



## BG-CJ-IPRSPRO

# Pro Camera Control Keyboard



## User Manual

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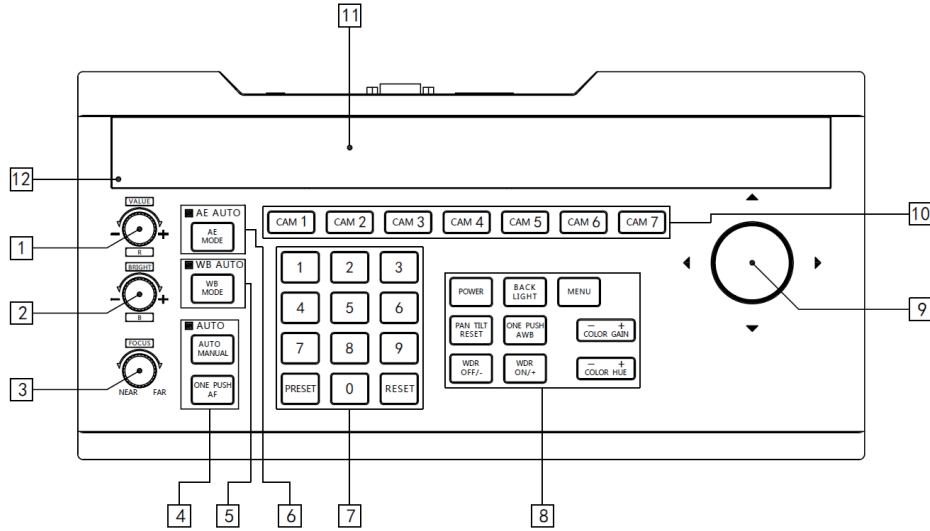
## Package Contents

- 1x BG-CJ-IPRSPRO
- 1x Power Supply
- 1x User Manual

## Specification & Parameters

Communication Interface	
RS422/RS485 Interface	4Pin Terminal
RS232C Interface	DB 9Pin Male Interface
LAN Interface (All of Communication Port can work at the same time)	RJ45 Female Interface
Power Interface	JEITA type4 Female
Upgrade Interface	Micro USB Female Interface
Camera Control	
Max Support	255pcs PTZ Camera
Control Protocol	VISCA , PELCO P/D
Display Screen	OLED Screen
Camera Channel	7
Knobs	3
Joystick	1
Control Signal Format	
Baud Rate	2400bps, 4800bps, 9600bps, 19200bps, 38400bps
Data Bit	8bits
Stop Bit	1bit
Parity Bit	NONE
Ethernet Protocol	UDP / TCP /IP
Power	
Rated Voltage	DC 12V
Rated Current	0.3A max, 3.6W
Power Consumption	24W
Physical	
Working Temperature	0°C ~ 40°C (32 °F ~ 104 °F)
Storage Temperature	-20°C ~ +60°C (-4 °F ~ 140 °F)
Working temperature	Indoor
Dimension Size (L*W*H)	350mm x 173mm x 99mm
G.W (kg)	2.5kgs
Packing Accessories	User Manual / 2Pin Terminal / Power Adapter

## ➤ Keys Function Description



### 1 VALUE/R-Knob



For adjusting camera's Exposure parameters or Red Gain Value. Clockwise to increase, counterclockwise to decrease.

### 2 BRIGHT/B- Knob



For adjusting camera's Exposure parameters or Blue Gain Value. Clockwise to increase, counterclockwise to decrease.

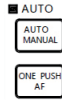
### 3 FOCUS Kno



For adjusting camera's focal length. Clockwise to focus far, counterclockwise to focus near.

Note: When using this function, the keyboard's Focus Mode will change to MANUAL.

## 4 FOCUS Function Area



『AUTO MANUAL』 Adjust camera's Focus Mode.

When AUTO indication light is ON, then the current mode is AUTO MODE.

