

## Tenveo KB200MAX

# Tenveo KB200MAX NDI PTZ Camera Controller Instruction Manual

Model: **KB200MAX** | Brand: **Tenveo**

## 1. INTRODUCTION

The Tenveo KB200MAX is an advanced NDI PTZ Camera Controller designed for precise and fluid control of PTZ cameras in various live streaming and video production environments. Featuring a 5-inch LCD real-time preview screen and a 4D variable-speed joystick, this controller enhances operational efficiency and accuracy. It supports multiple control protocols and offers flexible connectivity options, including Power over Ethernet (PoE).

## 2. KEY FEATURES

- **5-inch LCD Real-Time Preview Screen:** Provides instant visual feedback for camera adjustments.
- **4D Variable-Speed Joystick:** Ensures precise and fluid control over pan, tilt, zoom, and focus.
- **Built-in NDI License:** Facilitates NDI PTZ camera control and preset calling via the NDI protocol.
- **Comprehensive Control & Advanced OSD Configuration:** Offers full configuration capabilities including network settings, camera parameters, custom assignments, and direct access to internal camera settings via the OSD Menu Function.
- **Multiple Control Protocols:** Supports NDI, VISCA, Pelco-D, and Pelco-P for broad compatibility with various camera systems.
- **Multi-Camera Management:** Capable of controlling up to 255 PTZ cameras with support for 7-camera quick switching.
- **Track Recording & Playback:** Records and auto-plays complete PTZ movement sequences, including speed and dwell time.

- **Flexible Connectivity:** Equipped with RS232, RS422, RS485, and Ethernet (IP) interfaces.
- **Power over Ethernet (PoE) Support:** A single Ethernet cable delivers power, signal, and control, simplifying installation.
- **IP Auto-Search Function:** Automatically discovers IPs, configures static addresses, and provides one-click access to the web management interface (supports Tenveo Cameras V1.2.02+ and Tenveo PTZ Controller V5.4.6+).

### 3. SETUP GUIDE

#### 3.1. Unboxing and Initial Connection

Upon unboxing, ensure all components are present: the KB200MAX controller, power adapter, and user manual.



Image: Tenveo KB200MAX NDI PTZ Camera Controller with power adapter and user manual.

Video: Quick Unboxing of the Tenveo KB200MAX NDI PTZ Camera Controller, showing the contents of the package and initial setup steps.

### 3.2. Connecting to Cameras and Network

The KB200MAX supports various connection methods. For IP control, connect the controller and your PTZ cameras to the same local network, preferably using a PoE switch to simplify cabling.



Image: The KB200MAX controller connected via a single Ethernet cable for Power over Ethernet (PoE).

