

**XtendLan**  
**XL-ICA-641M2**  
**Camera User Manual**



Read the user manual carefully before using this product

# Important Safeguards

1. During the course of transportation and storage, the product should be avoided from incorrect operations such as heavy pressing, strong vibration, soaking etc, which may cause damage to the unit.
2. The product is designed for wall-mount and pendant-mount installation, it can not be installed upside-down. And the module should be handled properly so as not to bring about mechanical problems affecting the integrative functions of it.
3. Do not let any foreign objects or liquid infiltrate into the unit, which may damage the machine.
4. Please follow all electrical standards for safety when it is being connected and adopt the particular power supply which is provided with the unit. The product adopts TVS-class lightning damage preventing technology, which can effectively prevent such pulse signal damage caused by lightning under 500W or electric surge. Video signal should be kept enough distance from high voltage equipment and cables when they are in transmission, and necessary steps should be taken to prevent lightning damage or power surge.
5. No matter the unit is ruining or not, the camera should never be aimed at the sun or object with extremely bright light. Otherwise, the

camera's CCD might be permanently damaged.

6. There are no parts inside the unit which can be repaired by the users themselves. When mechanical problems arise, do not be in a haste to do any repairing, please refer to the User's Manual to find the trouble. If causes can not be located, please refer servicing to qualified professionals. All servicing must be done by authorized personnel.

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# **1 Product Description**

## **1.1 System Requirement**

- 1) Operation System: Microsoft Windows XP/2003/Vista/WIN7.0
- 2) Browser: Microsoft Internet Explorer 8.0 above
- 3) Hardware requirement: CPU: Intel Core 2 Duo E4600 / 2.4 GHz  
or above

Internal Storage: 1GB or above

Graphics card: Nvidia GeForce 8600 GT or above

Network card: 10/100Mbps

## **1.2 Product Description**

With the rapid development of our society, increasing requirement towards security product has been aroused in, and communication technology has greatly pushed forward the progress of security industry.

HD IP IR high speed dome camera is a new generation of network video monitoring terminal, with clear CMOS sensor and high-performance IP processor chip, which secures full frame rate and HD liquidity sport video. The camera supports video coding compression and data transportation, with which users can get access to

the real time remote image and voice. At night time, camera can give out the infrared light which cannot be seen by human eyes. The PTZ out casing has high protection level and great ability to prevent attack and destroy, it can be widely used in the field like protection & security, transportation, banking, electric system, medical system, etc.

## **1.3 Product Feature**

### **1.3.1 PTZ Performance**

- ◆ Self- developed of HD integrated zooming lens camera module, 1/3"CMOS.
- ◆ DSP & sophisticated step motor lead to accurate focusing and HD imagery.
- ◆ Delicate and compact structure facilitates easy installation & cabling.
- ◆ Entire aluminum alloy sealed structure, with excellent heat dispersion &IP66.
- ◆ IR-III design support high grade luminescence efficiency, long illuminate distances, evenly distribution of optical field, long life-span.

- ◆ Built-in defogger ensures clear picture capture with no fog internally.
- ◆ PTZ can flip automatically and accommodate to the control of focal length.
- ◆ Preset position, Auto Pan, patrol, pattern can be set.
- ◆ PTZ operating states can be check through long-distance.
- ◆ Guard function: can be linked to preset position, patrol, Auto Pan, pattern, etc.
- ◆ Support 3D smart positioning, click-tracing and amplification can be achieved through IE browser.
- ◆ EEPROM data storage method, storage data will not be lose when the electricity is off, PTZ can return k to the position after electricity on.
- ◆ Remote updating function: SCM update, auto system update, camera update.
- ◆ Low power consumption: DC12V; less than 8W when IR off, Max. Power consumption is 18W when power on. Support solar power supply.

### **1.3.2 Network Performance**

- ◆ H.264 video compression leads to high compression rate with good image quality; support dynamic code rate control.
- ◆ Built-in Web Server makes monitor, configure, and manage on IE possible.
- ◆ Network self-adjustable function: video transport frame rate can be adjusted automatically according to the network bandwidth.
- ◆ Support multiple stream output with 1080P/ 720P/ D1/ CIF/ QCIF.
- ◆ Support multiple users log in; log on privilege can be set.
- ◆ Image parameter can be adjusted.
- ◆ Support snap.
- ◆ Support move detection.
- ◆ Support local and front-end video record and playback.
- ◆ Support standard streaming media, third-party media players can play the live video and replay files.

## 1.4 Technical Data

<b>Camera</b>	Image Sensor	1/3", 1.3Mega CMOS Sensor	1/2.9" 2.43Mega CMOS Sensor
	Pixels	1.3MP	2.0MP
	Horizontal Resolution	720P	1080P
	Video Standard	1280*720/25/30P	1920*1080/25/30;1280*720/25/30
	Min. Illumination	0.3LUX@F1.6 IR off, 0LUX@IR on.	
	Gain Control	0~255 adjustable step4	
	S/N Ratio	>50dB	
	White Balance	auto/ indoor/outdoor/ manual/ ATW	
	WR	WDR	
	DNR	2D off & low/middle/ high optional	
	Shutter Time	1/12.5~1/10000 S	
<b>Lens</b>	Focal Length	5.6mm~100.8mm	
	Optical Zooming	18X 20X	
	Lens	F3.5~F1.6	
	Visual Angle	horizontal:48.3°~3.1°	horizontal:54.8°~3.4
<b>Network</b>	Video Compression Standard	H.264	
	Audio Compression Standard	AMR,G.711	
	Max. Frame Rate	720P 25 frames /s	1080P 25 frames /s

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	Video Resolution	1280*720(720P),720*576(D1),352*288 (CIF) ,176*144(QCIF)
		1920*1080 (1080P), 720*576 (D1,352*288(CIF),176*144(QCIF))
	Code Stream Type	720P/D1/CIF/QCIF 1080P/D1/CIF/QCIF
	Audio Compression Code Rate	16Kbps~8Mbps
	Image Delay	<200 millisecond(LAN)
	Internet Interface	RJ-45 10/100M network self-adjustable
	Internet Protocol	RTSP/RTP/RTCP/HTTP/HTTPS//FTP/DHCP/MUDP/SMTP/CIFS/UPNP/PPPOE/NTP/DDNS
	Device End Storage	TF card maximum support 16G (optical)
	Trigger Condition	move detection/ video loss
	Move Detection	Sensitivity:1~100 adjustable, linkage alarm can be set
	Video Loss	Sensitivity:1~100 adjustable, linkage alarm can be set
<b>PTZ</b>	Manual Control of Pan	0.1°~140°/S;Max: 115 °~160°/S adjustable, Max. preset speed:350°/S.
	Manual Control of Tilt	0.1°~120°/S;Max. preset speed:300°/S.
	Rotating Range	360°unlimited; tilt:0 ° ~90° ; Max. angle: 85 °~93 ° adjustable

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	Auto Flip Function	180° when vertical
	PTZ control	PTZ speed auto-adjusting per focal length
	Left & Right Scan	4 groups
	Speed of Left & Right Scan	Level 1 ~ 256 adjustable
	Pattern	4 groups
	Preset Position	210
	patrol	4 groups
	Point of each patrol	1-24 presets of each
	3D Position	support
	Defrog Function	built-in defogger
	Remote Updating	support remote SCM update, auto system update, camera update
<b>IR Performance</b>	IR Performance	6 high-power IR lamps, 2 micro laser lamps, IR distance : 150M.
	Max. Consumption	10W
<b>Outside Interface</b>	RJ45	Ethernet 10/ 100 M self-adjustable
	DC Power Supply Interface	DC12V/3A
<b>Generic Specification</b>	Power Supply	DC12V±10% (3A)
	Max. Consumption	18W
	Working Condition	Temperature: -30°C ~ 60°C; humidity: ≤95% with out condensation
	Protection Level	IP66
	Weight	4.7Kg

## 2 Connection Mode

### 2.1 Direct Connection

Connect the camera to PC by network directly.



IP address:192.168.1.217  
Subnet mask:255.255.255.0  
Gateway address:192.168.1.1

IP address:192.168.1.21  
Subnet mask:255.255.255.0  
Gateway address:192.168.1.1

### 2.2 Network Connection

Can connect the camera to internet, user can log in the device through client side software of browser.

There are two ways to connect to internet:

- ◆ Through PPPOE and DDNS
- ◆ Through router, as below figure



Network Connection Diagram

**Attention:** do not put the wire and network cable to places that will be easily touched by people, to avoid signal

### 2.3 Power On

1. Check the polarity of plug, socket and other connection, power on after confirmation
2. Camera will do self-checking, rotate 360° horizontally and 90° vertically for checking the camera lens, the electronic and machine structure for camera in horizontal and vertical status, after that, the camera will execute reset program and rotate to original. When the camera stop completely, the self-checking is finish and ready for controlling.

3. The continuous working time for dome camera is 18000H, please try to avoid keeping the dome camera working for long.

## 2.4 Camera Protocol, Bit Rate, Address Setting

The setting for HD IP IR camera protocol, baud rate and address is fix and can't be changed. After self-checking, the system information for camera is as below:

Protocol:	PELCO-D
Baud Rate:	38400bps
Address:	1
Data Bit:	8
Stop Bit:	1
Parity Check:	No

## 2.5 HD IP IR High-speed Dome Camera Hot Key List

**Tip:** some special functions don't have coordinate command in 'PELCO-D' protocol, in order to control these functions, we have switched the function for some common use command. Normally will switch by 'change preset position/set preset position', this function will be introduced in 4.1.3, below list the command switch form:

HD IP IR High-speed Dome Camera Hot Key List

<b>Item</b>	<b>Hot key Function</b>	<b>Call preset position</b>
Set left/right scan	Set left/right scan1-- left limit	210
	Set left/right scan1-- right limit	211
	Set left/right scan2-- left limit	212
	Set left/right scan2-- right limit	213
	Set left/right scan3-- left limit	214
	Set left/right scan3-- right limit	215
	Set left/right scan4-- left limit	216
	Set left/right scan4-- right limit	217
Operate 360°scan	Operate 360°circle scan	220
Operate left/right scan	Operate left/right scan1	221
	Operate left/right2	222
	Operate left/right scan3	223
	Operate left/right scan4	224
Set left/right scan speed	Speed=20	225
	Speed=60	226
	Speed=80	227
Operate pattern	Operate pattern1	231
	Operate pattern2	232
	Operate pattern3	233
	Operate pattern4	234
Record pattern	Record pattern1	235
	Record pattern2	236
	Record pattern3	237
	Record pattern4	238
Stop record pattern	Stop current record	239

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Operate tour loop scan	Operate tour loop scan1	241
	Operate tour loop scan2	242
	Operate tour loop scan3	243
	Operate tour loop scan4	244
Delete tour loop scan	Delete tour loop scan1	245
	Delete tour loop scan2	246
	Delete tour loop scan3	247
	Delete tour loop scan4	248
Activate insert tour loop preset position	Allow to insert tour loop preset point	240
Close insert tour loop preset position	Cancel insert tour loop preset position	249
Insert tour loop preset position	Insert preset position	1-209
Return to default setting	Return to default setting	251

### 3 PTZ and Camera Function

#### 3.1 PTZ Control

##### 1、PTZ Control

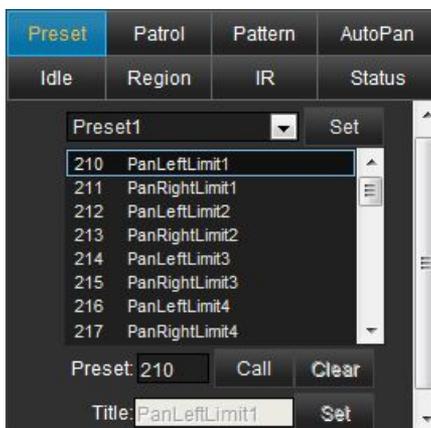


Name	Illustration	Remark
<b>Module&amp; PTZ Control</b>		
Zoom+/Zoom-	Control the zooming times of camera manually	
Focus+/Focus-	Adjust camera focusing manually	
Iris+/Iris-	Control the aperture of camera open & close	
R-Wiper/S-Wiper	Turn on & turn of the wiper	Not support
<b>PTZ Control</b>		
Up	Direction of PTZ: up	
Down	Direction of PTZ: down	
Left	Direction of PTZ: left	
Right	Direction of PTZ: right	
Auto rotating	PTZ rotates 360°unlimited	
Speed	Set the rotating speed of PTZ	Range: 1-63

## 3.2 PTZ Function

### 3.2.1 Preset Position Calling

Click the “Preset Position” menu, like the picture below:



#### 1、 Set preset position

Adjust the direction of PTZ to the preset position that you want to set ,drop down the preset list, choose the preset position formation, click “setting” button, and then finished.

