BirdDog

2022

CATALOGUE

PRODUCTION. SIMPLIFIED.

NDI®

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.

Dan Miall
Co-Founder and CEO
dan@bird-dog.tv

Eamon Drew
Co-Founder and CMO
eamon@bird-dog.tv

PTZ RANGE

$2999 USD

BirdDog | P240

Full NDI® PTZ Cameras. Levelled up.

Building upon the NDI® PTZ category defining P200, the all new P240 introduces an updated Sony Exmor R broadcast sensor to deliver increased light sensitivity, and best in class image quality and performance. P240 offers three output options including NDI®, SDI, and HDMI for ultimate video flexibility while Balanced XLR audio adds professional audio connections. IP output options include multiple flavours of NDI® including Full NDI®, NDI®|HX2, and HX3, SRT, and h.264, whilst BirdDog Cloud 3.0 integration unlocks globally connected remote productions. Free Auto-Tracking, FreeD output for AR/VR workflows, and additional features comprising an OLED display to show the IP address, 360° mohawk tally, filter thread, safety anchor point, and carry handle make P240 the best choice for live productions.

And yes, the cameras support NDI® 5.5 natively.

Sony Exmor R Sensor. Lowlight is a highlight.

Sensors matter and the best-in-class Sony Exmor R back-illuminated image sensor housed in P240 delivers beautiful images even in challenging lighting situations. P240 performs brilliantly in changing lighting conditions of a concert with amazing lowlight performance.

Balanced XRL. With Phantom Power.

P240 features Balanced XLR audio inputs and outputs via the included breakout cable with locking connector which can also supply Phantom Power.

BirdUI. With heads up display.

P240 features the world's most comprehensive interface for PTZ cameras. System statistics including the number of active connections, current bandwidth usage, and network traffic are presented in an intuitive way to give you the information you need at a quick glance.

RUDP. Trust us, it's awesome.

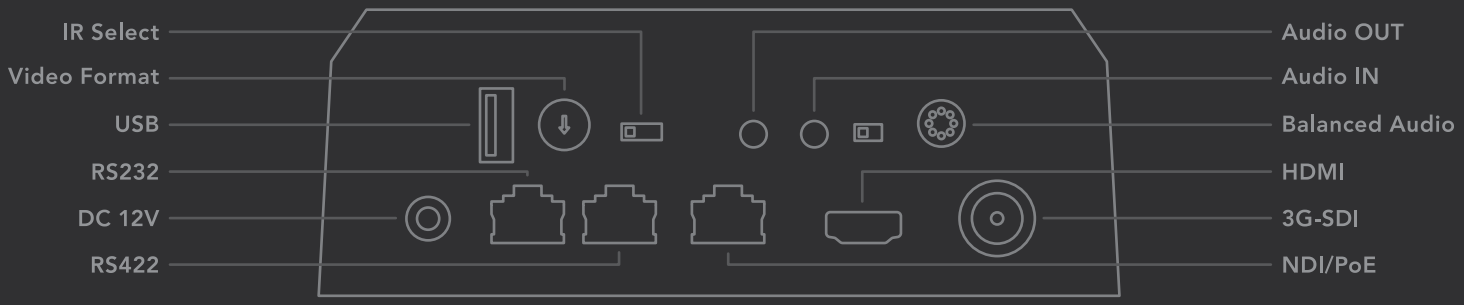
Reliable User Datagram Protocol (now you know why we say RUDP) reduces overall network load as not every packet needs to be acknowledged by every receiver. RUDP has error correction built in for smoothness and maximum reliability so you can be confident your packets are getting to where they need to go.

NDI® Genlock. Let that Sync in.

With NDI Genlock you can select an NDI® source to be the timing master to provide more predictable timing in multi camera environments.

FreeD. For free.

FreeD is a protocol for sending PTZ positioning data to AR/VR systems including Unreal Engine, Brainstorm, Vizrt's Viz Virtual Studio, and many more. P240 now supports FreeD and it's all built right into the BirdUI. FreeD function is currently in beta. Final release coming soon.



NDI® Video Scopes.

P240 can generate scopes in camera to send out as NDI®, NDI® Proxy, or both. This allows for monitoring scopes on the NDI® Proxy while sending a clean main NDI® feed simultaneously. Choose from Histogram, Waveform, Vectorscope, or RGB Parade and the position on the NDI® stream.

360° Mohawk Tally.

The innovative and totally punk mohawk tally gives a full 360° view so you'll never be caught out wondering which camera you need to be talking to. *If you gonna wear the mohawk, you stick with it. You don't just be dibby-dabbing. You make up your mind.*

Unique Numbering System.

Removable silicon numbers at the back of the P240 give additional Tally vision and allow switcher operators to easily identify cameras.

OLED Display.

The super handy OLED allows for information such as IP Address, Device Name, Stream Name, Resolution, and Frame Rate. Thanks to Jason it can also be turned off in the BirdUI.

Globally Connected. No computers needed.

By adding a BirdDog Cloud subscription, you can now access the PTZ cameras and all features from anywhere in the world. No computers needed on the camera side.

All formats supported. Well almost.

Along with Full NDI® P240 support an insane amount of formats including NDI®|HX2, NDI®|HX3, SRT, h.264 for low bandwidth requirements.

NDI®|HX2, NDI®|HX3, h.264, SRT, RTMP, RTSP, and Cloud Connect coming soon with a free firmware update.

Visit **BirdDog.tv/P240-overview** for more info.

P110
$1799
USD

P120
$1899
USD

BirdDog | P110 · P120

Full NDI® PTZ Cameras. Levelled up.

P110 and P120 set a new benchmark in format support, connection flexibility, and picture quality, with excellent lowlight performance. Housing a Sony Exmor R back-illuminated sensor and BirdDog's custom NDI® silicon, P110 & P120 offer four output options including NDI®, SDI, HDMI for live production work, and UVC USB for connecting to Zoom & Teams. Output multiple flavours of NDI® including Full NDI®, NDI®|HX2, and HX3, as well as other options including SRT, h.264, and Cloud Connect. It even supports FreeD output for AR/VR workflows. There's also an OLED display to show the IP address, 360° degree mohawk tally, filter thread, and free Auto-Tracking available.
And yes, the cameras support NDI® 5 natively.

P110. P120.
Same Same but Different.

P110 features 10x and P120 has 20x optical Zoom. Giving you ultimate flexibility to choose the perfect camera for your next production or meeting. In smaller studio and meeting spaces, P110 is your perfect companion, in larger areas with longer distance requirements, P120 adds additional reach and flexibility.

Sony Exmor R Sensor.
Lowlight is a highlight.

With a Sony Exmor R™ back-illuminated CMOS image sensor, P110 and P120 deliver beautiful images with significantly enhanced imaging characteristics including enhanced low noise sensitivity.

The BirdUI. With heads up display.

P110 & P120 feature the world's most comprehensive interface for PTZ cameras. System statistics including the number of active connections, current bandwidth usage, and network traffic are presented in an intuitive way to give you the information you need at a quick glance.

NDI® 5. Welcome to the party pal.

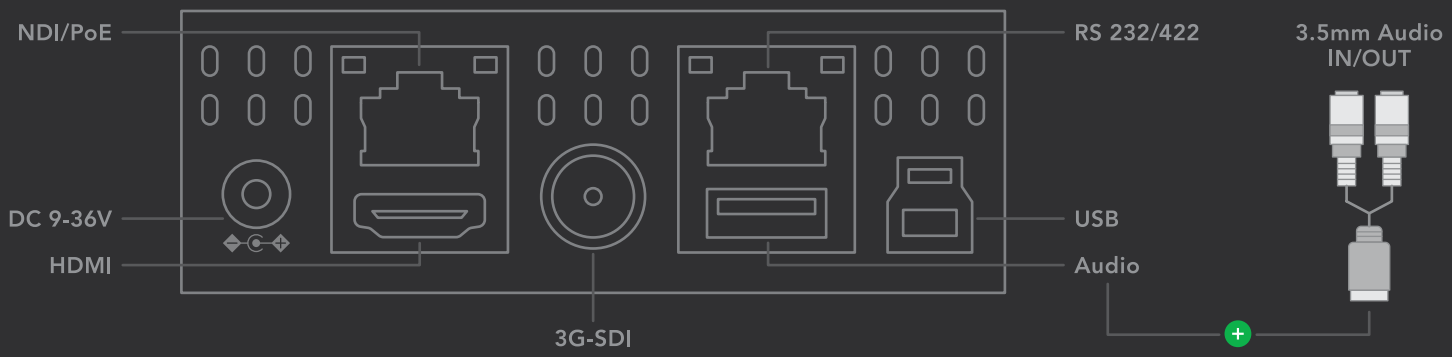
Full NDI® 5 support is built right in to P110 &P120 for maximum compatibility across all NDI® ecosystems.

RUDP. Trust us, it's awesome.

Reliable User Datagram Protocol (now you know why we say RUDP) reduces overall network load as not every packet needs to be acknowledged by every receiver. RUDP has error correction built in for smoothness and maximum reliability so you can be confident your packets are getting to where they need to go.

NDI® Genlock. Let that Sync in.

With NDI® Genlock you can select any NDI® source to be the timing master for your fleet of P110 or P120 cameras – allowing them all to operate off the same time-base, providing more predictable timing in multi camera environments. Perfect for greater continuity when recording concerts, conferences, and live productions.



FreeD. For free.

FreeD is a protocol for sending PTZ positioning data to AR/VR systems including Unreal Engine, Brainstorm, Vizrt's Viz Virtual Studio, and many more. Both P100 & P120 now support FreeD and it's all built right into the BirdUI. FreeD function is currently in beta. Final release coming soon.

NDI® Video Scopes.

All P110 & P120 can generate scopes in camera to send out as NDI®, NDI® Proxy, or both. This allows for monitoring scopes on the NDI® Proxy while sending a clean main NDI® feed simultaneously. Choose from Histogram, Waveform, Vectorscope, or RGB Parade and the position on the NDI® stream.

360° Mohawk Tally.

The innovative and totally punk mohawk tally gives a full 360° view so you'll never be caught out wondering which camera you need to be talking to. You talkin' to me?

Unique Numbering System.

Removable silicon numbers at the back of the P110 and P120 give additional Tally vision and allow switcher operators to easily identify cameras.

OLED Display.

The super handy OLED allows for information such as IP Address, Device Name, Stream Name, Resolution, and Frame Rate. Thanks to Jason it can also be turned off in the BirdUI.

Globally Connected. No computers needed.

By adding a BirdDog Cloud subscription, you can now access the PTZ cameras and all features from anywhere in the world. No computers needed on the camera side.

All formats supported. Well almost.

Along with Full NDI® P110 & P120 support an insane amount of formats including NDI®|HX2, NDI®|HX3, SRT, h.264 for low bandwidth requirements.

Visit page 28 for tech specifications.

$1295 USD

BirdDog | PF120

Unbox your new NDI® Box Cam.

Introducing PF120, the all new box camera that comes with all the amazing features you have come to expect from BirdDog cameras. Sony Exmor R back illuminated sensor, Full NDI®, with a 20x optical zoom, and a complete colour matrix all housed in a full metal enclosure that is built for life on the road. You've been asking ever so nicely, so we went ahead and boxed it up for you.

Sony Exmor R Sensor.

You deserve the best.
With a Sony Exmor R™ back-illuminated CMOS image sensor, PF120 delivers beautiful images with significantly enhanced imaging characteristics including enhanced low noise sensitivity.

Full NDI®. No compromises.

PF120 features BirdDog's unique NDI silicon to produce visually lossless, full bandwidth NDI, which is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60.

Boss Level Colour Tools.

PF120 has an incredible set of colour tools. With 64 levels of saturation and hue control over red, green, blue, cyan, yellow, and magenta, you can shade and match your PF120 cameras like a total boss. And of course, they're available in Cam Control as well.

USB for Zoom, Teams, Meet. HDMI too.

USB 2.0 UVC output allows for PF120 to connect directly to your favourite video conferencing platform giving even wider flexibility. There's also a HDMI output which is live at the same time as NDI®.

PoE or locking DC.

PF120 can be powered by Power over Ethernet (PoE 802.3af) or from the included power adapter which has a locking connector for maximum reliability.

20x Zoom & 49mm filter thread.

Adding an ND Filter or even a fisheye lens is now possible with the 49mm filter thread and PF120 also comes with a lens cap.

Built Like a Brick Outhouse.

Custom built from the ground up to withstand the demands of modern productions, PF120 is house inside a die cast chassis that is as strong as Donkey Kong™. Well almost.

Product Specifications

Camera
Image Sensor: SONY Exmor R CMOS 1/2.86″ – 2.13MP
Lens: 5.2–104mm
Optical Zoom: 20x
Digital Zoom: 16x
Field of View: 55.8° (W)~3.2° (T)
Aperture: F1.5 (W) – F3.0 (T)
Min. Illumination: 0.5 lux
Shutter Speed: 1/1 – 1/10000s
Filter Ring: Filter 49mm
Focus: Auto, Push, Manual
White Balance: Auto, Indoor, Outdoor, Manual, OPW, ATW
Exposure: Auto, Manual, Shutter/Iris Priority
Backlight Compensation: YES

Mechanical
Tally: Front
Preset Positions: 128
Preset Speed (Zoom): 0-5 Level adjustable
Environmental: Indoor
Operating Temp.: -10 – +50 (°C)
Operating Humidity: ≤80%
Noise at max. movement velocity (Zoom): Max 41dB at full speed zoom NC35
Mount: 1/4-20″ Tripod mount · 3/8″ Tripod mount

Video Interface
Video Output: NDI/HDMI/USB2.0
Video Formats:1080p 60, 59.94, 50, 29.97, 25 1080i 60, 59.94, 50 · 720p 60, 59.94, 50
Audio I/O: 3.5mm Audio In (Stereo) 3.5mm Audio Out (Stereo)(NDI, and HDMI only)

Control Interface
IP PTZ Control: NDI Control (auto config.), VISCA
Serial Control Protocol: RS232 VISCA / PELCO D
LAN: RJ45 x1 (1GbE), NDI/IP video streaming, System upgrade, PoE (IEEE 802.3af)

Power & Dimension
Power Input: 12V DC, PoE (IEEE 802.3af)
Max Power draw: 9W
Dimensions: 158x60x71mm
Weight: 666g (1lb 7.4oz)

Network
Video Compression: Full NDI – i-frame high quality low latency NDI for production
USB UVC protocol
Network Protocol: NDI – Discovery, configuration and control
Web Control interface: Full control via Web/Mobile UI inc. Scene presets

$1699 USD

BirdDog | P100

Your entry into the world of NDI®.

Built on BirdDog's custom NDI® silicon chip with a Sony CMOS Sensor, the P100 PTZ camera is your entry into the world of full NDI®. Featuring frame rates up to 1080p60, 10x optical zoom, USB 2.0, HDMI, SDI, and Full 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 NDI|HX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDI|HX is a compressed, long-GOP, H.264 variant that reaches around 12Mbits at 1080p60. Mini hardware only uses Full YUV422 NDI®.

Sony Sensor.

The best pictures come from the best silicon. P100 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.

NDI®, SDI, HDMI, & USB.

With NDI®, SDI, and HDMI simultaneous outputs the P100 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 P100 has you covered for all workflow situations. P100 can connect via USB to use as a webcam. Perfect for boardrooms and huddle rooms.

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.

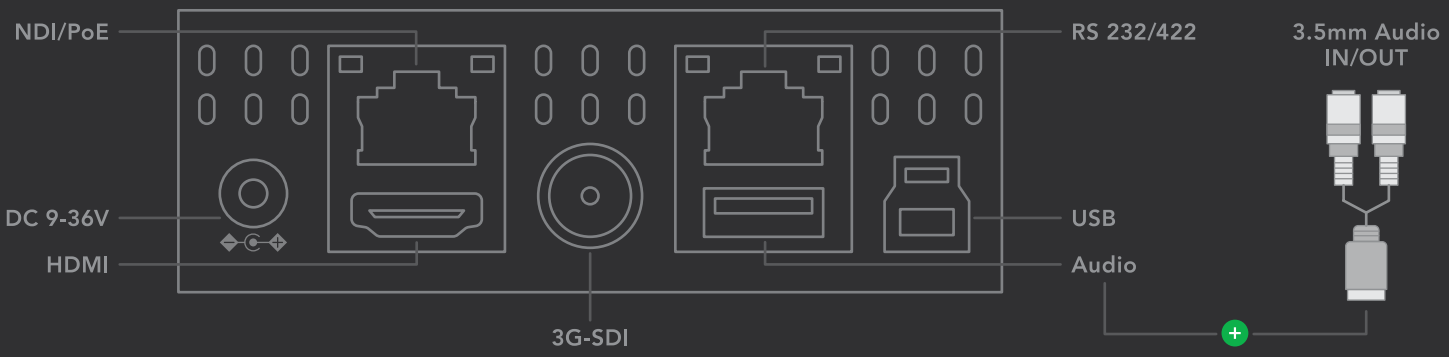
Extreme Speed. Optics done right.

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.

BOLİN



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: ±175° pan (Zoom Adaptive Speed Range: 0.05° to 100°/s)
Tilt Movement: Vertical: +90° to -30° (Zoom Adaptive Speed Range: 0.05° to 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/USB 2.0
Video Formats: 1080p 60, 59.94, 50, 29.97, 25
1080i 60, 59.94, 50 · 720p 60, 59.94, 50
Limited Resolution support over USB

Audio Interface
(via supplied USB accessory cable)
Audio I/O: 3.5mm Audio In (Stereo)
3.5mm Audio Out (Stereo)

Control Interface
IP PTZ Control: NDI Control (auto config.), VISCA IP
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

$1995 USD

BirdDog | P200

NDI® has 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 NDI|HX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDI|HX 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.

