Release Notes

AtomOS 10.71

Ninja V

Important Note:

In order to record RAW from the Panasonic LUMIX BS1H and Canon EOS R5, 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.

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

New Features:

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

Canon EOS R5 HDMI RAW Support

- **ProRes RAW Recording:**
    - **5K** (5088 x 2680) at 23.98p, 24p, 25p, 29.97p
- **WB and ISO Controls** for FCP Settings slider adjustment

Note: For detailed instructions on how to set up either the Panasonic LUMIX BS1H or Canon EOS-R5 for external ProRes RAW recording, watch the Setup Guides on our YouTube Channel.

AtomX CAST Features

When using AtomX CAST with Ninja V, the following features are now supported:

- 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.

Additional Notes for Canon EOS-R5:

- There's a 29:59 minute record time limit imposed by the EOS R5 if you trigger the recording via the camera's record button. You can immediately restart the recording by pressing the record button again once the timer runs out.
- For extended RAW recording, users should enable the "Standby: Low res" mode on the R5 and trigger recordings by touching the record button on the screen of the Ninja V and not the main shutter button or movie record button on the EOS R5. Triggering the recording from the Ninja V's touch screen will bypass the 29:59 minute record time limit, allowing continuous RAW recording to the media in the Ninja V.
- The Ninja V's screen and enclosure will get very warm during 5K RAW recording. This is completely normal and expected behavior. The Ninja V has various safety features designed to manage the thermal performance of the unit. However, we would advise being cautious when using the product in high ambient temperatures and high screen brightness. Particularly when touching the product to swap the battery or SSD media. Make sure that the product is well ventilated at all times and do not obstruct or block the Ninja V's air vents. Please visit the **FAQs on atomos.com** in case you need further information.
- Make sure you're using a qualified drive for ProRes RAW recording, and if supported, use the secure erase function. You can find our qualified SSD's and options for CFAST 2.0 cards here: **atomos.com/compatible-drives**
- Record Time Examples*:
    - 1TB @ 5K30 ProRes RAW HQ: ~45 minutes
    - 1TB @ 5K30 ProRes RAW: ~61 minutes
    - 500GB @ 5K30 ProRes RAW HQ: ~22 minutes
    - 500GB @ 5K30 ProRes RAW: ~30 minutes

    * Time available for continuous shooting in a 23°C / 73°F environment, from a cold start. If the camera isn't in the "Standby: Low res." mode, or if the ambient temperature is higher, the shooting time may be shorter.

Bug Fix

- Re-enabled the LQ and MQ compression modes for H.265 recording at 4K60.

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.
- 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.
- Recording in CAST Program mode is link the the operation of the LIVE button. If CAST Program record mode is enabled the Record option will only be available once LIVE mode is activated. After Live mode is deactivated, the recording can be continued but will only record a black screen as there is no CAST Program out active to be recorded.
- 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:
    o   C4K 8bit 150M 60p,
    o   C4K 8bit 150M 50p,
    o   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.