



# BLUSTREAM PRO88HBT100CS Custom Pro 8x8 HDBaseT CSC Matrix Instruction Manual

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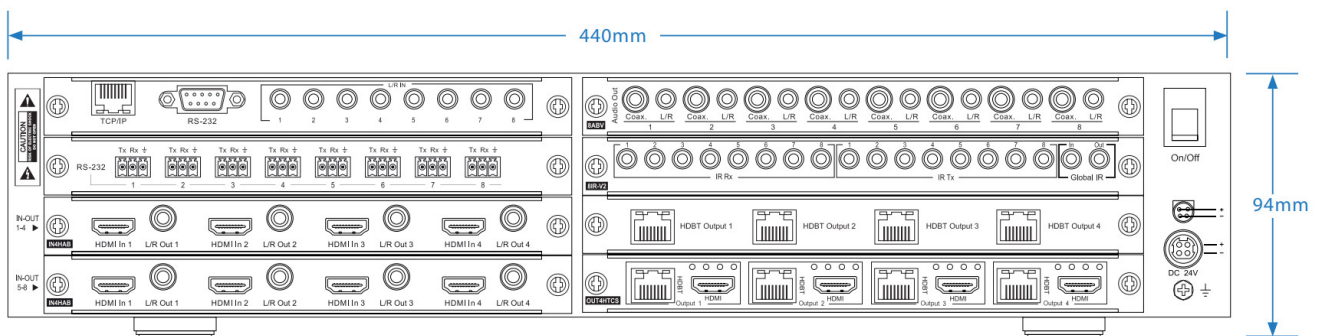
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## Description

Our 100m Custom Pro 8x8 HDBaseT™ CSC Matrix offers unprecedented 4K HDR performance for the custom installation market. The PRO88HBT100CS is an HDMI 2.0 4K 60Hz 4:4:4 HDCP 2.2 Matrix utilising CSC technology to deliver HDMI, Bi-directional IR, PoH (PoE) up to lengths of 100m over a single CAT cable (4K HDR up to 70m) with independent down-scaling of 4K video inputs on the CSC HDBaseT™ outputs to allow displays only capable of supporting lower video resolutions to receive 4K video while still showing maximum original 4K UHD resolution on the higher-definition displays.

The Matrix also provides advanced features including 4 x simultaneous HDMI outputs, audio breakout with line level pre amp volume control and a web browser interface module for control and configuration of the matrix.

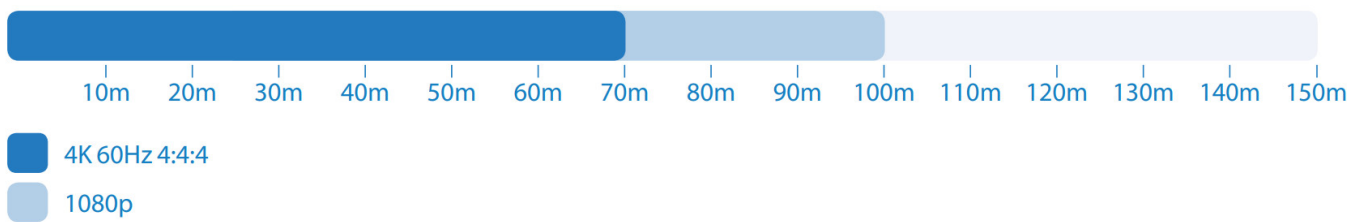


## Key Features

- HDBaseT™ technology offers the distribution of video and audio over a single CAT cable
- Advanced Colour Space Conversion (CSC) supports HDMI 2.0 18Gbps specification including HDR
- Features 8 x HDMI inputs which can be independently routed to 8 x HDBaseT™ outputs
- Extends 4K 60Hz 4:4:4 UHD video up to 70m with HDR support
- Extends HDMI 1080p video up to 100m
- Independent down-scaling of resolutions up to 4K 60Hz 4:4:4 video input to the following formats:
  - 1080p 60Hz (for screens that do not support 4K)
  - 4K 60Hz 4:2:0 (for screens that do not support full 4K 60Hz 4:4:4)
- 4 x Simultaneous HDMI Outputs
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K HDR
- Supports all known digital HDMI audio formats including Dolby TrueHD, Atmos; DTS-HD Master Audio and DTS:X transmissions
- 8 x simultaneous coaxial digital and variable line-level analogue L/R audio outputs
- Analogue audio input can be embedded onto any HDMI input
- Web interface module for control and configuration of Matrix

- Supports bi-directional IR / RS-232
- Supplied with Blustream IR receivers and emitters
- Control via front panel, IR, RS-232 and TCP/IP
- Supports PoH (Power over HDBaseT™) to power compatible HDBaseT™ receivers
- 3rd Party drivers available for major control brands
- 2U Design for 19" rack mount integration – Mounting kit included
- Advanced EDID management
- HDCP 2.2 compliant
- To be used with the HEX100CS-RX receivers

## Transmission Distance via Cat6



## Connectivity

- Video Input Connectors: 8 x HDMI Type A, 19-pin, female
- Video Output Connectors: 8 x HDBaseT™ RJ45 connector, 4 x HDMI Type A, 19-pin, female
- Audio Input Connectors: 8 x 3.5mm stereo jack (L/R)
- RS-232 serial ports: DB-9, female
- TCP/IP Control: RJ45, female
- Ethernet/Network: RJ45, female
- IR Input ports: 9 x 3.5mm stereo jack

## Specifications

- Dimensions (W x D x H ): 440mm x 288mm x 94mm
- Shipping Weight: 5kg
- 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: 2U rack height, rack ears included

### Included Accessories

IR Accessories	9 x IRR, 9 x IRE, 8 x IRCAB
IR Remote	1 x REM88
Rack Mount	2 x 19" Wings
Power Supply	24V/8A DC

### Control

TCP/IP  
RS-232  
iOS/Android app  
IR  
Front Panel

### RS-232 Connectivity

Baud Rate:	57600
Data Bit:	8-Bit
Parity:	None
Stop Bit:	1-Bit
Flow Control:	None

### Compatible Receivers

HEX70CS-RX  
HEX100CS-RX

### Regulatory Compliance



CAN ICES-3 (B)/NMB-3(B)

### Colour Space Conversion (CSC) Technology in HDBaseT™

Due to the data rate of HDBaseT™ technology being capped at 10.2Gbps, it is unable to pass the latest native 4K UHD resolutions of 4K 60Hz 4:4:4. There is now a requirement to integrate video resolutions with data speeds up to 18Gbps across a multi-zone AV environment. Blustream has implemented CSC (Colour Space Conversion) technology into our latest products to ensure 4K HDR signals can now be supported over the 10.2Gbps infrastructure of HDBaseT™\*.

Colour Space Conversion reduces the data rate of the HDMI signal by converting the colour space (or Wide

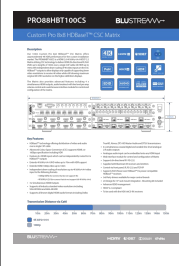
Colour Gamut) from 4:4:4 or 4:2:2 to a lower format. Within Colour Space Conversion technology the native resolution, frame rate and colour depth all remain constant from end to end. The only part of the signal that is converted during transmission is the colour gamut.

\*Blustream CSC products do not support HDR10+ or Dolby Vision due to the way these specific variations of HDR are encoded. These codecs transmit repeated metadata packets throughout the transmission of any media making it impossible at this stage to convert in the same way using CSC technology.

Blustream cannot be held responsible for errors in typography or photography. Specifications are subject to change without notice.



Documents / Resources



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