HMXL88ARC

BLUSTREAM

8x8 HDBaseT™ ARC Matrix

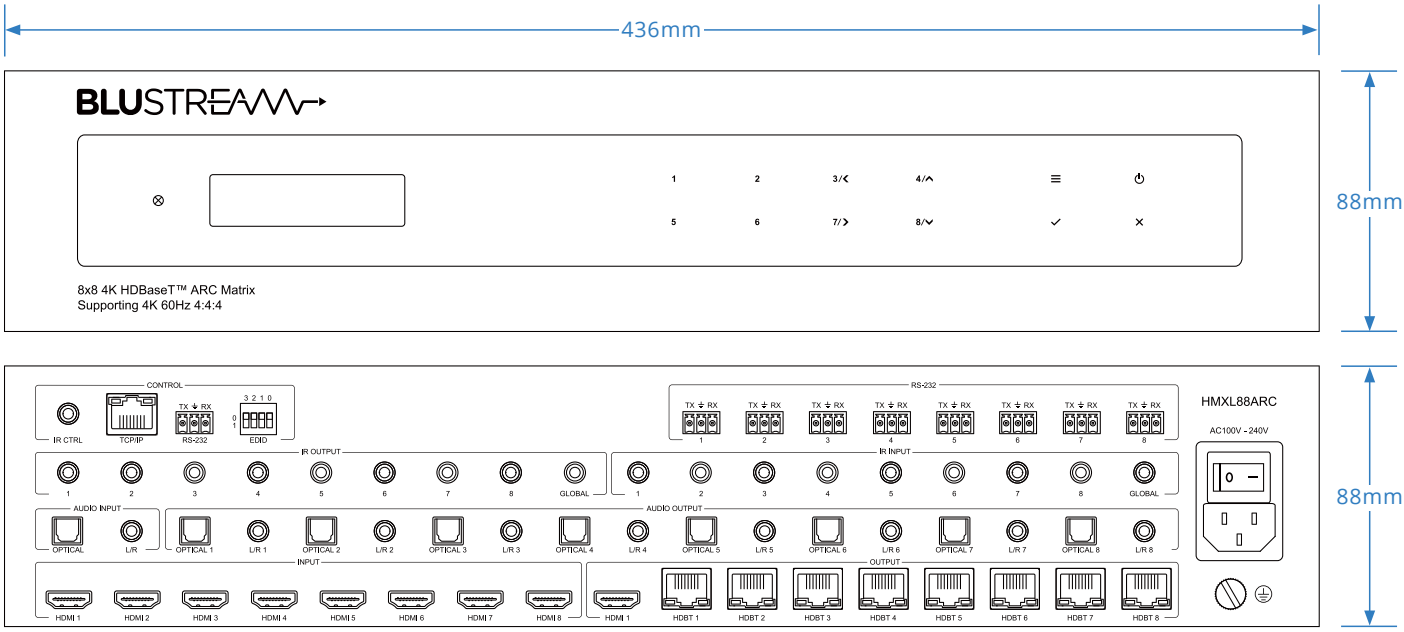
Description

The HMXL88ARC HDBaseT™ Matrix delivers new levels of advanced audio integration into our Essential range of 4K video matrix solutions. The HMXL88ARC is an 8x8 HDMI 2.0 4K 60Hz 4:4:4 matrix that uses CSC (Colour Space Conversion) technology to deliver 18Gbps HDMI over distances of up to 40m (1080p to 70m).

The HMXL88ARC features enhanced audio routing via an integrated 26x8 audio matrix. This enables the audio both from displays and sources, to be embedded and routed through the system at the users discretion.

The HMXL88ARC includes a simultaneous HDBaseT™ / HDMI output on output 1, video smart scaling on all HDBaseT™ outputs, and PoC (Power over Cable) to the remote RX70CS HDBaseT™ receivers. A in-built web browser interface for configuration and control of the Matrix, along with RS-232 and IR pass-through to enable seamless 3rd party control integration.

