zowietek ZowiePTZ HDMI SDI USB 25X

Zowietek 4K PTZ Camera User Manual

Model: ZowiePTZ (HDMI SDI USB 25X)

Brand: zowietek

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Zowietek 4K PTZ Camera, Model ZowiePTZ (HDMI SDI USB 25X). This camera is designed for professional video applications, offering 4K resolution, 25X optical zoom, and versatile output options including HDMI, SDI, and USB, alongside advanced IP streaming capabilities.

Please read this manual thoroughly before using the product to ensure proper and safe operation. Keep this manual for future reference.

2. SAFETY INFORMATION

- **Power Supply:** Use only the provided power adapter. Ensure the power source matches the camera's requirements.

- **Installation:** Install the camera on a stable surface or mount securely according to instructions. Avoid placing it in unstable locations.

- **Environment:** Do not expose the camera to moisture, dust, extreme temperatures, or direct sunlight. Operate within specified environmental conditions.

- **Cleaning:** Disconnect power before cleaning. Use a soft, dry cloth. Avoid liquid or aerosol cleaners.

- **Servicing:** Do not attempt to open or service the camera yourself. Refer all servicing to qualified personnel.

- **Cables:** Ensure all cables are properly connected and not damaged. Avoid tripping hazards.

3. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- 4K PTZ Camera

- Power Supply

- Quick Start Guide

- Wall Mount

- HDMI Cable
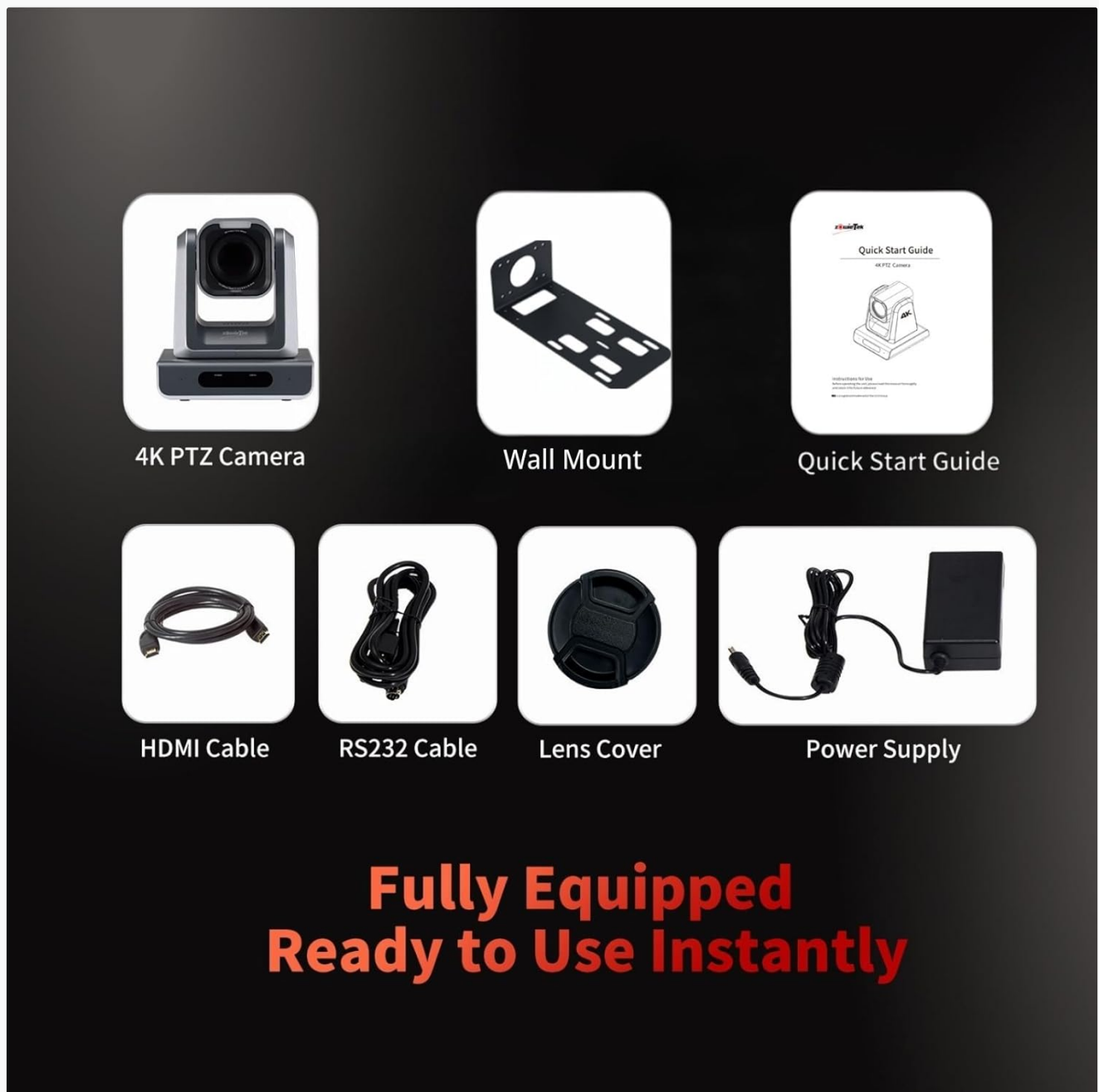- RS232 Cable
- Lens Cover

Figure 3.1: Package Contents. The image displays the Zowietek 4K PTZ Camera, two remote controls, a wall mount bracket, screws, an HDMI cable, an RS232 cable, a lens cover, and a power supply unit.

4. PRODUCT OVERVIEW

4.1 Camera Components

Figure 4.1: Front view of the Zowietek 4K PTZ Camera. Shows the camera lens, the 4K branding, and the base with Power and Status indicators.

The Zowietek 4K PTZ Camera features a high-quality lens with 25X optical zoom, capable of capturing stunning 4K UHD video. The camera body is designed for pan, tilt, and zoom movements, controlled remotely. The front panel includes LED indicators for Power and Status.

