

Switch 2.0.2 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 (free), Switch Plus (\$49), and Switch Pro(\$295).

Switch Player is a robust multi-format media player with deep inspection capabilities. The media player supports high-quality playback for 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 watermarked or limited to 30 seconds or half the duration of the media file.

Switch Plus is perfect for video editors and post-production professionals. Plus adds support for embedded caption playback and subtitle files; professional audio meters; export to MP4, QuickTime MOV, MPEG-2 Program Streams and Transport Streams; as well as additional playback support for: HEVC, MPEG-2 (Windows), and AC-3 audio.

Switch Pro is designed for Broadcast and Media QC analysis professionals. Pro adds full playback support for additional formats: IMF, DNxHD, and JPEG-2000; extends the professional Audio Meters (included in Plus) to include a loudness panel with options to calculate loudness gated (BS1770-3) or ungated (BS1770-2); as well as deeper inspection of application specific metadata (e.g., AS-11 with DPP metadata) as well as visual representation of the video's GOP structure. Switch Pro also has an interlacing option to display Fields. Switch Pro also adds export capabilities including an iTunes export preset for creating asset-only iTunes store packages.

System Requirements

Mac Minimum System Requirements

- Operating System: OS X 10.10 or higher
- CPU: All Macs that support 10.10 and above, 2.4 Ghz Core 2 Duo or faster.

- Any Core i3, i5, or i7
- RAM: 4 GB or more
- 256 MB or more
- Display: 1280 x 768 or larger, 50 Hz or faster

Windows Minimum System Requirements

- Operating System: Windows 7 64-bit SP1, Windows 8, Windows 8.1, Windows 10
- CPU: 2.4 Ghz Core 2 Duo or faster. Any Core i3, i5, or i7
- RAM: 4 GB or more
- Any graphics adapter that supports Direct3D feature level 10.1 or better
- 256 MB or more
- Display: 1280 x 768 or larger, 50 Hz or faster

Switch 2.0.2

IMPROVEMENTS

- Added support for the 'R10g' video four-character-code from AJA as an equivalent format for 'R10k' (AJA 10-Bit RGB).
- The default frame rate for transcode templates is now the source frame rate when possible.
- Switch's video preview now uses Lanczos scaling by default in OS X 10.11 and later, to improve the quality of the video when scaled. This can be controlled via the "Use high-quality scaling for video playback" preference.
- When multiple audio tracks are present, and they contain more than one channel each, Switch will now automatically solo the first track that matches the system language. If none match the system language, then the first track will be soloed. This avoids having multiple languages of audio playing simultaneously by default.
- Audio meters will now continue to update even when playback is muted. They will be dimmed to reflect that they are muted.
- Added support for Apple Lossless Audio Codec (ALAC) decoding.
- The current playback rate will now persist while looping.
- A "Pause All" menu item is now available when all currently opened videos are playing.

- Clicking anywhere in a secondary file in the container tab of the inspector now selects that row. Previously, there was an area within that row which, when clicked, would display a popup revealing the path of the file. Since this area took up most of the row, it would frequently get in the way of making a selection. You can still determine the path of the file using the "Show in Finder" or "Copy URL" menu items in the action (gear) button.
- In an attempt to aid in determining when caption tracks are present in source files, without having to do an exhaustive search of the media that would cause delays, Switch will now search the metadata for each video sample that is displayed, regardless of whether captions are enabled. A caption track will be added in the inspector when caption metadata is found.
- Switch will now differentiate between C608 and C708 captions in the track list in the inspector. Therefore it is now possible to view caption tracks for 608 and 708 captions in the inspector.
- Added fit-to-screen constraint sizes for iPhone 5/6/6 Plus, iPad 3/4/Air/Pro, Apple Watch, 2K, UHD, & 4K.
- Enabled support for raw 8-bit unsigned LPCM in AVI containers.
- For exports, the default resize mode is now Letterbox/Pillarbox.
- Improved the mapping of Microsoft Wave Format audio codes to four character codes so that ASF and AVI containers can more frequently identify codecs.
- Switch will now skip bad packets in ASF containers rather than aborting. This allows for playback of the rest of the movie after the bad packet.
- Added support for E-AC3 System B (DVB) audio track detection in MPEG-2 Transport Stream and Program Stream containers. Decode support is not available.
- Switch will now drop out of full screen mode when the application or front most player window becomes inactive.
- Multiple secondary audio or subtitle files can now be added at once.
- Improved subtitle/caption menu items for clarity.
- Added an error to the export summary dialog if you attempt to export video with a non-zero clean aperture to MPEG-2 Program or Transport Streams as these containers don't support it.

