▶ C44-KIT
User Manual

Thank you for purchasing this product.

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Safety And Performance Notice

The transmission distances of HDMI over UTP cables are measured using TE CONNECTIVITY 1427071-6

EIA/TIA-568-B termination (T568B) of cables is recommended for optimal performance.

To minimise interference of the unshielded twisted pairs in the CAT5e/6 cable do not run the HDBaseT / Cat5e/6/6a cabling with or in close parallel proximity to mains power cables.

Do not substitute or use any other power supply other than the enclosed unit, or a Blustream approved replacement.

Do not disassemble either the Transmitter or Receiver units for any reason. Doing so will void the manufacturer's warranty.

Contents

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
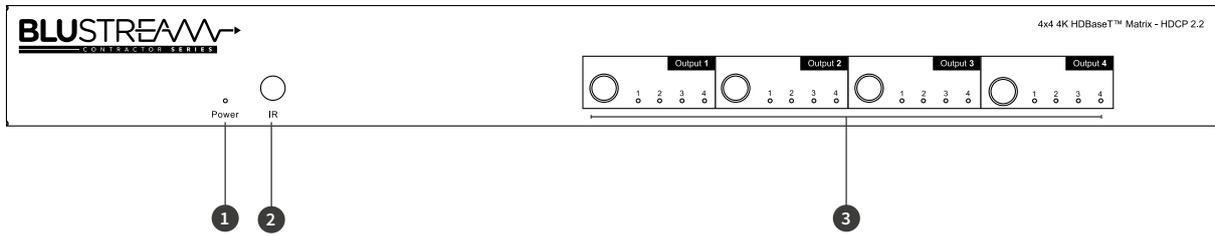
❶ Power LED Indicator

❷ IR Receiver Window

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

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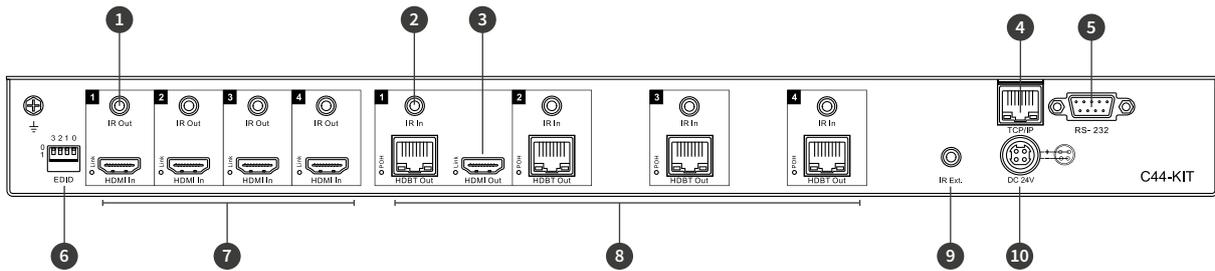
❶ IR Outputs 1 to 4 – 3.5mm stereo jack. Routed IR 5V emitter outputs for discrete source control

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

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

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

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

❻ EDID Dip-switch – Used for global EDID settings

❼ HDMI Inputs 1 to 4 – Connect HDMI sources

❽ HDBT Outputs 1 to 4 – Output for displays

❾ 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

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

Control Ports

The C44 Matrix main communication ports are located on the rear panel and includes the following connections:
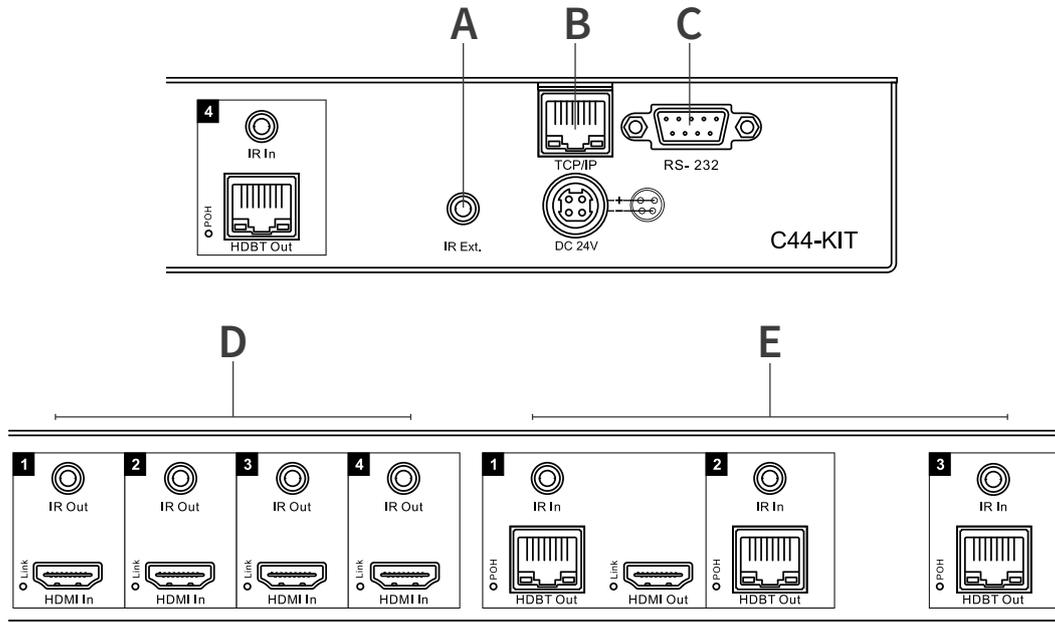
Connections:

A. Global IR Input 3.5mm stereo jack - For control of the Matrix Switcher*

B. TCP/IP – For control of the Matrix (RJ45 Connector)

C. RS-232 – For control of the Matrix (9 pin serial connection)

D. IR Output (3.5mm mono jack) for routed IR control of source equipment*

E. IR Input (3.5mm stereo jack) for IR pass-through to the associated output HDBaseT Receiver*

   *Note - Blustream products use 5V IR hardware. For further details please see page 8 'Infrared Distribution'

   Blustream C44-KIT Matrix is supplied with all required 5V IR emitters and receivers

TCP/IP

The Blustream C44-KIT Matrix can be controlled via TCP/IP.
For the full list of protocols please see ' RS-232 and Telnet Commands' located at the rear of this manual.
The C44-KIT Matrix features a built-in web browser user interface allowing control and configuration of the matrix. For further details please see page 17 'Web Browser Interface'.
A 'Straight-through' RJ45 patch lead should be used.

RS-232 2-Way

The Blustream Matrix can be controlled via a 9-pin serial cable.
For the full list of protocols please see 'RS-232 and Telnet Commands' located at the rear of this manual.
Details of RS-232 pin assignment and communication are adjacent. Please note that depending on your control device serial port pin configuration you may require either a 'Straight' RS-232 cable or 'Null-modem' type.

BLUSTREAM RS-232		REMOTE CONTROL CONSOLE	
PIN	Assignment	PIN	Assignment
1	NC	1	NC
2	Tx	2	Rx
3	Rx	3	Tx
4	NC	4	NC
5	GND	5	GND
6	NC	6	NC
7	NC	7	NC
8	NC	8	NC
9	NC	9	NC

Baud Rate: 57600 bps

Data Bit: 8-bit

Parity: None

Stop Bit: 1-bit

Flow Control: None

Matrix HDBaseT™ Receiver Options

HEX70B-RX

HDBaseT™ receiver with 2-way IR pass-through. Supports distances up to 40m @ 4K and 70m @ 1080p. HDCP 2.2 compliant.
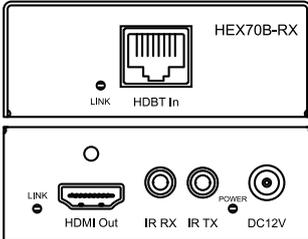
- HDBaseT™ Input
- HDMI Output
- IR Output 3.5mm mono jack
- IR Input 3.5mm stereo jack

Terminating HDBaseT™ CAT Cable

It is important that the interconnecting CAT cable between the Blustream HDBaseT™ products is terminated using the correct RJ45 pin configuration. The CAT cable MUST be a 'straight' (pin-to-pin) CAT cable and it is advised that this is wired to the T568B wiring standard as this format is less prone to EMI (Electro-Magnetic Interference).

When installing CAT cables it is advised that you use the best possible CAT cable quality possible. HDMI distribution products will only work if used with CAT5e standard cable or above. Blustream recommends using a CAT6 cable for your installations, especially when running over longer distances, in areas of high EMI, or for 4K signal distribution. It is advised that using any method of patch panel, wall plate or join in the CAT cable is avoided as these will result in HDBaseT™ signal degradation. Blustream also recommend using the best quality RJ45 connectors possible.

