

# SC11HD-V2 User Manual



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# 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

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.

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# Introduction

Our Blustream SC11HD-V2 is a HDMI 4K scaler, designed for installations with multiple displays that support different maximum video resolutions. The SC11HD-V2 is ideal for installations with muliple output resolution requirements.

The SC11HD-V2 supports down-scaling of 4K video to 1080P and supports HDCP 2.2 with advanced EDID management. It also features either de-embedding or embedding audio within the HDMI signal path.

#### FEATURES:

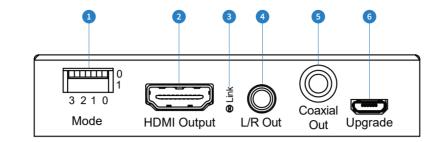
- HDMI 4K video scaler
- Supports 4K UHD video input (3840 x 2160 @30Hz 4:4:4 with HDR) 3840 x 2160 @ 50/60Hz 4:2:0)
- HDMI output will downscale 4K@24/25/30Hz 4:4:4 to 1080P@24/25/30Hz, and 4K@24/25/30/50/60Hz 4:2:0 to 1080P@ 24/25/30 /50/60Hz
- Supports 10-bit HDR10
- Can be configured to work as either a HDMI audio de-embedder or audio embedder
- HDMI audio de-embedded to both analogue L/R audio and coaxial digital outputs concurrently (2CH PCM only)
- Embed analogue L/R 2CH audio input onto HDMI output
- Supports all known HDMI audio formats including Dolby TrueHD, Dolby Atmos, Dolby Digital Plus and DTS-HD Master Audio transmission

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- Advanced EDID management
- HDCP 2.2 support
- CEC and ARC pass through

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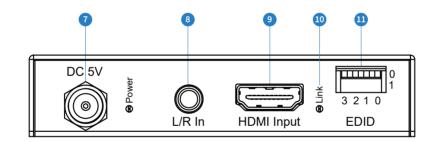
#### Front Panel



#### **Connections:**

- MODE dip-switches adjust the MODE setting for HDMI output see page 5 for further details
- 2 HDMI output connect to a HDMI display / end point
- 3 HDMI LED indicator lit when there is an active HDMI connection to a display / end point
- Left/Right Analogue Audio Output 3.5mm stereo jack Extract audio from HDMI input source NOTE: Source audio must be PCM 2 channel.
- 6 Coaxial Digital Output used when audio is de-embedded from HDMI
- 6 Micro USB port used for firmware upgrade only

#### Rear Panel



#### **Connections:**

- Power connection use supplied 5V 1A DC adaptor
- 8 Left/Right Analogue Audio Input
- 9 HDMI input connecto to source device
- 0 HDMI LED indicator lit when there is an active HDMI connection from source device
- DID dip-switches adjust the EDID setting for source input see page 5 for further details

### EDID Management

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.

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.

The SC11HD-V2 will act as an 'end point' in the HDMI signal path. Using the EDID dip-switches pre-determins the video resolution and audio format of the source regardless of the video output resolution that the SC11HD-V2 scales to.

To change the EDID settings move the EDID dipswitches as required on the front panel of the unit. Please see adjacent table for settings.

