

AJA Desktop Software Release Notes - v17.1

Windows v17.1 Drivers and Software for KONA, Io, and T-TAP Pro

Introduction

AJA Desktop Software

This unified software, driver and firmware package contains everything needed in order to use AJA video I/O hardware.

The following AJA applications are installed:

- AJA Control Panel v17.1:
 - For setup and control of your AJA KONA, lo or T-TAP Pro product, including firmware updates.
- AJA Control Room v17.1:
 - For high quality capture, monitoring, playback and output.
- AJA System Test v17.1:
 - For testing storage to determine if it will be possible to sustain frame or data rates for a chosen format(s).
- AJA Multi-Channel Config v17.1:
 - For setting up video I/O for use with Telestream Wirecast.
- AJA NMOS v17.1:
 - Optional SMPTE ST 2110 application providing discovery, registration and control for AJA IP devices.

Operating System

This version of AJA's unified software package is compatible with Windows 11 and Windows 10.

Note that this software no longer supports versions of Windows before Windows 10 (Windows 8, etc.).

If installing AJA Thunderbolt devices on a host system for the first time, check the Known Issues, Limitations and Additional Details section near the end of this document. Additionally, pay particular attention to requirements around Windows settings for Sleep / Hibernation / Fast Boot / and Power.

- Before running this installer, uninstall all previous versions of AJA Desktop software.
- AJA recommends running this installer as an Administrator. To do this, right click on the installer and select 'Run As Administrator'. The 'Run As Administrator' option may not be present if Windows User Account Control (UAC) is turned off.



Third Party Software

AJA KONA, lo and T-TAP Pro 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:

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

AJA hardware also comes with out-of-the-box support for popular software from Adobe, Avid, OBS Project and Telestream on Windows as follows:

- Adobe Premiere Pro, After Effects, Photoshop, Character Animator, Audition 2024, 2023, 2022
- Avid Media Composer 2024.x, 2023.x, 2022.x, 2021.x, 2020.x, 2019.x, Pro Tools 2023.x, 2022.x, 2021.x, 2020.x, 2019.x
- 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)
- **Telestream** Wirecast 16.x, 15.x, 14.x, 13.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 compatibility.

Relevant Products

The following products benefit from, and are compatible with, this update:

- KONA X
- KONA 5
- KONA 4
- KONA 1
- KONA HDMI
- KONA LHi
- KONA LHe Plus
- T-TAP Pro
- lo X3
- Io 4K Plus
- Avid Artist DNxIV



Recommendations in v17.1

- AJA offers a comprehensive SDK for developers who are interested in doing more with KONA, Corvid, and lo
 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.

Fixes and Improvements in v17.1

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.

New Feature – Control Room Metadata Support

Version 17.1 introduces a new feature to AJA Control Room that is compatible with any AJA I/O device that supports caption metadata via SDI. This new feature is called the "Control Room Metadata Toolset", and it provides the ability for all ANC metadata present on the SDI input to be captured and played back in the AJA Control Room application. This feature supports SCTE-104 triggers, Dolby Vision metadata, Closed Captioning metadata, SMPTE time code and other RDD 8-2008 metadata types. Captured metadata is written to an .MKV file, which appears in the application BIN. This file can be played back for validation of captured metadata or can be used for other upstream metadata purposes. Refer to the v17.1 manual for AJA Control Room for operational information covering this new feature.

Other fixes and improvements

- Fixed issue of AJA KONA X not appearing as an available device for capture or output in OBS (Open Broadcast Software) application. Note that AJA has contributed the code to fix this issue it should be available upon the next public release of OBS for all supported platforms.
- Fixed an issue in which AJA Control Room would fail to display burn-in timecode for certain frame sizes.
- Fixed an issue in which Capture in AJA Control Room was exhibiting glitching in video and audio when using the KONA LHe Plus device.
- Fixed an issue affecting the AJA NMOS Application in which multiple NMOS application instances would sometimes be shown in the Windows system tray.
- Implemented the ability to route CSC1 Key YUV output to SDI2 for SDK users.



