

Please read and understand this manual
before attempting installation of the product.



RA、RB、RBU Series

User Manual

Jan, 2018






V1.0

Statement




If the user manual doesn't help you to solve the problem, please call our technology center for technical support.

Notice

1. Installation Environment

-  Keep away from the places for high-temperature, heat source and direct sunlight;
-  Keep away from water and if wet, power off immediately.
-  Avoid using in the damp environment; the reference range for operation humidity is below 85%RH.
-  Avoid using in too hot or too cold environment, the reference range for operation temperature is $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$
-  Please install it horizontally or wall mount, avoid strenuous vibration and do not place other items on top of the unit.

2. Transport and Handling

-  Please handle the item carefully.
-  Do not move the item between too hot and too cold areas.
-  Please disconnect the item from the mains before moving.



Notice:

1. Do not fall down the camera or beat it strongly.
2. Do not touch the optical components for the image sensor, such as the lens, if necessary, please place a clean and moistened cloth with alcohol and wipe the dirt gently; When not in use, please place the dust cover onto the item to protect the image sensor.
3. Do not aim the camera directly into the sun or at other intense light sources that could affect the image quality, this will also shorten the service life for the image sensor.
4. Keep away from laser when it is working, otherwise the image sensor can be damaged.
5. If the equipment is not working properly, please contact the store or the service centre, do not disassemble or modify the equipment in any way.

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1 Product Introduction

1.1. Product Overview

Thank you for choosing RA series high definition SmartP2P IP Camera, the IP Camera combines a high definition digital video camera with network connectivity and a powerful web server to bring high definition video to your desktop from anywhere on your local network or over the Internet. It includes indoor HD PTZ camera, indoor HD cube camera, outdoor HD waterproof camera etc. It is very suitable for home, shops, offices and so on.

Product features:

- Support High profile H.264 encoding, 3 kinds of resolution video stream simultaneously, suitable for Local, Internet and Cross-platform view;
- Support Wi-Fi protocol 802.11b/g/n;
- Support WPS/QSS one key Wi-Fi configuration;
- Support one touch Wi-Fi configuration on mobile phone before connect to the network;
- Support max. 128G SD/TF card storage for the alarm video and pictures, timing snapshot and recording, support MP4 format;
- Built-in web server, use one port to send all the data, users can facilitates network setting;
- Support IE/Firefox/Chrome/Safari browser to view video and configure device;
- Support P2P private network through transmission via manufacturer cloud platform;
- Provide IOS/Android mobile phone Apps;
- Provide Windows/Mac OS PC client software.

1.2. Product Exposition

Please check carefully if all listed items are included in the package, it includes camera, power adapter, network cable, installation bracket. If anything missing, please contact vendor in time.

The camera functions maybe different due to different product model, the main functions as below:

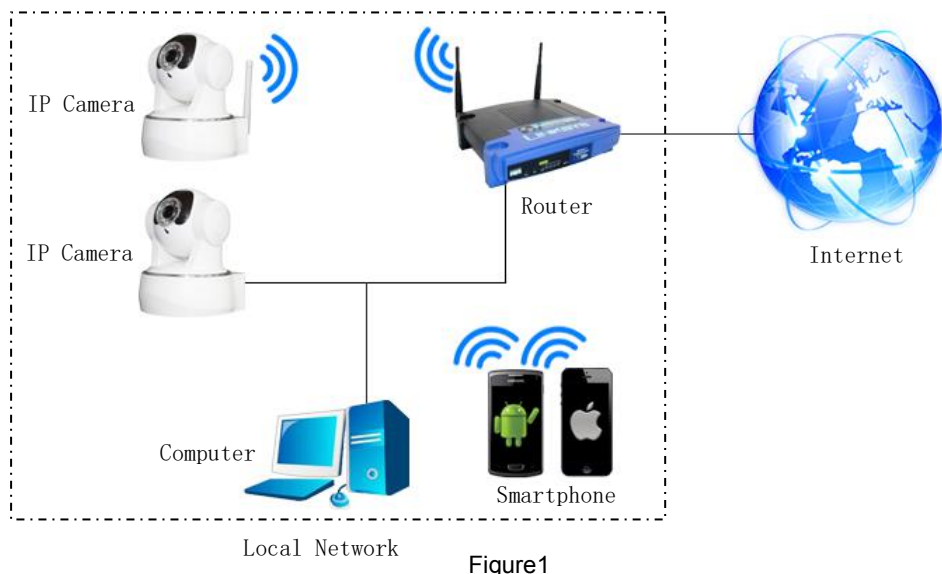
- **Main chip and sensor:** Due to main control chip and sensor is different, so the camera support different resolution:720P, 1080P and above;
- **Power input port:** Check power supply if 5V or 12V. Plug right power supply, or it will damage the camera or cannot run. We suggest to use the default power adapter.
- **RJ45 Port:** Network port;
- **Wi-Fi function:** The device features Wi-Fi function, built-in Wi-Fi module and antenna. The Wi-Fi antenna includes built-in Wi-Fi antenna, integration antenna, separated antenna and so on. The separated antenna would be packed with the camera in the gift box, users should install it to camera before it works.
- **IR-CUT:** A filter switching device, from day and night to switch to a different filter, then forbid or allow the infrared light in, which make the picture more true;
- **Lens:** Due to focus length of lens is different, so vision angle of lens is different. Please twist the

