



# OG-3G-AMA

An openGear 8-Channel analog audio embedder/disembedder, OG-3G-AMA supports 3G-SDI input and output up to 1080p 60, and automatically detects and configures to the input video standard. It uses 3-pin terminal block connectors that can be set to perform audio input or output functionality.

Analog audio levels and audio embedding/disembedding are selectable, with embedding/disembedding on a channel pair basis to pass 3G-SDI input audio or embed input analog audio from 3-pin terminal block connectors.

Designed for use in high density openGear 2RU frames including AJA's OG-X-FR frame, new DashBoard Software support on Windows®, macOS® and Linux® offers remote control and monitoring of the openGear architecture and provides convenient and industry-standard configuration, monitoring and control options over a PC or local network.

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

## Video Formats

- (2K) 2048 x 1080p
- (2K) 2048 x 1080PsF
- (HD) 1920 x 1080p
- (HD) 1920 x 1080PsF
- (HD) 1920 x 1080i
- (HD) 1280 x 720p
- (SD) 720 x 576i
- (SD) 720 x 480i

- (SD) 625i 50
- (SD) 525i 59.94

## Video Input Digital

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

## Video Input Formats

- 1x 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
- 1x 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
- 1x 270 Mb SDI

## Video Output Digital

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

## Video Output Formats

Video Out is a delayed, relocked 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

## Audio Inputs and Outputs

- Audio Connectors
  - 8 Analog Audio
    - 4x 2-Pair Balanced Analog Audio 3-Pin Terminal Block connectors; 8 Channel In, 8 Channel Out or 4 Channel In & 4 Channel Out
- 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.

- 16 Channels supported on the SDI at any given time (8 of which can be from the analog inputs).
- 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 Dashboard 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

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- External DIP switch
- openGear DashBoard network control software via Windows, macOS or Linux

## Size (w x d x h)

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- openGear standard form factor, front slot and rear card. Two slots required for each card.

## Weight

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- 0.5 lb (0.3 kg)

## Power

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- openGear frame compatible, 5.0 watts max per card

## Environment

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- 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)