

AJA U-TAP – Release Notes v1.5.5

Updater/Firmware for AJA U-TAP SDI and U-TAP HDMI

Introduction

All users of U-TAP SDI and U-TAP HDMI are encouraged to download and install the latest U-TAP Updater v1.5.5, with which the latest firmware updates can be applied using either a macOS or Windows host system.

Features, Updates and Improvements in v1.5.5

- Fixed an infrequent issue where the U-TAP video freezes while the audio continues. This issue has been reported most often with Dell laptops.
- Rectified an edge case where U-TAP updates with v1.5.4 and earlier could in some cases fail, causing the unit to become unresponsive.

Features, Updates and Improvements in previous releases

As of v1.5.5, all previous versions of U-TAP Updater are being removed from the AJA U-TAP Support Pages. We are taking this step out of an abundance of caution, since v1.5.5 rectifies an edge case where updates with any earlier version of the U-TAP Updater could in some cases fail, causing the unit to become unresponsive.

Version 1.5.4

- New Configuration tab in U-TAP Updater Application
- New feature for pre-configurable behavior upon Loss of Signal; Black (default), Blue Matte, 100% Bars.
- Mac Updater application, U-TAP HDMI and U-TAP SDI compatible with Mac M1.
- Mac Updater application, U-TAP HDMI and U-TAP SDI compatible with macOS Big Sur 11.x.
- Win Updater application, U-TAP HDMI and U-TAP SDI no longer tested or officially supported with versions prior to Windows 10.
- Solved an issue whereby audio pops and clicks were sometimes present with U-TAP HDMI and U-TAP SDI with firmware updates after v1.1
- Fixed a loss of audio that occurred if the HDMI cable was connected to U-TAP HDMI at startup.

Version 1.5.3

- Solved problem with macOS, where sometimes when using video conferencing/sharing software including, but not limited to Google Hangouts, MS Teams, OBS, Skype, Zoom, etc. an audio problem could occur when muting the camera (i.e. going into audio-only presentation mode) or, by deleting the video input (OBS).
- U-TAP Updater graphical interface enhancement such that the progress bar now incorporates both the CPU and FPGA updates, rather than having a separate progress bar for each update sequentially.
- Fixed issue with Windows U-TAP Updater whereby the message “unknown publisher” would occur during installation.
- Rectified edge-case behavior whereby a washed-out pink image would occur on the host desktop/application when receiving a YCbCr 1080i 59.94 HDMI input to U-TAP HDMI from an AJA Hi5-Plus.
- Resolved issue when using QuickTime with older MacBook Pros where the video stream could fail (black screen) if, while streaming video from a U-TAP, the video quality setting is changed.
- Fixed problem when using QuickTime with older MacBook Pros where QuickTime is working fine with video only, but when audio is added, video goes black.

Version 1.5.2

- Mac Updater application compatible with macOS Catalina.
- Windows Updater application upgraded to an .msi installer (previously an .exe).
- Added 3G-SDI Level B support (B-DL) for U-TAP SDI.
- Changed default frame rate of U-TAP to 60 Hz.
- Fixed issue where green line would show for some users on edge of raster.
- Minimum and Recommended host-system specifications added to the U-TAP SDI and U-TAP HDMI Manual, to reflect the fact that Mac or PC capabilities/performance will govern what video formats are possible.

Version 1.2

- Fixed Support for Linux operating systems:
 - CentOS 6.8,
 - CentOS 7.0,
 - Ubuntu 14.04
 - Ubuntu 16.04
- New GUI Software Updater programs for Windows and Mac.
- Correctly recognizes and updates pre v1.0 versions.
- Fixed L/R audio channel swap.
- Augmented the enumerated USB device name with the product serial number.

Version 1.0

- Introduction of U-TAP SDI and U-TAP HDMI for Windows, macOS and Linux.

Known Issues and Limitations

- For best performance USB 3.0 (USB 3.2, Gen 1) or better is required on the host computer.
- USB 2.0, and/or USB connections via Hubs may not always deliver sufficient power for U-TAP.