lens for best effect if the video is fuzzy;

- **PTZ:** Control PTZ remotely, view video from several vision angle. Some device have PTZ function and some device have not PTZ due to the product cover is different, and PTZ moving angle maybe different;
- **SD socket:** Some product use SD socket and some use MicroSD socket due to the products cover are different, Max support 128GB memory card;
- **MIC inside:** Can collect the sound from camera workplace;
- **Speaker inside:** can play sound from device start, talking and alarm;
- **Audio in port:** If the camera without MIC in it, you can connect extra MIC to collect sound;
- **Audio out port:** If the camera without speaker in it, you can connect extra sound systems;
- **Alarm in port:** Connect with switchable sensor, check sensor signal if high or low to judge if detect any event;
- **Alarm out Port:** Connect with external alarm device, control device alarm action when detect any event;
- **Reset button:** After the camera started, press and hold the reset button for at least 10 seconds, it restores default settings and reboot; press and hold the reset button for 3 seconds to set up the Wi-Fi by using WPS/QSS; press the reset button briefly, the Wi-Fi indicator will flashes for a few seconds while the camera was connecting with Wi-Fi connection, you can assess Wi-Fi signal intensity by the flash frequency, the faster flash, the stronger signal;
- **Wi-Fi indicator:** Blue LED for Wi-Fi indicator that be used to display Wi-Fi work state, such as off, slow flash, fast flash, steady work etc;
- **Work status indicator:** Red LED is operation indicator that displays the state of equipment, there are off, slow flash and flashlights flash, when someone access video, otherwise slow flash;
- **POE function:** The function that supply power to camera through network cable. But you need the camera with POE module. the device connect to POE switcher by a network cable and POE switcher supply power for device through the network cable;
- **PIR function:** The device with PIR sensor, used for detect the human movement, it trigger alarm if detect any abnormal.

2 Device Connection

2.1.Connection Diagram



Power on the camera by attaching the power adapter, and then connect the camera and router by network cable, so you can visit the camera via computer in LAN and view camera video as <<3. View video by browser>>

You can also connect camera and router by Wi-Fi, you need to configure Wi-Fi of the camera as <<2.2 Wi-Fi Setting>>.

2.2.Wi-Fi Setting

You can setting up the Wi-Fi as the following three way.

2.2.1. Configuration via network cable connection

Connect the camera and router by network cable as Figure1, please login the camera as <<3.View video by browser>>, access to system configuration interface to finish the setting as <<5.1.2.3 Wi-Fi setting>>.Pull up the network cable, then you can connect the router by Wi-Fi.

2.2.2. WPS/QSS One key configure Wi-Fi

Power on the camera and wait for 1 minute, the camera started, hold on reset button 3 seconds, and then click “WPS/QSS” button of the router , the camera and router will be configured Wi-Fi as WPS/QSS protocol, after configuration successfully, the blue Wi-Fi indicator of the camera will quickly flash several times, and then it will be connected to router automatically and the blue indicator will be always on.

Notice: Due to some router do not support WPS/QSS function, so you can not use the configuration way.



Figure2

2.2.3. Mobile Phone Setting

Install the iSmartViewPro App in android phone or iPhone at first. Open the App, access to **More** interface, select “One key configure Wi-Fi” and fill in Wi-Fi SSID and password, and then click configure to finish the setting as Figure3.



Figure3

Tips:

- Before configuring, please turn on the camera. Press and hold the camera reset button (RST) after the camera is turned on. You can configure the camera (the blue Wi-Fi indicator flashes slowly). Otherwise, it cannot be configured. You must turn the camera back on.
- Move mobile phone speaker to camera MIC, click **Configure**; (please confirm if the camera have MIC, otherwise the configuration will be unsuccessfully)
- After configuring successfully, the blue Wi-Fi indicator will flash several times quickly, and then connect to router automatically and the blue indicator is always on. You can click **Configure** several times when the configuration is unsuccessfully.

