

▶ 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

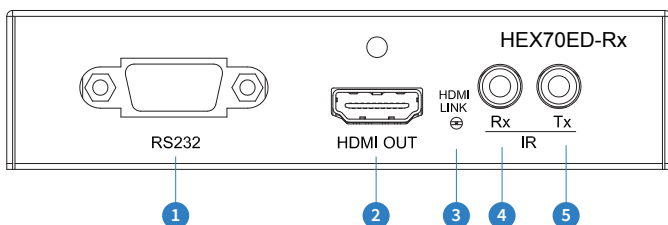
The Blustream HEX70ED is a HDMI extender solution enabling a single CAT5e/6 cable to distribute HDMI, bi-directional IR and RS232 up to 70 metres by utilizing HDBaseT Lite technology. Not only can the HEX70ED send HDMI, IR and RS232 over a single CAT5e/6 cable but it also gives the installer the ability to modify the EDID information being sent to the source enabling the installer more freedoms to accommodate for difficult sources or displays.

FEATURES:

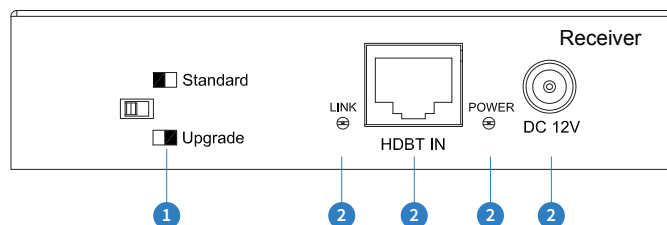
- HDMI v1.4 and HDCP compliant, support 1080p@60Hz, 3D
- Support 1080P@60Hz or VESA: 1920x1200@60Hz up to 70m
- Dolby TrueHD and DTS-HD master audio pass through HDMI output
- Bi-Directional IR and RS232 pass through.
- Power over HDBT enabling only one power supply to be needed at either transmitter or receiver side.
- With ESD Protection.

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

Panel Description HEX70ED-RX

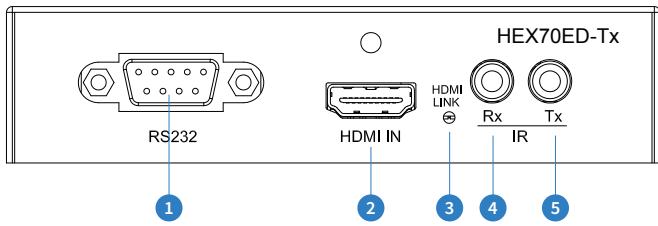


- 1 RS232 connector
- 2 HDMI output
- 3 HDMI link indicator
- 4 IR RX jack (To IR sensor)
- 5 IR TX jack (To IR emitter)

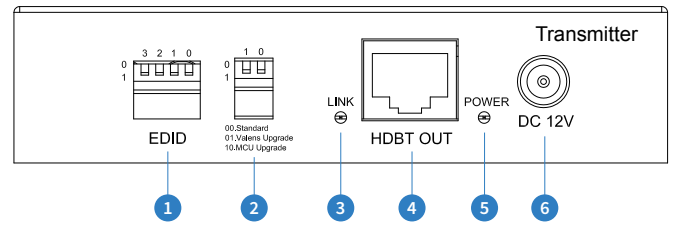


- 1 Standard/Upgrade mode switch
- 2 Signal Link indicator
- 3 HDBT input
- 4 Power status indicator
- 5 DC 12V screw type connector

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
- 4 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.

