



## Firmware Release Notes

### BirdDog PTZ Keyboard

NOTE: Due to internal BirdDog requirements, our firmware releases don't always have sequential numbering.

This document provides instructions for updating the PTZ Keyboard firmware.

### Firmware 4.5.214-LTS

This release includes the following new features:

- Joystick calibration steps are now displayed on the LCD on bootup.
- The MAC address is now displayed in the Model Info menu of the LCD.
- When connected via NDI®, the TCP/UDP port is now displayed on the LCD.

#### Known Issues

- Keyboard Port Reset is not working.

## PREVIOUS RELEASE NOTES

### Firmware 4.5.203-LTS

This release includes the following new features and bug fixes:

- Fixed an issue with a delayed response when connecting to a camera.
- Improved the compatibility with 3rd party cameras (VISCA, NDI®, NDI HX).
- Improved joystick calibration.

**NOTE:** When booting the PTZ Keyboard, calibrate the joystick by moving it up-down and left-right. These initial movements will not be sent as commands to the camera.



## IMPORTANT!

This PTZ Keyboard firmware upgrade requires that BirdDog cameras have the following firmware version, or later, also installed.

CAMERA	FIRMWARE
P4K	4.5.206-LTS
P400	4.5.206-LTS
P200/A200/A300	4.5.3414-LTS
PF120	4.5.3793-LTS
P100	4.5.3787-LTS

## Firmware 4.5.201-LTS beta

This release includes the following new features and bug fixes:

- New NDI® Keyboard Router function that outputs a video stream that follows the active controlled camera.
- Redesigned joystick sensitivity and mapping.
- Added joystick calibration feature.
- Added the ability to program the Function buttons with API command calls.
- Fixed an issue with the GPI I/O terminal not working correctly.
- Fixed issues with incorrect button mapping.
- Fixed an issue that could prevent communication with 3rd party cameras.
- General stability improvements.

## Known Limitations

1. Cameras set to Multicast can't be controlled via NDI®.
2. After each startup, the joystick needs to be moved up-down; left-right, before the control engages.

This PTZ Keyboard firmware upgrade requires that BirdDog cameras have the following new firmware also installed. Without this camera firmware installed, PTZ Keyboard will not communicate with the cameras.

CAMERA	FIRMWARE
P4K	4.5.200-LTS(BETA)
P400	4.5.200-LTS(BETA)
P200	4.5.3410-LTS(BETA)
P100	4.5.3782-LTS(BETA)



## Firmware 1.95

### IMPORTANT!

This firmware version 1.95 requires that the camera baseboard firmware is version 0.9 or above. Instructions on installing the baseboard firmware can be downloaded from our website via the following link:

#### [Firmware Updates](#)

This release includes the following new features and bug fixes:

- NDI® v4.5 support
  - This version of firmware includes the latest NDI® libraries which offer a significant performance boost.
- Improved stability with the 3rd party cameras over NDI®.
- Fixed the presets numbers offset issue.

## Firmware 1.7

### IMPORTANT!

This firmware version 1.7 requires that the camera baseboard firmware is version 0.9 or above.

To upgrade the firmware, please follow the **Firmware Upgrade Instructions** located in your firmware download folder and perform the 2 step upgrade process.

Firmware can be downloaded from our website via the following link:

#### [Firmware Updates](#)

This release includes the following new features and bug fixes:

- NDI® v4.1 support
  - This version of firmware includes the latest NDI® libraries allowing for greater compatibility, higher performance NDI® source discovery and new network operating modes
- Audio Comms Support
  - This version supports BirdDog Comms – the Keyboard can now be added into a BirdDog Comms group and when a headset is plugged in the operator can communicate with the rest of the production. Comms requires a separate installed application called BirdDog Comms – more information available at <https://www.bird-dog.tv/commsro-overview/>
- VISCA over IP improvements
  - Included in Firmware 1.7 is an improved VISCA over IP implementation that allows bi-directional feedback for interactive control.



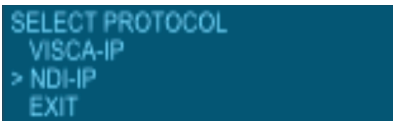
- Camera control and colour shading capabilities with BirdDog Eyes PTZ Cameras.
  - This release includes support for advanced colour features and control within the camera to be directly controlled by the BirdDog PTZ Keyboard. This includes Iris/ Shutter controls, colour shading and focus controls
- Re-scanning of NDI® sources and auto-reconfiguring IP addresses of cameras.
  - If cameras are connected to the PTZ keyboard change IP addresses as can happen if the network is set to DHCP mode, you are now able to re-scan these IP addresses and automatically update all save cameras within the keyboard.
- Spontaneous reboot remedied.
  - There were certain circumstances where the keyboard would spontaneously reboot, usually when adjusting network configurations. This is now resolved.

### Re-scanning of NDI® sources

This firmware automates the ability to re-map the IP addresses of configured cameras. This is particularly useful if you have a networking setup that takes advantage of DHCP IP address settings. If your cameras have changed IP addresses due to a reboot of the DHCP server, then it is simply a matter of re-scanning the NDI® sources to re-map them.

The process of re-scanning the NDI® sources is as follows:

3. Press the SEARCH button on the keyboard.
4. Navigate to NDI-IP in the PROTOCOL menu by turning the P/T SPEED knob.



```
SELECT PROTOCOL
VISCA-IP
> NDI-IP
EXIT
```

5. Press firmly on the P/T SPEED knob to select NDI-IP configuration mode.
6. Press firmly again to select YES. NDI® sources will be searched.
7. Once searching is complete, the IP addresses for all NDI® cameras will be updated. You can now navigate to EXIT and press the P/T SPEED button to exit the Scan menu, then navigate to NO and EXIT to back out of the Configuration and Scanning menus.
8. Your Keyboard is now updated and ready to control the cameras.