

HD IR Waterproof Fixed Network Camera

(With Integrated Bracket)

User's Manual

Welcome

Thank you for purchasing our network camera!

This user's manual is designed to be a reference tool for your system.

Please read the following safeguard and warnings carefully before you use this series product!

Please keep this user's manual well for future reference!

Important Safeguards and Warnings

1 . Electrical safety

All installation and operation here should conform to your local electrical safety codes.

The power shall conform to the requirement in the SELV (Safety Extra Low Voltage) and the Limited power source is rated 12V DC or 24V AC in the IEC60950-1. (Refer to general introduction) **Please note: Do not connect two power supplying sources to the device at the same time; it may result in device damage!**

We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

We are not liable for any problems caused by unauthorized modification or attempted repair.

2 . Transportation security

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3 . Installation

Do not apply power to the camera before completing installation.

Please install the proper power cut-off device during the installation connection.

Always follow the instruction guide the manufacturer recommended.

4 . Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers.

We are not liable for any problems caused by unauthorized modifications or attempted repair.

5 . Environment

This series network camera should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.

Please keep it away from the electromagnetic radiation object and environment.

Please make sure the CCD (CMOS) component is out of the radiation of the laser beam device.

Otherwise it may result in CCD (CMOS) optical component damage.

Please keep the sound ventilation.

Do not allow the water and other liquid falling into the camera.

Thunder-proof device is recommended to be adopted to better prevent thunder.

The grounding studs of the product are recommended to be grounded to further enhance the reliability of the camera.

6. Daily Maintenance

Please shut down the device and then unplug the power cable before you begin daily maintenance work.

Do not touch the CCD (CMOS) optic component. You can use the blower to clean the dust on the lens surface.

Always use the dry soft cloth to clean the device. If there is too much dust, please use the water to dilute the mild detergent first and then use it to clean the device. Finally use the dry cloth to clean the device.

Please put the dustproof cap to protect the CCD (CMOS) component when you do not use the camera. Dome enclosure is the optical component, do not touch the enclosure when you are installing the device or clean the enclosure when you are doing maintenance work. Please use professional optical clean method to clean the enclosure. Improper enclosure clean method (such as use cloth) may result in poor IR effect of camera with IR function.

7. Accessories

Be sure to use all the accessories recommended by manufacturer.

Before installation, please open the package and check all the components are included.

Contact your local retailer ASAP if something is broken in your package.

Accessory Name	Amount
Network Camera Unit	1
Quick Start Guide	1
Installation Accessories Bag	1
12V to 24V Conversion Cable (For AC 24V series product only)	1
CD	1

Table of Contents

1	General Introduction	1
1.1	Overview	1
1.2	Features	1
1.3	Specifications	2
1.3.1	Performance	2
1.3.2	Factory Default Setup	4
2	Structure	11
2.1	Multiple-function Combination Cable	11
2.2	Framework and Dimension	12
2.3	Bidirectional talk	13
2.3.1	Device-end to PC-end	13
2.3.2	PC-end to the Device-end	13
2.4	Alarm Setup	14
3	Installation	16
3.1	Device Installation	16
3.2	Micro SD Card Installation	17
3.3	Lens Adjustment	19
3.4	Bracket Adjustment	19
3.5	OSD Buttons (For Motorized Zoom Lens Series Product Only)	21
4	Quick Configuration Tool	23
4.1	Overview	23

4.2	Operation	23
5	Web Operation	25
5.1	Network Connection.....	25
5.2	Login and Main Interface.....	25
6	FAQ	28
7	Appendix Toxic or Hazardous Materials or Elements	29

1 General Introduction

1.1 Overview

This series network camera integrates the traditional camera and network video technology. It adopts audio and video data collection, transmission together. It can connect to the network directly without any auxiliary device.

This series network camera product uses standard H.264 video compression technology and G.711a audio compression technology, which maximally guarantee the audio and video quality.

It supports the IR night vision function. In the night environments, the device can use the IR light to highlight the object which is suitable for the surveillance function in the low illumination environments. The built-in protection enclosure and waterproof design conforms to the IP 66 level. It has the sound waterproof function suitable for use in the outdoor environments.

It supports real-time monitor and listening at the same time. It supports analog video output and dual-way bidirectional talk.

It can be used alone or used in a network area. When it is used lonely, you can connect it to the network and then use a network client-end. Due to its multiple functions and various uses, this series network camera is widely used in many environments such office, bank, road monitor and etc.

1.2 Features

User Management	<ul style="list-style-type: none">● Different user rights for each group, one user belongs to one group.● The user right shall not exceed the group right.
Storage Function	<ul style="list-style-type: none">● Support central server backup function in accordance with your configuration and setup in alarm or schedule setting● Support record via Web and the recorded file are storage in the client-end PC.● Support built-in Micro SD card.● Do not support local Micro SD card hot swap storage function. Support short-time storage when encounter disconnection.● Support network storage function such as FTP.
Alarm Function	<ul style="list-style-type: none">● Real-time respond to external on-off alarm input, and video detect as user pre-defined activation setup and generate corresponding message in screen and audio prompt(allow user to pre-record audio file)● Real-time video detect: motion detect, camera masking.
Network Monitor	<ul style="list-style-type: none">● Network camera supports one-channel audio/video data transmit to network terminal and then decode. Delay is within 270ms (network bandwidth support needed)● Max supports 20 connections.● Adopt the following audio and video transmission protocol: HTTP, TCP, UDP, MULTICAST, RTP/RTCP, RTSP and etc.● Support web access.
Network Management	<ul style="list-style-type: none">● Realize network camera configuration and management via Ethernet.● Support device management via web or client-end.
Power	<ul style="list-style-type: none">● External power adapter DC12V/AC 24V. You can select according to your actual environments. Please note system can not support these two types of power supplying at the same time.
Assistant Function	<ul style="list-style-type: none">● Log function● Support system resource information and running status real-time display.

	<ul style="list-style-type: none"> ● Day/Night mode auto switch. ● Built-in IR light. Support IR night vision. ● Support picture parameter setup such as electronic shutter and gain setup. ● Backlight compensation: screen auto split to realize backlight compensation to adjust the bright. ● Support video watermark function to avoid vicious video modification. ● The enclosure conforms to the IP 66 protection. Has the waterproof function.
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1.3 Specifications

1.3.1 Performance

Please refer to the following sheet for network camera performance specification.

Model		HFW3300C	HFW3200C	HFW3100C	HFW3101C
Parameter					
System	Main Processor	TI Davinci high performance DSP			
	OS	Embedded LINUX			
	System Resources	Support real-time network, local record, and remote operation at the same time.			
	User Interface	Remote operation interface such as WEB, DSS, PSS			
	System Status	Micro SD card status, bit stream statistics, log, and software version.			
Video Parameter	Image Sensor	1/2.8-inch CMOS	1/2.9-inch CMOS	1/3.0-inch CMOS	
	Pixel	2080(H)*1553(V)	1920(H)*1080(V)		
	Day/Night Mode	Support day/night mode switch and IR-CUT at the same time. (The lens has built-in IR-CUT mechanical component.).			
	Auto Aperture	Enable			
	Gain Control	Fixed/Auto			
	White Balance	Manual/Auto			
	BLC	Off/BLC/WDR (1-100 adjustable)/HLC(anti-flicker is outdoor and is valid only when exposure mode is auto with range 1-100)			
	Exposure Mode	Manual/Auto PAL: It ranges from 1/3 to 1/10000 NTSC: It ranges from 1/4 to 1/10000			
	Video Compression Standard	H.264/ H.264H/H.264B/MJPEG			
	Video Frame Rate	PAL: Main stream (3M@15fps,1080P@25fps,SXGA@25fps,1.3M@25fps,720P@25fps,D1@25fps) Extra stream (D1@25fps, CIF@25fps)	PAL: Main stream (1080P@25fps, SXGA@25fps,1.3M@25fps,720P@25fps,D1@25fps) Extra stream (D1@25fps,CIF@25fps)	PAL: Main stream (1.3M@25fps, 720P@25fps, D1@25fps) Extra stream (D1@25fps, CIF@25fps)	
		NTSC: Main stream (3M@15fps ,1080P@30fps, SXGA@30fps, 1.3M@30fps,	NTSC: Main stream (1080P@30fps, SXGA@30fps, 1.3M@30fps, 720P@30fps,	NTSC: Main stream: (1.3M@30fps, 720P@30fps, 704*480@30fps) Extra stream (704*480@30fps,352*240@30fps)	

		720P@30fps, 704*480@30fps) Extra stream (704*480@30fps, 352*240@30fps)	704*480@30fps) Extra stream (704*480@30fps, 352*240@30fps)	
	Video Bit Rate	H.264: 56Kbps-8192Kbps. H.264H 16Kbps-8192Kbps H.264B 56Kbps-8192Kbps MJPEG is adjustable and bit rate is adjustable. Support customized setup.		
	Video Flip	Support mirror. Support flip function.		
	Snapshot	Max 1f/s snapshot. File extension name is JPEG.		
	Privacy Mask	Supports max 4 privacy mask zones		
	Video Setup	Support parameter setup such as bright, contrast.		
	Video Information	Channel title, time title, motion detect, camera masking.		
	Lens	Manual zoom 3.3-12 mm@F1.4		
	Lens Interface	Φ14 interface. Lens is the default accessories		
Audio	Audio Input	1-channel. RCA		
	Audio Output	1-channel. RCA		
	Bidirectional Talk Input	Reuse the first audio input channel		
	Audio Bit Rate	16kbps 16BIT		
	Audio Compression Standard	G.711A/G.711Mu/PCM		
Video	Motion Detect	396 (18*22) detection zones; sensitivity level ranges from 0 to 100; area threshold ranges from 0 to 100. Activation event: video storage, image snapshot, log, email function and etc.		
Alarm Input		2-channel input, 1-channel output		
Record and Backup	Record Priority	Manual>External alarm >Video detect>Schedule		
	Local Storage	Support Micro SD card storage		
	Storage Management	Support display local storage status		
Network	Wire Network	1-channel wire Ethernet port, 10/100 Base-T Ethernet		
	Network Protocol	Standard HTTP, TCP/IP, ARP, IGMP, ICMP, RTSP, RTP,UDP, RTCP, SMTP, FTP, DHCP, DNS, DDNS, PPPOE, UPNP, NTP, Bonjour, SNMP.		
	Remote Operation	Monitor, system setup, file download, log information, maintenance , upgrade and etc.		
AUX Interface	Video Output	1-channel analog video output, BNC port.		
	Restore Default Setup	Reset button		
	Power	Support AC24V/DC12V power. (Can not support these two modes at the same time.)		
General Parameter	Power Consumption	8W MAX (10W MAX when ICR switch)		
	Working	-10℃~+60℃		

	Temperature	
	Working Humidify	10%~90%
	Dimensions(mm)	φ104*306.7
	Weight	1250g(Excluding box)
	Installation	Bracket is included in the accessories bag.
	IR Distance	20~30m
	Protection Level	IP66

1.3.2 Factory Default Setup

Please refer to the following sheet for factory default setup information.

Setup		Item		Default Setup				
				HFW3300C	HFW3200C	HFW3100C	HFW3101C	
Camera	Conditions	Config File		Normal				
		Brightness		50				
		Contrast		50				
		Saturation		50				
		Sharpness		50				
		Anti-flicker		Outdoor				
		Exposure Mode		Auto				
		Scene Mode		Auto				
		Day/night Mode		Auto				
		BLC		Off				
		Mirror		Off				
		Flip		Off				
		Profile Management		Normal				
		Video	Video bit stream	Main Stream	Bit stream type	General		
	Encode mode				H.264			
	Resolution				1080P(1920*1080)		1.3M（1280*960）	
	Frame Rate(FPS)				PAL:25 NTSC:30			
	Bit Rate Type				CBR			
	Recommen ded Bit				3584-8192 Kb/S		1536-8192Kb/s	
	Bit Rate				8192		6144	
	I Frame				50			
	Watermark				Enable			
	Watermark character				DigitalCCTV			
	Sub Stream			Enable	Enable			
		Bit stream		General				

Setup		Item		Default Setup				
				HFW3300C	HFW3200C	HFW3100C	HFW3101C	
				type				
				Encode mode	H.264			
				Resolution	PAL:CIF(352*288) NTSC:CIF(352*240)			
				Frame Rate(FPS)	PAL:25 NTSC:30			
				Bit Rate Type	CBR			
				Recommen ded Bit	192-1024Kb/S			
				Bit Rate	512			
				I Frame	50			
		Snapshot	Snapshot Type	General				
			Image Size	1080P(1920*1080)		720P(1280*720)		
			Quality	Better				
			Bit Rate	Main stream				
			Interval	1s				
		Video Overlay	Privacy Mask	Disable				
			Channel Title	Enable				
			Time Title	Enable				
		Path	Snapshot Path	C:\PictureDownload				
			Record Path	C:\RecordDownload				
	Audio	Main Stream	Enable	Enable				
			Encode Mode	G.711A				
		Sub Stream	Enable	Disable				
			Encode Mode	G.711A				
Network	TCP/IP	Host Name	IPC					
		Ethernet Card	Wire(Default)					
		Mode	Static					
		Mac Address	Device MAC address when it is shipped out of the factory					
		IP Version	IPV4					
		IP Address	192.168.1.108					
		Subnet Mask	255.255.255.0					
		Default	192.168.1.1					

Setup	Item		Default Setup			
			HFW3300C	HFW3200C	HFW3100C	HFW3101C
		Gateway				
		Preferred DNS	8.8.8.8			
		Alternate DNS	8.8.8.8			
		Enable ARP/Ping set device IP address service	Enable			
	Connection	Max Connection	10			
		TCP Port	37777			
		UDP Port	37778			
		HTTP Port	80			
		RTSP Port	554			
		HTTPs On	Disable			
		HTTPs Port	443			
	PPPoE	Enable	Disable			
		Username	none			
		Password	N/A			
	DDNS	Server Type	Disable, CN99 DDNS			
		Server Address	www.3322.org			
		Domain Name	none			
		Username	none			
		Password	****			
		Update Period	10 minutes			
	IP Filter	Trusted sites	Disable			
	SMTP(Email)	SMTP Server	none			
		Port	25			
		Anonymity	Disable			
		User Name	anonymity			
		Password	****			
		Sender	none			
		Authenticati	N/A			

Setup	Item		Default Setup			
			HFW3300C	HFW3200C	HFW3100C	HFW3101C
		on (Encryption mode)				
		Title (Subject)	IPC Message			
		Attachment	Enable			
		Mail Receiver	N/A			
		Interval	0 Second			
		Email Test	Disable, interval=60 seconds			
	UPnP	Enable UPnP	Disable			
	SNMP	SNMP Port	161			
		Read Community	public			
		Write Community	private			
		Trap Address	N/A			
		Trap Port	162			
		SNMP v1	Disable			
		SNMP v2	Disable			
		SNMP v3	Disable			
	Bonjour	Enable	Enable			
		Server Name	“SN”. It depends on the device.			
	Multicast	Main Stream	Enable	Enable		
			Multicast Address	239.255.42.42		
			Port	36666		
		Extra Stream	Enable	Disable		
			Multicast Address	239.255.42.42		
			Port	36667		
	IEEE802			Enable	Disable	
				Authentication	PEAP	
				Username	None	
				Password	****	
	QoS			Real-time Monitor	0	
				Command	0	

Setup	Item			Default Setup			
				HFW3300C	HFW3200C	HFW3100C	HFW3101C
Event	Video detect	Motion Detect	Enable	Disable			
			Anti-dither	5 seconds			
			Sensitivity	3			
			Record Channel	Enable			
			Record Delay	10 seconds			
			Relay out	Enable			
			Alarm Delay	10 seconds			
			Send Email	Disable			
			Snapshot	Disable			
		Video Masking	Enable	Disable			
			Record Channel	Enable			
			Record Delay	10 seconds			
			Relay out	Enable			
			Record Delay	10 seconds			
			Send Email	Disable			
			Snapshot	Disable			
	Alarm	Alarm Activation	Enable	Disable			
			Relay in	Alarm 1			
			Anti-dither	0 seconds			
			Sensor Type	NO			
			Record Channel	Enable			
			Record Delay	10 seconds			
			Relay out	Enable			
			Alarm Delay	10 seconds			
			Send Email	Disable			
			Snapshot	Disable			
	Abnormity	No SD Card	Enable	Disable			
			Relay out	Enable			
			Relay out Delay	10 seconds			
			Send email	Disable			
		Capacity Warning	Enable	Disable			
			Capacity Limit	10%			
			Relay out	Enable			

Setup	Item			Default Setup			
				HFW3300C	HFW3200C	HFW3100C	HFW3101C
			Relay out Delay	10 seconds			
			Send Email	Disable			
		SD Card Error	Enable	Disable			
			Relay out	Enable			
			Relay out Delay	10 seconds			
			Send email	Disable			
		Disconnection	Enable	Disable			
			Record	Enable			
			Record Delay	10 seconds			
			Relay out	Enable			
			Relay out Delay	10 seconds			
		IP Conflict	Enable	Disable			
			Record	Enable			
			Record Delay	10 seconds			
			Relay out	Enable			
			Relay out Delay	10 seconds			
Storage	Schedule	Holiday Schedule	Record	Disable			
			Snapshot	Disable			
	Storage	FTP	Enable FTP	Disable			
			Server Address	N/A			
			Port	21			
			Username	anonymity			
			Password	N/A			
			Remote path	share			
			Emergency (Local)	Disable			
	Record Control		Pack Duration	8 minutes			
			Pre-record	5 seconds			
			Disk Full	Overwrite			
			Record Mode	Auto			
System	General	Local Host	Device No	Device factory SN			
			Language	English			

Setup	Item			Default Setup			
				HFW3300C	HFW3200C	HFW3100C	HFW3101C
	Date time and	Video Standard	PAL				
		Date Format	Y-M-D				
		Time Format	24H				
		Time Zone	GMT+08:00				
		System Time	Sync				
		DST	Disable				
		DST Type	Date				
		Start Time	00:00:00 of Jan.1 st				
		End Time	00:00:00 of Jan.2 nd				
		NTP	Disable				
		NTP Server	clock.isc.org				
		Port	123				
		Update Period	10 minutes				
	Account		Anonymous Login	Disable			
	Auto Maintenance		Auto Reboot	Enable, Tuesday 02:00			
			Auto Delete Old Files	Disable			

2 Structure

2.1 Multiple-function Combination Cable

You can refer to the following figure for multiple-function combination cable information. See Figure 2-1.

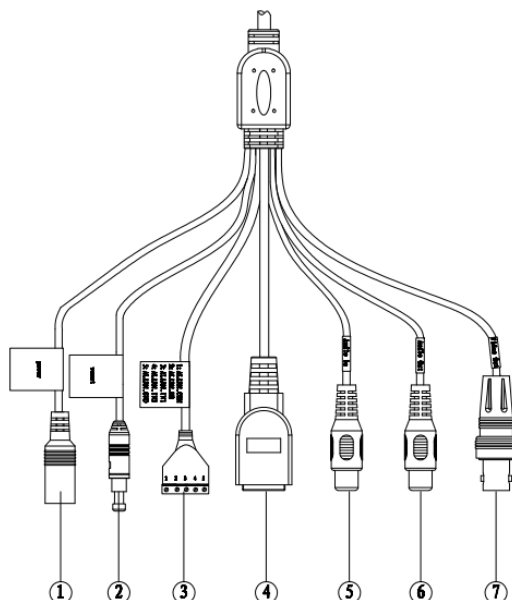


Figure 2-1 Multiple-function combination cable

Please refer to the following sheet for detailed information.

SN	Port Name	Function	Connection	Note
1	DC 12V/AC 24V	Power input port	/	Power port. Input DC 12V/AC 24V (Please use the provided conversion cable)
2	Reset	Reset port	/	Hardware reset function. Press it for 3 to 5 seconds; system hardware can restore default setup.
3	I/O	I/O port	/	Connect to I/O port.
4	LAN	Network port	Ethernet port	Connect to standard Ethernet cable.
5	AUDIO IN	Audio input port	RCA	Input audio signal. It can receive the analog audio signal from the pickup.
6	AUDIO OUT	Audio output port	RCA	Output audio signal to the devices such as the sound box.
7	VIDEO OUT	Video output port	BNC	Output analog video signal. It can connect to the TV monitor to view the video.

Please refer to the follow sheet for detailed I/O port information.

Port Name	SN	Name	Note
I/O Port	1	ALARM_COM	Alarm output public port.
	2	ALARM_NO	Alarm output port. It is to output the alarm signal to the alarm device. NO: normal open alarm output port. It works with the ALARM_COM port.
	3	ALARM_IN1	Alarm input port 1. It is to receive the on-off signal from the external alarm source.
	4	ALARM_IN2	Alarm input port 2. It is to receive the on-off signal from the external alarm source.
	5	GND	Ground port

2.2 Framework and Dimension

Please note all frame and dimension illustrations provided in this chapter are for reference only, and actual product may vary.

Please refer to Figure 2-2 or Figure 2-3 for dimension information according to the actual product. The unit is mm. Please also see Figure 2-4.

