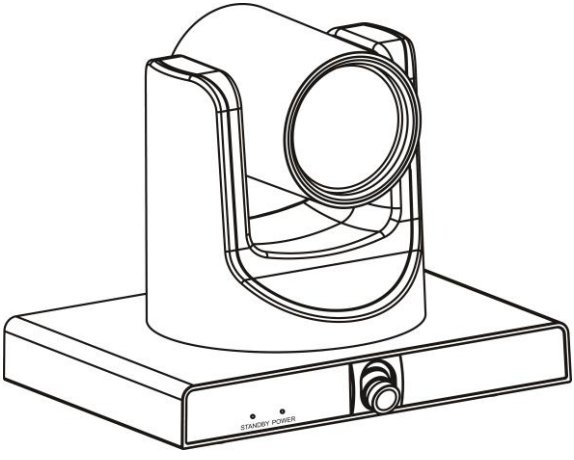
DVDO



DVDO-C3-1

PTZ Auto Tracking Camera

User Manual

Version: V1.0.2

Important Safety Instructions

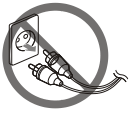
1. Do not expose this apparatus to rain, moisture, dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

6. Clean this apparatus only with dry cloth.

2. Do not install or place this unit in a bookcase, built-in cabinet or in any confined space. Ensure the unit is well ventilated.

7. Unplug this apparatus during lightning storms or when unused for long periods of time.

3. To prevent risk of electric shock or fire hazard due to overheating, do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.



8. Protect the power cord from being walked on or pinched, especially at the plug.

4. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Only use attachments / accessories specified by the manufacturer.

5. Do not place sources of naked flames, such as lighted candles, on the unit.

10. Refer all servicing to qualified service personnel.

FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Table of Contents

Introduction

Features

- Integrated Design: Provides panoramic and close-up 4 channel Full HD 1080p video.
- Intelligent Tracking for Education: Built-in image recognition and tracking algorithm smoothly tracks the subject without auxiliary positioning camera or tracking host. Multiple cameras can be installed to track teacher and/or students, as well as meeting participants.
- Replaceable Lens: The panoramic lens is replaceable and compatible with M12 interface lenses, making it easy to adapt to various installations.
- Adjustable Viewing Angle: The panoramic lens angle can be adjusted up and down (-15°~0°) to facilitate installation and adjustment.
- Consistent Video: The panoramic and close-up images provide consistent brightness and color.
- 72.5° Wide-Angle Lens: Close-up camera uses 72.5° wide-angle high-quality lens and supports 12x optical zoom and 16x digital zoom.
- Full HD 1080p: High-precision Panasonic HD CMOS 1/2.7” sensor provides 2.07 million effective pixels, reaching 1920 x 1080 maximum resolution with pristine image quality.
- Ultra-High Frame Rate: Provides clear, smooth 1080p video in 60fps.
- AAC Audio Encoding: Close-up camera supports AAC audio encoding for superior sound quality and reduced bandwidth requirement.
- Low Light Performance: 2D / 3D noise reduction algorithms greatly reduce image noise to keep images clean and clear even under ultra-low lighting, with signal-to-noise ratio up to 55dB.
- Remote Control: The camera can be controlled remotely through the RS232 serial port.

Package Contents

- 1 x Camera
- 1 x AC Power Adaptor
- 1 x Power Cable
- 1 x RS232 Cable
- 1 x Remote
- 1 x Wall Bracket with Screw Pack

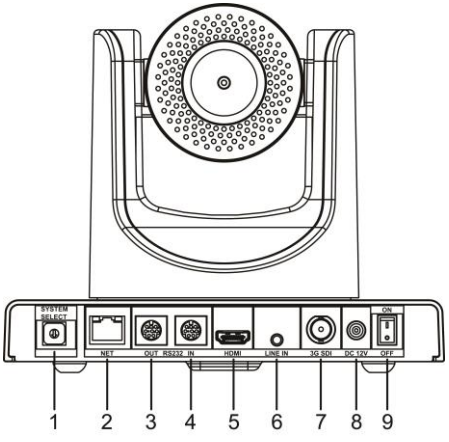
Specifications

Camera	
Video System	1080p/60, 1080p/50, 1080i/60, 1080i/50, 1080p/30, 1080p/25, 720p/60, 720p/50
Sensor	1/2.7", CMOS, Effective Pixel: 2.07M
Scanning Mode	Progressive
Lens	12x, f=3.5mm ~ 42.3mm, F1.8 ~ F2.8
Digital Zoom	16x
Minimum Illumination	0.5 Lux @ (F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Backlight Compensation	Supported
Digital Noise Reduction	2D & 3D Digital Noise Reduction
Signal Noise Ratio	≥55Db
Horizontal Angle of View	72.5° ~ 6.9°
Vertical Angle of View	44.8° ~ 3.9°
Horizontal Rotation Range	±170°
Vertical Rotation Range	-30° ~ +90°
Pan Speed Range	1.7° ~ 100°/s
Tilt Speed Range	1.7° ~ 69.9°/s
H & V Flip	Supported
Image Freeze	Supported
Number of Preset	255
Preset Accuracy	0.1°

Network Features	
Video Compression	H.264/MJPEG
Video Stream	First Stream, Second Stream, Third Stream, Fourth Stream
First Stream Resolution	1920x1080, 1280x720, 1024x576, 960x540, 640x480, 640x360
Second Stream Resolution	1920x1080, 1280x720, 1024x576, 720x576 (50Hz support), 720x480 (60Hz), 720x408, 640x360, 480x270, 320x240, 320x180
Third Stream Resolution	1024x576, 960x540, 720x576 (50Hz), 720x480 (60Hz), 720x408, 640x360, 480x270, 320x240, 320x180
Four Stream Resolution	1024x576, 960x540, 720x576 (50Hz), 720x480 (60Hz), 720x408, 640x360, 480x270, 320x240, 320x180
Video Bit Rate	32Kbps ~ 102400Kbps
Bit Rate Type	Variable Rate, Fixed Rate
Frame Rate	50Hz: 1fps ~ 25fps, 60Hz: 1fps ~ 30fps
Audio Compression	AAC
Audio Bit Rate	96Kbps, 128Kbps, 256Kbps
Protocols	TCP/IP, HTTP, RTSP, RTMP, ONVIF, DHCP, etc.
Input/Output Interface	
HD Output	1 x HDMI Version 1.3
	1 x 3G SDI: BNC type, 800mVp-p, 75Ω, SMPTE 424M standard
Network Interface	1 x RJ45: 10M/100M Adaptive Ethernet Port
Audio Interface	1 x LINE IN: 3.5mm Audio Interface
Communication Interface	1 x RS232 IN: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA / Pelco-D / Pelco-P