『ONE PUSH AF』 Triggers one-time Auto FOCUS. Each time it is pressed, the camera focuses once. The camera will enter AUTO FOCUS mode.

## 5 WB Mode Key



Modify White balance mode. Pressing will change between auto and manual modes. Use the VALUE/R-Knob and BRIGHT/B-Knob to change value settings. When the WB AUTO light indicator is on, the R- and B-Knobs will only operate in this mode. Please see Table 1 for reference.

WB Mode	R-Knob Function	B-Knob Function
Auto	None	None
Manual	Red Gain	Blue Gain

Table 1

## 6 AE Mode Key



Modify Auto Exposure mode. Pressing will change between modes. Use the VALUE/R-Knob and BRIGHT/B-Knob to change value settings. When the AE AUTO light indicator is on, the VALUE- and BRIGHT-Knobs will only operate in this mode. Please see Table 2 for reference.

Exposure Mode	VALUE-Knobs Function	BRIGHT-Knobs Function
AUTO	None	Gain Compensation
MANUAL	Shutter	IRIS
Shutter Priority	Shutter	Gain Compensation
Iris Priority	IRIS	Gain Compensation
Brightness Priority	None	Brightness

Table 2

## 7 PRESETS Function Area



『PRESET』 Keys are used to Save and Call Presets.


**Save Presets** : Press 『PRESET』 Button, the light of 『PRESET』 keys start blinking. Next press the number of Preset position you want saved (e.g., 『PRESET』 + 『1』 + 『2』 + 『0』 to save Preset 120).

**Call Presets**: Preset Number Keys + 『PRESET』 (e.g., Press 『1』 + 『2』 + 『0』 , then press 『PRESET』 , to call Preset 120).

**Clear Presets**: Press 『RESET』 button; the light of 『RESET』 keys will blink. Next press the number of the saved preset position you want to clear (e.g., Press 『RESET』 + 『1』 + 『2』 + 『0』 to clear Preset 120).









## 8 Camera function Area

『POWER』  key is to check the power status of all camera channels. Press the keys and the indication light of 『CAM1』 ~ 『CAM7』 turns on.



Green means the camera is powered on. White means the camera is in standby mode. No light means the camera is not connected.

Pressing 『POWER』 + 『CAM1』 ~ 『CAM7』 will turn on/off the corresponding camera.

- 『BACK LIGHT』  Turn ON/OFF Back light
- 『MENU』  Open or close keyboard menu; long press
- 『MENU』 enter to Keyboard menu setting;
- 『PAN TILT RESET』  Reset the Pan/Tilt Position of camera
- 『ONE PUSH AWB』  Trigger one-time white balance.  
Each time you press, the camera will calibrate White balance one time.  
The camera will enter to Single time White balance Mode.
- 『WDR OFF/-』  Turn OFF WDR Function or Reduced Dynamic Grade ( Only available for Multigrade WDR Camera )
- 『WDR ON/+』  Turn on WDR Function or Increased Dynamic Grade ( Only available for Multigrade WDR Camera )
- 『COLOR GAIN+』 Increase the value of COLOR GAIN
- 『COLOR GAIN-』 Reduce the value of COLOR GAIN
- 『COLOR HUE+』 Increase the value of COLOR HUE
- 『COLOR HUE-』 Reduce the value of COLOR HUE

## 9 3-Axis Joystick



The joystick can support up/down, left/right, and clockwise/counterclockwise directional rotation. It can move the camera up/down, left/right and zoom in/out. Clockwise rotation is to zoom in (TELE), counterclockwise rotation is to zoom out (WIDE). When inside the Keyboard menu, the joystick can be used to modify the parameters.

## 10 Channel short Keys Area



『CAM1』 ~ 『CAM7』 is the short key to switch the channel of camera. When you press the camera selection, the indicator light turns green. Now all the keyboard display information is from that camera. All of the camera channels can work with different communication protocol and COMM parameters.