- Fixed an issue in which a memory leak was occurring in AJA Control Panel when selections such as HDR Options in the Test Pattern drop-down, etc. were made.
- Fixed an issue in AJA Control Room in which the application would enter an unstable state after crashing on some Windows 11 systems. This issue was affecting HP systems and possible other makes of systems.
- Added the ability for SDK users to capture HDMI Info Frames, and metadata such as Dolby audio and metadata in autocirculate.
- Fixed an issue affecting the AJA Io 4K Plus in which the RGB-12 SDI VPID passthrough information was incorrectly shown as RGB-10.
- Fixed an issue affecting the AJA Io X3 in which output 4K video would be corrupt via HDMI when the output was set to Multiview.
- Fixed an issue affecting Adobe Premiere in which the AJA Serial Device Control would not be available in the application for connected devices.

Known Issues, Limitations and Additional Details

General

- "System Sleep" or "Hibernation": should not be used with KONA and Io devices. All sleep and power efficiency modes should be disabled in the operating system power management settings (Windows Control Panel).
- "Fast Startup": "Fast Boot" should be OFF in the BIOS, "Fast Startup" should be set to ON in Windows Control Panel.
- 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 in some environments, PCIe Gen2 boards (KONA 4, KONA HDMI, KONA 1, Corvid 88, Corvid 44) do not link with 8 lanes after Windows 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 does not affect the appearance ratio of the issue.)
 - CPUs when used on the motherboards above:
 - Core i7 13700
 - Core i7 12700
 - Core i9 12900



Known Issues

- AJA Control Room's viewer may be blank when using OpenGL on AMD-based systems. This is believed to be an OpenGL driver issue. To correct this, change settings to use Software Only – this is done by holding SHIFT down while starting Control Room (which resets startup options) and also selecting "Force software-only render in viewer", then click OK.
- AJA Control Room may hang indefinitely when making a change to the Host Audio Monitor, and thus require a restart to recover.
- When multi-layered interlaced HD timelines in Adobe Premiere Pro contain progressive clips, frames may be dropped regardless of the capabilities of the host computer system. Adobe is aware of this issue.
- 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.
- Cross Dissolved performed In or Out in Adobe Premiere Pro do not always output to an AJA KONA, Corvid or lo device.
- 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, and installed with the Desktop software package) to measure disk performance to make sure your storage systems can handle the resolution and bit rates of the recordings you wish to make.
- Captions in Adobe Premiere Pro may be doubled and overlapped depending on the configuration of captions in Premiere. If this occurs, try toggling Premiere Pro captions (overlay) on or off and also toggle SDI embedded captions on or off on preview or program monitors.
- AJA Control Room does not properly handle "Click and Drag" within Time Fields for certain video files.
- Occasionally, when using an AJA KONA X, if you play out video (1080i 59) from Premiere Pro (version 2024.2.1) audio playout will cease to function. This may require a system reboot to fix.
- When using Adobe After Effects, in the 2022 version, the After Effects sequence frame rate would match the frame
 rate of the active clip. In the 2023 version, the sequence frame rate matches the rate that was present when the
 application was launched. Workaround if this is encountered is to set the desired frame rate in the AJA Control
 Panel prior to launching After Effects.
- 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.
- The AJA KONA LHi is not detecting RP188 timecode.
- When using the AJA Io 4K Plus, AJA Control Room SDI and HDMI output may be corrupted after moving between certain video formats, for example from UHDp23.98 to 720p50.
- AJA Control Room may fail to update position in the viewer when the play head is moved during a frame drop.
- AJA Control Room alerts may fail to display during playback mode when No Device is selected.
- AJA Control Room improperly allows devices switching during Capture, when at least two devices are available to the system.
- There is an issue in this release affecting AJA LHe Plus devices in AJA Control Room in which glitching in both video and audio can appear both in the Control Room playback window, and in the device SDI output. This issue



will be addressed in the next release of this software. We do not recommend KONA LHe Plus users upgrade to this version of software.

