BirdDog P400 Firmware Upgrade User Guide

P400 Firmware Upgrade
User Guide

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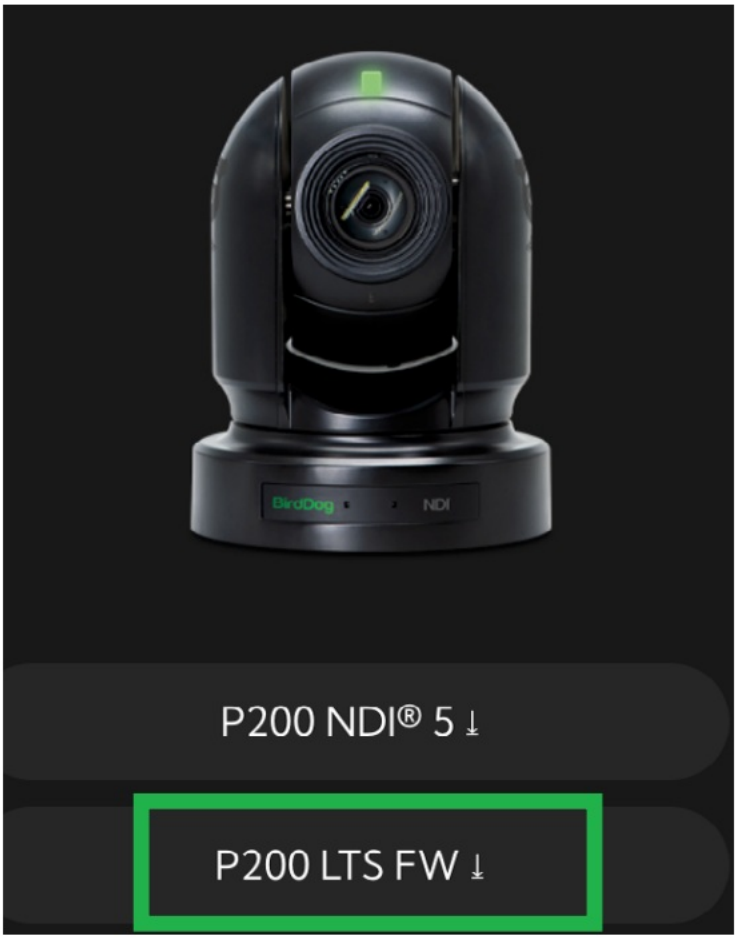
P400 Firmware Upgrade

P400 and P4K
Due to internal BirdDog requirements, our firmware releases don't always have sequential numbering. To upgrade the firmware, please follow the Firmware Upgrade Instructions located in your firmware download.
NOTE
Please be aware that if you are still running older firmware, such as NDI 3.X, you must first upgrade to the latest 4.5.X-LTS firmware for your camera before upgrading to NDI 5.X.
For example, if you are upgrading your P200 from an older software, please first upgrade to the displayed LTS firmware on the website before moving on to the latest NDI 5 firmware.



Firmware 5.5.094.1

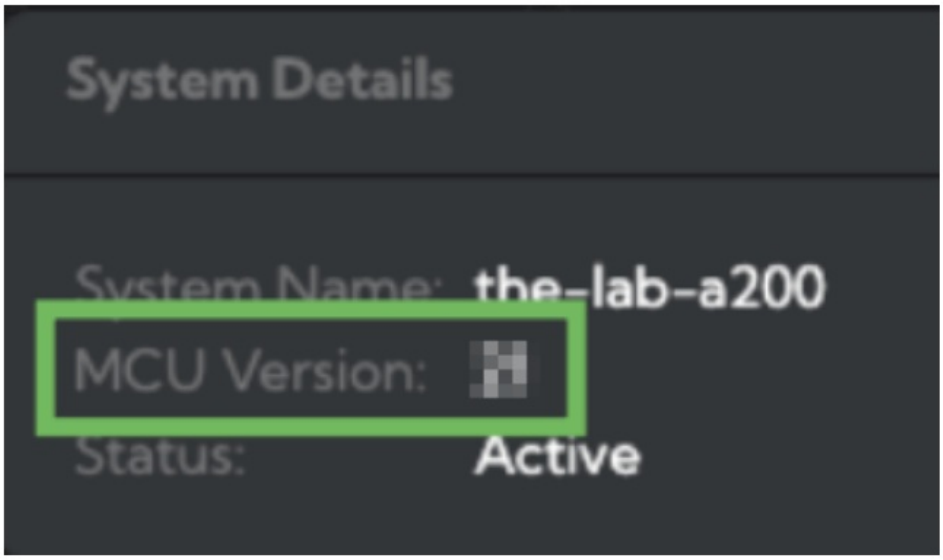
This release contains the following features and fixes:
P400 and P4K

