



Release Notes

Switch™

Telestream® Switch™ is an award-winning cross platform media player, inspector, and correction tool for professionals. Switch comes in three versions: Switch Player, Switch Plus, and Switch Pro.

Switch Player is a robust multi-format media player with deep inspection capabilities. Leveraging the Telestream Media framework, Switch supports high-quality playback of Windows Media, MXF, GXF, MPS, MTS, MOV, MP4, LXF and more. The inspector displays media properties including audio channels, aspect ratio, bitrate, encoding formats and more. In Switch Player, export is only supported when converting Windows Media content to H264 in the MP4 container. Exports using other combinations of source and output formats are watermarked or limited to 30 seconds/half the duration of the media file. Reduced frame decoding is available for reliable and performant playback of >UHD media, along with hardware acceleration to ensure a smooth experience.

Switch Plus is perfect for video editors and post-production professionals. Plus adds support for embedded caption playback and subtitle files; professional-grade audio meters; export to MP4, QuickTime MOV, MXF (OP-1a and OP-Atom), and MPEG-2 Program Streams and Transport Streams; as well as additional playback support for HEVC, DNxHD, DNxHR, JPEG-2000, and AC-3 audio*.

Switch Pro is a complete solution for Broadcast and Media QC professionals. Pro extends the professional Audio Meters (included in Plus) to include a loudness panel with options to calculate loudness gated (BS1770-3) or un-gated (BS1770-2); as well as deeper inspection of application specific metadata (e.g., AS-11 with DPP metadata). Switch Pro also includes visual representation of the video's GOP structure; an interlacing option to display fields, and a Compare Alternate Media feature to easily check multiple adaptive bitrate files in ABR workflows for easy comparison of multi-format media. Switch Pro includes all the export support of Switch Plus, and adds an iTunes export preset for creating asset-only iTunes store packages. Switch Pro also supports the decoding of ProRes RAW, and the opening of DCP and IMF packages.

*AC-3 is currently not supported on ARM Macs, because Dolby hasn't ported their SDK to ARM. Users with ARM Macs will have to run in Rosetta emulation mode to decode AC-3, or EC-3.





ATTENTION all previous version customers!

Customers with Premium Support

Switch 5 is a free upgrade for customers with **Premium Support**—simply download Switch 5 and install. <u>Contact Sales</u> if you need assistance.

Customers without Premium Support

For customers without Premium Support, please see below for your upgrade options. <u>Contact Sales</u> if you need assistance.

Switch 4 Plus and Switch 4 Pro

Before downloading and installing Switch 5, please renew your Premium Support at the following prices:

- Premium Support for Switch 4 Plus = \$60
- Premium Support for Switch 4 Pro = \$120

After renewing your Premium Support, the following upgrades will be available to you:

- Switch 4 Plus → Switch 5 Plus = \$739 FREE
- Switch 4 Pro → Switch 5 Pro = \$1,059 FREE
- Switch 4 Plus → Switch 5 Pro = \$1,059 \$810*

Switch 4 Player

The following upgrades are available to Switch 4 Player customers:

- Switch 4 Player → Switch 5 Player = \$19.95
- Switch 4 Player → Switch 5 Plus = \$739-\$724*
- Switch 4 Player → Switch 5 Pro = \$1,059 \$1,044*

For more information on upgrading and pricing, review the **How to Upgrade page**.

System Requirements:

- Apple Silicon or Intel-based Mac or Windows based PC
- Operating Systems
 - o Windows 10, Windows 11
 - o macOS 14 Sonoma, macOS 15 Sequoia
- For a full list of system requirements, go to the <u>Switch website</u>.

^{*}Includes 1 year of Premium Support





Switch 5.4 - Changes

NEW FEATURES

• Customer Requests

- Added Abekas (.clip) file playback support, including display of alpha channel mask, and preservation of alpha channel when exporting. (SWITCHWIN-4957)
- Added a preference to allow the user to lock the audio to full volume when playing out to an external device (AJA and/or Blackmagic). (SWITCHWIN-4975)

General

 Added support for hardware-accelerated decoding of H.264 10-bit, 4:2:2 and 4:4:4, progressive (not interlaced) content on macOS 15 (Sequoia) and later, when running natively on ARM. The Mac computer must support this hardware decoding for it to be available. (SWITCHWIN-4921)

IMPROVEMENTS

• Customer Requests

 Added a "close" command to the Switch Engine API to allow other applications to remotely close Switch player windows, thereby freeing external resources, such as AJA and/or Blackmagic devices, for use with other media or other applications. See the Switch Engine API Customer Integration Guide for more details. (SWITCHWIN-4972)

General

- o Improved Switch's ability to tolerate large numbers of invalid keys in growing MXF OP-1a files. Previously, these malformed files would cause the indexing to abort, and therefore users could no longer see new media that were added to the file. Switch now works around these errors, so that new media continues to appear. (SWITCHWIN-5007)
- Switch can now workaround certain errors in DVL Seachange files, namely bad frame count and frame rate fields in the headers. Previously, these errors prevented these files from being used in Switch, but now they can be opened and played. (SWITCHWIN-4952)
- Improved Switch's ability to find all audio channels, even malformed ones, in MXF files.
 (SWITCHWIN-4985)

