

# LIVE CAST PRODUCTION SYSTEM

## A new way of content creations

The emergence of NDI and SRT transmission resolve our needs in efficiency of multimedia live production and content distribution purpose.



### EYES P200 PTZ CAMERA

Full NDI®  
Sony Image Module  
30x Optical zoom  
PoE or DC



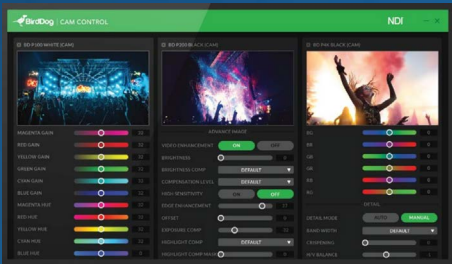
FP-PT1NW

### flp™ Wireless LIVECAM

360° Tally  
High-speed Precise Pan Tilt 300°/sec  
5 Kinds of Signal Transmit Simultaneously



## LIVECAST STATION



Free Cam Control App  
Paint, Set and Match



**ALL in ONE**  
Visual & Audio Mixer  
PTZ Joystick Control  
Director Intercom  
Tally System  
Stream Codec  
Title & Chroma Key  
Media Recorder  
Wired/Wireless Config



PTZKEY  
PTZ Keyboard



FP-LC8NW



FP-R20NW  
Wireless Encoder



P200  
PTZ Cam



P100  
PTZ Cam



|               |   |
|---------------|---|
| <b>Model</b>  | <b>BirdDog EYES P200 Full NDI Production Camera</b> |
| Imager        | 1 / 2.8 inch CMOS 2.13MP                            |
| LENS          | 4.3-129mm   |
| Zoom          | 30x ; 63.7° (W) – 2.3°(T)                           |
| Aperture      | F1.6 (W) – F4.7 (T)                                 |
| Shutter Speed | 1/1 – 1/10000s                                      |

|                  |  |
|------------------|--|
| Signal Format    | NDI /HDMI /SDI<br>Video Format: 1080p 60, 59.94, 50, 29.97, 25; 1080i 60, 59.94, 50; 720p 60, 59.94, 50<br>Audio I/O: 3.5mm Audio In (Stereo); 3.5mm Audio Out (Stereo)  |
| Distortion       | -2%~0.2%   |
| Pan Movement     | Horizontal: 175°~+175° (Zoom Adaptive Speed Range: 0.05° 100°/s)   |
| Tilt Movement    | Vertical: +90° to -30° (Zoom Adaptive Speed Range: 0.05° 50°/s)  |
| Preset Position  | 128 (Speed adjustable: Up to 150°/s)   |
| Preset Speed     | 0-5 Level adjustable   |
| 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)   |
| Noise Level      | Max 43dB at full speed pan   |
| Iris/Focus/WB    | Auto/Manual  |
| Camera control   | IP PTZ Control: NDI Control (auto configuring), VISCA IP<br>Serial PTZ Control: 2x RJ45: RS232/RS422/RS485; Protocol: VISCA / PELCO D  |
| Network          | Network Compression: Full NDI – i-frame high quality low latency NDI for production<br>Network Protocol: NDI – Discovery, configuration and control<br>Web Control Interface: Full control via Web/Mobile UI including Scene presets |
| Power            | 12V DC, PoE+ (IEEE 802.3at); Min: 15.2W; Max: 19.7W (PTZ move simultaneously)  |
| Dimension        | 160x178x220mm  |
| Weight           | 2.0Kg  |



|              |  |
|--------------|--|
| <b>Model</b> | <b>BirdDog PF200 Full NDI Box Camera</b>               |
| Imager       | SONY Exmor R CMOS sensors<br>1 / 2.86 inch CMOS 2.13MP |
| LENS         | 5.2-104mm  |
| Zoom         | 20x ; 55.8° (W)~3.2° (T)                               |
| Aperture     | F1.5 (W) – F3.0 (T)                                    |

|                   |  |
|-------------------|--|
| Shutter Speed     | 1/1 – 1/10000s   |
| Signal Format     | NDI/HDMI/USB2.0<br>Video Format: 1080p 60, 59.94, 50, 29.97, 25; 1080i 60, 59.94, 50 ; 720p 60, 59.94, 50<br>Audio I/O: 3.5mm Audio In (Stereo); 3.5mm Audio Out (Stereo) (NDI, and HDMI only) |
| Video Compression | Full NDI – i-frame high quality low latency NDI for production<br>USB UVC protocol   |
| Mechanical        | TALY: Front; Mount: 1/4-20" Tripod mount, 3/8" Tripod mount  |
| Preset Position   | 128 (Speed adjustable: Up to 150°/s)   |
| Preset Speed      | 0-5 Level adjustable   |
| Min illumination  | Color: 0.5 lux   |
| Noise Level       | Max 41dB at full speed zoom NC35   |
| Compensation      | Back Light Compensation  |
| Iris/Focus/WB     | Auto/Manual  |
| Filter Ring       | Filter 49 mm   |
| Control Interface | IP Control Protocol : NDI (auto configuring), VISCA<br>Serial Control Protocol: RS232 (VISCA / Pelco D/P)  |
| Network Interface | LAN: RJ45X1(1000Mb), NDI/IP video streaming, System upgrade, PoE (802.11af)<br>Web Control Interface: Full control via Web/Mobile UI including Scene presets                                   |
| Power             | 12V DC, PoE (IEEE 802.11af); 9W  |
| Dimension         | 58x60x71 mm  |
| Weight            | 666g (1lb 7.4oz)   |



| Model                | FP-PT4NW  | FP-PT1NW  |
|----------------------|---|---|
|                      | <b>flp™ LIVECAM Station</b><br>(NDI HX Wireless PTZ Camera, Optional Live RTMP/SRT Wireless Capable)                                |   |
| Imager               | 1/2.5" Back-Illuminated Exmor R CMOS  | 1/1.8" Exmor RS CMOS                                    |
| Pixels               | 8,930,000Pixels   | 2,400,000 Pixels  |
| Zoom                 | Optical Zoom 20X optical; Super Resolution Zoom (SRZ) 4K 30X, HD 40X;   | 12X   |
| Signal Format        | 2160/29.97p, 1080/59.94p, 1080/59.94i, 720/59.94p, 2160/25p, 1080/50p, 1080/50i, 720/50p, 2160/23.98p, 1080/23.98p                  | 1080p/60,1080i/60,1080p/50,1080i/50, 1080p/30,1080p/25, |
| Distortion           | -2%~0.2%  |   |
| Pan / tilt angle     | Pan -175°~+175°, Tilt +90°~45°  | Pan-175°~+175°,Tilt+90°~-30°                            |
| Pan / tilt speed     | Servo motor control. Shift speed: Pan 0.1°~300°/s, Tilt 0.1°~300°/s   |   |
| Pan / tilt precision | Precision repeatability error <0.01   |   |
| Shift / pitch slow   | Support   |   |
| Min illumination     | 0.01 Lux  |   |
| SNR                  | 50dB  | 55dB  |
| Definition           | 3840x2160   | 1920x1080   |
| Iris/Focus/White BAL | Auto/Manual   |   |
| Focal length         | f=4.4mm~88mm, F2.0 (Wide)~F3.8 (Tele)   | f=4.2mm 50.4mm,F1.8 (Wide) F2.8 (Tele)                  |
| Min distance         | 10mm~INF (Wide), 1500mm~INF (Tele)  | 1000mm INF (Wide),1500mm INF (Tele)                     |
| Preset position      | 100   |   |
| Camera control       | VISCA RS-422, RJ45 (input/output), Support control, NDI HX wireless   |   |
| Interface            | HDMI×1(PT4NW only), BNC (×1), 1.0 Vp-p, 75Ω, 3G-SDI OUT×1(option) ; NDI RJ45×1, NDI HX wireless Wi-Fi×2 IEEE802.11a/b/g/n/ac, USB×1 |   |
| Wireless             | NDI HX wireless, Delayed 150ms; (Optional SRT)  | NDI HX wireless, Delayed 100ms; (Optional SRT)          |
| Video coding         | H.264 Baseline/Main/High Profile, 4:2:0, MAX:32Mbps   | H.264 Baseline/Main/High Profile,4:2:0, MAX:8Mbps       |
| Audio coding         | AAC LC, 32Kbps, 64Kbps, 96Kbps,128 Kbps   |   |
| REC                  | MP4/MOV; 1920x1080@60fps  |   |
| Recorder Media       | Ultra TF (MicroSD), FAT32, exFAT  |   |
| Tally                | 360°Tally   |   |
| DC input             | DC jack 12DC, DC10.8V-13.2V, Power supply   |   |
| Dimension/Weight     | Size:160×155×230mm, Weight: ~3kg  | Size: 160×155×230 mm; Weight: ~3.7kg                    |



| Model                   | FP-R20NW Encode Recording Unit<br>(With NDI HX Wireless, Optional Wireless SRT Transimssion)  |
|-------------------------|---|
| Video I/O Ports         | Input: BNC×1, SD/HD/3G SDI<br>Loop Out: BNC×1, SD/HD/3G SDI<br>Output: Wi-Fi Antenna Port×, SMA-KEW IEEE 802.11 a/b/g/n/ac 5G frequency   |
| Network Port            | RJ45 ×1, 10/100/1000 Mbps Ethernet  |
| Control Interface       | UART serial port for controlling cameras. VISCA support   |
| Antenna Frequency Range | 2400-2500MHz, 5000-5850MHz, gain: 3db/8db /10db, standing wave ratio: 1.5, Input impedance:50Ω, high power: 50W, connector type SMA male, Antenna size: 160mm*18mm.   |
| Other I/O               | Power connector × 1, 12V, 2A.<br>Micro SD card socket × 1, store recording files.<br>USB type-A ×1, U-disk recording.<br>3.5mm jack × 1, MIC.   |
| Support Input Format    | SDI input loop out signal characteristics<br>• Support SD/HD/3Ga/3Gb/3Gb-DL/3Gb-DS standard.<br>• Supports up to 2048x1080 signal input.<br>• Supports 8/10/12-bit color depth.<br>• Support 60p, 60i, 50p, 50i, 30p, 25p signal formats.   |
| Recording               | • Video encoding: H.264 Baseline / Main / High Profile, 4:2:0, max. 8Mbps.<br>• Audio encoding: AAC LC, supports 32 Kbps, 64 Kbps, 96 Kbps, 128 Kbps.<br>• Recording file format: MP4 / MOV, constant frame and constant code, with TC<br>• Recording format: maximum support 1920x1080@60fps.<br>• Signal format: supports progressive and interlaced signals.<br>• The SD card file system format supports FAT32 and exFAT. |
| Live                    | Supports NDI HX 2.0, Encoding rate of the live video is the same as recording.  |
| Dimension               | 95mm×95mm×30mm  |
| Working Environment     | • Power requirements: 100 ~ 240 V AC, 50/60 Hz.<br>• Operating temperature: 5 to 40 degrees Celsius.<br>• Operating humidity: 20% to 80% (non-condensing state).  |

