

IPVD-EL3MPIR100ML2812 Web Operation Manual

Version 1.0.1F

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Important

The following functions are for reference only. Some series products may not support all the functions listed below.

1 Network Config

1.1 Network Connection

Network camera and PC connection mainly has two ways, see Figure 1- 1 and Figure 1- 2.



Figure 1- 1

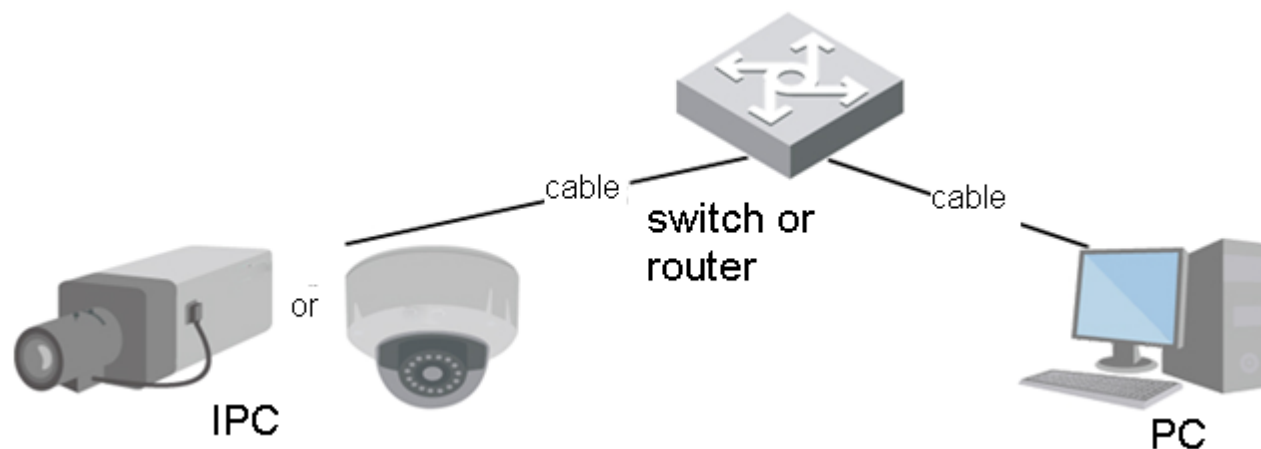


Figure 1- 2

Before you access network camera via the Internet, you need to have its IP address. User can use quick config tool to search IP of the network camera. Please refer to Quick Configuration Tool manual.

1.2 Log in

Open IE and input network camera address in the address bar.

For example, if your camera IP is 192.168.1.108, then please input `http:// 192.168.1.108` in IE address bar. See Figure 1- 3.

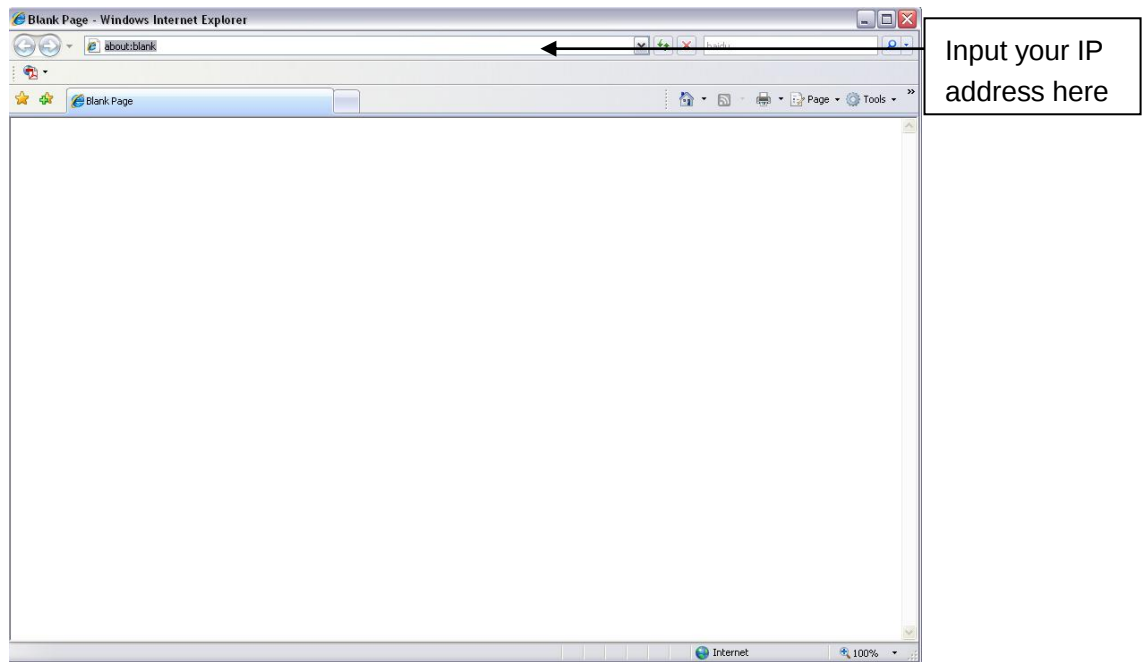


Figure 1- 3

The login interface is shown as below. See Figure 1- 4.

Please input your user name and password.

Default factory username is **admin** and password is **admin**.

Note: For security reasons, please modify your password after you first login.



Figure 1- 4

If it is your first time to login in, you may see the interface shown as in Figure 1- 5.

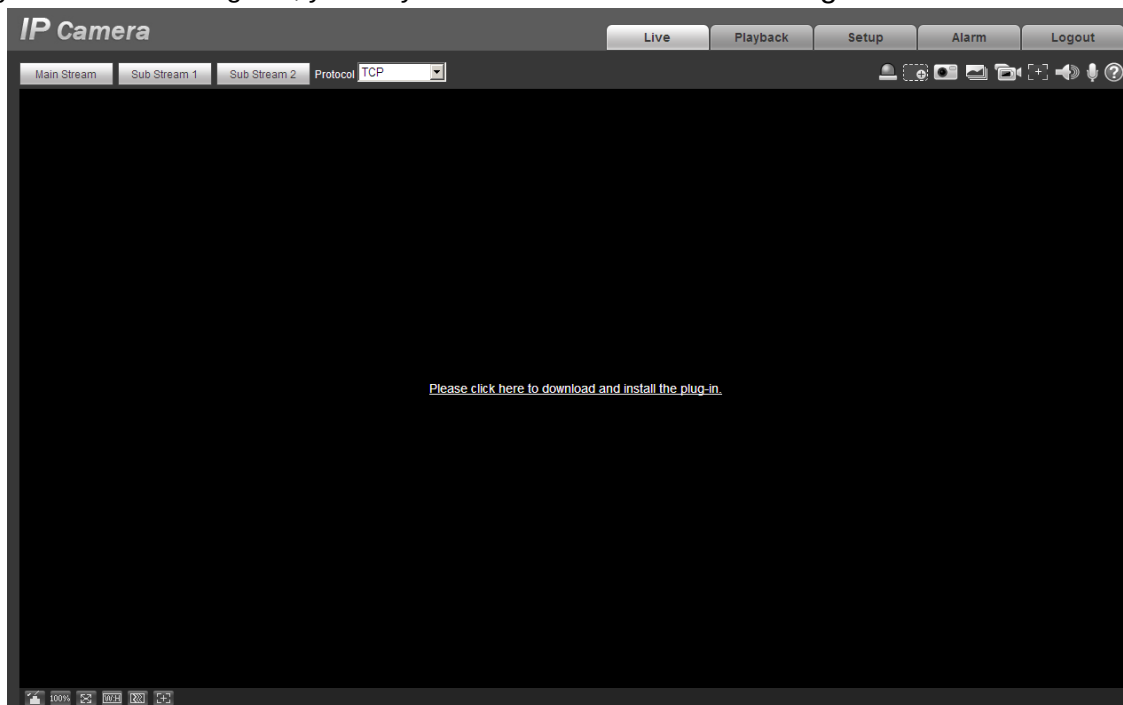


Figure 1- 5

Click on “Please click here to download and install the plug-in”. The system pops up warning information to ask you whether run or save this plug-in. See Figure 1- 6.



Figure 1- 6

You must either run or save the file to local and install it. Follow the following steps. Click on run, you will see Figure 1- 7and Figure 1- 8.

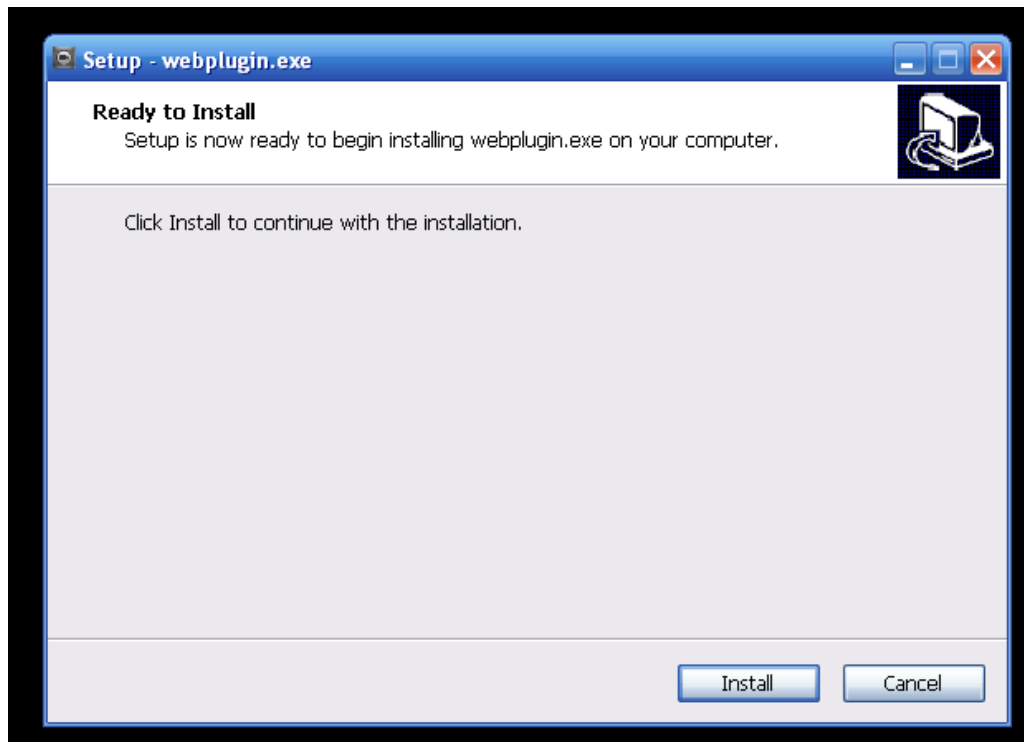


Figure 1- 7

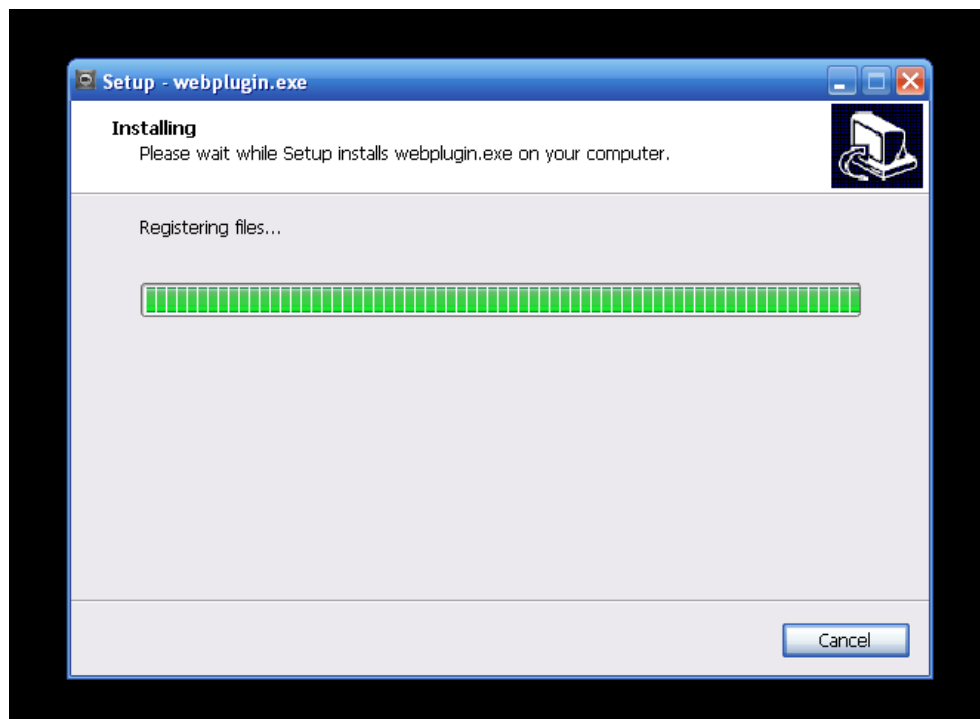


Figure 1- 8

When plug-in installation completes, the installation page closes automatically. The web-end will refresh automatically, and then you can view video captured by the camera.

2 Live

After you logged in, you can see the live monitor window. See Figure 2- 1.

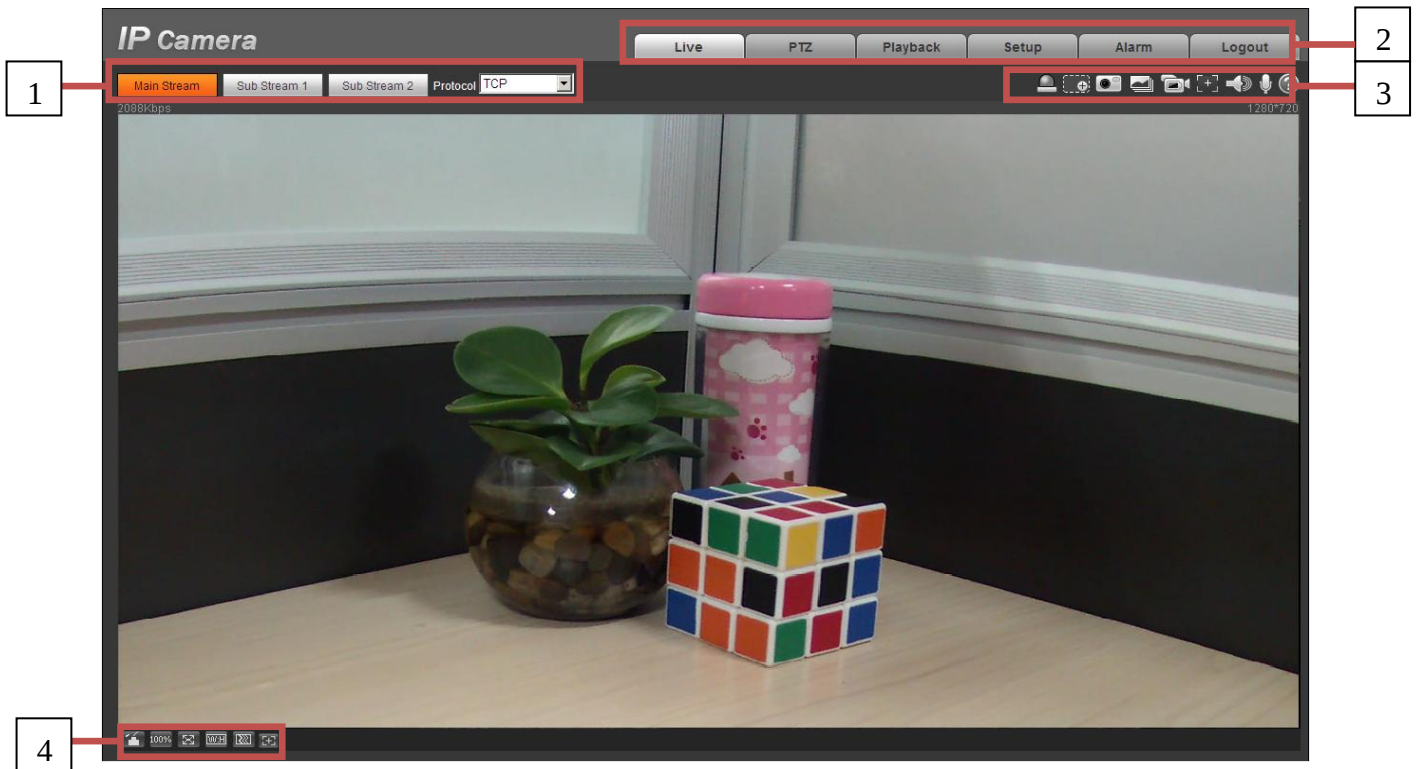


Figure 2- 1

There are four sections:

- Section 1: Encode setup bar
- Section 2: System menu
- Section 3: Window function option bar
- Section 4: Window adjust bar

2.1 Encode Setup

The encode setup interface is shown as in Figure 2- 2.

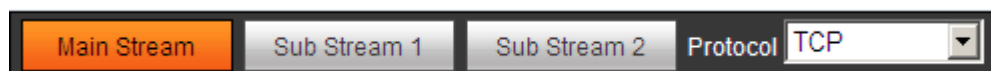


Figure 2- 2

Please refer to the following sheet for detailed information.

Parameter	Function
Main stream	Streaming media protocol connection, under main stream config, monitor video or not. Generally for storage and monitor.
Sub (Extra) stream 1	Streaming media protocol connection, under sub stream 1 config, monitor video or not. When network bandwidth is insufficient, it substitutes main stream for monitoring.
Sub (Extra) stream 2	Streaming media protocol connection, under sub stream 2 config, monitor video or not. When network bandwidth is insufficient, it substitutes main stream for monitoring.
Protocol	You can select stream media protocol from the dropdown list. There are three options: TCP/UDP/Multicast

2.2 System Menu

System menu is shown as in Figure 2- 3.

Please refer to chapter 2 Live, chapter 3 PTZ, chapter 4 Playback, chapter 5 Setup, chapter 6 Alarm, chapter 7 Log out for detailed information.



Figure 2- 3

2.3 Video Window Function Option

The interface is shown as below. See Figure 2- 4.

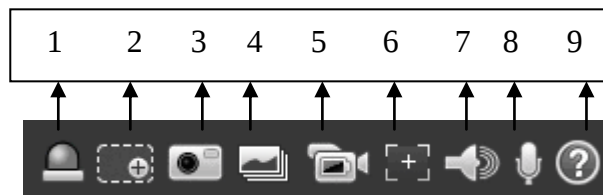


Figure 2- 4

Please refer to the following sheet for detailed information.

SN	Parameter	Function
1	Alarm on/off	Click on the button to trigger alarm, as: ● Red: means there is alarm output and alarm output is forced to be on. ● Grey: means there is no alarm output and alarm is forced to be off.

2	Zoom in	- When the video is in the original status, click it you can select any zone to zoom in. In the non-original status, you can drag the zoom-in zone in specified range. Right click mouse to restore previous status. - Click it; you can use the middle button of the mouse to zoom in/out the video size.
3	Snapshot	Click on the button to snapshot, save picture to path in Ch 5.1.2.5.
4	Triple snap	Click it, system can snap at 1f/s. All images are saved to path in Ch 5.1.2.5.
5	Record	Click it, system can record. All images are saved to path in Ch 5.1.2.5.
6	Easy focus	Click it, you can see there are two parameters on the preview video: AF Peak and AF Max. AF Peak: It is to display the video definition during the focus process. AF Max: It is the most suitable value for the video definition. The close the AF Peak and AF Max is, the better the focus effect is.
7	Audio output	Turn on or off audio when you are monitoring.
8	Bidirectional talk	Click it to start or end bidirectional talk.
9	Help	Click it to open help file.

2.4 Video Window Setup

The interface is shown as in Figure 2- 5.

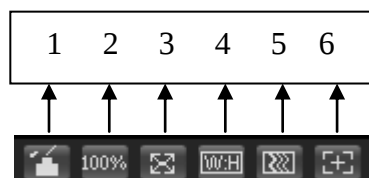


Figure 2- 5

2.4.1 Image Adjustment

See Figure 2- 6 for image adjustment.

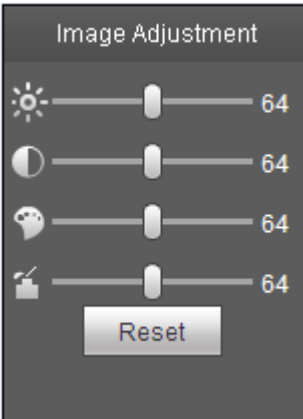


Figure 2- 6

Click this button to display/hide image control interface. Click it to open picture setup interface. This interface is on the top right pane.

Please refer to the following sheet for detailed information.

Parameter		Function	
Video setup		It is to adjust monitor video brightness.	Note: ● All the operations here apply to WEB end only. ● Please go to Setup->Camera->Conditions to adjust corresponding items.
		It is to adjust monitor video contrastness.	
		It is to adjust monitor video hue.	
		It is to adjust monitor video saturation.	
	Reset	Restore brightness, contrastness saturation and hue to system default setup.	

2.4.2 Original Size

Click this button to go to original size. It is to display the actual size of the video stream. It depends on the resolution of the bit stream.

2.4.3 Full Screen

Click it to go to full-screen mode. Double click the mouse or click the Esc button to exit the full screen.

2.4.4 Width and Height Ratio

Click it to restore original ratio or suitable window.

2.4.5 Fluency Adjustment

There are three levels of fluency for you to select (real-time, normal, fluent). The default is normal.

2.4.6 Focus zoom

Click this button and the focus zooming interface appears on the right of preview interface, as shown in figure 2-7, click left mouse button to adjust focus zooming configuration.

Note:

- Only electric zoom equipments have focus zoom button.
- Auto-focus after zoom focus adjustment.

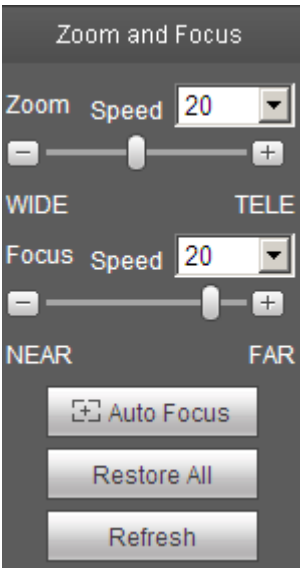


Figure 2- 7

Parameter	Function
Zoom	Adjust the focal length of the lens by clicking or long pressing “+”“-”buttons. Step length is used to adjust the length of one step with one click.

Parameter	Function
Focus	Adjust the sharpness of the lens by clicking or long pressing“+”、“-” buttons. Step length is used to adjust the length of one step with one click.
Auto-focus	Click to adjust the image definition automatically. Note: Other lens operations are not allowed during the process of auto-focus.
Reset	Reset the lens to zero position to eliminate the accumulative error of lens. Note: Please reset when the image adjustment is not clear or operating zoom focus many times.
Refresh	Synchronize the location of drag slider of lens and zoom focus after hardware zoom focusing.

3 PTZ Control

Please note only some series product support PTZ function.

Before PTZ operation, please make sure you have properly set PTZ protocol. (Please refer to Ch 5.5.3).

Here you can view direction keys, speed, zoom, focus, iris, preset, tour, pan, scan, pattern, aux close, and PTZ setup button. See Figure 3- 1.

Parameter	Note
PTZ direction	PTZ supports eight directions: left/right/up/down/upper left/upper right/bottom left/bottom right.
Speed	It controls rotation speed. The longer the step length, the higher the speed. Step length control PTZ, zoom, focus and iris.
 Quick Position	Use mouse to draw a box in monitoring video, PTZ will rotate and focus to quickly positioning.

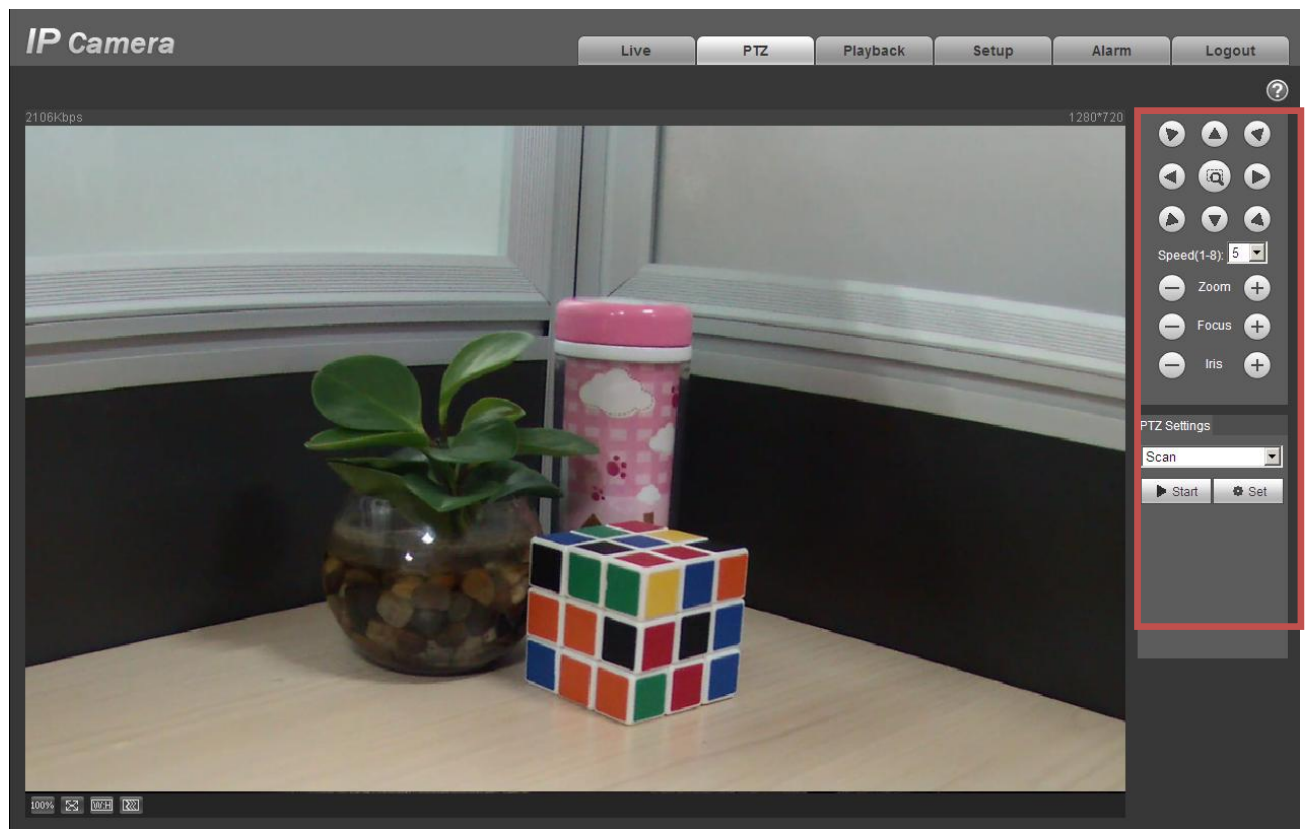


Figure 3- 1

PTZ setting interface is shown as in Figure 3- 2.

Here you can set scan, preset, tour, pattern, assistant function and light and wiper plus view coordinate.

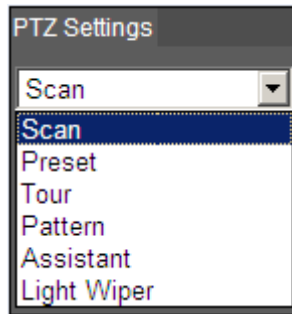


Figure 3- 2

3.1 Scan

Scan interface is shown in Figure 3- 3.

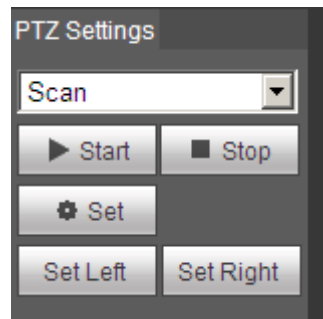


Figure 3- 3

Steps to scan are:



Step 1. Click on Set button, display icon.

Step 2. Move via direction key to select left, click on Set Left to set left border of camera

Step 3. Move via direction key to select right, click on Set Right to set right border of camera.

Step 4. Complete scan path setup.

3.2 Preset

Preset interface is shown in Figure 3- 4.

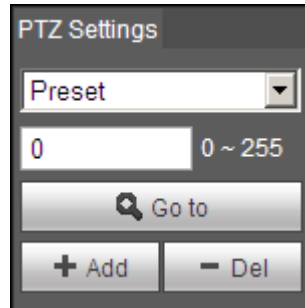


Figure 3- 4

Steps to preset are:

Step 1. In preset box, input preset value.

Step 2. Click on Go to, camera rotates to preset position.

Step 3. Use direction key to rotate camera, and in preset box input preset value.

Step 4. Click on Add to add a preset. Range of preset relates to PTZ protocol.

3.3 Tour

Tour interface is shown in Figure 3- 5.

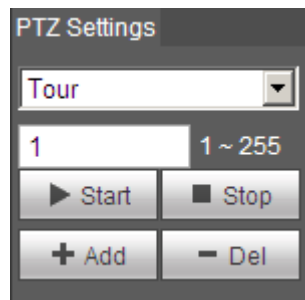


Figure 3- 5

Steps to tour are:

Step 1. In tour box, input tour path value.

Step 2. Click on Add. Range of tour relates to PTZ protocol.

Step 3. In preset box, input preset value.

Step 4. Click on Add as to add a preset in this tour. If click on Del, it deletes this preset in tour.

Note:

You can add more than one presets here, or delete more than one presets.

3.4 Pattern

Pattern interface is shown in Figure 3- 6.

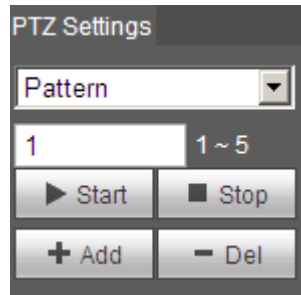


Figure 3- 6

Steps to pattern are:

- Step 1. In pattern box input pattern value, click on Add.
- Step 2. Click on Start, to zoom, focus, iris or move.
- Step 3. Click on Stop to finish setup of one pattern.

3.5 Assistant

Assistant interface is shown in Figure 3- 7.

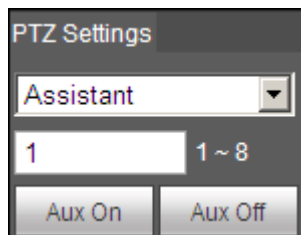


Figure 3- 7

Steps to assistant are:

- Step 1. In assistant box input assistant value.
- Step 2. Click on Aux On to turn on aux function.
Click on Aux off to turn off aux function.

3.6 Light Wiper

Light wiper interface is shown in Figure 3- 8.

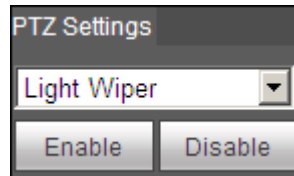


Figure 3- 8

Steps to light wiper are:

- Click on Enable to enable light wiper function.
- Click on Disable to disable light wiper function.

4 Playback

Web client playback supports video playback and picture playback.

Note:

Before playback, user shall set storage management as in Ch 5.4.

4.1 Playback

The playback interface is shown as in Figure 4- 1.

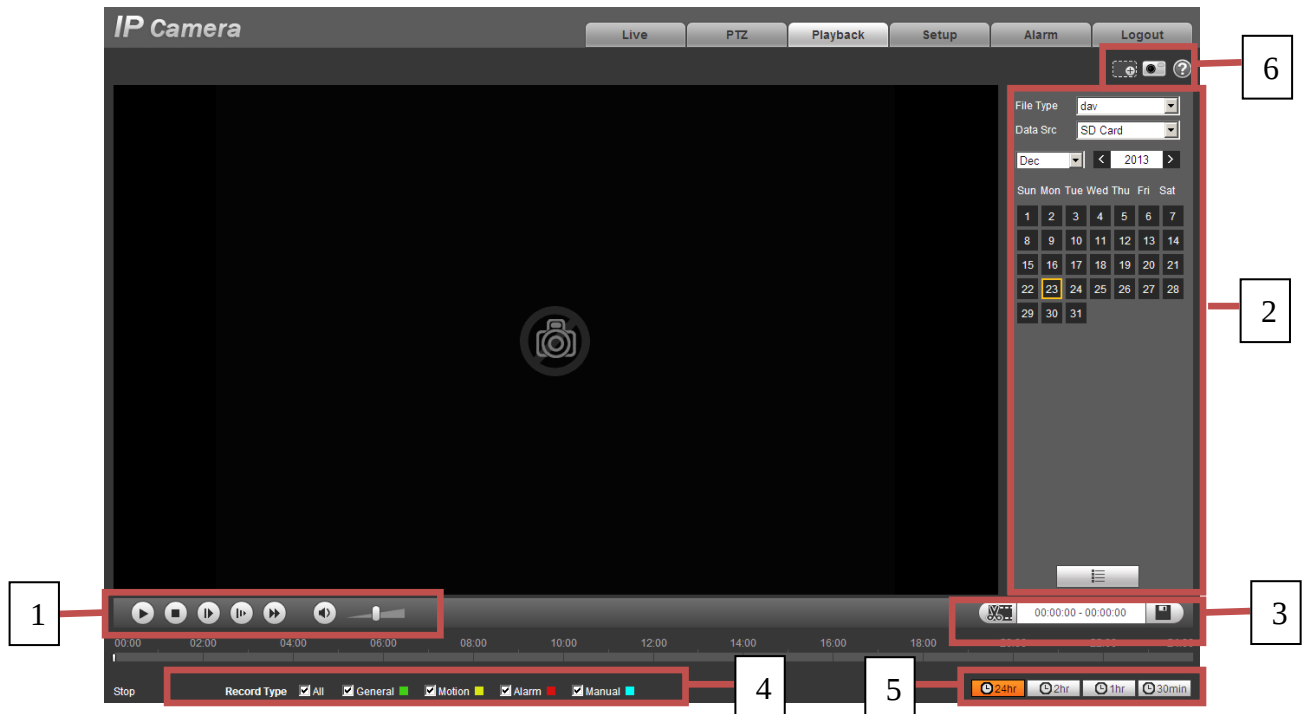


Figure 4- 1

There are four sections:

- Section 1: Function of play
- Section 2: Playback file
- Section 3: Play time cut
- Section 4: Record type
- Section 5: Progress bar
- Section 6: Assistant function

4.1.1 Function of Play

The function of play is shown as in Figure 4- 2.



Figure 4- 2

Parameter	Function
① Play	When you see this button, it means pause or not played record. Click on this button, switch to normal play status.
② Stop	Click this button to stop playing.
③ Play frame by	Click on this button to go to next frame. Note: You shall pause record when you use this function.
④ Slow	Click on this button to play slowly.
⑤ Quick	Click on this button to play quickly.
⑥ Silent	When this button displays, it means audio is silent. Click on this button to switch back to normal.
⑦ Volume	Click on left mouse to adjust volume.

4.1.2 Playback File

In calendar, blue date represents data currently has video record or snapshot. See Figure 4- 3.

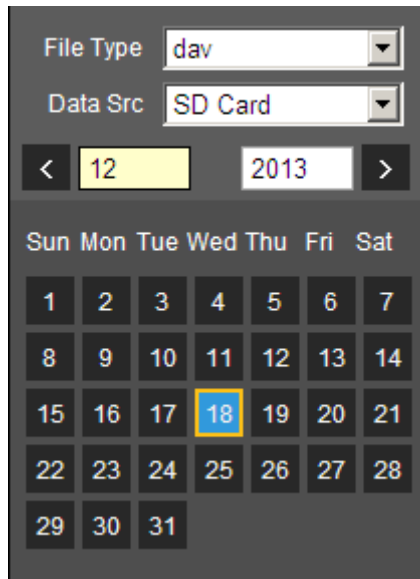


Figure 4- 3

Parameter	Function
File Type	• Select “dav”, as video playback. • Select “jpg” as picture playback.
Data Source	Default is SD card.

Step 1. Click on data in blue, time axis displays record file progress bar in color. While, green represents normal record, yellow represents motion detect record, red represents alarm record, and blue represents manual record.

Step 2. Click on certain time on progress bar, playback starts from this time. See Figure 4- 4.

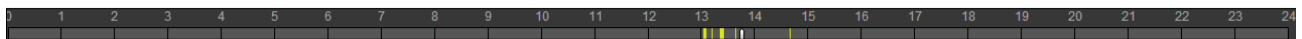


Figure 4- 4

Step 3. Click on file list , select date file will be displayed in list.

Step 4. Double click on file in list, playback this file and display file size, start time and end time. See Figure 4- 5.



Figure 4- 5

Parameter	Function
 Search	It means records within searched start time and end time on the date.
Record Download Format	There are two formats: dav, mp4.

Parameter	Function
 Download	- Record type is “dav”, click on download button to download file to local. - Record type is “mp4”, click on download button and download file to path in Ch 5.1.2.5. Note: System does not support download and playback of MP4 file.
 Back	Click on back button to go to calendar interface.

4.1.3 Playback Cut

Note:

Playback cut function will automatically pause playing record as playback cut and playback cannot be at the same time.

Step 1. Click on start time to cut on time axis. This time must be within progress bar range.

Step 2. Move mouse to cut icon . You will be ask to select start time. Click on cur icon  as finish cutting.

Step 3. Click on playback cut end time on time axis. This time must be within progress bar range.

Step 4. Move mouse to cut icon , you will be asked to select end time. Click on cut icon  as finish cutting.

Step 5. Click on Save button to save file cut to path in Ch 5.1.2.5. See Figure 4- 6.

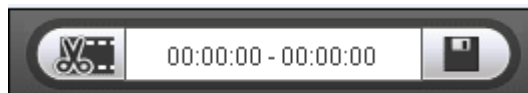


Figure 4- 6

4.1.4 Record Type

Check record file type, only selected file will be displayed in progress bar and file list. See Figure 4- 7.



Figure 4- 7

4.1.5 Progress Bar



Figure 4- 8

Parameter	Function
 24 hours	Click on it, means video in past 24 hours.
 2 hours	Click on it, means video in past 2 hours.
 1 hour	Click on it, means video in past 1 hour.
 30 min	Click on it, means video in past 30 min.

4.1.6 Assistant Function

Video playback assistant function is shown in Figure 4- 9.



Figure 4- 9

Parameter	Function
 Zoom in	- Click on it, video in playback status if is in original size, user can zoom in any area, If it is not in its original size, click on mouse to restore its original size. - Click on this button, you can scroll to zoom in.
 Snapshot	Click on this button, you can snapshot video under playback status. Snapshot will be saved to path in Ch 5.1.2.5.

4.2 Picture Playback

Web client picture playback interface has the following three functions:

Parameter	Function
1	Play function bar

2	Playback file bar
3	Snapshot type bar

See Figure 4- 10.

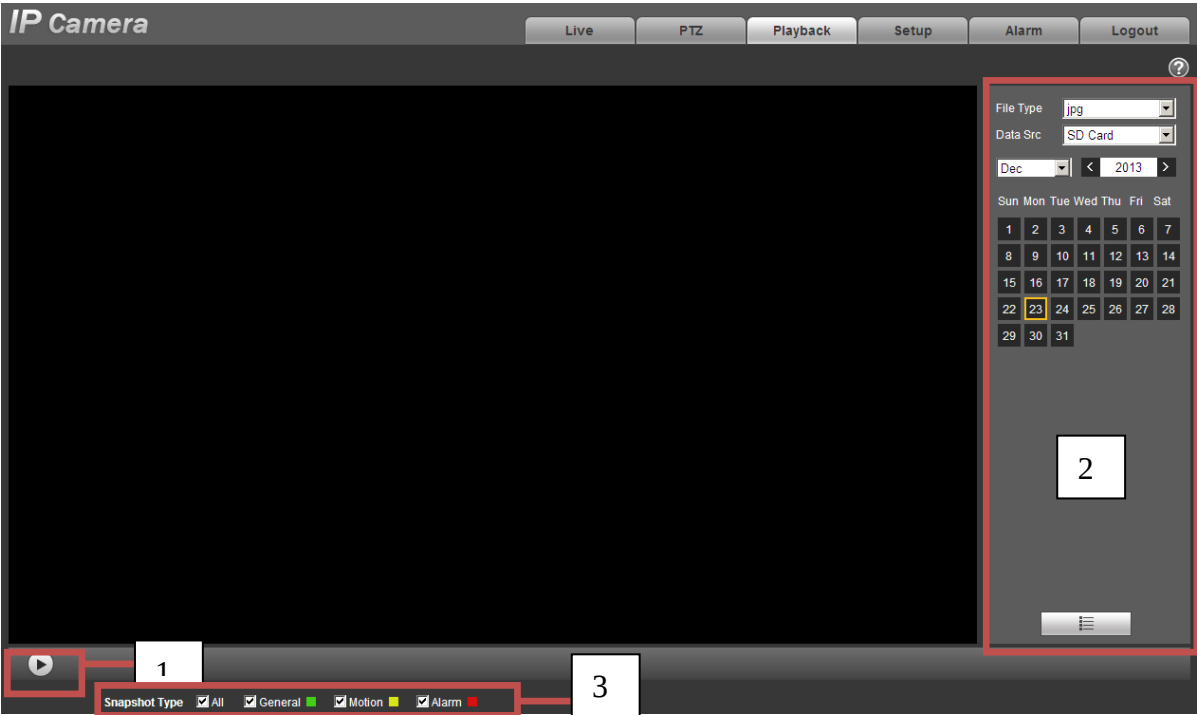


Figure 4- 10

4.2.1 Play



Figure 4- 11

Default icon is  and it means pause or not played picture. Click on play button to switch to normal play status. Icon become 
● Click on it to pause.

4.2.2 Playback File

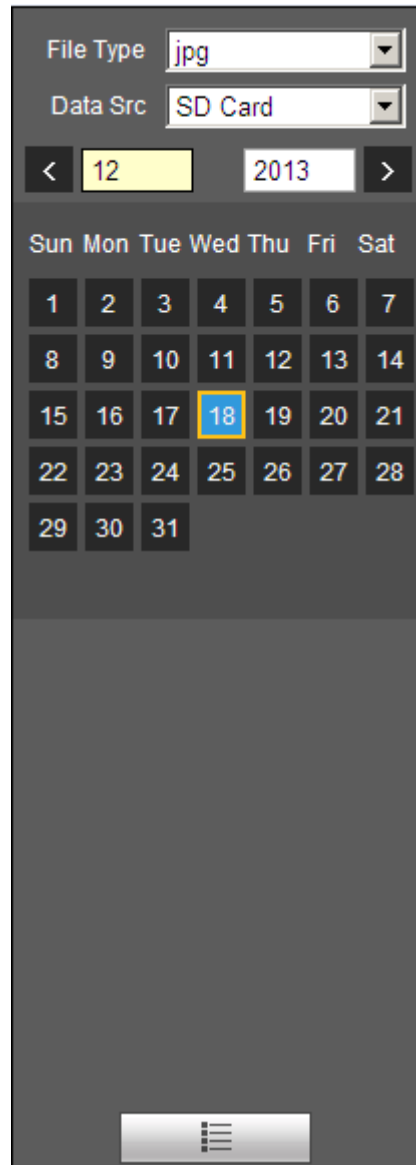


Figure 4- 12

- Step 1. Click on file list , select snapshot file of the date.
- Step 2. Double click on file in list, to play this snapshot.

Parameter	Function
 Search	It means all snapshot files within the start time and end time of selected date.
 Download	Click on download button to download snapshot file to local.
 Back	Click on back button to return to calendar interface and re-select time.



Figure 4- 13

4.2.3 Snapshot Type

Check snapshot file type, in file list only display file of selected type. See Figure 4- 14.

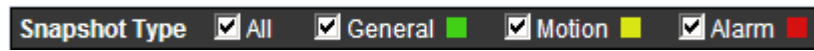


Figure 4- 14

5 Setup

Web client setup support camera, network, time, storage, system and system info view.

5.1 Camera

5.1.1 Conditions

Here you can view device property information. Slight differences may be found due to different network camera series. The setups become valid immediately after you set. See Figure 5- 1.

Note: Only motorized zoom lens device has zoom and focus function.

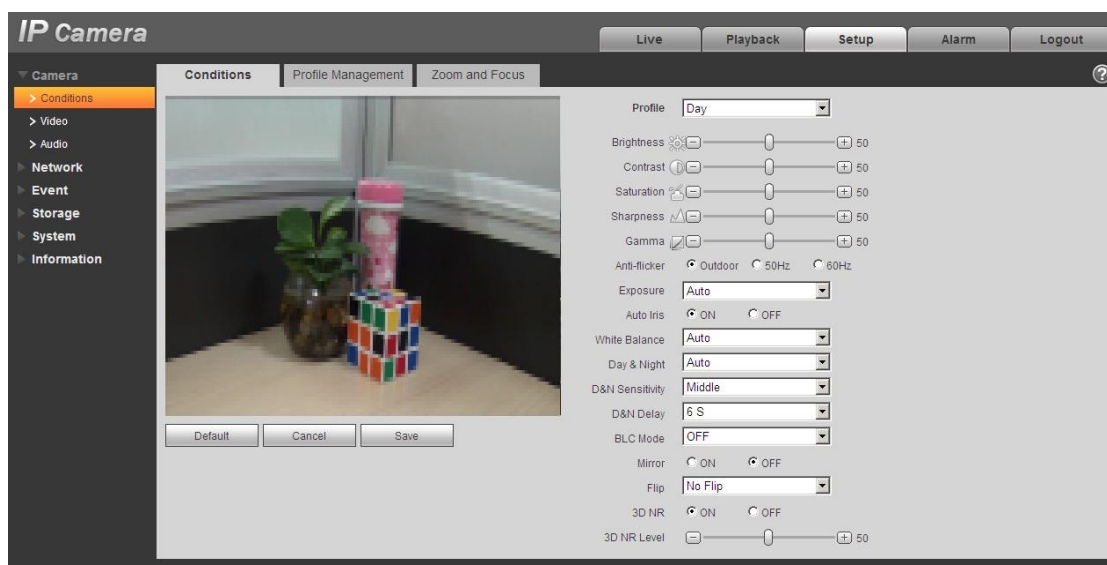


Figure 5- 1

Please refer to the following sheet for detailed information.

Parameter	Function
Profile	You may select normal, day and night mode. Then you can set and view config and its effect.
Brightness	It is to adjust monitor window brightness. You can adjust this value if the video is too dark or too bright. The larger the number, the bright the video is. When you input the value here, the bright section and the dark section of the video will be adjusted accordingly. Please note the video may become hazy if the value is too high. The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.

Contrast	It is to adjust monitor window contrast. The larger the number, the higher the contrast is. You can use this function when the whole video bright is OK but the contrast is not proper. Please note the video may become hazy if the value is too low. If this value is too high, the dark section may lack brightness while the bright section may over exposure . The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.
Saturation	It is to adjust monitor window saturation. The larger the number, the strong the color is. This value has no effect on the general brightness of the whole video. The video color may become too strong if the value is too high. For the grey part of the video, the distortion may occur if the white balance is not accurate. Please note the video may not be attractive if the value is too low. The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.
Sharpness	The value here is to adjust the edge of the video. The larger the value is, the clear the edge is and vice versa. Please note there is noise if the value here is too high. The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.
Gamma	This threshold value mainly change image brightness via nonlinear method and improves dynamic display range. The higher this value, the brighter image will be and vice versa. The value ranges from 0 to 100. The recommended value ranges from 40 to 60. The default value is 50.
Anti-flicker	● Outdoor: In this mode, you can switch exposure mode to get the effect under the corresponding exposure mode. ● 50Hz: When the current is 50Hz, system can auto adjust the exposure according to the environment brightness in case there is any strip. ● 60Hz: When the current is 60Hz, system can auto adjust the exposure according to the environment brightness in case there is any strip.

Exposure	Note: Only when anti-flicker is outdoor, exposure mode is available. ● Auto: ◆ The video whole brightness can automatically change within the proper exposure range according to the different environments. The higher the gain max value is, the lower the noise is. ● Low noise: ◆ The video whole brightness can automatically change within the proper exposure range according to the different environments. The higher the gain max value is, the lower the noise is. ◆ For the same environments, the noise of the low noise mode shall be smaller than the noise of the auto mode. ● Low motion blur ◆ The video whole brightness can automatically change within the proper exposure range according to the different environments. The lower the exposure max value is, the week the tail is. ◆ For the same environments, the noise of the low motion blur mode shall be smaller than that of the auto mode. ● Manual ◆ It is to display manual exposure value.
Auto Iris	Before the setup, please make sure you have installed the auto iris. You can check the box before ON to enable this function. The auto iris may change if the light becomes different. When you disable this function, the iris is at the max. System does not add the auto iris function in the exposure control. This function is on by default.

White Balance	It is to set the white balance mode. It has effect on the general hue of the video. This function is on by default. You can select the different scene mode such as auto, sunny, cloudy, home, office, night, disable and etc to adjust the video to the best quality. ● Auto: The auto white balance is on. System can auto compensate the color temperature to make sure the vide color is proper. ● Sunny: The threshold of the white balance is in the sunny mode. ● Night: The threshold of the white balance is in the night mode. ● Customized: You can set the gain of the red/blue channel. The value reneges from 0 to 100. ● Outdoor: White balance threshold sets to outdoor mode.
Day&Night	It is to set device day/night mode switch independently from config file. Default is auto mode. ● Color: Device outputs the color video. ● Auto: Device auto select to output the color or the B/W video according to the device feature (The general bright of the video or there is IR light or not.) ● B/W: The device outputs the black and white video. ● Sensor input: It is for external connection to IR light to control day/night mode. Note: Only some non-IR devices support sensor input function.
Sensitivity	It adjusts sensitivity of color and black/white switch. There are low, medium and high levels. Default is medium. Note: Available only when day/night is auto.
Delay	It adjusts delay value of color and black/white switch. Its value range is 2~10, and default is 6. Note: Available only when day/night is auto.

BLC Mode	BLC is used for backlight situation. ● BLC ◆ Default BLC: auto exposure according to scene. ◆ Custom: select area to exposure, the objective is to make appropriate brightness in selected area. ● WDR ◆ For the WDR scene, this function can lower the high bright section and enhance the brightness of the low bright section. So that you can view these two sections clearly at the same time. The value ranges from 1 to 100. Default is 50. ◆ When you switch the camera from no-WDR mode to the WDR mode, system may lose several seconds record video. ● HLC ◆ After you enabled HLC function, the device can lower the brightness of the brightest section according to the HLC control level. It can reduce the area of the halo and lower the brightness of the whole video. The value ranges from 0 to 100. The default value is 50 when HLC is on. ● Off Note: It is to disable the BLC function. Please note this function is disabled by default.
3D NR	This threshold is mainly for multi-frame (at least 2) image processing. It reduces noise with info between a frame and previous frame. The higher the value, the better NR will be. Default is enabled. NR level ranges from 0 to 100. The recommended value to from 40 to 60. Default value is 50.
Mirror	It is to switch video left and right limit. This function is disabled by default.
Full-screen Test	Click the  button on the video window, you can begin full-screen test.
Default	It is to set device default setup.
Cancel	It is to cancel the operation in current interface and restore previously saved operation.
OK	Save config.

Profile management has three modes: normal, full time and schedule. If you select normal, the video will be configured as normal as in Figure 5- 2.

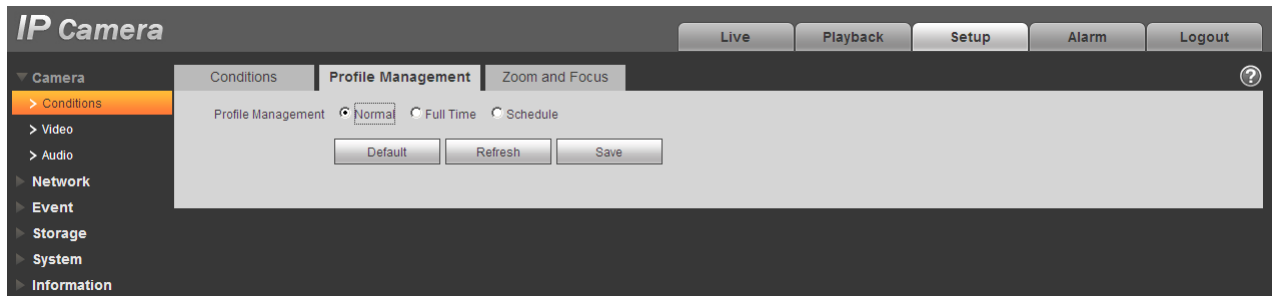


Figure 5- 2

If you select full time, you must select either day or night, and the video will be configured accordingly as in Figure 5- 3 and Figure 5- 4.

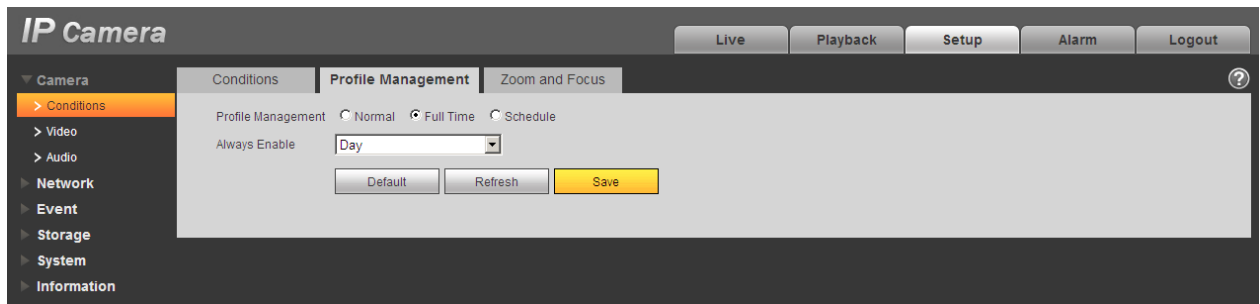


Figure 5- 3

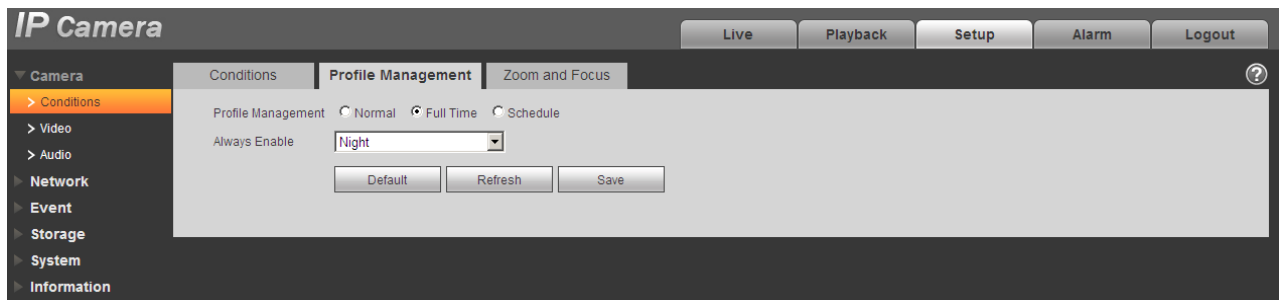


Figure 5- 4

If you select schedule, you can decide detained day time interval and night time interval as in Figure 5- 5. You can set 0:00 ~ 12:00 as day, and 12:00 ~ 24:00 as night.

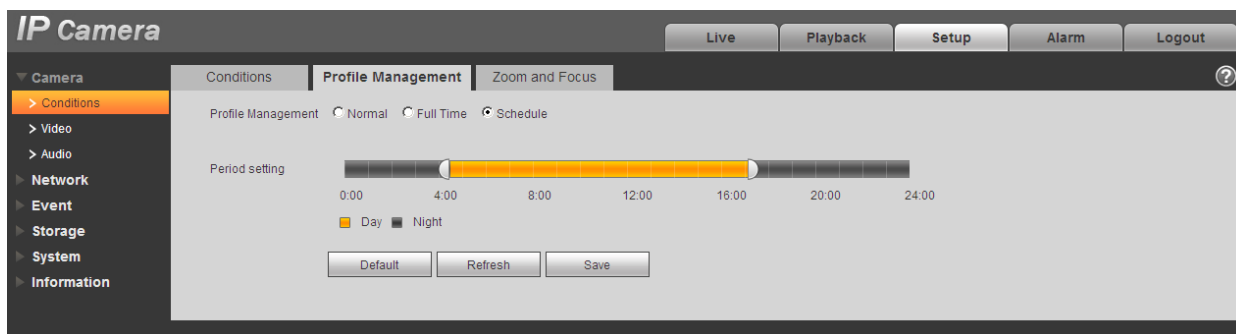


Figure 5- 5

Important

- The setup becomes immediately effective after you click on OK.
- You can see WDR option only if your camera supports WDR function. System does not support long-time exposure or low noise mode.

5.1.2 Zoom and Focus

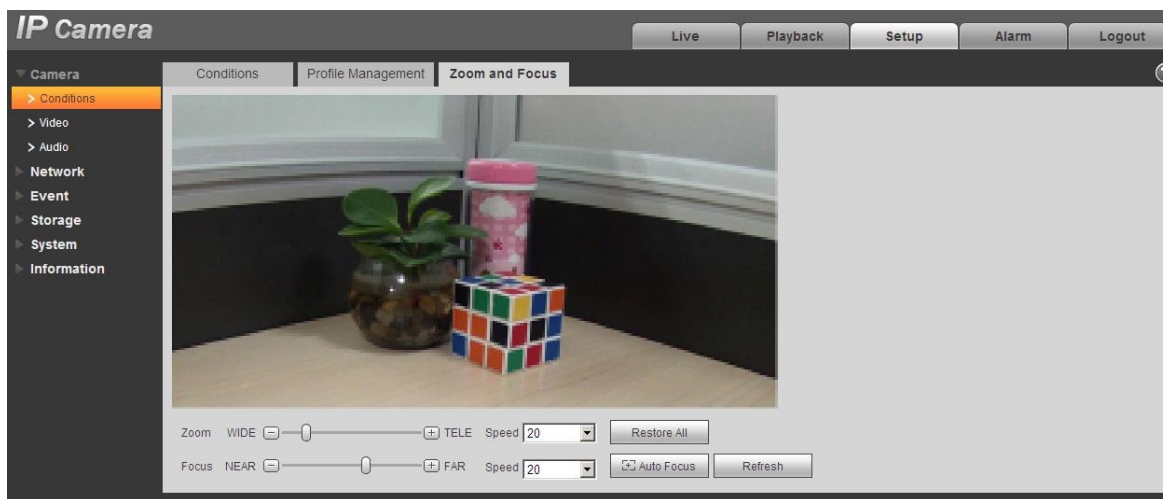


Figure 5- 6

Parameter		Function
Zoom	Wide	Press minus key to make the focal length small
	Tele	Press plus key to make the focal length big
	Speed	Including 1, 5, 20, 100

Parameter		Function
Focus	Near	Press minus key to make the focal plane of the lens move to close shot
	Far	Press plus key to make the focal lens move to move to long shot
	Speed	Including 1, 5, 20, 100
Restore all		Restore all, the value of both zoom and focus are reset as 0
Auto Focus		Adjust the focal plane of the lens to make the video image stay the clearest.
Refresh		Acquire the latest status of the zoom and focus

5.1.2 Video

5.1.2.1 Video bit stream

The video bit stream interface is shown as below. See Figure 5- 7.

The screenshot shows the 'IP Camera' web interface. The 'Setup' tab is selected, and the 'Video' sub-tab is active. The interface is divided into 'Main Stream' and 'Sub Stream' configuration panels. Both panels have a 'Video' tab selected. The 'Main Stream' settings include: Code-Stream Type (General), Encode Mode (H.264H), Resolution (720P (1280*720)), Frame rate(FPS) (25), Bit Rate Type (CBR), Reference Bit Rate (448-8192Kb/S), Bit Rate (2048), I Frame Interval (50), and Watermark Settings (checked, Character: DigitalCCTV). The 'Sub Stream' settings include: Enable (checked), Code-Stream Type (General), Encode Mode (H.264H), Resolution (D1 (704*576)), Frame rate(FPS) (25), Bit Rate Type (CBR), Reference Bit Rate (224-4096Kb/S), Bit Rate (1024), and I Frame Interval (50). At the bottom, there are buttons for 'Default', 'Refresh', and 'Save'.

Figure 5- 7

Please refer to the following sheet for detailed information.

Parameter	Function
Sub Stream Enable	Please check the box here to enable extra stream function. This function is enabled by default.
Code-Stream Type	ACF means using different fps to record. There are two options: VBR and CBR. Please note, you can set video quality in VBR mode.

Parameter	Function
Encode mode	There are three options: H.264(main profile standard, H.264H (high profile standard), and MJPG encode. ● The H.264, H.264H both are H264 bit stream. H.264 is the Main Profile encode and the You need to enable the sub stream function in your camera and set the resolution as CIF. Then you can monitor via the Blackberry cell phone. ● MJPEG: In this encode mode, the video needs to large bit stream to guarantee the video definition. You can use the max bit stream value in the recommend bit to get the better video output effect.
Resolution	There are multiple resolutions. You can select from the dropdown list. For each resolution, the recommended bit stream value is different. Note: When video is under rotating status, you cannot set resolution higher than 1080P (excluding 1080P).
Frame Rate	PAL: 1~25f/s, NTSC: 1~30f/s.. The frame rate may vary due to different resolutions.
Bit Rate Type	There are two options: VBR and CBR. Please note, you can set video quality in VBR mode. Under MJPEG mode, only CBR is available.
Recommended Bit	Recommended bit rate value according to the resolution and frame rate you have set.
Bit Rate	● In CBR, the bit rate here is the max value. In dynamic video, system needs to low frame rate or video quality to guarantee the value. ● The value is null in VBR mode. ● Please refer to recommend bit rate for the detailed information.
I Frame	Here you can set the P frame amount between two I frames. The value ranges from 1 to 150. Default value is 50. Recommended value is frame rate *2.
Watermark Settings	By calibrating watermark, to see if video is modified. Select Watermark function. Default watermark is Digital CCTV. Watermark character can only be number, letter, _, - within 128 characters.

5.1.2.2 Snapshot

The snapshot interface is shown as in Figure 5- 8.

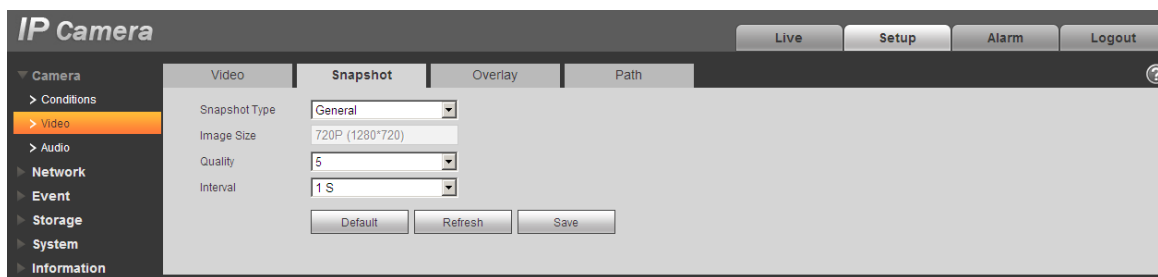


Figure 5- 8

Please refer to the following sheet for detailed information.

Parameter	Function
Snapshot type	There are two modes: general (schedule) and Event (activation).
Image size	It is the same with the resolution of snapshot (main stream or sub stream).
Quality	It is to set the image quality. There are six levels.
Interval	It is to set snapshot frequency. The value ranges from 1s to 7s.

5.1.2.3 Video Overlay

The video overlay interface is shown as in Figure 5- 9.

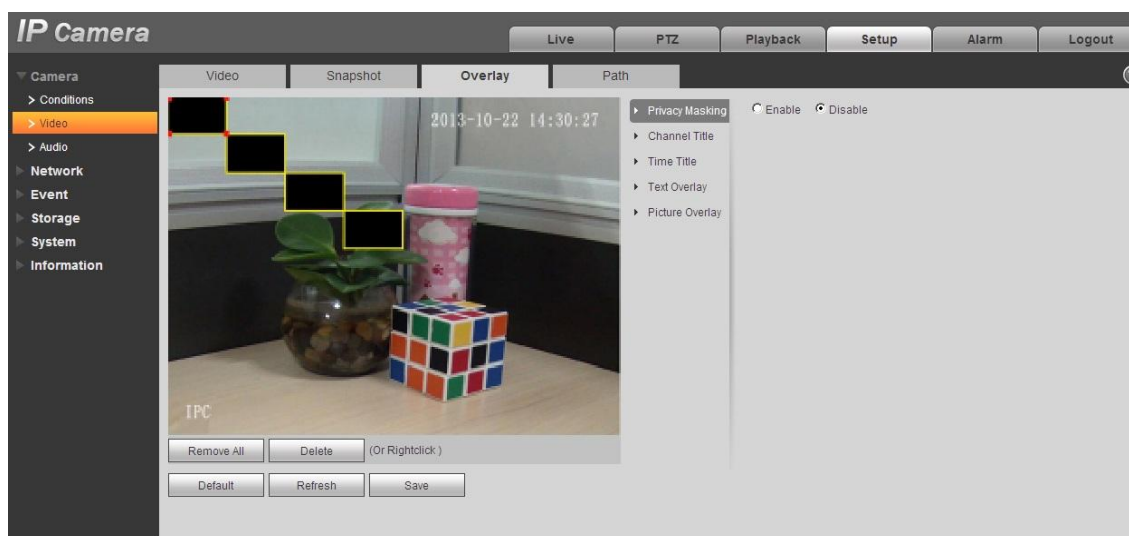


Figure 5- 9

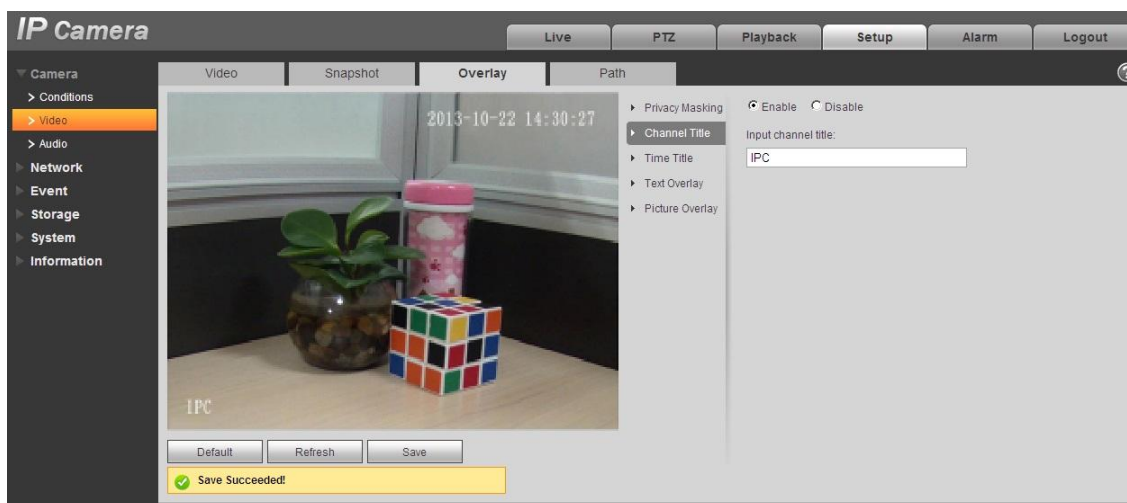


Figure 5- 10

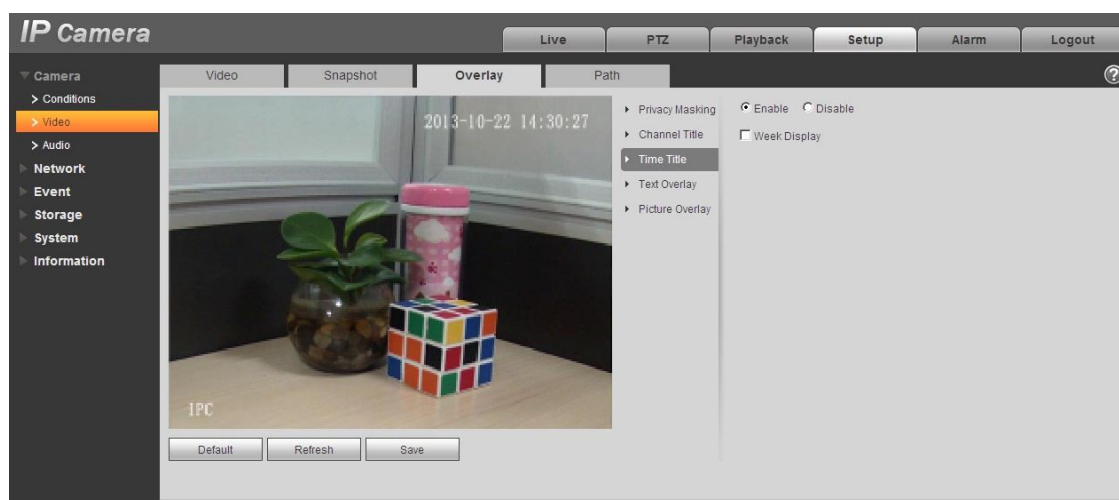


Figure 5- 11

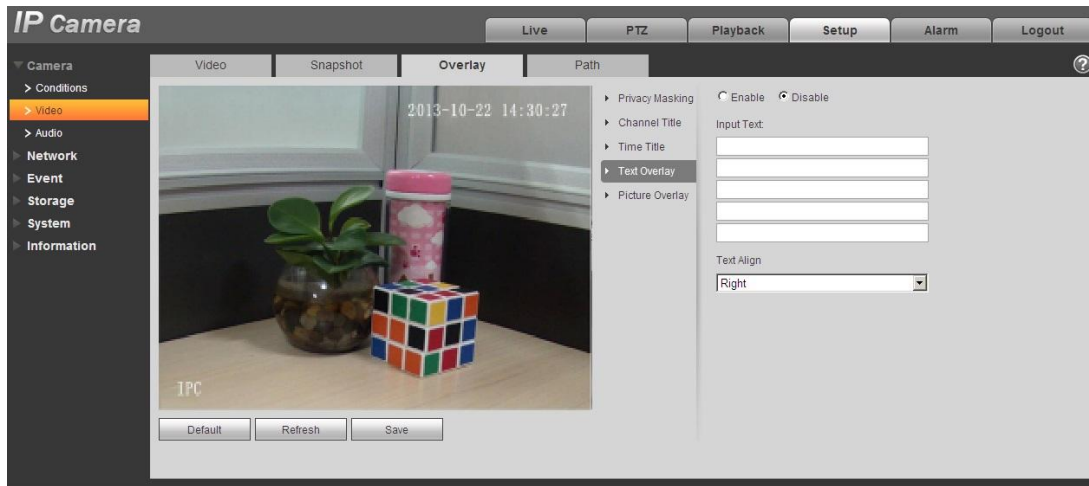


Figure 5- 12

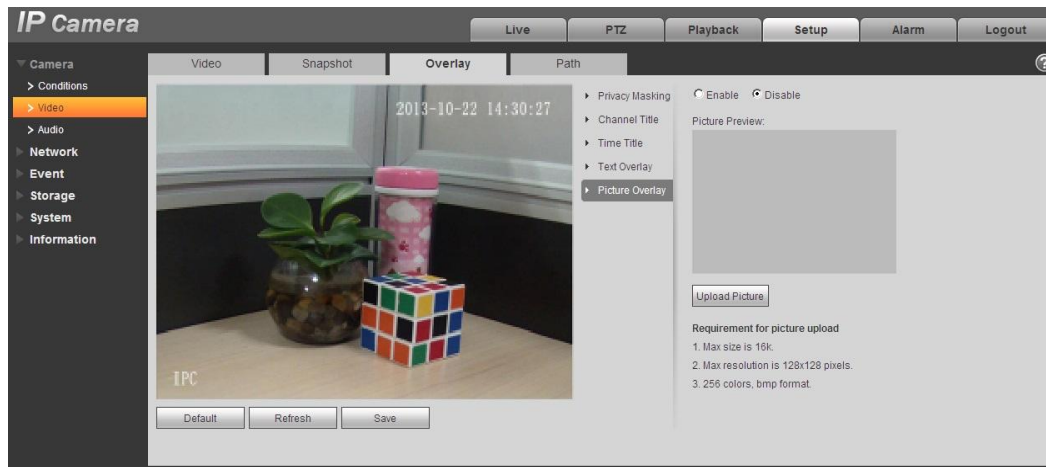


Figure 5- 13

Please refer to the following sheet for detailed information.

Parameter	Function
Privacy mask	● Here you can privacy mask the specified video in the monitor video. ● System max supports 4 privacy mask zones.
Time Title	● You can enable this function so that system overlays time information in video window. ● You can use the mouse to drag the time tile position.
Channel Title	● You can enable this function so that system overlays channel information in video window. ● You can use the mouse to drag the channel tile position.

Location	- You can enable this function to overlay location information in video window. - You can click on setup button to set location information. You can use the mouse to drag location box to adjust its position. Alignment include align left and align right.
Overlay	- You can enable this function to display overlay picture. Click on disable to turn it off. - Click on Upload Picture to overlay local picture into monitoring window. You can drag the yellow box to move it. Note: You cannot enable location and overlay at the same time.
Refresh	Set privacy mask, channel title, time title, location, overlay and save the change. You can click on Refresh to see effect.

5.1.2.4 Path

The storage path interface is shown as in Figure 5- 14.

Here you can set snap image saved path and the record storage path.

- The default monitor image path is C:\Documents and Settings\Administrator\WebDownload\Snapshot.
- The default monitor record path is C:\Documents and Settings\Administrator\WebDownload\LiveRecord.
- The default playback snapshot path is C:\Documents and Settings\Administrator\WebDownload\PlaybackSnapshot.
- The default playback download path is C:\Documents and Settings\Administrator\WebDownload\PlaybackRecord.
- The default playback cut path is: C:\Documents and Settings\Administrator\WebDownload\VideoClips.

Note:

Administrator is locally logged in PC account.

Please click the Save button to save current setup.

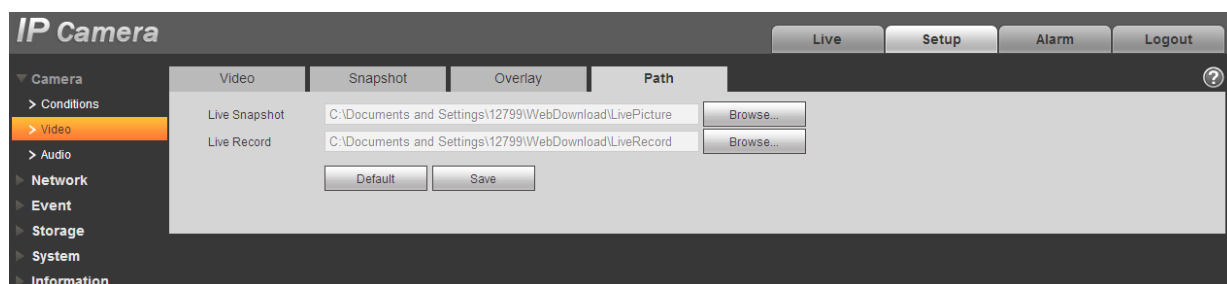


Figure 5- 14

5.1.3 Audio

Please note some series devices do not support audio function.

5.1.3.1 Audio

The audio interface is shown as below. See Figure 5- 15.

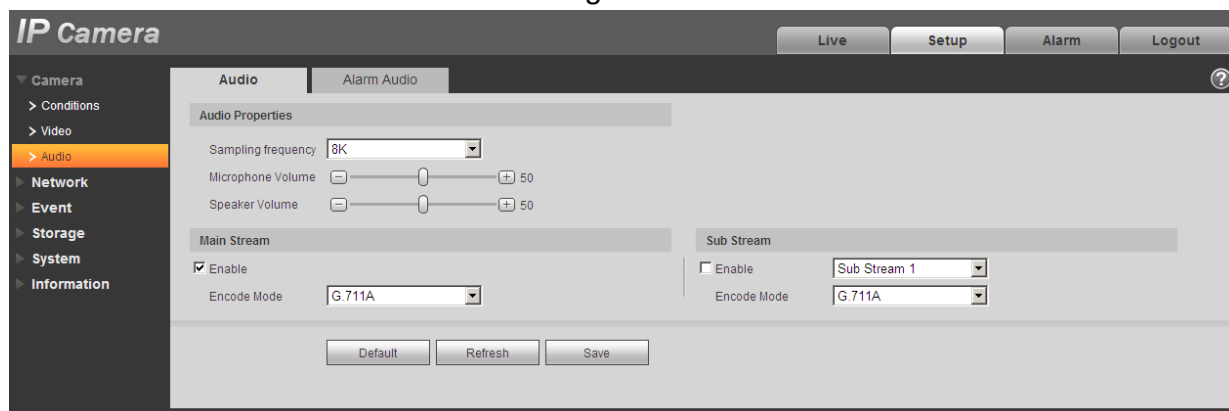


Figure 5- 15

Please refer to the following sheet for detailed information.

Parameter	Function
Sampling Frequency	Sampling frequency support two modes which are 8K and 16K. Default is 8K.
Microphone Volume	Adjust microphone volume from 0~100. Note: Supported by some devices.
Speaker Volume	Adjust speaker volume from 0~100. Note: Supported by some devices.
Audio enable	Check Enable: the stream is A/V composite stream, otherwise it contains video only. Audio is available only when this function is enabled.
Encode mode	The encode mode of the main stream and extra stream include G.711A and G.711Mu. The setup here is for audio encode mode and the bidirectional talk encode both.

5.1.3.2 Alarm audio

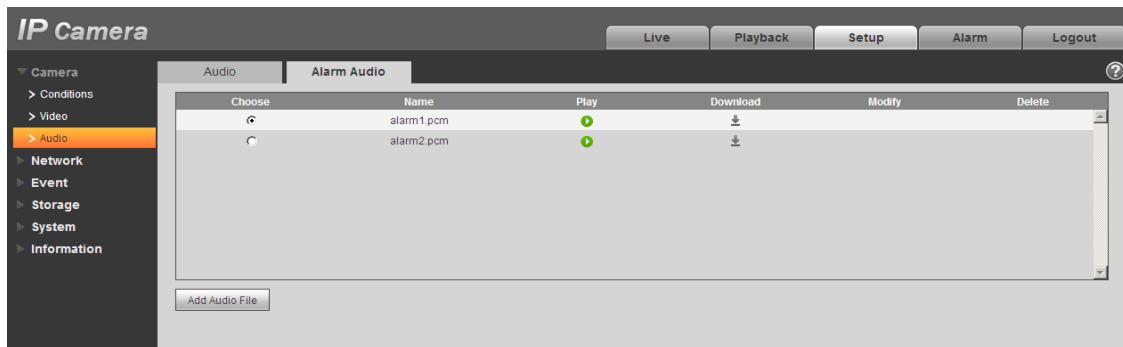


Figure 5- 16

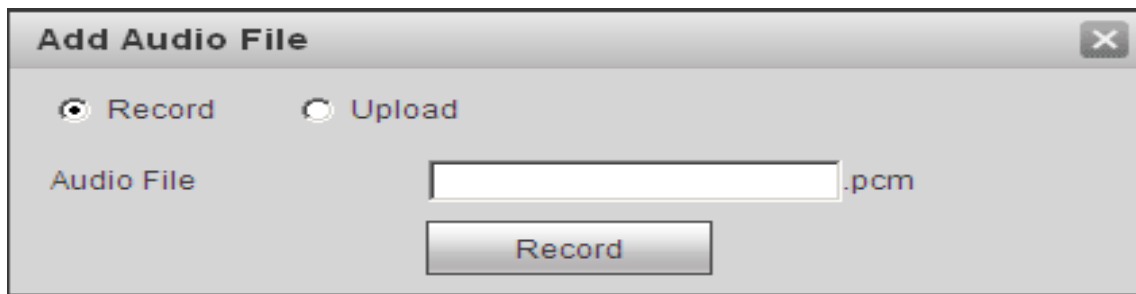


Figure 5- 17

Audio management currently supports PCM format to record and PCM, wav two forms to upload, and can select an audio file for the audio alarm linkage.

The way to download the web alarm playback audio file into local is as follows:

Step 1 Use the left mouse button to click the hollow circle  in the “choice” column on the left, and shows , which means effective choice of alarm audio.

Step 2 Use the right mouse button to click , select “save target as” to download.

5.2 Network

5.2.1 TCP/IP

The TCP/IP interface is shown as in Figure 5- . It supports IPv4 and IPv6. IPv4 supports static IP and DHCP. IPv6 supports static IP only. When user manually modify IP address, WEB will automatically jump to the new IP address.

The screenshot shows the 'IP Camera' web interface. The top navigation bar has 'Live', 'Setup', 'Alarm', and 'Logout' buttons. The left sidebar lists various configuration categories. The 'TCP/IP' section is active, showing fields for Host Name, Ethernet Card, Mode, MAC Address, IP Version, IP Address, Subnet mask, Default Gateway, Preferred DNS Server, and Alternate DNS Server. The 'Static' mode is selected under the Mode section. A checkbox for 'Enable ARP/Ping to set IP address service' is checked. At the bottom of the configuration area are 'Default', 'Refresh', and 'Save' buttons.

Figure 5- 18

Please refer to the following sheet for detailed information.

Parameter	Function
Host Name	It is to set current host device name. It max supports 15 characters.
Ethernet Card	Please select the Ethernet port. Default is wired. Please note you can modify the default Ethernet card if there is more than one card. . Please note the device needs to reboot to activate the new setup once you modify the default setup.
Mode	There are two modes: static mode and the DHCP mode. Select DHCP mode, it auto searches IP, and you cannot set IP/subnet mask/gateway. Select static mode, you must manually set IP/subnet mask/gateway.
Mac Address	It is to display hose Mac address.
IP Version	It is to select IP version. IPV4 or IPV6. You can access the IP address of these two version.
IP Address	Please use the keyboard to input the corresponding number to modify the IP address and then set the corresponding subnet mask and the default gateway.

Preferred DNS	DNS IP address.
Alternate DNS	Alternate DNS IP address.
Enable ARP/Ping set device IP address service.	You can use ARP/Ping command to modify or set the device IP address if you know the device MAC address. Before the operation, please make sure the network camera and the PC in the same LAN. This function is on by default. You can refer to the steps listed below. Step 1: Get an IP address. Set the network camera and the PC in the same LAN. Step 2: Get the physical address from the label of the network camera. Step 3: Go to the Run interface and then input the following commands. <pre>arp -s <IP Address> <MAC> ping -l 480 -t <IP Address></pre> Such as: arp -s 192.168.0.125 11-40-8c-18-10-11 ping -l 480 -t 192.168.0.125 Step 4: Reboot the device. Step 5: You can see the setup is OK if you can see there are output information such as “Reply from 192.168.0.125 ...” from the command output lines. Now you can close the command line. Step 6: Open the browse and then input http://<IP address>. Click the Enter button, you can access now.

5.2.2 Connection

5.2.2.1 Connection

The connection interface is shown as in Figure 5- 19.

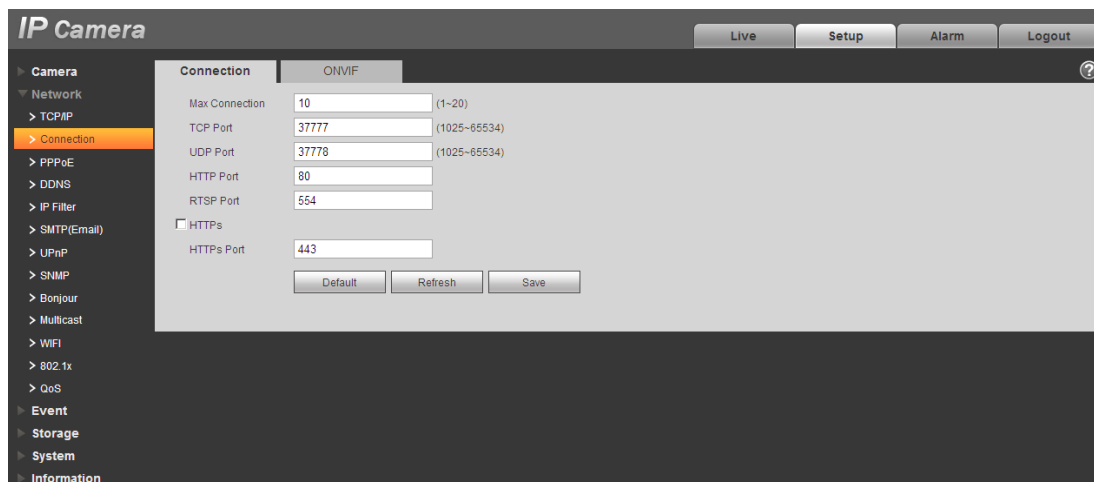


Figure 5- 19

Please refer to the following sheet for detailed information.

Parameter	Function
Max connection	It is the max Web connection for the same device. The value ranges from 1 to 20. Default connection amount is 10.
TCP port	Port range is 1025~65534. The default value is 37777. You can input the actual port number if necessary.
UDP port	Port range is 1025~65534. The default value is 37778. You can input the actual port number if necessary.
HTTP port	Port range is 1025~65524. The default value is 80. You can input the actual port number if necessary.
RTSP port	● The default value is 554. Please leave blank if use default. User uses QuickTime or VLC can play the following formats. BlackBerry can play too. ● Real-time monitoring URL format, please require real-time RTSP media server, require channel no., bit stream type in URL. You may need username and password. ● User uses BlackBerry need to set encode mode to H.264B, resolution to CIF and turn off audio. URL format is: rtsp://username:password@ip:port/cam/realmonitor?channel=1&subtype=0 username/password/IP and port. The IP is device IP and the port default value is 554. You can leave it in blank if it is the default value. Follow standard RTP protocol and when encode mode is MJPEG, the max resolution only supports 2040*2040.
HTTPS Enable	Check HTTPS enable, login as https://ip:port. Protect data. Default port is https://ip . It is disabled by default.
HTTPS Port	HTTPS communication port, range is 1025~65534, default is 443.

Note:

- 0~1024, 37780~37880, 1900, 3800, 5000, 5050, 9999, 37776, 39999, 42323 are all special ports. User cannot modify them.
- Avoid using default port value of other ports.

5.2.2.1 ONVIF

ONVIF (Open Network Video Interface Forum), this standard describes network video mode, interface, data type and data interaction mode. ONVIF Standard's aim is to achieve a network video frame agreement and makes the network video products (including video front-end, video equipment, etc.) from different manufacturers completely compatible.

ONVIF function default is closed.

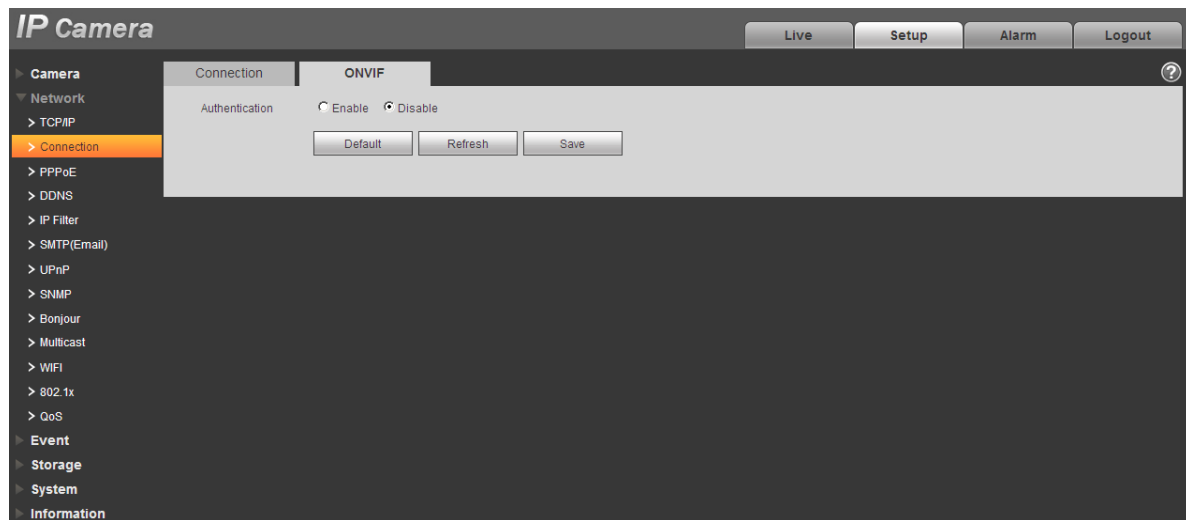


Figure 5- 20

5.2.3 PPPoE

The PPPoE interface is shown as in Figure 5- 21.

Input the PPPoE user name and password you get from the IPS (internet service provider) and enable PPPoE function. Please save current setup and then reboot the device to get the setup activated.

Device connects to the internet via PPPoE after reboot. You can get the IP address in the WAN from the IP address column. When PPPoE is on, please disable UPnP to avoid influence on dial-up.

When you Check PPPoE enable, please disable UPnP.

Please note, you need to go to the IP address item to via the device current device information. You can access the client-end via this address.

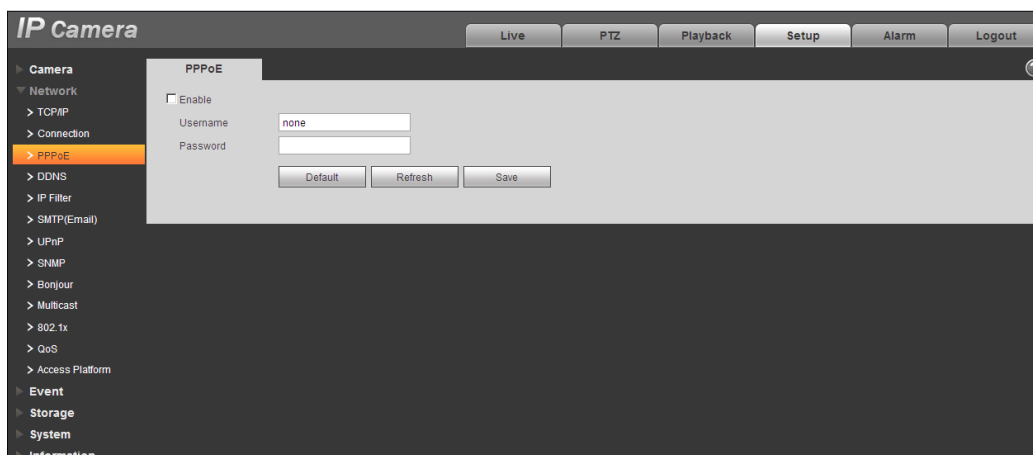


Figure 5- 21

5.2.4 DDNS

The DDNS interface is shown as in Figure 5- 22.

The DDNS is to set to connect the various servers so that you can access the system via the server. Please go to the corresponding service website to apply a domain name and then access the system via the domain. It works even your IP address has changed. When the device connects to WLAN, you should disable UPnP.

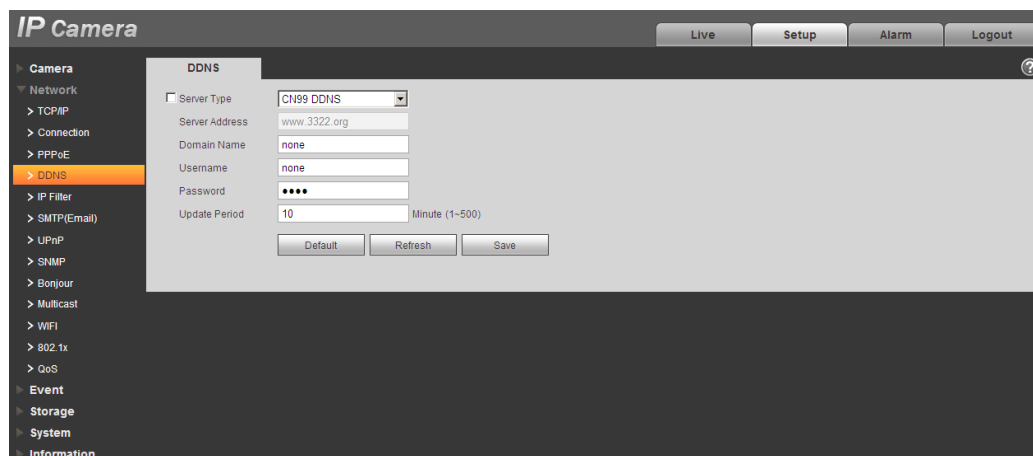


Figure 5- 22

Please refer to the following sheet for detailed information.

Parameter	Function
Server Type	You can select DDNS protocol from the dropdown list: CN99 DDNS, NO-IP DDNS, Dyndns DDNS, QUICK DDNS. The QUICK DDNS protocol means you use your self-defined private protocol to realize DDNS function.

Parameter	Function
Server Address	DDNS server IP address
Domain Name	Your self-defined domain name.
Username	The user name you input to log in the server.
Password	The password you input to log in the server.
Update period	Device sends out alive signal to the server regularly. Default is 10min.

The QUICK DDNS interface is shown as in Figure 5- 23.

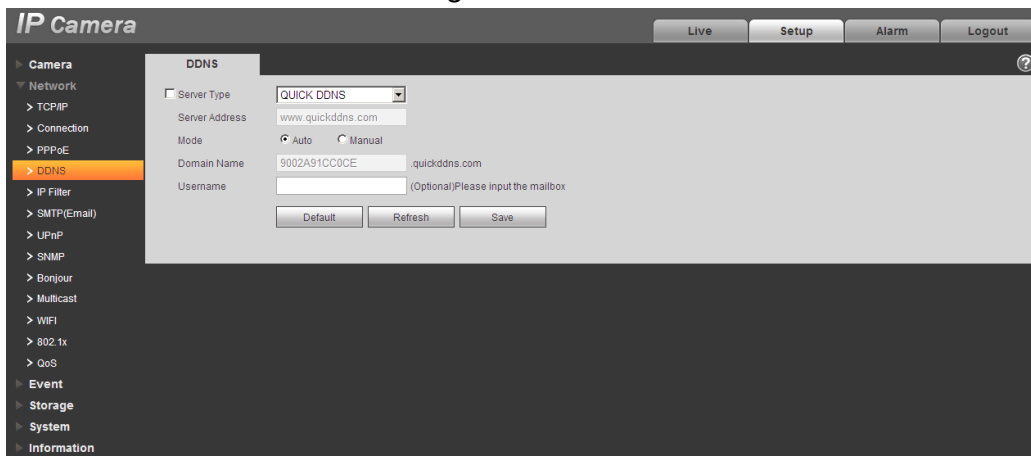


Figure 5- 23

Parameter	Function
Server Type	You can select DDNS protocol from the dropdown list and then enable DDNS function. The QUICK DDNS means you use your self-defined private protocol to realize DDNS function.
Server Address	DDNS server IP address. Under DDNS the default server address is www.quickddns.com
Mode	The default is auto, and you can select manual.
Domain Name	Auto and self-defined domain names are both MAC address.quickddns.com. You can self-define prefix.
Test	It is to test domain name. It is available only under manual mode.
Username	The user name you input to log in the server. Optional.

5.2.5 IP filter

The IP filter interface is shown as in Figure 5- 24.

You can enable IP filter function so that some specified IP/MAC user can access the network camera.

You can add IP address or IP address section.

If you do not check the box here, it means there is on access limit.

Here you can add IP address and MAC address. You must add these address before enabling the trusted sites.

Please note: You must set MAC address in the same network segment.

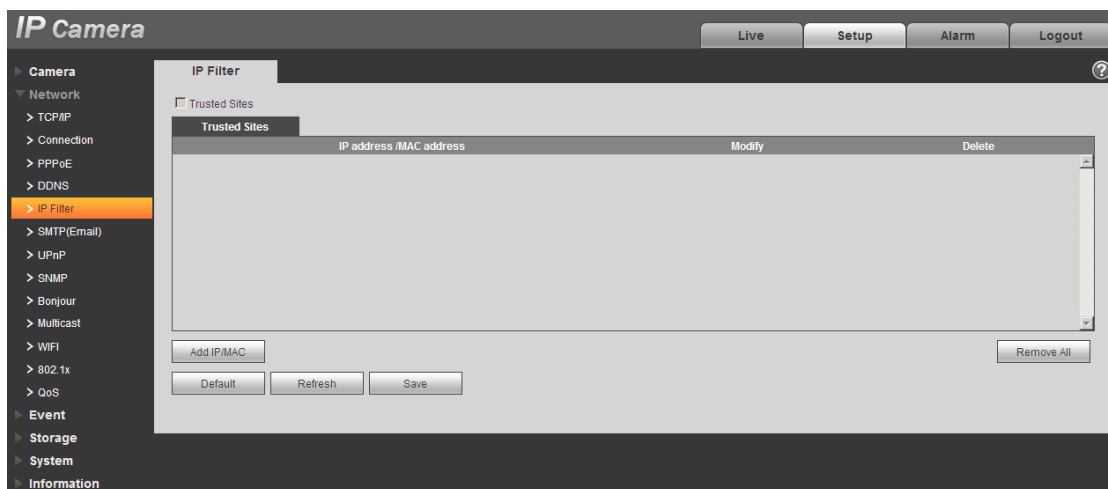


Figure 5- 24

5.2.6 SMTP (e-mail)

The SMTP interface is shown as in Figure 5- .

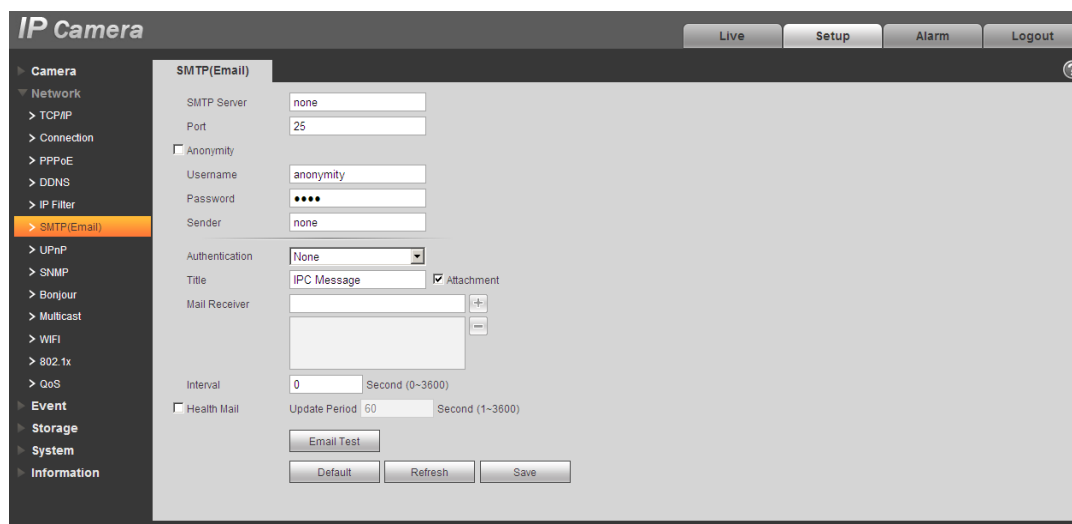


Figure 5- 25

Please refer to the following sheet for detailed information.

Parameter	Function
SMTP Server	Input server address and then enable this function.
Port	Default value is 25. You can modify it if necessary.
Anonymity	For the server supports the anonymity function. You can auto login anonymously. You do not need to input the user name, password and the sender information.
User Name	The user name of the sender email account.
Password	The password of sender email account.
Sender	Sender email address.
Authentication (Encryption mode)	You can select SSL, TLS or none.
Title (Subject)	Input email subject here.
Attachment	System can send out the email of the snapshot picture once you check the box here.
Mail receiver	Input receiver email address here. Max three addresses.
Interval	The send interval ranges from 0 to 3600 seconds. 0 means there is no interval. Please note system will not send out the email immediately when the alarm occurs. When the alarm, motion detection or the abnormality event activates the email, system sends out the email according to the interval you specified here. This function is very useful when there are too many emails activated by the abnormality events, which may result in heavy load for the email server.
Health mail enable	Please check the box here to enable this function.
Email test	The system will automatically sent out a email once to test the connection is OK or not .Before the email test, please save the email setup information.

5.2.7 UPnP

It allows you to establish the mapping relationship between the LAN and the public network.

Here you can also add, modify or remove UPnP item. For UPnP on different routers, you must disable UPnP function. See Figure 5- .

In the Windows OS, From Start->Control Panel->Add or remove programs. Click the “Add/Remove Windows Components” and then select the “Network Services” from the Windows Components Wizard. Click the Details button and then check the “Internet Gateway Device Discovery and Control client” and “UPnP User Interface”. Please click OK to begin installation.

Enable UPnP from the Web. If your UPnP is enabled in the Windows OS, the network camera can auto detect it via the “My Network Places”.

Under manual mode, you can modify external port. Under auto mode, select idle port for auto port mapping without user modification.

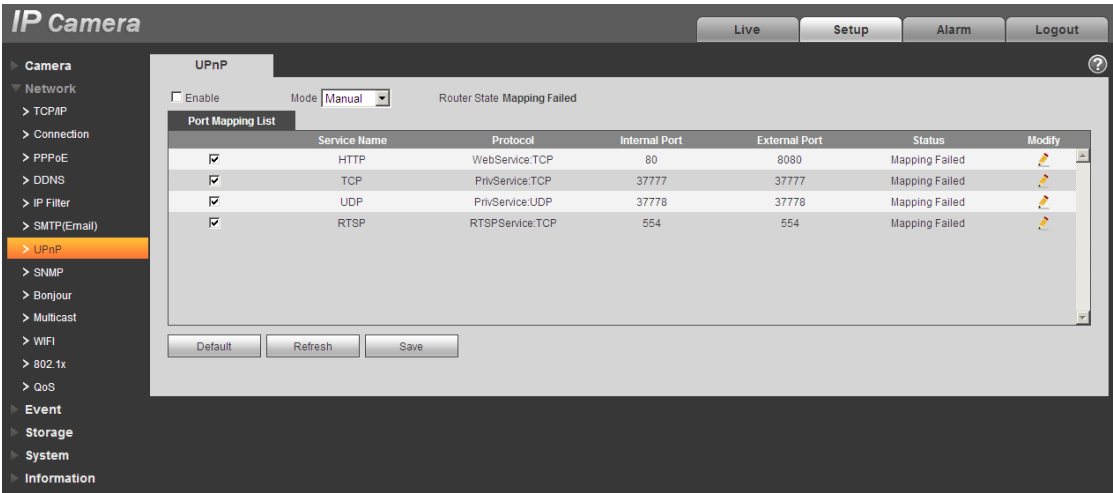


Figure 5- 26

5.2.8 SNMP

The SNMP interface is shown as in Figure 5- 27 and Figure 5- 28.

The SNMP allows the communication between the network management work station software and the proxy of the managed device. Please install the software such as MG MibBrowser 8.0c software or establish the SNMP service before you use this function. You need to reboot the device to activate the new setup.

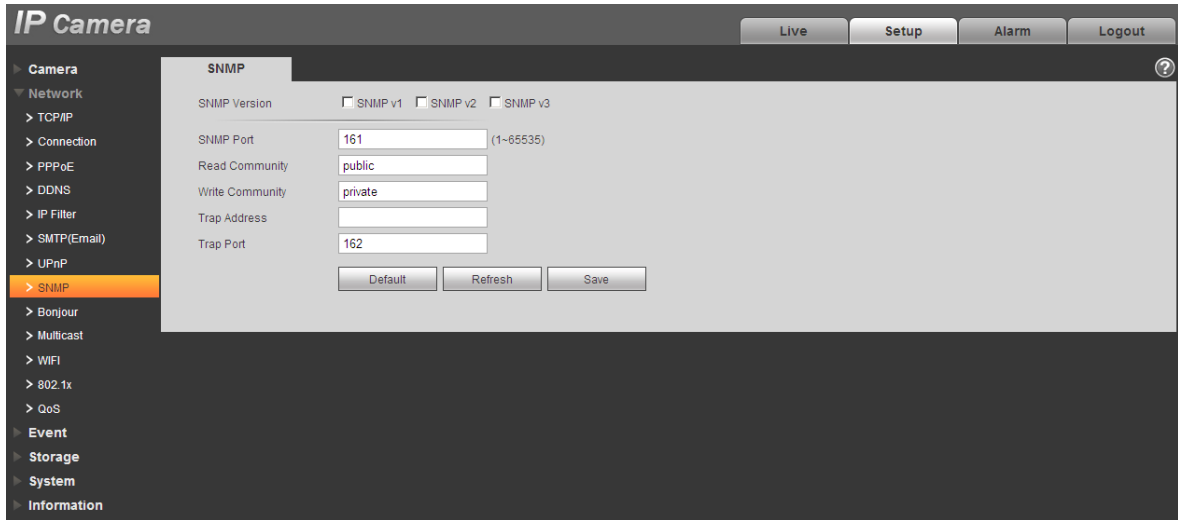


Figure 5- 27

Please refer to the following sheet for detailed information.

Parameter	Function
SNMP Version	● Check SNMP v1, device only process v1 info. ● Check SNMP v2, device only process v2 info. ● Check SNMP v3, can set username, password and encryption method. Server calibrate corresponding username, password and encryption method too access device and v1/v2 are unavailable.
SNMP port	The listening port of the proxy program of the device. It is a UDP port not a TCP port. The value ranges from 1 to 65535. The default value is 161
Community	It is a string, as command between management and proxy, , defining a proxy, and a manager's authentication.
Read community	Read-only access to all SNMP targets, default is public. Note: Only number, letter, _, and – supported.
Write community	Read/write access to all SNMP targets, default is private. Note: Only number, letter, _, and – supported.
Trap address	The destination address of the Trap information from the proxy program of the device.
Trap	SNMP trap is a proxy message sent to admin as important event notice or status change.
Trap Address	Address where to send Trap message.
Trap Port	Port which send Trap message, default is 162, range 1~65535.

The screenshot shows the 'SNMP' configuration page in an 'IP Camera' web interface. The sidebar on the left lists various settings categories. The main configuration area includes:

- SNMP Version:** Radio buttons for v1, v2, and v3 (v3 is selected).
- SNMP Port:** Text input field with '161' and a range '(1~65535)'.
- Read Community:** Text input field with 'public'.
- Write Community:** Text input field with 'private'.
- Trap Address:** Text input field.
- Trap Port:** Text input field with '162'.
- Read-only Username:** Text input field with 'public'.
- Authentication Type:** Radio buttons for MD5 (selected) and SHA.
- Authentication Password:** Text input field.
- Encryption Type:** Radio buttons for CBC-DES (selected) and others.
- Encryption Password:** Text input field.
- Read/write Username:** Text input field with 'private'.
- Authentication Type:** Radio buttons for MD5 (selected) and SHA.
- Authentication Password:** Text input field.
- Encryption Type:** Radio buttons for CBC-DES (selected) and others.
- Encryption Password:** Text input field.

At the bottom of the configuration area are three buttons: 'Default', 'Refresh', and 'Save'.

Figure 5- 28

Check SNMP v3 version and SNMP port, read community, write community, Trap address, Trap port are same with SNMP v1 and SNMP v2 versions. Only when SNMP version is SNMP v3, user need to configure parameter in chart.

Parameter	Function
SNMP Version	SNMP v3
Read-only Username	Default is public. Note: Name only can be number, letter and underline.
Read/Write Username	Default is private. Note: Name only can be number, letter and underline.
Authentication	You may select MD5 or SHA, default is MD5.
Authentication Password	Password not less than 8 characters.
Encryption	Default is CBC-DES.

Parameter	Function
Encryption Password	Password not less than 8 characters.

5.2.9 Bonjour

The Bonjour interface is shown as below. See Figure 5- 29.

Bonjour is based on the multicast DNS service from the Apple. The Bonjour device can automatically broadcast its service information and listen to the service information from other device.

You can use the browse of the Bonjour service in the same LAN to search the network camera device and then access if you do not know the network camera information such as IP address.

You can view the server name when the network camera is detected by the Bonjour. Please note the safari browse support this function. Click the “Display All Bookmarks: and open the Bonjour, system can auto detect the network camera of the Bonjour function in the LAN.

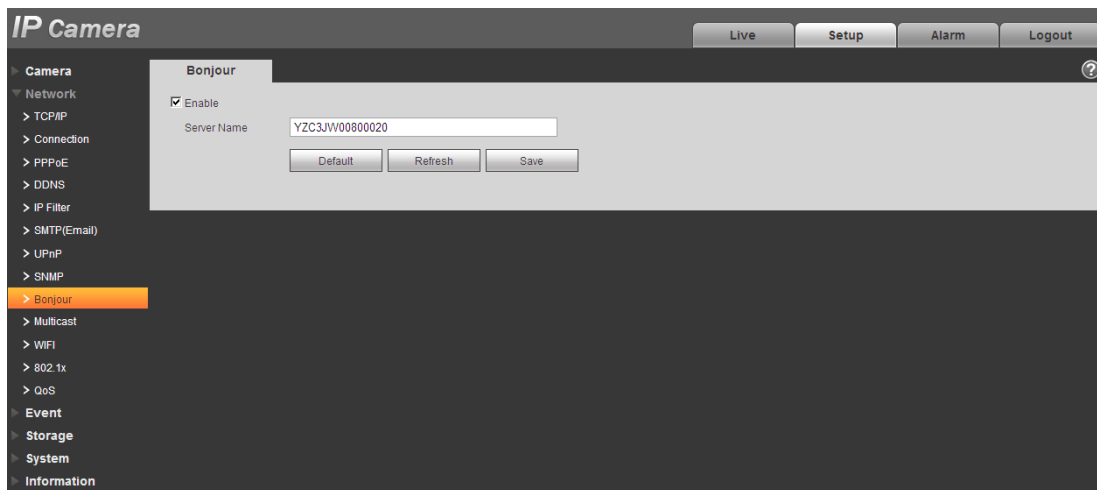


Figure 5- 29

5.2.10 Multicast

The multicast interface is shown as in Figure 5- 30.

Multicast is a transmission mode of data packet. When there is multiple-host to receive the same data packet, multiple-cast is the best option to reduce the broad width and the CPU load. The source host can just send out one data to transit. This function also depends on the relationship of the group member and group of the outer.

Note:

- Open preview, streaming media protocol, select multicast, and monitor via multicast format.
- Here you can set multicast address and port. You also need to go to Live interface to set the protocol as Multicast.

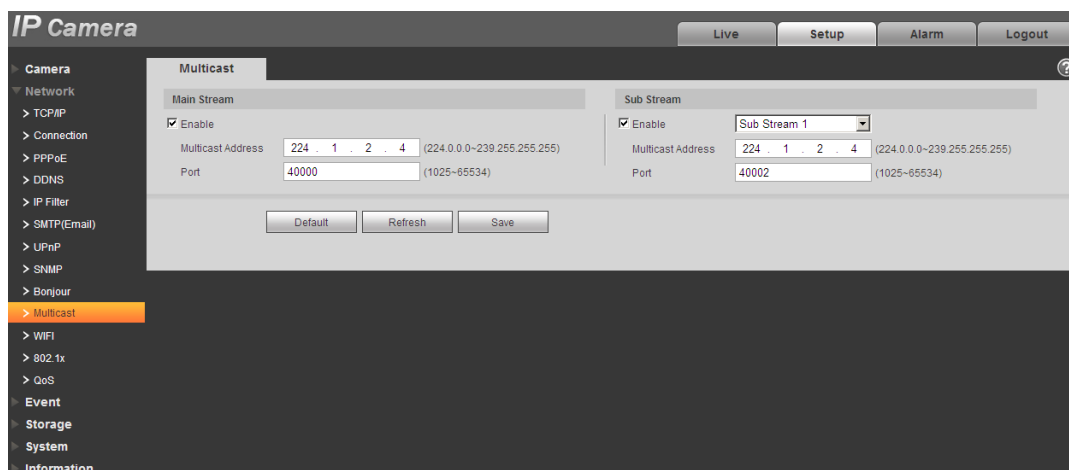


Figure 5- 30

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	Select to enable multicast function. Main stream and sub stream cannot be used at the same time.
Multicast address	Main/sub stream multicast default address is 224.1.2.4 and its range is 224.0.0.0~239.255.255.255.
Port	Multicast port. Main stream is 40000, sub stream is 40002 and the range is 1025~65534.

5.2.12 WIFI

Note:

Some series devices don't support WIFI and WPS function.

WIFI

WIFI work information column can show the name, status, IP information of the Current Hot Spot. Usually please "refresh" WIFI work information after reconnection to ensure the real-time display of the work status, because it often takes some time to connect WIFI Hot Spot, which depends on the network signal strength.



Figure 5- 31

WIFI setting method is as follows:

Step 1 Click  Enable, show as  Enable, means enabling WIFI function.

Step 2 Click “wireless network ID search”, and shows the wireless network hot spot of the current network camera environment in the list.

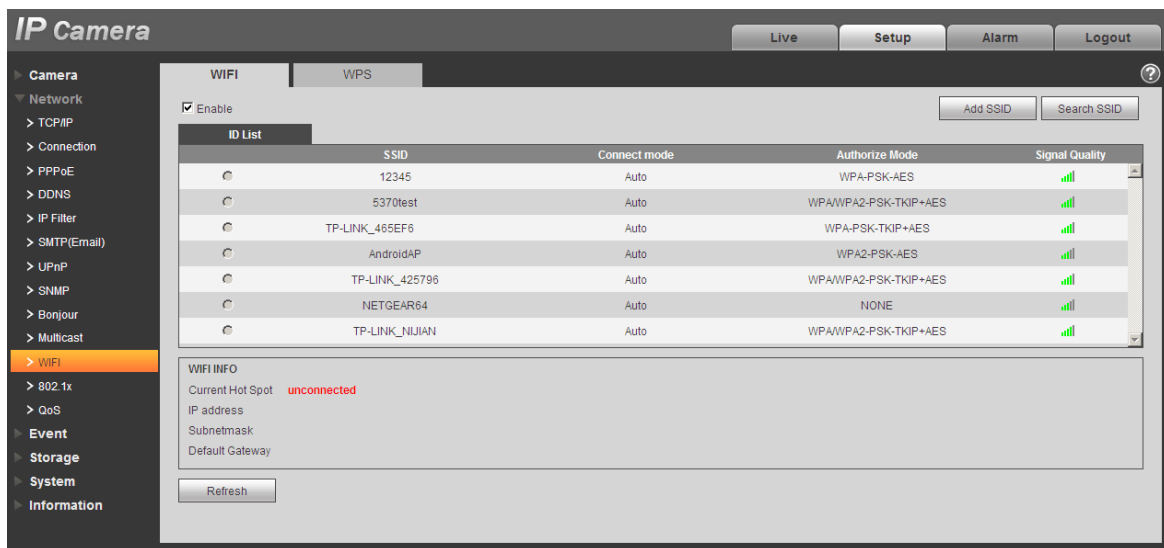


Figure 5- 32

Step 3 Click “add a wireless network ID” when need to add a wireless network manually, pop out an interface in the figure below, and enter network ID in the dialog box.

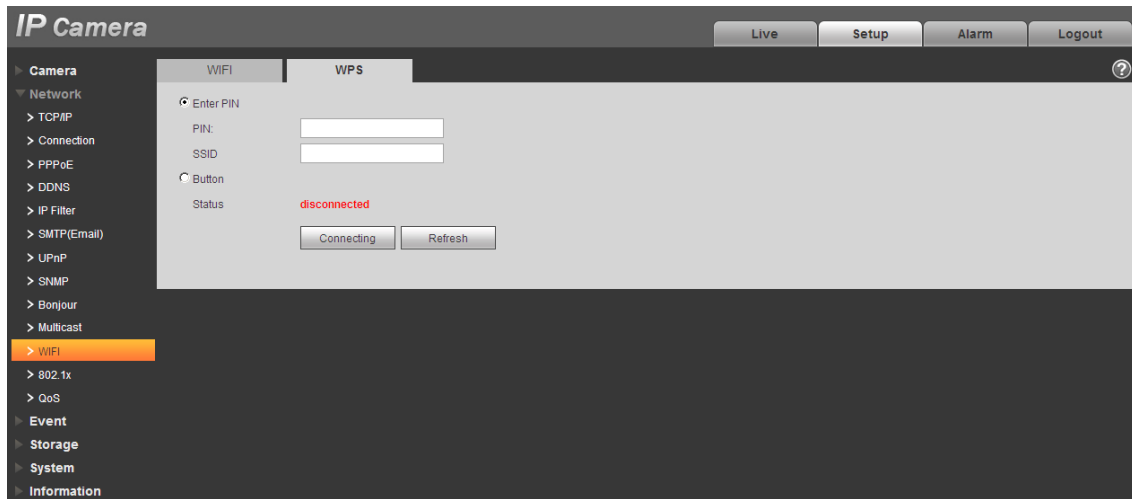


Figure 5- 33

Step 4 Click “wireless network ID search”, if can search the wireless network hot spot, it means the network ID is available.

Step 5 Double click on one can pop out the signal intensity and authentication of the hot spot.

- Please enter the password if necessary. Please keep the choice of password index number same as the router when entering password.
- Please click “connect” if it is unnecessary to enter the password.

5.2.12.2. WPS

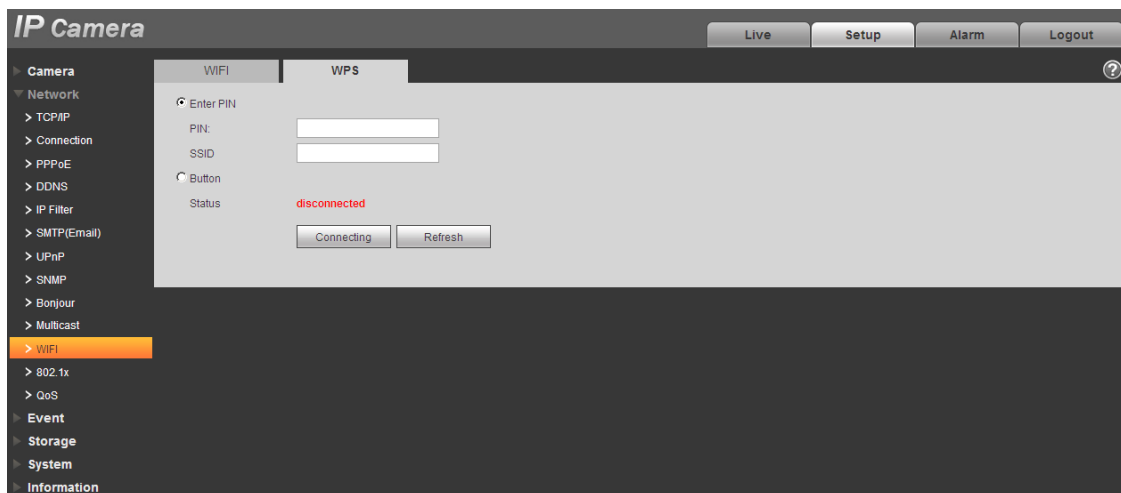


Figure 5- 34

PIN Number and SSID are both acquired from the router, please “refresh” the work information of WIFI to ensure the real-time display of work state after filling in correctly.

5.2.11 802.1x

802.1x (port based network access control protocol) supports manual selection of authentication method to control if device connected to LAN can join the LAN. It well supports authentication, charging, safety and management requirement of network.

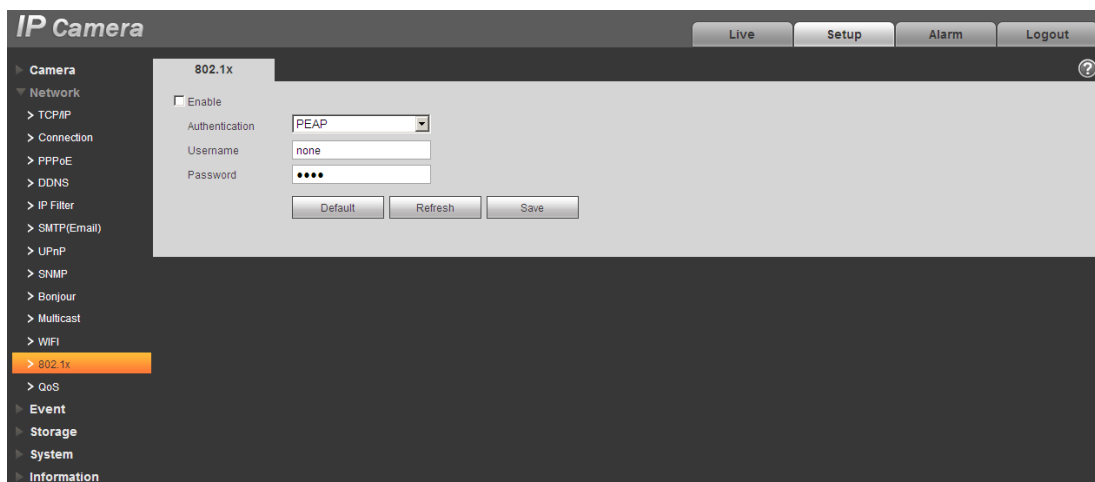


Figure 5- 35

Please refer to the following sheet for detailed information.

Parameter	Function
Authentication	PEAP (protected EAP protocol).
Username	It needs the username to login, which is authenticated by the server.
Password	Please input password here.

5.2.12 QoS

The QoS interface is shown as below. See Figure 5- 36.

Qos (Quality of Service) is network security mechanism. It is a technology to fix the network delay and jam problem and etc. For the network service, the quality of service includes the transmission bandwidth, delay, the packet loss and etc. We can guarantee the transmission bandwidth, lower the delay, reduce the loss of the data packet and anti-dither to enhance the quality.

We can set the DSCP (Differentiated Services Code Point) of the IP to distinguish the data packet so that the router or the hub can provide different services for various data packets. It can select the different queues according to the priority (64 different priority levels) of the packets and select the

bandwidth of the each queue. Level 0 is the lowest, and level 63 is the highest. It can also discard at the different ratio when the broad bandwidth is jam.

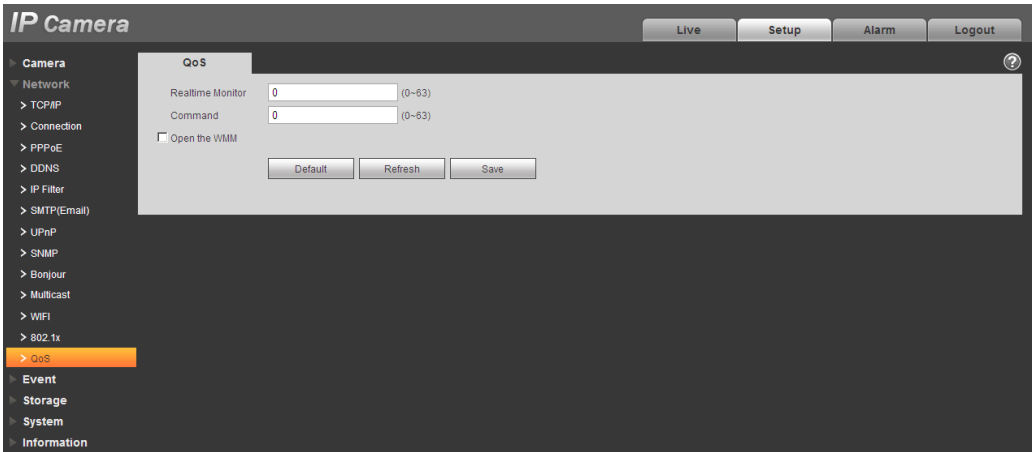


Figure 5- 36

Please refer to the following sheet for detailed information.

Parameter	Function
Real-time monitor	The value ranges from 0 to 63. The router or the switcher can provide different service for various data packets.
Command	The value ranges from 0 to 63. The router or the switcher can provide different service for various data packets.

5.3 Event

5.3.1 Video detect

5.3.1.1 Motion Detect

The motion detect interface is shown as in Figure 5- 37 through Figure 5- 38.

IP Camera

Live

PTZ

Playback

Setup

Alarm

Logout

Camera

Network

Event

Video Detect

Alarm

Abnormality

Storage

System

Information

Motion Detect

Video Tamper

Enable

Working Period

Setup

5

Second (0~100)

Area

Setup

Record

Record Delay

10

Second (10~300)

Relay-out

Alarm Delay

10

Second (10~300)

Send Email

PTZ

Snapshot

Default

Refresh

Save

Figure 5- 37

IP Camera

Live

PTZ

Playback

Setup

Alarm

Logout

Camera

Network

Event

Video Detect

Alarm

Abnormality

Storage

System

Information

Motion Detect

Video Tamper

Enable

Working Period

Setup

Record

Record Delay

10

Second (10~300)

Relay-out

Alarm Delay

10

Second (10~300)

Send Email

PTZ

Snapshot

Default

Refresh

Save

Figure 5- 38

60

Working Period

0 2 4 6 8 10 12 14 16 18 20 22 24

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

☐ All
 ☒ Sunday
 ☐ Monday
 ☐ Tuesday
 ☐ Wednesday
 ☐ Thursday
 ☐ Friday
 ☐ Saturday

☒ Period 1: 00 : 00 : 00 - 23 : 59 : 59
☐ Period 2: 00 : 00 : 00 - 23 : 59 : 59
☐ Period 3: 00 : 00 : 00 - 23 : 59 : 59
☐ Period 4: 00 : 00 : 00 - 23 : 59 : 59
☐ Period 5: 00 : 00 : 00 - 23 : 59 : 59
☐ Period 6: 00 : 00 : 00 - 23 : 59 : 59

Figure 5- 39

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	You need to check the box to enable motion detection function.
Working Period	Here you can set arm/disarm period. Click on set button to open period setup menu. There are six periods every day for setup and you must check box in front of each period to enable it. Note: Period setup can be done by dragging mouse while not release left mouse.
Anti-dither	System only memorizes one event during the anti-dither period. The value ranges from 0s to 100s.
Area	Here you can set motion detection region and its sensitivity and area. (The higher the sensitivity is, the easier to trigger motion detect; the smaller the area, the easier to trigger motion detect.) The default covers all regions. You must click on save before enabling your setup.

Parameter	Function
Record	Check it and so when alarm occurs, system will auto record. You shall set record period in Storage>Schedule and select auto record in record control interface.
Record Delay	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Relay out	Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs.
Alarm Delay	System can delay the alarm output for specified time after alarm ended. The value ranges from 10s to 300s.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends. User can set email address in Network>SMTP.
Audio linkage	Check it and the system will play alarm audio file when alarm occurs. User can set the recorded or uploaded audio file in “camera setting > audio > alarm audio”.
Flash linkage	Check it and the flash will be on when alarm occurs, and the flash will be off until the end of alarm after corresponding delay.
PTZ	- Here you can set PTZ movement when alarm occurs. Such as go to preset x when there is an alarm. - The event type includes: preset, tour and pattern.
Snapshot	You need to check the box here so that system can backup motion detection snapshot file. You shall set snapshot period in Storage>Schedule.

See Figure 5- 40.

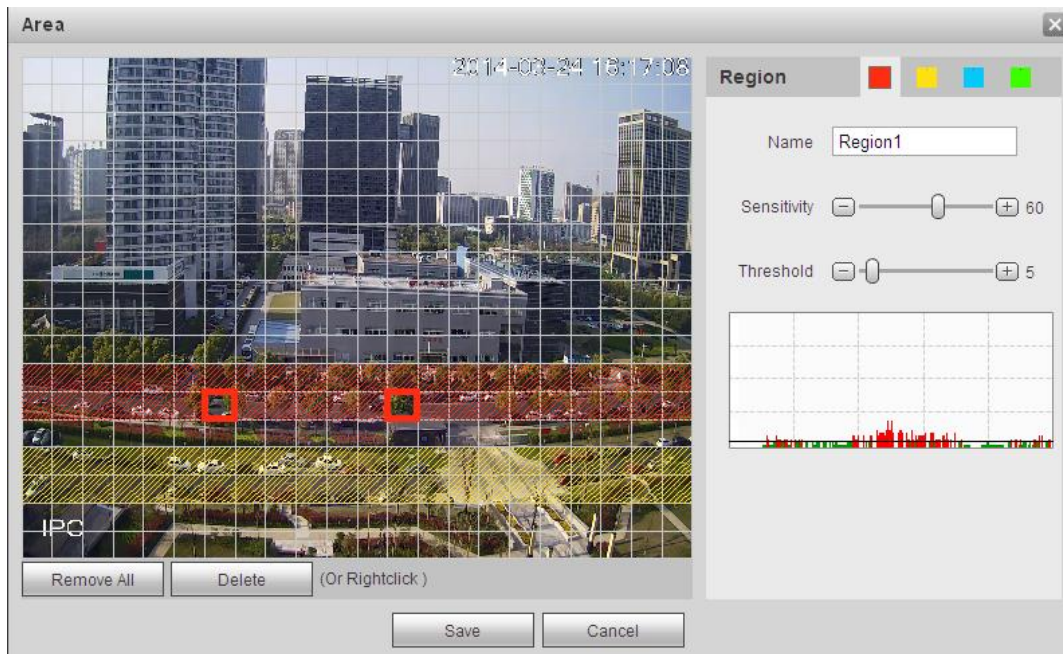


Figure 5- 40

Different colors represent different areas. Each area can set different detection zones. Detection zone can be irregular and discontinuous. If device monitoring zone is large, user can sub-divide the area into several zones for better motion detect.

Please refer to the following sheet for detailed information.

Parameter	Function
Name	Default area name includes Region0, Region1, Region2, Region3 and custom.
Sensitivity	It is sensitivity of brightness as motion detection is more possible to be trigger with high sensitivity. You can set up to four areas. The range is 0~100. The recommended value is 30~70.
Area threshold	It is to check target object area related to detection area. The lower the area threshold, the easier to trigger motion detection. You can set up to four areas. The range is 0~100. The recommended value is 0~10.
Waveform	Red means motion detect is triggered. Green means motion detect is not triggered.
Delete all	Clear all areas.
Delete	Delete selected area.

5.3.2 Alarm

Please note some series products do not support this function.

5.3.2.1 PIR alarm

The alarm activation interface PIR alarm is shown as in figure 5- 41.

The screenshot displays the 'IP Camera' web interface. On the left is a sidebar menu with categories: Camera, Network, Event, Video Detect, Alarm (highlighted), Abnormality, Storage, System, and Information. The main panel has tabs: Live, Playback, Setup, Alarm, and Logout. Under the 'Setup' tab, there are sub-tabs: PIR Alarm, Relay Activation, Flash Set, and Audio Detect. The 'PIR Alarm' sub-tab is selected, showing the following configuration options:

- ☐ Enable
- Working Period: [Setup button]
- Anti-Dither: [0] Second (0~100)
- ☒ Flash
 - Flash Delay: [10] Second (10~300)
- ☒ Record
 - Record Delay: [10] Second (10~300)
- ☒ Relay-out
 - Alarm Delay: [10] Second (10~300)
- ☐ Send Email
- ☐ Audio Linkage
- ☐ Snapshot

At the bottom of the configuration area are three buttons: Default, Refresh, and Save.

Figure 5- 41

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	After enabled, relay activation will work. Check it and enable the PIR alarm.
Working period	● This function becomes activated in the specified periods. ● There are six periods in one day. Please draw a circle to enable corresponding period. ● Select date. If you do not select, current setup applies to today only. You can select all week column to apply to the whole week. ● Click OK button, system goes back to motion detection interface; please click save button to exit. Note: User can set via dragging mouse while not releasing left mouse.
Anti-dither	System only memorizes one event during the anti-dither period. The value ranges from 0s to 100s.
Flash	After enabling, the system will automatically turn on the flash when alarm occurs.
Flash Delay	• The flash will be off with a period of time delay when the alarm linkage is over. • Time is calculated by unit of second and ranges from 10s~300s.
Record	System auto activates motion detection channel to record once alarm occurs (working with motion detection function).
Record Delay	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Relay out	Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs.
Alarm delay	System can delay the alarm output for specified time after alarm ended. The value ranges from 10s to 300s.
Send Email	After this function is enabled, system can send out email to alert you when alarm occurs and ends.
Audio Linkage	Check it and the system will play alarm audio file when alarm occurs. Users can set recorded audio file in "Camera Setting > Audio > Alarm Audio".
Snapshot	After you enabled snapshot, the system will automatically snapshot if alarm occurs.

5.3.2.1 Alarm Linkage

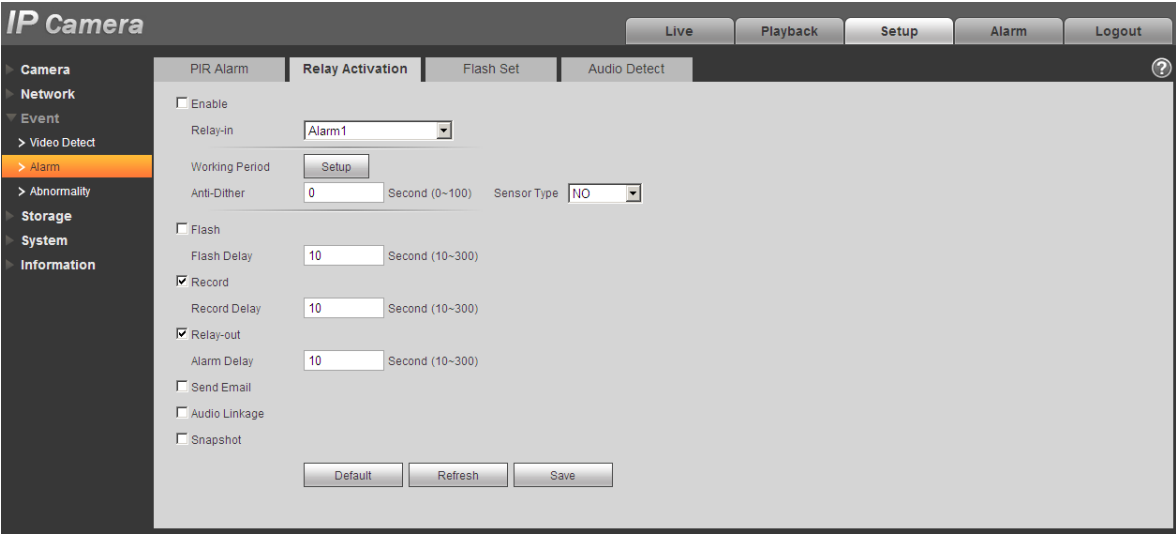


Figure 5-42

Parameter	Function
Enable	Check it and enable the alarm linkage.
Relay-in	The default alarm 1, some products can choose alarm 2.
Sensor Type	Two types of sensor which are normally open (NO) and normally closed (NC), switch from normally open to normally closed, open the alarm. Switch from normally closed to normally open, shut the alarm.
PTZ	Check it and set PTZ movement when alarm occurs. Such as go to preset x when there is an alarm. The event type includes: preset, tour and pattern and so on.

5.3.2.2 Flash Set

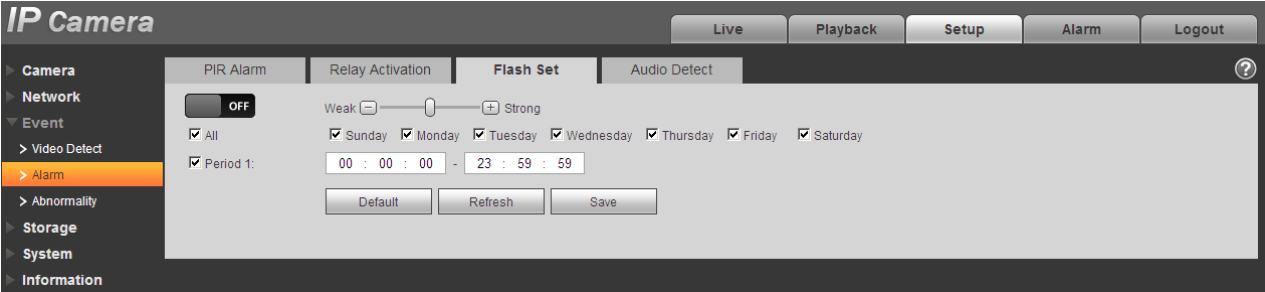


Figure 5-43

Parameter	Function
ON/OFF	ON means flash is on; OFF means flash is off.
Weak-strong bar	Via dragging this bar to adjust flash brightness.
All	Check and it means the day flash works.
Period	Period that flash is on.

5.3.2.3 Audio detection

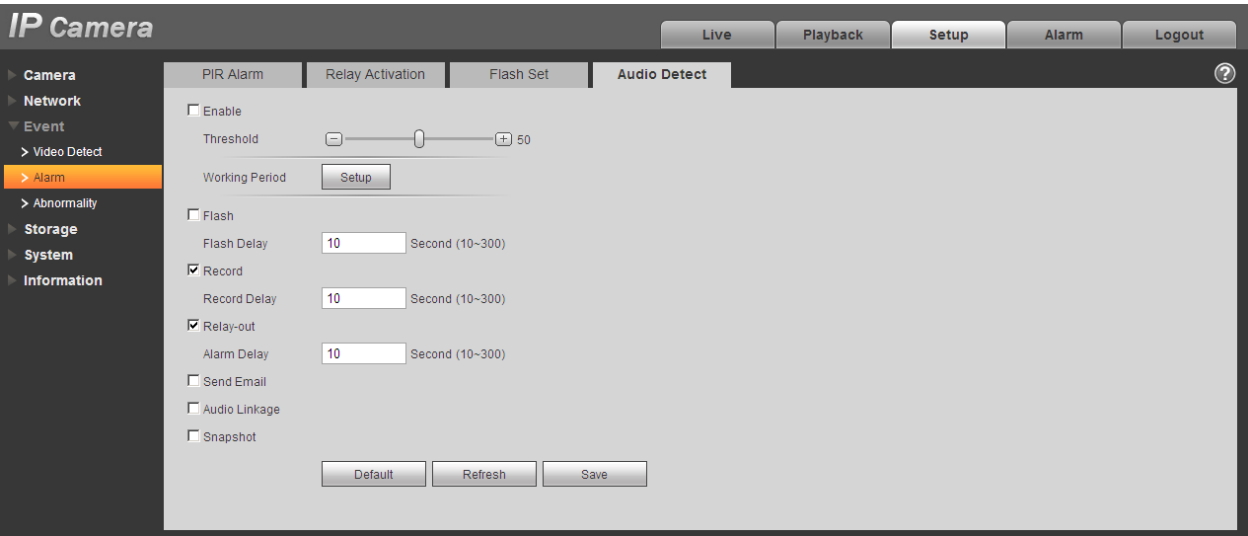


Figure 5-44

parameter	Function
Enable	Check it and enable audio detection.
Threshold	It will trigger alarm and set up a series of linkage when volume exceeds the set threshold.

5.3.3 Abnormity

Abnormity includes No SD Card, Capacity Warning, SD Card Error, Disconnection, IP Conflict and Unauthorized Access.

Note:

Only device with SD card function has these three statuses: No SD card, capacity warning, SD card error.

Device without SD card function does not have the above three statuses. See Figure 5-



Figure 5- 45

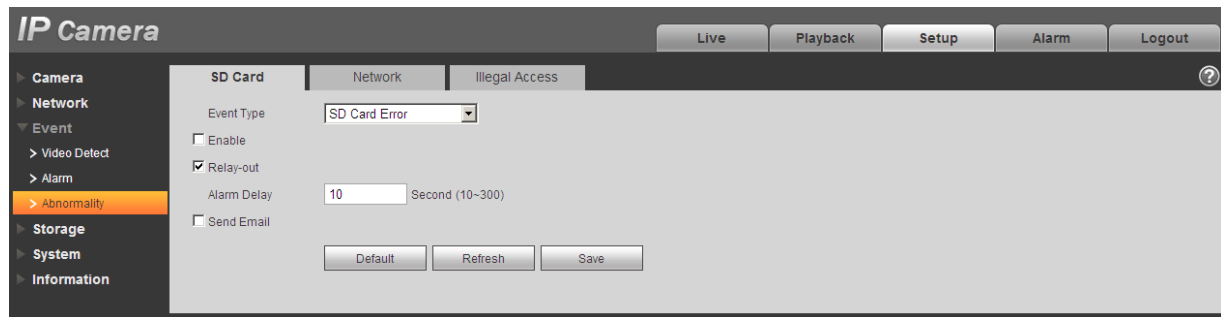


Figure 5-46



Figure 5-47

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	Check to alarm when SD card is abnormal.
Relay-out	Check to enable relay-out alarm.
Relay out delay	The alarm output can delay for the specified time after alarm stops. The value ranges from 10s to 300s. Note: No SD card, capacity warning, SD card error, relay-out delay all start from alarm occurs.
Send email	After you enabled this function, the system can send out email to alarm the specified user. This function is invalid when network is offline or IP conflict occurs.
SD Card Capacity Limit	User can set SD card capacity that is left free. When SD card space left is smaller than this limit, alarm occurs.

When device is offline or IP conflicts, the abnormal alarm is similar with case of SD card error.

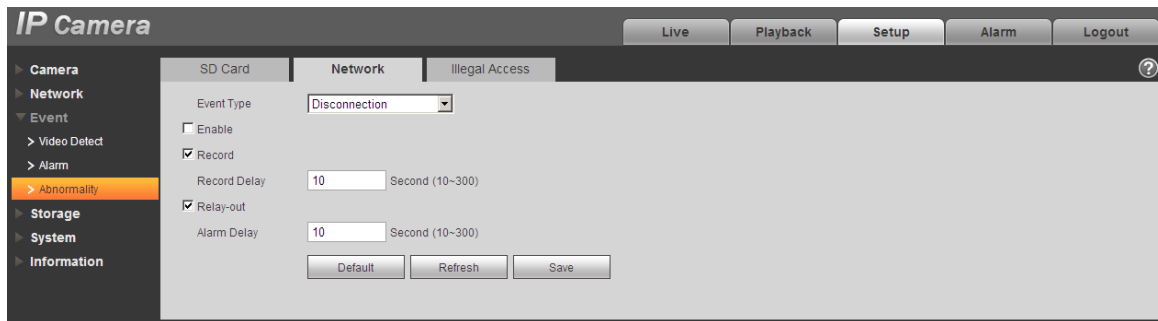


Figure 5- 48

When login password keep been wrong for a few times, unauthorized access alarm occurs. This operation is similar to SD card error. Allow login error times as when it exceeds this limit, user account will be locked.



Figure 5- 49

5.4 Storage Management

5.4.1 Schedule

Before schedule setup, user must set record mode is auto or manual.

Note:

If record mode in record control is off, then device will not snapshot according to schedule.

5.4.1.1 Record Schedule

Record schedule steps:

Step 1. Click on Record Schedule, see Figure 5- 50.

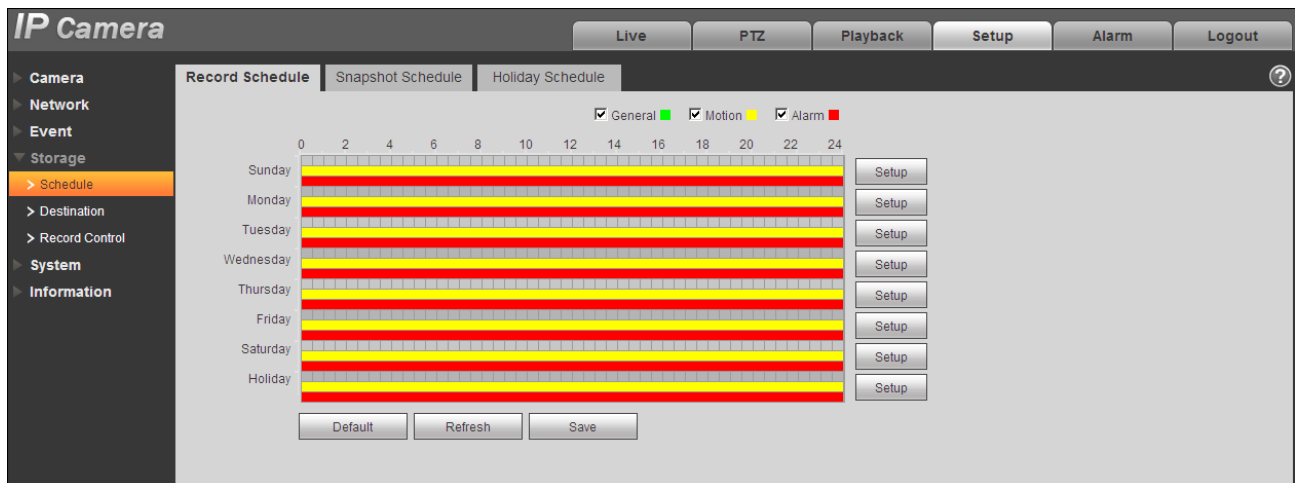


Figure 5- 50

Step 2. From Monday to Sunday select record time, click on setup on the right, see Figure 5- 51.

- Set period according to actual need. There are six periods available each day.
- By checking or unchecking, you can add or delete three types of record schedule: General, Motion, and Alarm.

Note:

Period setup can be done by dragging in record schedule interface while not releasing left mouse.

The 'Setup' dialog box is titled 'Setup' and has a close button (X) in the top right corner. It contains a row of checkboxes for days of the week: ☐ All, ☒ Sunday, ☐ Monday, ☐ Tuesday, ☐ Wednesday, ☐ Thursday, ☐ Friday, ☐ Saturday, and ☐ Holiday. Below this, there are six rows labeled 'Period 1:' through 'Period 6:'. Each row contains two time selection fields (HH : MM : SS) separated by a hyphen, followed by three checkboxes: 'General', 'Motion', and 'Alarm'. For Period 1, 'General' is unchecked, 'Motion' is checked, and 'Alarm' is checked. For Periods 2 through 6, all three checkboxes are unchecked. At the bottom of the dialog are 'Save' and 'Cancel' buttons.

Figure 5- 51

Step 3. Click on OK, return to record schedule interface. See Figure 5- 52.

- Green color stands for the general record/snapshot.
- Yellow color stands for the motion detect record/snapshot.
- Red color stands for the alarm record/snapshot.

The 'IP Camera' interface shows a top navigation bar with 'Live', 'PTZ', 'Playback', 'Setup', 'Alarm', and 'Logout' buttons. A left sidebar contains a tree view with 'Camera', 'Network', 'Event', 'Storage', 'Schedule' (highlighted), 'Destination', 'Record Control', 'System', and 'Information'. The main area is titled 'Record Schedule' and has tabs for 'Record Schedule', 'Snapshot Schedule', and 'Holiday Schedule'. A legend at the top indicates: ☒ General (green square), ☒ Motion (yellow square), and ☒ Alarm (red square). Below the legend is a 24-hour timeline (0 to 24) and a grid for each day of the week (Sunday to Holiday). The grid cells are colored: green for General, yellow for Motion, and red for Alarm. For Sunday, the first 12 hours are green, and the remaining 12 hours are red. For Monday through Saturday, the first 12 hours are red and the remaining 12 hours are yellow. For the Holiday, the entire 24 hours are yellow. To the right of the grid are 'Setup' buttons for each day. At the bottom are 'Default', 'Refresh', and 'Save' buttons.

Figure 5- 52

Step 4. In record schedule interface, click on OK. System prompts it is successfully saved.

5.4.1.2 Snapshot Schedule

Snapshot setup as:

Step 1. Click on Snapshot Schedule tab, see Figure 5- 53.

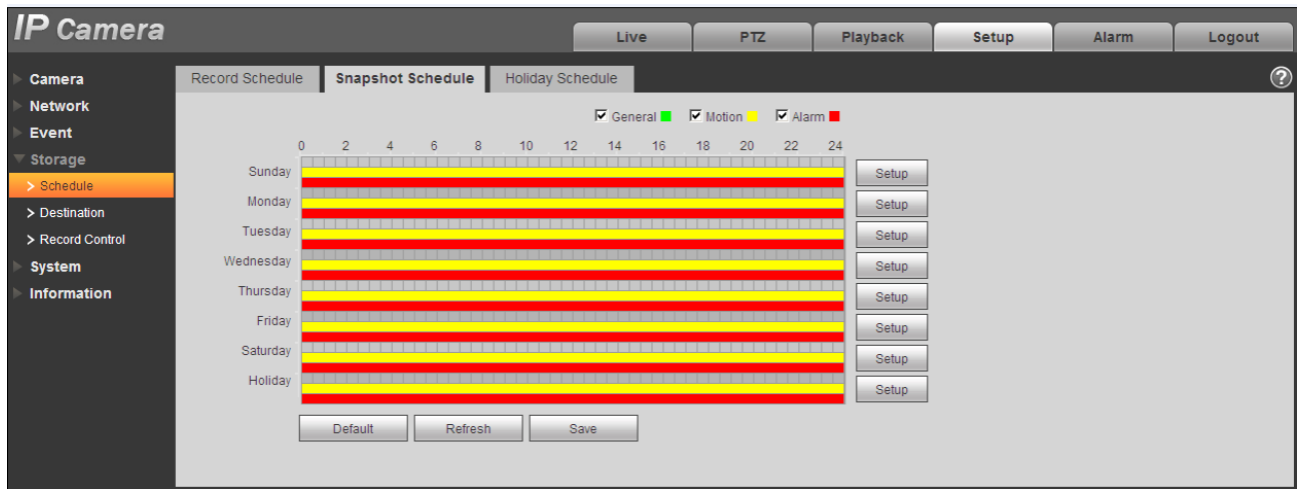


Figure 5- 53

Step 2. From Monday to Sunday select snapshot time, click on setup on the right. See Figure 5-

- Set snapshot period according to actual need. There are six periods available each day.
- By checking or unchecking, user can add or delete three types of snapshot schedule: General, Motion and Alarm.

Note: Period setup can be done by dragging in snapshot schedule interface while not releasing left mouse.

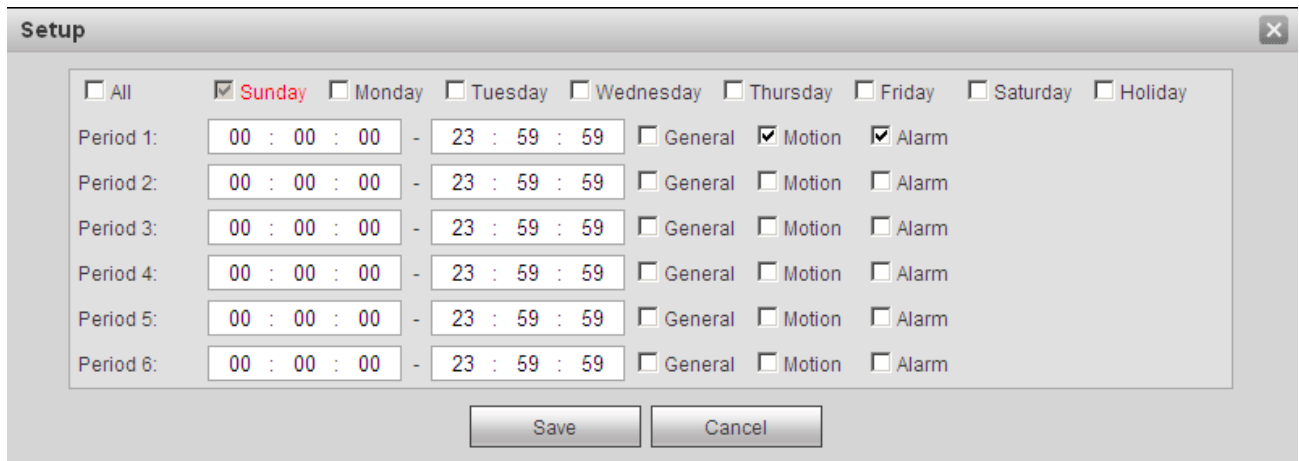


Figure 5- 54

Step 3. Click on OK, return to snapshot schedule interface. See Figure 5- .

- Green color stands for the general record/snapshot.

- Yellow color stands for the motion detect record/snapshot.
- Red color stands for the alarm record/snapshot.

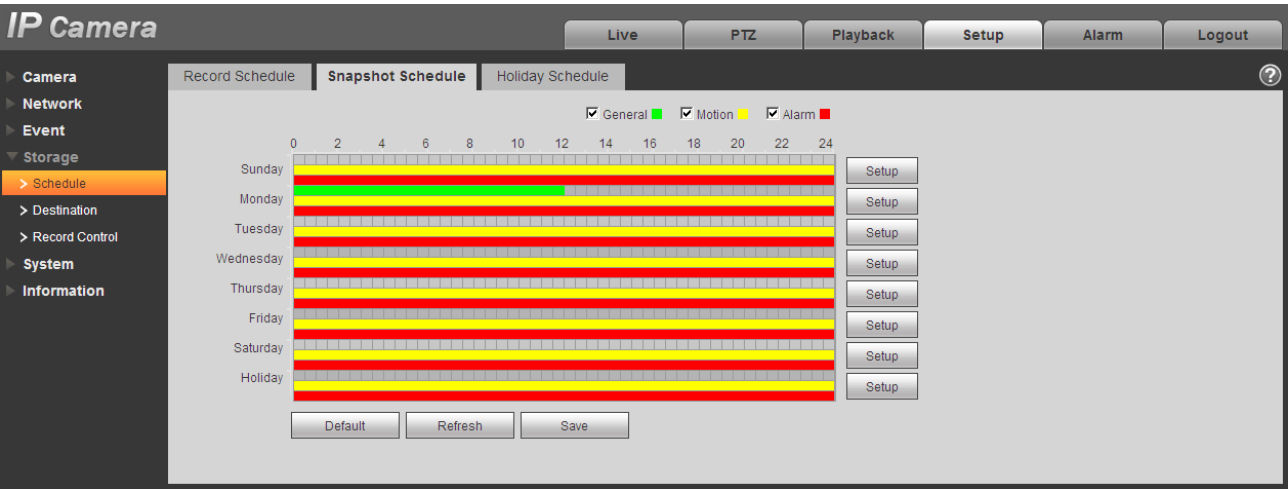


Figure 5- 55

Step 5. In snapshot interface, click on OK. System prompts it is successfully saved.

5.4.1.3 Holiday Schedule

Holiday schedule can set specific date as holiday.

Step 1. Click on Holiday Schedule tab, see Figure 5- .

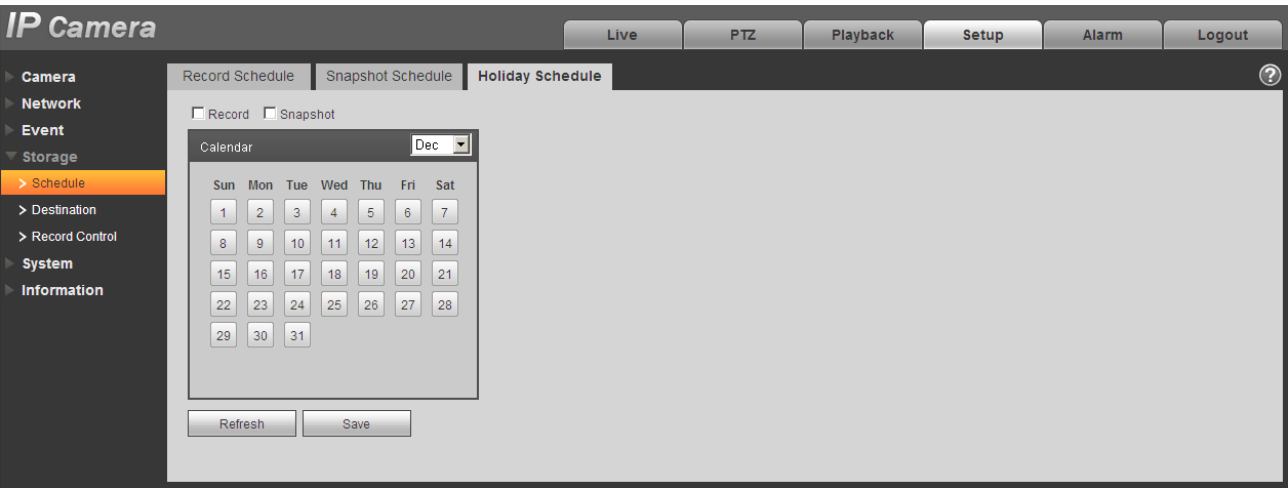


Figure 5- 56

Step 2. Select date to set as holiday. The selected date will be highlighted in yellow.

