Release Notes

System Requirements

	Minimum	Recommended
Operating System	Windows 7, 8, 10, macOS Sierra, macOS High Sierra	Windows 10, macOS High Sierra
Processor	i5 dual-core @ 2.3GHz[1]	i7 quad-core @ 2.8GHz+
Memory	4GB RAM	16GB+ RAM
Hard Drive	2GB[2], 7200 RPM for record to disk	500GB+, Solid State OS Drive
Graphics Card	Intel HD[3], DirectX 11 capable	Nvidia GeForce or AMD Radeon, 1GB+ video memory
Internet Connectivity	Open HTTP/HTTPS port 80, RTMP port 1935, port 7272 for Remote Desktop Presenter	If behind a firewall, check with your CDN for any sites to whitelist

[1] *May be insufficient for 1080p+ or 60 fps workflows*
[2] *Additional hard disk space required for record to disk.*
[3] *Insufficient for advanced Multi-Viewer workflows.*

Languages Supported:

- English
- German
- Italian
- Brazilian Portuguese
- Chinese (Simplified)
- Japanese
- Korean
- Czech
- Dutch
- French
- Spanish
- Swedish

An internet connection is recommended for Wirecast 9.0 license activation. A Wirecast 9.0 license will automatically update at no cost after download for Wirecast 8 users if standard maintenance and support is current.

ATTN: Wirecast 9 has dropped support of HDV licenses/cameras.
~ Please click here for additional information ~

NewBlueFX Titler Live Express & Present – Includes over 60 title templates for lower-thirds and overlays (Mac & Windows).

- *Purchase of Wirecast 9 Studio includes a free copy of NewBlueFX Titler Live Express.*
- *Purchase of Wirecast 9 Pro includes a free copy of NewBlueFX Titler Live Present.*

www.telestream.net/wirecast/newblue.htm

Remote Desktop Presenter - Please use the Remote Desktop Presenter version 2.0.8, available as a separate download from Telestream: www.telestream.net/dtp

Best Practices

Minimum Required Upload Speed:

- It is recommended that an upload speed rate of at least double the selected video bitrate be available, especially for a total target bit-rate of 10Mbps (Megabits per second) or less, or when there are multiple outgoing streams.
- Upload speed can be tested at a website such as TestMy.net/upload.
- Additional tasks that can consume upload bandwidth on the network should also be considered when determining how much of the available upload bandwidth can be allocated towards streaming.

Rendezvous

Wirecast Rendezvous uses WebRTC technology that can be very resource intensive. For the best experience, we suggest considering the following table when choosing hardware:

	Studio *(2 guests + 1 host)*	Pro *(7 guests + 1 host)*
Bandwidth[4]	Add 4 Mbps	Add 5+ Mbps[5]
Processor[4]	i5 quad-core[6]	i7 quad-core[6]

[4]Based on a single simultaneous stream of 720p30 x264 @ 4.0Mbps.
[5]Bandwidth per guest will scale downwards as more are added to maintain reliability.
[6]Minimum recommended processor with example stream[4]. More demanding workflows may require a more capable CPU.

ISO Recording:

- Solid State Drive or fast RAID array recommended for ISO Recording and Replay functionality.
- Actual data rates will vary depending on quality level selected for ProRes (Mac) or MJPEG recording (Windows), as well as the resolution and frame rate selected.
  - For Mac ProRes recording please refer to Apple's ProRes data rate specifications. HYPERLINK "https://documentation.apple.com/en/finalcutpro/professionalformatsandworkflows/index.html"□HYPERLINK "https://documentation.apple.com/en/finalcutpro/professionalformatsandworkflows/index.html"
  - Windows MJPEG Best Quality Guidelines (Megabytes per second):
    - *1080i and 1080p 29.97 and 30 FPS, MJPEG Best Quality – ~25MB/sec*
    - *1080p 60 FPS, MJPEG Best Quality – ~50 MB/sec*
    - *720p 59.94 and 60 FPS, MJPEG Best Quality – ~20 MB/sec*
- Total expected data rate should be compared to available disk write speed to ensure adequate disk throughput.

Failure to ensure the available disk write speed is greater than the highest expected total data rate may result in frames being dropped from recordings (ISO, Replay, and Record-to-Disk).

Best Practices (cont.)

