# Hi<sub>5</sub> 3D

# 3G/HD-SDI Multiplexer To HDMI 1.4a and SDI Video and Audio Converter

The Hi5-3D is a 3D video multiplexer that combines two 3G or HD-SDI Inputs into various multiplexed 3D formats for output on HDMI 1.4a and HD-SDI. The HDMI 1.4a output supports EDID transactions that allow automatic 2D/3D configuration per the HDMI monitor's capabilities. Input SDI 2 will be frame synchronized to input SDI 1 in 3D Modes. Embedded SDI input audio is embedded in both the HDMI and SDI outputs. 2 channel RCA audio output is also supported with user control of channel selection. The Hi5-3D supports AJA's Mini-Config application for user configuration and firmware download.

#### Features

3G/HD-SDI to HDMI 1.4a with additional SDI output

10-bit HDMI 1.4a support including 3D and embedded audio

Additional 2 Channel RCA jack audio output

Setup via Dipswitch or PC/Mac using USB port and supplied USB cable (USB configuration software application supplied on CD)

Uses 5-20V power (supply sold separately)

5 year warranty

## **3D Modes Supported**

The Hi5-3D supports, depending on the video format, "side-by-side", "top-bottom", and "frame-packing" 3D modes. The "side-by-side" and "top-bottom" modes involve compressing, either horizontally or vertically, each input for combining into a single video stream at the same rate of the inputs. The "frame-packing" mode stacks two full resolution inputs into a "tall" frame (at twice the clock and line rates). When selected, "frame-packing" can only be used with 23.98/24Hz input frame rates

Each input, in addition to 3D processing, can be flipped either horizontally, vertically, or both. This control is provided by 4 switches that can be engaged in any combination.

## **Format support**

The Hi5-3D works with both 2D and 3D inputs. When in the 2D mode, the input is simply passed to the output unmodified. In the 3D mode, the Hi5-3D supports the minimum required 3D modes as defined by the CEA for HDMI 1.4a televisions.

## **CEA Required 3D modes:**

2xSDI	1.5gb	720p50/59.94/60	T/B
2xSDI	1.5gb	1080p23.98/24	T/B, FP
2xSDI	1.5gb	1080psf23.98/24	T/B, FP
2xSDI	1.5gb	1080i50/59.94	S/S

## Notes:

"psf" inputs are converted to "p" for HDMI output. The SDI output can support S/S and T/B formats only. Future software versions may add other frame rates.

## **User Control**

The Hi5-3D supports both dipswitch control and host control via the Mini-Config application. One of the dipswitches is a "Local/Remote" switch. When in the "Local" mode, the remaining dipswitches support a subset of the user controls. When in the "Remote" mode, AJA's Mini-Config application controls the unit (or control as last set).

# **Specifications**

## Input Formats:

720p 50/59.94/60 1080i 50/59.94/60 1080p23.98 1080p24