Manuals+ — User Manuals Simplified.

BLUSTREAM HEX100CS-KIT CSC Extender Set Supporting User Guide

BLUSTREAM HEX100CS-KIT CSC Extender Set Supporting User Guide
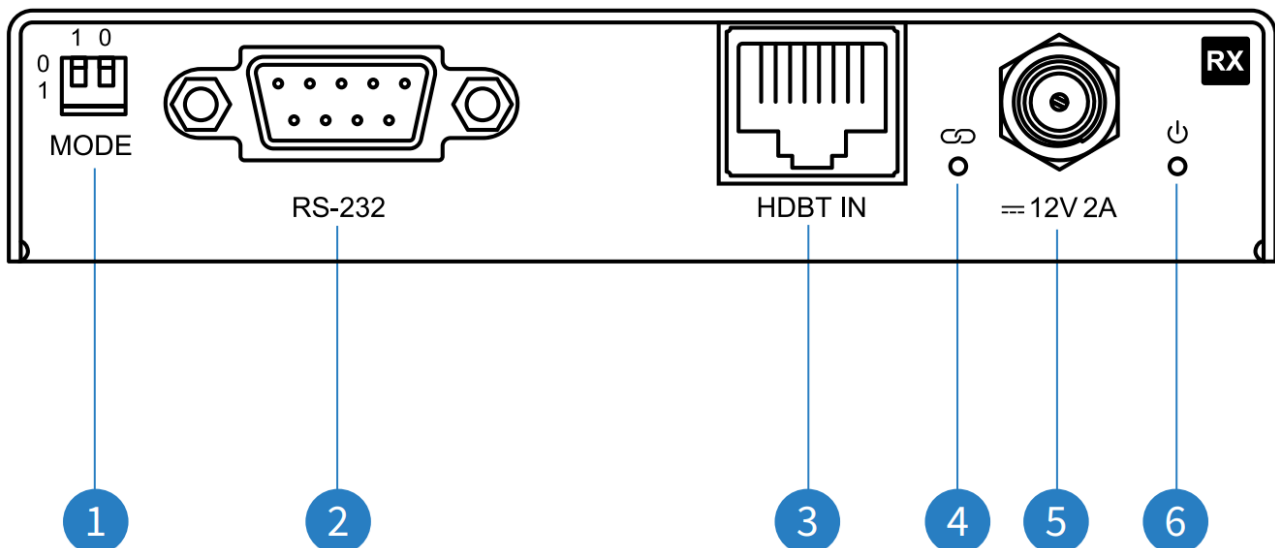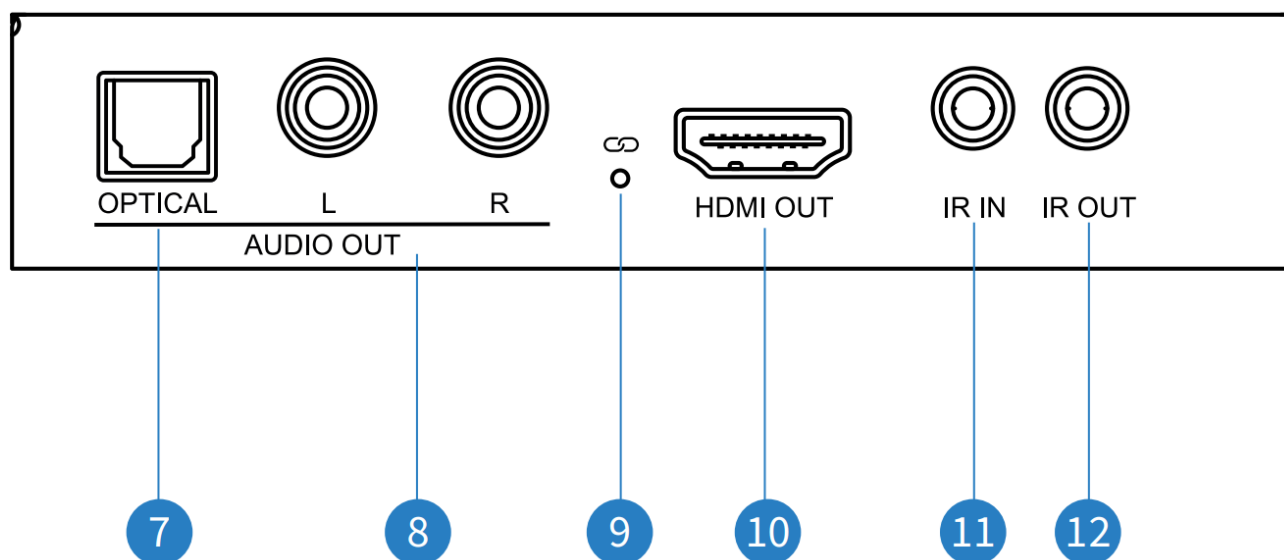

Contents

Introduction

Our HEX100CS-KIT HDMI 2.0 4K 60Hz 4:4:4 (18Gbps) HDCP 2.2 HDBaseT™ extender set offers market leading features and outstanding value utilising CSC technology. The product extends HDMI, Bi-directional IR & RS-232 and Bi-directional PoC up to lengths of 100m (4K 70m). The Transmitter includes a HDMI loop-out for integrating local displays or cascading to multiple devices. The Receiver features simultaneous analogue stereo and digital optical (S/PDIF) audio breakout.
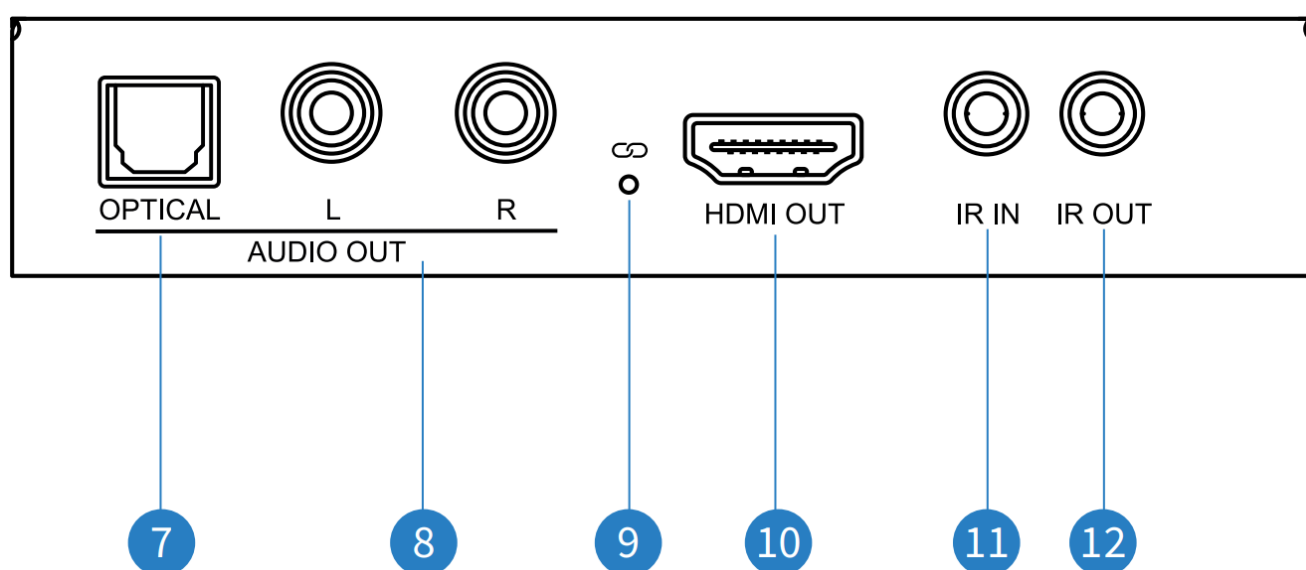
FEATURES:

- Advanced HDBaseT™ technology offering distribution of video and audio over a single CAT cable
- Advanced Color Space Conversion (CSC) supports HDMI 2.0 18Gbps specification including HDR
- Supports 4K 60Hz 4:4:4 UHD video up to 70m
- Extends HDMI 1080P video up to 100m
- Features 1 x HDMI loop-out on HEX100CS-TX for integrating local displays or cascading to multiple devices
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K
- Supports all known HDMI audio formats including Dolby TrueHD, Atmos and DTS-HD Master Audio transmission
- HDMI re-clocking on the HDBaseT™ Receiver to help solve HDMI, HDCP compatibility and handshaking issues
- HDMI audio breakout to analogue L/R audio and optical (S/PDIF) outputs concurrently
- Supports bi-directional RS-232 pass through
- Supports bi-directional IR pass through
- Supplied with Blustream 5V IR receiver and emitter
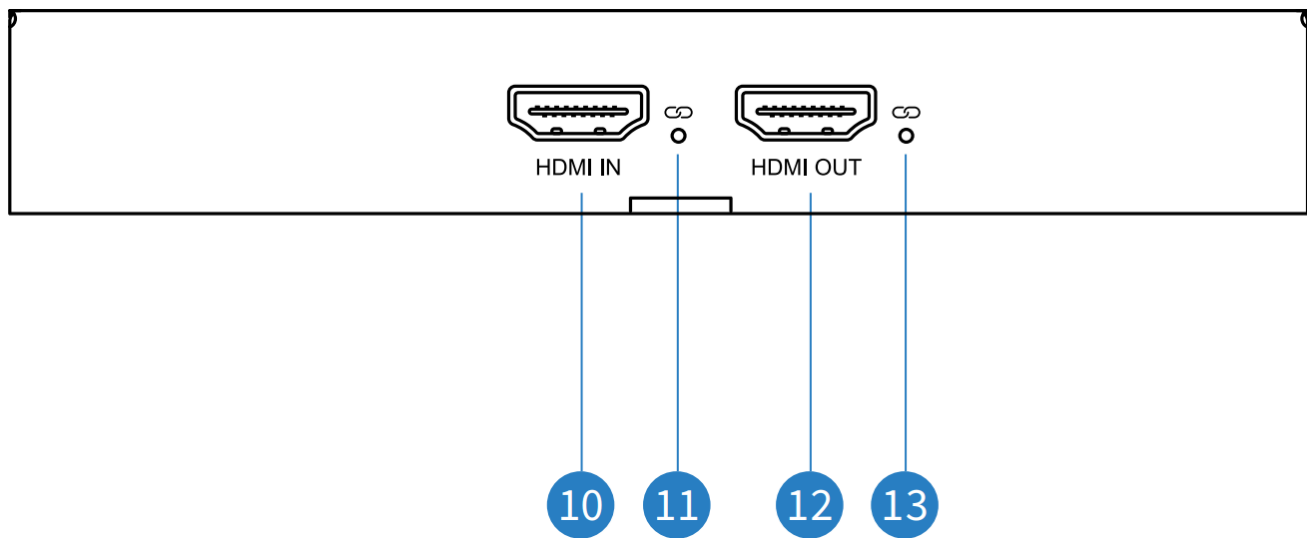- Advanced EDID management
- HDCP 2.2 Support

Panel Description HEX100CS-RX

OPTICAL	L	R	⌒	HDMI OUT	IR IN IR OUT
	AUDIO OUT				
7	8	9	10	11	12

1. Mode dip-switch – To switch RS-232 serial port between pass-through and firmware update mode

2. RS-232 / serial connector

3. HDBaseT™ input

4. HDBaseT™ signal link indicator

5. DC 12V screw type connector

6. Power status indicator

7. Optical digital output – de-embedded from HDMI input

8. Analogue audio Left / Right output (3.5mm stereo jack de-embedded from HDMI input. Supports stereo 2ch PCM audio only

9. HDMI signal link indicator

10. HDMI Output

11. IR IN (to Blustream 5V 3.5mm IR receiver)

12. IR OUT (to Blustream 5V 3.5mm IR emitter)

OPTICAL	L	R	⌒	HDMI OUT	IR IN IR OUT
	AUDIO OUT				
7	8	9	10	11	12

HDMI IN   HDMI OUT

⑩ ⑪ ⑫ ⑬

1. EDID DIP switch (UP=0, DOWN=1)
2. IR OUT (to Blustream 5V 3.5mm IR emitter)
3. IR IN (to Blustream 5V 3.5mm IR receiver)
4. RS-232 / Serial connector
5. USB Upgrade port – For future use
6. HDBaseT™ output
7. Power status indicator
8. DC 12V screw type connector
9. HDMI input
10. HDMI link indicator
11. HDMI output
12. HDMI link indicator

Specifications

HEX100CS-TX

- **Video Input:** 1 x HDMI Type A, female
- **Video Output:** 1 x HDBaseT™ RJ45 connector 1 x HDMI Type A, female
- **RS-232 Serial Port:** 1 x DB9 female connector
- **IR Input:** 1 x 3.5mm stereo jack
- **IR Output:** 1 x 3.5mm mono jack
- **EDID DIP Switch:** 4-pin
- **Mounting Kit:** Included
- **Dimensions excl. Connections (W x D x H):** 143mm x 134mm x 22mm
- **Shipping Weight (Kit):** 0.5 kg
- **Power:** 12V/2A DC, screw type connector
- **Operating Temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage Temperature:** -4°F to 140°F (-20°C to 60°C)

HEX100CS-RX

- **Video Input:** 1 x HDBaseT™ RJ45 connector
- **Video Output:** 1 x HDMI Type A, female
- **Audio Output:** 1 x 3.5mm L/R analogue audio 1 x Optical digital (S/PDIF)
- RS-232 Serial Port: 1 x DB9 female connector
- **IR Input:** 1 x 3.5mm stereo jack
- **IR Output:** 1 x 3.5mm mono jack
- **Mounting Kit:** Included
- **Dimensions excl. Connections (W x D x H):** 113mm x 124mm x 22mm
- **Shipping Weight (Kit):** 0.4 kg
- **Power:** 12V/2A DC, screw type connector
- **Operating Temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage Temperature: –**4°F to 140°F (-20°C to 60°C)

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

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.