FIXES

- When encountering multiple audio tracks, where some are supported and others are not, Switch previously was unable to play any audio. Now, we skip the unsupported audio tracks and play the supported ones.
- Fixed a bug that caused corrupted audio playback when an unsupported audio track preceded a supported one.

- To aid in distinguishing between unsupported audio and audio that contains silence, there are now badges in the audio track table in the inspector that label each track as either available, unsupported, requiring Switch Plus, or requiring Switch Pro.
- Fixed a bug that prevented playback of DNxHR from within MOV and MP4 containers.
- Fixed a bug that prevented the use of the x264 bitrate command line parameter for exports.
- MXF XDCAM files now show commercial name in the format section instead of 'mp2v'.
- Fixed a crash when trying to open a particular Digital Cinema Package (DCP) JPEG 2000 MXF file.
- Fixed a problem that prevented the use of EBU STL subtitle files whose Time Code: Start-of-Programme (TCP) value is larger than the Time Code: First In-Cue (TCF), TTI Time Code In (TCI), and TTI Time Code Out (TCO) values.
- Fixed a bug that caused split captions from WebVTT files to display without a space between some words.
- Switch now tolerates the incorrect use of the VC-3 picture coding (DNxHR HQX) label in Blackmagic DaVinci Resolve MXF files.
- Relaxed validation requirements for DFXP caption files to support those created by 3PlayMedia which fail to include the XML declaration node.
- Switch can now detect Packed RGB 555, Packed RGB 565, and Microsoft RLE in AVI containers, even though these formats are not playable.

General

- Switch no longer aborts indexing AVI files when unsupported audio is encountered. This allows playback of the other supported media in the file.
- Fixed several problems, including a crash on Windows, when opening a video while the store window was open.
- Fixed a crash when attempting to open files with unsupported video.
- Fixed a crash when opening MP4 or MOV containers with null media headers and no timecode.
- Improved performance when resizing causes the window to extend past the bounds of the screen.
- Fixed a bug that caused the "Subtitle/Caption Source" menu item on Windows to always be disabled.
- Fixed a bug that caused any x264 command line parameters entered in custom mode to continue to be used when switching to a preset.
- Fixed a bug that caused external preview to stop working after switching devices.

- Fixed a bug in the AIFF container reader that made it assume all audio was PCM. This resulted in compressed audio being tagged as LPCM which resulted in corrupted audio playback in Switch.
- Updated the AVI container reader to support detecting audio formats that are specified by the subformat field of the WAVEFORMATEXTENSIBLE structure.
- Enabled identification of AAC and AC-3 in AVI containers.
- Fixed a bug that caused trimmed exports to always have one additional video frame and caused the "Go" button in the trim section of the inspector to jump to that same one extra frame past the originally intended end of the trim.
- Fixed a bug that caused the truncated duration of unlicensed exports to be incorrect when exporting to a compressor preset that uses a different timescale than the source.
- Fixed a hang when attempting to play an H.262 MPEG-2 Program Stream file exported by Switch.
- Fixed a crash when playing MXF OP-1b.
- Fixed a bug that caused AAC audio in an MPEG-2 Program Stream to be silent in Switch.
- Fixed a bug that caused either wasted time, or lost frames, in exports with trimmed leaders and changed frame rates.
- Fixed a bug that caused transcode exports with trims and reduced frame rates to include superfluous hidden frames, thereby bloating the file size unnecessarily. Transcode exports will no longer include any hidden frames.
- Fixed display of GOP timeline at high resolutions.
- Fixed a bug that prevented the export of the current video frame with files whose decompressors generate 'NV12' video.
- Fixed a bug that caused the magnifying glass button in the export progress dialog to reveal all prior exports, when it should only reveal the one export it is associated with.
- Fixed a bug that caused the audio sample rate popup in the inspector to be blank if the source used a sample rate that Switch does not support for export. Now, Switch will default to 48kHz.

OS X

- Fixed a bug that caused the wrong external device to be marked as active.
- Pending changes in the inspector are now automatically committed when initiating an export.
- Fixed a bug that caused display problems when pasting multiple lines of text into text fields.
- Disabled user-invoked completion in text fields via the escape key as they are inappropriate.

- Fixed a bug that prevented the system-provided undo and redo from working in text fields.

Windows

- Fixed several bugs that prevented playback navigation via the keyboard after interacting with the timeline.
- Audio meters will now work even without an audio device on Windows.

KNOWN ISSUES

General

- CEA-708 captions inserted into H.264 video in an MP4 file via Vantage may have been displayed at improper positions in Switch on Windows, and may cause problems with the video quality on OS X. Both platforms may exhibit audio/video synchronization issues.
- Frames with long durations make time display appear to stall because it always shows the presentation time of the frame.
- VANC is not output in fast forward and reverse playback modes.
- ASF files with variable frame rate display incorrect frame rate in the inspector.
- If the first video sample cannot be read within 3 seconds, opening the file will fail.
- No detection of interlaced content is done for Windows Media files.
- WMV sources export files with A/V synchronization issues when transcoded to H.264 in a MPEG-2 TS or MPEG-2 PS container.

Windows

- Ancillary LTC timecode is not passed when using the KONA 4G with the 4k mode firmware.
- Ancillary LTC timecode is not passed when seeking/scrubbing.

Mac App Store

- In the Mac App Store version of Switch, when opening a file that references other files, such as QuickTime Reference Movies or IMF XML files, Switch will prompt the user to explicitly give permission to open each of the referenced files in order to satisfy the sandbox requirements. Users who purchase Switch directly from Telestream do not have to perform these additional steps.

- Users who purchase Switch Plus from the Mac App Store and then decide to purchase Switch Pro are not offered upgrade pricing, but instead must pay the full price.

Switch 2.0.1

FIXES

Customer Issues

- Prevent Switch from launching on OS X 10.9, which is unsupported
- Prevent opening of bundle directories, such as Final Cut Pro X Camera Archives and ACHD packages, to prevent the OS from changing the permissions and making them unusable
- Fixed a crash that occurred when certain system fonts were disabled, corrupted, or missing on OS X
- Added the ability to toggle between 2 or more SDI devices in External Preview

General

- Fixed the export audio bitrate popup in the inspector to not be empty by default
- Fixed an issue where A/V sync was off when adding a trim in audio transcode mode
- Fixed a problem where export menu options and key commands fail to respond
- Fixed situations where AJA devices would output noise when audio is disabled
- Fixed a problem where frame count and timecode display modes were enabled when there was no video
- Fixed a problem where changing the interlacing mode using SDI will cause the player to stop working (WINDOWS ONLY)
- If Flip4Mac is installed, Windows Media decoding will be available in Switch Player

Switch 2.0

NEW

General

- Added support for displaying interlaced fields side by side.

- Added support for decoding Windows Media Video and Windows Media Audio in ASF files, including WMA 7/8, WMA 9 Standard, WMA 9 Pro, WMA 9 Lossless, WMA 9 Voice, WMA 10 Pro, WMV 7, WMV 8, WMV 9 Standard, WMV 9 Advanced, and Microsoft SMPTE VC-1.
- Add support for scrubbing using the mouse wheel, track pad, and magic mouse.
- Audio peak meter displays will now be dimmed for muted channels.
- The mute and solo buttons on the audio meter window can now be used to control an entire track.
- Added support for running Switch for Windows on a Lightspeed Server.
- Added persistence of setting for enabling closed captions in all files.

Customer Requested Features

- Added support for omitting video and exporting only audio.
- Added timeline view of GOP structure and data rate.
- Added the ability to open multiple secondary audio or subtitle files at once.
- Added the ability to drag and drop media onto the welcome dialog to open them.
- Added the ability to drag and drop secondary audio and/or subtitle files on to the container tab of the inspector.
- Added support for 24-bit and 32-bit Apple QuickTime Animation RLE decoding.
- Added persistence of the time display type setting.
- Added the ability to pass closed captions (608 and 708), AFD, V-chip, and timecode as VANC to external preview device.
- Added support for AJA and Blackmagic 10-bit RGB decoding.
- Added support for preserving '@mak', '@mod', and '@xyz' metadata in QuickTime MOV files.
- Added the ability to jump to a desired time, timecode, or frame number.
- Added support for audio devices with more than 8 channels.
- Added support for restoring the placement of the inspector and audio meter windows.

FIXES

Customer Issues

- Worked around a bug in Final Cut Pro X that creates H.264 MOV files whose container reports a frame rate of 29.97 fps but whose essence reports a frame rate of 25fps. To be consistent with Apple applications, the essence frame rate is now ignored in this case.

- Fixed a bug that caused audio output to AJA hardware to be 6 dB too low.
- Improved performance of playback from MPEG-2 Transport Streams with captions displayed.
- Fixed a hang that occurred while playing backwards with loop enabled.
- Improved playback performance at end of video with closed caption enabled.
- Improved tolerance of malformed GXF files.
- Fixed a bug that caused the color of HEVC files created by Episode to be washed out.
- Fixed a crash when opening some SCC files.
- Fixed a bug that prevented timecode from displaying properly in MXF proxy files.
- Fixed a bug that prevented MPEG-2 GOP timecode from displaying.
- Fixed a bug that caused the wrong key to be used for geographic location metadata.
- Fixed a bug that caused SD video to be cropped when viewed full screen.
- Fixed a bug that prevented the last line of captions from being displayed in ProRes files.
- Fixed a bug that prevented display of timecode and captions in MP4 files.
- Fixed a bug that caused loss of A/V sync when opening the audio meters window while playing.
- Fixed a bug that prevented playback of HEVC files created by Episode.

General

- Fixed a bug that caused a 404 error when signing up for the mailing list in the Mac App Store version.
- Fixed a bug on Windows 7 that caused the audio meters to flash.
- Fixed a bug that prevented the iTunes Store Package Profile popup menu to not display under certain conditions.
- Fixed a bug that prevented the display of warnings in the export summary dialog when exporting iTunes Store packages.
- Fixed a bug that caused the container type in the export summary dialog to always be MOV, regardless of the settings, when exporting iTunes Store packages.
- Fixed a crash when encountering invalid IMF files.
- Audio from secondary files will be omitted from the primary media file in iTunes Store package exports.
Additionally, any audio tracks that contain audio from both primary and secondary sources will also be omitted, and you will be warned about these mixed tracks.
- Fixed an audio clicking distortion in MXF OP-1b files.
- ITT files will be assigned the data_file role of "subtitles" and SCC files will be assigned the role of "captions" in iTunes Store Package metadata XML. In addition, the iTunes Store Package validator will display a warning when users try to create iTunes Store Packages with subtitles that are not from ITT or SCC files.

- Fixed a bug that caused preferences to be all cleared on Windows when resetting. Now they return to their default values.
- Prevented a crash in the x264 encoder by not allowing odd (as opposed to even) video dimensions.
- Subtitle tracks that require indexing now have their durations updated with the results of indexing.
- Fixed several bugs that prevented opening and playback of IMF packages created by Vantage.
- Improved network audio playback.
- Fixed a bug that caused preview to display interlaced when double-rate deinterlacing was enabled, if the window was not full size.
- Added persistence of preference for showing loudness meters.
- Fixed a bug that caused changes to audio settings to be lost after adding or removing a secondary audio file.
- Fixed a crash while playing HEVC.
- Fixed a bug that caused the loss of A/V sync when resizing the preview window while playing.
- Added tolerance for MPEG-2 video that only contains the the sequence header in the first GOP.
- Improved double-rate deinterlacing to avoid shaky video.

KNOWN ISSUES

General

- Some 10-Bit DNxHD & DNxHR files will cause a crash on Windows if the CPU does not support SSE4.1.
- CEA-708 captions inserted into H.264 video in an MP4 file via Vantage may have be displayed at improper positions in Switch on Windows, and may cause problems with the video quality on OS X. Both platforms may exhibit audio/video synchronization issues.
- JPEG-2000 video in an MOV container may cause a crash.
- Switch assumes that secondary subtitle files are authored in sync with the video with the first caption starting at zero time.
- Chapter markers in QuickTime MOV files are neither read nor written.
- Performance problems are noticeable with ASF files in reverse playback mode.
- Frames with long durations make time display appear to stall because it always shows the presentation time of the frame.
- Colors are off when transcoding video from any colorspace other than Rec.601.
- Hang while canceling exports during shutdown.

- VANC is not output in fast forward and reverse playback modes.
- ASF files with variable frame rate display incorrect frame rate in the inspector.
- Playing AAC in MPEG-2 Program Stream results in silent audio.
- If the first video sample cannot be read within 3 seconds, opening the file will fail.
- No detection of interlaced content is done for Windows Media files.
- WMV sources export files with A/V synchronization issues when transcoded to H.264 in a MPEG-2 TS or MPEG-2 PS container.

Windows

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

Mac App Store

- In the Mac App Store version of Switch, when opening a file that references other files, such as QuickTime Reference Movies or IMF XML files, Switch will prompt the user to explicitly give permission to open each of the referenced files in order to satisfy the sandbox requirements. Users who purchase Switch directly from Telestream do not have to perform these additional steps.
- Users who purchase Switch Plus from the Mac App Store and then decide to purchase Switch Pro are not offered upgrade pricing, but instead must pay the full price.

Switch 1.6.2

NEW

- Now available on the Mac App Store.
- Added support for Avid AVC Proxy in MXF OP-Atom.
- Dramatically improved speed of indexing MXF files.
- Audio track languages are now displayed in the tooltips of the menu items for muting and soloing tracks.
- Fixed an issue that prevented animation of user interface elements, such as audio meters, on Windows with Nvidia GeForce drivers of version 352.86 or later.

FIXES

- Improved support for IMF by tolerating missing required elements in the CPL file.

- Fixed a bug that caused poor playback quality of MXF OP-1b files containing AVC Ultra because field 2 decoding was failing without multiple PPS NAL units.
- Fixed a bug that caused the current mute/solo configuration to reset if you opened the inspector while playing.
- Fixed a crash that occurred when exporting multiple audio tracks that used the same source channels.
- Fixed a bug that caused the playback of 20-bit PCM audio to be too loud.
- Fixed a crash when attempting to open an FLV file with complex script objects.
- Fixed a bug that caused invalid iTunes Store Package metadata.xml files to be created in packages with an asset type set to "Preview" and a territory other than "WW" (Worldwide)
- Fixed a bug that caused the export dialog to display black bars after resizing the audio meters.

Closed Captions & Subtitles

- Fixed a bug that prevented the display of some subtitles if the ITT file specified a text region that was too small to show all of the subtitles in the specified character set.
- Fixed a bug that prevented the display of CEA-708 captions containing unicode characters.
- Fixed a bug that either caused a crash or prevented the display of DVB subtitles where the bitmap object data contained pixel lines of different lengths.

Windows

- Fixed a crash on Windows when exporting after resizing the audio meters.
- Improved performance of playback of JPEG-2000 on Windows.

KNOWN ISSUES

- Some 10-Bit DNxHD & DNxHR files will cause a crash on Windows if the CPU does not support SSE4.1.
- CEA-708 captions inserted into H.264 video in an MP4 file via Vantage may have be displayed at improper positions in Switch on Windows, and may cause problems with the video quality on OS X. Both platforms may exhibit audio/video synchronization issues.
- Rewinding jumps forward before rewinding.
- JPEG-2000 video in an MOV container may cause a crash.
- Double-rate deinterlacing produces shaky video.
- Switch assumes that secondary subtitle files are authored in sync with the video with the first caption starting at zero time.

- Chapter markers in QuickTime MOV files are neither read nor written.
- Changes to audio settings in the inspector are lost after adding or removing a secondary audio file.
- Some HEVC files cause a crash.
- Lightspeed servers do not meet the minimum requirements for Switch for Windows.
- Switch is unable to open any files on storage devices that do not support file locks.
- iTunes Packages: Files with a ".scc" extension are being assigned a role of "subtitles" instead of captions in the data_file element

Mac App Store

- In the Mac App Store version of Switch, when opening a file that references other files, such as QuickTime Reference Movies or IMF XML files, Switch will prompt the user to explicitly give permission to open each of the referenced files in order to satisfy the sandbox requirements.

Switch 1.6.1

Bug Fixes

- Fixed a Memory Leak that occurred when playing back Closed Captions on Windows
- Fixed a bug that caused exported DNxHD content to be incompatible with Switch
- Changed Ungated Loudness to display BS 1770:1 rather than BS 1770:2
- Corrected an outdated link so that the application directs to the current User Guide

KNOWN ISSUES

- Very loud audio from PCM AES SMPTE 302M 20-bit audio files
- Bad Timecode generated from exported H.262 or H.264 content when converting the Framerate
- Dropdown lists in the Inspector will reset following video playback
- Changes in the Inspector are not registered until focus is shifted away from the field in question

