



Camera Firmware Release Notes

IMPORTANT

To upgrade the firmware, please follow the **Firmware Upgrade Instructions** located in your firmware download folder.

Firmware 5.0.064

This release features native support for NDI® 5 for maximum compatibility across the entire NDI® ecosystem.

NDI® 5 Libraries

- The latest technology from NDI® provides increased compatibility and performance.
- **RUDP (Reliable UDP)** – Reduces overall network load by not requiring every packet to be acknowledged by every receiver. However, RUDP has built-in error correction for smooth and reliable transmission.
- **NDI® Genlock** – Select a source (BirdDog camera, converter or even TriCaster) to be the timing master. Provides more predictable timing in multi-camera environments.

Unified Single File Firmware

- All cameras now share a single firmware update file. Some cameras require an additional MCU update, as detailed in the relevant Firmware Update Instructions in the firmware download.

New Control Engine

- Greater VISCA compatibility.
- Overall better support for 3rd party applications.

New WebUI

- Complete, ground-up redesign.
- Key system statistics are now displayed on the Dashboard **before** login – number of active connections, current encoder bandwidth, current network traffic and video format.
- More logically organized, responsive and mobile friendly.
- Faster overall UI response.
- Better browser compatibility.
- Download **and** Upload configuration files. Easily swap **Remote IP Addresses** and **NDI® User Groups** files between cameras.
- NDI® Signal Mute (video and audio). Toggle off the live NDI® stream in the WebUI and display your choice of static image. Choose from BirdDog splash screen, black image, or a live capture from the NDI® stream. API controllable.

CamControl

Camera controls, including a newly designed Color Matrix, have been reorganized and grouped into a new CamControl tab.

NDI Discovery Server Failover Support

You can nominate a list of multiple NDI® Discovery Servers which will then be used simultaneously. As long as one server remains active, all sources will always remain visible.



NDI Scopes

- Realtime overlaid Scopes (with or without transparency):
 - Histogram
 - Waveform
 - Vectorscope
 - RGB Parade
- Accurate – Scopes are directly fed from raw sensor data.
- Scopes can be displayed on Main, Proxy or both outputs. Allows for a clean Main NDI® stream with Scopes displayed on the Proxy stream.
- Selectable Scope location (top left, top right, bottom left, bottom right).
- Scaleable size (normal or double size).

FreeD

- All cameras can be configured to transmit positional data over the network for use in Augmented Reality.
 - Includes Pan, Tilt, Zoom, Focus and Iris information.
 - Realtime, per frame data transmission.
- Integrates with many 3rd party graphics systems, including:
 - Unreal Engine
 - Brainstorm
 - Viz Vector
 - RT Softwareand many others.

Known Limitations

All cameras have the following known limitations:

- A Factory Reset does not clear Presets.
- Cameras do not output 2160@23.97.
- When changing to Manual Exposure in the BirdUI, settings do not reflect their correct value until the parameter is changed.

The P4K and P400 have the following additional limitations:

- Audio out does not work on SDI at UHD resolution.
- The Visca address cannot be changed.

The P200 has the following additional limitation:

- Outputting interlaced SDI will cause Atomos monitor/recorders to crash.