

AJA OG-HA5-4K – Release Notes v1.8

Firmware v1.8 for OG-HA5-4K

Introduction

OG-HA5-4K openGear card firmware update v1.8 adds support for 4K/2K 48/47.95 frame rates. It also provides a bug fix for Compressed Audio Pass-thru support including AC-3 and E-AC-3 (DD+ and DD+ JOC). Signal rates are now shown in fields instead of frames when processing an interlaced signal on the input and output. 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-HA5-4K Support Page](#).

Features, Updates and Improvements in v1.8

Version v1.8

- 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.

Features, Updates and Improvements in Previous Releases

Version v1.7.2

- Fixes issue where input signal detection was timing out before some signals could be locked.
- EDID now reports 2 channel support for non-PCM audio.

Version v1.6.2

- 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 HDMI source infoframes or overwritten. Real-time HDMI HDR metadata and mastering display information is displayed in the Mini-Config app . Provides HDR/WCG status of input and output signals.
- Adds color space converter support for BT.2020 color gamut.
- Adds support for Dual Link (2x 1.5G) SDI output.

Version v1.5.3

- Added EDID Emulation capability that allows the user to specify a specific video format for the EDID. This information is then sent to the source video device. The feature can indicate whether YCbCr formats are supported. It can also indicate the number of supported audio channels (2 or 8).
- 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).
- Now supports embedded audio pass-through of E-AC-3 (Dolby Digital Plus) compressed audio, including DD+ Atmos (aka DD+ JOC) immersive sound.

Version v1.4.1

- Updated the EDID to support for YCbCr 444 Deep Color.
- 1080i input signals are now correctly identified in DashBoard.
- Updated the VPID values.

Version v1.3.1

- Added power LED functionality to follow the state of the card as displayed in DashBoard. The power LED will now illuminate yellow if there is a yellow DashBoard alarm, red if there is a red DashBoard alarm, and green if no alarms are present.
- Added an identify checkbox to the Setup Tab. This feature will force the power LED to blink orange so it can be easily identified for service.

Version v1.2.2

- Improved ability to lock after an input signal change.

Version v1.1.2

- Updated the FPGA, and FW numbering to comply with Ross Video's versioning system to avoid a warning message during software upload.
- Corrected the output SDI VPID at 4K/UHD low frame rate input signals.
- Video and audio outputs are now muted when no active HDMI input video signal is detected

Version v1.0.10

- Initial Firmware release for OG-HA5-4K
- openGear compatible card
- Supports HDMI 2.0 up to 60p at 4:4:4, 4:2:2, and 4:2:0
- Supports quadrant (square division) and 2SI (two sample interleave) 4K/UltraHD SDI mapping
- 4x 3G-SDI outputs
- Controlled by DashBoard network control software
- HD resolutions supported
- HDR Infoframe analysis with AJA DashBoard
- Embedded audio support
- Input Present and Input SMPTE Lock LEDs
- Hot-swappable
- Compatible with OGX, OG3 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-HA5-4K section of the AJA website:
<https://www.aja.com/products/og-ha5-4k>

DashBoard Initial Setup, Control, and Updating Firmware

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

1. Check the AJA website for new software for your OG-HA5-4K. If new software is found, download it and uncompress the file archive (zip). <https://www.aja.com/family/opengear#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.

Technical Support

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

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