



Dahua Network Speed Dome Web3.0 Operation Manual

Table of Contents

1	Network Connection	1
1.1	Preparation.....	1
1.2	Log in	1
1.3	Live Interface	3
1.4	Encode Setup	3
1.5	Video Window Setup	4
1.6	System Menu.....	5
1.7	Video Window Function Option	6
1.8	PTZ Control.....	7
1.9	Joystick.....	8
1.10	PTZ Setup/Menu	8
2	Playback.....	11
2.1	Video Playback.....	11
2.1.1	Play Function	12
2.1.2	Playback File	12
2.1.3	Playback Cut.....	15
2.1.4	Record Type	16
2.1.5	Progress Bar Time Format	16
2.1.6	Aux Function.....	16
2.2	Picture Playback	17
2.2.1	Play Function	17
2.2.2	Playback File	18



2.2.3	Snapshot Type	20
3	Setup.....	21
3.1	Camera	21
3.1.1	Video	21
3.1.2	Audio	28
3.2	IVS Setup	29
3.2.1	Global Setup	29
3.2.2	Scene Setup	30
3.2.3	Rule Setup	32
3.2.4	Parameter.....	41
3.3	Network.....	43
3.3.1	TCP/IP	43
3.3.2	Connection	45
3.3.3	ONVIF	46
3.3.4	PPPoE	47
3.3.5	DDNS.....	48
3.3.6	IP filter.....	49
3.3.7	SMTP (e-mail)	49
3.3.8	UPnP.....	51
3.3.9	SNMP.....	52
3.3.10	Bonjour	53
3.3.11	Multicast	54
3.3.12	IEEE802	55
3.3.13	Qos.....	56
3.4	Event.....	57
3.4.1	Video detect	57
3.4.2	Audio Detect	62
3.4.3	Alarm.....	63
3.4.4	Abnormality	65
3.5	Storage	67
3.5.1	Record schedule and snapshot schedule	67
3.5.2	Destination	68



3.5.3	Record control	69
3.6	System.....	70
3.6.1	General	70
3.6.2	Account.....	72
3.6.3	PTZ.....	76
3.6.4	Default.....	77
3.6.5	Import/Export	78
3.6.6	Auto maintenance	78
3.6.7	Upgrade.....	79
3.7	Information	80
3.7.1	Version.....	80
3.7.2	Log.....	80
3.7.3	Online User	81
4	Alarm.....	82
5	Log out.....	83

Important

- The following functions are for reference only. Some series products may not support all the functions listed below.
- Usually we recommend IE 7 or higher version. For those versions below IE 7, it may not support the operation of some functions.

1 Network Connection

1.1 Preparation

This series speed dome product supports the Web access and management via PC.

Web includes several modules: monitor channel preview, PTZ control, system configuration, alarm and etc.

Please follow the steps listed below for network connection.

- Make sure the speed dome has connected to the network properly.
- Speed dome IP address and PC IP address shall be in the same network segment. If there is router, please set the corresponding gateway and subnet mask.
- Use order ping `***.***.***.***`(* speed dome address) to check connection is OK or not.

1.2 Log in

Open IE and input speed dome address in the address bar.

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

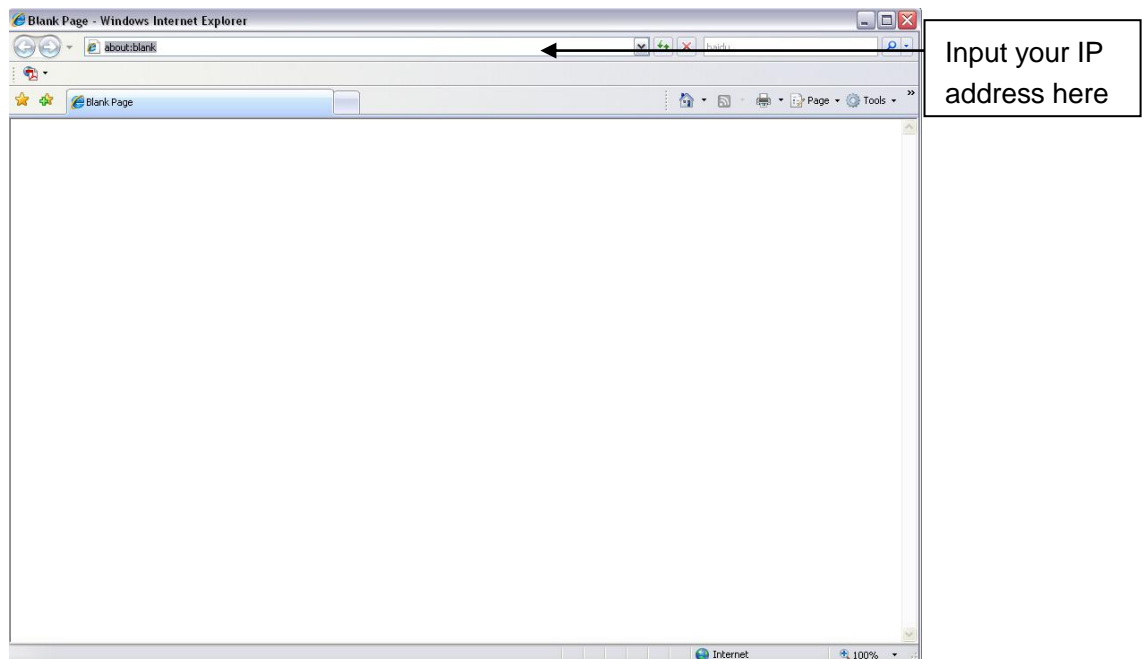


Figure 1-1

The login interface is shown as below. See Figure 1-2.

Please input your user name and password.

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

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



Figure 1-2

If it is your first time to login in, system pops up warning information to ask you whether install control webrec.cab or not. Please click OK button, system can automatically install the control. When system is upgrading, it can overwrite the previous Web too.

If you can't download the ActiveX file, please check whether you have installed the plug-in to disable the control download. Or you can lower the IE security level. See Figure 1-3.

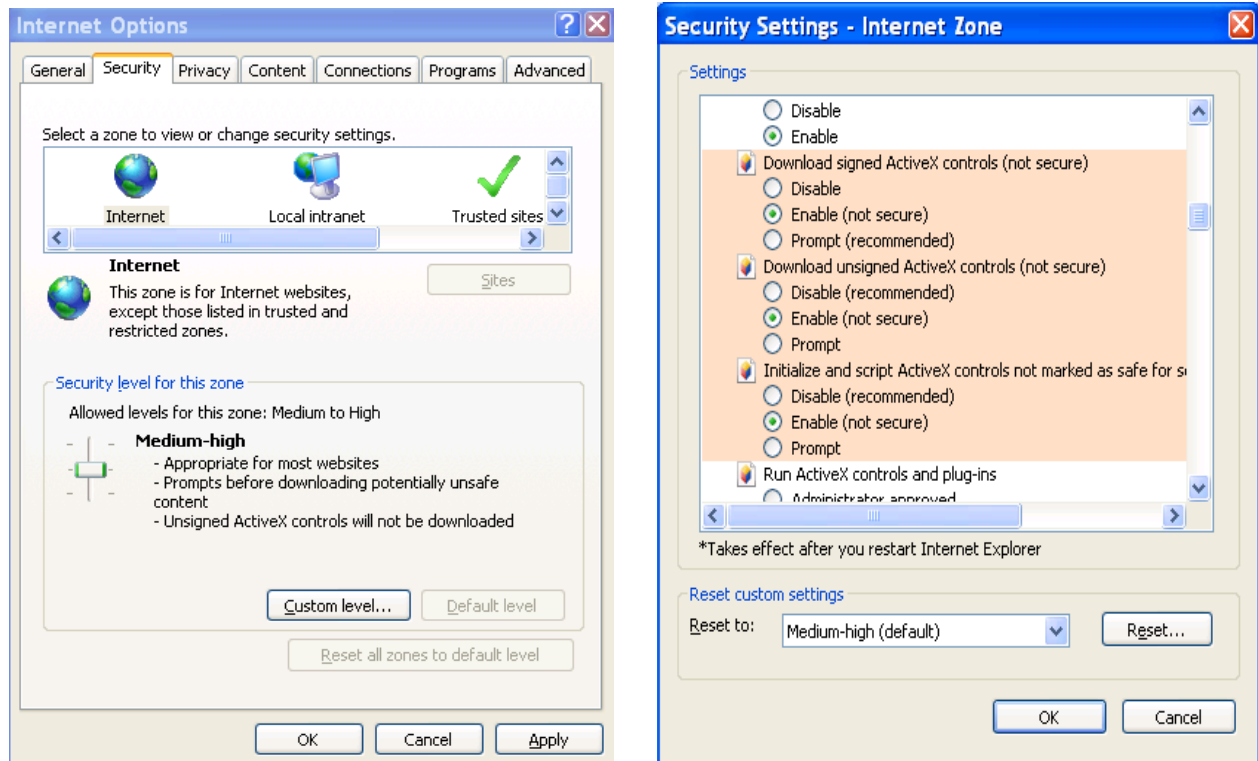


Figure 1-3

1.3 Live Interface

After you logged in, you can see the live monitor window. Now you can operate the speed dome via the WEB. See Figure 1-4.



Figure 1-4

There are six sections:

- Section 1: Encode setup bar
- Section 2: Window adjust bar
- Section 3: System menu bar
- Section 4: Window function option bar
- Section 5: PTZ control
- Section 6: PTZ function

1.4 Encode Setup

The encode setup interface is shown as in Figure 1-5.

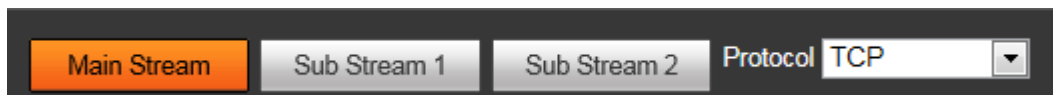


Figure 1-5

Please refer to the following sheet for detailed information.

Parameter	Function
Main stream	In normal network width environment, main stream can record audio/video file and realize network monitor.
Sub Stream 1	Connected to the Protocol, monitor or close the video under sub stream 1 configuration. It can be used for network monitoring instead of main stream when network bandwidth is not sufficient.
Sub Stream 2	Connected to the Protocol, monitor or close the video under sub stream 2 configuration. It can be used for network monitoring instead of main stream when network bandwidth is not sufficient.
Protocol	You can select video monitor protocol from the dropdown list. There are three options: TCP/UDP/Multicast.

1.5 Video Window Setup

The interface is shown as in Figure 1-6.

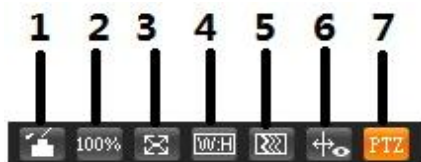


Figure 1-6

Please refer to the following sheet for detailed information.

SN	Parameter	Function
1	Image adjustment	Click it to show or hide picture setup interface. See Figure 1-7. This interface is on the top right pane.
2	Original size	Click this button to go to original size. It is to display the actual size of the video. It depends on the resolution of the video.
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.
4	Width and height ratio	Click it to restore original ratio or suitable window.

5	Fluency setup	There are three types: real-time/normal/fluency.
6	Rules info	Click it to enable live interface to display intelligent rules, default is enable.
7	Open/close PTZ interface	Left click it to display or hide the PTZ control interface.

The picture setup interface is shown as in Figure 1-7.

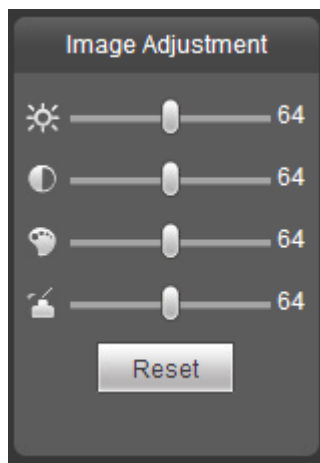






Figure 1-7

Please refer to the following sheet for detailed information.

Parameter		Function	
Video setup		Brightness setup icon. It is to adjust monitor video brightness.	Note: <ul style="list-style-type: none"> All the operations here apply to WEB end only. Please go to Setup->Camera->Conditions to adjust brightness, contrast, hue and saturation setup.
		Contrast setup icon. It is to adjust monitor video contrastness.	
		Saturation setup icon. It is to adjust monitor video saturation.	
		Hue setup icon. It is to adjust monitor video hue.	
	Reset	Restore brightness, contrastness saturation and hue to system default setup.	

1.6 System Menu

System menu is shown as in Figure 1-8.

Please refer to chapter 1.3 Live, chapter 2 Playback, chapter 3 Setup, chapter 4 Alarm, chapter 5 Logout for detailed information.



Figure 1-8

1.7 Video Window Function Option

The interface is shown as below. See Figure 1-9.



Figure 1-9

Please refer to the following sheet for detailed information.

SN	Parameter	Function
1	Remark	Click it and then select pen color, you can write down the mark information on the preview interface.
2	Gesture control	On the preview interface you can left click mouse to control the PTZ and use the middle button to zoom in/zoom out.
3	Alarm output	Click it to generate an alarm output and the button becomes red. Click it again to stop alarm output. There are two alarm output icons since this series product supports two relay output. Please note the alarm output interface may vary due to different series products.
4	Digital zoom	When video is in original status, click this button you can select any zone to zoom in. After zoom in ,you can drag the zoom in area in the specified area. Right click mouse system restores original status. You can use the wheel to zoom out the video.
5	Snapshot	You can snapshot important video. You can go to Setup->Camera->Video->Path to modify the local record save path.
6	Triple snap	Click it, system can snap at 1f/s for three times. All images are memorized in system storage folder.
7	Record	When you click local record button, the system begins recording. You can go to Setup->Camera->Video->Path to modify the local record save path.

8	Manual Track	Click it and then left click the mouse and drag the mouse in the video window to select any zone, you can enable the speed dome to auto track the object in the specified area. Please note, you need to go to the Setup->IVS setup->Global setup interface to enable IVS auto track function. Otherwise, this function is null.
9	Audio output	Turn on or off audio when you are monitoring. You can go to Setup->Camera->Audio to set.
10	Bidirectional talk	Click it to begin audio talk. You can go to Setup->Camera->Audio to set bidirectional talk mode.
11	Help	Click it to open help file.

1.8 PTZ Control

Before PTZ operation, please make sure you have properly set PTZ protocol. (Please go to Setup->System->PTZ to set.).

Here you can view direction keys, speed, zoom, focus, iris button. See Figure 1-10.

- PTZ direction: PTZ supports eight directions: left/right/up/down/upper left/upper right/bottom left/bottom right/ fast positioning.
- Speed: The step 8 speed is faster than step 1.



Figure 1-10

1.9 Joystick



Figure 1-11

The function of joystick can be simulated by dragging the button in the middle, which can be used to control the device rotation.

1.10 PTZ Setup/Menu

The PTZ setup/Menu interface is shown as in Figure 1-11.

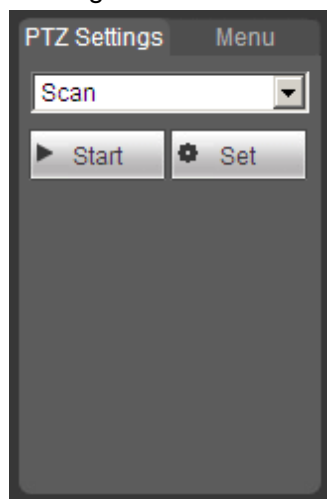


Figure 1-11

Click PTZ set button, the interface is shown as in Figure 1-12. Here you can select scan, preset, tour pattern, assistant function and etc.

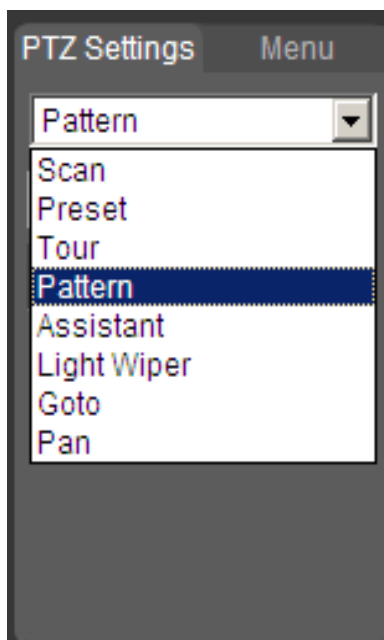


Figure 1-12

Please refer to the following sheet for PTZ setup information.

Parameter	Function
Scan	<ul style="list-style-type: none"> Select Scan from the dropdown list, click Set button and then control the PTZ to set the scan left limit and right limit. Start button, you can begin scan operation. Default SN is 1.
Preset	<ul style="list-style-type: none"> Select Preset from the dropdown list, input the preset value and then click Add button, now system save current position as one preset. Click View button, the camera turns to the corresponding position of the preset.
Tour	<ul style="list-style-type: none"> Select Tour from the dropdown list and then input tour value. Click Add or Delete button to add/remove one preset from the tour. Click Start button, you can begin tour.
Pattern	<ul style="list-style-type: none"> You can select Pattern from the dropdown list and then click Add button, now you can operate PTZ to realize zoom, focus, iris, direction operation and etc. Click Stop button to stop memory pattern process. Click Start button to begin PTZ movement.
Assistant	<ul style="list-style-type: none"> Input assistant value and click AUX on button to enable corresponding assistant value. Click AUX off button to disable assistant function.

Parameter	Function
Goto	<ul style="list-style-type: none">● It is the accurate positioning function. Please input corresponding horizontal angle, tilt angle, and speed dome zoom speed and then click Goto button to go to a specified position.● One unit of the horizontal angle or tilt angle stands for 0.1 degree.
Pan	Select Pan from the dropdown list and then click Start button, you can turn the PTZ realize 360 degrees movement. Click Stop button to stop current operation.

2 Playback

The playback of WEB client end supports two modes which are video playback and picture playback.

Note:

It needs to set “3.5 Storage Management” before operating playback.

2.1 Video Playback

The video playback interface of WEB client end includes the following six functions:

Parameter	Note
1	Play function
2	Playback file
3	Playback clip
4	Record type
5	Progress bar
6	Aux function

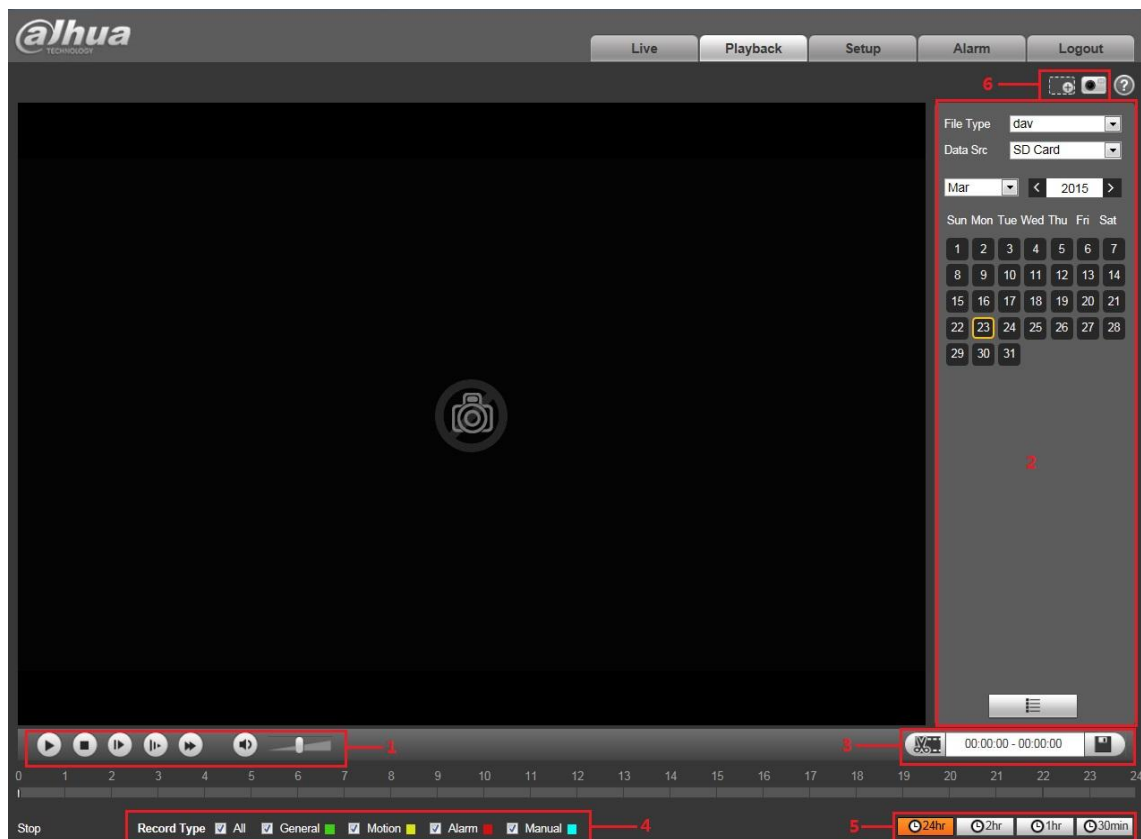


Figure 2-1

2.1.1 Play Function

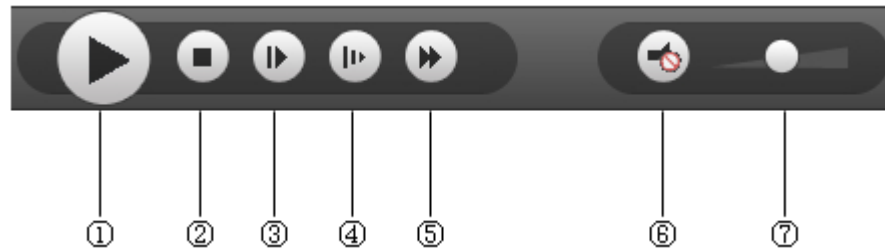


Figure 2-2

Parameter	Note
① Play	When it displays this button, it means stop playing or not playing video. Click it to switch to normal playing status.
② Stop	Click it to stop playing current video.
③ Next frame	Click it to play next frame. Note: It needs to pause playback when using next frame function.
④ Slow	Click it to make it play slowly.
⑤ Fast	Click it to make it play fast.
⑥ Quiet	It is mute when it displays this button, Click it to restore audio function.
⑦ Volume	Click the left mouse button to adjust the playback volume.

2.1.2 Playback File

The blue date in the calendar means that there is video or snapshot file on the current day.

