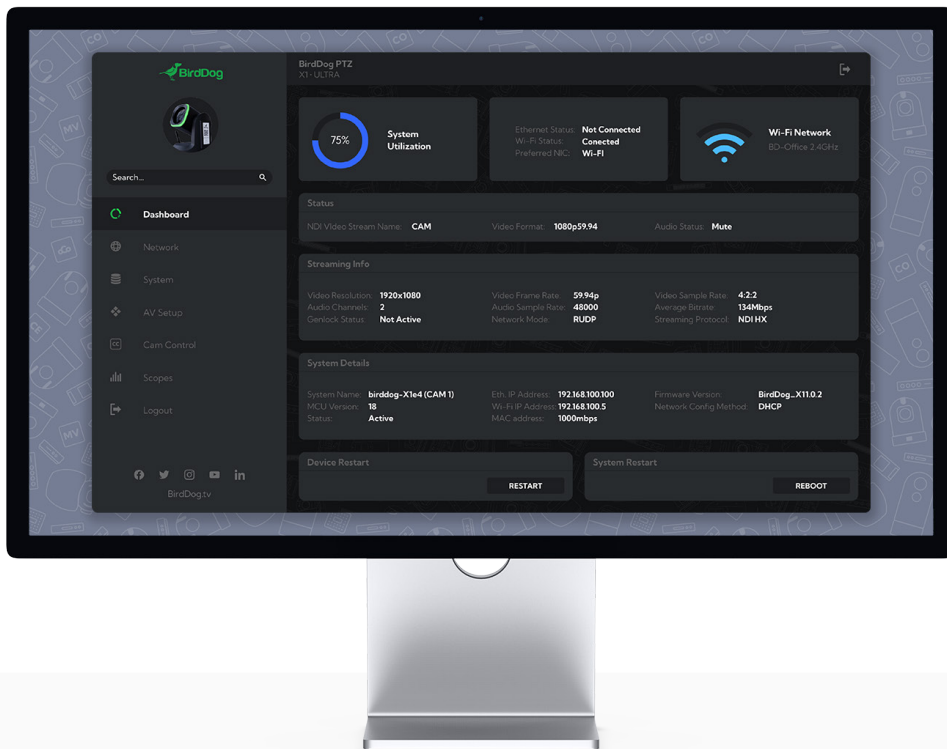




# BirdUI Quickstart Guide

April 2024



NDI



## Basic Configuration

### NDI® Tools

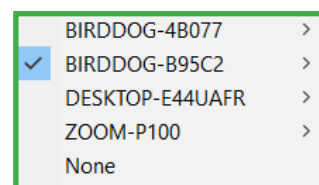
NDI® Tools is a free suite of applications designed to introduce you to the world of IP video and is available [here](#).

Once installed, launch the Studio Monitor (Video Monitor, if using a Mac) application. This simple application allows you to view all NDI® sources on your network. Right click on the Studio Monitor window to view your camera as an NDI® source. In the example to the right, three cameras and a desktop computer are shown as NDI® sources.

### Tip

By default, the displayed sources have names that include the last five digits of your camera MAC address which is displayed on the bottom of the camera.

Clicking on your camera in the source list will display the image from your camera with the default automatic settings.



## The BirdUI

**System Utilization**

Ethernet Status: **Not Connected**  
Wi-Fi Status: **Connected**  
Preferred NIC: **Wi-Fi**

**Wi-Fi Network**  
BD-Office 2.4GHz

**Status**  
NDI Video Stream Name: **CAM**      Video Format: **1080p60**      Audio Status: **Mute**

**Stream Info**  
Video Resolution: **1920x1080**      Video Frame Rate: **60**      Video Sample Rate: **4:2:2**  
Audio Channels: **2**      Audio Sample Rate: **48000**      Average Bitrate: **134Mbps**  
Genlock Status: **Not Active**      Network Mode: **RUDP**      Streaming Protocol: **NDI HX**

**System Details**  
System Name: **birddog-X1ULTRA**      Eth. IP Address: **192.168.100.100**      Firmware Version: **BirdDog\_X1\_1.0.2**  
MCU Version: **1**      Wi-Fi IP Address: **192.168.100.5**      Network Config Method: **DHCP**  
Status: **Active**      MAC address: **e8:eb:1b:49:a6:78**

**Device Restart**      **System Reboot**

BirdDog cameras have a web interface (BirdUI) that is displayed by your computer browser and can be used to configure your camera remotely.