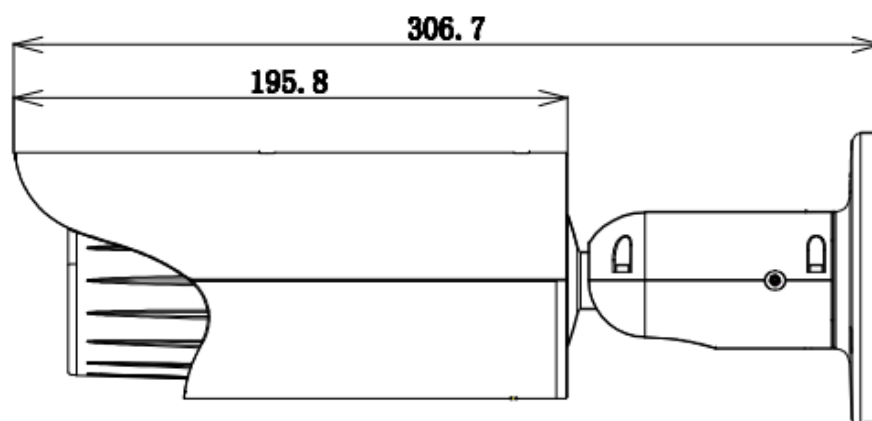


Figure 2-2 Dimension illustration 1

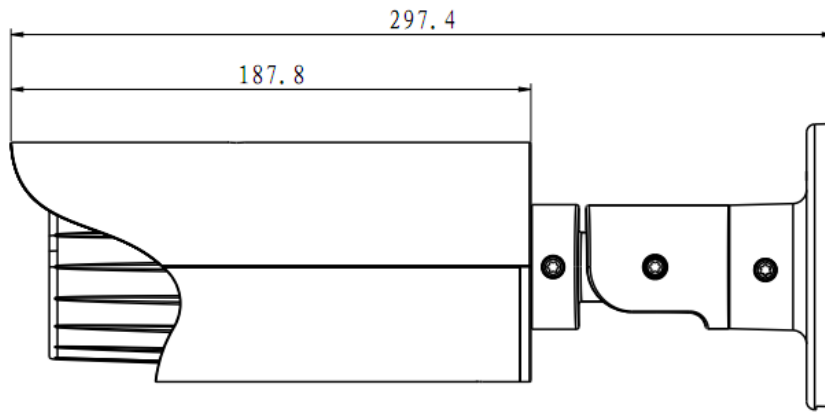


Figure 2-3 Dimension illustration 2

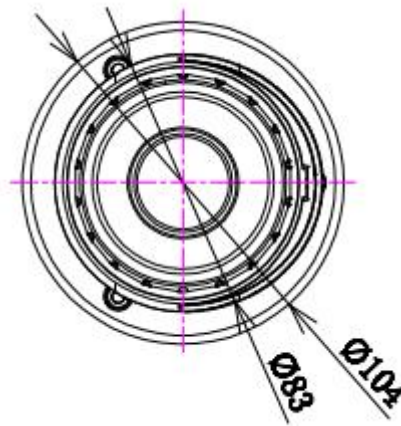


Figure 2-4 Dimension illustration 3

2.3 Bidirectional talk

2.3.1 Device-end to PC-end

Device Connection

Please connect the speaker or the MIC to the audio input port of the device. Then connect the earphone to the audio output port of the PC.

Login the Web and then click the Audio button to enable the bidirectional talk function.

You can see the button becomes orange after you enabled the audio talk function.

Click Audio button again to stop the bidirectional talk function.

Listening Operation

At the device end, speak via the speaker or the pickup, and then you can get the audio from the earphone or sound box at the pc-end.

2.3.2 PC-end to the Device-end

Device Connection

Connect the speaker or the MIC to the audio input port of the PC and then connect the earphone to the audio output port of the device.

Login the Web and then click the Audio button to enable the bidirectional talk function. You can see the button becomes orange after you enabled the audio talk function. Click Audio button again to stop the bidirectional talk function.

Please note the listening operation is null during the bidirectional talk process.

Listening Operation

At the PC-end, speak via the speaker or the pickup, and then you can get the audio from the earphone or sound box at the device-end.

2.4 Alarm Setup

The alarm interface is shown as in Figure 2-5. Please follow the steps listed below for local alarm input and output connection.

- 1) Connect the alarm input device to the alarm input port (No.3 pin or No.4 pin) of the I/O cable.
- 2) Connect the alarm output device to the alarm output port (No.2 pin) and alarm output public port (No.1 pin). The alarm output port supports NO (normal open) alarm device only.
- 3) Open the Web, go to the Figure 2-5. Please set the alarm input 01 port for the first channel of the I/O cable (No.3 pin). The alarm input 02 is for the 2nd channel of I/O cable (No.4 pin). Then you can select the corresponding type (NO/NC.)
- 4) Set the WEB alarm output. The alarm output 01 is for the alarm output port of the device. It is the No.2 pin of the I/O cable.

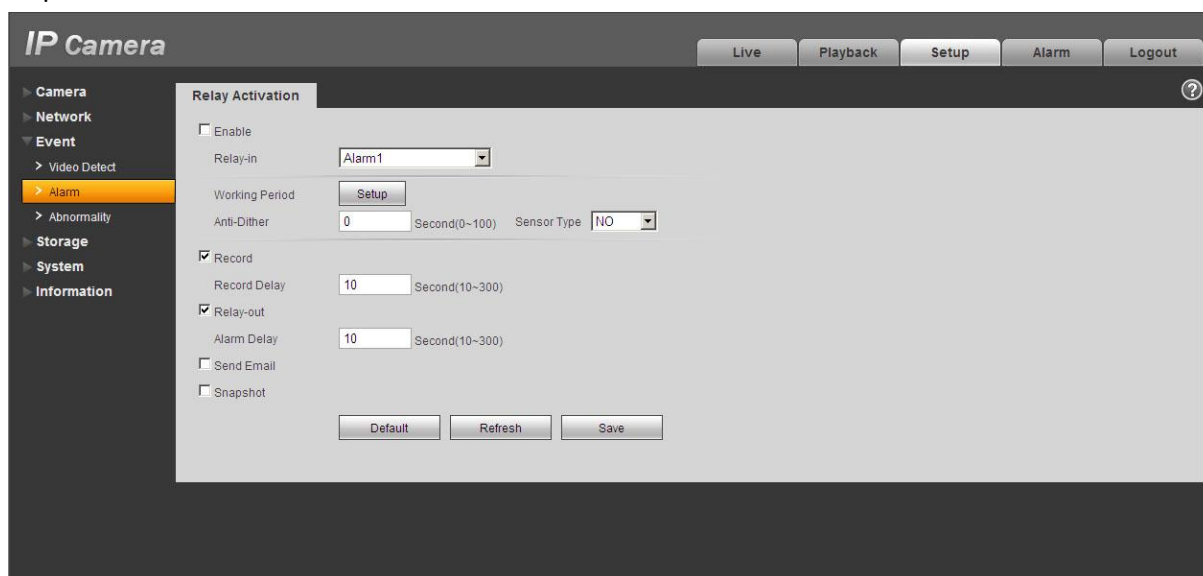


Figure 2-5 Alarm

Please refer to the following figure for alarm input information. See Figure 2-6.

Alarm input: When the input signal is idle or grounded, the device can collect the different statuses of the alarm input port. When the input signal is connected to the 5V or is idle, the device collects the logic "1". When the input signal is grounded, the device collects the logic "0".

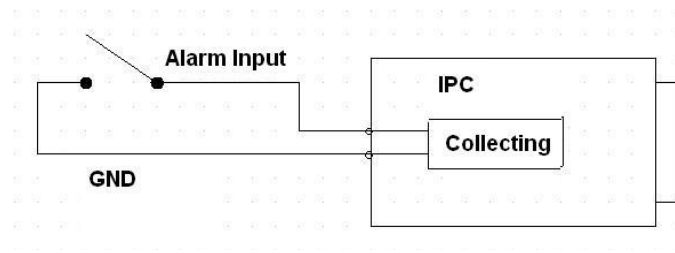


Figure 2-6 Alarm input

Please refer to the following figure for alarm output information. See Figure 2-7.

Port ALARM_COM and Port ALARM_NO composes an on-off button to provide the alarm output.

If the type is NO, this button is normal open. The button becomes on when there is an alarm output.

If the type is NC, this button is normal off. The button becomes off when there is an alarm output.

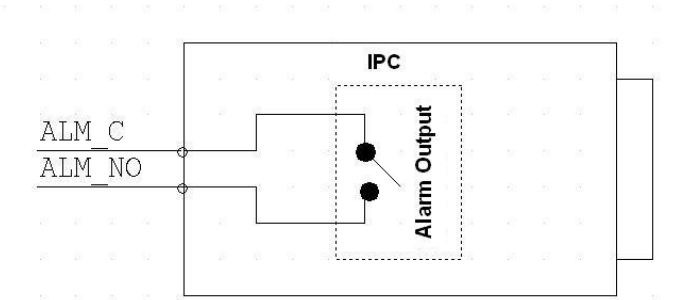


Figure 2-7 Alarm output

3 Installation

Please note all frame and dimension illustrations provided in this chapter are for reference only, and actual product may vary.

3.1 Device Installation

Please refer to Figure 3-1 or Figure 3-2 for installation information according to the actual product.

Please follow the steps listed below to install the device.

- Please draw the installation holes in the installation surface and then mark three expansion bolts holes in the surface. Insert three bolts in the hole and secure firmly.
- Please line up the installation holes of the bottom of the pendant mount bracket to the installation holes in the surface. Then insert the three bolts to the holes of the bottom of the bracket. Finally fasten the device on the installation surface.

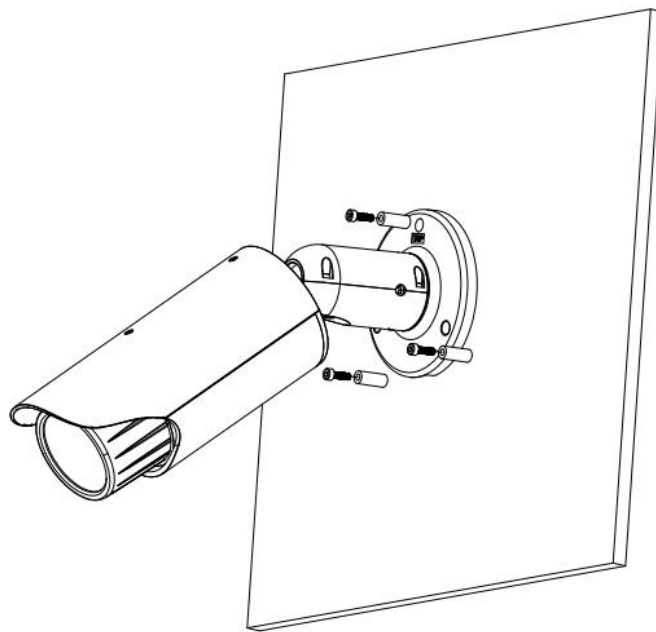


Figure 3-1 Device installation 1

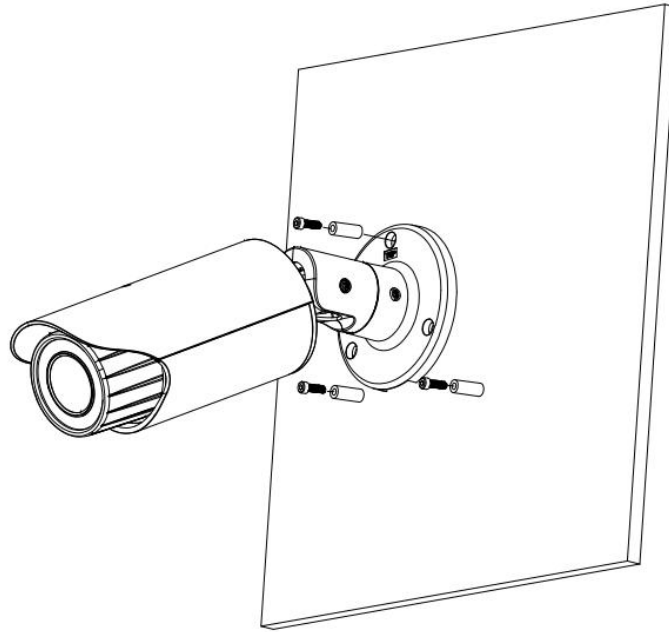


Figure 3-2 Device installation 2

3.2 Micro SD Card Installation

Use the inner hex wrench from the installation accessories bag to remove the four inner hex screws from the rear cover. Please refer to Figure 3-3 or Figure 3-4 to find the Micro SD card slot position according to the actual product. Insert the Micro SD card and then fix the four screws of the rear cover.

Important

- Please make sure the cable connection between the power board and the main board is firm. Otherwise, it may result in device malfunction.
- The rear cover of the device adopts the waterproof design. Please secure four screws firmly after you complete the Micro SD card installation.

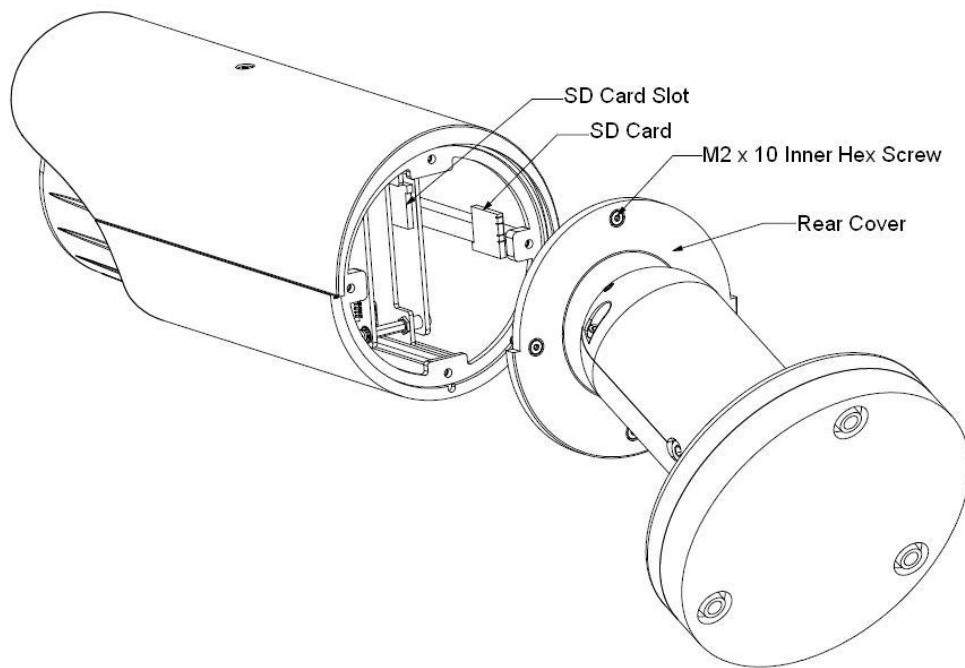


Figure 3-3 Micro SD card installation 1

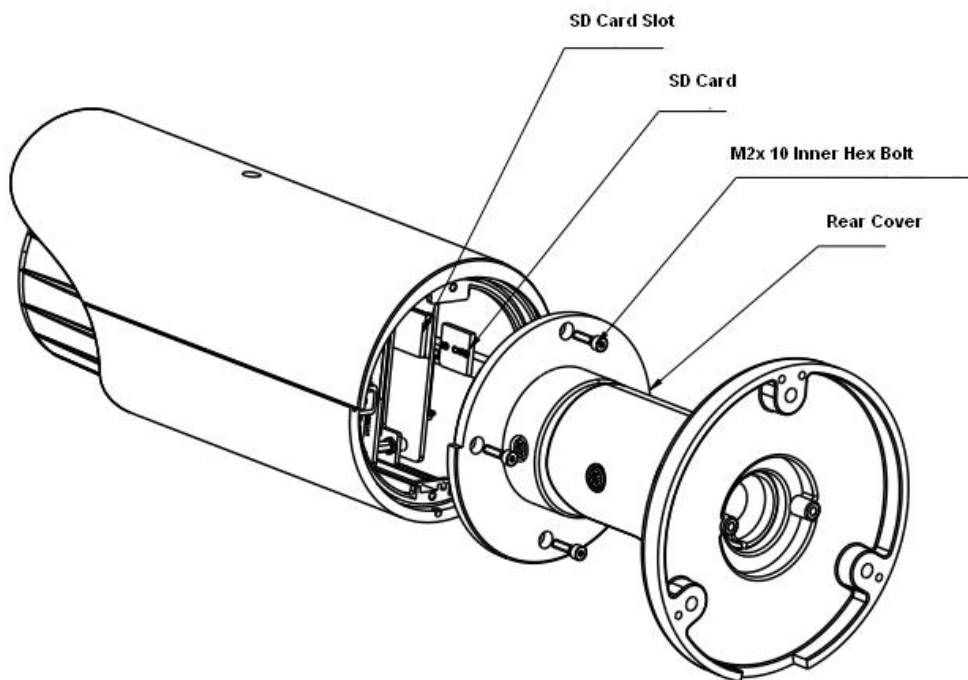


Figure 3-4 Micro SD card installation 2

3.3 Lens Adjustment

Turn counter clockwise to remove the lens cover, now you can see the iris front and rear control rod. The front control rod is to focus and the rear control rod is to zoom. See Figure 3-5. Please turn clockwise to fix the lens cover back firmly.

Important

- Please remove the sunshield first and remove the lens cover if you can not unfasten the lens cover.
- The lens cover has the waterproof function. Please make sure it is secure after you complete the lens adjustment.
- The motorized zoom lens series product has the default motorized zoom lens. You do not need to adjust manually.

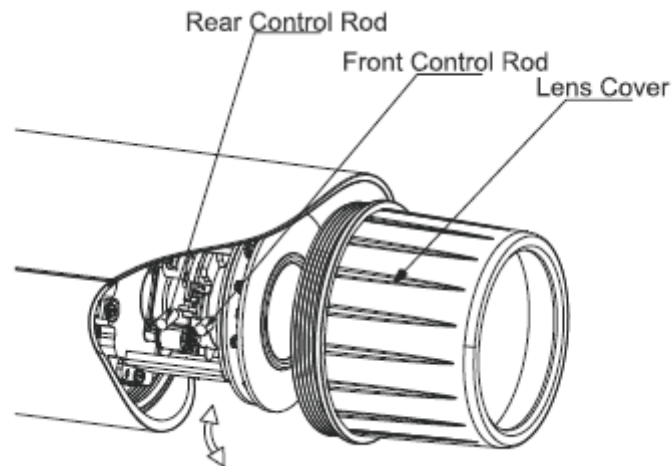


Figure 3-5 Lens adjustment

3.4 Bracket Adjustment

You can use an inner hex screw to control the bracket. Please use the inner hex wrench from the installation accessories bag to unfasten the screw. Please refer to Figure 3-6 or Figure 3-7 according to the actual product. The horizontal angle of the rear cover can rotate 360°, the tilt angle can rotate 90° and the chassis can rotate 360°.

Please use the inner hex wrench to firmly secure the inner hex screw after you complete the setup.

Important

- Please make sure the M4 inner hex screw or M4 inner hex flat tight screws are firm, otherwise it may result in chassis vibration and the camera cannot fix to a specified angle.

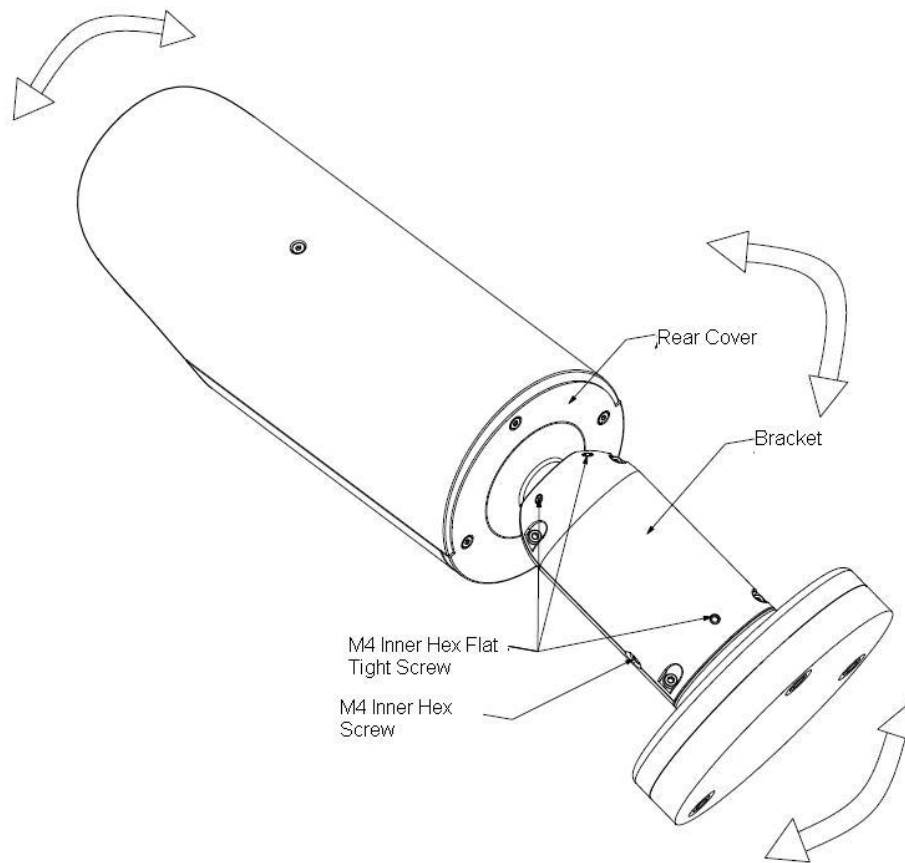


Figure 3-6 Bracket adjustment 1

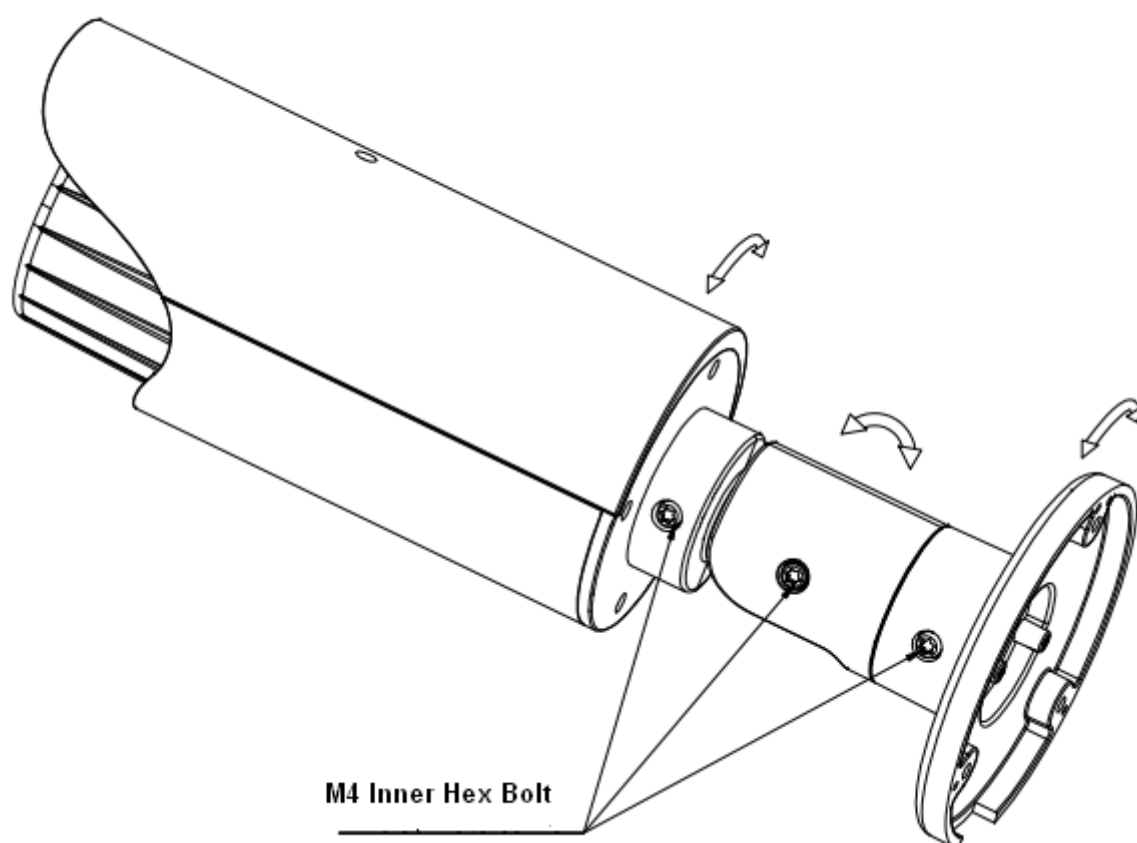


Figure 3-7 Bracket adjustment 2

3.5 OSD Buttons

Please refer to the following contents for detailed information. See Figure 3-8 and Figure 3-9.

- Top button: Focus zoom in
- Bottom button: Focus zoom out.
- Left button: Far.
- Right button: Near.
- Middle button: Auto focus. It is to get clear video.

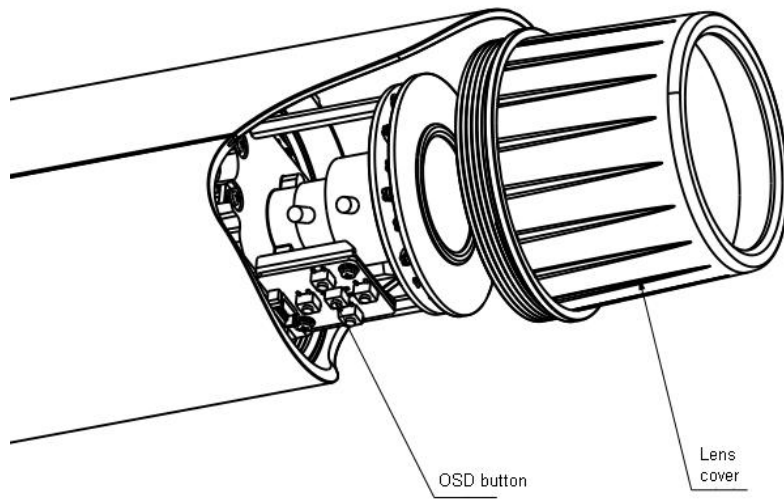


Figure 3-8 OSD button 1

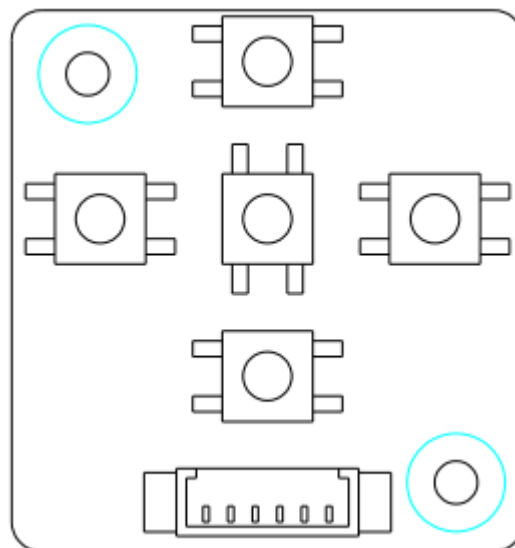


Figure 3-9 OSD button 2

In the configuration tool search interface (Figure 4-1), please select a device IP address and then double click it to open the login interface. Or you can select an IP address and then click the Login button to go to the login interface. See Figure 4-3.

In Figure 4-3, you can view device IP address, user name, password and port. Please modify the corresponding information to login.

Please note the port information here shall be identical with the port value you set in TCP port in Web Network interface. Otherwise, you cannot login the device.

If you are using device background upgrade port 3800 to login, other setups are all invalid.

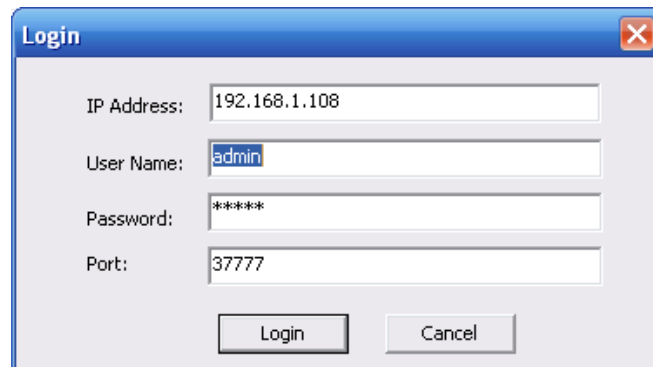
A Windows-style dialog box titled "Login" with a close button in the top right corner. It contains four text input fields: "IP Address:" with the value "192.168.1.108", "User Name:" with the value "admin", "Password:" with the value "*****", and "Port:" with the value "37777". At the bottom, there are two buttons: "Login" and "Cancel".

Figure 4-3 Login prompt

After you logged in, the configuration tool main interface is shown as below. See Figure 4-4.

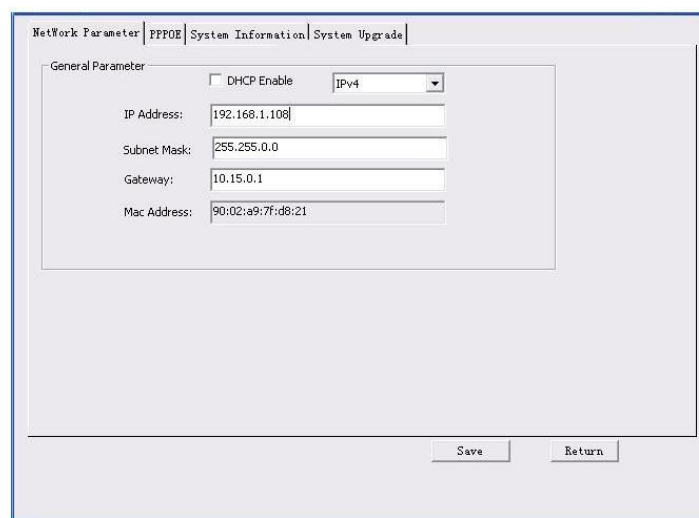
A screenshot of the main configuration tool interface. It has a tabbed menu at the top with "Network Parameter", "PPPOE", "System Information", and "System Upgrade". The "Network Parameter" tab is active, showing a "General Parameter" section. This section includes a "DHCP Enable" checkbox (unchecked) and a "IPv4" dropdown menu. Below these are five text input fields: "IP Address:" (192.168.1.108), "Subnet Mask:" (255.255.0.0), "Gateway:" (10.15.0.1), and "Mac Address:" (90:02:a9:7f:d8:21). At the bottom right of the main area are "Save" and "Return" buttons.

Figure 4-4 Main interface

For detailed information and operation instruction of the quick configuration tool, please refer to the *Quick Configuration Tool User's Manual* included in the resources CD.

5 Web Operation

This series network camera products support the Web access and management via PC. Web includes several modules: Monitor channel preview, system configuration, alarm and etc.

5.1 Network Connection

Please follow the steps listed below for network connection.

- Make sure the network camera has connected to the network properly.
- Please set the IP address, subnet mask and gateway of the PC and the network camera respectively. Network camera default IP address is 192.168.1.108. Subnet mask is 255.255.255.0. Gateway is 192.168.1.1
- Use order ping `***.***.***.***(* network camera address)` to check connection is OK or not.

5.2 Login and Main Interface

Open IE and input network camera address in the address bar. See Figure 5- 1.