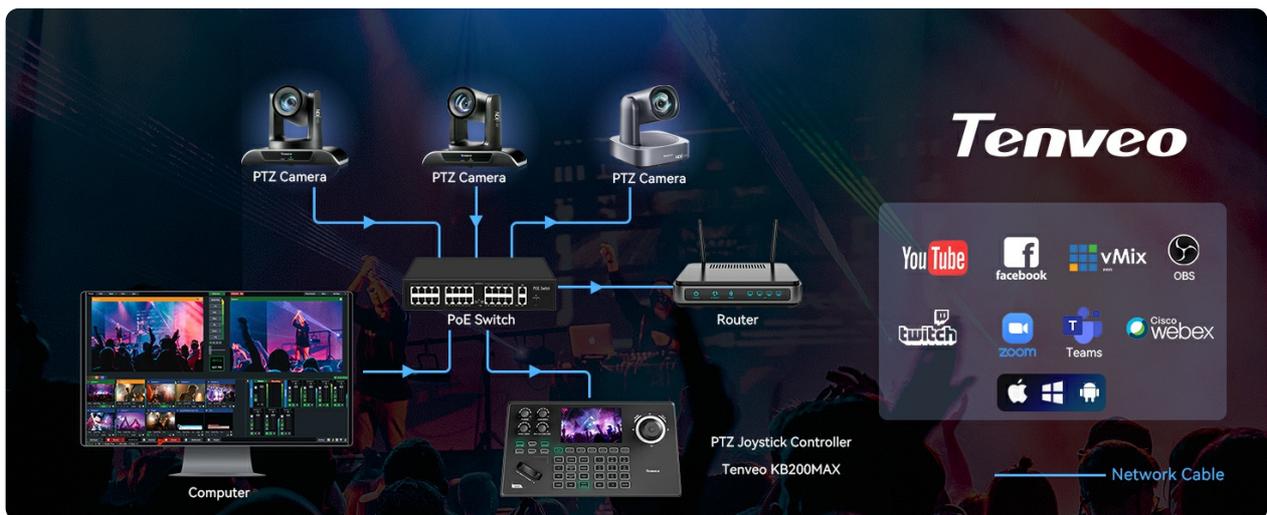


Image: Diagram showing multiple PTZ cameras connected to a PoE switch, which is then connected to the KB200MAX controller and a computer for multi-camera video production.

Video: Demonstrates the process of connecting PTZ cameras to the KB200MAX IP PTZ Controller using network cables and a PoE switch.

### 3.3. IP Configuration using Tenveo IP Search Tool

To ensure proper communication, configure the IP addresses of your cameras and controller to be within the same network segment. The Tenveo IP Search Tool simplifies this process.

1. Download the IP Search Tool from the official Tenveo website.
2. Install the tool on your computer.
3. Launch the tool and click 'Search' to discover all Tenveo devices on your local network.
4. Select the device you wish to modify and click 'Modify'.
5. Change the IP address to match your network segment (e.g., if your computer's IP is 192.168.2.11, set the device IP to 192.168.2.XXX, where XXX is a unique number between 2-254 not already in use).

6. Click 'Confirm' to save changes. The device will restart.
7. Once restarted, select the device with the modified IP and click 'Access Web' to log into its web management interface for advanced settings.



Image: Screenshot of the Tenveo IP Search Tool, showing device discovery, IP modification, and web access options.

Video: Guide on using the KB200MAX IP Search Tool for configuration and web access.

Video: Detailed instructions on how to use the Tenveo IP Search Tool.

## 4. OPERATING THE CONTROLLER

### 4.1. Basic Controls

The KB200MAX features a 4D joystick for intuitive control and a 5-inch LCD screen for real-time monitoring.



Image: Close-up of the Tenveo KB200MAX controller highlighting the 5-inch LCD real-time screen.

## Variable 4D Joystick for Precise Control

360°



The 4D Joystick provides superior command over pan, tilt, zoom, and focus with exceptional smoothness and precision, essential for dynamic live productions.

Image: Detailed view of the 4D joystick, illustrating its variable-speed control for pan, tilt, zoom, and focus.

