

Appendix A: Specifications

Video Input

- SDI, 1x BNC
- 3G SMPTE 424/425M
- HD SMPTE 292/296M
- SD SMPTE 259M

Input Formats

(automatic configuration)

- 1 x 3Gb SDI (level A or B)**
- 2048x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
 - 2048x1080psf 23.98, 24, 25, 29.97, 30
 - 1920x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
 - 1920x1080psf 23.98, 24, 25, 29.97, 30
 - 1920x1080i 25, 29.97, 30 (4:4:4 and 4:2:2, 12 bit)
 - 1280x720p 50, 59.94, 60 (4:4:4 and 4:2:2, 12 bit)

- 1 x 1.5Gb SDI**
- 2048x1080p 23.98, 24, 25, 29.97, 30
 - 2048x1080psf 23.98, 24, 25, 29.97, 30
 - 1920x1080p 23.98, 24, 25, 29.97, 30
 - 1920x1080psf 23.98, 24, 25, 29.97, 30
 - 1920x1080i 25, 29.97, 30
 - 1280x720p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60

- 1 x 270Mb SDI**
- 525i 29.97
 - 625i 25

NOTE: Interlaced and Progressive formats shown with frame rates.

Video Output

- SDI, 1x BNC

Output Formats

Video Out is a delayed, reclocked version of Video In, at same frame rate, etc. Video Out is undefined when no input is present.

Video Latency (time measured between video input and video output connector):

- SD (270 Mb) = 17.2 usec
- HD (1.5 Gb) = 6.3 usec
- 3G level A = 3.2 usec
- 3G level B = 6.1 usec

Audio Inputs and Outputs

- Balanced Analog Audio, 1 x 25 pin D female connector on converter, 4 channels in, 4 channels out.
- Breakout cable provided with 1 x 25 pin D male connector:
 - 4 x XLR female input breakout connector
 - 4 x XLR male output breakout connectors

Digital Audio Converters

- 24 bit

Embedded Audio

- SMPTE 272M (SD): 20-bit, 48KHz synchronous
- SMPTE 299M (3G/HD): 24 bit, 48KHz synchronous
- Incoming embedded audio can be passed, removed, or overridden.
- Up to 16 channels supported.

NOTE: 2048x1080p/psf 29.97 and 30 formats support a maximum of 8 channels embedded audio.

Embed Path Audio Latency (time measured between audio input and video output connector):

- 1100 usec

Disembed Path Audio Latency (time measured between video input and audio output connector):

- 1200 usec

Analog Audio Levels Configured via Mini-Config software:

Pro 1: 0 dBfs = +24 dBu

Pro 2: 0 dBfs = +18 dBu

Pro 3: 0 dBfs = +15 dBu

Consumer 1: 0 dBfs = +12 dBu

User Controls

- External DIP switch
- USB port used with Mini-Config software application to configure device via PC/Mac

Physical

Power

- +5 to 20V DC regulated, 6 watts max
- AJA external power supply model DWP-U-R1 (included):
 - 100-240V, 50/60Hz universal input

Size

- 5.8" x 3.1" x 1 (147 x 79 x 25mm)

Environment

Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)

Operating Relative Humidity: 10-90% non-condensing

Operating Altitude: <2,500 meters (<8,000 feet)

*Safe Storage Temperature
(Power OFF):* -40 to 60 degrees C (-40 to 140 degrees F)