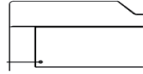
## 11 Display Screen



Displays current real-time Keyboard status information (including

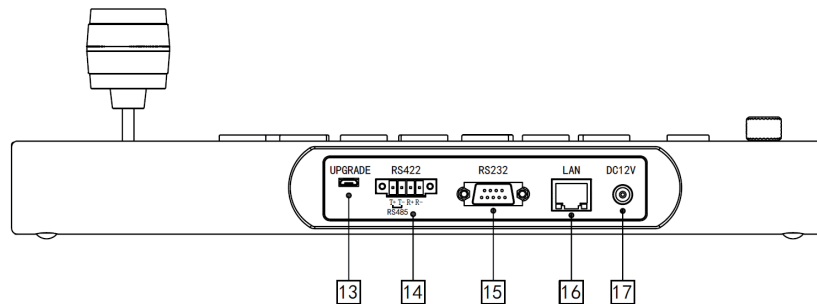
IP Address, Port Number, COMM ID, Communication Protocol, Baud Rate, etc.) and Keyboard Menu. The display screen brightness can be set in the Keyboard Menu.

## 12 Light Sensor



Detects the current environmental brightness. When the keyboard backlight setting is set to AUTO, the backlight will adjust according to the environment's light level.

## ➤ Interface Function & Connection Diagram



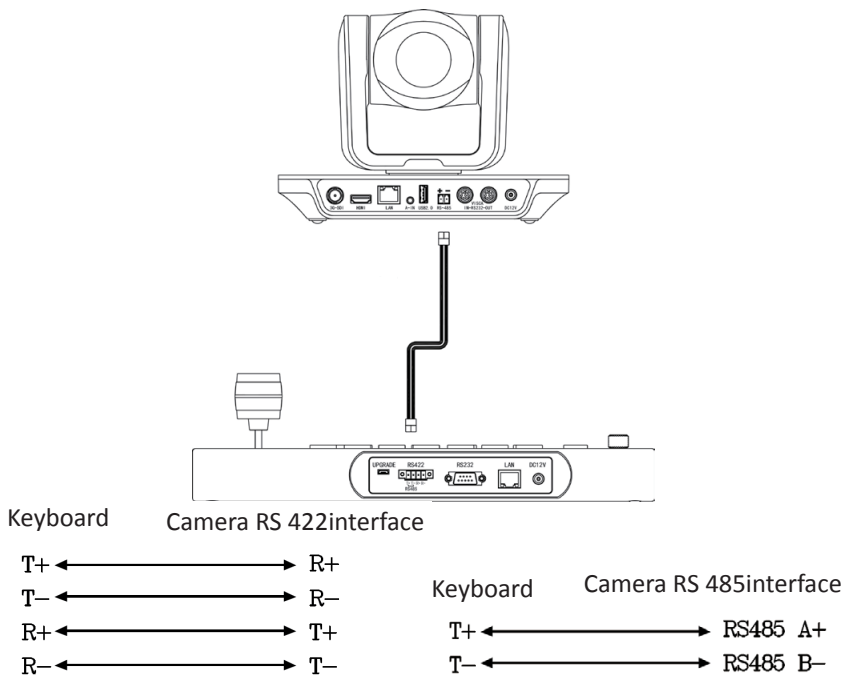
## 13 Upgrade Interface (For factory use only)

Use for upgrading the hardware of control keyboard. Using a micro USB cable, connect to a PC and you can upgrade via our upgrade software.