3 View Video by Browser

3.1. Access to camera webpage and install Plug-in

Double click to Open the “SearchPro” in the attached CD and click **Search** as Figure4.

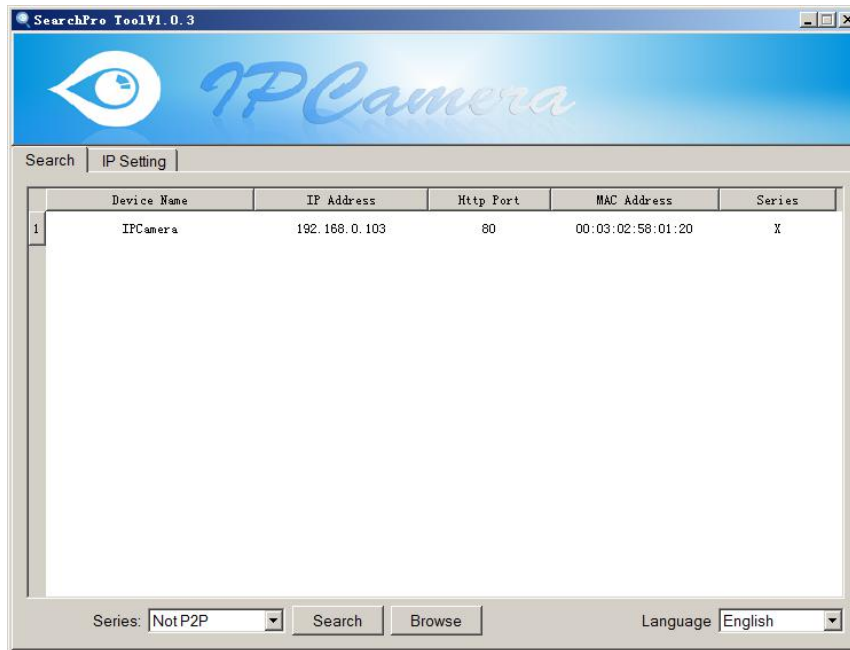


Figure4

Select the founded device and double click it to open to view in the browser, enter user name and password at popup dialog to login camera webpage as Figure5.

Tips: default username/password:admin/12345, please modify the password for safety.



Figure5

- Need to download plug-in when first use, click “download plug-in” as figure 6, click **Run** to install it.

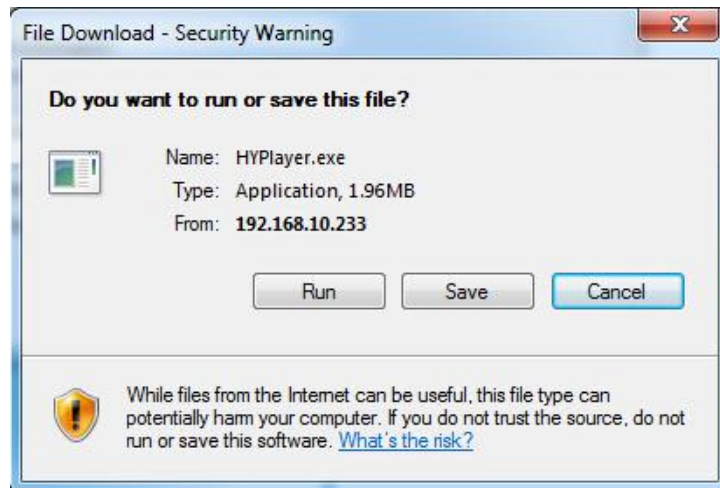


Figure6

3.2.View Live Video

Access to Live Video interface, it plays video automatically as Figure7.