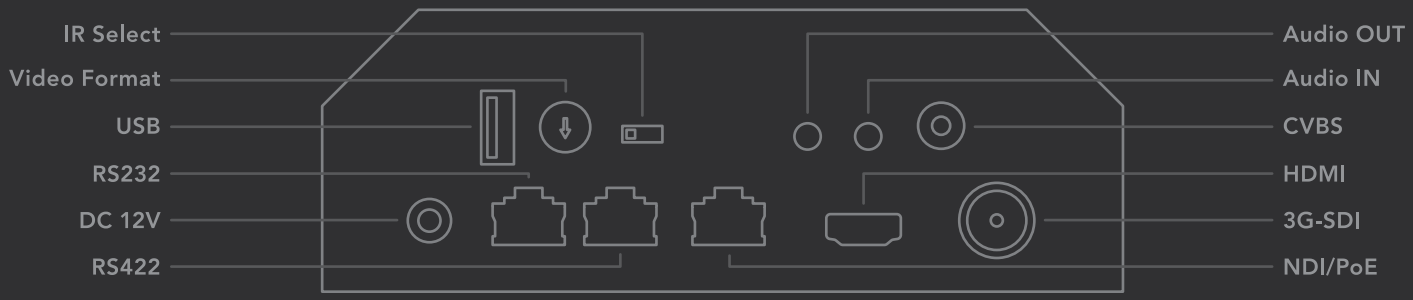
30x Optical zoom.

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.

BOLİN



Product Specifications

Camera
Image Sensor: 1/2.8" CMOS 2.13MP
Lens: 4.3-129mm
Optical Zoom: 30x
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: ±175° pan (Zoom Adaptive Speed Range: 0.05° to 100°/s)
Tilt Movement: Vertical: +90° to -30° (Zoom Adaptive Speed Range: 0.05° to 50°/s)
Preset Positions: 128
(Speed adjustable: Up to 150°/s)
Preset Speed: 0-5 Level adjustable
Environmental: Indoor
Operating Temperature: -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
Audio I/O: 3.5mm Audio In (Stereo)
3.5mm Audio Out (Stereo)

Control Interface
IP PTZ Control: NDI Control (auto configuring), VISCA IP
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 includes Scene Presets

P400

$4195 USD

BirdDog | P400

Stunning 4K NDI® with incredible colour tools.

P400 features stunning 4K resolution NDI and allows chroma subsampling in your choice of 4:2:0 or 4:2:2. Wow.
P400 teams up BirdDog's custom NDI® silicon chip, a 4K Sony CMOS Backlit sensor, and a true Sony Image Module. Double Wow.
P400 includes professional-level colour tools including Colour Matrix control, Black level, Gamma including 512 pre-set gamma positions. Triple Wow.

4:2:2 4K. Numbers matter.

P400 debuts the world's first 4K NDI with chroma subsampling at 4:2:2 which can be decoded natively in hardware by BirdDog's 4K Family of NDI Encoders and Decoders. If decoding with a 4:2:0 receiver the stream will automatically serve 4:2:0 and this is what will be decoded. Think of it as an automatic and virtual handshake.

Cam Control. Shade like a pro, bro.

BirdDog Cam Control allows full access to the entire colour matrix, black levels, and even the gamma to be able to shade your P400's like a total pro. Right click to view camera full screen on a secondary monitor to really dial in the look you want and then copy the settings to colour match cameras in seconds. Yes that's right. Colour match cameras in seconds.

Incredible low light performance.

In low light conditions the camera automatically switches from day to night mode, removing the IR-cut filter to boost sensitivity for clear pictures in near-darkness.

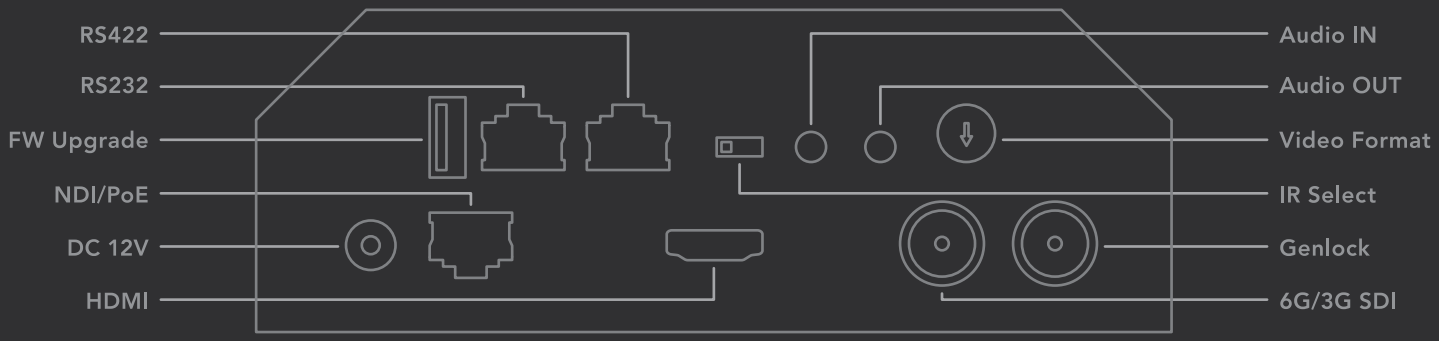
Triple output. NDI®, 6G-SDI & HDMI.

With NDI®, 6G-SDI, and HDMI simultaneous outputs, the P400 is ready to go live with your full NDI® workflow today or if you are still in an old school SDI workflow you can use as an SDI camera and ease your way into the world of NDI® when you are ready. We'll be here to welcome you into the future with open arms.

Superfine Robotics.

P400's robotics are super precise and super sensitive. Wind down the panning and tilting speeds to create super professional shots that are dramatic, or crank up the speeds for high action sports to allow you to follow the movements.
The 20x optical zoom offers a bright F2.0 aperture with a super smooth and fast zoom. Transition from wide to tele and recall preset positions really quickly.

BOLİN



Product Specifications

Camera

Image Sensor: 1/2.5 inch CMOS 8.5MP
Lens: 4.4-88.4mm - Optical Zoom: 20x
SRZ (Super Resolution Zoom): 30X in 4K, 40X in FHD
Horizontal Angle of View: 70.2°(W) – 4.1°(T)
Aperture: F2.0 – F3.8
Min. Illumination: Color: 0.4lux (1/30s, 50%, High Sensitivity mode On), 1.6lux (1/30s, 50%, High Sensitivity mode Off), 0.06lux(1/4s(1/3s),50%, High Sensitivity mode On)
Shutter Speed: 1/1 – 1/10000s
Features: Defog (Auto, 3 levels), Visibility enhancer, Black & White, E-Flip, Mirror, Colour enhancement, Black level, gamma, Sat/Hue Adjust, HLC, Colour Bar
WDR: YES (130dB) · Image Stabilizer: YES
Color Gain: Yes (16 step) – Color Hue: Yes (16 step)
Gamma: Standard, Straight, 512 pattern
Gamma Level: Yes (72 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
Focus: Auto Focus (Trigger/Interval), Manual Focus (Variable Speed), 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
Backlight Compensation: YES

Mechanical

Pan Movement: Horizontal: ±175° pan (Zoom Adaptive Speed Range: 0.05° to 100°/s)
Tilt Movement: Vertical:+90° to -30° (Zoom Adaptive Speed Range: 0.05° to 50°/s)
Preset 128 Speed adjustable: Up to 150°/s
Environmental: Indoor
Operating Temperature: -10 – +40 (°C)
Operating Humidity: ≤80%

Video Interface

Video Output: NDI/HDMI/6G-SDI
4K Video Formats: 4Kp 30, 29.97, 25, 23.98, 24,
HD Video Formats: 1080p 60, 59.94, 50, 29.97, 25
1080i 60, 59.94, 50 · 720p 60, 59.94, 50
Audio I/O (Mono): 3.5mm Audio In / 3.5mm Audio Out

Control Interface

IP PTZ Control: NDI Control (auto config.), VISCA IP
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: 142x159x217mm · Weight: 2.7Kg

Network

Video Compression: Full NDI – i-frame high quality low latency NDI for production
Network Protocol: NDI | Discovery, config. and control
Web Control interface: Full control via Web/Mobile UI includes Scene Presets
Optional Mounts: Ceiling mount, Wall mount

BirdDog | P4K

THE HIGHEST QUALITY FULL NDI®
CAMERA ON THE PLANET.

$8395
USD

BirdDog | P4K

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 NDI|HX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDI|HX is a compressed, long-GOP, H.264 variant that reaches around 12Mbits at 1080p60. P4K is a Full NDI® camera.

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.

Advanced Colour Controls.

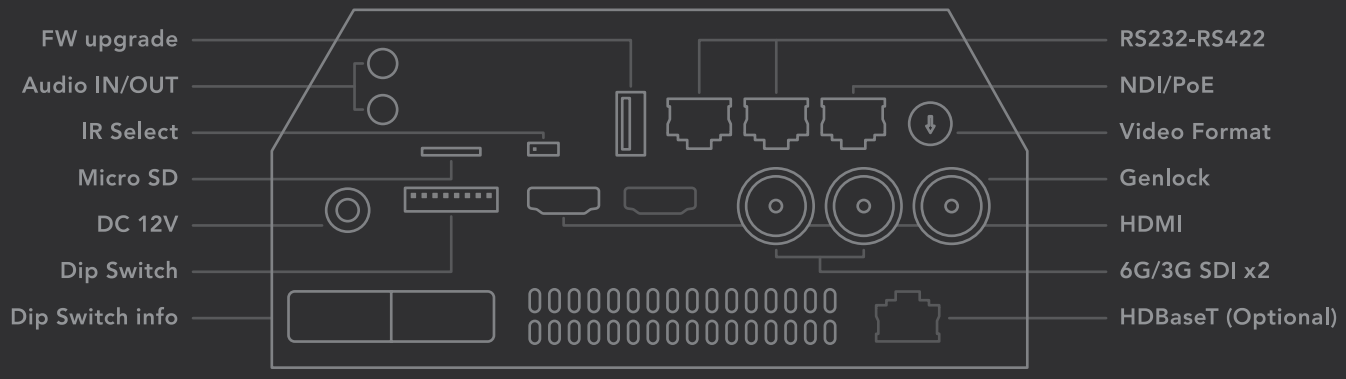
With user selectable gamma settings and black gamma adjustment, fine tuning your shot has never been more flexible in a PTZ. Sony's legendary sensor technology sets the tone for your next quality production.

Superfine Robotics.

Precise control at your fingers.
P4K's robotics are super precise and super sensitive. Wind down the panning and tilting speeds to create super professional shots that are dramatic, or crank up the speeds for high action sports to allow you to follow the movements.

360 degree Tally lights.

The front, rear, and side Tally lights combine to create a 360 degree Tally light. Now everyone on the production set can see which camera is live to air.



Product Specifications

Camera
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 lux (1/30 sec, 50%, Hi-Sen. mode On)
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
Features: High Sensitivity, Defog mode, Backlight 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

Mechanical
Pan Movement: Horiz.: ±175° pan (Zoom Adaptive Speed Range: 0.05° to 100°/s)
Tilt Movement: Vertical:+90° to -30° (Zoom Adaptive Speed Range: 0.05° to 50°/s)
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

Interface
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
IP Video Stream: Up to 4K/30 & 1080p60
Camera Control Interface: RS232/RS422/RS485(RJ45 x2),
NDI/IP Control (RJ45), IR Remote Control
Control Protocol: NDI, VISCA, VISCA IP
LAN: RJ45 x1(1GbE), NDI/IP video streaming, System upgrade, PoE+ (IEEE 802.3at)
Analogue Audio I/O
3.5mm Audio In (Mono), 3.5mm Audio Out (Mono)
Audio Output:
Embedded with main HDMI, 24bit Stereo
Embedded with SDI, 24bit Stereo. Embedded with NDI
360° Tally: Front, Side, Back

Environmental
Optional Mounts: Ceiling mount, Wall mount, Tripod
Operating Temperature : -10 to +40 (°C), 32 to 104 (°F)
Operating Humidity: ≤80% Suitable for Use
Power Input: 12V DC, PoE+ (IEEE 802.3at)
Power Consumption: 22W
Dimension: 165x196x247mm
Weight: 3.4Kg

$5599 USD

BirdDog | A200 · GEN 2

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 NDI|HX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDI|HX 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.

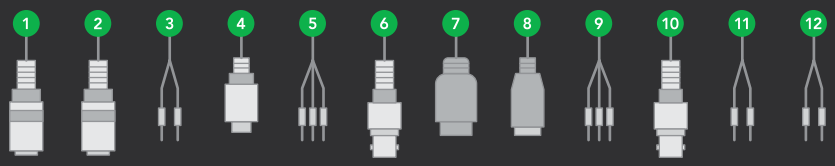
All weather.

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.

BOLİN



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° to 150°/s)
Tilt Movement: Vertical: –90° to +15° (Zoom Adaptive Speed Range: 0.05° to 90°/s)
Preset Positions: 255
(Speed adjustable: Up to 150°/s)
Environmental: Outdoor/Indoor, IP67, corrosion resistant treated housing
Operating Temperature: -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
Audio I/O: 3.5mm Audio In (Stereo)
3.5mm Audio Out (Stereo)

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

Power & Dimensions
Power Input: AC 24V, PoE 97W
(BirdDog PoE 97W Injector, optional)
Power Consumption: Min: 22W; Max: 51.84W
(Fully loaded operation)
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 includes Scene Presets

$7999 USD

BirdDog | A300 · GEN 2

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 NDI|HX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDI|HX 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.

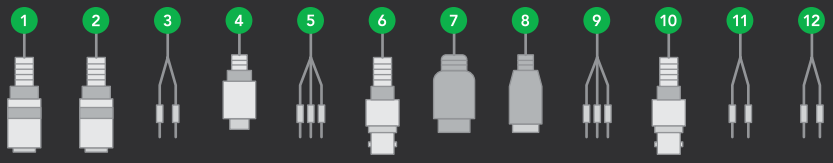
30x Optical zoom.

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

Nitrogen Filled Housing.

Nitrogen filled housing eliminates fog.

BOLİN



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 Adap. Speed Range: 0.01° to 80°/s)
Tilt Movement: Vertical: +90° to -30° (Zoom Adaptive Speed Range: 0.1° to 90°/s)
Preset Positions: 255
(Speed adjustable: 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 Temperature: -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
Audio I/O: 3.5mm Audio In (Stereo)
3.5mm Audio Out (Stereo)

Control Interface
IP PTZ Control: NDI Control (auto config.), VISCA IP
Serial PTZ Control: RS422/RS485 connector
Serial Control Protocol: VISCA / PELCO D

Power & Dimensions
Power Input: AC 24V, PoE 97W
(BirdDog PoE 97W Injector, optional)
Power Consumption: Min: 36W; Max: 76.68W
(Fully loaded operation with heater and 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 includes Scene Presets

$1699 USD

BirdDog | PTZ KEYBOARD

World's first NDI® PTZ Controller.

BirdDog PTZ Keyboard is a full featured PTZ Keyboard that supports NDI®, NDI|HX, 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.

Router Output.

With Router Output you always know which PTZ Camera you are controlling. Simply hook up the free NDI Studio Monitor, and PTZ Keyboard will automatically update the Router Output to the camera you are controlling.

Universal control. 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 NDI|HX support. Along with NDI® there is support for Visca over IP, RS422, and RS232. You can mix and match cameras from any of the supported protocols and control them all from a single PTZ Keyboard.

Auto Joystick Calibration.

When you turn on the PTZ Keyboard you simply need to move the Joystick up, down, left, and right to the maximum and the Joystick will be calibrated. The Joystick continues to automatically calibrate for the entire session.

3-Way Joystick. Pan, Tilt, Zoom.

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.

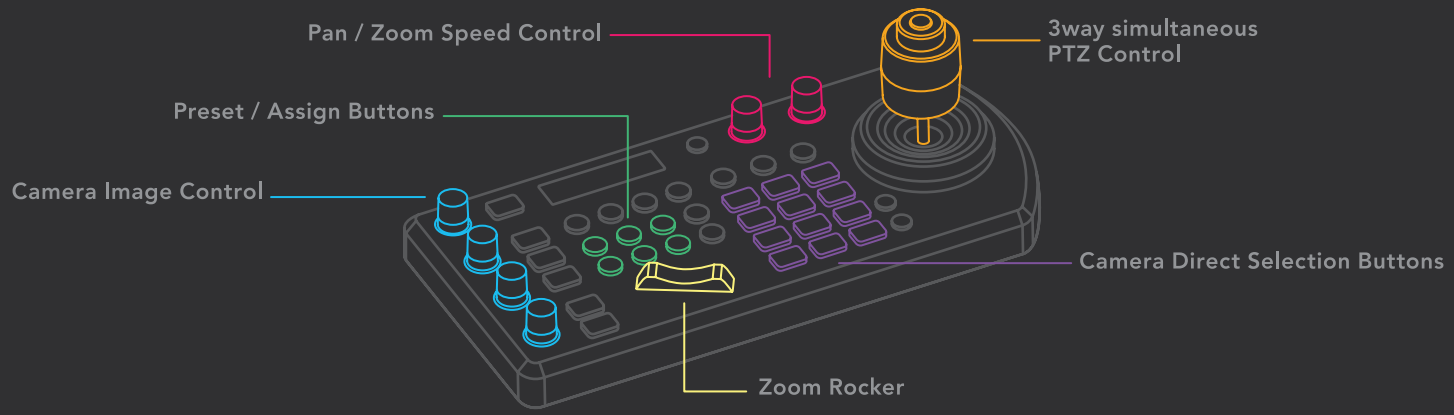
Soft touch buttons. Treat your fingers.

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.

6 program buttons. With API control.

Set up your quick access buttons to work the way you want. Chose from the list of functions from the PTZ Keyboard, or use JSON, HTTP, and API commands to program hot keys for your favourite NDI software applications. Yes, you can now use your PTZ Keyboard as an NDI switcher panel.

BOLİN



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
(Sony VISCA Compatible)
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

Note:
Not all features are available on all control protocols.

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	No	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 sensitive mode), 0.1 lux (F1.6, AGC on, 1/30s, Normal sensitive mode)		
Shutter Speed	1/1 – 1/30000s	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: ±175° *		Horizontal: 360° continuous pan *	
Tilt Movement	Vertical: +90° to -30° *		Vertical: -90° to +15° *	Vertical: +90° to -30° *
Preset Positions	128 (Speed adjustable: Up to 150°/s)		255 (Speed adjustable: Up to 150°/s)	
Preset Speed	-		-	
Environmental	0–5 Level adjustable Indoor		Out/Indoor, IP67, corrosion resistant treated housing	Out/Indoor, IP67, corrosion resistant treated housing, wind load durability 60m/s, Nitrogen filled housing
Operating Temperature	-10 – +50 (°C)		-40 – +60 (°C)	
Operating Humidity	≤80%			
Infrared	-		Adaptive, illum. up to 100m	IR Laser, up to 500m
VIDEO INTERFACE				
Video Output	NDI/HDMI/SDI/USB	NDI/HDMI/SDI	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), VISCA IP			
Serial PTZ Control	2x RJ45: RS232/RS422/RS485			
Serial Control Protocol	VISCA / PELCO D			
POWER & DIMENSIONS				
Power Input	12V DC, PoE+ (IEEE 802.3at)	12V DC, PoE+ (IEEE 802.3at)	AC 24V, PoE 97W (BirdDog PoE 97W Injector, optional)	
Power Consumption	Min. 11.1W Max. 15.2W	Min. 15.2W Max. 19.7W	Min. 22W Max. 51.84W	Min. 36W Max. 76.68W (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			

* Check Zoom Adaptive Speed Range on the single camera page.

Feature/Specification	P400	P4K
CAMERA		
Image Sensor	1/2.5 inch CMOS 8.5MP	1.0-type back-illuminated Exmor R CMOS sensor 14.2MP
Lens	4.4-88.4mm	Zeiss Vario-Sonnar T lens
Optical Zoom	20x	12x
Digital Zoom	SRZ (Super Revolution Zoom) 30x in 4K, 40x in Full HD	12x, with SRZ feat.,18x zoom at 4K, or 24x zoom at FHD
Horizontal Angle of View	70.2° (W) – 4.1° (T)	64.6° (Wide) – 6.1° (Tele), f=9.3 to 111.6mm, F2.8(Wide),
Aperture	F2.0 (W) – F3.8 (T)	F4.5(Tele)
Min. Illumination	Color: 0.4lux (1/30s, 50%, High Sensitivity mode On), 1.6lux (1/30s, 50%, High Sensitivity mode Off), 0.06lux(1/4s(1/3s),50%, High Sensitivity mode On)	F2.8 Constant (W)~(T), 16 Steps 0.5 lx (1/30 sec, 50%, High Sensitivity mode On) 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	1/1 – 1/10000s	1/10000s to 1/8 (59.94/29.97)
Focus	Auto Focus (Trigger/Interval), Manual Focus (Variable Speed), One Push Trigger, Near Limit	
White Balance	AUTO, ATW, Indoor, Outdoor, One Push WB, Manual WB, Outdoor Auto, Sodium Vapor Lamp (Fix/Outdoor/Auto)	
Exposure	Full Auto, Gain, Gain Limit, Shutter Priority, Iris Priority, Manual, Bright, Slow Shutter, Shutter Limit, Slow AE	
Features	High Sensitivity, Backlight Compensation, HLC, E-FLIP, Mirror, Day/Night, Visibility Enhancer, Black Level, WDR, ND Filter, Image Stabiliser, Color Gain, Color Hue, Gamma, Gamma Level, Flicker Cancel, Noise Reduction	
S/N Ratio	≥50dB	
MECHANICAL		
Pan Movement		
Tilt Movement	Vertical: +90° to -30° (Zoom Adaptive Speed Range: 0.05°~50°/S)	
Preset Positions	128 (Speed adjustable: Up to 150°/S, 6 presets on remote controller)	
Preset Speed	0~5 Level Adjustable	
Preset Memory	YES, (Picture Profile Preset-Preset Memory for image parameters)	
Environmental	Indoor	
Quietness	49dB	
Home Position	YES	
Operating Temperature	-10 to +40 (°C)	
Operating Humidity	≤80%	
INTERFACE		
Video Output	NDI/HDMI/6G-SDI	4K: Main 4K HDMI Type-A (x1) 6G-SDI (x2) or Dual Link 3G-SDI(2SI only) x2. HD: Main HD HDMI Type-A (x1) 3G-SDI x2
4K Video Formats	2160p 30, 29.97, 25, 23.98, 24	
HD Video Formats	1080p 60, 59.94, 50, 30, 29.97, 25 • 1080i 60, 59.94, 50 • 720p 60, 59.94, 50	
HDMI Color Space	YCbCr, 4:2:2 RGB, 4:4:4	
NDI Video Encode	Full bandwidth NDI	
IP Video Stream	Up to 4K/30 and 1080p60	
Camera Control Interface	RS232/RS-422/RS485(RJ45 x2), NDI/IP Control (RJ45), IR Remote Control	
Control Protocol	NDI, VISCA, VISCA IP	
LAN	RJ45X1(1000Mb), NDI/IP video streaming, System upgrade, PoE+ (IEEE 802.3at)	
Audio I/O	3.5mm Audio In (Mono) - 3.5mm Audio Out (Mono)	
Tally Light	Front	Front and Back
POWER & DIMENSIONS		
Power Input	12V DC, PoE+ (IEEE 802.3at)	
Power Consumption	Min. 23.2W - Max. 26.8W	Min. 22.4W - Max. 28W
Dimensions	142x159x217mm	165x196x247mm
Weight	2.7Kg	3.4Kg
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	

Feature/Specification	P110	P120
IMAGING		
Image Sensor	1 / 2.86 inch CMOS 2.2MP	
Lens	4.7–47mm	5.2–104mm
Optical Zoom	10x	20x
Digital Zoom	12x	16x
Horizontal Angle of View	60.9° (W) ~ 6.43° (T)	55.8° (W) ~ 3.2° (T)
Aperture	F1.6 (W) – F3.0 (T)	F1.5 (W) – F3.0 (T)
Min. Illumination	Color: 0.5 lux	
Shutter Speed	1/1 – 1/30000s	1/1 – 1/10000s
Filter Ring	49mm	
Focus	Auto, Push, Manual	
White Balance	Auto, Indoor, Outdoor, Manual, OPW, ATW, Temp (Kelvin)	
Exposure	Auto, Manual, Shutter/Iris Priority	
Backlight Compensation	Yes	
MECHANICAL		
Pan Movement	Horizontal: ±175° (Zoom Adaptive Speed Range: 0.5°~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 Temperature	-10 – +50 (°C)	
Operating Humidity	≤80%	
Operating Noise	Max 41dB at full speed pan	
Tally Display	Bi Colour Full overhead and rear (w/included 0-9 number silicon plugs)	
ONBOARD DISPLAY		
Onboard OLED Display	5-line, RGB Color, Graphical	
VIDEO INTERFACE		
Video Output	NDI/SDI/HDMI/USB2.0(UVC)	
Video Format Support	1080p 60, 59.94, 50, 29.97, 25 - 1080i 60, 59.94, 50 - 720p 60, 59.94, 50	
AUDIO I/O (via USB breakout cable) Limited Resolution support over USB	3.5mm Audio In (Stereo)- 3.5mm Audio Out (Stereo) - (NDI, SDI, and HDMI only)	
CONTROL INTERFACE		
IP Control	NDI Control (auto configuring), VISCA IP	
Serial PTZ control	1x RJ45: RS232/RS422	
Serial Control Protocol	VISCA / PELCO D	
Software Control	Included Cam Control (Win 10.+) Realtime subject motion tracking control (AI)	
POWER & DIMENSIONS		
Power Input	12v DC, PoE+ (IEEE 802.3at)	
Dimensions	145x152x171mm	
Weight	1.0Kg	
NETWORK		
Video Compression	Full NDI – i-frame high quality low latency NDI for production h.264 long-GOP (Limited resolution support)	
Network Protocol Support	NDI – Discovery, configuration and control NDI | HX2 SRT Cloud Connect RTSP RTMP	
Web Control Interface	Full control via Web/Mobixle UI including Scene presets	

CONVERTERS

CORE 5
$1295
USD

CORE 7
$1495
USD

BirdDog | CORE

Encode. Decode. Stream. Monitor. Record.

Core 5 and Core 7 live at the very heart of your live production and offers format flexibility never seen before. Convert any SDI or HDMI signal live into your choice of NDI®, NDI®|HX2, NDI®|HX3, SRT, H.264, HEVC/H.265, RTMP, or RTSP in up to 4Kp60. Record files to the USB-C port. Add a Cloud Connect licence and you have a globally connected camera with super low latency. The High Bright screens are viewable in direct sunlight and the video analysis tools include vector scopes, Waveform, RGB parade, and more, while the SFP+ port allows for a direct 10GbE connection over copper or Fiber for ultra-long runs.

The Ultimate Camera Sidekick.

Core 5 and Core 7 are a multi-purpose tool for every camera. Use as a video monitor, use as a cross converter, a video analysis tool, an NDI encoder, an encoder to streaming formats like H.264 or HEVC. It's kind of like having Robin, Chewbacca, Goose, and Milhouse all in one.

Same Same but different.

Core 5 and Core 7 are almost identical twins with the only differences being physical. Core 5 features a gorgeous 5.5" screen while Core 7 has (drum roll please) a 7" screen. Core 7 additionally features an etherCON connection for added connection dependability, an additional bi-directional 12G SDI connector, and an aircraft-grade aluminium chassis.

Format support. It's a long list.

Core supports an insane amount of video output formats including: The world's highest quality NDI®, NDI®|HX3, NDI®|HX2, SRT, BirdDog Cloud Connect, RTMP, H.264, HEVC, HEVC Main 10, HEVC 4:2:2 Main 10.

Buttons. Keep your screen clean.

Core 5 and Core 7 feature buttons to access the features so you can keep your screen clean. It also means you can drive them via muscle memory without taking your eyes off the road. Change settings, not your focus.

High Bright Screens.

Daylight viewable high bright screens give full confidence monitoring even in direct sunlight.

USB Recording & NDI® Encoding.

Connect any qualified USB-C media and record native NDI® files for post editing, or send live ultra low latency high quality video over Ethernet.

Cloud Connect your Core.

By adding a BirdDog Cloud subscription, you can access Core and the incoming video feeds from anywhere in the world to view the camera feed with no computers needed.

SFP+.

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

COREtex.

Core has an unrivalled NDI hardware processing engine, delivering multiple configuration options for maximum flexibility.

	SDI 1	SDI 2	SDI 3 (CORE 7 ONLY)	HDMI IN	HDMI OUT
DUAL SDI	IN	IN	LOOP	✘	✘
DUAL SDI + HDMI	IN	✘	LOOP	IN	LOOP
DUAL DECODE	OUT	OUT	OUT	✘	OUT

Huge Tally Light.

The huge Tally light on the reverse side to the monitor, you know facing the talent, requires zero configuration.

Heads up display.

System statistics including the number of active connections, current bandwidth usage, and network traffic are presented to monitor the device and network without having to login.

RUDP. Trust us, it's awesome.

Reliable User Datagram Protocol (now you know why we say RUDP) reduces overall network load as not every packet needs to be acknowledged by every receiver. RUDP has error correction built in for smoothness and maximum reliability so you can be confident your packets are getting to where they need to go.

NDI® Genlock. Let that Sync in.

With NDI® Genlock you can select any NDI® source to be the timing master for your fleet of P110 or P120 cameras – allowing them all to operate off the same time-base, providing more predictable timing in multi camera environments. Perfect for greater continuity when recording concerts, conferences, and live productions.

NDI® Video Scopes.

All Core can generate scopes to send out as NDI®, NDI® Proxy, or both. This allows for monitoring scopes on the NDI® Proxy while sending a clean main NDI® feed simultaneously. Choose from Histogram, Waveform, Vectorscope, or RGB Parade and the position on the NDI® stream.

$2495 USD

BirdDog | OG4

The World's First NDI® openGear card.

BirdDog OG4 is the world's first NDI® openGear card. OG4 features four independently configurable 12G SDI inputs and outputs. Full Dashboard support is included along with SFP+ port for 10GbE connectivity. A true OG.

openGear. United We Stand.

openGear is an open-architecture and modular 2RU rack frame system that allows for OG's from various manufacturers to live together in the same frame in total harmony.

Professional Cooling. Professional Power.

openGear frames include integrated cooling fans to provide maximum cooling for all cards and can be configured with dual, redundant power supplies for maximum reliability and uptime.

Dashboard.

BirdDog OG4 offers full support for Dashboard, the freely available unified control software for MacOS, Windows, and Linux.

SFP+ for 10GbE & long range.

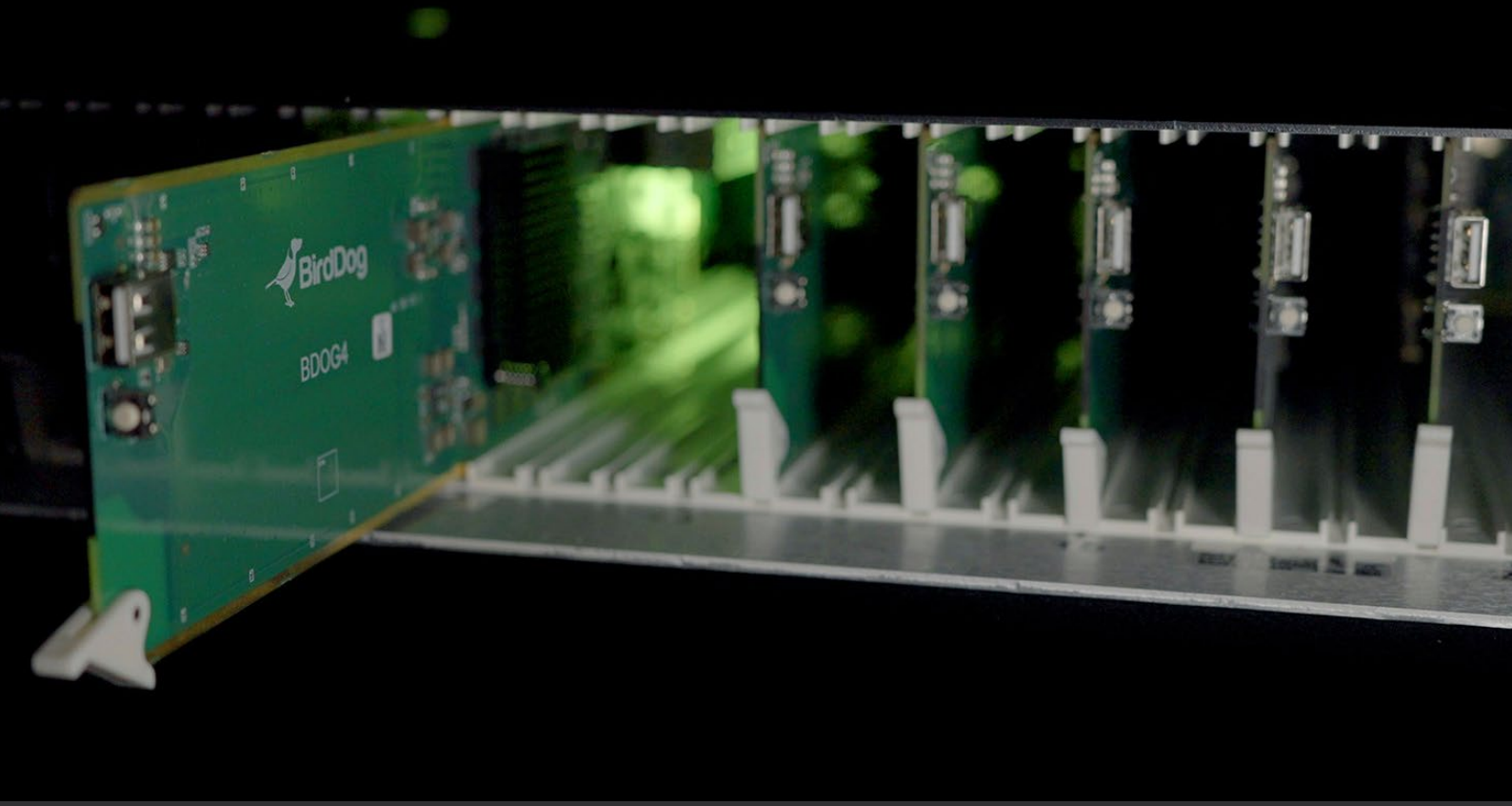
Industry standard SFP+ connection allows for short, medium, and long-range connections over fiber and supports Ethernet protocols from 1GbE to 10GbE.

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.OG4 supports up to 4x channels of 4Kp60 Encode and 2 channels of 4Kp60 Decode. Of course, OG4 supports 4 channels of 1080p60 decode.

Independent Channel Control.

Each channel has independent control of frame rates and resolutions so you can mix and match. Set channel 1 to 4Kp60 and channel 2 to 1080i50. Firmware supports all Encode or all Decode.



Product Specifications

Supported video formats:
UHD 3840x2160p
23.98, 24, 25, 29.97, 30, 50, 59.94, 60
HD 1920x1080p
23.98, 24, 25, 29.97, 30, 50, 59.94, 60
HD 1920x1080i
50, 59.94, 60
HD 1280x720p
50, 59.94, 60

Video I/O Connectivity
12G SDI Selectable Input/Output*
Full-size x 4

Audio Input
SDI
2-ch Per SDI connector

Audio Output
SDI
2-ch Per SDI connector

Video Codec Support
NDI® (Full Bandwidth i-frame compression)
Max. 4ch UHD 60p

Network Streaming Transport Support
NDI®
Full NDI®

Network Connectivity
OpenGEAR Network Port (Integrated in Chassis backplane)
1 x 1Gbps

SFP+ Network Port
1 x 10Gbps optional module, Optical or Copper 10GbE

Dimensions
33.5cm x 7.5cm x 2.4cm (Processor card only)

Control Support
System management and control
On-device WebUI, Published RESTful API, Q-Sys plugin, Crestron, Zoom, openGear Dashboard control system

Health monitoring
On-device WebUI

*4-Ch. 12G SDI encode support, 2-Ch. 12G/4-Ch 1.5/3/6G SDI decode support.

$529 USD

BirdDog | MINI

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 NDI|HX. NDI® is a variable bit rate, I-Frame codec that is reaches around 140Mbits at 1080p60 and is visually lossless. NDI|HX 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.

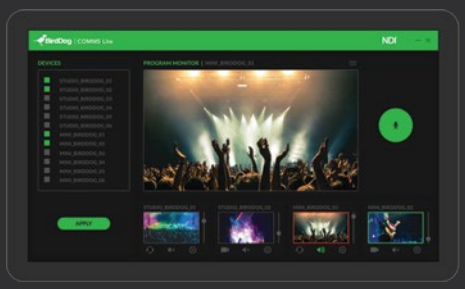
Aircraft Grade Aluminium case.