- For best performance when using browser-based applications, AJA recommends upgrading to the latest (stable) version of your browser of choice. Note that Safari has shown web streaming limitations, so choosing other browsers will likely be the best choice.
- Inconsistency with detecting audio when first launching OBS. Workaround is to proceed within OBS to “Advanced Properties” and then toggle “Active Sources Only”.
- When using VLC on macOS with U-TAP HDMI problems can occur with recognizing video and audio. With macOS 10.13 High Sierra and macOS 10.15 Catalina, video can either be dropping frames or title name appears but no video appears. With macOS 10.14 Mojave a static frame may appear in the viewer with no audio present. Replugging USB and HDMI cables can help alleviate. VLC on Windows is unaffected by this issue.
- It appears that with some combinations of OS, host system and camera, that U-TAP can after streaming for some time, lose video detection when using video conferencing/sharing software including, but not limited to Google Hangouts, MS Teams, OBS, Skype, Zoom, etc. Replugging USB and HDMI cables will usually alleviate.
- Intermittent U-TAP detection failure when frequently changing apps or moving U-TAP between different host systems. Re-plugging the USB cable will fix, but it may on occasion require up to two USB plug cycles to rectify.
- Intermittent disconnect / device freeze with a small number of laptops. Replugging USB and HDMI cables will usually alleviate.
- In some cases U-TAP HDMI is unable to properly detect SD video (PAL and NTSC). Workaround would be to upconvert the SD video to HD upstream of the U-TAP HDMI, or use U-TAP SDI if available.
- PsF formats are not supported with U-TAP SDI.

Troubleshooting

- For troubleshooting it is highly recommended to try at least two different USB cables and two different USB ports, to make sure the problem is not a damaged cable or unreliable USB port.
- Not all USB hubs or extenders properly support video devices. If there is a USB hub or extender between U-TAP and the host-system and difficulties are being experienced, try connecting U-TAP directly to your computer using a known good cable.
- If problems occur with U-TAP not being recognized by your host-system, most often this can be resolved by unplugging and re-plugging the U-TAP.
- It is recommended to disable system sleep and hibernation when using U-TAP, to avoid loss of connection and/or behavior that requires an unplug and re-plug in order to put U-TAP back into a functional state for Video Capture.
- If problems cannot be resolved by unplugging and re-plugging the U-TAP, a host-system system shut-down and restart may be required.
- Check to make sure the most powerful GPU available to the U-TAP host-system is in use. For example, some systems have both an onboard/embedded graphics adapter as well as a (more powerful) third party GPU.
- Be aware of how many applications are running and consuming resources (CPU cycles, RAM) on your host-system. If you are running multiple software applications, try closing some to see if a point can be found where U-TAP is not having to compete for the system resources necessary for Video Capture.
- From time to time OS updates may cause issues that have to be addressed via a firmware update. If you have recently updated to a new host-system OS and are now experiencing problems, please contact AJA Technical Support with the previous and current OS versions.

- Occasionally, for some computers it may be necessary to update the USB chipset driver. Check with the manufacturer of the host-system (or your IT department) to see if you have the latest version installed.
- AV sync problems; U-TAP is only capable of creating a maximum delay of ~10ms between the video and audio. Any AV sync issues beyond that are due to the host application and the USB audio sink.

Downloading and Applying Updater/Firmware from AJA.com

Although U-TAP products come from the factory pre-installed with the latest firmware at the time of manufacture, it may be necessary to update U-TAP with new firmware that has been posted on the AJA website. This is done via the U-TAP Updater application, which is bundled with the necessary firmware, meaning a single package to download.

Note that while U-TAP is compatible with applications running on Linux, there is no Linux U-TAP Updater installer. The workaround is to use a Windows or Mac system to update U-TAP when necessary, and then go back to using U-TAP with the Linux system after the update has been applied.

The steps required to upgrade AJA U-TAP Updater/Firmware are as follows.

