Network Camera

User Manual

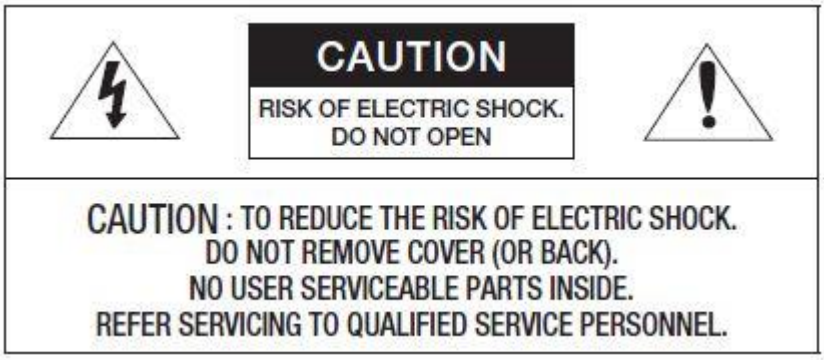
CONTENT

Chapter 1 Warning

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENNINGS ON THE EQUIPMENT.

Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

CAUTION



EXPLANATION OF GRAPHICAL SYMBOLS

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of "dangerous voltage" within the

product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literatureaccompanying the product.

Battery

Batteries(battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

Disconnection Device

Disconnect the main plug from the apparatus, if it's defected. And please call a repair man in your location.

When used outside of the U.S., it may be used HAR code with fittings of an approved agency is employed.

CAUTION

These servicing instructions are for use by qualified service personnel only.
To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

The BNC Out terminal of the product is provided for easier installation, and is not recommended for monitoring purposes.

If you keep the BNC cable connected, a risk of lightening may cause damage or malfunction to the product.

Please use the input power with just one camera and other devices must notbe connected.

Please read the following recommend safety precautions carefully.

- Do not place this apparatus on an uneven surface.
- Do not install on a surface where it is exposed to direct sunlight, near
- heating equipment or heavy cold area.
- Do not place this apparatus near conductive material.
- Do not attempt to service this apparatus yourself.
- Do not place a glass of water on the product.
- Do not install near any magnetic sources.
- Do not block any ventilation openings.
- Do not place heavy items on the product.

User's Manual is a guidance book for how to use the products.
The meaning of the symbols are shown below.

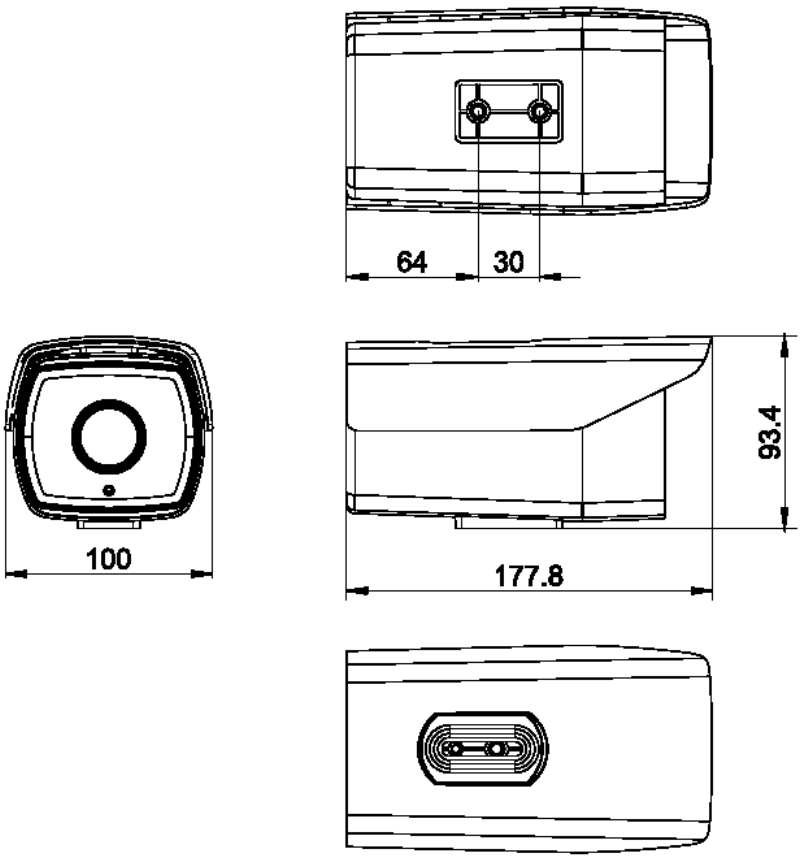
- Reference : In case of providing information for helping of product's usages
- Notice : If there's any possibility to occur any damages for the goods andhuman caused by not following the instruction

Please read this manual for the safety before using of goods and keep it inthe safe place.

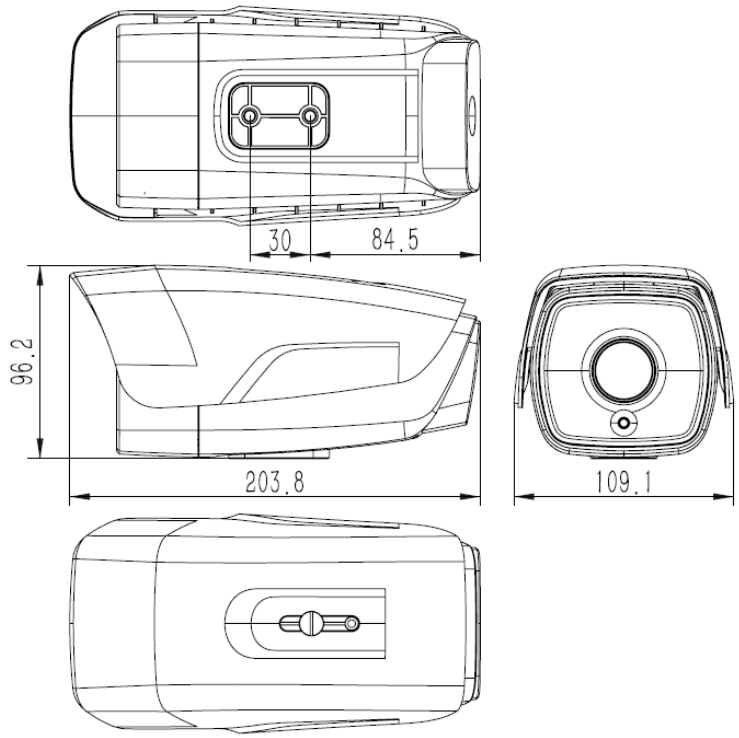
Chapter 2 Product Overview

Default IP address: http://192.168.1.2
Default user name: admin
Default password: 1111

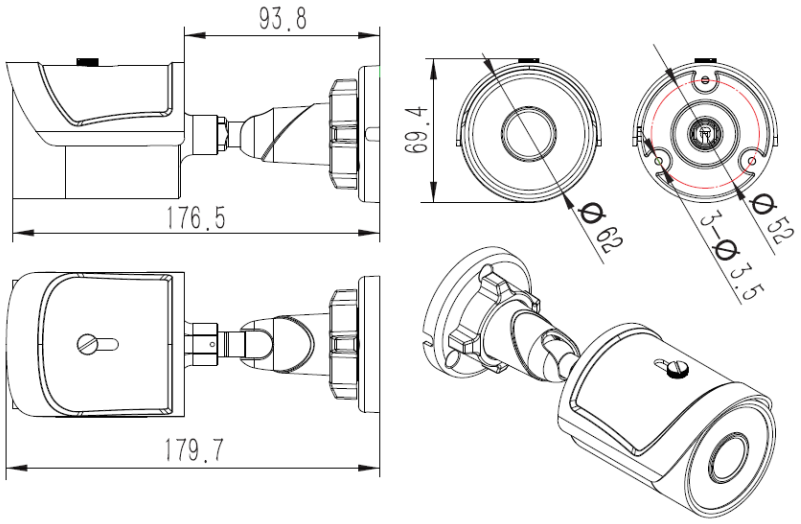
IP IR Bullet Camera



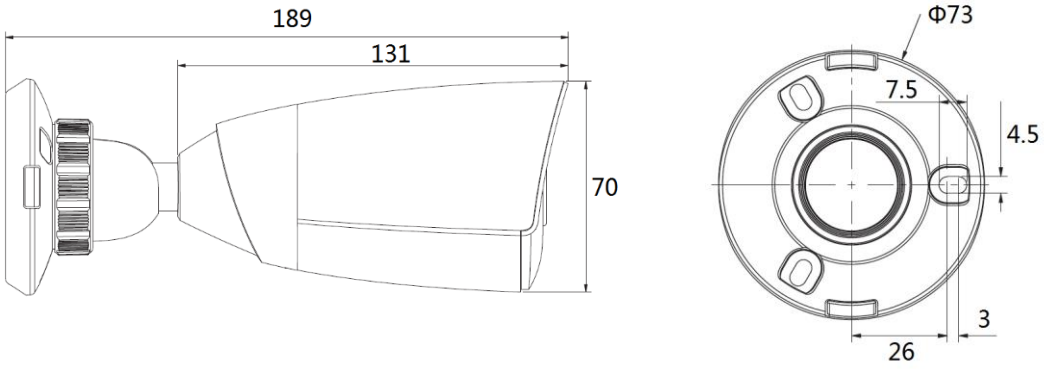
Pic 2.1 Size of IP IR bullet camera



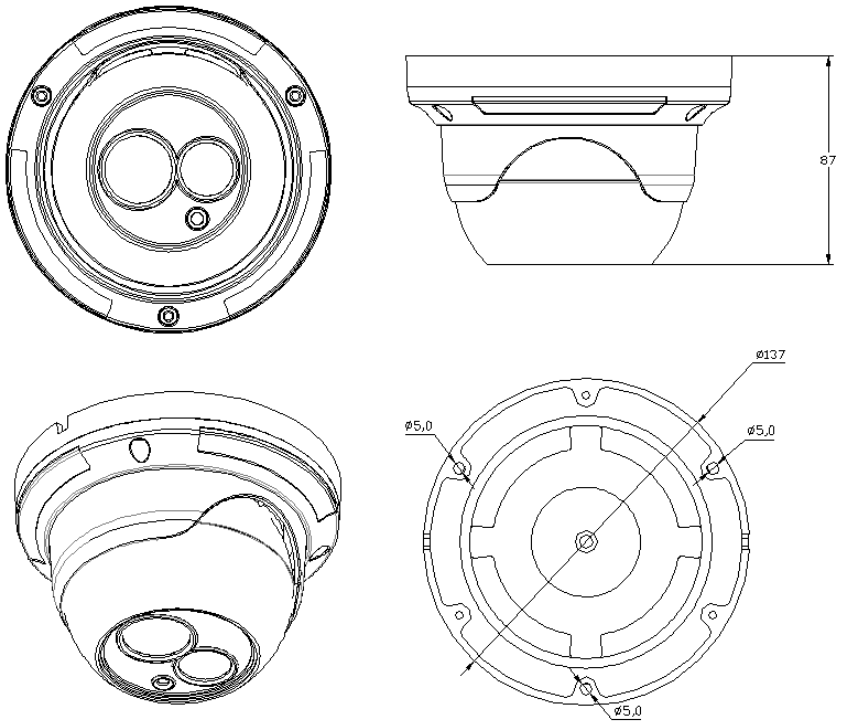
IP Mini Bullet Camera



Pic 2.2 Size of IP Mini bullet camera



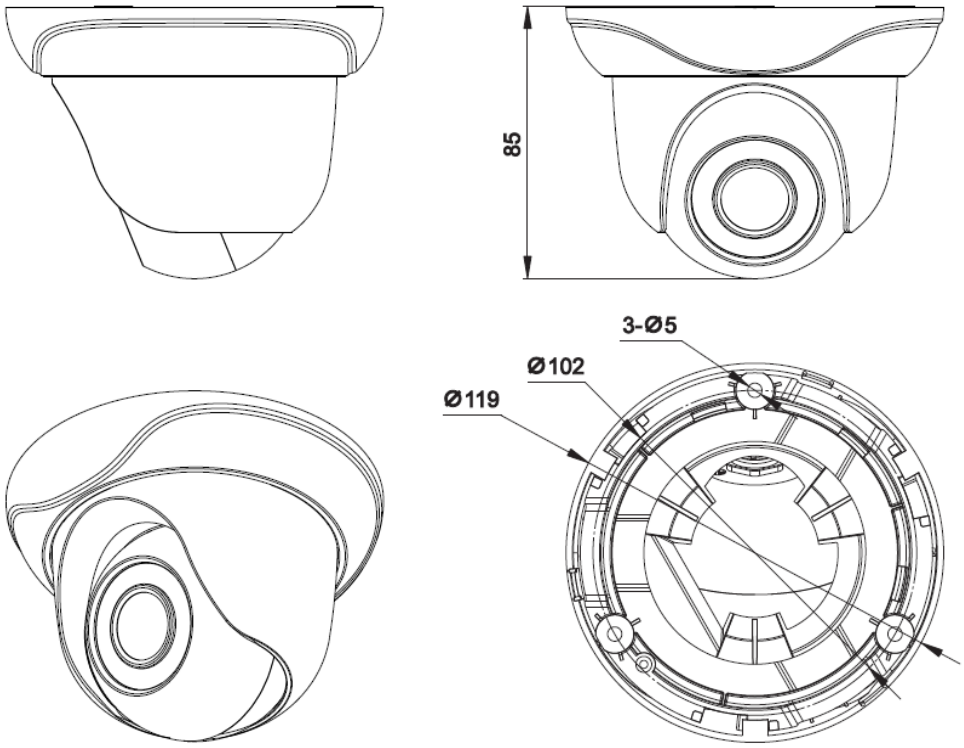
IP IR Dome Camera



Unit:mm

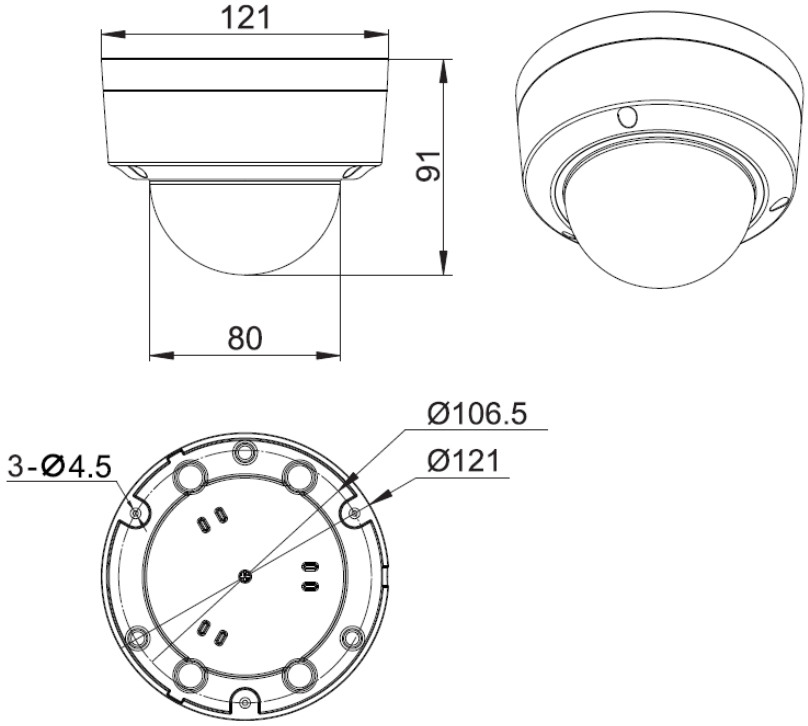
Pic2.3 Size of IP IR dome camera

IP Mini Dome Camera

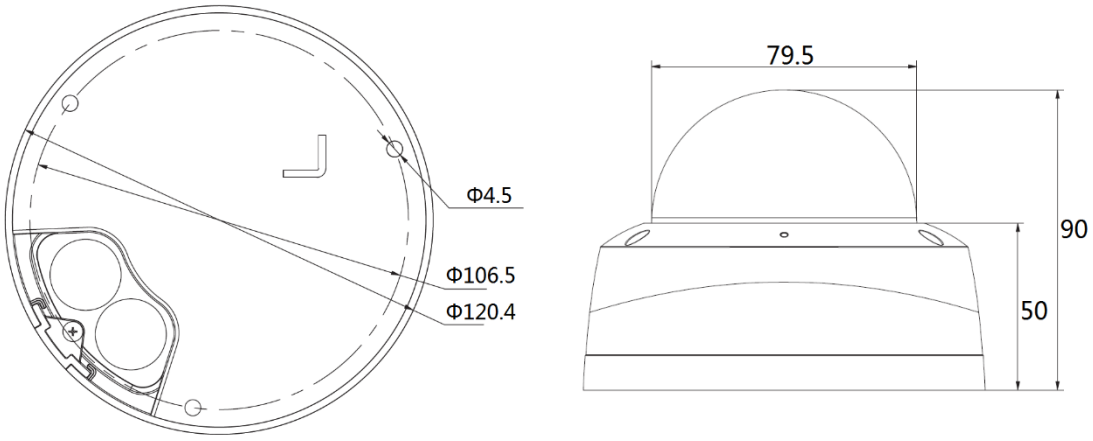


Pic 2.4 Size of IP Mini dome camera

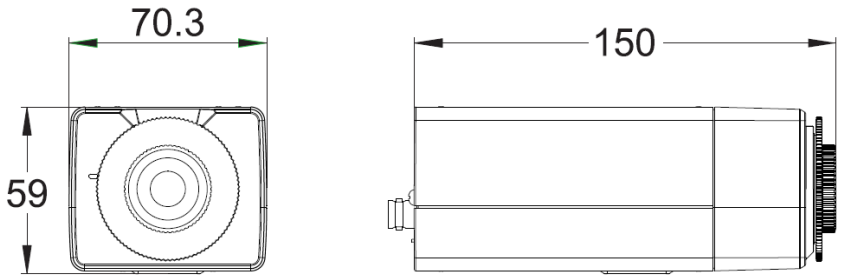
IP Vandal-proof IR Dome Camera



Pic 2.5 Size of IP vandal-proof IR dome camera

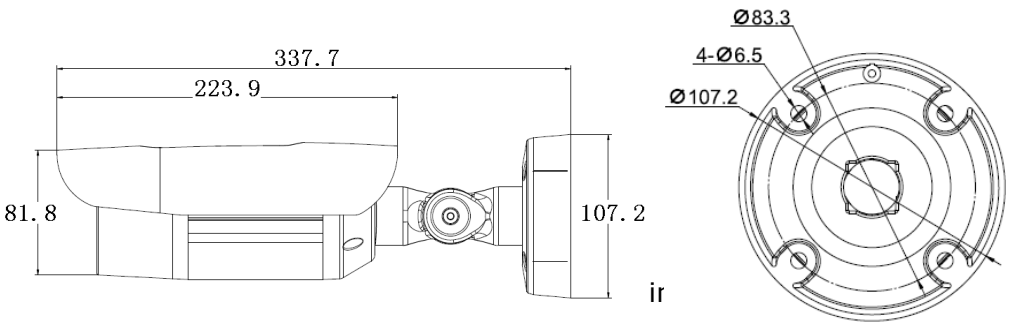


IP Box Camera



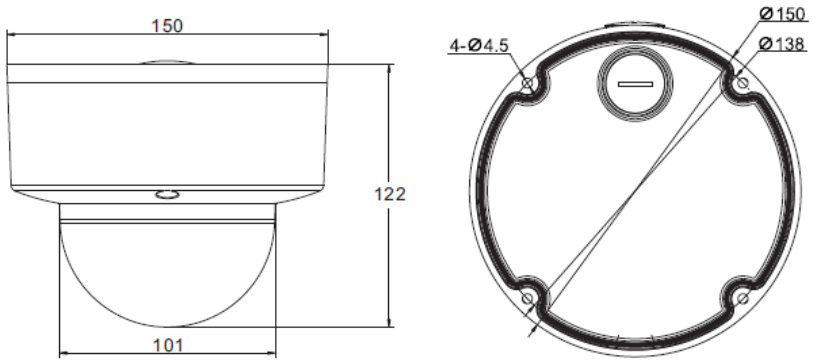
Pic 2.6 Box camera dimension

IP Varifocal Bullet Camera



ir

IP Varifocal Dome Camera



Pic 2.7 Varifocal Dome camera dimension

Chapter 3 Specifications

3.1 Specifications

3.1.1 1.3M&2M Mini Camera Specifications

Item	1.3MP Mini Bullet	1.3MP Mini Dome	2.0MP Mini Bullet	2.0MP Mini Dome
Processor	Processor			
OS	OS			
Video Codec	H.264 HP/MP/BP, M-JPEG			
Audio Codec	G.711/G.726/ADPCM/ACC_LC			
Sensor	1/3 Inch CMOS		1/2.8 Inch CMOS	
Resolution	1280*960		1920*1080	
Frame	PAL:960P@25fps;NTSC: 960P@30fps		PAL:1080P@25fps;NTSC: 1080P@30fps	
WDR	100dB		100dB	
Video Process	NIR Enhancement/HLC/3D NR/BLC/Gamma/Margin Enhancement			
E-shutter	Manual/Auto,1/100k～1s adjustable			
Day/Night	Dual ICR			
Code Range	Video:32K～16M bps, Audio: 8k,32k,48k			
Interface	POE/Audio-in (optional)			
IR Distance	25m～30m	20m～25m	25m～30m	20m～25m
Network	10M/100M			
Network Protocol	TCP/UDP/HTTP/MULTICAST/UPnP/NTP/RTSP/Onvif			
IVA(Intelligent Video Analytics)	Tripwire/Perimeter			
Protection	IP66,4000V TVS and Anti-surging			
Temperature	-30℃～65℃(IR OFF) -30℃～40℃(IR OFF)			
Consumption	6W	5W	6W	5W
Weight	0.5Kg	0.3Kg	0.5Kg	0.3Kg
Power Supply	Excluded in the camera. DC12V(±10%)/PoE			

3.1.2 1.3M&2M Vandal-proof Dome Camera Specifications

Item	1.3MP Vandal-proof Dome	2.0MP Vandal-proof Dome
Processor	ARM9	
OS	Linux	
Video Codec	H.264 HP/MP/BP, M-JPEG	
Audio Codec	G.711/G.726/ADPCM/ACC_LC	
Sensor	1/3 Inch CMOS	1/2.8 Inch CMOS
Resolution	1280*960	1920*1080
Frame	PAL:960P@25fps;NTSC: 960P@25fps	PAL:1080P@25fps;NTSC: 1080P@25fps
WDR	100dB	
Video Process	NIR Enhancement/HLC/3D NR/BLC/Gamma/Margin Enhancement	
E-shutter	Manual/Auto,1/100k～1s adjustable	
Day/Night	Dual ICR	
Code Range	Video:32K～16M bps, Audio: 8k,32k,48k	
Interface	POE/Audio-in (optional)	
IR Distance	25m～30m	
Network	10M/100M	
Network Protocol	TCP/UDP/HTTP/MULTICAST/UPnP/NTP/RTSP/Onvif	
IVA(Intelligent Video Analytics)	Tripwire/Perimeter	
Protection	IP66,4000V TVS and Anti-surging	
Temperature	-30℃～60℃(IR OFF) -30℃～40℃(IR OFF)	
Consumption	6W(IR ON)/3W(IR OFF)	
Weight	0.5Kg	
Power Supply	Excluded in the camera. DC12V(±10%)/PoE	

3.1.3 1.3M&2M Box Camera Specifications

Item	1.3MP Box Camera	2.0MP Box Camera
Processor	ARM9	
OS	Linux	
Video Codec	H.264 HP/MP/BP, M-JPEG	
Audio Codec	G.711/G.726/ADPCM	
Sensor	1/3 Inch CMOS	1/2.8 Inch CMOS
Resolution	1280*960	1920*1080
Frame	PAL:960P@25fps;NTSC: 960P@25fps	PAL:1080P@25fps;NTSC: 1080P@25fps
WDR	100dB	

Video Process	NIR Enhancement/HLC/3D NR/BLC/Gamma/Margin Enhancement
E-shutter	Manual/Auto,1/100k～1s adjustable
Day/Night	Dual ICR
Code Range	Video:32K～16M bps, Audio: 8k,32k,48k
Interface	POE/Audio-in
IR Distance	25m～30m
Network	10M/100M
Network Protocol	TCP/UDP/HTTP/MULTICAST/UPnP/NTP/RTSP/Onvif
IVA(Intelligent Video Analytics)	Tripwire/Perimeter
Protection	IP66,4000V TVS and Anti-surge
Temperature	-35℃～65℃
Consumption	4W
Weight	0.5Kg
Power Supply	AC24V/DC12V(±10%)/PoE

3.1.4 2M Varifocal Camera Specifications

Item	2.0MP VF Bullet Camera	2.0MP VF Dome Camera
Processor	ARM9	
OS	Linux	
Video Codec	H.264 HP/MP/BP, M-JPEG	
Audio Codec	G.711/G.726/ADPCM	
Sensor	1/2.8 Inch CMOS	1/2.8 Inch CMOS
Resolution	1920*1080	1920*1080
Frame	PAL:1080P@25fps;NTSC: 1080P@25fps	PAL:1080P@25fps;NTSC: 1080P@25fps
WDR	100dB	
Video Process	NIR Enhancement/HLC/3D NR/BLC/Gamma/Margin Enhancement	
E-shutter	Manual/Auto,1/100k～1s adjustable	
Day/Night	Dual ICR	
Code Range	Video:32K～16M bps, Audio: 8k,32k,48k	
Interface	POE/Audio-in	
IR Distance	25m～30m	
Network	10M/100M	
Network Protocol	TCP/UDP/HTTP/MULTICAST/UPnP/NTP/RTSP/Onvif	
IVA(Intelligent Video Analytics)	Tripwire/Perimeter	
Protection	IP66,4000V TVS and Anti-surge	
Temperature	-35℃～65℃	

Consumption	8.5W(IR On),7W(IR Off)
Weight	1Kg
Power Supply	DC12V(±10%)/PoE

3.1.5 3M Camera Specifications

Item	3MP Box Camera	3MP VF Dome Camera	3MP VF Bullet Camera
Processor	Cortex A7		
OS	Embedded Linux OS		
Video Codec	H.265/H264/M-JPEG		
Audio Codec	G.711/G.726/ADPCM/AAC		
Sensor	1/2.8" SONY Exmor CMOS		
Resolution	2048x1536		
Frame	Pal 2048x1536@25fps/1920x1080@50fps NTSC 2048x1536@30fps/1920x1080@60fps		
WDR	120dB		
Video Process	3D DNR/NIR Enhancement/HLC/BLC/De-interlace/Margin Enhancement/Gamma		
E-shutter	Auto/Manual,1/10000～1s		
Day/Night	Dual ICR		
Code Rate	Video rate,32K～16M bps. Audio rate,8k/32k/48k		
Audio-in	Support, built-in Mic	Support, built-in Mic	Support
Audio-out	Support	Support	Support
Alarm-in	2ch in and 1ch Sync-switch	2ch	2ch
Relay-out	1ch	1ch	1ch
Analog Video	Y	Y	Y
RS485	Y	Y	Y
RS232	Y	--	--
USB	--	Y	Y
MicroSD	Y	Y	Y
IR Range	--	20-30 meter	20-30 meter
Dual Light	--	--	-W model support
Lens Interface	DC/Piris, C/CS	DC, motorized lens 2.8-12mm	DC, motorized lens 2.8-12mm
Ethernet	10M/100M/1000M		
Network Protocol	ONVIF/TCP/IP/ICMP/HTTP/HTTPS/FTP/DHCP/DNS/DDNS/RTP/RTSP/RTCP/ PPPoE/NTP/UPnP/SMTP/SNMP/IGMP/802.1X/QoS/IPv6/Bonjour		
IVA (Intelligent Video Analytics)	Tripwire/Perimeter/Facial detection/People Counting/ Missing&Foreign Object/Crowd/Loitering/Fast Moving/Parking/Off-position/Blurred Image/Audio Offline/Screaming Detection		
Protection	TVS 6000V/Anti-surging		

IP	Indoor	IP 66	IP 67
/Working Temperature	-35℃～40℃	-35℃～65℃(IR ON) -35℃～40℃(IR OFF)	-35℃～65℃(IR ON) -35℃～40℃(IR OFF)
Power Consumption	5.0W	8W	10W
Weight	0.5Kg	1Kg	1Kg
Power Supply	PoE/DC12V(±10%)/AC24V(±25%)		

3.1.6 4M Camera Specifications

Item	4MP Mini Bullet Camera	4MP Vandal-proof Dome Camera
Processor	ARM9	
OS	Linux	
Video Codec	H.265,H.264 HP/MP/BP, M-JPEG	
Audio Codec	G.711/G.726/ADPCM/ACC_LC	
Sensor	1/3 Inch CMOS	
Resolution	1440P (2560×1440)	
Frame	PAL: 1440P@25fps, QXGA@25fps ; NTSC: 1440P@25fps, QXGA@30fps	
WDR	100dB	
Video Process	NIR Enhancement/HLC/3D NR/BLC/Gamma/Margin Enhancement	
E-shutter	Manual/Auto,1/100k～1s adjustable	
Day/Night	Dual ICR	
Code Range	Video:32K～16M bps, Audio: 8k,32k,48k	
Interface	POE/MicroSD card/Reset button /Audio-in(Vandal-proof Dome Camera)	
IR Distance	20m～30m	
Network	10M/100M	
Network Protocol	TCP/UDP/HTTP/MULTICAST/UPnP/NTP/RTSP/Onvif	
IVA(Intelligent Video Analytics)	Tripwire/Perimeter/Facial detection/People Counting/ Missing&Foreign Object/Crowd/Loitering/Fast Moving/Parking/Off-position/Blurred Image/Audio Offline/Screaming Detection	
Protection	IP67(Bullet)/IP66(Dome),4000V TVS and Anti-surging	
Temperature	-30℃～60℃(IR OFF) -30℃～40℃(IR OFF)	
Consumption	8W	
Weight	0.4Kg	0.6Kg
Power Supply	Excluded in the camera. DC12V(±10%)/PoE	

3.1.7 5M Camera Specifications

Item	5MP Box Camera	5MP VF Dome Camera	5MP VF Bullet Camera
Processor	Cortex A7		
OS	Embedded Linux OS		
Video Codec	H.265/H264/M-JPEG		
Audio Codec	G.711/G.726/ADPCM/AAC		
Sensor	1/2.8" SONY Exmor CMOS		
Resolution	2592×1952		
Frame	Pal 2048x1536@25fps/1920x1080@50fps NTSC 2048x1536@30fps/1920x1080@60fps		
WDR	120dB		
Video Process	3D DNR/NIR Enhancement/HLC/BLC/De-interlace/Margin Enhancement/Gamma		
E-shutter	Auto/Manual,1/10000～1s		
Day/Night	Dual ICR		
Code Rate	Video rate,32K～16M bps. Audio rate,8k/32k/48k		
Audio-in	Support, built-in Mic	Support, built-in Mic	Support
Audio-out	Support	Support	Support
Alarm-in	2ch in and 1ch Sync-switch	2ch	2ch
Relay-out	1ch	1ch	1ch
Analog Video	Y	Y	Y
RS485	Y	Y	Y
RS232	Y	--	--
USB	--	Y	Y
MicroSD	Y	Y	Y
IR Range	--	20-30 meter	20-30 meter
Dual Light	--	--	-W model support
Lens Interface	DC/Piris, C/CS	DC, motorized lens 2.8-12mm	DC, motorized lens 2.8-12mm
Ethernet	10M/100M/1000M		
Network Protocol	ONVIF/TCP/IP/ICMP/HTTP/HTTPS/FTP/DHCP/DNS/DDNS/RTP/RTSP/RTCP/ PPPoE/NTP/UPnP/SMTP/SNMP/IGMP/802.1X/QoS/IPv6/Bonjour		
IVA (Intelligent Video Analytics)	Tripwire/Perimeter/Facial detection/People Counting/ Missing&Foreign Object/Crowd/Loitering/Fast Moving/Parking/Off-position/Blurred Image/Audio Offline/Screaming Detection		
Protection	TVS 6000V/Anti-surging		
IP	Indoor	IP 66	IP 67
/Working Temperature	-35℃～40℃	-35℃～65℃(IR ON) -35℃～40℃(IR OFF)	-35℃～65℃(IR ON) -35℃～40℃(IR OFF)
Power	5.0W	8W	10W

Consumption			
Weight	0.5Kg	1Kg	1Kg
Power Supply	PoE/DC12V(±10%)/AC24V(±25%)		

