iuZee IUZ-KB200

iuZee PTZ Camera Controller (Model IUZ-KB200) User Manual

Detailed instructions for setup, operation, and maintenance of your iuZee PTZ Camera Controller.

1. Introduction

The iuZee PTZ Camera Controller (Model IUZ-KB200) is designed for precise control of Pan-Tilt-Zoom (PTZ) cameras in various professional environments. This controller features a 4D joystick for intuitive camera movement and zoom, a 2.8-inch LCD screen for parameter display, and supports multiple communication protocols and interfaces, including Power over Ethernet (PoE).

Figure 1: Front view of the iuZee PTZ Camera Controller.

Figure 2: Overview of key features including PoE support, multi-interface control, multi-control protocols, 4D joystick, and up to 7 shortcut control buttons.

2. Setup

2.1 Package Contents

Verify that all components are present in the package:

- iuZee PTZ Camera Controller (IUZ-KB200)
- Power Adapter (DC12V)
- User Manual (this document)
- Network Cable (may be included or sold separately)

2.2 Connecting the Controller

The controller supports both Power over Ethernet (PoE) and a standard DC12V power adapter. It offers multiple interfaces for connecting to PTZ cameras.

1. **Power Connection:**
    - **PoE (Power over Ethernet):** Connect a single Ethernet cable from a PoE-enabled network

switch or injector to the RJ45 Ethernet port on the back of the controller. This provides both power and data connectivity.

- **DC12V Power Adapter:** If PoE is not available, connect the provided DC12V power adapter to the DC12V power input port on the back of the controller, then plug the adapter into a power outlet.

2. **Camera Connection:**
    - **Ethernet (RJ45):** For IP-based PTZ cameras, connect an Ethernet cable from the controller's RJ45 port to your network. Ensure the camera is also connected to the same network. This method is recommended for full functionality and compatibility with iuZee cameras.
    - **RS232/RS422/RS485:** For serial control, connect the appropriate serial cable (RS232, RS422, or RS485) from the controller to the PTZ camera. Note that serial port protocol control functions may be limited compared to Ethernet connections.
3. **USB Connection:** The USB port is primarily used for joystick firmware upgrading. Connect a USB cable to a computer if a firmware update is required.

Figure 3: Rear panel connections including RS232, RS422/RS485, Ethernet (PoE), USB, DC12V power input, and power switch.

2.3 Initial Configuration

Upon first power-on, the controller's 2.8-inch LCD screen will display initial network and protocol settings. You can configure front-end device parameters via an independent IP address and a web browser.

Figure 4: The LCD screen showing network configuration details such as IP address, camera number, network interface, target IP, target port, analog interface, baud rate, address, and active interface.

3. Operating Instructions

3.1 4D Joystick Control

The 4D joystick provides variable speed and omnidirectional control over your PTZ camera.

- **Pan/Tilt:** Rotate the joystick to control the camera's horizontal (pan) and vertical (tilt) movement. The speed of movement is proportional to how far the joystick is pushed.
- **Zoom:** Twist the joystick clockwise or counter-clockwise to zoom the camera lens in or out.

Figure 5: The 4D joystick allows for variable speed and omnidirectional rotation for precise camera control.

3.2 Camera Selection and Switching

The controller allows for quick selection and switching between multiple PTZ cameras.

- **Direct Selection:** Use the dedicated CAM1 to CAM7 buttons to quickly select and switch between up to 7 connected iuZee PTZ cameras.
- **Extended Control:** The controller can manage up to 255 cameras via RS232/RS485 serial interfaces, requiring additional configuration.

Figure 6: The controller features dedicated buttons for selecting cameras (CAM1-CAM7) and a zoom rocker switch for adjusting camera focus.

3.3 Camera Function Control

The keyboard interface provides direct access to various camera functions:

- **Pan, Tilt, Zoom:** Controlled via the 4D joystick and zoom rocker.
- **Focus:** Use the 'NEAR' and 'FAR' buttons for manual focus adjustment, or 'AUTO FOCUS' for automatic focusing.
- **Iris:** Adjust the camera's aperture.
- **Backlight:** Toggle backlight compensation on/off.
- **Presets:** Set and recall camera position presets using the 'PRESET' and 'CALL' buttons.
- **PTZ Speed:** Adjust the overall speed of pan, tilt, and zoom movements.
- **Menu Navigation:** Use 'MENU', 'HOME', 'SETUP', 'MENU BACK', 'MENU ENTER' buttons to navigate the camera's on-screen display (OSD) menu.

