# IP Camera Manual





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## Contents

Introduction	
1. Overview	4
1.1 Range of Application	4
1.2 Product Description	5
1.3 Operation Environment	5
2. Device Connection	6
3. Device Operation Instructions	7
3.1 Check Connection	7
3.2 Searching Device	8
3.3 Installation of Controls and Login to System	
3.3.1 Preview	
3.3.2 Playback (optional function)	
4 Parameter Setting	14
4.1 Display Configuration	
4.2 Image Control	
4.3 Video Blocking	
4.4 ROI (if applicable)	
5.Record Parameters	
5.1Rec Parameters	
5.2Schedule	
6. Network Parameters	
6.1 Network Parameters	
6.2 Bit stream setting	
6.3 E-Mail Configuration	21
6.4 DDNS Configuration	
6.5 IP Filtering	23
6.6 RTSP	
6.7 FTP	
7. Alarm Parameter	25
7.1 Mobile Detection	25

7.2 I/O Alarm (if applicable)	
7.3 Lens Blocking	
8. Device	27
8.1 SD Card (optional function)	27
8.2 Audio	
8.3 Logs	
9. System Parameters	
9.1 Basic Information	
10. Advanced	
10.1 System Update	
10.2 Default Parameters	
10.3 System Maintenance	
11. Intelligent	
11.1 Smart Schedule	
11.2 Smart Analysis	
11.3 Perimeter Intrusion Detection (PID)	
11.4Line Crossing Detection (LCD)	
11.5 Stationary Object Detection	
11.6 Pedestrian Detection(PD)	
11.7 Face Detection (FD)	
11.8 Cross Counting(FD)	

## **Introduction**

Thank you for using our network camera products. Our network camera products are integrated and developed for network video monitoring, including Storage Network Bullet, Wireless Storage Network Bullet, IR Network Dome, IR Network Weather-Proof Cameras and High-Speed Network Ball. High-performance single SOC chips are used in media processor for audio/video acquisition, compression and transmission/transfer. Standard H.264 encoding algorithm is applied to ensure clear and smooth video representation and transfer performance. Embedded Web Server offers users access to real-time surveillance and remote control of front-end camera through IE browser.

The network cameras are easy to install and operate. The network cameras are applicable to large and medium-size enterprises, governmental projects, large mall, chain supermarkets, intelligent buildings, hotels, Hospitals and schools and other group customers, as well as to applications requiring remote network video transmission and monitoring.

#### Instructions:

- For purpose of this manual, IP camera means network camera.
- Single click means a single click on the left mouse button.
- Double click means a double-click on the left mouse button.
- The default factory IP address for IP camera is 192.168.1.168.
- The default factory administrator user name for IP camera is admin (in lowercase), and the password is admin (in lowercase).
- The default Web port number is 80 and the default media port number is 9988.

#### Statement:

The information contained in this manual refers to a wide range of products which may differ from the purchased product.

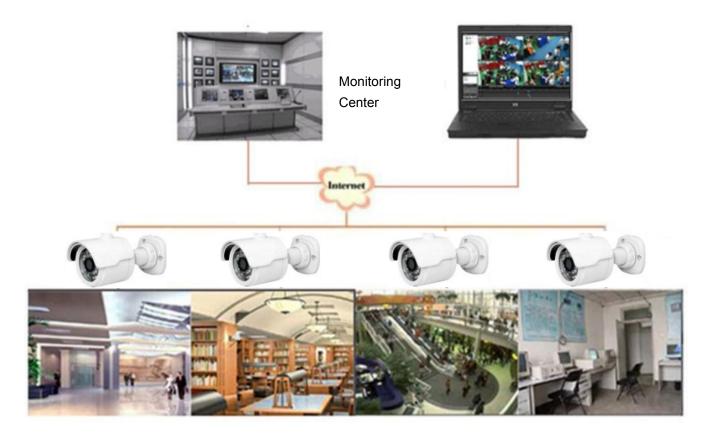
Please contact our technical support to raise any queries.

This manual may be subject to change without prior notice.

## 1. Overview

## 1.1 Range of Application

The network cameras with powerful image processing capacity may be applied at various public places such as mall, supermarket, school, factory and workshop, as well as in environments requiring HD video image such as bank and traffic control system, as shown below:



### **1.2 Product Description**

An IP camera is a digital online surveillance camera embedded with Web server and capable of independent operation, giving user access to real-time monitoring through web browser or client software from any place across the world.

IP camera is based on the latest Hisilicon solution, an integrated media processing platform for audio/video acquisition, compression and network transmission on a single board. It is in compliance with H.264/ H265 High Profile encoding standards. Any remote user can have access to real-time monitoring by entering the IP address or domain name of the IP camera in web browser. This network camera solution is applicable to residential or business environmentas well as a wide range of situations requiring remote network video monitoring and transmission. The IP camera products are easy to install and operate.

The IP cameras can be managed by several users with different authorization levels.

IP cameras allows mobile detection, and sends e-mail and snapshot taken in case of emergency and store the image or video snapshot in SD card for retrieval.

### **1.3 Operation Environment**

Operating system: Windows 7/Windows 8/Windows 2008 (32/64-bit), Windows 2003/Windows XP/Windows 2000 (32-bit) CPU: Intel Core Duo II dual-core processor or higher Memory: 1G or more Video memory: 256M or more Display: 1024 × 768 or higher resolution IE: IE 6.0 or higher version

## 2. Device Connection

IP camera can be connected in two ways:

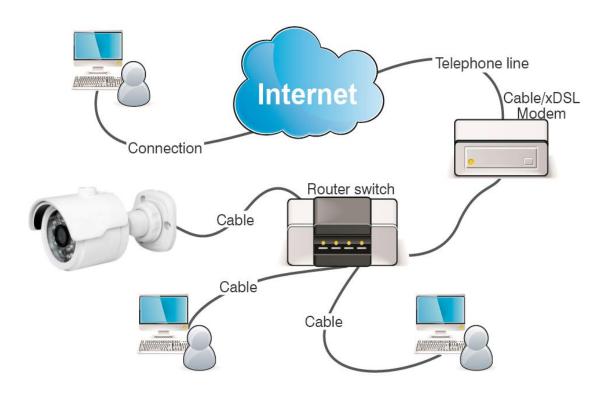
1. Connection to PC

Connect IP camera to PC via straight-through network cable, with power input connected to a DC 12V adaptor, and set the IP addresses of the PC and IP camera in one network segment. The IP camera will communicate with PC within one minute after being powered on if the network operates normally.



