BirdDog
PLAY PRO · User Guide

FEB · 2026

BirdDog

TABLE OF CONTENTS

COPYRIGHT

Trademark Acknowledgement

BirdDog and other BirdDog trademarks and logos are the property of BirdDog Australia. Other trademarks, company names and product names contained in this manual are the property of their respective owners.

- Microsoft, Windows, ActiveX, and Internet Explorer are registered trademarks of Microsoft Corporation
- in the U.S. and/or other countries.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are the trademarks or registered
- trademarks of HDMI Licensing, LLC in the United States and other countries.
- Other trademarks, company names and product names contained in this manual are the property of
- their respective owners.
- NDI® is a registered trademark of NewTek, Inc.

IMPORTANT INFORMATION

Legal Notice

To ensure account security, please change the password after your first log in. You are recommended to set a strong password (no less than eight characters).

The contents of this document are subject to change without prior notice. Updates will be added to the new version of this manual. We will readily improve or update the products or procedures described in the manual.

Best effort has been made to verify the integrity and correctness of the contents in this document, but no statement, information, or recommendation in this manual shall constitute formal guarantee of any kind, expressed or implied. We shall not be held responsible for any technical or typographical errors in this manual.

The product appearance shown in this manual is for reference only and may be different from the actual appearance of your device.

Due to uncertainties such as physical environment, discrepancy may exist between the actual values and reference values provided in this manual.

Use of this document and the subsequent results shall be entirely on the user's own responsibility.

REGULATORY COMPLIANCE

FCC Part 15

This equipment has been tested and found to comply with the limits for digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in

accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

LVD/EMC Directive

This product complies with the European Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/EC.

WELCOME TO BIRDDOG

Thank you for purchasing PLAY PRO. If you have any questions regarding the device, please contact your authorised dealer.

Using This Manual

PLAY PRO is a sophisticated device, so please read this manual before use and retain for future reference.

Tip

When viewing the diagrams in this manual, use the zoom controls in your browser or PDF reader to reveal more detail.

We're Invested in Your Success

We pride ourselves on being approachable and easily contactable. We'd love to hear from you.

WELCOME TO THE FUTURE

What is NDI®?

Your new PLAY PRO has been designed to support the cutting edge NDI® video transmission standard.

NDI® (Network Device Interface) is a high-quality, low-latency, frame-accurate standard that enables compatible devices to communicate, and deliver and receive high definition video over your existing Gigabit Ethernet network.

Operating bi-directionally, NDI® devices can be auto-detected, powered and controlled over the same Ethernet cable used to send the video and audio. If you have a Gigabit network, you have the potential for a streamlined, interconnected, video production environment.

With the introduction of NDI® 5, you can now securely share network sources between remote sites anywhere in the world - on a single network port. Even a smartphone can be a NDI® source.

Transitioning to NDI® can also occur gradually. Existing SDI or HDMI signals can easily be converted to an NDI® stream and piped where required on your network and converted back only at the necessary endpoints.

BirdDog has been on the NDI® journey since the very beginning, and PLAY PRO is just one of our products designed to take advantage of the features and potential of NDI®.

For more information on NDI®, please refer to this page on our website.

KEY FEATURES

PLAY PRO is a simple and effective way to convert NDI® streams to HDMI for display on a variety of screens.

Setup is simple:

- Connect PLAY PRO to your network via the PoE Ethernet Port.
- Connect output of PLAY PRO to your TV via the HDMI port.

NDI® 6

PLAY PRO supports new NDI® 6 functions including high bandwidth NDI®, NDI® HX2 and HX3.

4K UHD

Receive NDI®, NDI® HX2, and NDI® HX3 in resolutions up to 4Kp60.

Tiny Footprint.

PLAY PRO measures just 76mm x 76mm x 28mm, and weighs 158 grams.

USB Power

PLAY PRO can be powered by standard USB-C cable (5V 2A). PoE is preferred.

Comprehensive API Support

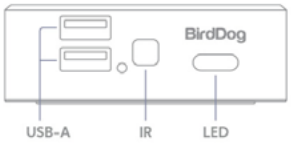
RESTful API, Crestron control module, Zoom API, Q-SYS API.

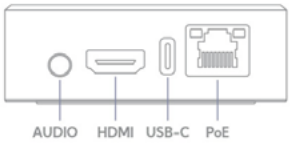
Multi Protocol Support

Choose from either NDI®, SRT or Cloud Connect sources.

GETTING TO KNOW PLAY PRO

Physical Layout





Powering PLAY PRO PRO

Located at the back of the PLAY PRO is a PoE RJ45 Port.
There is also a USB-C connection port. This power input accepts 5V DC, 1.2A power. PoE is recommended.

GETTING STARTED WITH PLAY PRO

Make Your Connection

- Connect PLAY PRO to PoE (Ethernet Port) for power and network.
- Connect PLAY PRO to your TV via the HDMI port.