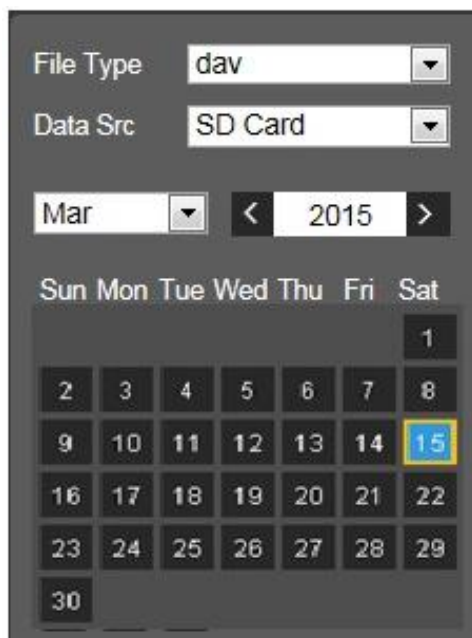


Figure 2-3

Parameter	Note
File type	<ul style="list-style-type: none"> • Select “dav” to playback video. • Select “jpg” to playback picture.
Data source	The default is SD card.

Step 1

Click the blue date, the time line will display the record file progress bar with colors. Green represents general record; yellow represents motion record; red represents alarm record; blue represents manual record.


Step 2

Click a certain time location of the record file progress bar area, the playback interface will play the record file from that time.



Figure 2-4

Step 3

Click file list , the record file of selected date will display in the list.

Step 4

Double click the file in the list, and it will playback the file, meanwhile it will also display file size, begin time and end time.

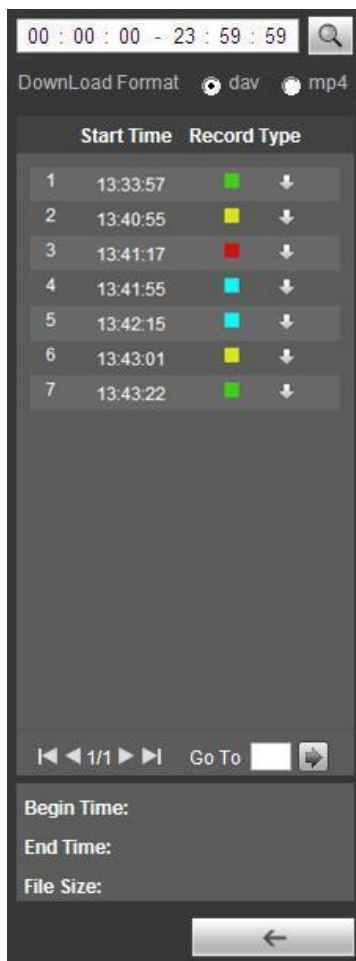





Figure 2-5

Parameter	Note
 Search	It is to search all the record file between begin time and end time of the selected date.
Download Format	Two formats to select: dav and mp4.

Parameter	Note
 Download	<ul style="list-style-type: none"> When record type is “dav”, click download button to download the file to local. When record type is “mp4”, click download button to download file to 3.1.15. Storage path. <p>Note: The system doesn't support download and playback record of MP4 format at the same time.</p>
 Back	Click it to go back to calendar interface to select date again.

2.1.3 Playback Cut


Note:


When using playback cut function, the record file which is being played back will stop playing automatically, which means that playback cut and playback can't be done at the same time.

Step 1

Click the begin time of playback cut on the timeline, and the time needs to be within the range of progress bar area of the record file.

Step 2

Move the mouse to the top of the clip icon  , it will display “Select Begin Time” on the lower right


corner. Click cut icon  , and finish the setting of begin time of playback clip.

Step 3

Click the end time of playback cut on the timeline, and the time needs to be within the range of progress bar area of the record file.

Step 4

Move the mouse to the top of the cut icon  ; it will display “Select End Time” on the lower right

corner. Click cut icon  , and finish the setting of end time of playback cut.

Step 5

Click “Save” to edit the file to 3.1.1.5 storage path.



Figure 2-6

2.1.4 Record Type

After checking record file type, it will only display the selected type of file in the progress bar and file list.







Figure 2-7

2.1.5 Progress Bar Time Format





Figure 2-8

Parameter	Note
 24 hour button	Click the button and the progress bar will display in 24-hour mode.
 2 hour button	Click the button and the progress bar will display the record file within 2 hours range.
 1 hour button	Click the button and the progress bar will display the record file within 1 hour range.
 30 min button	Click the button and the progress bar will display the record file with 30 minutes range.

2.1.6 Aux Function



Figure 2-9

Parameter	Note
 Regional Zoom	<ul style="list-style-type: none"> Click the button to select any area to zoom when the playback video is in the original state, it can drag and zoom the area in a certain range when it is in the non-original state, click the right mouse button to restore the original state. Click the button and zoom the image size by rolling the mouse wheel.
 Snapshot	Click the button and snapshot the playback video, the image will be stored in the path 3.1.1.5.

2.2 Picture Playback

The picture playback interface of WEB client includes following three functions.

Parameter	Note
1	Play function
2	Playback file
3	Snapshot type

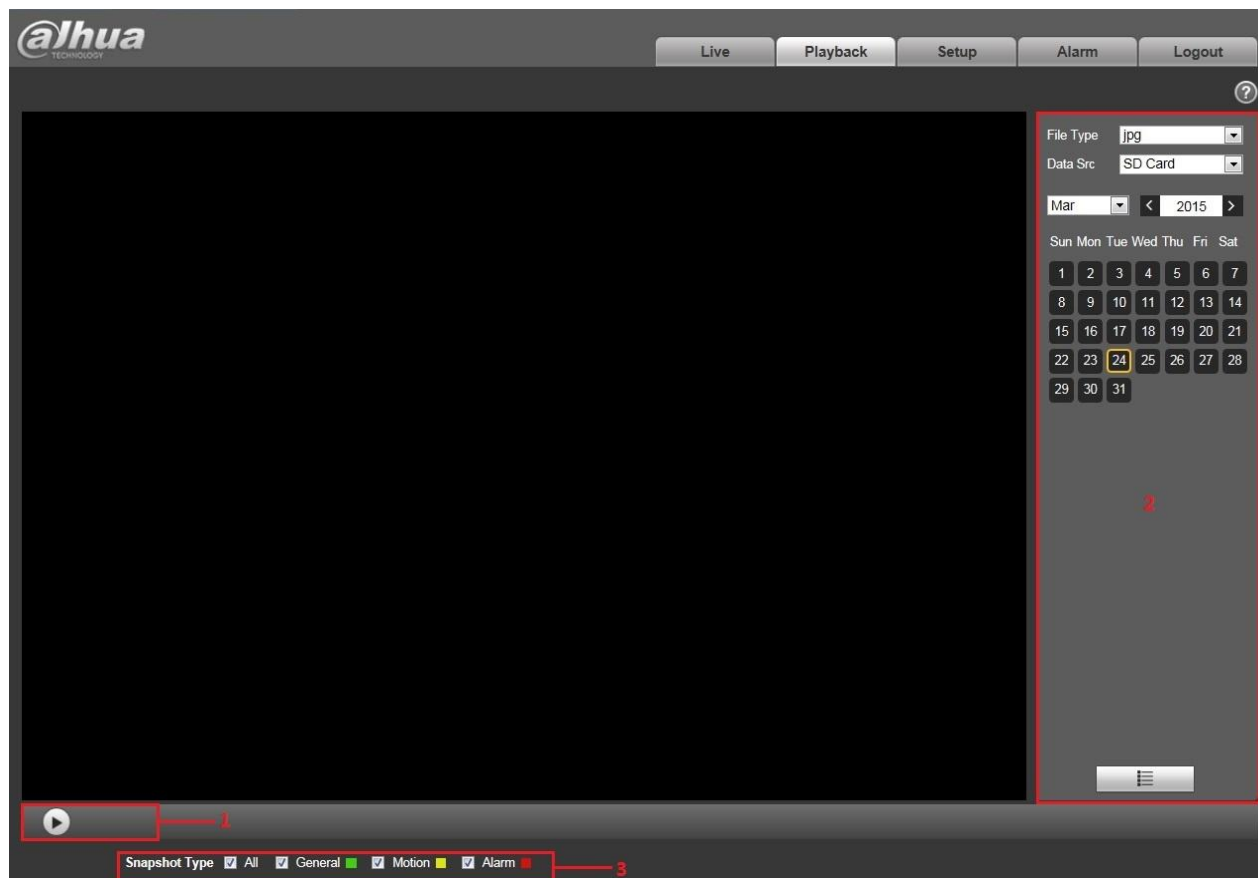




Figure 2-10

2.2.1 Play Function



Figure 2-11

The default icon is , which means stopping playing or not playing pictures.

Click play button and switch to normal play state, at this moment, the icon displays as .

Click pause button and switch to pause play state.

2.2.2 Playback File

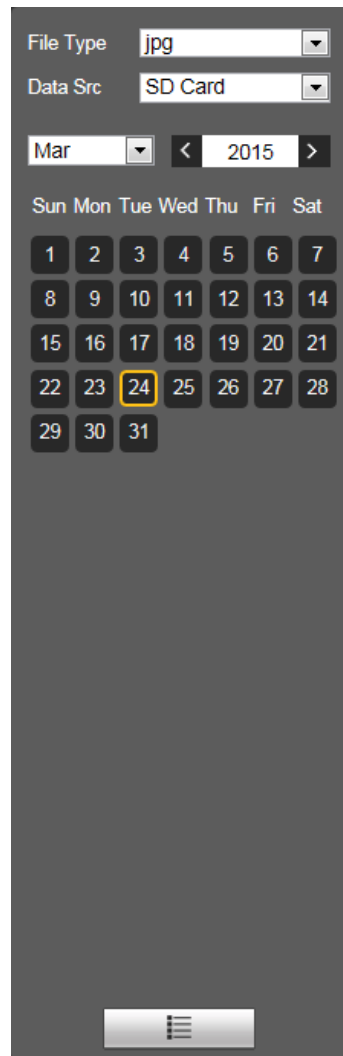



Figure 2-12






Figure 2-13

Step 1

Click file list , the snapshot file of selected date will display in the list.

Step 2

Double click the file in the list, it will playback the snapshot picture.

Parameter	Note
 Search	It is to search all the snapshot file between begin time and end time of the selected date.
 Download	Click “Download” button and download the snapshot file to local.
 Back	Click it to go back to calendar interface to select time again.

2.2.3 Snapshot Type

After checking snapshot type, it will only display the selected type of file in the file list.

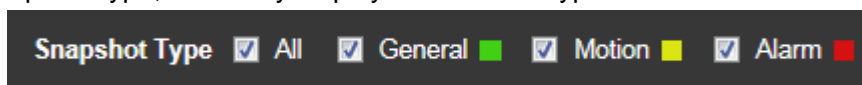


Figure 2-14

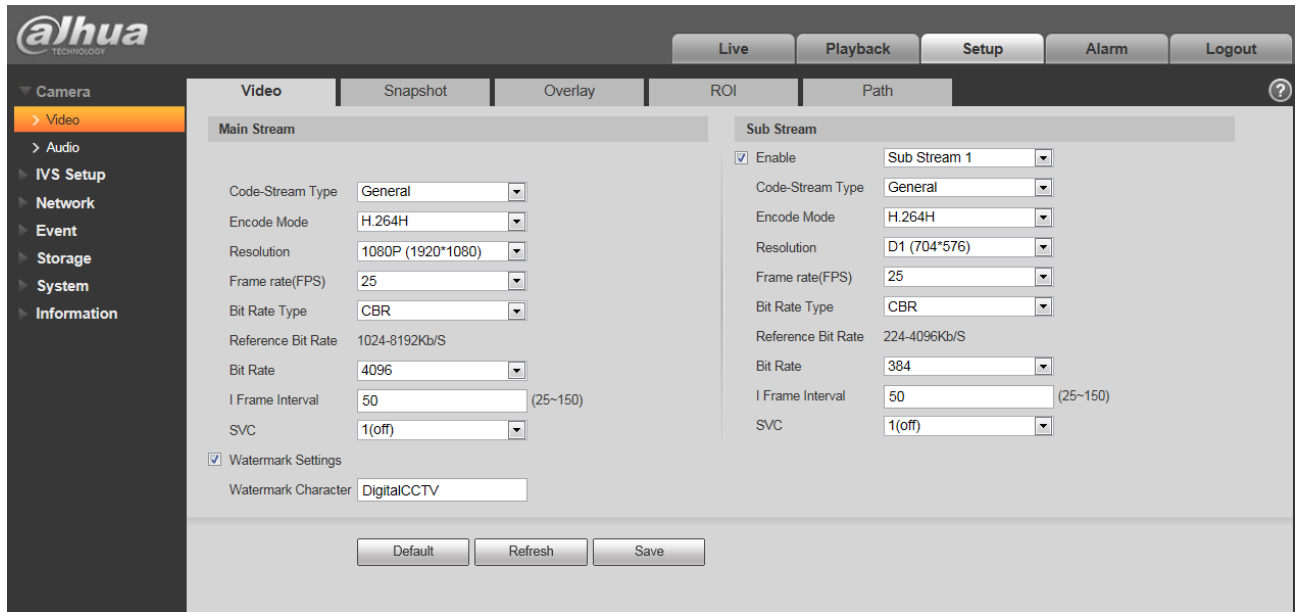
3 Setup

3.1 Camera

3.1.1 Video

3.1.1.1 Video bit stream

The video bit stream interface is shown as below. See Figure 3-1.



The screenshot displays the Dahua Network Speed Dome Web 3.0 Setup interface. The top navigation bar includes 'Live', 'Playback', 'Setup', 'Alarm', and 'Logout'. The left sidebar shows a tree view with 'Camera' expanded, and 'Video' selected. The main content area is divided into 'Main Stream' and 'Sub Stream' sections. The 'Main Stream' section includes settings for Code-Stream Type (General), Encode Mode (H.264H), Resolution (1080P (1920*1080)), Frame rate(FPS) (25), Bit Rate Type (CBR), Reference Bit Rate (1024-8192Kb/S), Bit Rate (4096), I Frame Interval (50 (25~150)), SVC (1(off)), and Watermark Settings (checked, with character 'DigitalCCTV'). The 'Sub Stream' section includes settings for Enable (checked), Sub Stream 1 (selected), 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 (384), I Frame Interval (50 (25~150)), and SVC (1(off)). At the bottom, there are 'Default', 'Refresh', and 'Save' buttons.

Figure 3-1

Please refer to the following sheet for detailed information.

Parameter		Function
Main stream	Bit stream type	It includes general stream, motion stream and alarm stream. You can select different encode frame rates for different recorded events. The frame rates of the motion detect and alarm is customized.
	Encode mode	There are four options: H.264, H.264H, and MJPEG encode mode. <ul style="list-style-type: none"> ● H.264 : Main Profile encode mode. ● H.264H: High Profile encode mode. ● MJPEG: In this encode mode, the video needs general 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.

Parameter		Function
	Resolution	There are multiple resolutions. You can select from the dropdown list. For each resolution, the recommended bit stream value is different.
	Frame Rate (FPS)	PAL: 1~25f/s, NTSC: 1~30f/s.
	Bit Rate Type	There are two options: VBR and CBR. Please note, you can set video quality in VBR mode. In MJPEG mode, the bit stream control mode can only be CBR.
	Recommended Bit	Recommended bit rate value according to the resolution and frame rate you have set.
	Bit Rate	<ul style="list-style-type: none"> In CBR, the bit rate here is the average value. Usually it goes up and down between 10%. It is the max value in VBR mode. When the scene is not complicated, the bit value may be lower than you set.
	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. Important I frame interval setup is null if it is the MJPEG encode mode.
	SVC	Frame rate can be encoded by layer. It is a flexible encoding method. By default, it is 1 as 1 layer. You also can set 2/3/4 layers.
Sub stream	Watermark	This function allows you to verify the video is tampered or not. The max length is 128-digit. The character can only include number, character, underline and hyphen.
	Sub Stream Enable	If check the enable box here to enable or disable sub stream, it is enabled by default. It supports enable two sub streams at the same time: sub stream 1, sub stream 2.
	Bit stream type	General bit stream.

Parameter		Function
	Encode mode	<p>There are four options: H.264, H.264H, and MJPEG encode mode.</p> <ul style="list-style-type: none"> ● H.264 : Main Profile encode mode. ● H.264H: High Profile encode mode. ● MJPEG: In this encode mode, the video needs general 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	<p>There are multiple resolutions. You can select from the dropdown list.</p> <p>For each resolution, the recommended bit stream value is different.</p>
	Frame Rate (FPS)	PAL: 1~25f/s, NTSC: 1~30f/s.
	Bit Rate Type	<p>There are two options: VBR and CBR.</p> <p>Please note, you can set video quality in VBR mode.</p>
	Recommended Bit	Recommended bit rate value according to the resolution and frame rate you have set.
	Bit Rate	<ul style="list-style-type: none"> • In CBR, the bit rate here is the average value. Usually it goes up and down between 10%. • It is the max value in VBR mode. When the scene is not complicated, the bit value may be lower than you set.
	I Frame	<p>Here you can set the P frame amount between two I frames. The value ranges from 1 to 150. Default value is 50.</p> <p>Recommended value is frame rate *2.</p> <p>Important</p> <p>I frame interval setup is null if it is the MJPEG encode mode.</p> <p>Frame rate can be encoded by layer. It is a scalable encoding method. By default, it is 1 as 1 layer. You also can set 2/3/4 layers.</p>

3.1.1.2 Snapshot

The snapshot interface is shown as in Figure 3-2.

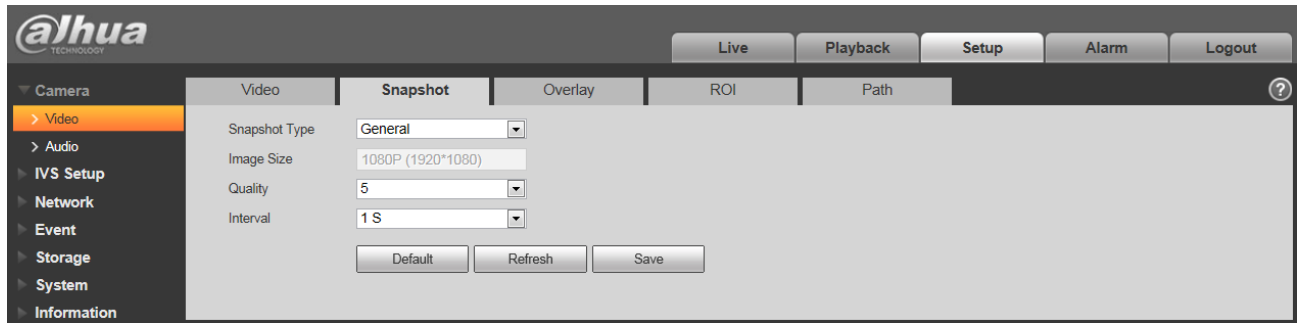


Figure 3-2

Please refer to the following sheet for detailed information.

Parameter	Function
Snapshot type	There are two modes: general (schedule) and Event (activation). General (schedule) snapshot is to snap in the specified period. Event (Activation) snapshot is to snap when the motion detect, camera masking, local alarm event occurrence. If you want to use this function, please make sure: <ul style="list-style-type: none"> ● The event occurred during the specified period. ● Motion detect, video masking, local alarm and corresponding snap function are all enable.
Image size	It has relationship with the resolution of the main 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.

3.1.1.3 Video Overlay

The video overlay interface is shown as in Figure 3-3.