**Attention: users can set the preset position from 1 to 209 manually.**

#### 2、 Call preset position

- (1) 、 In the preset position list ,choose the preset position information ,then click the” calling” button.

- (2) 、 Input the preset position number in preset text box, then click the “call” button.

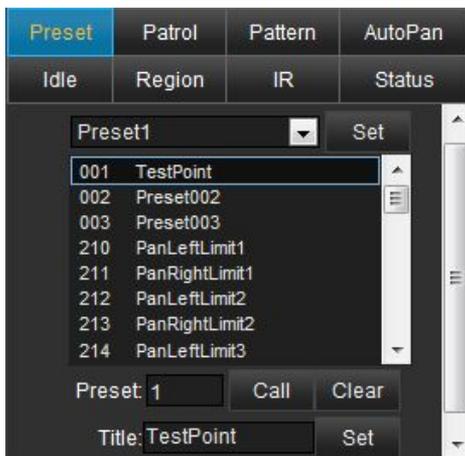
### 3、 Clear preset position

In the preset position list, choose the preset position information, then click the “clear” button.

### 4、 Set the title of preset position

In the preset position list, choose the preset position information, modify the title of preset in the title text box, and click the “set” button.

Like the picture below.:



### 5、 Special preset position calling

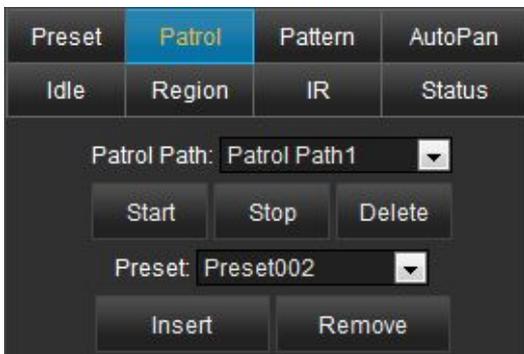
Number 210 to 251 are the special preset position of PTZ camera. Users can see the preset list in IE, double-click or choose the special preset information, click “setting” button, then the special preset has

been called and the related function can be achieved.

**Attention:** The special preset positions in PTZ can only be called, users can not delete or modify them.

### 3.2.2 Patrol

Click "Patrol" button, enter the menu below:



This camera supports 4 patrols, each group can set 24 preset position max.

#### 1、Insert / delete preset position in patrol

- (1) Insert : drop down the list of patrol path, choose the patrol information, then choose the preset position in the preset position drop down list, click "insert" button.
- (2) Remove : drop down the list of patrol path, choose the patrol information, then choose the preset position in the

preset position drop down list, click “remove” button.

## 2、 Start patrol

Drop down the patrol path list, choose the patrol information, click “start” button.

## 3、 stop patrol

Drop down the patrol path list, choose the patrol information, click “stop” button.

## 4、 delete patrol

Drop down the patrol path list, choose the patrol information, click “delete ”button.

### 3.2.3 Pattern

Click the pattern menu, like the picture below:



This PTZ supports 4 groups pattern.

### **1、 Record pattern.**

- (1)、 drop down the pattern list, choose the number of each pattern.
- (2)、 click “start record” button, the PTZ starts to remember and record the scan path, users can set the moving path with PTZ control button.
- (3)、 click “stop record” button, the camera will stop record pattern.

### **2、 Operate pattern**

In the drop-down list of pattern, choose the information of pattern, click “start”.

### **3、 Stop pattern**

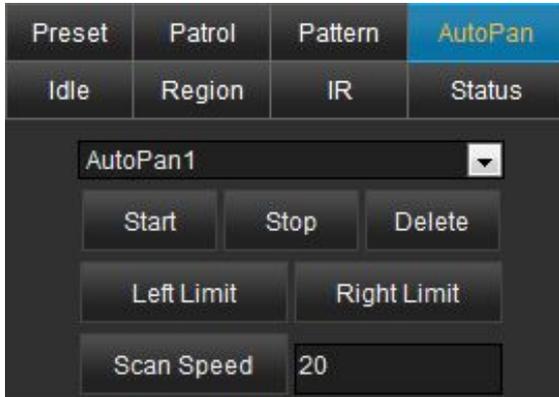
In the drop-down list of pattern, choose the information of pattern, click “stop”.

### **4、 Delete pattern**

In the drop-down list of pattern, choose the information of pattern, click “delete”.

### 3.2.4 Auto Pan

Click “left & right” button, like the picture below:



This PTZ supports 4groups Auto Pan.

#### 1、 set left limit position and right limit position

- (1)、 In the drop-down list of Auto Pan , choose the number of Auto Pan.
- ( 2 ) 、 Control PTZ to the left limit position through PTZ control interface, click “left limit ”,and the left limit position of Auto Pan has been set.
- ( 2 ) 、 Control PTZ to the right limit position through PTZ control interface, click “right limit ”,and the left right position of Auto Pan has been set.

## **2、 Start Auto Pan**

In the drop-down list of left & right , choose the number of left & right, click “Start” button.

## **3、 Stop Auto Pan**

In the drop-down list of left & right , choose the number of left & right., click “stop” button.

## **4、 delete Auto Pan**

In the drop-down list of left & right , choose the number of left & right., click “delete” button.

### **3.2.5 Idle setting**

If there is no operation on PTZ during the setting time, the PTZ will execute the idle function and turn to the guard position which set before. The idle function supports preset position calling, patrol, Auto Pan and pattern.

Click the menu of “idle”, like the picture below:

Preset	Patrol	Pattern	AutoPan
Idle	Region	IR	Status

Residence Time:

Idle Function:  ▼

Function No.:  ▼

- 1、 Input the time for idle waiting in the text box of residence time, unit is second.
- 2、 In the drop-down list of idle function, choose the function you want to operate, this dome camera support preset position calling, patrol, Auto Pan, pattern.
- 3、 After choose the function of guard Idle, then choose the right number of function. This dome camera supports preset position calling, 4 groups patrol, 4 groups Auto Pan, 4 group's pattern.

Click “set” button, the guard position idle function will start using.

If there is on operation on PTZ during the setting time, the PTZ will execute the guard position function.

### 3.2.6 Area setting

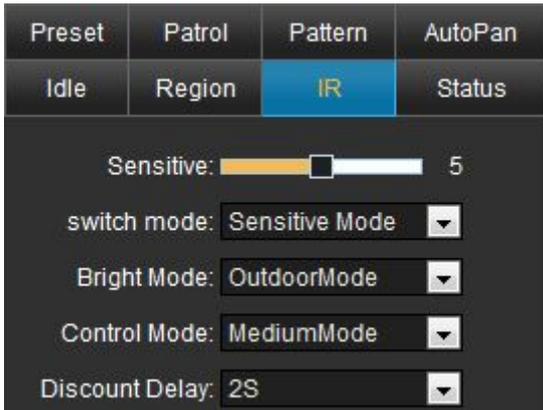
Click the menu of “Region”, like the picture below:



**Attention:** This dome camera cannot support Region at present.

### 3.2.7 IR light

Click the menu of “ IR ”, like the picture below:

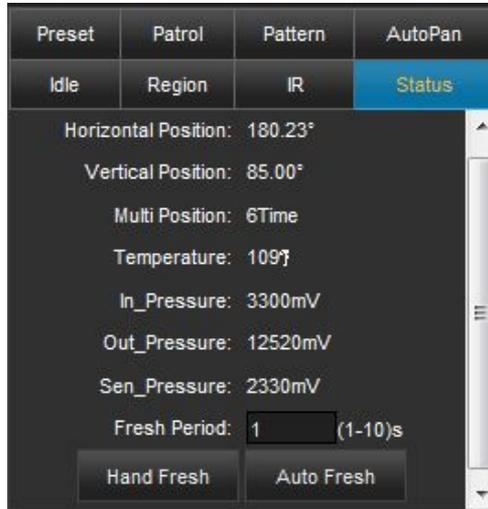


- 1、 **Sensitive** : Use mouse to move the scroll bar, set the light sensitivity level. The range is 0-10. 0 means IR light is off. 1-10 means 10 different level of sensitivity.

- 2、 **Switch mode:** In the drop-down list of switching mode, users can choose 2 different mode of IR switching: light sensor mode & amount of camera light through mode.
- 3、 **Bright mode:** In the drop-down list, there are two modes: Indoor mode & Outside mode.
- 4、 **Control mode:** In the drop-down list, there are two modes: auto control, light for short distance manually, light for middle distance manually, light for distance manually.
- 5、 **Discount delay:** In the drop-down list, time can be set from 0 to 20s.

### 3.2.8 Status

Click the button “Status”, users can see the present operating condition of dome camera. Like the picture below:

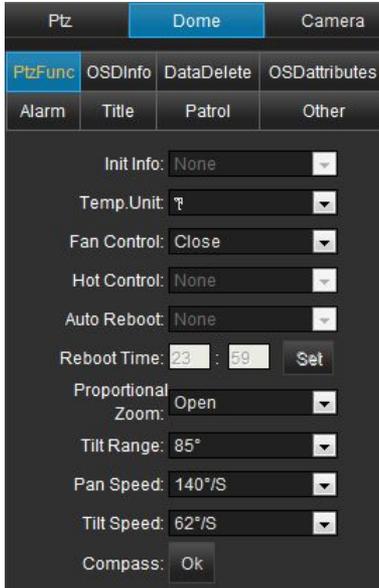


- 1、 Users can see the horizontal position, vertical position, zooming times of camera, Inside temperature of dome, inside voltage, outside voltage, light sensor voltage,etc.
- 2、 Click “manual refresh”, the dome camera will refresh the present running state.
- 3、 Users can set the interval time of refresh cycle in the text box, the range is from 1s to 10s. Click “auto refresh”, the dome camera will refresh the running state automatically information per interval time.