- AJA Control Room may crash when switching clips during playback of clips that cause frame drops.
- AJA Control Panel RGB Range dropdown selection is not always accurate to what is being output on Frame Buffer or SDI output.
- AJA Control Room fails to insert a standard color space when writing DNxHR.
- 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.
- AJA Control Room can crash when sending media to the viewer Launch Control Room Add media to the bin -Send to Viewer - Double click on the next file in the bin, repeat this step and crash may occur.
- AJA Control Room may crash when ending a capture during a frame drop condition.
- Issue with Adobe After Effects: Output does not start until click off focus and back to project (multi-sequence complex project).
- AJA Control Room may crash when a "Reserve Buffer Size" setting is entered.
- AJA Control Room may exhibit a memory leak when playing H.264 at increased playback speeds. This memory leak can eventually lead to a program hang, or a crash requiring a restart.
- AJA Control Panel window may fail to show when clicking the Windows tray icon. Workaround: Click the taskbar button to restore the window. If instead you right-click Control Panel's taskbar button and choose "Close window," or click the Control Panel window's close box ("X"), the window hides, and the workaround (click tray icon) will function.
- Issue with using Fast Switching Firmware on KONA 5: Audio Test Tone feature works intermittently. Workaround is to use normal firmware.
- Issue with capturing H.264 / H.265 on Windows 11 with certain NVIDIA GPUs.
- 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.
- AJA Control Room may display captions from previous captures, and these may remain on the canvas until the application is restarted.

Troubleshooting

- The following are items that may help troubleshoot performance issues on some HP Z8 or Z4 workstations with AJA cards and devices:
 - Start by carefully checking BIOS settings and then comparing with OS-level settings (Windows Control Panel). As mentioned above, there are occasions where the settings may be the opposite of each other. To set the mode for BIOS:
 - Power Up > F10 > Enter BIOS > Advanced > Power Management Options > Energy/Performance BIOS control Choose either "OS Controls EPB" or "BIOS Controls EPS"
 - If you have chosen "OS Controls EPB" to enable the operating system power management settings (Windows Control Panel) make sure that "High Performance Mode" is explicitly chosen for use. Setting sleep to 0, may not be as reliable as choosing "High Performance Mode".
 - This setting can be found in Control Panel > All Control Panel Items > Power Options > Select
 Power Plan > Choose "High Performance" (vs. "Balanced")



- "PCI Express Power Management" is a setting to consider unchecking if you are experiencing bus-related issues with ThunderBolt connected devices:
 - Enabling this option permits the PCI Express links to use Active State Power Management (ASPM) to enter low power states while not in use.

Thunderbolt Devices

In cases where an AJA Thunderbolt device is being installed for the first time on your host system, a Thunderbolt dialog box should present itself, providing the opportunity to "approve the device." If this is the case, proceed to approve and the installation will succeed accordingly.



If the dialog is missed, or else it didn't present itself, then although the AJA Thunderbolt device will show up in Device Manager, it will not be recognized by the installed AJA Desktop (or other) software. In this case, follow the instructions below to "approve the device."

1: Launch Thunderbolt software under Start menu in the Thunderbolt folder

8	Thunderbolt™ Software	^
Ľ	🧭 Thunderbolt™ Software	
∑3	Tips	
	v	
ŝ	Video Editor	
Φ	VideoLAN	~
	✓ Type here to search	



2: This will put the Thunderbolt software icon in the tray (lower left in hidden icons)



3: Right click the Thunderbolt software icon to view options, click Approve Attached Devices on the Port

4: Click arrow to select Always Connect





5: AJA Control Panel can now see the Thunderbolt device

EE T-TAP Pro - AJA	Control Panel		– 🗆 X
Control Format SDI Output HDMI HDR Video Setup Audio Setup		1080i29.97 Yuv-10 Playback	1080i29.97 SDI Out HD 1080i29.97 HDMI YUV8
Audio Mixer Presets Firmware Info	Firmware Info	Firmware mation T-TAP Pro - 2021/02/19	
	Click the 2021/02	T-TAP Pro - 2021/02/19 Reinstall e "Install" button to re-install the T-TAP Pro firmware da //19.	ted

