

## BirdDog BD-BDPF120

# BirdDog PF120 Full HD NDI 20x Box Camera User Manual

Model: BD-BDPF120

## 1. INTRODUCTION

The BirdDog PF120 is a high-performance Full HD NDI box camera designed for professional video production environments. It features an Exmor R back-illuminated sensor, 20x optical zoom, and a full color matrix, all housed within a durable all-metal chassis. This manual provides essential information for the proper setup, operation, and maintenance of your PF120 camera.

## 2. PACKAGE CONTENTS

Please verify that all items listed below are included in your package. If any items are missing or damaged, contact your vendor immediately.

- BirdDog PF120 Full HD NDI 20x Box Camera
- Power Adapter (DC 12V)
- Lens Cap
- Documentation (Quick Start Guide, Safety Information)

## 3. PRODUCT OVERVIEW

The BirdDog PF120 is engineered for versatility and robust performance. Key features include:

- Full NDI support for seamless integration into IP workflows.
- 20x optical zoom for detailed close-ups.
- Exmor R back-illuminated sensor for superior low-light performance.
- Durable all-metal housing.
- Multiple connectivity options including HDMI, NDI/PoE, RS-232, and USB2.0.

### 3.1 Camera Views and Components



**Figure 3.1:** Front-side view of the BirdDog PF120 camera, showcasing the lens and the BirdDog logo on the side panel.



**Figure 3.2:** Rear panel of the BirdDog PF120, displaying the power input (DC 12V), audio input/output, NDI/PoE port, HDMI output, RS-232 port, and USB2.0 port.



**Figure 3.3:** Combined view of the BirdDog PF120, showing both the front lens assembly and the rear connectivity panel.



**Figure 3.4:** Top view of the BirdDog PF120 camera, highlighting the sleek design and BirdDog branding.

## 4. SETUP

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### 4.1 Powering On

1. Connect the supplied DC 12V power adapter to the "DC 12V" port on the rear of the camera.
2. Plug the power adapter into a suitable power outlet.
3. Alternatively, if using a PoE-enabled network switch, connect an Ethernet cable to the "NDI/PoE" port. The camera will power on via Power over Ethernet.

### 4.2 Network Connection (NDI)

1. Connect an Ethernet cable from the "NDI/PoE" port on the camera to your network switch or router.
2. Ensure your network is configured to support NDI protocols.
3. The camera will obtain an IP address automatically via DHCP. For static IP configuration, refer to the BirdDog Central application or web interface.

### 4.3 Video Output

- **NDI Output:** The primary video output is via NDI over the Ethernet connection.
- **HDMI Output:** Connect an HDMI cable from the "HDMI" port on the camera to a monitor or video switcher for direct video monitoring.

## 5. OPERATING THE CAMERA

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### 5.1 Accessing the Web Interface

1. Once connected to the network, use the BirdDog Central application or an IP scanner to discover the camera's IP address.
2. Open a web browser and enter the camera's IP address to access its web interface.
3. From the web interface, you can configure video settings, network parameters, and control camera functions.

## 5.2 Camera Control

The PF120 can be controlled via:

- **NDI Tools:** Utilize NewTek NDI Tools (e.g., NDI Studio Monitor) for basic control.
- **BirdDog Central / Cam Control:** BirdDog's dedicated software provides comprehensive control over camera settings, including zoom, focus, iris, and color matrix.
- **RS-232:** Connect a compatible serial controller to the RS-232 port for hardware control.
- **Remote Control:** The camera supports remote control methods as specified in the product documentation.

## 5.3 Zoom and Focus

The PF120 features a 20x optical zoom lens. Zoom and focus adjustments are typically made through the web interface or compatible control software.

# 6. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the camera body. For the lens, use a specialized lens cleaning solution and microfiber cloth. Avoid abrasive cleaners.
- **Firmware Updates:** Periodically check the BirdDog website for firmware updates. Keeping the firmware updated ensures optimal performance and access to new features.
- **Storage:** When not in use for extended periods, store the camera in a cool, dry place, away from direct sunlight and extreme temperatures.

# 7. TROUBLESHOOTING

## 7.1 No Power

- Ensure the power adapter is securely connected to both the camera and a working power outlet.
- If using PoE, verify that the Ethernet cable is connected to a PoE-enabled port on your switch and that the switch is providing power.

## 7.2 No NDI Signal

- Check the Ethernet cable connection.
- Verify that the camera has obtained an IP address (check your router's DHCP client list or use BirdDog Central).
- Ensure your network firewall is not blocking NDI traffic.
- Confirm that NDI tools or software on your receiving device are correctly configured to discover NDI sources.

## 7.3 Image Quality Issues

- Check lens for smudges or dust and clean if necessary.
- Adjust focus settings via the web interface or control software.
- Review exposure, white balance, and color matrix settings in the camera's web interface.

# 8. SPECIFICATIONS

Feature	Detail
Model Number	BD-BDPF120

Feature	Detail
Video Capture Resolution	1080p
Effective Video Resolution	720 Pixels
Optical Zoom	20x
Zoom Type	Digital Zoom, Optical Zoom
Connectivity Technology	Wired
Connectivity Protocol	Wi-Fi (for control/management, NDI is primary video)
Control Method	Remote, Iris, RS-232
Power Source	AC/DC, PoE
Wattage	5 watts
Material	Metal
Item Dimensions (L x W x H)	9.9 x 9 x 3.6 inches
Item Weight	2.94 pounds
Mounting Type	Wall Mount (as per spec, but typically box cameras are versatile)
International Protection Rating	IP65
Low Light Technology	Night Color

## 9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official BirdDog website or contact your authorized BirdDog reseller. Keep your proof of purchase for warranty claims.  
**BirdDog Official Website:** [www.bird-dog.tv](http://www.bird-dog.tv)