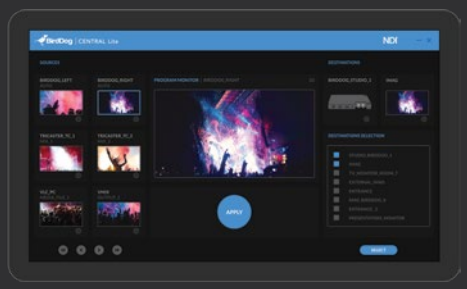
It's easier to imagine Mini on display within the Louvre in Paris than on a live video production set, but that is where the deception of the senses first takes place. The perfectly finished casing is actually aircraft grade aluminium and designed to withstand the rigours of life on the road.

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 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 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/at

$429ea USD

BirdDog | FLEX 4K FAMILY

The Smallest 4K NDI® on the Planet.

4K NDI® in an incredibly small package. Flex delivers everything you have come to expect from BirdDog's one cable solution including Tally, Audio Intercom, Video, Audio, PTZ Control, and Power all down a single Ethernet cable. With 3 models to choose from in the Flex Family is a Flex to perfect for your workflow needs.

Small is the new Big.

With a footprint only slightly larger than a credit card, the Flex 4K NDI Encoders and Decoders are the smallest on the planet. Because sometimes the biggest things are also the smallest.

One cable to rule them all. Now with added power.

BirdDog's revolutionary Studio NDI gave the world NDI, Power, Video, Audio, Tally, and Audio Intercom all done a single Ethernet cable. Flex 4K IN and Flex 4K BACKPACK take it one step even further and provides an additional 15w extra power allowing you to use the DC output to power your monitor, recorder, or even your camera.

Halo Tally. It just works.

Flex's revolutionary Halo Tally system is built right into the Flex Family and it requires zero configuration when connected with any NDI enabled software based production system. The Halo Tally is designed to be seen by the camera operators as well as the on air talent.

Flex 4K BACKPACK. Upgrade your monitor.

Flex BACKPACK is the ultimate upgrade for your camera top monitor recorder. Featuring an NP style battery connection, and 15w power output, it allows you to encode NDI, power your monitor, and record all at the same time. With great power comes great responsibility.

The ultimate PTZ sidekick.

If you aren't lucky enough to own a BirdDog PTZ camera with full NDI natively then Flex can become the ultimate sidekick. Plug in HDMI to encode beautiful and Full NDI, and attach a PTZ control cable to have PTZ passthrough control. Perfect upgrade for your PTZ camera while waiting for Santa to bring you a BirdDog.

Cool touch thermals.

Sometimes the biggest features are also the least obvious. Flex 4K NDI has unmatched thermal design and whisper quiet fans to keep Flex cool and fresh even on the hottest days and in direct sunlight.

FLEX 4K IN

$429

4K BACKPACK

$429

FLEX 4K OUT

$429

Feature/Specification	FLEX 4K IN	FLEX 4K OUT	4K BACKPACK
SUPPORTED VIDEO FORMATS			
UHD 2160p	25.00, 29.97, 30.00		
HD 1080p	25.00, 29.97, 30.00, 50.00, 59.94, 60.00		
HD 1080i	50.00, 59.94		
HD 720p	50.00, 59.94, 60.00		
VIDEO I/O CONNECTIVITY			
HDMI 2.0 Input	✓	–	✓
HDMI 2.0 Output	–	✓	–
AUDIO INPUT			
HDMI	2Ch, 48kHz	–	2Ch, 48kHz
3.5mm AUDIO	Microphone/line input		
AUDIO OUTPUT			
HDMI	–	2Ch, 48kHz	–
3.5mm AUDIO	Stereo Headphone/Line Output		–
VIDEO CODEC SUPPORT			
NDI (Full bandwidth i-frame compresssion)	✓	✓	✓
TALLY			
Integrated tricolour Halo Tally	✓	✓	✓
PTZ CONTROL			
2.5mm 4-pole RS232 (VISCA)	✓	✓	✓
NETWORK CONNECTIVITY			
Ethernet RJ45 1000baseT w/integrated PoE (Power over Ethernet)	✓	✓	✓
Embedded Web configuration Panel	✓	✓	✓
WEIGHTS & DIMENSIONS			
Size	107x63x31mm	107x63x31mm	107x63x42.5mm
Weight	140g	140g	150g
POWER			
PoE (Power over Ethernet)	PoE+ 802.3at		
DC Input	DC 12V (30W max)		
DC Output	DC 12V (15W max)	–	DC 12V (15W max)
NP style Battery Output	–	–	✓

4K HDMI
4K 12G SDI
4K QUAD

BirdDog | 4K FAMILY

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. The HDMI port is not enabled on QUAD.

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.

4K SDI and 4K HDMI include a built-in cross converter and any 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. This function is not available in QUAD.

RESTful API. DIY automation.

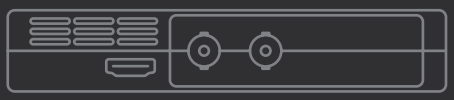
Download the free BirdDog RESTful API and program your own automation for all BirdDog hardware endpoints, including cameras.

4K HDMI

$949* USD

1x HDMI 2.0 Input
1x HDMI 2.0 Output
1x 12G SDI Output

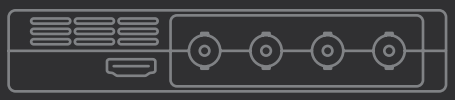
4K 12G SDI



$1099* USD

1x HDMI 2.0 Output
1x 12G SDI Input
1x 12G SDI Output

4K QUAD



$2099* USD

1x HDMI 2.0 Output
4x 12G SDI Input/Output

*Pricing and specifications subject to change.

Product Dimensions

4K FAMILY

Features & Specifications Comparison

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		
HD 1920x1080p	23.98, 25.00, 29.97, 30.00, 50.00, 59.94, 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	–	–	4
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		
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)	✓	✓	✓
Open SFP+ Cage (10gb SFP+ Adapters sold separately)*	✓	✓	✓
Embedded Web configuration Panel	✓	✓	✓
WEIGHTS & DIMENSIONS			
Size	135x85x25mm		
Weight	260g	260g	320g
POWER			
DC Input	DC 12V / 16W		
PoE (Power over Ethernet)	PoE+ 802.3at		
EXTERNAL INTERFACE SUPPORT (requires optional cables)*			
USB to RJ45 for additional network in device support	✓	✓	✓
USB to RJ45 for VISCA over IP PTZ control	✓	✓	✓
USB to Serial PTZ control (RS232)	✓	✓	✓
USB ISO recording	✓	✓	✓

* Feature coming soon with free firmware update.

SOFTWARE

ENT. **$1995** USD

PRO **$299** USD

LITE **FREE**

BirdDog | CENTRAL 2.0

Enterprise grade NDI® routing. And so much more.

Central 2.0 ushers in a new era of NDI® routing control. Browser-based with SSO support, smart grouping of NDI® receivers, real-time NDI® routing, media playback engine, and support for thousands of sources, Central 2.0 is your ultimate NDI® management tool.

Smart Grouping.

Group NDI® decoders together to easily manage content distribution to multiple receivers.

Central. De-Centralised.

Central 2.0 is browser based so you can access anywhere on your network.

SSO.

Central 2.0 supports SSO to make life easy when working in an enterprise environment.

Video preview windows.

The video previews allow interactive browser based monitoring and switching of sources making Central 2.0 a great option for pre-switching sources on large events and live shows.

NDI Routing. 3 clicks.

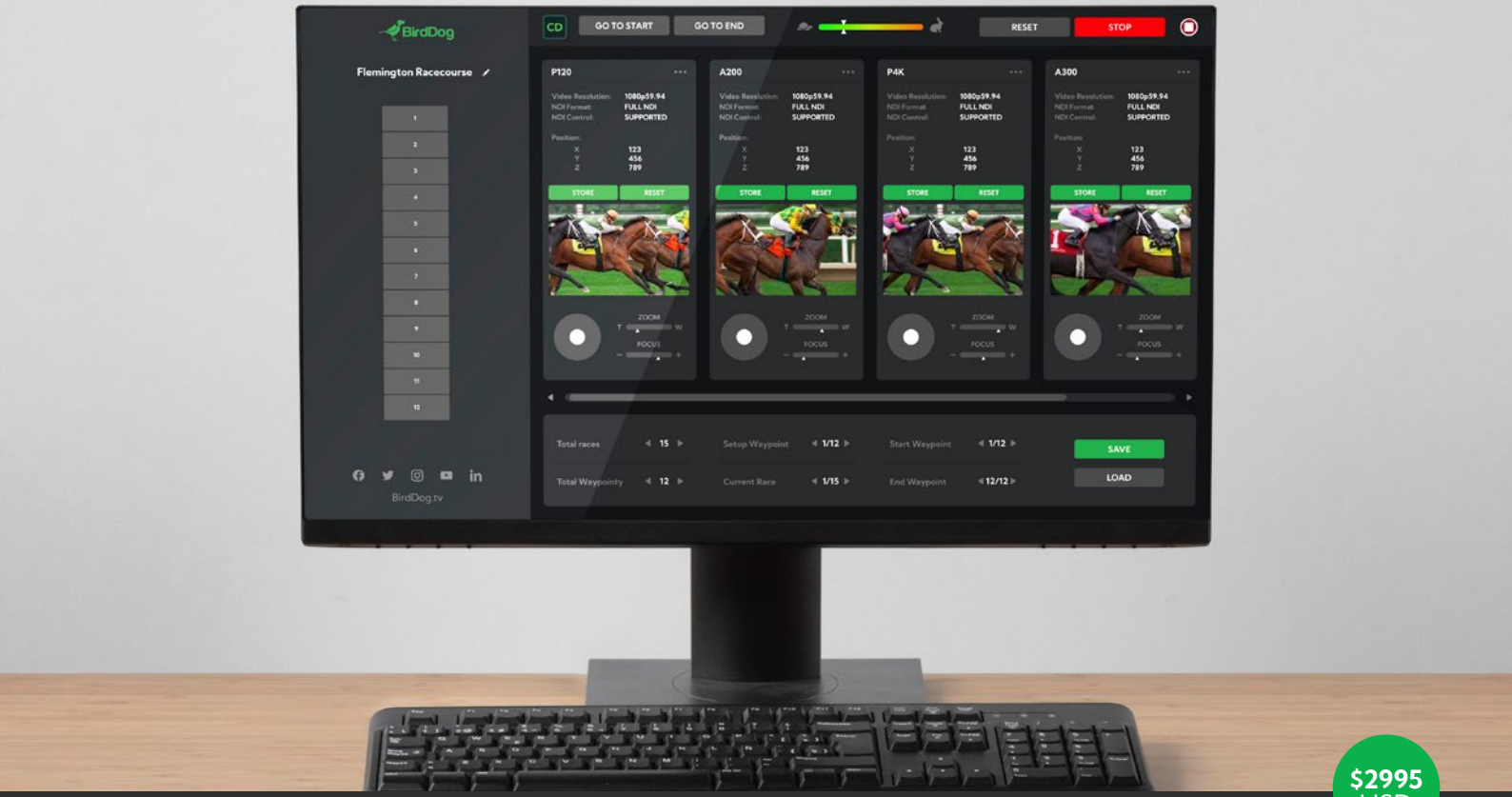
At its core Central 2.0 is an NDI® routing application. Route NDI® video across your network easily by selecting a source, a destination device, or a group, and hitting connect.

Media player. Light as a feather.

The built-in media player uses an insanely low amount CPU power, regardless of playing the file back once or looping 24/7. It achieves this by pre-rendering sources to NDI so when you play them back they are already natively NDI.

NDI audio re-insertion.

Select any NDI® video source and join it with a separate audio source to create a new mix. great for creating sub mixes for distribution in venue or remotely via BirdDog Cloud and works seamlessly with BirdDog Dante NDI Bridge software.



$2995 USD

BirdDog | CAMERA DIRECTOR

PTZ Production Software that makes Multicam Sports a Breeze.

Camera Director is the ultimate tool for PTZ productions that have multiple BirdDog PTZ cameras. Create individual Pan, Tilt, and Zoom paths for each camera, then group those cameras together to move as one when you recall that preset. Create as many multicam presets as you wish and then set them to start automatically by adding waypoints. As the cameras hit each waypoint they will move to the next group preset. Set up as many waypoints as you wish, put them in order, and you have a totally automated multicamera production. Camera Director is perfect for any production where you have a repetitive set of movements, such as Horse Racing, Cricket, Awards Ceremonies, Presentations, Car Racing, and more.

Group presets. Individual PTZ path.

Group BirdDog PTZ Cameras to enable them to all move as one when you recall a preset. Each camera in the group can have its own unique pan, tilt, and zoom settings so will move to the path you set.

Preset playlists.

Create a playlist of group presets to choreograph your cameras in unison. Each camera will move to the individual motion path you set. A single button press to start the preset playlist and all your PTZ's will have the moves like Jagger.

Multiple Playlists.

Save multiple movement playlists and easily move through them to handle requirements with numerous events such as horse racing.

Speed control.

When recalling presets, Camera Director gives real time speed control access so you can adjust the speed of the preset on the fly.

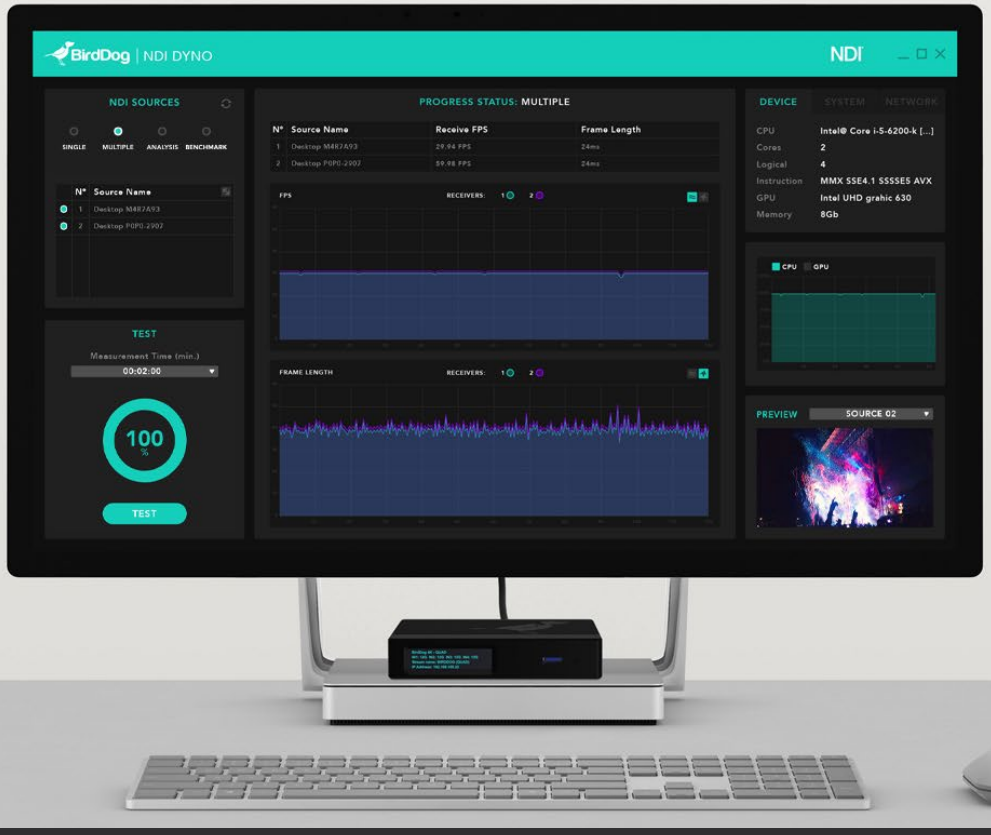
Save and load profiles.

Save production set up time by loading a profile with all your camera settings that brings in everything you need including camera groups, waypoints, and group presets.

No software limits.

Camera Director can support as many cameras as your PC can handle.

Tl;dr – if you want to automate your multicam PTZ Camera shoot then Camera Director is for you.



FREE

BirdDog | DYNO

Visual NDI® network performance monitoring.

DYNO is a window into your NDI® network performance. Test your network speed, performance, and stability with a single NDI stream or multiple streams. Now you can be confident your network can deliver rock solid NDI® streams to your hardware and software receivers. All in a beautiful interface.

100% FREE. DYNO is as free as a Bird(Dog).

Speed Test.

Test a single point to point NDI® source to ensure constant frame rates and those frames are being received smoothly and predictably.

Scale Test.

Monitor a single source delivering multiple NDI® streams. This will show you how many streams of NDI® any given source is able to deliver across current network infrastructure to your receiving computer.

Reliability Test.

Check your computer and networking infrastructure is able to reliably receive video frames from all NDI® sources simultaneously. Ensure frame rates are maintained and the pace of these frames is delivered predictably.

Pretty graphs. Powerful engine.

Dyno lays all that data out in easy to use and understand graphs. Visually monitor up to 8 resolution independent NDI streams and dynamically toggle on/off any the streams you wish Dyno to display. Switch between Raw or Average data display, or overlay Raw and Average simultaneously.

Visual NDI Analysis.