### 3.3 PTZ setting

#### 3.3.1 PTZ function

Click the “PTZ function”, and then enter the interface like the picture below:



- 1、 **Temp. Unit:** There are two modes of temperature: Centigrade degree & Fahrenheit degree.

- 2、 **Proportional Zoom:** In the drop-down list, users can choose to turn on or turn off speed smart adjust.  
Switch on: the rotating speed of dome will linked to camera zooming times, the bigger the zooming times is, the slower the speed of dome is. Switch off: there is no linkage between speed of dome and zooming times of camera. The rotating speed is fixed with any zooming times.
- 3、 **Tilt range:** Rotating range can be set in the drop-down list from  $85^{\circ}$  to  $93^{\circ}$ .
- 4、 **Pan speed:** Horizontal rotating speed can be set in the drop-down list from  $115^{\circ}/s$  to  $160^{\circ}/s$ .
- 5、 **Tilt speed:** Vertical rotating speed can be set in the drop-down list from  $52^{\circ}/s$  to  $70^{\circ}/s$ .
- 6、 **Compass :** Click “OK”, camera will present horizontal coordinates position as the truth north direction, which is the direction of  $0^{\circ}$ .

**Attention :** This camera is not support the function like initial information, fans control, heat control, auto restart.

### 3.3.2 OSD Information

Click “OSD information” and see the interface below:



**Attention:** This PTZ cannot support OSD information setting.

### 3.3.3 Data delete

Click “data delete” ,and enter interface like below:



- 1、 **Delete preset** : Click the “delete preset”, users can delete the information of preset position and clear out the information from the list.
- 2、 **Delete Auto Pan**: Clicks “delete Auto Pan” and users can delete the information of Auto Pan.
- 3、 **Delete patrol**: Click “delete patrol”, and users can delete the information of patrol.
- 4、 **Delete pattern**: Click “delete pattern”, and users can delete the information of pattern.

### 3.3.4 OSD attribute

Click “OSD attribute” and enter the interface below:



**Attention:** This dome camera cannot support the function of setting character attribute.

### 3.3.5 Alarm setting

Click “alarm” and enter the interface below:



Attention: This dome camera cannot support the function of alarm setting.

### 3.3.6 Title setting

Click “title setting” and enter the interface below:



Attention: This dome camera cannot support the function of title setting.

### 3.3.7 patrol setting

Click the “patrol” and enter the interface below. Users can modify

the patrol information, the preset position of patrol, the dwell time of preset position.

#	Preset	Dwell Time	#	Preset	Dwell Time
1	1	3	2	2	3
3	3	3	4		3
5		3	6		3
7		3	8		3
9		3	10		3
11		3	12		3
13		3	14		3
15		3	16		3
17		3	18		3
19		3	20		3
21		3	22		3
23		3	24		3
25		3	26		3
27		3	28		3
29		3	30		3
31		3	32		3

- 1、 In the drop-down list of patrol path, choose the path number. This dome supports 4 paths.
- 2、 In the drop-down list of preset, users can set or modify the information of preset. In the list of Dwell Time, users can choose

the staying time of each preset. Each patrol can set 32 preset positions. This dome supports 24 preset positions at present.

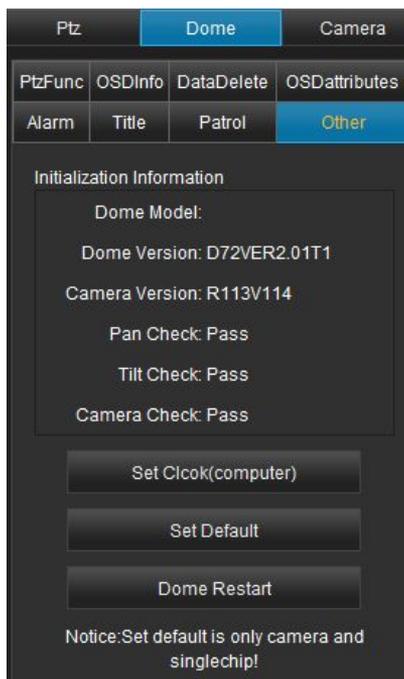
3、 Click “save”, the patrol information will be saved.

Click “start”, the dome will operate the patrol.

Click “delete”, the dome will delete the patrol information.

### 3.3.8 Other setting

Click “Other”, and then enter the interface below. Users can see the initialization information, and can restart or default the camera.



- 1、 **Initialization Information:** Users can see the information like:  
dome software vision, camera software vision, dome model, PTZ pan check, PTZ tilt check and camera module check.
- 2、 **Set Clock:** Click “set clock”, time of dome camera can match to computer.
- 3、 **Set default:** Click “set default”, dome will recover to the default setting of SCM and camera.
- 4、 **Dome restart:** Click “dome restart”, the program of PTZ and camera will restart.

## 3.4 Camera setting

### 3.4.1 Auto Recovery

Click the menu of “auto recovery”, and then enter the interface below:



### 1、Close auto rocker recovery:

In the drop-down list of rocker automatic, choose “close”, the dome will close the function of auto rocker recovery.

### 2、Open auto rocker recovery

In the drop-down list of rocker automatic, choose “full open”, dome will open the function of auto focus recovery and auto iris recovery. Users can set the interval time of auto focus & iris recovery. The range is from 3s to 16s.

### 3、Auto focus recovery

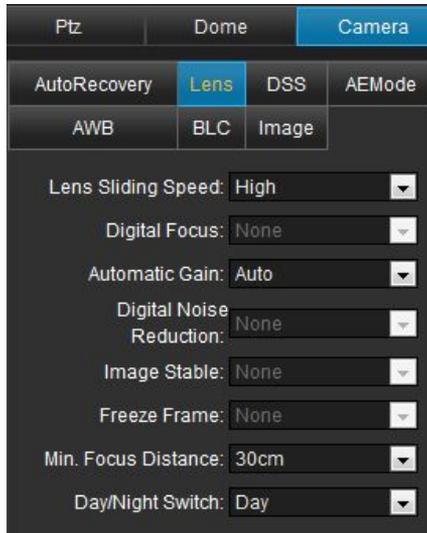
In the drop-down list of auto focus recovery, choose the focus option and dome will open the function of auto focus recovery. Users can set the interval time of auto focus recovery. The range is from 3s to 16s.

#### 4、 Auto iris recovery

In the drop-down list of auto rocker recovery, choose the iris option, and the dome will open the function of auto iris recovery. Users can set the interval time of auto iris recovery. The range is from 3s to 16s.

#### 3.4.2 Lens Data

Click “lens” and then enter the interface below:



- 1、 **Lens sliding speed:** Click the list, users can set the speed of lens changing. There are 3 modes of lens sliding speed: High/ Middle/ Low.

**2、 Automatic Gain:** Click the list, users can set auto gain data. There are 16 ranges can be chosen from -3db to 28db. Users can set different levels to adjust the brightness during nighttime.

**3、 Min.Focus distance:** Click the list, users can set the level of min.focus distance. There are 5 different levels can be chosen: 1cm、 10cm、 30cm、 1m、 1.5m. Users can choose the suitable distance according to the installing environment.

**4、 Day/night switch:** Users can choose the switch mode in the drop-down list.

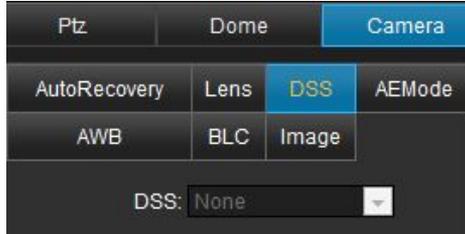
**Auto:** Camera can choose day mode or nighttime mode automatically according to level of IR sensor.

**Day:** In this mode,. Camera is compelled to show the picture like the daytime. Picture is colorful even in nighttime.

**Night:** In this mode, Camera is compelled to show the picture like the nighttime. Picture has no color even in daytime.

### 3.4.3 DSS

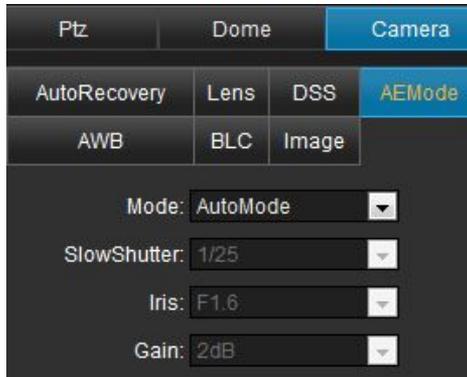
Click the button “DSS” and enter the interface below:



**Attention:** This dome cannot support DSS setting.

### 3.4.4 AE Mode

Click “AE mode” and enter the interface below.



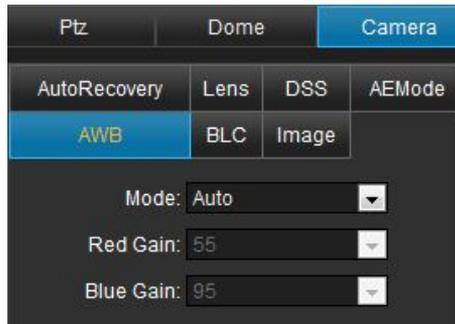
- 1、 **AE mode:** Choose “auto mode” in the list, camera will exposure automatically according to light of outside environment.

**2、 Iris:** Choose “iris”, the camera will exposure according to the information of iris.

**Attention:** This camera can only support two modes: AE Mode & Iris. It cannot support shutter or gain mode.

### 3.4.5 AWB

Click “AWB” and enter the interface below:



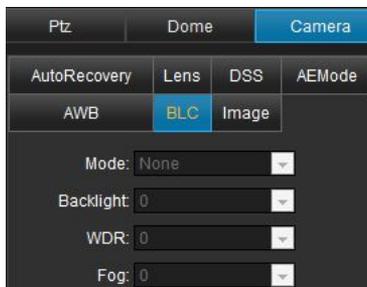
**1、 Auto:** camera will adjust the white balance according to information of outside environment.

**2、 Manual:** Users can adjust the white balance manually according to the level of red/blue gain.

**Attention:** This dome can only support two modes: auto & manual. It cannot support the mode like :auto tracking ,indoor, outdoor, auto locking.