1. Click on the gear icon on the bottom right of the Studio Monitor window.
2. In the displayed window, type the default password 'birddog' (all lower case) and click the OK button. The Dashboard window is displayed.

The Dashboard shows important basic camera settings. For now, check that the displayed Status is Active and take note of the frame rate that is currently output from the camera (displayed under NDI® connection info). This frame rate should be set identically for all cameras according to the requirements of your production. Let's see how to change this and other important camera settings.



## NDI Encode Settings

### NDI Encode Settings

|                     |   |                      |   |
|---------------------|---|----------------------|---|
| Bitrate Management  | <input type="button" value="MANUAL"/> <input checked="" type="button" value="NDI MANAGED"/> | Encode Screensaver   | <input type="button" value="VIDEO MODE"/> ⋮                                 |
| NDI Video Bandwidth | <input type="range" value="120"/> 120   | Capture Screen Frame | <input type="button" value="CAPTURE"/>                                      |
| NDI Group Enable    | <input checked="" type="button" value="ENABLE"/> <input type="button" value="DISABLE"/>     | Onboard Tally        | <input type="button" value="TallyOn"/> ⋮                                    |
| NDI Group Name      | <input type="text" value="BirdDog"/>  | Genlock Source       | <input type="button" value="None"/> ⋮                                       |
| NDI Stream Name     | <input type="text" value="STREAM_01"/>  | Failover Source      | <input type="button" value="None"/> ⋮                                       |
| Video Input Format  | <input type="text" value="1080p59.94"/> ⋮   | Update Source List   | <input type="button" value="RESET"/> <input type="button" value="REFRESH"/> |
| NDI Audio           | <input type="button" value="ANALOGUE"/> <input checked="" type="button" value="MUTE"/>      | Apply Source         | <input type="button" value="APPLY"/>  |
| Stream to Network   | <input type="button" value="OFF"/> <input checked="" type="button" value="ON"/>             |                      |   |

### Bitrate Management

Because you're sending NDI® video over your computer network, you may need to be mindful of the amount of bandwidth your video will consume. By setting Bitrate Management to NDI MANAGED, the target bitrate will be set in accordance with the NDI® standard. This will achieve an optimum balance between bandwidth consumption and video quality. In this mode, the video bitrate will be around 120–140 Mbps. If you do opt for Manual management, you may select a target bitrate within a range of 60–360 Mbps. Do this with care, as the actual bitrate may be greater, straining the capacity of the network and the receiving device, and lower settings may result in reduced image quality.

### NDI Video Format

Here you can set the frame rate of the camera to match that of your production. All cameras should be set to the same frame rate.

### NDI Group

NDI® supports Grouping which allows you to hide the visibility of video sources to viewers that are not part of the group. If disabled, the video source is public and viewable by any receiver on your network.

### Stream Name

Give the output video stream of the camera a memorable name to make identification easier on NDI® receiving devices.

### NDI Audio

You can choose to embed audio from the audio input connector into the NDI® stream or mute it.

### NDI Failover Source

If the selected HDMI source is interrupted for any reason, the Camera can automatically switch to a pre-determined alternative NDI® source. Select an available NDI® source for the failover function from the *Available NDI® sources* dropdown list. Pressing the Refresh button will add new sources to the list, whereas pressing Reset will populate the list with only active NDI® sources. Click the Apply button to apply your failover source change.



