



#### About Blustream

Blustream is the audio visual industry's award winning option for advanced HDMI distribution. Our products have been designed and engineered by a global team of AV specialists with over 30 years experience. Research highlighted the market need for an AV distribution brand that could deliver both industry leading performance and most importantly reliability. This has resulted in us developing a range of HDBaseT, Video over IP and HDMI solutions that deliver seamless AV integration within any installation environment. As an official HDBaseT adopter and alliance member, Blustream is firmly positioned at the forefront of this advanced technology. Through integration of the latest pioneering chipsets our engineers have developed the world's most innovative range of AV distribution products.

#### Why Choose Blustream?

- > Blustream products support resolutions up to 4K
- > Bi-directional PoE on all HDBaseT™ matrices and extenders
- > Audio breakout functionality
- Integration of Audio Return Channel (ARC)
- > Advanced EDID management
- > Limitless integrated control options

From initial specification of projects through to industry leading after-sales support and training, Blustream provide our partners with complete confidence in the AV solutions they deliver. Our global technical support team are available via phone, Skype or email 24 hours a day.





# UNDERSTANDING THE TECHNOLOGY



HDBaseT™ transmits converged uncompressed full HD digital video, audio, 100 BaseT Ethernet, Power-over-Ethernet (PoE or PoH) and various control signals through a single Cat5e/6/7 cable over distances of up to 100 metres.



Video over IP - distribute resolutions up to 4K HDR over an IP infrastructure with visually lossless reproduction, minimal latency, fully flexible I/O structure, and virtually limitless cabling distances.



HDCP2.2 is the next generation of copy protection required to allow the playback of the latest 4K source media.



A 4K screen has four times the number of pixels than your current Full HD 1080p display so the clarity of the image is much more superior and detailed



Blustream extenders and matrices feature PoH. This feature allows you to power the remote HDBaseT™ receiver/s via the CAT cable, removing the need for a power supply.



HDR (or High Dynamic Range) expands the ability of a display to show a wider and richer range of colours, much brighter whites, and much darker blacks.



HDMI carries both video and audio to our screens. You can extract the audio element of the HDMI signal to feed into your home stereo / audio system for a better quality sound experience.



HD audio is featured on many sources in formats such as Dolby Digital and DTS. Blustream products are compatible with the latest HD audio resolutions.



Audio Return Channel (ARC) works by transmitting the audio signal the opposite way down a HDMI cable, connecting your display directly to an amplifier for better sound reproduction.



Extended Display Identification Data. When a source is connected to a screen a digital 'handshake' happens. This handshake ensures that your screen displays your media with the best possible video and audio quality available.



Picture in Picture allows for a secondary source to be overlayed onto a primary video feed enabling the user to watch simultaneous feeds on one screen.



A combination of multiple screens can be made into an array for the viewing of one large media image across multiple screens.



Pre-amp line level volume control allows for the volume of an audio output to be altered using the Web GUI for the associated product.



The new Blustream V2 products feature a Graphical User Interface via an in-built webserver. This feature allows users to set-up and control their matrix from a mobile device or computer connected to the same network.





Blustream products have an unrivalled ability to seamlessly distribute AV signals throughout your smart home.

Utilising the latest HDBaseT<sup>M</sup> chipsets, our engineers have developed pioneering solutions that push the boundaries of both performance and reliability.

#### About HDBaseT™

HDBaseT™ is the revolutionary technology that enables video signals and more to be distributed over long distances around a property. The following lists all the integrated signals that can be distributed by HDBaseT™ over a single CAT 6 cable network.

- 1. Video Uncompressed 4K UHD Video
- 2. Audio Any standard digital audio format including Dolby Digital and DTS
- 3. Control Various control signals including 2-way IR, IP and RS-232
- 4. Ethernet Expand wired internet coverage throughout the home
- 5. Power over Ethernet (PoE) Deliver power directly to the HDBaseT™ receiver, removing the need for additional power supplies





### Deliver the ultimate entertainment experience



Blustream products make it simple to distribute HDMI or VGA signals to multiple displays. Utilising a single CAT6 cable infrastructure, our solutions transmit 4K resolutions to multiple displays with ease. Blustream products offer unrivalled levels of performance and reliability. Our products have all been tested and approved for compatibility with all recognised manufacturers of TV displays and AV hardware.