**Note:** You must power-cycle the SC11HD-V2 after changes have been made in order for the EDID settings to update.

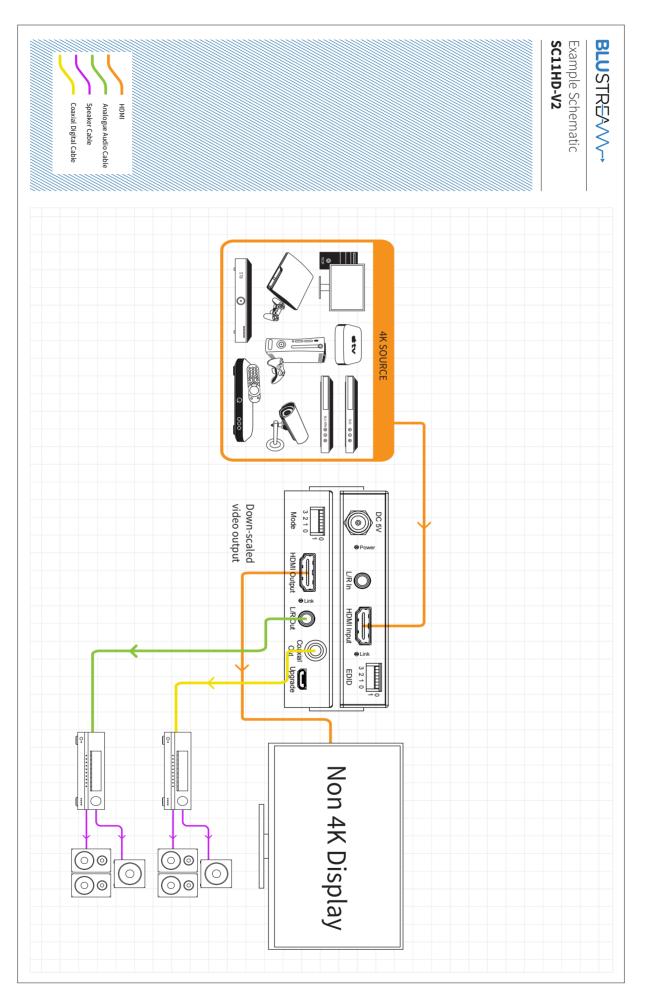
3	2	1	0	
Со	mbination o	EDID Type		
0	0	0	0	Copy EDID from output
0	0	0	1	1080p 2.0ch
0	0	1	0	1080p 5.1ch
0	0	1	1	1080p 7.1ch
0	1	0	0	1080i 2.0ch
0	1	0	1	1080i 5.1ch
0	1	1	0	1080i 7.1ch
0	1	1	1	4K60Hz 4:2:0 2.0CH
1	0	0	0	4K60Hz 4:2:0 5.1CH,
1	0	0	1	4K60Hz 4:2:0 7.1CH
1	0	1	0	4K30Hz 4:4:4 2.0CH
1	0	1	1	4K30Hz 4:4:4 5.1CH
1	1	0	0	4K30Hz 4:4:4 7.1CH
1	1	0	1	DVI 1280x1024
1	1	1	0	DVI 1920x1080
1	1	1	1	DVI 1920x1200

Mode Management

3	2	1	0	Mode Settings			
Combination of DIP positions			sitions	Mode Settings			
1	Х	х	0	Always convert 4K formats to 1080P			
0	х	х	0	Auto convert 4K formats to 1080P when the device detects the display cannot support 4K			
х	1	х	0	HDCP follows the source device			
х	0	х	0	HDCP follows the display device			
х	Х	1	0	Audio embed mode - embeds the analogue left/right audio onto the HDMI signal			
х	х	0	0	Audio bypass mode - allows HDMI audio to pass through			
х	Х	х	1	Mode control by serial USB			
х	Х	Х	0	Mode control by DIP switch			

**Note:** You must power-cycle the SC11HD-V2 after changes have been made in order for the Mode settings to update. The SC11HD-V2 cannot up-scale to 4K video formats.





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### Specifications

Audio Input Connectors: 1x Analogue Left/Right audio (3.5mm stereo jack) Audio Output Connectors: 1x RCA (SPDIF) & 1x Analogue Left/Right audio (3.5mm stereo jack) Video Input Connectors: 1x HDMI Type A, 19-pin, female Video Output Connectors: 1x HDMI Type A, 19-pin, female EDID: 4-PIN DIP Switch MODE: 4-PIN DIP Switch Product upgrade: 1x Female Micro USB Dimensions including connections (W x H x D): 83mm x 15mm x 83mm Shipping Weight: 0.5kg 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: 5V/1A DC

### Package Contents:

- 1x SC11HD-V2
- 1x 5V/1A DC power supply
- 1x Mounting kit
- 1x Quick Reference Guide

### Maintenance

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



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