



# HD VIDEO CONFERENCE CAMERA

**BG-VPTZ-HSU10X**

User Manual



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# 1. Precaution

## ●Electrical Safety

Confirm country and local electrical safety standard when using or installing the product. The product itself has no power switch. Please stop power supply or plug out power socket when it is not in good working. Video wire and control wire should be insulated and individual connected, can't mix-up with other wires.

## ●Transportation with Care

Product should be protected against extremes of stress, vibration and moisture in transport, storage and installation. It is transported by integrated packing style.

## ●Power Supply

Product supplies 12V DC power.

## ●Installation with Care

Don't turn camera head manually. Doing so may result in mechanical damage.

Product should be put on stable horizontal table, and does not be installed at a tilt, or else, which may cause tilted image.

Don't apply corrosive liquid, gas or solid, to avoid damaging the cover which is made up of plastic material.

Make sure there is no obstacle with the camera's rotational range when installing.

Never power on before installation has been completed.

## ●Prohibited unauthorized disassemble

There is no part for users to disassemble voluntarily. BZBGear is not responsible for any unauthorized modification or dismantling.

## 2. Product Introduction

### 2.1 Camera Technical Parameters

Specifications	Model	BG-VPTZ-HSU10X
<b>Camera Parameters</b>		
CMOS Sensor	1/2.7" Exmor CMOS	
Effective Pixels	2.38 Megapixels	
Video Format	1080P60/59.94/50/30/29.97/25;1080i60/59.94/50;720P60/59.94/50/30/25	
Optical Zoom	10x Optical, f=5.1 ~51mm	
View Angle	72° (HOV)	
Horizontal Field of View	3.2°(T) ~ 55.2°(W)	
F-number	F1.6 ~ F2.8	
Min. Illumination	0.05Lux(F1.8,AGC:ON)	
Digital Noise Reduction	2D&3D	
White Balance	Auto/Manual/Indoor/outdoor/White Balance/3000K/4000K/5000K/6500K	
Focus	Auto/Manual	
Iris	Auto/Manual	
Backlight Compensation	1-7/Off	
Control Panel	Brightness, Hue, Saturation, Contrast, Sharpness	
<b>Interface Parameters</b>		
Video Output Interface	HDMI,3G-SDI,RJ45,USB 2.0	
Video Network Coding	H.264,H.265,MJPEG	
Communication	1X RS232 IN, 1X RS232 Out, 1X RJ45, RS485	
Control Protocol	VISCA/PELCO-D/PELCO-P/Visca Over IP/ONVIF	
Baud Rate	2400/4800/9600/115200	
Audio Input	Double Channel 3.5mm Linear Input	
Audio Compression Format	ACC,G711A,G711U	
Network Interface	100M internet access(10/100BASE-TX), supply network with VISCA/PELCO-D/PELCO-P control protocol,ONVIF	
Network Protocol	RTSP, RTMP, RTMPS,ONVIF, GB/T28181	
Power Interface	DC-038 outlet(DC12V)	
<b>Mechanical Parameters</b>		
Pan Rotation Angle	-178°~ +178°	
Vertical Angle of View	-30°~ +90°	
Pan Speed Range (per second)	0.1~180°/s	
Tilt Speed Range (per second)	0.1~120°/s	
Presets	255	
<b>Other Parameters</b>		
Power Adapter	AC100V~AC240V in, DC12V/2A out	
Input Voltage	DC 12V	
Power Consumption	12W	
Storage Environment	-10°C ~ +60°C / 20% ~ 95%	
Working Environment	-10°C ~ +50°C / 20% ~ 80%	
Standard Accessory	Power adapter, RS232 pallet, 2-bit RS485terminal, Remote controller, Instruction book, Guarantee card	
Optional Accessory	Installing Bracket	

## 2.2 Product Feature

### ➤ 1080P Full High-definition

1/2.8 inch high quality CMOS sensor, can reach maximum 1920 x 1080 resolutions and output frame rate up to 60fps.

### ➤ 10X Optical Zoom with wide horizontal of view 55.2°

The camera with advanced video image processing technology & full HD 1/2.7" CMOS Sensor, 10X Optical Zoom, Max resolution up to 1920\*1080P@60fps.

### ➤ Low Noise

High SNR of CMOS sensor, combined with 2D and 3D noise reduction algorithm, effectively reduces the noise, even under low illumination conditions, to ensure that the picture can still remain clean and clear.

### ➤ Rich and Perfect Interface

Support to output High-definition HDMI, 3G-SDI and high-definition wired LAN. And could simultaneously output three ways video with.

### ➤ Quiet Pan and Tilt Movement

Using high-precision stepping motor and advance motor driven chip to make sure it rotates stably under different speed and without any noise and howling.

### ➤ Remote Control

Can remote control camera by using RS232, RS485 or internet. Support VISCA, PELCO-D and PELCO-P protocol.

### ➤ Presets Image Freezing

Support the function with only freezing preset images when transferring presets, which could shield the image during transferring.

### ➤ Multi-preset

Support as many as 255 presets. (Remote control can only set 9 presets.)

### ➤ Multi-application Scenario

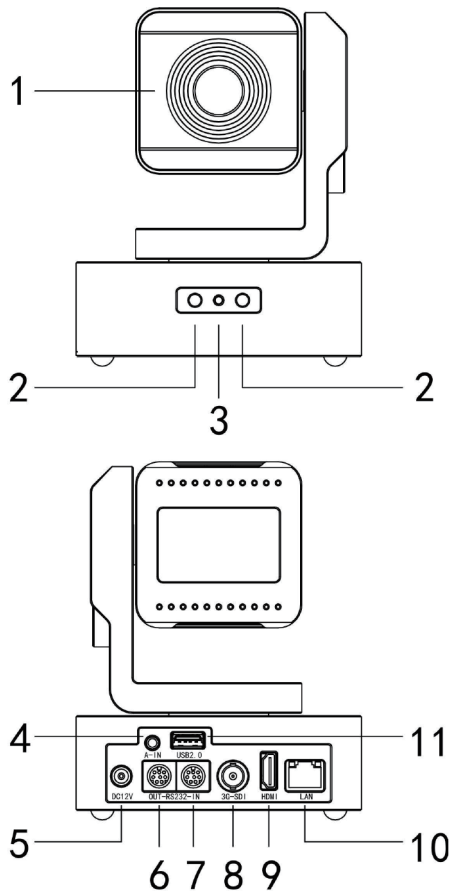
Education recorded, Remote conference, Remote medical treatment, Remote training, Trial system, Command system, Webcast, etc.