Switch 1.6

Fixes and Enhancements

- **New! Switch Plus (\$49) license level.**
- **New! External preview/SDI out to AJA T-Tap, ioXT, io4K (Mac), and AJA Kona 3G, & Kona 4 (Win).**
- **New! Professional Audio meters** with decibel scale, average loudness, maximum peak,
- **New! Additional export support to:** MP4 (MPEG-4 Part 14), MPEG-2 Transport Stream, and Program Stream file formats; as well as x.264, MPEG-2 Video (including HDV, IMX, XDCAM, XDCAM HD, XDCAM EX, XDCAM HD 4:2:2), AAC-LC, MPEG-2 Audio.
- **New! Added playback support for:** IMF (Interoperable Master Format) files; as well as JPEG-2000, DNxHR, DNxHD SQ TR (Thin Raster).
- **New!** Added playback support for subtitles from Spruce STL and SubRip SRT files
- **New!** Now localized in English, French, German, Spanish, and Japanese.
- Added keyboard shortcuts for enabling closed captions
- Added a “Clear” button to the welcome dialog that allows you to remove one or more videos from the recent media list.
- Added an option to turn off the welcome dialog
- The export summary dialog’s video section now displays both the storage and display dimensions, when the two differ. It will also display the pixel aspect ratio (PAR)

Bug Fixes

- Fixed a crash when launching Switch for Windows 64-Bit on older AMD CPUs.
- You can now double-click the title bar to zoom in OS X 10.10 (Yosemite).
- Fixed a crash that occurred if you were exporting from a file over a network and then lost or disabled the network connection
- Fixed an issue with files that have multiple video tracks, where Switch was playing the wrong video track.
- Fixed the vertical positioning of captions from WebVTT files.
- Fixed a bug that caused timecode from a GXF file to show as non-drop-frame when it was actually in drop-frame format.
- Fixed a bug that caused the display of subtitles and closed captions to be cut off when applying a clean aperture.

- Fixed a bug that prevented the resize constraint and resize mode settings from being reverted when reverting the video settings.
- Fixed the preservation and conversion of timecode when using double-rate deinterlacing.
- Fixed a hang that occurred when closing the last video window and returning to the welcome dialog.
- Fixed a bug that caused a static timecode to be displayed for MXF OP-Atom files that do not contain timecode.
- Fixed a bug that allowed spurious CEA-608 CC3 data to prevent Switch from displaying some captions from CC4.
- Fixed the export progress dialog so that new exports are placed at the top and more easily visible.
- Fixed a bug that caused MPEG-2 Transport Stream files with 24-bit SMPTE 302M audio to be mistakenly identified as 20-bit audio.
- Fixed VANC extraction from DV video essence. Added CEA-708 caption extraction from VANC.
- Fixed the vertical positioning of CEA-708 captions with anchor IDs other than zero.
- Fixed the preview of double-rate deinterlacing when the video is not displayed at full size.
- Fixed a bug that caused Switch to open multiple instances of the same media file rather than bringing the existing instance to the front.
- Fixed the display of export progress when unlicensed.
- Fixed the audio sample rate converter so that it no longer attenuates the audio by 0.2 dB.
- Fixed a bug that caused an incorrect clean aperture to be read from LXF IMX files.
- Fixed a bug that caused the Gather-Support-Information feature to collect crash dump files from other applications. (Windows Only)
- Fixed a crash when quitting the application while in full-screen mode. (Mac OS X Only)

KNOWN ISSUES

- Some 10Bit DNxHD & DNxHR files will cause a crash on Windows if the CPU does not support SSE4.1
- If an ITT file specifies a text region that is too small to show all of the subtitles in the specified character set, some will not be displayed. This is handled differently on OS X than on Windows.

- CEA-708 captions inserted into H.264 video in an MP4 file via Vantage may have be displayed at improper positions in Switch on Windows, and may cause problems with the video quality on OS X. Both platforms may exhibit audio/video synchronization issues.
- Rewinding jumps forward before rewinding.

Switch 1.5.1

- Fixes and Enhancements
- Fixed a bug that caused multi-line CEA-708 captions to only show the first line if the captions contained certain special characters.
- Fixed a bug that caused roll-up CEA-608 captions at the top of the screen to only show a single row, when it was configured to show multiple rows.
- Fixed a bug that prevented the display of CEA-708 captions embedded in AVC A/72 Supplemental Enhancement Information (SEI).
- Fixed a bug in the rendering of CEA-608 captions with mid-row style changes.
- Fixed a bug in the rendering of CEA-708 captions on Windows which prevented them from displaying the colored background.
- Switch will now ensure that blank lines in CEA-708 captions have the same height as non-blank lines to preserve the correct vertical spacing.
- Fixed a bug that prevented Switch from detecting PCM audio in certain WAV files.
- Fixed a bug that caused timecode from MXF files not to be displayed
- Switch will now warn you before exporting an iTunes Store package, if you have trimmed off any chapters. If you choose to continue, these chapters will now be automatically omitted from the package. In addition, all chapters' starting timecodes will now be automatically adjusted during export to account for trimming.
- Fixed a crash when adding an invalid or malformed secondary subtitle file.
- Fixed problems with opening files larger than 4GB, including the failure to open in some cases, as well as the inability to get creation and modification dates.
- Fixed the command key equivalent for muting audio to avoid conflicts with the operating system's command key equivalent for viewing all windows in the current application. (Mac only)
- Fixed problems when exporting to a path that contains multi-byte unicode characters. (Windows only)

Switch 1.5

Fixes and Enhancements

- New! Now available for Windows
- New! Supports extraction and playback of CEA-608 & CEA-708 captions
- New! Supports playback of SCC, DVB, TTML (iTT and SMPTE-TT captions) and WebVTT subtitle files.
- New! Fullscreen playback.
- New! Supports playback of MXF OP-1a Proxy and MXF OP-1b files.
- New! Supports playback of Apple ProRes XQ.
- New! Supports playback of Avid DNxHR.

- New! Supports playback of 10-bit uncompressed YUV ('v210') video.
- New! Now includes validation of audio and video codecs for iTunes Store packages.
- New! Now supports exporting of 32-bit signed integer and 32-bit floating point LPCM audio in both big and little endian formats.
- Modernized user interface appearance.
- Improved viewing of AS-11 DPP metadata
- The screensaver is now disabled during playback.

Bug Fixes

- Chapter order is now recalculated if the chapter time is changed manually using the timecode box and chapter time is set before/after another chapter
- MXF DNxHD 4:4:4 10 bit RGB files made with Adobe Premiere will now open and play in Switch
- A-Law and μ -Law PCM are now audible in Switch
- Fixed several bugs that could cause exports to be malformed if the movie, track, or media duration could not be expressed in the given timescale in 32-bits.
- Fixed an issue where files created by Switch could not be used in Omneon or Vantage Server 6.3 because the component type value of the 'hdlr' atom was null
- Alpha channel are now passed on in transcoded exports to ProRes4444
- Displayed position of captions is now adjusted for changes to CLAP

Known Issues

- HEVC support is experimental, please notify Telestream Desktop Support if you have an HEVC file that cannot play back in Switch
- When using SCC caption files, the first caption must be at zero timecode to be displayed in sync with the video
- 59.94 timecode is displayed in 29.97 with two frames per timecode when doing double rate de-interlacing

Switch 1.1

Fixes and Enhancements

- **New!** iTunes Timed Text (ITT) subtitle files can now be added as secondary subtitle files and will be included in iTunes Store Package exports.
- **New!** The table columns in the inspector are now resizable horizontally.
- Updated the code signing of Switch to support the new Gatekeeper requirements of OS X 10.9.5 and later.

- Added support for muting or soloing entire secondary audio files via the Audio menu or via contextual menus in the Audio Meters window.
- Moved the Container Metadata section to second from the top in the inspector, just below the File section, and above the Secondary Audio and Secondary Subtitle sections.
- Added support for reporting a problematic file via the Help menu, even if the file is not open.
- Container, video, and audio metadata field now requires a Switch Pro license for viewing and/or editing.

Bug Fixes

- Fixed a bug that caused the inspector to enter Export mode whenever the user changed tabs.
- Fixed a bug that caused a crash on Mavericks when scrubbing to the end of the video and then holding the “J” key to rewind.
- Fixed a bug that caused a crash when adding more than 32 channels of audio.
- Fixed a bug that caused the current display scale of the video to be lost when reverting changes, resulting in improper calculations for video edits, when the movie was not displayed at 100%.
- Fixed a bug that allowed the crop top inset to persist when changing from video transcode to pass-through.
- Fixed a bug in the remapping of audio input channels to output channels that prevented the preservation of old mappings when the speaker label order of the source did not match the order defined by the program (i.e. Source: L C R Lb Rb LFE, Export: L R C LFE Lb Rb) and the source contained another track with the desired speaker label. Previously, the remapping code would only preserve the mapping if it was in the same order with the same speaker label. Now, if that fails, we also accept the first unused old mapping with the desired speaker label.
- Fixed a bug with stuttering when pausing and resuming playback.
- Fixed a bug that occasionally caused the loss of 1 or 2 video frames off the end of a video in transcode exports if the compressor was more than 1 frame behind in delivering its output.
- Fixed a bug that prevented the purchase of a new serial number if a deactivated serial number was installed.
- Fixed a bug that prevented the increase and decrease size menu items from working with the shift key down if the video had no audio tracks.

- Fixed a bug that caused black bars on the top, right, and bottom of non-square-pixel H.264 video decoded by Core Video and shown with the pixel aspect ratio (PAR) disabled, such as when in crop, resize, or clean aperture modes
- Fixed three bugs where Switch incorrectly mapped Left Center (Lc) and Right Center (Rc) speaker labels to Left Side (Ls) and Right Side (Rs), respectively.

Switch 1.0 Features

Media Playback

Switch has the playback control features of a professional player, such as: Fast forward and rewind, slow motion, as well as single-frame forward and back. Switch also supports playback of secondary audio files as well as SCC files.

Containers:

- AAC
- AC3*
- AIFF
- AVC (AVC Elementary Stream)
- AVI (open DML)
- DV
- HEVC (HEVC Elementary Stream) *
- GXF
- LXF
- MOV
- M1V (MPEG-1 Video Elementary Stream)
- M2V (MPEG-2 Video Elementary Stream)
- MP3 (MPEG Layer 1/2/3 Audio Elementary Stream)
- MP4 (ISO Based Media Format)
- MPG (MPEG-1 System Stream)
- MPS (MPEG-2 Program Stream)
- MTS (MPEG-2 Transport Stream)
- MXF (OP.1a; AS02, AS03, AS11)
- MXF (OP.Atom)
- SCC
- WAV

Video Codecs:

- Apple ProRes
- DNxHD*
- DV 25
- DVCPro 25
- DVCPro 50
- DVCPro 100
- DVCPro HD
- H.263
- H.264
- H.265*
- JPEG
- MPEG-1
- MPEG-2
- MPEG-4

Audio Codecs:

- AAC
- AC3*
- Microsoft ADPCM
- MPEG Audio Layer 1,2,3
- IMA ADPCM
- G.711 aLaw
- G.711 uLaw
- G.726
- PCM

*Note: due to royalties DNxHD, HEVC and AC3 playback is watermarked in Switch Player.

Media Inspection

Switch enables inspection of container, video and audio codec properties, and subtitle assets.

Container information

File name, location, size, type, duration, creation date, modified date, secondary audio, secondary SCC files, metadata

Video codec information

Format, bit rate, subsampling, color space, locale, duration, frame rate, whether the file is interlaced or progressive, encoded size, clean aperture, pixel aspect ratio, display size and additional metadata*

Audio codec information

Per track: source file, channels, format Per channel: speaker labels, source track

Additional information: bit rate, sample rate, locale, duration and additional metadata

*Note: Advanced inspection of application-specific metadata included only in Switch Pro.

Media Edit and Export

In export mode, users can make changes to the file: Trim, scale or crop the video; change the aspect ratio and clean aperture; rearrange audio tracks; edit speaker assignments; add metadata; insert chapter markers; and add caption tracks. Video and Audio passthrough mode enables users to make non-encoding-related changes to media. For more in-depth details see below.

Edit Details**Container:**

Edit: file name, file type and metadata

Video:

Edit: format, color space, locale, trim, scale, crop, change the aspect ratio and clean aperture

Audio:

Edit: format, rearrange audio tracks, channels, edit speaker assignments, sample rate, and locale Video and Audio pass-through mode enables users to make non-encoding related changes.

Subtitle*:

Inspect your subtitle track

Time:

Set trim in-and-out points and add chapter markers*

*Note, export of SCC files and chapter markers are only supported as part of an iTunes store package. iTT files can be added as secondary file for export as part of an iTunes store package.

Export formats

Containers:

- MOV
- SCC (only as part of an iTunes package export)

Video Codecs:

- Apple ProRes

Audio Codecs:

- PCM

Export to iTunes

Switch contains an iTunes export option that creates a complete asset-only iTunes store package.

Coming Features

- Full screen playback
- Switch for Windows
- Support for embedded closed captions
- Support for adding captions to file export
- Support for opening and displaying chapter markers in MOV files
- Support for adding chapters to exported movies
- Additional containers and codecs for export

Known Issues

- HEVC support is experimental, please notify Telestream Desktop Support if you have an HEVC file that cannot play back in Switch
- Chapter order is not recalculated if the chapter time is changed manually using the timecode box and chapter time is set before/after another chapter
- Displayed position of captions is not adjusted for changes to CLAP
- When using SCC caption files, the first caption must be at zero timecode to be displayed in sync with the video
- Alpha channel is not passed on in transcoded exports
- 59.94 timecode is displayed in 29.97 with two frames per timecodesample