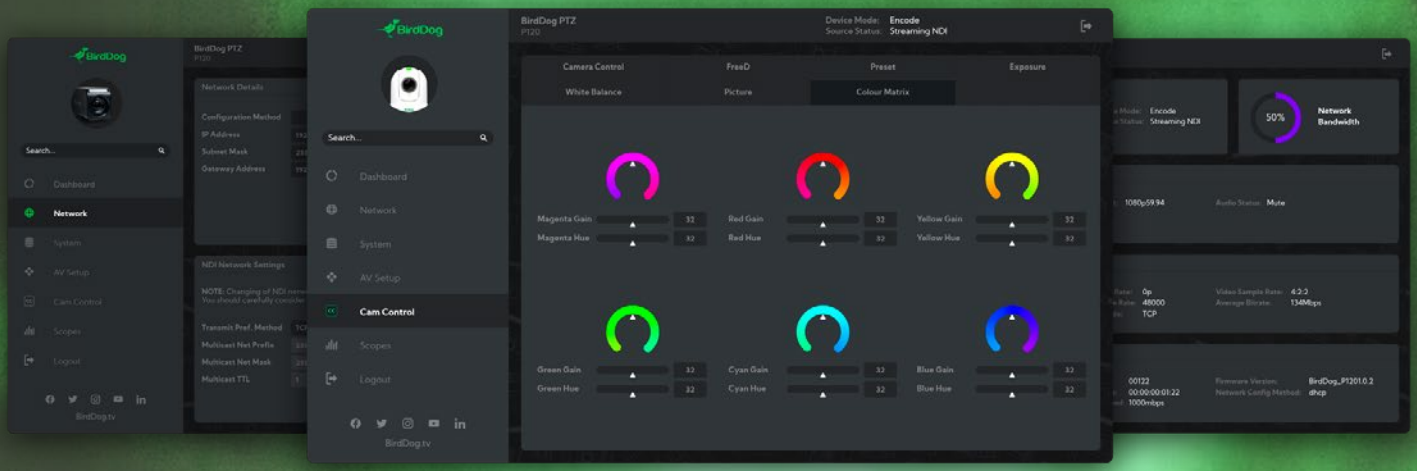
The free NDI Analysis tool (available from ndi.tv/tools) is an amazing test application that can report anomalies on an NDI source. With Dyno you can now monitor these test results in a beautiful graphical interface in NDI Analysis mode. All you need to do is ensure you have the free tools loaded on your computer and Dyno does the rest automatically.

NDI Source list.

View all NDI sources on your network including IP address, resolution and frame rate, and source name. When included in a multiple source test run, Dyno will display performance characteristics of each source.

Confidence Monitor.

Dyno has a monitor built in for viewing the NDI video source so you can watch graphs and video while Dyno does its thing. If you are testing multiple NDI sources you can switch between them without having to leave the Dyno interface.



FREE

BirdDog | Bird UI

The all-new BirdDog User Interface with NDI® 5 support.

BirdUI is the easiest and fastest way to access all the functions of your BirdDog hardware devices, all within a beautiful and intuitive interface. A browser-based application, it can be accessed from anywhere on the same network as the BirdDog device.

NDI® 5 support.

BirdUI brings native NDI® 5 support for maximum compatibility across the entire NDI® ecosystem.

NDI® Genlock. Let that Sync in.

With NDI® Genlock you can select any NDI® source to be the timing master for your fleet of P110 or P120 cameras – allowing them all to operate off the same time-base, providing more predictable timing in multi camera environments. Perfect for greater continuity when recording concerts, conferences, and live productions.

Heads up display.

System statistics including the number of active connections, current bandwidth usage, and network traffic are presented to monitor the device and network without having to login.

RUDP. Trust us, it's awesome.

Reliable User Datagram Protocol (now you know why we say RUDP) reduces overall network load as not every packet needs to be acknowledged by every receiver. RUDP has error correction built in for smoothness and maximum reliability so you can be confident your packets are getting to where they need to go.

Backstage pass.

Once logged in you have total control over all settings including output formats, resolutions, and frame rates.

NDI® Video Scopes.

All BirdDog cameras can generate scopes in camera which can be sent out as overlays on the Full NDI® stream and the NDI® Proxy. Scope options include Waveform, RGB Parade, Vectorscope, and Histogram.

3 Extra Features for Cameras.

PTZ Control, Cam Control, and FreeD.
For free.

BirdDog | CLOUD CONNECT

Cloud Connect. This changes EVERYTHING.

This is Cloud Connect. The game changing, globally scalable, totally interconnected video workflow with apps across Apple TV, Android TV, Apple iOS, Android, Windows, and MacOS. And of course the all-new BirdDog PLAY.

Preliminary specifications subject to change.

2 Frames Latency. We've gone to Plaid.

Cloud Connect provides the fastest connection to your live production or editorial workflow. In as little as 2 frames from source to screen, you can be monitoring your NDI feeds anywhere in the world on your BirdDog PLAY, iPad, Apple TV, iPhone, or Android device.

NDI® 5.

Cloud Connect integrates the amazing features of NDI® 5 including high bandwidth NDI, NDI® HX2, NDI® Remote, and NDI® Bridge. Learn more about all the amazing features of NDI 5 here.

Remote Editorial Workflows.

Editors can output Avid or Adobe timelines in NDI® using the free plugins. Producers, Directors, and anyone needing to monitor can all use BirdDog PLAY or the Cloud Connect apps to view and collaborate.

Remote Production Workflows.

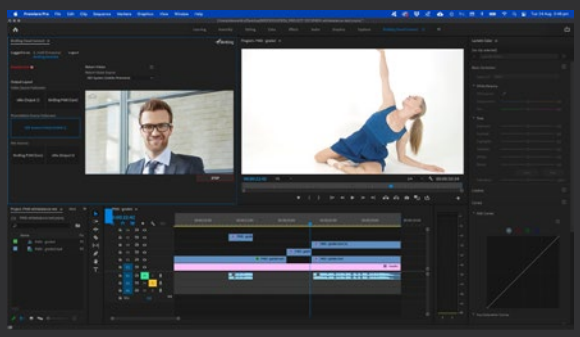
With Cloud Connect it's easy to produce a Remote Production from anywhere in the world. Control the New York studio from London across the public internet with full PTZ control, Tally, and Talkback. Using BirdDog PLAY or the Cloud Connect suite of apps anyone who needs to monitor with as little as 2 frames latency.

Remote Monitoring. With Multiviews.

Monitor all your NDI feeds from anywhere in the world over the public internet. Set up a Multiview and watch it on your giant TV using BirdDog PLAY with Cloud Connect. Or use Apple or Android TV. It's just so easy.

Beautiful Vistas.

BirdDog Cloud Connect applications make navigation and use a breeze with cutting edge and beautiful user interfaces, no matter what device you have. Zoom in on your phone or lean back and watch on your TV.



For Cloud Connect.

BirdDog's new Adobe Plugin allows Adobe Creative Cloud users to directly connect to BirdDog Cloud Connect series of iPhone, iPad, Apple TV, Android Mobile, and Android TV apps without having to leave the Adobe Interface.

Dante or NDI. Flexible Audio.

With an optional BirdDog Cloud Dante licence (add on to regular BirdDog Cloud licence) you can select Dante audio to be sent to your Cloud Connect receiver.

PTZ Control. Tally.

PTZ control is a total breeze. When using Cloud Connect app on your phone you have PTZ control with your finger on the phone touchscreen. Tally is also sent with the NDI stream for maximum visibility of the production.

PTZ Camera Support.

Cloud Connect supports all NDI and NDI HX PTZ cameras from all manufacturers. So don't have a BirdDog PTZ? No worries!

Security? We got you.

Cloud Connect is totally secure. You can lock sessions to be one-on-one to avoid unwanted guest drop-ins as well as customising your session timeouts so people can't copy your connections.

Quality Control.

Cloud Connect is built for production and offers much higher quality than video conferencing. You can also adjust the quality levels to handle the fastest and toughest network environments.

Wi-Fi & 4G Friendly.

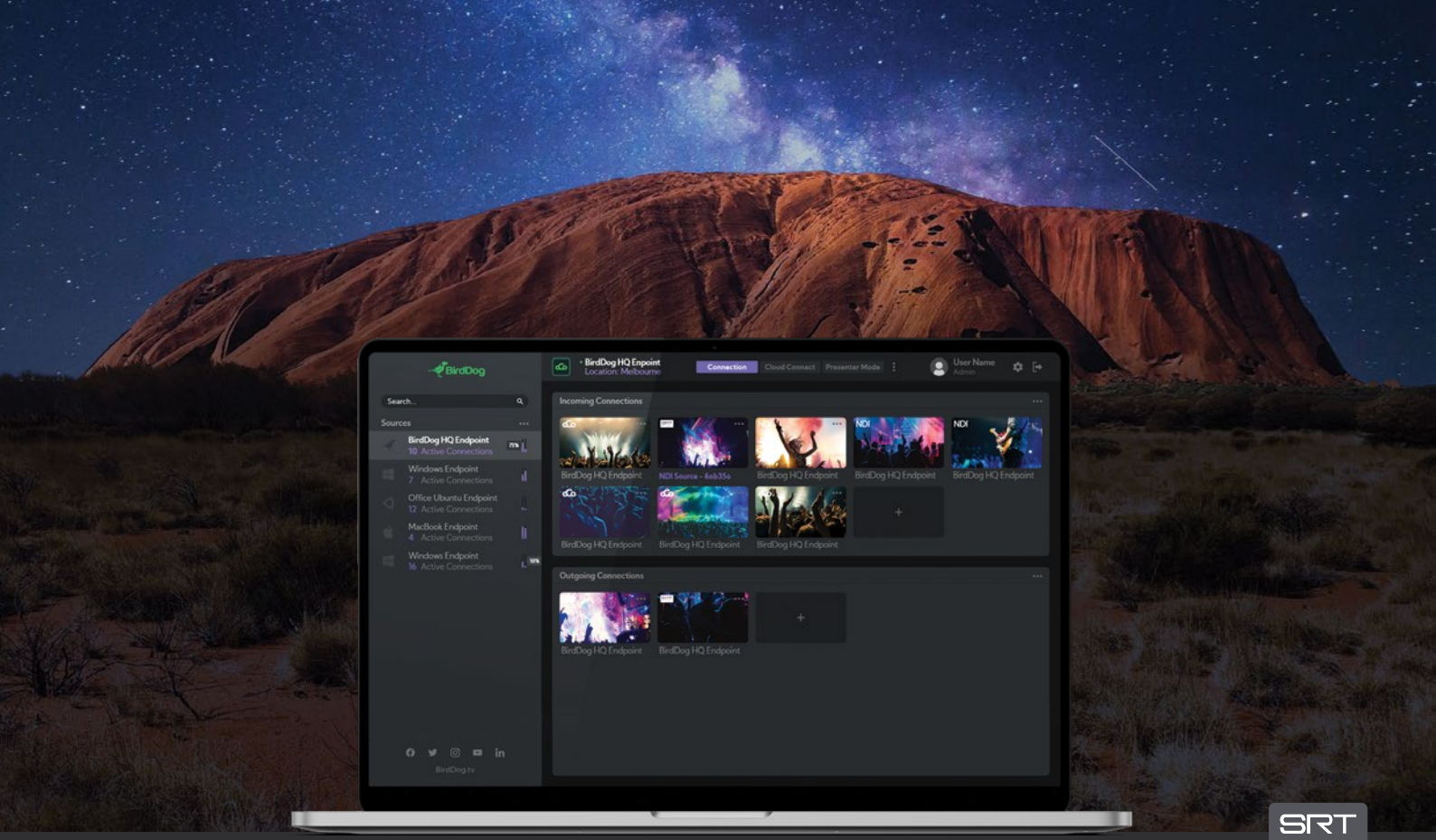
Connecting and monitoring your sources on the run has never been easier. Now you can monitor from airports, coffee shops, on the run, or just chilling out on the beach drinking a piña colada.

No Firewall configuration.

Cloud Connect is totally network and IT admin friendly. There are no firewalls to configure allowing instant access to your NDI sources from anywhere.

Next-Gen Engine. Say that 3 times fast.

Using the next generation BirdDog Cloud engine you can easily publish Cloud Connect sessions instantly, add in thumbnails and friendly names for easy identification. Underpinned by the latest NDI® 5 you can publish any source from anywhere on your network.



SRT READY

BirdDog | CLOUD 3.0

Connect any number of NDI® or SDI sources to anywhere across the globe.

BirdDog Cloud 3.0, the next generation of BirdDog's globally connected advanced media platform, is the fastest and easiest way to expand outside your local network to distribute your content to anywhere in the world.

At its core Cloud 3.0 harnesses BirdDog's specialised transport engine, a highly reliable and scalable media pipeline, delivering all the benefits and security of SRT, augmented with deep control layers for PTZ and metadata, and multi camera synchronisation support.

Live Production.

Take any number of NDI or SDI video sources in any location across the globe and make them available to your production with the magic of BirdDog Cloud 3.0. Control remote PTZ cameras via software, or with the tactile BirdDog PTZ controller, and adjust colours and camera settings in real-time with BirdDog Cam Control. All remotely in almost zero latency.

Post Production.

Intuitive and lightening fast remote editing workflows come to life with the award-winning, free Adobe panel for collaboration between directors, editors, and producers anywhere in the world.

`Producers can easily select their views interactively, instantly switching from timeline to confidence monitor to edit suite camera views, even with picture-in-picture overlays.

Bring your own Device.

Apple TV, Android TV, Samsung TV, iOS, and Android devices just went Pro. Cloud 3.0 delivers new Cloud Apps for all these devices deeply integrating them into your next media event.

Utilising Cloud Apps allows anyone to be in on the action in real-time, from a producer who wants input in a shoot, a director who wants to see all the action, or an event manager ensuring the run-sheet is on point.

More GPU support. M1 included.

Cloud 3,0 ushers in a raft of new GPU accelerated codec support including Apple Video ToolBox for MacOS to take full advantage of those beefy Apple M1 chips. iOS and tvOS (h.264 and HEVC), nVidia NVENC (h.264 and HEVC), and Intel Quicksync (h.264, HEVC, and VP9) all make for the fastest and most flexible remote production workflows.

JPEG XS over SRT.

Along with all the GPU accelerated high-efficiency codec, JPEG XS is also a selectable option to transmit over SRT in Cloud 3.0. JPEG XS is an interoperable, visually lossless, low-latency, and lightweight image and video coding system making Cloud 3.0 even more flexible than ever before.

Lower latency. Yes even lower.

New under the hood magic has enabled even lower latency for blazingly fast connections and BirdDog PTZ camera control. What comes after Plaid?

BirdDog | CLOUD 3.0

Simplified licencing.

With an entirely new licencing system, Cloud 3.0 has never been faster to set up and start working with.

DX. Port forwarding solved.

DX is BirdDog's revolutionary technology to easily navigate challenging corporate IT networks. No need for port-forwarding or firewall exceptions. DX retains end to end encryption and total security of the network. Did we just hear the IT admins popping corks?

DX will be an additional monthly charge. Pricing TBC.

New, more intuitive user interface.

A ground-up rebuild of the interface not only makes Cloud 3.0 more beautiful, it's also more intuitive to set up connections.

Mobile App Audio Selection and Routing. When in the game-changing Presenter Mode you can now switch in real-time which audio source you wish to monitor. Switch between microphone, mix-minus, program, or PC audio. The choice is yours.

Less protocol overhead.

Cloud 3.0 has taken all the magic of SRT and enhanced it with less overhead requirements on lossy networks resulting in better pictures, faster, and with less data.

BirdDog TURN.

In conjunction with Google, BirdDog TURN, a new TURN server designed for easy operation with BirdDog Cloud 3.0. Have your own or want to use your existing provider? No worries we can accommodate.

NVENC amplified.

Added support for additional parameters in NVENC encoder configuration.

API control.

New API support creates incredible opportunities to build global and scalable video workflows like never before.

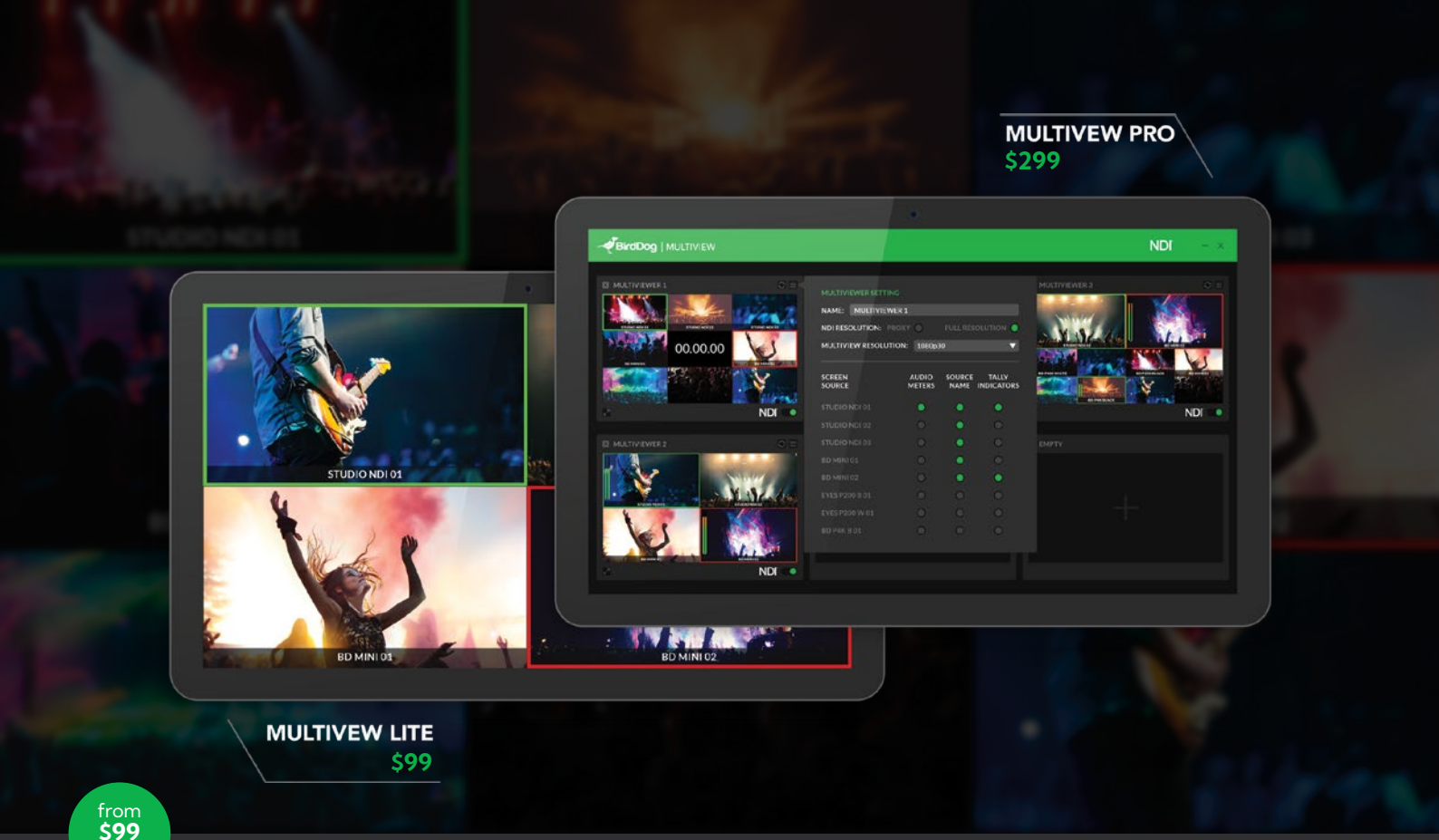
Cloud Recorder.