RJ45 Wiring - T568B
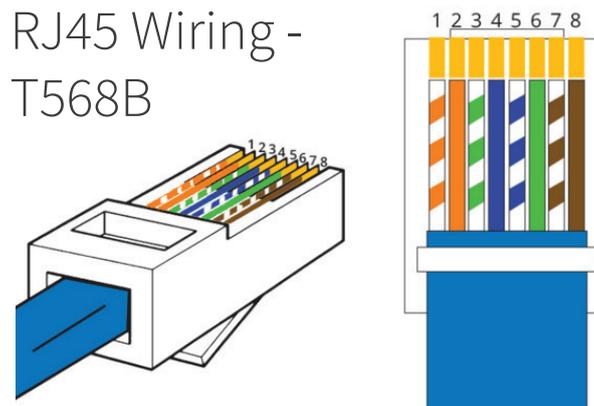
Understanding The Matrix / Receiver HDBaseT™ Status Lights

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

Infrared Distribution

The Blustream range of matrix products include multiple options for control and routing of IR.

IMPORTANT: Blustream Infrared products are all 5V and NOT compatible with alternative manufacturers Infrared solutions. When using third party 12V IR control solutions please use optional Blustream IRCAB cable for IR conversion.

IR Emitter - IRE1 & IRE2 (IRE2 sold separately)

Blustream 5V IR Emitter designed for discrete IR control of hardware.
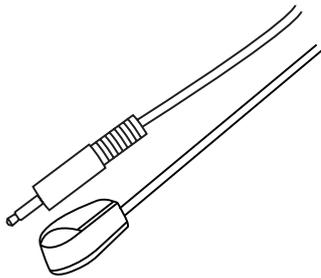
Infrared 3.5mm Pin-Out

IR Emitter - Mono 3.5mm.
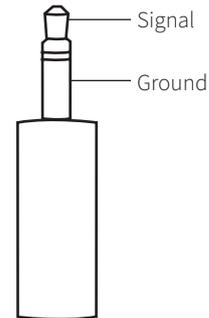
Signal
Ground

IR Receiver - IRR

Blustream 5V IR receiver to receive IR signal and distribute through Blustream products.
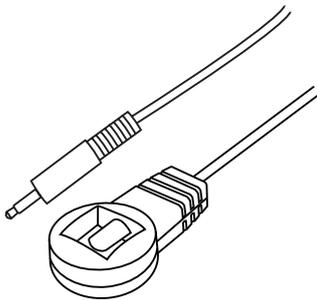
IR Receiver - Stereo 3.5mm

Signal
5V
Ground
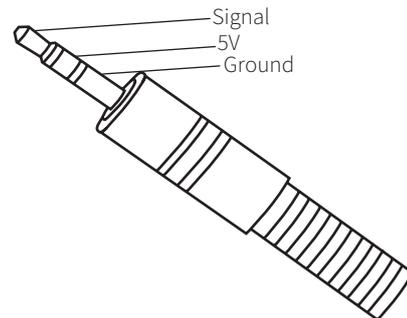
IR Control Cable - IRCAB

Blustream IR Control cable 3.5mm Mono to 3.5mm Stereo for linking third party control solutions to Blustream products.
Compatible with 12V IR third party products.
Note: Cable is directional as indicated.
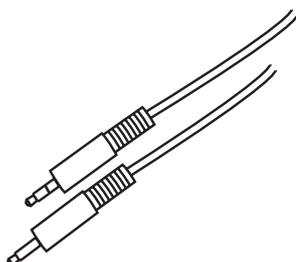
Infrared Remote Control
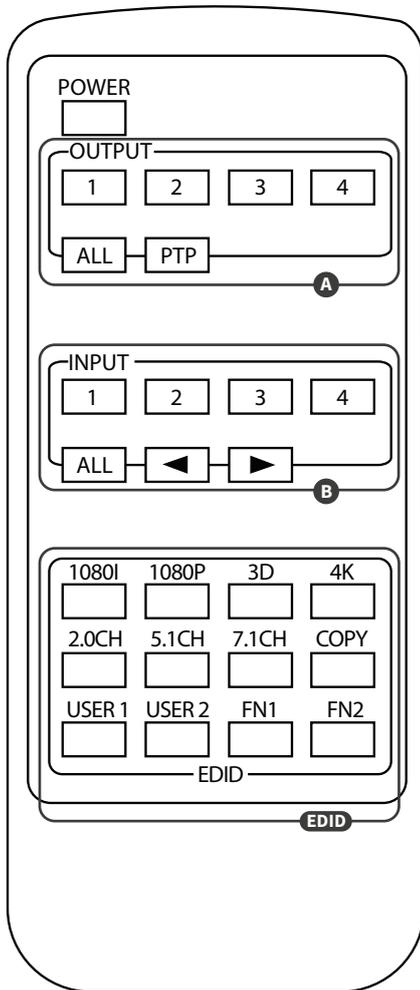
OUTPUT AND INPUT SELECTION

A. Select the zone OUTPUT you wish to change the source on (Numbers 1-4 correspond to the zone outputs 1-4).

B. Select the source INPUT you wish to change on the selected zone to (Numbers 1-4 corresponds to the source inputs 1-4).