6: View Attached Devices in Thunderbolt software to show connection status





12-bit RGB support (4K/UHD)

- For working with 4K/UHD RGB 4:4:4 12-bit, use KONA 5 with the "KONA 5 (12-bit)" firmware for the greatest
 flexibility via 12G-SDI and HDMI 2.0. 12-bit RGB functionality also exists with T-TAP Pro, Io 4K Plus and Avid DNxIV,
 but to a lesser extent. 12-bit RGB via HDMI from KONA or Io will deliver 12-bit to the downstream (sink) device
 provided it is capable, otherwise the bit depth can be down-rated based on the capabilities of the monitor or other
 sink (communicated to KONA via sink device's EDID):
 - In AJA Control Panel "Auto Detect" will put out the signal that works with the receiving monitor.
 - In AJA Control Panel "Auto-Set" will use what the Frame Buffer is set to.

AV Sync

• For highest accuracy, always use the Video and Audio coming from your AJA device for monitoring. Using an AJA device for Video monitoring, but using the host for Audio monitoring may result in AV sync or drift issues. If these issues arise it is a function of your host system/OS, and therefore AJA recommends monitoring Audio via AJA device.

KONA 5

- Note that recently purchased (2023) KONA 5 cards will need to be used with AJA Desktop software version 16.2.6 or later.
- KONA 5 bitfile:
 - There are three KONA 5 bitfiles, each tuned to harness the capabilities of the KONA 5 hardware in different ways "KONA 5", "KONA 5 (12bit)" and "KONA 5 (8K)".
- "KONA 5" bitfile supports:
 - Up to 4K I/O YCbCr & RGB (including Color Space Conversion)
 - AJA Control Panel (including AJA Audio-Mixer)
 - AJA Control Room
 - Adobe Premiere Pro
 - Avid Media Composer
 - OBS Studio
 - Telestream Wirecast
 - Video Mixer/Keyer up to HD 60p
- "KONA 5 (12bit)" bitfile supports:
 - Up to 4K I/O RGB (including 12-bit LUT support)
 - AJA Control Panel (including AJA Audio-Mixer)
 - AJA Control Room
 - Adobe Premiere Pro
 - Avid Media Composer
 - OBS Studio
 - Telestream Wirecast



- Video Mixer/Keyer up to HD 60p
- "KONA 5 (8K)" bitfile supports:
 - Up to 8K I/O YCbCr *or* RGB (no Color Space Conversion)
 - Full 2SI path for the 8K raster (in additional to a Square Division presentation of 4x 4K 2SI)
 - 8K to 4K subsample via HDMI 2.0 out
 - AJA Control Panel (not including AJA Audio-Mixer)
 - AJA Control Room
 - Adobe Premiere Pro
 - Avid Media Composer
 - Video Mixer/Keyer not supported

KONA HDMI

- Audio channel configurations differ between Ports 1 and 2, vs. Ports 3 and 4.
 - AJA Control Panel has an audio channel swap feature to ensure compatibility.
- Some SD sources do not work correctly with ports 1 and 2. Please use channels 3 and/or 4 for SD ingest.

Occasionally, HDMI sources do not work correctly. Please contact AJA Support to report this issue if you encounter it.

lo X3

 Some units were shipped from AJA with incorrect Thunderbolt Firmware. This manifests as an issue whereby the "host" Thunderbolt 3 port is not recognized when a laptop host is running on battery power only (no laptop power supply in use). The workaround is to use the secondary "downstream" Thunderbolt 3 port, or apply power to the laptop host. For a permanent fix to this issue, please contact AJA Technical Support who may be able to solve this remotely.