With Cloud Recorder NDI® is able to be recorded at both sender and receiver endpoints.

Hello Apple.

Cloud 3.0 Core now runs on MacOS and takes full advantage of Apple's advanced M1 and M2 silicon.

More informations at **BirdDog.tv/cloud**.



from **$99** USD

BirdDog | MULTIVIEW

6 NDI Multiview Outputs. 5 Layout Options. 1 Powerful Software App.

NDI Multiview has been designed to be incredibly powerful and super intuitive to use. Create an NDI Multiview stream in a matter of seconds. Simply select the Multiview layout of your choice, select which NDI® source you want in each window, and select which overlays you wish to see. Toggle on the NDI® switch and you are sending a Multiview window out as a standard NDI® source. Yes. It really is that easy.

Create NDI Multiviews in Seconds.

NDI Multiview Pro supports up to 6 Multiview outputs and each can be independently configured with any of the 5 preset layouts. Choose between full screen, 2x2, 3x3, 4x4 and the traditional 2&8 (two large and eight small windows). With all NDI® sources on your network automatically detected you can create your NDI Multiview outputs in an insanely short amount of time.
NDI Multiview Lite supports 6 outputs with a maximum layout of 2x2.

Now available for Mac and Server Version.

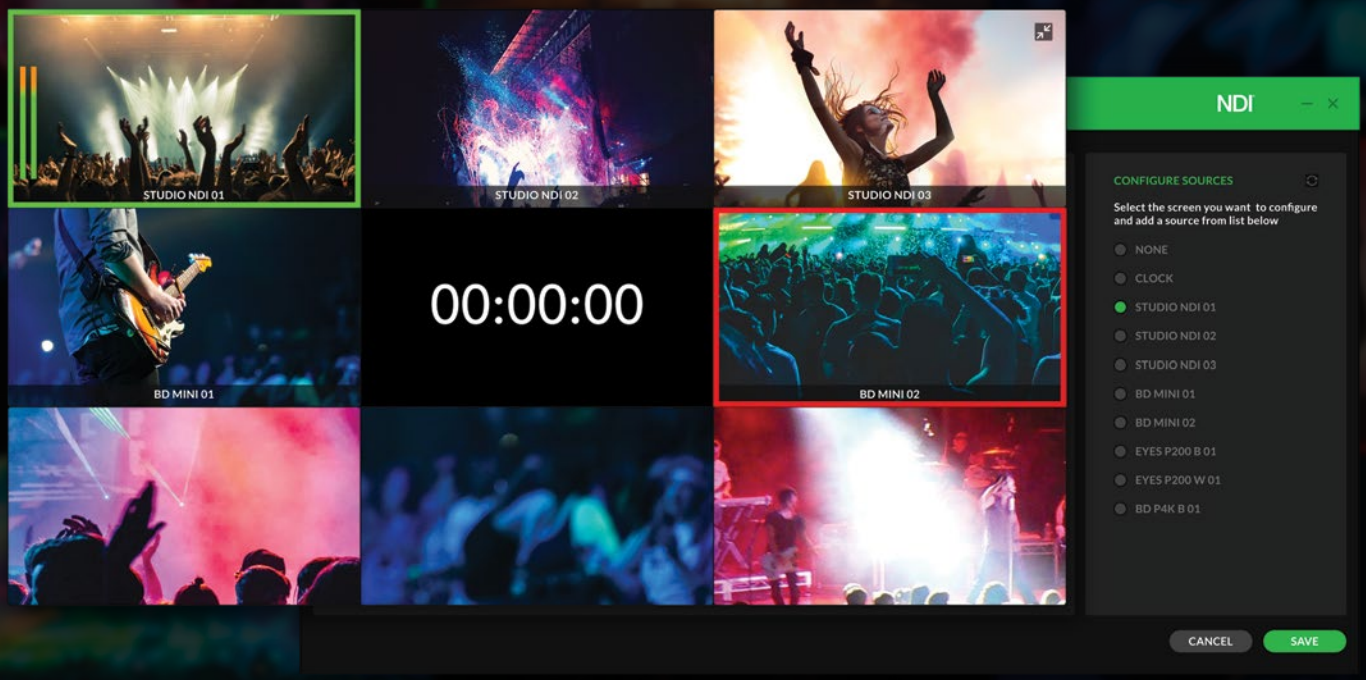
Following on from BirdDog's hugely successful NDI® Multiview software are two new versions, Mac and Server Editions. The Mac version takes full advantage of the powerful Mac M1 CPU and GPU acceleration, while the server edition allows users anywhere on the network to access Multiview from their System Tray and generate Multiview NDI® streams.

96 sources in Pro. 24 sources in Lite.

NDI Multiview Pro supports up to six 4x4 windows for a total of 96 independent NDI sources. NDI Multiview Lite has maximum of six 2x2 windows for a total of 24. That's a lot of NDI® flying around the place but don't worry, we never cross the streams.

Full Screen Local Preview.

Once you have decided upon your layout and overlays you can view that Multiview on your local machine.



Selectable overlays per window.

Each window within NDI Multiview can have its own customised overlays. Simply toggle on or off in the setup.

Audio Levels.

VU Meters that run vertically on the left-hand side of each window.

Tally.

BirdDog's signature tally border overlays.

Source Labels.

Select the NDI Source name to display at the bottom of the window.

Receive in software or hardware.

Multiview outputs a standard NDI stream per window which can be received on any Mac or PC running NDI Tools, any NDI compatible software based switcher, or use a BirdDog NDI Decoder to send back out to baseband video.

Compatible with Central.

The NDI Multiview outputs are a standard NDI stream you can use Central to route the streams to BirdDog NDI Decoders.

Bandwidth concerns? We got you.

NDI Multiview has a bunch of options to help you save on network bandwidth.

Proxy Support: Use the low bandwidth 6Mbps NDI Proxy as a source.

Output Resolution: Choose between 720p and 1080p.

Output Framerate: Drop the frame rate down as low as 1 frame per second.

Multicast: Using Multicast you only put one stream of NDI onto the network and each stream can be picked up multiple receivers.

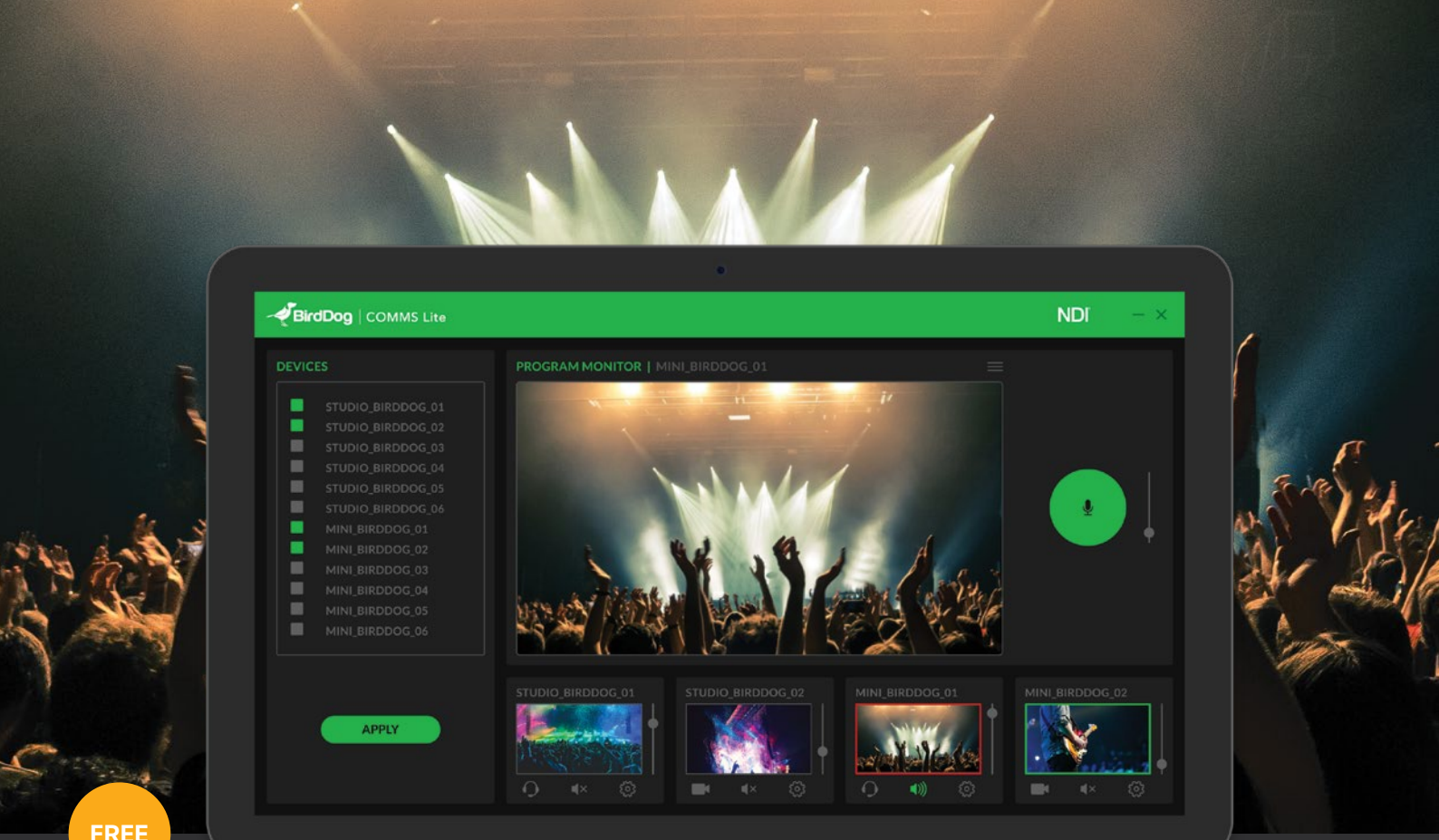
Output Toggle: Toggle between NDI output on and off to save bandwidth if Multiview window not in use.

Receive in software or hardware.

Multiview outputs a standard NDI stream per window which can be received on any Mac or PC running NDI Tools, any NDI compatible software based switcher, or use a BirdDog NDI Decoder to send back out to baseband video.

Audio Track Selector.

Select an audio track from any of the NDI inputs to send with the Multiview.



FREE

BirdDog | COMMS Lite

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.

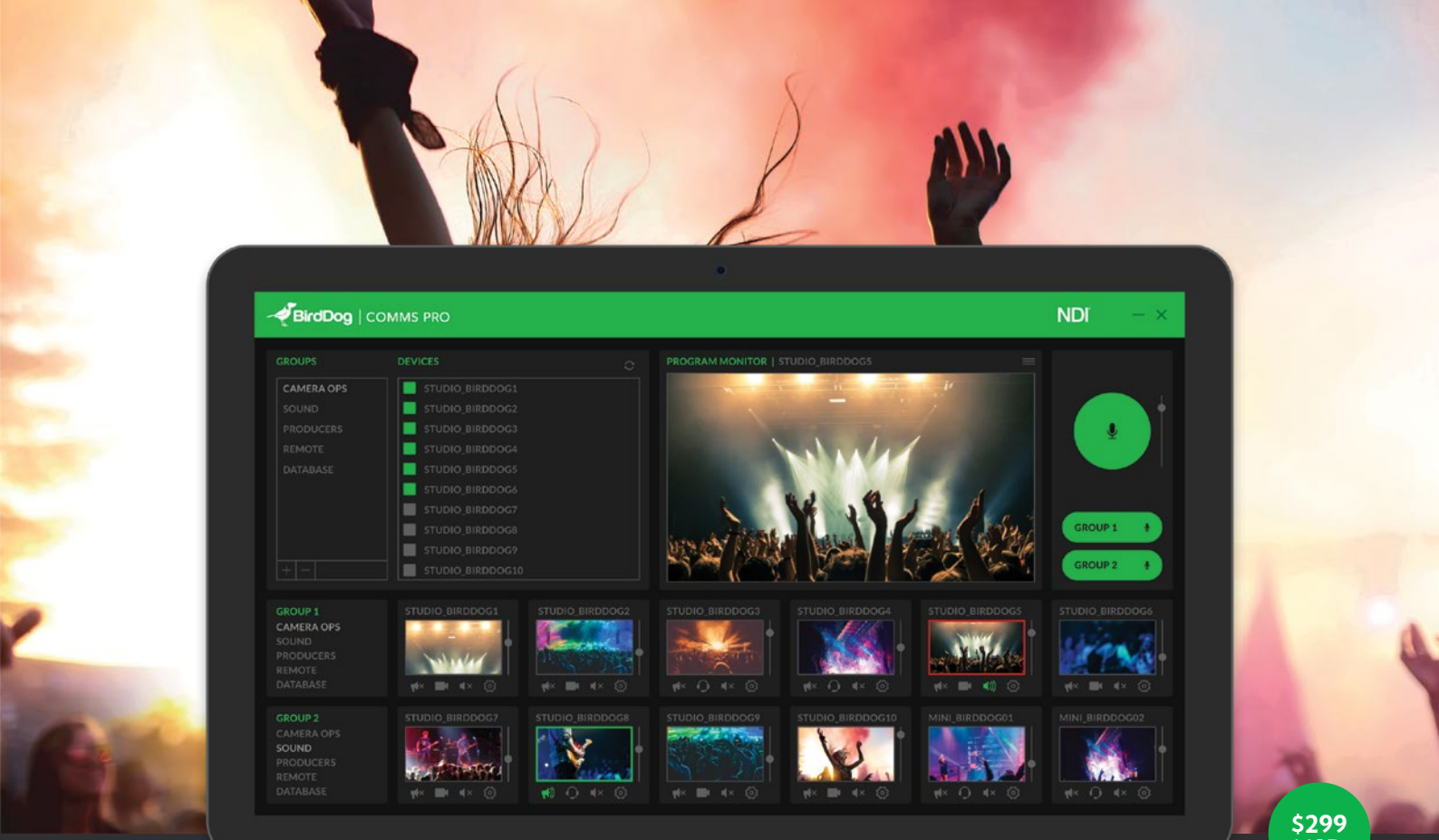
Comms Lite automatically detects all your BirdDog compatible devices so you can easily select which four you want to use. Super easy to set up and use.

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	$299
Groups	1	5
Max BirdDog's per group	4	6
Live video windows	4	12
Director Push to Talk buttons	1	3

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



$299 USD

BirdDog | COMMS PRO

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.

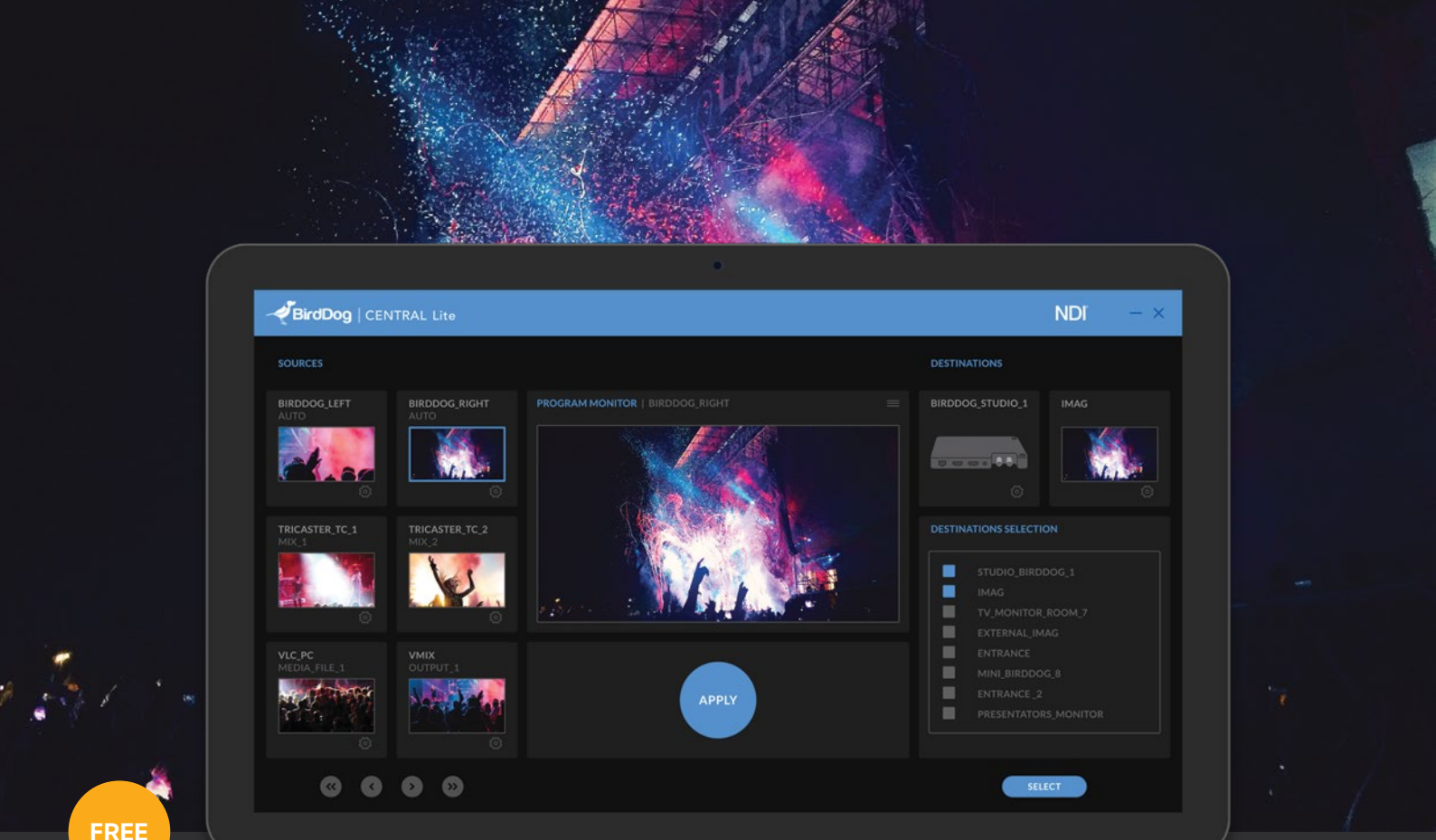
Your camera operators can simply push your call button on any 4 Pole TRRS headset and talk to the group you have been set up in. On the directors side you simply push any of the groups to talk to that group.

