

D7160-4K

AI Auto Tracking PTZ Camera



Description

The D7160-4K AI Auto Tracking PTZ Camera integrates 4K Ultra HD imaging, AI-powered auto tracking, auto framing, and 12× optical zoom into a professional conferencing solution. Equipped with a premium Sony CMOS sensor and intelligent edge AI technology, it delivers accurate speaker tracking and exceptional image quality. With support for NDI®|HX2, HDMI 2.0, 3G-SDI, USB 3.0, and IP streaming, it is ideal for conference rooms, education, live streaming, remote collaboration, and other professional AV applications.

Features

- **AI Tracking Optimized for Professional Applications:** The D7160-4K Professional AI PTZ Camera combines a premium CMOS image sensor with an advanced edge AI processor to deliver stunning 4K@30fps Ultra HD video. Powered by intelligent AI computing and facial tracking technology, together with 12× optical zoom, it is ideal for education, conferencing, and other professional applications. Supporting the NDI®|HX2 protocol, the camera enables high-quality, low-latency IP video transmission over dedicated conference networks.
- **256 Preset Positions for Instant Multi-Angle Switching:** The camera supports up to 256 preset positions, allowing users to preconfigure panoramic, medium, and close-up shots. With a single press on the remote controller, camera views can be recalled instantly for smooth and efficient scene transitions during meetings and presentations.
- **NDI®|HX2 for Efficient IP Video Transmission:** Compatible with the NDI®|HX2 transmission protocol, the camera delivers high-quality video over a single Ethernet cable. Its efficient bandwidth compression minimizes network usage while maintaining excellent image quality, effectively reducing packet loss, video stuttering, and other transmission issues caused by limited network bandwidth.
- **AI Speaker Tracking:** Powered by proprietary ReID (Person Re-Identification) technology, the camera intelligently recognizes speakers based on body shape, facial features, and clothing characteristics. It automatically follows the target to keep the speaker centered in the frame throughout the presentation. Even when multiple people enter the scene or the presenter temporarily leaves the field of view, the

camera can quickly re-identify and resume tracking once the target reappears.

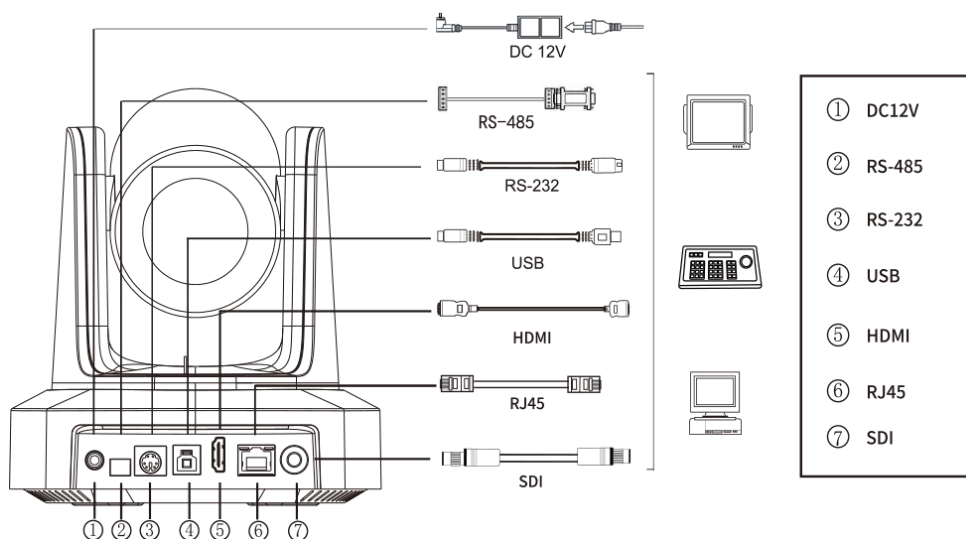
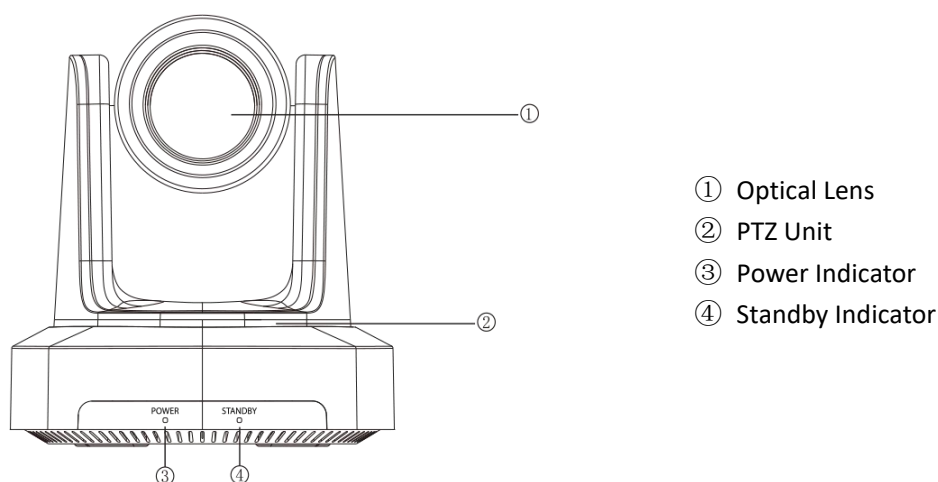
- **12× Optical Zoom for Long-Distance Capture:** Equipped with a 12× optical zoom lens, the camera captures distant subjects with exceptional clarity while preserving fine details. It delivers sharp, vivid images and an immersive viewing experience across various installation environments.
- **4K@30fps Ultra HD Image Quality:** Featuring the Sony IMX415 1/2.8-inch CMOS image sensor with 8.29 million effective pixels, the camera outputs crystal-clear 4K@30fps Ultra HD video. With outstanding low-light performance, it captures fine details and natural facial expressions in both small meeting rooms and large conference venues, delivering vivid, lifelike images and an immersive viewing experience.
- **70° Wide-Angle Coverage:** The camera is equipped with a 70.28° wide-angle lens, providing broad coverage for conference spaces. With a horizontal field of view ranging from 70.28° (Wide) to 6.57° (Tele) and a vertical field of view from 42.06° (Wide) to 3.76° (Tele), it adapts easily to conferences, training sessions, presentations, and live streaming, delivering clear, natural images with minimal distortion.
- **Multiple Simultaneous Video Outputs:** Featuring HDMI 2.0 and 3G-SDI interfaces, the camera supports 4K@30fps uncompressed video output. It can simultaneously output four high-definition video streams via HDMI 2.0, 3G-SDI, USB 3.0, and IP, providing flexible connectivity for a wide range of professional AV applications.
- **Flexible Installation Options:** An integrated gravity sensor automatically adjusts image orientation, supporting desktop, wall-mounted, ceiling-mounted, and inverted installations for greater deployment flexibility across different project requirements.

Specifications

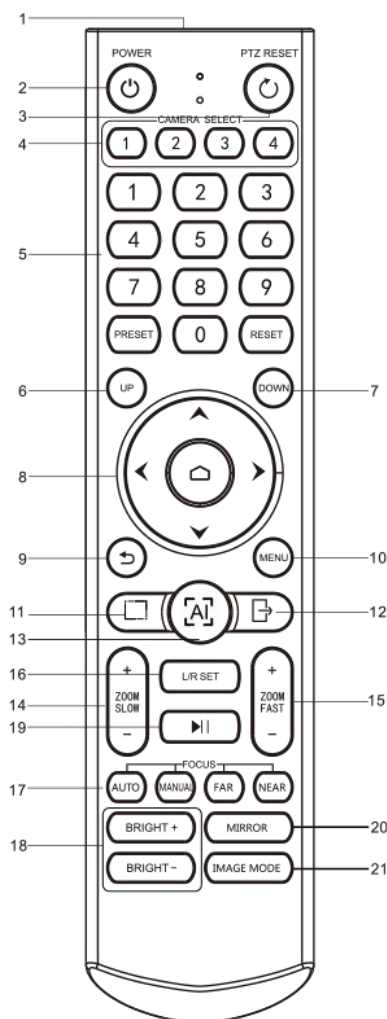
Model	D7160-4K
Image Sensor	Sony IMX415 1/2.8" CMOS
Effective Pixels	8.29 megapixels, 16:9
Optical Zoom	12× Optical Zoom
Focal Length	f = 4.1–49.2 mm
Aperture	F1.8–F2.68
Horizontal Field of View	70.28° (Wide) – 6.57° (Tele)
Vertical Field of View	42.06° (Wide) – 3.76° (Tele)
Diagonal Field of View	78.36° (Wide) – 7.5° (Tele)
Video Output Format	HDMI (4KP@30/25fps, 1080P@60/59.94/50/30/29.97/25fps, 720P@60/59.94/50/30); USB3.0 (3840*2160P@30fps, 1920*1080P@30fps, 1280*720P@30fps, 640*480P@30fps, 320*240P@30fps; YUY2/NV12/H.264/H.265/MJPEG)
Video Compression	H.264, H.265, MJPG, YUY2
Backlight Compensation	Supported
Signal-to-Noise Ratio	≥50dB
Focus	Auto / Manual
Digital Noise Reduction	2D & 3D DNR
Exposure Compensation	Auto / Manual
Input / Output Interfaces	
Video Output Interface	HDMI, USB3.0, RJ45, SDI
Video Compression	H.264, H.265, MJPG, YUY2
Ethernet Port	10/100/1000 Mbps adaptive Ethernet port, supports PoE (IEEE 802.3at)
Network Protocols	NDI HX2, RTSP, RTMP, VISCA over IP, ONVIF, SRT
Control Protocols	VISCA/Pelco-D/Pelco-P; Baud Rate: 2400/4800/9600/38400

Control Interfaces	RS232 (input only), RS485, USB3.0 (UVC1.1), RJ45
PTZ Parameters	
Pan Rotation	350° (±175°), speed: 0.1°/s – 100°/s
Tilt Rotation	180° (±90°), speed: 0.1°/s – 80°/s
Presets	Up to 255 presets (10 presets via IR remote control)
General	
Operating Systems	Windows 10 / Windows 11 or higher, Android, macOS 10.10 or higher, Linux (UVC supported required)
Power Supply	DC 12V
Current	2.0A (Max.)
Power Consumption	24W (Max.)
Storage Temperature	-20℃~60℃
Storage Humidity	20%~90% RH
Operating Temperature	0℃~40℃
Operating Humidity	20%~80% RH
Product Dimensions (W×H×D)	166 × 165 × 170 mm
Package Dimensions (W×H×D)	285 × 217 × 197 mm
Net Weight	1.6 kg
Gross Weight	2.8 kg

Front / Rear Panel



Remote Control



No.	Item	Description
1	IR Transmitter	Infrared transmission window of the remote control.
2	Power	Press to switch the camera to Standby mode.
3	Auto Test	Resets the PTZ position (PTZ Home).
4	Camera Address	Used to match the remote control with the corresponding camera address.
5	Preset Control	Used for preset position operations. Set Preset: [SET] + [Number] Clear Preset: [CLEAR] + [Number]
6	Normal Installation	Sets the camera to normal (upright) installation mode.
7	Ceiling Installation	Sets the camera to inverted (ceiling-mounted) installation mode.
8	PTZ Control	Controls camera pan and tilt using the directional buttons. Press the [] button to return the camera to its home position.
9	Back	Returns to the previous menu.
10	Menu	Opens the on-screen menu for camera configuration.
11		Enters Single-Person Tracking mode. Use the Left/Right buttons to select the target, then press OK to confirm.
12		Exits Single-Person Tracking mode and returns to Multi-Person Tracking mode.
13		Enables or disables Multi-Person Tracking mode.
14	Slow Zoom	[+] Zoom In (Slow) [-] Zoom Out (Slow)
15	Fast Zoom	[+] Zoom In (Fast) [-] Zoom Out (Fast)
16	Left/Right Setting	Press and hold for 5 seconds to reverse the left/right pan direction.
17	Focus	Auto Focus is enabled by default. Switch to Manual Focus and adjust using Near or Far until the image is clear.
18	Brightness	Increases or decreases image brightness.
19	Freeze	Freezes or unfreezes the video image.
20	Mirror	Enables or disables left/right image mirroring.
21	Image Mode	Switches between three image modes: Standard, PC, and Vivid.

Operation Notes:

1. Ensure that the indicator corresponding to the selected camera address is illuminated.
2. Make sure the batteries are installed correctly.
3. Verify that the camera address selected on the remote control matches the Remote Control Address configured in the camera menu.
4. Ensure that the camera is powered on and operating normally.