

## Tenveo B0FH23Z2DX

# Tenveo VHD630A-NDI PTZ Camera and KB300PRO Joystick Controller Bundle User Manual

Model: B0FH23Z2DX

## 1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your Tenveo VHD630A-NDI AI Auto Tracking PTZ Camera (3-pack) and KB300PRO 7-inch LCD Quad-Screen NDI PTZ Joystick Controller Bundle. Please read this manual thoroughly before use to ensure optimal performance and longevity of your equipment.

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Video: Tenveo - Innovating the Future of Communication. This video provides a general overview of Tenveo's commitment to communication technology.

## 2. WHAT'S IN THE BOX

- 3x Tenveo FHD AI Tracking NDI PTZ Camera (VHD630A-NDI)
- 3x IR Remote Control for Cameras
- 3x Power Adapter for Cameras
- 3x USB3.0 Cable for Cameras
- 3x Wall Mount Bracket for Cameras
- 3x Set of Mounting Screws for Cameras
- 1x Tenveo NDI PTZ Joystick Controller (KB300PRO)
- 1x Power Adapter for Controller
- 1x User Manual

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Video: Tenveo 3\*VHD630A-NDI+KB300PRO - Designed for Live Streaming. This video showcases the components included in the bundle and their application in live streaming.

## 3. SETUP

### 3.1 Camera Connections

Each VHD630A-NDI camera offers multiple connectivity options for video, audio, and control:

- **3G-SDI:** For high-quality video transmission over long distances.
- **HDMI:** Standard high-definition video output.
- **USB3.0:** For direct connection to a computer for video and control.
- **RJ45 (LAN/PoE):** Ethernet connection for NDI streaming, IP control, and Power over Ethernet (PoE).
- **LINE IN/OUT:** 3.5mm audio jacks for external audio devices.
- **RS232/RS422/RS485:** Serial ports for traditional PTZ control protocols.



Image: Rear view of the Tenveo VHD630A-NDI camera, highlighting its various input and output ports including 3G-SDI, HDMI, USB3.0, LAN (PoE), and serial control ports.

### 3.2 Controller Connections

The KB300PRO joystick controller connects to your network via an RJ45 Ethernet port, supporting Power over Ethernet (PoE) for simplified cabling. It also features RS232 and RS422 ports for direct serial control of cameras.

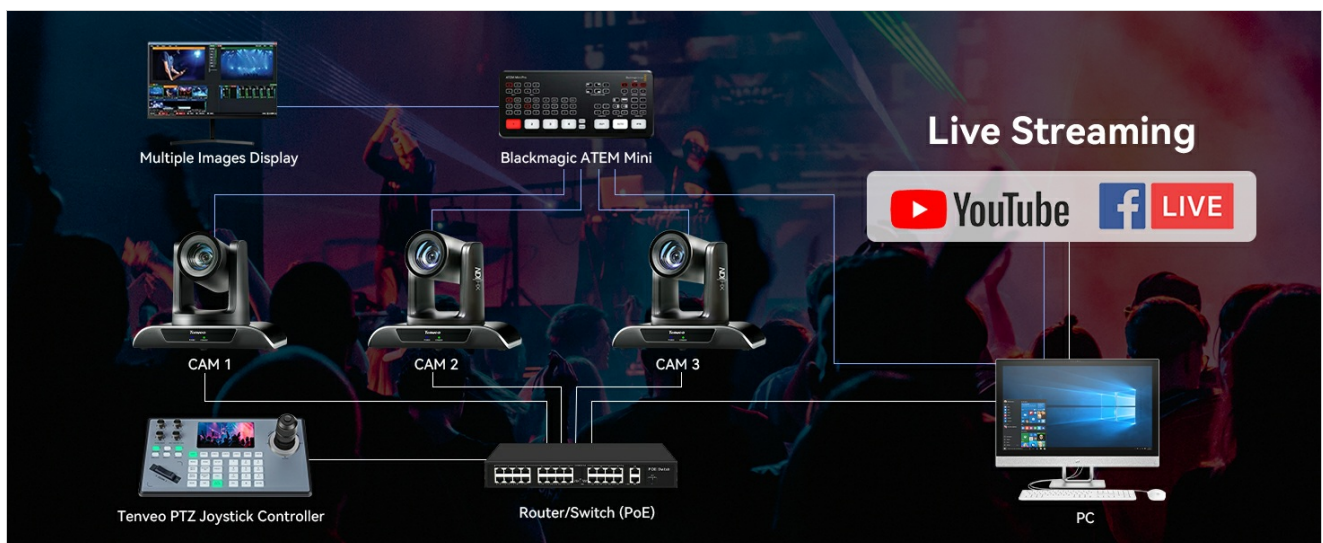


Image: The Tenveo KB300PRO joystick controller connected to a network via an Ethernet cable, demonstrating its Power over Ethernet (PoE) capability.

### 3.3 Network Setup

For NDI streaming and IP control, connect all cameras and the joystick controller to a PoE-enabled network switch. Ensure all devices are on the same network segment. The controller allows for automatic search or manual addition of IP cameras, assigning unique IDs for control.



Image: A comprehensive diagram illustrating the network setup for multiple PTZ cameras and the KB300PRO joystick controller connected to a PoE switch for live streaming applications.



Image: The KB300PRO controller's screen displaying options for automatic network search and manual IP camera addition, facilitating easy setup and management.

## 4. OPERATING INSTRUCTIONS

### 4.1 PTZ Control with KB300PRO Joystick

The KB300PRO features a 4D joystick for precise control over pan, tilt, and zoom functions. Variable speed adjustments allow for smooth and accurate camera movements. Dedicated buttons for focus, Iris, and backlight control are also available.

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Video: Tenveo KB300PRO - NDI PTZ Joystick Controller for Streaming. This video demonstrates the functionality and features of the KB300PRO joystick controller.

### 4.2 Quad-Screen Real-time Monitoring

The 7-inch LCD screen on the KB300PRO controller provides real-time preview of up to four camera feeds simultaneously. This allows for instant visual feedback and seamless switching between cameras during live events.



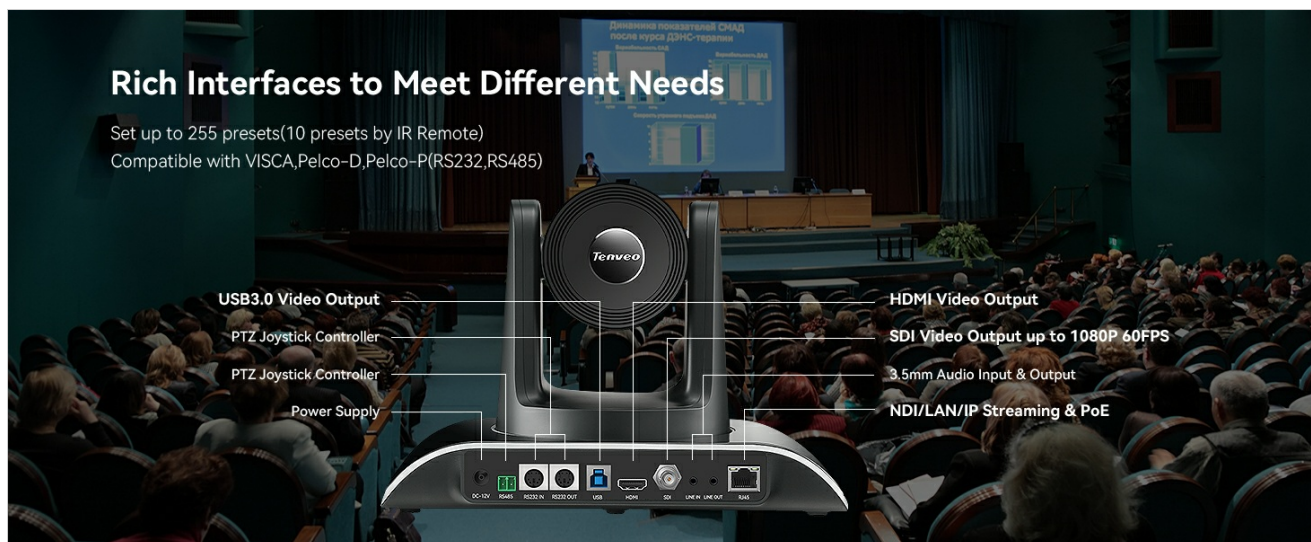


Image: The Tenveo KB300PRO controller's 7-inch LCD screen displaying real-time quad-screen monitoring of multiple camera feeds, ideal for dynamic live productions.

### 4.3 AI Auto Tracking and Auto Framing

The VHD630A-NDI cameras feature advanced AI algorithms for human shape tracking and face recognition. This enables automatic tracking of subjects and intelligent auto-framing, ensuring the subject remains in focus and within the frame without manual intervention.

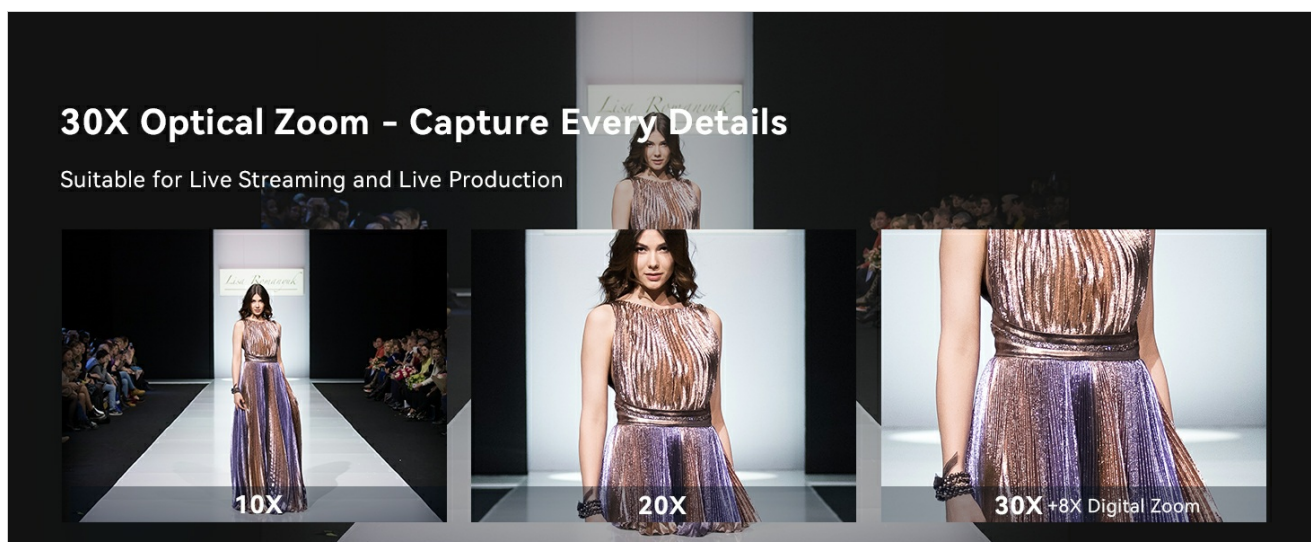


Image: A Tenveo PTZ camera actively tracking a presenter on a stage, illustrating its AI auto-tracking and auto-framing features for professional presentations.

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Video: Tenveo VHD630A-NDI - Professional AI Tracking NDI PTZ Camera. This video highlights the AI tracking capabilities of the VHD630A-NDI camera.

### 4.4 Preset Positions

Both the camera and controller support setting and recalling preset positions. This allows for quick transitions between different shots, enhancing the efficiency of your production.

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Video: How to control PTZ Cameras via Tenveo Joystick Controller? This video demonstrates how to set and recall preset positions using the joystick controller.

## 5. FEATURES

## 5.1 Optical and Digital Zoom

The VHD630A-NDI camera features a powerful 30X optical zoom combined with 8X digital zoom, allowing for clear capture of subjects from various distances without loss of detail.



Image: A visual demonstration of the 30X optical zoom capability, showing progressive magnification of a subject on a runway from 10X to 30X optical plus 8X digital zoom.

## 5.2 High-Quality CMOS Sensor

Equipped with a 1/2.8" SONY CMOS Sensor and advanced 2D&3D Digital Noise Reduction algorithms, the camera delivers crisp 1080P 60FPS Full HD video output, even in challenging lighting conditions.



Image: An internal view diagram of the Tenveo PTZ camera, emphasizing the 1/2.8" SONY CMOS Sensor, 2.07 megapixels, 69.5° wide FOV, and its pan/tilt ranges.

## 5.3 Universal Compatibility

The bundle is compatible with popular live streaming software like vMix and OBS, and supports platforms such as YouTube, Facebook, Zoom, and Microsoft Teams. The controller supports NDI, VISCA, Onvif, Pelco-D, and Pelco-P protocols for broad integration.



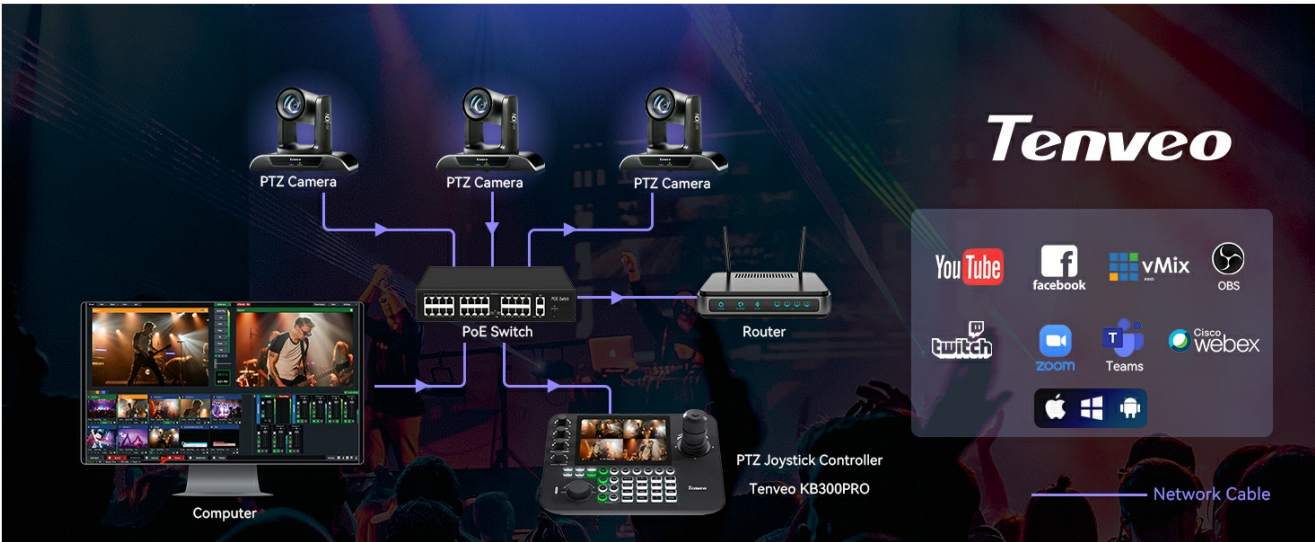


Image: The Tenveo camera and controller bundle displayed alongside logos of various compatible software and platforms, including OBS, Zoom, vMix, Cisco Webex, and Facebook, illustrating its universal compatibility.

