



# O4



## Built for the Wild. Ready for the world.

BirdDog O4 is a purpose-built outdoor PTZ engineered for permanent deployment. With IP66 weatherproofing,  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  tolerance, 30 $\times$  optical zoom (60 $\times$  in HD), 500 m infrared night vision, and 4K60 video, O4 delivers reliable coverage where other PTZs fail.



### Broadcast-Quality Video, Anywhere.

O4 captures sharp, color-accurate 4K60 video using a large 1/1.8" CMOS sensor with multi-exposure HDR. With fine control over color, gamma, exposure, and dynamic range, it matches the look of higher-end production cameras — making it ideal for mixed workflows across AV and broadcast. From sports facilities to smart cities, transport, houses of worship, large-scale events, and security, O4 is built to produce exceptional content anywhere.



### See Further. Even at Night.

The 30 $\times$  optical zoom lens (60 $\times$  in HD) lets you frame subjects clearly from a distance, without relying on digital tricks. For low-light or no-light conditions, O4 deploys a precision 500 m infrared laser emitter, paired with IR cut filters and a black-and-white mode that adapts automatically to changing light. The result is visibility you can count on, day or night.



### All-Weather Warrior.

O4 operates from  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  and is protected by a fully sealed IP66-rated housing. A built-in heater prevents condensation, and cutting-edge lens coatings keep your optics clean. The result is a PTZ you can trust year-round, in any condition.



### Installation Made Simple.

Unlike typical outdoor PTZs that create cable management headaches, O4 is designed with installers in mind. All I/O connections live in a concealed, weather-sealed undercarriage with three flanges and built-in strain relief for clean, reliable setups. Power can be delivered over PoE++ for single-cable simplicity, or via external DC for flexibility. And if you need O4 indoors, simply remove the panel and mount it like any standard PTZ.



### AI Tracking That Moves With Purpose.

O4 features BirdDog's next-generation AI tracking engine with fully adjustable movement profiles. Whether you need fast, responsive tracking for sports or smooth, cinematic motion for worship and live events, O4 adapts to your environment. For security and monitoring, its human-like precision ensures subjects are always in frame.



### No Wipers. No Worries.

O4 is built for unforgiving outdoor conditions, so we eliminated the weakest link — the wiper. Instead, its aircraft-grade, hydrophobic glass repels water, dust, and grime to keep the lens clear without moving parts. That means no smears, no streaks, and no maintenance. Rain or shine, O4 delivers consistent visibility and reliable performance year-round.

NDI HX3

NDI

### Mount Like You Mean It.

The optional O4 mount system transforms your install into a clean, architectural feature. It hides cables, hugs the surface, and keeps the camera looking sleek — never like a repurposed CCTV box.

### Maximum Workflow Flexibility.

O4 is built for almost any workflow. Stream in Full NDI® and NDI® HX3 at the same time, or output NDI alongside SRT, RTMP, or RTSP. With native 12G-SDI and fiber via SFP+, O4 is built to deliver broadcast results in any environment. O4 integrates effortlessly into IP, hybrid, or traditional baseband setups. PoE++ keeps installs simple and scalable, while dual-streaming support ensures you can deliver in multiple formats at once.

### BirdDog DNA. Field Ready.

O4 is powered by BirdDog's next-generation software, control it through BirdUI, API, or third-party systems, and it integrates instantly with KBD, CamControl, and other BirdDog tools.



Feature	Specifications
<b>IMAGING</b>	
Imaging Sensor	Sony 1 / 1.8" CMOS – ULTRA HD
Lens	f=6.9mm~215mm
Optical Zoom	Optical 30x (4k) – 60x (HD), 8x Digital
Video Format	2160p @ 60/59.94/50/30/29.97/25fps 1080p @ 60/59.94/50/30/29.97/25fps 1080i @ 60,59.94,50fps 720p @ 30/29.97/25fps
Horizontal angle of view	60°~2°
Vertical angle of view	34°~1.1°
Diagonal angle of view	67°~2.3°
Aperture	f1.35~f4.6
Focus	Auto (Global/Centre/Upper/Lower/Left/Right), Manual
Exposure	Auto, Manual Shutter Priority, Iris Priority, Brightness Priority
Exposure Metering	Average, Centre, Top, Bottom, Left, Right
Backlight Compensation	Yes
Exposure Compensation	Yes
Flicker Reduction	Outdoor / 50Hz / 60Hz
White Balance	Auto / One Push / Indoor / Outdoor / Manual / Color Temperature
Digital Noise Reduction	2D/3D Noise Reduction
SNR	>50dB
Effective Pixels	8.4 MP
HDR	Supported, REC.2020 Colour Space

<b>MECHANICAL</b>	
Pan/Tilt Rotation	±170°, -30° ~ +90°
Pan Control Speed	0.05~90°/sec
Tilt Control Speed	0.05~90°/sec
Preset Number	255 Presets

Feature	Specifications
IR Laser	Included, 500m illumination distance
FreeD Support	Included, UDP and Embedded in NDI Stream
Integrated Heater	Included
Glass Coating	High-strength Aerospace/Marine grade Hydrophobic, Anti-mildew, Anti-fouling coating.
<b>AI FUNCTIONS</b>	
AI Auto Tracking	Area Management, Framing Adjustment, Sensitivity Adjustment, Auto Framing, Stage Tracking, Zone Tracking
AI Gesture Control	Supported
<b>I/O INTERFACE</b>	
Video Output Interfaces	12G-SDI, RJ-45
Video Compression Formats	h.264, h.265, NDI High Bandwidth
Audio I/O	Stereo Unbalanced 1/4" TRS Input/Output
Network Interface	SFP+ Fibre Optic, RJ45 1GbBaseT adaptive Ethernet port; PoE++
Encoder Network Protocols	NDI® HX2, NDI® HX3, High Bandwidth NDI, RTSP, RTMP, SRT, Dante AV-H (unlocked via Dante Activator)
Control Interfaces	Ethernet, Serial
Control Protocols	NDI, VISCA-IP
API Control	BirdDog RESTful API 2.0

<b>GENERAL</b>	
Input Voltage	DC 24V, PoE++
Input Current	2.1 A
Power Consumption	40W Max.
Operating Temperature	-40°C ~ +60°C
IP Rating	IP66
Dimensions (W*H*D)	200x330x226mm
Weight	7.6Kg