### 3.4.6 BLC

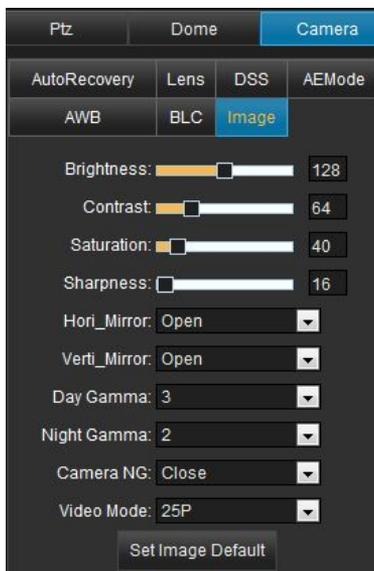
Click “BLC” and enter the interface below:



**Attention:** This dome cannot support BLC at present.

### 3.4.7 Image setting

Click “image” and then enter the interface below:



- 1、 Image color:** Users can set the brightness/ contrast/ saturation/ sharpness to adjust the data of image.
- 2、 Horizontal mirror:** Users can choose it to change the imaging status become horizontal mirror.
- 3、 Vertical mirror:** Users can choose it to change the imaging status become vertical mirror.
- 4、 Day gamma:** Users can choose the level of daytime gamma from the list. The range is from 0 to 5. The default gamma is 3. The bigger the gamma is, the darker the image is. The smaller the gamma is, the brighter the image is.
- 5、 Night gamma:** Users can choose the level of nighttime gamma from the list. The range is from 0 to 5. The default gamma is 1. The bigger the gamma is, the darker the image is. The smaller the gamma is, the brighter the image is.
- 6、 Camera NG:** Users can choose to open or close.
- 7、 Video mode:** There are 2 modes for users to choose: 25P & 30P.
- 8、 Set image default:** Users can recover the default information of brightness, contrast, saturation, sharpness, horizontal mirror, vertical mirror, day

gamma, night gamma.

## **4 IP Function**

### **4.1 Log in**

#### **4.1.1 Device log in**

Firstly, set the IP address segment of PC the same as the Device's. For example, the device IP address is 192.168.1.217, gateway 192.168.1.1. PC IP address should be 192.168.1.XX, gateway 192.168.1.1.

Open the IE browser, input default IP address in address column, or visit through domain name if the domain name analytic function is in use, input domain name will display log in dialog box, as the picture below. If user is not sure of the device address, can search it by using searching tool or client side software.



Original Status:

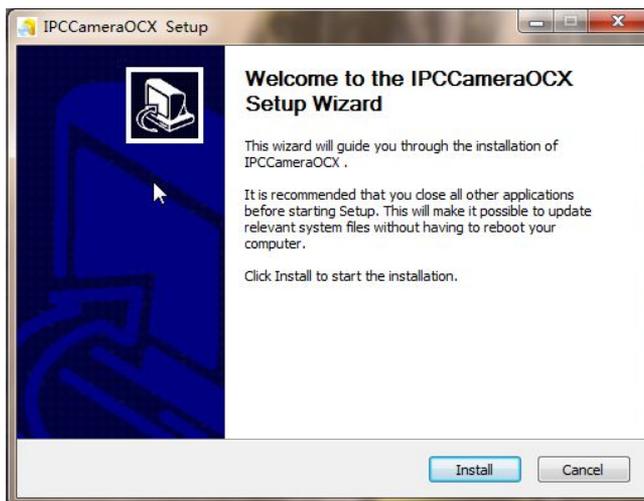
Default Address	192.168.1.217		
User Name	admin	operator	user
Password	admin	operator	user

Attention: use default user name to log in successfully, then the user will have authorization for all kinds of operations. It's suggested that user to modify password after first log in for security.

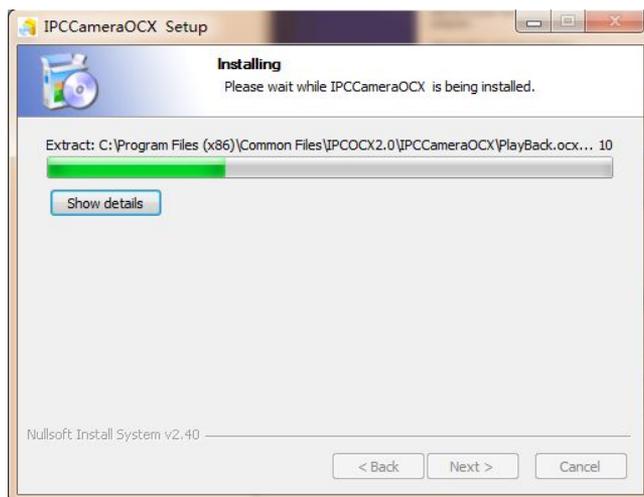
Click or can switch language

For using this software for the first time will need to do below setting in IE.

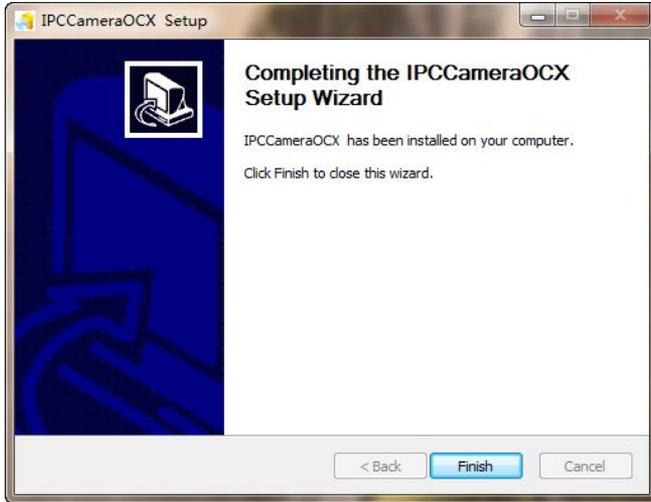
For first use user, he needs to install OCX Active X, or can't view video. Click Download OCX file for installation. After successfully downloading, click OCX icon for installation, below page will be shown up:



Click “install”, and the interface is like below:



After installed, the interface will show like below:

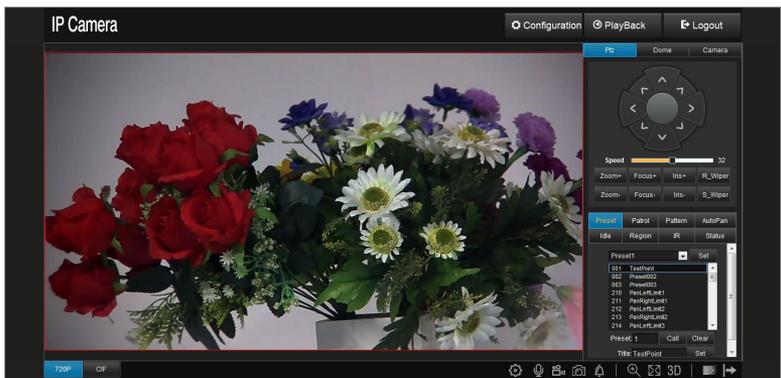


Click “finish” and the web browser active has been installed.

Input the user name and password, then logged into the IE interface of dome camera.

#### **4.1.2 Home Page Instruction**

After log in, users will enter the IE homepage, as below:



## 4.1.3 Home Page Instruction

### 1、Tool Bar Instruction



Play setting: set the video fluency and connecting type of video type.



Talk back: users can talk back to controllers at real time.



Local manual record: save the real time video & audio to local PC.



Local manual snap: save the image to the local PC. (the default path is C:\IP Camera\snapshots\,users can modify it in local set).



Alarm status: show the present alarm status.



Amplification: Amplify the area which users chosen.



Full screen: video become full screen.



3Dpositon: Show the 3 D positioning function.



PTZ menu exchange: show the PTZ menu in the left or right.



PTZ show/hide: show or hide the PTZ.

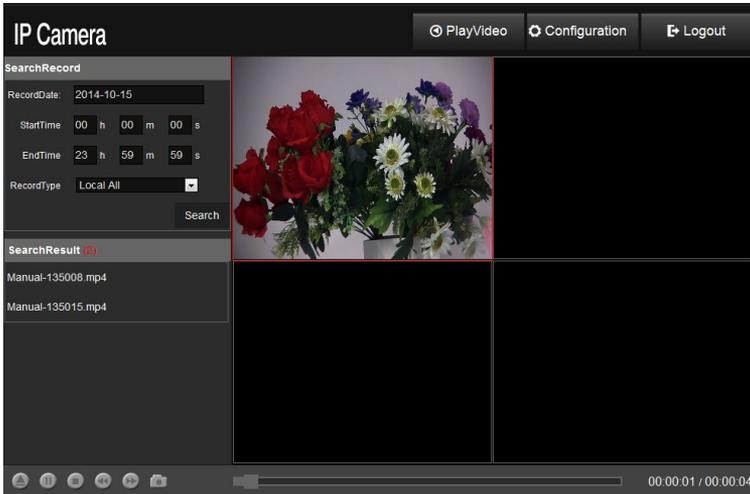
## 2、Illustration for video form



HD IP high speed dome camera support dual code stream output. Main code stream of 720P supports: 720P/ D1. Sub code stream supports: D1, CIF, QCIF. Main code stream of 1080P supports: 1080P /720P/D1. Sub code stream supports: D1/ CIF/ QCIF. Generally speaking, 1080P/ 720P/ D1 is used in LAN, CIF is used in WAN, QCIF is used in mobile phone monitoring. Users can choose different form per different needs.

## 4.2 Video record

Click “video record” and enter the interface below:



In this interface, users can search and replay the local and device end video, including manual recording, timing recording and alarm recording.

- 1、 Search record:** users can search the record according to time and type. Select the record date, input the start time ,end time and record type, which includes local record and device end record. Each type of record includes alarm record, timing record (not support through IE browser) and manual record. Click “search” and the selected video will show on the searching list.

**2、 Play video:** choose the file, click “play” or double click the file.

The video will show on the right screen.

Double click the screen, and it can exchange between single screen and split screen.

The toolbar on the screen can support pause/stop/speed up/speed down/snap/play by order/open audio/close audio.

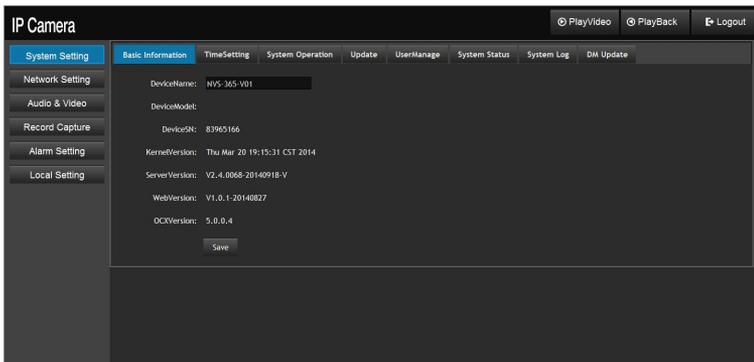
## 4.3 Log out

Click “log out”, IE browser will log out the present operation interface, and return to the log in interface.

## 4.4 System setting

### 4.4.1 Basic information

Click basic information and enter the interface below:

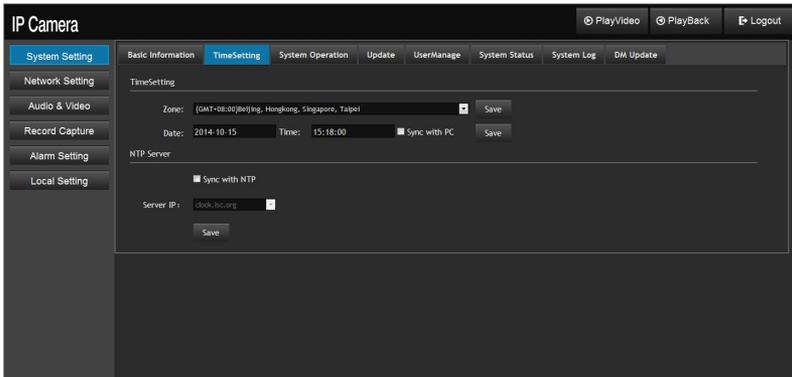


This interface shows the device name, device mode, device SN, kernel version, server version, web version, OCX version.

- 1、 **Device name:** show the name of device. Users can modify it and click “save”, the new name will be saved.
- 2、 **Device mode:** show the type of device.
- 3、 **Device SN:** show the serial number.
- 4、 **Kernel version:** show the version of kernel.
- 5、 **Service version:** show information of the software service version.
- 6、 **Web version:** show the information of web version.
- 7、 **OCX version:** show the OCX information of IE browser.

#### 4.2.2 Time setting

Click “time setting “and enter the interface below:

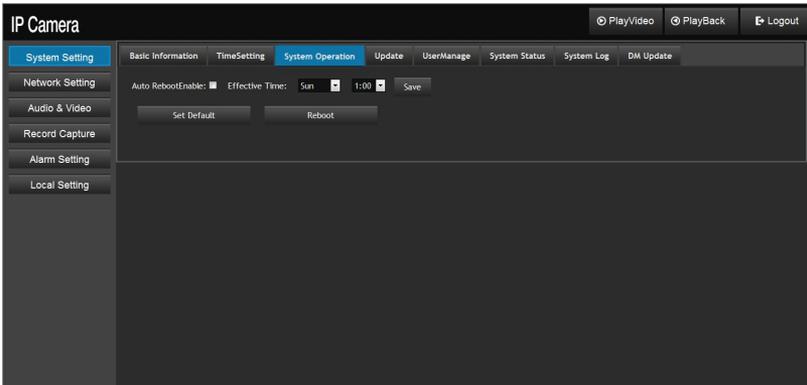


Users can choose time zone, adjust date and time.

- 1、 **Zone setting:** choose the local time zone, and clicks” save”.
- 2、 **Date setting:** date can be matched with PC, click “sync with PC” and click “save”.
- 3、 **NTP setting:** choose “sync with NTP”, the system time will be matched with internet time server.

### 4.2.3 System operation

Click “system operation” and enter the interface below. Users can set the information like timing restart, return to default.



- 1、 **Auto reboot:** Users can set the auto reboot time.

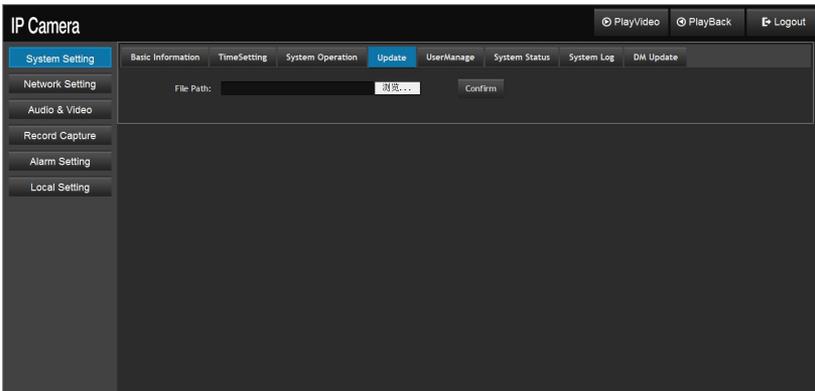
Click “effective time”, set the reboot time, it can be every day or someday in a week, and click save.

2、 **Set default:** Default all the setting.

3、 **Reboot:** Auto reboot the machine.

#### 4.2.4 System update

Click “system update” and enter the interface below. Users can update the network program.



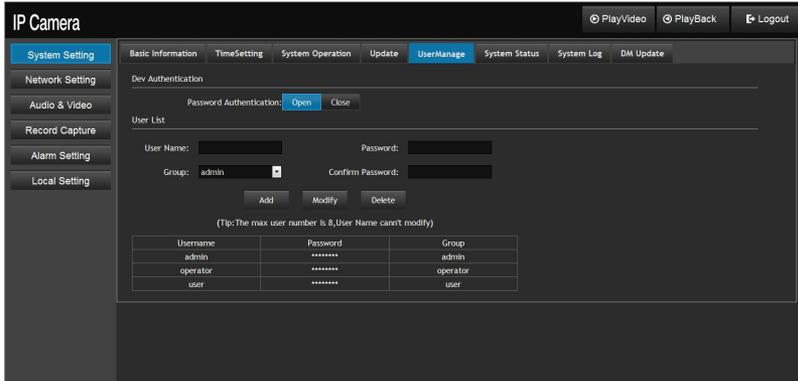
System update: click “浏览” and choose the path of target file, and click “confirm”.

Users can update the software and become the newest version.

**Attention: do not cut off the power supply and operate the dome when updating,**

## 4.2.5 Users manage

Click “users manage” and enter the interface below. It can add or delete users.

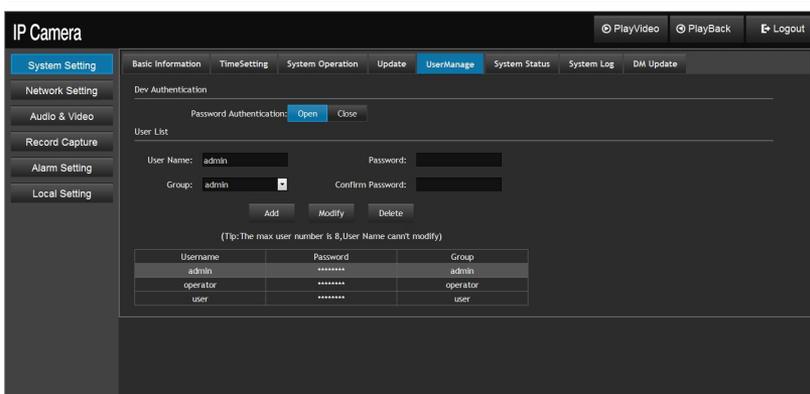


### 1. Password authentication

When open password authentication, users need to input the user name and password . When it is closed, users can log in without user name and password.

### 2. Password setting

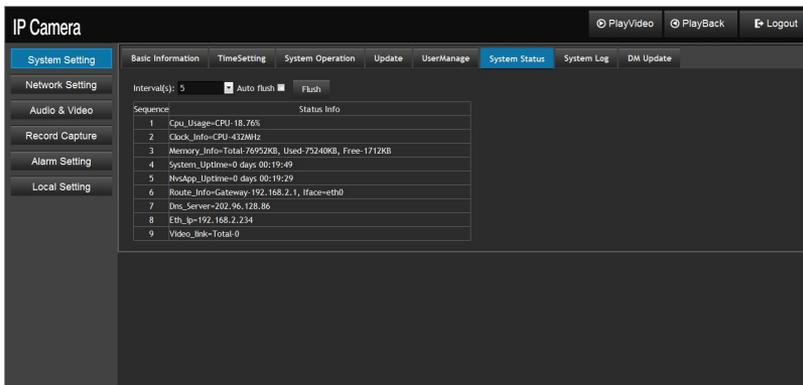
Users can add/ delete the information of users, modify password ,add new user groups.



- 1、 Add:** input the user name and password, choose the group, click “add”, the system will remain “add successfully”, and the new users will show on the user list.
- 2、 Delete:** choose the users can click “delete”, the system will remain “delete successfully”, and the users will move away from the user list.
- 3、 Modify:** choose the users, modify the password, click “modify” and system will remain “modify password successfully”.

## 4.2.6 System state

Click “system state” and enter the interface below:



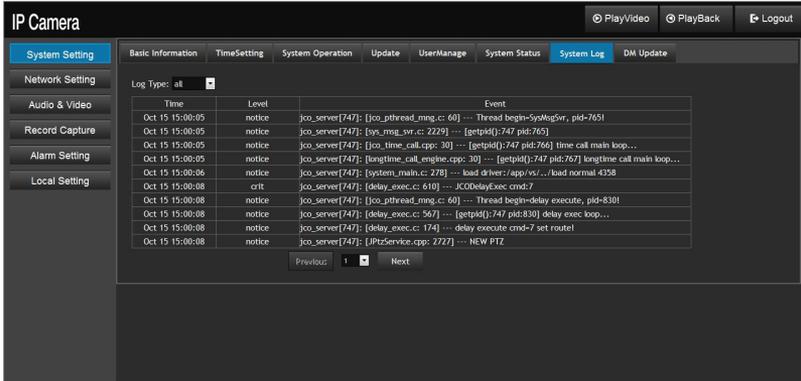
Choose the refresh interval or click auto refresh, the machine will auto refresh the system status.

The system status information:

- N.1: CUP using status.
- N.2: clock information of CUP frequency.
- N.3: status of system memory.
- N.4: using time of machine after power on.
- N.5: standing time of system start.
- N.6: the information of system UPNP.
- N.7: ROUTE information.
- N.8: DNS sever information.
- N.9: the number of video stream connected to the machine.

### 4.2.7 System log

Click system log and enter the interface below:

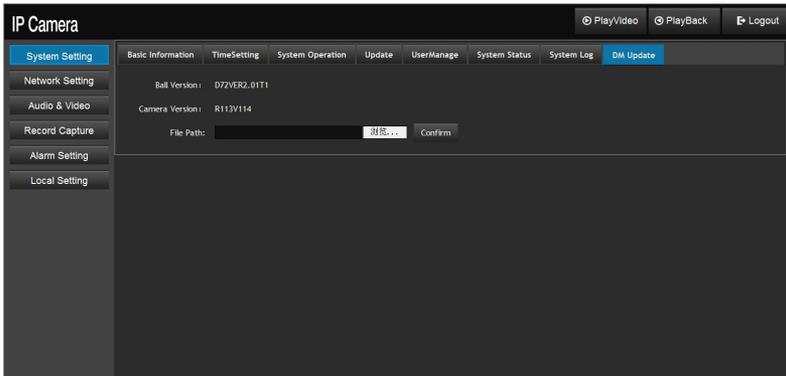


Choose the log type, and users can look into the system log.

Choose the page number, and users can look into the system log.

### 4.2.8 SCM update

Click “SCM update” and enter the interface below:



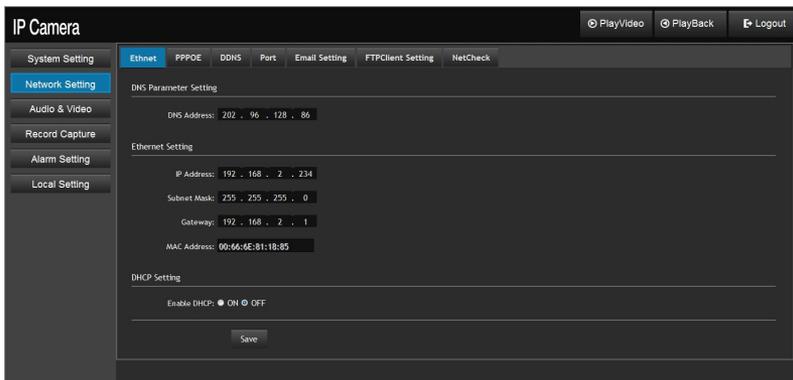
Click “浏览” and choose the SCM and camera program , click confirm. Do not cut off the power supply and do not have any operation when upgrading.

## 4.3 Network setting

In this part, users can set the information like: Ethernet setting , DNS setting, FTP setting, mail server setting.

