AJA OG-12GM – Release Notes v1.5

Firmware v1.5 for OG-12GM

Introduction

OG-12GM openGear card firmware v1.5 includes features added Dual Stream support and UI control over supported and unsupported non-PCM audio processing. It also includes bug fixes. It is highly recommended that you update to this version of software.

Be sure to consult the Installation and Operation Guide (user manual) for detailed information about features and configuration guidelines. The most current documentation can always be found on the OG-12GM Support Page.

Features, Updates, and Improvements in v1.5

Version v1.5

- Dual Stream support.
- A new drop down menu to control non-PCM audio processing and unsupported non-PCM audio.
- A new drop down menu to control extraction of individual or both Data Streams of a 3G B-Dual Stream input that can be sent to individual outputs.
- Resolves an issue where, after an arbitrary number of input changes, the embedded audio gets corrupted.
- Resolves an issue when the OG-12GM won't lock to select inputs 2-4 when in auto-mode.
- Resolves an issue when some dual link formats are not being handled properly.
- Resolves an issue where the SDI Tx limiter was not engaged and it was possible for some full range RGB signals to exceed allowable values.
- OG-12GM units with an Assembly number equal or greater than 108998-R4, will only work with release version 1.5 or greater. To check compatibility, see the "Assembly" field on the "Card Tab"in the DashBoard UI.

DashBoard Initial Setup, Control and Updating Firmware

Note: DashBoard software (free) is needed to update the firmware, configure and monitor AJA openGear DashBoard supported cards.

1. Check the AJA website for new software for your OG-12GM. If new software is found, download it and uncompress the file archive (zip). https://www.aja.com/products/og-12gm#support
2. Click the Upload button in the lower panel of the DashBoard Control System to open the Upload Software Wizard.
3. From the Upload Software Wizard window, select Browse.
4. Navigate to the location of the downloaded .bin file containing the software update. Select the .bin file, then select Open. The Upload Software Wizard window displays characteristics of the selected file for uploading.
5. Click Finish.
6. When the progress bar indicates that the uploading is finished and status indicates "Complete," click OK.
7. To verify the version of software or firmware currently installed on your card, select the Card tab from the center panel of DashBoard.

NOTE: Before the upload begins, DashBoard will erase the firmware on the card, taking approximately 20 seconds.

Features, Updates, and Improvements in Previous Releases

Version v1.4

- 4K/2K 48/47.95 frame rate support.
- Bug fix for Compressed Audio Pass-thru support including AC-3 and E-AC-3 (DD+ and DD+ JOC).
- Signal rates now shown in fields instead of frames when processing Interlace on input and output

NOTE: Firmware v.1.4 and lower is not compatible with OG-12GM boards with assembly numbers greater than or equal to 108998-R4.

Version v1.3.3

- Fixes issue where switching between two sources can cause long periods of video artifacts.
- Fixes issue where timing analyzer was not working properly on all inputs.
- Fixes issue where some raster/transport combinations would cause incorrect colors.

Version v1.2.2

- Adds HDR Metadata VPID Pass-through with optional override and updates HDR Metadata management. SDI output VPID settings for Transfer Characteristic (EOTF) and Colorimetry can be automatically generated based on the SDI source VPID or overwritten. Provides HDR/WCG status of input and output signals.
- Adds support for Dual Link (2x 6G, 2x 3G, and 2x 1.5G) SDI input and output formats.
- Adds support for 10 or 12-bit depth Output selection

Version v1.1.2

- Added PsF support for 1.5G-SDI transport of 2K and 1080p low frame rate video formats.
- Added a simple frame rate converter that uses a frame drop/frame repeat methodology to convert integer input video frame rates to non-integer (e.g., p60 to p59.94) or non-integer to integer (e.g., p59.94 to p60).
- Once the input signal(s) are acquired, all SDI outputs will output simultaneously when set to quad or DA mode.
- 12GM correctly outputs single-link 12G when the input signal is 3G-SDI Level B-DL Quad link.

Version v1.0.2

- Initial Firmware release for OG-12GM
- Single 12G-SDI to/from Quad 3G-SDI Level A
- Single 12G-SDI to/from Quad 3G-SDI Level B-DL
- Single 6G-SDI to/from Quad 1.5G-SDI
- Quad 3G-SDI Level A to/from Quad 3G-SDI Level B-DL
- Two Sample Interleave (2SI) to/from Square Division (Quadrant) pixel mapping, 3G
- Pass through of Single Link 3G, 1.5G and 270M SDI video
- Distribution Amplifier support (1x4)
- Input signal diagnostics and timing analyzer for quad-link signals

- Automatic or manual control
- Detailed timing analysis for validating alignment of quad-link SDI inputs
- Passes SDI embedded audio, 24-bit, up to 16-Channels
- Recognizes and transmits High Dynamic Range (HDR) and Wide Color Gamut (WCG) signaling on VPID
- Power: 12 watts
- Hot-swappable
- Remote Ethernet configuration through Ross DashBoard software
- Rear I/O card included
- Two slots required for each card
- Compatible with OG-X-FR, OG-3-FR, and DFR-8321 openGear frames
- Five year warranty
- DashBoard Support with Smart Control:
- https://www.opengear.tv/frame-and-control/control-system/download/
- For additional information, please refer to the OG-12GM section of the AJA website: https://www.aja.com/products/OG-12GM

Technical Support

AJA Technical Support is free and available to help you answer questions or resolve issues with any of your AJA products.

To contact AJA Technical Support:

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