2. Connection to router/switch

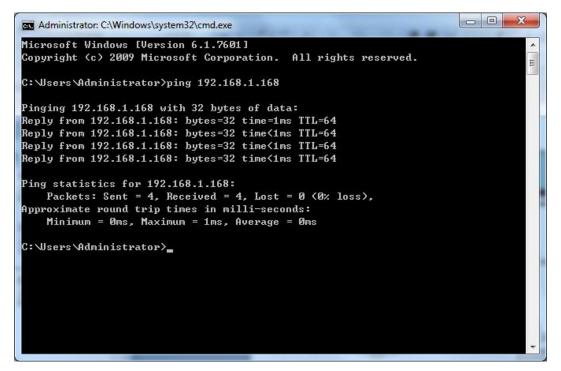
This is more commonly used in connecting the IP camera to Internet, where the camera and PC are connected to LAN ports of a router/switch, with gateway of the camera set to the IP address of the router.



## **3. Device Operation Instructions**

#### 3.1 Check Connection

- 1. The default factory IP address for IP camera is 192.168.1.168 and the subnet mask is 255.255.255.0. Allocate to your computer an IP address in the same network segment as the IP camera, for example, 192.168.1.69, and a same subnet mask as that of the IP camera.
- Test whether the IP camera is connected properly and started normally by clicking on Start > Run and entering "cmd" and pressing ENTER, and entering "ping 192.168.1.168" in the command line window to



Check whether the IP camera is accessible. If the PING command is executed successfully, it indicates that the IP camera operates normally and the network is connected properly. If the PING command fails, check IP address and gateway setting of the PC and connectivity of the network.

### 3.2 Searching Device

Tips: IPC Device Search may be used for device searching across network segments. Before running IPC

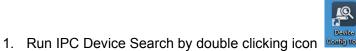
Device Search, click on the local connection icon **I** at the lower right corner of the desktop;

1. Add IP addresses of several network segments in TCP/IP setting for local connection (as shown below). By running the searching tool you can search any device with IP address in the same network segment.

Connect using:		1 N	0	20	
Realtek PCIe GBE Family Controller	Internet Protocol Version 4 (TC	P/IPv4) Properties		Advanced TCP/IP Settings	<u></u>
Config This connection uses the following items: Client for Microsoft Networks Client for Microsoft Networks Client for Microsoft Networks Client Protocol Version 6 (TCP/IP46) Client Protocol Version 7 (TCP/IP46)	You can get IP setting a soign this capability. Otherwise, you for the appropriate IP settings Obtain an IP address aut Obtain an IP address: Subnet mask: Default gateway: Obtain DNS server addre Obtain DNS server addre	need to ask your network omatically ess: 192 168 1 255 255 255 192 168 1 ss automatically ver addresses: 202 96 128	. 77 . 0 . 1	IP Settings DNS WINS IP addresses IP address 192.168.1.77 Default gateways: TCP/IP Address IP address: Subnet mask:	Subnet mask 255.255.0 Add Edit Remove ? 192 . 168 . 4 . 77 255 . 255 . 255 . 0  Add Cance

#### Note:

IPC Device Search uses multicast protocol for device searching across segments but any firewall forbids traffic of multicast data packets, so any firewall must be disabled in order that network the information on device can be acquired.



content real. It will search and display any online IPC and

its IP address, port number, number of channels, device type and version, subnet mask, gateway, MAC address and connection pattern.

	Sea	irch	Upgrade	Config		Filtrat	tion	IP
N	ю.	IP	Media Port	Web Port	Channel	Device Name	Device Version	Net N
1	7	<u>192.168.1.201</u>	9988	80	1	CH293H3_16M	V2.1.3.3_170317	255.255
3	10	<u>192.168.1.200</u>	9988	80	1	CM-H54MPW-BU	V2.1.3.3_170317	255.255
	12	<u>192.168.1.120</u>	9988	80	1	CH292H3_16M	V2.1.1.1_161025	255.25
1	3	<u>192.168.1.36</u>	9000	80	16	NVR16-1080P	V6.0.0-20170310	255.25
	5	<u>192.168.0.200</u>	9988	80	1	CH292H3_16M	V2.1.3.3_170314	255.25
	8	<u>192.168.0.177</u>	9988	80	1	CM-H54MPW-BU	V2.1.3.3_170317	255.25
2	20	<u>192.168.0.171</u>	9988	80	1	IP CAMERA	V1.0.1.1-151009	255.25
	17	<u>192.168.0.170</u>	9988	80	1	IP CAMERA	V1.0.1.1-150316	255.25
1	21	<u>192.168.0.169</u>	9988	80	1	IP CAMERA	V1.0.1.1-160607	255.25
3	9	<u>192.168.0.167</u>	9988	80	1	CH492H3C-36P-A	V2.1.3.3_170316	255.25
	19	<u>192.168.0.166</u>	9988	80	1	IP CAMERA	V1.0.1.1-141203	255.25
] -	18	<u>192.168.0.163</u>	63206	63210	1	CM-H54MPW-BU	V2.1.3.3_170106	255.25
1	26	<u>192.168.0.162</u>	9988	80	1	IP CAMERA	V1.0.1.1-160607	255.25
3	27	<u>192.168.0.161</u>	9988	80	1	IP CAMERA	V1.0.1.1-160607	255.25
1	4	<u>192.168.0.160</u>	9988	80	1	CM-H54MPW-BU	V2.1.3.3_170314	255.25

Upgrade: it can offer 1pcs or more than 1pcs IP camera upgrade.Please choose the IP camera you want to upgrade in the left frame,Open the icon to choose the software you want ,put in the user name and password, the press the right corner button to upgrade.

	arch	Upgrade			Filtration	IP
No.	IP	Media Port	Channel	Device Name	Device Version	Status
22	<u>192.168.0.158</u>	9988	1	IP CAMERA	V1.0.1.1-160808	
] 5	<u>192.168.0.160</u>	9988	1	CM-H54MPW-BU	V2.1.3.3_170314	
] 27	<u>192.168.0.161</u>	9988	1	IP CAMERA	V1.0.1.1-160607	
24	<u>192.168.0.162</u>	9988	1	IP CAMERA	V1.0.1.1-160607	
6	<u>192.168.0.163</u>	63206	1	CM-H54MPW-BU	V2.1.3.3_170106	
26	<u>192.168.0.163</u>	9988	1	CH241HC-40PW	V4.1.3.2_161205	
21	<u>192.168.0.166</u>	9988	1	IP CAMERA	V1.0.1.1-141203	
20	<u>192.168.0.167</u>	9988	1	CH492H3C-36P-A	V2.1.3.3_170316	
29	<u>192.168.0.169</u>	9988	1	IP CAMERA	V1.0.1.1-160607	
] 19	<u>192.168.0.170</u>	9988	1	IP CAMERA	V1.0.1.1-150316	
25	<u>192.168.0.171</u>	9988	1	IP CAMERA	V1.0.1.1-151009	
] 15	<u>192.168.0.177</u>	9988	1	CM-H54MPW-BU	V2.1.3.3_170317	
9	<u>192.168.0.200</u>	9988	1	CH292H3_16M	V2.1.3.3_170314	
] 4	<u>192.168.1.36</u>	9000	16	NVR16-1080P	V6.0.0-20170310	
7	192.168.1.120	9988	1	CH292H3_16M	V2.1.1.1_161025	

Config: Double-click the selected camera in the search page, turn to the Config page to reboot the camera, change passwords, and reset the camera.

🖳 Device	Search			
Search	Upgrade	Config	Filtration	Ib 🔺
IP 192.16	88.0.158 Media Port 9988	UserName admin	Password •••••	Login
Reboot User Default	<ul> <li>Display</li> <li>Record</li> <li>Network</li> <li>Alarm</li> <li>Device</li> <li>System</li> <li>Advanced</li> </ul>			
	Login successful			Set

## 3.3 Installation of Controls and Login to System

Before using IE (Internet Explorer) browser to access the IP camera for the first time, related plug-in

components must be installed by following the procedure below:

Access IP address of the IP camera to automatically load the controls from it.

In a pop-up plug-in installation dialog box, choose an installation option to perform the installation

process.

	to the the REP RESERVE County RERE . Manual Red	
(C) 6 http://192.168.0.153/index.html?_1490251540346	,D + C ØWeb Viewer ×	<u>ନ                                    </u>
You haven't insta	alled the plugin or it is not the latest version.	
Please click g	download to download the latest plugin.	
Discounter along	a hora and a form of a local all a form (1)	
Piease close	e browser before plugin installation!!!	
🗬 Setup - Surveillancei	Plugin _ = ×	
Ready to Install	is begin installing SurveillancePlugin on your computer.	
Setup 6 now ready to	to begin installing SurveillancePlugin on your computer.	
Click Install to contin change any settings.	ue with the installation, or click Back if you want to review or	
Destination location	n (Surveilanceifugin	
Start Menu folder:		
SurveilancePlug	en	
4		
	Install	
		💐 100% 🔹

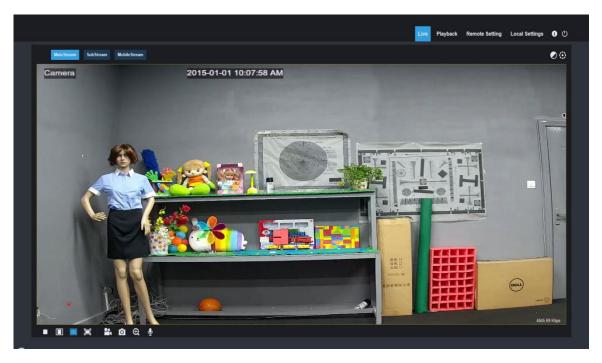
#### 3.3.1 Preview

Operate IE and enter the IP address of the camera (http://192.168.1.168) to open a login box as shown below:

1	admin
-•	•••••
Z Re	emember Password
	Login
	Login

In the login box you can choose a language for the IE client. Enter your user name (admin by default)

and password (admin by default) and then press OK to open a preview frame as shown below:



Some buttons in the preview frame are described below.



Color setting button, for setting of color, brightness, contrast, saturation and sharpness of the frame.



PTZ CONTROL press the icon ,then it show below picture:



It has eight difference angle to control in the circle button, 0-10, it means difference PTZ speed, ZOOM: adjust lens FOCUS: fix lens.Restore: restore factory setting.

Playback

read the recording file from SD card, and then playback from browser.

Remote Setting

Local Setting

Access to device setting menu, for customized setting of various device parameters.

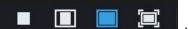


: Help information (including current user, Web browser and plug-in versions), logout button,

: For setting of snapshot, video file type and storage path.

for returning to the login page.

Mobile Stream



automatic preview frame ratio, full preview frame from the left to the right.

. 🖆 🖸 🕀 📢 ሧ : On/Off

SubStream

Main Stream

Preview control buttons - Zoon-In/Out, Open Video, Snap and Sound On/Off, Mircophone arranged from the left to the right.

: Dynamic switching of bit stream for the preview frame.

Click Path Configuration button to pop up the following dialog box: In this dialog box you can set video storage location, paths for download of remote file and storage of image snapshot, file type (RF by default, in H265 encoding) and video recording duration.

Local Settings		
Record Path	D:\Device\Record	
Download Path	D:\Device\Download	
Snapshot Path	D:\Device\Capture	
File type	RF 🔻	
		Save

#### 3.3.2 Playback (optional function)

Click record file to playback, select the corresponding date, then click the Search to go to below page

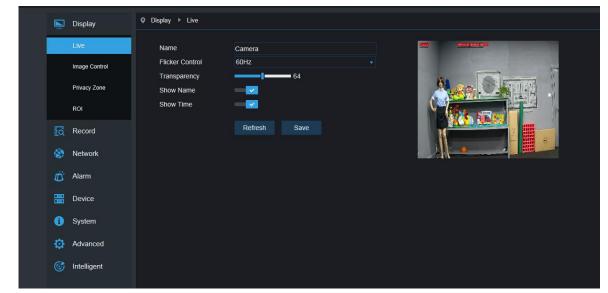


User can search video by file type as needed, and operate the video through the simple tool on the toolbar, e.g. open/stop video , bit stream video, recording, snapshot, download recording , quick motion video playback, Sound On/Off.

## 4 Parameter Setting

## 4.1 Display Configuration

Click on Parameter Setting to open the page as below (preview setting page by default):



Name of channel: name of the IP camera

Display of channel: Choose to display or conceal it.

Time display: Choose to display or conceal it.

Blinking control: Choose 50Hz, 60Hz or disable it.

Transparency: Choose transparency of display of name of channel and time on the preview frame

(smaller value indicates higher transparency)

**OSD:** the text in red color on the frame; you can locate display of the name of channel and time by dragging it in the preview frame.

## 4.2 Image Control

Live	IR-CUT Mode	Color Mode		Daman 2015 OL 01 Younged AV
Image Control	IR-CUT Delay	-1	2	in the second
	Lens Flip			
Privacy Zone	Angle Flip			
ROI	Corridor Mode			
1	Angle Rotation			
Record	Back Light			
Network	3D Noise Reduction	Auto		
	Level		128	
🗂 Alarm	WDR	0		
E Device	AGC	Midd		
Device	White Balance	Auto		
<ol> <li>System</li> </ol>	Shutter	Auto		
-	Time Exposure	1/8		
🔅 Advanced	Defog Mode	Disable		
6 Intelligent	Refresh Si	ave Default		

Click on Image Control in Display Configuration to open the following page:

IR-Cut Model: Classified into GPIO Automatic, Colored, and Black-White models.

Delay: IR-cut switching delay.

**Image Flip-Over:**including flip horizontal, flip vertical, Corridor mode and Angle rotation (0°、180°)

Image Control: backlight compensation, 3D noise reduction, WDR, automatic gain, shutter speed,

exposure time and de-moist model.

**Note**: Below 2MP device ,it doesn't support Corridor mode and Angle rotation , fog mode.

## 4.3 Video Blocking

Click on Video Blocking in Display Configuration to open the following page:

	Display	Display      Privacy Zone
	Live	Privacy Zone 🧕
	Image Control	Refresh Save
	Privacy Zone	
	ROI	
E.	d Record	
6	Network	
Ľ	j Alarm	Delete
	Device	
6	System	
4	Advanced	
6	Jntelligent	

#### Procedure of setting video blocking:

- 1. Check Enable Video Blocking
- 2. Press down and hold the left mouse button and drag out a area for video blocking (up to four areas at one time)
- 3. Click on Save to enable the video blocking area.

**Remove:** After clicking Refresh, choose a blocked area by clicking it and then click Remove and click Save to remove it.

## 4.4 ROI (if applicable)

Live	Bitrate	MainStream	Cares 2050-01 101007 40
Image Control	Region ID		_
Privacy Zone	Enable Region ROI Level	Disable Lowest	
ROI	Non-ROI Fps (1~20)	20	
Record		Refresh Save	
S Network			
🗂 Alarm			
Device			
<ol> <li>System</li> </ol>			
Advanced			
G Intelligent			

Click on ROI in Display Configuration to open the following page:

#### Procedure of setting ROI:

- 1. Choose an area of application
- 2. Press down and hold the left mouse button and drag out a ROI area (only one ROI can be set for each area)
- 3. Click on Save to apply the ROI area.

**Bit stream type:** Choose bit stream effective for ROI among Main Bit Stream, Sub-Bit Stream and Cell Phone Stream.

Area Numbering: Up to 8 ROI areas can be set in one bit stream.

Enable ROI area: Enable or disable ROI area

Area image quality: Set quality of the image in the area (relative quality, absolute quality)

ROI level: Set ROI level in one bit stream; larger value indicates higher-quality image in ROI area (1~6

Levels)

**Non-ROI frame rate:** Set frame rate out of RIO area; smaller value indicates higher-quality image in ROI area. Range of frame rate is in relation to video standard and resolution. (Note: Different non-ROI frame rates may be allocated to different ROI areas, but the minimum value among them is used as the frame rate to be applied for the non-ROI area on the preview frame. )

## **5.Record Parameters**

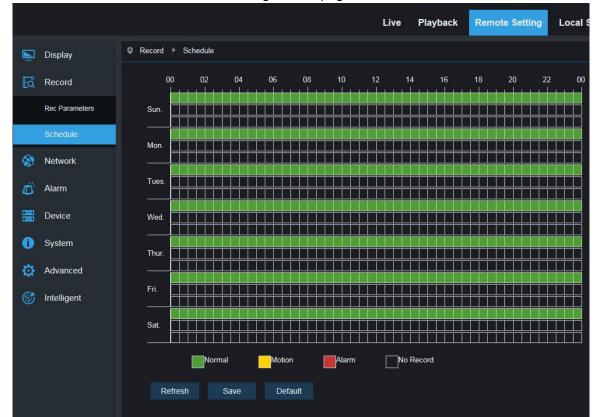
### **5.1Rec Parameters**

Click Rec Parameters under the menu Record, go to below page

					Live	Playback	Remote Setting
<b>N</b>	Display	Record Rec Parameters					
a	Record	Stream Mode	MainStream				
	Rec Parameters	Record PreRecord					
	Schedule		Refresh	Save			
۲	Network		Renear	oute			
Ŭ	Alarm						
0	Device						

This function is to control the record, pre record and record type (main stream and substream)

## 5.2Schedule



Click Schedule under the menu Record, then go to the page as below

As image: one grid in the table is 30 minutes, green is normal record, yellow is motion detection alarm, red is I/0 User can setup according to private requirement to choose different record type and time.

## **6. Network Parameters**

#### **6.1 Network Parameters**

Click on Network Parameters in Network Parameter Menu to open the following page:

				Live	Playback	Remote Setting
	Display	♥ Network ► Network				
Ea	Record	Туре	Static			
-	Network	Client Port HTTP Port	9988 80			
	Network	IP Address	192.168.0.154			
	Video Streaming	Subnet Mask Gateway	255.255.255.0 192.168.0.1			
	Email	DNS 1	192.168.1.1			
	DDNS	DNS 2 UPNP	0.0.0.0			
	IPFilter	Port Range: 1024~6553	5(Media port, web port, mobile phone po	ort)		
	RTSP		Refresh Save			
	FTP					
Ű	Alarm					
0) 0)	Device					

Networking mode: DHCP (Automatically Acquired), Manually Configured and PPPOE; the default is

Manually Configured

Media port: Media port for IPC

Web port: Web port for IPC

IP address: IP address of IPC

Subnet mast: Subnet mast of IPC

Default gateway: Default gateway of the device

Preferred/Alternate DNS server: Set DNS server

UPNP: Enable or disable UPNP function for the device (enabled by default)

Note: To enable UPNP, the media/web/cell phone port should be set to a value between 1024-65535;

the media port is used for connection of proprietary cell phone client; cell phone port is used for connection of the mobile client.

#### 6.2 Bit stream setting

			Live	Playback	Remote Setting
🔄 Display \land	♀ Network ► Video Stream	ming			
Record	Main Stream S	ubStream MobileStream			
Network	Resolution	2592x1520			
Network	FPS	20			
Video Streaming	Video Code Type Video Code Level	H.264 Main Profile			
Email	Bitrate Control	CBR			
DDNS	Bitrate Mode Bitrate	Predefined 4096		Kbps	
IPFilter	Audio	0			
RTSP	I Frame Interval	40		(1~100)	
FTP	Refresh S	ave			
🛋 Alarm					
Device					

Click on Bit Stream Setting in Network Parameter Menu to open the following page:

By default the available bit streams are: main bit stream, sub-bit stream and cell phone bit steam.

You can set resolution, frame rate, video encoding, encoding level, audio, I frame interval, variable frame rate and bit stream size respectively for main bit stream, sub-bit stream and cell phone bit steam.

**Resolution:** Set resolutions respectively for bit streams: The highest resolution for main bit stream is 2048×1536. The higher resolution for sub-bit stream is 704×480. The only resolution available for cell phone bit steam is 320×480.

**Note:** The higher resolution for main bit stream of 3MP Series is 2048\*1536 (frame rate of 30 fps). The higher resolution for main bit stream of 4MP Series is 2592\*1520 (frame rate of 20 fps). The higher resolution for main bit stream of 5MP Series is 2592\*1944 (frame rate of 15 fps). The higher resolution for main bit stream of 8MP Series is 3840x2160 (frame rate of 30 fps). The higher resolution for main bit stream of 2MP Series is 3840x2160 (frame rate of 30 fps).

**Frame rate:** When refresh rate is 50Hz, the maximum available frame rate is 25 fps. When refresh rate is 60Hz, the maximum available frame rate is 30 fps.

Video encoding: Set video encoding (H265/H264) for each bit stream.

Audio: Enable audio for each bit stream.

I frame interval: Set I frame interval.

Bitrate control: Set constant or variable bitrate for bit stream.

Bit stream: Set bit stream value by choosing fixed value or customizing it.

Note: Range of main bit stream is 256-8192.

Range of sub-bit stream is 128-4096.

Range of cell phone bit steam is 8-1536.

Video encoding and encoding level are unavailable in setting page of IP camera of 2MP Series.

## 6.3 E-Mail Configuration

										<u> </u>
								Live	Playback	Remote Setting
Þ	Display	~ •	Network ► Ema	il						
łā	Record		Email			2				
1	Network		Encryption		Disab	le			•	
	Network	1	SMTP Port SMTP Server		25 smtp.1	126.com				
	Video Streaming		User Name			t0707@126.co	om			
	Email		Password Sender		czitest	t0707@126.co	m			
	DDNS		Receiver1 Receiver2		24789	122@qq.com		>	:	
	IPFilter		Receiver3							
	RTSP		Interval		3Min					
	FTP		Refresh	Save	e	Test Email	Cancel			
Ū,	Alarm									
0***1 0***1	Device									
1	System									
٥	Advanced									

Click on E-Mail Configuration in Network Parameter menu to open the following page:

E-Mail Configuration: mail service setting - used with alarm function to upload images snapped to the mail server.

Enable e-mail: Enable or disable e-mail function.

SSL: ON/OFF SSL proto.

Port: The default port number is 25 (mail serve port).

**SMTP server:** Enter the address of mail server.

Address of sender: Address of sending mailbox.

Password of sender: Password of sending mailbox.

Address of recipient: Address of receiving mailbox.

Time interval: Time interval for sending mail (1 minute, 3 minute, 5 minute, 10 minute).

**E-mail test:** Click it to test whether the mailbox is configured properly by sending a test mail to the recipient's mailbox.

## **6.4 DDNS Configuration**

Click on DDNS Configuration in Network Parameter menu to open the following page:

DDNS configuration: Dynamic DNS configuration - used with server for access from an extranet.

					Live	Playback	Remote Setting
	Display	Q Network ► DDNS					
٤ā	Record	DDNS	-				
1	Network	Server Hostname	NO_IP				
	Network	Username					
	Video Streaming	Password					
	Email		Refresh	Save	Test DDNS		
	DDNS						
	IPFilter						
	RTSP						
	FTP						
Ŭ	Alarm						
0] 0]	Device						
0	System						

Enable DDNS: Enable or disable it.

Address of server: Choose "3322".

Name of host: Enter the name of active server

User name: Name of the user

Password: Password of the user

## 6.5 IP Filtering

							Live	Playback	Remote Setting
	Display	~ • N	etwork ► IPFilter						
Ea	Record								
<b>(</b>	Network		Refresh Filter model	Save Allo	Add w all IP connections	Del			
8	Network		NO.		IP Address		E	Enable	
			1		192.168.1.177	×			
	Video Streaming								
	Email								
	DDNS								
	IPFilter								
	RTSP								
	FTP								
Ŭ	Alarm								
	Device								
6	System								

Click on IP Filtering in Network Parameter menu to open the following page:

**Filtering mode:** Three modes are available (Allow all IP connections, Allow all IP connections as set, Forbid IP connection as set).

Add: Add any allowed or forbidden IP address

Delete: Delete any IP address added previously

#### **6.6 RTSP**

Click on RTSP in Network Parameter menu to open the following page:

						Live	Playback	Remote Setting
	Display	Network	k ▶ RTSP					
Ea	Record	RTS	PEnable					
۲	Network	RTS	P Port	554				
	Network		uction : rtsp://IP:F					
	Video Streaming	A:0(	MainStream), 1(S	ubStream), 2(MobileStrea	ım)			
	Email	R	efresh S	ave				
	DDNS							
	IPFilter							
	RTSP							
	FTP							
Ö	Alarm							

**RTSP Enabling:** Enable or disable RTSP. RTSP is enabled by default. After it is disabled, it will not be found with ONVIF.

**RTSP Port:** The default port number is 554, and can be changed to another value between 1024 and 65535. Modification to the parameter will restart the system.

#### **Operation Instructions:**

For IP cameras of 3MP/4MP/5MP/8MP Series: rtsp://IP:Port/ch00/A A:0 (main bit stream), 1(sub-bit stream), 2 (cell phone bit stream)

For IP cameras of 2MP Series: rtsp://IP:Port /A A:0 (main bit stream), 1(sub-bit stream), 2 (cell phone bit stream)

### 6.7 FTP

Click on FTP in Network Parameter menu to open the following page:

					Live	Playback	Remote Setting
	Display 🛆	♥ Network ► FTP					
đ	Record	FTP Enable					
۲	Network	Server Port	21				
	Network	Username	21				
	Video Streaming	Password Transfer images	0				
	Email		Refresh	Save			
	DDNS						
	IPFilter						
	RTSP						
	FTP						
Ű	Alarm						

**FTP**: FTP service setting - used with alarm function to upload images or videos snapped to the FTP server.

FTP:Enable or disable it.

User name: The user name for access to FTP service

Password: The password for access to FTP service

FTP Server: Enter the address of FTP server.

**Port:**FTP service port number; the default number is 21.

Transmit Image: Check it to transmit image

## 7. Alarm Parameter

## 7.1 Mobile Detection

Click on Mobile Detection in Alarm Parameter menu to open the following page:

Display	Q Alarm ► Motion		Enn. XEGNITERAD
Record	Enable		(baan <u>2000/01/202</u> 4)
Network	Sensitivity		
	Post Recording	5S	
🗂 Alarm	Send Email	0	
Motion	Enable Record		
Lens Shade		Refresh Save	
Device			
(i) System			Clear All
🔅 Advanced			
G Intelligent			

#### Procedure of setting Mobile Detection:

- 1. Check Enable Mobile Detection.
- 2. Press down and hold the left mouse button and drag out an area for mobile detection.
- 3. Set the sensitivity for mobile detection (ranging from 1 to 8; larger value indicates higher sensitivity).
- 4. Used with SMTP to enable mail delivery.
- 5. Click on Save to apply the settings.

(Note: When any object moves within the target area, a letter "M" in green color will be displayed on the preview frame)

## 7.2 I/O Alarm (if applicable)

			Live	Playback Remote Setting
Display	♀ Alarm ► Alarm			
Record	Alarm Type	Normally-Open		
🔅 Network	Latch Time Alarm Out	55		
dlarm	Enable Record			
Motion	Post Recording	55		
Alarm		Refresh Save		
Lens Shade				
Device				
<ol> <li>System</li> </ol>				

Click on I/O Alarm in Alarm Parameter menu to open the following page:

I/O Alarm Input: Enable or disable I/O alarm.