- Step 3. Check Record/Snapshot, click on Save. System prompts it is successfully saved.
- Step 4. Check Record Schedule/Snapshot Schedule interface, click on setup next to Holiday, refer to setup of Monday to Sunday.
- Step 5. Complete setup of holiday, then it records/snapshots according to date in holiday schedule.

5.4.2 Destination

5.4.2.1 Path

The destination interface is shown as in Figure 5- 57

Path can config record and snapshot storage path. There are three options: Local, FTP and NAS. You can only select one mode. System can save according to the event types. It is corresponding to the three modes (general/motion/alarm) in the Schedule interface. Please check the box to enable the save functions.

Note: Only device supports SD card has local.

Record				Snapshot			
Event Type	Scheduled	Motion Detect	Alarm	Event Type	Scheduled	Motion Detect	Alarm
Local	☒	☒	☒	Local	☒	☒	☒
FTP	☐	☐	☐	FTP	☐	☐	☐
NAS	☐	☐	☐	NAS	☐	☐	☐

Figure 5- 57

Please refer to the following sheet for detailed information.

Parameter	Function
Event Type	It includes: scheduled, motion detect and alarm.
Local	It saved in the SD card.
FTP	It saved in the FTP server.
NAS	It saved in NAS disk.

5.4.2.2 Local

The local interface is shown as in Figure 5- 58.

Here you can view local Micro SD card or NAS disk information. You can also operate the read-only, write-only, hot swap and format operation.

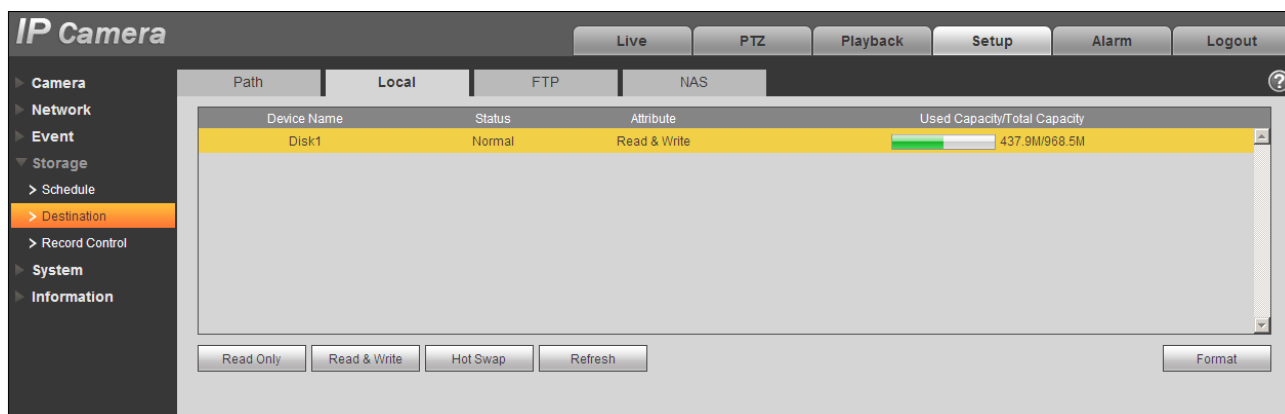


Figure 5- 58

5.4.2.3 FTP

The FTP interface is shown as in Figure 5- 59.

You need to check the box to enable the FTP function. When network disconnect occurred or there is malfunction. Emergency storage can save the record/snapshot picture to the local SD card.

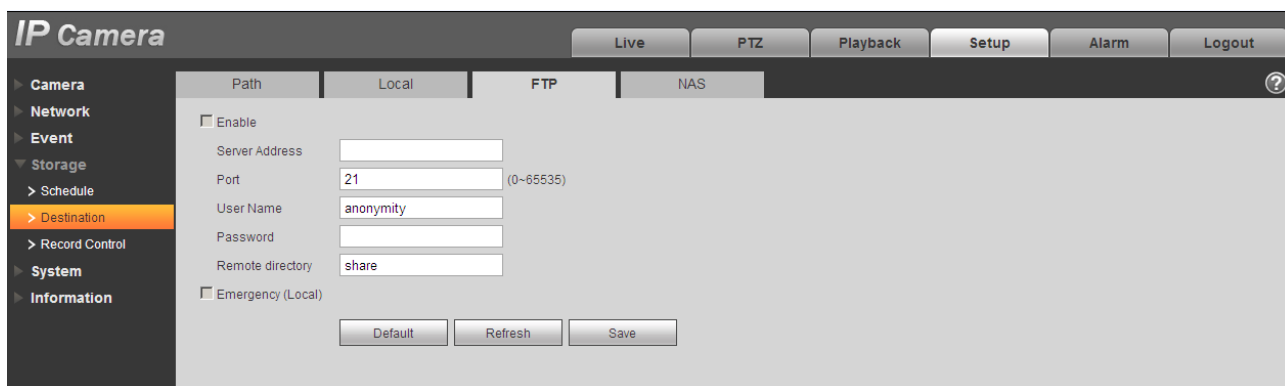


Figure 5- 59

5.4.2.4 NAS

You need to check the box to enable the NAS function. Select NAS storage, fill in NAS server address and corresponding store path, then you can store video file or pictorial information in the NAS server.

Select NAS storage as same file to NAS disk. See Figure 5- 60.

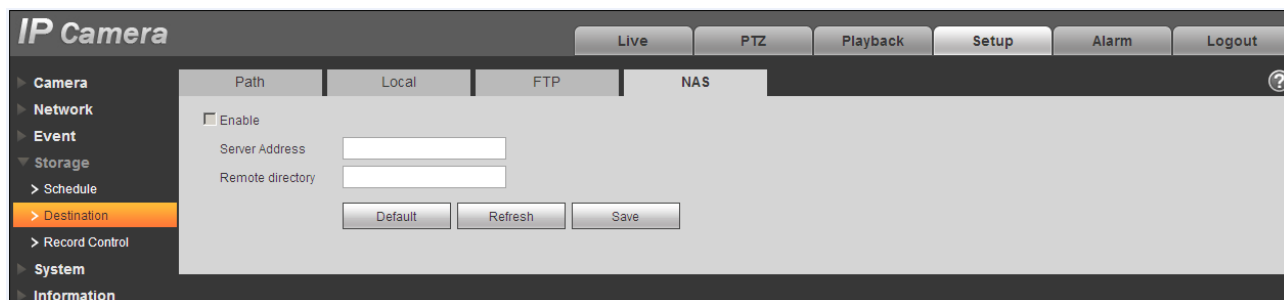


Figure 5- 60

Parameter	Function
Server Address	Set IP address of NAS server.
Remote Directory	Set storage directory, videos and pictures can be stored in to corresponding server directory.

5.4.3 Record control

The record control interface is shown as in Figure 5- 61.

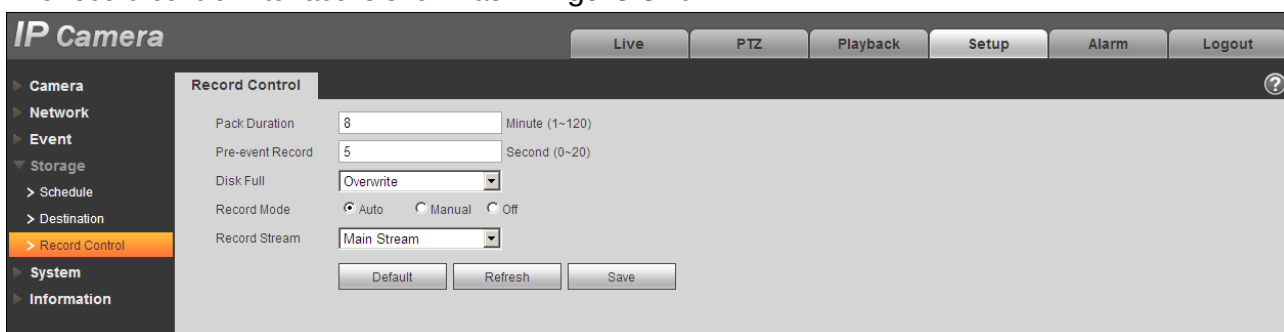


Figure 5- 61

Please refer to the following sheet for detailed information.

Parameter	Function
Pack Duration	Here you can select file size within 1min~120min. Default setup is 8 minutes.

Pre-record	Please input pre-record value here. For example, system can record the four seconds video in the buffer. The record begins from the fifth second. Note: Configure pre-record time, when alarm or motion detection occurs, if there is no record, system will record the preceding n seconds record.
Disk Full	There are two options: stop recording or overwrite the previous files when HDD is full. ● Stop: Current working HDD is overwriting or current HDD is full, it will stop record. ● Overwrite: Current working HDD is full; it will overwrite the previous file.
Record mode	There are three modes: Auto/manual/close.
Record stream	There are two options: main stream and sub stream.

5.5 System

5.5.1 General

The General interface is shown as in Figure 5- 62.

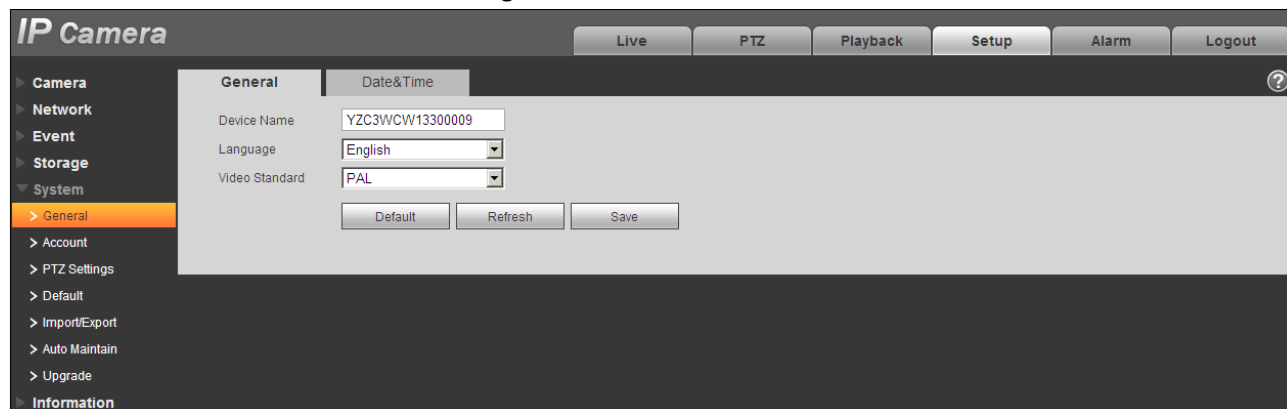


Figure 5- 62

Please refer to the following sheet for detailed information.

Parameter	Function
Device Name	It is to set device name.

Video Standard	This is to display video standard such as PAL.
Language	You can select the language from the dropdown list.

The date and time interface is shown as in Figure 5- 63.

The screenshot shows the 'IP Camera' web interface with the 'Setup' tab selected. The 'Date & Time' sub-tab is active. The left sidebar lists various system settings categories. The main content area contains the following settings:

- Date Format:** Year-Month-Day
- Time Format:** 24-Hour-based System
- Time Zone:** GMT+08:00
- Current Time:** 2013 - 12 - 18 15 : 49 : 13 (with a 'Sync PC' button)
- DST Enable:** ☐ (unchecked)
- DST Type:** Date (selected) / Week
- Start Time:** Jan 1 00 : 00 : 00
- End Time:** Jan 2 00 : 00 : 00
- Synchronize with NTP:** ☐ (unchecked)
- NTP Server:** clock.isc.org
- Port:** 123
- Update Period:** 10 Minute (0~30)

Buttons at the bottom include 'Default', 'Refresh', and 'Save'.

Figure 5- 63

Please refer to the following sheet for detailed information.

Parameter	Function
Date format	Here you can select date format from the dropdown list.
Time Format	There are two options: 24-H and 12-H.
Time zone	The time zone of the device.
System time	It is to set system time. It becomes valid after you set.
Sync PC	You can click this button to save the system time as your PC current time.
DST	Here you can set day night save time begin time and end time. You can set according to the date format or according to the week format.
NTP	You can check the box to enable NTP function.

NTP server	You can set the time server address.
Port	It is to set the time server port.
Update period	It is to set the sync periods between the device and the time server.

5.5.2 Account

- For the character in the following user name or the user group name, system max supports 15-digits. The valid string includes: character, number, and underline.
- Password can be 0~32 characters in number and letter only. User can modify other user's password.
- The user amount is 18 and the group amount is 8 when the device is shipped out of the factory. The factory default setup includes two levels: user and admin. You can set the corresponding group and then set the rights for the respective user in the specified groups.
- User management adopts group/user modes. The user name and the group name shall be unique. One user shall be included in only one group.
- Currently logged in user cannot change his/her own right.
-

5.5.2.1 Username

In this interface you can enable anonymity login, add/remove user and modify user name. See Figure 5- 64.

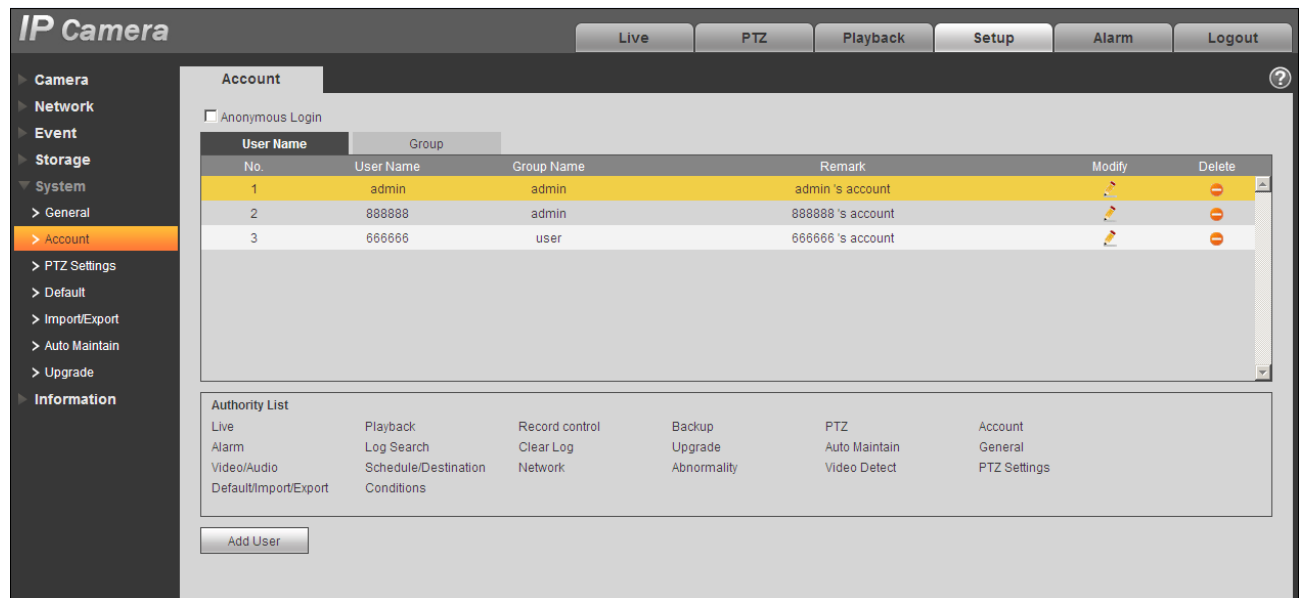


Figure 5- 64

Enable anonymity login: Enable anonymity login, and input IP. No username or password is required, you can log in by anonymity (with limited rights). You can click logout to end your session.

Add user: It is to add a name to group and set the user rights. See Figure 5- .

There are four default users: admin/888888/666666 and hidden user “default”. Except user 66666, other users have administrator right. The user 666666 can only have the monitor rights,.

Hidden user “default” is for system interior use only and cannot be deleted. When there is no login user, hidden user “default” automatically login. You can set some rights such as monitor for this user so that you can view some channel view without login.

Here you can input the user name and password and then select one group for current user.

Please note the user rights shall not exceed the group right setup.

For convenient setup, please make sure the general user has the lower rights setup than the admin.

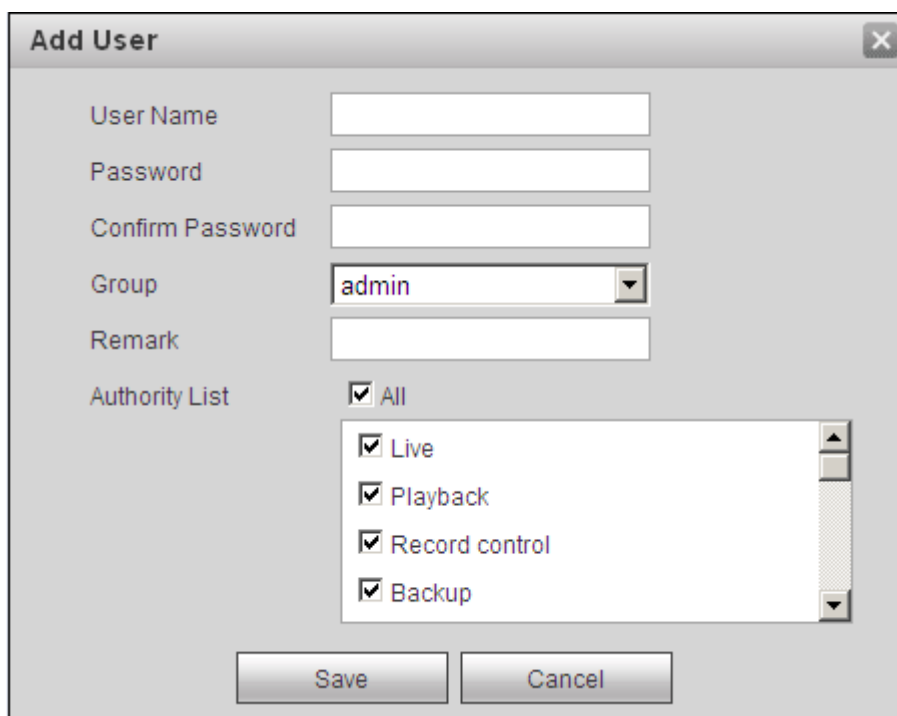


Figure 5- 65

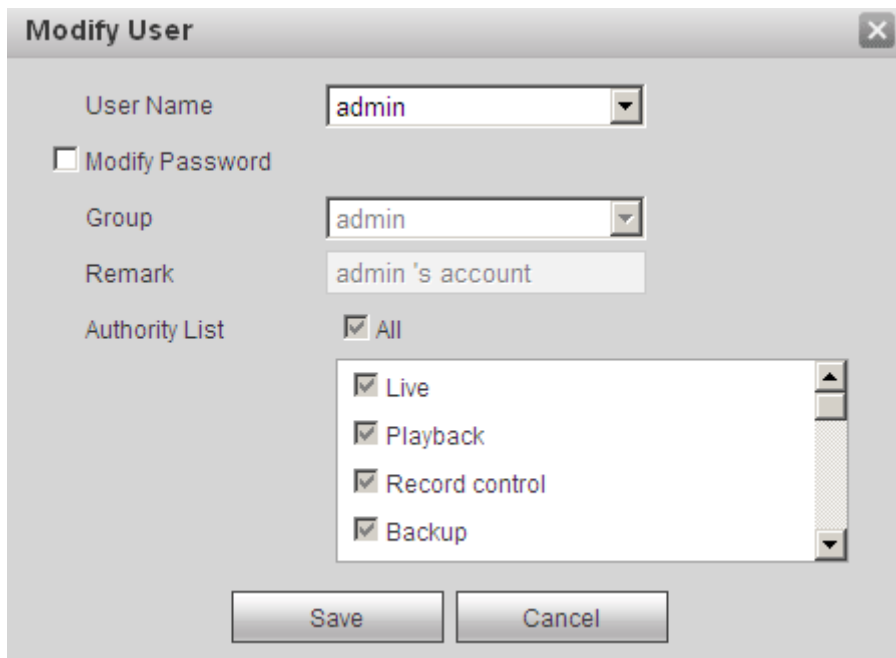
Modify user

It is to modify the user property, belonging group, password and rights. See Figure 5- .

Modify password

It is to modify the user password. You need to input the old password and then input the new password twice to confirm the new setup. Please click the OK button to save.

Please note, the password ranges from 0-digit to 32-digit. It shall include the number and letter only. For the user who has the account rights, he can modify the password of other users.



Modify User

User Name:

☐ Modify Password

Group:

Remark:

Authority List: ☒ All

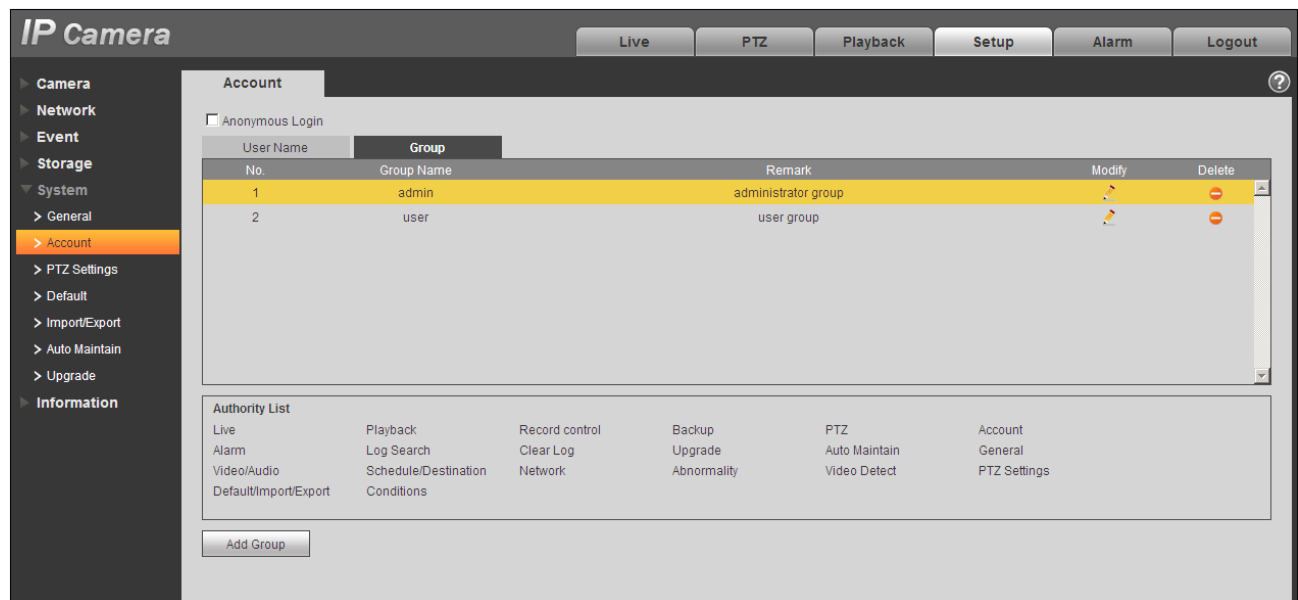
- ☒ Live
- ☒ Playback
- ☒ Record control
- ☒ Backup

Save Cancel

Figure 5- 66

5.5.2.2 Group

The group management interface can add/remove group, modify group password and etc. The interface is shown as in Figure 5- 67.



IP Camera

Live PTZ Playback Setup Alarm Logout

Account

☐ Anonymous Login

No.	Group Name	Remark	Modify	Delete
1	admin	administrator group		
2	user	user group		

Authority List

Live	Playback	Record control	Backup	PTZ	Account
Alarm	Log Search	Clear Log	Upgrade	Auto Maintain	General
Video/Audio	Schedule/Destination	Network	Abnormality	Video Detect	PTZ Settings
Default/Import/Export	Conditions				

Add Group

Figure 5- 67

Add group: It is to add group and set its corresponding rights. See Figure 5- 68.

Please input the group name and then check the box to select the corresponding rights. It includes: preview, playback, record control, PTZ control and etc.

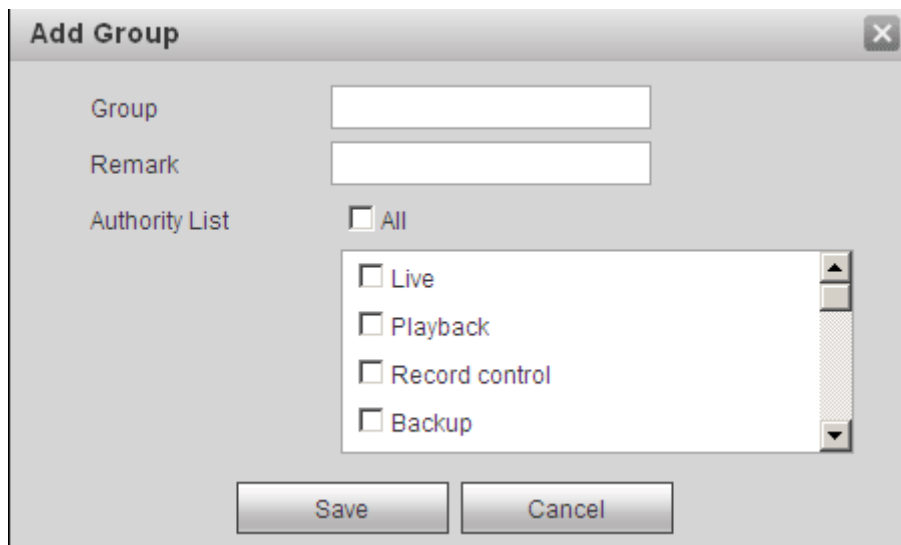
A screenshot of a software dialog box titled "Add Group". It features a close button (X) in the top right corner. The dialog contains three input fields: "Group" (empty), "Remark" (empty), and "Authority List". The "Authority List" section includes a checkbox labeled "All" which is unchecked, and a scrollable list box containing four items: "Live", "Playback", "Record control", and "Backup", each with an unchecked checkbox. At the bottom of the dialog are two buttons: "Save" and "Cancel".

Figure 5- 68

Modify group

Click the modify group button, you can see an interface is shown as in Figure 5- 69.