- Camera presets saved as PTZ ONLY now correctly recall the zoom setting.
- Technical improvements to the firmware update process.

Confirming the update

To confirm the update, log in to the camera BirdUI and view the System Details on the Dashboard. Check that the MCU Version matches the number listed below for your camera.

CAMERA	MCU VERSION
P400	28
P4K	22



Firmware 5.5.093
This release contains the following features and fixes:

- Security update.
- Changes to the update process:
- Improved update speed.
- Update order is now reversed. It is recommended that the firmware is now updated before the MCU.

Firmware 5.5.089
This update contains a critical security patch and is recommended for all users.
WARNING This firmware update cannot be rolled back without first lodging a Support ticket. Other features and fixes of this release include:
All cameras

- The Source Status display on the Dashboard is now working correctly and is no longer frozen on “Changing Video Format”.
- resets now work correctly with the Flip function engaged.
- Manual exposure settings are now correctly updated.
- The Network Speed display on the Dashboard now displays the correct units.
- The Remote IP List is now searched correctly.
- Pan and tilt movement is now improved at low speeds.
- NDI 5.5 library

P4K/P400

- Video is now correctly output at 2160@23.97.
- Setting Stream to Network to OFF no longer causes the screensaver to flash.
- Interlaced video is now handled correctly.

A200/A300

- Video no longer stutters during zooming.
- Camera Control/RESET function now works correctly. (A200)

P200

- Preset Colour Matrix values are now correctly stored and recalled.

P120

- PTZ only presets are now recalled correctly.

P110

- The Bidi/Camera Control/RESET function now works correctly.

Known Limitations
All cameras

- A Factory Reset does not clear the Presets.

P4K/P400

- Analogue audio output is not working at SDI and UHD resolutions.
- The VISCA address cannot be changed.

P200

- Outputting interlaced SDI causes Atomos monitor/recorders to crash.

Firmware 5.0.064
This release features continued native support for NDI® 5 for maximum compatibility across the entire NDI® ecosystem.
Firmware 5.0.054
This firmware release includes the following new features and bug fixes:

- Audio gain has been changed to better handle line level inputs.
- A bug preventing the P4K/P400 cameras from encoding 4:2:0 correctly has been resolved.

Known Limitations
All cameras:

- Performing a Factory Reset doesn’t clear the Presets.

P200:

- Outputting interlaced SDI to an Atomos monitor/recorder will cause the unit to crash.

P4K/P400:

- No audio out on SDI at UHD resolutions.
- Visca Address Can Not Be Changed.
- A hard reboot (power off to shut down and then restart) is required after firmware installation to restore the video output signal.

Firmware 5.0.053
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 Cam Control 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

- Real time overplayed Scopes (with or without transparency):
- Histogram
  – Waveform
  – Vector scope
  – 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 Vectar
- RT Software and many others.

The FreeD function is currently in beta. Final release coming soon.

Known Limitations
The P4K cameras have the following known limitations in this beta release:

- A hard reboot (power off to shut down and then restart) is required after firmware installation to restore the video output signal.
- Audio out does not work on SDI at UHD resolution.
- The Visca address cannot be changed.

Documents / Resources

BirdDog Firmware Release Notes

P400 and P4K

BirdDog P400 Firmware Upgrade [pdf] User Guide

P400, P4K, P400 Firmware Upgrade, Firmware Upgrade, Upgrade