4.2 Rear Panel Interfaces

Figure 4.2: Rear panel interfaces. This image details the various ports on the back of the camera, including DC Power, LAN/PoE, 3G-SDI, HDMI-4K, USB Type-A, RS232 (Input/Output), RS485/422, TF Card slot, and Line In.

- **DC Power:** Connect the provided power adapter.
- **LAN/PoE:** Ethernet port for network connection and Power over Ethernet (PoE).
- **3G-SDI:** SDI video output (up to 1080P).
- **HDMI-4K:** HDMI video output (up to 4K).
- **USB Type-A:** USB output for conference applications.
- **RS232 (Input/Output):** Serial port for camera control.

- **RS485/422:** Additional serial port for control.

- **TF Card:** Slot for local recording to a MicroSD card.

- **Line In:** Audio input for external microphone.

- **Built-in Microphone:** Integrated microphone for audio capture.

5. SETUP

5.1 Physical Installation

The camera can be placed on a flat surface or mounted using the included wall mount bracket.

1. **Desktop Placement:** Ensure the camera is on a stable, level surface.

2. **Wall Mounting:**

   - Attach the wall mount bracket to the desired location using appropriate screws and anchors.
   - Secure the camera to the bracket. Ensure it is firmly attached to prevent accidental falls.

5.2 Power and Network Connection

1. **Power Supply:** Connect the power adapter to the DC Power port on the camera and plug it into an electrical outlet. Alternatively, if using Power over Ethernet (PoE), connect an Ethernet cable from a PoE-enabled switch or injector to the LAN/PoE port.

2. **Network Connection:** Connect an Ethernet cable from your network router or switch to the LAN/PoE port for IP control and streaming.

Figure 5.1: Power over Ethernet (PoE) connection. This image illustrates how the Zowietek camera can receive power and data through a single Ethernet cable via PoE.

5.3 Video and Audio Output Connections

- **HDMI Output:** Connect an HDMI cable from the HDMI-4K port to your display, capture card, or switcher.

- **SDI Output:** Connect an SDI cable from the 3G-SDI port to your SDI-compatible device.

- **USB Output:** Connect a USB cable from the USB Type-A port to a computer for use as a webcam or for conference applications.

