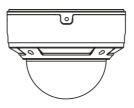
# **IR Water-Proof Network Camera**

# User Manual





# MP225E-HD

Please read this instruction carefully for correct use of the product

# Notes

- Before operation, we strongly advise users to read this manual and keep it properly for using later.
- Please use the specified power supply to connect.
- Avoid from in correct operation, shock vibration, heavy pressing which can cause damage to product.
- Do not use corrosive detergent to clean main body of the camera. If necessary, please use soft dry cloth to wipe dirt; for hard contamination, use neutral detergent. Any cleanser for high grade furniture is applicable.
- Avoid aiming the camera directly towards extremely bright objects, such as, sun, as this may damage the image sensor.
- Please follow the instructions to install the camera. Do not reverse the camera, or the reversing image will be received.
- Do not operate it incase temperature, humidity and power supply are beyond the limited stipulations.
- Keep away from heat sources such as radiators, heat registers, stove, etc.
- This is product instructions not quality warranty. We may reserve the rights of amending the typographical errors, inconsistencies with the latest version, software upgrades and product improvements, interpretation and modification. These changes will be published in the latest version without special notification.
- When this product is in use, the relevant contents of Microsoft, Apple and Google will be involved in. The pictures and screenshots in this manual are only used to explain the usage of our product. The ownerships of trademarks, logos and other intellectual properties related to Microsoft, Apple and Google belong to the above-mentioned companies.
- This manual is suitable for IR water-proof network camera. All pictures and examples used in the manual are for reference only.

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# **1** Introduction

# **1.1 Summarization**

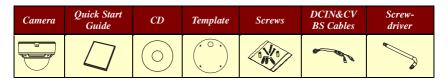
This IP-CAMERA (short for IP-CAM) is designed for high performance CCTV solutions. It adopts state of the art video processing chips. It utilizes most advanced technologies, such as video encoding and decoding technology, complies with the TCP/IP protocol, SoC, etc to ensure this system more stable and reliable. This unit consists of two parts: the IP-CAM device and central management software (short for CMS). The CMS centralizes all devices together via internet or LAN and establishes a sound surveillance system to realize unified management and remote operation to all devices in one network.

This product is widely used in banks, telecommunication systems, electricity power departments, law systems, factories, storehouses, uptowns, etc. In addition, it is also an ideal choice for surveillance sites with middle or high risks.

### **Main Features**

- 1080P  $(1920 \times 1080)$  full real time coding
- Max. resolution: 1920 ×1080
- ICR auto switch, true day/night
- 3D DNR, digital WDR
- ROI coding
- Support CVBS output, MIC in/out, alarm in/out, RS485
- PoE power supply
- Support smart phone, iPad, remote monitoring
- Support P2P (NET Traversal)

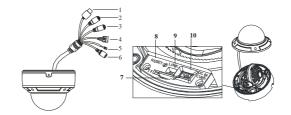
# 1.2 Check Package Content



Name	Description
Camera	The device
Quick Start Guide	Tell you how to use the camera quickly
CD	Including user manual, quick start guide, IP-Tool, CMS, etc.
Drill Template	For installation
Screws/Spiles/Screwdriver	For installation
DC IN&CVBS Cables	For testing

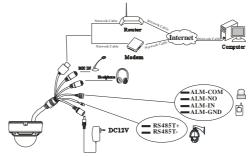
## 1.3 Overview

This series of cameras support varifocal lens and prime lens. If the camera you get is prime lens, please skip the descriptions of the zoom and focus.



1	Network cable	6	Power cable
2	MIC IN cable	7	TF card slot
3	Headphone cable	8	Reset hole
4	Alarm input/output cable	9	Network indicator
5	RS485 cable	10	DC IN&CVBS port for testing

#### **Cable Connections**



Alarm Connection:

Alarm Input: There is one independent alarm input port (ALM-IN) and one grounding port(ALM-GND). There are no type requirements for sensors. NO and NC are both available.

Join the grounding ends of the sensor and the camera and then connect the signal cable of the sensor to the alarm input port of the camera.

Alarm Output: There is 1 CH alarm output including COM and NO connections.

Loosen the screws in the alarm output port and then insert the signal wires of the alarm output devices into the port of NO and COM separately. Finally, tighten the screws. Some of the external alarm output devices need the power supply.

RS 485 Connection:

You can control the speed dome by RS485 interfaces.

# 2 Installation

# 2.1 Install IP-CAM

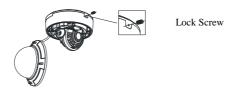
Before you start, please make sure that the wall or ceiling is strong enough to withstand three times the weight of the camera and check whether the power supply is in conformity with your AC outlet.

The mounting steps are as follows:

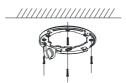
① Attach the drill template to the place where you want to fix the camera and then drill 4 screw holes according to the drill template.



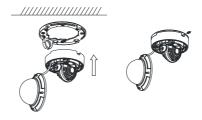
② Loosen the screws to open the lower dome and then loosen the lock screw to disassemble the mounting base.



③ Route and connect the cables. Then secure the mounting base to the ceiling or wall with screws as shown below.

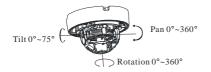


(4) Fix the dome to the mounting base with the lock screw.



(5) Three-axis adjustment. Before adjustment, preview the image of the camera on a monitor

and then adjust the camera according to the figure below to get an optimum angle.



(6) Adjust the focus and zoom screws to get a clear image. (If the model you get doesn't support to adjust zoom and focus, please skip this step).



⑦ Install the lower dome back to the camera and secure it with the screws.