3.1.8 1.3M Starlight Camera Specifications

Item	1.3MP Starlight Box Camera	1.3MP Starlight Dome Camera			1.3MP Starlight Mini Bullet Camera
		Standard	Vandal-proof	Mini	
Processor	ARM9 Architecture				
OS	Embedded Linux OS				
Video Codec	H264/M-JPEG				
Audio Codec	G.711/G.726 /ADPCM				
Sensor	1/3" Sony CMOS sensor				
Resolution	1280x960				
Frame	50Hz: 25fps (1280x960), 25fps (1280 × 720) 60Hz: 30fps (1280x960), 30fps (1280 × 720)				
WDR	100dB				
Video Process	NIR, WDR, 3D DNR, BLC,HLC, Dual-ICR				
E-shutter	1/10000～1s				
Day/Night	Dual IR Cut Filter with Auto Switch				
Code Rate	Video rate,32K～16M bps (64K ～8Mbps for two models: TC-NC9500S3E-MP-E-I & TC-NC9400S3E-MP-E-I). Audio rate,8k-48k				
Browser	IE 7+, Chrome 18 +, Firefox 5.0 +				
Mobile	P2P (IOS/Android)				
Video Analytics	Tripwire/Perimeter(Available on 720P)				
Alarm Trigger	Motion Detection/IP Conflict/MAC Conflict				
Protocols	TCP/UDP/HTTP/MULTICAST/UPnP/DHCP/PPPoE/DDNS/NFS/FTP/NTP/ RTP/RTSP/IPv6/SNMP/SMTP/802.1X/QoS/				
User Permission	4 Level/8 Users				
Remote Connection	2-ch Access				
NTP	Y				
System Compatibility	ONVIF (Profile S), SDK				
Audio-in	1ch	1ch	1ch	---	---
Audio-out	1ch	1ch	---	---	---
Alarm-in	1ch	1ch	---	---	---
USB	1X USB2.0	1X USB2.0	---	---	---

IR Range	30-50m/80m-	20-30m	20-30m	15-20m	15-25m
Lens options	4mm/6mm/8mm/12mm	2.8mm/4mm/6mm	2.8mm/4mm/6mm	2.8mm/4mm	4mm/6mm
Ethernet	1-ch RJ45 10M / 100M Ethernet Interface				
Network Protocol	TCP/IP/ICMP/HTTP/HTTPS/FTP/DHCP/DNS/DDNS/RTP/RTSP/RTCP/PP PoE/NTP/UPnP/SMTP/SNMP/IGMP/802.1X/QoS/IPv6/Bonjour				
Protection	TVS 6000V Protection, IP67	TVS 6000V Protection, IP66	TVS 6000V Protection, IP66, IK10	TVS 6000V Protection, IP66	TVS 6000V Protection, IP66
/Working Temperature	-35 ℃～65℃(IR OFF) /-35 ℃～40℃(IR ON), 0 ～95% RHG				
Power Consumption	Max. 3W(IR OFF) (ICR Instant Switch 8W) Max. 6W(IR ON)	Max. 3W(IR OFF) (ICR Instant Switch 7W) Max. 5W(IR ON)	Max. 3W(IR OFF) (ICR Instant Switch 7W) Max. 5W(IR ON)	Max. 3W(IR OFF) (ICR Instant Switch 7W) Max. 5W(IR ON)	Max. 3.5W(IR OFF) (ICR Instant Switch 7.5W) Max. 5.5W(IR ON)
Weight	0.6Kg	0.6Kg	0.6Kg	0.3Kg	0.4Kg
Power Supply	DC12V(±10%)/ POE (802.3af)				

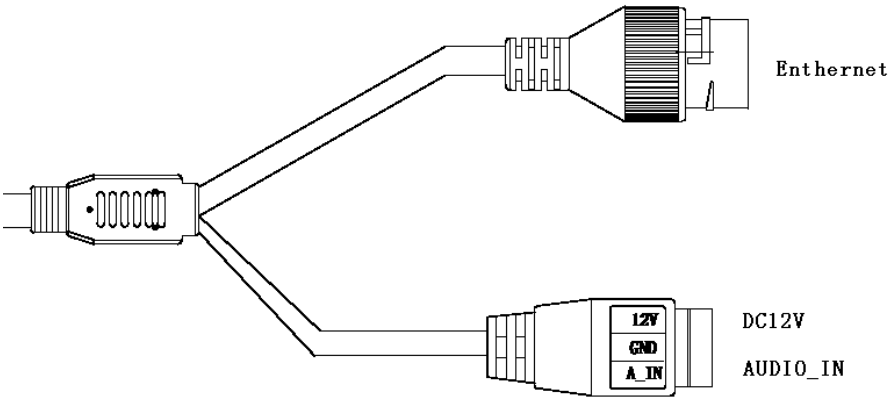
3.1.9 2M Starlight Camera Specifications

Item	2MP Bullet Camera (80m IR)	2MP Bullet Camera (50m IR)	2MP Dome Camera (30m IR)	2MP Bullet Camera (50m IR lite)	2MP Dome Camera (30m IR lite)	2MP Mini Bullet Camera	2MP Mini Dome Camera	2MP Mini Vandalproof Dome
Process	ARM9 Architecture							
OS	Embedded Linux OS							
Video Codec	H.265/H264/M-JPEG							
Audio Codec	G.711/G.726/ADPCM/AAC							
Sensor	1/2.8” SONY Exmor CMOS							
Resolution	1920×1080							
Frame	Pal 50Hz: 25fps (1920 × 1080), 25fps (1280 × 720) NTSC 60Hz: 30fps (1920 × 1080), 30fps (1280 × 720)							
WDR	100dB							
Video Process	3D DNR/NIR Enhancement/HLC/BLC/De-interlace/Margin Enhancement/Gamma							
E-shutter	Auto/Manual,1/100000～1s							

Day/Night	Dual ICR							
Code Rate	Video rate,32K～16M bps. Audio rate,8k～48k							
Audio-in	1-ch			--		--	1-ch	
Audio-out	1-ch			--				
Alarm-in	1-ch			--				
Relay-out	--							
USB	Y			N/A		--		
MicroSD	Y							
IR Range	80m	30-50m	30-50m	50m	20-30m	15-25m	20-30m	15-20m
Lens Interface	16mm	4/6/8/12 mm	2.8/4/6 mm	4/6/8/12 mm	2.8/4/6 mm	4/6mm	2.8/4/6 mm	2.8/4 mm
Ethernet	10M/100M/1000M							
Network Protocol	ONVIF/TCP/IP/ICMP/HTTP/HTTPS/FTP/DHCP/DNS/DDNS/RTP/RTSP/RTCP/ PPPoE/NTP/UPnP/SMTP/SNMP/IGMP/802.1X/QoS/IPv6/Bonjour							
IVA	Tripwire/Perimeter							
Protection	TVS 6000V, Lightning/Surge Protection: (Power 2000V, RJ45 1000V)							
IP	IP 67		IP66	IP 67	IP66			
/Working Temperature	-30℃～60℃(IR OFF) /-30℃～40℃(IR ON)							
Power Consumption	3w	3W				6W	3W	5W
Weight	1.2Kg	0.6Kg				0.6Kg	0.6Kg	0.6Kg
Power Supply	PoE/DC12V(±10%)							

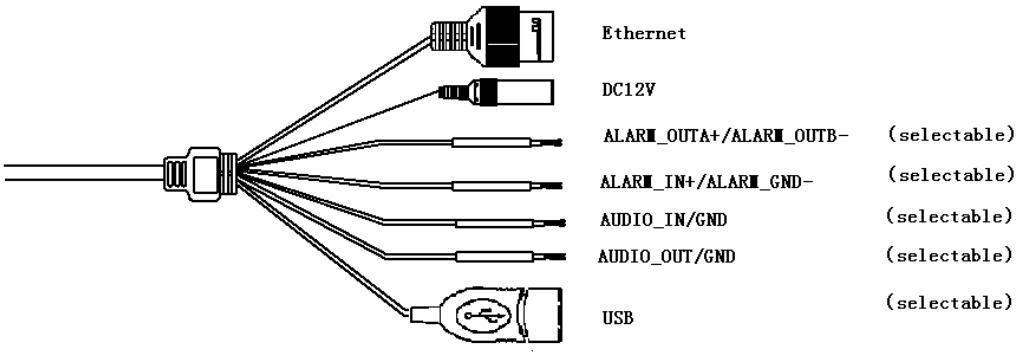
3.2 Hardware Interface

3.2.1 Fixed Camera Interfaces



Pic 3.2.1 Type-I interface

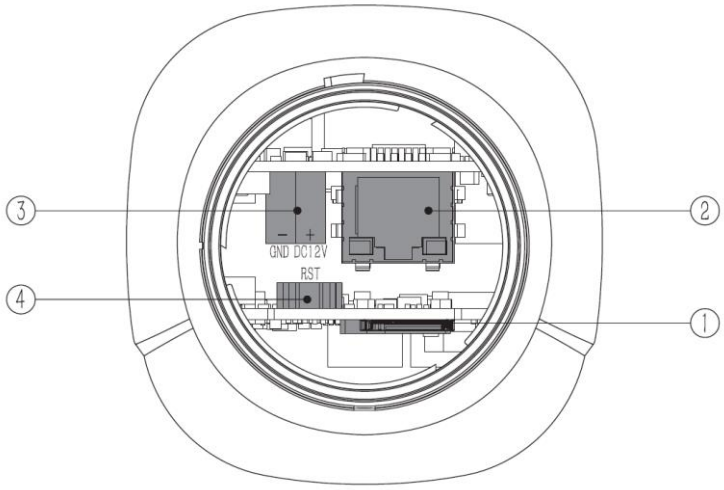
Type	Function	Name	Description
Common	Power	DC12V	DC12V±10%
	Ethernet	ETHERNET	10M/100M,RJ45
Audio	Input	A_IN	Line-in, GND is common por, and voltage input ≤1V;

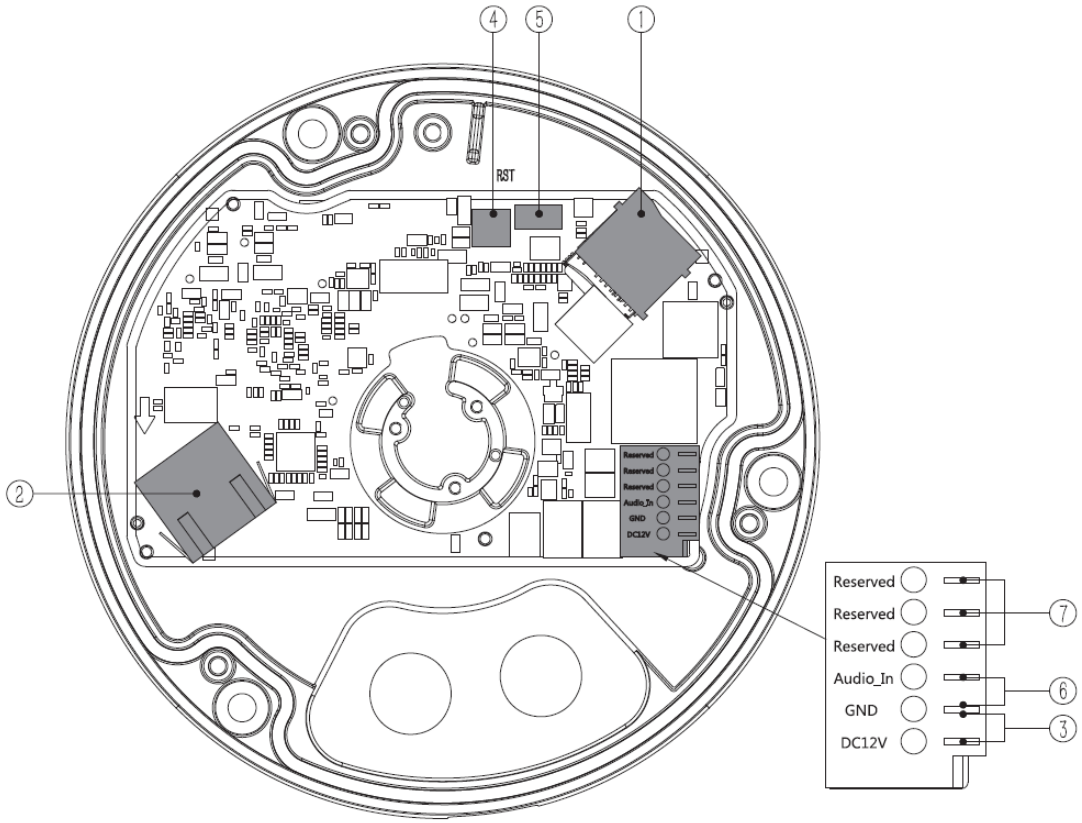


Pic 3.2.2 Type-II interface

Type	Function	Name	Description
Common	Power	DC12V	DC12V±10%
	Ethernet	ETHERNET	10M/100M,RJ45

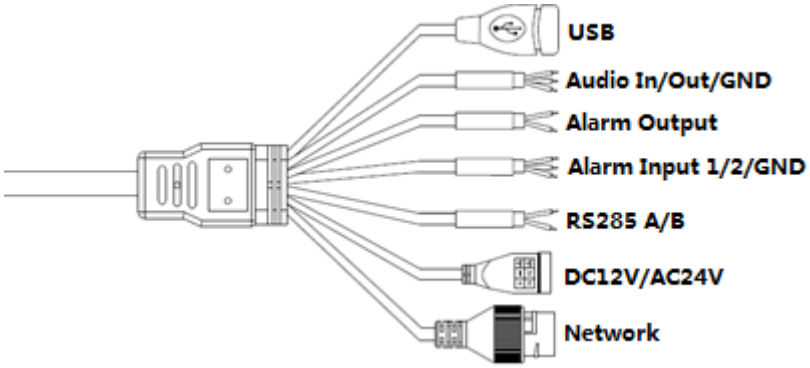
Extension	Audio	A_IN	Line-in, GND is common port, and voltage input ≤ 1V;
		AUDIO_OUT	Line-in, GND is common port, Using with active speaker (optional)
	Alarm	ALARM_IN	Discrete input, GND is common port (optional)
		ALARM_OUT	Discrete output, GND is common port (optional)
	Control	RS-485	A is 485(+), B is 485(-) (optional)
Storage	Support	USB	Up to 64G (suggest 32G but no less than 8G)



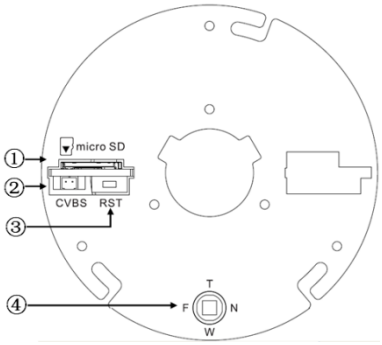


Order	Name	Description
①	micro SD slot	You'd better use micro SD card larger than 8GB. Cut the power before operate it.
②	Internet interface	10M/100M,RJ45
③	Power interface	DC12V±10%
④	Hardware reset	Press it for 5 second. This operation will de1ete all your personal data, and reset all settings to the manufacturer default settings.
⑤	MIC interface	Connect the microphone.
⑥	Audio in	Line-in, GND is common port, and voltage input ≤ 1V;
⑦	Obligate interface	For obligate function

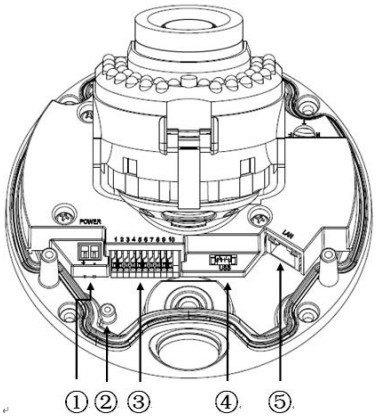
3.2.2 Varifocal Camera Interfaces

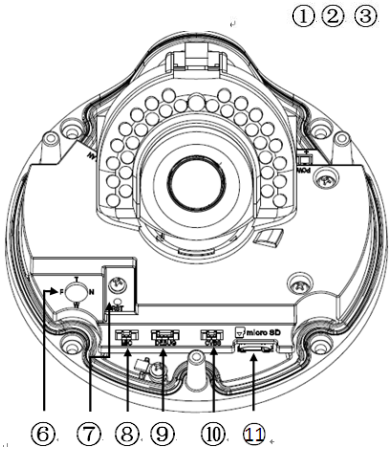


Pic 3.2.4 Varifocal Bullet Camera Cable



① Micro SD Card Slot
② BNC Output
③ Reset Button
④ Onekey Focus Button (3mp motorized camera support)



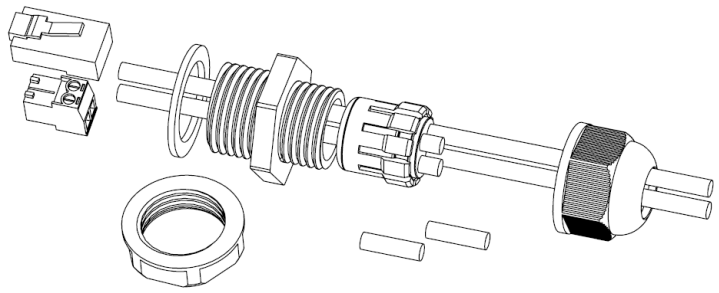


Pic 3.2.5 Varifocal Dome Camera Interface

① Power:DC12V 和 AC24V
② GND
③ Alarm

④ USB Port(GND/D+/D-/5V)
⑤ Network Interface RJ45
⑥ Onekey Focus Button for motorized model
⑦ Reset Button
⑧ Mic
⑨ Debug Port
⑩ BNC Output
⑪ MicroSD Card Slot

Note: Only available for embedded interface models



Pic 3.2.6 Waterproof Cap

Note: waterproof cap has 4 holes, each hole support cable with 3~5mm diameter. Use chock plug to cover the hole that has no cable input.

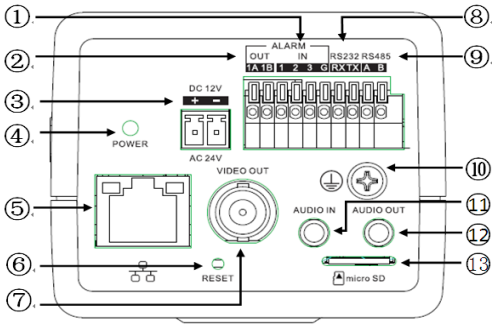
Interface:

Type	Name	Description
System Port	POWER	DC12V(±10%),AC24V(±25%),POE
	ETHERNET	10M/100M/1000M,RJ45 port
	RESET	Press for 5 seconds to reset to factory default
	DEBUG	For technical specialist to check and fix bug
	LENS	Control DC/P-Iris Lens
Audio& Video Port	VIDEO OUT /CVBS	75Ωp-p analog signal
	AUDIO IN	Mic in/Line in
	AUDIO OUT	Audio Output
Alarm	ALARM IN	G is common port; 1&2 are alarm input ports,3 is alarm switch port, connect/disconnect to G to control camera Day/Night switch.
	ALARM OUT	1A/1B,signal relay output port

Storage	Micro SD	Support up to 64G (operate after power off)
	USB	Support extended storage(max 64G) or Wifi module
Extension	RS485A/B	485 communication
	Lens:T/W/F/N	Motorized Lens control: T- zoom in/W-zoom out/F-focus far/N-focus near Press to auto-focus (motorized model supported)

3.2.3 IP Box Camera

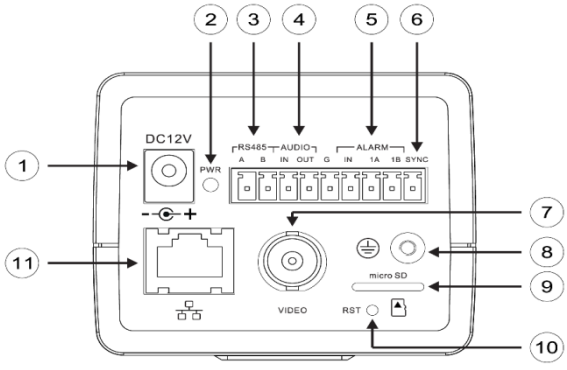
3.2.3.1 I-type Box Camera



Pic 3.2.7 I-type box camera

① 1&2 alarm input, 3 is alarm switch port
② Alarm Output
③ Power Port, DC12V and AC24V
④ Power Indicator
⑤ Ethernet Port
⑥ Reset Button
⑦ BNC Output
⑧ RS232 Port
⑨ RS485 Port
⑩ GND
⑪ MicroSD card slot
⑫

3.2.3.2 II-type Box Camera



Pic 3.2.8 II-type box camera

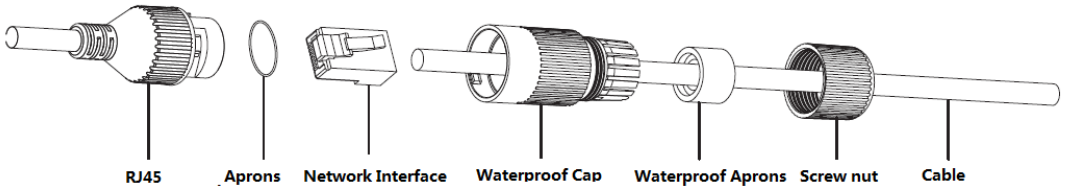
① Power Port, DC12V
② Power Indicator
③ RS485
④ Audio Port
⑤ Alarm Port, IN is alarm input, 1A and 1B are alarm output
⑥ Alarm Switch Port
⑦ Analogue Video Port
⑧ GND
⑨ MicroSD card slot
⑩ Reset Button
⑪ Ethernet Port

Interface:

Type	Function	Description
System	POWER	DC12V(±10%),AC24V(±25%),POE
	ETHERNET	10M/100M/1000M,RJ45 port
	RESER	Press for 5 seconds to reset to factory default
Audio& Video Port	VIDEO OUT /CVBS	75Ωp-p analog signal
	AUDIO IN	Mic in/Line in
	AUDIO OUT	Audio Output
Alarm	ALARM IN	I-type:G is common port; 1&2 are alarm input ports,3 is alarm switch port, connect/disconnect to G to control camera Day/Night switch. II-type:G is common port; IN is alarm input, SYNC is switch port, connect/disconnect to G to control camera Day/Night switch.
	ALARM OUT	1A/1B,signal relay output port
Storage	Micro SD	Support up to 64G (operate after power off)
Extension	RS485A/B	485 communication
	RS232:RX/TX/G	RX-receive port/TX-transmit port/G-GND

The product is designed as a waterproof camera. It need to do the following steps to make it waterproof. According to Pic 3.2.3 to avoid leakage at the ethernet port, and power port need to be wrapped firmly by the tape in case that it would take

risk of short circuit.



Pic 3.2.3 Ethernet port waterproof instruction

3.3 Common Functions

3.3.1 Upgrade

New kernel firmware is helpful for a more stable and better system and make it more applicable for updated and different situations.
And new built-in WEB firmware can adjust the web page to make it more user friendly.

How to upgrade the firmware

Steps	Description
1	Ensure PC and Camera in the same network segment.
2	Enter IP address and login WEB page of camera.
3	Find the official firmware, and select kernel firmware (*.bin) to start upgrading. **Notice**: Kernel firmware need to be updated TWICE.
4	Select WEB firmware (*.box) to update WEB page. The camera will reboot after upgrading.
5	Login in the camera and check version information page if it is upgraded successfully.

Chapter 4 Installation Instruction

4.1 Installation Preparation

1. Preparation

All electrical work must comply with the latest electrical codes, fire regulations and relevant laws and regulations;According to the packing list check if all accessories are in the package and determine the location of the high speed dome camera and installation applications are consistent with the requirements; if not match, please contact your dealer. Please follow the work environment requires the use of the product. Depending on the circumstances actually required to prepare your own tools.

2. Necessary Tools:

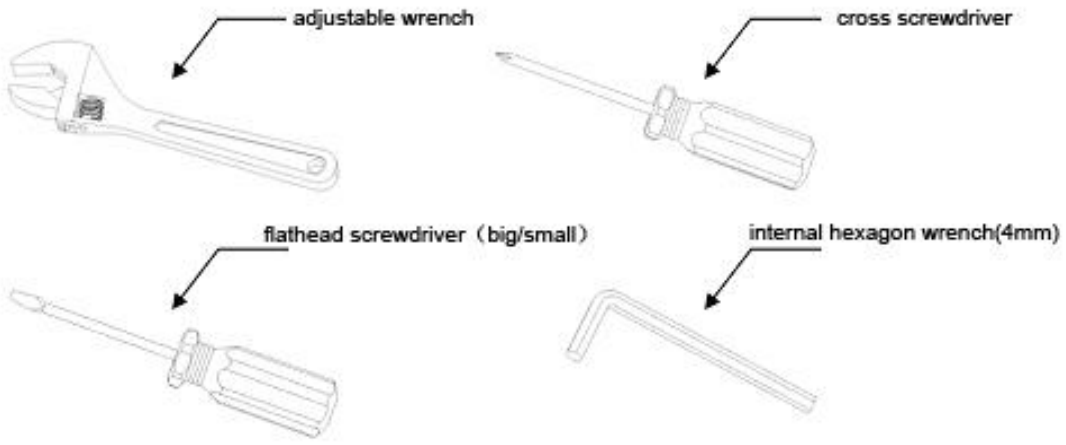


Fig 4.1.1Tools

3. Check the installation location space and intensity

Please make sure the location has sufficient space and intensity to install. The ceiling, wall or bracket must be able to bear 4 times the weight of the IP camera itself.

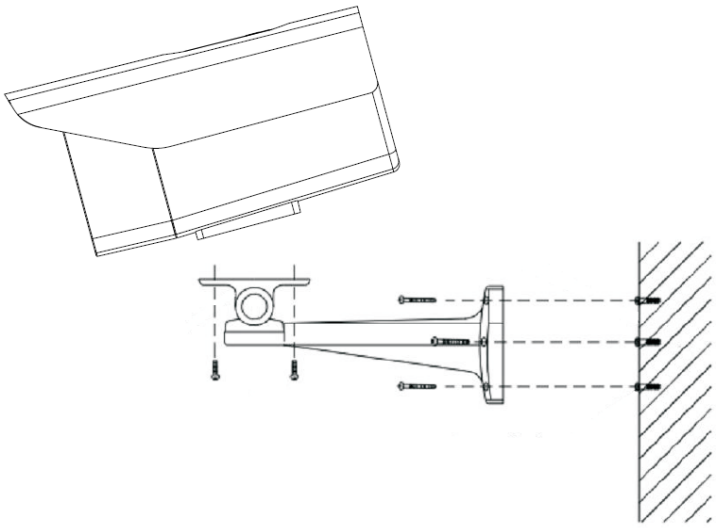
4. Please save all packaging material

Please well keep the original packing materials, in order to send back if any problem.

★ Notice: Non-original packing material may result in accidental damage in transit.

4.2 Installation Instruction

4.2.1 IP IR Bullet Camera

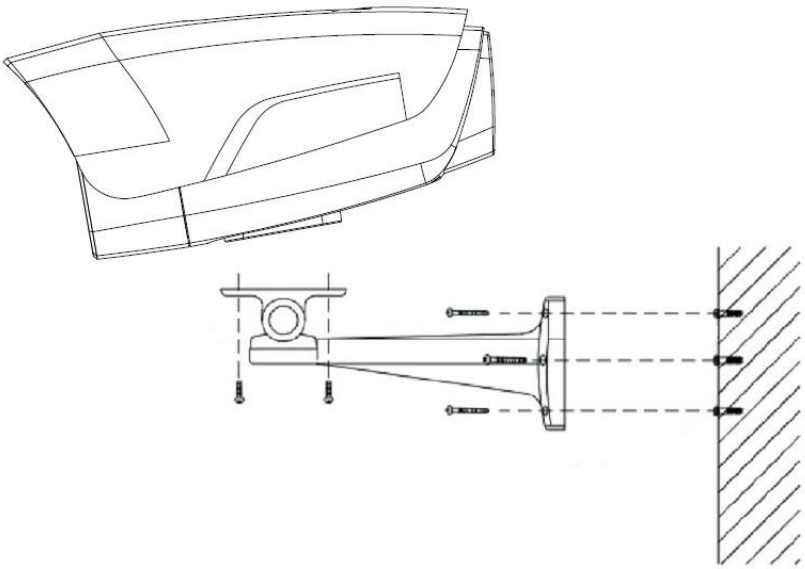


Pic 4.2.1 IP IR bullet camera installation

Steps

1. Mark the installation holes in the wall by market pen.
2. Drill holes in marked points.
3. Plug the expansion bolts into the holes.
4. Screw the bracket fastened to the wall.
5. Fix two nut screws aligned camera position and rotate tight. Adjust bracket gimbals to appropriate location.
6. Tear off the film on the front cap.

Note: Bracket need to be purchased separately. The surface to install camera should be strong enough to bear camera.

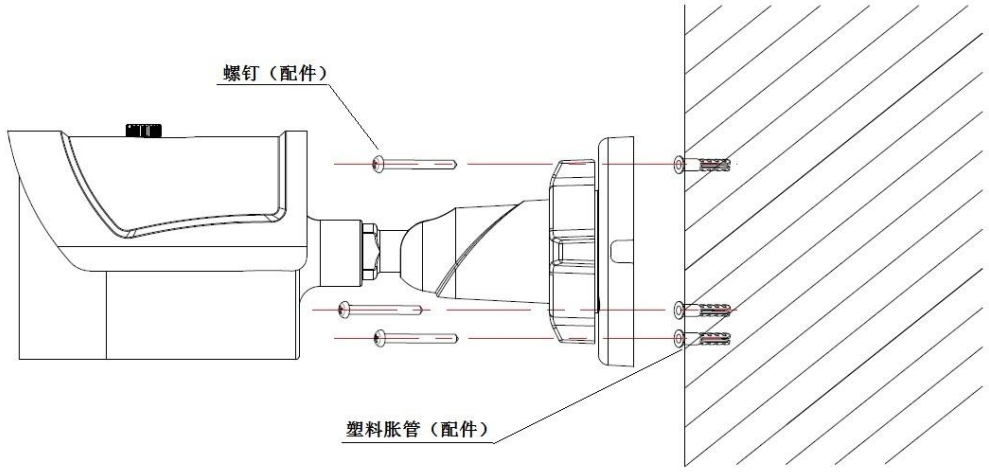


Steps

1. Mark the installation holes in the wall by market pen.
2. Drill holes in marked points.
3. Plug the expansion bolts into the holes.
4. Screw the bracket fastened to the wall.
5. Fix two nut screws aligned camera position and rotate tight. Adjust bracket gimbals to appropriate location.
6. Tear off the film on the front cap.

Note: Bracket need to be purchased separately. The surface to install camera should be strong enough to bear camera.

4.2.2 IP Mini Bullet Camera



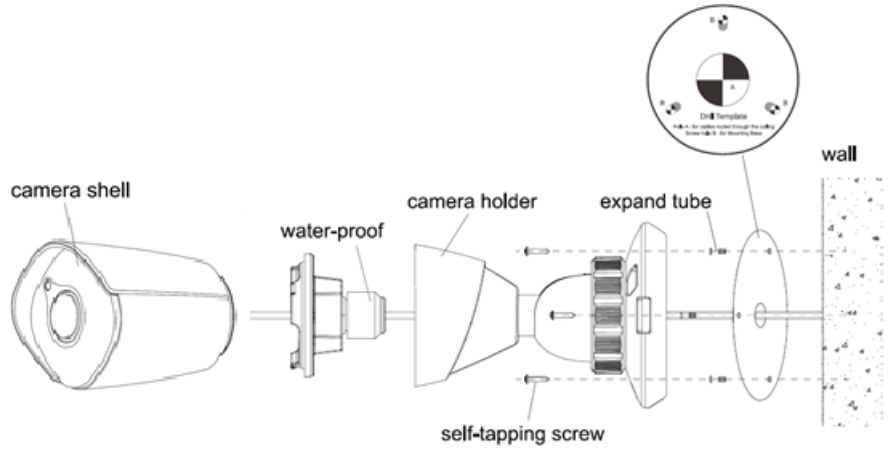
Pic 4.2.2 IP Mini bullet camera installation

Note: Adjust the sun-shield position after fix angle to avoid cover IR light or vision.

Steps

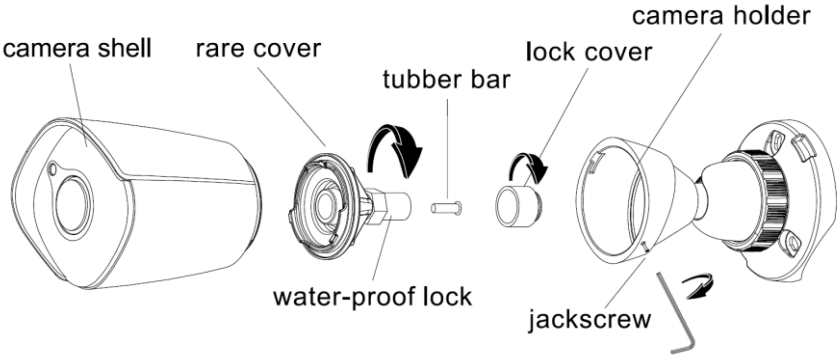
1. Mark the installation holes in the wall by market pen.
2. Drill holes in marked points.
3. Plug the expansion bolts into the holes.
4. Fix two nut screws aligned camera position and rotate tight. Adjust bracket gimbals to appropriate location.

Note: The surface to install camera should be strong enough to bear camera.



Steps

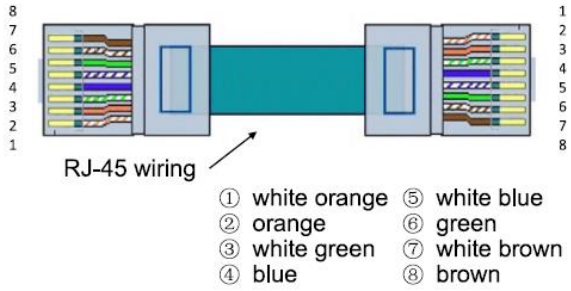
1. Remove the screw, remove camera holder. Remove rare cover as guide showed, open water-proof, remove rubber bar.



