Ki Pro Quad
Release Notes - Firmware Version 5.2

File-based 4K/UHD/2K/HD recorder and player

Introduction

This v5.2 firmware update includes several new features and improvements for Ki Pro Quad.

Be sure to consult the updated Ki Pro Quad Installation and Operation Manual for information about features, configuration guidelines and the proper procedure for updating your Ki Pro Quad firmware. Documentation is available at www.aja.com.

New Features

- Added support for 4K or UltraHD HDMI output via the new "HDMI Out" menu parameter and the "Full Raster" selection.

  In most cases, 4K or UHD HDMI is possible, but there are some limitations to be aware of when "Full Raster" is selected and a 4K or UHD video source is used:

  - HDMI full raster output is disabled when the video source is a 4K RAW signal that must be debayered. For example, when the Ki Pro Quad is used with the Canon C500, 4K or UHD HDMI output during E-to-E or recording is not supported. If realtime debayer, recording and 4K or UHD HDMI monitoring is needed, consider the use of the AJA Ki Pro Quad 4 x SDI outputs connected to an AJA Hi5-4K Mini-Converter.

    Note: 4K or UHD HDMI output is possible during playback when Full Raster is selected because debayer processing is no longer required.

  - If Full Raster is selected and the video source is 4096x2160 at any frame rates other than 23.98 or 24 fps, then the output is disabled. HDMI 1.4 only provides support for 4K 4096x2160 at 24Hz. However, the Ki Pro Quad may be configured for an In Convert>4K Crop to Quad HD or an Out Convert>4K Crop to Quad HD so that 4096x2160 signals greater than 24Hz may be output as UHD 3840x2160.

  - The maximum supported frame rate for 3840x2160 is 30Hz as specified by HDMI 1.4.

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- Full Raster output disables the Super Out feature; superimposed timecode and transport state is not possible with a 4K or UHD HDMI output.
- Added a new "Ignore ANC" menu parameter.
  - This new parameter is offered in the event the incoming signal supplied to the Ki Pro Quad is misidentified. Misidentified signal formats can be caused by inaccurate ancillary (ANC) data. Typically, the VPID (video payload identifier) information in ancillary (ANC) data being supplied by the video source is accurate, but when it is not, this menu parameter may be configured to ignore the inaccurate ancillary (ANC) data or VPID information.
- Added support for 3G SDI Level A or Level B selection via a new "3G SDI Level" menu parameter.
  - This parameter allows the 3G SDI output to be configured for either Level A or Level B. While many 3G SDI devices will support both Level A and Level B, some devices may need a specific 3G SDI selection to operate as expected.

Improvements and fixes

- Addressed an issue where 2K p50 and 2K p59.94 recordings were sometimes incorrectly encoded.
- Addressed an issue where 2K p50 and 2K p59.94 sources did not arm recordings as expected when using the "Camera Data" menu parameter.
- The "In Convert" feature now offers support for "4K/Quad HD to 2K/1080" input passthrough and live scaled video output; previously this conversion was only supported for recording.
- Addressed an issue when using "Custom Clip Name" where the "Custom Take" number did not always increment as expected.
- Provided more information in the web UI for some "Invalid Selection" alarms.
- Improved the SDI Monitor output values when working with a RAW input.
- Addressed an issue where the "Super Out" timecode value could sometimes be offset by one frame.
- Changed the default value of the "Progressive Playback" menu parameter to "Progressive" since most 4K and UHD devices accept true progressive as opposed to progressive segmented frame; "PsF" playback is still offered as an option in the "Progressive Playback" menu parameter.

Special Considerations

- "WARNING 2 Channel Format" appears in red in the Alarms portion on the web UI, but the alarm does not block recording; typically alarms that do not block recording appear in yellow.

- "WARNING Genlock Missing" appears in red in the Alarms portion on the web UI, but the alarm does not block recording; typically alarms that do not block recording appear in yellow.