



OG-12G-AMA

The OG-12G-AMA is an openGear 8-channel analog audio embedder/disembedder, that supports 12G-SDI input and output up to 4K/UltraHD, 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.

\$1245 US MSRP

Analog audio levels and audio embedding/disembedding are selectable, with embedding/disembedding on a channel pair basis to pass 12G-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. Ross DashBoard Software supports Windows®, macOS®, and Linux® and provides convenient, configuration, monitoring, and control options for openGear cards and frames via a connected computer or over local network with DashBoard's web UI.

https://www.aja.com/products/og-12g-ama

Video Formats

- (4K) 4096x2160p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
- (UltraHD) 3840x2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (2K) 2048x1080p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
- (HD) 1920x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920x1080i 50, 59.94, 60
- (HD) 1280x720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94
- RGB and YCbCr, 4:4:4/4:2:2, 10-bit

Note: Raster and frame rate dependent. Please see OG-12G-AMA Video Formats in Documents and Manual.

Video Input Digital

- 1x 12G-SDI BNC, SMPTE 259/292/424/2081/2082
 - Single Link SD/HD/2K/UltraHD/4K
 - o Single Link 3G-SDI Level A, Level B (DL or DS), SMPTE 425

Video Output Digital

- 1x 12G-SDI BNC, SMPTE 259/292/424/2081/2082
 - o Single Link SD/HD/2K/UltraHD/4K
 - o Single Link 3G-SDI Level A, Level B (DL or DS), SMPTE 425

Video Path Delay

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

 Video Latency, time measured between video input and video output connector.

- \circ 12G = 4 µsec
- \circ 6G = 4 µsec
- o 3G level A = 4 μsec
- o 3G level B = 8 µsec
- HD (1.5 Gb) = 8 μsec
- SD (270 Mb) = 22 μsec

Audio Inputs and Outputs

- Audio Connectors
 - o 8 Balanced analog audio connections (4 pairs total)
 - Each pair configurable to Inputs or Outputs

Audio Converters (Analog-to-Digital/ Digtal-to-Analog)

• 24-bit

Embedded Audio

- SMPTE 272M (SD): 20-bit, 48 kHz synchronous
- SMPTE 299M (12G/6G/3G/1.5G): 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 Audio 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

 openGear DashBoard network control software via Windows, macOS, or Linux

Size $(w \times d \times h)$

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

Weight

• 0.5 lb (0.3 kg)

Power

• openGear frame compatible, 8 watts max per card

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)