# 2.2 Install CMS

Find CMS software from CD and then double click "Setup.exe" file to pop up installation wizard. Install the software according to the prompts in the wizard. After you complete the installation, you will see the CMS and IP-Tool icon on the desktop. Please see the user manual of this software for more details.

If you need to install IP-Tool separately, please double click IP-Tool installation package and install it according its wizard prompts. After you finish installing, double click IP-Tool icon to start IP-Tool.

# **3** IE Remote Access

You may connect IP-Cam via LAN or WAN. Here only take IE browser (6.0) for example. The details are as follows:

# 3.1 LAN

In LAN, there are two ways to access IP-Cam: 1. Access through IP-Tool; 2. Directly access through IE browser.

## 3.1.1 Access through IP-Tool

① Make sure the PC and IP-Cam are connected to the LAN and the IP-Tool is installed in the PC from the CD.

(2) Double click the IP-Tool icon on the desktop to run this software as shown below:



(3) Modify the IP address. Click the information of the camera listed in the above table to show the network information on the right hand. Modify the IP address and gateway of the camera and make sure its network address is in the same local network segment as the computer's. Please modify the IP address of your device according to the practical situation.

Mac Address				
IP Address	192 · 168 · 13 · 185			
Subnet Mask	225 · 225 · 225 · 0			
Gateway	192 · 168 · 13 · 1			
•••••	Modify			
Tip: Enter the administrator password, and then modify the network parameters.				

For example, the IP address of your computer is 192.168.13.4. So the IP address of the camera shall be changed to 192.168.13.X. After modification, please input the password of the administrator and click "Modify" button to modify the setting.

Ĩ

The default password of the administrator is "123456".

(4) Double click the IP address and then the system will pop up the IE browser to connect IP-CAM. IE browser will auto download the Active X control. After downloading, a login window will pop up as shown below.



Input the username and password to log in.

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The default username is "admin"; the default password is "123456".

### 3.1.2 Directly Access through IE

① Manually set the IP address of the PC and the network segment should be as the same as the default settings of the IP camera. Open the network and share center. Click "Local Area Connection" to pop up the following window.

Local Area Connection Status	×
General	
Connection	
IPv4 Connectivity:	Internet
IPv6 Connectivity:	No Internet access
Media State:	Enabled
Duration:	00:01:27
Speed:	100.0 Mbps
Details	
Activity	
Sent —	Received
Bytes: 27,480	778,065
Properties Bisable	Diagnose
	Close

Select "Property" and then select internet protocol according to the actual situation (for example: IPV4). Next, click "Property" button to set the network of the PC.

General				
You can get IP settings assigne this capability. Otherwise, you for the appropriate IP settings.	need to ask yo			
Obtain an IP address auton	natically			
— Use the following IP addres	s:			
IP address:		1.1	1.1	
Subnet mask:				
Default gateway:				
Obtain DNS server address	automatically			
— Use the following DNS server	er addresses:			
Preferred DNS server:				
Alternate DNS server:				
Validate settings upon exit			Adv	anced

② Open the IE browser and input the default address of IP-CAM and confirm. The IE browser will download Active X control automatically.

(3) After downloading Active X control, the login dialog box will pop up.

④ Input the default username and password and then enter to view.

### 3.2 WAN

#### Take access the camera by the router or virtual server for example

(1) Make sure the camera is well connected via LAN and then log in the camera via LAN and go to the Config $\rightarrow$ Network Config $\rightarrow$ Port menu to set up the port number.

(2) Go to Config  $\rightarrow$  Network Config $\rightarrow$  Wired menu to modify the IP address.

③ Go to the router's management interface through IE browser to forward the IP address and port of the camera in the "Virtual Server".

		IP Config
Network basic confi	ő	© Obtain an IF address automatically C Use the following IP address
HTTP Port	80	IP Address         192         160         12         153           Subnet Hank         255         255         0         Gateray         192         160         12         1
Data Port	1024	Detain DNS server address automatica
RTSP Port	554	C Use the following DMS server Preferred DMS 192 168 226 1 Alternate DMS 8 8 8 8 8
	Port Setup	IP Setup

TeleEye

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			Port	Range		
Application	Start		End	Protocol	IP Address	Enabl
1	9008	to	9008	Both 💌	192.168.6. 6	
2	80	to	81	Both 💌	192.168.6.6	2
3	10000	to	10001	Both 💌	192.168.6. 166	
4	21000	to	21001	Both 💌	192.168.6. 156	
5	7777	to	7778	Both 💌	192.168.6. 206	
6	1029	to	1030	Both 💌	192.168.6. 207	

④ Open the IE browser and input its WAN IP and http port to access.

# 4 Remote Preview

# 4.1 The Remote Preview Interface



Icon	Description	Icon	Description
*	Motion alarm indicator icon	( <b>(</b> ))	Sensor alarm indicator icon
$\Box$	Fix size	REC	Start/Stop record
Ţ	Actual size		Playback
Ð	Zoom in	Ô	Snap
Ø	Zoom out	∎¥	Talk
$\times$	Full screen	<b>~</b>	Enable audio

• When motion detection alarm is triggered, the people icon will turn red.

Right click to pop up a pull-down list as shown below:

Stream: Three streams are optional.

**Turn off the live:** Click this item will close present live preview. **Full screen:** The live preview picture will full-screen display. Double click or click right mouse to return to the previous interface.

**Online user:** Display the current user connecting to the device.

**System information:** Display the device information: device name, firmware version, software build date, kernel version and hardware version.

Click PTZ extended button to unfold PTZ control panel. In remote preview interface, you can view the image from every direction by controlling PTZ panel.