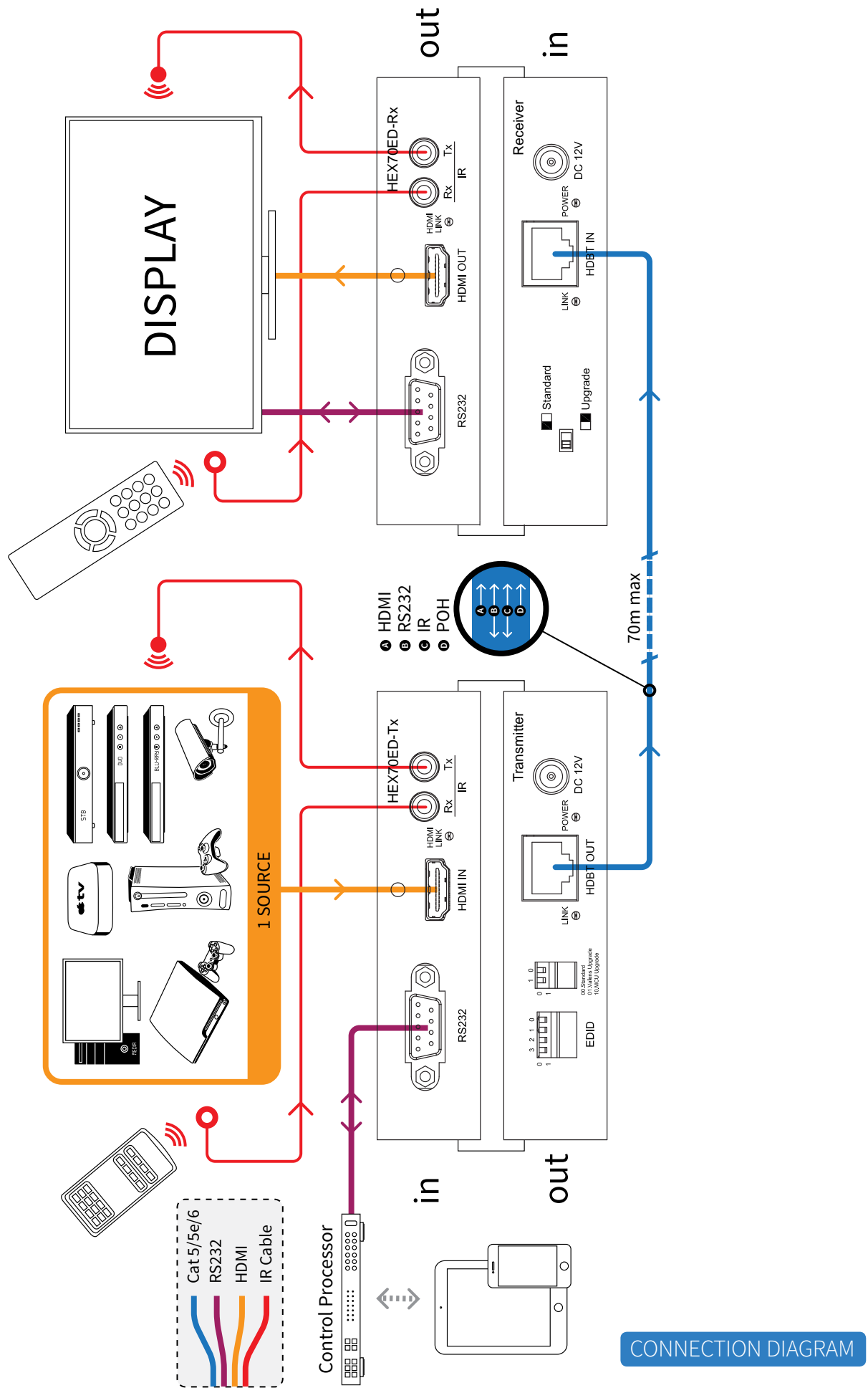
While the objective of EDID is to make connecting a digital display to a source a simple plug and play procedure issues do arise when multiple displays or video matrix switching is introduced because of the increased number of variables.

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

Bandwidth	10.2 Gbps	
Video input	HEX70ED-Tx 1XHDMI Type A, 19-pin, female	HEX70ED-Rx 1xRJ45
Video output	HEX70ED-Tx 1xRJ45	HEX70ED-Rx 1XHDMI Type A, 19-pin, female
IR input	2x3.5mm stereo jack	
IR output	2x3.5mm stereo jack	
RS232 control	2x DB9	
Power Supply	12V/2A DC, screw type connector	
Power Consumption	9.5W	
Audio	Passes up to Dolby TrueHD or DTS-HD Master Audio	
Resolution	Video: up to 4Kx2K VESA: up to 1920x1200	
Distance	70m @ 1080p over CAT5e/6 40m @ 4Kx2K over CAT5e/6	
Dimensions	107x107x27mm (WxLxH)	
Weight	200g	
Temperature	Operating 32°F to 104°F (0°C to 40°C)	Storage -4°F to 140°F (20°C to 60°C)
Rack-Mountable	Rack ears included	

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

Package Contents:

- 1 x HEX70ED-Tx
- 1 x HEX70ED-Rx
- 4 x mounting ear
- 1 x 12V/2A power supply
- 1 x IR emitter
- 1 x IR sensor
- 1 x manual

Maintenance

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



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