Hi5 3D Mini-Converter Q&A

3/2011

1. What is the Hi5 3D?

The Hi5 3D is a 3D video multiplexer Mini-Converter that combines two HD-SDI inputs (3G supported) into various multiplexed 3D formats for output on true stereoscopic ("stereo") HDMI 1.4a as well as HD-SDI.
The Hi5 3D is the most flexible 3D Mini-Converter in the market with Horizontal and Vertical image flipping independently on both inputs, an absolute must for the reality of 3D camera setups.

2. What are the inputs to the Hi5 3D?

Dual HD-SDI with 3G support (auto-selected), SMPTE-292/296/424:

1 SDI for left eye input (10-bit)
1 SDI for right eye input (10-bit)

3. What are the outputs of the Hi5 3D?

1 - HDMI v1.4a true stereo output at 10-bit.
1 - 3G/HD-SDI output at 10-bit.

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4. Is SD-SDI supported on the HI5 3D?

No, SD-SDI stereoscopic muxing is not supported.
The input needs to be a 3G or HD-SDI source for proper stereoscopic muxing.
However, if an SD-SDI signal is input to the Hi5 3D, it will be passed straight through as an SD signal to both HDMI and SDI outputs.

5. Since the Hi5 3D supports HDMI 1.4a does it support all the previous HDMI standards?

Yes, all HDMI standards up to and including true stereo HDMI 1.4a are supported.

6. What modes of 3D are supported in the Hi5 3D?

The Hi5 3D supports the following 3D modes, depending on the video format:

1. Side-by-Side (S/S)
2. Top-Bottom (T/B)
3. Frame- Packing
4. Anaglyph for screening 3D material on 2D monitors.

The "Side-by-Side" and "Top-Bottom" modes involve squeezing, either horizontally or vertically, each input for combining into a single HD video stream at the same frame 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. The control is provided by 4 switches that can be engaged in any combination or through the Mini-Config application.

7. What are the formats supported?

The Hi5 3D works with both 2D and 3D inputs.
When in the 2D mode, the input is simply passed to the output unmodified.

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In the 3D mode, the Hi5 3D supports the minimum required 3D modes as defined by the CEA for HDMI 1.4a televisions.

8. What raster sizes and frame rates does the minimum CEA standard entail?

720p 50/59.94/60
1080p 23.98/24
1080psf 23.98/24
1080i 50/59.94

Note: "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.

9. What type of user controls are supported?

The Hi5 3D supports both dip-switch control and host control via the AJA Mini-Config application.
 One of the dip-switches is a "Local/Remote" switch:
When in the "Local" mode, the remaining dip-switches support a subset of the user controls. When in the "Remote" mode, AJA's Mini-Config application controls the unit via a standard USB interface.

10. Can I use the HD-SDI output to deliver to a 3D stream over SDI?

Yes, the HD-SDI output can be used to deliver a 3D stream to other devices for distribution in a facility or mobile truck environment.

11. Are all the outputs active at the same time?

Yes.

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12. What type of monitor is needed for the 3D output?

A 3D HD-SDI and/or true stereo HDMI 1.4a capable monitor is required to view the output of the Hi5 3D as a stereo image.

13. How is the Hi5 3D powered?

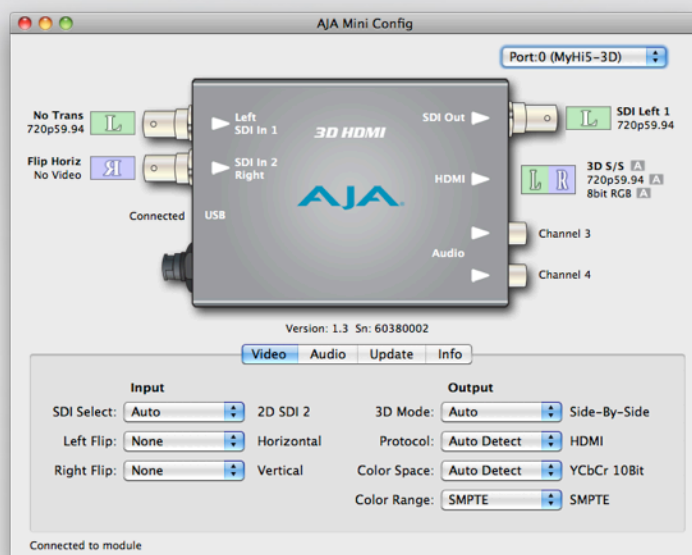The Hi5 3D is 5-20V and can be powered by the DWP, DWP-U or DWP-12V.
Note: (power supply sold separately)

14. Does the Hi5 3 support audio?

Yes, embedded audio (2 or 8 channel) is supported from input plus an additional 2 channel RCA jack outputs audio, useful for monitoring where necessary. Selection of the audio channels output via RCA can be done via the AJA Mini-Config application.

15. How do I upgrade or change settings on the Hi5 3D?

Setup via Dip-Switch or the AJA Mini-Config app on PC/Mac using the USB port and supplied USB cable (USB configuration software application supplied on CD). Any future firmware updates are done via the USB interface.

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16. Where do I go for more information on the Hi5 3D?

More information can be obtained from your local reseller or you can visit the AJA website: http://www.aja.com

Or you can call or email AJA Sales directly for more information: sales@aja.com

17. What is the price of the Hi5 3D?

The retail price for the Hi5 3D is an astonishingly low USD $495.00

18. What is the warranty period for the Hi5 3D?

The warranty period for the Hi5 3D is a generous 5 years, the standard international warranty period for all AJA Converter products.

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