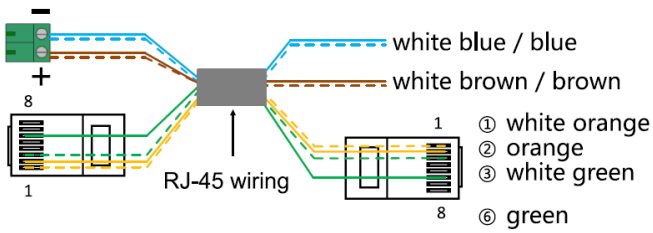
2. Stick the location tag to the place where the camera is placed, drill the aperture as aperture B, set the expand tube in the newly made aperture. Aperture A is outlet, if you need. Drill as the picture showed. Across the audio line (optional) and reticle in the bottom aperture. Cable diameter is 3mm-5mm, pull back the line after you set them to make sure the waterproofness. Then use 3 self-tapping screws (optional) fasten the eyeball camera to the ceiling or the wall. Across the reticle in the water-proof lock and rare cover.

3. Make reticle RJ-45 terminal and power terminal

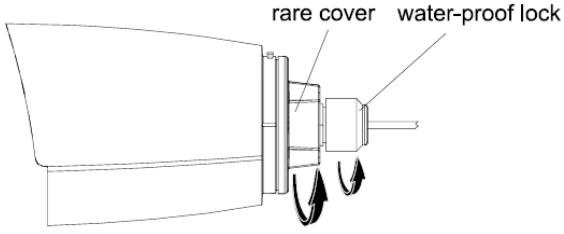
POE power supply:



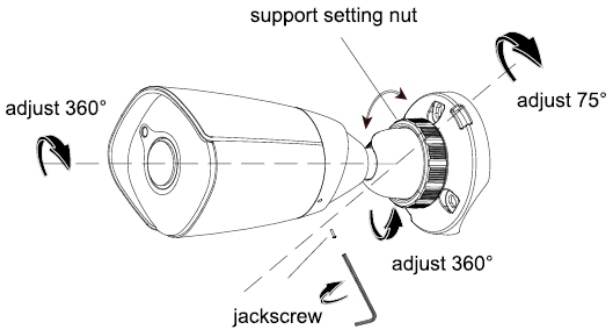
Other power supply:



4. Fix rare cover to the original place, judge the wire length, then lock the water-proof lock.

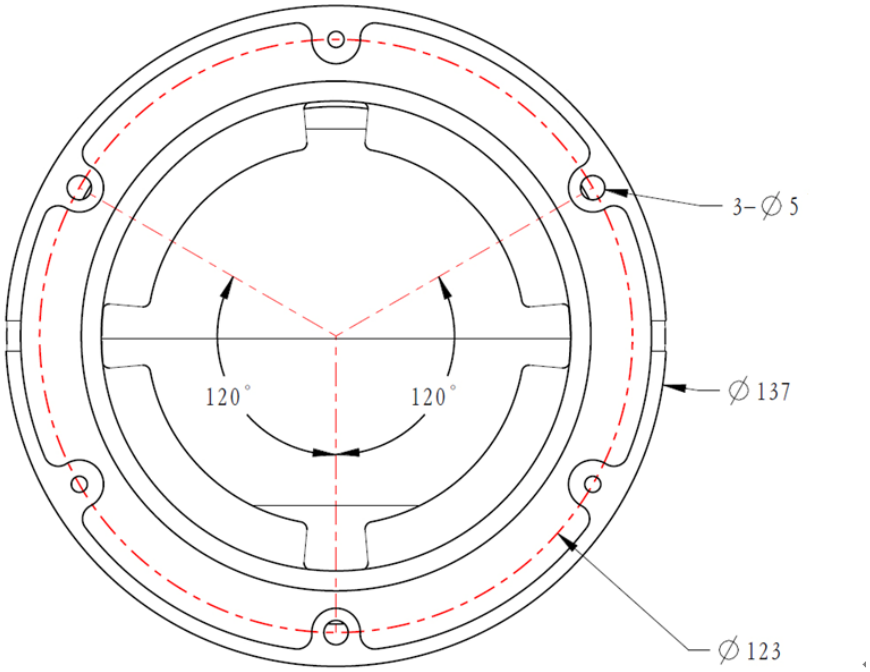


5. Fasten the shell to the pedestal, fasten screws remove mask.



Note: The surface to install camera should be strong enough to bear camera.

4.2.3 IP IR Dome Camera



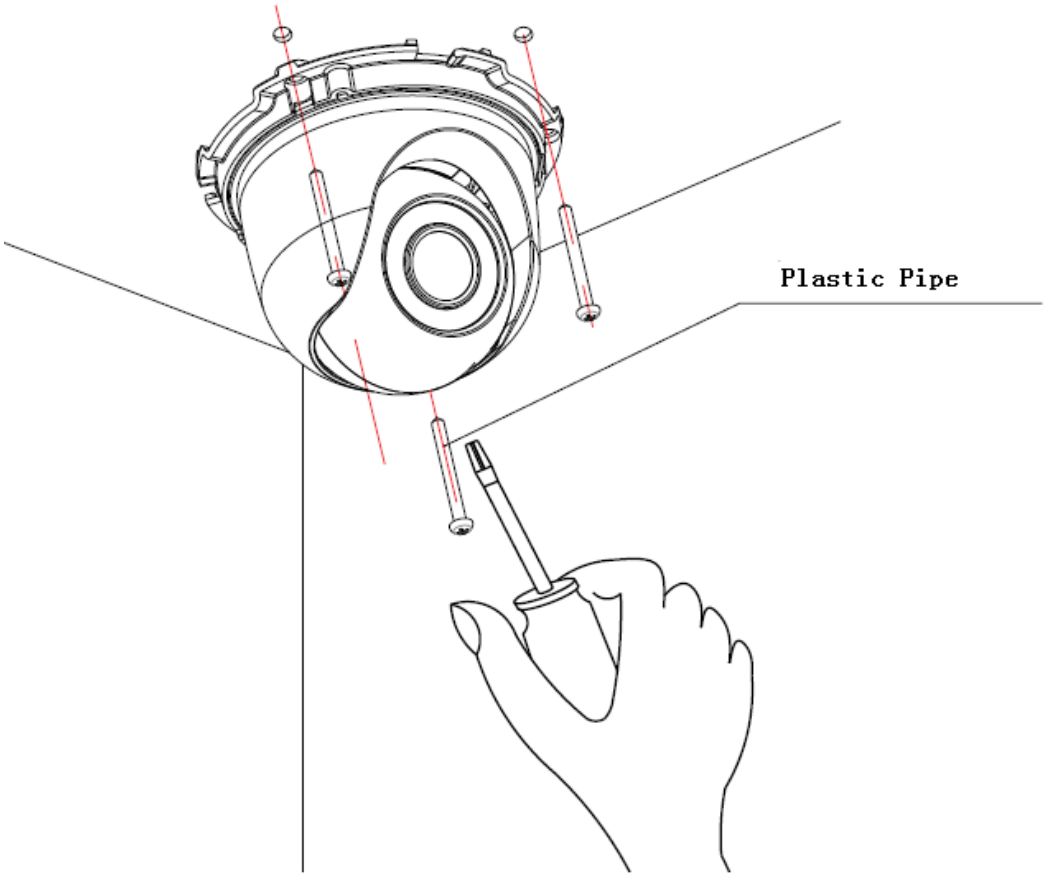
Pic 4.2.3 IP IR dome camera installation

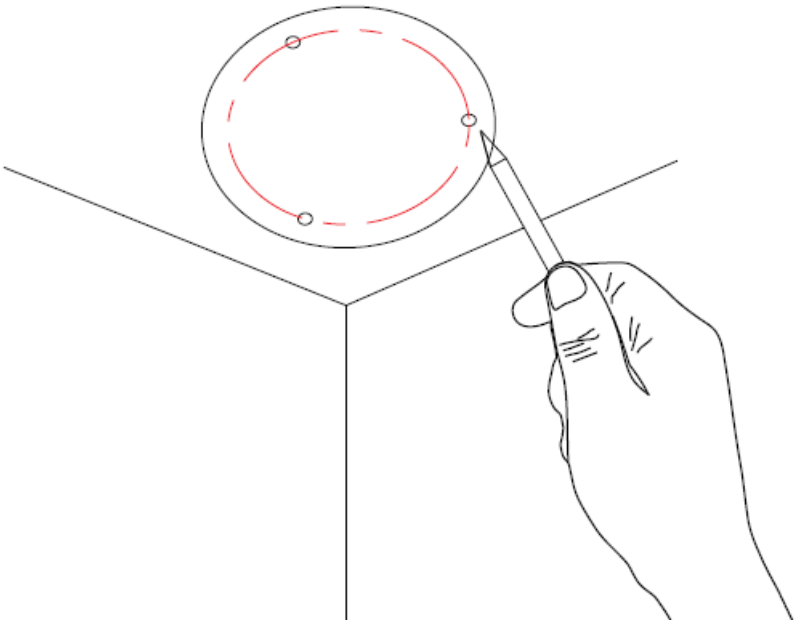
Steps

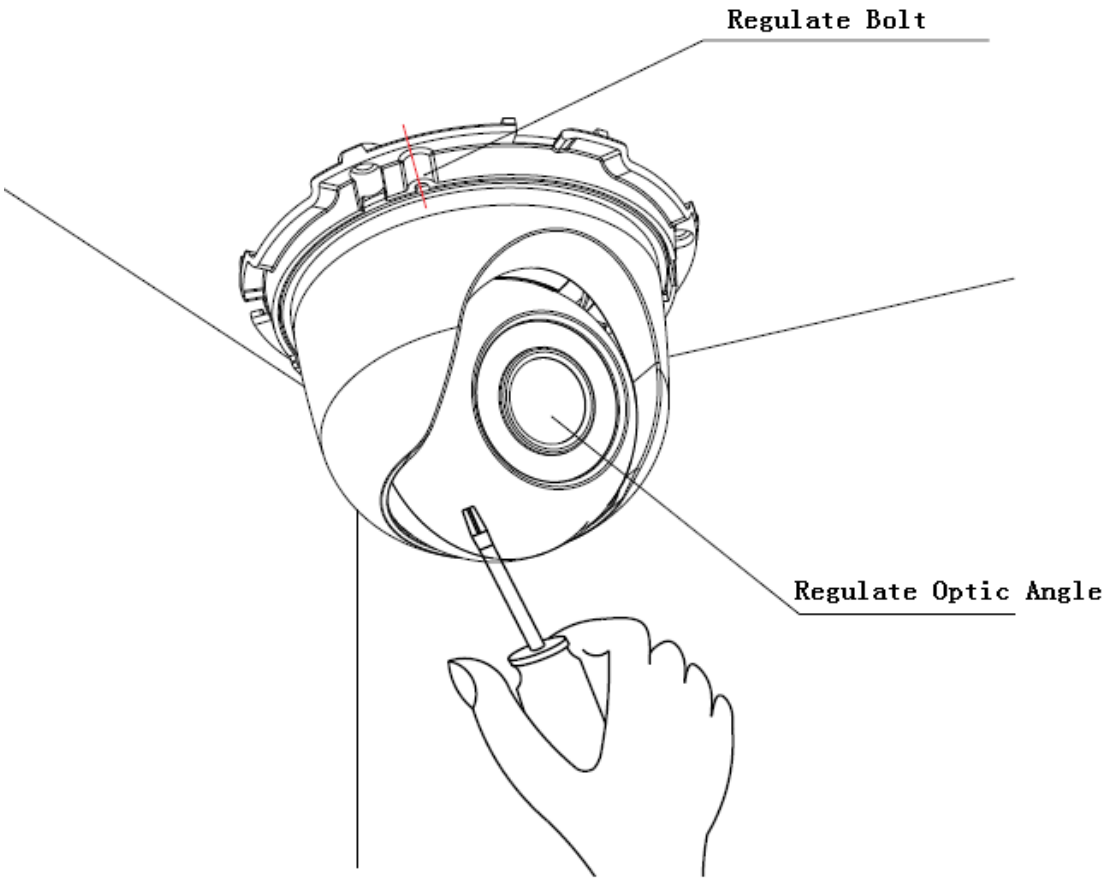
1. Take the camera out of box, and loosen 3pcs screws on the case, and then take down the base (see the Pic 4.2.3)
2. Mark the installation holes in the wall by market pen.
3. Drill holes in marked points.
4. Plug the expansion bolts into the holes.
5. Twist screws at 3φ5 holes to fix base on the wall. Reassemble the parts which you take down in Step1. Adjust the camera lens to a right direction, and then tighten 3pcs screws on the case.

Note: The surface to install camera should be strong enough to bear camera.

4.2.4 IP Mini Dome Camera







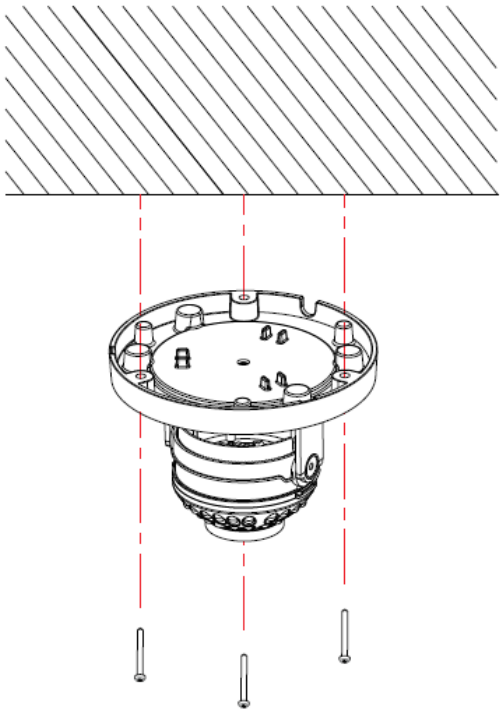
Pic 4.2.4 IP Mini dome camera installation

Steps

1. Drill holes according to the hole position chart and plug the expansion bolts into the holes.
2. Take the camera out of box and take down the cover, and then fix the dome onto the ceiling.
3. Loosen the regulating screws to adjust camera lens to a right direction and tighten the screws again.
4. Put the dome cover back.

Note: The surface to install camera should be strong enough to bear camera.

4.2.5 IP Vandal-proof Dome Camera

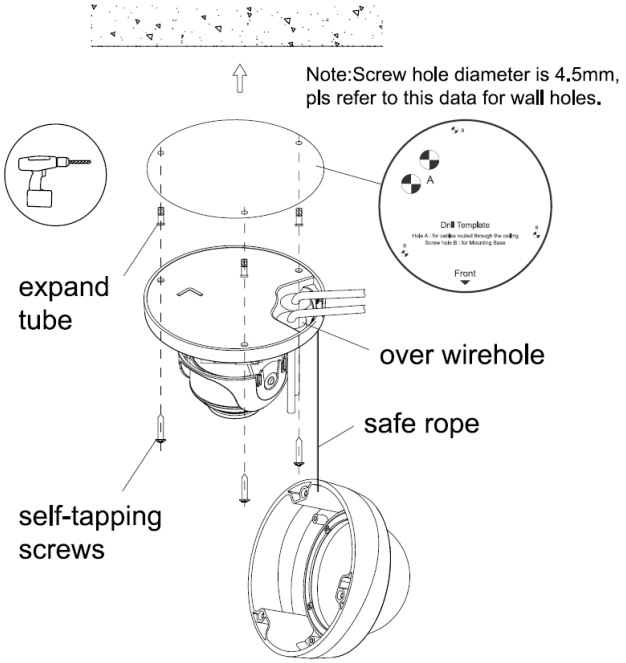


Pic 4.2.5 IP Vandal-proof dome camera installation

Steps

1. Drill holes according to the hole position chart and plug the expansion bolts into the holes.
2. Take the camera out of box and take down the cover, and then fix the dome onto the ceiling.
3. Loosen the regulating screws to adjust camera lens to a right direction and tighten the screws again.
4. Put the dome cover back.
5. Tear off the film on the cover. (Pay attention to protect the cover in case of dirt and scratch)

Note: The surface to install camera should be strong enough to bear camera.

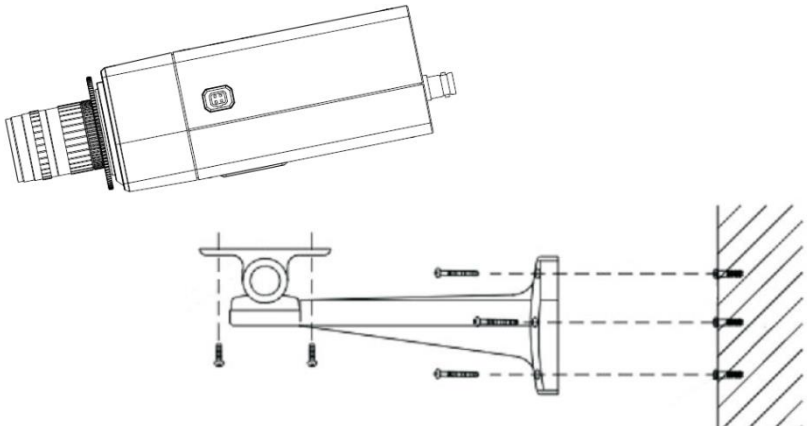


Steps

1. Remove the screw, open the eyeball camera.
2. Stick the location tag to the place where the camera is placed, drill the aperture as aperture B, set the expand tube in the newly made aperture. Aperture A is outlet, if you need. Drill as the picture showed. Across the audio line (optional) and reticle in the bottom aperture. Cable diameter is 3mm-5mm, pull back the line after you set them to make sure the waterproofness. Then use 3 Self-tapping screws (optional) fasten the eyeball camera to the ceiling or the wall.
3. Connect the power line (optional) to the right interface, make the reticle with right RJ45 order, and connect them.
4. Remove the mask, unscrew regular screw, set the right angle as shoew, adjust the view you want, Fasten screw.
5. Fasten the shell to the pedestal, fasten screws remove mask.

Note: The surface to install camera should be strong enough to bear camera.

4.2.6 IP Box Camera



Pic 4.2.6 IP Box Camera Installation

Steps:

1.Mark holes position on the wall;

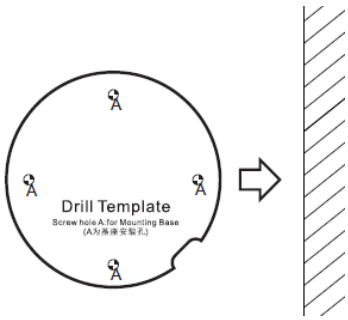
2.Drill the holes on the wall;

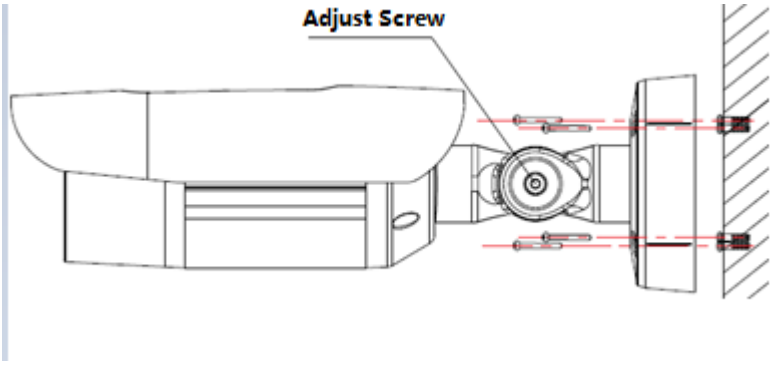
3.Put expansion rubber plug into the holes;

4.Install the bracket with screws onto the wall;

5.Fix the camera onto bracket with two screws, adjust to right direction and angle then tighten up the screws.

4.2.7 Network Varifocal Bullet Camera:





Pic 4.2.7 Network Varifocal Bullet Camera Installation

Steps:

1.Paste the position tag onto the wall;

2.Drill the holes on the wall as per the marks on the tag;

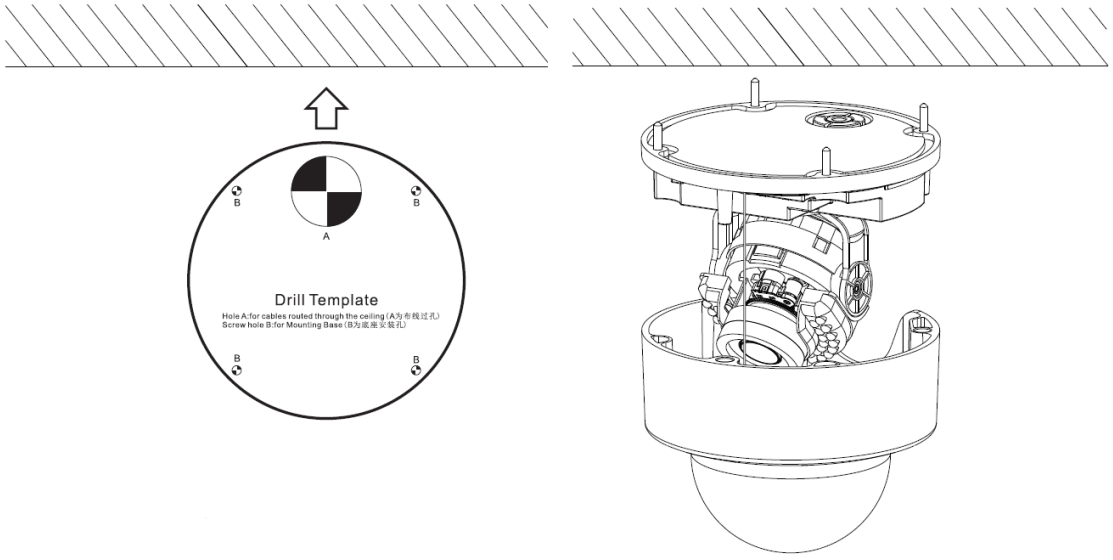
3.Put expansion rubber plug into the holes;

4.Fix the bracket onto the wall with screws;

5.Adjust angle then tighten up the adjust screw on bracket;

6.Adjust the position of sunshield to avoid masking IR Led or Sunlight.

4.2.8 Network Varifocal Dome Camera



Pic 4.2.8 Network Varifocal Dome Camera Installation

Steps:

1.Paste the position tag onto the wall;

2.Drill the holes on the wall as per the marks on the tag;

3.Put expansion rubber plug into the holes;

4.Fix the bracket onto the wall with screws;

5.Adjust the lens to the right direction and angle, then close the dome cover and tighten it up.

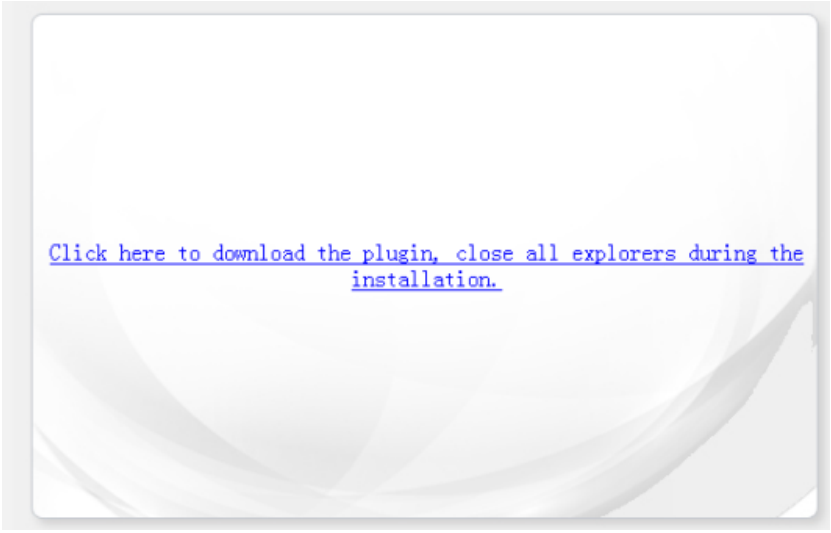
Chapter 5 WEB Instruction

5.1 System Requirement

It support Win7 system or higher, please make sure right installation and setup of following items:
(1) Display resolution: 1440 * 900 or higher, color: High Color (32-bit).
(2) Please make sure the Windows system install the necessary character style.
(3)Please make sure PC disk partition contains disk C and D disk.

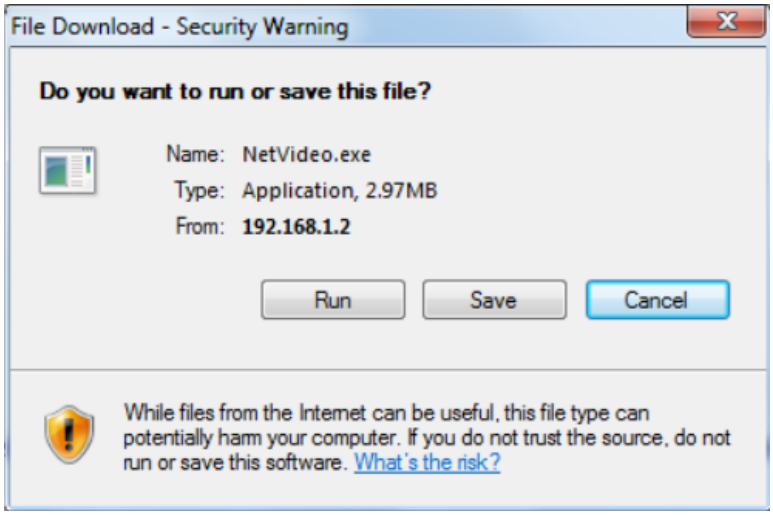
5.2 Built-in Web Instruction

When using the network video products for the first time, an ActiveX control is needed.
(1) Login IP address and enter to ActiveX download interface.



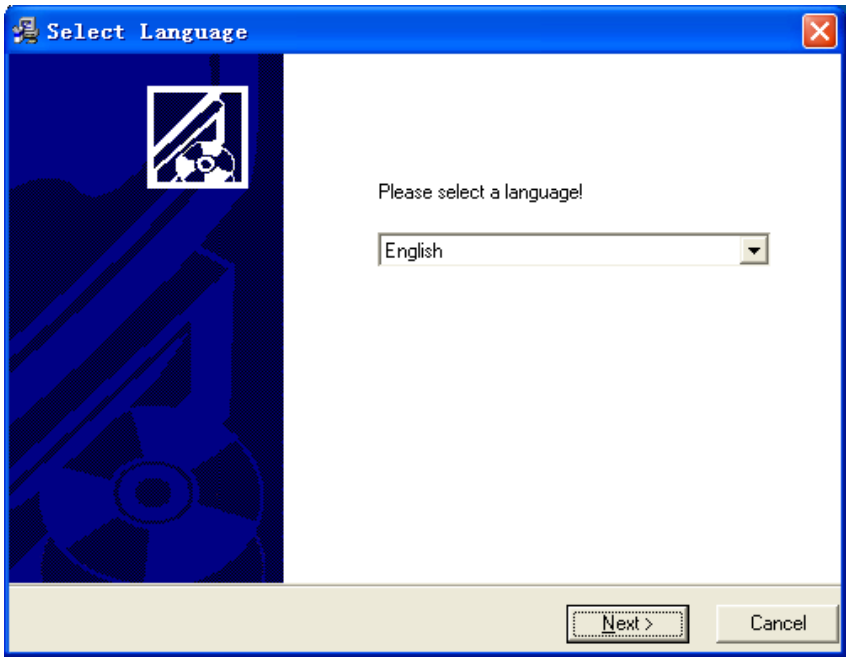
Pic 5.2.1 Web plug-in

(2) Download ActiveX and click 【Run】to install



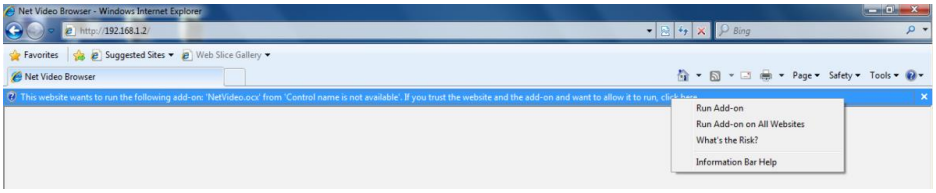
Pic 5.2.2 Web plug-in

(3) During installation, please close web browser and click 【next】to finish installation.

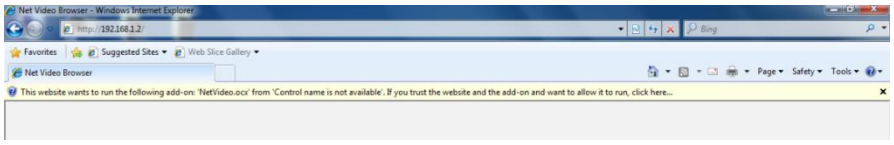


Pic 5.2.3 Web plug-in Installation

(4) After installation, login IP address and allow operating system loading plug-in.

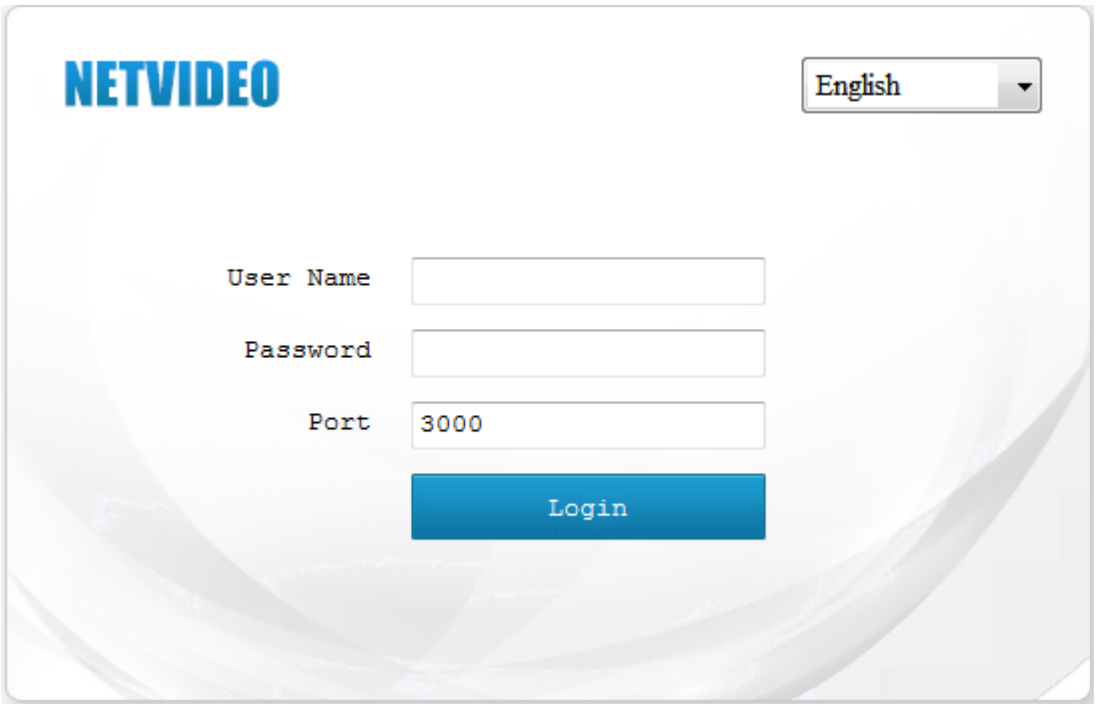


Pic 5.2.4 Windows XP allow loading Web plug-in



Pic 5.2.5 Win7/Win8 allow loading Web plug-in

(5) After success loading plug-in, it will display login interface and then input correct user name and password.



Pic 5.2.6 Loading Web plug-in

Note: Please use IE browser of windows and make sure the version above 6.0. Do not use any other browser except Firefox, Google.

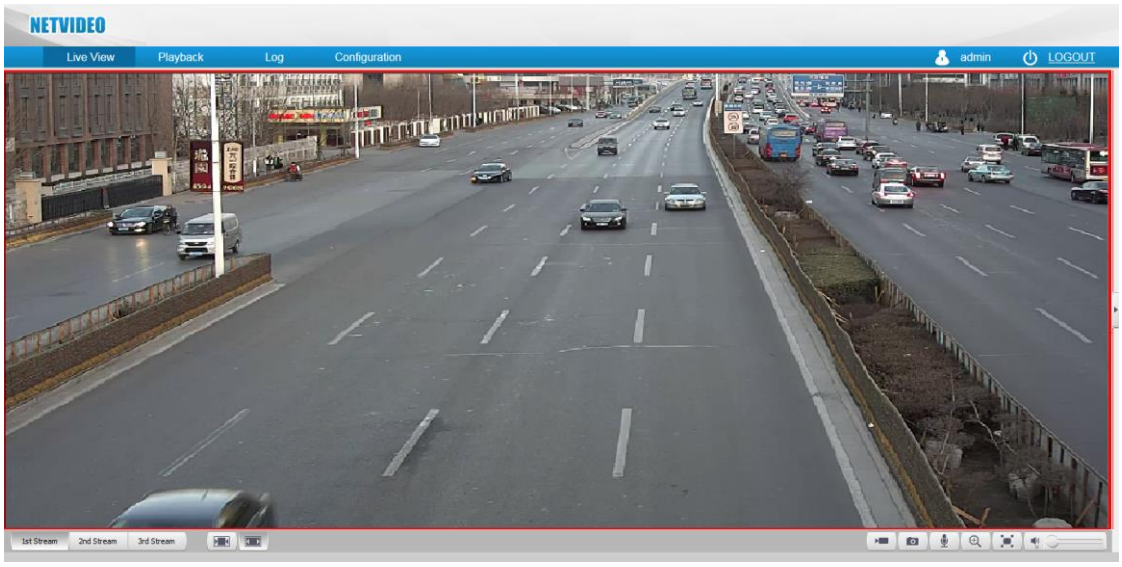
5.3 Log in

(1)Enter IP address and enter login interface.
(2)Enter IP address and password, click login. The default user name is admin, password is 1111.
(3)The default port is 3000

5.4 A/V Preview

After login, system will display preview interface. If on other interface, please click preview button at the top of interface and go back to video preview interface.

5.4.1 A/V Preview



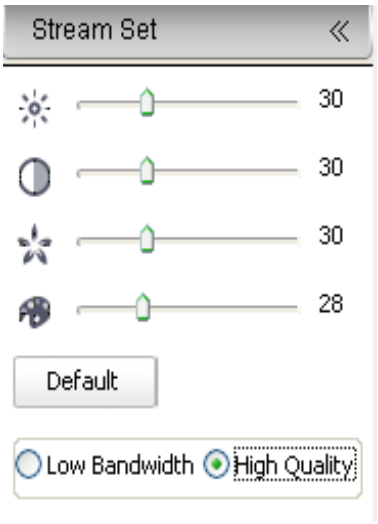
Pic 5.4.1 A/V Preview Interface

Icon	Function	Description
1st Stream	1st Stream	Preview 1st stream and default display 1st stream video
2nd Stream	2nd Stream	Preview 2nd stream
3rd Stream	3rd Stream	Preview 3rd stream
	Fixed proportion	Video images maintain a fixed proportion according to the resolution of the IPC when adjustment
	Display video	Full screen display
	Local record	The default save path: D:\NetVideoBrowser\ RecordFiles
	Snapshot	The default save path: D:\NetVideoBrowser\ CapturePics
	Intercom	Click the icon to start intercom, and click again to stop it
	Open audio	Audio preview
	Set mute	Close audio preview
	Full screen	Click the icon to enter full screen, and double click the screen or press【Esc】to quit

Note:(1)When stream type is【Pure Video】,audio preview is invalid.

(2)【IPC】It is support intercom with one user at the same time.

5.4.2 Stream set



Pic 5.4.2 Stream set interface

Click stream set and open parameter set interface.

By dragging the target bar to adjust brightness, contrast, saturation and color

Click【Default】to resume the default settings.

According to network situation it can choose preview mode from 【Low bandwidth】 to【High quality】

5.4.3 PTZ control

This function only support camera with RS-485.

Pic 5.4.4 PTZ

【PTZ control】It shows eight button and control the direction, click will enable auto scan.

【speed】Adjust speed by manual, range from 0～100.

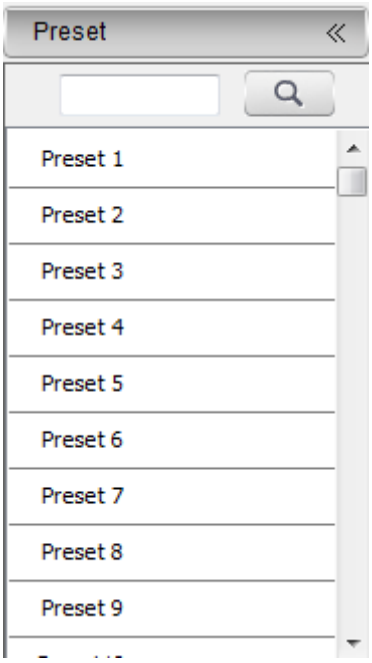
【zoom】Enable to zoom in or zoom out, including optical and digital zoom.

【focus】Focus on the object manually according to how far it is when the auto focus does not work precisely.

【Iris】Manually start or shut down iris.

5.4.4 PTZ position

Enter preset number and click  to search the preset position and 【Set】 or 【Call】

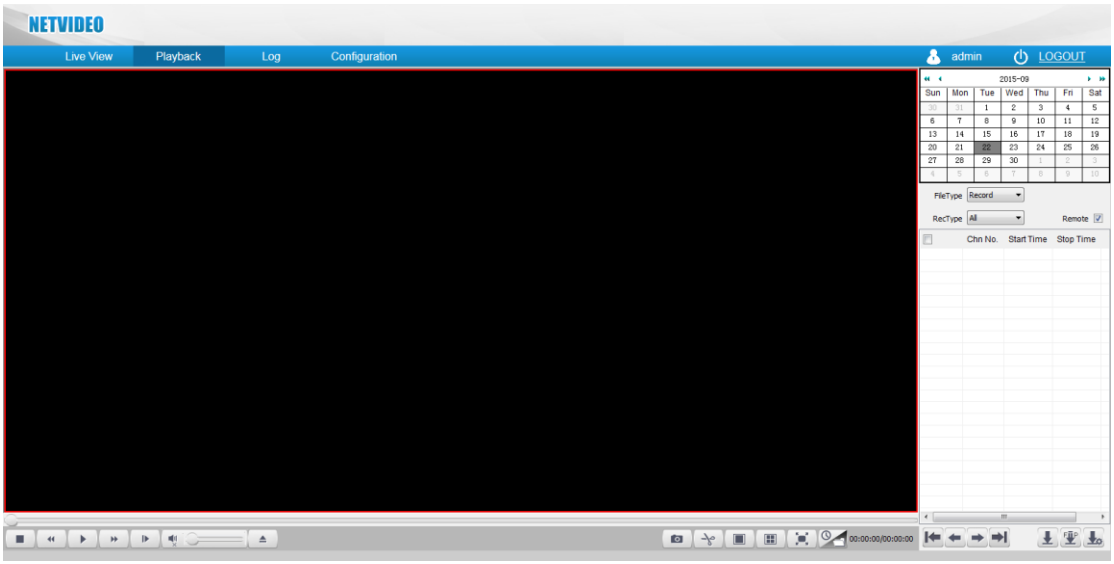


Pic 5.4.5 Preset interface

【set】Set the preset, add preset position, support add multiple presets.

【call】Call the preset, make speed dome to preset position

5.5 Playback



Pic 5.5.1 Playback

5.5.1 Search recording files

(1)Select【Record】and【Picture】in【File Type】.
(2)Select targeted file type in 【Rec Type】.
(3)Double click date in the schedule to search files.
(4)Select【remote】and check record from IPC otherwise check the local record.

5.5.2 Download recording files

(1)Check targeted files to download.
(2)Click  to download recording files.
(3)Click  to download files into FTP server.
(4)Click  to preview download status,and pause or delete when you need.

5.5.3 Playback

(1)Check targeted files to download.
(2)Click  to download recording files.
(3)Click  to download files into FTP server.
(4)Click  to preview download status,and pause or delete when you need.

5.5.3 Playback

(1)Double click searched recording files for playback.
(2)Click  to select local recording files.
(3)Click  to play the playback. When you click  the icon will change into  to pause.
(4)Click  to fast move forwarder in speed of 2X,4X,6X and 8X.
(5)Click  to move forwarder slowly in speed of 1/2X,1/4X,1/6X and 1/8X.
(6)Click  to play frame by frame.

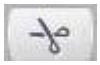
(7)Click  to cancel mute and click  to mute.

(8)Click  to stop

5.5.4 Recording snapshot

Click  to capture the picture when play back the video. Default storage path is D:\NetVideoBrowser\ PlaybackPics.

5.5.5 Video clip

Click  to cut a clip of video when play back the video. Click once to start and click again to finish. Default storage path is D:\NetVideoBrowser\ PlaybackFiles.

5.5.6 Four screen play

Click  to playback in 4 screen at the same time which can play separately for each screen. Once you select one screen and open the recording files you want.

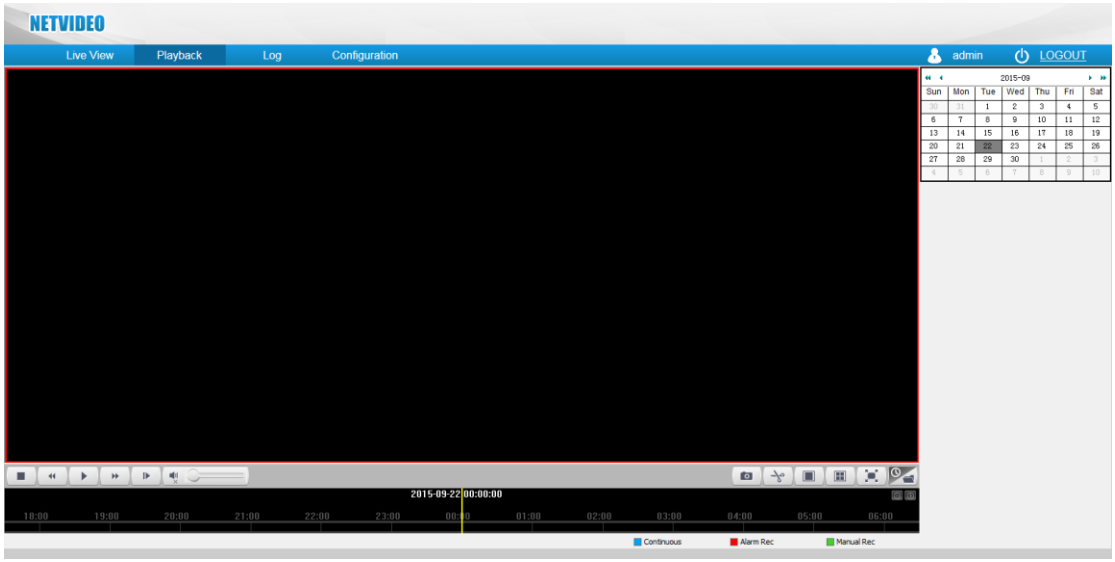
Note:Click  to resume single screen.

5.5.7 Full screen

Double click the screen or click  to enter full screen status. In full screen, double click or enter 【Esc】 to quit full screen.

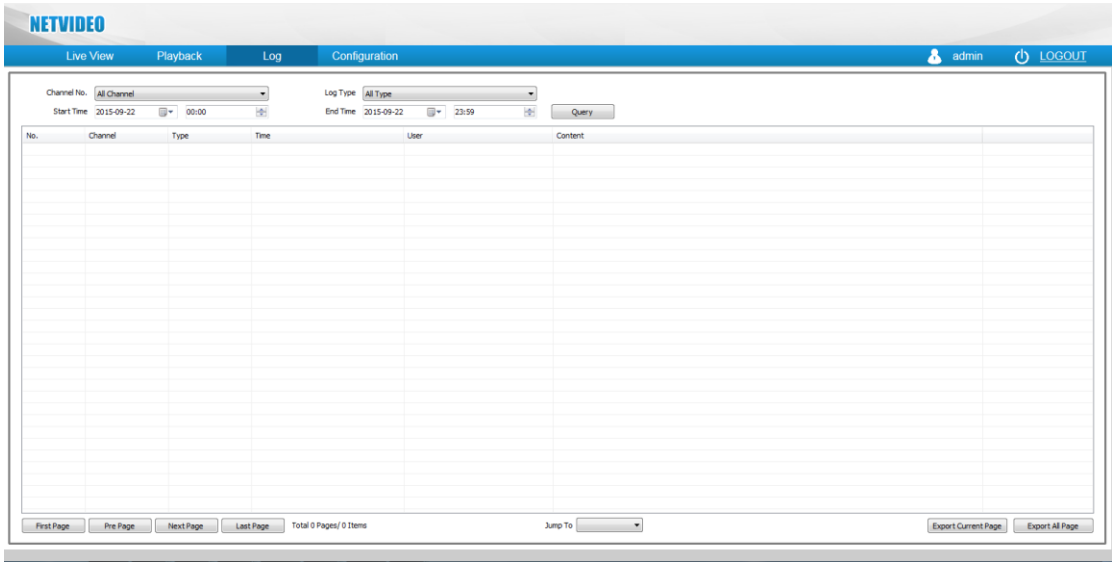
5.5.8 Switch mode

Click  to playback switch mode.



5.6 Log searching

Click【Log】to enter the page.



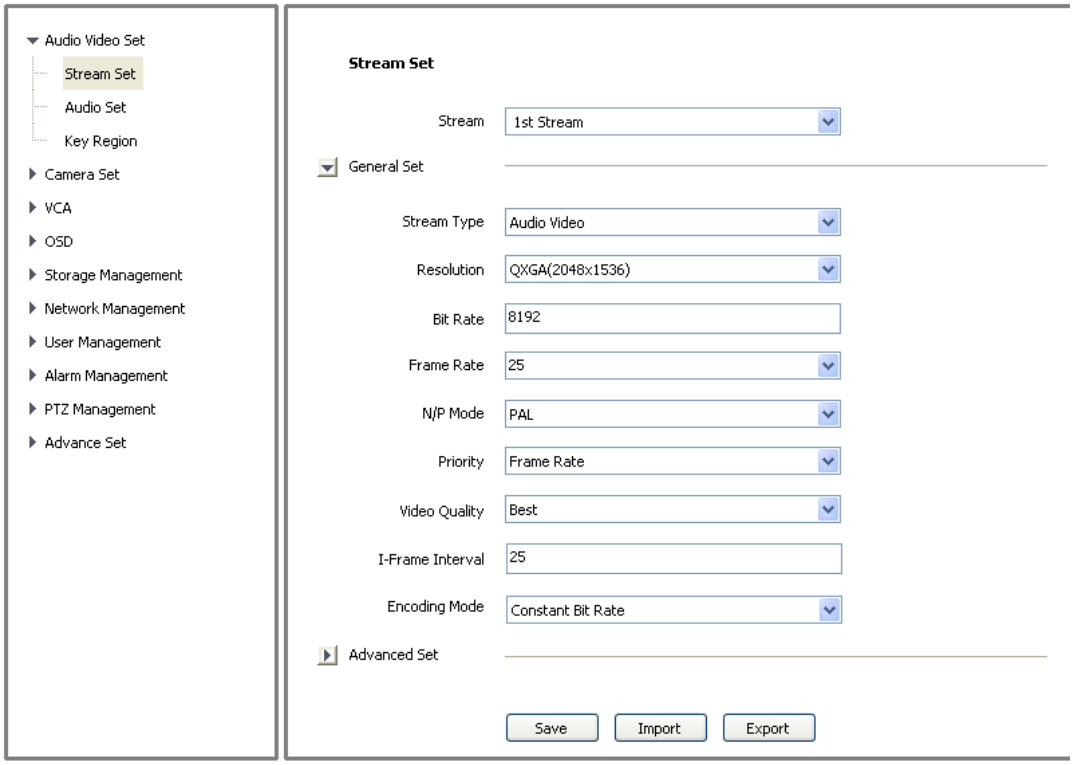
Pic 5.6.1 Log management interface

(1)【Channel No.】Select which channel you want to search.
(2)【Log type】Select which type of log you want to search.
(3)【Start time】Select start date and time.
(4)【End time】Select end date and time.
(5)【Query】Make a list of log at the presetting time.
(6)When there are many pages,you can click【First page】【Pre page】【Next page】【Last page】at left corner to check the log or 【Jump to】target page.
(7)Click【Export current page】to export log of current page to your computer. It is saved in D:\NetVideoBrowser.

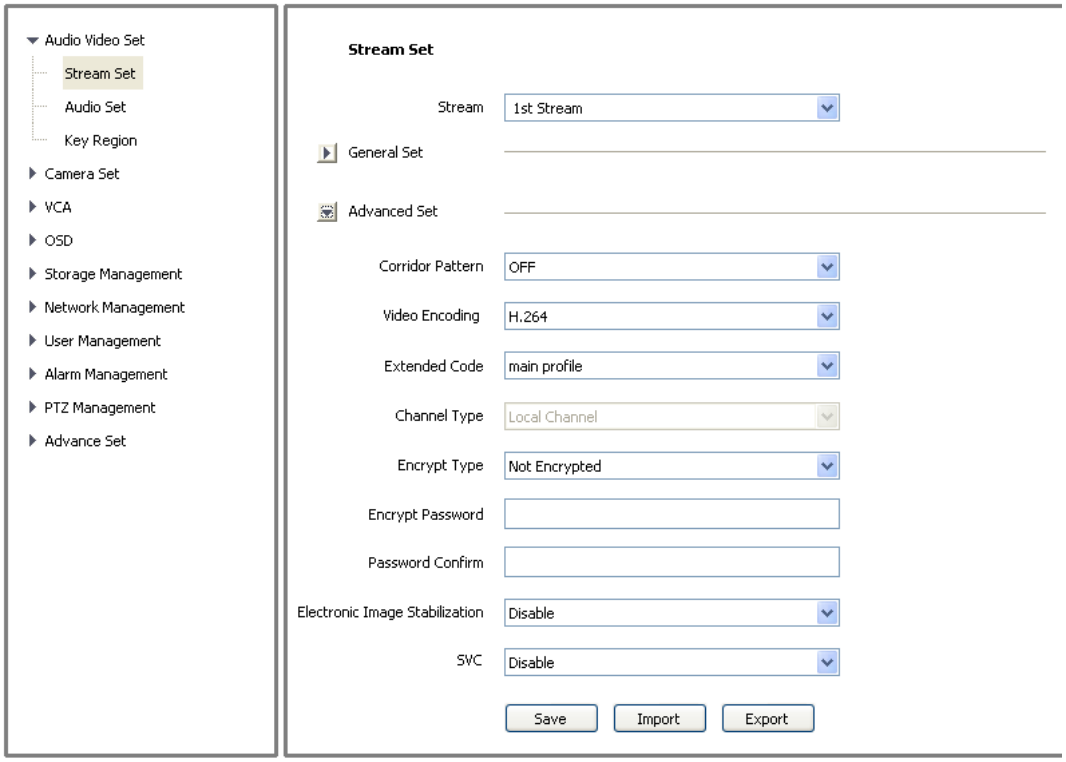
(8)Click【Export all page】 to export all the pages query to your computer. It is saved in D:\NetVideoBrowser.

5.7 Audio video set

5.7.1 Stream set



Pic 5.7.1.1 Stream Set-General Set



Pic 5.7.1.2 Stream Set –Advanced Set

Parameter	Description
Stream Type	Pure video, audio & video
Resolution	4CIF,VGA,720P,960P,1080P. Different camera support multi resolution type.
Bit Rate	Range from 32-16384 Kbps
Frame Rate	PAL:1 5 10 15 20 25 NTSC: 1 5 10 15 20 25 30
N/P Mode	PAL,NTSC
Prefer Mode	Frame Rate, Quality
Video Quality	Best, Better, Good, Fair, Poor. The better quality the more stream and bandwidth occupation
I Frame Rate	To set the interval time for each two I frame
Compression	Static code rate and Dynamic code rate When choose Static code rate, stream will be stable and enable stable occupation of bandwidth for network transmission; When choose Dynamic code rate, stream will be changed according to the video, but it would take up less bandwidth when there is no change on video.
Encoding	H.265, H.264, M-JPEG optional
Corridor Mode	Display picture rotated 90 degrees, and default set is close.
Extended Code	high profile ,main profile, baseline optional
Encrypt Type	Support AES encryption and default type is without encrypt.

EIS	Support electronic image stabilization, and default set is close.
SVC	Key frame function, Enable or disable SVC function.

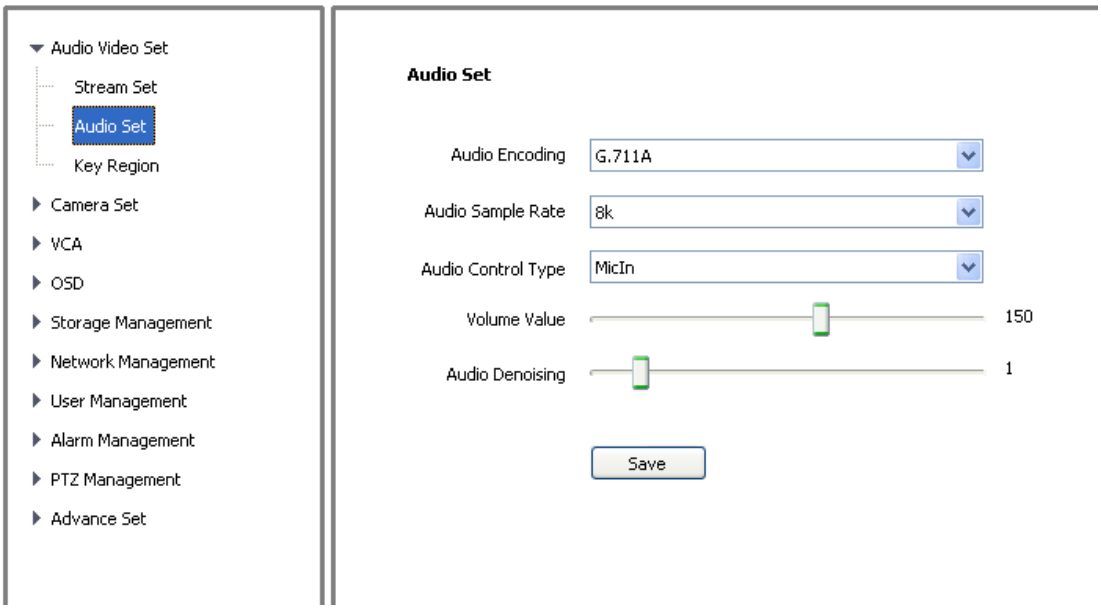
Stream set-Export

Click【Export】to do backup of the configuration file for all the parameter, save to D:\NetVideoBrowser\VideoParam.dat)

Stream set - Import

Click 【 Import 】 to import the backup file for parameter configuration D:\NetVideoBrowser\VideoParam.dat)

5.7.2 Audio Set



Pic 5.7.2 Audio Set

【Audio Encoding】Support G.711A,G.711U,ADPCM_D,AAC_LC.

【Audio Sample Rate】8k,32k,48k

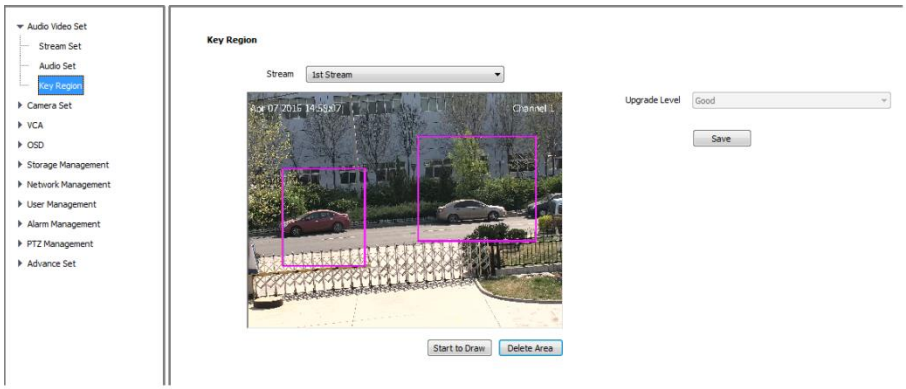
【Audio Control Type】Active audio input select LineIn, passive select MicIn MIC

【Volume】Range from 0～100

【Audio Noise Reduction】Range from 1～9,delete the noise from voice.

Note: It needs restart after revise parameter.

5.7.3 Key Region



PIC 5.7.3 Key region

【Key Region】 To have better image quality for some regions on the video, there are 4 regions settable for each video.

1.【Draw Region】

Use the mouse to draw the key region on the video.

2. Click【Save】 to enable.

3.【Delete Region】 Delete the drawn regions.

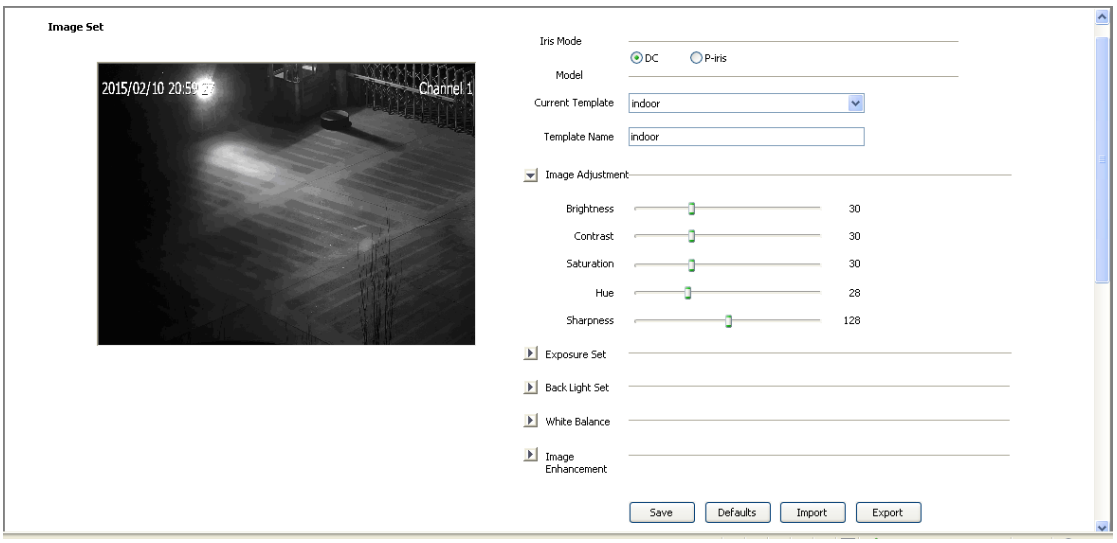
5.8 Camera Set

5.8.1 HD Parameter

Set video image parameter in this page.

HD Parameter -Model

The system provides 8 video templates for different application, all the video parameter can only be revised and saved in the template.



Pic 5.8.1 HD Parameters

【Current Template】 choose template that need to be modified.

【Template Name】 input template name

HD Parameter – Image adjustment

Set image brightness, contrast, saturation, hue, sharpness.

HD Parameter – Exposure Set

【Shutter speed】 setup max exposure time.

Note: If exposure time too long, the moving object's image will has slur, if exposure time too short, the image color will much black.

【Auto gain】 setup max gain that affect image brightness.

Note: It will produce much noise when gain value too high

【Brightness adjustment】 setup brightness value

【AE adjustment】 setup AE adjustment speed

HD Parameter – Backlight set

【Smart IR】 work in IR camera models, when image overexposure, turn on 【Smart IR】 camera will turn down the brightness to avoid not see object cause of overexposure

【HLC】 High light control, mainly used in transportation, turn on 【HLC】 to suppress high light of car's headlight.

【WDR】 select WDR mode, 【WDR Auto】 or 【WDR Manual】, drag the slider to setup WDR level fit for environment.

HD Parameter – White Balance

Select white balance mode according to the actual scene.

If select 【Manual】, by adjusting the red, green, blue to meet demand, R for red gain, G for green gain, B for blue gain.

HD Parameter – Image Enhancement

【Image style】

【Indoor/Outdoor Mode】 select indoor or outdoor mode.

【Defog】 select on or off

【DNR】 digital noise reduction

Note: Please click 【Save】 after settings.

HD Parameter – Export

Click 【Export】 export current HD parameter template to certain place (default address D:\NetVideoBrowser\HDPara.dat), this template can be used for other same model cameras.

HD Parameter – Import

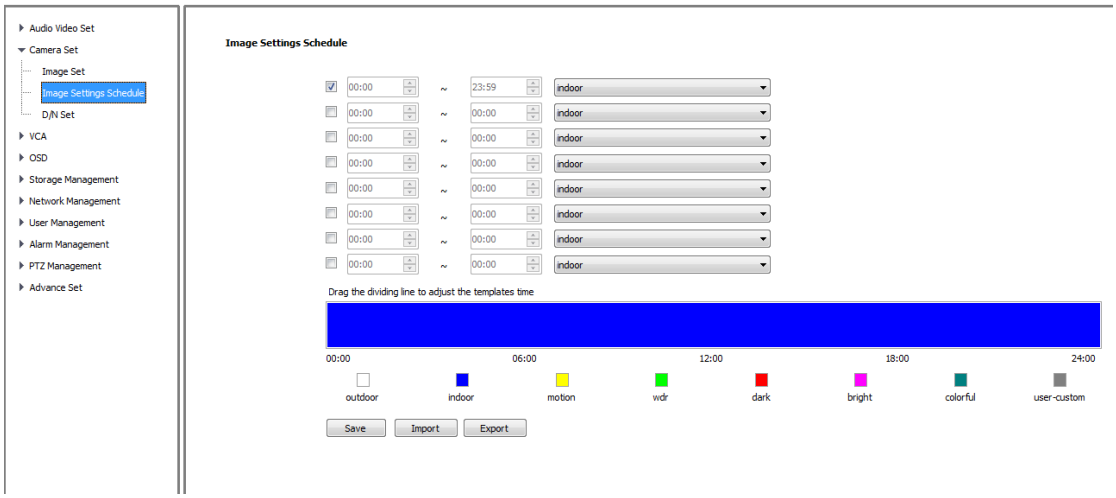
Click 【Import】 import HD parameter setting file from default address(default address D:\NetVideoBrowser\ HDPara.dat), to achieve quick configuration.

HD Parameter – Default

Click 【Default】 each template parameters will restored factory default settings.

5.8.2 Image Settings Schedule

User can setup device different image settings in different time, to get best image in different time period.



Pic 5.8.2 Image settings schedule

It provides max to 8 time periods

Setup schedule for each time periods, Drag to adjust different schedule in time line, different color means different schedule. And 【Save】

Image settings schedule - Export

Click 【export】 export current image schedule to certain place (default address D:\NetVideoBrowser\ HDSchedulePara.dat), this template can be used for other same model cameras.

Image settings schedule – Import

Click 【import】 import image schedule file from default address(default address D:\NetVideoBrowser\ HDSchedulePara.dat), to achieve quick configuration.

5.8.3 Day/Night Setting

【D/N Setup】 setup IP camera to switch in day and night with different rules

Pic 5.8.3D/N Setup

Color to gray:

Self-adaption: In color mode, IPC will detect and analysis the brightnesss by internal synchronization sensor. When the brightness is lower than the setted night brightness ,the image will change into B/W.

in B/W mode. In color mode, IPC will detect and analysis the brightnesss by external synchronization Photoresistor. When the brightness is higher than the setted daylight brightness, the image will change into color .

Color: video is always in color mode

Gray: video is always in gray mode

Timer: user can define the time of day and night

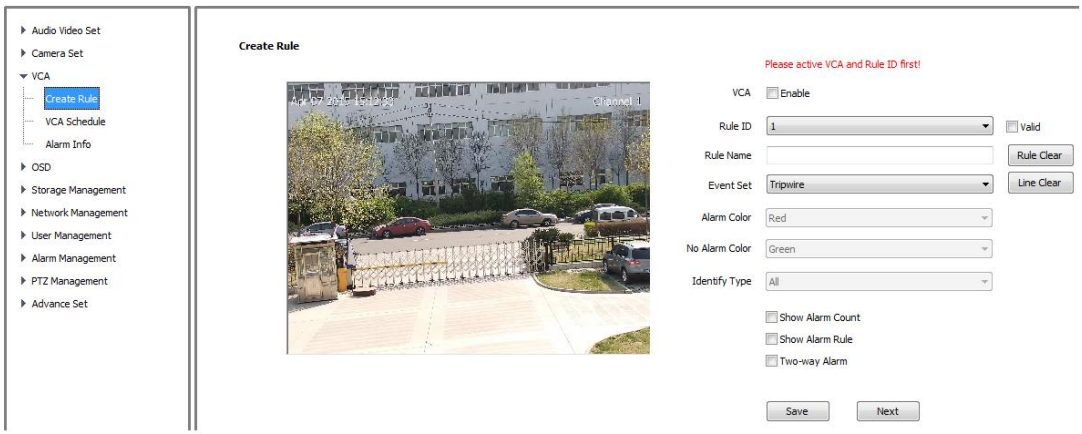
Auto(inside):camera will auto detect video image brightness. Video will become color when brightness value higher than day value; Video will become gray when brightness value lower than night value. 【Realtime brightness】 is video real time brightness value.

