

FoMaKo KC608 pro+3xKN30A

FoMaKo PTZ NDI Camera System Instruction Manual

Model: KC608 Pro + 3x KN30A

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your FoMaKo PTZ NDI Camera System. This comprehensive bundle includes one KC608 Pro PTZ Controller and three KN30A PTZ Cameras, designed for professional live streaming and video production environments such as event centers, conference facilities, churches, and educational institutions. The system offers high-quality video output with advanced features like 30x optical zoom and AI auto-tracking.

2. PRODUCT OVERVIEW AND KEY FEATURES

The FoMaKo PTZ NDI Camera System is engineered to deliver professional-grade video for various applications. Below is an overview of the components and their primary features.

2.1 System Components



Image: The FoMaKo PTZ NDI Camera System bundle, showing three PTZ cameras and one PTZ controller.

- **FoMaKo KC608 Pro PTZ Controller:** A dedicated hardware controller with a 4D joystick and a 3-inch LCD screen for precise camera control.
- **FoMaKo KN30A PTZ Cameras (x3):** High-performance PTZ cameras with 30x optical zoom, capable of 1080p 60FPS video output.

2.2 Camera Features (KN30A)

- **Video Output:** 3G-SDI, HDMI, IP, NDI, USB3.0 for versatile connectivity.
- **Optical Zoom:** 30x optical zoom for capturing distant subjects with clarity.

FoMaKo | 30X Optical Zoom



Image: A FoMaKo PTZ camera demonstrating its 30X optical zoom capability, showing a wide shot and a zoomed-in view of a speaker in a church.

- **NDI Certified:** Official NDI 6 & NDI HX3 certification by Newtek ensures stable, high-quality video over network with low bandwidth optimization.



Image: Banner indicating the camera's Official NDI HX3 Certification.

- **AI Auto-Tracking:** Features Gen 3 AI auto-tracking algorithms for smooth and stable subject tracking.

FoMaKo | AI Auto-Tracking



Image: A FoMaKo PTZ camera demonstrating AI auto-tracking in an educational setting, highlighting the tracking box around a person.

- **PoE Support:** Power over Ethernet simplifies installation with a single cable for power and data.
- **Compatibility:** Compatible with popular live streaming software including vMix, OBS, Propresenter, StreamYards, Streamlabs, Wirecast, and Zoom, across Mac and Windows PC platforms.

FoMaKo | Focus Your Streaming



Image: A FoMaKo PTZ camera positioned in front of a monitor displaying live streaming software interfaces, with logos of compatible platforms like vMix, OBS Studio, Wirecast, YouTube, Twitch, and Facebook Live.

2.3 Controller Features (KC608 Pro)

- **4D Joystick:** Provides intuitive control over pan, tilt, and zoom functions.

FoMaKo | 4D Joystick



Image: A close-up of the 4D joystick on the FoMaKo PTZ controller, illustrating its multi-directional movement.

- **3-Inch LCD Screen:** Displays real-time preview and system parameters for efficient monitoring.

FoMaKo | 3-Inch LCD screen

Two preview modes



**Pre
monitoring
screen**



**System
Parameter**



Image: The 3-inch LCD screen on the FoMaKo PTZ controller, showing two preview modes: a pre-monitoring screen and system parameters.

- **Adjustable PTZ Speed:** Dedicated controls for fine-tuning pan, tilt, and zoom speeds.

FoMaKo | PTZ Speed Adjustable



Image: A close-up of the PTZ Speed adjustment knob on the FoMaKo PTZ controller.

- **Multiple Protocols:** Supports VISCA, PELCO-P, and PELCO-D protocols.
- **Connectivity:** RS232, RS422, RS485, and Ethernet IP connections for flexible integration.

3. SETUP

Proper setup is crucial for optimal performance of your FoMaKo PTZ NDI Camera System. Follow these steps to get started.

3.1 Unpacking and Inspection

1. Carefully unpack all components from the box.
2. Verify that all items listed in the 'What's in the Box' section are present: 1x KC608 Pro PTZ Controller, 3x KN30A PTZ Cameras.
3. Inspect all components for any signs of physical damage. Contact customer support immediately if any damage is found.