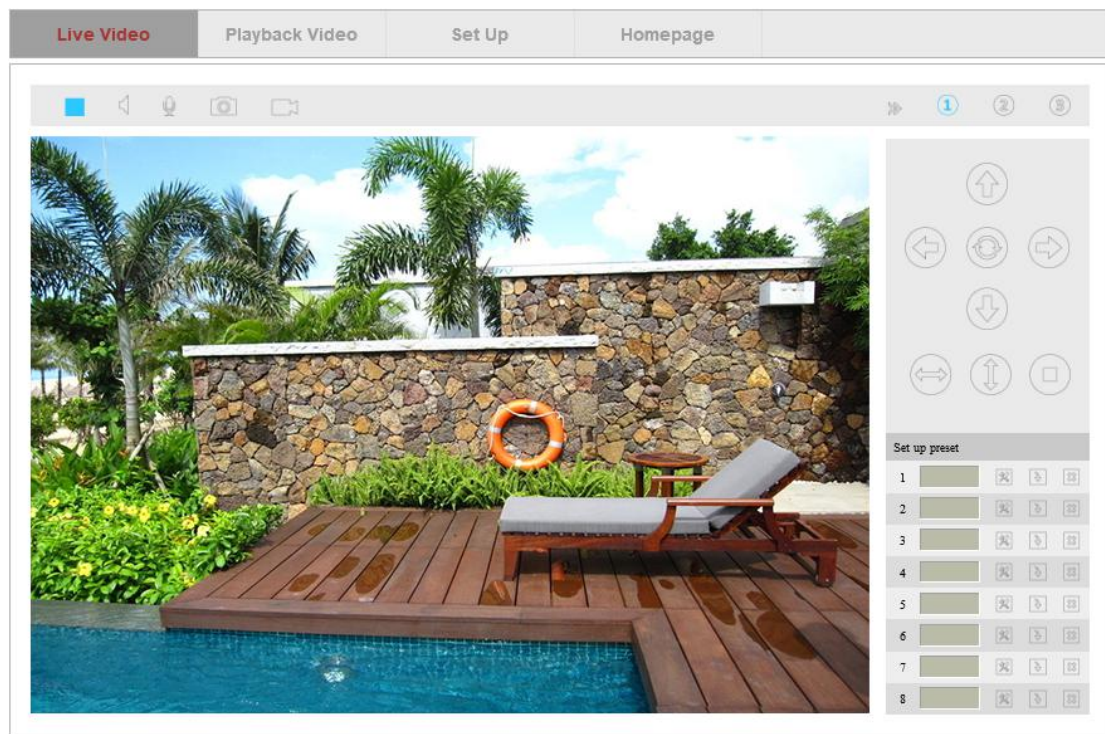
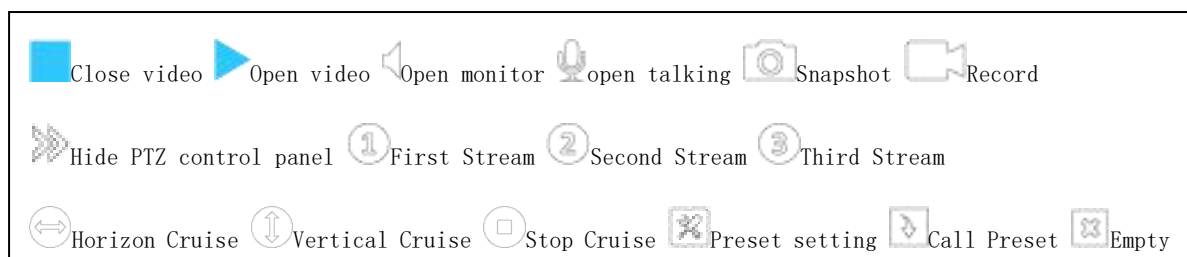


Figure7



4 Query and Playback SD Record by Browser

4.1. Playback Video

Click Playback Video to access to SD record playback interface, click record date which you want to query ,click **Search** to list recording file, select one to playback it, also can click download button to download the file as Figure8.

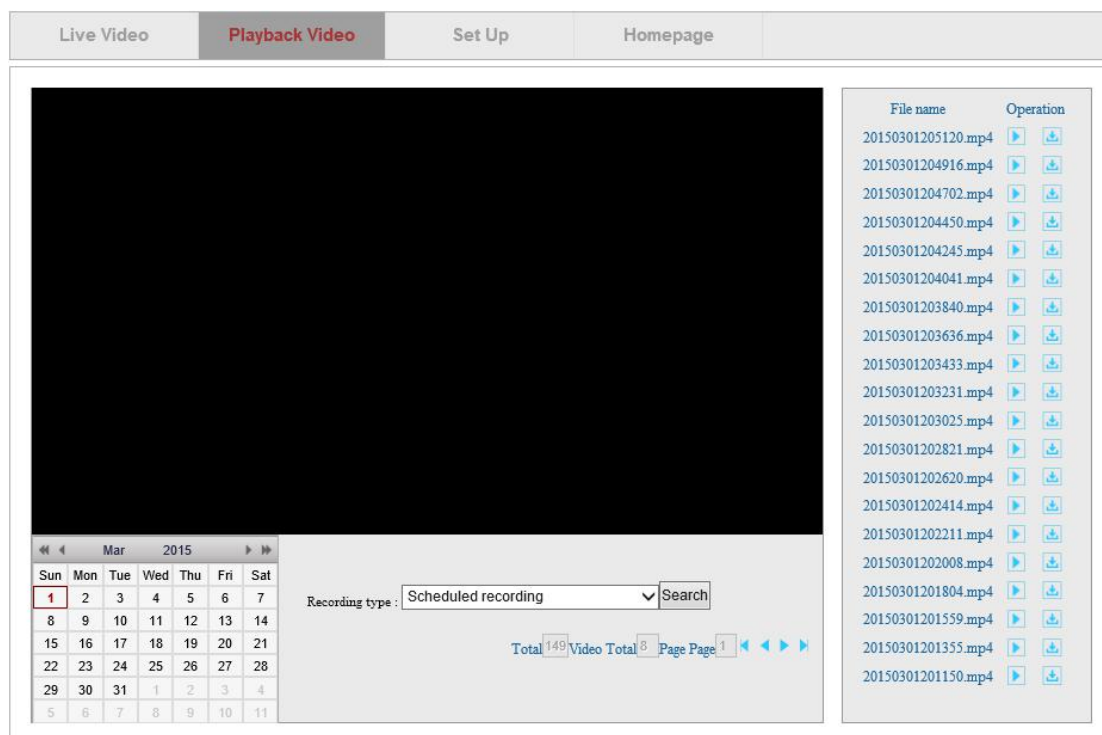


Figure8

5 Device Configuration and Local Setting

5.1. Device Configuration

5.1.1. System

5.1.1.1. Device Status

You can view current user, network connection way, Mac address, SD status and internet ip address of the camera as Figure9.

Device Status	
Current users	0
Network connection	Wired
MAC address	D8:A3:C3:A4:D5:AD
Recording status	in scheduled recording
SD status	SD valid, Total capacity : 3844 MB; Remaining capacity : 644
Internet IP address	<input type="button" value="Check internet IP"/>

Figure9

5.1.1.2. Time Setting

Current time	2015-03-01 20:59:48
Time setting	
Timezone	(GMT+08:00) Beijing, Chongqing, HKSAR, Urumchi
Sync. with PC	<input type="button" value="Confirm"/>
NTP service	
Enable NTP	<input checked="" type="checkbox"/>
NTP server	time.nist.gov

Figure10

5.1.1.3. PTZ Setting

You can set up PTZ speed, cruise circles (1-10 turns) and disable motion detection when PTZ moving as Figure11.

Pan&Tilt setting	
Pan&Tilt speed	Fast spe
Cruise circles	1
Auto-check after booting	<input checked="" type="radio"/> ON <input type="radio"/> OFF
Go centre	<input checked="" type="radio"/> ON <input type="radio"/> OFF
<input checked="" type="checkbox"/> Disable motion detection when PTZ moving	

Figure11

5.1.1.4. Other Setting

You can turn off the status LED and WPS LED of the camera in other setting as Figure12.

Indicator setting	
Status LED	<input checked="" type="radio"/> ON <input type="radio"/> OFF
WPS LED	<input checked="" type="radio"/> ON <input type="radio"/> OFF

Figure12

5.1.1.5. System Maintenance

The system maintenance includes system setting and timing reboot setting. You can set up reboot, backup setting, restore backup setting, upgrade camera and timing reboot etc as Figure13.

System setting	
Reboot	<input type="button" value="Reboot"/>
Restore to default	<input type="button" value="Restore to default"/>
Backup setting	<input type="button" value="Backup setting"/>
Restore backup setting	<input type="text"/> <input type="button" value="浏览..."/> <input type="button" value="Restore backup setting"/>
Upgrade	<input type="text"/> <input type="button" value="浏览..."/> <input type="button" value="Upgrade"/>

Restart timing settings	
Enable schedule reboot	<input checked="" type="checkbox"/>
	<input type="checkbox"/> Sun <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input type="checkbox"/> Wed <input type="checkbox"/> Thu <input type="checkbox"/> Fri <input type="checkbox"/> Sat
Time :	00 : 00 [hh:mm]

Figure13

5.1.1.6. Device Information

You can modify device name and check system firmware version, system firmware time and Web UI firmware here as Figure14.

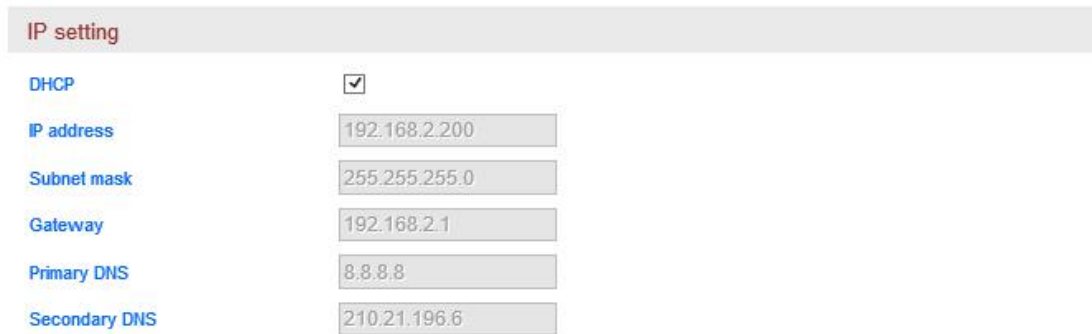
Device information	
Device Name	<input type="text" value="IPCamera"/> <input type="button" value="?"/>
System Firmware	<input type="text" value="00.01.01.0012"/>
System firmware time	<input type="text" value="2015-02-08 13:55"/>
WebUI Firmware	<input type="text" value="0.0.0.3"/>

Figure14

5.1.2. Network

5.1.2.1. IP Address Setting

You can modify IP address of the camera etc, the default is DHCP,achieve automatically as Figure15.




The screenshot shows the 'IP setting' configuration page. It includes a 'DHCP' checkbox which is checked. Below it are input fields for 'IP address' (192.168.2.200), 'Subnet mask' (255.255.255.0), 'Gateway' (192.168.2.1), 'Primary DNS' (8.8.8.8), and 'Secondary DNS' (210.21.196.6).

IP setting	
DHCP	<input checked="" type="checkbox"/>
IP address	192.168.2.200
Subnet mask	255.255.255.0
Gateway	192.168.2.1
Primary DNS	8.8.8.8
Secondary DNS	210.21.196.6

Figure15

5.1.2.2. Port Setting

You can change webpage http port here as Figure16.



The screenshot shows the 'Port setting' configuration page. It includes an input field for 'HTTP port' with the value 80.

Port setting	
HTTP port	80

Figure16

5.1.2.3. Wi-Fi Setting

Click **Search**, and switch on enable Wi-Fi, select the wireless router you want to connect, enter password of the router, click **Save** to finish the Wi-Fi configuration. Click **Test** to test if it can be connected to the router after finishing the configuration as Figure17.

Wireless Network List :

100%--11--[ipcamera]--AES--WPAPSK

Enable Wi-Fi : ON OFF

SSID :

Authorization :

Encryption :

Key :

Figure17

5.1.2.4. Port Forwarding

Access to port forwarding, you can enable UPNP port forwarding and check the status of it as Figure18.

UPNP setting

UPNP port forwarding ON OFF

UPNP status ?

Port type	Port	Status
http	80	Success
rtsp	554	Success

Figure18

5.1.2.5. DDNS Setting

You can enable manufacturer's DDNS and set up third party DDNS (the third party DDNS support 3322.org/Dyndns.org/No-ip.com now, the manufacturer provide a free DDNS for every camera.

Manufacturer'S DDNS setting

Manufacturer'S DDNS ON OFF

Manufacturer'S DDNS

Third party DDNS setting

Third party DDNS ON OFF

DDNS server

Username

Password

Third party DDNS

Figure19

5.1.2.6. RTSP Setting

You can set up RTSP port, also can close RTSP authentication as Figure20.

RTSP setting

Authentication ON OFF

RTSP port

Figure20

You can view video by some general RTSP stream media software, for example, VLC. The visit link as below:

First stream: rtsp://user:password@IP:rtsp port/live/ch0

Second stream: rtsp://User:password@IP:rtsp port/live/ch1

Third stream: rtsp://user:password@IP:rtsp port/live/ch2

5.1.2.7. FTP Setting

Access to FTP setting, please fill in relative FTP parameters as the following case to achieve the FTP transfer as Figure21.

FTP setting

FTP server address

Server Port

Username

Password

Path

Figure21

5.1.2.8. SMTP (E-mail) Setting

Please fill in relative parameters as the following case to achieve the E-mail transfer, as Figure22.

Email setting	
SMTP server address	smtp.gmail.com
Server Port	25
Security connection	SSL/TLS
Authentication	<input checked="" type="radio"/> ON <input type="radio"/> OFF
Username	estest1990@gmail.com
Password	••••••••
Sender address	289893348@qq.com
Receiver address #1	lilong19901017@163.com
Receiver address #2	97199004@qq.com
Mail subject	alarm
Mail content	alarm
<input type="button" value="Test"/> <input type="button" value="Save"/> <input type="button" value="Refresh"/>	

Figure22

5.1.3. Audio and Video

5.1.3.1. Video Encoding Setting

Access to Video Encoding setting, you can set up AC frequency and video stream as Figure23.

AC frequency: 50HZ and 60HZ optional;

Video stream: Bit rate (256~4096kbps), frame rate (1~30fps), video encoding control etc;

Tips: you can set up the video with audio or not.

AC frequency	
AC frequency	50HZ
Select stream <input checked="" type="radio"/> First stream <input type="radio"/> Second stream <input type="radio"/> Third stream	
Resolution	1920*1080
Bit rate	3072kbps
Frame rate	25
Stream control	Variable bitrate
Stream type	With audio

Figure23

5.1.3.2. Volume Setting

Access to Volume setting, you can adjust the volume of MIC and speaker as Figure24.

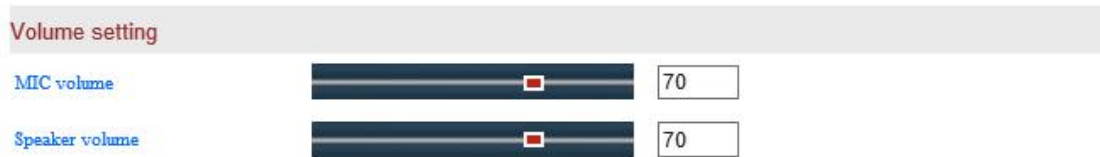


Figure24

5.1.3.3. Image Setting

Access to Image Setting, you can flip and mirror the image, also can adjust the brightness, contrast, saturation and hue of image for getting best color effect as Figure25.



Figure25

5.1.3.4. OSD Setting

Access to OSD setting, you can overlay the time and name in Live video as Figure26.



Figure26

5.1.3.5. Night vision Settings

Access to **Night vision Settings**, you can set up IR LED and IRCUT as Figure27.

IR LED setting

Turn Off IR LED

IRCUT Setting

Shift mode Auto Manual Timing

Brightness ?

Figure27

5.1.4. Safety

Access to User management, you can add or edit the user as Figure28.

Username	Password	User authorization
admin	••••••	Administrator
user	••••	Operator
guest	••••••	Viewer

Figure28

Tips: After setting up, click save and refresh button, the entering info will display in the webpage. Also you can set up the IP filtering to allow or deny some IP address to visit the device as below.

User
IP filtering

Whitelist

Start IP address

End IP address

Allow list

Blacklist

Start IP address

End IP address

Deny List

5.1.5. Alarm

5.1.5.1. IO Detect

Access to IO detector, can enable detect function and set up input signal type as Figure29.



Figure29

5.1.5.2. Motion Detection

To access motion detection, you can set the detection alarm sensitivity (1-100). The larger the value, the more sensitive it is, as shown in Figure 30.

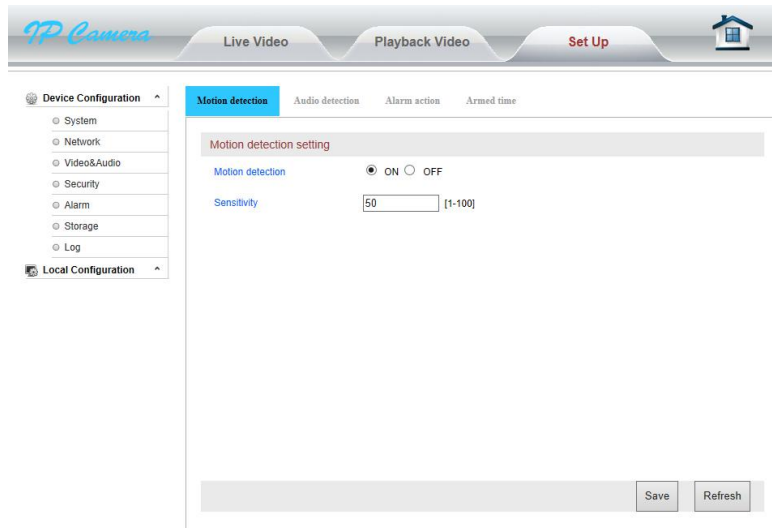


Figure30

5.1.5.3. Audio Detection

Access to audio detection, you can enable audio detection and set up sensitivity of it as Figure31.



Figure31

5.1.5.4. Linkage alarm setting

You can set up IO detect, motion detection and audio detect, it can linkage to trigger the action: snapshot to Email or FTP server or SD card, recording to FTP server or SD card, and trigger IO output as

Figure32.

Tips: The usage for combination of alarm trigger in alarm trigger type:

For example, you enable the audio detection and motion detection, so the camera is enabled combination of alarm trigger, it will perform the action in alarm action setting when the audio detect and motion detection detect any change.

