AJA Desktop Software v17.5 Release Notes

v17.5 Rocky Linux Drivers and Software for KONA

Introduction

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AJA Desktop Software

This unified software, driver and firmware package contains the necessities to use AJA video I/O hardware.

The following AJA applications are installed:

- AJA Control Panel v17.5:
  - For setup and control of your AJA KONA hardware, including firmware updates.
- AJA Control Room v17.5:
  - For high quality capture, monitoring, playback and output.
- AJA System Test v17.5:
  - For testing storage to determine if it will be possible to sustain frame and data rates for a chosen format(s).

    Note: As of this release, AJA NMOS is no longer available to install. (It is not required for the new KONA IP25)

    Note: If you encounter an issue where the KONA IP25 becomes unresponsive, make sure to completely power down the computer system and then restart to make sure that the card is completely power cycled.

Fixes and Improvements in v17.5

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Note: Items below are identified against the main AJA products affected.
These same issues may have also affected other AJA products that are not specifically called out.
Refer to the issue number shown below if contacting support for more information.

Features and Fixes in this release:

- Support for the new AJA KONA IP25 card – See details here: https://www.aja.com/products/kona-ip25
- #185 - Fixed an issue that was causing the AJA KONA 5 to pass certain HD rates via 3G B incorrectly.
- #179 - Fixed an issue in which Crosspoints were being routed incorrectly for RGB via 3G A in the AJA KONA 5 and Io 4K Plus devices.
- #826 - Fixed an issue in which AJA Control Room would crash when switching clips.
- #651 - Fixed an issue in which AJA Control Room output would be corrupted after moving between some formats, when using the AJA Io 4K Plus.

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- #918 - Fixed an issue in which AJA Control Panel would display a LUT screen with visual anomalies.
- #68 - Fixed an issue in AJA Control Panel in which Dual Link Capture would show improper routing.
- #670 - Fixed an issue in AJA Control Panel where the "in use by" message displayed in the upper right of the UI would only display "OEM Application" when using Telestream Wirecast or Open Broadcast Software (OBS), rather than displaying the name of one of those applications that was being used.
- #970 - Fixed an issue impacting the AJA NTV2 SDK in which the NTV2QtPreview tool was not working correctly.
- #771 - Fixed an issue impacting the AJA NTV2 SDK in which the NTV2QtPreview tool would show an invalid route when using HDMI In.
- #271 - Fixed an issue that was causing AJA Control Room to crash when switching clips during playback and frames were being dropped.
- #913 - Fixed an issue affecting some KONA and Corvid models in which selecting certain buffer sizes when using NTV2 interface AncSetFrameBufferSize causes the ancillary data to drop out during playback. The problem buffer sizes are 64K, and 128K - this does not occur for any other buffer size, including 16K, 32K, 63K, 65K, 127K, and 129K.

Operating System Information

- Note that, as of AJA Desktop Software release v17.0, Rocky Linux support replaces Red Hat/CentOS support.
- This driver/software version is compatible with Rocky Linux versions up to 8.10 and 9.5.
- Red Hat/CentOS 8 was EOL as of Dec 2021.
    - AJA SDK v16.2 was the final official SDK version supporting Red Hat/CentOS 8.
    - Note that after this release (17.1) applications may cease to work entirely with CentOS.
- Red Hat/CentOS 7 support, while expected to work, may have unknown issues.
- Note that some new features may not work with older distributions.
- Before running this installer, uninstall all previous versions of AJA software:
    - sudo dnf remove ajantv2-dkms ajaretail
- Two packages that must be installed: DKMS driver and AJA Retail Software.
    - The DKMS Driver installer requires the following package:
        - sudo dnf install epel-release
    - The driver installer must run either in a root shell or with root permissions.
        - sudo dnf install ajantv2-dkms-XXXXXX.noarch.rpm
        - Note: Use the exact package name here, see file name in install package
- The AJA Retail software must run either in a root shell or with root permissions.
    - sudo dnf install ajaretail-ajaretail-XXXXXX.x86_64.rpm
    - Note: Use the exact package name here, see file name in install package
- For GPU accelerated desktop display, an OpenCL version 1.2 or greater capable GPU is required.
- Check the Known Issues, Limitations and Additional Details section near the end of this document.
- Note that on later versions of GNOME, the extension management has been moved to its own dedicated app called GNOME Extensions (gnome-extensions-app). Execute the following to perform the installation:
    - Rocky 8:
        - sudo dnf install gnome-shell-extension-appindicator gnome-tweaks
        - open GNOME Tweaks
        - click Extensions on the left list
        - turn on Kstatusnotifieritem/appindicator support
        - launch Control Panel

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- Rocky 9:
    - sudo dnf install gnome-shell-extension-appindicator gnome-extensions-app
    - log out of current user session (needed to do this for the Extensions app to see the newly installed extension)
    - log back in
    - open Extensions app
    - turn on AppIndicator and KStatusNotifierItem Support
    - launch Control Panel

Third Party Software

AJA KONA hardware is used by many software and systems manufacturers, who provide their own software for user installation. The links below provide a guide to software support AJA is aware of, with additional software support being added frequently. Please contact the appropriate software vendor for information on whether AJA software or drivers are required when using their application. AJA recommends the latest released versions of 3rd party software for best performance (**note that the new KONA IP25 card is pending third-party testing and may not work with some or all of these applications as of the date of release**):

https://www.aja.com/compatibility/kona

- Autodesk - Flame and related products
- AJA KONA hardware also comes with out-of-the-box support for OBS Studio as follows:
    - **OBS Project** - OBS Studio 30, 29.1.3, 28.1.x, 27.2.x (note that there are known issue with 29.13 and 30 for KONA X)

In all cases, AJA recommends checking the system and OS requirements for 3rd party software packages with the software creator/vendor directly, to ensure a supportable configuration.