I/O Alarm Output Time: Set I/O alarm output time (10s, 20s, 40s, 60s)

Recording Delay Time: After checking Enable Triggered Recording, you can set recording delay time (5S/10S/20S/30S)

## 7.3 Lens Blocking

Click on Lens Blocking in Alarm Parameter menu to open the following page:

				Live	Playback	Remote Setting
	Display	Q Alarm ▶ Lens Shade				
EQ.	Record	ODSwitch				
۲	Network	Sensitivity EmailLink	3			
Ö	Alarm			ave		
	Motion		Reliesh Sa			
	Alarm					
	Lens Shade					
0001 01	Device					
0	System					

Check Lens Blocking option (checked by default) to activate Security Level and Mail Linkage options.

**Security Level:** Set security level for lens blocking (Level 1~8; larger value indicates higher security level)

Mail Linkage: It is disabled by default. After enabled, it may be used with SMTP to enable mail delivery.

## 8. Device

It includes SD Card (optional function) Logs and Audio. Their interfaces and functions are described below.

## 8.1 SD Card (optional function)

Click SD Card under the menu Device, then go to below page

			Live	Playback	Remote Setting
Display	Q Device ► HDD				
Record	NO. State	Free / Total (G)	Free Time		
🔅 Network	Overwrite Auto				
dlarm	Format Hard Disk NO.				
Device	No Hard Disk Found!				
HDD					
Audio	Refresh Save				
Log					
1 System					
🔅 Advanced					

Insert SD card to device, system will auto detect the total capacity and balance capacity of SD card and give

The information of time to record

SD Card Overwrite:when the capacity of SD card is 0, new recorad will overlap previous record(this function is default on)

SD Card Format: to format SD card

### 8.2 Audio

Playback **Remote Setting** Live O Device ► Audio 🔄 Display Record Enable Audio Output Volume -Network Input Volume Audio Code Type G711A Alarm 🚟 Device Refresh Save System 🔅 Advanced

Click on Audio in Device menu to open the following page:

#### **Procedure of setting Audio:**

Check Open Audio option to access audio setting, and set audio input/output volume (ranging 0~10), and then click on Save to save the parameters set.

(Note: For application of audio function, the audio option in Bit Stream Setting needs to be enabled)

## 8.3 Logs

Click on Logs in Device menu to open the following page:

	Display	♥ Device ► Log					
	Cicpicy						
ą	Record	Major Type	All Log			Search	
<b>(</b> )	Network	Begin Time	2017 🔻	3 🔹 27 🝷	00:00:00		
		End Time	2017 -	3 🔻 27 🔻	23 :59 :59		
Ď	Alarm	No.	Time	Operat	tion Lo	og Info	
0	Device		-27 12:23:13	System Tim		i	
01			-27 12:18:53	admin Login		<b>i</b>	
	HDD		-27 12:13:04	System Tim		1	
	Audio		-27 12:02:54	System Tim		i	
			-27 12:02:32	admin Login		<b>i</b>	
	Log		-27 12:02:32	System Tim		<b>i</b>	
0	System		-27 11:52:46	System Tim		<b>i</b>	
			-27 11:32:01	System Tim		0	
ø	Advanced		-27 11:30:03	System Tim		0	
C)	Intelligent	10 2017-03	-27 11:30:02	admin Login	Success	i	
		First Page Pre	v 1 2 3 4	4 5 6 7 Nex	t Last		
		Total 7 Pages, G	oto OK				

Log Type: Eight types of logs are available - system logs, network logs, parameter logs, alarm logs, user logs, recording logs, storage logs and all logs). Choose the starting and ending date/time for retrieval.

Click on "Search" to retrieve and display related logs in the table below.

Click on "Delete" to delete all device logs.

Click on "Refresh" to refresh the logs selected.

## 9. System Parameters

System parameters include Basic Information, User Configuration and System Information. Their interfaces and functions are described below.

#### 9.1 Basic Information

Click on Basic Information in System Parameters menu to open the following page:

				Live	Playback	Remote Setting
	Display	System F General				
<u>ta</u>	Record	System Time	2017-3-27	12:32:45 AM 🔻		
۲	Network	Date Format Time Format	YY-MM-DD 12Hour	*		
Ö	Alarm	●DST ●NTP ●S				
0000	Device		Refresh Save			
0	System		REIIESII Save	3		
	General					
	Users					
	Info					
ø	Advanced					

The device time, system time, date format and time format contained in the basic information can be manually set and saved.

Three automatic time correction functions are provided in this device.

#### **User Manual**

**DST:** Check Daylight Savings Time (DST) option to enable DST correction.

The device will correct the time based on the time deviation as set.

**NTP:** Check Enable NTP option, input the address of time server and choose a time zone and then save the setting. The system will correct time in accordance with the time server.

**Sync with PC Time:** The device will use PC as a time server to correct time.

9.2	User	Config	uration
-----	------	--------	---------

Click on User Configuration in System Parameters menu to open the following page:

						Live Playback	Remote Setting
ē	Display	♀ System ▶ Users					
a	Record	NO.	Username	Password	Active	Username	admin
8	Network	1	admin	Enable	Enable	Password	aumin
		2	user1	Disable	Disable	Fassword	••••
Ľ۲	Alarm	3	user2	Disable	Disable	Confirm	
0000	Device	4	user3	Disable	Disable	Active	
0]	Device	5	user4	Disable	Disable	Active	
Û	System	6	user5	Disable	Disable	Password	
	General	7	user6	Disable	Disable		
			Re	fresh Sa	ive		
	Users						
	Info						
ø	Advanced						
6	Intelligent						

Here you can set user access authority and login password.



## 9.3 System Information

				Live	Playback	Remote Setting
	Display	♥ System ト Info				
Łā	Record	Device ID	000000			
۲	Network	Device Name Device Type	4MP-NORMAL			
Ď	Alarm	Hardware Version	RS-CM-127B			
	Device	Software Version	V2.1.3.3_170314 V1.0.1.15_170310			
0	System	MAC Address	00-16-6C-F7-A4-D7			
	General	AF Version P2P ID	20161312.000 RSV1609013008016			
	Users	Refresh				
	Info					
ø	Advanced					
Ċ	Intelligent					

Click on System Information in System Parameters menu to open the following page:

Here some system information on the device will be displayed, including device type, MAC address and software version.

You can visit mobile app through P2P QR code directly  $_{\circ}$ 

## 10. Advanced

It includes System Update, Default Parameters and System Maintenance. Their interfaces and functions are described below.

### 10.1 System Update

Click on System Update in Advanced menu to open the following page:

				Live	Playback	Remote Setting
	Display	Q Advanced ► Firmware Up	odate			
ā	Record	Upgrade file path			Scan	
۲	Network					
Ö	Alarm		Start			
01 01	Device			/ser or turn off the	power whe	n to
0	System					
ø	Advanced					
	Firmware Update					
	Load Default					
	Maintain					
Ċ	Intelligent					

Update will be unavailable if the update files do not match the target device.

### **10.2 Default Parameters**

Click on Default Parameters in Advanced menu to open the following page:

					Live	Playback	Remote Setting
	Display	Q Advanced ► Load De	fault				
Ea	Record	Display					
1	Network	Record Network					
Ď	Alarm		letwork Setting Parameters	<b>O</b> All			
0] 0]	Device	Alarm Device					
1	System	System Advanced					
ø	Advanced	Intelligent					
	Firmware Update		Default	All	Save		
	Load Default						
	Maintain						
Ċ	Intelligent						

Check relevant options and click on Save to recover the default factory settings for the options as checked.

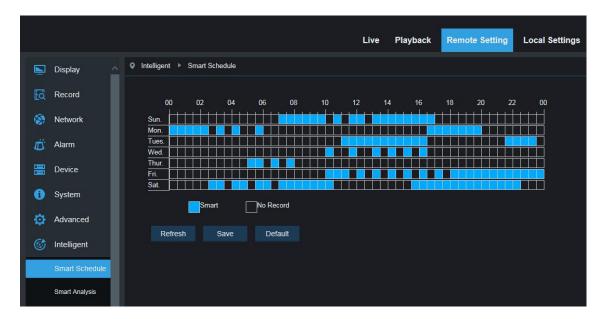
## **10.3 System Maintenance**

				Live	Playback	Remote Setting
<b>N</b>	Display	Advanced Maintain				
<u>a</u>	Record	Auto Reboot	-			
۲	Network	Reboot	Every Week 🔹 Sun. 💌 O(	0:00		
Ö	Alarm		Refresh Save	Reboot		
0] 0]	Device					
0	System					
ø	Advanced					
	Firmware Update					
	Load Default					
	Maintain					
Ċ	Intelligent					

Click on System Maintenance in Advanced menu to open the following page:

Here you can set regular restart or manual restart of the device.

**<u>11. Intelligent</u>** Only certain camera models include the Intelligent functionality.



## 11.1 Smart Schedule

one grid in the table is 30 minute,User can setup according to private requirement to choose different record type and time.

### **11.2 Smart Analysis**

						Live	Playback	Remote Setting	Local Settings	6
	Display	<	telligent 🕨 Smart Ar	alysis						
ā	Record		Form Type	Week			Search			
۲	Network		Alarm Type Count Type	Object Number of in						
Ŭ	Alarm		Start Time	2017-3-27						
	Device			list	graph	lineChart				
~				Statistical time(day)				Number of in		
0	System			Sun.						
0	Advanced			Mon.						
				Tues.						
Ċ	Intelligent			Wed.						
	Smart Schedule		Thur.							
_				Fri.						
	Smart Analysis			Sat.						
	PID									
	LCD									

This page can correctly show the different time period's line crossing count (including different years, months and weeks' line crossing count). User can search the video according to the recording types, alarm types and the beginning time of the recording.

## **11.3 Perimeter Intrusion Detection (PID)**

Click Perimeter Intrusiion under the menu Intelligent:

Ē.	Display	♥ Intelligent ▶ PID		
Łą	Record	Switch		2000 2000 200 200 200 200 200 200 200 2
	Network	Post Recording Sensitive	5S 2	
Ď	Alarm	Scene Send Email	Indoor	
	Device	Rule Number	1	
0	System	Rule Switch Rule Type	<b>○</b> A-> B	
	Advanced	Enable Record		Delete Delete All
	Intelligent		Refresh Save	
	Smart Schedule			
	Smart Analysis			
	PID			
	SOD			
	PD			
	FD			
	сс			

Function description: in the preview page, to detect and follow up the invaded object Switch: PID function master switch

Latch Time: when trigger alarm, the external alarm device ouput alarm time, can selected time period is 5S,10S, 20S, 30S.

Post Recording: after triggered alarm, the post record time, selected time period is 5S, 10S, 20S, 30S

Sensitive: Sensitive level, range is 1-4, default to 2. If the detected object sensitivity is more high, the moving

Object can be detected easily. Meanwhile, the false detection rate is higher. Suggest to use default level.

Scene: Scene setup, user can choose Indoor or outoddor according to real situationEnable I/O Out: Trigger alarm then if will be I/O output

Send Email: If trigger alarm, send the Email to notify, the Email setup need to set in Remote Setting –Network-Email

Record: if to do record

Rule Number: Max set 4 rule numberule Switch: The switch to every rule

Rule Type: Setup to each rule, A->B means can detect A to B direction moving, B->A means can detect B to A direction moving, A  $\leftarrow \rightarrow$  B means can detect two directions moving.

## **11.4 Line Crossing Detection (LCD)**

		Display	♥ Intelligent ▶ LCD		
	łà	Record	Switch	-	Even 2015/00 Bit State
	۲	Network	Post Recording Sensitive	5S 2	
	Ö	Alarm	Scene	Indoor	
	0100) 0100)	Device	Send Email Rule Number	1	
	0	System	Rule Switch Rule Type	S A -> B	
	۵	Advanced	Enable Record	0	Delete Delete All
		Intelligent		Refresh Save	Delete Delete All
		Smart Schedule			
		Smart Analysis			
		PID			
3		LCD			
		SOD			
		PD			
		FD			
		сс			

Click Line Crossing under the menu Intelligent to go to below page

Function description: in the preview page, detect and followup the moving object to pass through the guard line

Switch: LCD master switch

Latch Time: when trigger alarm, the external alarm device ouput alarm time, can selected time period is 5S,10S, 20S, 30S.

Post Recording:

after triggered alarm, the post record time, selected time period is 5S, 10S, 20S, 30S Sensitive:

Sensitive level, range is 1-4, default to 2. If the detected object sensitivity is more high, the moving Object can be detected easily. Meanwhile, the false detection rate is higher. Suggest to use default level Scene: Scene setup, user can choose Indoor or outoddor according to real situationEnable I/O Out: Trigger alarm then if will be I/O output Send Email:

If trigger alarm, send the Email to notify, the Email setup need to set in Remote Setting –Network-Email Record: if to do record

Rule Number: : Max set 4 rule numberRule Switch:

The switch to every rule

Rule Type:

Setup to each rule, A->B means can detect A to B direction moving, B->A means can detect B to A direction moving, A  $\leftarrow \rightarrow$ B means can detect two directions moving.

## 11.5 Stationary Object Detection

Click Stationary Object under the menu Intelligent to go to below page

	Þ	Display	♀ Intelligent ► SOD		
	a	Record	Switch	-	Cares 2016/01/02/04/07
	۲	Network	Post Recording Sensitive	5S 2	
	Ő	Alarm	Scene	Indoor	
	0111) 01111	Device	Send Email Rule Number	1	
	0	System	Rule Switch Rule Type	S Legacy	
	ø	Advanced	Enable Record	©	Delete Delete All
G		Intelligent		Refresh Save	
		Smart Schedule			
		Smart Analysis			
		PID			
		LCD			
		SOD			
		PD FD			
		сс			

Function description: in the preview page, detect the lost and leave behind object in one fixed area Switch: LCD master switch

Latch Time: when trigger alarm, the external alarm device ouput alarm time, can selected time period is 5S,10S, 20S, 30S.

Post Recording:

after triggered alarm, the post record time, selected time period is 5S, 10S, 20S, 30S Sensitive:

Sensitive level, range is 1-4, default to 2. If the detected object sensitivity is more high, the moving Object can be detected easily. Meanwhile, the false detection rate is higher. Suggest to use default level. Scene: Scene setup, user can choose Indoor or outoddor according to real situationEnable I/O Out: Trigger alarm then if will be I/O output

Send Email:

If trigger alarm, send the Email to notify, the Email setup need to set in Remote Setting –Network-Email Record: if to do record

Rule Number: Max set 4 rule numberRule Switch:

The switch to every rule

Rule Type:

Setup to each rule, A->B means can detect A to B direction moving, B->A means can detect B to A direction moving, A  $\leftarrow \rightarrow$  B means can detect two directions moving.

Ņ	Display	♀ Intelligent ▶ PD		
łą	Record	Switch		2mm(0) () % % % % % % % % % % % % % % % % % %
۲	Network	Post Recording Level	5s Middle	
Ö	Alarm	Scene	Indoor	
01 01	Device	Send Email Rule Number	0	
0	System	Rule Switch	S Normal	
۵	Advanced	Rule Type Enable Record	S	Delete Delete All
	Intelligent		Refresh Save	
	Smart Schedule			
	Smart Analysis			
	PID			
	LCD			
	SOD			
	PD			
	FD			
	сс			

## 11.6 Pedestrian Detection(PD)

Function description: in the preview page, detect the moving pedestrian.

[Switch]: Enable/Disable

[Latch Time]: when trigger alarm, the external alarm device output alarm time, can selected time period is 5S,10S, 20S, 30S.

[Post Recording]: after triggered alarm, the post record time, selected time period is 5S, 10S, 20S, 30S

[Level]: detecting range is Small, Middle, Big, default to Middle. The detected target is far away, the range can be small, meanwhile the detected target is nearby, the range should be Big. Different detect ranges can display as one big and one small red rectangular box on the screen.(red rectangular box indicates the maximum and minimum range of the detected target at the current detecting, the detect range can be setup according to monitoring target.)

[Scene]: Scene setup, only support indoor.

Enable I/O Out: Trigger alarm then if will be I/O output

Send Email:

If trigger alarm, send the Email to notify, the Email setup need to set in Remote Setting –Network-Email Record: if to do record.

Rule Number: Max set 1 rule number.

Rule Switch: The switch to every rule, Eanble/disable.

Rule Type: Setup to each rule, default to Normal.

## 11.7 Face Detection (FD)

-	3	11-		
	Displ <mark>ay</mark>	♥ Intelligent ► FD		
łà	Record	Switch		2016-01-01 16/2007 AV
۲	Network	Post Recording Level	5s Middle	MT:Normal
Ď	Alarm	Scene	Indoor	
0000	Device	Send Email Rule Number	S 1	
0	System	Rule Switch Rule Type	o Normal	
ø	Advanced	Enable Record	0	
Ċ	Intelligent		Refresh Save	Delete Delete All
	Smart Schedule			
	Smart Analysis			
	PID			
	LCD			
	SOD			
	PD			
	FD			
	сс			

Function description: in the preview page, detect the moving face.

[Switch]: Enable/Disable

[Latch Time]: when trigger alarm, the external alarm device output alarm time, can selected time period is 5S,10S, 20S, 30S.

[Post Recording]: after triggered alarm, the post record time, selected time period is 5S, 10S, 20S, 30S [Level]: detecting range is Small, Middle, Big, default to Middle. The detected target is far away, the range can be small, meanwhile the detected target is nearby, the range should be Big. Different detect ranges can display as one big and one small red rectangular box on the screen.(red rectangular box indicates the maximum and minimum range of the detected target at the current detecting, the detect range can be setup according to monitoring target.)

[Scene]: Scene setup, only support indoor.

Enable I/O Out: Trigger alarm then if will be I/O output

Send Email: If trigger alarm, send the Email to notify, the Email setup need to set in Remote Setting –Network-Email

Record: if to do record.

Rule Number: Max set 1 rule number.

Rule Switch: The switch to every rule, Eanble/disable.

Rule Type: Setup to each rule, default to Normal.

## 11.8 Cross Counting(FD)

Ē	Display	♀ Intelligent ➤ CC		
Ed	Record	Switch		Zener antera variani
	Network	Post Recording	5s	
Ö	Alarm	Sensitive Scene	2 Indoor	
LU	Alam	Send Email		
0==1	Device	Rule Number	1	
0	System	Rule Switch		
		Rule Type	Object	
	Advanced	Enable Record		Delete Delete All
	Intelligent		Refresh Save	
	Smart Schedule			
	Smart Analysis			
	PID			
	LCD			
	SOD			
	PD			
	FD			
	сс			

Function description: in the preview page, detect and line crossing count the moving object and pedestrian.

[Switch]: Enable/Disable

[Latch Time]: when trigger alarm, the external alarm device output alarm time, can selected time period is 5S,10S, 20S, 30S.

[Post Recording]: after triggered alarm, the post record time, selected time period is 5S, 10S, 20S, 30S

[Level]: range is 1-4, default to 2. If the detected object sensitivity is more high, the moving

Object can be detected easily. Meanwhile, the false detection rate is higher. Suggest to use default level. [Scene]: Scene setup, only support indoor.

Enable I/O Out: Trigger alarm then if will be I/O output

Send Email: If trigger alarm, send the Email to notify, the Email setup need to set in Remote Setting –Network-Email

Record: if to do record.

Rule Number: Max set 1 rule number.

Rule Switch: The switch to every rule, Eanble/disable.

Rule Type: Setup to each rule, Object-line crossing count of the object. Pedestrain-line crossing count of the pedestrain.

#### Tips:

1) IA function enable, need 30S-1 mins to initializate, during this period, function don't work

2) When enable PID, LCD and SOD function at same time, the setup is follow up the the last one scene3) the Intelligent alarm of FD,PD and CC are exclusive with the PID,LCD,SOD, cannot be used at the same time.

#### CAUTION

#### RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE

#### DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS