



12GM

12GM is a compact SDI transport converter that enables 12G-SDI to quad link 3G-SDI and quad link 3G-SDI to 12G-SDI conversion. The muxer/demuxer supports 4K, UltraHD, 2K, HD and SD workflows and conversions from quad link SDI signals to single link SDI signals, and vice versa at 12G, 6G, 3G and 1.5G bit rates. Both Square Division (Quadrant) and Two Sample Interleave (2SI) input and output mappings are supported.

\$1,079 US MSRP

<https://www.aja.com/products/12gm>

Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (4K) 4096 x 2160PsF 23.98, 24, 25, 29.97, 30
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (UltraHD) 3840 x 2160PsF 23.98, 24, 25, 29.97, 30
- (2K) 2048 x 1080p 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
- (SD) 625i 50
- (SD) 525i 59.94
- YCbCr 4:2:2/4:4:4
- RGB 4:4:4, SMPTE or Full level
- 10 or 12-bit

Note: Raster and Frame Rate Dependent, please see 12GM Video Formats in Documents and Manual

Video Input and Output Digital

- 4x 12G-SDI BNC, SMPTE 259/292/424/2081/2082
 - Single Link 12G/6G/3G/1.5G-SDI
 - Dual Link 2x6G/2x3G/2x1.5G-SDI
 - Quad Link 4x3G Level A or B Dual Link/4x1.5G-SDI

Supported Conversions and Functions

- Quad 3G-SDI Level A to Single 12G-SDI
- Quad 3G-SDI Level B Dual Link to Single 12G-SDI
- Single 12G-SDI to Quad 3G-SDI Level A
- Single 12G-SDI to Quad 3G-SDI Level B Dual Link
- Quad 3G-SDI Level A to Dual 6G-SDI
- Quad 3G-SDI Level B Dual Link to Dual 6G-SDI
- Dual 6G-SDI to Quad 3G-SDI Level A
- Dual 6G-SDI to Quad 3G-SDI Level B Dual Link
- Dual 3G-SDI Level A to Single 6G-SDI

- Dual 3G-SDI Level B Dual Link to Single 6G-SDI
- Single 6G-SDI to Dual 3G-SDI Level A
- Single 6G-SDI to Dual 3G-SDI Level B Dual Link
- Quad 1.5G-SDI to Single 6G-SDI
- Single 6G-SDI to Quad 1.5G-SDI
- Dual 1.5G-SDI to Single 3G-SDI Level A
- Dual 1.5G-SDI to Single 3G-SDI Level B Dual Link
- Single 3G-SDI Level A to Dual 1.5G-SDI
- Single 3G-SDI Level B Dual Link to Dual 1.5G-SDI
- Quad 3G-SDI Level A to Quad 3G-SDI Level B Dual Link
- Quad 3G-SDI Level B Dual Link to Quad 3G-SDI Level A
- Two Sample Interleave (2SI) to Square Division (Quadrant) pixel mapping
- Square Division (Quadrant) to Two Sample Interleave (2SI) pixel mapping
- HDR VPID pass-through or override for Colorimetry and Transfer Characteristic
- Pass-through of Single Link 12G, 6G, 3G, 1.5G, and 270M SDI video
- Distribution Amplifier support (1x4)
- Input signal diagnostics
- Input timing analyzer for Quad link signals

Cable Equalization

(Belden 1694A coax)

- 12 Gbps, 70m
- 6 Gbps, 100m
- 3 Gbps, 140m
- 1.5 Gbps, 200m
- 270 Mbps, 300m

Audio Input/Output Digital

- Passes SDI embedded audio, 24-bit, up to 16-channels

User Interface

- USB port used with supplied cable and Mini-Config software application to configure the device and access diagnostics via macOS



or Windows.

Size (w x d x h)

- 5.76" x 4.02" x 0.90" (146.31 x 102.11 x 22.86 mm)

Weight

- 0.6 lb (0.3 kg)

Power

- 5-16 VDC regulated, 12 watts, power supply required, included with purchase
- AC Adapter: 100-240VAC, 50/60 Hz, universal input

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)

*12GM uses approximately 12 watts of power and convection cooling. It will be very warm to the touch, which is normal. When installing the unit, mount in a location where it has access to air for proper cooling. Do not stack the 12GM with other Mini-Converters.