- **Audio Input:** If using an external microphone, connect it to the Line In port.

Figure 5.2: HDMI and SDI Embedded Audio. This graphic indicates that audio can be embedded within the HDMI and SDI video outputs.

5.4 Initial Configuration (ZowieUI)

The ZowieUI web interface allows comprehensive control and configuration of your camera.

1. Ensure the camera is connected to your network.

2. Open a web browser on a computer connected to the same network.

3. Enter the camera's IP address in the browser's address bar. The default IP address can usually be found in the Quick Start Guide or detected using network scanning tools. A common default IP is http://192.168.1.128.

4. Log in using the default credentials (refer to the Quick Start Guide for details).

5. From the ZowieUI, you can manage settings such as focus, white balance, exposure, color, streaming protocols (H.265/H.264, bitrate), audio, and OSD (On-Screen Display).

Figure 5.3: ZowieUI web interface. This image shows the comprehensive control panel for managing camera settings, including multiview, movement, zoom, and image adjustments.

6. OPERATING THE CAMERA

6.1 Pan, Tilt, and Zoom (PTZ) Control

The camera's pan, tilt, and zoom functions can be controlled via the included IR remote, the ZowieUI web interface, or a compatible PTZ controller.

- **IR Remote Control:** Use the directional buttons for pan/tilt and the zoom buttons (W/T) for optical zoom.
- **ZowieUI:** Navigate to the "Camera Movement/Zoom Control" section in the web interface to adjust PTZ parameters.

- **PTZ Controller:** Connect a compatible PTZ controller via RS232, RS485/422, or IP (VISCA over IP, PELCO-D, PELCO-P protocols are supported).

Figure 6.1: Optical Zoom Capabilities. This image demonstrates the camera's 12X, 18X, and 25X optical zoom options, suitable for various scene requirements.

6.2 Preset Positions

The camera supports storing and recalling preset positions, allowing quick transitions between different camera angles.

- **IR Remote:** Up to 10 presets can be set and recalled using the remote control.
- **ZowieUI:** The web interface allows for a greater number of presets and more precise control.
- **PTZ Controller:** Compatible controllers can access a large number of presets (e.g., 7 for VISCA, 255 for PELCO-D, 32 for PELCO-P).

Figure 6.2: Quick Preset Settings. This image illustrates the concept of setting and recalling camera presets, showing different protocol support and the number of presets available.

6.3 Live Streaming

The Zowietek PTZ camera supports various IP streaming protocols for direct streaming to platforms like YouTube, Twitch, and Facebook.

- **Supported Protocols:** RTSP, RTMP(s), SRT, NDI|HX3.
- **Configuration:** Access the streaming settings via the ZowieUI web interface to configure your desired

protocol, bitrate, and destination.

- **Standalone Streaming:** The camera can stream directly to platforms without requiring an additional PC.

Figure 6.3: Smooth Streaming. This image highlights the camera's ability to stream to multiple online platforms with low latency using various protocols.

6.4 Recording

The camera offers multiple recording options:

- **TF Card:** Insert a MicroSD card into the TF Card slot for local recording. Manage recording settings through ZowieUI.
- **USB Storage:** Connect a USB flash drive to the USB Type-A port for direct recording.
- **NAS Recording:** Configure Network Attached Storage (NAS) for network-based recording (CIFS, NFS, SMB protocols supported).

Figure 6.4: Recording Options. This image shows the camera's capability to store videos to TF cards, USB flash drives, and Network Attached Storage (NAS).

7. Maintenance

- **Cleaning the Lens:** Use a soft, lint-free cloth specifically designed for optical lenses. Avoid harsh chemicals.
- **Cleaning the Body:** Wipe the camera body with a soft, dry cloth. Do not use abrasive cleaners.
- **Firmware Updates:** Periodically check the Zowietek website for firmware updates. Updates can improve

performance, add features, and fix bugs. Follow the instructions provided with the firmware update carefully.