FIXES

Customer Issues

- Fixed a bug that prevented the decoding and playback of certain H.265/HEVC 4:2:2 files on Mac. (SWITCHWIN-4977)
- Fixed a bug in the Switch Engine API, and related documentation, that made it difficult to add secondary subtitle files via the API. Switch was expecting to receive a command of "add subtitle <path>" but the sample app (and documentation) showed the command as "add subtitles <path>" (note the plural, "subtitles"). We now accept both variations. (SWITCHWIN-4929)

- Fixed several bugs that caused hangs when playing growing MXF OP-1a files. (SWITCHWIN-4966)
- Fixed a bug that caused the display of redundant conflict entries in the analysis window for colorspace properties. (SWITCHWIN-4941)





KNOWN ISSUES

General

O Dolby AC-3 and EC-3/E-AC-3 are not supported for playback on ARM Macs, as Dolby is not providing their SDK for the ARM architecture. If this feature is important to you, please contact Dolby and let them know that you want them to support the Mac ARM (Apple Silicon) architecture. In the meantime, you can work around this by putting Switch into Rosetta emulation mode using the Finder. Select the Switch application in the Finder, select the File-> Get Info menu item, and click on the "Open using Rosetta" checkbox to enable it. Then launch Switch. This will run the Intel version of Switch, which does support Dolby AC-3 and EC-3/E-AC-3. (SWITCHWIN-4976, SWITCHWIN-4980)

Previous Versions: Switch 5.3 Release Notes

• General

- Switch will run on the Mac ARM Apple silicon and will not require the Rosetta Translation Layer
- Add user alert when there is a conflict between container and essence metadata
- o Added support for macOS 14 (Sonoma) and 15 (Sequoia)

Improvements

• Customer Requests

- Added support for passing timecode to external device.
- Added support for automatic Teletext page detection.

Fixes

Customer Issues

- O Addressed issue where DNX Specification 2.0 DNxHD 36 would not open.
- o Addressed an issue with CEA 608 and CEA 708 captions not being shown in the Switch Inspector.
- o Addressed an issue with collecting support information on MacOS. The System Profile support information is now gathered in a file called "SystemProfile.spx" on MacOS systems.
- o Addressed an issue with OP47 436M Teletext not being displayed in Switch.
- Disabled sync correction in the MPEG-1 system and MPEG-2 transport stream and program stream container readers. This avoids insertion of black frames to fill gaps, overlaps and discontinuities in the timestamps in the file. Please note that files with timestamp gaps/discontinuities in the video may result in AV sync issues.
- o Improved external playout via AJA Kona and Blackmagic cards to no longer downscale 4K/2K files to 1080p on Mac.

NOTE: The ARM version of Switch will not be able to decode Cineform because the open source project has not been ported to ARM. Any Switch user who needs to be able to play Cineform video on ARM Macs will need to guit Switch, and relaunch it using Rosetta in order to view the file.





Switch 5.2 Release Notes

New Features

Customer Requests

Added support for AJA Kona LHi.

• General

Added support for macOS Ventura 13.

Improvements

Customer Requests

- o Improved scrubbing performance. If the user is moving the scrubber to within 500ms of video, we will continue trying to seek to B-frames and P-frames. If the user has moved the scrubber more than 500ms away from the previous seek attempt, we will instead seek to the nearest I-frame. The user can also hold down the shir key while scrubbing to force Switch to seek to any frame. This can be helpful if they want precision scrubbing and their machine can handle it.
- Made it easier to passthrough Dolby-E by automatically setting the volume to full for external playout and muting it for desktop playback. This removes the need for the user to change a preference setting for analyzing audio to detect SMPTE 337M.
- Removed embedded web browser for purchasing via web store. This allows customers to buy with PayPal again, and avoids potential security concerns. Activation of Switch serial numbers can now be done by clicking on a hyperlink.
- o Improved support for sending selected 9mecode to external devices.

Fixes

Customer Issues

- Fixed a bug that prevented changes to the starting timecode and format for some secondary subtitle files from taking effect the first time they were changed.
- Fixed a bug that caused halos around the borders between masked objects in videos with alpha channels on Mac.
- o Fixed a bug that, on rare occasions, caused some very large files to take a very long time to load.
- Fixed a bug that prevented quadraphonic MOV/MP4 files from opening if they lacked a channel configuration.
- Fixed a bug that caused TTML caption top/bottom placements to be swapped in Hebrew and Arabic languages.
- Fixed a bug that prevented opening of UTF-16 SRT subtitle files.
- o Fixed a bug that prevented opening of files that contain AC-3 audio in little-endian byte order.

Known Issues

- Frames with long durations make the time display appear to stall, because it always shows the presentation time of the frame.
- ASF files with variable frame rate display incorrect frame rate in the inspector.
- o In the luma scope on Mac, tent and pluge are missing for files that should show them.





Switch 5.1 Release Notes

New Features & Improvements

- Vector Scopes (Technical Preview)
 - Added several video scopes, including a luma scope for plotting histograms of brightness, a
 vector scope for plotting U-V brightness distribution, and a component parade for plotting
 RGB brightness distribution. Note that this is the initial implementation of video scopes,
 which is being considered a technical preview, not a completely finished feature set. Future
 releases of Switch will add more capability to the video scope features.
- Index Advancement During Seek
 - Added the ability to advance the indexer during any seek operation, including flag navigation, chapter navigation, jump to mark in/out, 10 second skip, etc. Use the normal controls but hold down the option (Mac) or alt (Windows) keys. Once you do this, subtitle/caption playback will be disabled, as that requires indexing the entire file. Also, our support for advancing the indexer only exists in MPEG-2 TS and MPEG-2 PS containers. If the indexer cannot advance to the desired point within 30 seconds, the operation will be aborted.

Other New Features

- Added the ability to play Microsoft ADPCM audio from a WAV file.
- o Added the ability to play AMR audio files.
- o Added the ability to play HEVC MPEG-2 PS files.
- Added support for displaying timecode from SEI, MPEG-4 Sony Metadata, Seachange ANC & VBI.

Fixes

General

- o Fixed a bug that caused scrambled playback for non-standard resolutions, wherein widths were not a multiple of sixteen, on macOS.
- Fixed a bug that prevented the display of outlines of subtitles for SMPTE Timed Text files generated by EZ Titles.
- Fixed a bug that could cause audio from ASF files to go out of sync with the video if the file specified a pre roll.
- Fixed a bug that prevented playback of Broadcast Wave (BWF) files from Logic Pro X.
- Fixed a bug in dark mode on macOS where the timecode source popup in the jump-to-time interface was obscured.

Known Issues

- Frames with long durations make time display appear to stall because it always shows the presentation time of the frame.
- o ASF files with variable frame rate display incorrect frame rate in the inspector.
- o No detection of interlaced content is done for Windows Media files.





 ProRes Raw on recent versions of macOS displays almost black on Intel machines, and with a stride problem on ARM machines.

Windows

- o Ancillary LTC timecode is not passed when using the KONA 4G with the 4k driver.
- Ancillary LTC timecode is not passed when seeking/scrubbing to a KONA 3G or KONA 4G.

Switch 5.0 Release Notes

IMPROVEMENTS

• General

- ProRes RAW decoding (Pro).
- DCP/IMF Playback (Pro).
- Hardware accelerated decoding (all versions).
- o Reduced scale decoding op9on (all versions).
- o Ability to export media as TIFO (Plus and Pro).
- o Ability to skip indexing for faster media load 9mes (all versions).
- Dolby-E passthrough via SDI (Pro).
- Support for up to 64 tracks of audio (all versions).
- SwitchEngine API available for 3rd party integration (Pro).
- o Improved verbosity of displayed alerts from Vidchecker (Pro).

FIXES

General

- o Improved readability in Dark Mode (all versions, Mac).
- o AC-3 loudness measurement accuracy improved (Pro).
- o V-Chip code detection accuracy improved (all versions).
- Multiple improvements and fixes to Telestream Media Framework (all versions).

KNOWN ISSUES

General

- Frames with long durations make time display appear to stall because it always shows the presentation time of the frame.
- o ASF files with variable frame rate display incorrect frame rate in the inspector.
- o No detection of interlaced content is done for Windows Media files.
- o Cavena 890 subtitles not supported.
- Opening a ProRes RAW media file with Switch 5.0 on a Windows 10 system with a NVIDIA Quadro P1000 graphics card might return an unsupported video format message. If so, this is caused by an outdated version of the NVIDIA Quadro P1000 graphics driver. To resolve the issue, update the graphics driver to the latest available version.

Windows

- o Ancillary LTC timecode is not pass when using the KONA 4G with the 4K driver.
- Ancillary LTC timecode is not passed while seeking/scrubbing.





Switch 4.5.7 Release Notes

IMPROVEMENTS

• Customer Requested Improvements

 Updated the Inspector title bar to allow for standard macOS functionality such as CommandClick to show path, reveal in finder, or initiate dragging.

FIXES

- Fixed the licensing button coloring in Dark Mode on macOS so that they remain visible in the preferences.
- Fixed a bug that would cause the video dimensions shown in the window title bar to disappear when changing to Dark Mode on macOS Mojave and remain hidden until a relaunch using Light Mode.
- Modified the display of the video filename in the player window title bar so that it can easily be read in macOS Light and Dark modes.
- O Changed the preferences text coloring in macOS Light and Dark modes so that all user interface elements remain clearly legible in both modes.
- Changed the Inspector text coloring in macOS Light and Dark modes so that all user interface elements remain clearly legible in both modes.
- Changed the Welcome screen text coloring in macOS Light and Dark modes so that all user interface elements remain clearly legible in both modes.