Auto(outside):device detects outside environment brightness with photoreceptor. Video will become color when outside brightness value higher day value; Video will become gray when outside brightness value lower than night value. (Only for IR camera)

5.9 VCA (for 2MP and 1.3MP Camera)

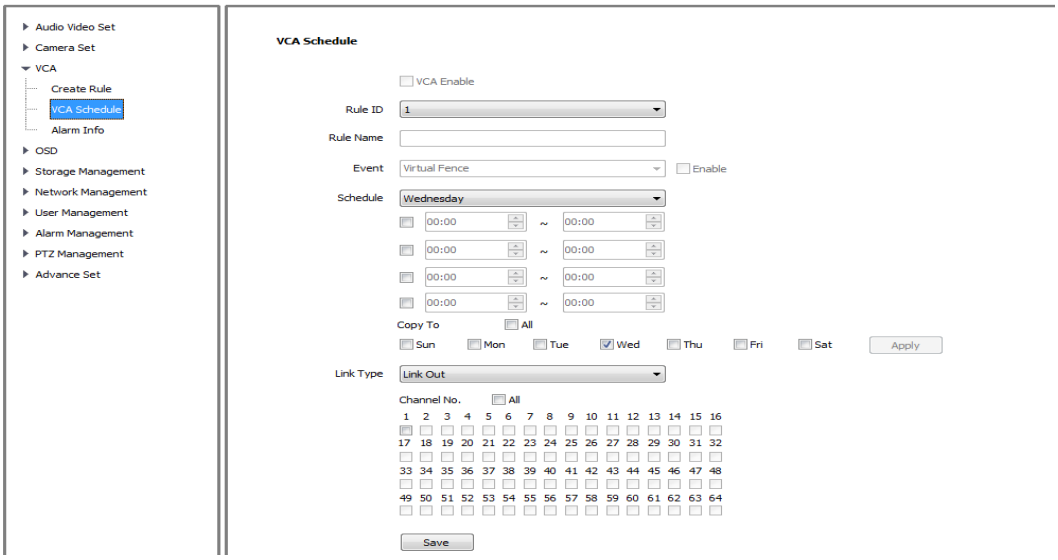
【VCA】 intelligent analysis, process event alarm.

5.9.1 Create Rule



(1)【Enable】 turn on or off current channel's VCA function
(2)【Rulename】 remark the rule
(3)【Rule ID】 can setup 2 rules at same time.
(4)【Event set】support【Virtual fence】【intrusion detection】
【Virtual fence】:if object cross the line in setting area, will trigger alarm
【intrusion detection】:【Detection mode】 include :【intrusion】,【in】,【out】, when object intrusion, in or out the area, will trigger alarm.
(5)【Show alarm count】: show alarm count when detect alarm on screen
(6)【Show alarm rule】: show the alarm area line on screen
(7)【Two-way alarm】:when select event setup to virtual fence, if select 【Two-way alarm】,will trigger alarm if cross line in both side.
(8)【Save】:save settings
(9)【Line clear】:clear the line on video
(10)【Rule clear】:clear the settings of rule

5.9.2 Alarm Setup



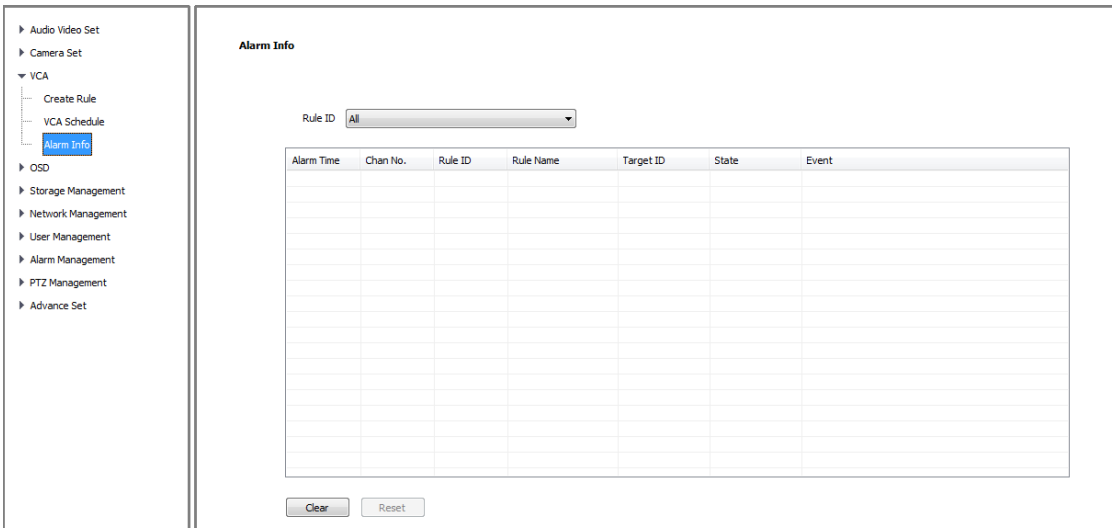
Pic 5.9.2 VCA Schedule

(1)Select 【Rule ID】,【Enable】,setup time in 【Schedule】 and 【Save】

(2)Setup 【Link type】, support four kinds of alarm linkage type 【Link out】,【Link record】,【Link snapshut】,【Link PTZ】.

(3)【Save】

5.9.3 Alarm information



Pic 5.9.3 Alarm information

(1)Switch【Rule ID】check alarm information of current rule.

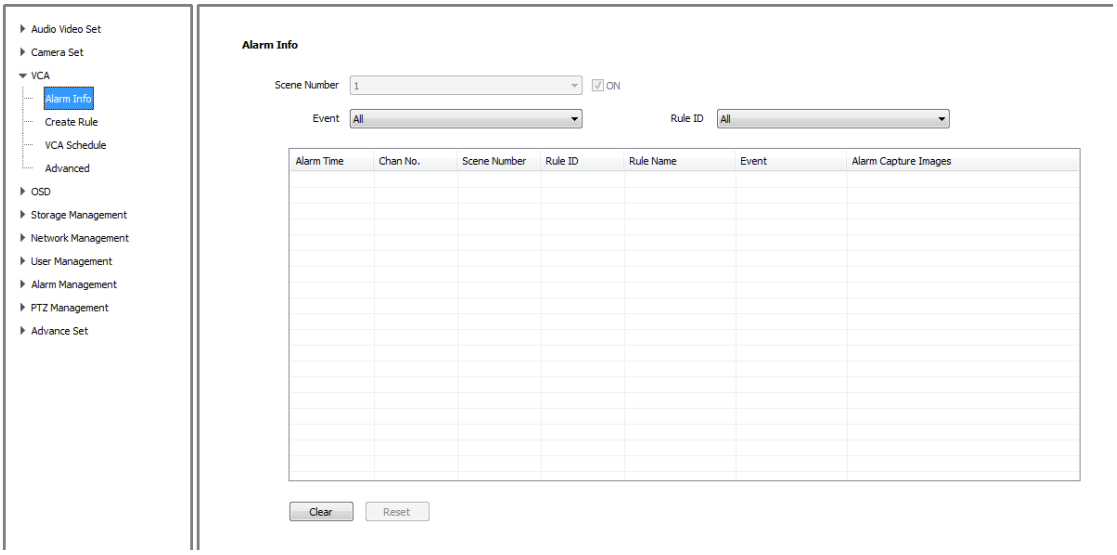
(2)【Reset】:clear current channel events alarm, and beginfromone in next event

happened.
(3)【Clear】 clear all alarm information from current list.

5.10 VCA

【VCA】 intelligent analysis, process event alarm.

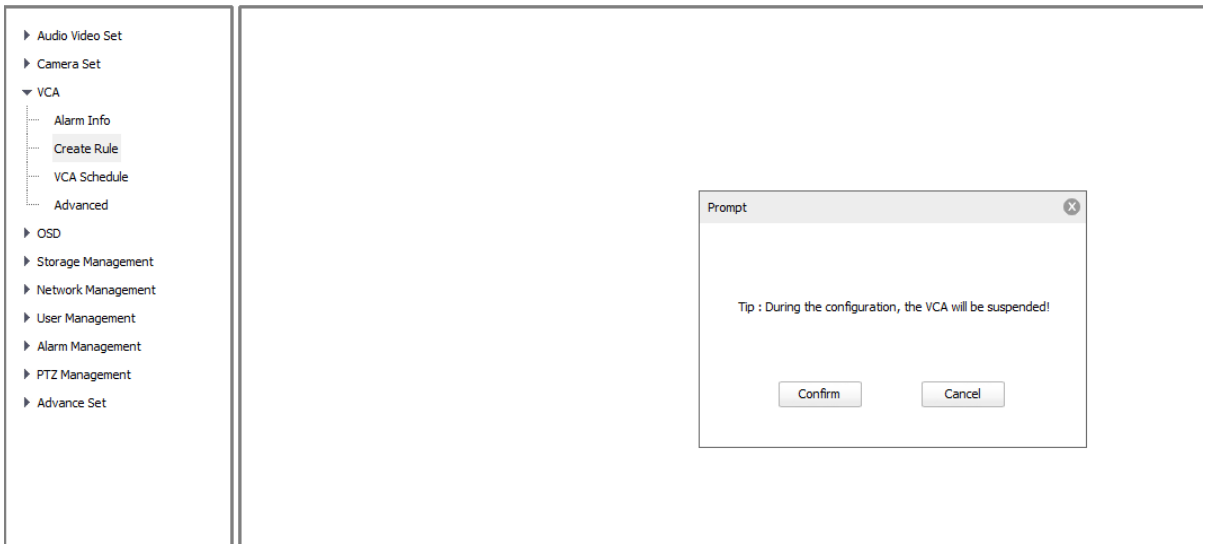
5.10.1 Alarm information

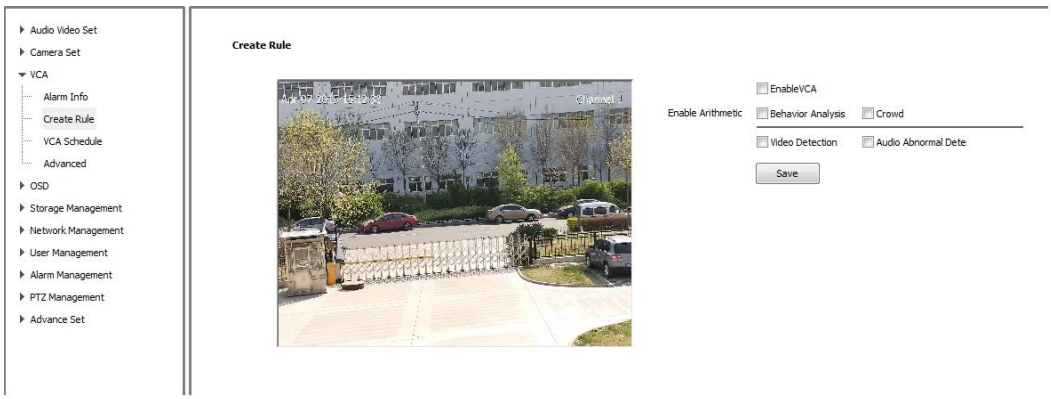


【Event】 check certain or all VCA events alarm information.
【Rule ID】 check certain or all rule's alarm information
【Clear】 clear all alarm information from current list.

5.10.2 Create Rule

During the configuration, the VCA will be suspended.





【Enable】 turn on or off current channel's VCA function

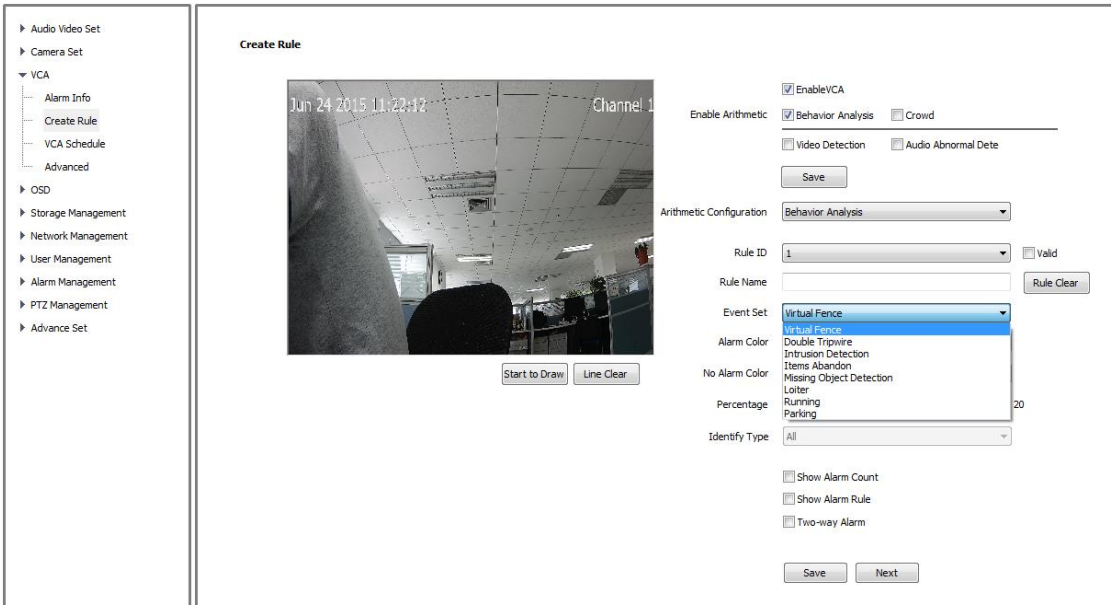
【Enable Arithmetic】

Behavior analysis and crowd analysis functions only can enable one in one time. Video and audio abnormal detection can work with upon analysis functions at same time.

【Save】select VCA , save it.

Note: Behavior analysis, video detection and audio abnormal detection need go into 【Alarm Setup】 to setup "enable time" and ""alarm trigger template" after 【Save】

5.10.2.1【Arithmetic Configuration】→【Behavior Analysis】

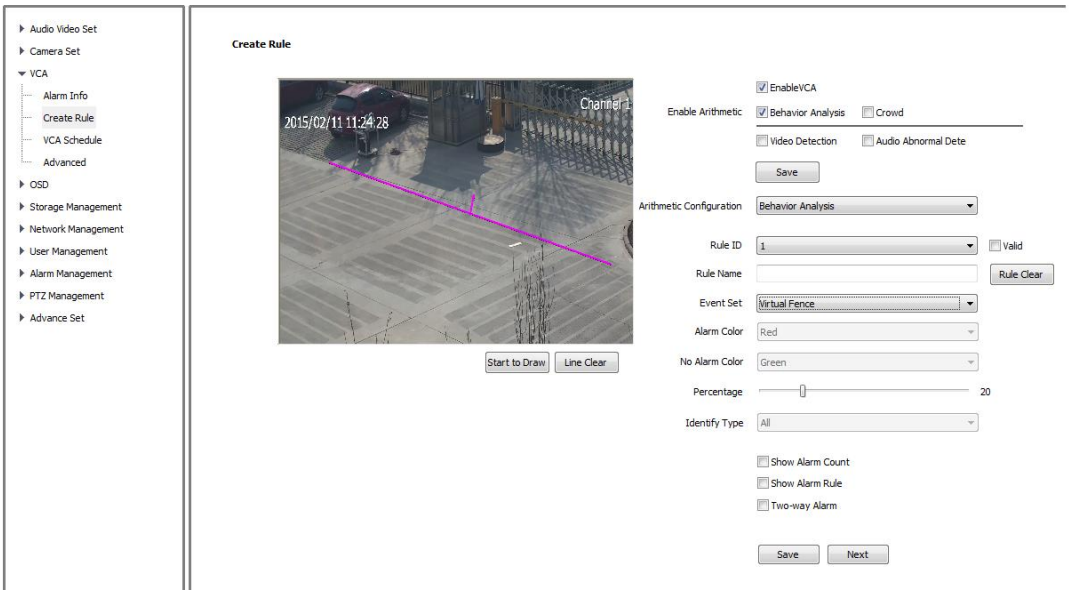


【Behavior Analysis】 include 8 kinds of functions : virtual fence, double tripwire, intrusion detection, items abandon, missing object detection, loiter, running, parking. Every function can be setup with different settings, but total rule number should less 8 rules.

【Save】save all the settings

【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.2【Arithmetic Configuration】→【Behavior Analysis】→【Virtual Fence】

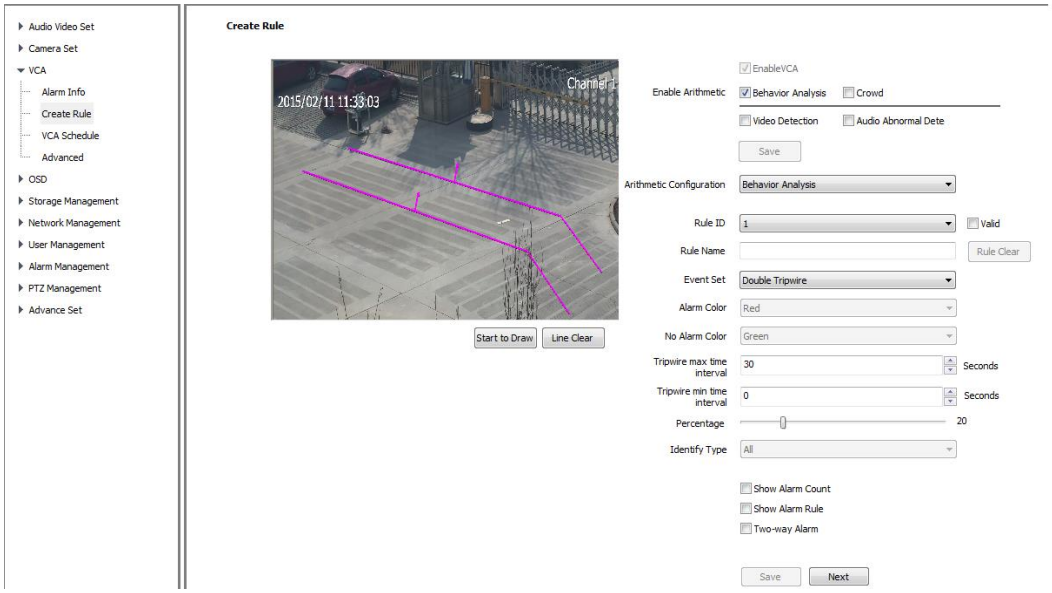


Select rule number, 【Event Set】 virtual fence, and check 【Valid】

Draw rule line, the arrow of line means direction of prohibit crossing.

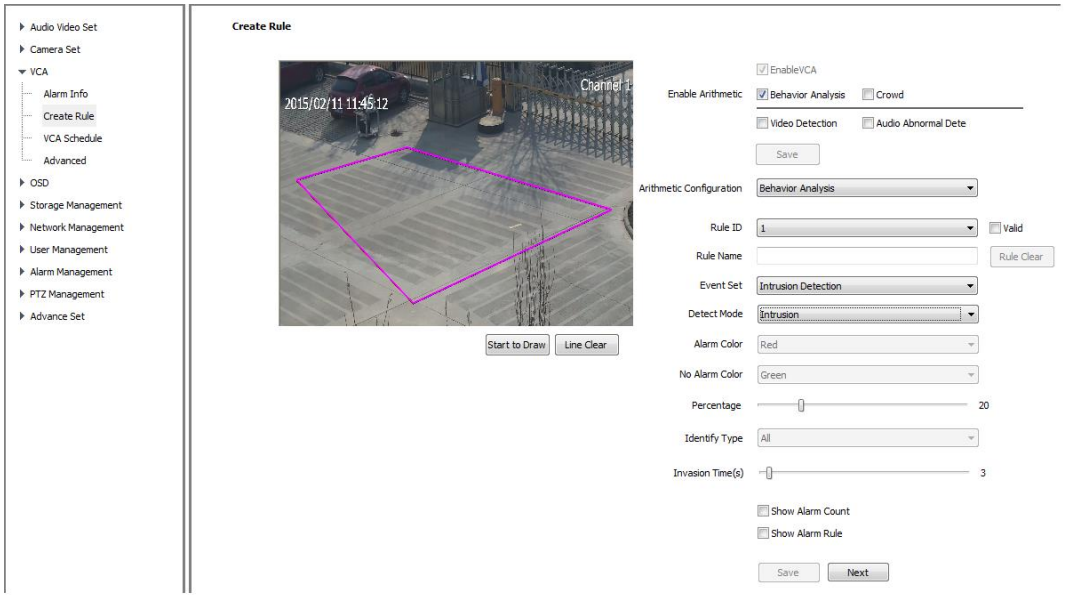
【Percentage】 setup target size in the total screen (area percent).
Setup 【Two-way Alarm】 if needed
【Save】save all the settings
【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.3 【Arithmetic Configuration】→【Behavior Analysis】→【Double Tripwire】



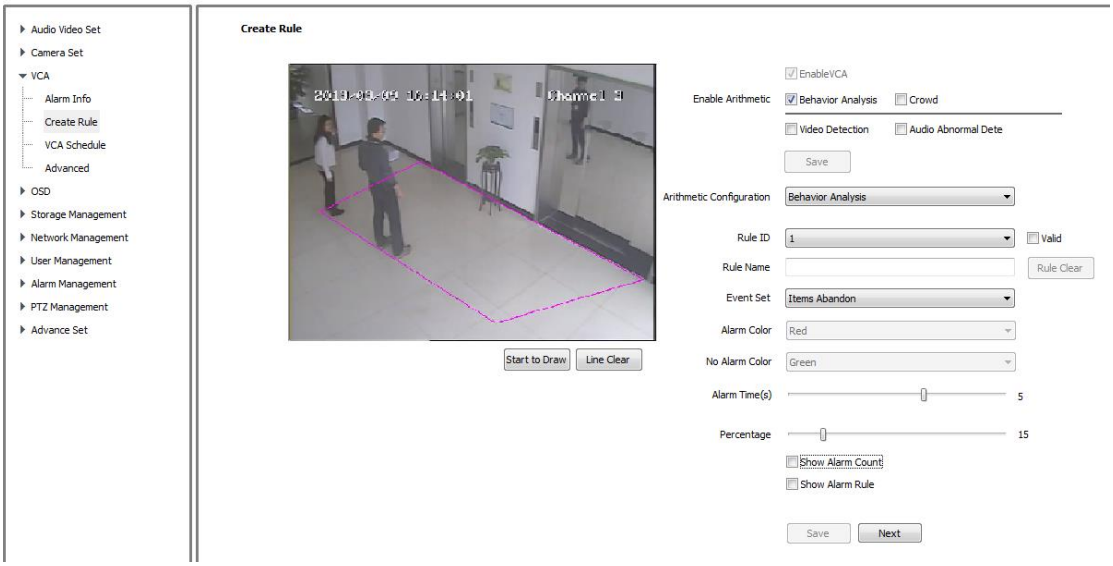
Select rule number, 【Event Set】 double tripwire, and check 【Valid】
Draw two rule lines, the arrow of line means direction of prohibit crossing, 2 lines direction should be the same, it will alarm when target object cross 2 lines continuously within the specified time
【Tripwire Max Time Interval】 and 【Tripwire Min Time Interval】 setup time range of cross 2 lines continuously.
【Percentage】 setup target size in the total screen (area percent).
Setup 【Two-way Alarm】 if needed
【Save】save all the settings
【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.4【Arithmetic Configuration】→【Behavior Analysis】→【Intrusion Detection】



Select rule number, 【Event Set】 intrusion detection, and check 【Valid】
Draw the detection area
Select detection mode, 【in】 it will trigger alarm when object go in detection area; 【out】 it will trigger alarm when object go out detection area; 【Intrusion】 it will trigger alarm when object stay in detection area until reach 【Invasion Time】.
【Percentage】 setup target size in the total screen (area percent).
【Invasion Time】 setup invasion time of object stay in detection area, it will trigger alarm when over the time.
【Save】save all the settings
【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.5 【Arithmetic Configuration】→【Behavior Analysis】→【Items Abandon】



Select rule number, 【Event Set】 items abandon, and check 【Valid】

Draw detection area, please notice the detection area shouldn't overlap when 【Items Abandon】 and 【Missing Object Detection】 are enable at same time

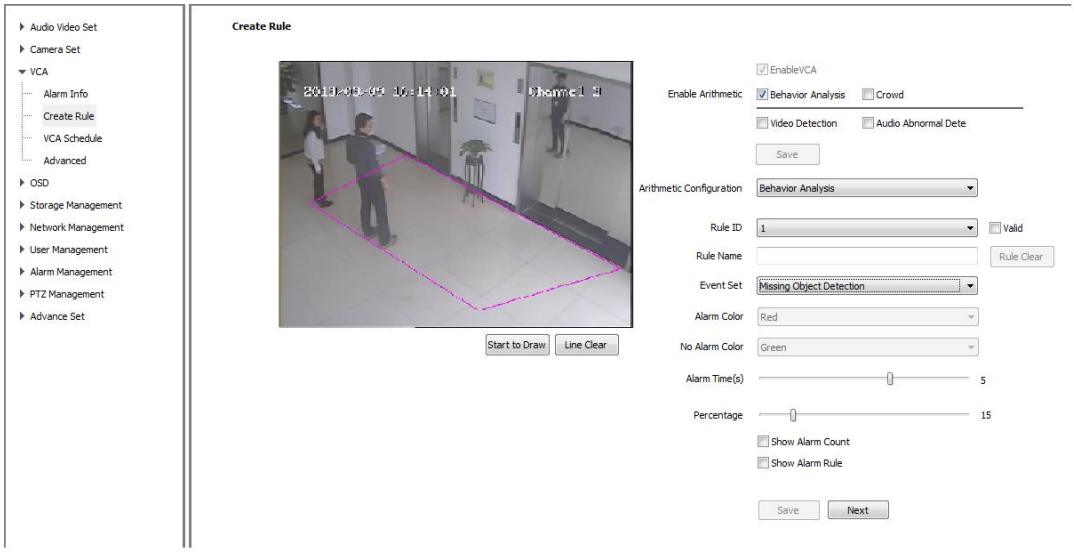
【Percentage】 setup target size in the total screen (area percent).

【Alarm Time】 setup alarm time of object stay in detection area, it will trigger alarm when over the time.

【Save】save all the settings

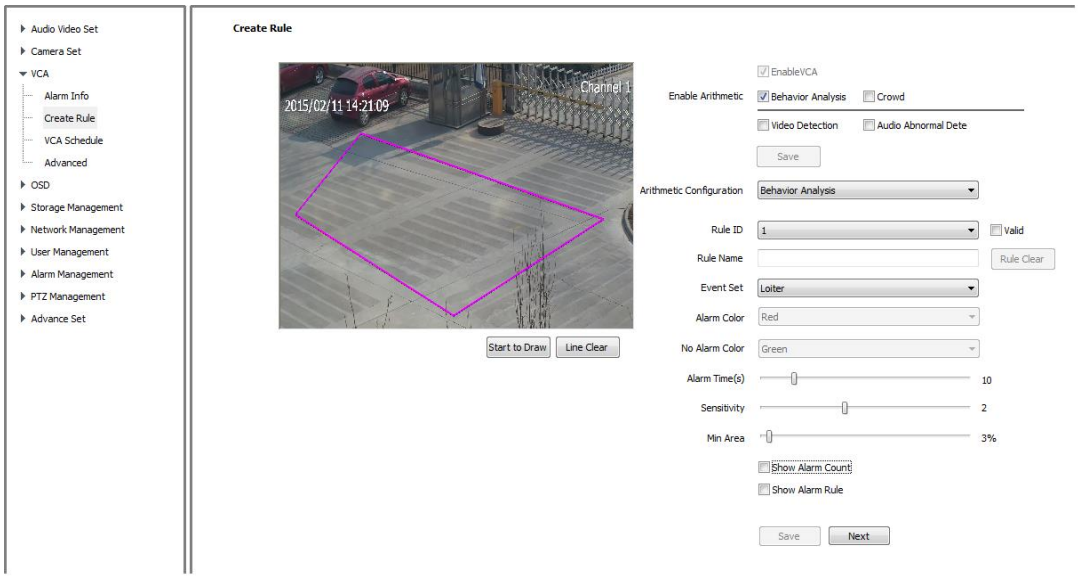
【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.6【Arithmetic Configuration】→【Behavior Analysis】→【Missing Object Detection】



Select rule number, 【Event Set】 missing object detection, and check 【Valid】
Draw detection area, please notice the detection area shouldn't overlap when 【Items Abandon】 and 【Missing Object Detection】 are enable at same time
【Percentage】 setup target size in the total screen (area percent).
【Alarm time】 setup alarm time of object lost in detection area, it will trigger alarm when over the time.
【Save】save all the settings
【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.7【Arithmetic Configuration】→【Behavior Analysis】→【Loiter】



Choose【Rule ID】→【Loiter】→【Valid】

Draw detection area on the image

Setup alarm time, alarm when the object keep loitering to this alarm time

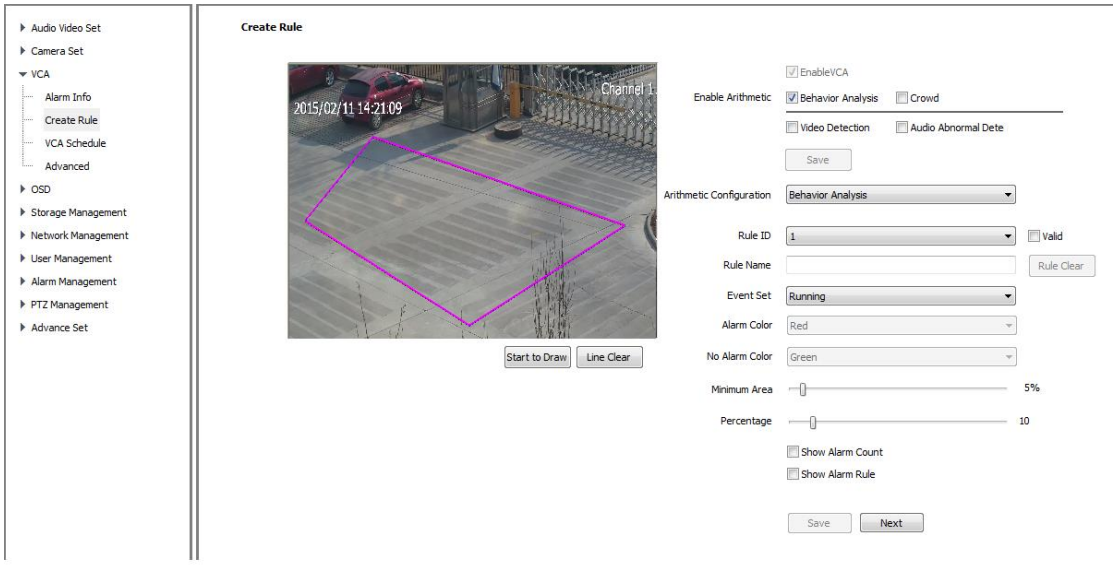
Setup min area, alarm when the object's motion area is equal to or greater than this min area.

Setup sensitivity, greater→more sensitive

【Save】save all the settings

【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.8【Arithmetic Configuration】 【Behavior Analysis】 【Running】



Choose 【Rule ID】→【Running】→【Vaild】

Draw detection area on the image

Setup alarm time, alarm when the object keep running to this alarm time

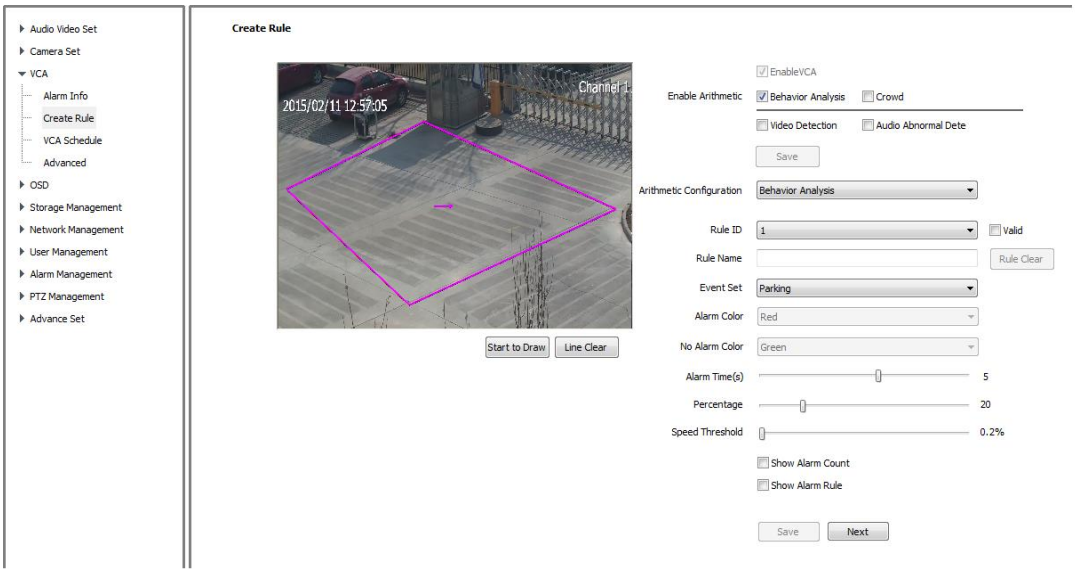
Setup min area, alarm when the object's running area is equal to or greater than this min area.

Setup percentage, the percent of the object in the whole image.