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	-	✓



FREE

BirdDog | CENTRAL Lite

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.

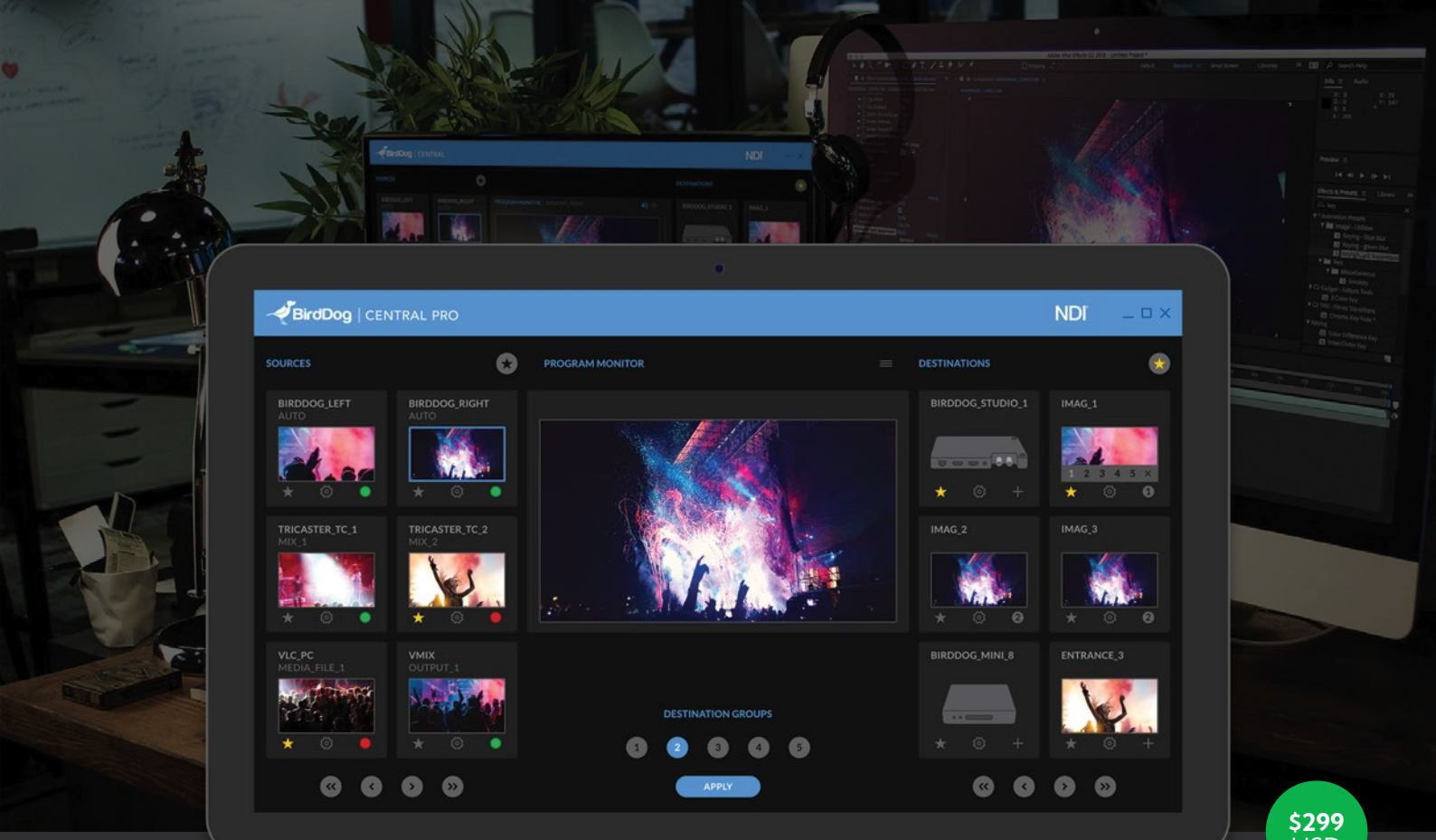
Simply select your source, select your destination, and click apply. Now you are sending your NDI® content to a single BirdDog hardware decoder or any of your groups.

Unlimited sources. Two destinations.

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

Central Features	Lite	Pro
Price in USD	Free	$299
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



$299 USD

BirdDog | CENTRAL PRO

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.

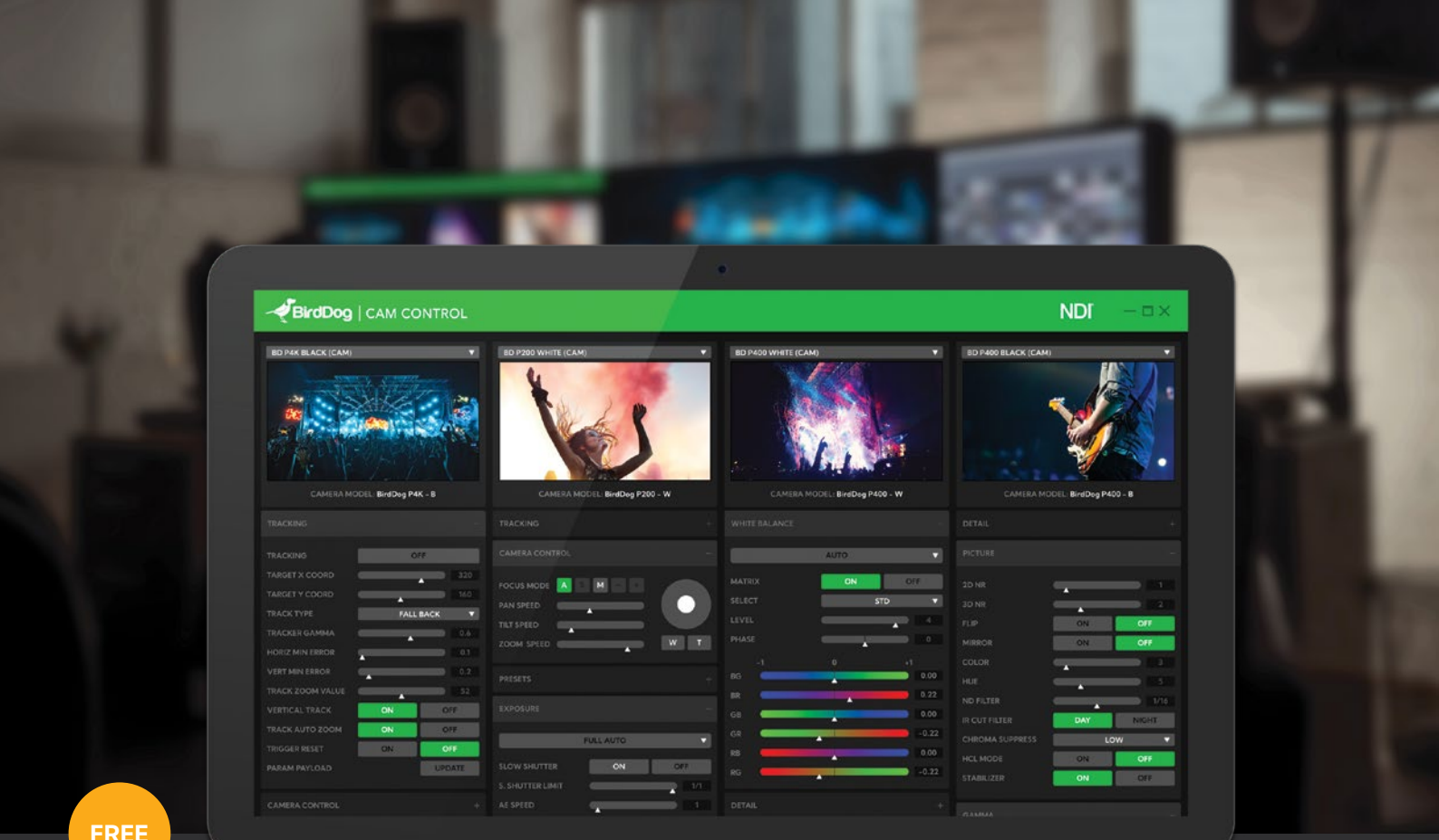
Central is compatible with all BirdDog hardware generated NDI® sources including Studio NDI, Mini, and of course the ground-breaking PTZ Line. These will show up automatically in your source windows and you can then chose which destinations to send them to.

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.



FREE

BirdDog | CAM CONTROL

Total Camera Control.

The free Cam Control app is the easiest and most user-friendly way to dial in BirdDog cameras. Simply load on a Windows 10 machine on the same network as your BirdDog cameras and access all functions of the camera through a beautiful interface. Auto Tracking is built right in, with adjustable parameters to track via facial or body recognition.

Auto Tracking. Facial and Body Recognition.

Cam Control features fully automated tracking with adjustable parameters to dial in the sensitivity of how you wish to track your talent. You can set to track via facial or body recognition which gives maximum flexibility depending on the environment. Auto tracking is perfect for Broadcast studios, Lecturer and Teacher applications, House of Worship, or any time on-air talent is moving around

Colour match in seconds.

All BirdDog cameras feature a complete Colour Matrix offering an incredible set of tools for dialing in the look you want. With Cam Control you can match cameras quickly, easily, and all from within a single interface.

Four cameras. Multiple instances.

Inside Cam Control you can load up to four cameras. Need more than four? No worries, Cam Control supports multiple instances so you can load as many Cam Control windows as your computer can handle.

Save and Recall Presets.

As if Cam Control wasn't already the fastest and easiest to use camera shading tool on the planet, you can also save and recall camera presets. Use Preset 1 to save your favourite camera settings and when you fire up your cameras on your next job, Cam Control will already be set. No all you need to do is work out what you are going to do with all that time you just saved. We strongly suggest cat videos on YouTube.

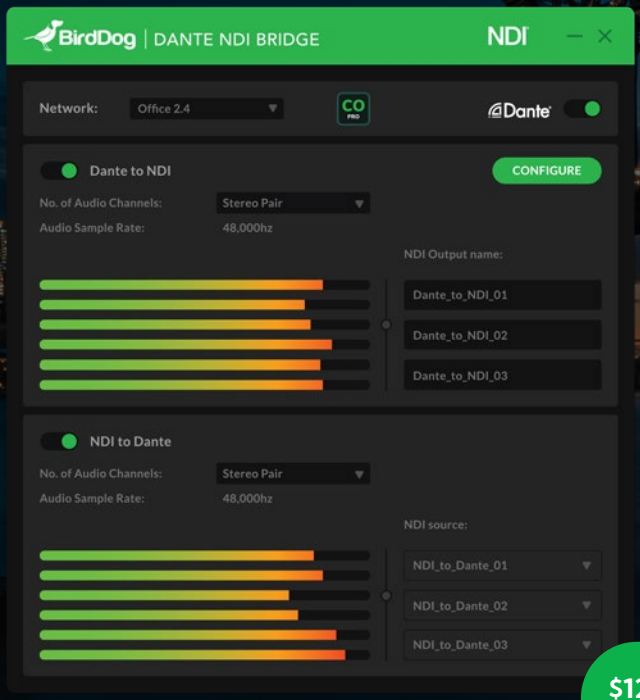
All areas Access.

Along with the incredible access to Auto Tracking features and Colour Matrix tools found in all cameras, Cam Control also gives control over all settings found in each camera.

Mix & Match. Automatic Camera Detection.

Load any mix of BirdDog camera models side by side within Cam Control and the automatic camera detection will display all the adjustment settings available for that camera.

Full user interface at **BirdDog.tv/camcontrol**



$129 USD

BirdDog

DANTE NDI BRIDGE

CONNECT YOUR IP WORLDS.

Dante NDI Bridge is a Windows 10 application for flipping audio tracks between NDI® and Dante®. With support for up to 3 stereo pairs, Dante NDI Bridge can receive 3 NDI® streams and create 3 stereo pairs of Dante® audio, or receive a single NDI® stream and create 3 Dante® stereo audio pairs. All this in sub-frame latency and of course the same applies in reverse.

BirdDog | TOGETHER

FOR ALL EDUCATIONAL FACILITIES, HOUSE OF WORSHIP, NOT FOR PROFITS.

Free Central Pro and Comms Pro Offer.

BirdDog is pleased to offer Central Pro and Comms Pro free to all Educational Facilities, House of Worship, and Not for Profit organisations.

BirdDog Central Pro and Comms Pro require compatible BirdDog hardware in order to function correctly.

To claim your licences please email **together@bird-dog.tv** with your proof of purchase of relevant BirdDog hardware and ensure the email is sent from a registered email address of the organisation claiming the software.

COMING SOON

BirdDog | SILICON 2

Unrivalled Format Support. Globally Connected Workflows.

Silicon 2 is a free update for all BirdDog cameras, all 4K Pro converters, Flex IN, and Flex Backpack delivering unparalleled format support and never seen before workflow opportunities. For free. The usual suspects are all in there – NDI®, NDI®|HX2, NDI®|HX3, SRT, h.264, HEVC/h.265, RTMP, RTSP, plus we've added some additional magic to create globally connected workflows without any need for computers. That's right we've built Cloud Connect directly into the hardware so you can send directly from any of the supported hardware to another piece of supported hardware with no computers required. All this makes Silicon 2 more flexible than your yoga teacher.

Global Connections. No Computers.

When combined with Cloud Connect, Silicon 2 allows for globally connected devices without the need for any computers, opening up a whole new world of workflow possibilities. Connect a BirdDog PTZ Studio in London to a Master Control room in New York City whilst monitoring in Melbourne and Paris simultaneously.

All totally secure, totally reliable, and with super-low latency.

Cloud Connect is a series of applications so you can also monitor a Silicon 2 activated BirdDog Camera or Converter on any iOS, Apple TV, Android Mobile, Android TV, and even Samsun Tizen. All without any computers.

And that's just the start of what's possible...

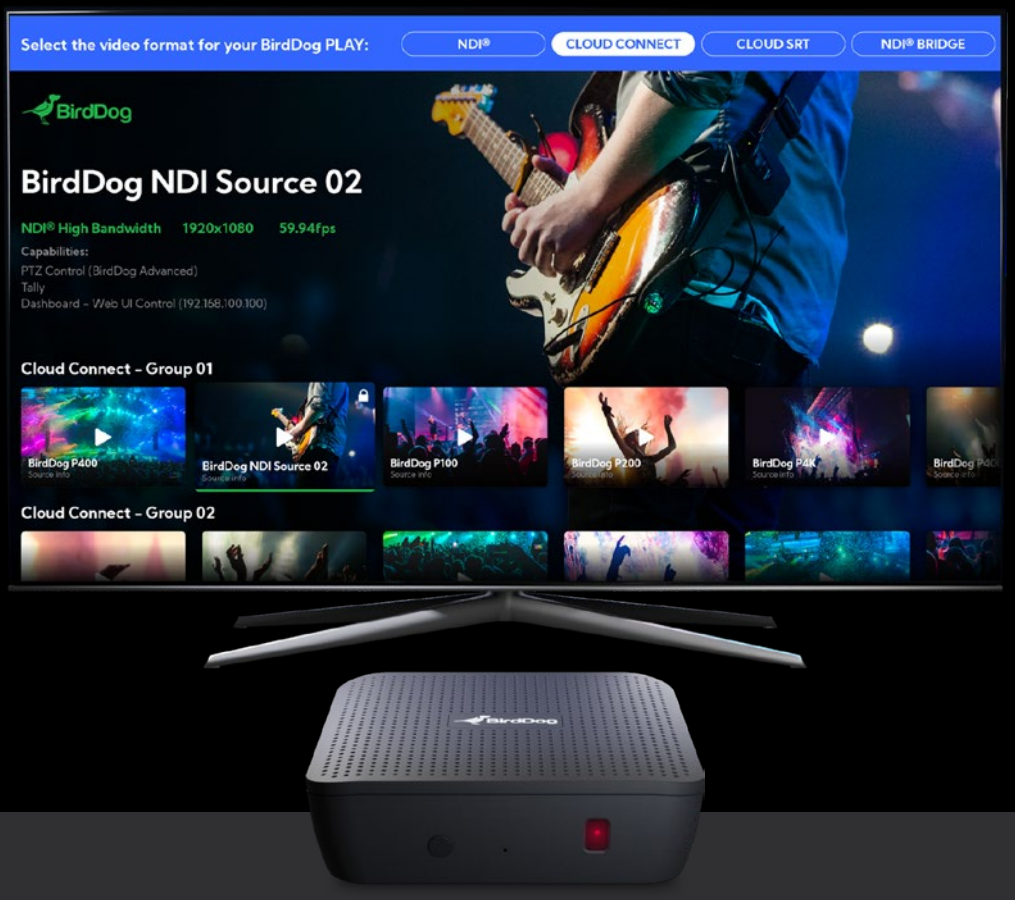
FPGA Implementation. Better. Faster.

Silicon 2 is implemented into BirdDog's custom IP core making for the fastest possible NDI processing.

Including NDI|HX3 in both Encode and Decode modes.

For more information visit
BirdDog.tv/silicon2

AV SECTION



$149 USD

BirdDog | PLAY

Hello World. Come PLAY.

Meet PLAY, the newest and smallest 4K NDI Player on the planet with full support for NDI® 5. Now connections are a breeze, simply connect PLAY to your NDI network, plug it into your TV via HDMI, and use your own remote to browse the new and gorgeous interface.

Preliminary Specifications & Subject to Change.

NDI® 5.

PLAY supports all the new NDI® 5 functions including high bandwidth NDI, NDI® HX2, NDI® Remote, and NDI® Bridge. Learn more about all the amazing features of NDI 5 here.

Tiny footprint.

Play measures just 85mm x 85mm x 19mm and only weighs 97grams.

Magnetic Base. Non-slip grip ring.

Attach PLAY behind your TV screen with the built-in magnet or sit in front of the TV confidently with its non-slip rubberised grip ring.