C. Press PTP button If you wish to instantly mirror all inputs and outputs (Example - Input 1 to output 1, input 2 to output 2 etc).

EDID SET UP

The C44-KIT Matrix provides a comprehensive range of EDID settings. Below are three examples of how to deploy the desired EDID setting when using the supplied remote.

A. Fix EDID to an Input or ALL inputs: Press the desired video resolution button (1080i / 1080p / 3D / 4K), then select the desired audio format (2.0ch / 5.1ch / 7.1ch), then select the source input you want this EDID information allocated to by pressing the INPUT 1–4 or the ALL button.

B. Copy EDID of Output-X to an Input or ALL: Press the COPY button then select the OUTPUT you wish to copy the EDID information from, then select the source input you want to copy this EDID to by selecting the INPUT 1-4 or the ALL button.

NOTE: THE BUTTON PRESS SEQUENCE SHOULD BE FINISHED IN 3 SECONDS, OTHERWISE THE OPERATION IS DISCARDED.

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 then from this information the source will discover what the best audio and video resolutions need to be outputted.

While the objective of EDID is to make connecting a digital display to a source a simple plug and play procedure issues do arise when multiple displays or video matrix switching is introduced because of the increased number of variables.

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 the following ways:

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

Global EDID Settings
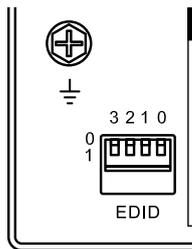
Dip-switch Position '0' = Off

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

To manage EDID using the App or Web GUI, it is necessary to select the appropriate DIP switch selection on the matrix. Until the matrix EDID DIP switches have been assigned to 'Software Controlled EDID', the option to select individual EDID's per input will remain greyed out within the software.