Download the Latest Updater/Firmware package

- Current and past releases of U-TAP firmware (starting with v1.5.5) are available on AJA's website:
 - <https://www.aja.com/products/u-tap-sdi#support>
 - <https://www.aja.com/products/u-tap-hdmi#support>
- On either of the above pages, under the Software heading, the U-TAP packages for either Mac or Windows can be selected for download.
 - AJA_U-TAP_Win_v1.x.zip.
 - AJA_U-TAP_Mac_v1.x.zip.
- Download the required package(s) to the host-system where you will perform the U-TAP update.
- The update can be performed with a Mac or Windows computer with a USB 3.0 or USB 2.0 port, although note that for best performance USB 3.0 (USB 3.2, Gen 1) or better is required on the host computer.

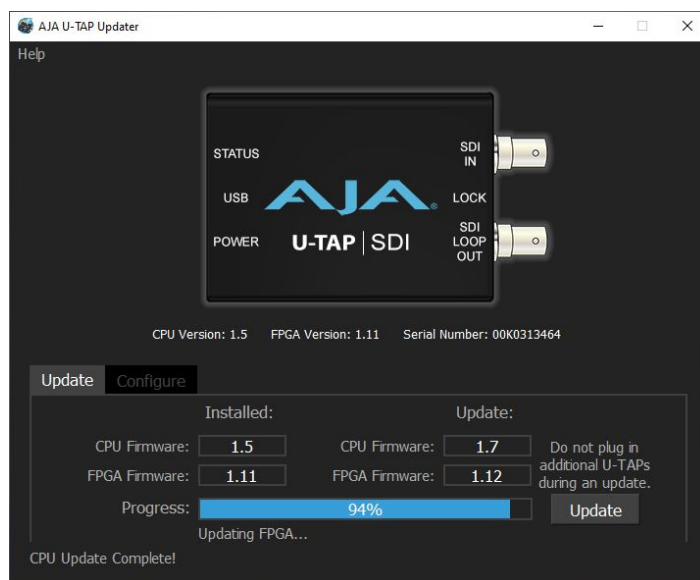
Unpack U-TAP Updater/Firmware

- The Updater package downloaded from AJA.com is a "ZIP" file which can be opened with OS tools or third party applications.
- Extract the contents of the ZIP file (unzip). This will present a folder containing the U-TAP Product Manual, Release Notes, and appropriate Updater (.dmg for Mac and .msi for Windows).

Follow this procedure to update the firmware

1. Connect U-TAP to the host-computer with the supplied 1 meter USB 3.0 cable.
2. Wait approximately 3-5 seconds for the U-TAP to boot up.
3. Ensure that only one U-TAP is connected during this procedure.
4. Run the previously extracted .dmg or .msi file and install the U-TAP Updater application.

5. Launch the AJA U-TAP Updater application. If a connected U-TAP is found, a window opens reporting the current firmware versions installed and the versions available for update.
NOTE: If a U-TAP is not detected, a No Module Connected message is displayed. Choose Scan to enumerate recently attached U-TAP devices.
6. Click on the Update button to update the U-TAP firmware.
7. A progress bar will report update progression.
NOTE: Macs typically require 2 or 3 minutes to install the U-TAP firmware. Windows machines typically install the U-TAP firmware in about a minute.
8. When complete, a message indicates the U-TAP must be rebooted.
9. Reboot the U-TAP by disconnecting and reconnecting the USB cable.
10. U-TAP will now be operational with the newly loaded firmware.



NOTE: While updating firmware, do not attach more than one U-TAP to your computer at the same time.

Manual and Additional Information

The U-TAP Manual is available via the U-TAP Updater application, under the Help menu.

Please refer to the U-TAP section of the AJA website for more information:

<https://www.aja.com/products/u-tap-sdi>

<https://www.aja.com/products/u-tap-hdmi>

Technical Support

AJA Technical Support is free and available to help 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: <https://www.aja.com/support/contact>

Shipping: 180 Litton Dr. Grass Valley, CA 95945 USA