



2024

CATALOGUE

PRODUCTION. SIMPLIFIED.

NDI



X1
\$995
USD

X1 ULTRA
\$1495
USD

BirdDog | X1 · X1 ULTRA

Bring on the X-Factor.

Get ready to revolutionize your content creation experience with BirdDog X1 and X1 Ultra – PTZs like no other.

Experience category defining smooth, controllable movement and stunning image quality with X1 and X1 Ultra, with Halo Tally and AI Tracking for pure live production magic. Say hello to seamless connectivity with NDI® | HX3 and Wi-Fi, ensuring you stay at the cutting edge of technological excellence. And here's the showstopper: an industry-first e-ink display that not only tells you everything you need to know, but stays brilliantly visible even when the camera is off! One more thing... X1 and X1 Ultra decode NDI® | HX* at the same time! Say goodbye to guesswork with confidence monitoring or teleprompting output directly from your camera.

Elevate your creativity, embrace innovation, and let the excitement unfold with X1 and X1 Ultra.

*NDI | HX2 and NDI | HX3 supported.

Halo Tally.

Professional results need professional tools. X1 and X1 Ultra sport the most visible and effective Tally system available. Up front with a large, daylight visible border, and out back with an interchangeable, illuminated numbering system. Your cast and crew will always know where to look to keep your audience engaged.

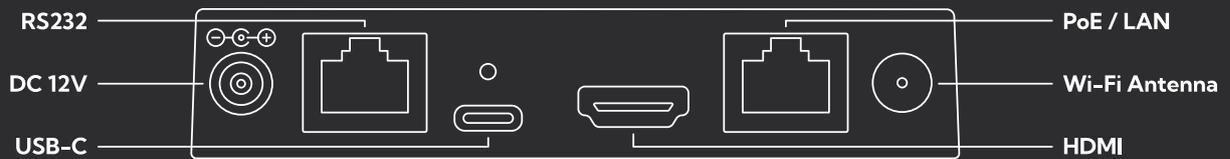
AI Tracking.

Every production could use a little help from a friend. The X1 and X1 Ultra keep your subject in focus with AI tracking technology, intelligently following your subject's movements in real-time. Whether you're orchestrating a live event, capturing spontaneous moments in a hybrid environment, or focusing on details in a TED talk, AI tracking helps you get well framed – without needing an octopus to run the controller. You can even select the individual in the frame to follow.

NDI® | HX3.

The X1 and X1 Ultra delivers superior network performance via NDI® | HX3 integration. Significantly reducing network impact while maintaining excellent image quality, meaning its more friendly in more network environments. BirdDog's NDI® | HX3 surpasses certification parameters, delivering quality and performance you can count on.

*NDI® | HX2 and NDI® | HX3 supported.



Wi-Fi.

No need to use cables to capture every shot. On top of regular Ethernet with PoE, X1 and X1 Ultra have built-in Wi-Fi functionality. Easily capture shots from spots where it's hard to run cable, seamlessly integrating into any environment. Your set up just became a whole lot more flexible.

Integrated NDI® | HX Decoder.

The X1 and X1 Ultra are the world's first PTZ cameras featuring a simultaneous NDI® | HX* Decoder designed specifically for confidence monitoring, return feeds, or teleprompter usage. We've pulled all this connectivity into a single cable, radically simplifying how you interface with your equipment. Less gear. Less hassle. Whether you're broadcasting live or delivering a CEO address, the integrated NDI® | HX decoder enables more engagement with less setup.

*NDI® | HX2 and NDI® | HX3 supported.

E-Ink Label. Get Inked.

The always-on e-Ink label on the X1 and X1 Ultra is a game-changer. From network addresses for easy access to controls through to customisable logos* to complement your brand image, this cool feature ensures that your set-up is clear and each camera easily identifiable even when the power is off.

*Coming soon.

MAKI



12x*
\$1295
USD

20x*
\$1295
USD

BirdDog | MAKI ULTRA

Make A Killer Image.

Introducing the groundbreaking MAKI Ultra NDI® | HX3 camera, where compact innovation meets potent performance.

This powerhouse combines lightning-fast autofocus and 4K60 capabilities, ensuring you capture every moment with stunning precision.

Intuitive physical buttons located on the side of the camera give you seamless control, immerse yourself in your creative zone without being bogged down by technicalities. Featuring BirdDog's HALO Tally system, MAKI Ultra makes it simple and clear to see which camera is live on air at any time.

Choose between 12x and 20x zoom options to tailor your shooting experience.

Halo Tally.

Professional results need professional tools. MAKI Ultra sports the most visible and effective Tally system available. Up front with a large, daylight visible border. Your cast and crew will always know where to look to keep you audience engaged and your look polished.

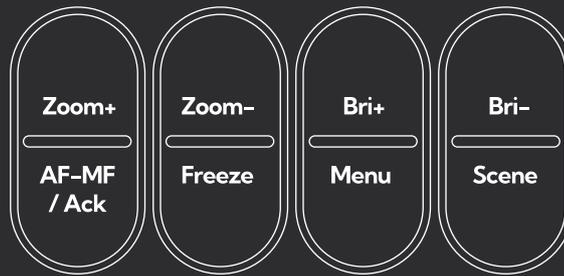
Compact. Yet Mighty.

The MAKI Ultra boasts a compact footprint helping you capture those unusual and engaging camera angles with ease. With MAKI Ultra you can deliver killer POV shots that put your audience right in the game at eSports events, or attach MAKI Ultra to a band rig to capture incredible angles of your drummers or instrumentalists, be they in a band or a house of worship. Wherever the action is, MAKI Ultra ensures you never miss a beat.

Super-Fast Autofocus. Keeping Pace with Your Vision.

It's fast AF. MAKI Ultra's super-fast autofocus is a game-changer for dynamic content and fast-paced environments. Equipped with a ToF sensor and powered by advanced automatic focusing algorithms, MAKI Ultra ensures rapid and accurate autofocus. Whether your subjects are zipping across the frame or moving closer and further away to the camera, MAKI Ultra keeps them sharp and in focus. Every. Single. Time.

*Maki Ultra is available in 12x or 20x zoom.



4K60 – Capture Every Moment with Ultra detail.

With its 4K60 capabilities, MAKI Ultra expands your options on what and how you capture content. From fast-moving action shots to incredible detail in low-light sets, you can get all the detail thanks to MAKI Ultra's high frame rate and advanced image processing capabilities.

NDI® | HX3: Enhanced Reliability on More Networks.

MAKI Ultra delivers superior network performance via NDI® | HX3 integration. Significantly reducing network impact while maintaining excellent image quality, meaning it's more friendly in more network environments. BirdDog's NDI® | HX3 surpasses certification parameters, delivering quality and performance you can count on.

On-board Buttons. Let your digits take control.

MAKI Ultra's intuitive physical buttons means that once you've set it up, you can just reach in and make quick adjustments to zoom and focus, and access to the onscreen menu. No awkwardly placed controls or a walk back to your controller. One and done, on to the next task.

| Feature | X1 | X1 Ultra |
|--------------------------------|---|---|
| IMAGING | | |
| Image Sensor | Sony 1/2.8" CMOS · FULL HD | Sony 1/2.8" CMOS · ULTRA HD |
| Lens | f=5.5mm ~ 110mm | f=4.1mm – 49.2mm |
| Optical Zoom | 20x | 12x |
| Video Format | 1080p @ 60/59.94/50/30/29.97/25fps 720p @ 60/50/30/25fps | 2160p @ 30/29.97/25fps 1080p @ 30/29.97/25fps 720p @ 30/29.97/25fps |
| Horizontal angle of view | 55.8° (W) – 3.2° (T) | 70.28° (W) – 6.57° (T) |
| Vertical angle of view | 32.2° (W) – 1.8° (T) | 42.06° (W) – 3.76° (T) |
| Diagonal angle of view | 61° (W) – 3.64° (T) | 78.36° (W) – 7.5° (T) |
| Aperture | F1.6 ~ 3.5 | F1.8 ~ 2.68 |
| Focus | Auto, Manual | |
| Exposure | Auto, Shutter Priority, Iris Priority, Manual | |
| Backlight Compensation | Yes | |
| Digital Noise Reduction | 2D and 3D Noise Reduction | |
| SNR | >50dB | |
| Effective Pixels | 2.07 MP | 8.29 MP |
| MECHANICAL | | |
| Pan/Tilt Rotation | ±175°, -90°~+90° | |
| Pan Control Speed | 0.1 ~80°/sec | |
| Tilt Control Speed | 0.1 ~60°/sec | |
| Preset Number | 255 presets | |
| I/O INTERFACE | | |
| Video Output Interfaces | HDMI, USB-C UVC 1.1, Network | |
| Video Compression Format | H.264, H.265 | |
| Network Interfaces | 100M adaptive Ethernet port; POE IEEE802.3af, Wi-Fi IEEE 802.11ac | |
| Encoder Network Protocols | NDI HX2, NDI HX3, RTSP, RTMP | |
| HDMI Decoder Network Protocols | NDI HX2, NDI HX3 | |
| Control Interfaces | 10M/100M Ethernet, Wi-Fi IEEE 802.11ac, RS232 (input & output), RS485, TYPE-C(UVC1.1) | |
| Control Protocols | VISCA Baud Rate: 9600/4800/38400/2400, VISCA-IP, NDI | |
| GENERAL PARAMETER | | |
| Input Voltage | DC 12V, POE IEEE802.3af | |
| Input Current | 2.0A (Max.) | |
| Power Consumption | 13W (Max.) | |
| Working Temperature | -10°C +40° | |
| Working Humidity | 20% ~ 80% | |
| Dimension (W*H*D) | 171.6*192.6*171.6mm/ 260*217*197mm (before/ after packing) | |
| Net and Gross Weight | 1.35kg/2.05kg (Net/Gross weight) | 1.43kg/2.096kg (Net/Gross weight) |

| Feature | Maki Ultra 12x | Maki Ultra 20x |
|--------------------------|--|-----------------------|
| IMAGING | | |
| Image Sensor | 1/2.8 inches, CMOS | |
| Optical Zoom | 12x | 20x |
| Video Format | 2160p @ 60/59.94/50/30/29.97/25fps 1080p @ 60/59.94/50/30/29.97/25fps 720p @ 60/50/30/25fps | |
| Horizontal angle of view | 72.8° (W) ~ 6.8° (T) | 61.2° (W) ~ 3.38° (T) |
| Vertical angle of view | 44.1° (W) ~ 3.8° (T) | 35.3° (W) ~ 1.9° (T) |
| Aperture | F1.8~F2.68 | F1.6~F3.6 |
| Focus | TOF, Auto, Manual | |
| Exposure | Auto, Shutter Priority, Iris Priority, Manual | |
| Backlight Compensation | Yes | |
| Digital Noise Reduction | Yes | |
| SNR | >55dB | |
| Effective Pixels | >8.4 Megapixels | |
| MECHANICAL | | |
| Physical Buttons | Quantity: 8; Features: Zoom operation, focus operation, brightness adjustment, menu control, image freezing, and mode switching. | |
| I/O INTERFACE | | |
| Video Interfaces | 1 x HDMI 2.0; 1 x 3G-SDI, USB-C UVC 1.1 | |
| Video Compression Format | H.264 / H.265 | |
| LAN | 100M/1000M adaptive Ethernet Support: PoE(802.3af) | |
| Network Protocol | NDI HX2, NDI HX3 | |
| Control Protocol | VISCA Baud Rate: 38400/9600/4800/2400, VISCA-IP, NDI | |
| Control Interface | RS485: 2 pin phoenix port, TYPE-C (UVC1.1) | |
| Audio I/O | 1 x Line In, 3.5mm Jack; 1 x Line Out, 3.5mm Jack, Built-in Mic | |
| USB | 1 x USB3.0, Type-C (UVC 1.1) | |
| GENERAL PARAMETER | | |
| Power Input | DC 005-2.0mm type (DC IN 12V) | |
| Input Voltage | DC 12V / PoE(802.3af) | |
| Input Current | 1A(Max.) | |
| Power Consumption | 12W (Max) | |
| Dimension (W*H*D) | 145mm 79mm 80mm (SDI connector excluded) | |
| Net and Gross Weight | 0.8kg/1.3kg (Net/Gross weight) | |