Alarm action setting

- Snapshot to Email
- Snapshot to FTP server
- Recording to FTP server
- Snapshot to SD
- Recording to SD
- Trigger IO output Alarm duration : Second
- Trigger preset Preset :
- Trigger speaker Alarm duration : Second

Alarm trigger type

Alarm trigger type Trigger independently Trigger jointly ?

Figure32

5.1.5.5. Protected duration setting

After setting up alarm detect type and alarm trigger linkage, you need to set up protected duration. You must set up it, then the camera perform trigger linkage; the time format is 7 days, 24 hours per day, 15 minutes per a block as Figure33.

Protected duration

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Sunday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Monday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Tuesday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Wednesday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Thursday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Friday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Saturday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

Figure33

5.1.6. Storage

5.1.6.1. SD Management

Access to SD management, you can check and download recording and snapshot file in SD card, and check SD card remaining capacity, format SD as Figure34.

SD Management

[SD Management](#)
[Check SD](#)
[Format SD](#)

SD status SD valid

Total capacity 3844 MB

Remaining capacity 672 MB

Figure34

5.1.6.2. SD card snapshot setting (Timing Snapshot)

Access to setting of timing snapshot to SD card, you can enable SD snapshot, you can set up snapshot time interval and snapshot duration; time format is 7 days, 24 hours per day, 15 minutes per a block as Figure35.

Timing snapshot

Timing snapshot ON
 OFF

Time interval
5-2000 seconds

Snapshot duration

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Sunday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Monday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Tuesday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Wednesday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Thursday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Friday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Saturday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

Figure35

5.1.6.3. SD Card Recording Setting

Access to SD Card Recording Setting, you can enable SD recording and set up recording duration for every file; time format is 7 days, 24 hours, 15 minutes per a block as Figure36.

Tips: it will overlay SD recording file automatically by default; it will overlay previous recording file when the SD space is full.

Scheduled recording

SD Recording ON OFF

Recording duration Recording file duration (15-900 seconds)

Recording bit rate ▼

Recording duration

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Sunday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Monday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Tuesday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Wednesday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Thursday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Friday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Saturday	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

Figure36

5.1.7. Log

Access to Log menu, you can check the user operation log as Figure37.

IP Camera

Live Video Playback Video **Set Up** Homepage

Device Configuration ^

- System
- Network
- Video&Audio
- Security
- Alarm
- Storage
- Log

Local Configuration ^

Log

Log

2015-03-02 11:09:35,admin,set mac address
 2015-03-02 11:11:00,admin,set mac address
 2015-03-02 11:39:26,admin,set net attr
 2015-03-02 11:40:33,admin,set http port

Time 14 : 39 : 1

Check by time Start time : End time :

Figure37

5.2. Local Setting

Access to local setting, you can set up recording path, snapshot path and recording duration as Figure38.

Tips:

- You must use administrator to run the browse, then recording path and snapshot path can be save successfully at above IE9; the default recording path is D:\HYRec.

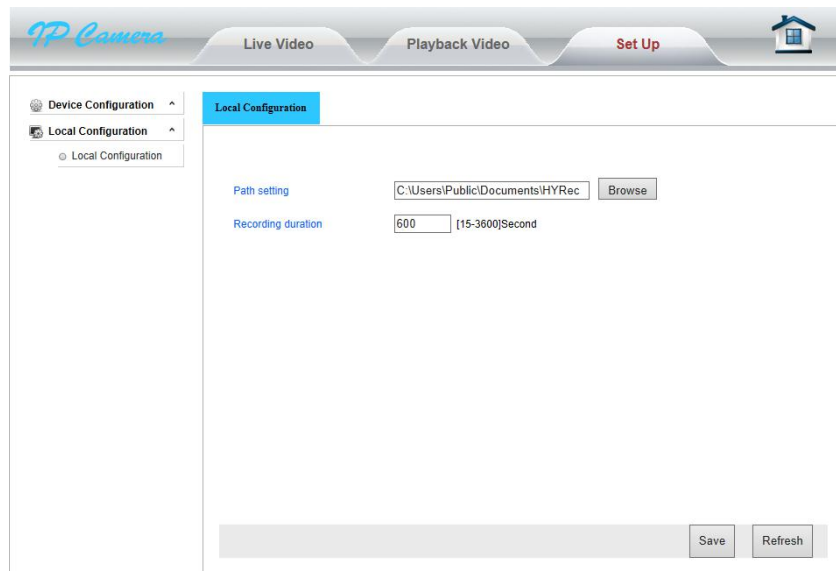


Figure38