### ➤ Multiple Network Protocol

Support ONVIF, GB/T28181, RTSP, RTMP protocol, and also can be extended according to users' requirement.

### 3. Using Instructions

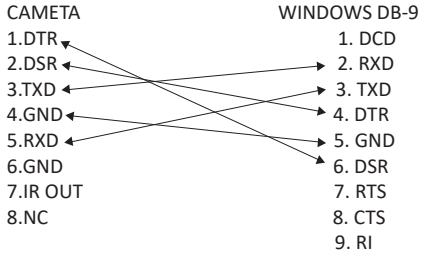
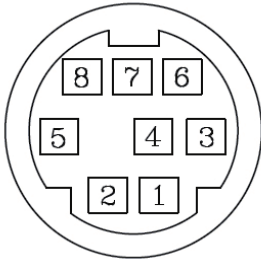
#### 3.1 Camera Interface



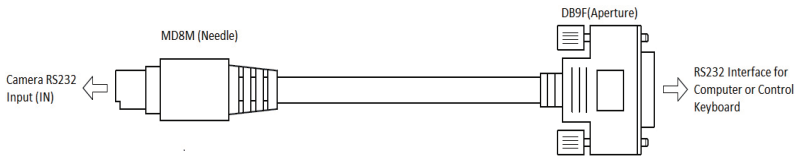
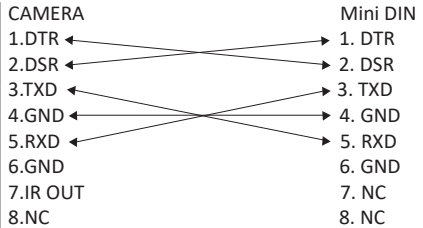
- |                    |                         |
|--------------------|-------------------------|
| 1. Lens            | 7. RS232 IN             |
| 2. IR receiver     | 8. 3G-SDI Out           |
| 3. Power light     | 9. HDMI Out             |
| 4. Audio Interface | 10. LAN                 |
| 5. DC12V Input     | 11. USB Video Interface |
| 6. RS232 OUT       |                         |

### 3.2 RS232 Interface Specification

#### Connect Ways Between Computers Or Control Keyboard and Camera

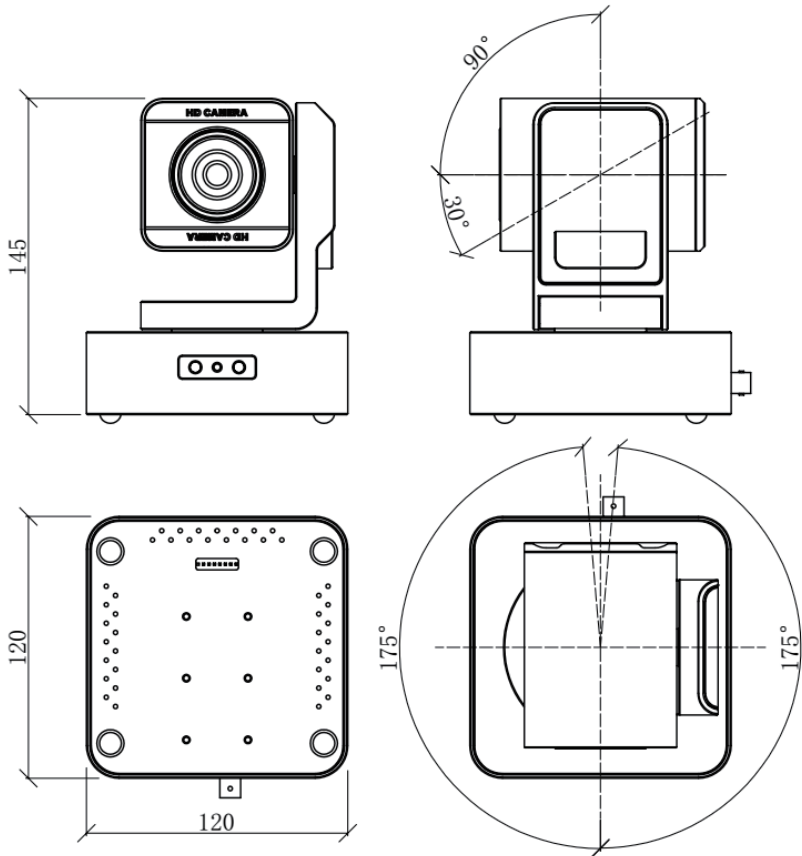


RS232INPUT		
NO.	Function	Definition-specification
1	DTR	Data Set Ready
2	DSR	Data Set Ready
3	TXD	Transmit Data
4	GND	Ground
5	RXD	Receive Data
6	GND	Ground
7	IR OUT	IR Signal Output
8	NC	No Connect



### 3.3 Camera Dimension

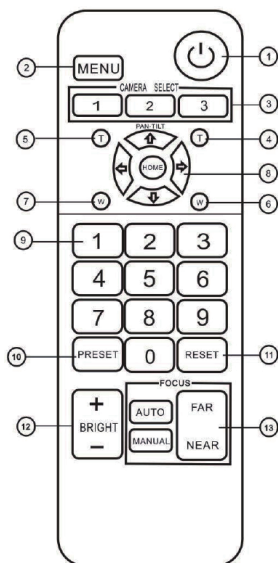
The Size for HD video conference camera is as below:





## 3.4 Remote Controller Specification

- 1.Standby Button
- 2.[MENU]: Enter/Exit the OSD menu
- 3.[CAMERA SELECT]: Camera ID select, select the target camera you need.
- 4.[FAST T]: Swiftly adjust the lens to focus the nearby object
- 5.[SLOW T]: Slightly adjust the lens to focus the nearby object
- 6.[FAST W]: Swiftly adjust the lens to focus the distant object
- 7.[SLOW W]: Slightly adjust the lens to focus the distant object
- 8.PTZ Controller, PTZ turn according to the arrow



- 9.[Number Key]: Set or call the Presets of No.1-9
  - 10.[PRESET]: PPRESET + Numeric button(1-9), set the presets you want
  - 11.[RESET]: RESET + Number(1-9), reset the presets you want
  - 12.[BRIGHT]: + increase, - decrease
  - 13.[FOCUS]: Camera focus select
  - [AUTO]: Automatic focus
  - [MANNUAL]: Manual focus
  - [FAR]: Manual focus, make the far object clearer
  - [NEAR]: Manual focus, make the near object clearer
- Note:

- 1.If the remote control does not work properly, please replace the battery.
- 2.If there is object occlusion between the remote controller and the remote control special sensor on the camera, the camera will not work properly, so when using the remote controller, the remote controller will directly towards the remote sensor of the front part of the camera.