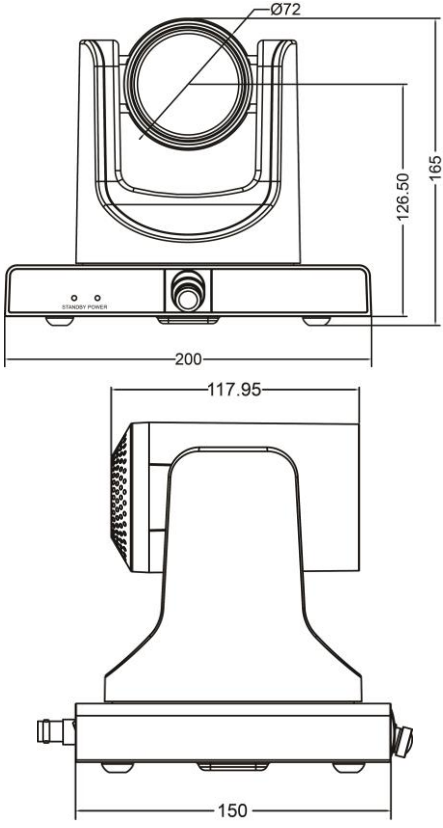
	1 x RS-232 OUT: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA network use only
Power Jack	JEITA type (DC IN 12V)
Physical Parameter	
Input Voltage	DC 12V
Current Consumption	1.0A (Max)
Operating Temperature	-10°C ~ 40°C
Storage Temperature	-40°C ~ 60°C
Power Consumption	12W (Max)
MTBF	＞30000h
Size	200 x 150 x 165mm/7.87” x 5.91” x 6.50”
Net Weight	1.6 kg / 3.53 lb

Panel Description



Item	Name
1	System Select Switch
2	Network Interface
3	RS232 OUT Interface
4	RS232 IN Interface
5	HDMI Interface
6	LINE IN Interface
7	3G SDI Interface
8	DC 12V Interface
9	Power Switch

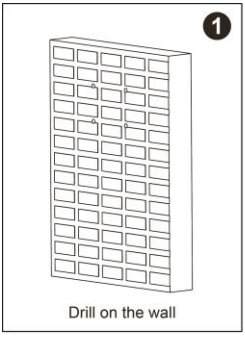
Dimensions

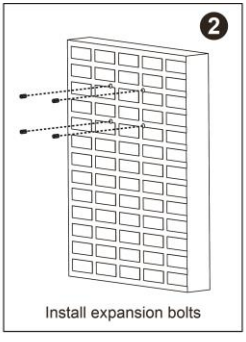


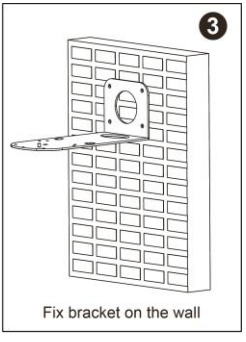
Installation and Wiring

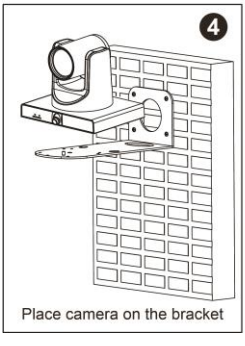
Installation

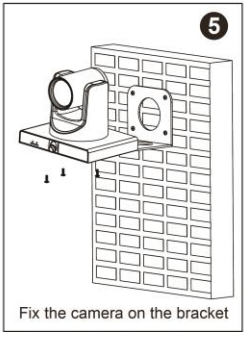
To mount camera on a wall, please follow the following wall mounting installation steps.

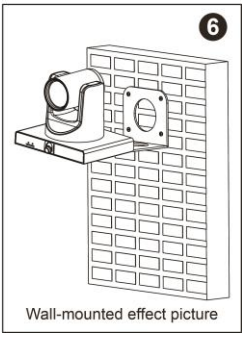












Safety Precautions

- **Electrical Safety**

Please install and operate this product in accordance with all electrical safety standards.

- **Use caution to transport**

Avoid stress, vibration or liquid damage in transport, storage and installation.

- **Power supply polarity**

This product uses a +12V power supply with 1.5A max electrical current.

- **Installation Precautions**

Do not hold the camera lens when carrying it. Mechanical damage may be caused by touching camera lens by hand. Do not use in corrosive liquid, gas or solid environments to avoid plastic cover damage. Make sure there are no obstacles within rotation range. Do not power on before installation is completed.

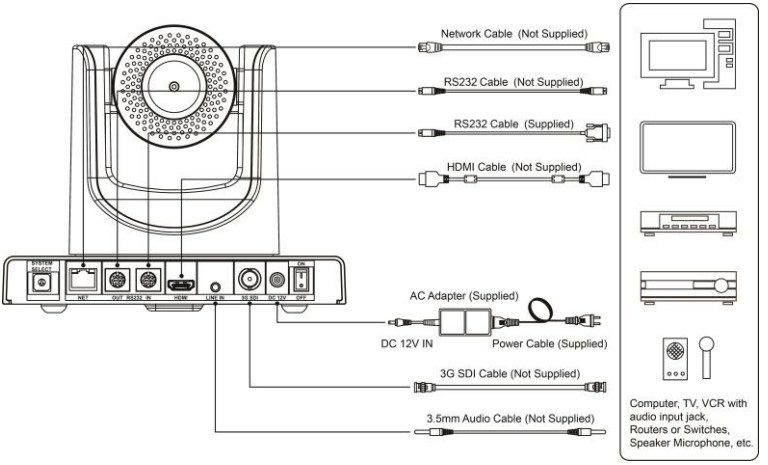
- **Do not disassemble camera**

We are not responsible for any unauthorized modification or dismantling.