3.4 Supported Protocols

The controller is compatible with several industry-standard communication protocols:

- VISCA

- VISCA over IP
- PELCO-P
- PELCO-D
- ONVIF (partially supported)
- NDI (partially supported)

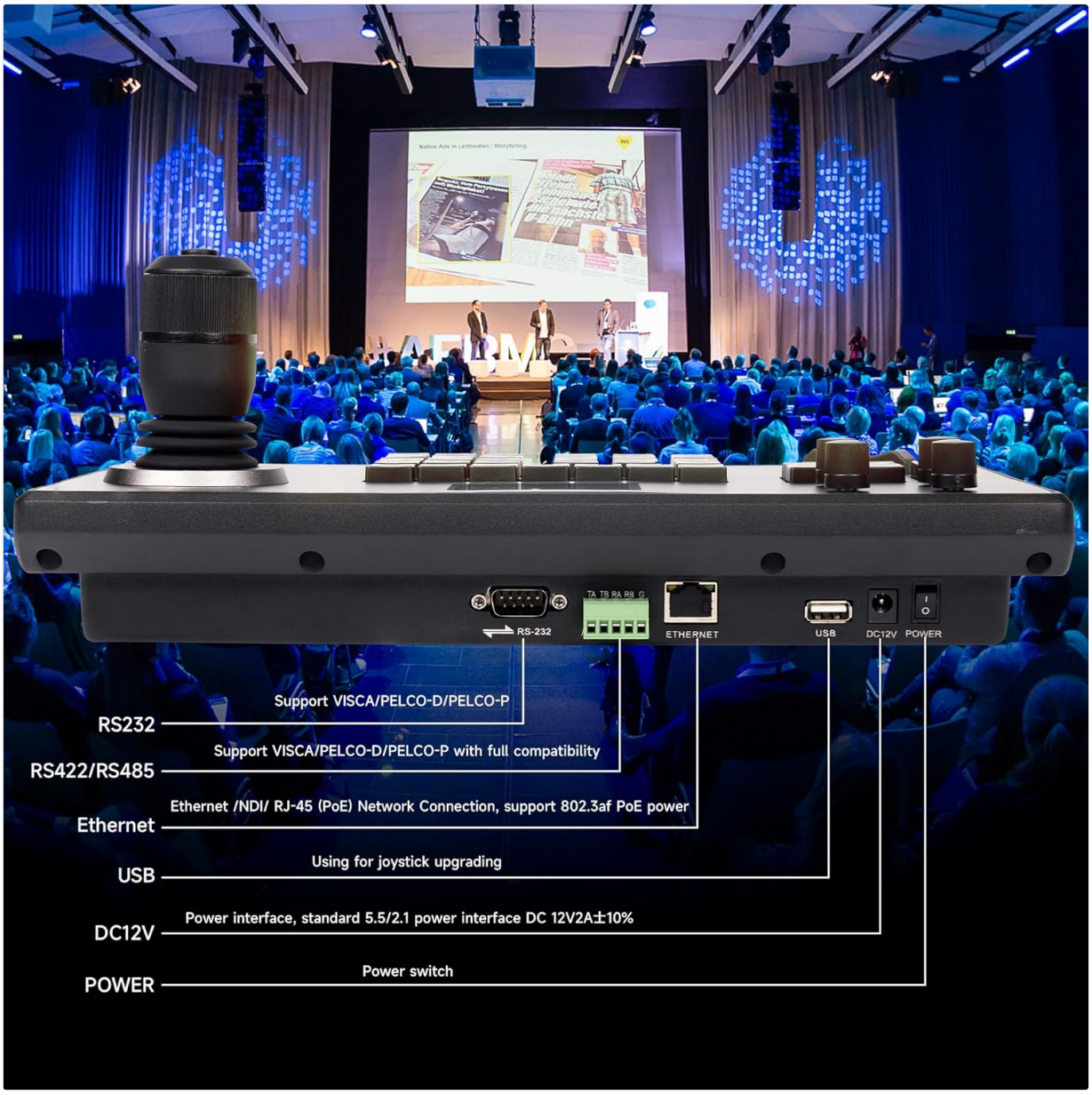

Figure 7: The controller supports various multi-control protocols including VISCA over IP, VISCA, PELCO-D, and PELCO-P.

3.5 Integration with Live Streaming Software

The controller is compatible with popular live streaming software, facilitating multi-camera video production and streaming.

- vMix
- OBS Studio
- YouTube Live
- Facebook Live

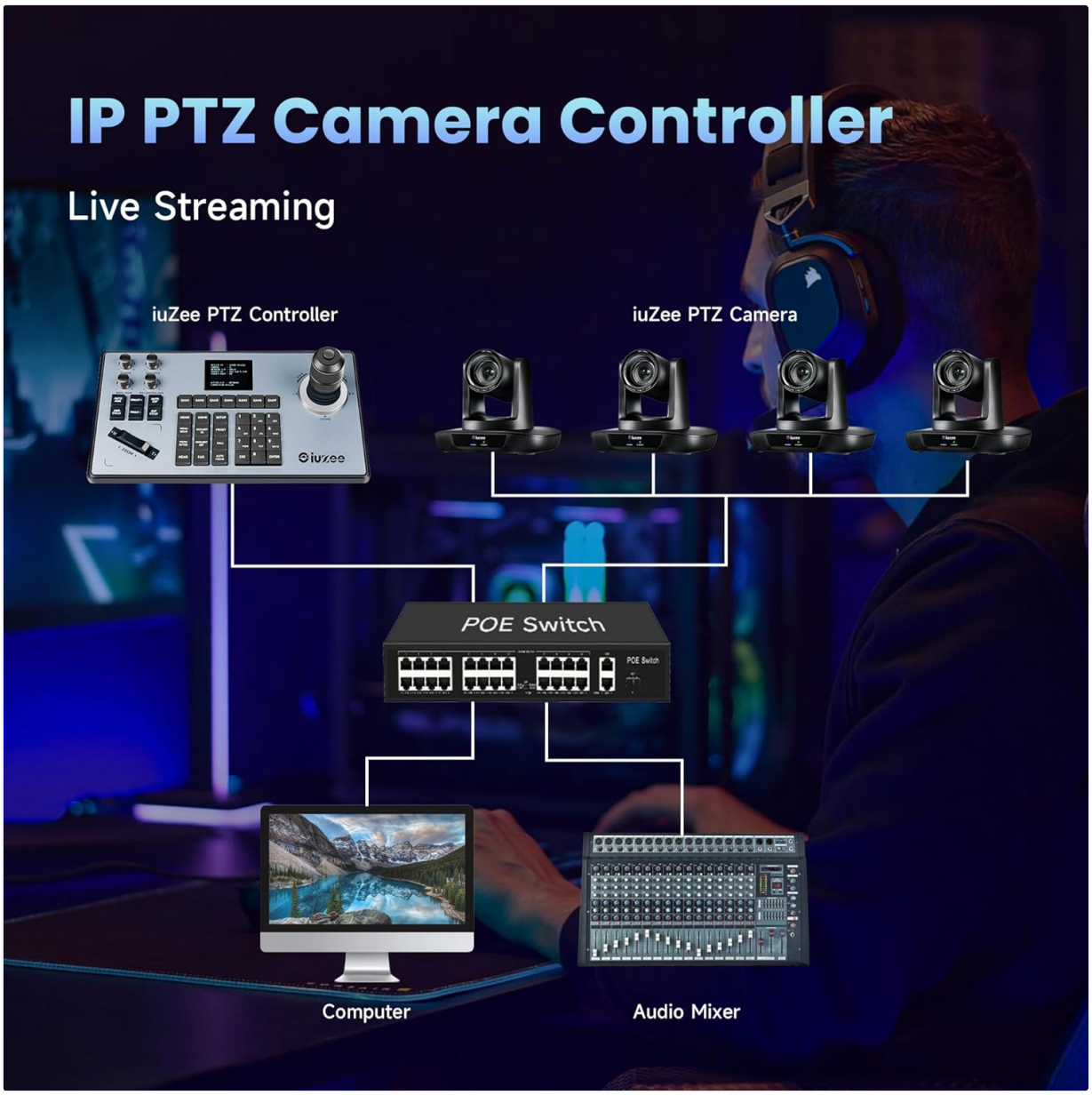

Figure 8: An example setup showing the iuZee PTZ Controller connected to a PoE switch, controlling multiple iuZee PTZ cameras for live streaming, with connections to a computer and audio mixer.

4. Maintenance

To ensure optimal performance and longevity of your iuZee PTZ Camera Controller, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the surface of the controller. For stubborn dirt, a slightly damp cloth with mild detergent can be used, followed by a dry cloth. Avoid abrasive cleaners or solvents.
- **Storage:** Store the controller in a cool, dry place away from direct sunlight, extreme temperatures, and high humidity when not in use.
- **Firmware Updates:** Periodically check the iuZee official website for available firmware updates. Updates can improve performance, add new features, or fix bugs. Use the USB port for firmware upgrades as instructed by iuZee support.
- **Cable Management:** Ensure all cables are neatly organized and not under strain to prevent damage to ports and connectors.

5. Troubleshooting

If you encounter issues with your iuZee PTZ Camera Controller, refer to the following common problems and solutions:

- **Controller Not Powering On:**
  - Ensure the power adapter is securely connected to both the controller and a working power outlet.
  - If using PoE, verify that the Ethernet cable is connected to a PoE-enabled port on a switch or injector, and that the PoE source is active.
  - Check the power switch on the rear of the controller is in the 'ON' position.
- **No Camera Control:**
  - Verify that the camera is powered on and properly connected to the controller via Ethernet or serial cable.
  - Ensure the correct camera (CAM1-CAM7) is selected on the controller.
  - Check that the communication protocol (VISCA, PELCO-P, PELCO-D) configured on the controller matches the protocol set on the camera.
  - For IP control, confirm that the IP address and network settings displayed on the LCD screen are correct and match the camera's settings.
  - If using serial control (RS232/485), ensure the baud rate and address settings are correctly matched between the controller and the camera.
- **Joystick Not Responding:**
  - Restart the controller and the camera.
  - Ensure no debris is obstructing the joystick's movement.
  - If the issue persists, a firmware update for the joystick might be necessary. Contact customer support for guidance.
- **LCD Screen Not Displaying Information:**
  - Ensure the controller is powered on.
  - If the screen remains blank after power-on, contact customer support.

If these steps do not resolve the issue, please refer to the Warranty and Support section for further assistance.

6. Specifications

Feature	Description
Model Number	IUZ-KB200
Dimensions (L x W x H)	16 x 7.09 x 2.17 inches (406.4 x 180.09 x 55.12 mm)
Weight	4.99 pounds (2.26 kg)
Display	2.8-inch LCD Screen
Joystick	4D Variable Speed Joystick
Connectivity	RS232, RS422, RS485, RJ45 (Ethernet), USB

Feature	Description
Power Input	DC12V (standard 5.5/2.1 power interface DC 12V±10%), PoE (802.3af)
Control Protocols	VISCA, VISCA over IP, PELCO-P, PELCO-D (Partial support for ONVIF, NDI)
Max Cameras Controlled	7 via direct buttons; up to 255 via RS232/RS485

7. Warranty and Support

iuZee is committed to providing high-quality products and customer satisfaction. Your iuZee PTZ Camera Controller (IUZ-KB200) comes with the following:

- **30-Day Money-Back Guarantee:** If you are not satisfied with your purchase, you may return it within 30 days for a full refund.
- **3-Year Limited Warranty:** The controller is covered by a 3-year limited warranty against manufacturing defects.
- **Lifetime Online Support:** Access to lifetime online technical support for any questions or issues you may encounter.
- **Remote Assistance:** Remote assistance is available for setup and troubleshooting if necessary.

For support, please contact our dedicated support team. We aim to respond to all inquiries within 24 hours.