3.2 Camera Installation (KN30A)

The KN30A cameras can be mounted on a wall or ceiling. Ensure the mounting surface is sturdy enough to support the camera's weight. PoE (Power over Ethernet) simplifies cabling by delivering both power and data through a single Ethernet cable.

- **Mounting:** Securely attach the camera to your desired location using appropriate mounting hardware (not included).
- **Connections:** Connect an Ethernet cable from the camera's LAN port to a PoE-enabled network switch or injector.

FoMaKo**4-channels** video output**NDI/LAN, USB3.0, HDMI, 3G-SDI**

Image: The rear panel of a FoMaKo PTZ camera, showing various input/output ports including 3G-SDI, HDMI, USB3.0, LAN (PoE), RS232, RS422, and DC12V power.

- **Video Output:** Connect HDMI or 3G-SDI cables from the camera to your video mixer, capture card, or display as needed.
- **USB 3.0:** For direct connection to a computer for streaming or capture.

3.3 Controller Connection (KC608 Pro)

The KC608 Pro controller connects to your network to control the cameras via IP.

1. Connect the KC608 Pro controller to your network using an Ethernet cable. Ensure it is on the same network as your PTZ cameras.
2. Power on the controller.
3. Refer to the controller's on-screen menu to discover and add your KN30A cameras to the control system. This

typically involves scanning the network for NDI or IP cameras and assigning them to specific camera buttons on the controller.

3.4 System Diagram



Image: A diagram illustrating a typical live streaming setup with FoMaKo PTZ cameras, an IP PTZ camera controller, a router/switch (PoE), a video mixer/switcher, and a computer for live streaming to platforms like YouTube and Facebook Live.

4. OPERATING INSTRUCTIONS

This section details the basic and advanced operations of your FoMaKo PTZ NDI Camera System.

4.1 Basic Camera Control

Use the KC608 Pro controller to manipulate the cameras.

FoMaKo

PTZ controller



Image: A user operating the FoMaKo PTZ controller with a 4D joystick, showing a multi-screen live production setup in the background.

- **Camera Selection:** Press the corresponding camera button (e.g., CAM 1, CAM 2) on the controller to select the camera you wish to control.
- **Pan/Tilt:** Use the 4D joystick to pan (horizontal movement) and tilt (vertical movement) the selected camera.
- **Zoom:** Use the zoom rocker (TELE/WIDE) to zoom in or out.
- **Focus:** Adjust focus using the NEAR/FAR buttons or enable AUTO focus.
- **PTZ Speed:** Rotate the PTZ SPEED knob to adjust the responsiveness of the pan, tilt, and zoom movements.

4.2 Advanced Features

- **Presets:** Store and recall specific camera positions (pan, tilt, zoom, focus) using the numbered preset buttons (0-9) and STORE/CALL functions.
- **AI Auto-Tracking:** Activate the AI auto-tracking feature through the controller's menu or dedicated button to automatically follow a designated subject.
- **IP Address Configuration:** The controller allows you to change the IP address settings of the cameras via its menu.



Image: A graphic displaying network settings (DHCP, IP Address, Subnet Mask, Gateway) and PTZ parameters (Speed by zoom, Zoom speed, ImageFreezing, Acc Curve, Preset speed, Ptz speed, Preset Lock) that can be adjusted via the camera's menu.

- **Exposure and White Balance:** Adjust exposure modes (e.g., auto, manual) and white balance settings for optimal image quality in different lighting conditions.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your FoMaKo PTZ NDI Camera System.

- **Cleaning:** Use a soft, dry cloth to clean the camera lenses and controller surfaces. For stubborn dirt, a slightly damp cloth with mild, non-abrasive cleaner can be used, ensuring no liquid enters the device.
- **Firmware Updates:** Periodically check the FoMaKo official website for firmware updates. Keeping your devices updated ensures access to the latest features and performance improvements. Follow the provided instructions carefully when performing updates.
- **Cable Management:** Ensure all cables are neatly organized and secured to prevent accidental disconnections or damage. Avoid bending cables sharply.
- **Environmental Conditions:** Operate and store the system in a clean, dry environment within the specified temperature and humidity ranges to prevent damage.

6. TROUBLESHOOTING

This section addresses common issues you might encounter and provides solutions.

| Problem | Possible Cause | Solution |
|---------|----------------|----------|
|---------|----------------|----------|

| Problem | Possible Cause | Solution |
|--|--|---|
| No video output from camera. | Loose cable connection, incorrect input selection on display, power issue. | Check HDMI/SDI/USB cables. Ensure camera is powered on. Verify correct input selected on monitor/mixer. |
| Controller cannot connect to camera. | Network issue, incorrect IP settings, camera not powered on. | Ensure controller and camera are on the same network. Verify camera IP address and controller settings. Restart both devices. |
| PTZ movements are jerky or unresponsive. | PTZ speed setting too low, network latency, physical obstruction. | Adjust PTZ speed on the controller. Check network stability. Ensure no physical obstructions to camera movement. |
| AI Auto-Tracking not working. | Feature not enabled, poor lighting, subject too far/small. | Ensure AI tracking is enabled in camera settings. Optimize lighting conditions. Ensure subject is within optimal range and size for tracking. |

7. SPECIFICATIONS

Detailed technical specifications for the FoMaKo PTZ NDI Camera System.

| Feature | Detail |
|--------------------------|---|
| Brand | FoMaKo |
| Model | KC608 Pro (Controller) + KN30A (Camera) |
| Optical Zoom | 30x |
| Video Capture Resolution | 1080p |
| Photo Sensor Technology | CMOS |
| Connectivity Technology | Ethernet, HDMI, 3G-SDI, USB3.0, RS232, RS422, RS485 |
| Supported Audio Format | AAC, MP3 |
| Video Capture Format | MP4 |
| Flash Memory Type | SD (for firmware/settings, not for video recording) |
| Special Feature | Low Light, AI Auto-Tracking, PoE Support, NDI 6 & NDI HX3 Certified |
| Country of Origin | China |

8. WARRANTY AND SUPPORT

FoMaKo is committed to providing excellent customer service and support for your product.

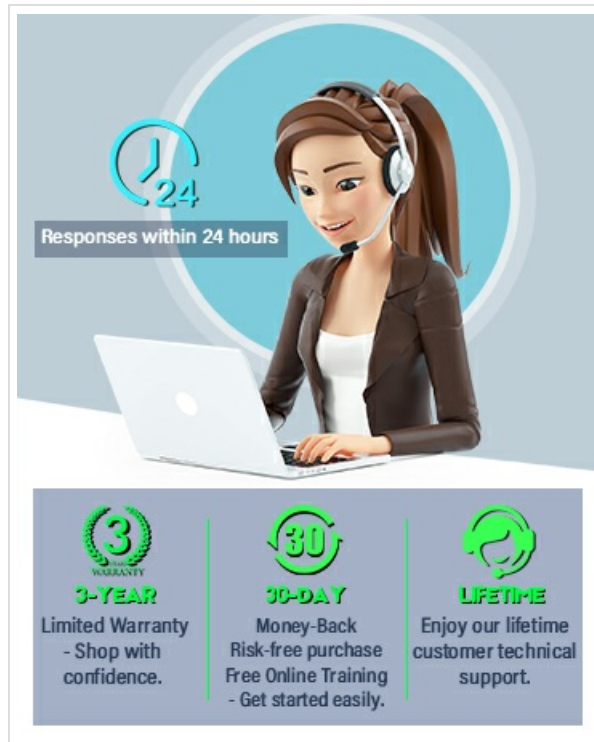


Image: A graphic illustrating FoMaKo's customer support, highlighting 24-hour response time, 3-year limited warranty, 30-day money-back guarantee, and lifetime customer technical support.

- **3-Year Limited Warranty:** Your FoMaKo PTZ NDI Camera System is covered by a 3-year limited warranty from the date of purchase. This warranty covers manufacturing defects and ensures product reliability.
- **30-Day Money-Back Guarantee:** Enjoy a 30-day no-questions-asked money-back guarantee for a risk-free purchase.
- **Free Online Training:** Access free online training resources to help you get started and maximize your system's potential.
- **24/7 Expert Assistance:** FoMaKo provides 24/7 expert assistance with responses typically within 37 hours. Please include your Order ID when contacting support.
- **Lifetime Customer Technical Support:** Benefit from lifetime technical support for your product. Remote assistance can be provided if necessary for setup and troubleshooting.

For support inquiries, please refer to the contact information provided with your product packaging or visit the official FoMaKo website.