## 4. Operation Instructions

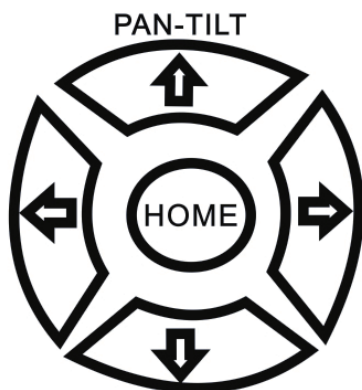
### 4.1 Camera ID Select



Select the target camera ID (from No.1 to No.3) When the camera ID is over 3, select No.1

will enable you to operate the camera.

### 4.2 Pan/Tilt Control



Turn up Press 

Turn down Press 

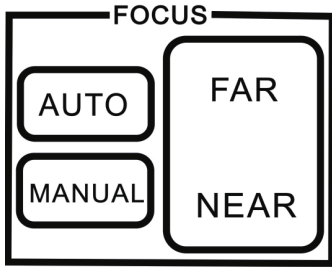
Turn left Press 

Turn right Press 

Reposition Press: [HOME] button

Press the corresponding buttons to adjust the angle of the lens. Tip: Click on the direction button will enable the camera rotating in a slow speed, while keep pressing the direction button in a period of time will enable the camera rotating in a fast speed.

## 4.3 Focus



[AUTO] Enable camera automatically focus

[MANUAL] Switch to manually control mode

[FAR] Manually focus the distant object

[NEAR] Manually focus the nearby object

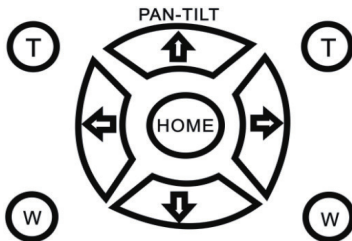
### ➤ Backlight imaging

Strong background ray can make back-lighting objects engender shadow press [BRIGHT+] to activate the back light mode. Quit the back light mode press [BRIGHT-]

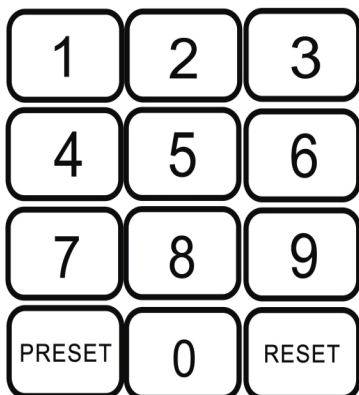


### ➤ Zoom

Press the four [ZOOM] buttons to zoom the target object



## 4.4 Preset Setting



1, Save the preset press [PRESET] button first, then press any of the numbers you need (from1-9) to save the preset.

**Note: You can save at most 9 presets through the remote controller.**


2, Call the preset press the saved preset number from1-9 will activate the corresponding preset position.

Note: Call a preset number has not been saved will be invalid.

3, Reset the preset Press [RESET] button firstly, then press the number (from1-9) will clear the corresponding preset.

## 4.5 Function of Touch Button (N/A for BG-VPTZ-HSU)

1, Double click the breathing light on the camera touch panel, and wake up the touch button, the breathing light will keep lighting.

2, Click [  ] on the camera touch panel, select the parameters to modify, including: output format, protocol, baud rate, address code

3, Click [  ] to modify parameters, and click [  ] to confirm the change, at last restart the camera to make settings take effect.

## 5. Menu Setting

1, Operate remote controller, press the [MENU] button to display the OSD menu.

2, Press the arrow keys to select the menu, press left and right button to set the camera.

### 5.1 EXPOSURE

Press the [MENU] button to display the OSD menu, press arrow keys to move to EXPOSURE and then press right button to enter sub menu, as the right picture.

- [AE MODE]: AUTO/SHUTTER/IRIS
- [EXPOSURE SETTING]: Press right,button, for optional as Follows
  - [AUTO]:N/A
  - [SHUTTER]: shutter priority mode:  
1/1-1/10000
  - [IRIS]: iris priority mode: F1.6-F24
  - [EXPCOMP]: -3.5DB - 3.5DB, OFF
  - [BACKLIGHT]: 1-7/OFF
  - [FLICKER]: 50HZ, 60HZ, OFF
  - [GAMMA]:0-9

MAIN MENU	
EXPOSURE	
COLOR	
PICTURE	
P/T/Z	
NOISE REDUCE	
VIDEO OUT	
SYSTEM SETUP	
SEFAULT SETUP	
EXIT	

EXPOSURE	
AE MODE:	AUTO
AE LEVEL:	N/A
EXPCOMP:	OFF
BACKLIGHT:	OFF
FLICKER:	50HZ
GAMMA:	5
BACK	
EXIT	

## 5.2 COLOR

Press the [MENU] button to display the OSD menu, press arrow keys to move to COLOR and then press right button to enter sub menu, as the right picture.

- [WB MODE]: AUTO/INDOOR/OUTDOOR/ONE-SHOT/ATW/MUNUAL/3000K/4000K/5000K/6500K
- [SATURATION]: 60%-200%
- [COLOR HUE]: 0-14
- [RED GAIN]: 0-255(only under MANUAL)
- [BLUE GAIN]: 0-255(only under MANUAL)

COLOR	
WB MODE:	AUTO
SATURATION	100%
COLOR HUE:	7
BACK	
EXIT	

## 5.3 PICTURE

Press the [MENU] button to display the OSD menu, press arrow keys to move to [PICTURE] and then press right button to enter sub menu, as the right picture.