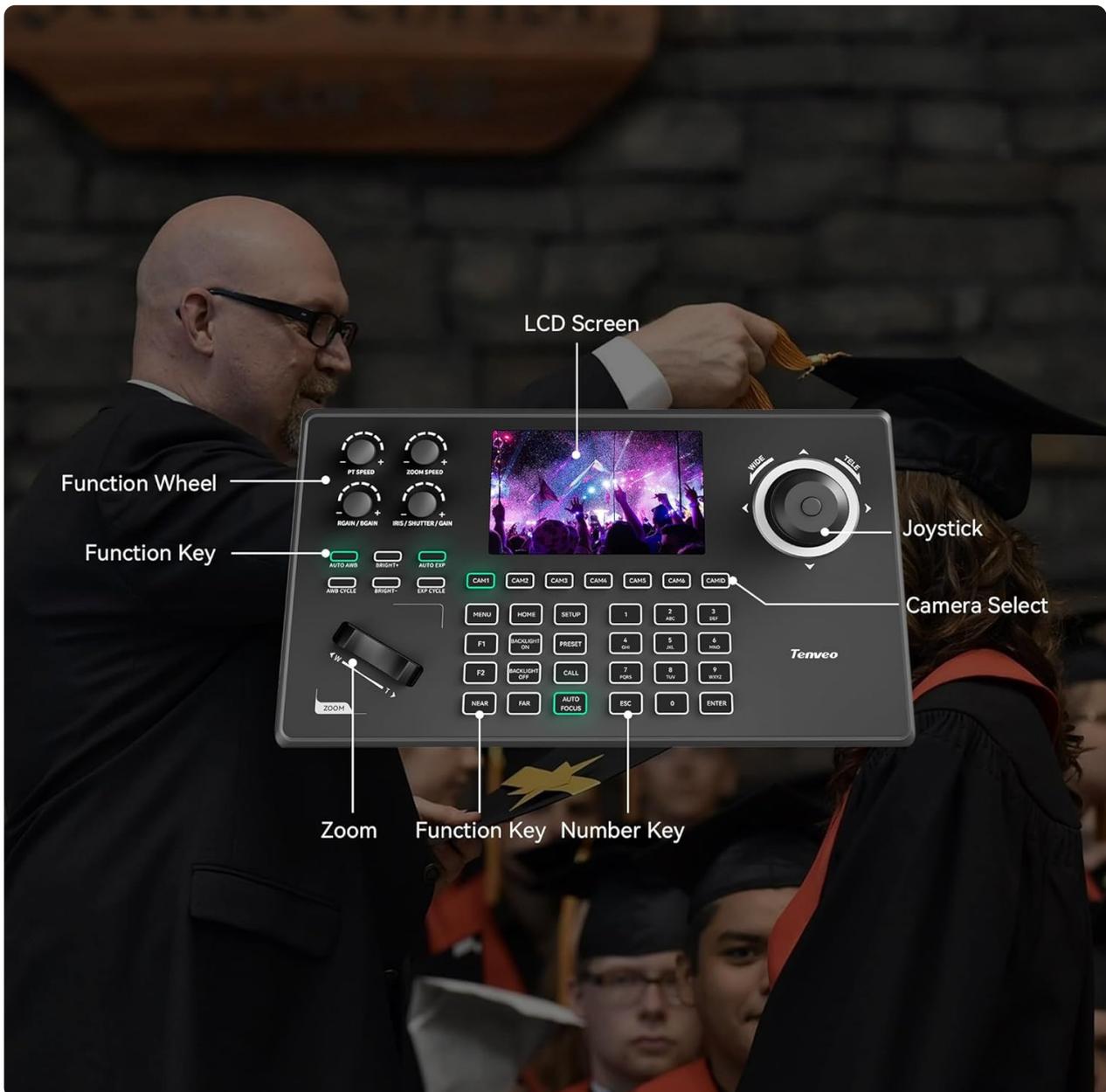


Image: An overview of the KB200MAX controller with labels for the LCD screen, joystick, function wheel, function keys, camera select buttons, zoom control, focus adjust, preset position setting, and multi-function digital panel.

## 4.2. Camera Selection and Presets

Use the dedicated camera selection shortcuts (CAM1-CAM7) to quickly switch between connected cameras. You can set and recall up to 255 preset positions for precise shot management.



Image: The KB200MAX controller displaying the 7 camera selection shortcuts, allowing quick switching between multiple cameras.

