

SMTAV BX30UHD

SMTAV 4K PTZ Camera User Manual

Model: BX30UHD

INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your SMTAV 4K PTZ Camera (Model: BX30UHD). This camera features a new generation 1/1.8-inch UHD CMOS sensor, capable of delivering 4K (3840x2160) ultra-high-resolution images, and is backward compatible with 1080p and 720p resolutions. It supports 30X optical zoom, POE, Network IP Live Streaming, and simultaneous 3G-SDI and USB3.0 video output, making it suitable for conferences, church services, and educational environments.

PRODUCT OVERVIEW

Figure 1: Front view of the SMTAV 4K PTZ Camera. This image displays the camera's main lens, the pan-tilt mechanism, and the front panel of the base unit which includes LED indicators for 'STANDBY' and 'POWER'. The camera is white with black accents around the lens and base.

Figure 2: Rear view of the SMTAV 4K PTZ Camera. This image highlights the connectivity options available on the back of the camera's base. Ports visible include DC 12V power input, LAN (Ethernet), USB 2.0, USB 3.0, 3G-SDI, HDMI, RS232 IN/OUT, RS485, and audio Line In/Out. A 'RESTORE' button is also present.

SETUP GUIDE

1. Unpacking and Inspection

- Carefully remove the camera and all accessories from the packaging.
- Verify that all components listed in the packing list are present.
- Inspect the camera for any signs of physical damage. If damage is found, contact your dealer immediately.

2. Placement

Position the camera on a stable, flat surface or mount it securely using a compatible mounting bracket (sold separately). Ensure the camera has adequate ventilation and is not exposed to direct sunlight, excessive heat, or moisture.

3. Connections

Refer to Figure 2 for port locations.

1. **Power Connection:** Connect the provided 12V DC power adapter to the "DC 12V" port on the rear of the camera.
2. **Network Connection (PoE or LAN):**
 - For Power over Ethernet (PoE): Connect an Ethernet cable from a PoE-enabled switch or injector to the "LAN" port. This will provide both power and network connectivity.
 - For standard LAN: Connect an Ethernet cable from your network router/switch to the "LAN" port.
3. **Video Output:**
 - **HDMI:** Connect an HDMI cable to the "HDMI" port for direct video output to a display or capture device.
 - **3G-SDI:** Connect an SDI cable to the "3G-SDI" port for professional video output.
 - **USB 3.0:** Connect a USB 3.0 cable to the "USB 3.0" port for high-speed video output to a computer.
 - **USB 2.0:** Connect a USB 2.0 cable to the "USB 2.0" port for additional connectivity, if required.
4. **Audio Connection:** Connect audio input devices (e.g., microphone) to "LINE IN" and audio output devices (e.g., speakers) to "LINE OUT" using 3.5mm audio cables.
5. **Control Connections (Optional):**
 - **RS232:** Use the "RS232 IN" and "RS232 OUT" ports for serial control.
 - **RS485:** Use the "RS485" port for serial control.

OPERATING INSTRUCTIONS

1. Powering On/Off

- **Power On:** After all connections are made, connect the power adapter to an electrical outlet. The "POWER" indicator on the front panel (Figure 1) will illuminate.
- **Power Off:** Disconnect the power adapter from the electrical outlet.

2. Basic Camera Control

The camera can be controlled via IP (network), RS232, or RS485. A dedicated remote control (sold separately) or software application is typically used for full functionality.

- **Pan/Tilt/Zoom (PTZ):** Use the control interface to adjust the camera's horizontal (pan), vertical (tilt), and optical zoom (30X) positions.
- **Focus:** The camera supports auto-focus. Manual focus adjustment may be available through the control interface.
- **Image Settings:** Adjust settings such as brightness, contrast, saturation, white balance, and exposure through the camera's web interface or control software.

3. Network Configuration

To access the camera's web interface for advanced settings and IP streaming, you will need to configure its network settings. The default IP address can usually be found in a separate quick start guide or on the camera's packaging. Connect a computer to the same network as the camera and use a web browser to access the camera's IP address.

4. Live Streaming and Recording

The camera supports various streaming protocols (e.g., RTMP, RTSP) for live broadcasting and integration with video conferencing platforms. Refer to the camera's web interface or software manual for detailed streaming setup instructions.

MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the camera body. For the lens, use a lens cleaning cloth and specialized lens cleaning solution. Do not use harsh chemicals or abrasive materials.
- **Firmware Updates:** Periodically check the SMTAV official website for firmware updates. Keeping the firmware updated ensures optimal performance and access to new features.
- **Storage:** When not in use for extended periods, store the camera in a cool, dry place, away from direct sunlight and dust.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No Power	Power adapter not connected; Power outlet faulty; PoE not active.	Ensure power adapter is securely connected and plugged into a working outlet. Verify PoE switch/injector is active if using PoE.
No Video Output	Incorrect cable connection; Display/capture device issue; Incorrect video settings.	Check HDMI, SDI, or USB cable connections. Ensure the display/capture device is working correctly and set to the correct input. Verify camera video output settings.
Camera Not Responding to Control	Incorrect network settings; Control cable issue; Software/remote control malfunction.	Verify network connectivity and IP address. Check RS232/RS485 cable connections. Restart control software or remote.
Poor Image Quality	Lens dirty; Lighting conditions; Incorrect image settings.	Clean the lens. Adjust lighting in the environment. Modify image settings (exposure, white balance, etc.) via the control interface.

If the problem persists after attempting these solutions, please contact SMTAV customer support.

SPECIFICATIONS

Feature	Detail
Model Name	BX30UHD
Sensor	1/1.8-inch UHD CMOS (8.42 million pixels)
Resolution	4K (3840x2160), 1080p, 720p
Optical Zoom	30x
Connectivity	HDMI, 3G-SDI, USB 3.0, USB 2.0, LAN (PoE), RS232, RS485, Line In/Out
Special Features	H.267, color, real-time, USB, Zoom, Network IP Live Streaming, Tracking
Color	White
Item Weight	3.31 pounds
Package Dimensions	11.8 x 9.9 x 9.8 inches

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or visit the official SMTAV website. Keep your proof of purchase for warranty claims.

SMTAV Official Website: www.smtav.com