- [BRIGHT] : 0-14
- [CONTRAST] : 0-14
- [SHARPNESS] : 0-15
- [ICR] : COLOR/BLACK
- [STYLE]: STANDARD/CLEAR/BRIGHT/RTSP/GENTAL

PICTURE	
BRIGHT:	8
CONTRAST:	7
SHARPNESS:	5
ICR:	COLOR
STYLE:	STANDARD
BACK	
EXIT	

## 5.4 P/T/Z

Press the [MENU] button to display the OSD menu, press the arrow keys to move to [P/T/Z], press right button to the sub menu, as the right picture shown.

- [FILP]: ON/OFF
- [L/R DIRECTION]: ON/OFF
- [AF MODE]: AUTO/MANUAL/ZOOM
- [AF SENS]: NORMAL/LOW
- [PRESET FREEZE]: ON/OFF
- [D ZOOM]: ON/OFF
- [P/T]:NORMAL/TRACING
- [PRESET SPEED]:1-24

<b>P / T / Z</b>	
FLIP:	OFF
L/R DIRECTION:	OFF
AF MODE:	AUTO
AF SENS:	NORMAL
PRESET FREEZE:	OFF
D ZOOM:	ON
P/T:	NORMAL
PRESET SPEED:	24
BACK	
EXIT	

## 5.5 Noise Reduction

Press the [MENU] button to display the OSD menu, press the arrow keys to move to [NOISE REDUCTION], press right button to the sub menu, as the right picture shown.

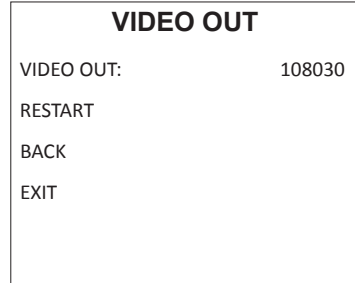
- [2D NR]: 0-5 / OFF
- [3D NR]: 0-5 / OFF
- [DYN HOT PIXEL]: ON/OFF

<b>NOISE REDUCE</b>	
2D NR:	2
3D NR:	3
DYN HOT PIXEL:	OFF
BACK	
EXIT	

## 5.6 Video Format

Press the [MENU] button to display the OSD menu, press the arrow keys to move to [VIDEOOUT], press right button to the sub menu, as the right picture shown.

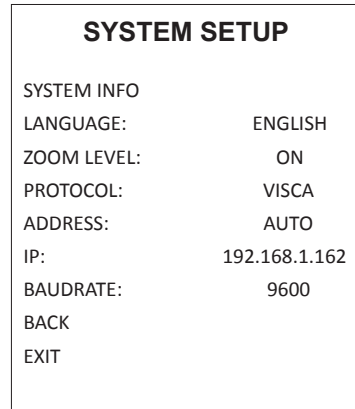
- [VIDEO OUT] : 720P25,720P30,720P50,720P59,720P60,1080I50,1080I59,1080I60,1080P25,1080P29,1080P30,1080P50,1080P59,1080P60



## 5.7 System Setting

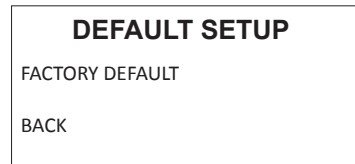
Press the [MENU] button to display the OSD menu, press the arrow keys to move to [SYSTEM SETTING], press right button to the sub menu, as the right picture shown.

- [SYSTEM INFO]: press right button to the sub menu, as the right picture shown
- [LANGUAGE]: CHINESE/ENGLISH
- [ZOOM LEVEL]: ON/OFF
- [PROTOCOL]: VISCA/PELCO-D/PELCO-P
- [ADDRESS]: 1-255
- [BAUDRATE]:2400/4800/9600/19200/38400



## 5.8 Restore Default

Press the [MENU] button to display the OSD menu, press the arrow keys to move to [DEFAULT], press right button to make the OSD parameter return to the default.





## 6. Network Connecting

### 6.1 Mode of Connecting

Direct Mode: Connect camera with computer through network cable directly.

LAN Connecting Mode: Camera could connect to the Internet by router or interchanger then users could log in through browser.

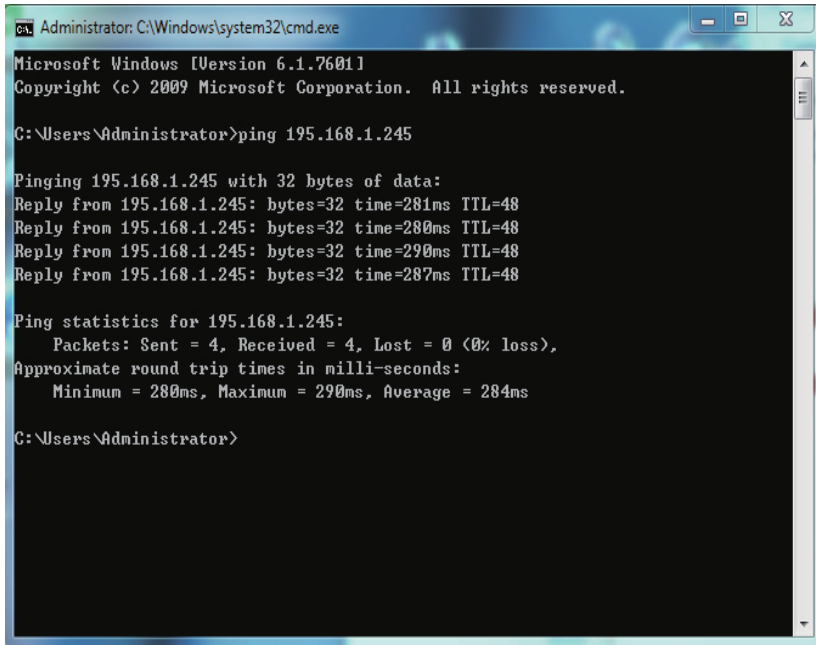
**Note: Don't put the wires and cables at somewhere easily touched by people for fear that the quality of imaging is affected by unstable signal transmission which is caused by line contact problem.**

There must be IP net segment for camera in the computer. It will be a phenomenon that couldn't log in if without net segment. For example, camera's default IP is 192.168.1.162 then the computer should add Network of 1.

Specific process as below: First, open [Properties] at computer's local network, then select "Internet Protocol Version 4(TCP/IPv4)" and double click or click its [Properties] and enter. And then click [Advanced] to enter into Advanced TCP/IP Settings. Input IP to the [WINS server] and click [Add] to finish. Users could change the camera IP address with relevant net segment.

