



23 November 2021

Release Notes

AtomOS 10.71

Ninja V+



Important Note:

In order to record RAW on the Ninja V+, you first need to activate ProRes RAW via the my.atomos.com portal.

If you have previously activated ProRes RAW, you do NOT need to activate it again.

- **To activate codecs on your devices please visit <http://my.atomos.com>**
Log-in if you are an existing user or create a new account to access the **my.atomos.com** portal. Within your account you can add your product or access a previously registered Atomos product. When accessing your registered products, you'll then be presented with options to unlock additional features.

For RAW recording with a Sony FS-Series camera, you also need an AtomX SDI Module, as well an SDI RAW Activation which can be purchased via <http://my.atomos.com>.

Both an SDI Module and the SDI RAW Activation are included in the Ninja V+ Pro Kit Bundle.

If you have any issues, please contact support@atomos.com

Ninja V+ New Features:

Sony FS-Series ProRes RAW recording

Combined with the Atomos Ninja V+ Pro Kit or Ninja V+ (SDI Module attached), select Sony FS-Series cameras can now record ProRes RAW in DCI 4K and 2K.

- **Sony FS5 (with RAW Upgrade) / FS5 II**
 - **4K** (4096 x 2160) at 24p, 25p, 30p, 50p, 60p, 100p*, 120p*
 - **2K** (2048 x 1080) at 100p, 120p, 200p, 240p (as 24p, 25p, 30p, 50p, and 60p)
- **Sony FS700 (with RAW Upgrade) / FS700R**
 - **4K** (4096 x 2160) at 24p, 25p, 30p, 50p, 60p, 100p*, 120p*
 - **2K** (2048 x 1080) at 24p, 25p, 30p, 50p, 60p, 100p, 120p, 200p, 240p
- **Sony FS7 (with XDCA-FS7) / Sony FS7 II (with XDCA-FS7)**
 - **4K** (4096 x 2160) at 24p, 25p, 30p, 50p, 60p
 - **2K** (2048x 1080) at 24p, 25p, 30p, 50p, 60p, 100p, 120p, 200p, 240p

Disclaimer: * 4K at 100/120p is available in an S&Q burst mode which is buffered in camera and output as a 60p signal. The burst duration is ~4 seconds. WB & ISO Controls in FCP are not available in this release.

Panasonic LUMIX BS1H HDMI RAW Support

When combined with the Atomos Ninja V+, the LUMIX BS1H can record up to 5.9Kp30, 4.1Kp60 and 3.5Kp50 anamorphic ProRes RAW.

- **ProRes RAW Recording:**
 - **5.9K** (5888 x 3312) at 23.98p, 25p, 29.97p
 - **4.1K** (4128 x 2176) at 23.98p, 25p, 29.97p, 50p, 59.94p
 - **3.5K Anamorphic** (3536 x 2656) at 23.98p, 25p, 29.97p, 50p
- **WB and ISO Controls** for FCP Settings slider adjustments

Note: For detailed instructions on how to set up the Panasonic LUMIX BS1H for external ProRes RAW recording, watch the Setup Guides on our [YouTube Channel](#).

Bug Fixes

- Re-enabled the LQ and MQ compression modes for H.265 recording at 4K60.
- Resolved an issue where HDMI inputs from certain cameras would lock with an incorrect chroma subsampling when ProRes or DNx were selected for recording.

AtomX CAST – Now supported on Ninja V+

Starting with this release, the Ninja V+ supports the AtomX CAST switching dock. Please consult the Quick Start Guide (QSG) included in the box with the AtomX CAST for details on how to connect the device.

Note: To use any of the CAST’s features, boot your Ninja V+ into CAST mode by selecting it in the new Source menu.

For an in-depth walk through of the AtomX CAST and its core functionality, we recommend watching our official Setup Guide [on YouTube](#).



For further information on CAST specific functions such as creating custom graphics and overlays, visit our dedicated section in [the Support FAQs](#).

AtomX CAST – New features in 10.71

- Introduction of “Dip to”-transitions, available in black & white. These can be automatically applied on each switch from one input to another.
- Addition of updated program recording options. Choose “Clean” to record a clean feed of the currently switched to input or use the new “CAST Program” mode. In CAST Program mode, graphical overlays, and the picture in picture (PiP) get recorded onto the SSD/HDD inserted in the Ninja V+. The recording contains the new “Dip to”-transitions as well as the Fade In/Fade Out buttons used to fade in or fade out of your program during recording.
- Interlaced signals are now supported. An automatic pulldown conversion gets applied to them, which then gets conformed to the Project Rate.
- Audio delay options are now available, which apply frame delays to all audio inputs including analog and embedded audio (calibrate feature not supported).
- General bug fixes.

