

## 4K/60Hz HDMI Scaler with Audio Embed/Extract & Image Flip Capability



- Any video resolution can be scaled up or down to any other resolution
- Supports UHD / 4K @ 60 Hz with 4:4:4 Color on input and output
- Horizontal and Vertical mirroring (x or y-axis flip)
- Analog and digital audio inputs and outputs
- Advanced scaling for real-time frame rate capture & conversion
- By default scales the output to the native resolution of any connected display
- Quick Select button combinations for setting output resolution
- Supports audio extraction without attached display
- Embeds audio to HDMI from analog or digital audio source
- Selectable audio delay up to 150ms (for lip sync)
- HDMI, HDCP, and DVI Compliant

The SC-HD-2B is a video scaler/processor that can convert any HDMI resolution into a user specifiable output resolution. It accepts virtually all PC and HDTV resolutions including 4Kx2K @ 60Hz with 4:4:4 color. Its world-class scaling engine works in real time with no delay and is capable of flipping the video horizontally or vertically making it ideal for teleprompting, rear projection or semi 3-D holographic applications. Contrast, hue, saturation, and other parameters of video can be also manipulated.

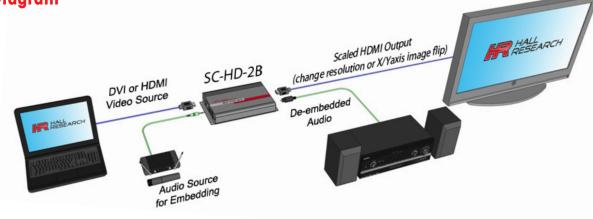
Both stereo analog and optical digital audio inputs and outputs are available. The audio from the HDMI input signal can be extracted (de-embedded) and output on both digital as well as stereo analog signal. The audio embedded into the HDMI output is selectable from one of three sources: HDMI input, analog L/R input, or digital optical input.

The SC-HD-2B has the ability to output a wide range of resolutions regardless of the input timing and resolution. The output resolution can automatically match the native resolution of the display connected to its output (based on the EDID setting of the display), or it can be specified by the user.

The SC-HD-2B features an OSD menu for configuration, picture setup, system information and other advanced options. The compact and sturdy enclosure features integrated mounting brackets.



## **Block Diagram**



## **Specifications**

Video Bandwidth: 600 MHz / 18 Gbps

Input Ports: (1) HDMI

(1) 3.5mm Analog Audio (1) Digital Audio (TOSLINK) (1) USB (Service Only)

Output Ports: (1) HDMI

(1) 3.5mm Analog Audio (1) Digital Audio (TOSLINK)

Resolutions: DVI signal VGA (640x480) thru WUXGA (1920x1200)

HDTV signal 480p through UHD+ (4096x2160@60Hz)

Analog Audio Input: Audio Level 2 Vrms Max Impedance 49.9 Kohm

Type Unbalanced

Analog Audio Output: Audio Level 2 Vrms Max THD+N < -80 dB @ 0 dBFS 1 kHz (A-wt)

SNR >70 dB @ 0 dBFS

Freq. Response < +/- 3 dB @ 20 Hz- 20 kHz

Crosstalk < -70 dB @ 10 kHz

Type Unbalanced

Optical Audio Input:Sampling Rate (kHz): 32, 44.1, 48, 82, 88.2, 96, 176.4 and 192 Optical Audio Output:Sampling Rate: 48 kHz

Mounting:Brackets at each end with screw holes provided for rack or wall mounting

HDMI Cable Lengths:Input:

1080p 8-bit: 15m 1080p 12-bit: 10m 4K 8-bit: 3m 1080p 8-bit: 15m

Output: 1080p 12-bit: 10m

4K 8-bit: 3m

100 VAC to 240 VAC, 50-60 Hz, 0.6A, External; 5 VDC, 2.6 A (US/EU Standard, CE/FCC/UL Certified) Power Supply:

Temperature/Humidity:Storage: -4 to +140 °F (-20 to 60 °C) 20%~90%, non-condensing +32 to +104 °F (0 to 40 °C) 20%~90%, non-condensing Operating:

Typical DC Current Draw:5VDC, 2.6 A Power Supply ~2.2 A Max

Model: SC-HD-2B

**Enclosure Type:** Metal (Aluminum) Cooling: Convection

4.02" W x 6.5" D x 0.98" H Dimensions:

102 mm W x 165 mm D x 25 mm H Dimensions include mounting flanges Model Only: 0.77 lbs (0.35 kg)

2.85 lbs (1.29 kg) Shipping:

Safety: CF

EMI/EMC: CE, FCC Class A 90,000 hours estimated MTBF: Warranty: 3 years parts and labor



Weight: