

2020

# **CATALOGUE**

PRODUCTION. SIMPLIFIED.





WELCOME TO THE FUTURE.

# WELCOME TO THE WORLD OF NDI. WE'VE BEEN WAITING FOR YOU.

## Hello,

Firstly thank you for your interest in BirdDog and our products. It's truly humbling.

BirdDog is an Australian company started in 2016 with a simple mission – to bring high quality products to market that solve workflow problems and reduce the complexity of equipment required.

At ISE 2020 we are proud to announce NDI Wallplates, which have been designed from the ground up for building into permanent AV installations. Dedicated AV features such as a RESTful API to integrate with control systems such as Crestron as well as EDID, will make for a smooth and seamless end user experience. The interchangeable face plates and soft glow indicators add a level of elegance that will look right at home in high end spaces.

We invest a lot of time listening to our customers to understand their requirements in order to implement features and functions to simplify workflows. BirdDog already has a long list of world first achievements and as we expand our product line we still feel like we are just getting started.

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

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# Send NDI® anywhere in the world with SRT encryption.

Expand outside your local network to distribute your NDI® content to anywhere in the world. Utilising SRT, Cloud has 128/256 bit AES encryption so you can send over the public internet with total peace of mind. SRT video transport protocol also ensures reliable streams even over lossy networks. A scalable and modular platform with support for Tally, BirdDog Comms, and PTZ Control, Cloud integrates seamlessly with all BirdDog hardware and software solutions.

## Production Everywhere.

BirdDog Cloud allows for remote production from anywhere in the world. All you need is an internet connection and you can instantly and remotely access any NDI enabled device.

# Super fast.

Cloud is blazingly fast. The SRT integration means that even over lossy connections you can access any NDI content anywhere in the world at under ½ a second delay.

# Total encryption.

Cloud uses SRT video transport protocol for end-to-end 128/256 bit AES encryption. Whether it's a single stream delivery or a single stream to multiple sites, the AES encryption is all the way through the pipeline.

# Scalable and Modular. Only pay for what you need.

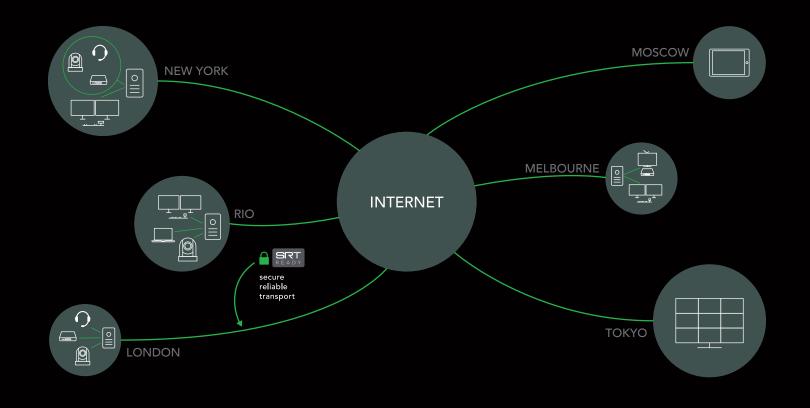
Endpoint Core, Endpoint Multi, Multistream, Multiview, Alpha, Record, WebRTC•

# Portable monitoring

With the WebRTC module you can monitor your NDI streams on an iPad, Tablet or other portable device with zero latency

## Total control.

PTZ Control, Tally, and BirdDog Comms (free audio intercom software) are all totally integrated within Cloud. You can remotely control PTZ Cameras from the other side of the world, have complete talk back with your camera operators with Tally.





# **BIrdDog Cloud Modules**

**Endpoint Core** (required) – Everything you need to get started for a single point to point connection. Includes Tally, Comms, Video, Audio, and PTZ Control all over a secure and encrypted connection.

**Endpoint Multi** – Multiple stream licence that is only limited by how many streams your computer can process. The faster the machine the more streams. This enables multiple single End Point to End Point connections.

**Multistream** – Enables multiple streams over a single SRT connection. Use an End Point at each end and stream from Oslo to New York, Paris, and Melbourne simultaneously. All NDI feeds sent from Endpoint to Endpoint will maintain individual sync.

**Multiview** – A scalable and powerful NDI Multiviewer that automatically creates the least number of video windows needed whilst still maintaining a 16x9 aspect ratio. Each receiving End Point can configure it's own custom Multiviewer. The NDI for the Multivewer is sent at lower bandwidth NDI to allow you more video windows than you can with full bandwidth NDI.

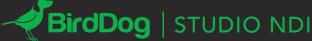
There are controls to set to 720p or 1080p resolutions and you can even throttle the NDI if desired.

**Alpha** – Adds support for sending remote graphics or other sources with alpha over the SRT link.

**Record** – Add recording for both the source and destination.

**WebRTC** – Convert NDI to WebRTC with very low latency as Program out back channel to ENG or other remote productions.





# The one that started it all.

Studio NDI is the world's flagship NDI® Encoder and Decoder. Built around BirdDog's custom NDI® silicon chip and housed in an aircraft grade aluminium case, Studio NDI has been engineered from the ground up for real-world users. Featuring SDI and HDMI inputs and outputs, built-in cross converter, active loop outs, dual NDI® encoding, audio intercom system, NDI® tally system, PoE, and compatibility with BirdDog's Comms and Central Apps, Studio NDI is the perfect addition to any live producers toolkit.

# NDI® Encode or Decode.

Built with total flexibility in mind Studio NDI can be configured as an NDI® Encoder or NDI® Decoder. Studio NDI is capable of Encoding resolutions up to 1080p60 SDI and HDMI to NDI® and Decoding NDI® resolutions up to 1080p60 to SDI or HDMI.

## Full NDI<sup>®</sup>. No compromises.

In the world of NDI® there are two flavours, NDI® and NDIIHX. NDI® is a VBR, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDIIHX is a compressed, long-GOP, H.264 variant that reaches around 12Mbits at 1080p60.

Studio NDI hardware is Full YUV422 NDI®.

## Extreme Speed.

BirdDog's revolutionary custom silicon chip is what drives the best NDI® products on the planet. Only BirdDog's hardware can do line-based processing to give the fastest possible NDI® Encoding or Decoding technically possible.

## Camera Mount.

A 1/4-20" thread top and bottom allows for easy mounting on magic arms and other traditional camera mounting gear whilst the 7mm diameter through holes can be used for mounting on cheese plates. The optional camera mount adds a 1/4-20 thread to the bottom for further mounting options.

# Aircraft Grade Aluminium case.

It's easier to imagine Studio NDI on display within the Louvre in Paris than on a live video production set, but that is where the deception of the senses first takes place. The perfectly finished casing is actually aircraft grade aluminium and designed to withstand the rigours of life on the road.

## Tally. It just works.

The world's first NDI® Tally system is built right into Studio NDI and it requires zero configuration. Includes a built-in large Tally display for your on-air talent to easily see which camera is live, plus user selectable Tally borders on loop out.



## Included COMMS Lite & CENTRAL Lite - 100% FREE





# **Product Specifications**

# **Video Formats**

(HD) 1080p 23.98, 25, 29.97, 30, 50, 59.94, 60

(HD) 1080i 25, 29.97, 30

(HD) 720p 50, 59.94, 60

## Video Input

1 x 3G-SDI, SMPTE-259/292/296/424 (Level A / Level B)

1 x HDMI Standard Type A connector HDMI v1.4a, RGB or YCbCr

# Video Output

1 x 3G-SDI, SMPTE-259/292/296/424 (Level A)

1 x HDMI Standard Type A connector

HDMI v1.4a, RGB or YCbCr

## **Audio Digital**

2-Channel, 24-bit SDI embedded audio, 48 kHz sample rate, synchronous

2-Channel, 24-bit HDMI embedded audio, 48 kHz

sample rate, synchronous

# **Audio Analog**

 $3.5 mm \; Microphone \; headset \; input \; / \; output$ 

## **Video Codec Support**

Realtime, ultra-low latency, full-bitrate NDI (i-frame)

## Display

Internal 35×5 tri-colour LED display for information and tally indication

# Network Interface

10/100/1000 Ethernet (RJ-45) with PoE (Power over Ethernet)

Embedded web configuration panel for control and firmware updates

**User Interface Controls** 

Network settings

Video settings

Tally settings

Audio and Comms settings

## **External Tally**

3.5mm 2 position +5v tally connector

## Size (W x D x H)

150mm x 105mm x 21mm

## Weight

0.3kg

### Power

100-240V, 50/60 Hz Universal Input, +5-18V DC 7W Max

Power over Ethernet (PoE) 802.3af/at





# Pocket sized NDI®.

Big things come in small packages. Utilising BirdDog's custom NDI® silicon chip and housed in aircraft grade aluminium case, Mini is the ultimate entry point into the world of NDI® Encoding and Decoding. Featuring HDMI inputs and outputs, Active Loop Outs, Audio Intercom System, NDI® Tally System, PoE, and compatibility with BirdDog's Comms and Central Apps.

## Full NDI®.

In the world of NDI® there are two flavours, NDI® and NDIIHX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDIIHX is a compressed, long-GOP, H.264 variant that reaches around 12Mbits at 1080p60. Mini hardware only uses Full YUV422 NDI®.

## NDI® Encode or Decode.

Built with total flexibility in mind, Mini can be configured as an NDI® Encoder or NDI® Decoder. In either Encode or Decode mode Mini is the perfect way to get your HDMI sources into and out of the world of NDI®.

## Extreme Speed.

BirdDog's revolutionary custom silicon chip is what drives the best NDI® products on the planet. Only BirdDog's hardware can do line-based processing to give the fastest possible NDI® Encoding or Decoding technically possible.

## Tally. It just works.

The world's first NDI® Tally system is built right into Mini and it requires zero configuration. Includes a built-in large Tally display for your on-air talent to easily see which camera is live, plus user selectable Tally borders on loop out, and an external Tally output.

# Aircraft Grade Aluminium case.

It's easier to imagine Mini on display within the Louvre in Paris than on a live video production set, but that is where the deception of the senses first takes place. The perfectly finished casing is actually aircraft grade aluminium and designed to withstand the rigours of life on the road.

## **VESA or Camera Mount.**

With the optional VESA and Camera mounts Mini is easy to mount. Use the VESA mount to attach to screens or use the camera mount for easy mounting with ball heads, magic arms, and other traditional mounting gear.



# Included COMMS Lite & CENTRAL Lite - 100% FREE





# **Product Specifications**

## **Video Formats**

(HD) 1080p 23.98, 25, 29.97, 30, 50, 59.94, 60

(HD) 1080i 25, 29.97, 30

(HD) 720p 50, 59.94, 60

## Video Input

1 x HDMI Standard Type A connector HDMI v1.4a, RGB or YCbCr

## Video output

 $1 \times HDMI$  Standard Type A connector

HDMI v1.4a, RGB or YCbCr

# Audio digital

2-Channel, 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous

# Audio analog

3.5mm Microphone headset input / output

## Video Codec support

Realtime, ultra-low latency, full-bitrate NDI (i-frame)

## Display

Bicolor Tally (Red/Green)

## **Multicolour status information**

Full status information on HDMI output (Selectable)

## **Network Interface**

10/100/1000 Ethernet (RJ-45) with PoE (Power over Ethernet)

Embedded web configuration panel for control and firmware updates

## **User Interface Controls**

Network settings Video settings Tally settings

Audio and Comms

Size (WxDxH)

98x110x22mm

Weight

200g

Power

+5-18V DC 7W Max

Power over Ethernet (PoE) 802.3af/atsettings





## Next Level NDI® Tools.

Following on from the award winning HD NDI® products, the 4K Family has been engineered from the ground up for real-world users. Built around BirdDog's custom NDI® silicon chip and housed in an aircraft grade aluminium case, features include 12G SDI and HDMI 2.0 inputs and outputs, built-in cross converter, SFP+ port for 10GbE connectivity, active loop outs, audio intercom system, NDI® tally system, PoE, and compatibility with BirdDog's Comms Pro and Central Pro apps.

## Encode & Decode up to 4Kp60.

With support for all resolutions up to 4Kp60, including all HD resolutions, Encoding and Decoding 4K Full NDI® has never been easier.

# 12G & HDMI 2.0 connections.

All SDI connectors on the 4K line are 12G SDI, including all four SDI connectors on 4K Quad. All the HDMI connectors are 2.0 for maximum compatibility with your sources and destinations.

# SFP+ for 10GbE & long range.

Industry standard SFP+ connection allows for short, medium, and long range connections over fiber and supports Ethernet protocols from 1GbE to 10GbE.

# NDI Tally that just works.

A full Tally system is built right into the 4K Family and it requires zero configuration. Includes a built-in large Tally light for your on-air talent to easily see which camera is live, plus user selectable Tally borders on loop out.

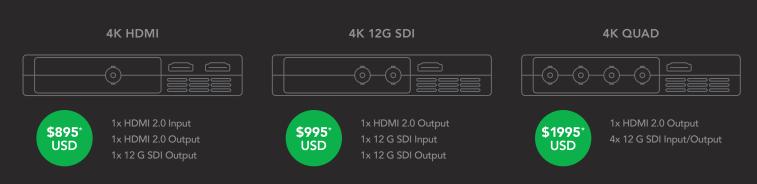
## **Cross Converter.**

All 4K products include a built in cross converter and of the 12G SDI inputs can be looped out the HDMI 2.0 port and any of the HDMI 2.0 inputs can be looped out the 12G SDI.

# PTZ Control.

With the optional USB to Ethernet dongle you can control any PTZ camera that supports NDI®, NDIIHX, or Visca over IP.





\*Pricing and specifications subject to change



Feature/Specification	4K HDMI	4K 12G-SDI	4K QUAD
SUPPORTED VIDEO FORMATS			
UHD 3840x2160	23.98, 25.00, 29.97, 30.00, 50.00, 59.94, 60.00		2.94, 60.00
HD 1920x1080p	23.98, 25	.00, 29.97, 30.00, 50.00, 59	2.94, 60.00
HD 1920x1080i		50.00i, 59.94i	
HD 1280x720p		50.00p, 59.94p, 60.00p	
VIDEO I/O CONNECTIVITY			
HDMI 2.0 Input	✓	-	
HDMI 2.0 Output	✓	✓	
12G SDI Input	-	✓	
12G SDI Output	✓	✓	
12G SDI Selectable Input/Output	-	-	
AUDIO INPUT			
HDMI	2Ch, 48kHz	-	
SDI	-	2Ch, 48kHz	2Ch, 48kHz
3.5mm AUDIO		Microphone/Line Input	
AUDIO OUTPUT			
HDMI		2Ch, 48kHz	
SDI	2Ch, 48kHz		
3.5mm AUDIO	Stereo Headphone/Line Output		out
VIDEO PROCESSING			
Downconvert NDI output	4K -> 1080p, 1080p -> 720p		р
VIDEO CODEC SUPPORT			
NDI (Full bandwidth i-frame compresssion)	✓	✓	✓
DISPLAY			
Integrated 4-line OLED Status Display	✓	✓	
Integrated Multiviewer	-	-	HDMI OUT
TALLY			
Onboard Bi-color Tally indicator	✓	✓	
Selectable Tally indicator on video loop outputs	✓	✓	✓
NETWORK CONNECTIVITY			
Ethernet RJ45 1000baseT w/integrated PoE (Power over Ethernet)	<b>√</b>	<b>✓</b>	
Open SFP+ Cage (10gb SFP+ Adapters sold separately)	<b>√</b>	<b>✓</b>	
Embedded Web configuration Panel	✓	<b>√</b>	✓
WEIGHTS & DIMENSIONS			
Size		135x85x25mm	
Weight	260g	260g	320g
POWER			
DC Input			
PoE (Power over Ethernet)			
EXTERNAL INTERFACE SUPPORT *			
USB to RJ45 for additional network in device support	<b>√</b>	<b>√</b>	
USB to RJ45 for VISCA over IP PTZ control	✓	✓	
USB to Serial PTZ control (RS232)	✓	✓	
USB ISO recording	✓	✓	

<sup>\*</sup> Requires Optional Cables.

# PTZ CAMERAS

# Features & Specifications Comparison

Feature/Specification	P100	P200	A200	A300
CAMERA				
Image Sensor	1/2.86" CMOS 2.2MP		1/2.8" CMOS 2.13MP	
Lens	4.7 - 47mm		4.3-129mm	
Optical Zoom	10x		30x	
Digital Zoom	12x		12x	
Horizontal Angle of View	60.9° (W) – 6.43° (T)		63.7° (W) – 2.3° (T)	
Aperture	F1.6 (W) – F3.0 (T)		F1.6 (W) – F4.7 (T)	
Min. Illumination	0.5 lux	Color: 0.01 lux	: (F1.6, AGC on, 1/30s, High se	ensitive mode),
		0.1 lux (F1.6	6, AGC on, 1/30s, Normal sens	itive mode)
Shutter Speed	1/1 – 1/30000s		1/1 – 1/10000s	
Focus		Auto, Pus	h, Manual	
White Balance		Auto, Indoor, Outdoo	r, Manual, OPW, ATW	
Exposure		Auto, Manual, Sh	outter/Iris Priority	
Backlight Compensation		YE	ES	
MECHANICAL				
Pan Movement	Horizontal: ±350°		Horizontal: ±360°	
Tilt Movement	Vertical: +9		Vertical: -90° to +15° *	Vertical: +90° to -30° *
Preset Positions	128 (Speed adjusta		255 (Speed adjust	able: Up to 150°/s)
Preset Speed	0-5 Level adjustable			
Environmental	Ind	oor	Out/Indoor, IP67,	Out/Indoor, IP67, corrosion
			corrosion resistant	resistant treated housing,
			treated housing	wind load durability 60m/s,
		E0 (00)		Nitrogen filled housing
Operating Temperature	-10 – +	-10 – +50 (°C)		·60 (°C)
Operating Humidity	≤8			ID 1 . 500
Infrared			Adaptive, illum. up to 100m	IR Laser, up to 500m
VIDEO INTERFACE	NDI/SDI	NDI/HDMI/SDI	NDI/CDI	NDI/SDI
Video Output Video Formats			NDI/SDI	
Audio I/O	1080p 60, 59.94, 50, 29.97, 25 • 1080i 60, 59.94, 50 • 720p 60, 59.94, 50, 29.97, 25			
CONTROL INTERFACE	3.5mm Audio In (Stereo) - 3.5mm Audio Out (Stereo)			
IP PTZ Control	NDI Control (auto configuring)			
Serial PTZ Control	2x RJ45: RS232/RS422/RS485			
Serial Control Protocol	VISCA / Pelco D			
POWER & DIMENSIONS		¥13 G/ ( /	1 0100 5	
Power Input	12v DC, PoE	12v DC, PoE	AC 24v. PoF	80W Ready
	+ (IEEE 802.3at)	+ (IEEE 802.3at)		ector needed, optional)
Power Consumption	. (.=== =====,	. (.===	Min. 15W, Max. 60W	Min. 24W, Max. 80W
		-	(-40°C)	(-40°C, IR Laser ON)
Dimensions	145x145x154mm	160x178x220mm	210x210x333mm	180x180x423mm
Weight	1.0Kg	2.0Kg	5.5Kg	10.2Kg
NETWORK				
Video Compression	Full NDI – i-frame high quality low latency NDI for production			
Network Protocol	NDI – Discovery, configuration and control			
Web Control interface	Full control via Web/Mobile UI inc. Scene presets			



# BirdDog | PTZ KEYBOARD

## World's first NDI® PTZ Controller.

BirdDog PTZ Keyboard is a full featured PTZ Keyboard that supports NDI®, NDIIHX, Visca over IP, RS422, and RS232. By harnessing BirdDog's next generation NDI® and IP technology, it's never been easier to discover, connect, and control your PTZ cameras. Featuring superior ergonomics, premium buttons and joystick, all in a beautiful form factor this is the PTZ controller you have been waiting for.

## Mix and Match protocols.

Never before has a PTZ controller been so flexible. PTZ Keyboard is the world's first PTZ controller with NDI® and NDIIHX support. Along with NDI® there is support for Visca over IP, RS422, and RS232. You can mix and match any of the supported protocols and control them from a single PTZ Keyboard.

## **Superior Ergonomics.**

Using the PTZ Keyboard is a breeze with well thought out button layout. Quickly access all the cameras on the network, and set up quick access buttons for your favourite settings like Exposure, Focus, Zoom, and movement speeds.

## 3-Way Joystick.

Effortless, one handed control of Pan, Tilt, and Zoom is possible with the 3-Way Joystick. For those who prefer a zoom rocker there is also one of those exactly where your left hand wants it.

# Soft touch buttons.

Your fingers will thank you for using the PTZ Keyboard. Soft-touch silicon buttons and easy turn dials give a premium sensation while achieving the responsiveness you expect and deserve.

## Control 255 cameras.

Designed to control up to 255 PTZ cameras on a single network, PTZ Keyboard can scale to even the most complex installations.

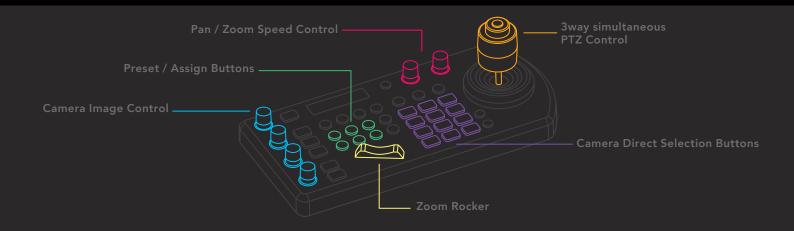
## 6 program buttons.

Set up your quick access buttons to work the way you want. Exposure, Focus, PT Speed, Zoom, Shutter Speed, Iris, White Balance, Compensation, and more, can all be programmed into the assignable buttons.

## PoE or DC.

P200 can be powered by Power over Ethernet (PoE) or from the included power adapter.





# **Product Specifications**

## **Input/Output Connectors**

Control Input/Output

**LAN:** RJ45 x1 (With PoE) 100 BASE-TX **RS232:** RJ45 x1 • **RS422:** RJ45 x2

Audio: Analog 3.5mm Mic/Headphone

## Control signal format

NDI® Control VISCA over IP

**RS 232/RS422:** Baud Rate 2400/4800/9600/19200/38400

# User Interface

Display: LED

**Speed control:** Yes, 2 knobs (pan/tilt, zoom)

Zoom rocker: Yes

Joystick zoom ring: Yes

**Programmable function buttons:** 6

## Camera Control

Maximum camera control: Max. 255 with multiple protocols including NDI/IP

Maximum serial connections

**RS232:** 7

**RS422:** 7 x 2 (A/B)

Key/Button illumination: Multi-colour LED

## Buttons

**Exposure Selection:** Yes, Button **One push White balance:** Yes, Button

Backlight control: Yes, Button

**Display status of WB, Iris, Gain, Shutter, Focus:** Yes

White balance model selection: Yes, Button

R, B, Gain: Yes, Knob Iris Adjustment: Yes, Knob Shutter Speed: Yes, Knob

Focus model selection: Yes, Button

One push auto focus: Yes, Button

Manual focus: Yes, Knob

## General

Power input: DC 12V, PoE (Power over Ethernet),

Power via RS232/RS422 port

Power: 3W

**Operating Temp:** 0 - 40 °C

**Dimensions:** 278x132x99.5

Notes

Not all features are available on all control protocols.



# NDI Wallplates for Building the Ultimate AV Experiences.

NDI Wallplates are the answer to elegant and permanent NDI installations. With two models to choose from, Dual Input or Dual Output, they have been designed to make boardroom setups a breeze. Install the Dual Output in the wall to drive content to the TV screens and install the Dual Input into the meeting table to take inputs from laptops and other devices using EDID.

## Wallplate Input.

Wallplate Input features two independent inputs, each with EDID, and is designed for connecting cameras, laptops, and other devices to convert them into the world of NDI®. Perfect for installation into boardroom tables, meeting spaces, lecterns, stages, and anywhere you have sources that need to convert to NDI®. There is also a mic input.

# Wallplate Output.

Wallplate Output features two independent outputs and is designed for driving content to screens. Output the video conferencing group to one screen and output the presentation or laptop screen share to

another screen to make for super engaging meetings. There is also a speaker output for connecting to an audio system.

## RESTful API.

BirdDog Wallplates are programmable via the free RESTful API. It's never been easier to integrate NDI® into automated and integrated AV solution no matter what the overarching system is.

## HDMI Auto Detection with EDID.

Wallplate Input has complete EDID to automatically convert your laptop's HDMI input into a supported resolution to send to Wallplate Output. This makes for a seamless user experience in boardrooms and anywhere you need to get your PC onto a TV.

## One Cable for PoE, Video, Audio.

NDI Wallplates are powered by PoE, so you only need to run a single Ethernet cable to power the units, along with carrying video and audio. One cable to rule them all.

# Extreme Speed. It's all about the silicon.

BirdDog's revolutionary custom silicon chip is what drives the best NDI® products on the planet. Only BirdDog's hardware can do line-based processing to give the fastest NDI® possible.



Wallplates are all built upon BirdDog's custom NDI chip and can be totally automated via the programmable RESTful API, and also feature PoE for single Ethernet cable functionality, Mic Input, Speaker output, interchangeable faceplates, soft glow status indicators, and a easy to use web management console to change settings.

# Wallplate Input Preliminary Specs

## Video Format

(HD) 1080p 23.98, 25, 29.97, 50, 59.94

(HD) 1080i 25, 29.97

(HD) 720p 50, 59.94

## Video Input

2 x HDMI Standard Type A connector HDMI v1.4a, RGB or YCbCr with EDID

## Audio digital

2-Channel, 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous

## Audio analog

3.5mm microphone input • 3.5mm stereo output

### Video Codec support

Realtime, ultra-low latency, full-bitrate NDI (i-frame)

## Soft glow Indicators

User definable status indicators to show

active/non-active connections.

## **Network Interface**

10/100/1000 Ethernet (RJ-45) with PoE

(Power over Ethernet)

Embedded web configuration panel for control and firmware updates

## Power

Power over Ethernet (PoE) 802.3af/at

# **Wallplate Output Preliminary Specs** Video Format

(HD) 1080p 23.98, 25, 29.97, 50, 59.94

(HD) 1080i 25, 29.97

(HD) 720p 50, 59.94

## Video Output

2 x HDMI Standard Type A connector HDMI v1.4a, RGB or YCbCr

## **Audio digital**

2-Channel, 24-bit HDMI embedded audio,

48 kHz sample rate, synchronous

### Audio analog

3.5mm microphone input • 3.5mm stereo output

# Video Codec support

Realtime, ultra-low latency, full-bitrate NDI (i-frame)

### **Soft glow Indicators**

User definable status indicators to show active/non-active connections.

## **Network Interface**

10/100/1000 Ethernet (RJ-45) with PoE

(Power over Ethernet)

Embedded web configuration panel for control and firmware updates

### Power

Power over Ethernet (PoE) 802.3af/at







# Hello Sony 1" Sensor. Meet NDI.

P4K is the real deal. A huge 1" Sony Exmor R CMOS back lit Sensor and 14.4 million effective pixels enable P4K to deliver stunning pictures in 4K resolutions with Full Bandwidth NDI®. Excellent light sensitivity makes P4K perfect for all broadcast applications, sports, remote studios, newsrooms, house of worship and any shoot where quality matters.

## Sony 1" Sensor. Size does matter.

The best images come from the best sensors and the P4K is built exclusively around the best sensor in its category. The massive 1" Sony Exmor R CMOS backlit sensor delivers truly stunning pictures in all shoot modes and frame rates whether in HD or 4K.

## Full NDI. No compromises.

In the world of NDI® there are two flavours, NDI® and NDIIHX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDIIHX is a compressed, long-GOP, H.264 variant that reaches around 12Mbits at 1080p60. P4K is a Full NDI® camera.

# BirdDog Cloud Integration. Directly in the camera.

P4K can communicate directly to BirdDog Cloud without the need for a computer running Cloud Core. Simply plug the P4K into your network and configure it through BirdDog Cloud Command to control all functions of P4K from literally anywhere in the world. Roads? Where we're going you don't need roads.

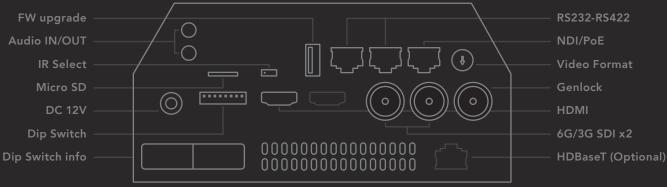
# More than just a production PTZ. Shoot true cinematic styles.

P4K is a PTZ designed for the most demanding live production shoots and supports all the traditional frame rates you would expect including 29.97 but now you can use your PTZ as a camera for TVC's, drama, and shoot 24p for that wonderful cinematic look.

## 10-bit. NDI4.

P4K is a 10-bit sensor and with NDI4 you can have an end to end 10-bit workflow. Perfect for broadcasters and other productions where bit depth matters. With 10-bit support you can record the NDI® feeds using free tools such as NewTek NDI Monitor or IsoCorder Pro.





# **Product Specifications**

Image Sensor: 1.0-type back-illumin. Exmor R CMOS sensor Number of effective pixels: 14.2 Megapixels

Picture elements: 3840 x 2160, 8.29 Megapixels Lens: Optical, 12X

Digital Zoom: Digital Zoom 12X, with SRZ feature,18X zoom at 4K, or 24X zoom at FHD

Horiz. Ang. of View Focal Length: 64.6 (Wide) - 6.1 (Tele), f=9.3 to 111.6mm, F2.8(Wide), F4.5(Tele)

Min. object distance: 80mm (W), 1000mm (T)

Aperture: F2.8 Constant (W)~(T), 16 Steps

Min. Illumination: 0.5 lx (1/30 sec, 50%, High Sensit. mode On)

VIII. illumination: 0.5 ix (1/30 sec, 50%, Filgh Sensit: mode 2.0 lx (1/30 sec, 50%, High Sensitivity mode Off) 0.067 lx (1/4 sec (1/3 sec), 50%, High Sensitivity mode On) 0.267 lx (1/4 sec (1/3 sec), 50%, High Sensitivity mode Off) Shutter Speed: 1/10000s to 1/8 (59.94/29.97)

Focus: Auto Focus(Trigger/Interval), Manual Focus(Variable

Sp.), One Push Trigger, Near Limit White Balance: AUTO, ATW, Indoor, Outdoor, One Push WB,

Manual WB, Outdoor Auto, Sodium Vapor Lamp(Fix/Auto/Outdoor Auto)

Exposure: Full Auto, Gain, Gain Limit, Shutter Priority, Iris Priority, Manual, Bright,

Slow Shutter, Max/Min Shutter Limit, Slow AE

 $\textbf{Features:} \ \mathsf{High} \ \mathsf{Sensitivity}, \ \mathsf{Defog} \ \mathsf{mode}, \ \mathsf{Backlight} \ \mathsf{Comp.},$ HLC, E-FLIP, Mirror, Flicker Control, Day/Night, Defog WDR: YES (130dB) - ND Filter: YES - Image Stabilizer: YES Color Gain: Yes (15 step) - Color Hue: Yes (15 step)

Gamma: Standard/Straight/MOVIE/STILL/CINE1/ CINE2/CINE3/CINE4/ITU709//Pattern

Gamma Level: Yes (15 step)

Black Level: Yes (97 step)

Flicker Cancel: Yes

Noise Reduction: On/Off (level 5 to 1 / Off, 6 steps), 2D/3D

# S/N Ratio: ≥50db

Pan Movement: Horiz.:±350 degrees continuous pan (Zoom Adaptive Speed Range: 0.05°~100°/S)

Tilt Movement: Vertical:+90 degrees to -30 degrees (Zoom

Preset Position/Speed: 0~5 Level Adjustable

Preset Memory: YES, (Picture Profile Preset-Preset Memory for image parameters)

Quietness: 45db

Home Position: Supported - Environmental: Indoor

4K Video Output: Main 4K HDMI Type-A (x1) 6G-SDI (x2) or Dual Link 3G-SDI(2SI only) x2

HD Video Output: Main HD HDMI Type-A (x1) - 3G-SDI x2

HDMI Color Space: YCbCr, 4:2:2 RGB, 4:4:4 NDI Video Encode: Full bandwidth NDI

NDI Version: NDI v4.0 (Firmware upgradeable)

**IP Video Stream:** UP to 4K/30 & 1080p60

Camera Control Interface: RS232/RS-422/RS485(RJ45 x2),

NDI/IP Control (RJ45), IR Remote Control

Control Protocol: NDI, VISCA, VISCA Over IP

LAN: RJ45X1(1000Mb), NDI/IP video streaming, System upgrade, PoE(IEEE802.3bt)

External Sync. Input: BNCX1,  $75\Omega$ , HD 3-level sync, SD Black

Audio I/O: Audio input x1, Audio output x1, 3.5mm audio jack Audio Output: Embedded with main HDMI, 24bit Stereo Embedded with SDI, 24bit Stereo - Embedded with NDI Tally Light: Front and Back

## Enviornmental

Mount: Ceiling mount, Wall mount, Tripod

**Operating Temperature :** -10 to +40 (°C), 32 to 104 (°F)

Operating Humidity: ≤80% Suitable for Use Power Input: 12VDC, PoE++ (IEEE 802.3bt)

**Power Consumption: 22W** Dimension: 165x196x247mm

Weight: 3.4kg





# Your entry into the world of NDI®.

Built on BirdDog's custom NDI® silicon chip, the P100 PTZ camera is your entry into the world of full NDI®. Featuring frame rates up to 1080p60, 10x optical zoom, and dual SDI and NDI® outputs, P100 gives you professional level quality, performance, and total flexibility.

3.5mm audio connectors allow P100 to work with BirdDog Comms, the world's first NDI® audio intercom platform.

# Full NDI®.

In the world of NDI® there are two flavours, NDI® and NDIIHX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDIIHX is a compressed, long-GOP, H.264 variant that reaches around 12Mbits at 1080p60. Mini hardware only uses Full YUV422 NDI®.

## **Broadcast Sensor.**

P100 is teams up a true broadcast camera sensor with the BirdDog custom NDI® chip to form a match made in silicon heaven. Champagne images on a beer budget because your productions deserve the best.

# NDI® and SDI.

With NDI® and SDI simultaneous outputs you can use the P100 is ready to go live with your full NDI® workflow, or if you are still in an old school SDI workflow you can control via RS422, RS485, and RS232. Future proof your investment by using baseband video now and move to NDI® when you are ready.

## Tiny Footprint.

P100 is incredibly small with a diameter of just 145mm / 5.7 inches making it perfect for courtrooms, boardrooms, classrooms, and any application where you need a small, yet powerful, PTZ camera.

## Extreme Speed. Optics done right.

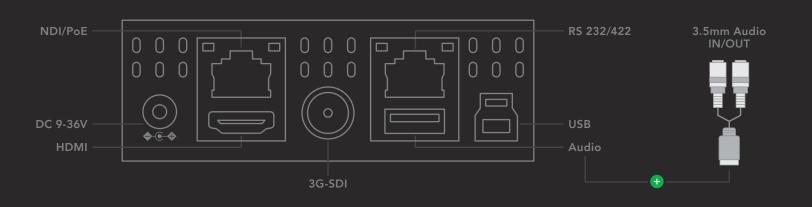
Lightning auto focus. Insanely fast zoom. Precision optics. P100 has been engineered to meet the most demanding situations whether you are in a boardroom streaming your quarterly results, producing a live event for your church, or live streaming sports.

## PTZ Keyboard. Take control.

Combine P100 with the BirdDog PTZ Keyboard and you have total control of all functions remotely. PTZ Keyboard is a full featured controller that can control up to 255 PTZ cameras and can control P100 over NDI® or by RS422 / RS232 when using in SDI mode.







## **Product Specifications**

## Camera

Image Sensor: 1/2.86" CMOS 2.2MP

Lens: 4.7 - 47mm Optical Zoom: 10x Digital Zoom: 12x

Horizontal Angle of View: 60.9° (W) – 6.43° (T)

Aperture: F1.6 (W) – F3.0 (T) Min. Illumination: 0.5 lux Shutter Speed: 1/1 – 1/30000s Focus: Auto, Push, Manual

White Balance: Auto, Indoor, Outdoor, Manual,

OPW, ATW

Exposure: Auto, Manual, Shutter/Iris Priority

**Backlight Compensation: YES** 

## Mechanical

Pan Movement:

Horizontal:  $\pm 350^{\circ}$  continuous pan (Zoom Adaptive

Speed Range: 0.05°~100°/S)

Tilt Movement:

Vertical: +90° to -30° (Zoom Adaptive Speed

Range: 0.05°~72°/S)

Preset Positions: 128

(Speed adjustable: Up to 150°/s) **Preset Speed:** 0-5 Level adjustable

Environmental: Indoor

Operating Temp.: -10 – +50 (°C)
Operating Humidity: ≤80%

Video Interface

Video Output: NDI/HDMI/3G-SDI

**Video Formats:**1080p 60, 59.94, 50, 29.97, 25 1080i 60, 59.94, 50 • 720p 60, 59.94, 50, 29.97, 25 **Audio I/O:** 3.5mm Audio In (Stereo) 3.5mm Audio Out (Stereo)

Control Interface

IP PTZ Control: NDI Control (auto configuring)
Serial PTZ Control: 1x RJ45: RS232/RS422
Serial Control Protocol: VISCA / Pelco D

Power & Dimension

Power Input: 12v DC, PoE + (IEEE 802.3at)

**Dimensions:** 145x145x154mm

Weight: 1.0Kg

Network

**Video Compression:** Full NDI – i-frame high quality low latency NDI for production **Network Protocol:** NDI – Discovery,

configuration and control

**Web Control interface:** Full control via Web/Mobile UI inc. Scene presets





# NDI® is never looked so good.

Designed for serious production the image quality of P200 is best in class. By teaming up BirdDog's custom NDI® silicon chip, a Sony CMOS Backlit Sensor, and a true Sony Image Module, P200 has lightening auto focus, incredibly sharp images, and insanely fast zoom. P200 has frame rates up to 1080p60, 30x optical zoom, and features independent, live triple outputs in SDI, HDMI and Full NDI®.

# Full NDI®.

In the world of NDI® there are two flavours, NDI® and NDIIHX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDIIHX is a compressed, long-GOP, H.264 variant that reaches around 12Mbits at 1080p60. P200 is a Full NDI® camera.

## NDI®, SDI & HDMI.

With NDI®, SDI, and HDMI simultaneous outputs the P200 is ready to go live with full NDI® today or can be use as a traditional SDI/HDMI camera. You can rest easy in the knowledge that P200 has you covered for all workflow situations.

## Sony Sensor.

The best pictures come from the best silicon. P200 is teams up a world class Sony CMOS Backlit Sensor with the BirdDog custom NDI® chip to form a match made in silicon heaven. Your productions deserve the best.

## Sony Image Module.

Lightning auto focus. Insanely fast zoom. Precision optics. The only way to achieve the best picture quality is with image module made by the world's best. P200 uses a true Sony image module to give unparalleled performance, picture quality, and responsiveness.

## 30x Optical zoom.

Never miss a shot again. 30x optical zoom brings the whole world to you. Now you can zoom in to the other end of a football game and stay locked in on the action. The incredible optical zoom function makes P200 perfect for sports such as football, baseball, hockey, ski fields, basketball, soccer, and more.

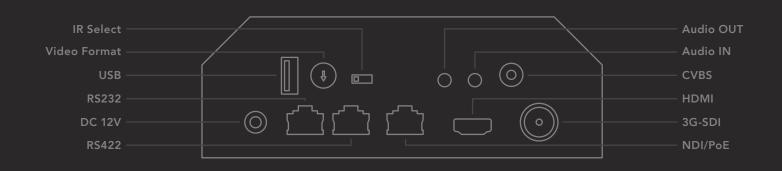
## PoE or DC.

P200 can be powered by Power over Ethernet (PoE) or from the included power adapter.









# **Product Specifications**

### Camera

Image Sensor: 1/2.8" CMOS 2.13MP

Lens: 4.3-129mm Optical Zoom: 30x Digital Zoom: 12x Horizontal Angle of View:

63.7° (W) – 2.3° (T)

**Aperture:** F1.6 (W) – F4.7 (T) **Min. Illumination:** Color: 0.01 lux (F1.6, AGC on,

1/30s, High sensitive mode), 0.1 lux (F1.6, AGC on, 1/30s, Normal sensitive mode)

Shutter Speed: 1/1 – 1/10000s Focus: Auto, Push, Manual

White Balance: Auto, Indoor, Outdoor, Manual,

OPW, ATW

Exposure: Auto, Manual, Shutter/Iris Priority

**Backlight Compensation:** YES

## Mechanical

**Pan Movement:** Horizontal: ±350° continuous pan (Zoom Adaptive Speed Range: 0.05°~100°/S)

**Tilt Movement:** Vertical: +90° to -30° (Zoom

Adaptive Speed Range: 0.05°~50°/S)

**Preset Positions:** 128

(Speed adjustable: Up to 150°/s) **Preset Speed:** 0-5 Level adjustable

Environmental: Indoor

Operating Temp.: -10 – +50 (°C)
Operating Humidity: ≤80%

Video Interface

Video Output: NDI/HDMI/3G-SDI

**Video Formats:** 1080p 60, 59.94, 50, 29.97, 25 1080i 60, 59.94, 50 • 720p 60, 59.94, 50, 29.97, 25

Audio I/O: 3.5mm Audio In (Stereo)

3.5mm Audio Out (Stereo)

## Control Interface

IP PTZ Control: NDI Control

(auto configuring)

Serial PTZ Control: 2x RJ45: RS232/RS422/RS485

**Serial Control Protocol:** VISCA / Pelco D

**Power & Dimensions** 

Power Input: 12v DC, PoE + (IEEE 802.3at)

Dimensions: 160x178x220mm

Weight: 2.0Kg

## Network

Video Compression: Full NDI – i-frame high quality low latency NDI for production Network Protocol: NDI – Discovery,

configuration and control

**Web Control interface:** Full control via Web/Mobile UI inc. Scene presets





## Weatherproof Full NDI® PTZ.

Designed for fixed outdoor installations such as sports, the IP67 rating means A200 can withstand pretty much any weather conditions. By teaming up BirdDog's custom NDI® silicon chip, a Sony CMOS backlit sensor, and a true Sony Image module A200 has lightning auto focus, incredibly sharp images, and insanely fast zoom.

A200 has frame rates up to 1080p60, 30x optical zoom, and outputs SDI and Full NDI® simultaneously.

## Full NDI®.

In the world of NDI there are two flavours, NDI® and NDIIHX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDIIHX is a compressed, long-GOP, H.264 variant that reaches around 12Mbits at 1080p60. Eyes A200 hardware only Encodes and Decodes Full YUV422 NDI®.

## NDI® & SDI.

With NDI® and SDI simultaneous outputs the A200 is ready to go live with full NDI® today or can be use as a traditional SDI camera.

## Sony Sensor.

The best pictures come from the best silicon. A200 is teams up a world class Sony CMOS Backlit Sensor with the BirdDog custom NDI® chip to form a match made in silicon heaven. Your productions deserve the best.

## Sony Image Module.

Lightning auto focus. Insanely fast zoom. Precision optics. The only way to achieve the best picture quality is with image module made by the world's best.

A200 uses a true Sony image module to give unparalleled performance, picture quality, and responsiveness.

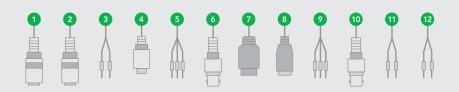
# All weather.

With an IP67 rating, external housing corrosion resistance treatment against salt spray, and an -40°C to +60°C operating temperature rating, A200 has been designed to withstand the most extreme elements on earth. It even has a rain wiper to keep water off the lens.

## 30x Optical zoom.

30x optical zoom makes A200 perfect for outdoor and indoor fixed installations for sports such as football, baseball, hockey, ski fields, basketball, soccer, and more.





1. Audio Input • 2. Audio Ouput • 3. RS422 Connector (Combine with 11) • 4. Upgrade Interface • 5. Alarm Input 6. BNC Connector: 3G-SDI video output • 7. RJ45 Ethernet Port • 8. AUX DC12V Output • 9. AC Power Connector 10. BNC Connector: Analog video output • 11. RS485/RS422 Connector (Combine with 3) • 12. Alarm Output

## **Product Specifications**

Camera

Image Sensor: 1/2.8" CMOS 2.13MP

**Lens:** 4.3-129mm Optical Zoom: 30x Digital Zoom: 12x Horizontal Angle of View:

63.7° (W) – 2.3° (T)

**Aperture:** F1.6 (W) – F4.7 (T)

Min. Illumination: Color: 0.01 lux (F1.6, AGC on, 1/30s, High sensitive mode), 0.1 lux (F1.6, AGC

on, 1/30s, Normal sensitive mode) **Shutter Speed:** 1/1 – 1/10000s Focus: Auto, Push, Manual

White Balance: Auto, Indoor, Outdoor, Manual,

OPW, ATW

Exposure: Auto, Manual, Shutter/Iris Priority

**Backlight Compensation: YES** 

## Mechanical

Pan Movement: Horizontal: ±360° continuous pan (Zoom Adaptive Speed Range: 0.01°~150°/S) **Tilt Movement:** Vertical: –90° to +15° (Zoom Adaptive Speed Range: 0.05°~90°/S)

**Preset Positions: 255** 

(Speed adjustable: Up to 150°/s)

Environmental: Outdoor/Indoor, IP67, corrosion

resistant treated housing

**Operating Temp.:** -40 – +60 (°C) **Operating Humidity:** ≤80%

Infrared: Adaptive infrared, illumination up to 100m

Video Interface

Video Output: NDI/SDI

Video Formats: 1080p 60, 59.94, 50, 29.97, 25 1080i 60, 59.94, 50 • 720p 60, 59.94, 50, 29.97, 25

Audio I/O: 3.5mm Audio In (Stereo) 3.5mm Audio Out (Stereo)

## Control Interface

IP PTZ Control: NDI Control (auto configuring) Serial PTZ Control: RS422/RS485 connector Serial Control Protocol: VISCA / Pelco D

Power & Dimensions

Power Input: AC 24v, PoE 80W Ready (BirdDog PoE 80W Injector needed, optional)

Power Consumption: Min. 15W, Max. 60W (-40°C)

Dimensions: 210x210x333mm

Weight: 5.5Kg Network

Video Compression: Full NDI – i-frame high quality low latency NDI for production Network Protocol: NDI - Discovery,

configuration and control

Web Control interface: Full control via Web/Mobile UI inc. Scene presets





## Weatherproof Full NDI® PTZ.

Designed for fixed outdoor installations such as sports, the IP67 rating and the Wind Load Durability rating equal to that of a category 4 Hurricane, which means A300 can withstand pretty much any weather conditions. By teaming up BirdDog's custom NDI® silicon chip, a Sony CMOS backlit sensor, and a true Sony Image module A300 has lightning auto focus, incredibly sharp images, and insanely fast zoom.

A300 has frame rates up to 1080p60, 30x optical zoom, and outputs SDI and Full NDI® simultaneously.

# Full NDI®.

In the world of NDI there are two flavours, NDI® and NDIIHX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDIIHX is a compressed, long-GOP, H.264 variant that reaches around 12Mbits at 1080p60.

Eyes A300 hardware only Encodes and Decodes Full YUV422 NDI®.

## NDI® & SDI.

With NDI® & SDI simultaneous outputs the A300 is ready to go live with full NDI® today or can be use as a traditional SDI camera.

## Sony Sensor.

The best pictures come from the best silicon. A300 is teams up a world class Sony CMOS Backlit Sensor with the BirdDog custom NDI® chip to form a match made in silicon heaven. Your productions deserve the best.

## Sony Image Module.

Lightning auto focus. Insanely fast zoom. Precision optics. The only way to achieve the best picture quality is with image module made by the world's best.

A300 uses a true Sony image module to give unparalleled performance, picture quality, and responsiveness.

# All weather.

With an IP67 rating, external housing corrosion resistance treatment against salt spray, and an -40°C to +60°C operating temperature rating, A300 has been designed to withstand the most extreme elements on earth. It can even work through a category 4 hurricane.

## 30x Optical zoom.

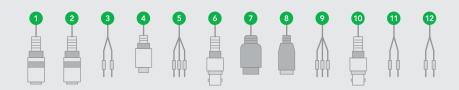
30x optical zoom makes A300 perfect for outdoor and indoor fixed installations for sports.

## Nitrogen Filled Housing.

Nitrogen filled housing eliminates fog.







Audio Input
 2. Audio Ouput
 3. RS422 Connector (Combine with 11)
 4. Upgrade Interface
 5. Alarm Input
 BNC Connector: 3G-SDI video output
 7. RJ45 Ethernet Port
 8. AUX DC12V Output
 9. AC Power Connector
 10. BNC Connector: Analog video output
 11. RS485/RS422 Connector (Combine with 3)
 12. Alarm Output

## **Product Specifications**

# Camera

Image Sensor: 1/2.8" CMOS 2.13MP

Lens: 4.3-129mm Optical Zoom: 30x Digital Zoom: 12x Horizontal Angle of View:

63.7° (W) – 2.3° (T)

**Aperture:** F1.6 (W) – F4.7 (T)

Min. Illumination: Color: 0.01 lux (F1.6, AGC on, 1/30s, High sensitive mode), 0.1 lux (F1.6, AGC

on, 1/30s, Normal sensitive mode) **Shutter Speed:** 1/1 – 1/10000s **Focus:** Auto, Push, Manual

White Balance: Auto, Indoor, Outdoor, Manual,

OPW, ATW

Exposure: Auto, Manual, Shutter/Iris Priority

**Backlight Compensation: YES** 

## Mechanical

**Pan Movement:** Horizontal:  $\pm 360^\circ$  continuous pan (Zoom Adaptive Speed Range:  $0.01^\circ \sim 80^\circ/S$ ) **Tilt Movement:** Vertical:  $+90^\circ$  to  $-30^\circ$  (Zoom

Adaptive Speed Range: 0.1°~90°/S)

Preset Positions: 255 (Speed adjust.: Up to 150°/s) Environmental: Outdoor/Indoor, IP67, corrosion resistant treated housing, wind load durability

60m/s, Nitrogen filled housing Illumination: IR Laser, up to 500m Operating Temp.: -40 - +60 (°C) Operating Humidity: ≤80%

Video Interface

Video Output: NDI/SDI

**Video Formats:** 1080p 60, 59.94, 50, 29.97, 25 1080i 60, 59.94, 50 • 720p 60, 59.94, 50, 29.97, 25

**Audio I/O:** 3.5mm Audio In (Stereo) 3.5mm Audio Out (Stereo)

## Control Interface

IP PTZ Control: NDI Control (auto configuring)
Serial PTZ Control: RS422/RS485 Connector
Serial Control Protocol: VISCA / Pelco D

Power & Dimensions

**Power Input:** AC 24v, PoE 80W Ready (BirdDog PoE 80W Injector needed, optional)

**Power Consumption:** Min. 24W, Max. 80W (-40°C. IR Laser ON)

Dimensions: 180x180x423mm

Weight: 10.2Kg

Network

Video Compression: Full NDI – i-frame high quality low latency NDI for production Network Protocol: NDI – Discovery,

configuration and control

**Web Control interface:** Full control via Web/Mobile UI inc. Scene presets





# Enter the World of NDI® Audio Intercom.

Comms Lite is the entry point to the world's only audio intercom platform that supports video preview windows. With support for four BirdDog devices, plus a director, Comms Lite is a great way to start using Audio Intercom in your live productions.

And it's free for all BirdDog hardware customers.

# Four BirdDog's. One Director.

Comms Lite supports up to four BirdDog devices and one Director licence.

## Touchscreen.

Use a Windows 10 Pro enabled touchscreen tablet for a touchscreen experience.

# Auto source detection.

Comms Lite automatically detects all your BirdDog compatible devices so you can easily select which four you want to use. Super easy to set up and use.

# 100% Free.

Simply log your details on our website on the Comms Lite page and we'll send you Comms for free.

Comms Features	Lite	Pro
Price in USD	Free	\$495
Groups		5
Max BirdDog's per group	4	6
Live video windows		12
Director Push to Talk buttons		3

Comms Features	Lite	Pro
Director to All		✓
BirdDog to Director		✓
Mute Camera Operator		✓
Shortcut to Web Console		✓
Monitor Camera Audio		✓





# World's Best NDI® Audio Intercom System.

Harnessing the true power of NDI®, BirdDog Comms Pro is the world's first audio intercom system integrating live camera feeds.

Be in total control and see every angle of your live production with live video windows from every BirdDog NDI® enabled camera source.

# 5 party lines.

With video windows available for all the BirdDog Encoded NDI® Sources, your director now has vision of all the cameras at their fingertips.

Intuitive group management ensures everyone is on the right channel.

# Push to talk.

Your camera operators can simply push your call button on any 4 Pole TRRS headset and talk to the group you have been set up in. On the directors side you simply push any of the groups to talk to that group.

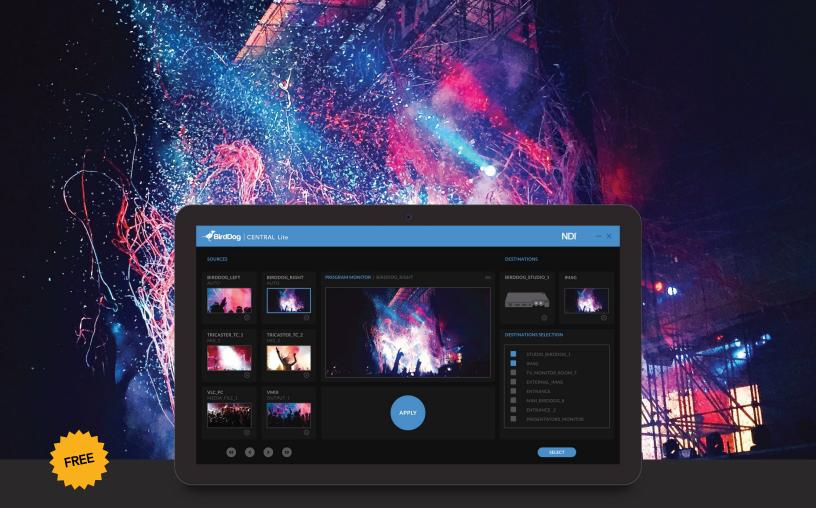
# Auto-source detection & touchscreen.

Comms Lite automatically detects all your BirdDog compatible devices so you can easily select which four you want to use. Super easy to set up and use.

Use a Windows 10 Pro enabled touchscreen tablet for a touchscreen experience.

Comms Features	Lite	Pro
Auto detect NDI Sources		
Volume sider bar		
BirdDog Push to Talk		
Director to Group		

Comms Features	Lite	Pro
BirdDog Operator Broadcast		
Mix Minus		✓
Keyboard shortcuts / hot case		
Refresh NDI Sources		✓





# Enter the world of NDI® Routing.

Central Lite is the entry point to NDI® routing on a platform that supports live video preview windows.

By teaming up Central Lite with any NDI® source, including all BirdDog hardware capable of creating NDI® sources, you can now drive your NDI® streams to any BirdDog decoder.

# 100% Free.

Simply log your details on our website and we'll send you Central Lite for free.

## Touchscreen.

Use a Windows 10 Pro enabled touchscreen tablet for a touchscreen experience.

# Three clicks.

Simply select your source, select your destination, and click apply. Now you are sending your NDI® content to a single BirdDog hardware decoder or any of your groups.

# Unlimited sources. Two destinations.

Central Lite supports unlimited Full NDI® sources and two BirdDog hardware destinations.

Central Features	Lite	Pro
Price in USD	Free	\$995
Sources	Unlimited	Unlimited
Destinations	2	Unlimited
Source Active Status		
Favourites Sources		

Central Features	Lite	Pro
Fav. Destinations		
Groups		
Number of Groups		5
Devices in Groups		Unlimited
NDI Decoder Support	BirdDog	BirdDog & NewTek NDI® Monitor





# NDI® Distribution Made Easy.

BirdDog Central is a software platform set to redefine the way we think about driving content to TV screens. By teaming up Central with any NDI® source, including all BirdDog hardware capable of creating NDI® sources, you can now drive your NDI® streams to any BirdDog Studio NDI or Mini to decode NDI® back to SDI or HDMI.

# Three clicks.

It's really that easy to get NDI® content onto your screens. Simply select your source, select your destination, and click apply. Now you are sending your NDI® content to a single BirdDog hardware decoder or any of your groups anywhere on the network.

## 5 Groups.

By grouping your BirdDog NDI® Decoders you can instantly drive content to multiple screens. Gang up 10, 20, or even hundreds of receivers and push the NDI® content to your group with just three clicks. With Central it's so easy to create the groups, simply select and assign to a group.

## Large video preview window.

With the large live video preview window you can easily monitor any NDI® source. Simply click the list button and select any NDI® stream on the network to bring that up in the Program Monitor window.

# BirdDog compatible.

Central is compatible with all BirdDog hardware generated NDI® sources including Studio NDI, Mini, and of course the ground-breaking PTZ Line. These will show up automatically in your source windows and you can then chose which destinations to send them to.

## Any NDI® source.

Central will work with any full version NDI® source on your network, whether it is a feed from a live BirdDog PTZ Camera, a BirdDog Encoder, a file playing off a computer, or the output from an NDI® compatible switcher. Any of your NDI® sources will show up in Central and you can push that to your BirdDog Studio NDI or Mini and they'll play nice and decode it back to baseband video for you.

## Touchscreen.

Use a Windows 10 Pro enabled touchscreen tablet for a touchscreen experience.



bird-dog.tv

hello@bird-dog.tv