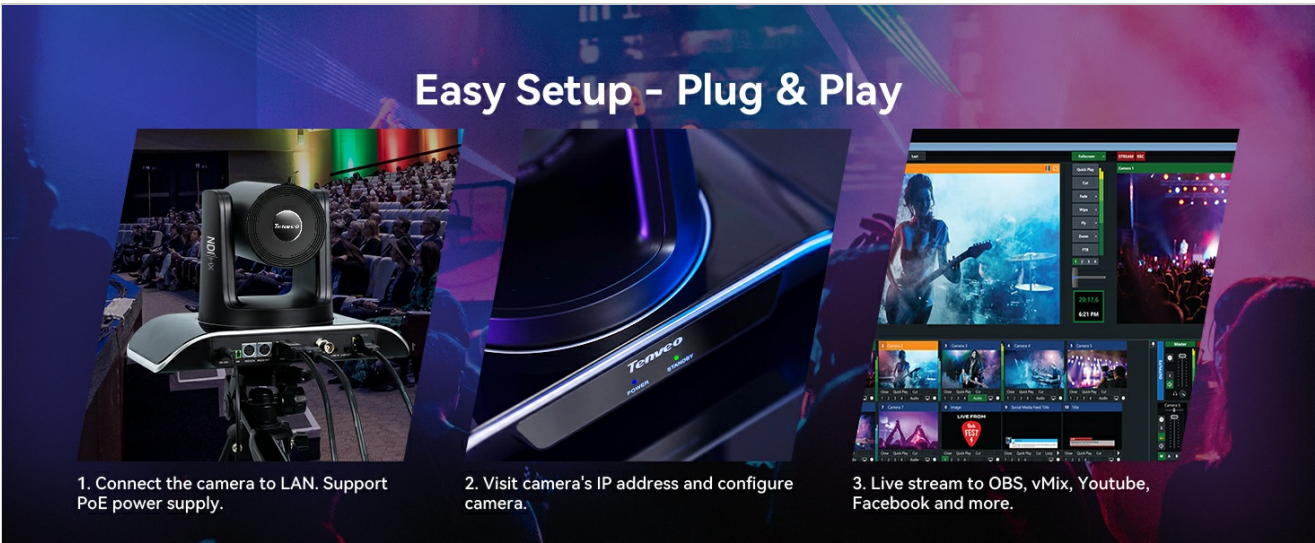


Image: The Tenveo KB300PRO controller interface displaying the wide range of universal protocols it supports, including NDI, VISCA, Onvif, Pelco-D, Pelco-P, and VISCA over IP, ensuring seamless integration into diverse systems.

## 6. SPECIFICATIONS

Feature	Specification
Brand	Tenveo
Model Number	B0FH23Z2DX (Bundle)
Camera Model	VHD630A-NDI
Controller Model	KB300PRO
Item Weight	26.4 pounds (total bundle)
Product Dimensions	15.7 x 21.7 x 9.8 inches (package)

Color	Black
Photo Sensor Technology	CMOS
Video Capture Resolution	1080p (1080P60/1080I60 FHD)
Optical Zoom	30X
Digital Zoom	8X
Maximum Focal Length	138 Millimeters
Maximum Aperture	1.8 f
Video Capture Format	H.264/H.265/MJPEG
Supported Audio Format	AAC, PCM
Controller Screen Size	7 Inches
Connectivity Technology	3G-SDI, Ethernet, Ethernet/RS232/RS422/USB, HDMI, Infrared, NDI, USB
Special Features	AI Auto Tracking & Auto Framing, NDI® HX, PoE Support, Universal Compatibility, 7" LCD Quad-Screen Real-time Preview, 4D Joystick, Multi-Cameras Precision Control, NDI/VISCA/VISCA over IP/PELCO-P/PELCO-D Protocols

## 7. MAINTENANCE

To ensure the longevity and optimal performance of your Tenveo PTZ Camera and Joystick Controller Bundle, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the camera lens and body. Avoid abrasive cleaners or solvents that could damage the surfaces.
- **Dust Protection:** When not in use, keep the camera lens covered with the provided lens cap to prevent dust accumulation.
- **Environmental Conditions:** Operate and store the equipment in a clean, dry environment away from extreme temperatures, humidity, and direct sunlight.
- **Cable Management:** Ensure all cables are securely connected and properly routed to prevent accidental disconnections or damage.

## 8. TROUBLESHOOTING

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If you encounter any issues with your Tenveo PTZ Camera and Joystick Controller Bundle, refer to the following common troubleshooting tips:

- **No Power:** Verify that the power adapters are securely connected to both the devices and a working power outlet. If using PoE, ensure the PoE switch is functioning correctly.
- **No Video Output:** Check all video cable connections (HDMI, SDI, USB). Ensure the correct input source is selected on your display device. Confirm camera settings for video output format.
- **No Control from Joystick:** Ensure the controller is powered on and connected to the same network as the cameras. Verify IP addresses and protocols are correctly configured on both the controller and cameras. Check for any network connectivity issues.
- **AI Tracking Issues:** Ensure the camera's firmware is up to date. Check lighting conditions and ensure the subject is clearly visible within the camera's field of view. Avoid rapid, erratic movements that might confuse the AI.
- **Image Quality Problems:** Adjust exposure, white balance, and noise reduction settings via the camera's menu or controller. Ensure the lens is clean and free from smudges.

For further assistance, please contact Tenveo customer support.

## 9. WARRANTY AND SUPPORT

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Tenveo offers a **3-year standard warranty** for this product, ensuring peace of mind regarding manufacturing defects and performance issues. In addition, customers benefit from **lifetime technical support**, which includes assistance with firmware upgrades and remote setup guidance if needed.

For any questions or support inquiries, please contact Tenveo customer service. We are committed to providing a satisfactory solution within 12 hours.

A **30-Day No-Questions-Asked Money-Back Guarantee** is also provided for risk-free purchase.

**Contact Email:** [tenveo\\_amazon@tenveo.com](mailto:tenveo_amazon@tenveo.com)