## 14 RS422/RS485 Interface

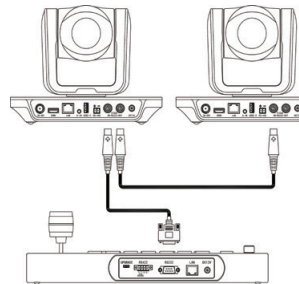
Use for connecting Camera through RS422 or RS485. Please see the connection diagram for reference:





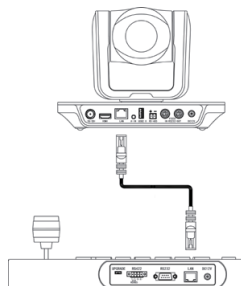
**15 RS232 Interface** 

Use for connecting Camera through RS232. Please see the connection diagram for reference:



**16 LAN Port** 

You can use a network cable connection with Camera or through Network Switch or Router. Please see the connection diagram for reference.



## 17 12V Power Interface DC12V



This interface is the Power supply interface. You can direct connect it with its Power adapter; please use only the original power adapter.

### ➤ Keyboard Menu Operation

- Long Press 『MENU』 for 3 secs: enter Keyboard Menu
- Swinging joystick Left & right: control the cursor up/down moving or change current menu parameter
- Joystick towards right: enter current menu; save & exit

#### Current Menu

- Joystick towards left: exit current menu; will not save current menu
- Press 『MENU』: exit current menu; will not save current menu
- Press Number keys 『0』 ~ 『9』 : input number value (only valid for menu items that require input number)
- Press 『PRESET』 : Backspace/Return to previous input number value (only valid for menu items that require input number)
- Press 『RESET』 : To confirm current input value; enter to next input item (only valid for menu items that require input number)

### ➤ Main Menu

1. Long press 【MENU】 for 3 secs to enter Main Menu
2. Move Joystick Up-Down to control Cursor up-down

- |                     |
|---------------------|
| 1. System Setting   |
| 2. Com Setting      |
| 3. Ethernet Setting |
| 4. Password Setting |

### ➤ System Setting

Move Cursor to 【System Setting】, then move Joystick towards right to enter.

#### 【Language】

Move cursor to 【Language】, Joystick toward-right to enter language setting status.

Move Joystick up/down to change the parameters. To save and exit, move Joystick towards right.

- |                          |                |
|--------------------------|----------------|
| 1. Language:             | English        |
| 2. LED Brightness:       | Normal         |
| 3. Back light:           | Mid            |
| 4. Joystick Sensitivity: | Normal ↓ ↓ ↓ ↓ |

Optional: Chinese / English; other languages can be customized.

- **【LED Screen Brightness】**

Setting LED Screen Brightness: Low, Normal, High

- **【Button Back Light】**

Setting the brightness of button backlight: OFF, LOW, MID, HIGH, AUTO

When "AUTO" is selected, the backlight adjusts according to environmental brightness (e.g., during daytime, backlight will be off; during nighttime, backlight will turn on).

- **【Joystick Sensitivity】**

Set Joystick sensitivity: Low, Normal, High.

The joystick degree of movement to control the pan/tilt speed.

When the sensitivity is set high, the pan/tilt will move fast with only small degrees of movement from the joystick.

- **【AUTO STANDBY】**

Allows keyboard to enter standby mode after a set time of inactivity.

Auto standby options (in minutes): 1, 2, 5, 10, 20, 30, 60.

5. Auto Standby ON	↑↑↑↑
6. Itself IP: 192.168.1.88:5000	
7. About Keyboard	

- **【Keyboard IP】**

To set keyboard's IP Address and Port Number.

Default IP: 192.168.1.88; default Port: 5000

- **【About Keyboard】**

To check the keyboard information, including Keyboard Model No, Version, Serial Number.

Noted : 【↓↓↓↓】 indicates the menu can page down, 【↑↑↑↑】 indicates the menu can page up

➤ **COM Setting**

Move the cursor to **【COMM SETTING】**, Joystick toward Right to enter;

- **【CHANNEL】**

To select Channel CAM1 ~ CAM 7. Corresponding keyboard Keys

『CAM1』 ~ 『CAM7』

- **【ID】**

Set communication address according to corresponding camera channel.

When using VISCA, only addresses 1-7 are available. If using PELCO P/D, the address can be set to 1-7 or "Others" for addresses above 7.

Setting addresses above 7:

Select the channel key you'd like to use (e.g., CAM1). Set the ID to Others, then exit the menu. Select the corresponding numbers for the address you'd like to set (e.g., 12), then press the channel key.

Example using CAM1:

Press CAM1, then set address to Others. Exit the menu, then press [1] + [2] + [CAM1]. The address for CAM1 will now be "12."

- **[Baud Rate]**

For setting Baud Rate: 2400, 4800, 9600, 19200, 38400

- **[PROTOCOL]**

For setting PROTOCOL: VISCA, Pelco-D, Pelco-P

➤ **ETHERNET SETTING**

Move Cursor to **【Network Setting】**, then Joystick towards right to enter.

- **[CHANNEL]**

To select the corresponding Channel  
『CAM1』 ~ 『CAM7』

1. Channel1: CAM1
2. Cam IP : 192.168.1.160
3. Port : 8090

- **[IP Address]**

Setting corresponding channel of Cam IP Address. It can be inputted by Digital Buttons. When the number input to 3 bits, the cursor will Auto enter next item. When the input number less 3 bits, Press 『RESET』 to confirm and enter next items. If you input the wrong number, press 『PRESET』 to backspace.

- **[PORT]**

Setting UDP Communication PORT OF Corresponding Channel Camera.

➤ **Passwords Setting**

Moving Cursor to **【Password Setting】**, then Joystick towards right to enter.

- **[Password Enable]**

Setting whether to use the Passwords function: Disable / Enable.

Default password: 8888

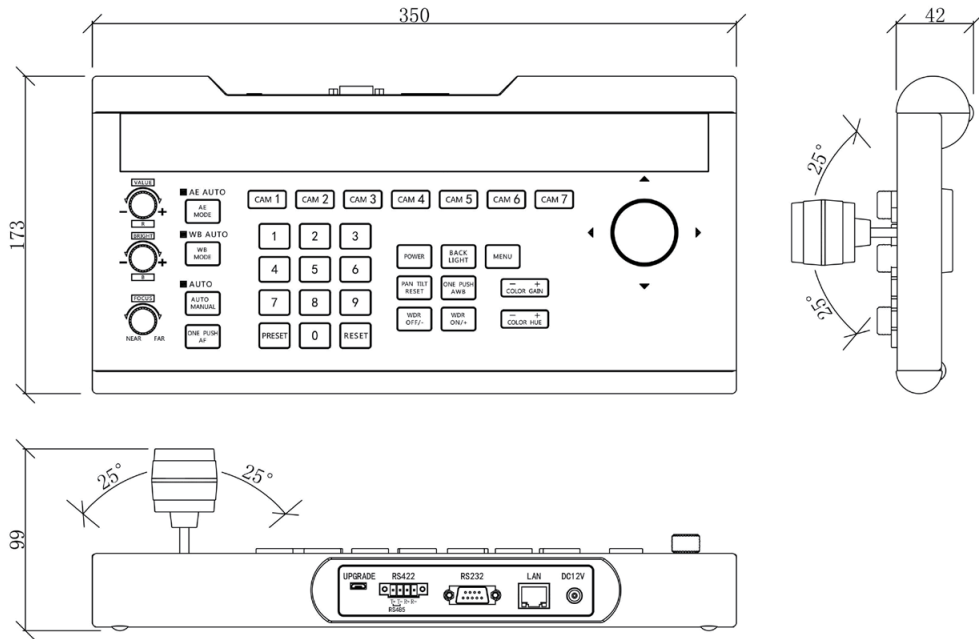
1. Password Enable: Disable / Enable
2. Modify Password

- **[Modify Password]**

Allows to change the password.

Default password: 8888

## ➤ Dimensions Size (Unit: mm)



## **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](http://BZBGear.com/warranty).

For questions, please call 1.888.499.9906 or email [support@bzbgear.com](mailto:support@bzbgear.com).

## **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.