KONA LHi

- When using SDI level A 1080p50/59.94/60 YUV input to an RGB frame buffer for capture, the image is scrambled or non-working for various NLEs. In Adobe Premiere CC, this issue causes the app to become unresponsive when using an RGB10 framebuffer/capture codec. Note that Level B works correctly with all supported NLEs.
- KONA LHi has only one audio system and is limited to capturing or outputting one channel at a time with audio. In
 applications where multiple video inputs and outputs can be used at the same time, the SDI input will have audio
 and the HDMI input will not. Additionally, if both input and output are used simultaneously and independently (as
 opposed to output passed through from input) only one channel will have audio.

AJA Control Panel

- AJA Control Panel/Services may surface incorrect routing after a Dynamic Reconfiguration with KONA 5 followed by a restart.
 - Workaround:
 - Ensure that Fast Boot is disabled via system BIOS.
 - Apply KONA 5 Dynamic Reconfiguration for 4K Bitfile, and this will fix the issue.



- AJA agent stops running following unplugging of a Thunderbolt device. This manifests itself most clearly when running more than one AJA device on the same host at the same time.
 - Workarounds for Windows
 - After an unplug, it will be necessary to restart AJA Control Panel and AJA Control Room.
 - For Windows systems, an administrator could also manually stop and restart the service to get the agent working again.

AJA Control Room

- H.264 and H.265 capture and playback (supported from v16.2 and later):
 - Create or playback HD media with Timecode, Closed Captioning and HDR metadata support.
 - YCbCr 4:2:0, 8-bit video.
 - AAC audio encoding for multiple tracks of Stereo and/or Mono.
 - All H.264 and H.265 encoding/decoding is courtesy of hardware acceleration on the host system.
 - For Windows based systems, Control Room will seek hardware resources in the following order:
 - NVIDIA
 - AMD (AMF)
 - Intel (QSV)
 - In each case, if the resource being sought is not found, the next resource possibility will be tried. If none of these resources are located on the system, then capture/playback of H.264 and H.265 will not be possible.
 - Notes:
 - You must be using the latest NVIDIA, AMD or Intel drivers. In some situations, you may need to disable using a resource in order to update its driver version, and then re-enable.
 - H.264 and H.265 can behave differently as compared with uncompressed media or I-frame codecs, especially during scrubbing and looping operations. This is to be expected with Long-GOP media.
 - Interlaced material will be captured as progressive, this is as designed.
- When the Deep Buffer feature is being used for playback protection, note that changes to settings may take some time to be reflected. For example, muting an audio channel can take many seconds between the mouse click and the desired result. This is normal when using the Deep Buffer feature.
- MXF OP-1A capture in AJA Control Room does not support the following formats: 720p60, 1080i30, 1080p30, 1080p60.

Adobe Applications

- Note that Adobe removed support for tape-based workflows as of Premiere Pro 2023. AJA Control Room can provide limited support for some of this functionality, but is not a direct replacement.
- When editing with 1080i25 clips/sequences in Adobe Premiere Pro, and with Sequence Settings > Video > Fields > Interlaced selected, then on pause interlaced artifacts are visible in the desktop (GUI) viewers, although the AJA hardware video output is unaffected. To remedy this, go to Sequence Settings > Video > Fields > and choose "No Fields (Progressive Scan)".