<u>Hardware accelerated encoding requirements:</u>

- Intel Quick Sync Video encoding requires an Intel CPU with an Intel® QuickSync Video core.
  <u>List of Intel CPUs supporting QuickSync</u>
- NVIDIA NVENC encoding requires an NVidia GPU with Kepler architecture or newer.
  <u>NVIDIA only maintains a general list of supported GPUs</u>
- Apple Hardware Accelerated H.264 encoding requires a Mac with an integrated Intel GPU*.
  This may change in the future, as the Apple API decides what hardware acceleration method is to be used. At the time of this writing, only Quick Sync via an Intel GPU is supported.

<u>High frame-rate streaming (60fps):</u>

- High frame-rate streaming will result in increased CPU usage and require a higher bit rate (4Mbps or higher) for a quality encode.
- Simply switching to a higher frame-rate without ensuring the CPU and bitrate are sufficient may result in a lower quality encode.

<u>CPU Usage:</u>

- Consider lowering your canvas frame rate and/or streaming resolution to lower CPU usage.
- Maintained system CPU usage greater than 60% will increase the likelihood of dropped frames.

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10.0 BETA – New Features

NEW – Wirecast Restream, Live Captions & Crossposting on Facebook

- Restream is a new web service offering the ability to take one live stream from Wirecast and restream it to up to five destinations. Simplifies distribution of content and reduces CPU usage and bandwidth needs caused by multiple encodes. You will be asked to create a Telestream Cloud account when you first configure Restream.
- Live Captions is another new Wirecast web service featuring speech-to-text transcription and live captioning. One transcription can be used for restreaming to multiple destinations.
- Crossposting on Facebook settings have been added to make it easier to crosspost live streams to other Pages from within Wirecast and for other Pages to crosspost to your Page. You need to first establish a crossposting relationship with another Page through Facebook's Publishing Tools.

10.0 BETA – Improvements

- Improvement – Always restore the previously selected folder when adding media files
- Improvement – Add Recent, Frequent, Open Empty Document and Open Support Assistant to the Windows Taskbar right-click icon on Windows
- Improvement – Add System Output to audio output devices on macOS
- Improvement – XKey Controller: Color the Title bar of shots to match the color of XKeys Controller
- Improvement – Add option to color the title bar of every shot on each master layer in the preferences
- Improvement – Add menu access for OLE scripting API
- Improvement – 48 KHZ audio option for RTP encoder
- Improvement – Render audio internally at 48 khz
- Improvement – Add support for playback of CineFormHD files, including Alpha support
- Improvement – Move 'Favorites' and 'All' to the top of the add source UI
- Improvement – Remove ISO button from UI when License level is not Pro

10.0 BETA – Fixes

- Fixed – Crash when clicking on the context menu of a shot that contains a '[no media]' layer
- Fixed – No audio input after closing and reopening document
- Fixed – Wirecast shows up as "Wirecast Application" in the Windows system Volume Mixer control panel
- Fixed – New text in languages localized as non-ascii does not appear correctly when creating new text shots
- Fixed – Unable to send shots live after adding video files on macOS
- Fixed – Open recent file structure is not maintained
- Fixed – Distorted video with certain Direct Show devices (Logitech and Magewell) on Windows 7
- Fixed – After upgrading Wirecast, Blackmagic capture cards no longer detect video
- Fixed – Fatal error with clock or scoreboard shots
- Fixed - Clock date not localized
- Fixed – Starting an iOS device can hang Wirecast for up to a minute on macOS High Sierra
- Fixed – Clicking on the context menu of a disconnected RDP source will hang the app for 4-8 seconds
- Fixed – Replay+ISO menu names are cutoff in Czech and Dutch
- Fixed – Unplugging an iOS device will disable video and audio rendering of existing A/V capture sources on macOS
- Fixed – Cannot change selection from one layer to another in Preview Editing if it overlaps another layer
- Fixed – Disable system beep when hitting 'Enter' in text entry fields
- Fixed - PTZ preset recall does not work when there are multiple PTZ presets within the same shot
- Fixed – Adding an existing Source SDK instance as a new shot/layer will create an new empty instance instead
- Fixed – WASAPI capture does not work for mono sources (Logitech G930)
- Fixed - Windows do not maximize with multiple monitors
- Fixed – Text flickers when switching shots
- Fixed – Enabling VoiceOver causes a crash when starting an NDI Output
- Fixed – Solid color shot palette hides hex code
- Fixed – Animated GIFs are causing performance issues on Windows
- Fixed – Animated GIFs with transparency are stacking frames until looped
- Fixed – Teradek StreamReader Plugin Properties Tab has broken UI
- Fixed – Incorrect font and spacing for buttons on macOS