



3G-AMA

The 3G-AMA is a 4-channel analog audio embedder/disembedder with support for 3G-SDI input and output up to 1080p 60. Audio disembedding is always functional, providing four analog outputs. Audio embedding is user selectable, on a channel pair basis, to either pass 3G-SDI input audio or to embed input analog audio from the breakout cable. Analog audio levels are selectable. The 3G-AMA automatically detects and configures to the input video standard.

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

Video Formats

- (2K) 2048x1080p
- (2K) 2048x1080PsF
- (HD) 1920x1080p
- (HD) 1920x1080PsF
- (HD) 1920x1080i
- (HD) 1280x720p
- (SD) 720x576i
- (SD) 720x480i

Video Input Formats

- 1x 3 Gb SDI (level A or B)
 - (2K) 2048x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
 - (2K) 2048x1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
 - (HD) 1920x1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920x1080i 50, 59.94, 60
 - (HD) 1280x720p 50, 59.94, 60
- 1x 1.5 Gb SDI
 - (2K) 2048x1080p 23.98, 24, 25, 29.97, 30
 - (2K) 2048x1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920x1080p 23.98, 24, 25, 29.97, 30
 - (HD) 1920x1080PsF 23.98, 24, 25, 29.97, 30
 - (HD) 1920x1080i 50, 59.94, 60
 - (HD) 1280x720p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- 1x 270 Mb SDI
 - (SD) 625i 50
 - (SD) 525i 59.94

Video Output Formats

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

- Video Latency, time measured between video input and video output connector:
 - 3G level A = 3.2 usec
 - 3G level B = 6.1 usec
 - HD (1.5 Gb) = 6.3 usec
 - SD (270 Mb) = 17.2 usec

Video Input Digital

- 1x 3G-SDI BNC, SMPTE-259/292/372/424

Video Output Digital

- 1x 3G-SDI BNC, SMPTE-259/292/372/424

Audio Inputs and Outputs

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

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: 2048x1080p/PsF 29.97 and 30 formats support a maximum of 8-channels embedded audio

Path Latency

- Embed Path 1100 μsec
- Disembed Path 1200 μsec

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 Interface

- 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)