

FoMaKo K800N

FoMaKo K800N 4K NDI PTZ Camera Instruction Manual

Model: K800N

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your FoMaKo K800N 4K NDI PTZ Camera. The K800N is a high-performance camera designed for professional video production and live streaming, featuring 4K 60fps video output, 20x optical zoom, and advanced AI auto-tracking capabilities. Please read this manual thoroughly before using the product to ensure proper functionality and longevity.



Figure 1: FoMaKo K800N 4K NDI PTZ Camera

2. PRODUCT FEATURES

- **4K 60FPS NDI HX3 Video Output:** Supports uncompressed Ultra High Definition video with HDMI/LAN output at 4K 60fps, USB at 4KP30, and 3G-SDI/NDI at 1080P 60fps.
- **20x Optical Zoom:** High-quality optical zoom for clear images even at a distance.

- **Advanced AI Auto-Tracking Gen 3:** Customizable tracking modes, sensitivity, figure size, character position, and lost target actions. Features real-time and regional tracking.
- **NDI 6 and NDI | HX3 Support:** NDI License Included, officially approved by Newtek Inc. Offers low latency and plug-and-play convenience.
- **Leading Auto-Focus (AF) Technology:** Fast, accurate, and stable auto-focus with adjustable Pan/Tilt/Zoom speed and preset speed.
- **Multiple Video Outputs:** Simultaneous LAN, USB3.0, HDMI 2.0, and 3G-SDI outputs.
- **PoE Support:** Power over Ethernet for simplified installation.
- **Remote Control:** Supports up to 255 presets (10 via IR remote control) and various control interfaces (RS232/RS485, TCP/IP, RTSP, RTMP, VISCA OVER IP, VISCA, SRT).

3. WHAT'S IN THE BOX

- FoMaKo K800N AI Tracking 4K 60FPS NDI PTZ Camera (20x optical zoom)
- IR Remote Controller
- Wall Mount Bracket
- Ceiling Bracket
- USB Cable
- Power Adapter (12V 2A)
- User Manual (English)



Figure 2: Included accessories with the FoMaKo K800N camera.

4. SETUP

4.1 Installation Methods

The FoMaKo K800N camera supports multiple installation methods to suit various environments:

- **Wall Mount:** Use the provided wall mount bracket to secure the camera to a vertical surface.
- **Tripod Mount:** The camera base includes a standard tripod screw mount for flexible positioning.
- **Ceiling Mount:** Utilize the included ceiling bracket for inverted installation, often used in larger venues.



Figure 3: Various installation methods for the PTZ camera.

4.2 System Connection

The camera offers versatile connectivity options for integration into various live streaming and video production systems. Below is a typical connection diagram:



Figure 4: Live streaming system connection with FoMaKo PTZ cameras.

For detailed instructions on setting up multiple PTZ cameras with a joystick controller, refer to the video below:

Video 1: How to Control Multiple PTZ Cameras via Joystick Controller. This video demonstrates the steps to connect and manage multiple PTZ cameras using a joystick controller for efficient video production.

For general installation guidance, including physical mounting, watch the following video:

Video 2: How to Install FoMaKo PTZ Camera. This video provides a visual guide on the physical installation process of the FoMaKo PTZ camera.

5. OPERATING INSTRUCTIONS

5.1 AI Auto-Tracking

The FoMaKo K800N features third-generation AI tracking, allowing for highly customized subject tracking. You can adjust various parameters to optimize tracking performance:

- **Tracking Modes:** Choose between real-time tracking and regional tracking based on your environment.
- **Tracking Sensitivity:** Adjust the camera's responsiveness to subject movement.
- **Figure Size & Character Position:** Define how the subject is framed within the shot (e.g., close, half, full body; left, middle, right).
- **Lost Target Action:** Configure the camera's behavior if the tracked subject leaves the frame.

To activate auto-tracking, simply press F2 on the remote control. Press F4 to switch between tracking targets.



Figure 5: AI Tracking settings interface.

5.2 Auto-Focus and Zoom

The camera utilizes advanced auto-focus technology for sharp and stable images. You can control focus and zoom settings:

- **Focus Modes:** Auto, Manual, or One Push Focus.
- **Pan/Tilt/Zoom Speed:** Adjustable to match your production needs.
- **Preset Speed:** Adjustable for quick and smooth transitions between saved camera positions.

Learn how to adjust PTZ and preset speeds in the video below:

Video 3: FoMaKo PTZ Camera - How to Change PTZ Speed and Preset Speed. This video demonstrates the process of adjusting the pan, tilt, zoom, and preset speeds of the camera.

5.3 Remote Control

The included IR remote controller allows for convenient operation of the camera. It supports up to 10 presets directly and 255 presets via other control interfaces. For more advanced control, an IP PTZ Controller can be used.

Video 4: FoMaKo PTZ Camera Remote Controller. This video showcases the functionality of the remote controller for the FoMaKo PTZ camera.

6. SPECIFICATIONS

Feature	Detail
Brand Name	FoMaKo
Model Number	K800N
Item Weight	7.45 pounds
Product Dimensions	10.63 x 9.84 x 9.06 inches
Color Name	Black
Special Features	AI tracking NDI PTZ Camera
Photo Sensor Technology	CMOS
Video Capture Resolution	4K
Maximum Focal Length	98 Millimeters
Maximum Aperture	60 f
Flash Memory Type	SD
Video Capture Format	MPEG

Supported Audio Format	AAC, MP3
Screen Size	2 Inches
Connectivity Technology	NDI LAN HDMI 3G-SDI USB3.0

7. MAINTENANCE

To ensure optimal performance and longevity of your FoMaKo K800N camera, follow these general maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the camera body. For the lens, use a specialized lens cleaning cloth and solution. Avoid abrasive materials or harsh chemicals.
- **Storage:** When not in use, store the camera in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** Handle the camera with care to prevent physical damage. Avoid sudden movements or impacts.
- **Firmware Updates:** Periodically check the FoMaKo website for firmware updates to ensure your camera has the latest features and performance enhancements.

8. TROUBLESHOOTING

If you encounter any issues with your FoMaKo K800N camera, consider the following basic troubleshooting steps:

- **No Power:** Ensure the power adapter is securely connected to both the camera and a working power outlet. If using PoE, verify the PoE switch is functioning correctly and providing power.
- **No Video Output:** Check all video cables (HDMI, SDI, USB, LAN) for secure connections. Verify that the input source on your display or switcher is correctly selected.
- **Auto-Tracking Issues:** Ensure the lighting conditions are adequate and there are no obstructions between the camera and the subject. Review the AI tracking settings in the web interface for optimal configuration.
- **Network Connectivity Problems:** Verify that the Ethernet cable is properly connected to the LAN port and the network. Check IP settings (DHCP or static) and ensure they are compatible with your network configuration.
- **Remote Control Not Responding:** Check the batteries in the IR remote controller. Ensure there are no obstructions between the remote and the camera's IR receiver.

For further assistance, please contact customer support as detailed in the Warranty and Support section.





9. WARRANTY AND SUPPORT

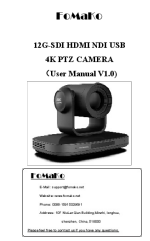
Your FoMaKo K800N camera comes with a**3-Year Limited Warranty**. We are committed to your satisfaction and offer comprehensive support services:

- **30-Day Money-Back Guarantee:** Risk-free purchase.
- **Free Online Training:** Get started easily with available training resources.
- **24/7 Expert Assistance:** Responses within 24 hours. Please include your Order ID for prompt service.
- **Lifetime Customer Technical Support:** Enjoy ongoing technical assistance for the lifetime of your product.
- **Remote Assistance:** If necessary, remote assistance can be provided for setup and troubleshooting.

For support, please visit the [FoMaKo Store on Amazon](#) or contact our customer service team directly.

Related Documents - K800N

	<p>FoMaKo 4K NDI/SDI/HDMI/USB PTZ Stream Camera User Manual V1.0</p> <p>This user manual provides comprehensive instructions for the FoMaKo 4K NDI/SDI/HDMI/USB PTZ Stream Camera (Model K820/K820N). It covers safety precautions, packing list, quick start guide, product features and specifications, installation, remote control operation, GUI settings, web interface controls, and troubleshooting.</p>
	<p>FoMaKo NDI/HDMI/USB IP PTZ Camera User Manual</p> <p>This user manual provides detailed information on the functions, installation, and operation of the FoMaKo NDI/HDMI/USB IP PTZ Camera. It covers setup, network configuration, remote control, troubleshooting, and streaming examples for platforms like Facebook and YouTube.</p>
	<p>FoMaKo Color Video Conference Camera User Manual</p> <p>User manual for the FoMaKo Color Video Conference Camera, detailing its features, operation, and technical specifications. Covers remote control functions, menu settings, and maintenance.</p>
	<p>FoMaKo K820S 4K PTZ Camera User Manual: Features, Setup, and AI Tracking</p> <p>Comprehensive user manual for the FoMaKo K820S 4K PTZ Camera. Learn about its features, specifications, installation, remote control, AI tracking capabilities, and troubleshooting.</p>



[FoMaKo 4K PTZ Camera User Manual V1.0](#)

User manual for the FoMaKo 12G-SDI HDMI NDI USB 4K PTZ Camera, covering features, specifications, installation, remote control, AI tracking, and troubleshooting.



[FoMaKo 4K PTZ Camera User Manual V1.0](#)

This user manual provides comprehensive details on the functions, installation, and operation of the FoMaKo 4K PTZ Camera. It covers quick start guide, product overview, technical specifications, remote control, network connection, serial communication, maintenance, troubleshooting, and usage examples.