Specific frequencies of electromagnetic fields may affect camera image performance.

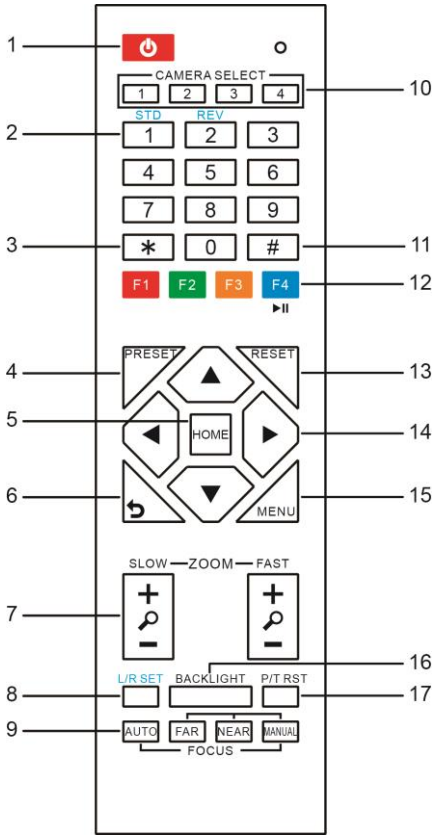
Device Wiring

1. Please check connections are correct before starting.



2. Connect the power adapter to the power connector on the rear panel of the camera. The power indicator on the front panel of the camera will turn on.
3. After the camera is powered on, it will initialize by moving to its limits, then returning horizontally and vertically to the middle position. The initialization is complete when the motor stops running. (Note: If preset 0 is saved, PTZ will move to preset 0.)

IR Remote Control



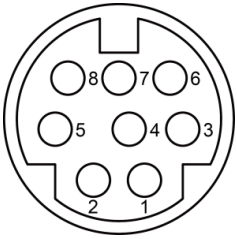
Key Description
1. Standby Key
Press this button to enter standby mode. Press it again to enter normal mode. **Note:** Power consumption in standby mode is approximately half of normal mode
2. Number Key

Key Description
To set preset or call preset.
3. *Key
Used with other buttons.
4. Preset Key
Set preset: Store a preset position. [SET PRESET] + Numeric button (0-9): Setting a corresponding numeric key preset position.
5. HOME Key
Confirm menu selection; Returns PTZ to the middle position when pressed.
6. Return Key
Return to previous level menu.
7. Zoom Key
Slow Zoom: Zoom In [+] or Zoom Out [-] slowly. Fast Zoom: Zoom In [+] or Zoom Out [-] quickly.
8. Left/Right Setting Key
Press with 1 button and 2 button to set the direction of the Pan-Tilt. • Simultaneously press L/R Set + 1 [STD]: Turns Pan-Tilt in same direction as the L/R Set. • Simultaneously press L/R Set + 2 [REV]: Turns Pan-Tilt in opposite direction as the L/R Set.
9. Focus Key
Used for focus adjustment. Press [AUTO] to adjust focus on the center of the object automatically. Press [MANUAL] to adjust focus on the center of the object manually. Use [FAR] to focus on distant object and [NEAR] to focus on close object.
10. Selection Key
Press the button corresponding to the camera to be operated with the remote controller.

Key Description
11. #Key
Used with other buttons.
12. IR Remote Control Key
[*]+[＃]+[F1]: Address 1 [*]+[＃]+[F2]: Address 2 [*]+[＃]+[F3]: Address 3 [*]+[＃]+[F4]: Address 4
13. Reset Key
Used to erase a preset position. [RESET] + Numeric button (0-9) Or: [*] + [#] + [RESET] to erase all presets.
14. PTZ Control Key
Press arrow buttons to pan and tilt. Press [HOME] button to return the camera to default position.
15. Menu Key
Press to enter or exit OSD MENU.
16. Backlight Key
Press to enable or disable backlight compensation. NOTE: • Effective only in auto exposure mode. Use when lighting behind subject darkens the image. • Backlight compensation will improve the image, and can be canceled by pressing [BACKLIGHT] button again.
17. PTZ Reset Key
Preset Pan/Tilt self-test.

Key Description
18. Image Freezing Function
Press remote control key [F4] to freeze the image. “Freeze” indication will appear on the upper left corner of image for five seconds. Press [F4] key again to return display to normal, and “Unfreeze” indication will appear for five seconds.
19. Shortcut Set
[*]+[＃]+[1]: OSD menu default English [*]+[＃]+[3]: OSD menu default Chinese [*]+[＃]+[4]: Display current IP address [*]+[＃]+[6]: Quickly recover the default [*]+[＃]+[8]: View the camera version [*]+[＃]+[9]: Quickly set up inversion [*]+[＃]+[MANUAL]: Restore default IP address

RS232 Interface



No.	Function
1	DTR
2	DSR
3	TXD
4	GND
5	RXD
6	GND
7	IR OUT
8	NC

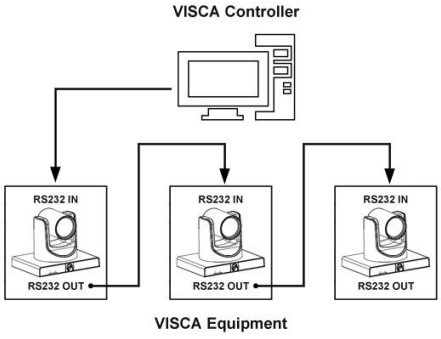
The correspondence between the camera and Windows DB-9 pin:

Camera	Windows DB-9
1.DTR	1.CD
2.DSR	2.RXD
3.TXD	3.TXD
4.GND	4.DTR
5.RXD	5.GND
6.GND	6.DSR
7.IR OUT	7.RTS
8.NC	8.CTS
	9.RI

The correspondence between the camera and the Mini DIN pin:

Camera	Mini DIN
1.DTR	1.DTR
2.DSR	2.DSR
3.TXD	3.TXD
4.GND	4.GND
5.RXD	5.RXD
6.GND	6.GND
7.IR OUT	7.NC
8.NC	8.NC

VISCA Network



RS232 Serial Communication Control

The camera is controlled via RS232; port parameters are as follows:

Parameters	Value
Baud Rate	2400/4800/9600/38400 bps
Starting Position	1 bit
Data Bits	8 bits
Parity	None
Stop Bits	1 bit
Flow Control	None

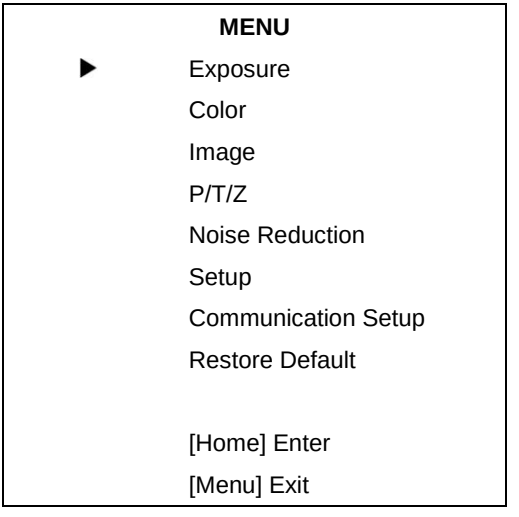
* After powering on, the camera goes to the upper right limit and then back to the middle position. The zoom lens is pulled to the farthest position, auto focus, and the aperture is adjusted to the default value. If the camera has preset 0 saved, the camera will be set to position 0 after the initialization is completed. At this point, the user can use the serial port command to control the camera.

The serial port of the camera follows the VISCA/Pelco-D/Pelco-P standard protocol. If secondary development is required, the camera can be controlled according to the standard protocol.

GUI Settings

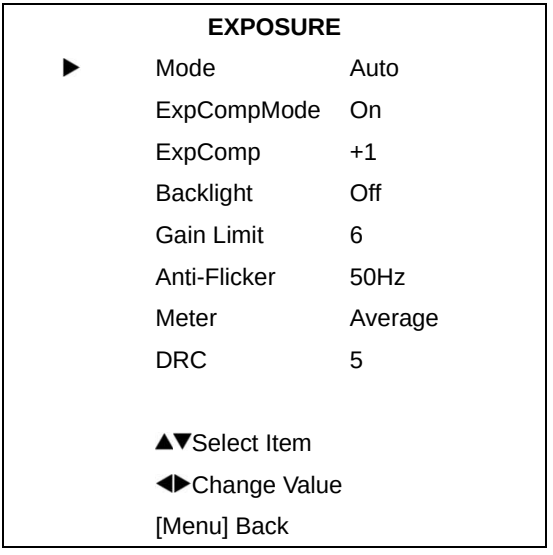
MENU

Press [MENU] button to display the main menu on the normal screen, using arrow button to move the cursor to the item to be set. Press the [HOME] button to enter the corresponding sub-menu.



EXPOSURE

Move the main menu cursor to [EXPOSURE], and press [HOME] key enter the exposure page, as shown below.

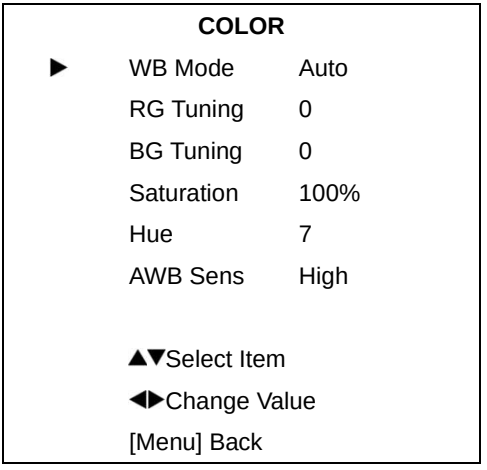


- **Mode:** Set Exposure to Auto, Manual, SAE, AAE, or Bright.
- **ExpCompMode:** Exposure Compensation On / Off. (Effective only in Auto mode)
- **ExpComp**: Exposure compensation range from -7~7. (With ExpCompMode On)
- **Backlight**: Backlight compensation On / Off. (Effective only in Auto mode)
- **Bright**: Intensity control from 0~17. (Effective only in Bright mode)
- **Gain Limit**: Maximum gain limit 0~15. (Effective in Auto, SAE, AAE, Bright modes)
- **Anti-Flicker**: Select Off / 50Hz / 60Hz. (Effective only in Auto, AAE, Bright modes)

- **Meter**: Select Average / Center / Smart / Top.
- **Iris**: Aperture value F1.8, F2.0, F2.4, F2.8, F3.4, F4.0, F4.8, F5.6, F6.8, F8.0, F9.6, F11.0, Close. (Effective only in Manual, AAE modes)
- **Shutter**: Select 1/30, 1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/725, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000, 1/10000. (Effective only in Manual, SAE modes)
- **Gain:** Select 0~7. (Effective only in Manual mode)
- **DRC**: DRC strength 0~8

COLOR

Move the main menu cursor to [COLOR], and press [HOME] key enter the color page, as shown below.