- Currently upon changing audio playback device from the AJA device to Adobe Desktop Audio, playback will fail. When hitting play, picture will not advance and the audio meters will move slowly and continue to move even after hitting Stop.
 - Workaround: Toggling Transmit off/on appears to resolve the issue. Also toggling to a different sequence and back will as well. Toggling to source side or focusing on desktop and back does not.
- Versions of AJA Desktop software prior to v15.5 will not show video preview during capture on Premiere 2020. However capture of content will not be affected.
- With rasters above HD/2K, Adobe After Effects may struggle to deliver frames in real time. AJA hardware will buffer as much as possible, but if frame rates get very slow, it will be impossible to sustain smooth real-time playback on the reference monitor.
- Audio output from AJA devices can be compromised when sequence frame rates do not match hardware frame rates.
 - This can occur when working in 720p formats other than 720p50, 59.94, 60.
 - To work around this limitation, go to Premiere Pro Playback preferences, and set the AJA video device to 'Match Control Panel'. Then set up a cross-conversion to output 1080 format. For example, if using a 720p23.98 project, set the AJA Control Panel to cross-convert to 1080PsF/23.98, which is a valid SDI output.
- Timecode is not stored in crash captured clips when the timecode source is RS-422. If this is required, use embedded timecode instead of RS-422 timecode.
- Variable frame rates (VFR) with pull down added are not adjusted for timecode.
- 'Crash Capture' and 'Print to Video' will work on Varicam frame rates over HD-SDI, but 'Insert Edit', 'In/Out. Capture', and 'Batch Capture' will not.
- When insert editing on Panasonic decks, destructive edits may occur too early on the tape. In order to avoid this, be sure that menu item 202 "ID SEL" is set to "OTHER."
- Preroll shorter than 4 seconds is not recommended for use with any deck, for capture or layback.
- Premiere Pro defaults to 'Display First Field' in its monitor wing menus. If interlacing issues appear on the output of AJA hardware, try changing this setting to 'Display Both Fields'.
- When changing from a DF tape to an NDF tape on the same deck, with the Premiere Pro capture window open, the NDF/DF status may not be picked up correctly. If this happens, the timecode values seen in the Premiere Pro capture window may be incorrect.
 - This Issue will NOT affect users unless they are changing between DF and NDF tapes on the same deck, in the same Premiere Pro Capture session.
 - To Avoid This: Always give the new tape a new name in the 'Tape Name' dialog that appears when changing tapes and be sure to let the new tape spool up all the way before clicking the 'OK' button on the dialog.
 - To Fix This: Close the Premiere Pro capture window and reopen it.
- When capturing from or exporting to a Panasonic D5 deck, the timecode source setting in the AJA Premiere Pro Device Control plug-in must be LTC+VITC.
- MXF OP-1A capture in Adobe Premiere Pro does not support the following formats: 720p60, 1080i30, 1080p30, 1080p60.



Avid Media Composer

- Support for HDR via Media Composer arrived with AJA Desktop software v16.0. One known limitation is when linking to HDR media, the Media Composer Source Setting Adapters may get misgenerated. Deleting them will resolve issues viewing HDR correctly.
- Version 15.5.3 and later, using lo 4K Plus and Avid DNxIV, provides for smoother and faster transitioning between Capture and Playback. Note that there are recommended combinations of settings covering both Capture and Playback, please consult the manual for more detail.
 - Note: If a recommended settings combination is not chosen, then lock-up operations may take several seconds when engaging/disengaging the capture tool. This could occur for example, when External Ref is set for Capture but not for Playback, or vice versa.
- AJA hardware does not control for, legalize or clamp video according to broadcast legal values. Use the tools in Media Composer to achieve legal broadcast levels. Note that AJA does prevent illegal levels according to the SDI specification, but this is not the same as the broadcast legal controls available inside Media Composer.
- For HDR, there may be some inconsistency in the state of AJA Control Panel when changing projects. Recommended best practice is to check your HDR settings in AJA Control Panel after switching Avid projects.
- For HDR with Media Composer 2019.11 and after, with AJA KONA 5, KONA 4, and Io 4K Plus is able to drive AJA Control Panel directly, so adjusting HDR parameters manually in AJA Control Panel should not be necessary.
- Avid Media Composer may occasionally take up to 15 seconds to quit. This is not an indicator of a problem.
- For the AJA device to be selectable for audio-only capture in the Capture Tool, it must first be selected in the Capture Tool:
 - Open the Capture Tool.
 - Select both the Video Input and Audio Input as AJA KONA or AJA Io.
 - Initiate your audio only capture.
- For the AJA device to be selectable in the Audio Punch-In Tool, it must first be selected in the Capture Tool:
 - Open the Capture Tool.
 - Select the Video Input as AJA KONA or AJA Io.
 - Close the Capture Tool.
 - Open the Audio Punch-In Tool.
 - Select the Input Device as AJA KONA or AJA Io.
- Indefinite looping of the timeline with Open I/O plug-in installed may cause Avid applications to stop playback and give an error message.
- Occasionally analog video input will not be detected correctly in the Media Composer Capture Tool. As a workaround, play the source video when you start up Media Composer.