Understanding the Transmitter / Receiver status lights

The Blustream HEX100CS-KIT 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.

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 HDBaseT™ link light will be off when there is no CAT cable / active HDBaseT™ connection on the RJ45 HDBaseT™ input
- The HDBaseT™ link light will blink if there is an unstable connection between the Transmitter and Receiver
- The 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

Transmitter:

- The Input HDMI signal link light will be off when there is no connection with a source device
- The Output HDMI signal link light will be off when there is no connection with a display / sink
- The Input HDMI link light will be on when there is an active connection with a source device
- The Output HDMI link light will be on when there is an active connection with a display / sink
- The HDBaseT™ link light will be off when there is no CAT cable / active HDBaseT™ connection on the RJ45 HDBaseT™ output
- The HDBaseT™ link light will blink if there is an unstable connection between the Transmitter and Receiver
- The 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
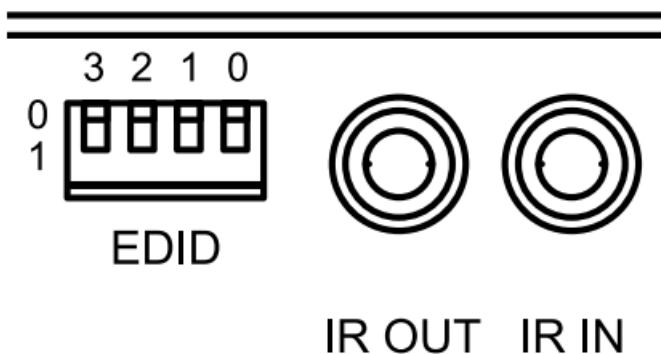
EDID Control

EDID (Extended Display Identification Data) is a data structure that is used between a display and a source. This data is used by the source to find out what audio and video resolutions are supported by the display. By pre-determining the video resolution and audio format of the source and display device you can reduce the time needed for EDID hand shaking thus making switching quicker and more reliable.
Configuration of extender EDID settings can be achieved using the product dip-switches on the end of the HEX100CS-TX. EDID dip-switch settings are shown below.

Global EDID settings

Dip-switch position : '0' = Off
Dip-switch position : '1' = On

EDID Dip-switches
[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 4K@60Hz 4:2:0+4K@30Hz 4:4:4, Audio 2ch PCM
[DIP]=0111: HDMI 4K@60Hz 4:2:0+4K@30Hz 4:4:4, Audio 5.1ch PCM/DTS/DOLBY
[DIP]=1000: HDMI 4K@60Hz 4:2:0+4K@30Hz 4:4:4, Audio 7.1ch PCM/DTS/DOLBY/HD
[DIP]=1001: HDMI 4K@60Hz 4:4:4, Audio 2ch PCM
[DIP]=1010: HDMI 4K@60Hz 4:4:4, Audio 5.1ch PCM/DTS/DOLBY
[DIP]=1011: HDMI 4K@60Hz 4:4:4, Audio 7.1ch PCM/DTS/DOLBY/HD
[DIP]=1100: DVI 1280×1024@60Hz, Audio None
[DIP]=1101: DVI 1920×1080@60Hz, Audio None
[DIP]=1110: DVI 1920×1200@60Hz, Audio None
[DIP]=1111: Copy EDID of output

www.blustream.com.au | **www.blustream.co.uk** | www.blustream-us.com
For the full Blustream HEX100CS-KIT User Manual please visit the dealer resource area of our **website :**
www.blustream.co.uk
contact : support@blustream.co.uk | **support@blustream.com.au** | **support@blustream-us.com**

Documents / Resources

BLUSTREAM HEX100CS-KIT CSC Extender Set Supporting [pdf] User Guide
HEX100CS-KIT, HEX100CS-RX, HEX100CS-TX, HEX100CS-KIT CSC Extender Set Supportin
g, HEX100CS-KIT, CSC Extender Set Supporting, Extender Set Supporting, Set Supporting, Su
pporting

References

- ⊕ **[Register a .US.COM domain today!](#)**

- ⎰ **[blustream-us.com](#)**

- ⎰ **[blustream.co.uk](#)**

- **[User Manual](#)**

- ⊕ **[Register a .US.COM domain today!](#)**

- ⎰ **[blustream-us.com](#)**

- ⎰ **[blustream.co.uk](#)**

- **[User Manual](#)**