Firmware Update Instructions

BirdDog P400

This document provides instructions on updating the camera's entire firmware set.

It is important to know the overall firmware structure of the camera. There are 2 separate locations that require firmware to be updated in order for the camera to operate in all conditions.

- **MCU (Master Control Unit)**

   The MCU is the overall control system that interprets and actions any incoming command to the camera. It sends image commands to the baseboard as well as controlling all the robotics such as Pan/Tilt/Zoom directly. Updating the MCU results in improvements in control compatibility, accuracy and speed.

- **NDI® Firmware**

   The NDI firmware handles all network-based activities including the Web User Interface (Web UI) and the encoding of video into NDI® video to be sent over the network. NDI Firmware includes many important performance updates, features, functions, and compatibility updates.

Updating the Camera Firmware

Updating your camera is a 2 step process. Please update the camera as per these instructions and in this specific order.

The firmware is available from the link below. This contains all the resources you need to update your camera.

Firmware Updates

What you will need

- 1 x P400 Firmware update .zip file (this contains all the files you need to update your camera).
- 1 x BirdDog P400 Camera.
- 1 x Windows PC or Laptop with a spare USB-A port running Windows 10.
- 1 x USB flash drive formatted as FAT32 on a Windows computer.

Note: While most USB flash drives smaller than 8Gb in capacity are compatible, some flash drives do not perform updates correctly. The Patriot Supersonic Boost XT USB flash drive has been successfully test and is recommended. This flash drive can be purchased from Amazon here.
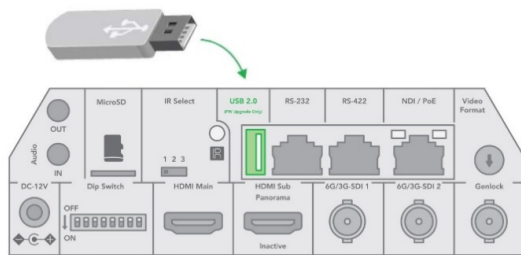
Procedure

STEP 1. MCU Update

a. On your Windows PC, navigate to the folder named STEP 1. This will contain a single .bin file.

b. If your flash drive is not formatted as FAT32, format it using a Windows 10 computer. The following video provides instructions on this. The process should only take a few minutes.

   [Formatting your USB drive](#)

   To check how your flash drive is formatted, insert the flash drive into a Windows computer, open My Computer and right-click on the flash drive. In most cases, this is the D: or E: drive. Select Properties from the pop-up menu. The file system (FAT32) should be specified near the top of the Properties window.

c. Insert your FAT32 formattted flash drive into your Windows PC.

d. Copy the .bin file from the STEP 1 folder to the top level folder of the flash drive.

e. Right-click on the flash drive in My Computer and eject the flash drive.

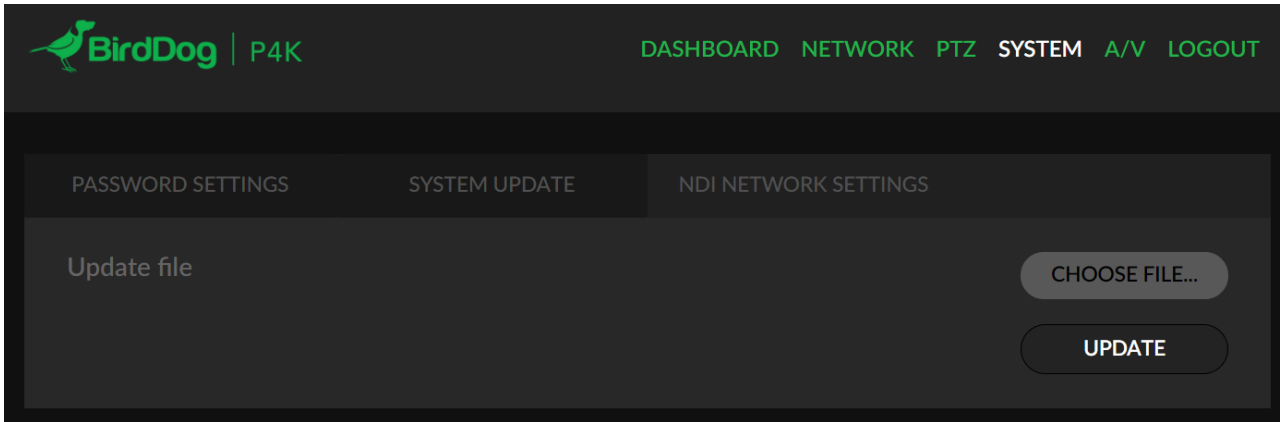f. Remove the flash drive from your Windows PC and insert it into the camera's USB port.

g. Ensure the camera is powered by the included AC/DC power adapter (not PoE – Power over Ethernet).

h. Remove all power from the camera, wait for 10 seconds and re-power the device with only the AC/DC power adapter and the flash drive connected.

i. Once the camera has finished boot up (it will pan fully left and then back to centre), power down and re-connect all usual cables to the camera.

j. To confirm the update, navigate to the WebGUI go to OSD section which is in the PTZ tab. Click OSD and navigate to 'SYSTEM' and check the bottom SV number (the really long one) ends in AA011T2. If it does, then the update is confirmed.

k. The MCU update is now complete. Please proceed to the next step.

STEP 2. NDI® FIRMWARE UPDATE

a. Navigate to the camera Web UI. This is done by opening a web browser (Chrome or Firefox preferred) and typing in the IP address of the camera. By default, the camera is set to DHCP mode, which means it will automatically acquire an IP address from your network infrastructure. If your network does not have a DHCP server present, then the camera will fall back to 192.168.100.100. Please ensure your network adapter on your computer is set to the same subnet as the camera.

b. Log into the Web UI. The default password is 'birddog'.

c. Navigate to the SYSTEM menu and select SYSTEM UPDATE.

d. From the displayed popup window, navigate to the folder named STEP 2, select the contained .fw file and click UPDATE.

    Note: This process will take up to 5 minutes and will require the camera to reboot. DO NOT power off the unit while this process completes.

e. After the process reports as complete, please allow 2 minutes for the camera to reboot and then refresh your browser.

f. If you wish to use the Web UI, you'll need to log in again.

g. The update process is now complete.

SUPPORT RESOURCES

BirdDog are committed to your success with our products and we have a team of global support engineers ready to help you. Should you need further assistance, please do not hesitate to reach out.

Email us at help@bird-dog.tv

This is a high priority email address and is received by support, engineering and management. We are here to help!