### 4.3.1 Ethernet

Click “Ethernet” and enter the interface below. Users can set the details.



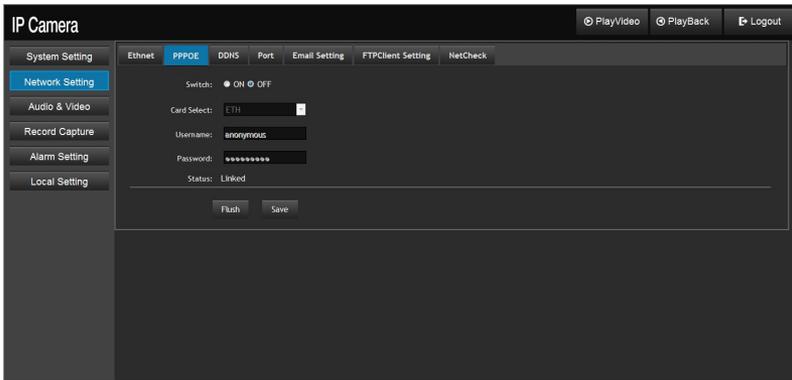
Users can set the network data , including DNS address, IP address, sub net mask , gateway.

MAC address is the physical address which can not be modified.

DHCP Setting: choose “on” and the machine will get the network data automatically from local network. This need to support by DHCP server, please conform to the network administrator.

### 4.3.2 PPPOE

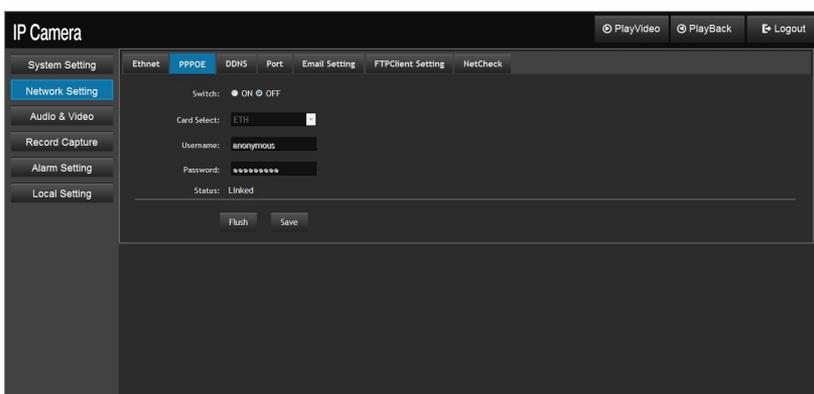
Click “PPPOE” and enter the interface below:



When setting auto dialing, users need to turn on the switch, choose the type of gateway, input the user name and password, then click “save”.

### 4.3.3 DDNS setting

Click “DDNS” and enter the interface below:



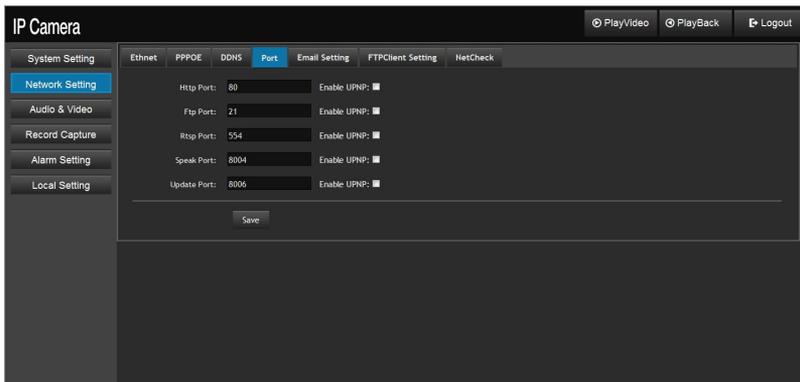
DDNS can map the dynamic IP address to a fixed domain name.

Users need to turn off the switch when setting DDNS.

Choose the DDNS service provider: 3322/org/9299.org. Input DDNS user name and password, and click “save”.

## 4.3.4 Net port

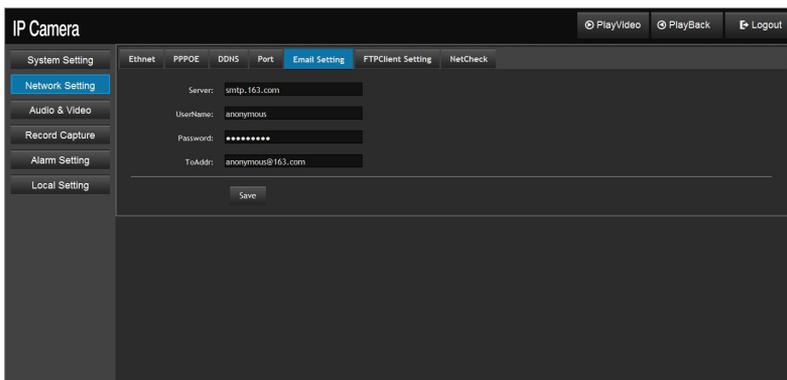
Click “port” and enter the interface below:



- 1、 **WEB port:** used for logging in the interface of IE.
- 2、 **FTP port:** used for FTP uploading and downloading.
- 3、 **RTSP port:** real time video stream to transport video.
- 4、 **Talk back port:** used for talk back.
- 5、 **Update port:** used for program updating.
- 6、 **UPNP switch:** auto mapping for port.(need to supported by router).

### 4.3.5 Email setting

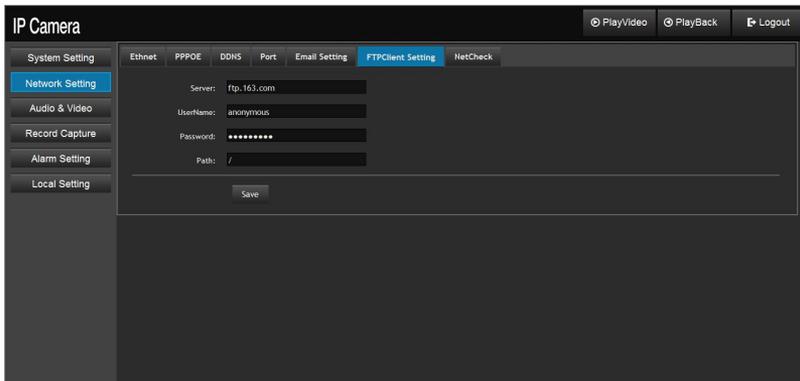
Click “email setting” and enter the interface below:



Email data: set the data of email server, user name and password.

### 4.3.6 FTP setting

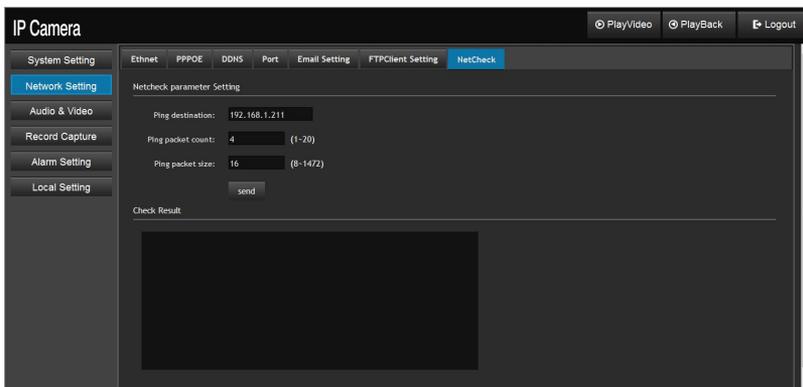
Click “FTP client setting” and enter the interface below:



**FTP data:** input server name, user name, password, FTP path and type of uploading, click “save”.

## 4.3.7 Network setting

Click network setting and enter the interface below. Users can test the present network status.



IP diagnostic parameters setting:

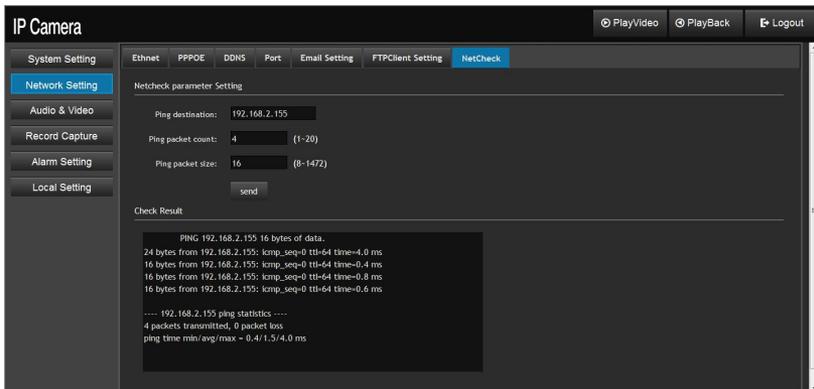
IP address or domain name: input the address of testing server.

Such as 192.168.5.155.

Number of Ping package: input the number data package during testing.

Input of every package.

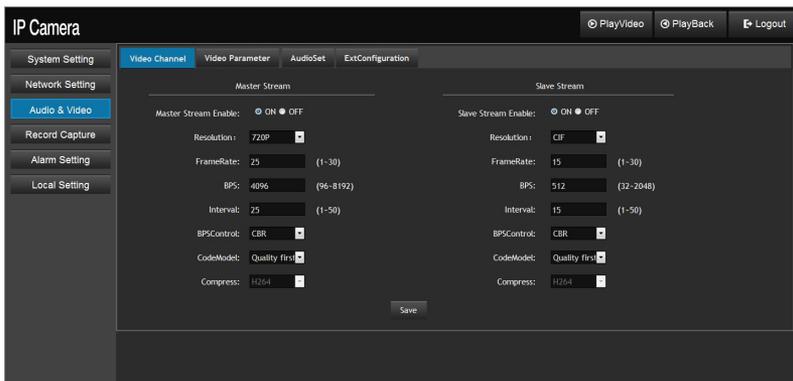
Check result: input the right parameters and click “send”, the diagnostic parameters will show after a few seconds.



## 4.4 Audio and video

### 4.4.1 Video channel

Click “video channel” and enter the interface below:

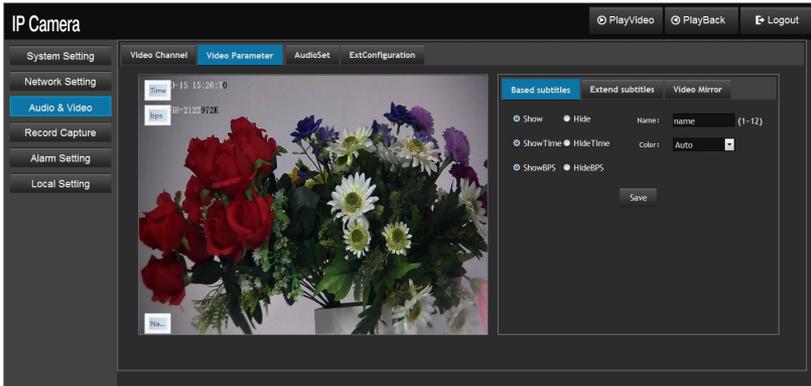


Users can choose different video path according to different type of network.

HD IP high speed dome camera support dual code stream output. Main code stream of 720P supports: 720P/ D1. Sub code stream supports: D1, CIF, and QCIF. Main code stream of 1080P supports: 1080P /720P/D1. Sub code stream supports: D1/ CIF/ QCIF. Users can open or close the two code stream, and set the relative data. There are 3 mode of video play: smooth, middle, real time. The type of connection can choose TCP or UCP.

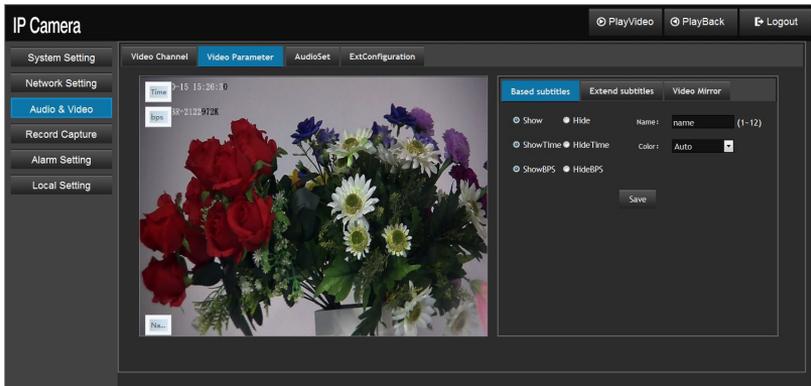
## 4.4.2 Video parameter

Click “video parameter” and enter the interface below. Users can set the basic subtitle, extend subtitle, video mirror.



### 1、basic subtitle

In this interface, users can set the information of name, time and code rate.



users can choose the information to show or hidden. Include : title, time, code rate.

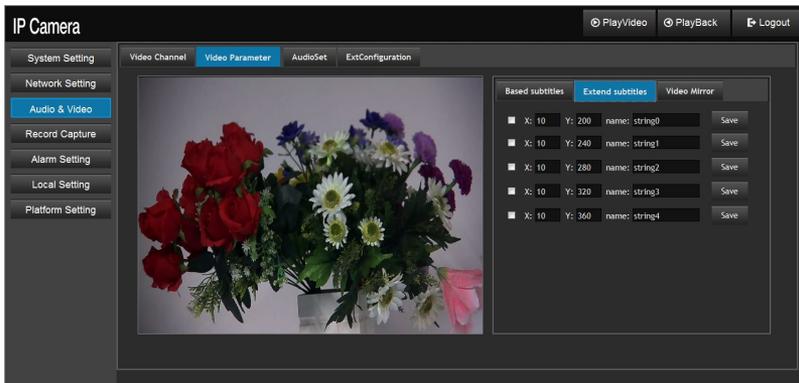
If users want to show the title, fix the information and click “save”.

**Attention: the title no more than 12 characters.**

The color of character can be set from: white/ black/ auto.

## 2、Extend subtitle

There are 5 extend subtitles for users to set.



Click extend subtitle;

Set the X coordinate and Y coordinate of subtitle;

Set the subtitle information;

Clicks “save”.

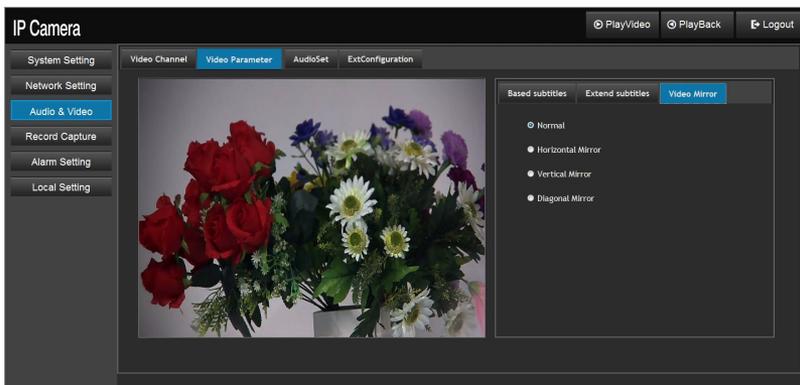
The extend subtitle will show like the picture below:



The letter in the red box is the extend subtitle.

### 3、 video mirror

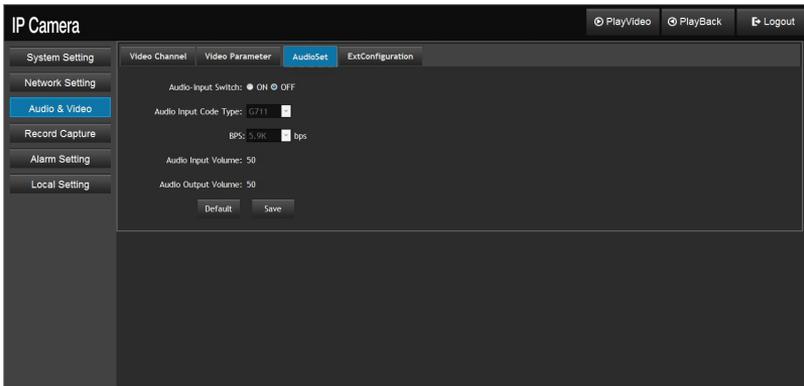
Click the video mirror and enter the interface like the picture below:



Users can set the video mirror in 3 modes: horizontal/ vertical/ diagonal.

### 4.4.3 Video setting

Click “audio set, users can set the volume of audio input /audio output.

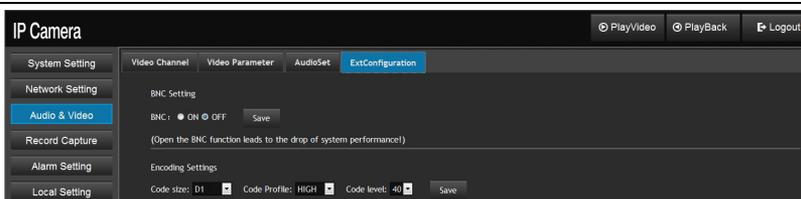


After setting all the information, click “save”.

If users want to recover to factory default, click “default”.

### 4.4.5 Extend setting

Click “extends setting” and enter the interface below:



In this part, users can choose code size, code profile, code level, and click “save”. Users also can choose to open or close BNC

### 4.5 Video capture

In this interface, users can set the information of front end & remote recording.

#### 4.5.1 Front end record

**Attention: this function can only be achieved when remote recording or there is TF card in dome.**

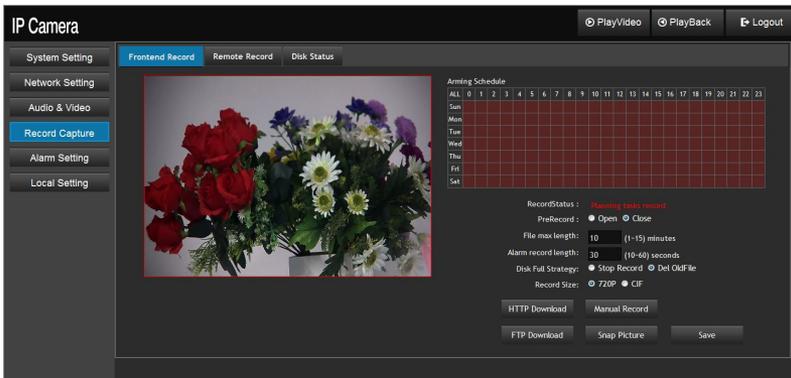
##### 1. Timing record setting

Users can set the auto recording time in time setting schedule.

Use the mouse to choose the time area, the color of chosen is orange.

**Attention:** if click “Sat”(or Mon, Tues,etc), the whole day will be chosen and become orange. If click “all”, the whole week will be chosen and become black.

After choosing the time, clicks “save”.



## 2. Video manage

Set the max. Recording time. The front end recording time is from 1 minute to 15 minutes. And set the disk full strategy (stop recording or delete old file.)

Set the length of alarm recording. There are 5 types of alarm auto recording: 1080P/ 720P/ D1/ CIF/ QCIF. Users can choose the suitable type according to main code stream and sub code stream.

Strategy for reserve disk space:

- Min. space: 50M; max. Space: 5G, default space: \*2%.
- Support multi type of recorder at the same time (e.g. Samba, TF card), only when one recorder is full and turn to another to storage.
- The machine will stop recording or delete old file only when all the storage space is full.

Only when the front end space is bigger than reserve space, the camera will operate front end recording.

Click “start record” and the status of recording is “manual record”, system start record. Click “stop record” to stop recording.

When set timing recording, system will record automatically. This status is “timing record.”

When the portable storage device is connected to the machine, users can download it from PC. There are two modes:

HTTP download: users can use the mode of HTTP to download the file to local disk.

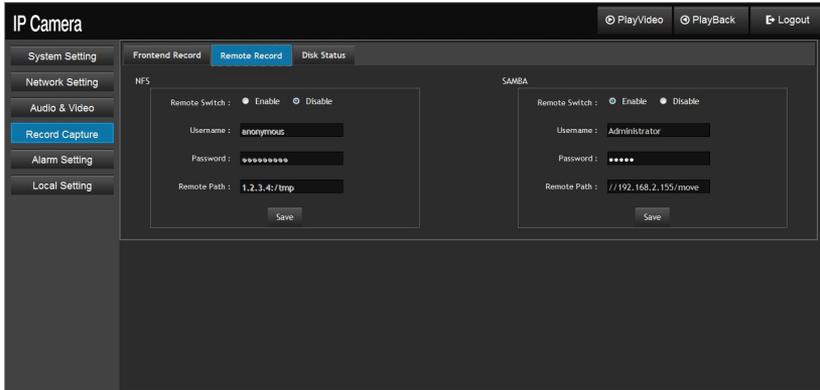
FTP download: users can use the mode of HTTP FTP to download the file to local disk.

Download: users can use the way of FTP to download the file to local disk.

Click: “snap picture”, users can save the present picture local disk..

## 4.5.2 Remote record

Click “remote record” and enter the interface below:



This function supports users use storage device in network as a front end device.

### 1. NFS setting (not support at present)

Switch of remote record: open or close the function of NFS remote recording.

Remote path: input the address of NFS.

User name: input the user name of NFS.

Password: input the password of NFS remote recording.

### 2. SAMBA setting

Remote recording switch: open or close the SAMBA remote recording function.

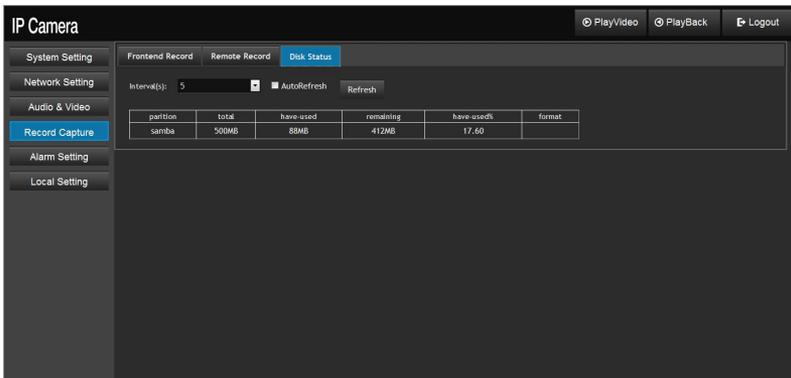
Remote path: input the address of SAMBA.

User name: input SAMBA address.

Password: input he SAMBA remote recording password.

### 4.5.3 Disk status

Click disk status and enter the interface below:



If use TF card, the information of it can be show in this part. Include dick area, total space, the used space, the remaining, and the percent of used space.

“Format” is used for formatting the storage space of the device.

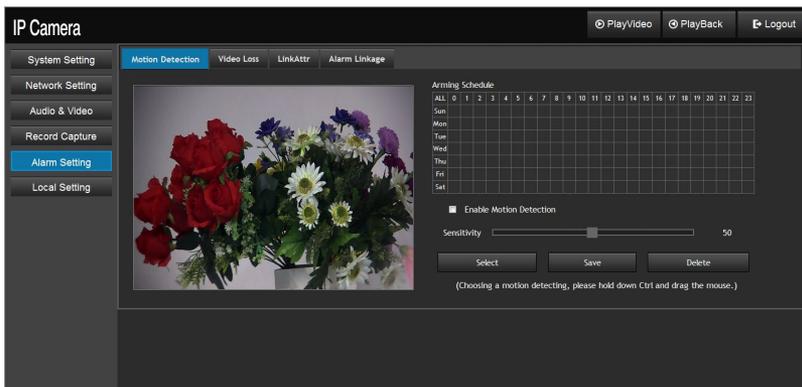
### 4.6 Alarm setting

In the interface of alarm, users can set the detail alarm information

of front end device.

### 4.6.1 alarm setting

Click “motion detection”, and enter the interface below:



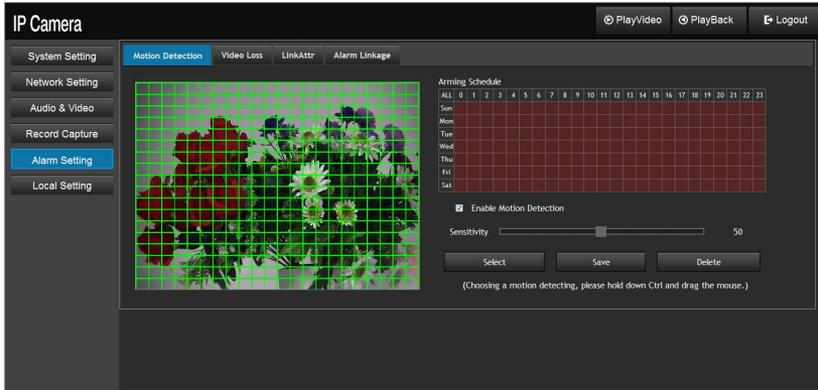
Motion detection data: users need to click “enable motion detection”, and set the sensitivity data. The range of sensitivity is 1 ~ 100.(The bigger the more sensitive). Then, choose the alarm time schedule: click “select”, push “Ctrl” and use mouse to select the time area. Click “show” and the detection area of time will show, choose “delete”, the time area will be deleted.

Move detection time schedule: set the time schedule of front end device. This can be linked to front end device. (Include front end device recording, send email, FTP upload).

#### Attention:

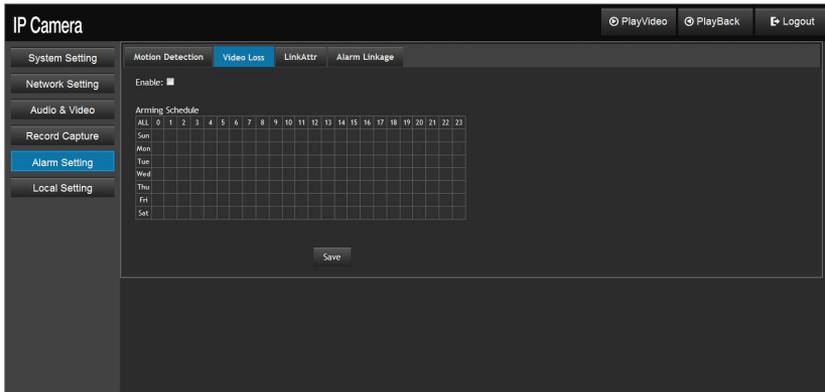
- When selected San (Mon/Tues/Wens/Thur/Fri/Sat), the color will be black.
- Click “all”, all the color will be orange.

Clicks “save”.



#### 4.6.2 Video loss

Click “video loss” and enter the interface below:



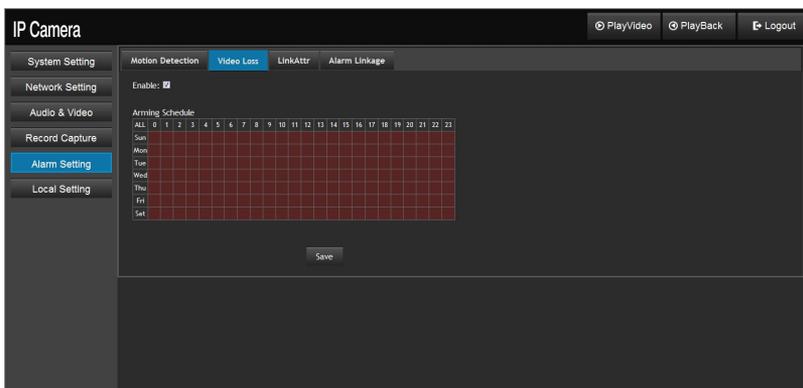
Sensitivity of video loss: click “enable” and set the sensitivity data.( 1~100,the bigger the data is ,the more sensitive

Video loss alarm schedule: set the time schedule, it can be linked to alarm when video is lost in front end device. (Include front end recording, send email, FTP upload).

**Attention:**

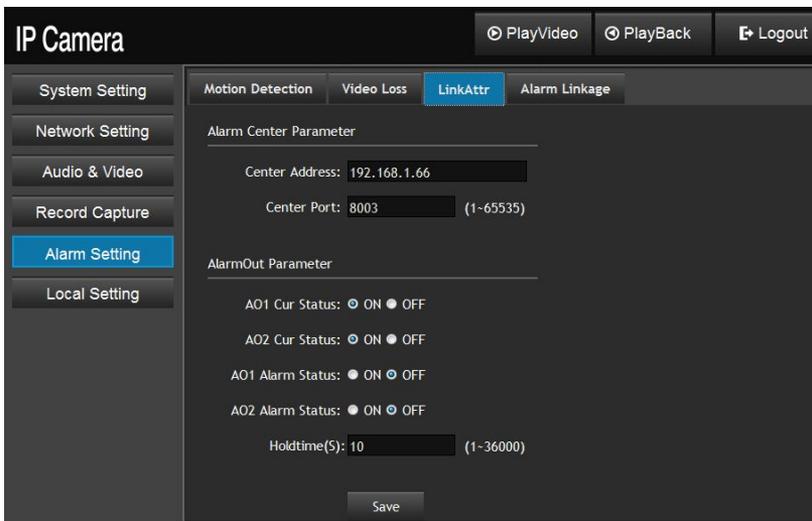
- When selected San(Mon/Tues/Wens/Thur/Fri/Sat),the color will be black.
- Click “all”, all the color will be orange.

Click “save” and the interface is below:



### 4.6.3 Link attr

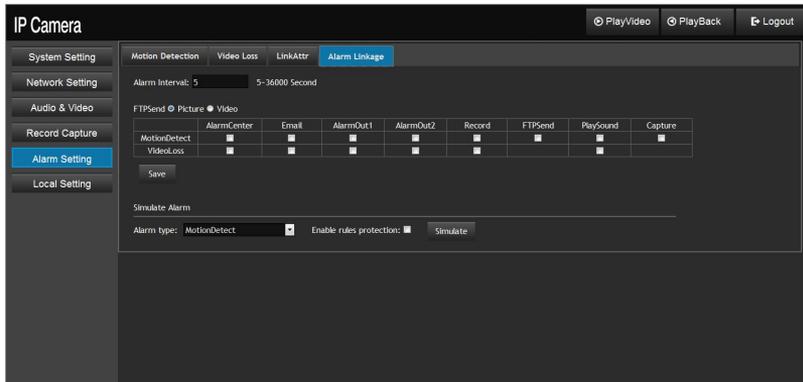
Click :link attr” and enter the interface below:



Alarm center parameter: input the center address and center port, click Alarm output data”: set the information of present output status and alarm status. Users can set the holding time o f alarms. Clicks “save” after setting the data.

#### 4.6.4 Alarm linkage

Click “alarm linkage” and enter the interface below:



- 1、 Alarm time interval:** the interval of alarm recording and snap.
- 2、 FTP uploading:** choose the file type of uploading: picture & video.
- 3、 Motion detection:** include alarm center, email, alarm output, front end record, FTP upload, play sound, capture,;
- 4、 Video loss:** include alarm center, email, alarm output, front end record, play sound.

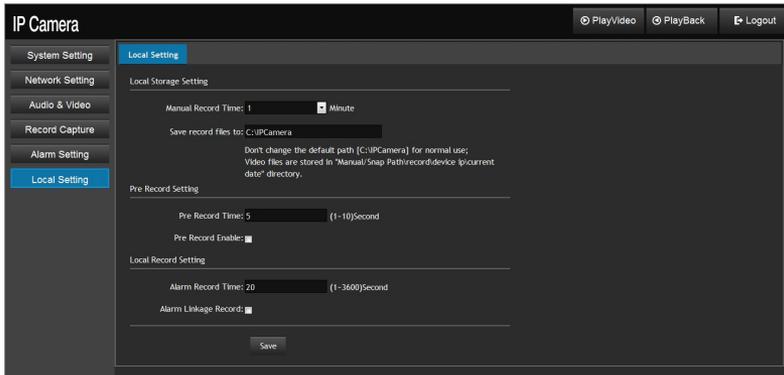
Simulate alarm: use mouse to click and putout alarm signal.

**Attention:** if the file type of FTP is video, please make sure that the device has connected with front end storage device, and click the matched front end recording choice.

## 4.7local setting

In the interface of local setting, users can set the information of

record/pre record/alarm linkage recording. Like the picture below:



**1、 Record setting:**

choose the recording time and choose the storage path.

**2、 Pre record setting:**

start the recording function in IE when PC start alarm recording.

**3、 Alarm linkage record:**

choose alarm linkage record, it will start record when alarming.

Set the recording time.

Clicks “save”.

## FAQ

### 1. Can Not Visit Via Browser

Possible Reason(1): Internet is not connected

Solution: Connect the PC to internet and check if it can normal work, get rid of cable and virus problem, till can ping to PC.

Possible Reason(2): IP address is being occupied by other devices

Solution : Connect the camera to PC and reset a new IP address

Possible Reason (3): Camera and PC IP address not in the same segment

Solution: Set them to the same segment

Possible Reason(4): Camera breakdown

Solution: Return for repairing

### 2. Can Not Control Camera via IE

Possible Reason (1) : Ensure if the settings of address, protocol and other parameters in 'Serial Port' are coordinate with the camera dial-up.

Solution: Check the camera protocol, bit rate and other parameters in 'Serial Port' and set them right.

Possible Reason(2): Camera breakdown

Solution: Return for repairing