AtomX CAST - Operational Considerations

- When using the combination of the NINJA V+ & AtomX CAST, treat them with respect and care.
- As with any professional equipment, we recommend building your setup around the way the CAST was intended to be used. Resting on a flat surface or mounted to a stand via the 1/4"-20 thread on the bottom of the device.
- If you want to record program out with graphics and the PIP overlays, we advise connecting a recorder to HDMI Out of the CAST or recording the USB-C output stream via your streaming applications such as OBS or Youtube's DVR.
- We recommend that in addition to connecting your input sources, to connect a display to the HDMI Out connector of the NINJA V+, and another display to the HDMI program out connector of the AtomX CAST. This will allow you to set up dedicated displays for both the preview feed and the program feed (select preview mode for the NINJA V+'s HDMI Out). Having a setup like this will allow you to preview graphics on screen before they're made live, and it also allows you to preview your inputs before you cut to them in the program feed.
- Whilst in use, do not obstruct the cooling vents of either the NINJA V+ or AtomX CAST. When running for extended times the NINJA V+ will feel warm to the touch and is expected behaviour as the aluminium bezel is designed to as part of the passive cooling for the device.
- The LIVE button in the top right corner of the UI must be pressed to allow your program feed to be output to your streaming software and/or the connected program display via the CAST USB-C and CAST HDMI outputs. The outputs of the AtomX CAST are disabled if LIVE isn't active. With the LIVE function enabled key aspects of the CAST such as Project Rate and output Frame Rate Conversion cannot be adjusted.
- For longer streams, we recommend running all input sources like cameras or playback devices connected to the CAST via mains power.

AtomX CAST - Known Limitations

- Graphics and PIP overlays can't be displayed on the NINJA V+ screen or graphical interface.
- Graphic overlays, PIP, Program/Preview, and audio channel status do not appear on the NINJA V+ display interface or the Multiview output from the NINJA V+ HDMI out.
- Streaming via USB is limited to 1920x1080 up to p30.
- For projects where the frame rate is greater > than p30, USB is not available as an output.
- For projects where the frame rate is greater > than p30, the Frame Rate conversion option (FPS Conversion) in the output menu can convert the output. p50 will be output at p25, and p60 will be output as p30.
- Audio inputs are limited to a single stereo pair, this can be either the selected HDMI embedded audio input or the Mic/Line input.
- Only PNG graphics are supported, up to a resolution of 1920x1080. File size limit: 1MB per file.
- If a connected input has a change in resolution or frame rate, the input may display as black and require the HDMI to be unplugged and re-plugged to resync the input to the project rate.
- With the project rate set to 1920x1080 in p59.94, the CAST HDMI output may present some audio artifacts.
- When switching between SOURCE modes, the graphical interface of the previous mode may momentarily appear.
- If the project rate is set to HDp50 and FPS conversion is enabled, some TVs may flag the p25 signal as incompatible.
- The headphone output of the NINJA V+ is only available for program audio monitoring.

Ninja V+ - Known Limitations:

- The following video signals from the DC-GH5S are not supported on the Ninja V+ for ProRes, DNx, and H.265 modes:
 - C4K 8bit 150M 60p,
 - C4K 8bit 150M 50p,
 - 4K 8bit 150M 50p.
- In some cases, the Ninja V+ may not lock to a RAW video signal from the Olympus OM-D E-M1 Mark III for ProRes RAW, when the Ninja V+ is switched between playback and record modes.
- Ninja V+ may not recommence recording automatically when momentarily losing video signal lock from the Sony Alpha 7SIII or Olympus OM-D E-M1 Mark III due to a faulty cable connection.
- Non-RAW Dual Link SDI video cannot be monitored when in ProRes RAW mode. To monitor and record Dual Link SDI modes please use either ProRes or DNx modes.
- In some cases, dual link video from the Panasonic Varicam LT may not lock when switching from single link video mode. Please reboot the Ninja V+ if this occurs.
- If switching between different camera models whilst HDMI Compatibility mode is selected, ensure that you reboot the Ninja V+ before connecting a new camera.