 2 Upgrades DIP switch
- 3 Signal Link indicator
- 4 HDBT output
- 5 Power status indicator
- 6 DC 12V screw type connector

EDID Control

EDID (Extended Display Identification Data) is a data structure that is used between a display and source. This data is used by the source to find out what audio and video resolutions are supported by the display then from this information the source will determine what the best audio and video resolutions are to be outputted.

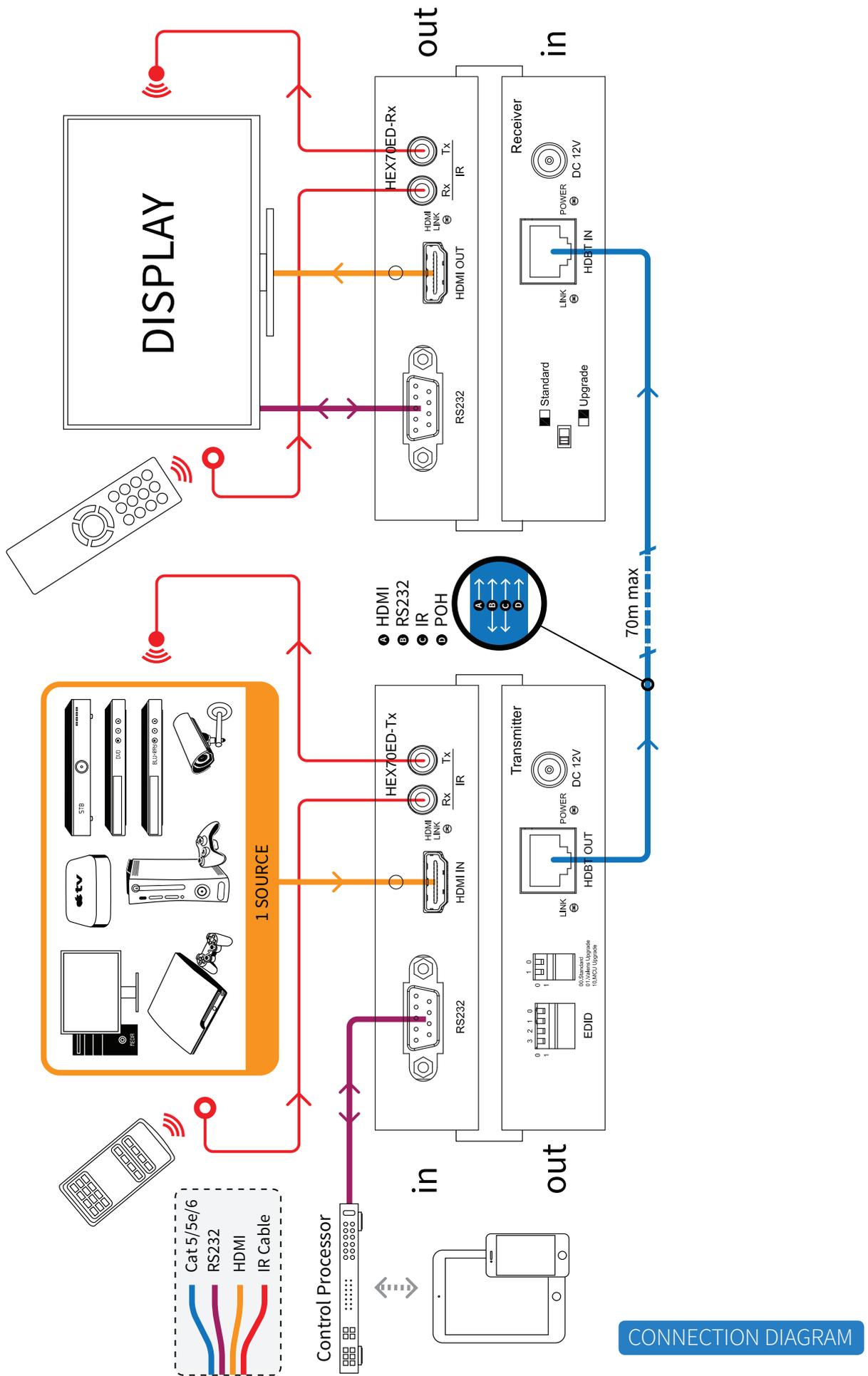
While the objective of EDID is to make connecting a digital display to a source a simple plug and play procedure issues do arise when multiple displays or video matrix switching is introduced because of the increased number of variables.

By pre-determining the video resolution and audio format of the source and display device we can remove some of the EDID hand shaking process thus making switching quicker and more reliable. Instructions on these setting can be found on the right



- [DIP]=0000:** HDMI 1080p@60Hz, Audio 2CH PCM
- [DIP]=0001:** HDMI 1080p@60Hz, Audio 5.1CH PCM/DTS/DOLBY
- [DIP]=0010:** HDMI 1080p@60Hz, Audio 7.1CH PCM/DTS/DOLBY/HD
- [DIP]=0011:** HDMI 1080i@60Hz, Audio 2CH PCM
- [DIP]=0100:** HDMI 1080i@60Hz, Audio 5.1CH PCM/DTS/DOLBY
- [DIP]=0101:** HDMI 1080i@60Hz, Audio 7.1CH PCM/DTS/DOLBY/HD
- [DIP]=0110:** HDMI 1080p@60Hz/3D, Audio 2CH PCM
- [DIP]=0111:** HDMI 1080p@60Hz/3D, Audio 5.1CH PCM/DTS/DOLBY
- [DIP]=1000:** HDMI 1080p@60Hz/3D, Audio 7.1CH PCM/DTS/DOLBY/HD
- [DIP]=1001:** HDMI 4K2K, Audio 2CH PCM
- [DIP]=1010:** HDMI 4K2K, Audio 5.1CH PCM/DTS/DOLBY
- [DIP]=1011:** HDMI 4K2K, Audio 7.1CH PCM/DTS/DOLBY/HD
- [DIP]=1100:** DVI 1280x1024@60Hz, Audio None
- [DIP]=1101:** DVI 1920x1080@60Hz, Audio None
- [DIP]=1110:** DVI 1920x1200@60Hz, Audio None

NOTE: The port will only read the DIP switch settings on power-up. The device must be powered off and then back on again for it to implement any change of the DIP switch settings.



Specifications

Video Input	HEX70ED-TX 1X HDMI Type A, 19-pin, female	HEX70ED-RX 1x HDBaseT™ RJ45
Video Output	HEX70ED-TX 1x HDBaseT™ RJ45	HEX70ED-RX 1X HDMI Type A, 19-pin, female
IR Input Ports	2x 3.5mm stereo jack	
IR Output Ports	2x 3.5mm mono jack	
RS-232 Control	2x DB9, female	
Power Supply	12V/2A DC, screw type connector	
Power Consumption	9.5W	
Dimensions (WxDxH)	107x107x27mm	
Shipping Weight	0.4kg	
Operating Temperature	32°F to 104°F (0°C to 40°C)	
Storage Temperature	-4°F to 140°F (-20°C to 60°C)	
Rack-Mountable	Mounting kit included	

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

Package Contents:

- 1 x HEX70ED-Tx
- 1 x HEX70ED-Rx
- 2 x Mounting brackets
- 1 x 12V/2A power supply
- 1 x IR emitter
- 1 x IR receiver
- 1 x User manual

Maintenance

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



www.blustream.co.uk
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