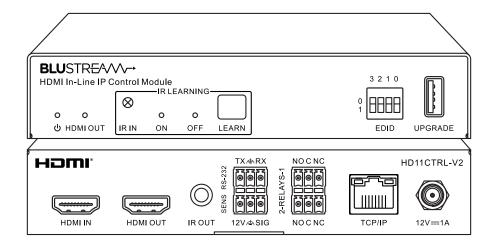


# HD11CTRL-V2

## Quick Reference Guide



### Introduction

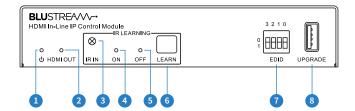
Our HD11CTRL-V2 HDMI in-line controller is an automated room control solution including display on / off control via CEC, RS-232, IR or IP when a HDMI signal is sensed on the input. External relay inputs allow third party triggers for integration with devices such as sensors or switches.

The HD11CTRL-V2 will also help with HDMI compatibility, HDCP 2.2, clock stretching, EDID and handshaking issues that can cause problems when distributing HDMI signals, especially 4K. The HD11CTRL-V2 supports full HDMI 2.0 and HDCP 2.2, with video resolutions up to and including 4K @ 60Hz 4:4:4, and features a web-GUI for control and configuration.

#### **FEATURES:**

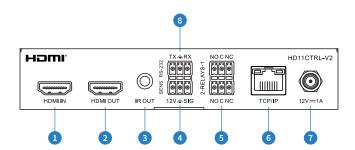
- Automated in-line HDMI control module supporting up to 10 macros, with up to 10 command functions per macro
- Supports HDMI 2.0 18Gbps specification including HDR
- Supports resolutions up to 4K UHD 60Hz 4:4:4
- Supports all known HDMI audio formats including Dolby TrueHD, Atmos and DTS-HD Master Audio transmission
- Features Smart-Scale technology to convert 4K input signal to 1080p output (**Note:** 4:2:2 colour space not supported)
- Can help to solve most HDMI EDID, HDCP, compatibility, and handshaking issues
- Automatic display control via CEC, RS-232, IR or IP
- IR learning up to 30 IR commands
- Relay control for interface to third party devices such as projector screens
- Signal sense input for connection from third party devices such as sensors or switches
- HDCP 2.2 compliant with advanced EDID management
- In-built web-GUI for configuration and control

### Front Panel



- 1 Power LED Indicator Illuminates when the device is powered
- Output LED Indicator Illuminates when the device has an active connection to a display
- 3 IR Learning IR In IR receiver used for learning IR commands to be used with auto on / off trigger
- 4 IR Learning IR On LED Flashes blue when device is in IR learning mode refer to User Manual for IR learning function
- 6 IR Learning IR Off LED Flashes blue when device is in IR learning mode refer to User Manual for IR learning function
- 6 IR Learning Learn Button Press to enable IR learning mode refer to User Manual for IR learning function
- EDID DIP Switches Adjust the EDID setting for the source input refer to the EDID management dip switch table
- USB Upgrade Port USB connector used for firmware upgrades

### Rear Panel



- 1 HDMI Input Connect to HDMI source device
- 2 HDMI Output Connect to HDMI display device (supports CEC)
- 3 IR Output 3.5mm mono jack provides IR output to a device
- 4 Signal Sense Input (12V) 3 pin Phoenix connector to connect to external sensor or switch
- Relay 1 ~ 2 3-pin Phoenix connector to allow relay control of a device such as a projector screen
- TCP/IP RJ45 connector for TCP/IP and web-GUI control of the Matrix
- Power Port Use included 12V/1A DC adaptor to power the device
- 8 RS-232 Serial Port 3-pin Phoenix connector for control of device by third party control system



### Web-GUI Control

The HD11CTRL-V2 features an in-built web-GUI which can be used for control and configuration of the device. By default the HD11CTRL-V2 is set to DHCP, however if a DHCP server (eg: network router) is not installed, the matrix IP address will revert to the below details:

Default **Username** is: blustream Default **Password** is: 1234 Default **IP Address** is: 192.168.0.200

For further information please see the HD11CTRL-V2 User Manual - available to download from the Blustream website.

# RS-232 Configuration

The RS-232 port can be used for configuration and control of the product, as well as allowing programmed control commands to be sent to a connected RS-232 device.

The default RS-232 communication settings are:

Baud Rate: 57600 Data Bit: 8 Stop Bit: 1 Parity Bit: none

For a complete RS-232 command list please see the HD11CTRL-V2 User Manual - available to download from the Blustream website.

# **EDID Management Dip-switches**

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 determine what the best resolution is to output.

To change the EDID settings, move the EDID dip-switches as required on the front panel of the unit. Please see table below for settings.

The Software EDID preset allows EDID selection via the devices web GUI, or for a custom EDID to be loaded into the HD11CTRL-V2. This is used for sources that may output non-standard resolutions or video formats.



3	2	1	0	EDID Type
<b>Combination of DIP positions</b>				Елір Туре
0	0	0	0	1080p 60Hz 2.0ch
0	0	0	1	1080p 60Hz 5.1ch
0	0	1	0	1080p 60Hz 7.1ch
0	0	1	1	1080i 60Hz 2.0ch
0	1	0	0	1080i 60Hz 5.1ch
0	1	0	1	1080i 60Hz 7.1ch
0	1	1	0	4K 60Hz 4:2:0 2.0ch
0	1	1	1	4K 60Hz 4:2:0 5.1ch
1	0	0	0	4K 60Hz 4:2:0 7.1ch
1	0	0	1	4K 60Hz 4:4:4 2.0ch
1	0	1	0	4K 60Hz 4:4:4 5.1ch
1	0	1	1	4K 60Hz 4:4:4 7.1ch
1	1	0	0	DVI 1920x1080@60Hz
1	1	0	1	DVI 1920x1200@60Hz
1	1	1	0	EDID Pass-through
1	1	1	1	Software Management



# Specifications

#### HD11CTRL-V2

**Video Input Connectors:** 1 x HDMI Type A, 19-pin, female **Video Output Connectors:** 1 x HDMI Type A, 19-pin, female

RS-232 Serial Port: 1 x 3-pin Phoenix connector

TCP/IP Control Port: 1 x RJ45, female
IR Output Port: 1 x 3.5mm mono jack
Relay Control: 2 x 3-pin Phoenix connector
Sensor Input: 1 x 3-pin Phoenix connector

EDID Selection: 4-pin DIP Switch

**Product Upgrade:** 1 x USB Type A, female

Dimensions (W x H x D): 145mm x 28mm x 84mm

Shipping Weight: 1.0kg

**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: 12V/1A DC

NOTE: Specifications are subject to change without notice. Weights and dimensions are approximate.

# Package Contents

#### HD11CTRL-V2

- 1 x HD11CTRL-V2
- 1 x 12V/1A DC Power Supply
- 1 x IR Emitter
- 1 x RS-232 Control Cable
- 1 x Mounting Kit
- 1 x Quick Reference Guide

### 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.