Avid Pro Tools with T-TAP Pro

For Avid Pro Tools users, the following is helpful to bear in mind regarding AV Sync when using AJA T-TAP Pro for video monitoring:



- T-TAP Pro provides silent, high quality, stable and smooth playback. Since there is no reference, the A/V sync can be off by half a frame from the start of playback (expected behavior). This smooth and tight playback is courtesy of Pro Tools "slewing behavior" (since Pro Tools 11). When Pro Tools detects that the connected audio OR video interface are not both locked to some kind of incoming external clock, Pro Tools engages its slewing algorithm. As long as the offset doesn't exceed 0.5 frames, all will play normally. Once the AV offset is above 0.5 frames Pro Tools will accommodate by dropping or duplicating a frame to keep in time. This is not intended as a frequent occurrence, for example it may take up to 20 minutes for clocks to drift far enough to drop a single frame.
- Note: Slewing does not account for start position offsets. Without a Pro Tools Sync HD/X to align the Pro Tools
 audio engine start position to a frame boundary, and instead with a video interface with a valid video reference,
 play starts will vary by up to a frame in either direction, and it will be different between each playback pass. This is
 fixed and known behavior. Slewing may drop its first frame immediately as a result, but then it will be a while before
 it would be needed again.

Avid Pro Tools with KONA / Io

For Avid Pro Tools users, the following is helpful to bear in mind regarding AV Sync when using AJA KONA and lo products, for video monitoring:

- KONA and Io devices with a reference input (including Avid Artist DNxIV) will achieve synchronous, stable and smooth playback when:
 - (a) Pro Tools Audio Hardware has reference connected
 - (b) Pro Tools Session "Video Ref" has been set to external reference
 - (c) AJA KONA or lo device has reference connected
 - (d) AJA Control panel is set to use external reference
- Note: The Pro Tools Session Setup always defaults to "Internal/VSO" when creating a new session. The Pro Tools user must take the extra step of setting the Sync HD's Clock Reference to "Video Ref" manually each time a new Session is created. Failure to do so can result in skipped frames during playback.

Microsoft Teams

• Recent changes in Microsoft Teams has resulted in intermittent or non-functional operation with AJA capture devices. AJA is working with Microsoft to address these issues.

OBS Studio

- Support beginning with Desktop Software v16.2 and OBS v.27.2.
 - Io X3, Io 4K Plus, T-TAP Pro, KONA 5, KONA 4, KONA HDMI.
 - 2K/HD up to 60p.
 - 4K/UHD up to 30p.
- Avoid manipulating the output settings when engaged in critical streaming applications (e.g. live show), as this can cause OBS to crash. Make sure to set up outputs ahead of time.
- Unplugging the Thunderbolt cable connecting Io X3 or Io 4K Plus to the host system while capturing with said device, will cause OBS to crash.
- Analog Audio Output option is currently unavailable with KONA 4.



Telestream Wirecast

When configuring a multi-channel device such as Io 4K Plus, KONA X, KONA 5, KONA 4, and/or KONA HDMI, the
inputs must be configured first (using AJA Multi-Channel Config application), if you plan to use the live program
output feature. This will set the master clock for the card (either NTSC or PAL), otherwise the card will be set to
1080i-29.97 by default and could cause the card to attempt a mix of PAL and NTSC clocks. Be sure to configure all
of your inputs and outputs in AJA Multi-Channel Config prior to launching Wirecast.

DirectShow

- Note that AJA no longer actively supports DirectShow filters after the release of AJA software v15.5.2.
 - More information here: <u>https://www.aja.com/support/directshow</u>

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 Phone: +1-530-271-3190 Fax: +1-530-274-9442 Web: <u>https://www.aja.com/support/contact</u> Shipping: 180 Litton Dr. Grass Valley, CA 95945 USA