



BG-AVENTO-4K

4K AI ENABLED DUAL-LENS NDI PTZ CONFERENCE CAMERA WITH INTELLIGENT SPEAKER TRACKING & PANORAMIC VIEW

The BG-AVENTO-4K is an advanced dual-lens AI-powered 4K camera built to transform collaboration in conference rooms, classrooms, and training environments. Featuring both a powerful 4K PTZ lens and a panoramic wide-angle lens, it simultaneously delivers detailed close-up visuals and full-room coverage, ensuring every participant is clearly visible and naturally framed on screen.

Designed for intelligent interaction, the BG-AVENTO-4K integrates four linear array microphones and sophisticated AI algorithms for precise sound localization and automatic speaker tracking. Combined with plug-and-play USB connectivity, 4K@30fps video performance, and compatibility with major conferencing platforms, it delivers a professional, seamless, and highly engaging communication experience for modern hybrid environments.



FEATURES



DUAL-LENS CAPTURE

Combines a 4K PTZ lens with a 1080p panoramic lens for simultaneous close-up and full-room viewing



TRUE 4K PERFORMANCE

Supports up to 4K@30fps via USB 3.0 for ultra-clear, professional-grade video quality



AI INTELLIGENT TRACKING

Auto framing, speaker tracking, presenter tracking, and individual framing ensure every participant is always in view



WIDE COVERAGE & OPTICAL ZOOM

3x optical zoom and wide-angle fields of view (110° PTZ / 120° panoramic) provide exceptional flexibility in small to medium spaces



AI VOICE DETECTION

4-mic linear array delivers accurate voice localization and tracking for enhanced AI responsiveness



PLUG-AND-PLAY

USB connectivity, HDMI output, and easy mounting options make installation fast and effortless



TECH SPECIFICATIONS

Video & Audio

Input & Output Port

1 x USB-C, 1 x HDMI OUT, 1 x USB-A, 1 x DC 12V IN

USB 3.0/2.0 Resolution Supported

MJPEG/H.265/H.264:

320x240@30fps, 640x340@30fps, 1280x720@30fps (default), 1920x1080@30fps, 3840x2160@30fps

NV12:

320x240@30fps, 640x340@30fps, 1280x720@30fps (default), 1920x1080@30fps*

Note: Resolutions above apply only to the main lens. The panoramic lens resolution is fixed at 1080p@30fps (MJPEG).

Output Video Encoding

MJPEG / H.264 / H.265 / NV12

USB Protocol

UVC 1.1

Latency

2 frames (33 ms) maximum

Camera

Lens

Main Lens – 8MP, 3x optical zoom, DFOV 110°
Panoramic Lens – 2MP, fixed focus, DFOV 120°

Sensor

Main Lens – 8MP
Panoramic Lens – 2MP

White Balance

Auto

Backlight Compensation

Auto

Digital Noise Reduction

2D, 3D DNR supported

PTZ Range

Horizontal ±75°, Vertical ±35°

HDR

Supported

Tracking Modes

Auto Framing / Speaker Tracking / Presenter Tracking / Individuals Gallery

Speakerphone

Microphone

4 x linear microphone arrays for human voice detection and audio tracking (not usable as video conference audio source)

Peripherals

Supports connection with USB peripherals such as speakerphones or third-party audio devices

Limited Product Warranty Terms

Pro Line: 5-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Essential Line: 3-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Cables: Lifetime Limited Product Warranty.

For complete warranty information, please visit bzbgear.com/warranty.

For questions, please call 1.888.499.9906 or email support@bzbgear.com.

Pro Line Products

5-YEAR WARRANTY

Essential Line Products

3-YEAR WARRANTY

Cables Products

LIFETIME WARRANTY





TECH SPECIFICATIONS

Communication & Control / General

| | |
|------------------------|---|
| Compatible OS | Windows 10/11, macOS 10.10 or above |
| HDMI OUT | HDMI 1.4b with 4K@30Hz (no-HDCP). Outputs continuously unless powered off or in standby. |
| USB Ports | USB-C 3.0 female; USB-A 2.0 female |
| Control Methods | IR Remote, LAN (Telnet & Web UI) |
| Operating Temperature | 32°F–104°F / 0°C–40°C, 10%–90% non-condensing |
| Storage Temperature | -4°F–140°F / -20°C–60°C, 10%–90% non-condensing |
| Power Supply | DC 12V, 3A |
| Power Consumption | 10.8W (Max) |
| Dimensions (W x H x D) | 7.87" x 3.95" x 2.72" / 200 x 100.44 x 69 mm |
| Net Weight | 0.97 lb / 0.44 kg |

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