- **Storage:** When not in use for extended periods, store the camera in a dry, cool place, protected from dust.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No power indicator light.	Power adapter not connected, power outlet faulty, or PoE not active.	Check power connections. Ensure the power outlet is functional. Verify PoE switch/injector is active if using PoE.
No video output.	Incorrect cable connection, display input not selected, or resolution mismatch.	Verify HDMI/SDI/USB cable connections. Select the correct input on your display/switcher. Adjust camera output resolution via ZowieUI if necessary.
Camera not responding to controls.	Remote battery low, incorrect control protocol, or network issue.	Replace remote batteries. Ensure the correct control protocol (VISCA, PELCO) is selected. Check network connection and camera IP address.
Image is blurry or out of focus.	Auto-focus issues, manual focus misadjusted, or low light conditions.	Adjust focus manually via ZowieUI or remote. Ensure adequate lighting. Consider updating firmware if focus issues persist.
Live stream freezes or disconnects.	Network instability, incorrect streaming settings, or insufficient bandwidth.	Check network stability and bandwidth. Verify streaming protocol and bitrate settings in ZowieUI. Reduce bitrate if network is congested.

9. SPECIFICATIONS

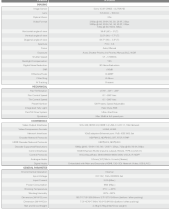| Feature	Detail
Brand	zowietek
Model Number	ZowiePTZ
Optical Zoom	25X (equivalent to 30X)
Digital Zoom	12X
Video Resolution	4K UHD
Sensor	1/2.3" 8MP CMOS (Back-illuminated and stacked)
Video Outputs	HDMI (4K), 3G-SDI (1080P), USB Type-A
Power	DC Power, Power over Ethernet (PoE)
Connectivity	Ethernet, RS232, RS485/422
Streaming Protocols	RTSP, RTMP(s), SRT, NDI|HX3
Audio Support	Built-in Microphone, Line In, Embedded Audio (HDMI/SDI)

Feature	Detail
Recording	TF Card, USB Storage, NAS (CIFS, NFS, SMB)
Dimensions	4 x 3.8 x 9.36 inches
Item Weight	7.57 pounds

10. WARRANTY AND SUPPORT

For warranty information, technical support, and additional resources, please visit the official Zowietek website or contact their customer service. You can also find more information on the Zowietek Store on Amazon.
Zowietek is committed to providing satisfactory solutions and responding to customer inquiries within 24 hours.

Related Documents - ZowiePTZ HDMI SDI USB 25X

[1080P HD Smart PTZ Camera User Manual](#)
This user manual provides comprehensive instructions for the 1080P HD Smart PTZ Camera, covering features, specifications, installation, remote control, GUI settings, web settings, and troubleshooting.

[Minrray UV570 Series NDI HD Video Conference Camera | High-Quality PTZ Camera](#)
Explore the Minrray UV570 series NDI HD video conference camera, featuring a 1/2.8" CMOS sensor, up to 60fps, multiple optical zoom options (5X-30X), advanced auto-focus, low noise, and versatile video outputs including HDMI, SDI, USB3.0, and LAN. Ideal for professional video conferencing and broadcasting.

[BirdDog X5 Ultra PTZ Camera Technical Specifications](#)
Comprehensive technical specifications for the BirdDog X5 Ultra PTZ camera, detailing imaging, mechanical, I/O, and environmental parameters. Includes sensor, lens, video formats, control interfaces, and power requirements.

	[RGBlink vue UHD PTZ Camera: 4K60, AI Tracking, NDI	Technical Specifications & Overview](#) Detailed specifications and features of the RGBlink vue UHD PTZ camera series, including 4K60 resolution, AI tracking, NDI support, and various optical zoom options. Learn about its connectivity, performance, and installation.
	[Marshall CV612-TBI/TWI User Manual: 12x AI Auto Track and Framing PTZ Camera](#) Comprehensive user manual for the Marshall CV612-TBI and CV612-TWI PTZ cameras. Details features, installation, operation, remote control, on-screen menus, network connection, serial communication, and troubleshooting for these AI-powered cameras.
	[HD Conference Camera User Manual - TONGVEO](#) Comprehensive user manual for TONGVEO HD Conference Cameras, covering product descriptions, specifications, remote control functions, menu settings, network operations, installation, and troubleshooting.