Logging In

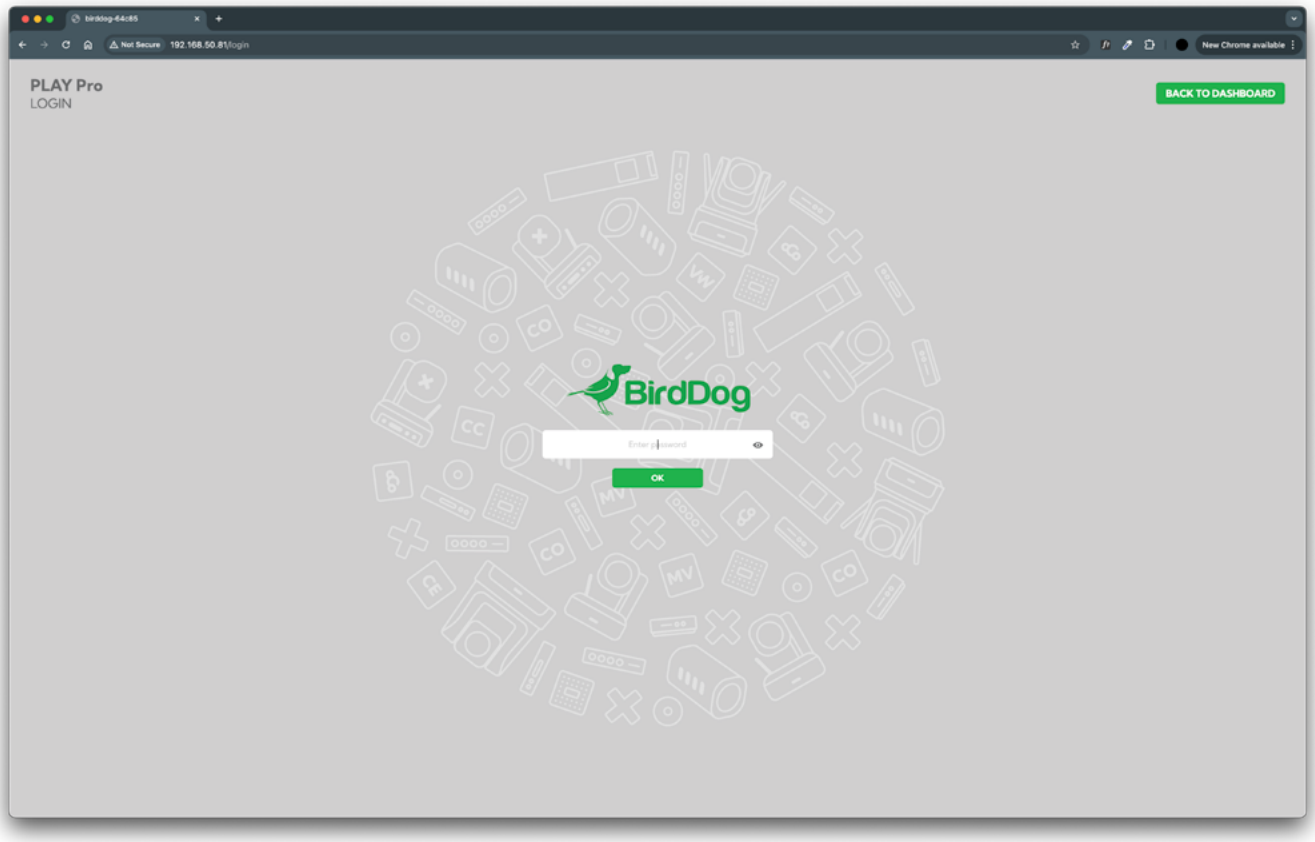
1. Once you've made your connections, the TV will display the BirdDog splashscreen. The PLAY PRO IP address will be displayed in the top left corner of the TV screen. You can scan the displayed QR code which will open the PLAY PRO Quickstart Guide on your device.
2. On your browser enabled device connected to the same network, type this IP address into the browser address bar and press enter. The BirdDog web interface (BirdUI) will display.
3. Type the default password (**birddog**, all lower case) into the password field and press the OK button. You can change the password later in the BirdU.

Selecting Your Source

Selecting a source via the BirdUI.

1. Login into the BirdUI as described above.
2. Select **AV Setup**.
3. Click the Update Source List **REFRESH** button.
4. Click on the **NDI Decode Source** dropdown and select your desired source. In a few seconds, your chosen
5. source should display on the TV screen.

WEB CONFIGURATION PANEL



The web configuration panel (BirdUI) allows you to alter key settings of PLAY PRO, specifically A/V settings, vvideo frame rates, restarting the video processing engine, changing networking parameters and applying firmware updates.

Password Management

Once you direct your web browser to the BirdUI, you will need to log in to change any settings.

Default Password

The web configuration panel is secured by a user-selectable password. The default password is:
birddog (one word, lower case).

To change the password simply log in using the default password, navigate to the network tab in the web interface, and select change password.

It is recommended to change this password in a network environment where your device is shared with other users (e.g. not private), since this password grants full access to the configuration settings and could interrupt a live program.

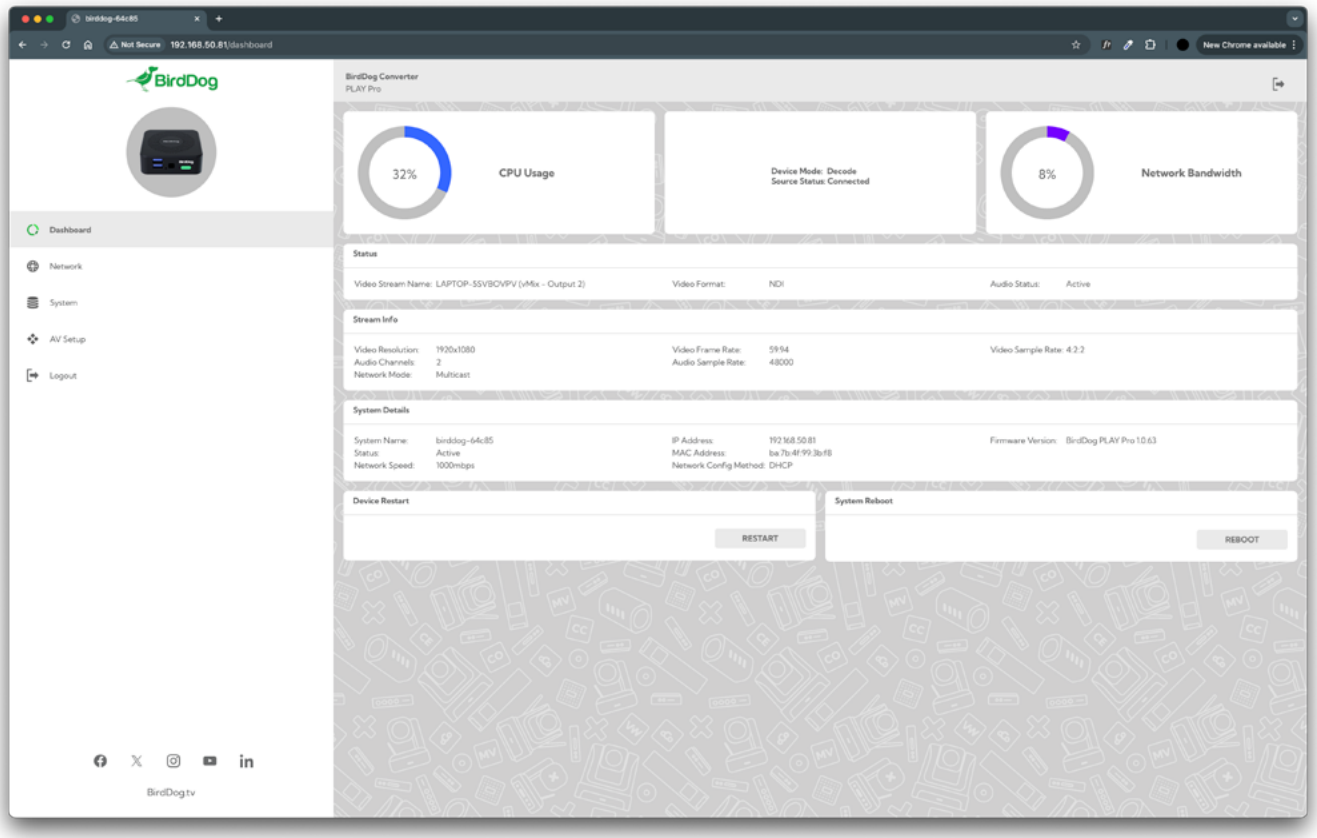
BIRDUI LAYOUT

The BirdUI is organized into the following panels:

1. **Dashboard**
   Overall view of important information such as the network connection type and video stream format and resolution.
2. **Network**
   General network settings such as DHCP IP Address details, timeout fallback address and network name, as well as NDI® specific network settings
3. **System**
   System admin functions such as updates, password change, designation of group access and reboot.
4. **AV Setup**
   Full NDI® encode management and audio settings.
5. **Login/Logout**
   BirdUI login/logout.

DASHBOARD

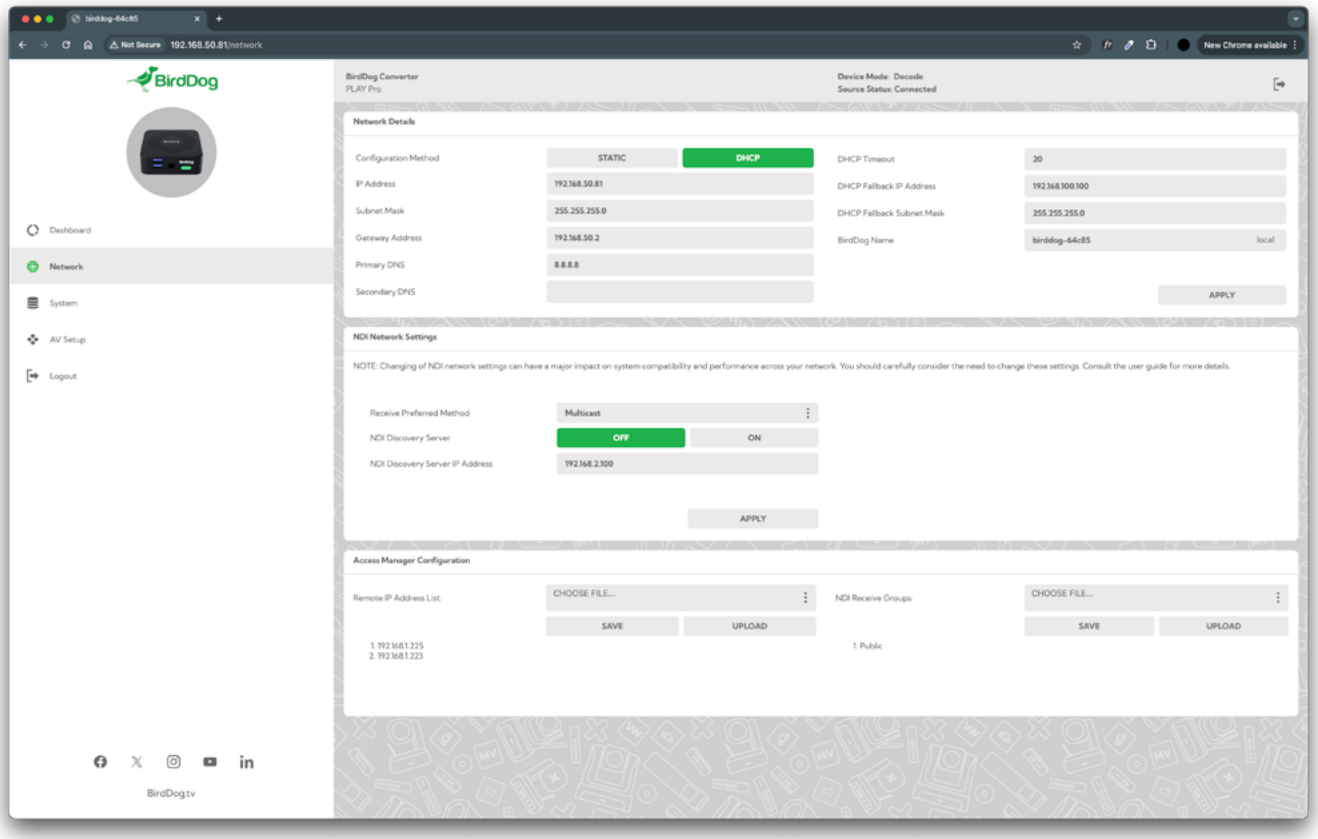
The Dashboard summarizes important settings and system information in one convenient location.



1. **CPU Usage**
   Current computer system CPU utilization.
2. **Device mode**
   PLAY PRO is always in Decode mode. Source Status indicates whether the selected source is available
3. **Network Bandwidth**
   Total network bandwidth consumption of the current device NDI® output.
4. **Status**
   a. NDI Video stream name.
   b. Selected video format.
   c. NDI® audio status, as configured.
5. **Stream Info**
   Source stream information.
   a. Video resolution.
   b. Video frame rate.
   c. Video sample rate.
   d. Number of audio channels.
   e. Audio sample rate.
   f. Network mode.
6. **System Details.**
   a. PLAY PRO DNS name.
   b. IP Address.
   c. Current PLAY PRO firmware version.
   d. Status of the PLAY PRO operating system.
   e. MAC address.
   f. Network speed.
   g. Preferred network configuration method.

NETWORK

Network Details



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

Configuration Method

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 PLAY PRO will look for a DHCP IP address. After this period, PLAY PRO will default to the designated fallback IP address.

This can be useful if you use PLAY PRO in other network environments. For example, if a DHCP server is available in your normal office or studio application, PLAY PRO will use the DHCP supplied IP address. If you

then use the device in another application without a DHCP server, it will always default to the known fallback IP address.

NOTE: Do not set the fallback IP address the same as the device IP address. It is recommended to keep the default fallback IP address.

BirdDog Name

You can give your device 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 device, navigate back to the System menu and click the REBOOT button. PLAY PRO will reinitialize and you'll be good to go.

NDI Network Settings

PLAY PRO operates with the latest NDI® Libraries. There are several options to configure it's behavior in an NDI®
network. Each configuration has its benefits, however it is recommended to use the default TCP transmit method unless you have reason to change.

Receive Preferred Method

TCP

TCP is the default method of transmission for NDI®. It operates well within local networks with predictable latency and limited jitter. BirdDog recommends that TCP be used for typical applications, and only using alternative transports for specific reasons.

UDP

UDP is recommended for networks where there is extended latency from one end to the other. The nature of UDP means that it does not receive a confirmation of each packet being successfully received – vastly improving performance on busy networks. UDP can have some consequences if there are other issues on the network such as jitter or lost packets as it will not inherently re-sent a lost packet.

R-UDP (Reliable UDP)

This protocol bridges the performance of TCP and UDP. Compared to TCP, it reduces overall network load (allowing more NDI® streams) by not requiring every packet to be 'acknowledged' by every receiver – has error correction built in for smoothness and reliability.

Multicast

Multicast is especially useful for use-cases that require a single source to be received on multiple receivers simultaneously. Utilizing Multicast offloads the distribution of the NDI® A/V packets to the network infrastructure. You should take care to ensure your network is specifically configured to support Multicast as using it on an illprepared network can create unintended network problems.

NDI® Discovery

If you choose to use an NDI® Discovery Server, you can configure it in this tab. By default, NDI® utilizes mDNS (multicast Domain Name System) to create the zero configuration environment for discovery. Unless the network is specifically configured to not allow mDNS, NDI® sources will be discovered.

The NDI® discovery service is designed to replace the automatic discovery NDI® uses with a server that operates as an efficient centralized registry of NDI® sources that requires much less bandwidth. Multiple servers can be specified for failover reduntancy. NDI® discovery server also helps with location of devices that reside on different subnets. The NDI® Discovery Server is available in the NDI® 5.5 version of the free NDI Tools (C:\Program Files\NDI\NDI 5 Tools\Discovery\NDI Discovery Service.exe).

1. If you are using one or more NDI® Discovery Servers, click the ON button.
2. Enter a comma delimited list of the IP address(es) of your NDI® Discovery Server(s).
3. Click the **APPLY** button to save your changes.

Access Manager Configuration

Remote IP List

By default, NDI® devices are visible to each other only when they're on the same subnet. If you want visibility or control of a device on a different subnet, you can add it's address manually as a Remote IP. You can upload and download Remote IP Lists for sharing with other devices. To upload a list:

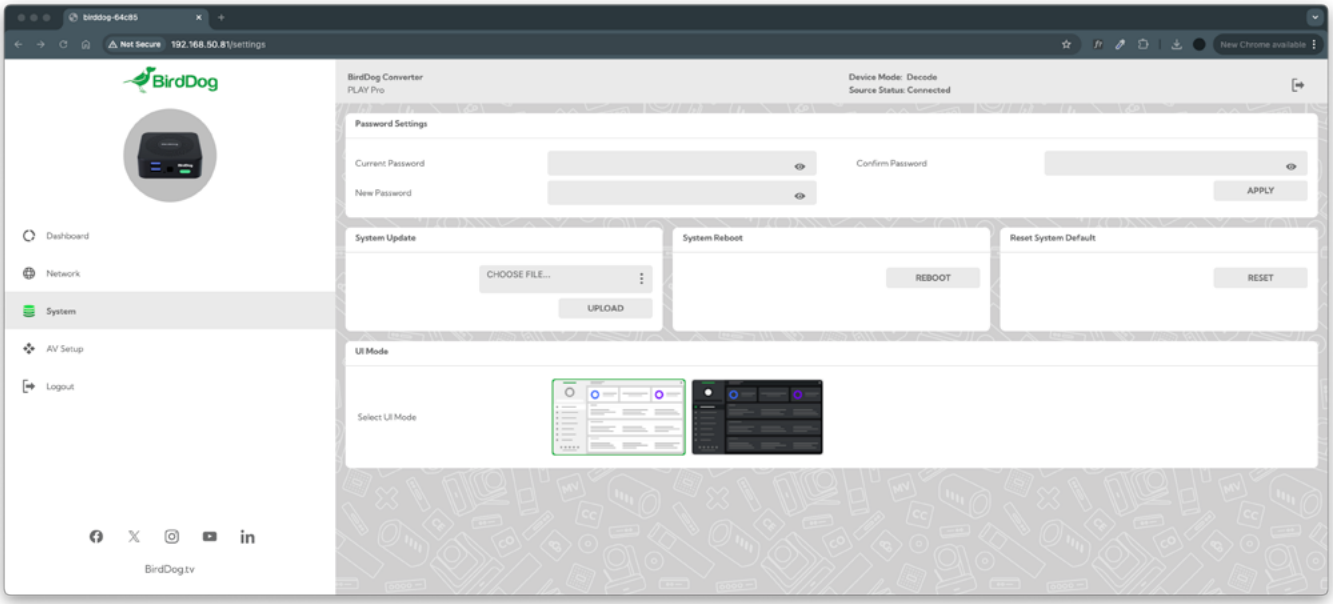
1. Click the **CHOOSE FILE** button to load your Remote IP List in UTF-8 encoded string format.
2. Click the **UPDATE button**. Do not upload a blank list.

NDI Group List

Set the NDI Group list. NDI® Groups allow you to restrict communication to only devices that belong to the same NDI® Group. NDI® Groups can be very useful to control visibility and access in larger environments. You can upload and download Group lists for sharing with other devices. Groups also need setting up in **NDI Access Manager**, available in NDI Tools. To upload a list:

1. Click the **CHOOSE FILE** button to load your NDI® Group List in UTF-8 encoded string format.
2. Click the **UPDATE** button. Do not upload a blank list.

SYSTEM



Password Settings

The BirdUI is secured by a user-selectable password. To make changes to any settings, you'll need to log in. The default password is **birddog** (one word, lower case). It is recommended that the default password be changed, since the BirdUI grants full access to the PLAY PRO configuration settings.

You can change the password in the **Password Settings** tab.

1. Enter the current password.
2. Enter the new password. It is recommended that you change this password to prevent unauthorized changes in a network environment where the device is shared with other users (e.g. not private). Confirm the new password and click the **APPLY** button.

System Update

We are always adding new features and improving the performance of our products, so installing the latest firmware will provide you with the best user experience. To upgrade the firmware, download the firmware and follow the Firmware Upgrade Instructions.

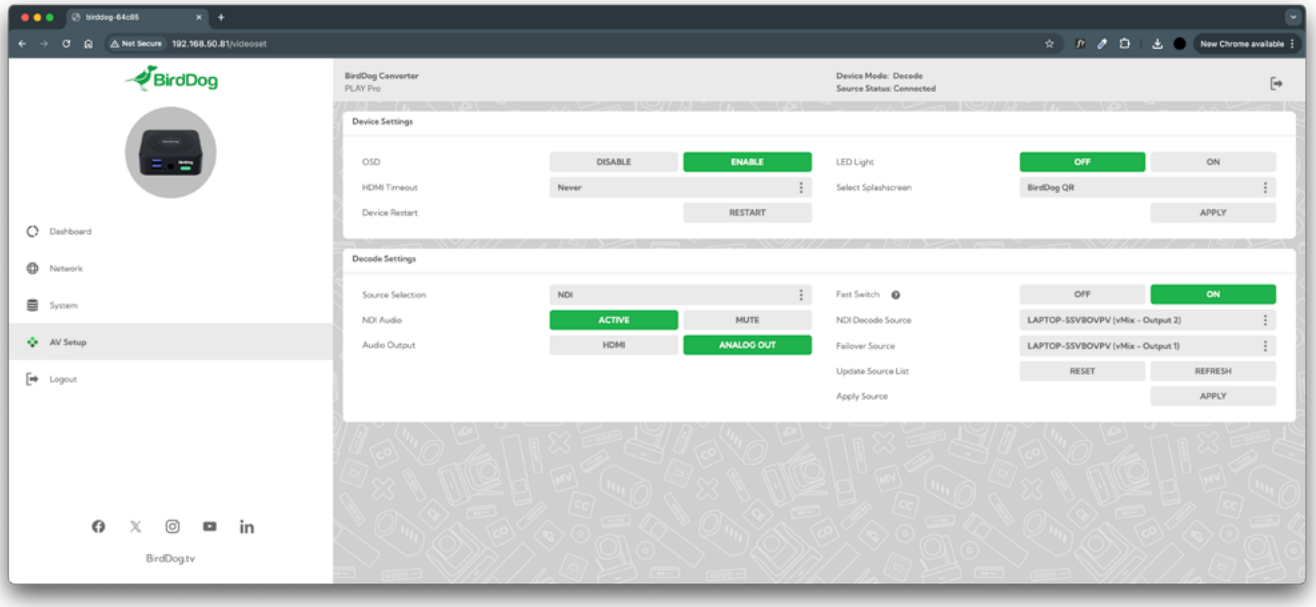
System Reboot

Click this button to reboot the unit after important changes such as Network settings or the BirdDog name.

Reset System Default

Click this button to revert all device settings to the factory default.

AV SETUP



Device Settings

OSD

You can choose to disable the On Screen Display (OSD) to help avoid setting changes by unauthorised persons.

HDMI Timeout

You can set the HDMI signal timeout to match your source device such as a laptop. The timeout can be choosen from a range of 1 second to 45 minutes.

Device Restart

Click this button to restart the decode engine. This may be necessary after changing key image settings e.g., resolution.

LED Light

Can be turned OFF or ON. By Default, the LED Light is ON and set to Status Mode.

Status Mode:

- White light means the unit is powered on by not decoding.
- Blue means there is an NDI signal being Decoded.

Custom:

- Set whatever color you want from the 8 options

Colour Cycle:

- Scrolls through the 8 colors

Tally

When PLAY PRO decodes a Camera source, the LED Light will reflect any tally information being sent to the camera. So, if the Camera is in Program on a Switcher, the LED Light will turn Red, if it's in Preview it will turn green.

Select SplashScreen

You can set a custom SplashScreen to display when PLAY PRO is idle. Custom Splash Screen has 4 options:

- BirdDog QR (Default)
- BirdDog Logo
- Black Screen
- Custom Logo

  The Custom Logo has some file format requirements, otherwise the file selected by the user will be rejected. The Image needs to follow this criteria:
  - PNG format
  - 1920 x 1080 resolution
  - Less than 5 MB file size
  - 8 bit color depth

Decode Settings

You can choose from either **NDI**, **SRT** or **Cloud Connect** sources.

NDI

Source Selection

Select NDI® as the source type.

NDI Audio

Click the **Mute** button to disable the incoming NDI® stream audio.

Audio Output

Choose between HDMI and Analog Out (3.5mm Jack).

FastSwitch

This mode is **OFF** by Default.

When turned on Fast switch makes it so you can switch between NDI sources with no reconnection needed, the video and audio will instantly switch over to the next source chosen. This can be used with API as well, if FastSwitch is ON change the decode source like normal, except there will be no pause for reconnecting the stream.

Note: NDI sources need to be the same format when using FastSwitch (HB NDI, HX H264, HX H265) If you switch between formats the source change will be delayed and PLAY PRO may need a 'Device Restart'.

NDI Decode Source

Select an available NDI® source from the **NDI Decode Source** dropdown. You can update this list by clicking the Update Source List **REFRESH** button.

Failover Source

If the generated NDI® stream is interrupted for any reason, the receiver can automatically switch to a nominated alternative NDI® stream. Select an available NDI® source for the failover function from the **Available NDI Sources** dropdown. Click the **RESET** button to reset this list to display only active streams, or click the **REFRESH** button to add new streams to the current list.

Apply Source

Click the **APPLY** button to save your changes.

SRT

PLAY PRO can be configured to receive and decode an SRT stream. SRT (Secure Reliable Transport) achieves highquality, low-latency streaming across unreliable Internet connections via UDP packets.

Source Selection

Choose SRT from the dropdown.

NDI Audio

Click the **Mute** button to disable the incoming NDI® stream audio.

Connection Type

In order to establish a bidirectional stream, SRT employs a handshake mechanism where each device identifies itself as either a Caller or as a Listener and waits for the other to initiate a connection. In certain cases, two devices can simultaneously negotiate an SRT session in what is referred to as Rendezvous mode.

Caller

Sets a source or destination device as the initiator of an SRT streaming session. You'll need to enter the IP address and port number of the Listener.

Listener

Sets a device to wait for a request to start an SRT streaming session. You'll need to enter the port that the Listener device will expect an SRT stream.

Rendezvous

Allows two devices to negotiate an SRT session over a mutually agreed upon port and both source and destination must be in Rendezvous mode. In this mode, a source port can be specified to help better handle NAT Firewall support.

Stream Name

You can choose to label the stream with a memorable name.

Port

Enter the port number.

Latency

When packets are lost during streaming, extra time is required to recover the packet before its "time to play" arrives. This parameter sets how long the receiver should wait for retransmission of lost packets.

Encryption
Enable or disable encryption.

Key Length
You can configure your SRT streams to use 128 bits, 192 bits, or 256 bits AES encryption. This can be thought of as fast, medium, or strong encryption. The encryption settings on the SRT encoder sending the stream must match the settings on the SRT decoder receiving the stream.

Pass Phrase/Stream ID
You can optionally assign the SRT stream an alphanumeric passphrase. The pass phrase setting on the SRT encoder sending the stream must match the setting on the SRT decoder receiving the stream.
If you disable the Pass Phrase, you can choose to enter the source **Stream ID**.

Connection URL
The automatically generated stream URL string.

Update SRT Sources
Click the **UPDATE SRT SOURCES** button to create a SRT connection source. This connection will now appear in the **SRT Sources** window.

SRT Sources
Displays SRT Sources that have been created using the above parameters. The sources display as the Stream Name you gave the connection.

Select Source
Select a created source from the dropdown and click the **APPLY** button. The **Source Status** at the top of the window will display 'Initializing' then 'Connected' when the Source is connected. The stream will now PLAY PRO from the **HDMI Out** port.

KVM
This feature allows you to plug in a USB-A Mouse and Keyboard into the Front ports of PLAY PRO and will give you NDI KVM control for NDI sources being decoded that have KVM enabled such as NDI Screen Capture.

TECHNICAL SPECIFICATIONS

Resolutions and Frame Rates*
UHD 2160p – 25, 29.97, 30, 50, 59.94, 60
HD 1080p – 25, 29.97, 30, 50, 59.94, 60
HD 720p – 30, 50, 59.94, 60

* Video decode resolution in Full NDI® 1080p60 max, NDI®|HX UHD60p.

Video Format Support
NDI® – 1080p60 in i-frame, low latency.
NDI® HX2 – UHD30p in h.264
NDI® HX 2 – UHD60p in HEVC
NDI® HX3 – UHD30p in h.264
NDI® HX 3 – UHD60p in HEVC

Video I/O Connectivity
1x HDMI 2.0 – Full size connector

Audio I/O Connectivity
Stereo audio over HDMI 2.0; Analogue audio output supported.

NDI KVM Support
Mouse and Keyboard connection over USB-A ports

LED Indicator
Status/Custom

Network Connectivity
Ethernet RJ45 1000baseT

Weights and Dimensions
Dimensions: 76x76x28mm
Weights: 158g

Power
Power Input: USB-C or PoE
Voltage: 5V DC, PoE (802.3af)
Current: 2A

GLOSSARY

Domain
A domain contains a group of computers that can be accessed and administered with a common set of rules. Domain can also refer to the IP address of a website on the Internet.

DNS
DNS (Domain Name System) is a system used by the Internet and private networks to translate domain names into IP addresses.

mDNS
mDNS (Multicast DNS) refers to the use of IP multicast with DNS to translate domain names into IP addresses and provide service discovery in a network that does not have access to a DNS server.

Ethernet
Ethernet, standardized as IEEE 802.3, refers to a series of technologies used to connect computers and other devices to a LAN (Local Area Network) or wide area network (WAN).

Firmware
Firmware is a class of software held in non-volatile memory that provides the low-level control for a device's hardware.

Gigabit Ethernet (GigE)
An Ethernet capable of transmitting frames at a rate of a gigabit per second. A Gigabit capable Ethernet network is recommended for NDI® production workflows.

IP
IP (Internet Protocol) is the communications protocol for the Internet, many wide area networks (WANs), and most local area networks (LANs) that defines the rules, formats, and address scheme for exchanging datagrams or packets between a source computer or device and a destination computer or device.

LAN
LAN (Local Area Network) is a network that connects computers and devices in a room, building, or group of buildings. A system of LANs can also be connected to form a WAN (Wide Area Network).

Mbps
Mbps (Megabits per second) is a unit of measurement for data transfer speed, with one megabit equal to one million bits. Network transmissions are commonly measured in Mbps.

NDI®
NDI® (Network Device Interface) is a standard allowing for transmission of video using standard LAN networking. NDI® comes in two flavours, NDI® and NDI|HX. NDI® is a variable bit rate, I-Frame codec that reaches rates of around 140Mbps at 1080p60 and is visually lossless. NDI|HX is a compressed, long-GOP, H.264 variant that achieves rates around 12Mbps at 1080p60.

Packet (Frame)
A packet s a unit of data transmitted over a packet-switched network, such as a LAN, WAN, or the Internet.

PELCO
PELCO is a camera control protocol used with PTZ cameras. See also VISCA.

PoE
Power over Ethernet

Port
A port is a communications channel for data transmission to and from a computer on a network. Each port is identified by a 16-bit number between 0 and 65535, with each process, application, or service using a specific port (or multiple ports) for data transmission. Port can also refer to a hardware socket used to physically connect a device or device cable to your computer or network.

RJ45
A form of standard interface commonly used to connect computers onto Ethernet-based local area networks (LAN).

RS422, RS485, RS232
Physical layer, serial communication protocols.

Subnet
Subnet or subnetwork is a segmented piece of a larger network.

Tally
A system that indicates the on-air status of video signals usually by the use of a red illuminated lamp.

TCP
TCP (Transmission Control Protocol) is a network communications protocol.

UDP
UDP (User Datagram Protocol) is an alternative protocol to TCP that is used when reliable delivery of data packets in not required.

VISCA
VISCA is a camera control protocol used with PTZ cameras. See also PELCO.

WAN
WAN (Wide Area Network) is a network that spans a relatively broad geographical area, such as a state, region, or nation.

White Balance
White balance (WB) is the process of ensuring that white objects and by extension, all colour, in your video are rendered accurately. Without correct white balance, objects in your video display unrealistic color casts.

BirdDog.tv