Relevant Products

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The following products benefit from this update:

- KONA IP25 (New this release)
- KONA X
- KONA 5
- KONA 4
- KONA 1
- KONA HDMI
- KONA LHi
- KONA LHe Plus

Recommendations in v17.5

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- AJA offers a comprehensive SDK for developers who are interested in doing more with KONA, Corvid, and Io products. We have recently moved repositories to Github at https://github.com/aja-video . Our Github site now offers access to both open source and pre-compiled code and tools that make developing applications that support our products much easier.
- Note that AJA Desktop Software v17.x still works with EOL products, including Io XT, Io 4K, KONA IP, Io IP, T-TAP, and DNxIP. However, releases after v16.2 were no longer qualified with end-of-life products. What this means is that issues affecting these EOL products may arise that are not caught during the testing phase for new software releases, and these issues may not be fixed. In some cases, AJA may elect to fix issues that affect EOL products, but that cannot be guaranteed.
- Note that "End-of-Life" products will continue to receive best effort SDK support, but the supported SDK version may be frozen to the version available when the device went "End-of-Sale".
- Note that Corvid HEVC (CORVID-HEVC-ATX6) is no longer being tested with new software releases.
- Note that some new PC motherboard and processor combinations do not offer full PCIe compatibility with add-on cards. Refer to our Hardware Compatibility Page on the AJA web site to see which systems have been tested in our lab and are known to work. https://www.aja.com/page/system-configuration

Additional Details

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General

- "System Sleep" and "Hibernation" should not be used with KONA cards. All sleep and power efficiency modes should be disabled in the operating system settings.
- AJA Control Room captures can fall behind and may fail to retain the entirety of the recording when used with hard drives and SSDs that cannot maintain sufficient read/write speeds. Enabling deep buffers can improve the situation but may not prevent issues in all cases. Please use AJA System Test (free tool available on AJA web site) to measure disk performance to make sure your storage systems can handle the resolution and bit rates of the recordings you wish to make.
- Note that AJA Control Room cannot play clips in which "Time of Day" timecode was used, if the capture happened from one "Day" to the next "Day" across 12:00AM.
- Note that users who are using a BIN in AJA Control Room and have not saved it will continue to receive prompts to save the BIN after every change. This is "as designed" to protect file retention in the user's BIN.
- Note that in some environments, PCIe Gen2 boards (KONA 4, KONA HDMI, KONA 1, Corvid 88, Corvid 44) do not link with 8 lanes after OS boots. When using these boards on these systems, maximum performance or functionality may not be available. Please contact AJA support if you experience these issues. Affected motherboards and CPU's:
  - Motherboards:
    - ASRock IMB-1314 with "PCIE1" and "PCIE3" slot (x8 supported slots)
    - AAEON MAX-Q670A with "PCIEX16_1" and "PCIEX16_2" slot (x8 supported slots)
      - (Note: The BIOS setting of CPU/PCIe slot for both motherboards do not affect the appearance ratio of the issue.)

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- ○ CPUs when used on the motherboards above:
  - Core i7 13700
  - Core i7 12700
  - Core i9 12900

Known Issues

- #1223 – Regarding KONA IP25 - As a current solution to limit the risk of over subscription (with AJA Desktop Software) KONA IP25 supports UHD input streams on IP 1 and IP 2. IP 3 and IP 4 support input streams up to 3G.
- #1218 – Regarding KONA IP25 - if upstream sending device network interface is disrupted, there is a potential to occasionally induce crackling on KONA IP25 audio input. Resetting the audio input of that stream in the web UI or the KONA IP25 will alleviate the issue.
- #1220 – Regarding KONA IP25 – Enabling outputs while other outputs are already streaming may result in momentary glitches to the existing output streams. In order to avoid this potential, enable all the outputs you intend to use ahead of time.
- #265 - AJA Control Room can perform destructive resizing under certain conditions when scaling video without GPU acceleration. When users perform the following steps: Launch Control Room, Go to Preferences – Viewer, Disable GPU Acceleration, add a video and send to the Viewer, Resize the Viewer either independently or by changing application dimensions, Repeat the last step more than once – Each resize is scaled from the previous Viewer image rather than from the original source.
- #262 - AJA Control Room does not properly handle "Click and Drag" within Time Fields for certain video files.
- #695 - AJA Control Room may hold displayed captions when moving the play head forward or back. The previously displayed captions will remain on both canvas and output indefinitely.
- #776 - The AJA KONA LHi is not detecting RP188 timecode.
- #273 - AJA Control Room alerts may fail to display during playback mode when No Device is selected.
- #222 - AJA Control Room improperly allows device switching during Capture, when at least two devices are available to the system.
- #272 - AJA Control Room may fail to update position in viewer when the play head is moved during a frame drop.
- #223 - AJA Control Panel RGB Range dropdown selection is not always accurate to what is being output on Frame Buffer or SDI output.
- #199 - AJA Control Room fails to insert a standard color space when writing DNxHR.
- #198 - AJA Control Panel outputs BGRA test pattern on the wire with a zero alpha channel resulting in the Alpha channel component being set to zero.
- #824 - AJA Control Room does not properly output 708 captions on Linux versions of the application.
- There is an intermittent issue in AJA Control Room in which captions captured from AJA FS1 frame synchronizer can produce bad or empty sidecar files.
- #691 - AJA Control Room may display captions from previous captures, and these may remain on the canvas until the application is restarted.

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:
Email: support@aja.com
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