



3G-AM

The 3G-AM is an 8-channel AES audio embedder/disembedder with support for 3G-SDI input and output up to 1080p 60. Audio disembedding is always functional, providing 4 AES outputs. Audio embedding is user selectable, on a channel pair basis, to either pass 3G-SDI input audio or to embed input AES audio from the breakout cable.

AES inputs are sample rate converted to a 48 KHz rate synchronous to the video input. The 3G-AM automatically detects and configures to the input video standard.

<https://www.aja.com/products/3g-am>

Video Input Formats

- 1 x 3 Gb SDI (level A or B)
 - (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
 - (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
 - (HD) 1920 x 1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920 x 1080i 50, 59.94, 60
 - (HD) 1280 x 720p 50, 59.94, 60
- 1 x 1.5 Gb SDI
 - (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30
 - (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30
 - (HD) 1920 x 1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920 x 1080i 50, 59.94, 60
 - (HD) 1280 x 720p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- 1 x 270 Mb SDI
 - (SD) 625i
 - (SD) 525i

Video Input Digital

- 1x 3G-SDI BNC, SMPTE-259/292/424

Video Output Digital

- 1x 3G-SDI BNC, SMPTE-259/292/424

Audio Inputs and Outputs

- AES PCM audio, 1x 25 pin D female connector on converter, 8-Channels in, 8-Channels out, selectable in pairs
- Breakout cable provided with 1x 25 pin D male connector:
 - 4x XLR female input breakout connectors (AES3 110 ohm)
 - 4x XLR male output breakout connectors (AES3 110 ohm)

Audio Data Formats

- AES3-2003

- SMPTE 337M

Digital Audio Converters

- 24-bit

Embedded Audio

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

NOTE: 2048 x 1080p/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):

- 1500 usec (SRC ON)
- 400 usec (SRC OFF)

Disembed Path Audio Latency

(time measured between video input and audio output connector):

- 210 usec

User Controls

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

Size (w x d x h)

- 5.8" x 3.1" x 1.0" (147.32 x 78.74 x 25.4 mm)

Power



- +5-20VDC, 5 watts power supply required, included with purchase

Environment

- Safe Operating Temperature: 0 to 40 C (32 to 104 F)
- Safe Storage Temperature (Power OFF): -40 to 60 C (-40 to 140 F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)