【Save】save all the settings

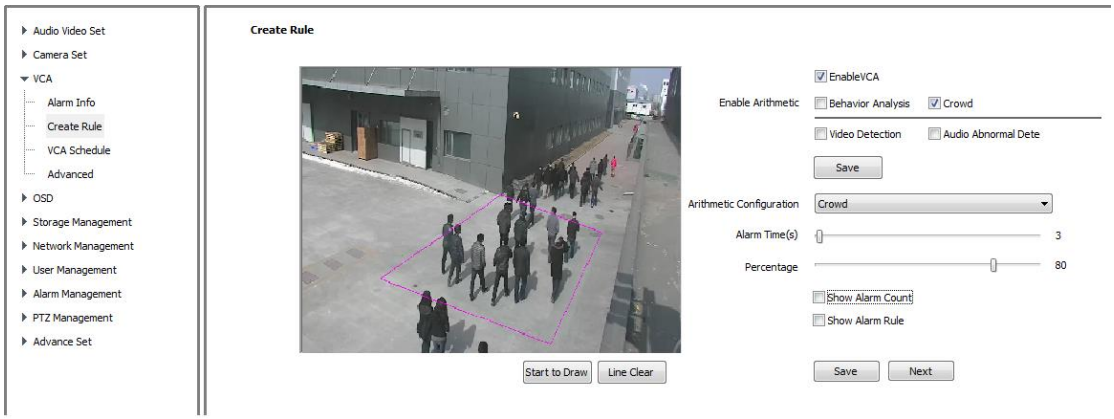
【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.9【Arithmetic Configuration】→【Behavior Analysis】→【Parking】



Choose 【Rule ID】→【Parking】→【Vaild】
Draw detection area on the image
Setup alarm time, alarm when the object keep parking to this alarm time
Setup percentage, the percent of the object in the whole image
Setup speed threshold, alarm when the object's moving speed (percent/second) is slower than this speed threshold.
【Save】save all the settings
【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.13【Enable Arithmetic】→【Crowd】



Draw the detection area

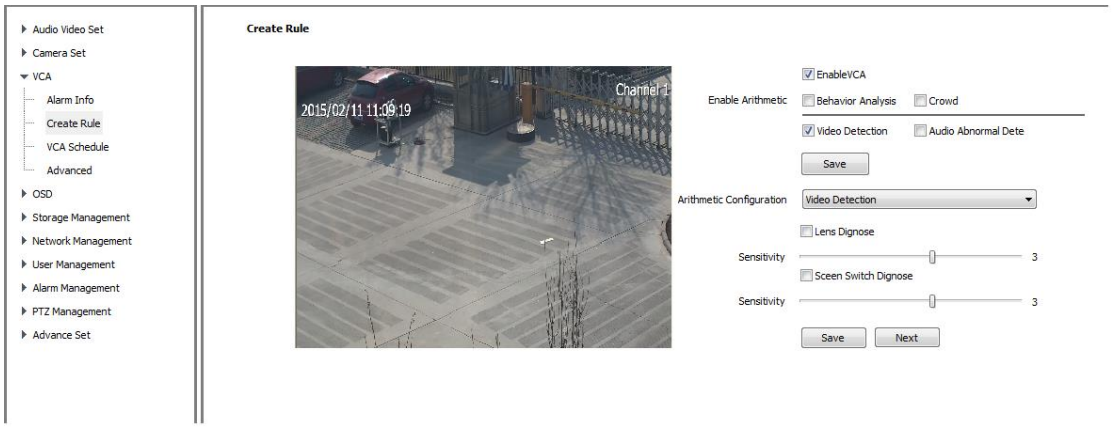
Set the time of linking to alarm

Set the crowd percentage

【Save】save all the settings

【Next】go into 【Alarm Setup】, please refer to 5.9.3

15.10.2.15【Enable Arithmetic】→【Video Detection】



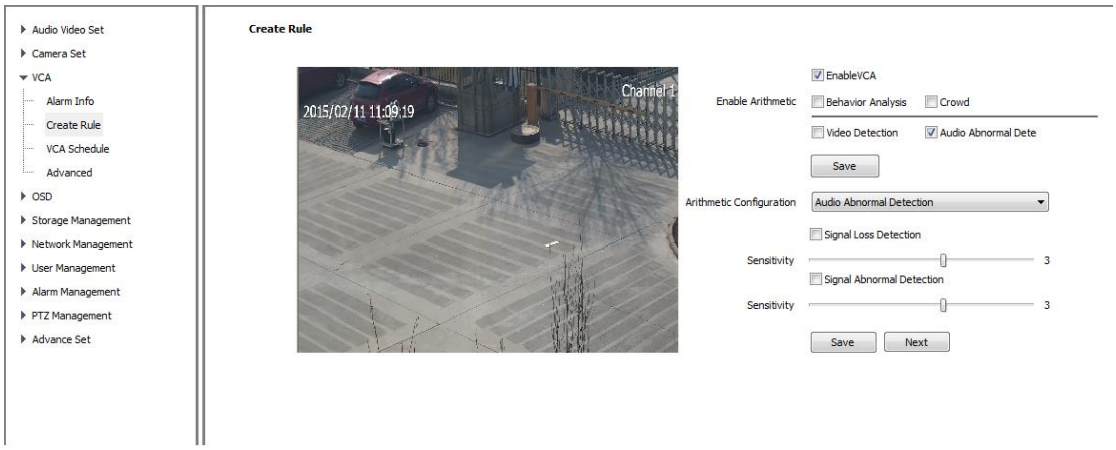
Enable lens or scene switch dignose

Set sensitivity, and the higher value means more sensitive

【Save】save all the settings

【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.2.16【Enable Arithmetic】→【Audio Abnormal Det.】



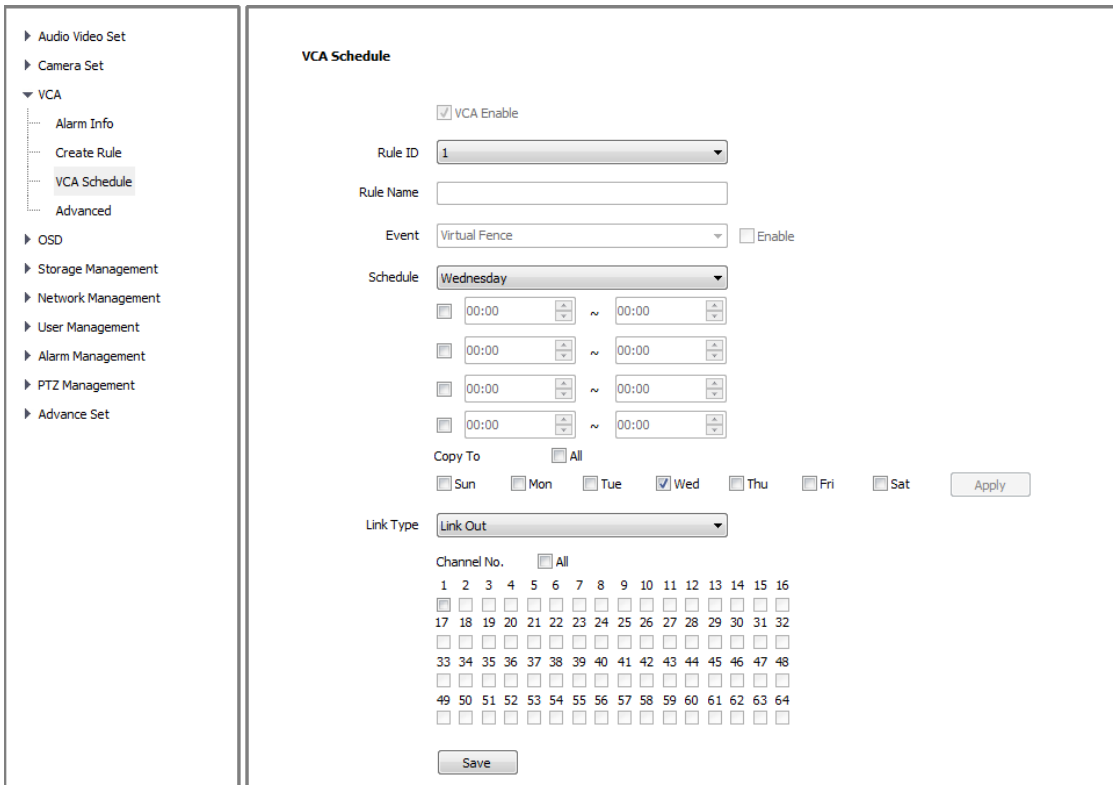
Enable signal loss or abnormal detection

Set sensitivity, and the higher value means more sensitive

【Save】save all the settings

【Next】go into 【Alarm Setup】, please refer to 5.9.3

5.10.3 VCA Schedule



Select the 【Rule ID】, the 【Rule Name】and 【Event】will auto update

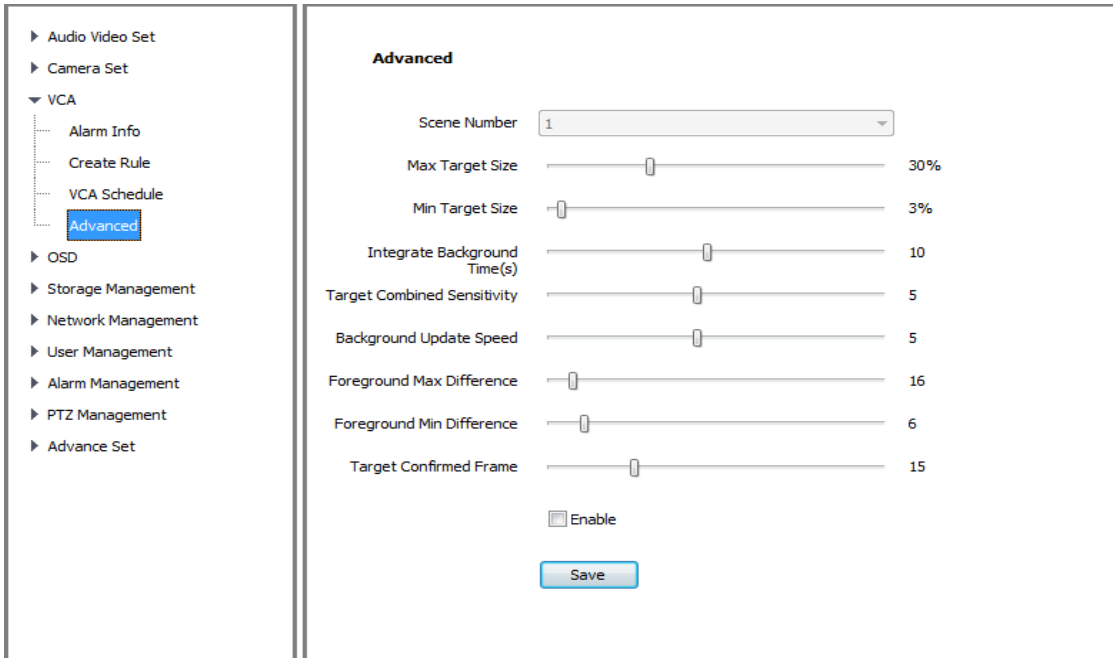
【Enable】to active the rule

Set schedule date and time

Set 【Link Type】: 【Link Out】,【Link Record】【Link Capture】【Link PTZ】

【Save】all the settings

5.10.4 Advanced

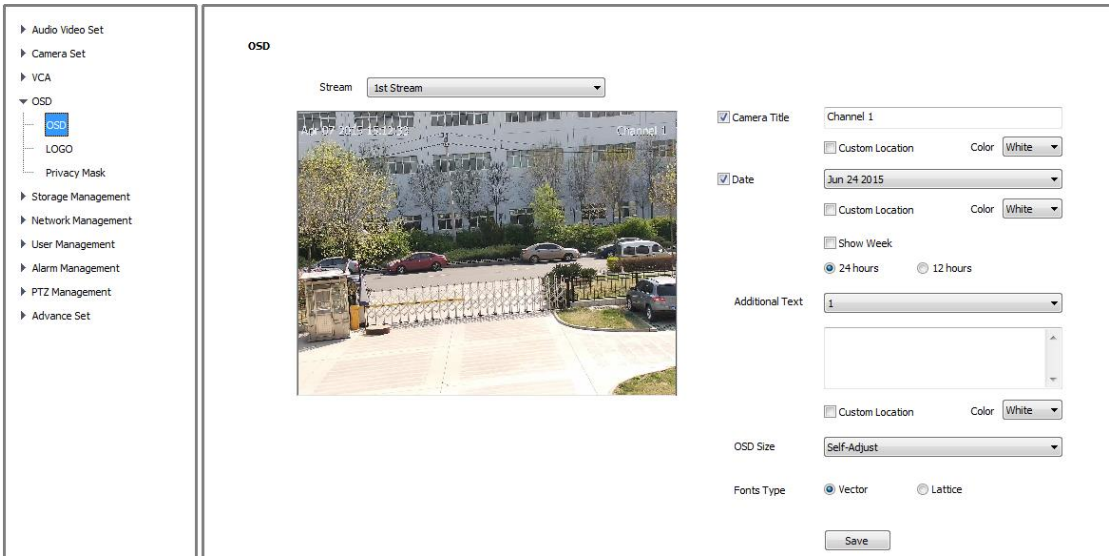


Note:【Advance】is only available for company engineer to setup

5.11 OSD

5.11.1 OSD

This function is used to add more info on the preview screen



Pic 5.10.1 OSD

OSD-Camera Title
Enable【Channel Title】 and input channel name
【Color】:select OSD color
【Custom Location】: select position on video image by mouse

OSD-Date
Enable【Date】to overlay date, and there are 11 formats for option
Enable 【Show Week】to overlay week information on image
Select 【24 hours】or 【12 hours】
【Color】:select OSD color
【Custom Location】: select position on video image by mouse

OSD-Additional Text
Select additional text area number(max 5)
Input overlay content, and it supports English and common punctuation marks.
【Color】:select OSD color
【Custom Location】: select position on video image by mouse

OSD-OSD Size
【OSD Size】select suitable pixel size, default is 【Self-Adjust】
OSD-Fonts Type
【Vector】and 【Lattice】are optional
【Save】all the settings

5.11.2 LOGO

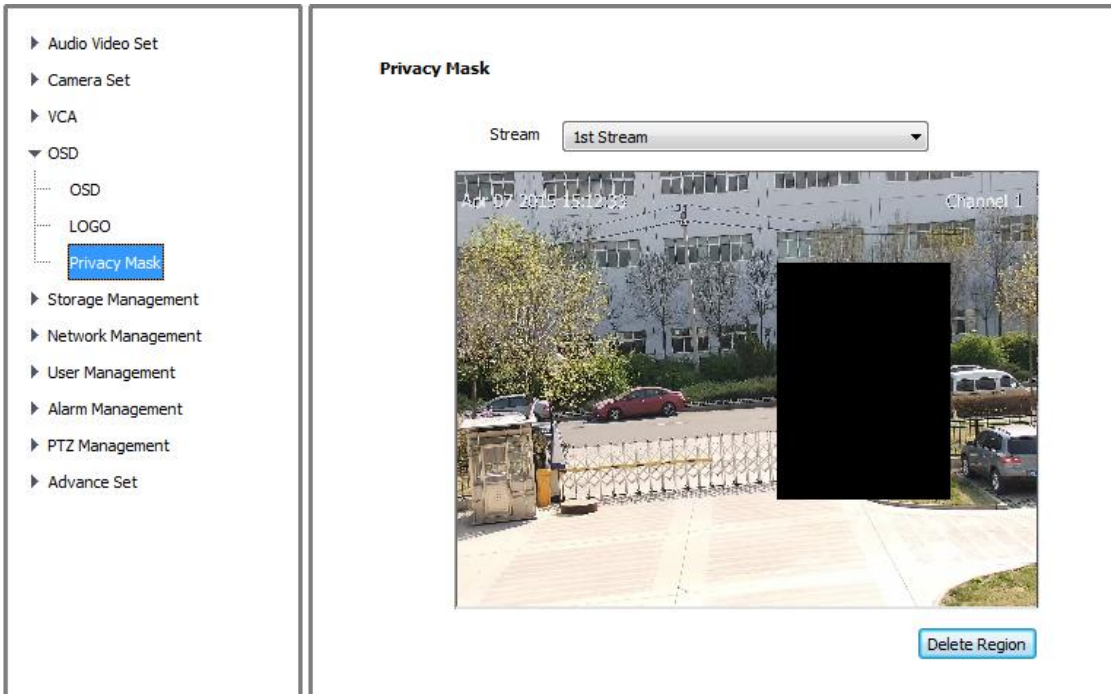
Pic 5.10.2 LOGO

This function is used to overlay Logo picture on the preview screen
【Logo File】input the file save path, or browse to find the logo
【Upload】: upload the logo file, and the IP camera will restart
After restart, please select【Enable】to display the logo
【Custom Location】:select logo position on video image

Note:
Logo format should be 24bit .bmp and size should be less than 200*200, and height and width are divisible by 4
System will remove the black and white picture background automatically

5.11.3 Privacy Mask

This function is used for setting hidden region on the preview screen to protect important info .It supports up to 4 regions

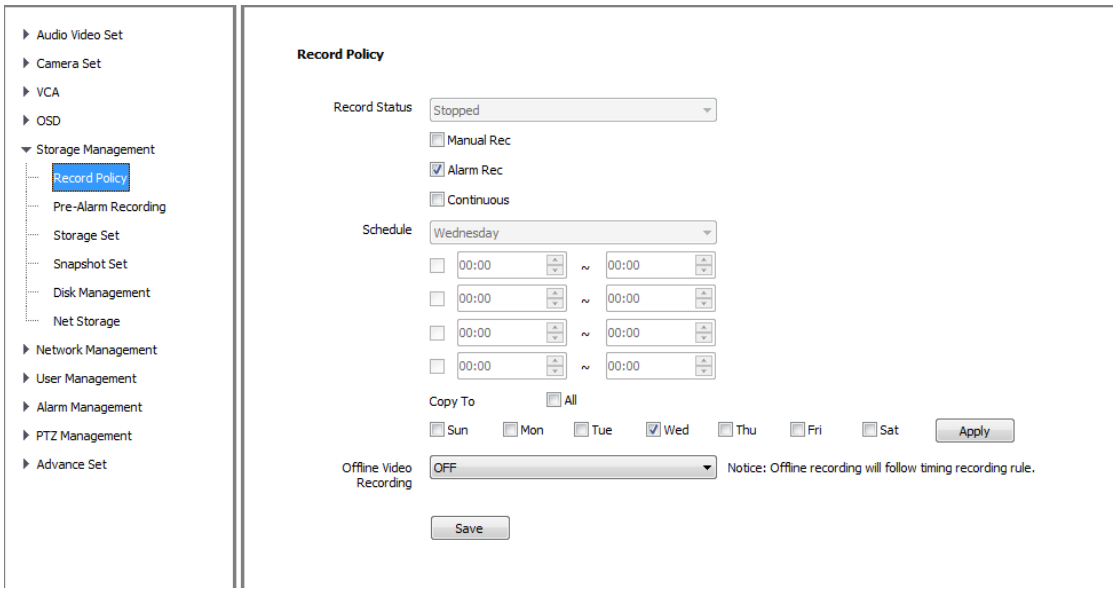


Pic 5.10.3 Privacy Mask

(1)【Stream】: select channel stream for privacy mask
(2)Draw the region on the screen by mouse. It supports up to 4 regions
(3)【Delete Region】: delete the drawn region

5.12 Storage Management

5.12.1 Record Policy



Pic 5.11.1 Record Policy

(1)【Record Status】: Show the device recording status

(2)【Manual Rec.】:Enable to start recording and cancel to stop

【Alarm Rec.】: Enable to start recording when alarm is triggered

【Continuous】: Enable to start timing recording

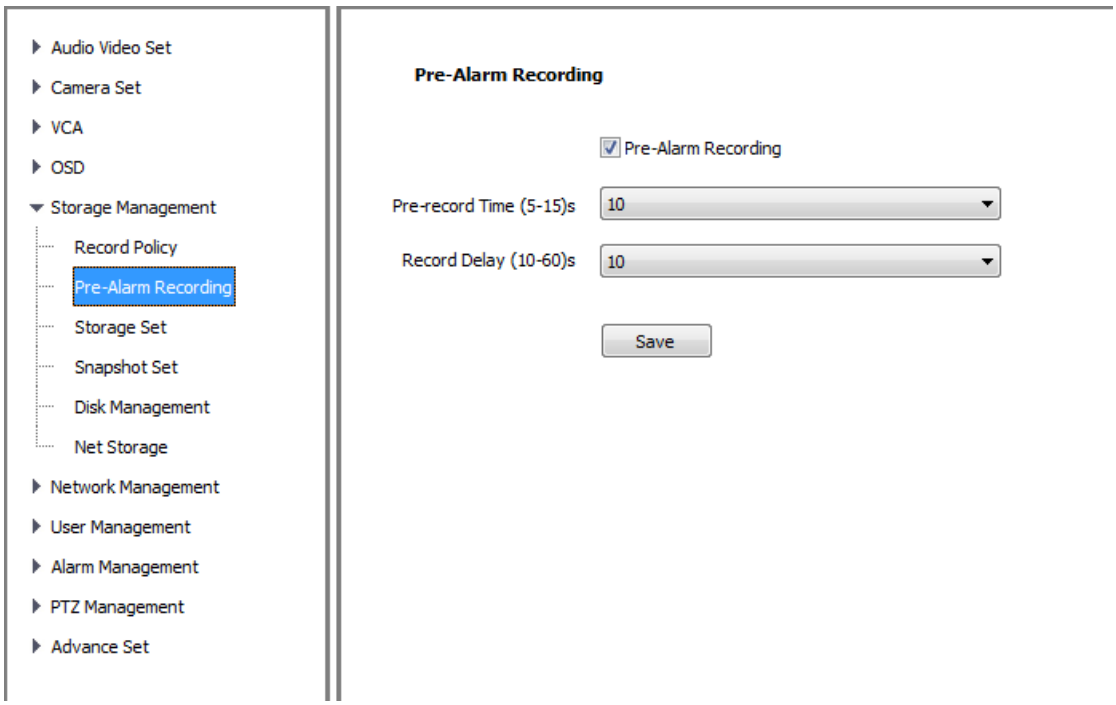
(3)【Schedule】: setup time period in 【Continuous】mode.

(4)【Offline Video Recording】: when the internet is disconnected, it will start timing recording into camera SD card

(5)【Save】: save all the setup

5.12.2 Pre-Alarm Recording

This function is used for pre-recording before alarm is triggered and extending recording time after alarm disappeared.



Pic 5.11.2 Pre-Alarm Recording

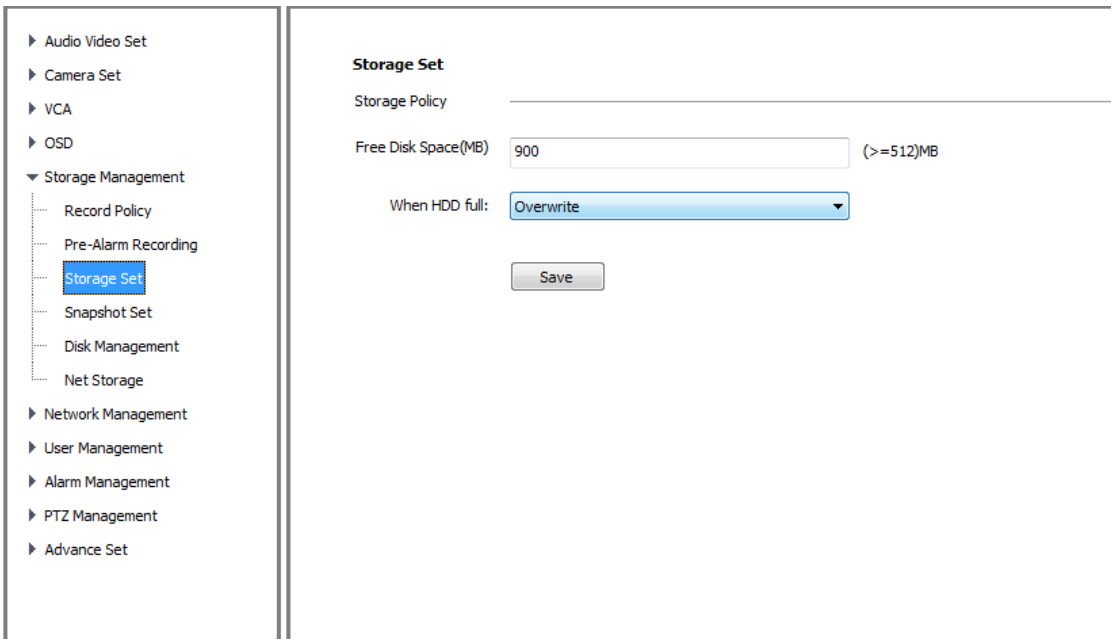
(1)【Pre-Alarm Recording】: enable to start

(2)【Pre-record Time(5-15)s】: support5s, 10s and 15s

【Record Delay(10-60)】: support 10s, 15, 30s and 60s

(3)【Save】: save all the setup

5.12.3 Storage Set



Pic 5.11.3 Storage Set

【Free Disk Space(MB)】: set the free disk space that custom want to keep.it should be larger than 512M

【When HDD full】: when the free disk space reached the target size, system will run the following operation:

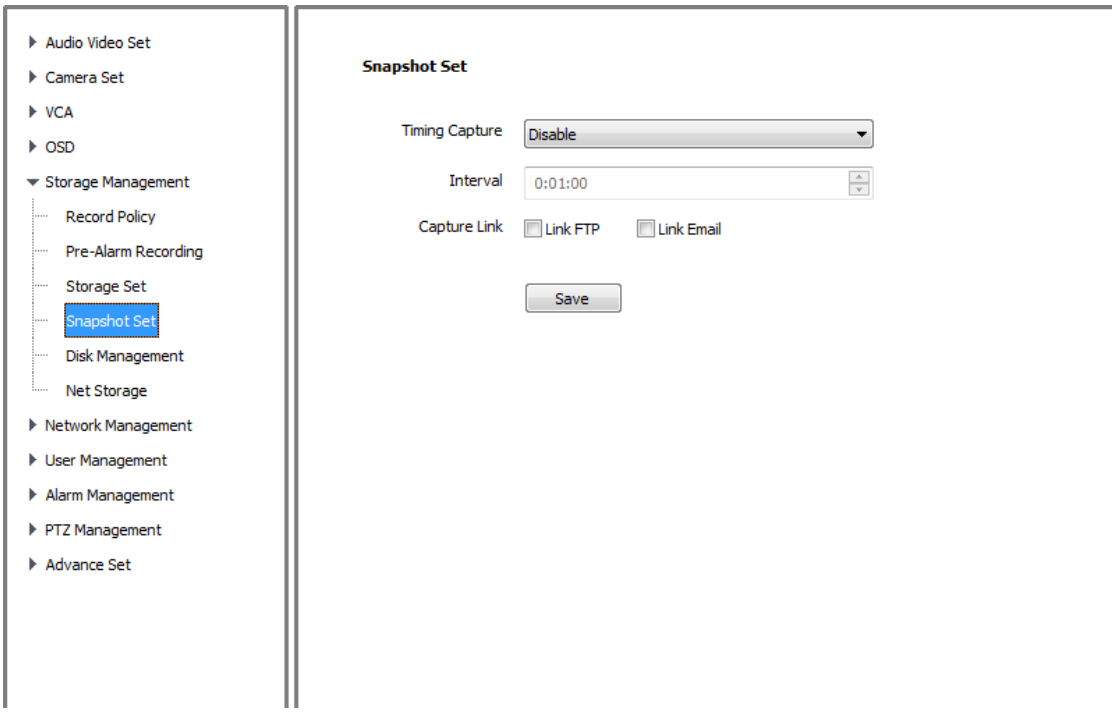
【Stop Record】: it will stop recording

【Overwrite】: it will loop delete the earliest record file

【Overwrite(Except alarm)】: it will loop delete the earliest record file except alarm Records.

【Save】: Save all the setup

5.12.4 Snapshot Set



Pic 5.11.4 Snapshot Set

(1)【Timing Capture】: enable to start timing capture.

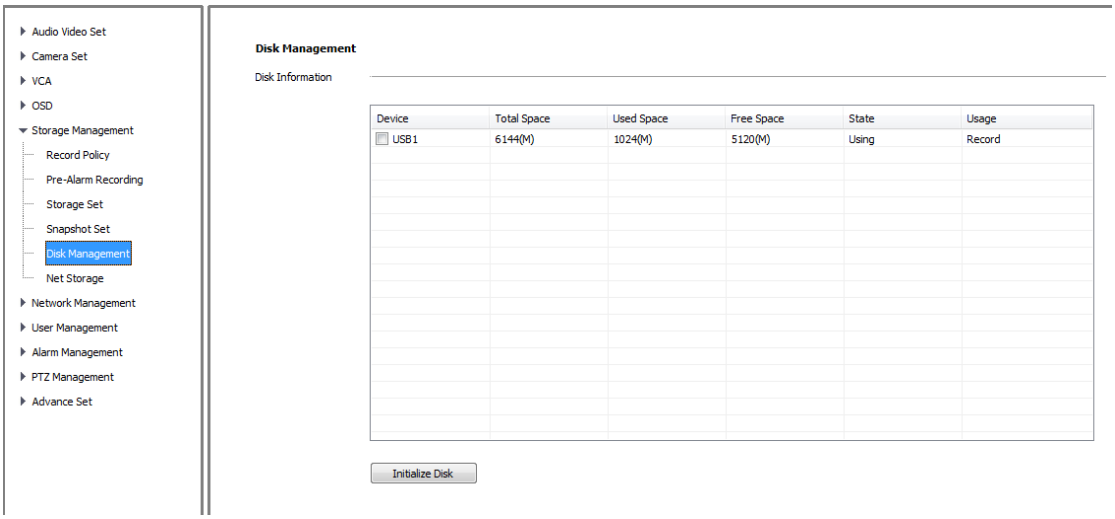
(2)【Interval(s)】: set timing capture interval time

(3) 【Capture Link】: 【Link FTP】capture picture will be uploaded to FTP server; 【Link Email】capture picture will be sent by email.

(4)【Save】: save all the setup

5.12.5 Disk Management

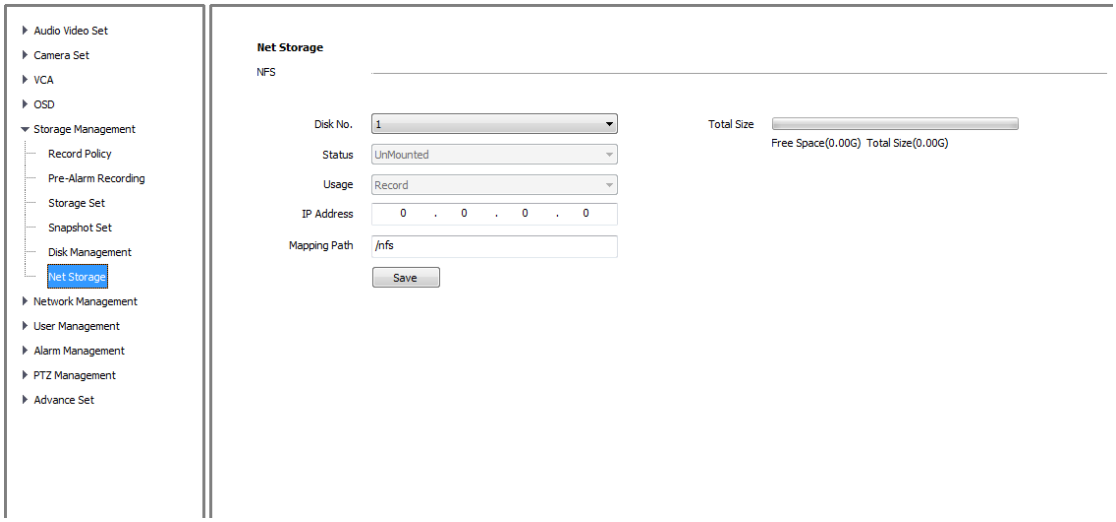
【Disk Information】: display the disk status



Pic 5.11.5 Disk Management

【Initialize Disk】: the new hard disk must be initialized first

5.12.6 Net Storage

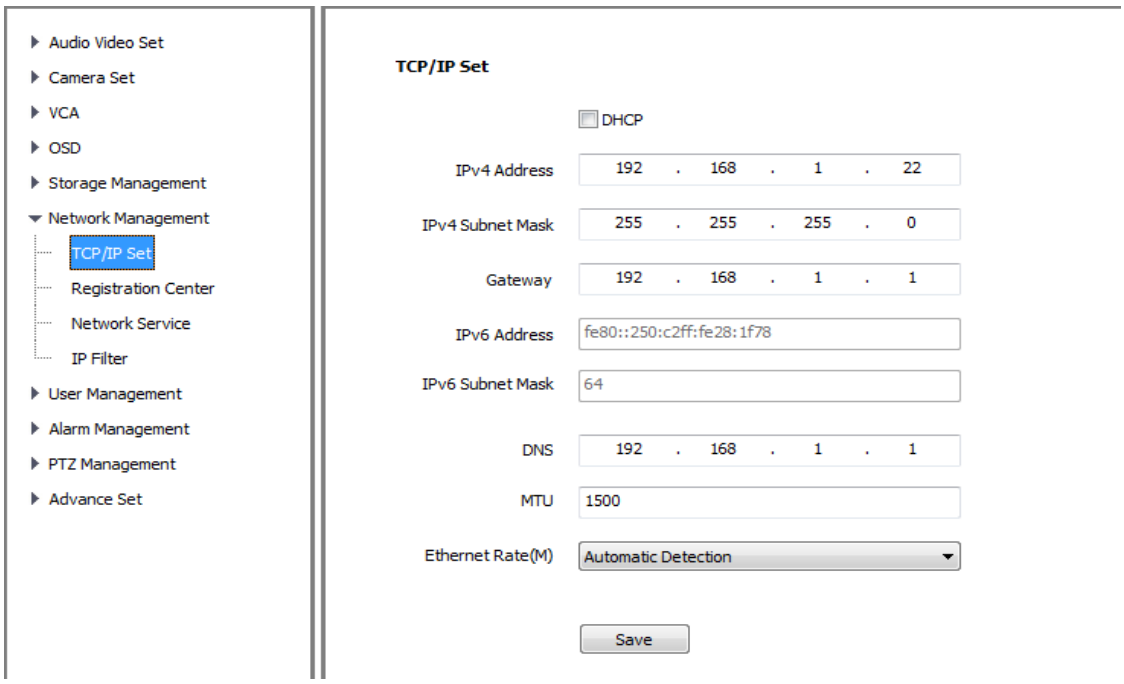


Pic 5.11.6 Disk Management

(1)【Disk No.】: select one disk to setup
(2)【Status】: show the disk installation status.【UnMounted】, 【Unformatted】, 【Formated】, 【Mounted】and 【Using】
are optional
(3)【Usage】: show the disk usage status.【Record】, 【Backup】, 【Redundant】and 【Read Only】are optional
(4)【IP Address】: set NFS server IP address
(5)【Mapping Path】: set the disk mapping path
【Total Size】: display the free space and total size
【Save】: save all the setup

5.13 Network Management

5.13.1 TCP/IP Set



5.13.1 TCP/IP Set

【DHCP】 check to enable DHCP server will automatically allocate IP address for devices.

