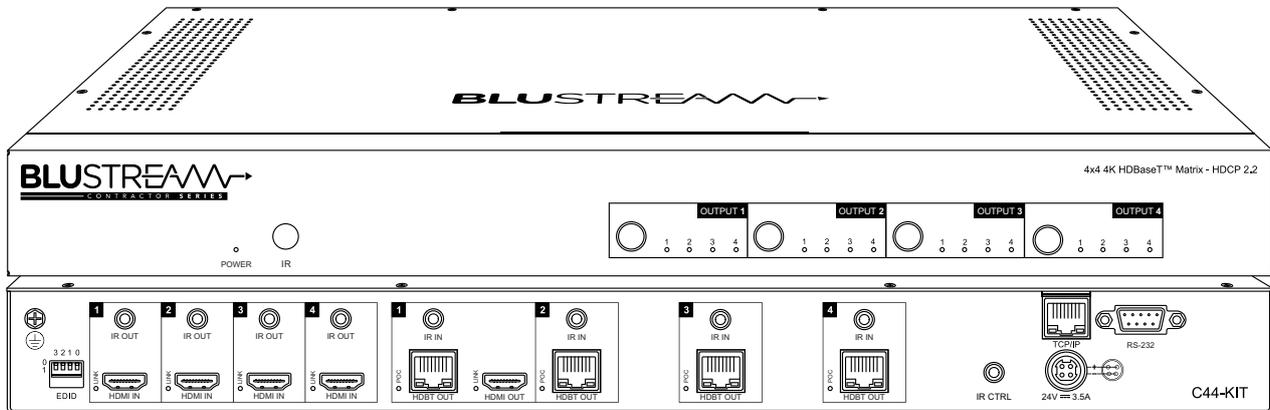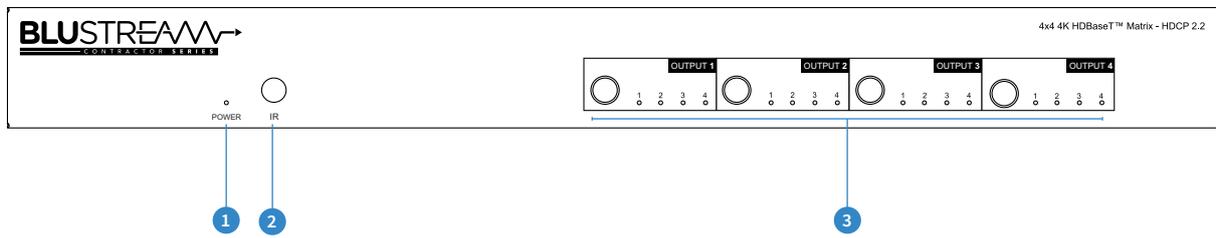# C44-KIT

Quick Reference Guide

Introduction

Our Contractor 4x4 HDBaseT™ Matrix offers unprecedented performance and value for the custom installation market. The C44-KIT is a 4K HDCP 2.2 matrix package, delivering HDMI, bi-directional IR and PoC up to lengths of 70m over a single CAT cable. The matrix also provides advanced features including simultaneous HDBaseT™ / HDMI on output 1 and a web browser interface module for control and configuration of the matrix. The C44-KIT is supplied with 4 x HEX70B receivers.

FEATURES:

- Advanced HDBaseT™ technology offering uncompressed video and audio with zero latency
- Features 4 x HDMI inputs which can be independently routed to 4 x HDBaseT™ outputs
- Output 1 features simultaneous HDMI and HDBaseT™ output
- Extends HDMI up to a distance of 70m 1080p over single CAT cable
- Supports 4K UHD video up to 40m (3840 x 2160 @30Hz 4:4:4, 4096 x 2160 @24Hz 4:4:4, and 4K @60Hz 4:2:0)
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K
- Supports 3D signal display
- Supports bitstream passthrough of multichannel surround sound including object-based audio formats in line with HDMI specifications
- Web interface module for control and configuration of matrix
- Supports bi-directional IR on all HDBaseT™ outputs
- Supplied with Blustream IR receivers and emitters
- Control via front panel, IR, RS-232, and TCP/IP
- Supports PoC (Power over Cable) to power compatible HDBaseT™ receivers
- 3rd Party drivers available for all major home control brands
- 1U Design for 19" rack mount integration - mounting kit included
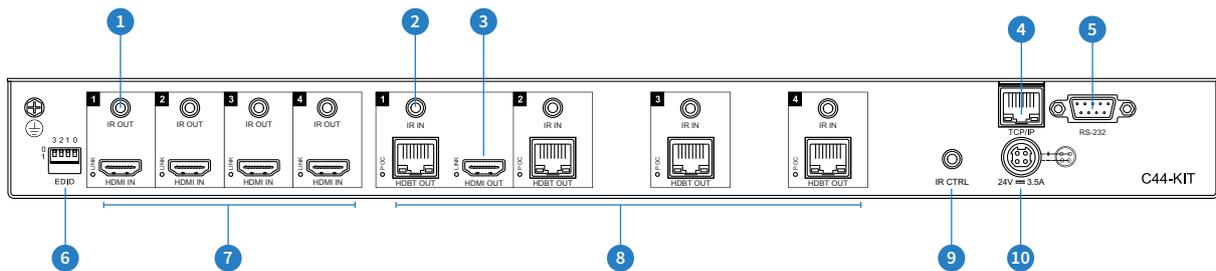- Advanced EDID management
- HDCP 2.2 compliant

Panel Descriptions

Front Panel

1 Power LED Indicator

2 IR Receiver Window

3 HDMI Output Selection Buttons 1-4 - Press to scroll through source inputs per HDMI output

Rear Panel

1 IR Outputs 1 to 4 – 3.5mm stereo jack. Routed IR 5V emitter outputs for discrete source control

2 IR Inputs 1 to 4 – 3.5mm stereo jack. Sends 5V IR out to corresponding HDBaseT™ zones

3 HDMI Output 1 – Output for displays (Output linked to HDBaseT™ Output 1)

4 TCP/IP (RJ45) – Connect to LAN for TCP/IP control of matrix

5 RS-232 Port - For control of the Matrix from PC or third party control processor.

6 EDID Dip-switch – Used for global EDID settings

7 HDMI Inputs 1 to 4 – Connect HDMI sources

8 HDBT Outputs 1 to 4 – Output for displays

9 IR Extension Receiver Input – 3.5mm stereo jack. 5V input for connection of a remote IR sensor or control processor for remote IR control of the matrix

10 Power Port – Use included 24V/3.5A DC adaptor to power the matrix switcher and HDBaseT™ receivers

Understanding the Matrix / Receiver Status Lights

The Blustream matrix and HDBaseT™ extender solutions include status LED indicators on both the matrix and receiver products to show all connections are active and to help diagnose possible problems.

Understanding The Status Lights

Blustream Matrix:

- The Yellow HDBaseT™ status link light will be off when the zone output has been turned off or there is a problem with the specific matrix output
- The Yellow HDBaseT™ status link light will blink when the zone output is on and working
- The Green HDBaseT™ link light will blink if there is an unstable connection between the Blustream matrix and HDBaseT™ receiver
- The Green HDBaseT™ link light will be lit when a there is an active HDBaseT™ receiver connected to the matrix
- The Green HDBaseT™ link light will be off when a there is no connection with a HDBaseT™ receiver

Blustream HDBaseT™ Receiver:

- The HDMI link light will be off when there is no connection with a display
- The HDMI link light will be on when there is an active connection with a display (**Note:** Not all HDBaseT™ RX feature a HDMI status LED)
- 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 Blustream matrix and HDBaseT™ receiver
- The HDBaseT™ link light will be lit when a CAT cable is connected to the HDBaseT™ RJ45 output on the matrix and an active connection is achieved with the Blustream HDBaseT™ receiver
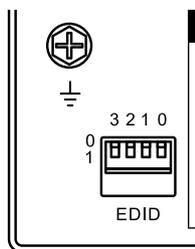
EDID Control

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 need for EDID hand shaking thus making switching quicker and more reliable.

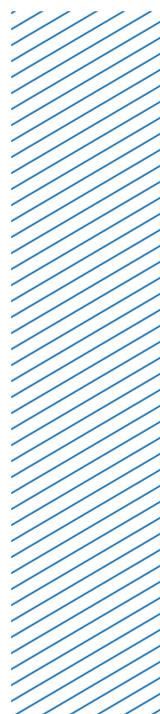Configuration of Matrix EDID settings can be achieved in one of three ways:

1. Using EDID dip-switches located on the rear of the Matrix - (For further details see 'C44-KIT User Manual')
2. Using Supplied Blustream Matrix IR Remote Control (For further details see 'C44-KIT User Manual')
3. Using C44 Web browser interface (For further details see 'Blustream Web GUI Manual')

Global EDID Settings

Dip-switch Position '0' = Off

Dip-switch Position '1' = On

DIP ON ▼/OFF▲ SWITCHING POSITIONS				
3	2	1	0	**EDID TYPE**
OFF	OFF	OFF	OFF	1080p/2.0ch
OFF	OFF	OFF	ON	1080p/5.1ch
OFF	OFF	ON	OFF	1080p/7.1ch
OFF	OFF	ON	ON	1080i/2.0ch
OFF	ON	OFF	OFF	1080i/5.1ch
OFF	ON	OFF	ON	1080i/7.1ch
OFF	ON	ON	OFF	4K60Hz 4:2:0/2.0ch
OFF	ON	ON	ON	4K60Hz 4:2:0/5.1ch
ON	OFF	OFF	OFF	4K60Hz 4:2:0/7.1ch
ON	OFF	OFF	ON	4K30Hz 4:4:4/2.0ch
ON	OFF	ON	OFF	4K30Hz 4:4:4/5.1ch
ON	OFF	ON	ON	4K30Hz 4:4:4/7.1ch
ON	ON	OFF	OFF	DVI 1280x1024
ON	ON	OFF	ON	DVI 1920x1080
ON	ON	ON	OFF	DVI 1920x1200
ON	ON	ON	ON	Software Controlled EDID

Specifications

Video Input Connectors: 4 x HDMI Type A, 19-pin, female, locking

Video Output Connectors: 1 x HDMI Type A, 4 x HDBaseT™ RJ45 connector

RS-232 Serial Port: 1 x DB 9 connector

TCP/IP Control: 1 x RJ45, female

IR Input Ports: 5 x 3.5mm stereo jack

IR Output Ports: 4 x 3.5mm mono jack

Dimensions (W x H x D): 438mm x 212mm x 52mm

Case Dimensions (W x H x D): 438mm x 202mm x 44mm

Shipping Weight: 2.7Kg

Operating Temperature: 32°F to 104°F (0°C to 40°C)

Storage Temperature: -4°F to 140°F (-20°C to 60°C)

Power Supply: 1 x 24V DC/3.5A

NOTE: *Specifications are subject to change without notice.*

Package Contents

- 1 x C44 Matrix
- 4 x HEX70B-RX Receivers
- 1 x Rack Mounting Kit
- 4 x Mounting Kits for HEX70B-RX
- 1 x 24V/3.5A Power Supply
- 1 x Remote Control
- 5 x IRR Blustream 5V IR Receiver
- 4 x IRE1 Blustream 5V IR Emitters
- 1 x Quick Reference Guide

Maintenance

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

For the full Blustream C44-KIT User Manual please visit the download area of our website.

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.