**Note: Don't clash the IP with other computers or IP equipment when adding IP address. Please make sure whether the IP you need is available or not before adding.**

Verify if the net segment works. Open [Start] on the computer and input cmd to "operation" and click "enter" then input ping 192.168.1.245 to DOS command window and press enter. Then it comes up with the information as below picture that means the net segment works.



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

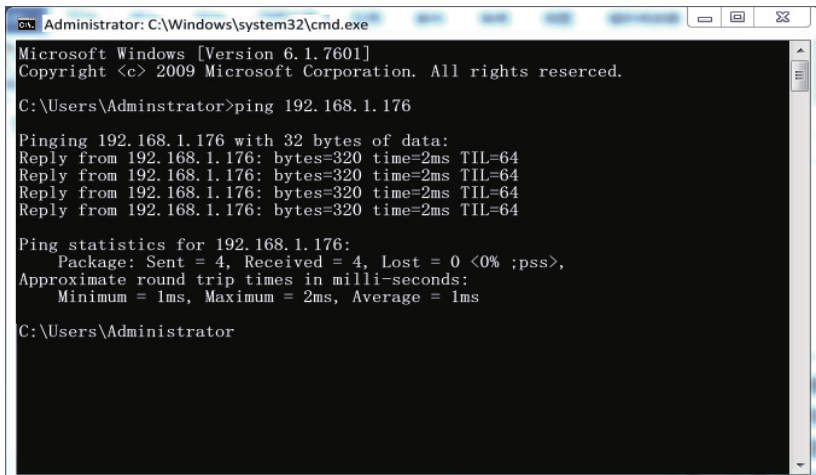
C:\Users\Administrator>ping 195.168.1.245

Pinging 195.168.1.245 with 32 bytes of data:
Reply from 195.168.1.245: bytes=32 time=281ms TTL=48
Reply from 195.168.1.245: bytes=32 time=280ms TTL=48
Reply from 195.168.1.245: bytes=32 time=290ms TTL=48
Reply from 195.168.1.245: bytes=32 time=287ms TTL=48

Ping statistics for 195.168.1.245:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 280ms, Maximum = 290ms, Average = 284ms

C:\Users\Administrator>
```

After products finished self-checking, it could follow the steps as above to check if the network works. For example, open DOS command window and input ping 192.168.1.176 and press the ENTER button. If it comes up with information as below picture, it means network working.



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>ping 192.168.1.176

Pinging 192.168.1.176 with 32 bytes of data:
Reply from 192.168.1.176: bytes=320 time=2ms TTL=64
Reply from 192.168.1.176: bytes=320 time=2ms TTL=64
Reply from 192.168.1.176: bytes=320 time=2ms TTL=64
Reply from 192.168.1.176: bytes=320 time=2ms TTL=64

Ping statistics for 192.168.1.176:
    Package: Sent = 4, Received = 4, Lost = 0 <0% ;pss>,
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\Users\Administrator>
```

## 6.2 CGI /APK login

### 6.2.1 CGI /APK Login

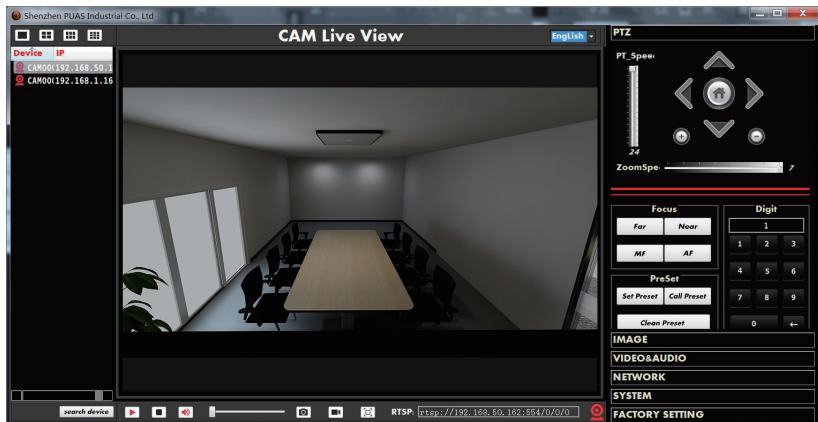
Open the client software (before turning on the client software, first turn off the anti-virus software such as 360, avoid being mistaken for viruses and be prohibited from running by 360). By default, admin login with user name and password can preview, record, screenshot, PTZ control, audio and video. Operations such as encoding configuration. At present, this version can be run on Windows7/32/64bits & windows 8 or higher. Multiple cameras are supported in the LAN for simultaneous display (up to 9 devices at the same time).

The Menu language can supports Chinese and English.

### 6.2.2. CGI /APK Overviews

#### 6.2.2.0 Interface Preview


After the login is successful, the system will be automatically searches for devices connected to the LAN, and enters the management interface as shown in the following pictures.




#### 6.2.2.1 Language

Chooses the drop-down menu **English** to switch the language to Chinese/English.


#### 6.2.2.2 Multi-Image Channel Display

This version of the software supports 1\*CH, 4\*CH, 6\*CH, 9\*CH, click on the interface software icon  , it also can support selection it by Click" Right" Button of Mouse.

### 6.2.2.3 Search Device


Click“Search Device” Button  ,Refresh the online camera, the online camera is displayed as a list. On the left side of the window, double-click a camera to operate the camera.

### 6.2.2.4 Play Video Streaming by RTSP

Click“PLAY”  Button, The Current RTSP Streaming will be Play( Default was Automatically Real-time Play).


**Note: When recording, click this button is invalid.**

### 6.2.2.5 Pause RTSP Video Streaming

Click“Pause”  Button, The current of RTSP Streaming will be stop display.

**Note: When recording, click this button is invalid.**

### 6.2.2.6 Audio


Click“Voice”  Button to Turn on/off Audio,( Default is ON)

**Note: when the Streaming Mode is selection” Video Streaming”  , the Audio will not be output.**


### 6.2.2.7 Voice Volume adjustment

Click the mouse to drag the Volume Slider  to changed the Voice Volume.

### 6.2.2.8 Screenshot (N/A for BG-VPTZ-HSU)


Click“ Screenshot” Button  to Select the saved path to save the current camera screen image.

### 6.2.2.9 Video Record (N/A for BG-VPTZ-HSU)

Click“Record” Button  to Select the saved path to save the current camera Video Output.

**Note: Clicking the play and pause button during the recording process is invalid.**

### 6.2.2.10 Full Screen Display

In single-Image or multi-Image display, double-click the screen in the video area to achieve full-screen display. Double-click again to exit full-screen display.Or Click“Full-Screen”  Button can also achieve full screen display.

### 6.2.2.11 RTSP Video Streaming

Enter the RTSP stream address of the current camera in the display window;

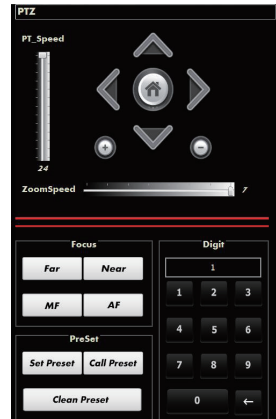
**Note:** You can also enter others RTSP addresses into the input box and click  to play the RTSP video stream.

### 6.2.2.12 Pan, Tilt, Zoom In/Out Control

The PTZ control is as shown in the figure below. Double-click the camera searched in the list to operate the current camera operations such as PTZ, zoom, focus, presets function.

#### 6.2.2.12.1 PTZ Control

The PTZ control is as shown in the figure below. Double-click the camera searched in the list to operate the current camera operations such as PTZ, zoom, focus, presets function.

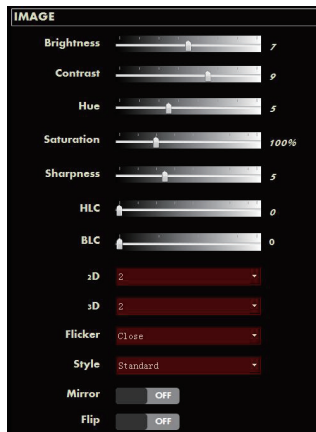


#### 6.2.2.12.2 Focus Mode

Click "Manual" or "Auto" to change the camera focus mode, and click "Far "and "near " button will be changes the focus state of the camera during in Manual Mode.

### 6.2.2.13 Image Setting

The image settings are as shown below. Double-click the camera searched in the list to adjustment the brightness and contrast, Chroma, saturation, sharpness, etc function of the current camera.



#### **6.2.2.13.1 Brightness Adjustment**

Click or drag the brightness control slider to change the brightness of the camera, and the label on the right will display the value of the brightness. The range of brightness varies (0-14).

#### **6.2.2.13.2 Contrast Adjustment**

Click or drag the Contrast control slider to change the contrast of the camera, and the label on the right will display the value of the contrast. The range of brightness varies (0-14).

#### **6.2.2.13.3 Chroma control**

Click or drag the Chroma control slider to change the chroma of the camera, and the label on the right will display the value of the chroma. The range of brightness varies (0-14).

#### **6.2.2.13.4 Saturation control**

Click or drag the Saturation control slider to change the Saturation of the camera, and the label on the right will display the value of the Saturation. The range of Saturation varies (60%-200%).

#### **6.2.2.13.5 Sharpness control**

Click or drag the Sharpness control slider to change the Sharpness of the camera, and the label on the right will display the value of the Sharpness. The range of Sharpness varies (0-15).

#### **6.2.2.13.6 HLC**

Click or drag the HLC control slider to change the HLC of the camera, and the label on the right will display the value of the HLC. The range of HLC varies (0-15).

#### **6.2.2.13.7 BLC(Backlight Compensation)**

Click or drag the BLC control slider to change the BLC of the camera, and the label on the right will display the value of the BLC. The range of BLC varies (0-15).

#### **6.2.2.13.8 2D Noise reduction control**

Select 2D noise reduction by the drop-down menu, turn on noise reduction and select different levels of noise reduction. Noise reduction level (1-5).

#### **6.2.2.13.9 3D Noise reduction control**

Select 3D noise reduction by the drop-down menu, turn on noise reduction and select different levels of noise reduction. Noise reduction level (1-5).



#### **6.2.2.13.10 Anti-flicker control**

Through the drop-down menu to select turn on /off the anti-flicker function and select 50Hz or select 60Hz.



### 6.2.2.13.11 Video Style

To Select different video styles through the drop-down menu, video style: standard, Bright, RTSP, Soft styles.

### 6.2.2.13.12 Mirror

Click left of the mirror button to turn on the mirror function , Click again to turn off the mirror function  .

### 6.2.2.13.13 FLIP

Click left of the Flip button to turn on the flip function , Click again to turn off the flip function  .

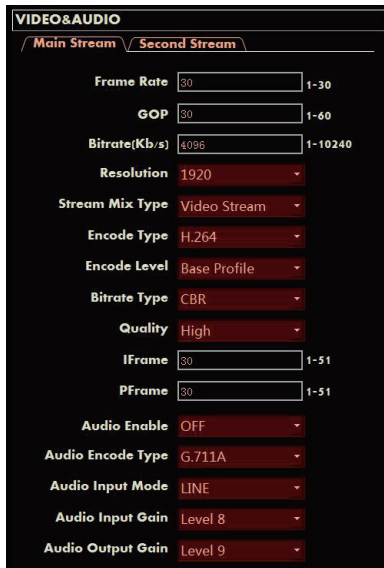
### 6.2.2.13.14 Save and default Restore

click on the "Save" button to save all image settings information in the current camera "Image Settings".

click on the "Restore Default" button, the system will restore the current camera "Image Settings" factory defaults.

## 6.2.2.14 Audio & Video Setting

The encoding settings of audio and video are as shown in the figure below. Double-click the camera searched in the list to setting encode the audio and video of the current camera.



#### 6.2.2.14.1 Main Streaming

a.Streaming Frame Rate: Input 1-30 to setting Streaming Framer rate,default 30.

b.GOP:Input 1-60 to setting valued of Frame Interval,default 30.

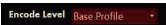
c.Bit Rate:Input 1-10240to Setting Video Bite Rate,default 4096.

d.Resolution:Through drop-down menu to selection Resolution, default 1920.

e.Streaming Type:Through drop-down menu to selection Video Stream or Complex Stream, default Complex Streaming.

**Note: When select Video Stream, "Audio" will automatically select OFF.** 

f. Encode Type:"MJPEG","H.264","H.265".

When Selection to "MJPEG", The Encode level only available Base Profile. 

When Selection to "H.264"or"H.265", Encode level have "Base Profiles/Main Profile",/High Profile for selection.

g. Encode Level: "Base Profile", "Main Profile", "High Profile".

According to "Encode Type" to Selection the Encode Level.

h. Bit ate type:"CBR","VBR","FIX QP"Representing "fixed Bit Rate", "variable Bit Rate", "coded bit Rate".

**Note: When "CBR" is selected, "stream quality", "IFrame", "PFrame" cannot be selected and edited.**

When "VBR" is selection, "IFrame", "PFrame"can't be edited.

When"FIX QP"is selection, "Quality"can be edited.

I.Streaming Quality:"High", "Middle", "Low",Streaming quality only valid when the Bit Rate type is"VBR".

j. IFrame: Input 1-51 Volume to setting IFrame,default 30.

**Note:IFrame only valid when the Bit Rate type is "FIX QP".**

k. PFrame: Input 1-51 Volume to Setting frame by frame quality, default 30.

**Note:Pframe only valid when the Bit Rate type is"FIX QP".**

l.Audio:Through Drop-down Menu to Selection ON/OFF Audio Input.

**Noted:When Selection "ON";"Streaming Model"will be automatically to Complex Stream.**

**When Selection "OFF";"Streaming Model"will be automatically to Video Stream.**

m. Audio Encoding:"G.711A","G.711B","AAC\_LC".

n.Audio Input Type:"MIC","LINE".

o.Input Volume:Through Drop-down menu"Mute" or 1-10 Grade to selection the Voice Input Volume.

p.Output Volume:Through Drop-down menu"Mute" or 1-10 Grade to selection the Voice Output Volume.

r. Save and default Restore.

Click"Saved"Button to saved the Main-Streaming Parameters.

Click"default Restore"Button to Restore the Main-streaming Parameters setting to default.



#### 6.2.2.14.2 Sub-Streaming

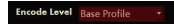
- a. Streaming Frame Rate: Input 1-30 to setting Streaming Framer rate,default 30.
- b.GOP:Input 1-60 to setting valued of Frame Interval,default 30.
- c.Bit Rate:Input 1-10240 to Setting Video Bite Rate,default 4096.
- d. Resolution:Through drop-down menu to selection Resolution, default 1920.
- e.Streaming Type:Through drop-down menu to selection Video Stream or Complex Stream, default Complex Streaming.

**Note: When select Video Stream, "Audio" will automatically select OFF.**



- f. Encode Type:"MJPEG","H.264","H.265"

When Selection to "MJPEG", The Encode level only available Base Profile.



When Selection to "H.264" or "H.265", Encode level have "Base Profiles/Main Profile", /High Profile for selection.

- g. Encode Level:"Base Profile", "Main Profile", "High Profile", According to "Encode Type" to Selection the Encode Level.
- h. Bit rate type:"CBR","VBR","FIX QP"Representing "fixed Bit Rate", "variable Bit Rate", "coded bit Rate"

**Note: When "CBR" is selected, "stream quality", "IFrame", "PFrame" cannot be selected and edited.**

When "VBR" is selection, "IFrame","PFrame"can't be edited.

When "FIX QP" is selection, "Quality" can be edited.

- i. Streaming Quality:"High", "Middle", "Low",Streaming quality only valid when the Bit Rate type is "VBR".

- j. IFrame: Input 1-51 Volume to setting IFrame,default 30

**Note:IFrame only valid when the Bit Rate type is "FIX QP"**

- k. PFrame: Input 1-51 Volume to Setting frame by frame quality, default 30.

**Note:Pframe only valid when the Bit Rate type is "FIX QP".**

- l.Audio:Through Drop-down Menu to Selection ON/OFF Audio Input.

**Noted:When Selection "ON","Streaming Model"will be automatically to Complex Stream**

**When Selection "OFF","Streaming Model"will be automatically to Video Stream.**

- m. Audio Encoding:"G.711A","G.711B","AAC\_LC".

- n.Audio Input Type:"MIC","LINE".

- o.Input Volume:Through Drop-down menu "Mute" or 1-10 Grade to selection the Voice Input Volume .

- p.Output Volume:Through Drop-down menu "Mute" or 1-10 Grade to selection the Voice Output Volume.

- r. Save and default Restore.

Click "Saved" Button to saved the Sub-Streaming Parameters.

Click "default Restore" Button to Restore the Sub-streaming Parameters setting to default.

### 6.2.2.15 Internet Setting

The network configuration is as shown in the figure below. Double-click the camera in the list to view the network setting & Information of the current camera.

#### 6.2.2.15.1 IP,DNS Config

##### a. IP Config

Supports automatic IP address and manual configuration of IP.

The system defaults to manual mode.

IP:192.168.1.162 Mask:255.255.255.0 Gate

Way:192.168.1.1

##### b. DNS Config

Supports automatic DNS address and manual configuration of IP.

The system defaults to manual mode.

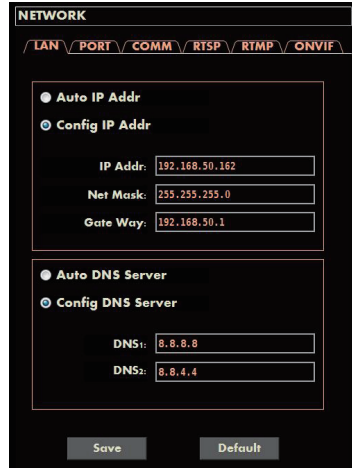
DNS1:8.8.8.8 DNS2:8.8.4.4

##### c. Saved & Restore Default

Click“Save”button, to Saved current Camera setting of IP, DNS.

Click“default”Button,to restore default setting of Current Camera.

***Noted: If you modify IP Network Segment, the Gateway also need to Revised, Otherwise,The Video image can't display.***



#### 6.2.2.15.2 Port Config

a.MSG Port: default 8080

b.RTSP Port: default 554

c.RTMP Port: default 1935

d.HTTP Port: default 80

***Note: Changing the port number requires restarting the camera to valid. In order to avoid port conflicts, please be careful to modify.***

#### 6.2.2.15.3 PTZ Config

a. PTZ Camera ID:(0-255)

b. Protocol:VISCA,Pelco-P,Pelco-D

c. Baud rate:2400,4800,9600,19200,38400

d. Left-Right Setting:Normal, Invert

e. PTZ Installation:Stand,Ceiling

f. Zoom Display:OFF,ON

g. Presets Freeze:OFF,ON

h. Saved & Restore Default

Click“Save”Button to saved the PTZ Parameters of Current Camera.

Click“default”Button to Restore PTZ Parameters of Current Camera.

#### **6.2.2.15.4 RTSP Streaming address**

Default Main Streaming:rtsp://192.168.50.190:554/0/0/0

Default Sub-Streaming:rtsp://192.168.50.190:554/0/0/1

#### **6.2.2.15.5 RTMP Config**

a.RTMP Auth: Through the drop-down menu to Selection“OFF”“ON”RTMP function.

b.Stream type: Through the drop-down menu“Main Stream”, “Second Stream”.

c.Port: To Setting RTMP Port,default 1935.

d.RTMP Server address : default : rtmp://14.146.230.121/live

e. Save & Restore default.

Click“Save”Button to Saved RTMP setting of current camera.

Click“Default” to Restore the default setting of RTMP of Camera.

#### **6.2.2.15.6 ONVIF Config**

a.ONVIF Authentication: Authentication enable,default not Enable.

b.ONVIF Server Port: default 8554.

c.ONVIF RTSP Authentication: Authentication enable,default not Enable.

d.RTSP Port:ONVIF RTSP Port, default 8554.

e. Save & Restore default.

Click“Save” Button to Saved the ONVIF Parameters of Camera.

Click“default”Button to restore the ONVIF Parameter to default of Camera.

### **6.2.2.16 System Setting**

The system settings are as shown below. Double-click the camera in the list to setting the system parameters of the camera.

#### **6.2.2.16.1 Device information**

a. Device Name:Display name/model of current camera, Can modify.

b. MAC Address:Display MAC address.

c. Mask:Display the Mask information of Camera.

d. Gateway:Display Gateway of current of Camera.

e. Software Version:Display the Software Version of Camera.

f. S/N:Display the S/N of Camera.

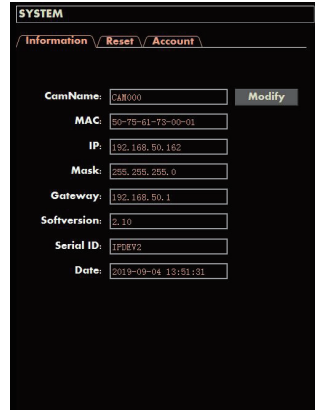
g. Software burning date:Display the software burning date of camera.

### 6.2.2.16.1 Reset Restart

- a. Click "Restart" Button to Restart Camera.
- b. Click "Restore setting" Button to restore default parameters.
- c. Firmware Upgrade: Click the "Browse" button to load the upgrade file and click "Upgrade" to Start upgrade the current camera.

The upgrade progress bar shows the current upgrade status, showing 100%, indicating that the upgrade is complete.

**Note: Restart the camera after the upgrade is complete.**



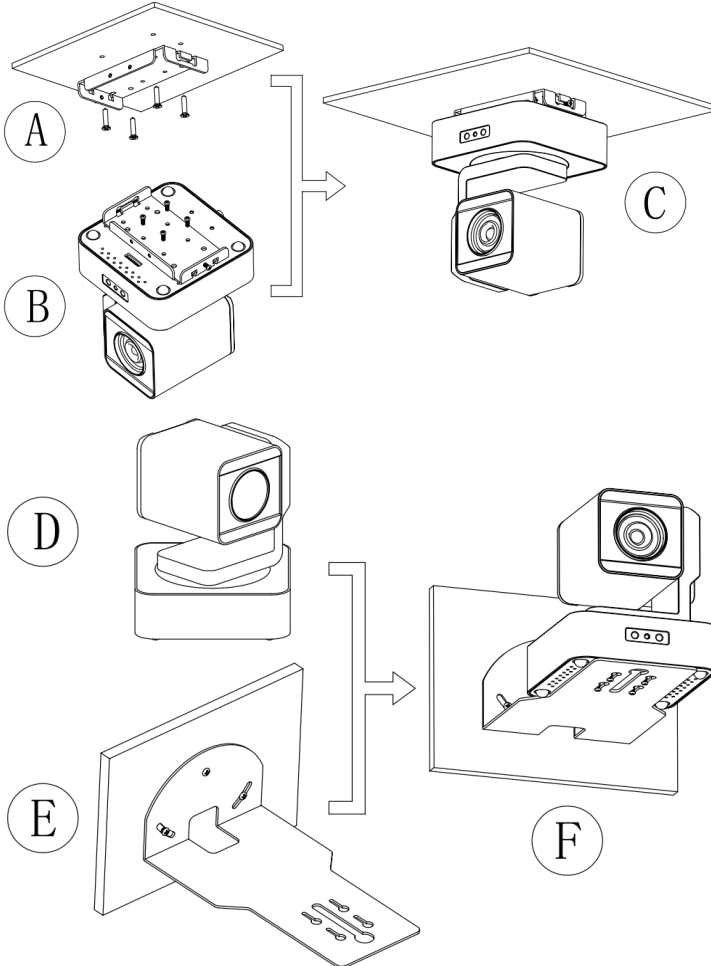
### 6.2.2.16.2 Account Modify

- a. Original: Input Original Account Name, default: admin
  - b. Original PIN: Input Original PIN, Default: admin
  - c. New Account: Input New Account Name
  - c. New PIN: Input New PASSWORD
- Click "Modify" to save the New Account information

**Note: In the process of modifying the account and password, if the original account and password are incorrect, the new account and password cannot be activated. The super account that the system logs in: administrator Super password: 666666.**

## 7. Installation Instruction (Ceiling / Wall Mount / Tripod)

Pendent: 1. Twist a pair of PM3 \* 8 screws on each side of the bracket (keep half out hooking). 2. using one of the brackets to the ceiling with four expansion screws (STP4 \* 16) (as like picture A). 3. Secure the other bracket to the bottom of the camera with 4 pieces of PM \* 8 screws (orientation as like picture B). 4. The two brackets mismatch facing the fit, from left to right side of the bracket hook screws to the side of the slot in another bracket, from front to back so that the two brackets close. Finally, tighten the screws on the side of the bracket ( as like picture C)



**Wall mounting:** 1. Secure the wall bracket to the wall (Figure E).  
2. Fix the camera D to the stand (Figure F).

## **8. 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](https://www.bzbgear.com/warranty).

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

## 9. 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.