1 1080P 25fps
2 QVGA 25fps
Turn off the live
Enable audio
Full Screen
Online User
System Information

The descriptions of the control panel are as follows:

Button	Description
	to rotate the dome upwards; $\blacksquare$ to rotate the dome downwards; $\blacksquare$ to rotate
<b>F</b> A T	the dome towards left; $\square$ to rotate the dome towards right; $\square$ to rotate the dome
	diagonally up-left; ; 🔽 to rotate the dome diagonally up-right; 🔼 to rotate the dome
	diagonally down-left; 🖾 to rotate the dome diagonally down-right; 🔲 to stop
	rotating the dome.
»» —0	Drag the scroll bar to adjust rotating speed of the dome.
+ OFocus -	Focus button. Click + button to have long focus and click is to have short
	focus so that you can adjust the image clearly.
+ 9 Zoom -	Zoom button. Click + to zoom in the image; click to zoom out the image.
+ O Iris -	Iris button. Click to increase light of the dome; click to decrease light of the
	dome.

# 4.2 Playback

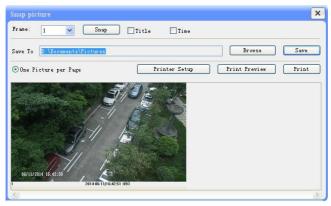
Before you play the record files, please make sure you have recorded. You make click the button to record. Then click is button to pop up a video player. Double click the record file to play the video as shown below.



1	Play	5	Next frame	9	Zoom out
2	Pause	6	The previous file	10	Full screen
3	Stop	7	The next file	11	Path
4	Forward	8	Zoom in	12	Volume

# 4.3 Snap Pictures

Select the picture number, and then click "Snap" icon as shown below:



Single Snap

Snap multiple pictures

Select the picture number from Frame pull down list box, such as 2, and check "Title" and "Time" to show capture title and time on the snap pictures simultaneously.



#### Multi-picture Snap

# **5** Remote Live Surveillance

Functions of remote configurations include: System Configuration, Video Configuration, PTZ Configuration, Alarm Configuration, Network Configuration and Advanced Configuration. You should firstly select the menu on the left, and then set the relative parameters. When one user configures parameters of a certain device, other users can not set this device.

# 5.1 System Configuration

The "System configuration" includes three submenus: Basic Information, Date & Time and SD card.

#### 5.1.1 Basic Information

In the "Basic Information" interface, you can set up the device name and can also check the relative information of the server.

Setting steps:

- 1. Clicking the "Config" icon will appear the menu list.
- 2. Clicking the "Basic Information" will pop up a window as shown below:
- 3. Input the name of the device in the "Device name" text box.
- 4. Press the "Save" button to save the settings.

System Infomation	n		
Software Version	3.4.0 beta8	Software Build Date	2014-6-26 (TYTY-MM-DD)
Kernel Version	20140610	Hardware Version	1.3
MAC	00:18:AE:44:AC:6D	Onvif Version	2.3
Device name	name33333333333333333	Maximum number of	4

Please refer to the following table for parameters and instructions of server basic configuration.

Parameter	Meaning
Software version	The software of the device
Software build date	The software build date of the device
Kernel version	The kernel version of the device
Hardware version	The hardware version of the device
Mac Address	MAC address of device
Maximum number of user	Support max 4 users to access
Device name	Name of the device.

## 5.1.2 Date & Time Configuration

#### Setting steps:

1. Go to Config $\rightarrow$ Date & Time menu as shown below.

Date and Time	setting					
Time Zone	GMT+08		Hong Kong,	Shanghai	,Taipei)	*
Timing mode -						
Set Ti	me	2014- 6-1	4 🔽 11	:30:59	🗢 🗌 PC time	
🔿 NTP						
NTP Se	rver	time.wind	ows.com			

- 2. Set time zone.
- 3. Enable DST mode as required.
- 4. Set time. You may set time manually or enable NTP.

#### 5.1.3 SD Card

1. Go to "System Configuration"  $\rightarrow$  "SD Card" as shown below:

SD Card			
State:	Available		
Used		Total Size	956 MB
Unused		Used	4 MB
		Unused	952 MB
Format S	SD card Eje	ect card	

The first time you used the SD card, you should click "Format SD card".

Click "Eject card" to stop writing data to SD card. Then the SD card can be ejected safely.

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**Note**: Using of SD card function should be coordinated with motion or sensor alarm. When alarm is triggered, the system will automatically snap picture and save the picture into SD card.

# 5.2 Video Configuration

Camera Configuration includes five submenus: Camera Configuration, Video Stream, OSD Config, Video Mask and ROI Config.

#### 5.2.1 Camera Configuration

Setting steps:

1. Go to "Video Configuration"  $\rightarrow$  "Camera" interface as shown below.

Canera			
Frequency	50HZ		Load Default
Brightness	60 Contrast 50		
Hue	50 Saturation 45		
white balance	LightAutomatic 💌		
wide dynamic	☑ 150	and the second	:
sharpen	☑ ── <b>〕</b> ──── 50	06/11/2014 16:05:14	
denoise	☑ ¬□ 15	Insge mirror	Inage flip
auto iris	disable without auto iris lens	On ⊙Off	○0n ④0ff
distortion correction	☑ · 100	Inage Rotate	
defog	I 100	0	
Day-night mo	de LightAutonatic V Bight to Day Hiddle V Sensitivity Day to Night Hiddle V	-	
Night Mode	Advanced Setting		

- 2. You may adjust brightness, contrast, hue and saturation of the picture.
- 3. Select white balance mode.
- 4. Wide dynamic, sharpen, and denoise are adjustable.
- 5. You can also set day-night mode and enable the image mirror and image overturn function.
- 6. You may frequency and repair bad pixel.
- 7. Press the "Save" button to save the settings.