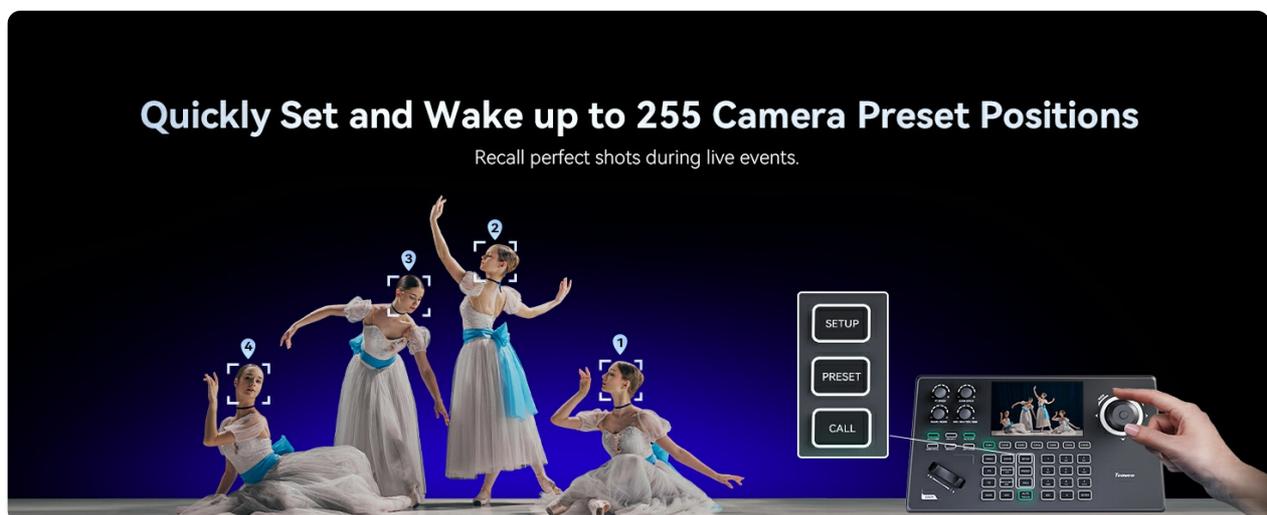


Image: Illustrates the process of quickly setting and recalling up to 255 camera preset positions using the controller.

### 4.3. Track Recording and Playback

The controller allows you to record and replay complex PTZ movement sequences. Long press [PRESET] to start recording a trajectory. After setting the trajectory, press [ENTER] to save the cruise. Long press [CALL] to begin playback. Any new operation during playback will prompt a confirmation to stop the cruise track.

## 5. MAINTENANCE

To ensure optimal performance and longevity of your Tenveo KB200MAX controller, follow these general maintenance guidelines:

- Keep the device clean and free from dust. Use a soft, dry cloth for cleaning.
- Avoid exposing the controller to extreme temperatures, humidity, or direct sunlight.
- Ensure proper ventilation to prevent overheating.

- Regularly check cable connections for security and wear.
- Perform firmware updates as recommended by Tenveo to access new features and improvements.

## 6. TROUBLESHOOTING

If you encounter issues with your KB200MAX controller, consider the following:

- **No Power:** Ensure the power adapter is securely connected and the power switch is on. If using PoE, verify the Ethernet cable is connected to a PoE-enabled port and the switch is functioning.
- **No Camera Control:**
  - Verify that the controller and cameras are on the same local network segment. Use the IP Search Tool to confirm and adjust IP addresses if necessary.
  - Check that the correct control protocol (NDI, VISCA, Pelco-D/P) is selected on both the controller and the camera.
  - Ensure network cables are properly connected and not damaged.
- **No Video Preview on LCD:** Confirm that the camera is properly connected and configured for video output to the controller. Check network connectivity.
- **Joystick Unresponsive:** Perform a joystick calibration through the controller's settings or web interface.
- **Firmware Compatibility:** Note that the IP Auto-Search function and some features require Tenveo Cameras V1.2.02 or later and Tenveo PTZ Controller V5.4.6 or later.

For further assistance, refer to the 'IP Search Tool User Guide' or contact Tenveo customer support.

## 7. SPECIFICATIONS

Feature	Detail
Model Number	KB200MAX
Product Dimensions	3.94 x 0.79 x 9.06 inches
Item Weight	4.03 pounds
Display	5-inch LCD Real-Time Preview Screen
Joystick	4D Variable-Speed Joystick
Control Protocols	NDI, VISCA, Pelco-D, Pelco-P
Interfaces	RS232, RS422, RS485, Ethernet (IP), USB
Power	PoE (Power over Ethernet) or DC12V
Max Cameras Controlled	255

## 8. WARRANTY AND SUPPORT

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Tenveo is committed to customer satisfaction and provides the following support:

- **Three-Year Standard Warranty:** Covers manufacturing defects and ensures product reliability.
- **Premium After-Sales Support:** Dedicated assistance for any product-related inquiries.
- **Lifetime Technical Assistance:** Ongoing technical support for the lifespan of the product.
- **30-Day Money-Back Guarantee:** Allows for returns within 30 days of purchase.
- **Remote Installation Assistance:** Support available for setting up your device.

For any questions or support needs, please contact Tenveo customer service. A satisfactory solution and reply will be provided within 12 hours.