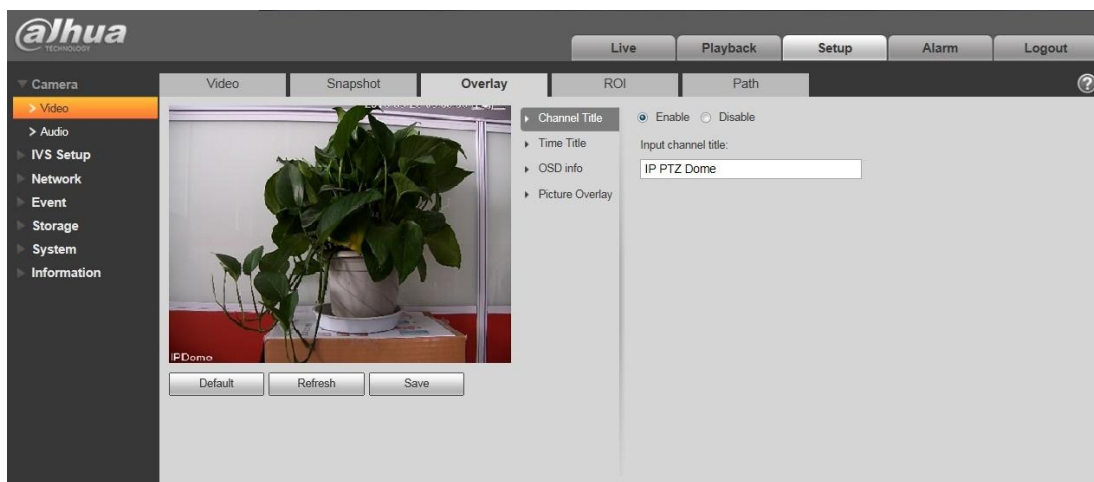


Figure 3-3

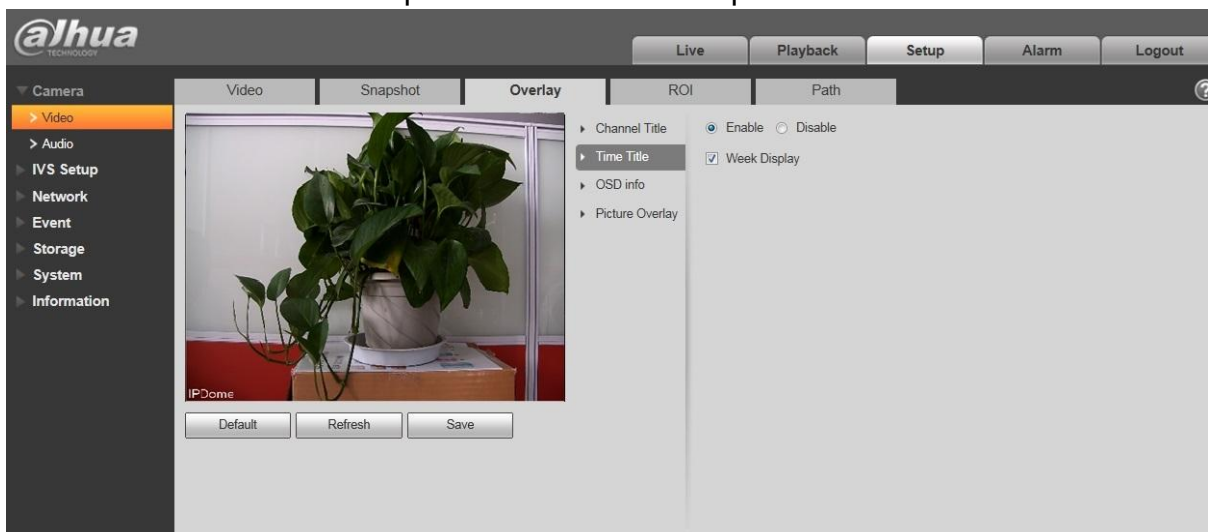


Figure 3-4

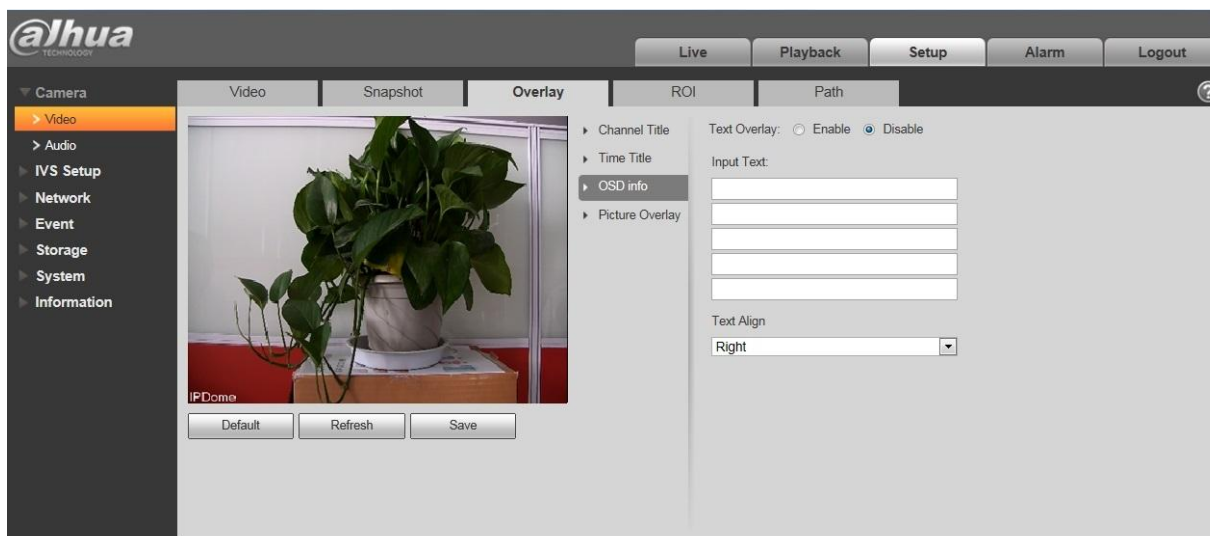


Figure 3-5

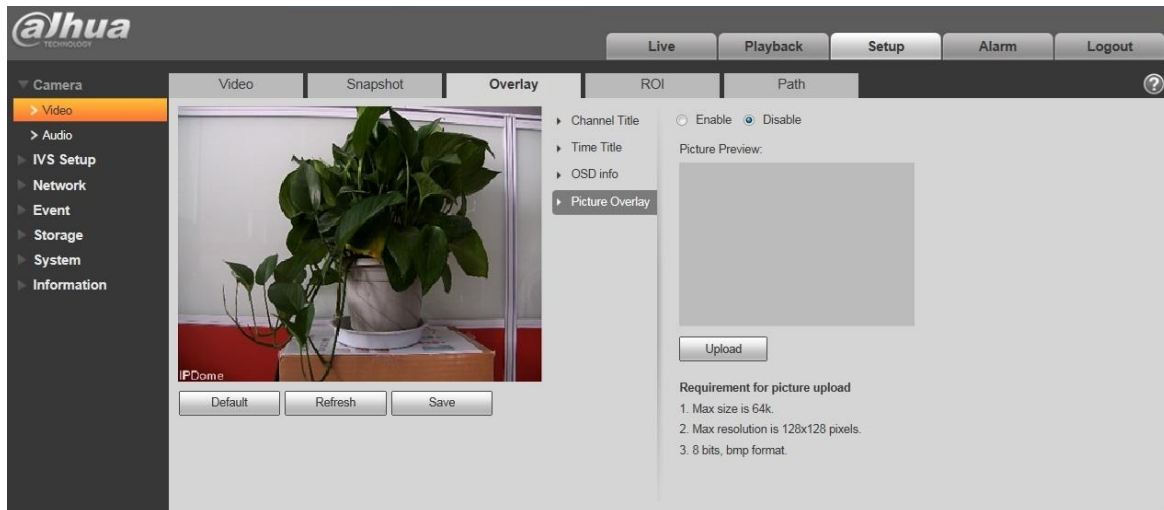


Figure 3-6

Parameter	Note
Channel Title	<ul style="list-style-type: none"> Check “Enable”, then it will display channel title in the video monitoring window; check “Disable”, then it won’t display. You can use the mouse to drag the “Channel Title” box to adjust its position.
Time Title	<ul style="list-style-type: none"> Check “Enable”, then it will display time title in the video monitoring window; check “Disable”, then it won’t display. You can use the mouse to drag the “Time Title” box to adjust its position.
OSD Info	<ul style="list-style-type: none"> Check “Enable”, then it will display OSD in the video monitoring window; check “Disable”, then it won’t display. You can use the mouse to drag “OSD Info” box to adjust its position. Alignment mode includes left align and right align.
Picture Overlay	<ul style="list-style-type: none"> Check “Enable”, then it will display picture overlay in the video monitoring window; check “Disable”, then it won’t display. Click it to upload picture, and it can overlay local picture into the video monitoring window. You can drag the yellow box to adjust the position of overlaid pictures. <p>Note: OSD Info and Picture Overlay can’t be enabled at the same time.</p>
Refresh	After setting Channel Title, Time Title, OSD Info and Picture Overlay and saving successfully, you can check the results by clicking refresh button.

3.1.1.4 ROI



Figure 3-7

Parameter	Note
Enable	Check “Enable” to display ROI in the video monitoring window; check “Disable” not to display.
Image Quality	It can set the image quality of ROI, ranging from 1~6.

3.1.1.5 Path

The storage path interface is shown as in Figure 3-4.

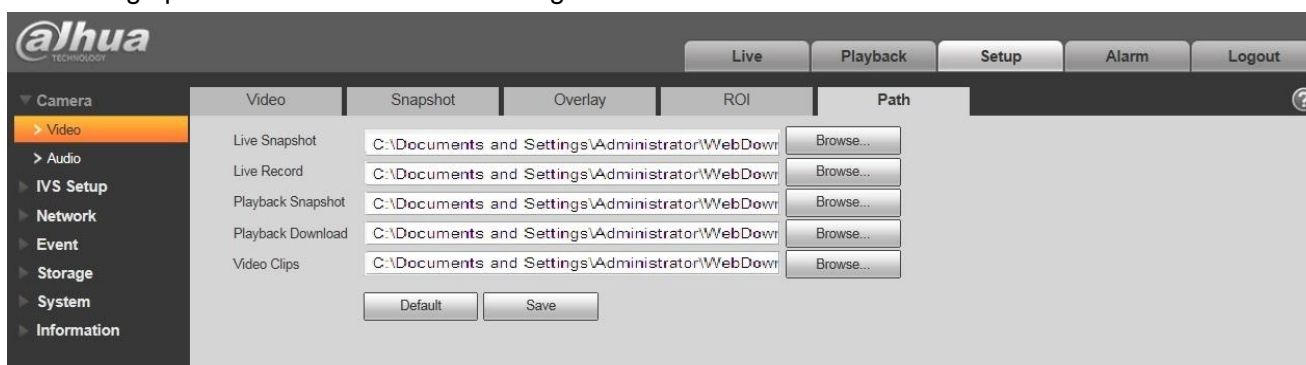


Figure 3-4

Storage path and the snapshot, record linkage in the live interface can set the storage path for monitoring snapshot and monitoring record respectively.

Storage path is linked to snapshot, download and clip in the playback interface, which can set the storage path for playback snapshot, record download and playback clip respectively.

- Default Live Snapshot path: C:\Documents and Settings\Administrator\WebDownload\LivePicture
- Default Live Record path: C:\Documents and Settings\Administrator\WebDownload\LiveRecord
- Default Playback Snapshot path: C:\Documents and Settings\Administrator\WebDownload\PlayBackPicture
- Default Playback Download path: C:\Documents and Settings\Administrator\WebDownload\PlayBackRecord
- Default Playback Clip path: C:\Documents and Settings\Administrator\WebDownload\PlayBackRecordCut

Note:

Administrator is the PC account with local login.

3.1.2 Audio

The audio interface is shown as below. See Figure 3-5.

Important

Please make sure you have enabled the video function, otherwise you can not enable the audio function.

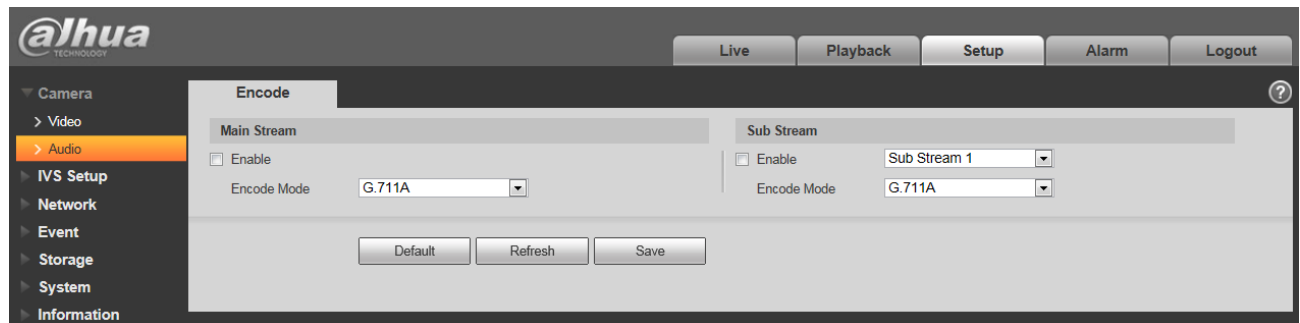


Figure 3-5

Please refer to the following sheet for detailed information.

Parameter	Function
Audio enable	<ul style="list-style-type: none"> ● Main stream: Recorded file only contains video by default. You need to check the audio box here to enable audio function so that the main stream the network transmitted is audio/video composite stream. ● Sub (Extra) stream: Recorded file only contains video by default. You need to check the audio box here to enable audio function so that the extra stream the network transmitted is audio/video composite stream.
Encode mode	<p>The encode mode of the main stream and extra stream include PCM, G.711A and G.711Mu.</p> <p>The setup here is for audio encode mode and the bidirectional talk encode both.</p>

3.2 IVS Setup

3.2.1 Global Setup

The global setup interface is shown as in Figure 3-6.

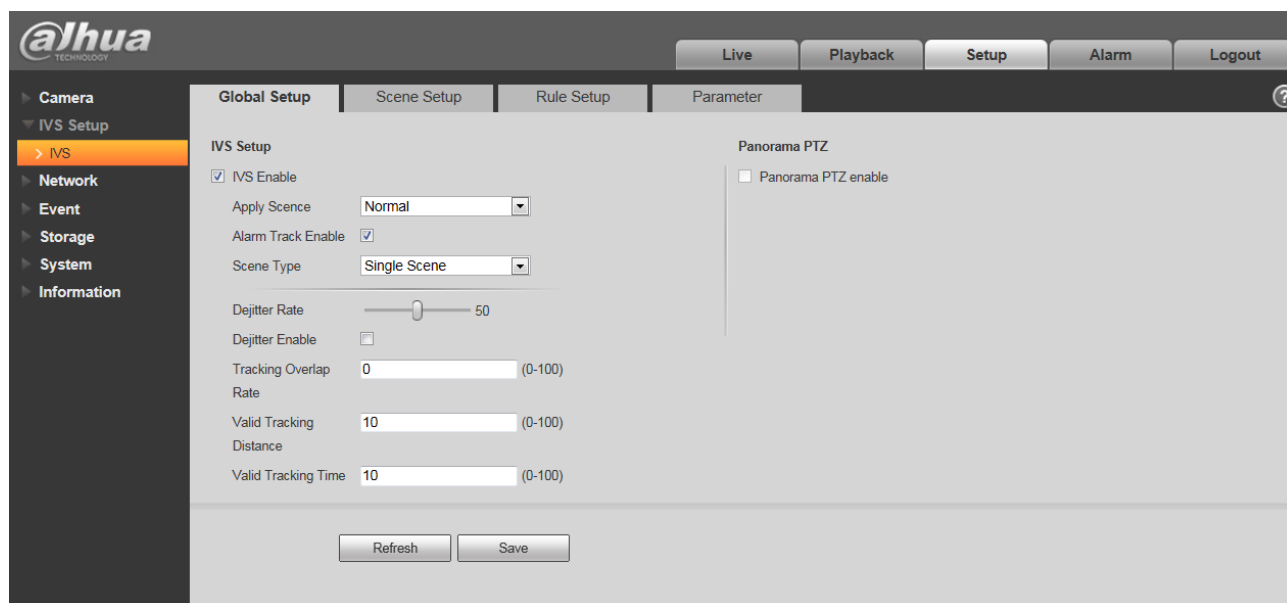


Figure 3-6

Please refer to the following sheet for detailed information.

Parameter	Function
IVS enable	Check the box here to enable IVS function.

Parameter	Function
Panorama PTZ enable	Click it to enable panorama PTZ. Note: IVS function and panorama PTZ can't be enabled at the same time.
Scene type	It includes: panorama, single scene and multiple-scene. <ul style="list-style-type: none"> • Panorama: Realize the intelligent analytics of current monitor video after you enabled the preview function. • Single scene: Realize the intelligent analytics of one scene. • Multiple-scene: It is to realize the intelligent analytics of several scenes and the scenes support tour function.
Apply scene	The default setup is normal.
Alarm track enable	Check the box here to enable this function. System can begin auto track function once a rule is activated. The alarm track function is null if you do not check the box here. It does not affect other alarm output when this function is null.
De-jitter	Here you can set device de-jitter rate.
De-jitter enable	Check the box here to enable de-jitter module.

3.2.2 Scene Setup

The scene setup is shown as in Figure 3-7.

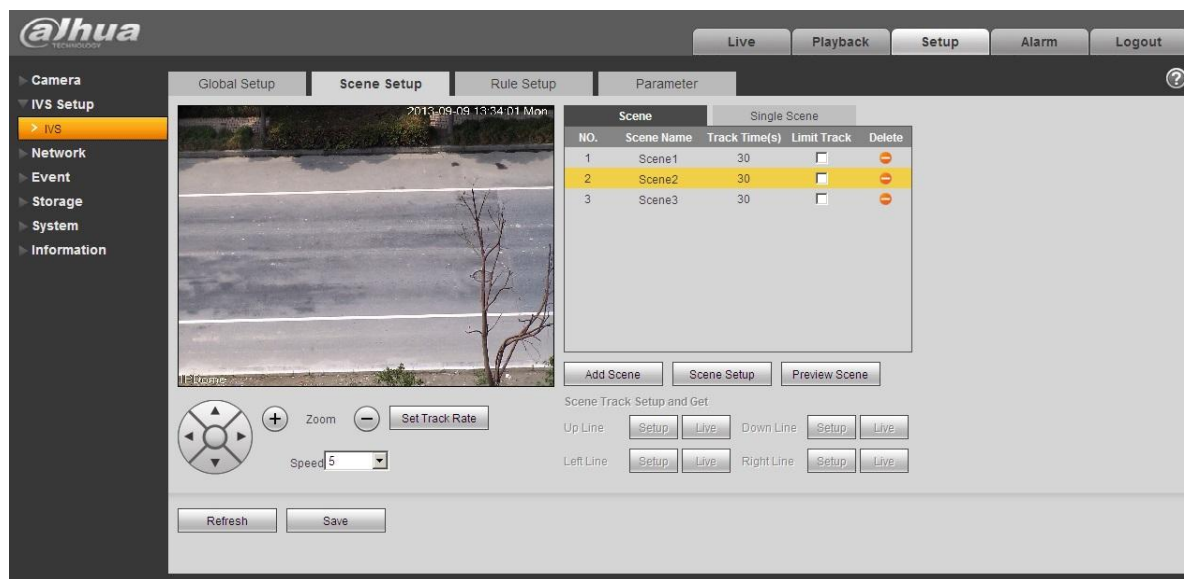





Figure 3-7

Please refer to the following sheet for detailed information.

Parameter	Function
Add scene	Click it to add a scene.
Scene setup	Click it to set current monitor video as the corresponding scene and get a number.
Preview scene	Click it to preview the selected scene.
Limit Track	Check the box here, you can set up/down/left/right limit at the bottom of the interface.
Zoom	Click  to zoom in and click  to zoom out.
PTZ	Click PTZ button  to adjust scene position.
Speed	It is to set PTZ movement speed. The value ranges from 1 to 8.

3.2.2.1 Single Scene

In Figure 3-6, select the single scene from the scene type list, you can see the single scene interface is shown as in Figure 3-8.

Here you can select one item from the No. list to view one monitor scene.

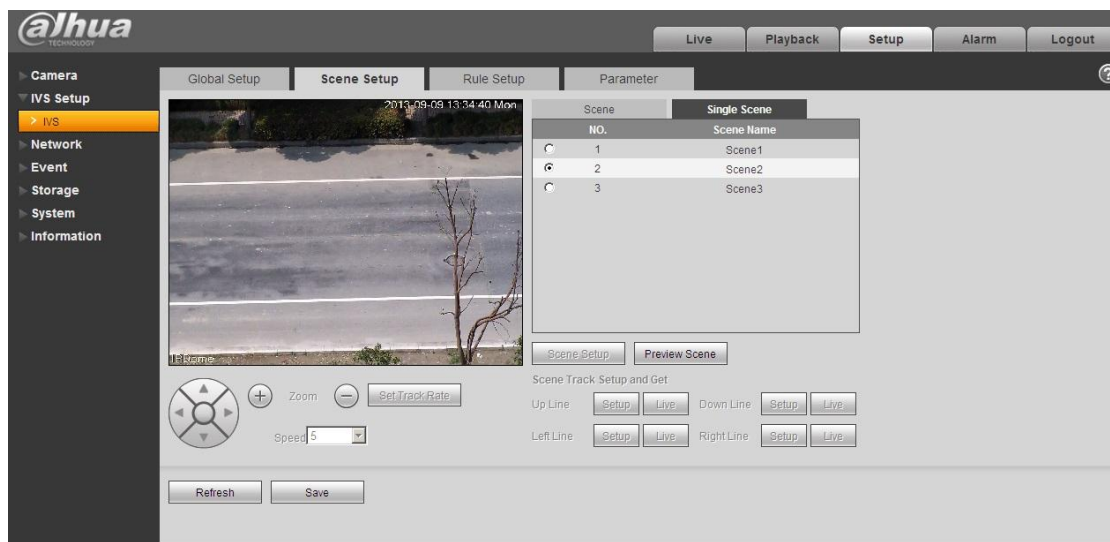


Figure 3-8

3.2.2.2 Multiple-scene track

In Figure 3-6, select the Multiple-scene from the scene type list, you can see the multiple-scene interface is shown as in Figure 3-9.

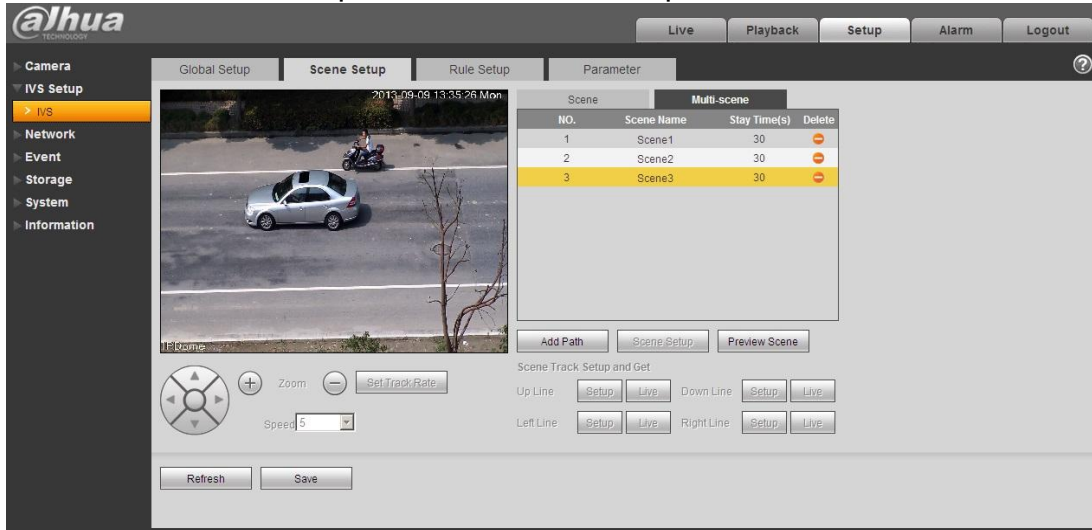


Figure 3-9

In Figure 3-9, click Add scene button you can set tour point during the scene tour process. Move the mouse to the Scene name list; you can select several scenes as a tour. Move the mouse to the Stay time, you can set stay time period.

3.2.3 Rule Setup

The rule setup interface is shown as in Figure 3-10.

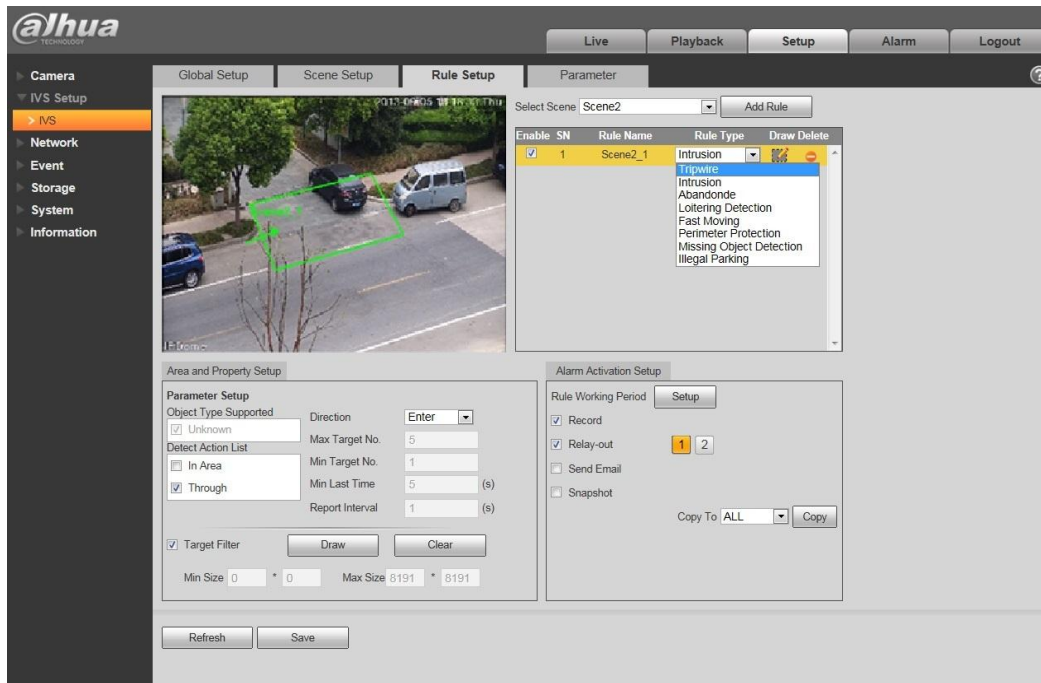




Figure 3-10

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Select scene.	You can select the scene from the dropdown list so that you can add the corresponding rule.
Add rule	Click it to add a rule to the selected scene.
Rule enable	Check the box here to enable the rule.
Rule name	Move you mouse to the rule name column to set a name.
Rule type	Move you mouse to the Rule type column to set the rule type. The option includes: Tripwire/Cross warning zone.
Draw rule	Click button  to draw current rule.
Delete rule	Click button  to delete current rule.

3.2.3.1 Tripwire

The tripwire interface is shown as in Figure 3-11.

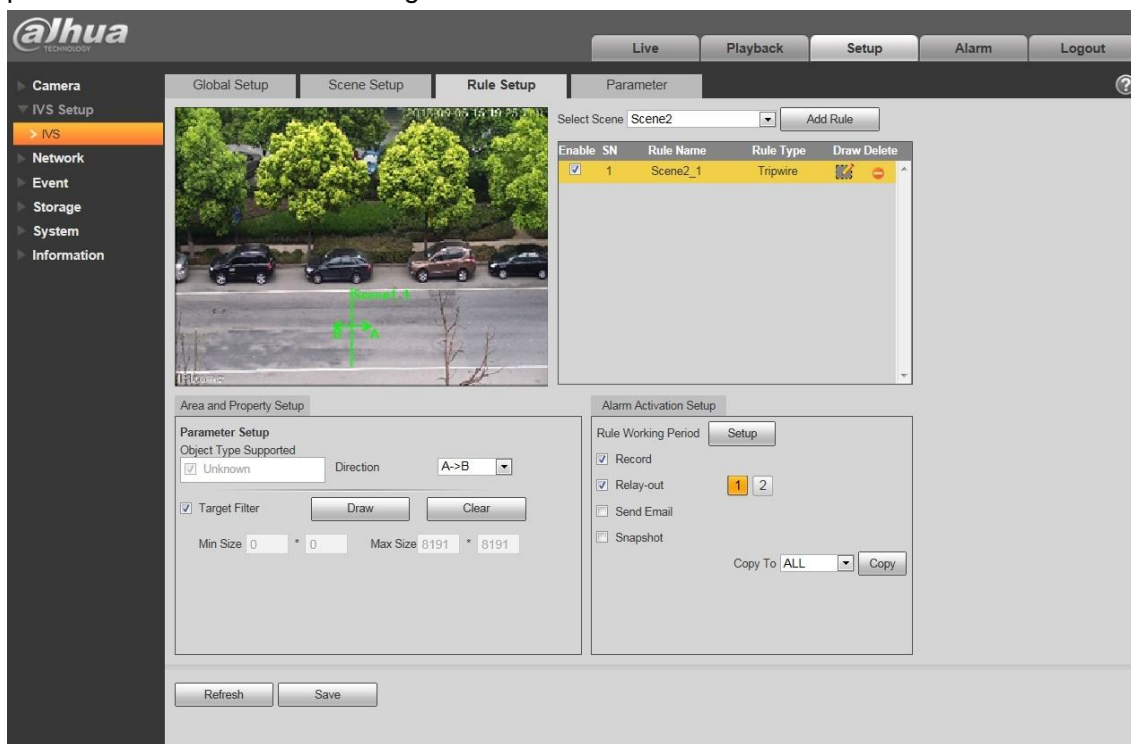




Figure 3-11

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Object type supported	You can select an object type here. The default setup is all types.

Parameter	Function
Direction	It is to set tripwire direction. The option includes: A->B、B->A、A<->B.
Target filter	Check the box here to enable this function and then click button  , you can set the target filter model in this scene for this rule. Click the button  , you can remove selected target filter model.

3.2.3.2 Cross Warning Zone

The cross warning zone interface is shown as in Figure 3-12.

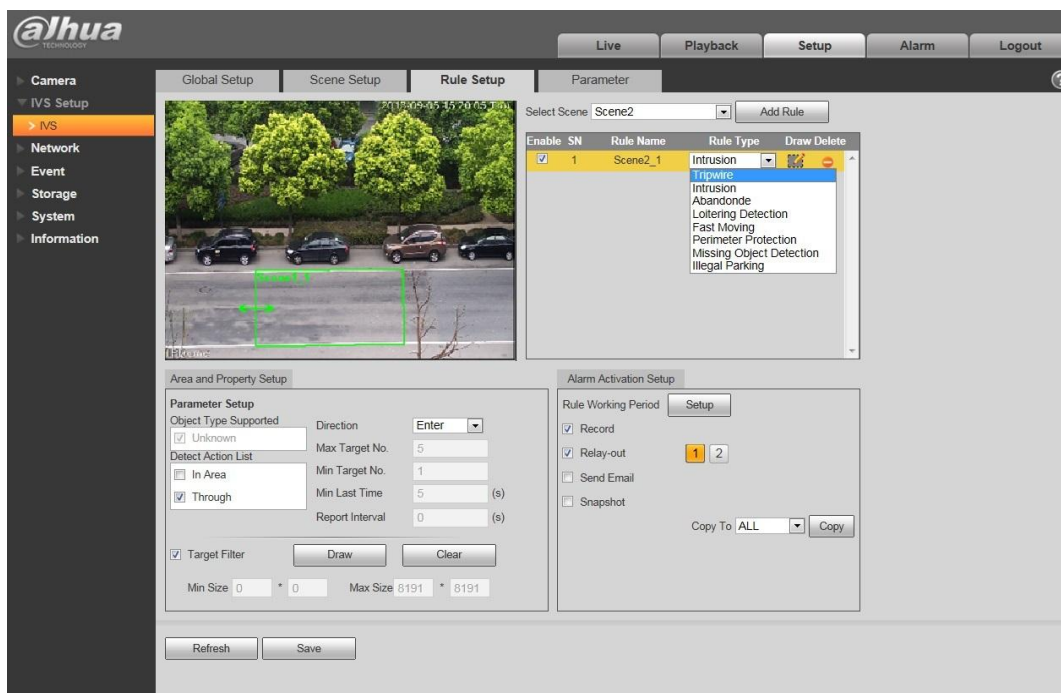




Figure 3-12

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Object type supported	You can select an object type here. The default setup is all types.
Detect action list	<ul style="list-style-type: none"> In area: When the tracking object is in the detect zone and the stay time is more than the time threshold you set here, system can activate an alarm. Through area: System can generate an alarm when the tracking object is crossing the limit you set here.
Direction	It is for the Through area option in the Detect action list item. It is to set the cross direction. The option includes: in/out/both (in&out)

Parameter	Function
Max target No.	It is for the In area option in the Detect action list item. It is to set the alarm activation amount in the zone. System will not generate an alarm when the object amount in the zone is more than the threshold you set here.
Min target No.	It is for the In area option in the Detect action list item. It is to set the alarm activation amount in the zone. System will not generate an alarm when the object amount in the zone is less than the threshold you set here.
Min last time	It is for the In area option in the Detect action list item. Here is to set the min time between the target in the zone and an alarm activation occurrence.
Report interval	It is for the In area option in the Detect action list item. It is to set alarm period. System just alarms once if the value is 0 here.
Target filter	Check the box here to enable this function and then click button  , you can set the target filter model in this scene. Click the button  , you can remove selected target filter model.

3.2.3.3 Abandoned Object Detection

The abandoned object detection interface is shown as in Figure 3-13.

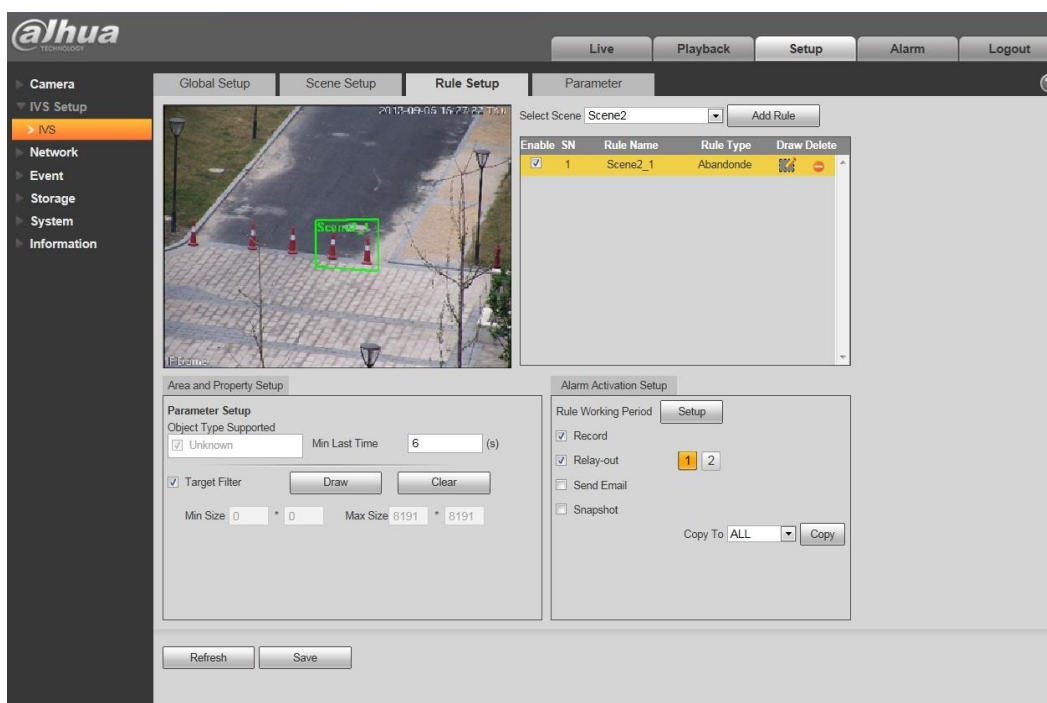




Figure 3-13

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Object type supported	You can select an object type here. The default setup is all types.
Min last time	It is to set the min time between the abandoned object occurrence and alarm activation.
Target filter	Check the box here to enable this function and then click button  , you can set the target filter model in this scene. Click the button  , you can remove selected target filter model.

3.2.3.4 Loitering Detection

The loitering detection interface is shown as in Figure 3-14.