#### 5.2.2 Video Stream

Go to "Video configuration"  $\rightarrow$  "Video Stream" to see an interface as shown below.

Resolution		Frame rate		Bitrate type		Video quality		Bitrate			I Frame Interval	Video Enco	ding	Profile	
1920×1080	~	25	~	CBR	~	Highest		6144	۷	Kbps	100	H264	~	High Profile	
704×576	~	25	٧	CBR	~	Highest	Y	1024	۷	Kbps	100	H264	~	High Profile	
352×288	~	25	*	CBR	~	Highest	v	1024	~	Kbps	100	H264	~	High Profile	

Three video streams can be adjustable.

Resolution: The higher the resolution is, the clearer the image is.

**Frame rate**: The higher the frame rate is, the more fluency the video is. However, more storage room will be taken up.

**Bitrate type**: Including CBR and VBR. CBR means that no matter how changeable the video resources are, the compression bitrate keeps constant. This will not only facilitate the image quality better in a constant bitrate but also help to calculate the capacity of the recording. VBR means that the compression bitrate can be adjustable according to the change of the video resources. This will help to optimize the network bandwidth.

**Video Quality**: When VBR is selected, you need to choose image quality. The higher the image quality you choose, the more bitrate will be required.

Bitrate: Please choose it according to the actual network situation.

**I Frame interval**: It is recommended to use the default value. If the value is over high, the read speed of the group of pictures will be slow resulting in the quality loss of the video. **Video encoding profile**: Baseline and main profile are optional. Baseline profile is mainly used in interactive application with low complexity and delay. Main profile is mainly used for

higher coding requirement.

Alarm picture size: Please select it according to the actual situation.

**Video encode slice split**: If enabled, you may get more fluency image even though using the low-performance PC.

### 5.2.3 OSD Configuration

Go to "Video Config"  $\rightarrow$  "OSD Config" menu to display the interface as shown below. You may set time stamp, device name and custom OSD here. Drag the time stamp and custom OSD to set their position. Then press the "Save" button to save the settings.

OSD Setting	
🗹 Show Time Stamp	
Date Format	MH-DD-YYYY
🗹 Show device nam	e
Device name	name
Custom OSD	
OSD Content	camera.
	Callera Doriti.2014 16:50:43

## 5.2.4 Video Mask

You can set 4 mask areas at most.



#### To set up video mask

- 1. Enable video mask and select mask color.
- 2. Click "Draw" button and then drag the mouse to draw the video mask area.
- 3. Click "Save" button to save the settings.
- 4. Return to the live to see the following picture.



Clear the video mask:

Go to video mask menu and then click "Clear" button to delete the current video mask area.

### 5.2.5 ROI Configuration

#### To set up ROI

1. Go to Config  $\rightarrow$  ROI Config menu.



- 2. Check "Enable" and then click "Draw" button.
- 3. Drag the mouse to set the ROI area.
- 4. Set the level.
- 5. Click "Save" button to save the settings.

Now, you will see the selected ROI area is clearer than other areas especially in low bitrate condition.



# 5.3 PTZ Configuration

PTZ Configuration includes two submenus: Protocol and Preset.

### 5.3.1 Protocol

1. Go to "PTZ Configuration"  $\rightarrow$  "Protocol" interface as shown below:

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Protocol Config		
🔽 Enable / Dis	able PTZ Controls	
Protocol:	PELCOP	~
Address:	4	
Baud Rate:	9600	~

2. Input the protocol, address and baud rate according to the speed dome.

### 5.3.2 Preset Configuration

1. Go to "PTZ Configuration"  $\rightarrow$  "Preset" to see an interface as shown below:



Button	Meanings
	<ul> <li>to rotate the dome upwards;</li> <li>to rotate the dome downwards;</li> <li>to rotate the dome towards left;</li> <li>to rotate the dome towards right;</li> <li>to stop rotating the dome.</li> </ul>
+ + -	Focus button. Click + button to have long focus; click - button to have short focus.
+ © -	Zoom button. Click + button to zoom in the locale picture ; click - button to zoom out the locale picture.
+ -	Iris button. Click + button to increase light of the dome; click - button to decrease the light of the dome.
	Drag the scroll bar to adjust rotating speed of the dome.

2. Input the preset number and set its position by controlling PTZ control panel and then click Add button to add preset point into the Available position list.

3. Select the preset in the pull down list of the Available position and click Go to button to move the dome to this preset point; click Delete button to delete checked preset point.

4. After finishing setting, click Save button to save the settings.

# **5.4 Alarm Configuration**

Alarm configuration includes six submenus: Motion Detection Area, Motion Detection Trigger, Motion Detection Schedule, Alarm Input Trigger, Alarm Input Schedule and Alarm Out.

## 5.4.1 Motion Detection Area

1. Go to "Alarm configuration"  $\rightarrow$  "Motion Detection Area" to see an interface as below.

Sen:	sit	iv:	i ty	e .		ie.							_	-	0	_												
2	*	4		à	a	2	X				E.						25		-				Г	S	ele	ct A	11	
1	i a														Ç					4			2			100	~	_
					•	-									Ľ.		10	Į.						0	Clea	ar Al	<b>.1</b> %	
																							(Tr	07/0	**	مامك	ctio	-
		÷					120						2	1						<u>A</u>			-			oere	cero	-
24	818 819					E.			7	6				100			100						6	Ad	ы			
						6		F				i					P						1					
						Ê.	đ	Z		ī	ī	ĩ				ŕ							C	)Er	ase			
							1		10					E	1		18					(P	r		ter	l kar	/ dr	
				1					龖				Ĩ,	1		膽	M	鬭			0	mo	use	e te	0 5	lec	ι	-0
1							1					8	in.			Ш	龖	灆	譾			mo	tic	n 1	reg	on.	)	
					ş	Y.								10			6				1							
20			1	s p	1				醧			Ĩ.				龖	1	譧										

2. Move the "Sensitivity" scroll bar to set up the motion trace sensitivity.

3. Check the "Add", press the "Ctrl" button and move mouse to select the motion detection area. Select "Erase" and move the mouse to clear all motion detection area.

4. Press the "Save" button to save the settings.

# 5.4.2 Motion Detection Trigger

1. Go to "Alarm Configuration"  $\rightarrow$  "Motion Detection Trigger" to display an interface as shown below.

Motion alarm setting			
Enable alarm     Trigger alarm out     Alarm out1	Alarm Holding	5 Seconds	•
✓ Trigger snap ✓ Trigger Email —			
Receival email address	☐ Attach pict	ure	
EMAIL Subject			
Server address	Uploading picture	9	

2. Check "Enable alarm" check box. Then motion based alarm is activated.

3. Set alarm holding time.

4. Set alarm trigger options.

Alarm Out: If selected, this would trigger the external relay output on detecting a motion based alarm.

**Trigger Snap**: If selected, the system will snap images on an alarm and save them in SD card. **Trigger Email**: If the email and attach picture checkbox is checked (Email address shall be set first in the Mail config interface), the triggered snap pictures and event will be sent into those address.

**Trigger FTP**: If "Uploading picture" is checked, the triggered snap pictures will be sent into FTP server address. Please refer to FTP configuration chapter for more details.

5. Press the "Save" button to save the settings.

## 5.4.3 Motion Detection Schedule

Go to "Alarm configuration"  $\rightarrow$  "Motion Detection schedule" interface as shown below.

~Week Schedule-	C Erase 💿 Add
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Sunday	
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Monday	
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Tuesday	
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Wednesday	
Thursday	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Thursday	
Friday	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Filldy	
Saturday	
- Holiday Schedule	
Date:	12/17/2009 C Add
Date.	Delete
Holiday	

#### Week schedule

User could set the alarm time from Monday to Sunday for alarm everyday in one week.

"Add": Add the schedule for a special day.

"Erase": Delete holiday schedule.

#### Day schedule

You could set alarm time for alarm in some time of special day, such as holiday.

1. Select a date at the "Date" pull down list, press "Add" button to add that date to the list box on the right side and then move the scroll bar to set the schedule of that day.

2. Select a date in the list box on the right side, and press "Erase" to remove the schedule on that day.

Press the "Save" button to save the settings.

Note: Holiday schedule is prior to Week schedule.

## 5.4.4 Alarm Input Trigger

1. Enter "Alarm Configuration"→ "Alarm Input Trigger" to see a screen as shown below:

Sensor alarm setting						
Sensor	Sensor 1	<b>•</b>				
Sensor Name	Sensor1		Alarm Typ	pe	NO	•
🔲 Enable alarm			Alarm Hol	lding	20 Seconds	•
Trigger alarm out						
Alarm out1						
✓ Trigger snap						
🥅 Trigger Email						
Trigger FTP						
Apply settings to		All	•	Сору		

2. Select the sensor at the "Sensor" pull down list and set the sensor name and alarm type: NO and NC.

3. Enable alarm and select alarm holding time.

4. Set alarm trigger options. The setting steps are the same with that of motion detection trigger. Please refer to motion detection trigger chapter for details.

5. Apply settings to all by clicking "Copy" button, which can quickly set the same settings for all sensors.

### 5.4.5 Alarm Input Schedule

Go to "Alarm Configuration"→"Alarm Input Schedule" as shown below:

Sensor schedu	le setting
Sensor	Sensor1 C Erase @ Add
Week Schedule	
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Sun	
Mon	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Tue	
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Wed	
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Thu	
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Fri	
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Sat	
Holiday Schedule	,
Date	7/ 1/2013 🕂 Add
	Delete
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Holiday	
Copy settings	
Apply settings to	All Copy

1. Select the sensor which needs to setup the alarm parameter at the "Sensor" pull down list.

2. The following setup steps are similar to Motion Detection Schedule's. Please refer to Motion Detection Schedule chapter for more details.

#### 5.4.6 Alarm Out

1. Go to "Alarm configuration"  $\rightarrow$  "Alarm output" as shown below:

Alarm out setting		
Alaram Out	Alarm out1	•
Alarm Holding Time	10 Seconds	•

2. Select alarm holding time and alarm name at the "Alarm out" and "Alarm holding time" pull down list box respectively.

3. Press the "Save" button to save the settings.

## 5.5 Network Configuration

Network configuration includes eight submenus: Port, Wired, Server Configuration, IP Notify, DDNS Config, RTSP, UPnP, Mail Setting and FTP.

### 5.5.1 Port

1. Go to "Network config"  $\rightarrow$  "Port" to see the interface as shown below.

Network basic config		
HTTP Port	80	
Data Port	1024	
RTSP Port	554	

2. Input port number for IE access in the "HTTP Port" textbox.

3. Input the port number for audio & video transmission in the "Data Port" textbox.

#### 5.5.2 Wired

1. Go to "Network Configuration"  $\rightarrow$  "Wired" to see a tab shown below.

2. There are two options for IP setup: obtain an IP address auto by DHCP protocol and use the following IP address. You may choose one of options as required.

3. Use the following IP address: display the IP address, subnet mask, gateway and DNS of the device.

**TeleEye** 

IP Config	_			
⊙Obtain an	IP address automatically			
OUse the fo	llowing IP address			
IP Address	192 . 168 . 15 . 24			
Subnet Mask	255 . 255 . 255 . 0	Gateway	192 . 168 . 15 . 1	1
001 · · · · · · · · · · · · · · · · · ·				
• Obtain DNS • Use the fo Preferred DNS server:	server address automati llowing DNS server	cai Alternate DNS server:	8.8.8.8	
• Obtain DNS • Use the fo Preferred DNS	server address automati llowing DNS server	<u>cal</u> Alternate DNS	8.8.8.8	

4. PPPoE: User needs to manual input the user name and password for dial-up internet.

Firstly, log in IE clients and then enter user name and password of PPPoE, save the setting and exit. Secondly, set up IP address change notice. Thirdly, connect with Modem. Then the device will dial up internet automatically.

5. Press the "Save" button to save the settings.

### 5.5.3 Server Configuration

Go to "Network Configuration"  $\rightarrow$  "Server Config".

Server Config		
🔽 Do you want l	PCamera to connect Server	
Server Address		
Server Port	0	
Device ID	1	

1. Check "Do you want IP Camera to connect Server".

2. Check the IP address and port of the transfer media server in the CMS/NVMS. Then enable the auto report in the CMS/NVMS when adding a new device. Next, self-define the device ID and input the remaining information of the device in the CMS/NVMS.

3. Input the above-mentioned server IP, server port and device ID in the relevant boxes.

4. Click "Save" button to save the settings.

### 5.5.4 IP Notify

1. Go to "Network Configuration"  $\rightarrow$  "IP Notify" to see a tab as shown below.

2. If the "Enable notifying change of IP" is selected, when the IP address of the device is changed, a new IP address will be sent to the appointed mailbox automatically; If "FTP" is selected, when the IP address of the device was changed, a new IP address will be sent to FTP server.

IP change notification	
Enable notifying change of IP	FTP
Receival email address	Server address

## 5.5.5 DDNS Configuration

1. Go to "Network Configuration" → "DDNS Configuration" tab as shown below.

DDNS config	
	V Enable DDNS
DDNS Server Type	www.dyndns.com
User Name	
Password	
Domain	

2. Apply for a domain name. Take www. dvrdydns.com for example.

Input <u>www.dvrdydns.com</u> in the IE address bar to visit its website. Then click "Registration" button to register as shown below.

NEW USER REGIST	RATION
USER NAME	XXXX
PASSWORD	•••••
PASSWORD CONFIRM	•••••
FIRST NAME	ххх
LAST NAME	XXX
SECURITY QUESTION.	My first phone number. 💌
ANSWER	XXXXXXXX
CONFIRM YOU'RE HUMAN	New Capitola Enter the text you see above
	Submit Reset

Create domain name.

You must create a de	omain name to continue,
Domain name must start with (a-z, 0-9). Can is not case-sensitive.	not end or start, but may contain a hyphen and
. dvrdydns.com 💌	Request Domain

After you successfully request your domain name, you will see your domain in the list.

		Click a name to edit your domain setting
NAME	STATUS	DOMAIN
654321ABC	0	654321abc.dvrdydns.com

3. Select the server type and then input the username, password and domain name you apply for in the DDNS configuration interface.

4. Click "Save" button to save the settings.

## 5.5.6 RTSP

Go to "Network Configuration"  $\rightarrow$  "RTSP" interface as shown below.

RTSP
▼Enable ETSF server
RTSP Port 554
RTSP Address rtsp://IP or domain name:port/profile1
rtsp://IP or domain name:port/profile2
rtsp://IP or domain name:port/profile3
Enable anonymous viewer login (no user name or password required)

- 1. Select "Enable RTSP server".
- 2. RTSP Port: Access Port of the streaming media. The default number is 554.
- 3. RTSP Address: The RTSP address you need to input in the media player.
- 4. You can also choose to enable anonymous viewer login.

### 5.5.7 UPnP

Go to "Network Configuration"  $\rightarrow$  "UPnP" interface as shown below. Select "Enable UPnP" and then input friendly name.

VPNP Setting	
✓ Enable UFNP Friendly Name	

```
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```

Then double click "Network" icon on the desktop of the PC to see an icon with the friendly name and IP address of the camera. You may quickly access the device by double clicking this icon.

#### 5.5.8 Mail Setting

Go to "Network Configuration"  $\rightarrow$  "Mail Setting" interface.

From Ernail:	test10007@gmail.com	
Jser Name :	test10007@gmail.com	Password :
Server address:	smtp.gmail.com	Secure Connection not required
SMTP Port	465 Use default	test your account settings
Receival email	address:	
Dessivelar	ail address:	
	ali auuless. II	

- 1. From Email: Sender's e-mail address.
- 2. User name and password: Sender's user name and password.
- 3. Server address: SMTP name of sender.

4. Select the secure connection type at the Secure Connection pull down list according to user' actual needs.

- 5. Receival email address list: Add email address into the list.
- 6. Receival email address: Receiver's e-mail address.
- 7. After all parameters set up, you can click "Test your account settings". If email sent

successful, a "Test Successful" window will pop up, if not, users can try other email addresses or check the setting.

**Notice:** If you change the static IP into PPPoE and select mailbox, there will be an e-mail sent to your mail box for notifying a new IP address.

#### 5.5.9 FTP

Go to Network Configuration  $\rightarrow$  FTP interface as shown below.

FTP Setting						
Server name	Server address	Port	User Name	Upload path:		
			Add	Modify D	elete	Test

1. Add: Click Add button to input FTP server's server name, address, port number, user name,

password, and upload path, click OK to confirm the setting.

- 2. Modify: Click this button to change some information of the FTP server.
- 3. Delete: Select s certain FTP account and click this button to delete this account.
- 4. Test: Select a certain FTP account and click this button to test its valid or not.

Please refer to the following table for parameters and instructions of FTP configuration.

Add	
Server name:	
Server address:	
Port:	21
User Name :	
Password :	
Confirm Password:	
Path	
ОК	Cancel

Parameter	Meaning
Server name	The name of the FTP server
Server address	The address of the FTP server
Port	The port number of the FTP server
User name	The user name of the FTP server
Password	The password of the FTP server
Path	The save path for FTP files

# 5.6 Advanced Configuration

Advanced configuration includes four submenus: User Configuration, Security Configuration, Configure Backup & Restore, Reboot and Upgrade.

### 5.6.1 User Configuration

Go to "User Configuration" interface.

#### Add user:

1. Clicking "Add" button pops up "Add user" dialog box.

			Add User	
			User Name : 111	
			Password :	
User config			Confirm Password:	
User Name:	User Type:	Bindng MAC	User Type: Normal user	
admin	Administrator	00:00:00:00:00:00	✓ binding MAC addre:	
			User PC MAC: 00 : 00 : 00 : 00 :	00 : 00 : 1 ancel
Add	De	lete Modify		ancei

**User Configuration** 

Add User

**Note:** After binding physical address to the IP-CAM, you can access the device on this PC in network only. If the MAC address was "00:00:00:00:00:00" which means it can be connected to any computers.

- 2. Input user name in "User Name" textbox (only letters).
- 3. Input characters in "Password" and "Confirm Password" textbox (letters or numbers).
- 4. Input the MAC address of the PC in "Binding MAC address" textbox.
- 5. Click "OK" button and then the new added user will display in the user list.

#### Modify user:

1. Select the user which needs to modify password and physical address in the user configuration list box.

2. Clicking "Modify" button will pop up "Modify user" dialog box as shown below.

Modify	X
🖂 change passw	ord
User Name :	111 Password :
New Password:	Confirm
🔽 binding MAC a	ddress
User PC MAC:	00 : 00 : 00 : 00 : 00 : 00
	OK Cancel

Modify User

3. Input original password of this user in the "Password" text box.

4. Input new password in the "New password" and "Confirmation" text box.

5. Input computer's physical address which is used to access the server in the "User PC MAC" text box.

6. Click "OK" button to modify password and binding MAC address successfully.

#### Delete user:

1. Select the user which needs to delete in the user configuration list box.

2. Clicking "Delete" button will pop up a confirm dialog box. Then click "OK" to delete the user.

Note: The default super administrator cannot be deleted.

Parameter	Meaning
User Name	User name to operate the logon client end
User Type	Type of users, normal user, advanced user and super administrator
Binding MAC address	The MAC addresses of user access the server which should set up according to actual MAC address of server.
Password	Password to log in the client terminal
Confirm Password	Password to log in the client terminal

#### 5.6.2 Security Configuration

1. Go to Advanced Configuration→Security Configuration to see a tab shown below.

2. Check "Enable IP address" check box, select "Deny the following IP address", input IP address in the IP address list box and click "Add" button. Then this IP address will display in the list box; the operation step of "Allow the following IP address" is the same with "Deny the following IP address".

3. Select the IP address which needs to be deleted from the IP address list box and click "Delete" button to delete that IP address.

4. Check "Enable MAC address" check box, select "Deny the following IP address", input MAC address in the MAC address list box and click "Add" button. Then this MAC address will display in the list box; the operation step of "Allow the following MAC address" is the same with "Deny the following IP address".

IP address filter setting	
🗹 Enable IP address filtering	
On the following IP address	Allow the following IP address
	Add Delete
MAC filter setting	
MAC filter setting	
	Allow the following MAC address

5. Select the MAC address which needs to be deleted from the MAC address list box and click "Delete" button to delete that MAC address.

6. Click "Save" button to save the above setting.

### 5.6.3 Configure Backup & Restore

Go to Advanced configuration  $\rightarrow$  Configure Backup & Restore Interface.

#### • Import & Export Configuration:

You can import or export the setting information from PC or to device.

1. Click "Browse" to select save path for import or export information on PC.

2. You can import or export all setting information to PC, but those two settings "User Configuration" and "Network Configuration" are exceptional.

Import setting	
Path	Browse
	All configuration exception for 💽 🔽 User Config 🗌 Network Config
	Import setting
Export setting	
	Export setting
Default setting	
	Load Default

#### Default Configuration

Click "Load default" button to restore all system settings to the default status.

#### 5.6.4 Reboot Device

Go to Advanced configuration—Reboot device to see an interface as shown below. Click "Reboot device" button to reboot the device.

ot	)t

### 5.6.5 Upgrade

Go to Advanced Configuration-Upgrade interface as shown below.

Upgrade	
Path	Browse
	Update server firmware

1. Click "Browse" button to select the save path of the upgrade file.

2. Click "Upgrade server firmware" button to start upgrading the application program.

3. The device will restart automatically.

4. After you successfully update the software, click "OK" button to close IE and then re-open IE to connect IP-CAM.

Notice: You can't disconnect to PC or close the IP-CAM during upgrade.

# 6 Video Search

Click "Picture" icon and search the images which saved in the SD card.

	Config	Picture	Live	
		◆ 三月 2014 <u>5 M T W</u> 23 24 25 26 2 2 3 4 5 9 10 11 12 1 16 17 18 19 2 23 24 25 26 2 30 31 1 2	T         F         S         Start           27         28         1         0:           6         7         8         0:           13         14         15         End T           20         21         22         23:           27         28         29         23:	: Time 00:00 ÷ 1ime 59:59 ÷
E 16 2 1 2 4 9 9 1 1 - 1.0	s	Motion V	Sensor S	Search
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	17 18 19 20 21 22 23			

- 1. Set time: Select date in the "Calendar" and choose the start and end time.
- 2. Choose event "Motion" or "Sensor".
- 3. Click "Search" button to search the picture.
- 4. Double click a filename or select a filename and then click "View" button in the list box to view captured pictures.



Item	Buttons	Explanations
1	1 <b>.</b>	Close: Select certain picture and click this button to close this picture.
2	<b>i</b>	Close all: Click this button to close all pictures viewing.
3	11	Save: Click this button to select the save path of the picture file on the PC for saving the current picture.
4		Save all: Click this button to select the save path of the picture files on PC for saving all pictures.
5		Fit size: The picture will fit on screen by clicking this button.
6	٩	Actual size: Click this button to display the actual size of the picture as required.
7	<b>∂</b> ⊕	Zoom in: Click this button to amplify the picture.
8	٩,	Zoom out: Click this button to zoom out the picture.
9		Slide play: Click this button to play the picture in slide show mode.
10		Stop: Click this button to stop slide show.
11	Ţ	Play speed: Play speed of the slide show.

# 7 Q & A

#### Q: How to find my password if I forget it?

A: Reset the device to the default factory settings. User name: admin Password: 123456

#### Q: Fail to connect devices through IE browser, why?

A: Network doesn't connect well. Please check the connection and make sure it connected well.

B: IP is not available. Reset the valid IP.

C: Web port number has been revised: contact administrator to get the correct port number.

D: Exclude the above reasons. Recover default setting by IP-Tool.

#### Q: IP tool cannot search devices, why?

A: It may be caused by the anti-virus software in your computer. Please exit it and try to search device again.

#### Q: IE cannot download ActiveX control. How can I do?

a. IE browser blocks ActiveX. Please do setup following below.

① Open IE browser. Click Tools-----Internet Options....



- 2 Select Security-----Custom Level....
- ③ Enable all the sub options under "ActiveX controls and plug-ins".

Internet Options 🔹 🤶 🗙	Security Settings
General Security Privacy Content Connections Programs Advanced	Settings:
Select a Web content zone to specify its security settings.	💽 Enable
	Download signed ActiveX controls      Disable
🥸 😼 💟 🖵	Enable
Internet Local intranet Trusted sites Restricted	_ O Prompt
sites	Download unsigned ActiveX controls
Internet	Disable
This zone contains all Web sites you Sites	Prompt
haven't placed in other zones	Initialize and script ActiveX controls not marked as safe
C Security level for this zone	Disable
	Enable
Custom	O Prompt
Custom settings.	
To change the settings, click Custom Level.     To use the recommended settings, click Default Level.	Reset custom settings
	Reset to: Medium
Custom Level Default Level	
OK Cancel Apply	OK Cancel

④ Then click OK to finish setup.

b. Other plug-ins or anti-virus blocks ActiveX. Please uninstall or close them.

#### **Q:** No sound can be heard, why?

A: Audio input device is not connected. Please connect and try again.

B: Audio function is not enabled at the corresponding channel. Please check AUDIO item to enable this function.

#### Q: Why doesn't the device connect to wireless?

A: Check the statues of wireless router. Please make sure the router is open.

B: Check the router and the device port.

# 8 Specification

Model	2 Megapixel Water-pro	oof Network Dome Camera		
Camera	Image Sensor	1/2.8 " CMOS		
	Image Size	1920 × 1080		
	Electronic Shutter	1/25s~1/100000s		
	Auto Iris	Fixed Iris		
	Min. Illumination	0 Lux (IR ON)		
	Lens	6mm (3.6mm, 8mm, 2.8~12 optional)		
	Day-Night Switch	ICR auto switch		
	WDR	Digital WDR		
	DNR	3D noise reduction		
	Video Compression	H.264/MJPEG		
	H.264 Compression	Baseline Profile/Main Profile/High Profile		
	Bitrate	64Kbps~8Mbps		
	Resolution	1080P(1920 $\times$ 1080), 720P(1280 $\times$ 720), VGA (640 $\times$ 480), QVGA(320 $\times$ 240)		
Image	Multi-streams	1920 ×1080(1~30fps)/1280 ×720(1~30fps) 1280 ×720(1~10fps)/640 ×480(1~30fps)/ 320 ×240(1~30fps)		
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR., etc., adjustable through client software or web browser		
	ROI	Support		
	Network	RJ45		
	Video	CVBS ×1		
	Audio	MIC IN $\times 1$ , MIC OUT $\times 1$		
Interfaces	Storage	Support TF, up to 64GB		
	RS485	Support		
	Alarm Input	1 CH		
	Alarm Output	1 CH		
	Remote Monitoring	IE browsing, CMS remote control		
	Online Connection	Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission		
	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP		
Function	Interface Protocol	ONVIF, GB-T/28181-2011		
	Smart Alarm	Motion Alarm, Sensor Alarm		
	PoE Power Supply	Support		
	IR Distance	No (20-30m optional)		
	Water-proof	IP66		
Others	Power Supply	DC12V/PoE		
	Power Consumption	< 3W (ICR OFF); < 6.5W (ICR ON)		
	Working Environment	-20°C~50°C, 10%~90% humidity		
	Dimension	Φ 150mm×114mm		
	Weight (Net)	880g		