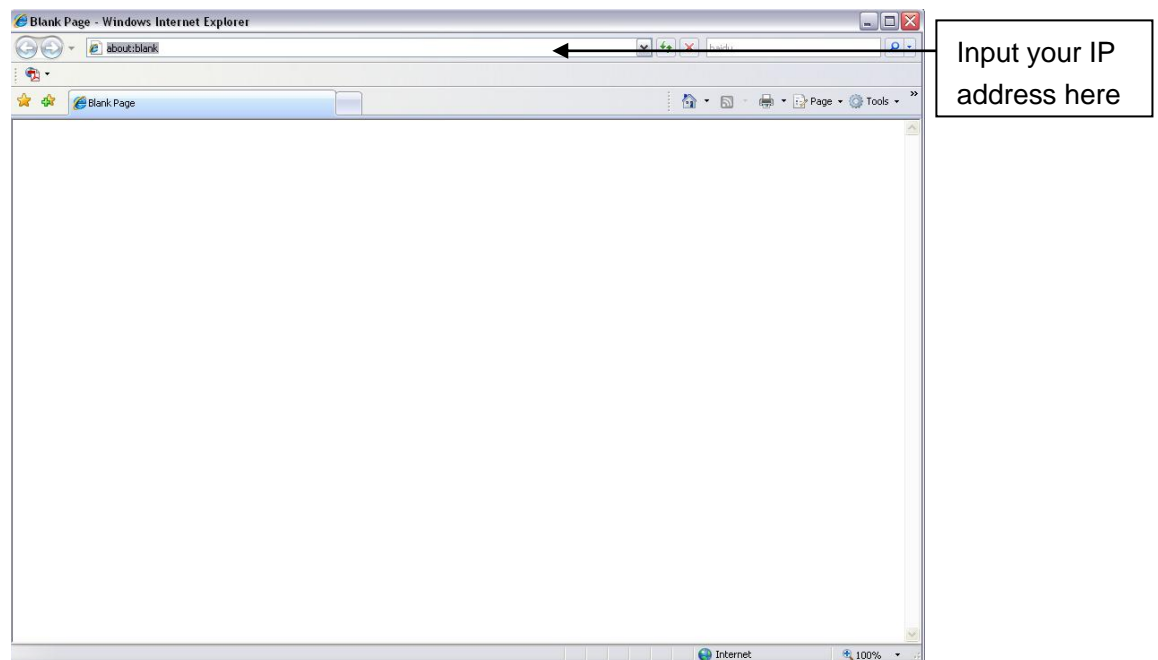


Figure 5- 1 IP address

The login interface is shown as below. See Figure 5- 2.

Please input your user name and password.

Default factory name is admin and password is admin.

Note: For security reasons, please modify your password after you first login.



Figure 5- 2 Web login

If it is your first time to log in, system pops up warning information to ask you whether install web plug-in or not after you logged in for one minute. For detailed plug-in installation, please refer to the Web Operation Manual included in the resource CD.

After you logged in, you can see the main window. See Figure 5- 3.

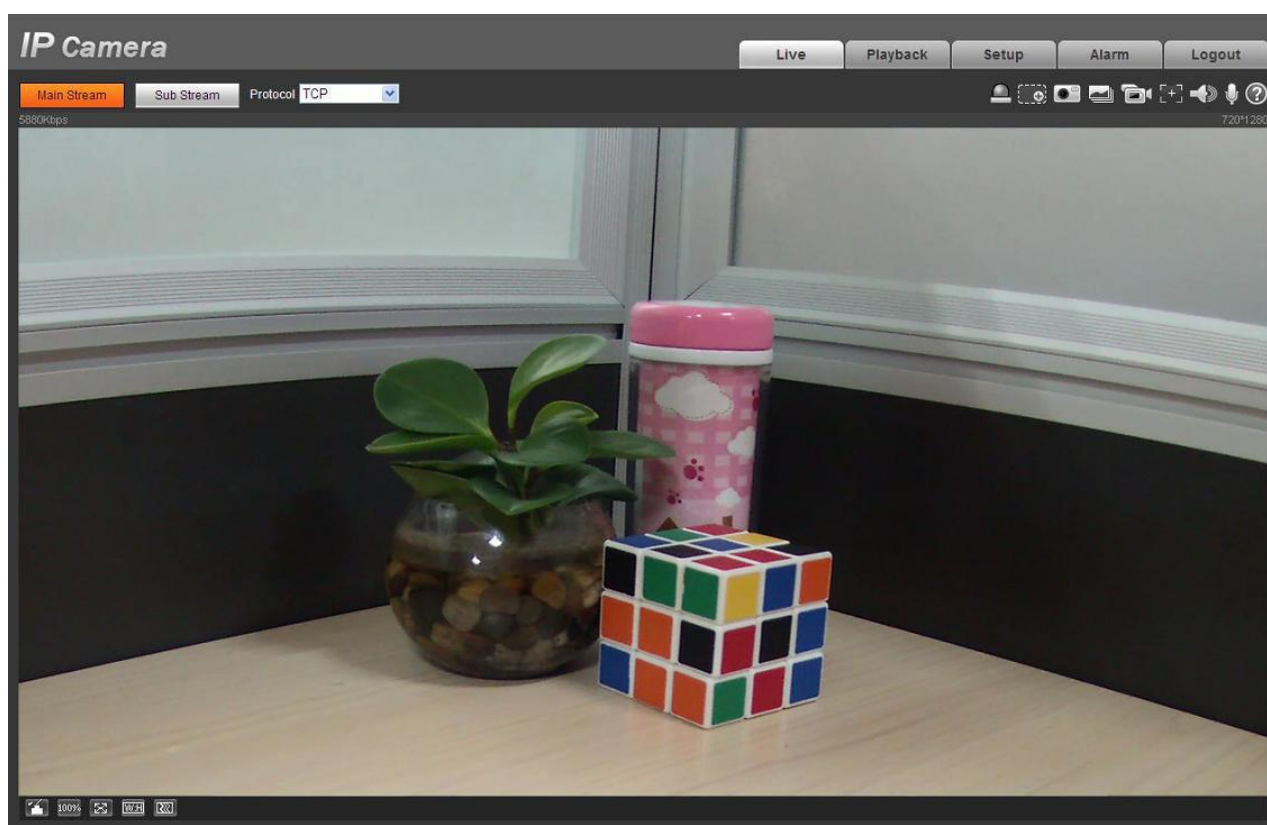


Figure 5- 3 Web monitoring window

Please refer to the Web Operation Manual included in the resource CD for detailed operation instruction.

6 FAQ

Bug	
I can not boot up the device.	Please click RESET button for at least five seconds to restore factory default setup.
Micro SD card write times	Do not set the Micro SD card as the storage media to storage the schedule record file. It may damage the Micro SD card duration.
I can not use the disk as the storage media.	When disk information is shown as hibernation or capacity is 0, please format it first (Via Web).
I can not upgrade the device via network.	When network upgrade operation failed, you can use port 3800 to continue upgrade.
Recommended Micro SD card brand	Kingston 4GB, Kingston 1GB, Kingston 16GB, Transcend 16GB, SanDisk 1G, SanDisk 4G Usually we recommend the 4GB (or higher) high speed card in case the slow speed results in data loss.
Audio function	Please use active device for the audio monitor input, otherwise there is no audio in the client-end.
To guarantee setup update	After you modified the important setup, please reboot the device via the software to make sure the setup has been updated to the storage medium.
Power adapter	The general power adapter can work ranging from 0℃ to 40 ℃.The device may result in unstable power supply when the temperature exceeds the working temperature. Please replace an industry-level power adapter if you are using in the harsh environments.
I can not fix the bracket firmly.	Please use the S3 inner hex wrench to secure the rear bracket firmly. Please use your hands to test the camera is firm or not after the installation.

7 Appendix Toxic or Hazardous Materials or Elements

Component Name	Toxic or Hazardous Materials or Elements					
	Pb	Hg	Cd	Cr VI	PBB	PBDE
Circuit Board Component	○	○	○	○	○	○
Case	○	○	○	○	○	○
Wire and Cable	○	○	○	○	○	○
Packing Components	○	○	○	○	○	○
Accessories	○	○	○	○	○	○

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T11363-2006 standard.

X: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T11363-2006 standard. During the environmental-friendly use period (EFUP) period, the toxic or hazardous substance or elements contained in products will not leak or mutate so that the use of these (substances or elements) will not result in any severe environmental pollution, any bodily injury or damage to any assets. The consumer is not authorized to process such kind of substances or elements, please return to the corresponding local authorities to process according to your local government statutes.

Note

- This user's manual is for reference only. Slight difference may be found in user interface.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website for more information.