

Autodesk Flame Family 2015 Extension 3

What's New

Welcome to Autodesk Flame Premium 2015 Extension 3. This extension release has adds support for the HP Z840, updates RED and ARRIRAW codecs support, as well as SDI interface.

New Hardware Configuration

- Extension introduces support for HP Z840 workstations. This requires DKU 9.5.1.
- With this release, it is possible to get rid of the NVidia SDI daughter board and perform SDI Preview and Real-Time Deliverable with the AJA Video IO card. See following sections for more details.
Note: The HP Z840 does not support the NVidia SDI daughter board; it requires the use of the AJA Video card for Preview and RTD.

Note that for systems with both AJA and NVidia SDI cards, it is still possible to use the NVidia SDI cards for RTD and Preview.

Updated Formats Support

Support for ARRIRAW SDK 4.6

- Content generated by ALEXA updated to firmware SUP 10 can now be imported in Flame Family products.
- Support for 4x3 cropped content generated by ALEXA cameras.
- Support for orientation metadata: It is now possible to define in camera the image orientation and this metadata can be read in Flame and Lustre. The default is Camera (so metadata set in Camera can be used) but user can use Flip, Flop or Flip-Flop to change the image orientation. In Lustre, it is possible to copy this setting using the Selector (Orientation section in Transcode section).
- Support for the new ADA-5 debayering mode (ADA-5 SW) is now the default debayering mode. This new algorithm delivers an improved image quality, sharper images, more detail, less noise in red and blue channels, less aliasing and has a new regulation of parameters. Especially for VFX work we expect advantages when keying blue or green screen.

Support for RED SDK 5.1

- New Dragon Enhanced Black option, located in the Debayering menu. Use this option to remove red noise in low light content. Only available in Full and Half Premium Debayering modes. In Lustre, it is possible to copy this setting using the Selector (in the Transcode section).

Flame, Flare, and Flame Assist Specific Improvements

New SDI timing for Preview:

- 2K DCI (1.5G)
 - Single Link 2K DCI 4:2:2(1.5G)
 - Dual Link 2K DCI (4:4:4) (1.5G)
 - Dual Link 2K DCI (Stereo 3D 4:2:2)
- HD (3G)
 - HFR (50p, 59.94p and 60P) (Single Link 4:2:2)
- 2K DCI (3G)
 - HFR (50p, 59.94p and 60P) (Single Link 4:2:2)
 - HFR (50p, 59.94p and 60P) (Dual Link 4:4:4)
- Stereo3D is 10-bit (i.e. NVidia SDI Stereo3D output was limited to 8-bit). Stereo 3D format is only 4:2:2.
- On Kona 4, HDMI output is now 10-bit.

Real-Time Deliverable through AJA SDI: it is now possible to use the AJA Kona cards for RTD. In this configuration, it is also possible to use SDI embedded audio. See limitations below:

- RTD supported up to HD resolution.
- When using AJA Kona card for Preview, there is a slight delay between the DVI and the SDI output. This is normal since the AJA card reads the output of the Graphic card.
- It is not possible to perform pulldown insertion when working with Stereo 3D sequence.

Lustre

Project Management for Flame Projects Used in Lustre

If you open a legacy project in Lustre 2015 Extension 3, you must redefine the used Video Device SDI raster from within Lustre:

1. Start Lustre Premium.
2. Edit the project.
3. In the Engineering menu, deselect the GFX SDI raster.
4. Define the Video Device to the desired raster.

Lustre-Flame Interoperability

When working in Sequence Grading (i.e. when Source Grading sequence import option is disabled) It is now possible to import sequence with Matte Container from Flame in Lustre and have access to the Mattes when Comp effect is muted. If the Comp Timeline Effect is enabled prior importing the sequence in Lustre, the Matte Container will not be available.

Note: avoid using Gap FX as Matte since these segments are not visible in Lustre. It is recommended to commit the Gap FX prior importing the sequence in Lustre

Video I/O and Preview

- The NVidia SDI daughter-board is no longer required for SDI Preview and Real-Time Deliverables. The AJA Kona 3G/4 cards can be used for all SDI I/O and Preview functionalities. This support adds the following:
 - Project Management: In the Engineering menu, you can now filter Video Device SDI rasters that support RGB 4:4:4 (Dual Link), 3G and 12-bit. The list of available rasters is then updated to show the supported rasters.
 - Editing / Capture and Playout menus have also been updated.
 - Support for embedded audio.
 - **Note:**
 - Video Device SDI settings are project based. It is possible to temporarily change these settings in the Editing menus but when the application is restarted, the settings defined in the project are used.
 - When using AJA Kona card for Preview, there is a slight delay between the DVI and the SDI output. This is normal since the AJA card reads the output of the Graphics card.
- The following functionality has been added:
 - 10-bit Stereo3D monitoring (NVidia Stereo 3D SDI was limited to 8-bit).
 - 3G option (When the 3G option is disabled, SDI signal is 1.5G).
 - New 1.5G rasters:
 - 2K DCI (23.97p, 24p, 25p, 29.97p and 30p)
 - 2K DCI (23.97PsF, 24PsF and 25 PsF)
 - New 3G rasters:
 - 2K DCI (59p, 59.94p and 60p)
 - 12-bit Dual Link 4:4:4 (Full Range only) for the following rasters:
 - HD 1080 (23.97p, 24p, 25p, 29.97p and 30p)
 - HD 1080 (23.97PsF, 24PsF and 25 PsF)

- HD 1080 (25i, 29.97i, 30i)
 - 2K DCI (23.97p, 24p, 25p, 29.97p and 30p)
 - 2K DCI (23.97PsF, 24PsF and 25 PsF)
 - 10-bit HDMI (AJA Kona 4 only). SDI Output is 10-bit unless the content's bit depth is set to 8-bit.
 - **Note:** When selecting RGB 4:4:4, 3G and/or 12-bit, the list of available rasters is updated. These buttons act as filters relative to the available rasters rather than action buttons. Some lists might be empty since some rasters are not supported. For example, SD footage will show no rasters since there are no 3G rasters supported for this format. Hence, the user has to select the desired raster after enabling one of these filters.
- Limitations:
 - GPU mode is required. If GPU is disabled, the following functionality is not visible on the SDI output. This does not impact non GPU plugins.
 - Image/Reposition (The image is shown at its native resolution)
 - Render/Resize
 - Dissolve
 - Legacy F7 mode
 - Stereo 3D Floating Windows are not available on AJA SDI if GPU is disabled.
 - Stereo 3D preview is dual link only. There is no single channel Interlaced/Side-by-Side or Top/Bottom options like in Flame)
 - No Stereo 3D Payout to VTR
 - No 4K RTD or Payout
 - For Real-Time Deliverables:
 - RTD to VTR is supported up to 1920x1080
 - Avoid using source media or renders of width larger than 2048.
- Screen-Grab (CTRL-F7) can now be enabled using the following AJA rasters:
 - HD, Film (2K and 4K) and UHDTV rasters
 - Support for Screen Grab in Stereo 3D mode: in Stereo3D, Screen Grab shows the currently selected eye on both SDI links.
 - **Note:**
 - No embedded audio is available when Screen Grab is enabled. Audio monitoring must be done via the AES outputs of the breakout box.
 - Screen Grab viewing mode shares the content of the DVI monitor on the SDI output. So, when using different Calibration LUT for DVI and SDI outputs, enabling Screen Grab automatically switches the SDI LUT on both DVI and SDI outputs to preserve color managed SDI display. Disabling the Screen Grab mode sets back the DVI Calibration LUT. Also, in Dual DVI configuration, Screen Grab functionality is not available.