BLUSTREAM

Example Schematic
C44-KIT

Network Connection
RS-232
HDMI
CAT (HDBaseT)
IR Cable

MAXIMUM OF 4x 4K SOURCES

SOURCE 01
SOURCE 02
SOURCE 03
SOURCE 04

IR Emitter
Link to source

IR Out

LOCAL DISPLAY

EDID
3 2 1 0

DISPLAY 1

70m max

HEX70B-RX

ZONE 01
ZONE 02
ZONE 03
ZONE 04

MAX 4x 4K DISPLAYS

12V POC
HDMI
IR

A B C

DISPLAY 4

70m max

HEX70B-RX

C44-KIT

IR EXT.
DC 24V
RS-232

Control Processor
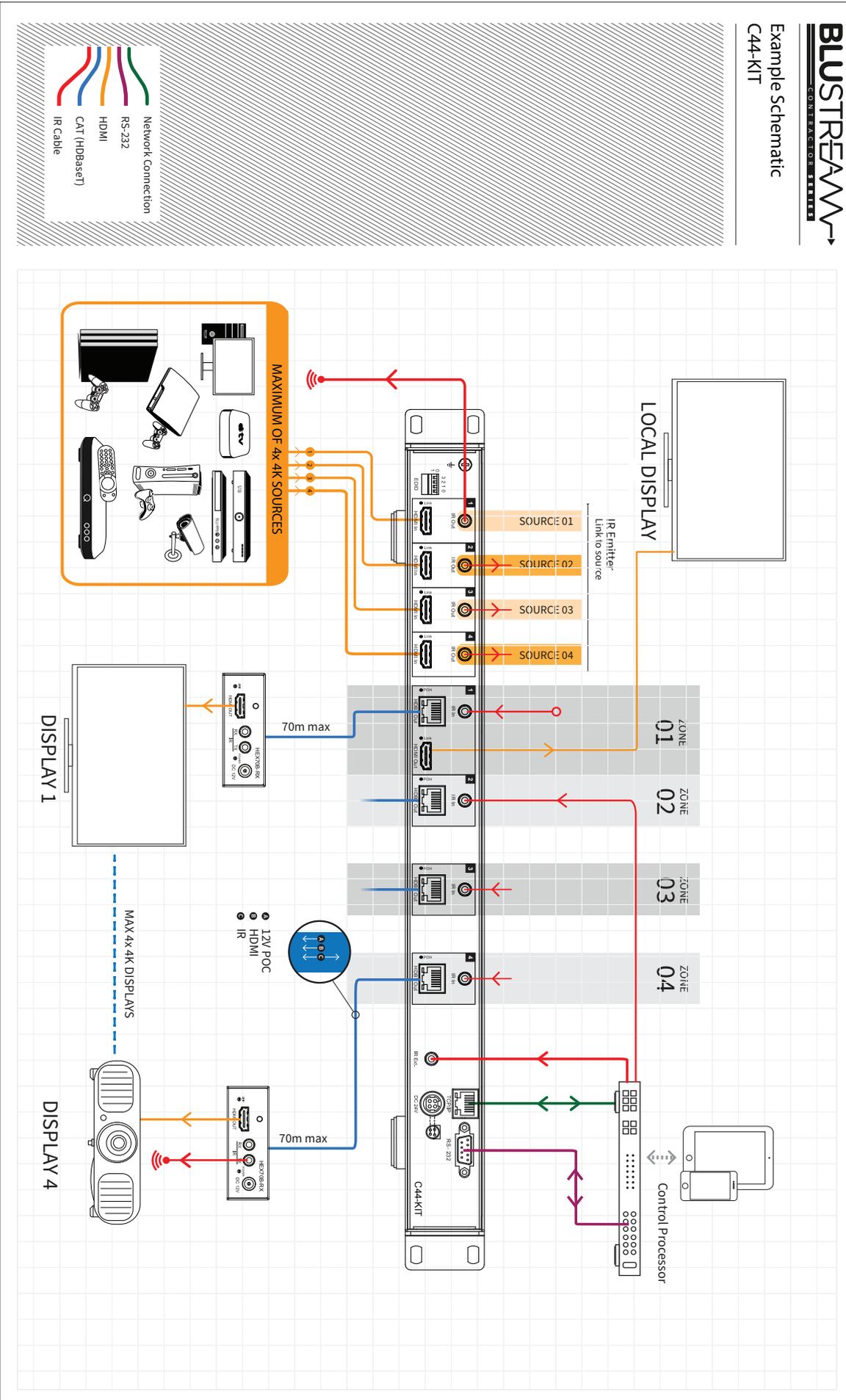
Specifications

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.

RS-232 and Telnet Commands

The Blustream C44-KIT can be controlled via serial and TCP/IP. The following pages list all available serial commands for the C44-KIT matrix. Details of RS-232 pin assignment can be found on page 5.

Commonly Used Serial Commands

There are several commands that are commonly used for control and testing:-

STATUS	Status will give feedback on Matrix such as zones on, type of connection etc
PON	Power on
POFF	Power off
OUTxxON	(xx is the zone number you wish to turn on)
Example:	OUT01ON (This would turn output one back on)
OUTxxFRyy	(xx is the zone out, yy is the input)
Example:	OUT01FR04 (This would switch output 1 to source input 4)

Common Mistakes

• Carriage return – Some programs do not require the carriage return where as other will not work unless sent directly after the string. In the case of some Terminal software the token <CR> is used to execute a carriage return. Depending on the program you are using this token maybe different. Some other examples that other control systems deploy include \r or 0D (in hex)

• Spaces – Blustream commands do not require space between commands unless specified. There may be some programs that require spacing in order to work.
  - How the string should look is as follows OUT01ON
  - How the string may look if spaces are required: OUT{Space}01{Space}ON

• Baud rate or other serial protocol settings not correct - please see Page 5 for matrix settings

RS232 Command	Description
?	Print Help Information
HELP	Print Help Information
STATUS	Print System Status And Port Status
PON	Power On, System Run On Normal State
POFF	Power Off, System Run On Power Save State
IRON/OFF	Set System IR Control On Or Off
KEYON/OFF	Set System KEY Control On Or Off
DBG ON/OFF	Set Debug Mode On Or Off
BEEPON/OFF	Set Onboard Beep On Or Off
RESET	Reset System To Default Setting (Should Type "Yes" To Confirm, "No" To Discard)
OUTxxON/OFF	Set OUTPUT:xx On Or Off
POHxxON/OFF	Set POH OUTPUT:xx On Or Off (xx = 01 to 04 or 'ALL' for all outputs)

RS232 and Telnet Commands (Continued)