## Ethernet Network Configuration

| Network Details      |  |                                       |                        |   |
|----------------------|--|---------------------------------------|------------------------|---|
| Configuration Method | <input type="radio"/> STATIC                 | <input checked="" type="radio"/> DHCP | DHCP Timeout           | <input type="text" value="20s"/>                  |
| IP Address           | <input type="text" value="192.168.100.100"/> |                                       | DHCP Fallb. IP Address | <input type="text" value="192.168.100.100"/>      |
| Subnet Mask          | <input type="text" value="255.255.255.0"/>   |                                       | DHCP Fallb. Sub. Mask  | <input type="text" value="255.255.255.0"/>        |
| Gateway Address      | <input type="text" value="192.168.100.1"/>   |                                       | BirdDog Name           | <input type="text" value="BirdDog-00122"/> .local |
|                      |  |                                       |                        | <input type="button" value="APPLY"/>              |

For the final part of this quick start guide, let's set up the network configuration of your camera so it can work with your wider network.

Most computer networks provide for both automatic and manual configuration of network devices and the Camera can accommodate both.

### Static or DHCP

Here you can set the network configuration to either DHCP (default) or Static. DHCP simplifies the management of IP addresses on networks. No two hosts can have the same IP address, so assigning them manually can potentially lead to errors. If your network is set up for DHCP, this is generally the best configuration to choose.

If you do choose to go with a Static IP address, you'll need to add the IP Address, Subnet Mask and Gateway Address information according to the requirements of your network.

### DHCP Timeout, Fallback IP address, Fallback Subnet Mask

You can set the timeout period during which the Camera will look for a DHCP IP address. After this period, the camera will default to the designated fallback IP address.

This can be useful if you use your camera in other network environments. For example, if a DHCP server is available in your normal office or studio application, the camera will use the DHCP supplied IP address. If you then use the camera in another application without a DHCP server, your camera will always default to the known fallback IP address.

### BirdDog Name

You can give your camera a meaningful name to make identification easier when viewing NDI® sources on a receiver such as a TriCaster, vMix or Studio Monitor. Be sure to make the name unique, as no two devices on the network should have the same name. The name can be any combination of 'a-z, 0-9, and -'.

After renaming your camera, navigate back to the Dashboard and click REBOOT DEVICE. The camera will re-initialize and you'll be good to go.

**NOTE:** Your computer will need to have 'Bonjour' services loaded on the unit via its user defined name. Apple devices come pre-installed with Bonjour, while Windows devices need a plugin available from [here](#).



## Wi-Fi Network Configuration

|       |  |                        |                      |
|-------|--|------------------------|----------------------|
| Wi-Fi | <b>ON</b> OFF  | Configuration Method   | STATIC <b>DHCP</b>   |
| SSID: | <ul style="list-style-type: none"><li>WiFi Network Name 01</li><li><b>BirdDog Office 2.4GHz</b></li><li>WiFi Network Name 03</li><li>WiFi Network Name 04</li><li>WiFi Network Name 05</li><li>WiFi Network Name 06</li><li>WiFi Network Name 07</li></ul> | IP Address             | 192.168.100.5        |
|       | <input type="checkbox"/> Set selected SSID as favourite  | Subnet Mask            | 255.255.255.0        |
|       |  | Gateway Address        | 192.168.100.1        |
|       |  | DHCP Timeout           | 20s                  |
|       |  | DHCP Fallb. IP Address | 192.168.100.100      |
|       |  | DHCP Fallb. Sub. Mask  | 255.255.255.0        |
|       |  | BirdDog Name           | BirdDog-00122 .local |
|       |  |                        | <b>APPLY</b>         |

1. Select the Wi-Fi Network tab.
1. Click the Wi-Fi On button to enable Wi-Fi operation.
2. Select your network.
3. Complete the rest of the Wi-Fi configuration as for Ethernet Network Configuration above.
4. Click the Apply button to save your changes.

## You're Done!

That concludes our quick start guide for the Camera. Your camera has many other features, so to get the most out of your camera, please review the rest of this manual.

To learn about more advanced camera options, such as exposure, white balance and colour management, please refer to [here](#) in this manual.



WELCOME TO THE FUTURE.

[BirdDog.tv](http://BirdDog.tv)