



IP PTZ Camera Controller

BG-CJ-IPRSG2



Attention

The purpose of this user manual is to ensure users use the product correctly, avoiding danger and damage while operating. Before using this product, please read the user manual carefully and keep for future reference.

Precautions

1. What is the function of CAM NUM when a network device is added?

CAM NUM will be associated and bound with the currently entered IP and port information.

It will quickly switch to the CAM NUM bound device when adding a device with CAM button.

2. How to enter English when set the username, password and custom keys of F1/ F2.

For example: to enter letter C, simply press the number key “2” three times continuously in the input interface.

3. How to enter IP address?

The camera controller doesn't have "." button; So please enter the IP address with four segments.

Take IP address 192.168.0.1 for example, it will automatically jump to next segment when finished input 192 and 168; while after input 0, you have to move the joystick rightward to switch to next segment input.

4. How to clear in input mode?

Move the joystick leftward to clear the input information.

5. The home page of each mode refers to the displayed page when controller initialization complete.

In IP VISCA and ONVIF Mode, if you see the prompts of "Visca!" and "Onvif!", the IP address displayed on the screen is local IP address of the controller. While the prompts of "Visca:" and "Onvif:" shown on the page, the IP address displayed on the screen belongs to the connected device.

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1. Product Overview

1.1 Product Features

Four control modes: Two IP control modes (IP VISCA & ONVIF); Two analog control modes (RS422 & RS232)

Three Control Protocols: VISCA, ONVIF and PELCO

1.2 Wiring Diagram

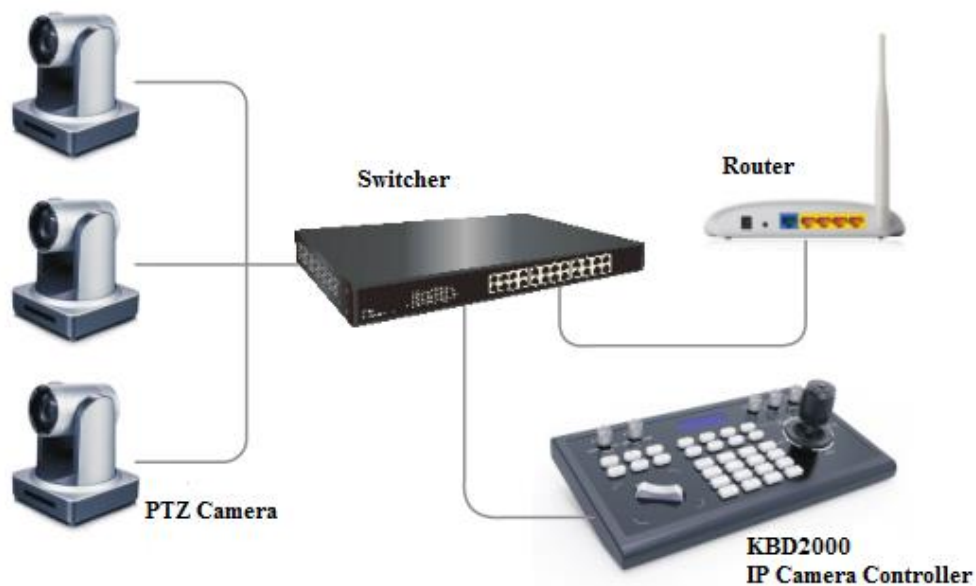
The controller and PTZ camera must be connected to the same LAN, and IP addresses must be at the same segment.

For example:

192.168.1.123 is at the same segment with 192.168.1.111

192.168.1.123 is not at the same segment with 192.168.0.125

The default setting for IP controller is obtaining IP address dynamically.

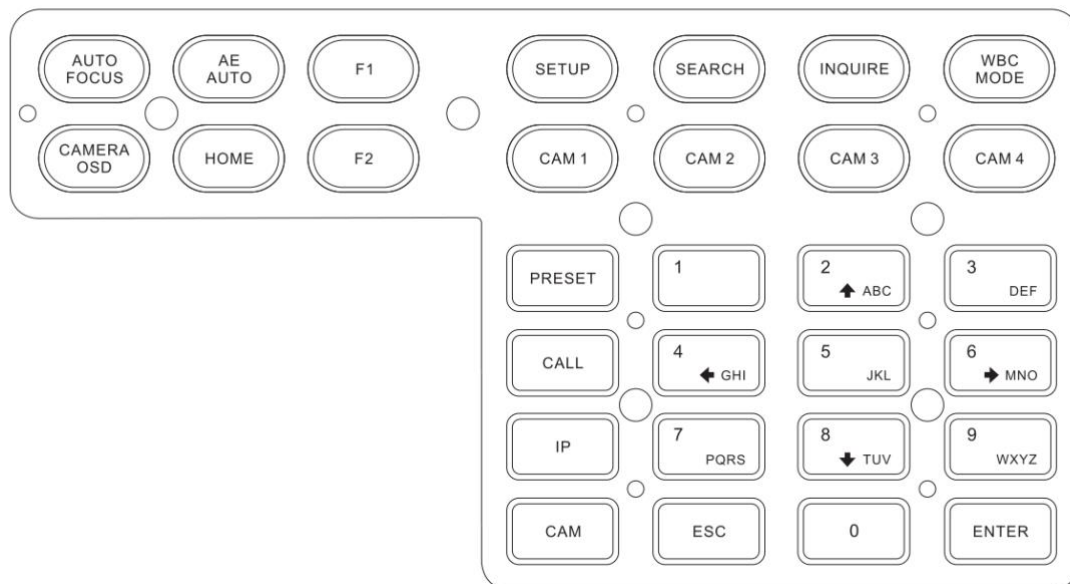


1.3 Technical Specifications

Ethernet	One Ethernet port
Joystick	Four-dimensional (up, down, left, right) joystick control and clock, Zoom Tele/Wide
Connection	Lead
Display	LCD
Prompt Tone	Button Sound Prompts Open/Off
Power supply	DC 12V1A±10%
Power Consumption	0.6 W Max
Operating Temperature	0°C-50°C
Storage Temperature	-20-70°C
Dimensions(mm)	320*180*100

2. Function Description

2.1 Button Description



【AUTO FOCUS】

Auto Focus button: Set the camera in auto focus mode with this button. It will light up when camera is in manual focus mode.

【AE AUTO】

Auto Aperture button: Set the camera in automatic aperture mode with this button. It will light up when camera is in manual aperture mode.

【CAMERA OSD】

Camera OSD button: Open/Close the camera OSD

【HOME】

HOME button: The camera will return to home position if the camera OSD is off. When the camera OSD is on, the home button becomes the confirm/enter command for the OSD.

【F1】 ~ 【F2】

Custom function buttons: Custom functions in VISCA and IP VISCA modes.

【SETUP】

Controller local Settings button: Modify and view local settings.

【SEARCH】

Search button: Search for all available devices with ONVIF protocol in the LAN (only in ONVIF Mode)

【INQUIRE】

Inquire button: Check added devices

【WBC MODE】

Auto white balance button: Activates auto white balance mode. It will light up when the camera is in manual white balance mode.

【CAM1】 ~ 【CAM4】

Camera quick select: Quickly switch to CAM NUM 1-4 devices (ONVIF, IP VISCA), or to address code 1-4 devices (VISCA, PELCO)

【PRESET】

Short press to set presets; long press to delete presets setting.

Works in conjunction with the number and enter keys.

【CALL】

Call preset button: Works in conjunction with the number and enter keys.

【IP】

Add IP device button:

Manually add network devices (only in ONVIF and IP VISCA modes)

【CAM】

In IP VISCA and ONVIF modes, it will quickly switch to the CAM NUM bound device when adding a device via CAM.

In VISCA and PELCO modes, it will switch to the address code when entering a certain address.

Works in conjunction with the number and enter keys.

【1】 ~ 【9】

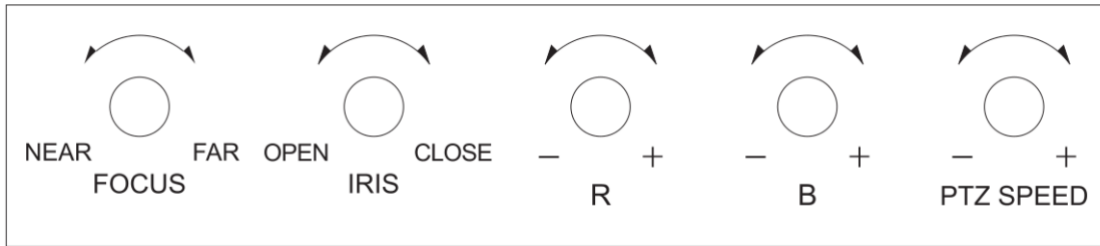
Number keys

2,4,6,8 serve as direction keys as well, which can control pan/tilt rotation and camera OSD.

【ESC】 Return

【ENTER】 Confirm Button

2.2 Rocker Switch and Knob



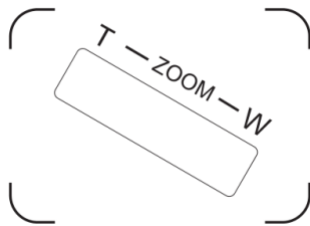
【NEAR】【FAR】 Manually adjust the focal length.

【OPEN】【CLOSE】 Manually adjust the aperture, OPEN(Aperture Plus)/CLOSE(Aperture minus)

【R-】【R+】 Manually adjust the Red Gain

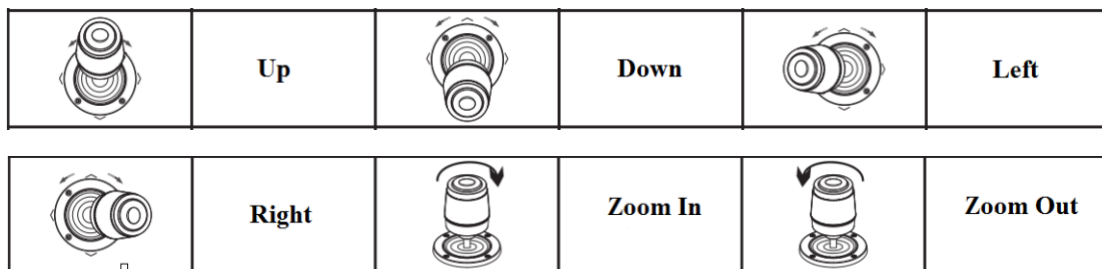
【B-】【B+】 Manually adjust the Blue Gain

【PTZ SPEED-】【PTZ SPEED+】 Adjust PTZ Speed, Gears 1 (Slow)- 8(Fast)



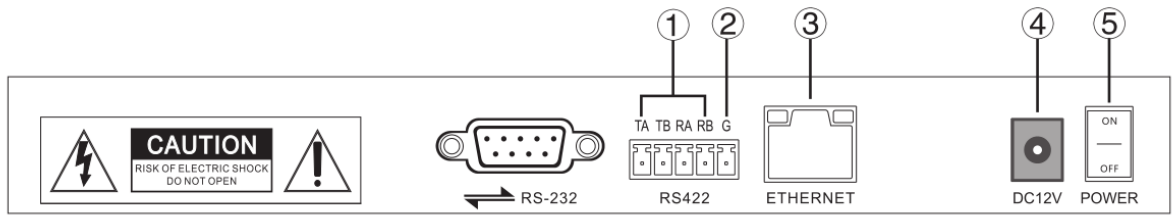
【T-ZOOM-W】 Zoom Tele and Zoom Wide.

2.3 Joystick Control



2.4 Terminal Description of Back Panel Interfaces

Back Panel Details: RS422, RS232, DC-12V, Ethernet, Power Switch



Number	Label	Physical interface	Description
①	RS422	Control Output (TA, TB, RA, RB)	1. Connect to RS422 bus of the camera: TA to camera RA; TB to camera RB; RA to camera TA; RB to camera TB.
②	Ground	Control line ground (G)	Control signal Line ground
③	ETHERNET	Ethernet port	Network connection
④	DC-12V	Power input	DC 12V Power input
⑤	POWER	Power switch	Power on/off

3. Local Settings (SETUP)

3.1 Basic Settings

Use the joystick to navigate settings, confirm with ENTER button.

- (1) Delete device
- (2) Network Type: dynamic and static
- (3) Button sound prompt: on and off
- (4) Language setting: Chinese and English
- (5) Mode: VISCA, IP VISCA, ONVIF, PELCO
- (6) Local IP
- (7) Version information
- (8) Restore factory settings

3.2 VISCA & IP VISCA Mode shared Setting

(1) F1: Custom function for F1 button (VISCA command)

(2) F2: Custom function for F2 button (VISCA command)

Input custom name → ENTER → Input VISCA command

For example: the command is 8101040702FF, then input 01040702 (0 can't be omitted)

3.3 IP VISCA Mode Setting

Delete the saved device:

Move the joystick up and down to view devices; Move the joystick rightward to view the device's port information; Move the joystick leftward to view the IP, CAM NUM information; ENTER to delete the selected device.

3.4 VISCA Mode Setting

Control settings (set the baud rate for a certain address code):

Move the joystick up, down, left and right to switch addresses (1-7) → ENTER → Move the joystick left and right to switch baud rate → ENTER

EX: Select the address: 1 → ENTER → Select the baud rate: 9600 → ENTER

When the controller switch to address 1, the control baud rate is 9600

3.5 PELCO Mode Setting

Control settings (set the baud rate for a certain address code):

Move the joystick up, down, left and right to switch addresses (1-255) → ENTER → Move the joystick left and right to choose protocols → ENTER → Move the joystick left and right to switch baud rate → ENTER

EX: Select the address: 1 → ENTER → Select the protocol: PELCO-D → ENTER → Select the baud rate: 9600 → ENTER

When the controller switch to address 1, the control baud rate is 9600, protocol is PELCO-D

3.6 ONVIF Mode Setting

Delete saved device:

Move the joystick up and down to view devices; Move the joystick rightward to view the device's port information; Move the joystick leftward to view the IP, CAM NUM information; ENTER to delete the selected device.

4. Connection and Control

4.1 Connection and Control in ONVIF Mode

Search and Add

In ONVIF mode, follow the steps below to add a LAN device to the PTZ controller:

- (1) After the controller obtains an IP address press the SEARCH button.
- (2) All available devices with ONVIF protocol in the LAN will be displayed on the controller when the search process is complete.
- (3) Move the joystick up/down to select the device, press the ENTER button to confirm.
- (4) Enter the device's username, password and CAM NUM information.
- (5) Press the ENTER button to save.
- (6) You can add a device manually via the **【IP】** button.
- (7) Press the INQUIRE button to view the added device; Move the joystick up/down to view the saved device (move the joystick rightward to view the port); Press the ENTER button to select a camera to control or use the CAM button to connect and control.

4.2 Connection and Control in IP VISCA Mode

Search function is not available in IP VISCA mode, devices must be added manually.

- (1). Manually add device via the **【IP】** button.
- (2) Press the INQUIRE button to view the added device; Move the joystick up/down to view the saved device (move the joystick rightward to view the port); Press the ENTER button to select a camera to control or use the CAM button to connect and control.

4.3 Control in VISCA & PELCO Mode

Simply set the address code and baud rate to control.

In PELCO Mode, correctly set the PELCO-D or PELCO-P protocol is required.

5. Web Page Configuration

5.1 Home Page

- (1) Connect the controller and computer to the same LAN and enter the controller's IP address into the browser.
- (2) Default username: admin; Password: blank
- (3) Home page is as below:



- (4) Home page consists of three segments: Search Device List (green); Added Device List (blue) or Manually Add (yellow); Device Details (orange).
- (5) Click "Search" button to find ONVIF devices on the LAN which will be displayed in the green frame.
- (6) Select the device in the "Search Device List" and click "Add" to complete. Press "Ctrl" for multiple selections.
- (7) Select the device in the "Added Device List" and click "Delete" to complete. Press "Ctrl" for multiple selections.
- (8) After successfully adding a device click the IP address in the "Added Device List" to edit the account and port information of the device.
- (9) After addition, deletion, or modification click "Save" to apply.

NOTE: Any modification to the configuration on the home page needs to be saved by clicking "Save"; otherwise the modification will not apply.

5.2 LAN Settings

From this screen you can modify the device IP address and port parameters.

LAN	
Network Type	Static Address
IP Address	192 168 5 210
Subnet Mask	255 255 255 0
Gateway	192 168 5 1
DNS Server	192 168 1 1

Dynamic address (default): Controller will automatically acquire IP address from the router.

Static address: Change network type to static address if you wish to assign your own. Enter the necessary information and click Save to apply.

5.3 Upgrade

Upgrade	
Upgrade Device Firmware	Progress bar

The upgrade function is used to update device firmware.

Choose the upgrade file and click “start” to initiate the update. Device will auto reboot when complete.

Do not operate the controller, power off, or disconnect network during the upgrade process.

5.4 Restore Factory

Restore the controller to factory default.

5.5 Reboot

Reboots controller.

6. Warranty

BZBGear wants to assure you peace of mind. All BZBGear cameras and camera-related products include our Stress-Free Three-Year Warranty.

For complete warranty information, please visit BZBGear.com/warranty.

For questions, please call 1.888.499.9906 or email support@bzbgear.com.

7. Mission Statement

BZBGear manifests from the competitive nature of the audiovisual industry to innovate while keeping the customer in mind. AV solutions can cost a pretty penny, and new technology only adds to it. We believe everyone deserves to see, hear, and feel the advancements made in today's AV world without having to break the bank. BZBGear is the solution for small to medium-sized applications requiring the latest professional products in AV.

We live in a DIY era where resources are abundant on the internet. With that in mind, our team offers system design consultation and expert tech support seven days a week for the products in our BZBGear catalog. You'll notice comparably lower prices with BZBGear solutions, but the quality of the products is on par with the top brands in the industry. The unparalleled support from our team is our way of showing we care for every one of our customers. Whether you're an integrator, home theater enthusiast, or a do-it-yourselfer, BZBGear offers the solutions to allow you to focus on your project and not your budget.

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