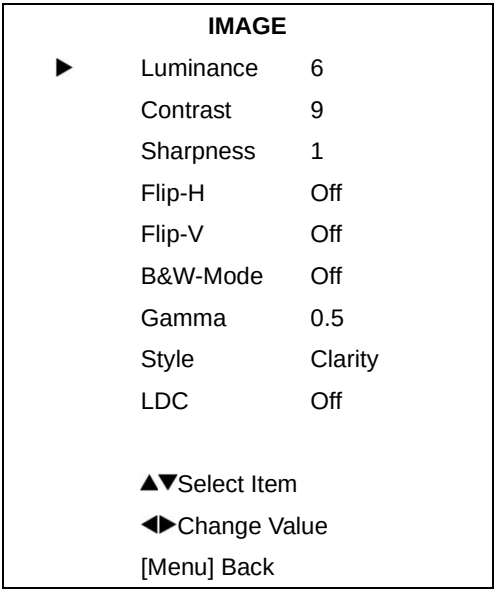


- **WB-Mode**: Set White Balance to Auto, Indoor, Outdoor, One Push, Manual, VAR.
- **RG Tuning**: Red Gain fine-tuning from -10~10. (Effective in Auto, One Push, VAR modes)
- **BG Tuning**: Blue Gain fine-tuningfrom -10~10. (Effective in Auto, One Push, VAR modes)
- **Saturation**: Select from 60% ~ 200%.

- **Hue**: Select from 0 ~ 14.
- **AWB Sens**: Set White Balance Sensitivity to Low / Middle / High.
- **RG**: Red Gain from 0~255. (Manual mode)
- **BG**: Blue gain from 0~255. (Manual mode)
- **Colortemp**: Select 2500K ~ 8000K. (Effective only in VAR mode).

IMAGE

Move the main menu cursor to [IMAGE], and press [HOME] key enter the image page, as shown below.



- **Luminance**: Select from 0~14.
- **Contrast**: Select from 0~14.
- **Sharpness**: Select Auto, 0~15.
- **Flip-H**: On / Off.
- **Flip-V**: On / Off.
- **B&W-Mode**: On / Off.
- **Gamma**: Select Default, 0.45, 0.5, 0.56, 0.63.

- **Style**: Select Default, Norm, Clarity, Clarity (LED), Bright, Soft, 5S.
- **LDC:** Set LDC Off / -10 ~ +10.

P/T/Z

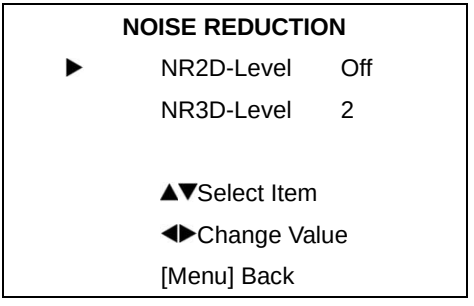
Move the main menu cursor to [P/T/Z], and press [HOME] key enter the P/T/Z page, as shown below.

P/T/Z		
▶	SpeedByZoom	On
	AF-Zone	Center
	AF-Sense	High
	L/R Set	STD
	Display Info	On
	Image Freeze	Off
	Digital Zoom	Off
	Call Preset Speed	24
	Pre Zoom Speed	5
	▲▼Select Item	
	◀▶Change Value	
	[Menu] Back	

- **SpeedByZoom**: Depth of field scale On / Off.
- **AF-Zone**: Set automatic focusing area to Top / Center / Bottom.
- **AF-Sense**: Set automatic focusing sensitivity to Low / Normal / High.
- **Display Info**: On / Off.
- **Image Freeze**: On / Off.
- **Call Preset Speed**: Select 1~24.
- **Pre Zoom Speed:** Select 0~7.

NOISE REDUCTION

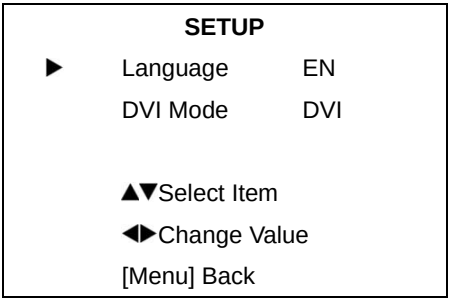
Move the main menu cursor to [NOISE REDUCTION], and press [HOME] key enter the noise reduction page, as shown below.



- **NR2D Level**: Set 2D noise reduction to Off / Auto / 1~5.
- **NR3D Level**: Set 3D noise reduction to Off / 1~8.

SETUP

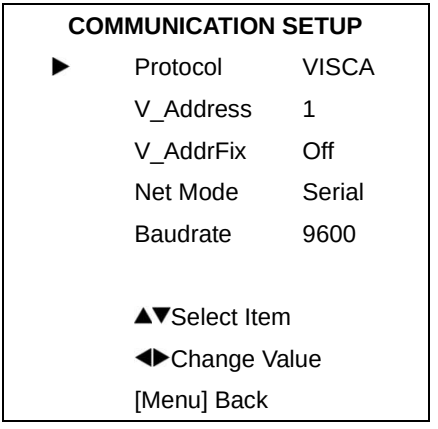
Move the main menu cursor to [SETUP], and press [HOME] key enter the setup page, as shown below.



- **Language**: Select EN (English) / Chinese / Russian.
- **DVI Mode:** Select DVI or HDMI.

COMMUNICATION SETUP

Move the main menu cursor to [COMMUNICATION SETUP], and press [HOME] key enter the communication setup page, as shown below.

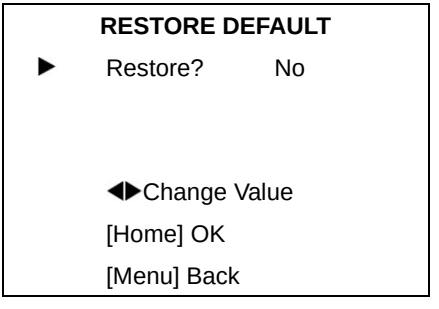


- **Protocol:** Select protocol type: Auto, VISCA, PELCO-D, PELCO-P.
- **V_Address:** Select 1 ~ 7. (Effective only in Auto, VISCA protocols)

- **V_AddrFix:** Select On / Off.
- **P_D_Address**: Select 0~254. (Effective only in PELCO-D protocol)
- **P_P_Address**: Select 0~31. (Effective only in PELCO-P protocol).
- **Net Mode**: Set serial port network control to Serial / Parallel.
- **Baudrate**: Select serial port baud rate to 2400 / 4800 / 9600 / 38400.

RESTORE DEFAULT

Move the main menu cursor to [RESTORE DEFAULT], and press [HOME] key enter the restore default page, as shown below.



- **Restore:** Confirm restore factory settings, Yes / No.

Note: Press [HOME] button to confirm restoring all parameters to default, including IR Remote address and VISICA address.

Network Function

System Requirements

Item	Requirements
Operating System	Windows 2000/2003/XP/ vista/7/8/10
Network Protocol	TCP/IP
Client PC	P4 / 128M RAM / 40G HDD / scaling graphics card with DirectX 8.0+.

Equipment Installation

1. Connect camera to the internet or to PC directly via ethernet cable.
2. Turn on DC 12V power.
3. If the network connection is normal, the green connection light at the network interface will light up within 5 seconds, and the orange data indicator will flash, indicating that the physical connection of the camera has been completed.

Internet Connection

There are two main ways to connect camera to the internet.

Connect by Network Cable

Connect by Switch / Router

Camera Controlled by LAN

Setup IP Address

Determine camera IP address as follows:

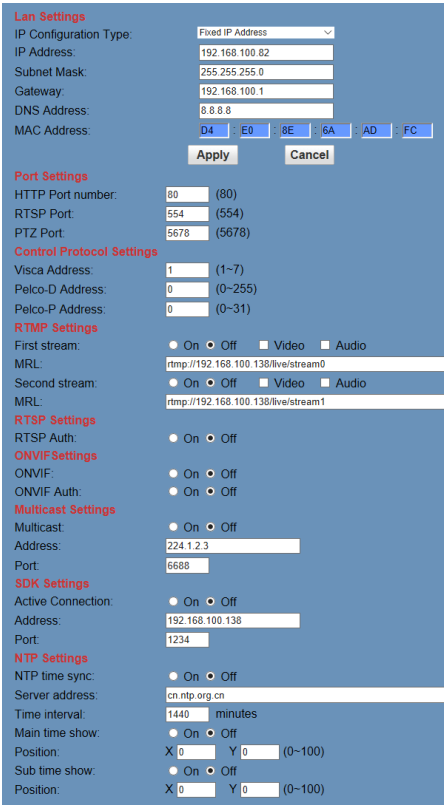
Method 1: Press * and # and 4 on remote controller one by one, the camera IP address will be shown on screen.

Method 2: Connect camera to PC with network cable, use “upgrade_En.exe” to search for IP address.

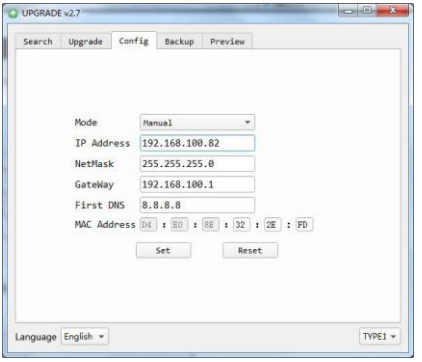
upgrade

To change IP address, two methods as below:

Method 1: Log in to the web interface, select “Network > Lan Settings”, change IP address, subnet mask and gateway. Click “Apply” and restart the camera.



Method 2: Open “upgrade_En.exe”, change IP and click “Set”. Camera will restart.



To change IP address:

1. Search the IP address of camera.
2. Select the camera IP to be changed.
3. Select “Config” tab in upgrade app.
4. Change the IP address, netmask and gateway, then click “Set”.

View / Access Camera

Input http://192.168.100.88 into browser (Internet Explorer recommended). Input login name: **admin** and password: **admin** into login window as shown:

The camera can now be viewed as shown:

Tip: When using this camera for the first time, VLC player software must be installed. Please visit http://www.videolan.org/vlc/#download and install VLC player software. Once VLC is installed, log in again to view camera.

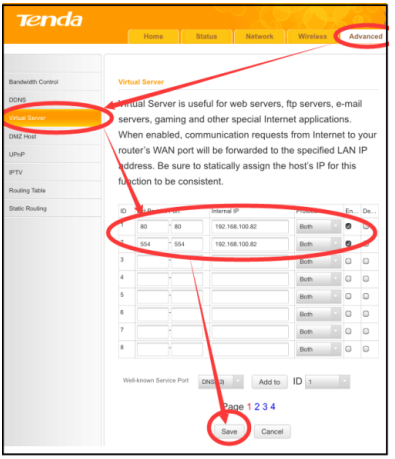
Camera Controlled by WAN

Setup IP Controlled by Dynamic DNS

Dynamic DNS providers: Dyndns.org, 3322.org.

Router Port Mapping:

Refer to below “Tenda” router example: enter the Router Home Page (interface page), select “Advanced” -> “Virtual Server”, add a new port number in “Ext Port”, add a new port number in “Int port”, input camera IP address to “Internal IP”, then select “Save”, as shown



Dynamic DNS View Camera

To view camera via DDNS, use this link format: http://hostname:port number. For example, for host computer name “youdomain.f3322.org” and camera port 89, the link is http://youdomain.3322.org:89

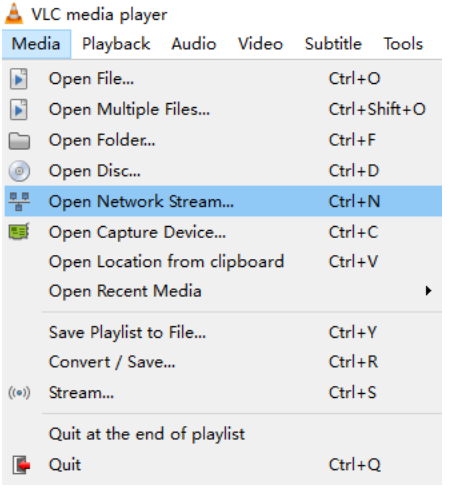
Tip: If the camera default port is 80, it is unnecessary to input port number. The host name can access camera directly.

VLC Stream Media Player Monitor

VLC media server viewing procedure

Step 1 Open VLC media player.

Step 2 Click “Media > Open Network Stream”, or click “Ctrl + N”; as shown:



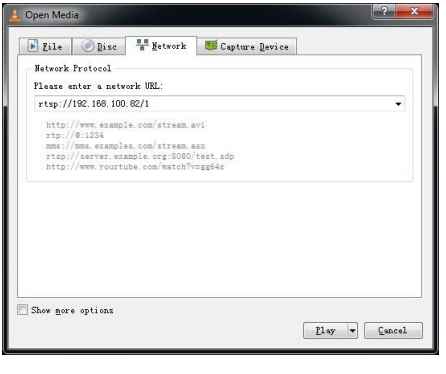
Step 3 Input URL address:

rtsp://ip: port number/1 (First stream);

rtsp://ip: port number/2 (Second stream).

Step 4 Click “Play”.

Tip: Default RTSP port number is 554. If the camera port default is 80, it is unnecessary to input port number of URL address.



Camera Parameter Setup

Homepage Introduction

Menu

All pages include two menu bars for:

Real time monitoring: displaying video image Parameter setup: with function buttons.

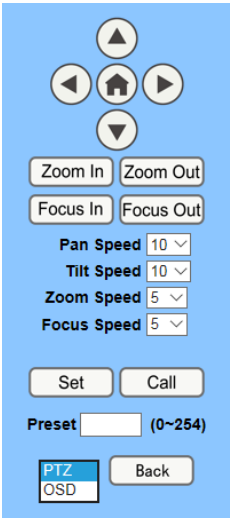
A. Video Viewing Window

Video viewing window must accommodate video resolution; higher resolutions will allow larger playback area. Double click viewing window to view full-screen; double click again to will restore window size.

Status bar in viewing window shown below:

1) Video playback pause button: pause video real-time, click to resume playback.
2) Audio control buttons: adjust volume or mute.
3) Full screen button.

A. PTZ Setup



1) Pan and Tilt Control

Up, Down, Left and Right arrows and home button allow you to manually move the camera to the desired position.

2) Zoom

Zoom In / Zoom Out control.

3) Focus

Focus In / Focus Out control for fine manual focus adjustment in case auto-focus encounters difficult objects or backgrounds.

4) PTZ Speeds

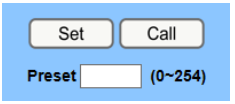
Pan speed can be set between 1 ~ 24.
Tilt speed can be set between 1 ~ 20.
Zoom and Focus speeds can be set 0 ~ 7.

5) PTZ Presets

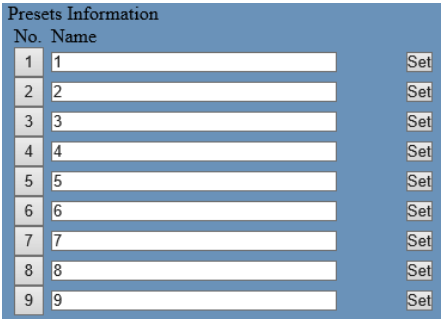
After manually setting up a shot that you would like to return to, you can save presets for quick recall of these positions. Type a number between 0 and 254 into the Preset box.

Click the “Set” button to save the current location to that preset number. Click the “Call” button to cause the camera to return to that position. This enables smooth, quick and convenient control without the need to manually move the camera.

1: Type a number into the Preset box.



2: Type preset name into Presets Information.

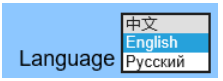


Click “Set” button. Click “Call” button or click the preset number / name in Presets Information to return PTZ to preset position.

6) PTZ / OSD Dropdown

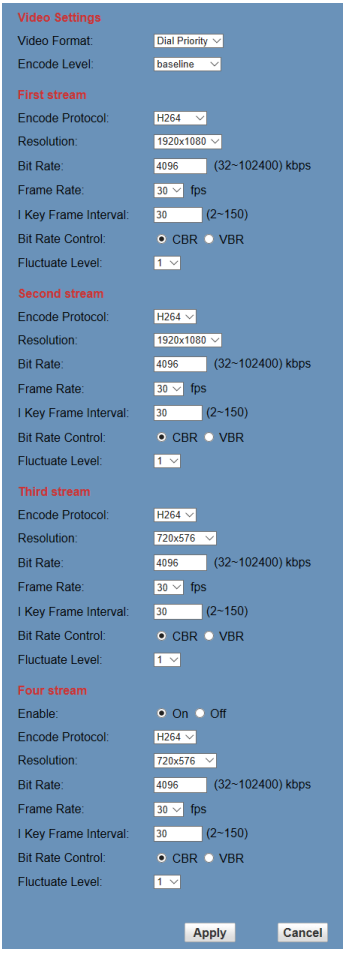
From the dropdown menu, click OSD option to open the camera’s on-screen display menu from the web interface.

B. Language Selection



Choose “Chinese”, “English” or “Russian” to change web interface language.

Video Settings



1) Video Format

Support 50Hz (PAL) and 60Hz (NTSC), and Dial Priority three formats.

2) Encode Level

Support baseline, mainprofile, highprofile and svc-t four levels.

3) Encode Protocol

Support H.264, H.265 and MJPEG three formats.

4) Resolution

First stream: 1920x1080, 1280x720, 1024x576, 960x540, 640x480, 640x360.
Second stream: 1280x720, 1024x576, 720x576 (50Hz), 720x480 (60Hz), 720x408, 640x360, 480x270, 320x240, 320x180
Higher resolutions provide clearer images while consuming more network bandwidth.

5) Bit Rate

The user may specify the bit rate. In general, higher bit rates provide clearer images. However, bit rate configuration must match network bandwidth. When network bandwidth is narrow, high bit rates may result in abnormal video streams and inferior images.

6) Frame Rate

The user may specify frame rate. In general, higher frame rates provide smoother video.

7) I Key Frame Interval

Set interval between I frames, Larger interval result in lower response from viewing window.