## Seamless integration of multiple video formats

Blustream have one box solutions that integrate HDMI, VGA and Component Video signals and distribute them via HDBaseT™. With the added ability of matrix video outputs, audio breakout and volume control, Blustream presentation switches make AV integration easy within any boardroom or classroom.









## Multicast UHD Has 4 Operational Modes

Matrix distribution with unlimited configuration options (Requires 1GB network switch)

Video wall presentation (Requires 1GB network switch)

One-to-one HDMI extender (No network switch required)

One-to-many HDMI distribution (No network switch required)



IP100UHD-TX/RX





# A New Era of video distribution

#### - IP100UHD-TX/RX

Multicast UHD from Blustream delivers virtually latency free distribution of HDMI video over a 1GB Network switch. Using lossless compression technology, Multicast delivers HDMI, Bi-directional IR and RS-232 up to lengths of 100m over a single CAT cable. The beauty of Multicast is its flexibility and ease of installation. The industry has been requesting a video over IP solution that can be installed in minutes and without the need for networking qualifications. Multicast UHD has been developed in line with these objectives and is now ready to deliver a new era in advanced video distribution.

#### **Key Features**

- Easy to set up and install using our comprehensive wizard software.
- Introducing 'Quick set-up' which allows basic product installation and configuration in just seconds without the need of a computer or configuration software.
- O No need for knowledge of networks or creating VLAN's.
- Product supports full 4K UHD, including HDR up to lengths of 100m.
- Virtually latency free (1 frame) delivering flawless image quality.
- Built-in video scaler in the Multicast receiver allows each display to playback its optimal quality video.
- Infinitely scalable to incorporate any number of transmitters and receivers.

- Easy integration with all 3rd party control systems including Control 4, Crestron, RTI, Push, Elan, URC, Savant & Demopad.
- Receivers include LAN loop out to daisy chain and extend distances
- Full IR control and IR pass-through for control of the Multicast system and source equipment
- PoE from the network switch will power all transmitters and receivers in the system.
- System can be configured with virtually any layer 3 network switch

#### CM100 Control Module

The CM100 Control Module allows simple third party control of the Multicast system using TCP/IP, RS-232 or IR. The system wizard PC configuration program and pre-built Blustream product drivers simplify product installation and negate the need for an understanding of complex network infrastructures.

#### Key Features

- Ocontrol via IP, RS232 & IR
- Simple Bridging of multiple networks
- Drivers available for all major control brands







#### HMXL44-KIT-V2 - 4x4 HDBaseT™ Matrix Kit

70m (4K up to 40m), Bi-directional IR & RS-232, PoH (PoE), Simultaneous HDMI + HDBaseT™ Outputs, Audio Breakout with pre-amp variable line-level control, RS-232 & TCP/IP Control, HDCP 2.2 compliant, includes 4x HDBaseT™ receivers



Model Description

HMXL44-KIT V2 4x4 HDBaseT™ Matrix Kit 4K, HDCP 2.2, Web GUI, Line Level Volume Control

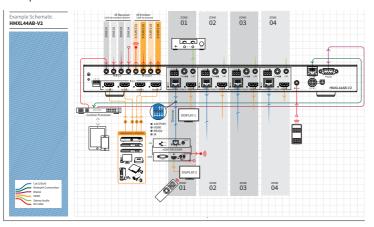
HMXL44-KIT V1 4x4 HDBaseT™ Matrix Kit 4K

The HMXL44-KIT-V2 is a 4K HDCP 2.2 compliant 4x4 matrix package, delivering HDMI, Bi-directional IR and PoH (PoE) up to lengths of 70m over a single CAT cable. The matrix also provides advanced features including audio breakout with pre-amp variable line-level control, simultaneous HDBase™HDMI outputs, RS-232 pass through to enable 3rd party control of displays and web interface module for control and configuration of the matrix. The HMXL44-KIT-V2 is supplied with 4 x HEX70ED Receivers.