4K 60Hz 4:4:4 | HDMI 2.0 | HDBT | HDCP 2.2 | CSC | ARC | OPTICAL AUDIO RETURN | HDR | PoC | SMART SCALING | EDID MANAGEMENT | WEB GUI GRAPHICAL USER INTERFACE



Key Features

- Advanced HDBaseT™ technology offering 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
- Output 1 features simultaneous HDMI and HDBaseT™ output
- Video Smart Scaling on HDBaseT™ outputs allowing a display only capable of supporting lower video resolutions (4K 60Hz 4:2:0 or 1080p) to receive 4K 60Hz 4:4:4 video content while still showing maximum original 4K UHD resolution on remaining video outputs
- Supports 4K 60Hz 4:4:4 UHD video up to 40m and 1080p video up to 70m
- 26x8 Audio Matrix independently controllable from video. Audio source inputs include:
  - 8 x audio breakout from HDMI source inputs
  - 8 x audio breakout from zone outputs
  - 8 x ARC from zone outputs*
  - 1 x Optical and 1 x Analogue audio input
- Supports all known HDMI audio formats including Dolby TrueHD, Dolby Atmos, Dolby Digital Plus and DTS-HD Master Audio transmission
- Web interface module for control and configuration of matrix
- Supports bi-directional IR and RS-232 on all HDBaseT™ outputs
- Control via front panel, IR, iOS / Android App, RS-232 and TCP/IP
- Supports 24V PoC (Power over Cable) to power compatible Blustream RX70CS receivers
- Supplied with Blustream IR receivers and emitters
- Advanced EDID management and HDCP 2.2 compliant

**ARC feature supports HDMI ARC or Optical ARC*

**PoC, CSC, and ARC feature compatible with RX70CS only*

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Connectivity

- Video Input Connectors: 8 x HDMI Type A, 19-pin, female
- Video Output Connectors: 1 x HDMI Type A, 19-pin, female, 8 x HDBaseT™ RJ45 connector, used with RX70CS receiver
- Audio Input Connectors: 1 x Analogue audio L/R (3.5mm stereo jack), 1 x Optical (S/PDIF)
- Audio Output Connectors: 8 x Analogue audio L/R (3.5mm stereo jack), 8 x Optical (S/PDIF)
- RS-232 Serial Ports: 9 x 3-pin Phoenix connector
- TCP/IP Control: 1 x RJ45, female
- IR Input Ports: 9 x 3.5mm stereo jack
- IR Output Ports: 9 x 3.5mm mono jack

Specifications

- Rack Mountable: 2U rack height, rack ears included
- Casing Dimensions (WxDxH): 436mm x 400mm x 88mm (without feet)
- Shipping Weight: 10.5kg
- Operating Temperature: 32°F to 104°F (-5°C to +55°C)
- Storage Temperature: -4°F to 140°F (-25°C to +70°C)
- Power Supply: Internal 100-240V AC

Included Accessories

IR Accessories	9 x IRR, 8 x IRE, 1 x IR-CAB
RS-232 Accessories	1 x Phoenix to Serial Cable, 6 x Phoenix Connector Blocks
IR Remote	8x8 Remote Control
Rack Mount	2 x 19" Wings
Power Supply	IEC Power Cable

Control

TCP/IP
RS-232
App / Web GUI
IR
Front Panel

RS-232 Connectivity

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

Regulatory Compliance

FC CE RoHS Compliant **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 have implemented CSC (Colour Space Conversion) technology into our latest products to ensure 4K HDR signals can now be supported over the limited infrastructure of HDBaseT™*.

Colour Space Conversion reduces the data rate of the HDMI signal by converting the colour space from 4:4:4 or 4:2:2 to a lower format. Within Colour Space Conversion technology the native resolution and frame rate remain constant from end to end. The only part of the signal that is converted during transmission is the colour.

*Blustream CSC products do not support HDR10+ or the dynamic variation of Dolby Vision due to the way these specific variations of dynamic HDR (dHDR) 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.

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