8) Bit Rate Control

CBR: Constant Bit Rate - Video encoded at preset speed.
VBR: Variable Bit Rate - Video encoder adjusts speed based on preset speed for optimal image quality.

9) Fluctuate Level

Set variable bit rate fluctuation range 1 ~ 6.

Image Settings

Brightness: Image brightness 0~14 slider. Default = 7.

Saturation: Saturation 0~14 slider. Default = 4.

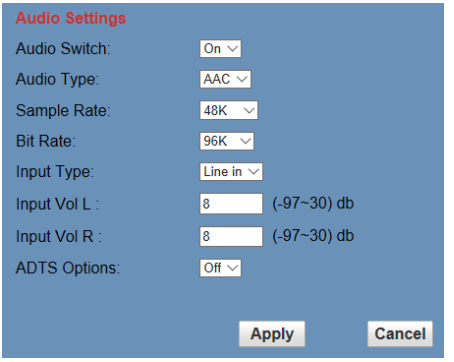
Contrast: Contrast 0~14 slider. Default = 8.

Sharpness: Sharpness 0~15 slider. Default = 3.

Hue: Hue 0~14, slider. Default = 7.

Flip & Mirror: Flip checkbox turns image upside down. Mirror checkbox reverses image left / right.

Audio Settings



Audio Switch: Enable / disable audio switch.

Audio Type: Audio type AAC.

Sample Rate Selectable: 44.1K / 48K.

Bit Rate: Selectable 96K / 128K / 256K.

Input Type: Input type line in.

Input Vol L: Left channel volume.

Input Vol R: Right channel volume.

ADTS Options: Enable / disable ADTS.

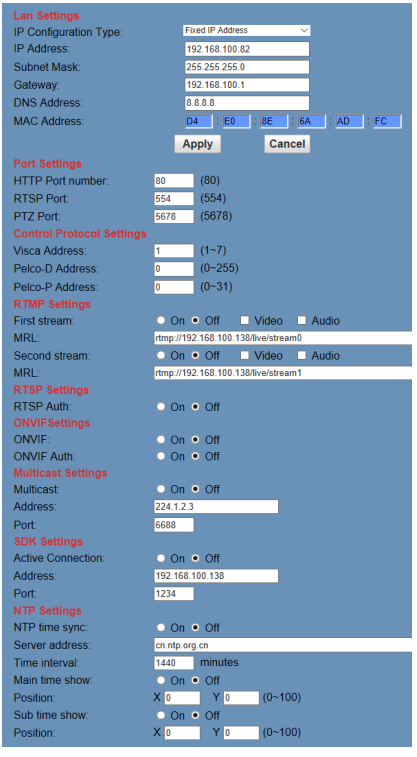
System Settings

Work Mode Select RTSP / SDK / Multicast. (default: RTSP)

Reboot Click to restart system.

Username and Password: Set password. (letters and numbers only)

Network Settings



Lan Settings

Default IP address 192.168.100.88
MAC address may not be modified.

Port Settings

A. HTTP Port

IP address identifies the network device, which may run multiple web applications using network ports to transmit data. Port setting determines web server program's transmission port. Port mapping must be consistent with port numbers. (default port: 80)

B. RTSP Port

RTSP protocol supported. (default port: 554) Use VLC tools broadcast.

C. PTZ Port

PTZ protocol supported. (default port: 5678)

Control Protocol Settings

Set camera control communication protocol. Enter Visca / Pelco-D / Pelco-P addresses.

RTMP Settings

Set MRL of RTMP. Turn each stream On / Off and selectively enable / disable video and audio per stream.

RTSP Settings

Turn On / Off RTSP authentication.

ONVIF Settings

Turn On / Off ONVIF and ONVIF authentication.

Multicast Settings

Turn On/Off multicast. Set multicast address (default: 224.1.2.3) and port (default: 6688 for first stream; 6690 for second stream).

SDK Settings

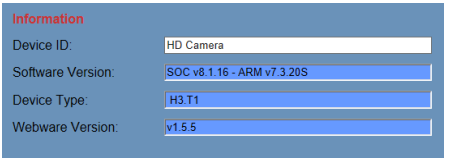
Turn On/Off active connection. Set SDK address (default: 192.168.100.138) and port (default: 1234).

NTP Settings

Turn On/Off NTP time sync, main time show and sub time show. Set NTP server address, time interval, main stream position and sub stream position.

Device Information

Display the current device information, as shown below.



Troubleshooting

- The monitor shows no image

  1. Check camera power supply is connected, voltage is normal, and power indicator light is always on.
  2. Turn off power switch to check whether camera is self-testing.
  3. Check all connections.

- Intermittent image loss

Check check all cable connecdtions of video platform and TV / display.

- Image jitter

  1. Ensure stable camera installation.
  2. Check for vibration near camera.

- No video image in IE browser

Please visit VLC website (http://www.videolan.org/vlc) to download and install VLC media player.

- Unable to access camera through IE browser

  1. Use PC to access network to test whether PC and camera can communicate.
  2. Disconnect the network, connect camera and PC separately, and reset the IP address of PC.
  3. Check IP address, subnet mask, and gateway settings for camera.
  4. Check for MAC address conflicts.
  5. Check whether the web port is occupied by another device.

- Forgot IP address or login password

Default IP address: 192.168.100.88
Default user name: admin
Default password: admin

Warranty Terms and Conditions

A service charge will apply for service(s) claimed for repairable products if the warranty becomes unenforceable or inapplicable due to the following cases:

1. The original serial number labeled on the product has been removed, erased, replaced, defaced or is illegible.
2. The warranty has expired.
3. The defects are caused by the product being repaired, dismantled or altered by anyone other than an authorized service partner.
4. The defects are caused the product being used or handled improperly, roughly or not as instructed in the User Guide.
5. The defects are caused by any force majeure including, but not limited to, accidents, fire, earthquake, lightning, tsunami and war.
6. Any service, configuration or offer not covered by contract.

DVDO reserves the right to determine these cases, and changes may be made at any time without notice.