#### **Key Features**

- Features 4x HDMI inputs which can be independently routed to 4x HDBaseT™/HDMI outputs
- Simultaneous HDBaseT™ and HDMI outputs to allow connection to dual displays per zone
- ➤ HDMI audio de-embedded to associated analogue L/R audio outputs and digital coax
- > HDCP 2.2 compliant
- Supports PoH (Power over HDBaseT™) to power compatible HDBaseT™ receivers
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K

#### **Example Schematic**



























#### HMXL88-V2 - 8x8 HDBaseT™ Matrix

6x 70m (4K up to 40m) HDBaseT™ Outputs + 2x HDMI
Outputs, Bi-directional IR, PoH (PoE), RS-232, IR & TCP/IP
Control. HDCP 2.2 compliant. Web GUI

Model	Description
HMXL88 V2	8X8 HDBaseT™ 4K Matrix, HDCP 2.2, Web GUI
HMXL88 V1	8X8 HDBaseT™ 4K Matrix



Our Essential 8x8 HDBaseT™ Matrix offers unprecedented performance and value for the custom installation market. The HMXL88-V2 is a 4K HDCP 2.2 8x8 matrix with a combination of 6 x HDBaseT™ and 2 x HDMI Outputs. This allows for cost effective integration of local displays and AV receivers within an installation. The matrix delivers HDMI, Bi-directional IR and PoH (PoE) up to lengths of 70m over a single CAT cable. The matrix features a web interface module for control and configuration and can also be seamlessly controlled by 3rd party control systems via RS-232 or IP.

















#### RX70AMP - HDBaseT™ Receiver with Integrated Audio Amplifier

70m HDBaseT™ Input (4K up to 40m), Local HDMI & Audio Input, 30w per channel digital Amplifier



The RX70AMP is a HDBaseT™ Receiver with a difference. The difference being is it has an integrated 30W digital amplifier. Perfect for discreet installations, this one box solution enables you to maximise audio performance without compromising cosmetics of the installation. The audio from the HDBaseT™ signal can then be extracted and output via either the 30W 2.1 digital amplifier or digital audio output. The RX70AMP also features local HDMI and Audio inputs, ARC integration and line level output.



























# AV DISTRIBUTION

#### PLA88ARC-V2-8x8 HDBaseT Matrix

100m (4K up to 70m), Bi-directional IR & RS-232, PoH (PoE), Simultaneous HDBaseT™/HDMI Outputs, Audio Breakout, ARC enabled, HDCP 2.2 compliant

#### **Product Overview**

Our Platinum 8x8 HDBaseT™ Matrix delivers a range of industry leading features. The PLA88ARC- V2 is a 4K HDCP 2.2 compliant 8x8 matrix, transmitting HDMI, Bi-directional IR and PoH (PoE) up to lengths of 100m over a single CAT cable. The matrix also provides advanced features including independent audio routing, Audio Return Channel (ARC), simultaneous HDBaseT/HDMI outputs, two HDBaseT inputs, LAN Serving, RS-232 pass through to enable seamless 3rd party control integration and web interface module for control and configuration of the matrix. The matrix can be configured using the Blustream Software or Web - GUI, allowing the user to define audio channels, designate EDID presets and insert audio delays on outputs to correct any lip sync issues within the system.

#### **Full Range Of Platinum Matrices Available**

Model	Description
PLA88ARC-V2	8x8 HDBaseT™ Platinum Matrix - 100m, 4K, HDCP 2.2, Web GUI, Line Level Volume Control
PLA88L-V2	8x8 HDBaseT™ Platinum Matrix - 70m, 4K, HDCP 2.2, Web GUI, Line Level Volume Control
PLA66ARC-V2	6x6 HDBaseT™ Platinum Matrix - 100m, 4K, HDCP 2.2, Web GUI, Line Level Volume Control
PLA66L-V2	6x6 HDBaseT™ Platinum Matrix - 70m, 4K, HDCP 2.2, Web GUI, Line Level Volume Control

<sup>\*</sup> Additional HDBaseT $^{\mathrm{m}}$  inputs can be configured by request





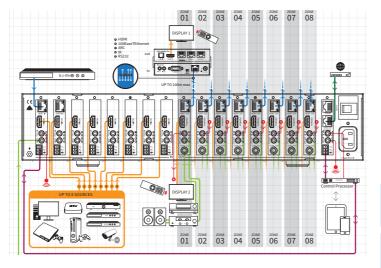






#### **Key Features**

- Advanced HDBaseT<sup>™</sup> technology offering uncompressed video and audio with zero latency
- ➤ Features 8x HDMI inputs which can be independently routed to 8x HDBaseT<sup>™</sup> and HDMI outputs
- > Simultaneous HDBaseT™ and HDMI outputs to allow connection to dual displays per zone
- > HDCP 2.2 compliant
- HDMI audio breakout to Coaxial digital and analogue L/R audio outputs with variable pre-amp line level control
- Supports PoH (Power over HDBaseT™) to power compatible HDBaseT™ transmitters & receivers
- > Features independent 24x16 audio matrix

























#### **NEW Custom Pro 4K Matrix**

Fully configurable HDMI / HDBaseT Matrix - Optional Bi-directional IR & RS-232, Simultaneous HDBaseT/HDMI Outputs and Audio Breakout, HDCP 2.2 compliant





The 'new' Custom Pro Matrix achieves new levels of both performance and flexibility. AV installers can now easily specify their desired I/O structure and choose the additional control features required for a specific project. The Custom Pro Matrix has been specifically designed to operate in challenging AV environments. Its robust housing and interlocking board configuration make both installation and maintenance a seamless experience. Advanced optional features include audio breakout with pre-amp variable line-level control, simultaneous HDBaseT™/HDMI outputs, RS-232 pass through and a web browser interface module for control and configuration of the matrix.

#### **Key Features**

- > 2-Way and 4-Way Interchangeable input & output boards
- ➤ Optional control boards; IR Routing, Audio breakout, RS-232
- > HDBaseT™ 2.0 specifications (coming soon)
- > HDCP 2.2 compliant
- > Pre-configured PRO Matrix models available

Custom Pro 4K - Input Boards	
PRO-IN2H	2-Way HDMI Input board
PRO-IN4H	4-Way HDMI Input board
Custom Pro 4k	C - Output Boards
PRO-OUT2H	2-Way HDMI Output Board
PRO-OUT4H	4-Way HDMI Output Board
PRO-OUT2TL	2-Way HDBaseT™ Lite Output Board (70m)
PRO-OUT4TL	4-Way HDBaseT™ Lite Output Board (70m)
PRO-OUT4TLS	4-Way HDBaseT™ Lite / HDMI Output Board (70m)
Custom Pro 4K - Feature Boards	
PRO-8IR	8-Way IR Control Board
PRO-8RS232	8-Way RS-232 Control Board
PRO-8AB	8-Way Audio Breakout Board



4-Way HDBaseT™ Lite / HDMI Output Board (70m)

Custom Pro 4K -	ustom Pro 4K - Chassis	
CUSTOMPRO-HUB	Custom Pro Matrix Hub	



# EFFORTLESS

We now offer dedicated control apps that significantly increase the control capability of our products. Configuration of your matrix and control of third party sources and displays has never been easier.

#### **Key Features**

- > Full configuration of advanced Blustream matrix controls
- Build a fully integrated multiroom AV control solution including third party sources and displays (requires Demopad Cloud account)
- > Fast and affordable integrated control for multi-room AV systems
- > Intuitive personalised user interface













#### Control Hardware

Control of sources and displays

CENTRO 8 Control Processor



CENTRO C Control Gateway





#### CENTRO 8M Micro-Control Processor





#### HEX100ARC-KIT-V2 - HDBaseT™ Extender Set

100m (4K up to 70m), Bi-directional IR & RS-232, Bi-directional PoH (PoE), HDMI loop-out, Audio Breakout, ARC, 3 x LAN switch and supports HDCP 2.2











#### HEX70ED-KIT-V2 - HDBaseT™ Extender Set

70m (4K up to 40m), Bi-directional IR & RS-232, EDID management, HDMI loop-out, Bi-directional PoH (PoE), HDCP 2.2







#### HEX70B-KIT - HDBaseT™ Extender Set

70m (4K up to 40m), Bi-directional IR, Bi-directional PoH (PoE)











→ UP TO 70m







#### EX40B-KIT - Slim Line HDMI Extender Set

40m @ 1080p (1080i up to 50m) & Bi-directional IR













#### HSP14AB-V2 - 4-Way 4K HDCP 2.2 HDBaseT™ Splitter

**NEW** 

with Audio Breakout, EDID Management and HDMI loop out





Our HSP14AB-V2 4K HDBaseT™ splitter distributes a single HDMI source to four simultaneous HDBaseT™ outputs. It transmits HDMI, Bi-directional IR and PoH (PoE) up to lengths of 70m over a single CAT cable. The 4-Way splitter also features HDCP 2.2 support, audio breakout, EDID management and HDMI loop out for integrating local displays or cascading to multiple devices.

#### MFP112 - 11 Input Multi-format Presentation Switch

11 Input 2 Output Multi-format Presentation Switch Including HDBaseT™ input and output





Our MFP112 is a multi-format presentation switcher with in-built video scaling, audio embedding, de-embedding, EDID management and HDBaseT<sup>TM</sup> input and output. The MFP112 works in 2 modes, first as a 11 input dual output switcher, alternatively each output can work independently with HDMI output 1 routing the 1x HDBaseT<sup>TM</sup> + 4x HDMI inputs only and output 2 switching all 11 video/audio inputs. With control of the switcher using the front-panel push buttons, IR remote control or RS-232 interface it is an ideal solution for commercial installations.

#### MFP72 - 7 Input Multi-format Presentation Switch

7 Input 2 Output Multi-format Presentation Switch





Our MFP72 is a multi-format presentation switcher with in-built video scaling, audio embedding, de-embedding and EDID management. The MFP72 works in 2 modes, first as a 7 input dual output switcher, alternatively each output can work independently with output 1 routing the 4x HDMI inputs only and output 2 switching all 7 video/audio inputs. With control of the switcher using the front-panel push buttons, IR remote control or RS-232.





#### MX44AB-V2 - 4K HDMI Matrix

with Audio Breakout and EDID Management

#### **NEW**





AUDIO







Our 4K HDMI matrix individually distributes four HDMI sources to four displays. This enables all sources to be viewed seamlessly as required within a matrix configuration. The unit transmits all HDMI resolutions up to and including 4K. The matrix also includes the advanced features of audio breakout / embedding and EDID management.

#### **4K HDMI Splitters**

with Audio Breakout and EDID Management

Model	Description
SP14-V2	4-Way 4K HDMI 2.0 Splitter - HDCP 2.2
SP12AB	2-Way 4K HDMI Splitter with Audio Breakout and EDID management







Our 4K UHD HDMI splitter distributes a single HDMI source to four simultaneous outputs. The unit transmits all HDMI resolutions up to and including 4K UHD. The splitter also includes the advances features of audio breakout and EDID management.

#### 4K HDMI Switch

with Audio Breakout and EDID Management

Model	Description
SW41AB-V	4-Way 4K HDMI Switch with Audio Breakout and EDID management
SW21AB-V	2 2-Way 4K HDMI 2.0 Switch with Audio breakout - HDCP 2.2



Our HDMI switch with integrated audio breakout can be controlled via IR, front panel and RS232. The switch supports all video resolutions up to and including 4K.

















#### MX44VW - 4x4 HDMI/VGA Matrix

4x4 4K Seamless Switching HDMI/VGA Matrix with Video Wall and Multi-viewer feature, IR routing, RS-232, IR & TCP/IP Control





Our MX44VW 4K HDMI/VGA matrix is a multi-purpose high-speed video processing system. The MX44VW can be configured for 3 different output modes. The MX44VW can perform as a 4x4 seamless matrix switcher, as a 2x2, 4x1 or 1x4 video wall solution and as a quad multi-view presentation system. Inputs can be assigned as either HDMI or VGA with associated L/R analogue audio with control of the switcher via the front-panel push buttons, IR remote control, RS-232 interface and TCP/IP.

#### SC12SP - 2-Way HDMI 4K Down-scaler and Splitter

HDMI 4K30 HDCP 2.2 compliant splitter with in-built down-scaler, audio breakout and EDID management







The Blustream SC12SP is a HDMI 4K splitter with in-built down-scaler, designed for installations in which a single 4K video source needs to be distributed to multiple displays that support different maximum video resolutions. The SC12SP allows those displays only capable of supporting lower video resolutions to receive 4K video while still showing maximum original 4K resolution on the higher-definition display. The SC12SP supports down-scaling of 4K video to various lower resolution video formats, features audio breakout, advanced EDID management and is HDCP 2.2 compliant.

#### SC11HD - HDMI 4K HDCP 2.2 compliant down-scaler

HDMI 4K30 HDCP 2.2 compliant down-scaler with EDID management







The Blustream SC11HD is a HDMI 4K down-scaler, designed for installations with multiple displays that support different maximum video resolutions. The SC11HD is ideal for installations incorporating HDMI Matrix products or AV amplifiers with 2+ HDMI outputs, allowing those displays only capable of supporting lower video resolutions to receive 4K video while still showing maximum original 4K resolution on the higher-definition displays. The SC11HD supports down-scaling of 4K video to various lower resolution video formats and is HDCP 2.2 compliant with advanced EDID management.





#### **SM11**

Signal Manager with Audio Embedder / De-Embedder



- ➤ Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K
- > Supports full HDMI 2.0 specification 4K UHD video (4k @ 60Hz 4:4:4)
- > HDCP 2.2 support.

#### ADC11AU

Analogue to Digital Audio Converter (ADC)





ADC (Analogue to Digital Audio Converter) converts analogue left/right stereo audio input to both SPDIF optical and coaxial digital PCM outputs

#### DAC12AU

Digital to Analogue Converter (DAC)
Simultaneous Analogue and Digital Output





- > Convert the digital audio output from a TV display into analogue stereo
- > Auto-detects digital connection in use
- > 192 kHz Sample Rate

#### DIG11AU

Digital Audio Converter





- Converts digital audio formats (optical to optical and coax, or, coax to optical or coax)
- ▶ Both optical and coaxial digital outputs work concurrently regardless of input type selected

#### CAT100AU

Audio over CAT





→ UP TO

- > Extend Optical and Coaxial digital audio signals up to distances of 300m
- > Both optical and coaxial digital can be distributed at the same time
- Built in DAC (Digital to Analogue audio Converter)

#### HD11AU

HDMI Audio Embedder / De-Embedder





- Can be configured to work as either a HDMI audio de-embedder or audio embedder
- > Supports 4K UHD video pass-through
- > Extract audio and embed analogue L/R audio input onto the HDMI output

#### OPT41AU

4-Way Optical Switch with built-in DAC and audio conversion



- Perfect for the integration of multiple audio sources with a soundbar
- DAC (Digital to Analogue Audio Converter) converts selected optical digital to analogue left/right stereo audio output



# Don't forget the cables.



#### STATIC STATE HDMI CABLE

Shape your cables and fix them in position for improved connection and cosmetics.

- Cable can be fixed in any required position, perfect for rack installations
- > Transmit all video resolutions up to and including 4K
- > High Speed with Ethernet
- > 3D Compatible
- Deep Colour

Model	Description
HDMISS-05	Blustream Static State HDMI 0.5m
HDMISS-07	Blustream Static State HDMI 0.7m
HDMISS-1	Blustream Static State HDMI 1.0m

#### PERFORMANCE HDMI CABLE

Our longer length Performance HDMI cables have been extensively tested to guarantee 4K resolutions up to 15m.

- > 99.999% Oxygen Free Copper for enhanced signal transfer
- > Transmit all video resolutions up to and including 4K
- > High Speed with Ethernet
- > 3D Compatible
- > Deep Colour

Model	Description
HDMIP-0.5	Performance HDMI Cable - 0.5m
HDMIP-1	Performance HDMI Cable - 1m
HDMIP-2	Performance HDMI Cable - 2m
HDMIP-3	Performance HDMI Cable - 3m





#### MICRO FORM HDMI CABLE

Discrete design for tight spaces and compact installations

- > Discrete design for tight spaces and compact installations
- > Transmit all video resolutions up to and including 4K
- > High Speed with Ethernet
- > 3D Compatible
- > Deep Colour

Model	Description
HDMIM-0.5	Micro Form HDMI Cable - 0.5m
HDMIM-1	Micro Form HDMI Cable - 1m
HDMIM-1.5	Micro Form HDMI Cable - 1.5m
HDMIM-2	Micro Form HDMI Cable - 2m







#### www.blustream.co.uk

Official Distribution Partner

Blustream Ltd 1st Floor Mail Workshop, Unit A, Little Tennis St. South, Nottingham, NG2 4EU, United Kingdom email: sales@blustream.co.uk

Tel: +44 (0)115 824 7000