【IPv6】 Display IPV6 address and subnet mask.

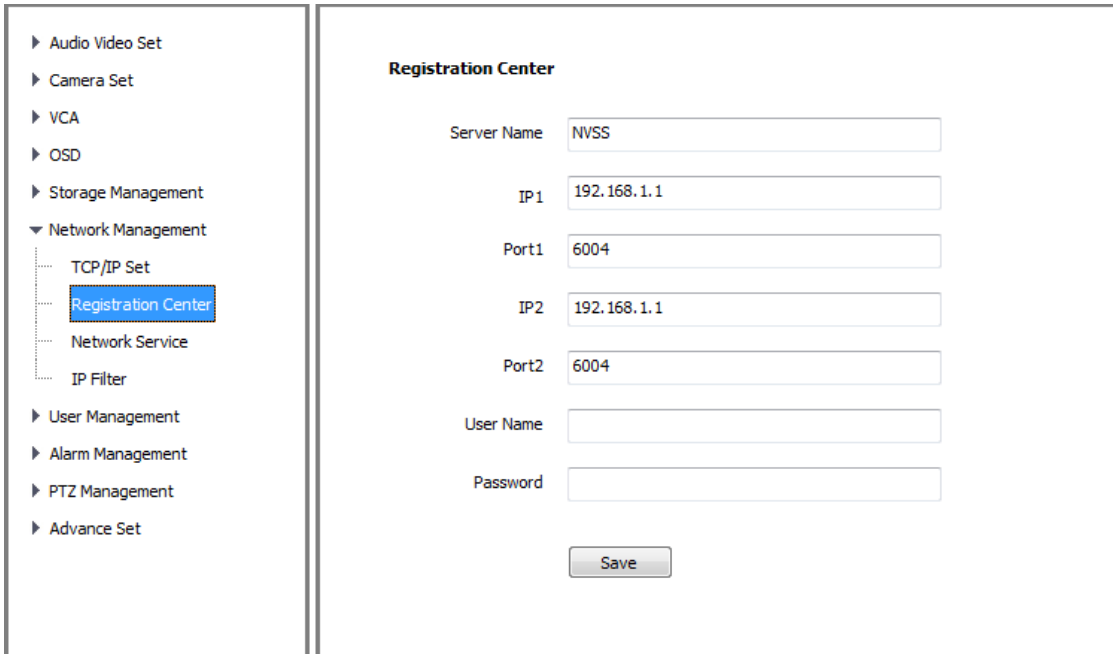
【MTU】 Maximum Transmission Unit, range from 500~1500, default value is 1500. Click 【Save】 after setting.

【Ethernet Rate】 Select mode and rate of Ethernet card, speed unit is MB .Default mode is【Automatic Detection】, modify not recommended.

Note: Devices will restart after change 【Ethernet Rate】.

5.13.2 Registration Center

Set 【Server Name 】【IP address】【Port】【User Name】and 【Password】in 【Registration Center】 in the registration center .

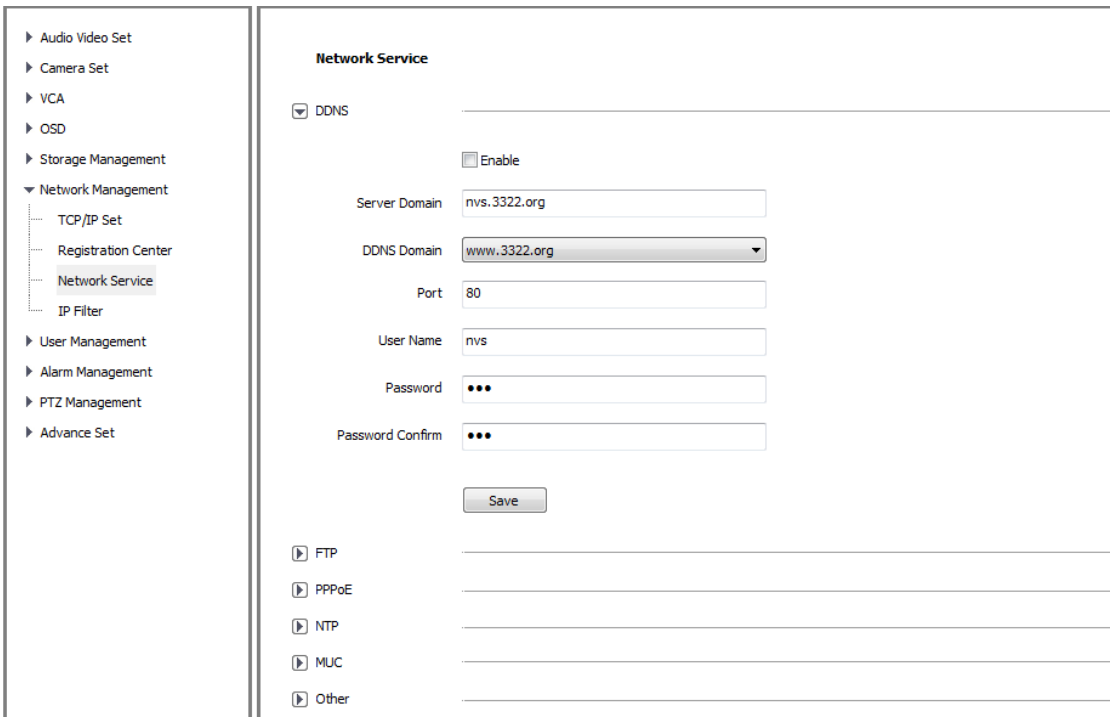


5.13.2 Registration Center

5.13.3 Network Service

5.13.3.1 DDNS

【Enable】 DDNS, Modify 【Sever Domain】【DDNS Domain】【Port】【User Name】【Password】, then click 【Save】.

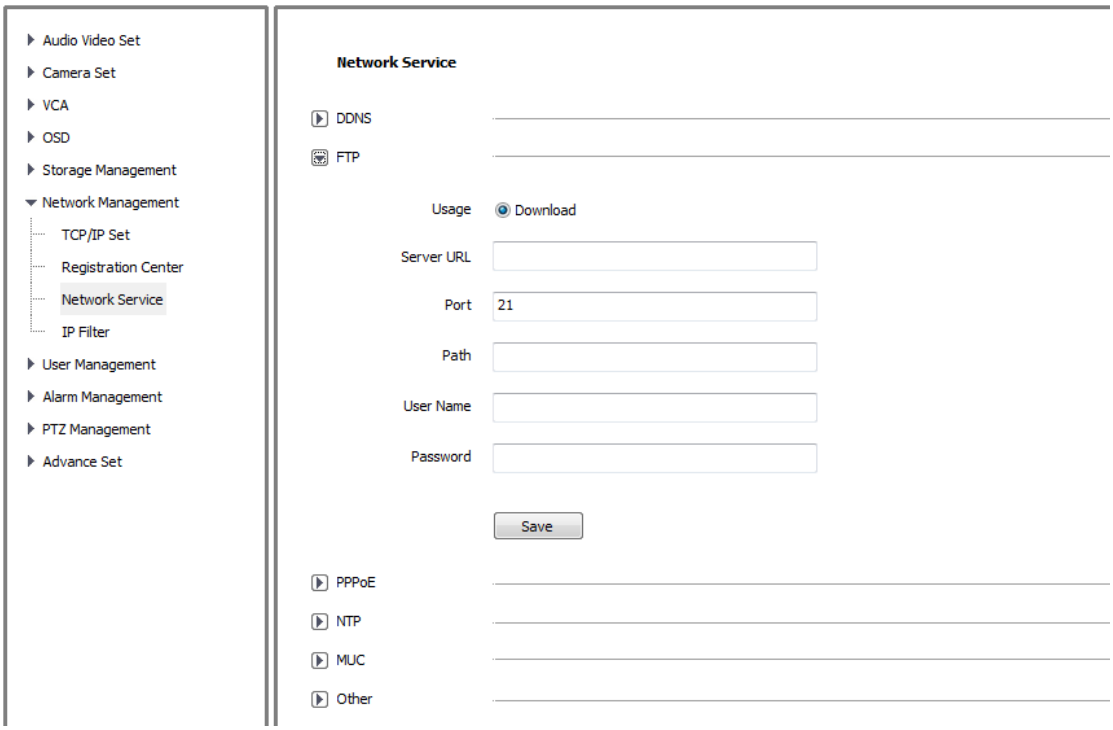


5.13.3.1 DDNS

5.13.3.2 FTP

Enter 【Server URL】【Port】【Path】【User Name】【Password】, Click 【Save】.

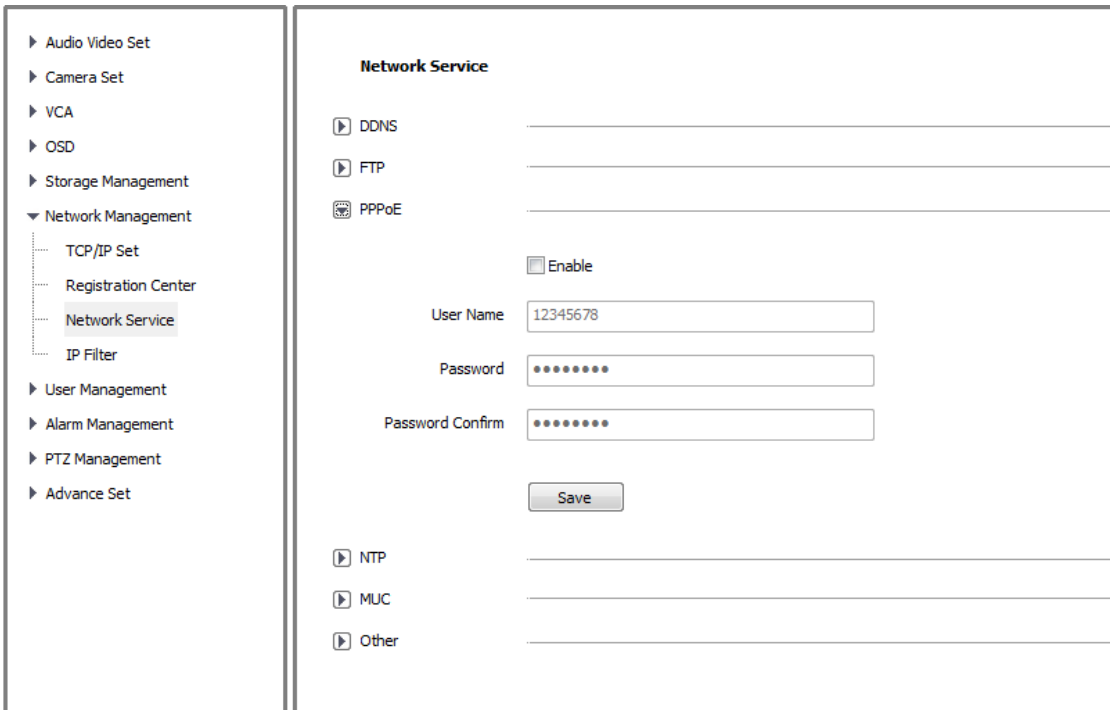
Make sure to insert the memory card.



5.13.3.2 FTP

5.13.3.3 PPPoE

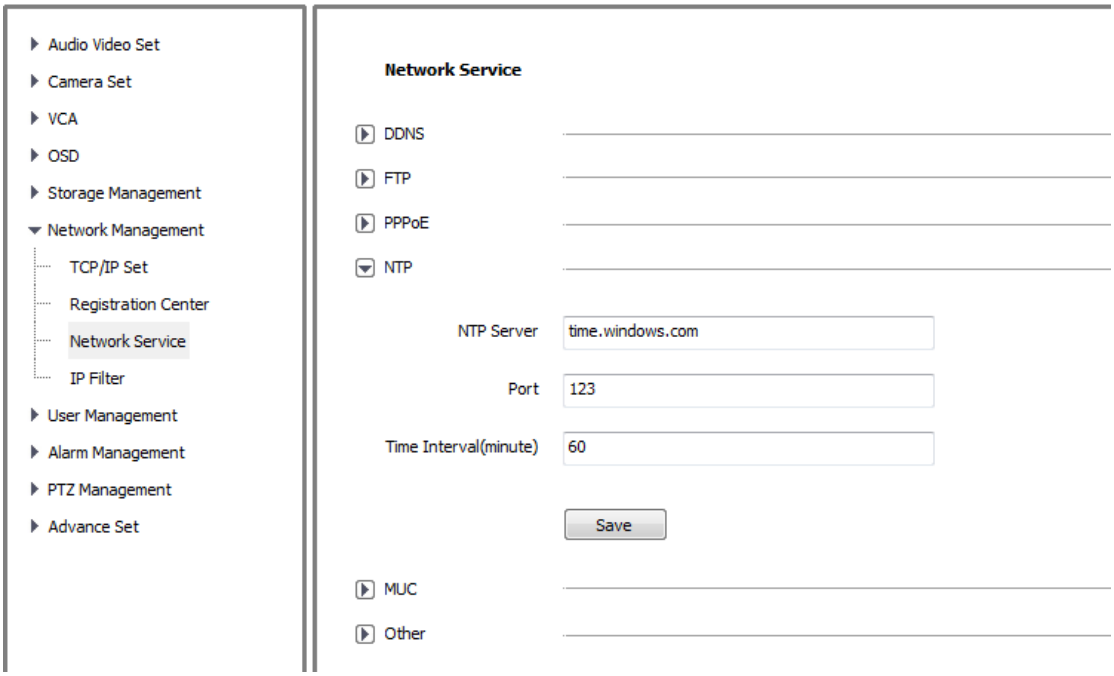
【Enable】 PPPoE function, enter【Username】【Password】and save the setting.



5.13.3.3 PPPoE

5.13.3.4 NTP

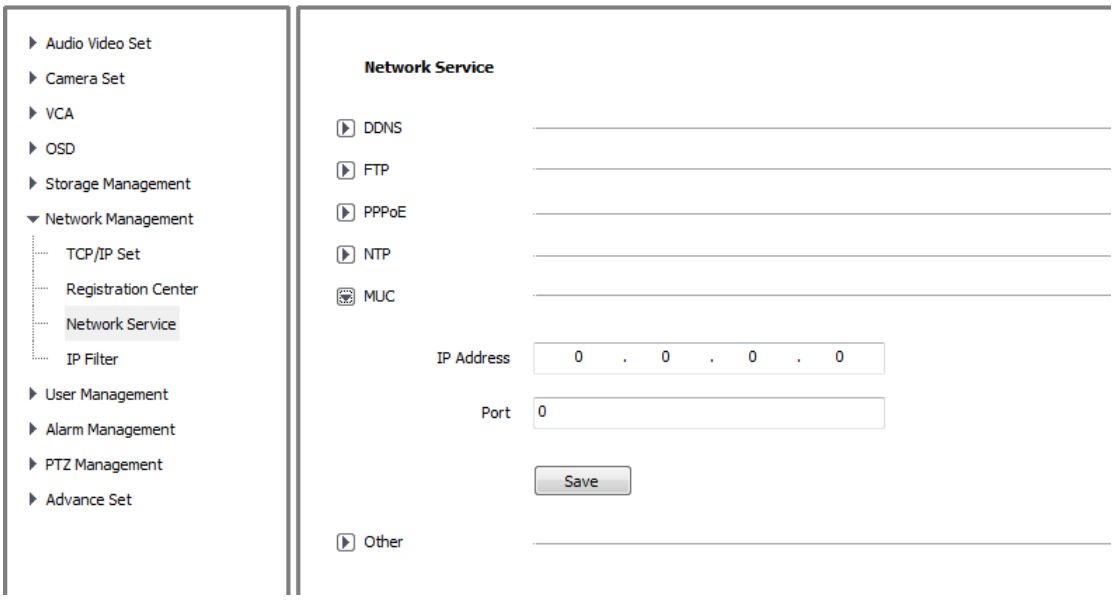
Enter【NTP Server】【Port】【Interval】 , click 【Save】.



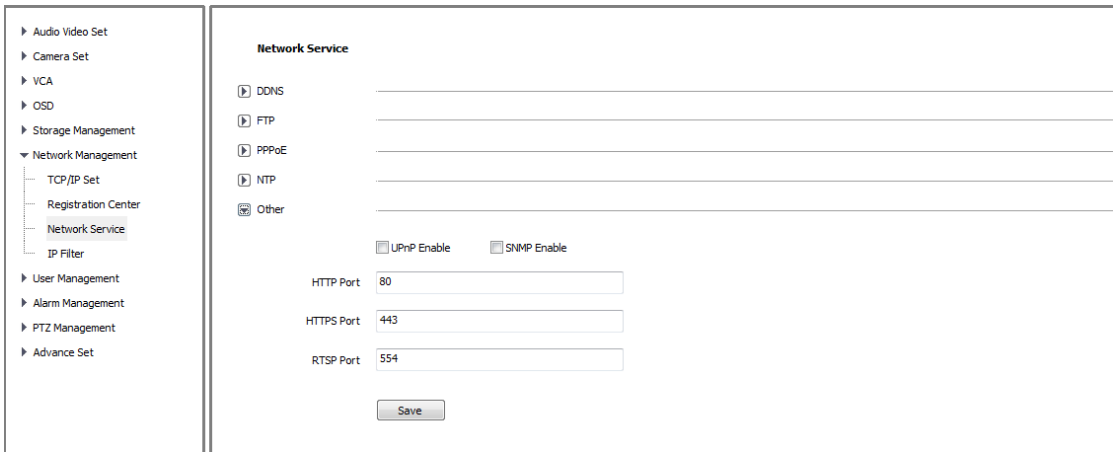
5.13.3.4 NTP

5.13.3.5 MUC

Enter【IP Address】 and【Port】,click 【Save】to enable multicast.



5.12.3.5 Others



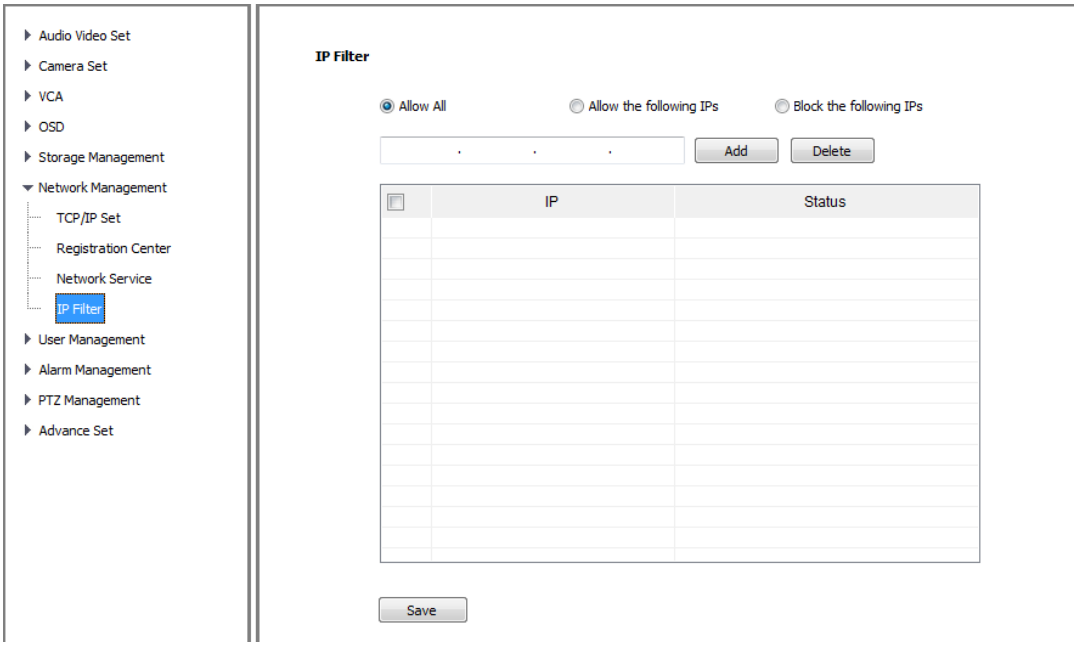
5.13.3.5 Others

HTTP Port
Enter Http port, restart device, then modify successfully.
HTTPS Port
Enter Https port, restart device, then modify successfully.
RTSP Port
Enter RTSP port, restart device, then modify successfully.
UPnP
Check the UPNP box and restart the device to enable the UPnP function. Cancel UPNP box and restart the device to able the UPnP.

SNMP
Check the SNMP box and restart the device to enable the SNMP function. Cancel UPNP/SNMP box and restart the device to able the SNMP function.

5.13.4 IP Filter

Backlist and whitelist also named 【IP filter】, used to manage the access right of users.



5.13.4 Blacklist

Blacklist

It used to block some IP address, select【Block the Following IPs】, input the block IP address, then click【Add】,【Save】.Max to add 16 blacklist IP address.

Caution: Please don't add your own IP address in blacklist, otherwise you will not be able to login.

Whitelist

If only some IP address allowed, select 【Allow the Following IP】, input trusted IP address, click 【Add】 and 【Save】. Max to 16 whitelist IP address.

Caution: Once enable the whitelist function, please make sure to add your own IP address in whitelist, otherwise you will not be able to login the device.

Cancel blacklist or whitelist

Anytime click【Allow All】 and 【Save】 to cancel all the blacklist and whitelist.

Note: Please restart device after setup blacklist or whitelist.

Delete Blacklist

Delete some black IP -Select the left check box and click 【Delete】.

Note: the IP filtering can only recognize the new user login, but not work for ready IP. It is strongly recommended that restart the equipment each time after Configuring black and white list.

5.14 User management

5.14.1 Add user

It need input 【Username】, 【Password】and 【authority】 when add new user. The user name and password can only input English letters and Numbers.

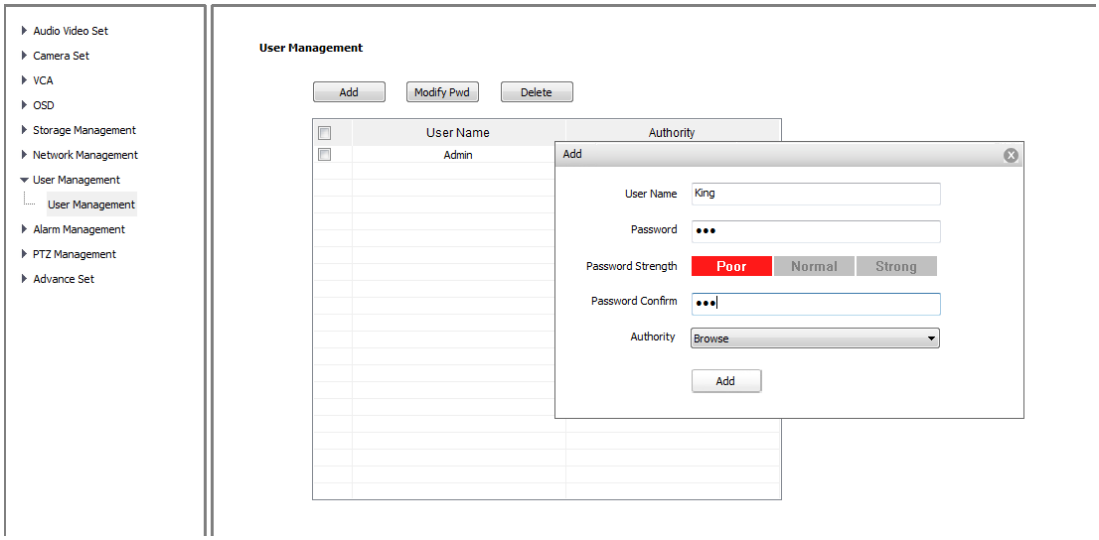
The authority includes “Brose”,” Browse+ Control”,” browse+ control+ set” and “Administrator ”.

Browse: Can only watch the videos.

Browse+ Control: Watch video and control PTZ.

Browse+ Control+ set: Allow all operation except user management.

Administrator: All operations available.

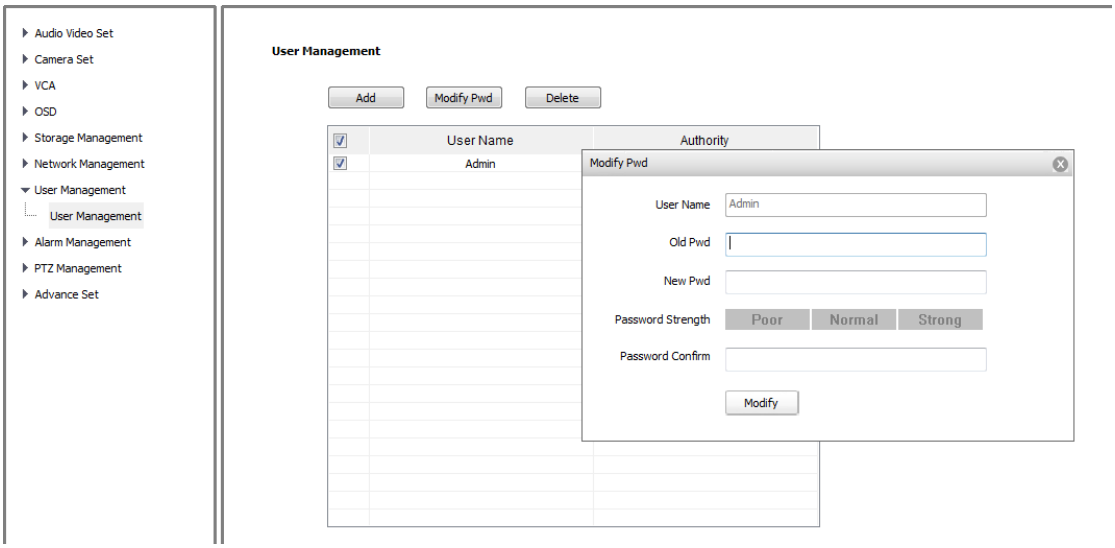


5.14.1 Add user

Note:Only the administrator can add and modify users.

5.14.2 Modify password

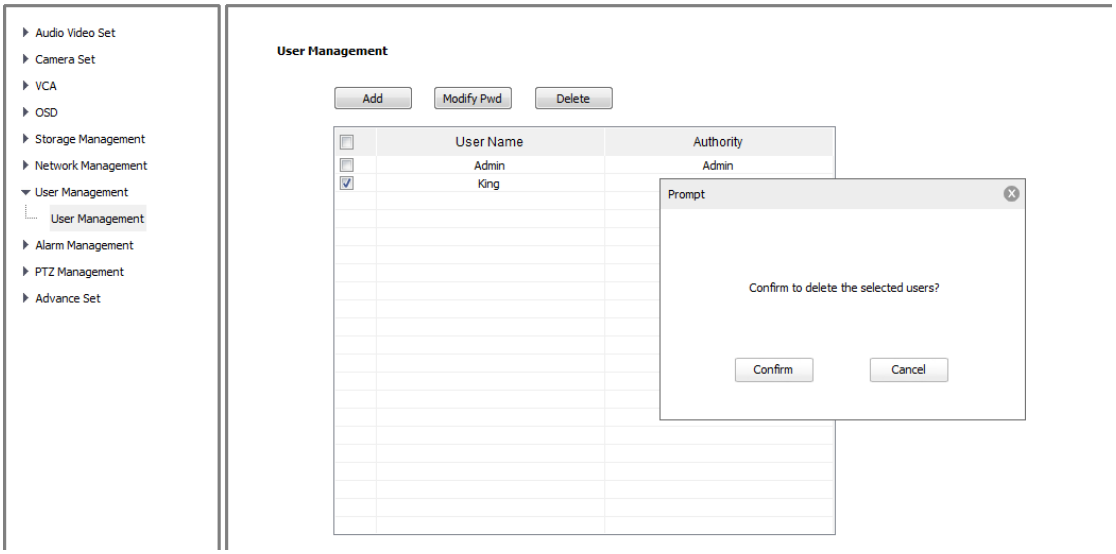
Select the user you want to modify in the user list, click 【Modify Pwd】, input the old password, new password, password confirmation, then click【Modify】.



5.14.2 Modify password

5.14.3 Delete User

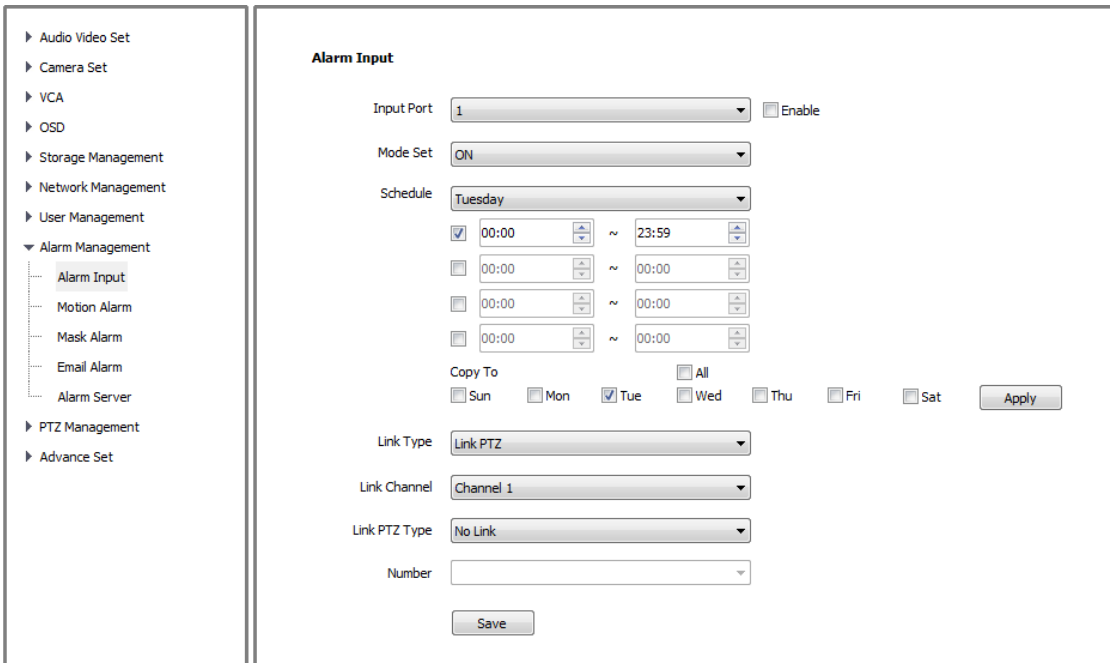
Select targeted user in user list and click【Delete】 to delete



5.14.3 Delete User

5.15 Alarm Management

5.15.1 Alarm Input



5.15.1 Alarm Input

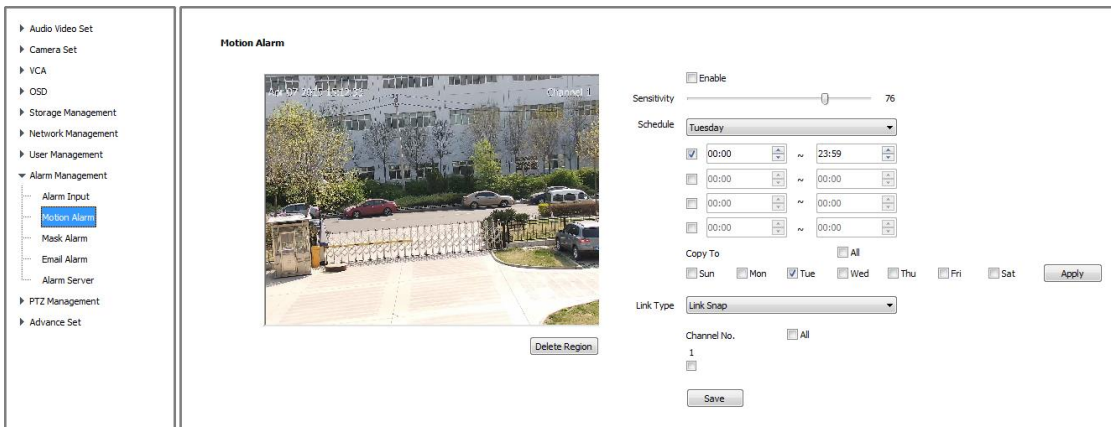
Select【Input port】, check "Enable" box to valid the port alarm function, and Cancel

it to close the alarm detection function.
【Mode set】 include “closed circuit alarm” and “open circuit alarm”.
【ON】is closed circuit alarm. It will alarm when disconnected circuit occurs short-circuit.
【OFF】is open circuit alarm. There was an alarm when the connected circuit disconnect.
【Schedule】 please set the date and time. It only alarm during the schedule.
【Link Type】set alarm activation,【Link Out】 and 【Link PTZ 】.
Click 【Save】

Note: The Alarm function only available for products which support Alarm In/Out.