Here you can modify group information such as remarks and rights.

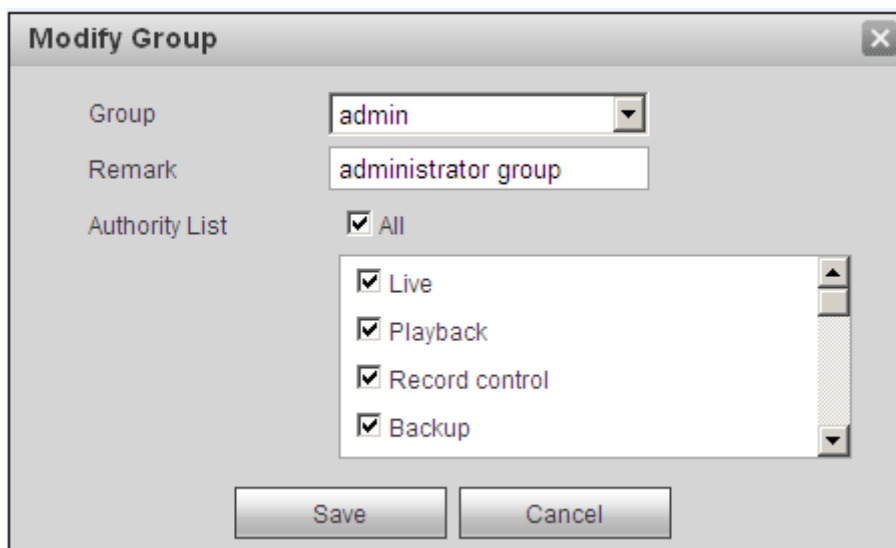
A screenshot of a software dialog box titled "Modify Group". It features a close button (X) in the top right corner. The dialog contains three input fields: "Group" (a dropdown menu showing "admin"), "Remark" (a text box containing "administrator group"), and "Authority List". The "Authority List" section includes a checkbox labeled "All" which is checked, and a scrollable list box containing four items: "Live", "Playback", "Record control", and "Backup", each with a checked checkbox. At the bottom of the dialog are two buttons: "Save" and "Cancel".

Figure 5- 69

5.5.3 PTZ

Please note only some series products support this function.

The PTZ interface is shown as in Figure 5- 70.

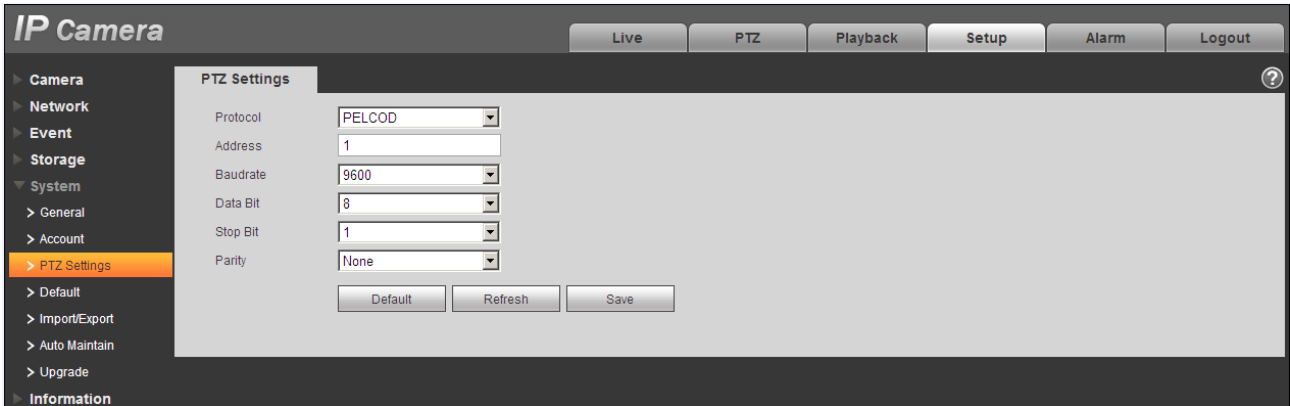


Figure 5- 70

Please refer to the following sheet for detailed information.

Parameter	Function
Protocol	Select the corresponding dome protocol.
Address	Set corresponding dome address. Default value is 1. Please note your setup here shall comply with your dome address; otherwise you can not control the speed dome.
Baud Rate	Select the dome baud rate. Default setup is 9600.
Data Bit	Default setup is 8.
Stop bit	Default setup is 1.
Parity	Default setup is none.

5.5.4 Default

The default setup interface is shown as in Figure 5- 71.

Please note system cannot restore some information such as network IP address.

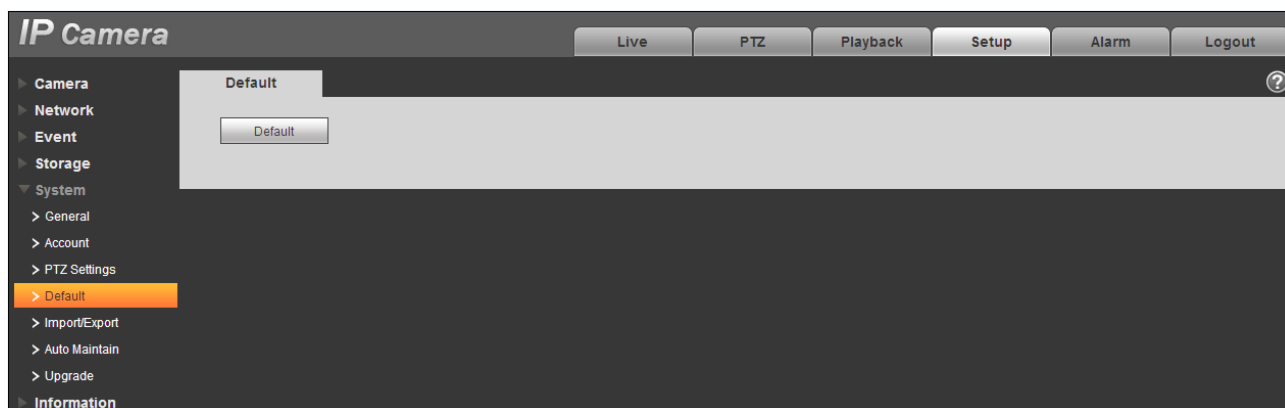


Figure 5- 71

5.5.5 Import/Export

The interface is shown as in Figure 5- 72.

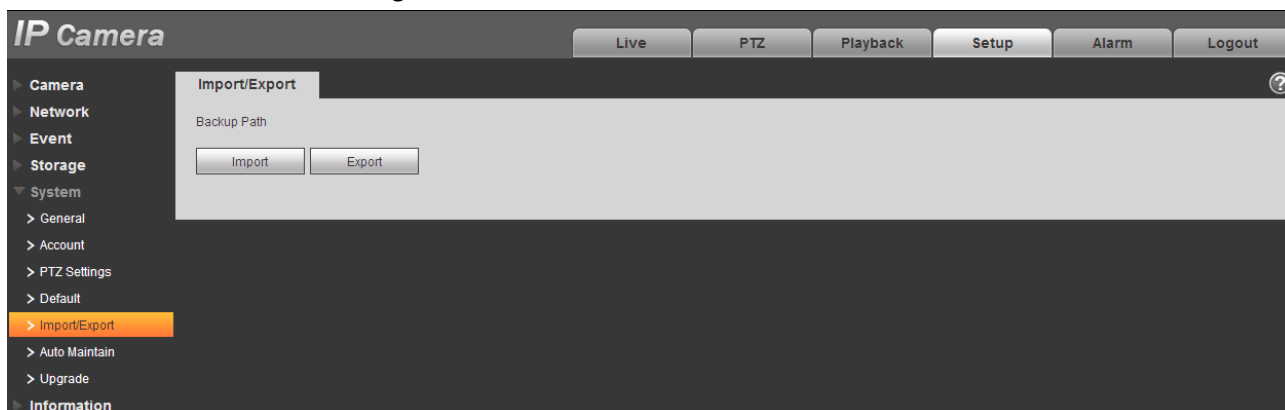


Figure 5-72

Please refer to the following sheet for detailed information.

Parameter	Function
Import	It is to import the local setup files to the system.
Export	It is to export the corresponding system setup to your local PC.

5.5.6 Remote control

Note:

Only supported by some devices.

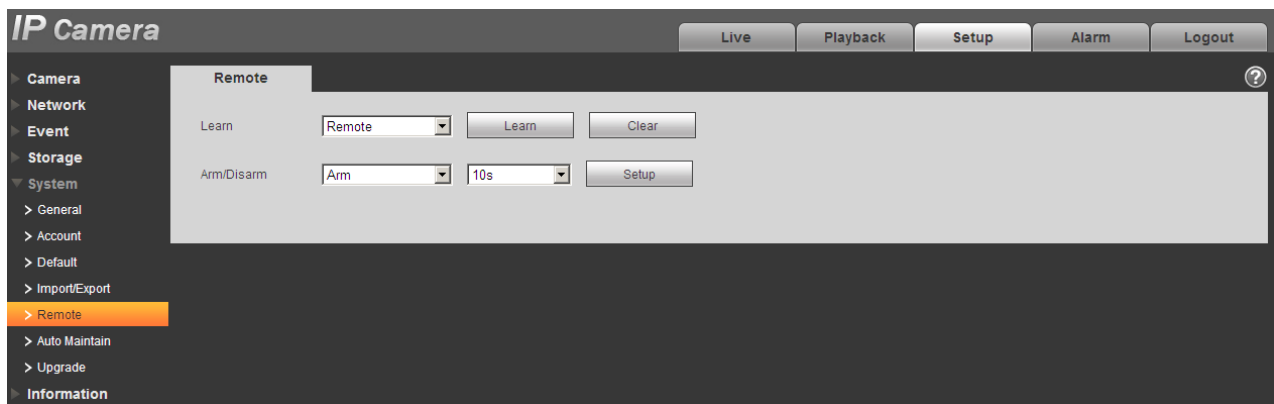


Figure 5-73

Parameter	Function
Learn	Bind remote control or wireless alarm with equipment.
Clear	Unbind remote control with equipment.
Arm/Disarm	Start arm after the time you choose, disarm comes into effect immediately. Note: With disarm status, all the following alarms won't trigger: motion detect alarm, masking alarm, local alarm, PIR alarm, wireless alarm.

5.5.6 Auto Maintenance

The auto maintenance interface is shown as in Figure 5- 74.

Here you can select auto reboot and auto delete old files interval from the dropdown list.

If you want to use the auto delete old files function, you need to set the file period.

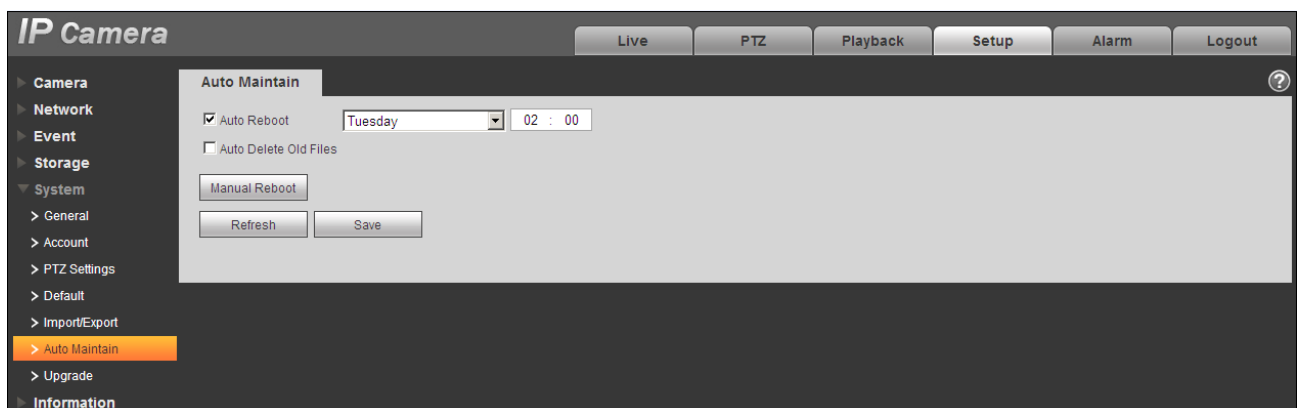


Figure 5- 74

Parameter	Function
Auto Reboot	Check it and set auto reboot time.
Auto Delete Old Files	Check it and set period within 1~31 days.

5.5.7 Upgrade

The upgrade interface is shown as in Figure 5- 75.

Please select the upgrade file (file extension is “.bin”) and then click the update button to begin firmware update.

Important

Improper upgrade program may result in device malfunction!

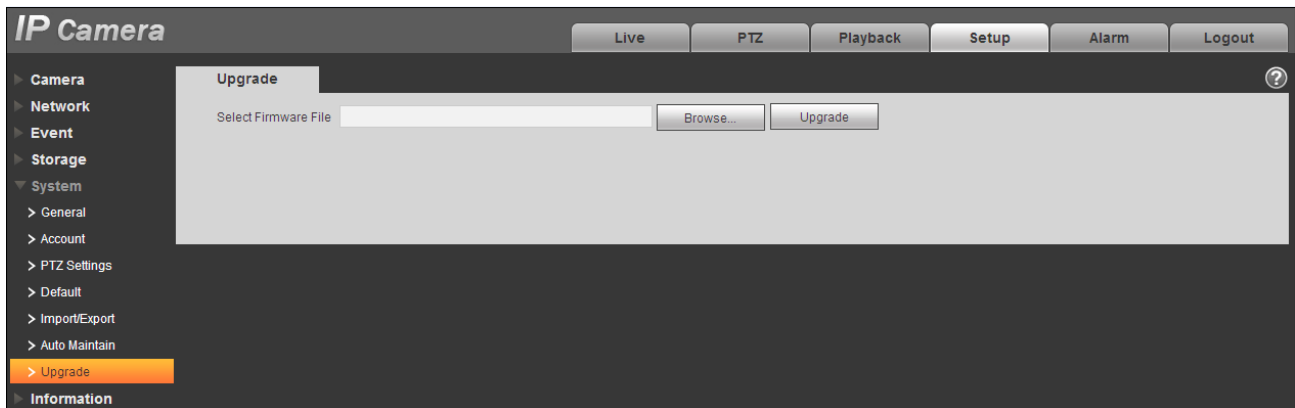


Figure 5- 75

5.6 Information

5.6.1 Version

The version interface is shown as in Figure 5- 76.

Here you can view system hardware features, software version, release date and etc. Please note the following information is for reference only.

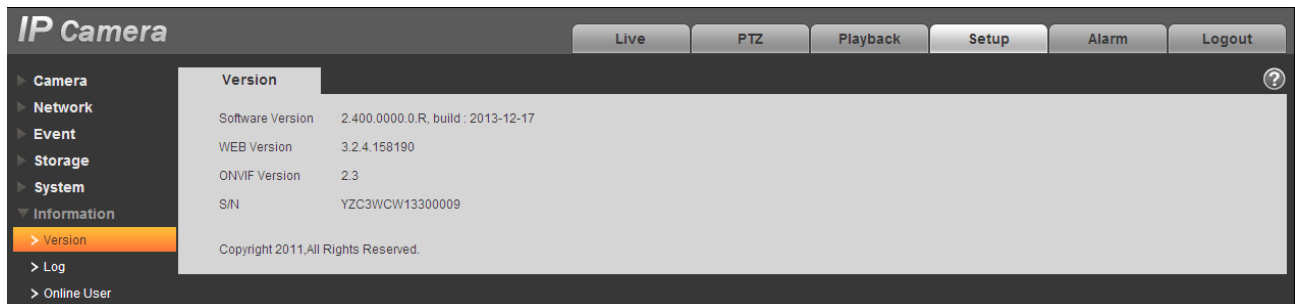


Figure 5- 76

5.6.2 Log

Here you can view system log. See Figure 5- 77.

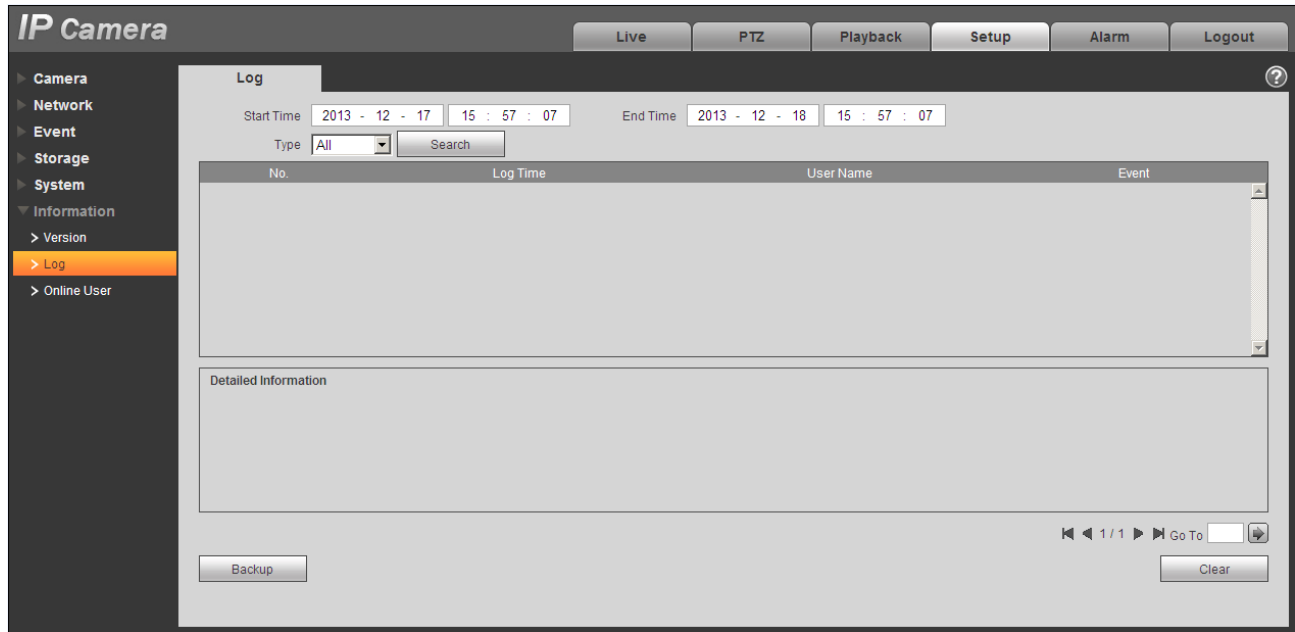


Figure 5- 77

Please refer to the following sheet for log parameter information.

Parameter	Function
Start time	Set the start time of the requested log. (The earliest time is 2000/1/1)
End time	Set the end time of the requested log. (The latest time is 2037/12/31)
Type	Log type.
Search	You can select log type from the drop down list and then click search button to view the list. You can click the stop button to terminate current search operation.
Log information	You can select one item to view the detailed information.
Clear	You can click this button to delete all displayed log files. Please note system does not support clear by type.
Backup	You can click this button to backup log files to current PC.

5.6.3 Online User

The online user interface is shown as in Figure 5- 78.
Here you can view current online user, group name, IP address and login time.

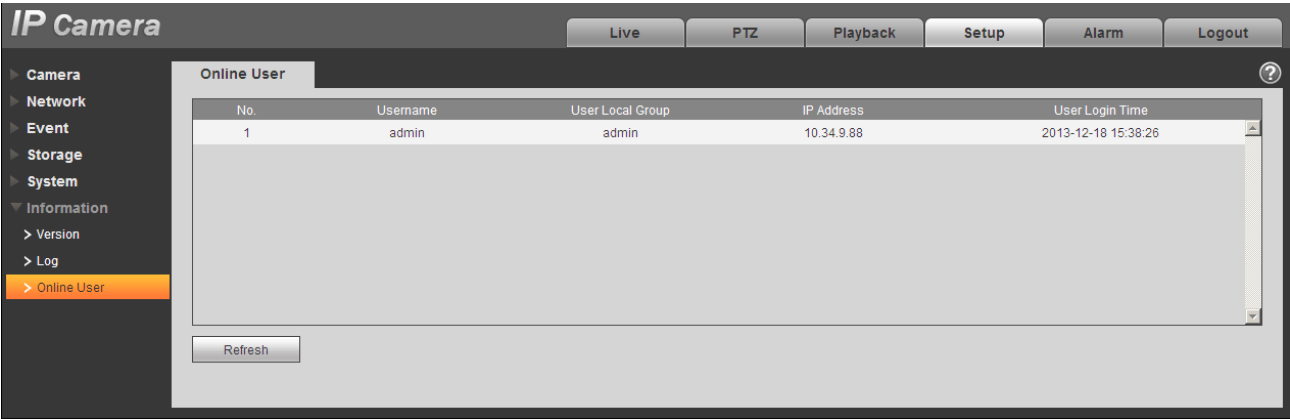


Figure 5- 78

6 Alarm

Please note some series product does not support this function.

Click alarm function, you can see an interface is shown as in Figure 6- 1.

Here you can set device alarm type and alarm sound setup.

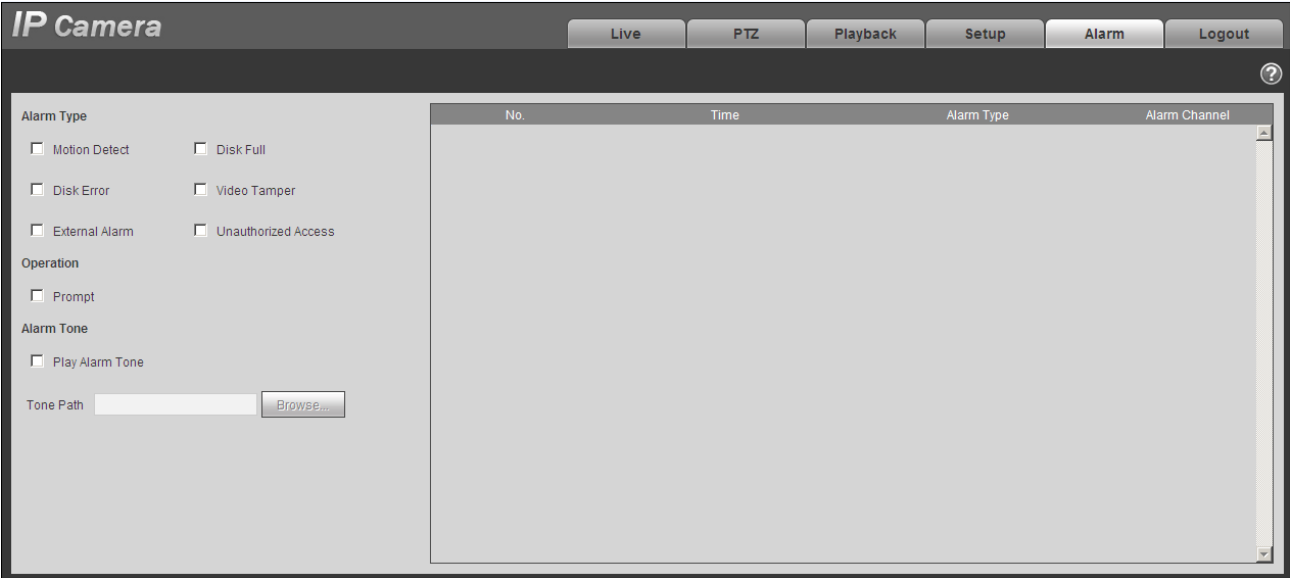


Figure 6- 1

Please refer to the following sheet for detailed information.

Type	Parameter	Function
Alarm type	Motion detection	System alarms when motion detection alarm occurs,
	Disk full	System alarms when disk is full.
	HDD malfunction	System generates an alarm when HDD is malfunction.
	Camera masking	System alarms when camera is viciously masking.
	External alarm	Alarm input device sends out alarm.
	Unauthorized Access	System alarms when there is unauthorized access.
Operation	Prompt	When alarm is triggered, there will be s  inmain menu of alarm interface and system automatically records alarm info. The icon disappears when user click on alarm menu bar. Note: If alarm interface is displayed, when alarm is triggered, there will be no image prompt, but alarm record will be in list on the right.

Type	Parameter	Function
Alarm audio	Audio	When alarm occurs, system auto generates alarm audio. The audio supports customized setup.
	Path	Here you can specify alarm sound file.

7 Log out

Click log out button, system goes back to log in interface. See Figure 7- 1.

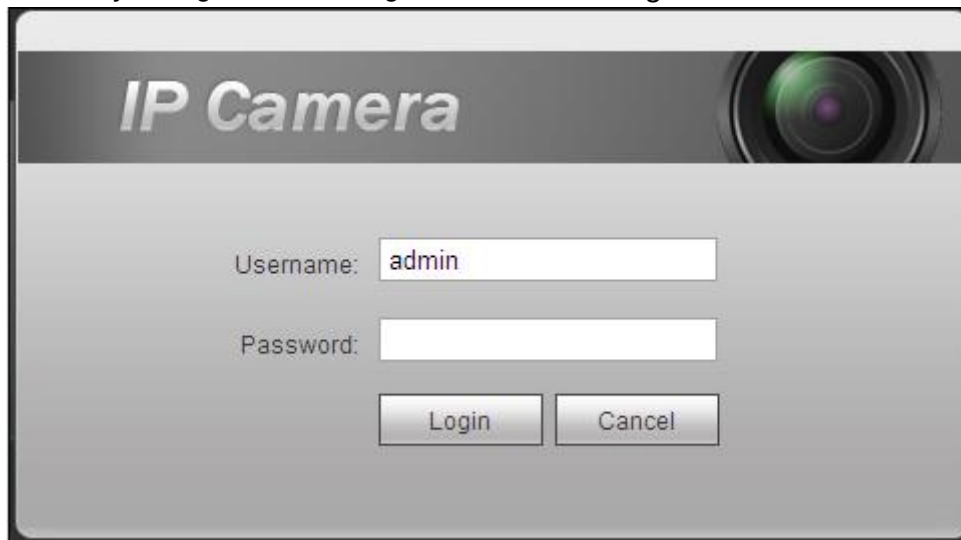


Figure 7- 1

Note:

- This manual is for reference only. Slight difference may be found in user interface.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks mentioned are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website for more information.