RS232 Command	Description
OUTxxFRyy	Set OUTPUT:xx From INPUT:yy
EDIDxxCPyy	Copy EDID from output (yy) to input (xx) Both yy & xx can be set individually (01-08) or as ALL (00)
EDIDxxDFzz	Set Input:xx EDID To Default EDID:zz xx=00: Select All INPUT Port xx=[01...04]: Select One INPUT Port yy=[01...02]: Select One OUTPUT Port zz=00: HDMI 1080p@60Hz, Audio 2CH PCM zz=01: HDMI 1080p@60Hz, Audio 5.1CH PCM/DTS/DOLBY zz=02: HDMI 1080p@60Hz, Audio 7.1CH PCM/DTS/DOLBY/HD zz=03: HDMI 1080i@60Hz, Audio 2CH PCM zz=04: HDMI 1080i@60Hz, Audio 5.1CH PCM/DTS/DOLBY zz=05: HDMI 1080i@60Hz, Audio 7.1CH PCM/DTS/DOLBY/HD zz=06: HDMI 1080p@60Hz/3D, Audio 2CH PCM zz=07: HDMI 1080p@60Hz/3D, Audio 5.1CH PCM/DTS/DOLBY zz=08: HDMI 1080p@60Hz/3D, Audio 7.1CH PCM/DTS/DOLBY/HD zz=09: HDMI 4K2K, Audio 2CH PCM zz=10: HDMI 4K2K, Audio 5.1CH PCM/DTS/DOLBY zz=11: HDMI 4K2K, Audio 7.1CH PCM/DTS/DOLBY/HD zz=12: DVI 1280x1024@60Hz, Audio None zz=13: DVI 1920x1080@60Hz, Audio None zz=14: DVI 1920x1200@60Hz, Audio None
MUTEmmTXyy	Turn MUTE (mm = ON or OFF) on OUTPUT (yy = 01 to 04 or 00 for all outputs)
RESETDEF	Restore factory settings

4x4 Matrix IR Database

4X4 MATRIX PRODUCTS	NEC IR: CUSTOMER CODE 1898	HEX IR
POWER	14	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 0689
OUTPUT 1	09	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0689
OUTPUT 2	1D	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 0689
OUTPUT 3	1F	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003f 0016 003f 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003f 0016 003f 0016 0016 0016 0016 0016 003f 0016 003f 0016 003f 0016 003f 0016 003f 0016 003f 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003f 0016 003f 0016 003f 0016 0689
OUTPUT 4	0D	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0689
OUTPUT ALL	19	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 0689
OUTPUT PTP	18	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 0689
INPUT 1	50	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0689
INPUT 2	55	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0689
INPUT 3	48	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0689
INPUT 4	4A	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 0689
INPUT ALL	5E	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0689
INPUT BACK	06	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0689
INPUT UP	05	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 003F 0016 0689
1080i	18	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 0689
1080P	44	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 0689
3D	0F	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0689

4x4 Matrix IR Database

4K	51	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0689
2.0CH	0A	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0689
5.1CH	1E	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 0689
7.1CH	0E	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 0689
COPY	1A	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 0689
USER 1	53	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0689
USER 2	52	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 0016 0016 003F 0016 0016 0016 003F 0016 0689
USER 3	01	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 003F 0016 003F 0016 003F 0016 003F 0016 0689
USER 4	45	0000 006D 0000 0022 0157 00AC 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 0016 0016 0016 0016 0016 0016 0016 0016 003F 0016 0016 0016 0016 0016 003F 0016 0016 0016 003F 0016 003F 0016 003F 0016 0016 0016 003F 0016 0689

Blustream Web Browser Interface

The Blustream C44-KIT matrix unit can be both controlled and configured using the in-built web-server.

The C44-KIT matrix must be connected to an active network router / switch and it is advised that the matrix is given a static IP address. You can configure the network settings of the matrix using either the Web Browser Interface (Blustream matrix products are shipped with the network set to DHCP) or using the Blustream PC Configuration Software (downloadable from the Blustream Drivers & Protocols link on the product web page). If a router is not present and no IP address is assigned to the matrix, the default IP address of the matrix will be 192.168.0.200.

For detailed instructions on using the Blustream Web Browser Interface please download the specific software manual.

Blustream PC Configuration Software

The Blustream C44-KIT matrix units can be configured using the Blustream matrix PC configuration software.

Please download the specific software and PC software manual.

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.

CANADA, AVIS D'INDUSTRY CANADA (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

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.

Installer Notes

BLUSTREAM
CONTRACTOR SERIES