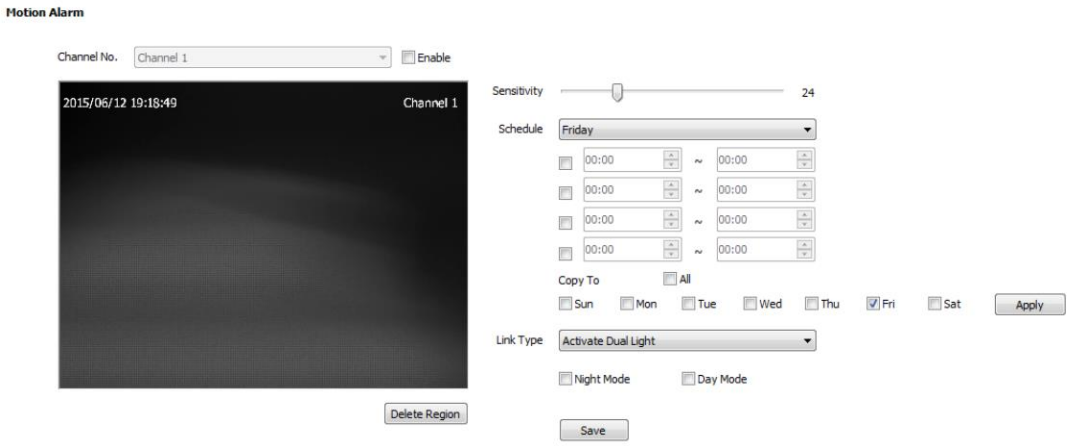
5.15.2 Motion Alarm

Set the motion alarm area. Any moving objects in the area, the tip will appear in the preview window.



5.15.3 Motion Alarm

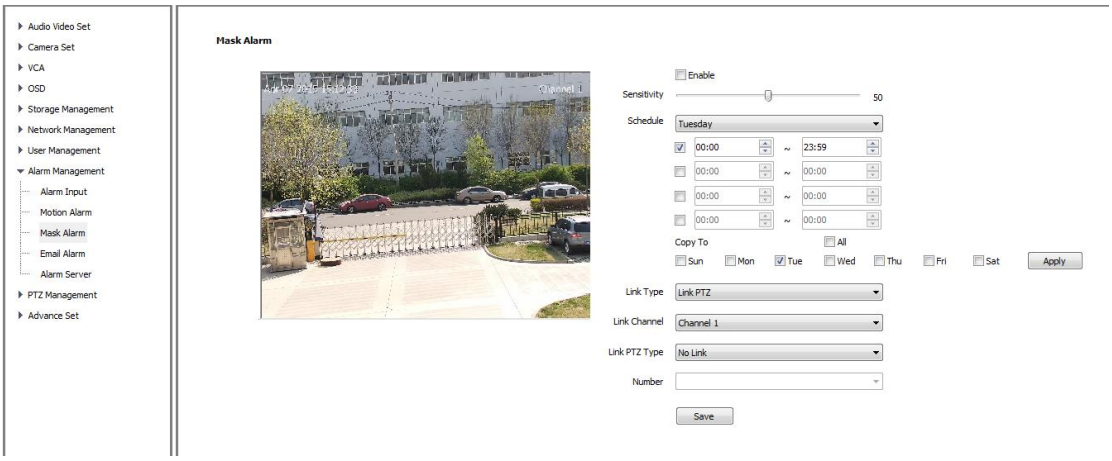
1. Enable 【Motion Alarm】, draw the area by dragging mouse left button.
Click 【Delete Region】 clean the draw area.
2. Set 【Sensitivity】, range from 0-24, small value means the higher sensitivity.
3.【Schedule 】, please set the date and time. It only alarm during the schedule.
4.【Link Out】support 【Link Out】【Activate Dual Light 】【Link Snapshot】.
【Activate Dual Light】only used for the model which have double light.
At night, motion detection link white light on. Under “Night Mode” (“White& Black” mode), IR LED on .Under “Day mode”(“Color” mode) ,IR LED off. Motion alarm disappear, double light off.



5. Click 【Save】

5.15.3 Video Occlusion Detection

When the video is covered, system will alarm according to the sensitivity setting.



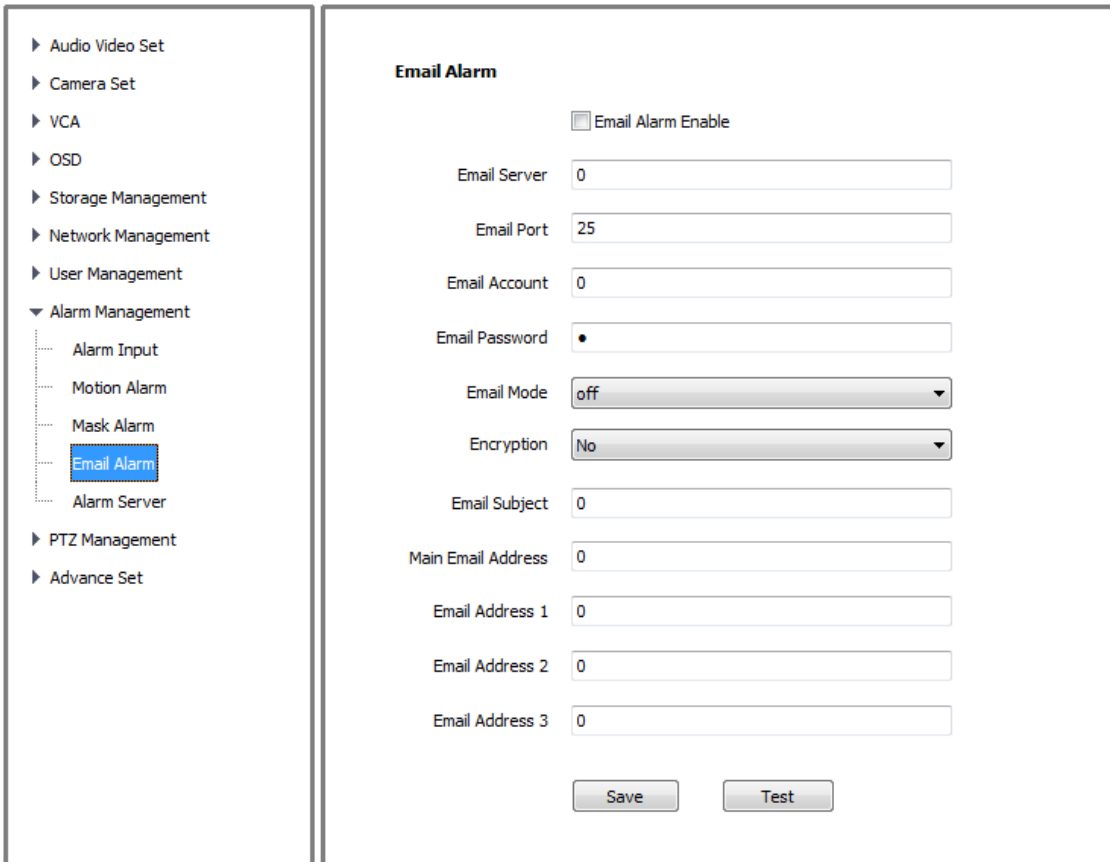
5.15.5 Video Occlusion Detection

1.【Enable】Click to open Video Occlusion Detection function.
2.【Sensitivity】 Smaller number means more sensitive.
3.【Schedule】. Video Occlusion Detection works only during this Schedule time
4.【Link Type】Set to achieve linking (such as link PTZ) after alarm is triggered. At the same time, set 【Link Channel】, 【Link PTZ Type】and 【Number】.
5.【Save】

5.15.4 Email Alarm

After this function is enabled, the alarm server will automatically send email to the

setting email address when alarm is triggered.



5.15.6 Email Alarm

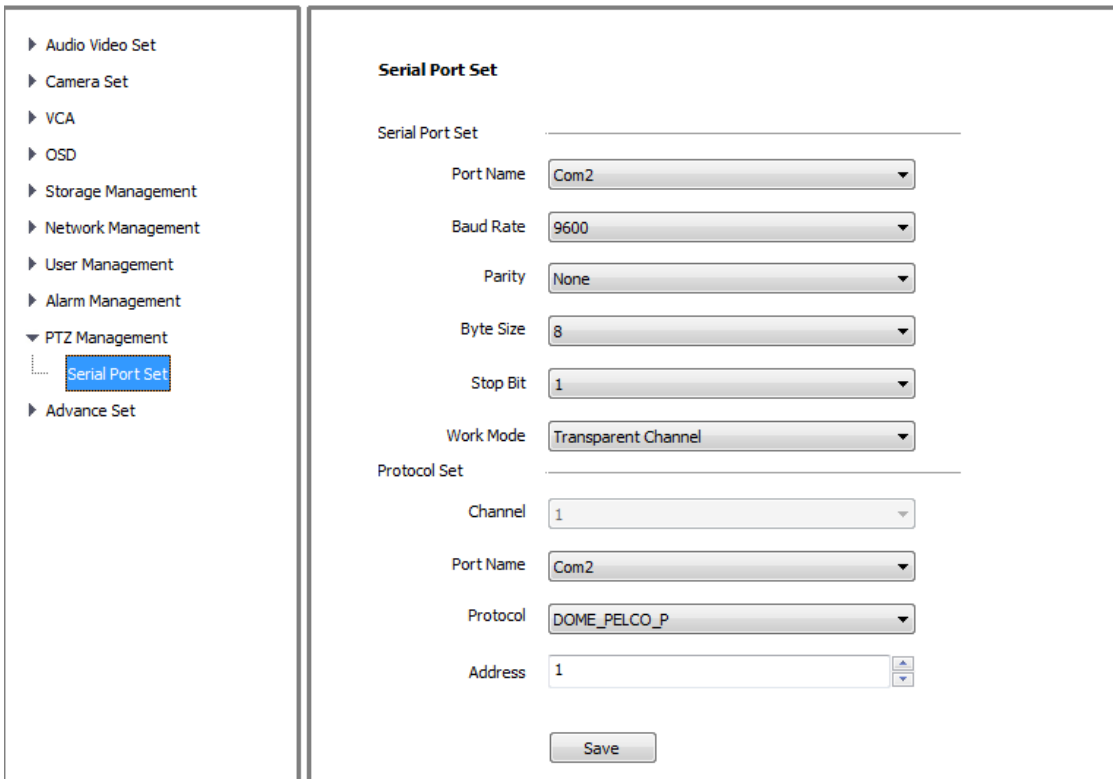
【Email Alarm Enable】check to enable this function.
【SMTP Server】 Address format should be smtp.xx.com. XX Stand for email server such as: smtp.gmail.com.
【SMIP Port】 Default number is 25.
【Email Account】and【Email Password】are for the sending email. 【Email Address】 is for the receiving email.
【Email Mode】" login" is suggested.
【Encryption Mode】 includes No, SSL or TSL.
Set 【Email Subject】 and 【Email Address】,Click 【Save】

5.15.7 Alarm Server

Alarm Server info is customized. Input【Address】and【port】, then click【Save】 to finish.

5.16 PTZ Management

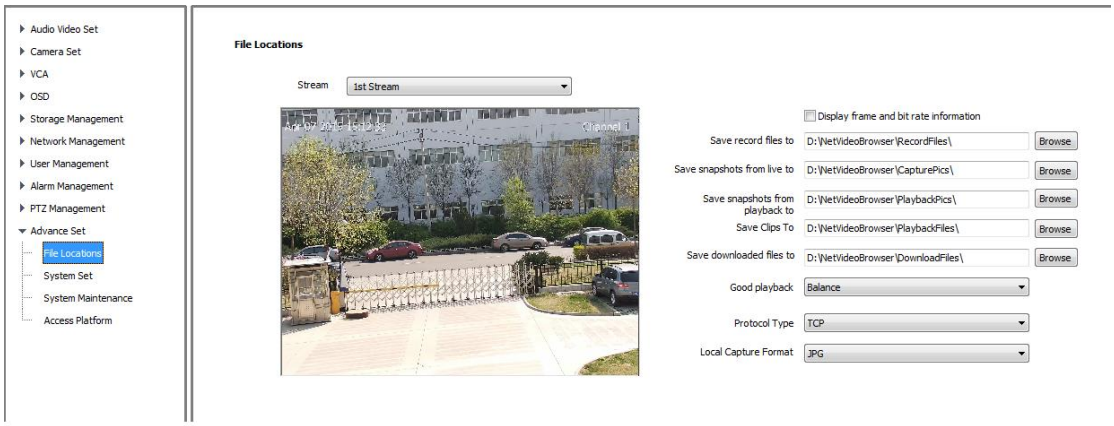
PTZ management includes 【Serial Port Set】and【Protocol Set】



Pic 5.16 PTZ Management

5.17 Advance Set

5.17.1 File Location



Pic 5.17.1 File Location

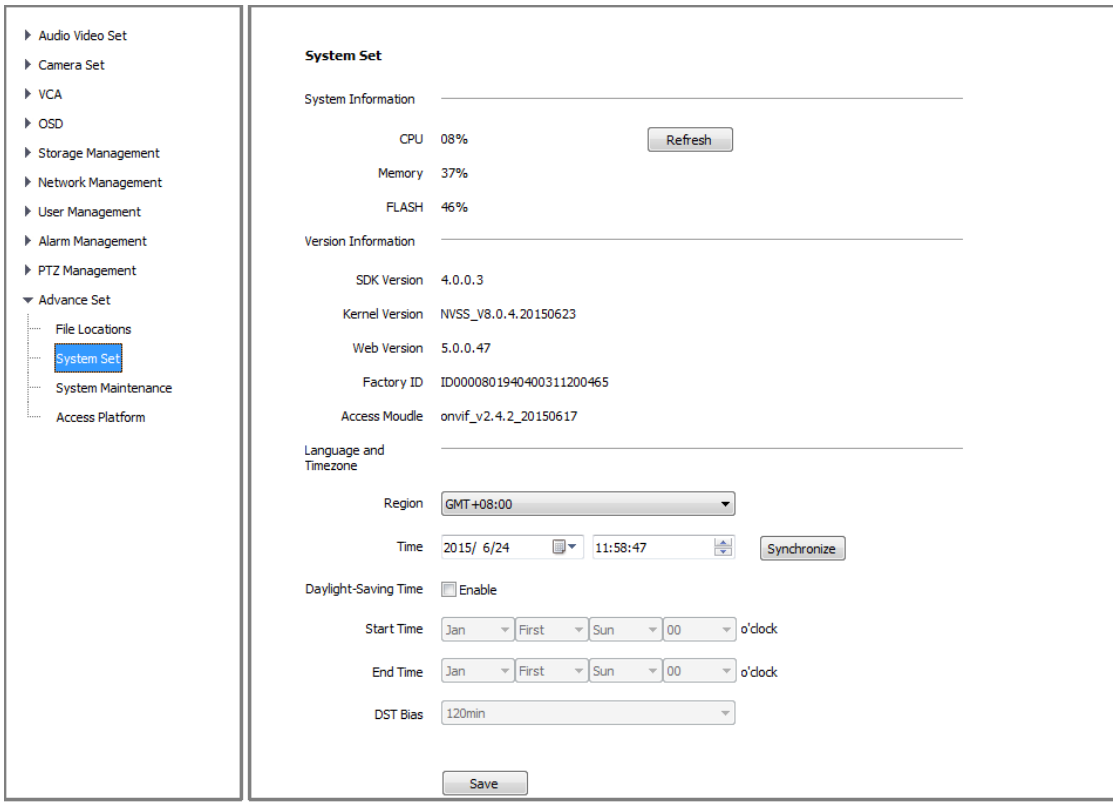
【Stream】Choose the stream for a certain channel.

【Display frame and bit rate information】Check to display frame rate and bit stream on video.

【Browse】Click to choose save path of record files, snapshot, clips and download files.

【Good Playback】 set to achieve the balance between fluency and delay.
【Minimum delay 】【Good real-time】【Balance】and 【Good Fluency】 is optional.
【Protocol Type】 TCP, UDP or multicast.

5.17.2 System setting

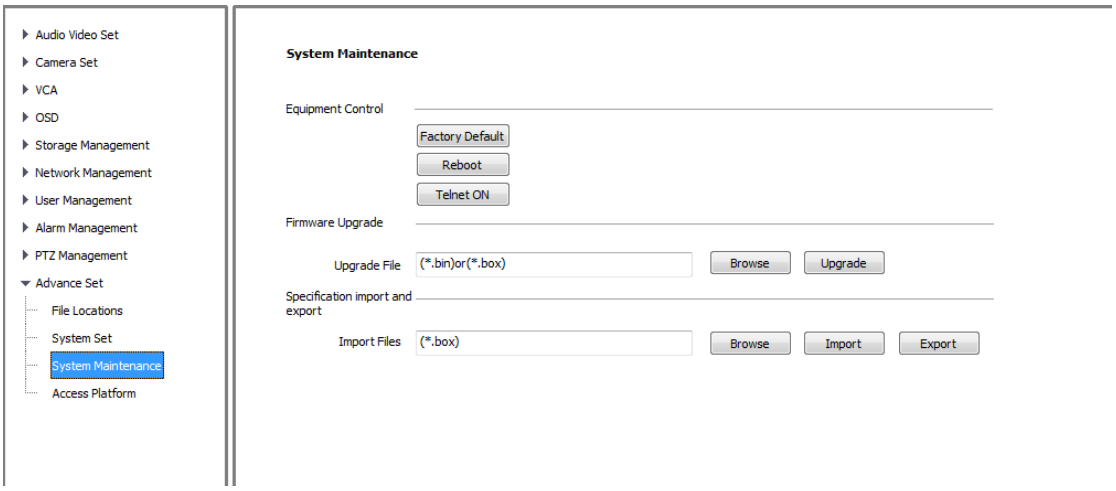


Pic 5.17.2 System setting

【System Information】Display information of CPU, Memory and FLASH.
【Version Information 】Display【SDK Version】,【Kernel Version】,【Web Version】, 【Factory ID】 and 【Access Module】.
【System Time】 Set time zone and time synchronous. Support daylight saving time.

5.17.3 System Maintenance

System maintenance includes 【Equipment Control】and 【Version Upgrade】



Pic 5.17.3 System Maintenance

Firmware Upgrade, upgrade new firmware. (firmware format: .box/.bin) Upgrade process normally needs a few minutes until indication for completion. Please strictly follow the instruction by technical specialist for firmware upgrade.

【Specification import and export】 includes three types of specification:

【Alarm】 specification includes alarm schedule and linkage info. VCA info is not included.

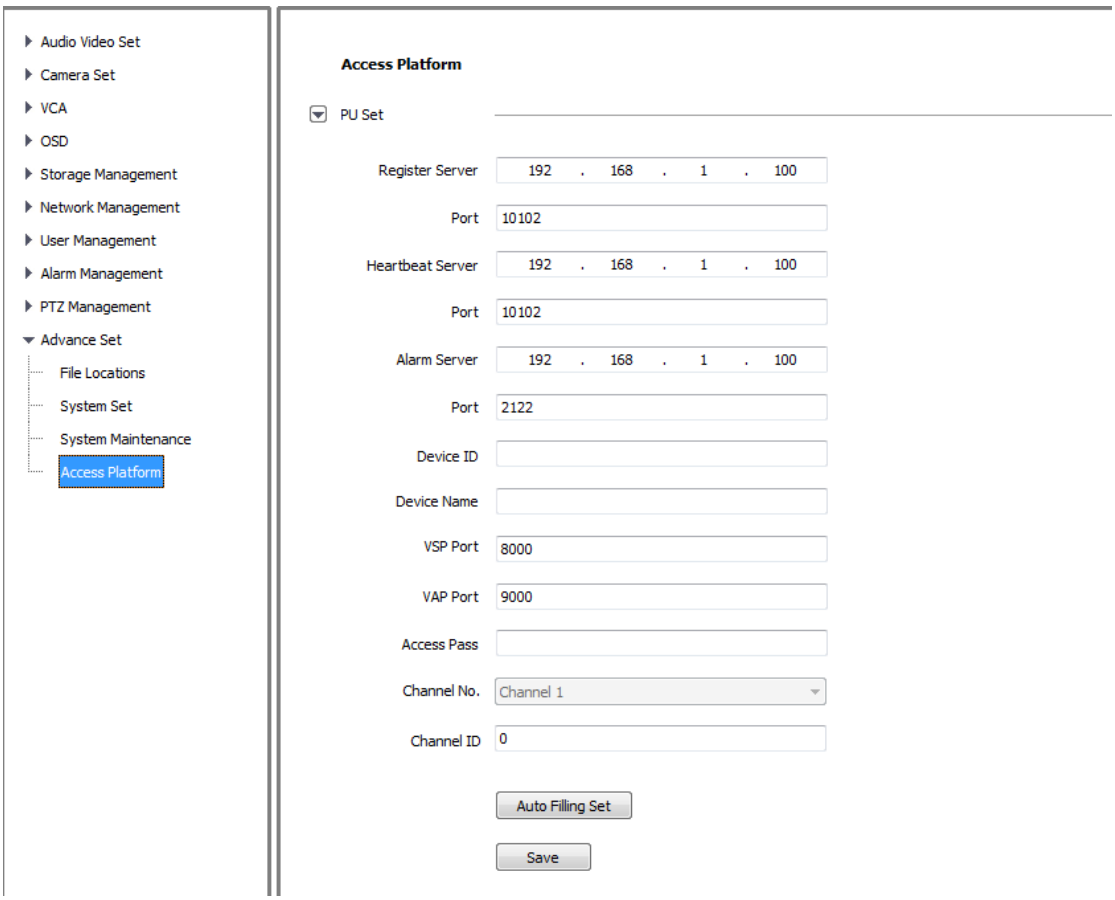
【VCA】 specification includes schedule, rule and related setting.

【System Set】 specification includes the other info except 【Alarm】 and 【VCA】 specification such as OSD, Recording strategy, Internet set and some other setting.

5.17.4 Access Platform

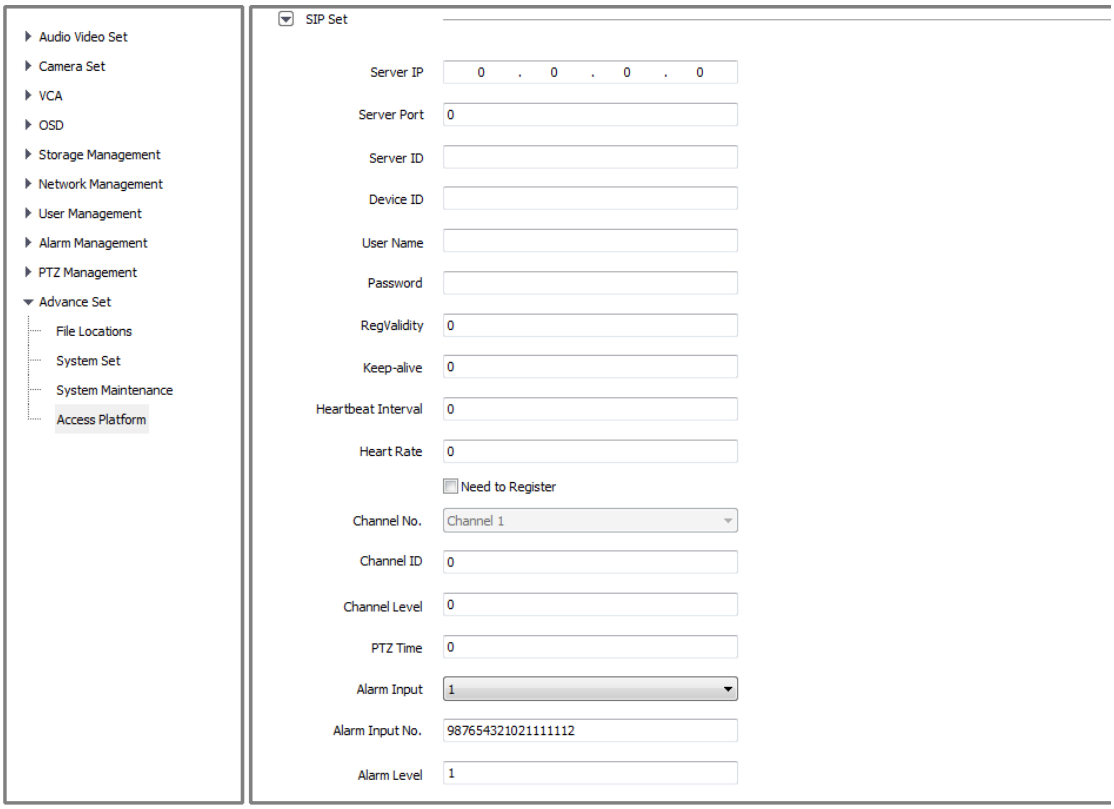
【PU set】 user can set the IP address and port number of【Register Server】 【Heartbeat Server】, 【Alarm Server】and VSP's port number and VAP's port number.

【Channel No. 】support【Auto Filling Setting】function.



Pic 5.17.4.1 Access Platform –PU Set

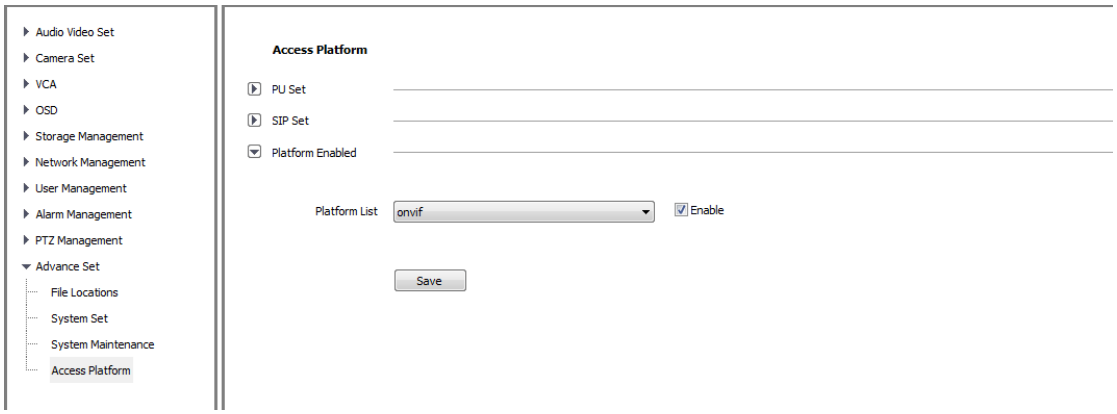
【SIP Set】



Pic 5.17.4.2 Access Platform –SIP Set

【Platform Enabled】

【Platform Enabled】Enable and disable Onvif. System will reboot automatically after setting.



Pic 5.19.4.3 Access Platform –Platform Enabled

Notes: Current platform must be disabled before changing into a new platform

Chapter 6 Simple Fault Maintenance

6.1 System Failure

6.1.1 Not able to recognize U-disk or SD card

Possible Reason:
Disk partition information has problem, which cause no recognition, need formatting for the disk;
Loose connection, re-plug U-disk/SD card and reboot the camera;
For portable disk, it may fail when there is not enough power, need to check the power supply method to make sure enough power supply or change to use independent power supply disk.

6.1.2 No recognition on Wireless Network Card

Possible Reason:
Static turn the network card into protection state, need to reboot the camera;
Unstable condition on the network card, need to replace for new network card.

6.2 Network Failure

6.2.1 Camera was power on but cannot be found on IP searcher

Troubleshooting steps:
Check status of computer/host NIC, NIC driver, network wire, and network connection, make sure all are correct;
Directly connect the camera to computer/host server to check it works or not, reset the computer/host server and try again;
Try another camera or another computer/host server;
Please contact us.

6.2.2 No image on IE

【IE setting】
It needs to download and install the ActiveX plug-in for IE browsing at first connection

6.2.3 Incorrect image after login

Possible Reason:
There is other device in the some network with same IP and Mac address.
Troubleshooting steps:
Disconnect the camera, try to ping the network to check whether there is return package.
Use the IP searcher to check whether there are devices with same IP address, then disconnect the other devices to make sure the IP address of the camera is unique.
Public network connection, login and select the port that is mapping to other equipment's port

6.2.4 It is ok to ping the server, but cannot properly login

Possible Reason:
Port 3001 is banned by the firewall;
Wrong port number is incorrect when logging in;
Wrong ID and password;
Too many access to the camera.
Be set in prohibit list
Troubleshooting steps:
Use IP searcher to check the listen port of the camera, make sure it is the same as the software.

6.2.5 UDP unable to connect video

Possible Reason:
Other client already connect to the camera on the same computer;
UDP port conflict with other application program on the same computer, revise camera IP address and test again

6.2.6 Video of two camera appear alternately, or connect and disconnect in sometime

Possible Reason:
Conflict on IP address, check on the IP searcher;
Conflict on MAC address, check on IP searcher;
Camera IP address conflict with other computer IP address

6.3 Operation Failure

6.3.1 No correct connection of video on IE

Troubleshooting steps:
Make sure host IP address is in the same network segment with the camera.
【Attention】Make routing if in different network segment.
Make sure to use IE at version 8.0 or higher;
Make sure driver for graphic card and DirectX are installed properly, it is recommended to install the latest version driver;
Make to enable ActiveX plug-in;
Turn off Anti-virus software and firewall to test;
Delete the installed plug-in, download again and re-install to test;
Use another computer/host server to test;
Contact us if still had problem.

6.3.2 Cannot connect sub-stream

Possible Reason:
Access to camera are full.

6.4 Control Failure

It is able to control Pan/Tilt/Zoom in IE, but cannot control in the software.
Troubleshooting Steps:
Make sure the control protocol is correct.
Possible Reason:
Make sure address for PTZ camera is correct set in software
Please contact us if problem still remain.

6.5 Video Failure

6.5.1 Video display properly in the software, but it is unstable or intermittent or lose frame.

Troubleshooting Steps:
Exit the software, check the CPU utilization of the computer, make sure the computer configuration is capable to run the software and there is no virus;
Ping the camera from the computer to check whether there is dropout;
Test network bandwidth, if it is not enough or unstable, please contact the Internet Service Provider;

Please lower down the resolution or image quality when need fluent video in narrow network bandwidth;
Please check if it open VCA functions, please close VCA function, then try again
Please contact us if it is not resolved.

6.5.2 Connection is correct but screen is black or video image is anamorphic

Other issues: No OSD, or image is anamorphic but go normal after full screen.
Possible Reason:
DirectX version lower than 9.0c;
Graphic card driver incorrect, which disable the accessory function of DirectX;
Set full screen privacy mask.

6.5.3 Video display properly in IE but abnormal in software

Troubleshooting Steps:
Please make sure software version is correct;
Make sure IP address and server type is correct in software; It is suggested to use "Main stream + TCP" type in LAN, and "Sub-stream +TCP" in WLAN.
Make sure video are all connected in the software main interface;
Reboot the software to connect again;
Please contact us if it is not resolved.

6.6 Audio Failure

6.6.1 Video display and control properly but no audio

Troubleshooting steps:
Make sure the computer audio card driver and connection is correct, please try to play some music to test;
Make sure to selected Video/Audio not only Video in camera setting;
Make sure the audio channel is correct;
Make sure the microphone is connected properly;
Please contact us if it is not resolved.

6.6.2 Weak Audio Signal

Make sure using active microphone;
Increase the sensitivity of the microphone;
Use active loudspeaker for audio playing.

6.7 Alarm Failure

6.7.1 No Alarm Output

Make sure output wiring is correct;
Power input: voltage—AC110V/DC24V, electricity—1A;
Check the setting for input/output port in IE;
Make sure the alarm device is working properly

6.8 Cant’s be save after setup the parameter

6.8.1 Suddenly loses power after setup the parameter

Parameter is set to save properly after 1 minute, unless reset the camera automatically

6.8.2 After setup the parameter, there need to reset the cameras to enable it.

6.9 Others

6.9.1 U disk become smaller after used in camera

Possible Reason: U disk and the TF card were formatted by the special division operation on the camera, the result in part of capacity on the computer can not be identified
Reformat U disk or TF card by BOOTICE.EXE software on the PC

Chapter 7 After-sales Service

We provide 1 years warranty for all our IP cameras. We provide free repair service in the warranty period except the following circumstances:
Not follow the User Manual and the incorrect operation cause cameras damage;
Lightning, fire, and in case of irresistible natural disasters;
Product damage caused by using poor design matching product from other manufacturers.

Statement
● As we will keep our technology up to date, product parameters change accordingly without prior notice.
● We reserves the right for final interpretation of this manual.