4K UHD. HDMI 2.0

Receive NDI in resolutions all the way up to 4Kp60. (Not all versions of NDI® 5 will be able to support 4Kp60.)

USB Power.

PLAY is powered by standard USB-C for maximum flexibility.

CEC control. BYO remote.

The built-in CEC control lets you use your own remote to browse and play NDI sources.

Incredible API support.

RESTful API, Crestron control module, Zoom API, Q-SYS API. You name it, PLAY supports it.

Beautiful interface.

Navigation to your NDI sources is an absolute breeze within the gorgeous PLAY interface.

Automatic source detection.

PLAY automatically scans your network for NDI sources and brings them up with a thumbnail view.

BirdDog Cloud Connect.*

Integrate PLAY with BirdDog Cloud Connect to use as a viewer for all your global BirdDog Cloud endpoints. Browsing is super intuitive, and the speed of connection is lightning fast. High-quality video in as little as 2 frames from anywhere in the world. Yes. You read that right. 2 frames latency.

TOP

BOTTOM

Product Specifications

Supported Video Formats**
UHD 2160p – 25, 29.97, 30, 50, 59.94, 60
HD 1080p – 25, 29.97, 30, 50, 59.94, 60
HD 720p – 50, 59.94, 60

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

Audio I/O Connectivity
HDMI 2.0 – Audio output (Stereo)
3.5mm Analog – Audio output (Stereo)

Video Codec Support
NDI® – High Bandwidth i-frame, low latency
NDI® HX2 – h.264/HEVC long-GOP
BirdDog Cloud Connect – Ultra-low latency, Internet delivered with discovery
NDI® 5 Bridge – YES
NDI® 5 REMOTE- YES, token based

Network Connectivity
Ethernet RJ45 1000baseT

Weights and dimensions
Dimensions: 85mm x 85mm x 19mm
Weights: 97g
Mounting Integrated magnetic base and rubber feet

Power
Power Input: USB-C
Voltage: 5V DC
Current: 1.2A

* Cloud Connect requires an additional licence.
See BirdDog Cloud Connect page for more details.
** Video decode resolution support may vary based on video CODEC in use, maximum video output resolution is 2160p60.

$729 USD

BirdDog | WALLPLATE

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.

Wallplate Input.

Wallplate Input features two independent inputs 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. Wallplate IN supports EDID connectivity to enable the source device to output 1080p video resolution.

Flush Mounted.

Wallplate can be flush mounted in almost every wall or surface such as boardroom walls, boardroom tables, and lecterns.

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. Use the RESTful API to automate the workflow.

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.

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, 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
Video Codec support
Realtime, ultra-low latency, full-bitrate NDI (i-frame)
Soft glow Indicators
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
Video Codec support
Realtime, ultra-low latency, full-bitrate NDI (i-frame)
Soft glow Indicators
Status indicators to show active/non-active connections.
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Power
Power over Ethernet (PoE) 802.3af/at

Please note, analogue audio is not active.

$199 USD

BirdDog | pod

NDI® to USB Webcam. That's what it does.

Access any NDI® video and convert to a USB webcam. Connect to Zoom, Teams, Meet, and any conferencing or software application that supports a USB Webcam input.

Preliminary Specifications & Subject to Change.

4 buttons. Switch sources.

Use the soft-touch buttons, conveniently numbered 1 to 4, to switch between sources.

PoE.

For the ultimate in elegant installations use with a PoE (Power over Ethernet) switch to power pod without the need for any wall plugs.

Grip ring.

The non-slip rubberised grip ring stops the Pod from moving around.

API controls.

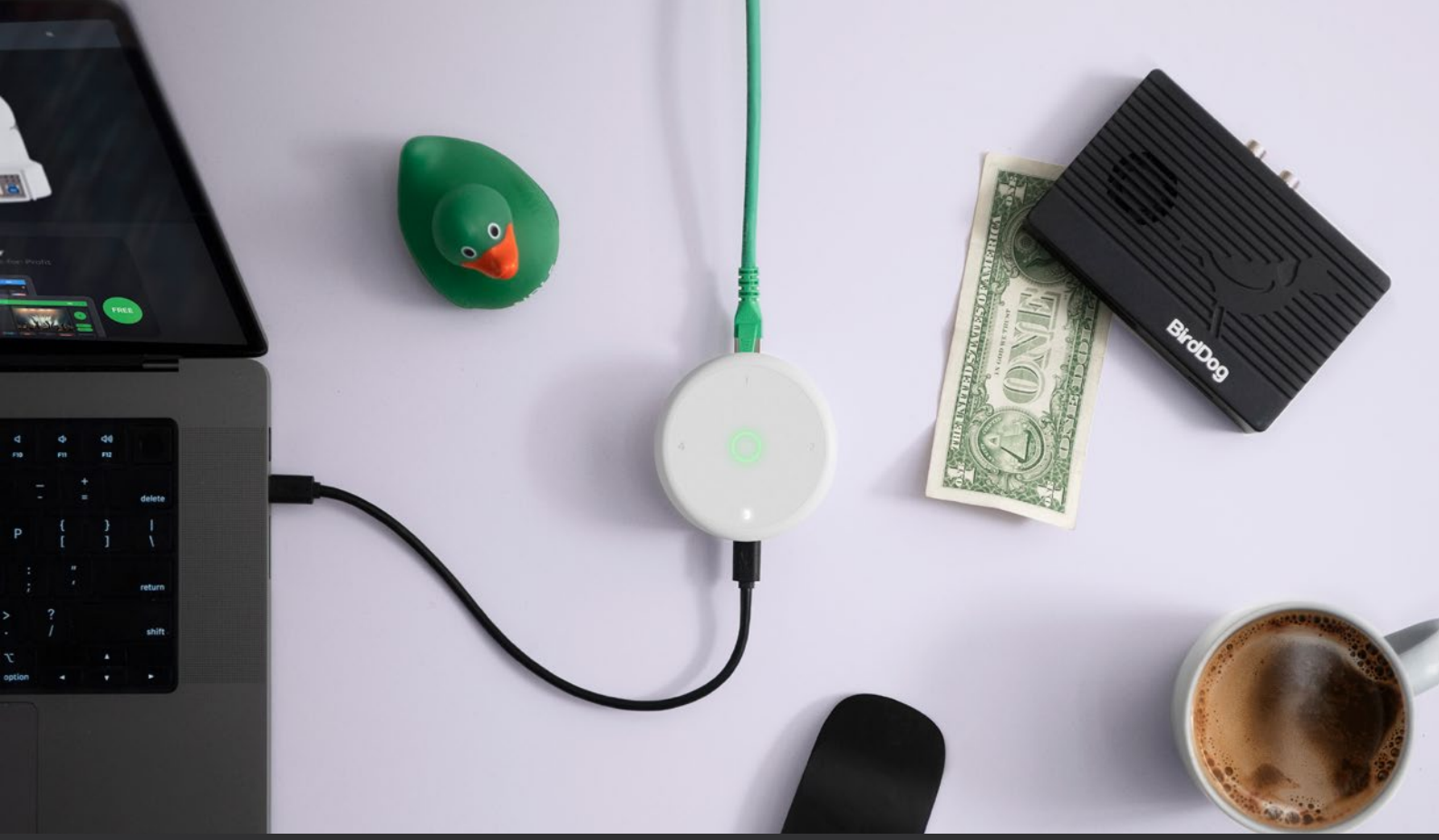
Pod supports API commands so you can build out the ultimate Zoom Room. Or Teams room. Or whatever room you like really.

Automatic source detection.

Pod automatically scans your network for NDI sources.

Choose your colour.

Pod comes in your choice of cream, bone, white, off-white, ivory, or beige. Not really, it just comes in white. We miss you, Richie.



SUPPORTED VIDEO FORMAT
NDI® – High Bandwidth i-frame,

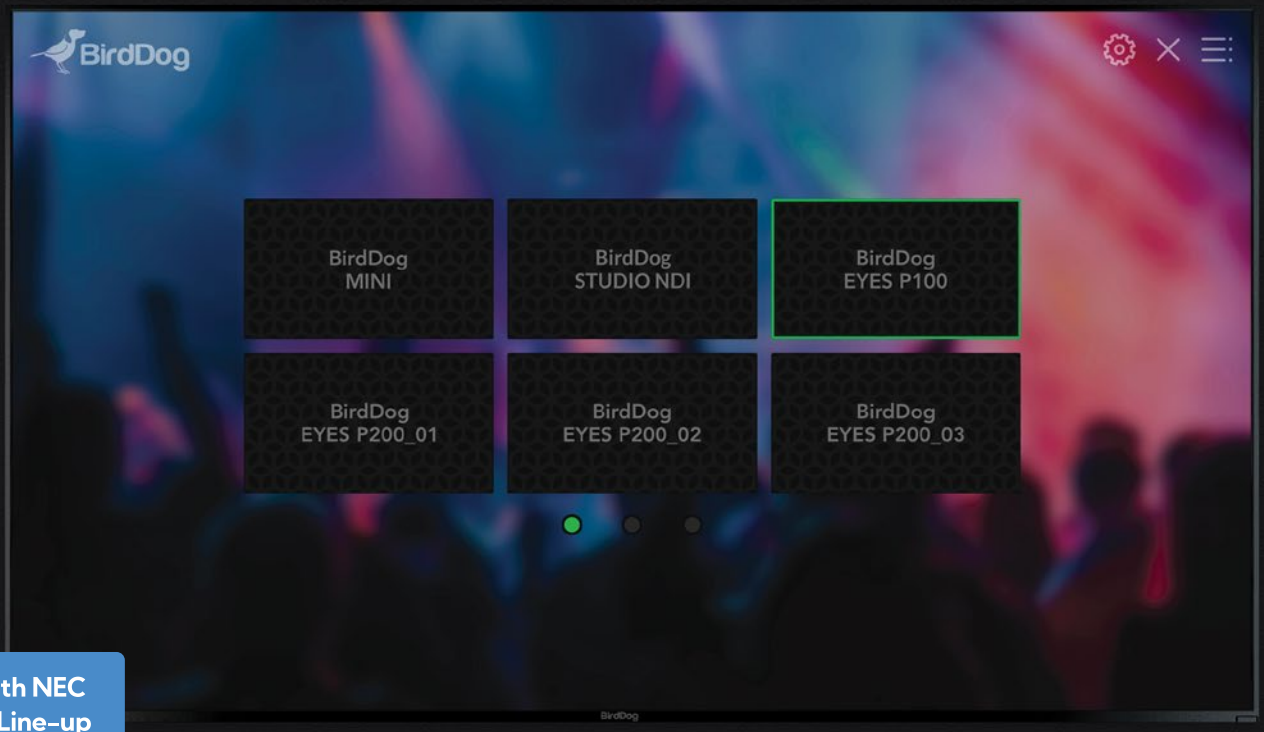
low latency NDI® HX2 – h.264/HEVC long-GOP

VIDEO OUTPUT SUPPORT
USB-C, UVC 1.1

NETWORK CONNECTIVITY
Ethernet RJ45 1000baseT

MECHANICAL
Power – PoE (802.11af)

Physical buttons – 4
Status Indicator – Multicolour LED



Works with NEC Message Line-up

BirdDog | SDM FAMILY

The ultimate NDI® experience integrated.

Built upon Intel® SDM platform the BirdDog SDM Family will revolutionise the way content is distributed to even the largest installations. Simply install the SDM module inside an SDM compatible flat panel display for the most integrated and scalable NDI® to screen solution available. No more wall boxes or patch panels, now the AV distribution is built directly into the display.

SDM Family.

Controlled by the all in one BirdDog OS and with two BirdDog SDM modules to choose from, M1 an M2, there is a solution for every project. M1 is a full NDI Sender and Receiver based on the Intel SDM-L form factor and M2 is an NDI Receiver built on the Intel® SDM-S module. With support for resolutions all the way up to 4Kp60, there is also a RESTful API for programming completely automated spaces.

BirdDog OS.

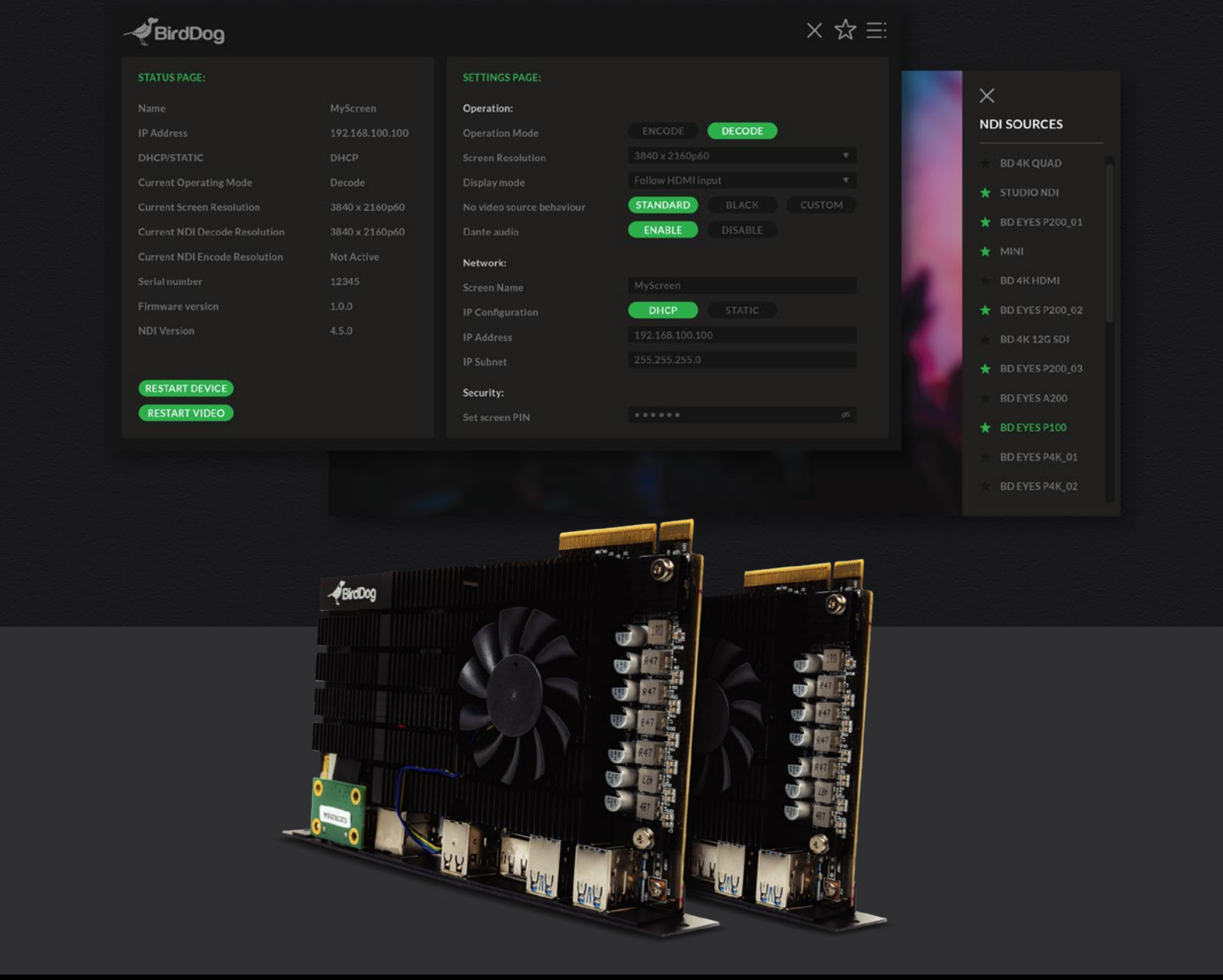
BirdDog have created a complete Operating System for Intel® SDM platform, simply called BirdDog OS, to give a truly integrated NDI® distribution system. Underpinned with BirdDog's technology, BirdDog OS has built in Crestron control and a RESTful API for complete automation.

M1.

M1 is an NDI® Sender and Receiver module based upon the Intel® SDM-L module. Receive NDI® from anywhere on the network to display on screen. With the Send function, you can plug a source such as a laptop in and then duplicate that across any number of additional BirdDog Display activated screens.

M2.

M2 is an NDI® Receiver module based upon the Intel® SDM-S module. Receive NDI® from anywhere on the network to display on screen.



Beautiful Interface.

The best user experiences are built upon easy to use interfaces. BirdDog OS features a clean and elegant design to make it super intuitive and easy to switch sources.

G'day Dante.

With the optional $99 USD Dante activation licence the M1 and M2 can have full Dante support. The M1 can embed Dante into the NDI stream and also de-embed Dante audio out of the NDI stream, and the M1 will allow for Dante embedding. Perfect for receiving NDI and splitting Dante out to the audio system in conference rooms, educational facilities, corporate AV spaces, and more.

Multiple Sources.

Harnessing the power of NDI®, BirdDog Display can receive see virtually unlimited number of NDI® sources on the network. Simply use a remote control or any pointing device to bring that source to full screen.

Powered by Intel.

BirdDog M1 and M2 are built upon Intel® SDM core architecture for maximum performance and reliability. Just as you'd expect when you use the best.

RESTful API. Crestron Control Library.

BirdDog Display has a complete RESTful API for programming your own automation as well as a Crestron Control Library.

Distribute NDI® content everywhere. Just add Central.

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. For more information see Central page.

Product Specifications TBC.

API

Crestron Control.

BirdDog's Crestron Control Library is a collection of examples and documentation to allow integration of BirdDog products within standard Crestron protocols. It includes a simple user interface for controlling BirdDog PTZ cameras and recalling positions, as well as routing NDI sources to BirdDog hardware decoders such as NDI Wallplates, SDM Modules, and converters.

RESTful API.

Download the free BirdDog RESTful API and program your own automation for all BirdDog hardware endpoints, including cameras.

Q-SYS Control Plugin.

Download the free BirdDog Q-SYS Plugin to start programming your own automation and integration into AV installations.

BirdDog Helpful Links

Unlock the latest features by updating firmware
BirdDog.tv/downloads

Activate your warranty by registering
BirdDog.tv/register

Download the latest manual
BirdDog/downloads

Help available
help@BirdDog.tv or BirdDog.tv/support

Join our user group
www.facebook.com/groups/BirdDogUsers

BirdDog.tv

hello@BirdDog.tv