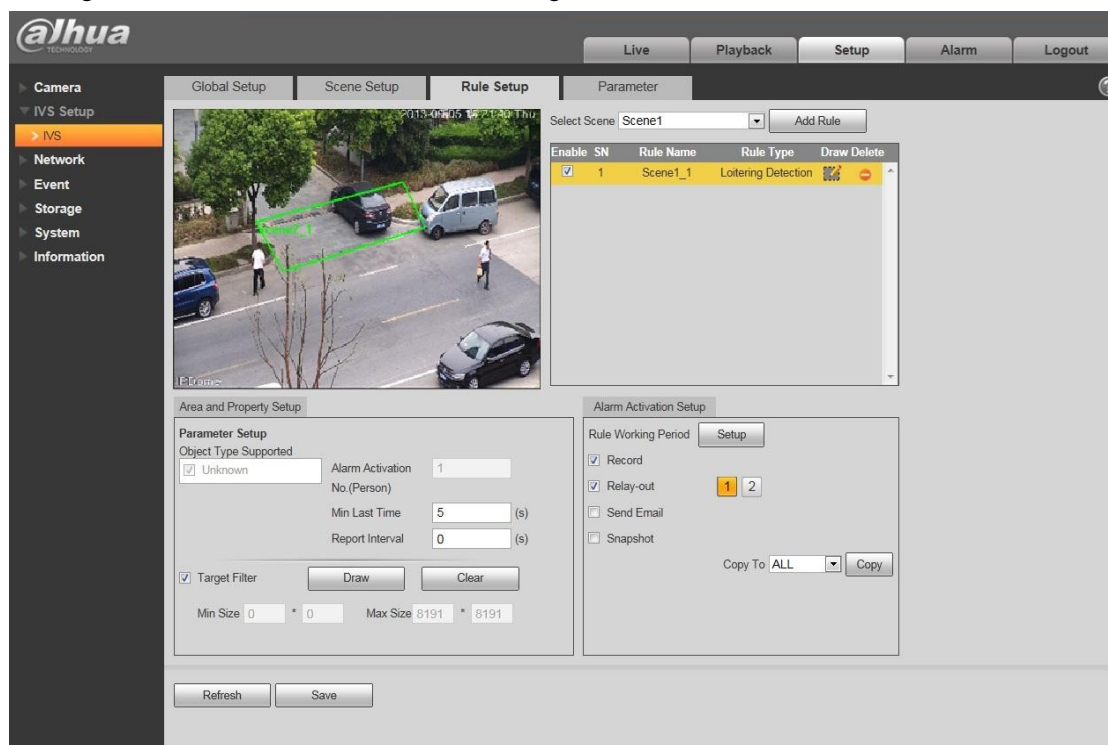




Figure 3-14

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Object type supported	You can select an object type here. The default setup is all types.
Alarm activation number (Person)	Here you can set the alarm activation threshold. The default setup is 0.

Parameter	Function
Min last time	Here is to set the min time between the target in the zone and an alarm activation occurrence.
Report interval	It is to set alarm period. System just alarms once if the value is 0 here.
Target filter	Check the box here to enable this function and then click button  , you can set the target filter model in this scene. Click the button  , you can remove selected target filter model.

3.2.3.5 Fast Moving

The fast moving interface is shown as below. See Figure 3-15.

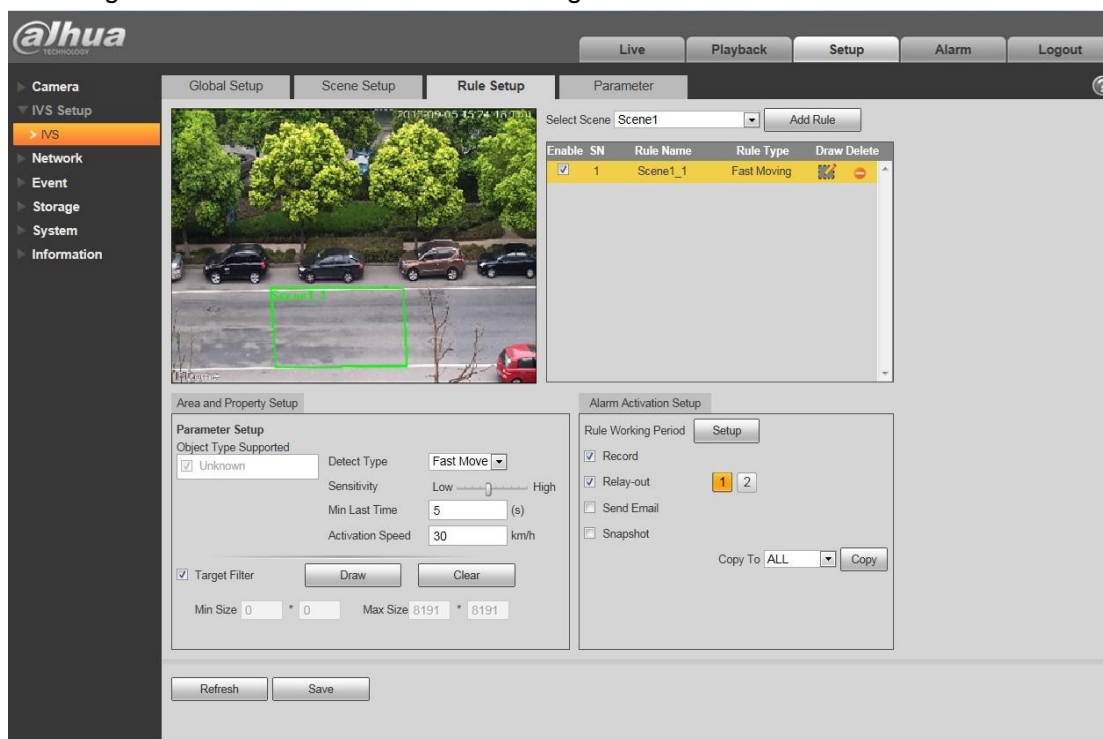




Figure 3-15

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Object type supported	You can select an object type here. The default setup is all types.
Detect type	It is to set detection type. The default setup is “Fast move”. The rule is to detect the fast moving object in the warning zone.
Sensitivity	Here you can set the alarm activation sensitivity.

Parameter	Function
Min last time	It is to set the min time between the object continuous movement and alarm activation.
Activation speed	It is to set the min speed here when an object can activate an alarm.
Target filter	Check the box here to enable this function and then click button  , you can set the target filter model in this scene. Click the button  , you can remove selected target filter model.

3.2.3.6 Perimeter Protection

The perimeter protection interface is shown as in Figure 3-16.

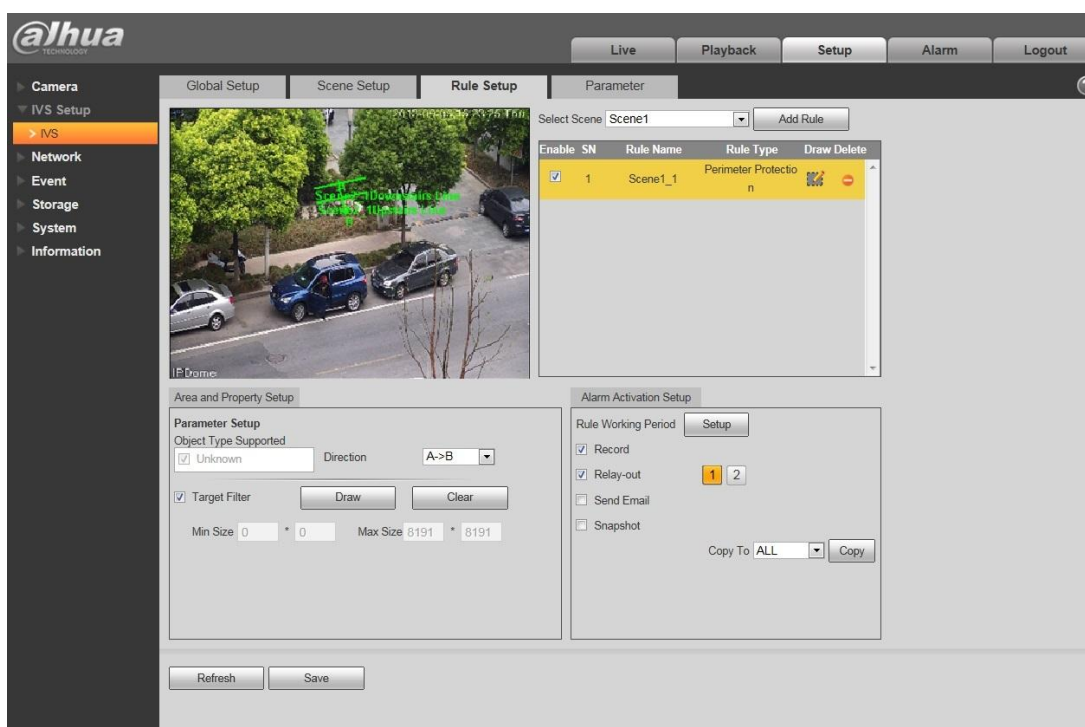




Figure 3-16

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Object type supported	You can select an object type here. The default setup is all types.
Direction	It is to set cross perimeter direction. The option includes: A->B、B->A、A<->B.

Parameter	Function
Target filter	Check the box here to enable this function and then click button  , you can set the target filter model in this scene. Click the button  , you can remove selected target filter model.

3.2.3.7 Missing Object Detection

The missing object detection interface is shown as below. See Figure 3-17.

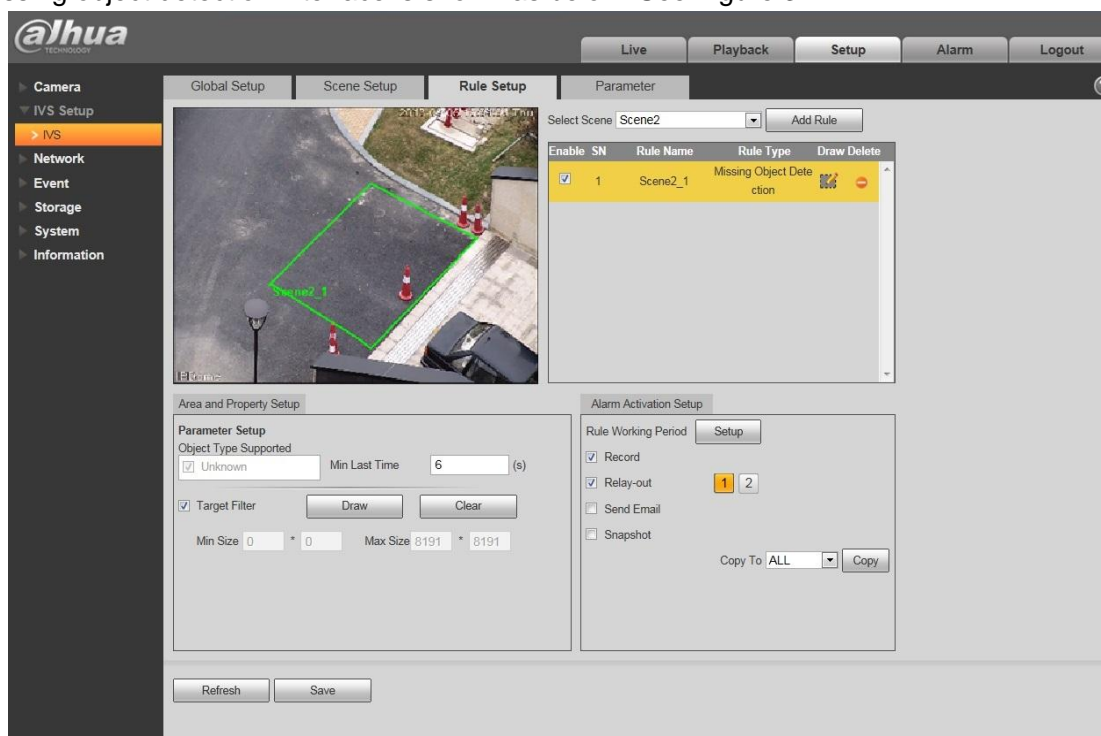




Figure 3-17

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Object type supported	You can select an object type here. The default setup is all types.
Min last time	It is to set the min time between the missing object occurrence and alarm activation.
Target filter	Check the box here to enable this function and then click button  , you can set the target filter model in this scene. Click the button  , you can remove selected target filter model.

3.2.3.8 Illegal Parking

The illegal parking interface is shown as in Figure 3-18.

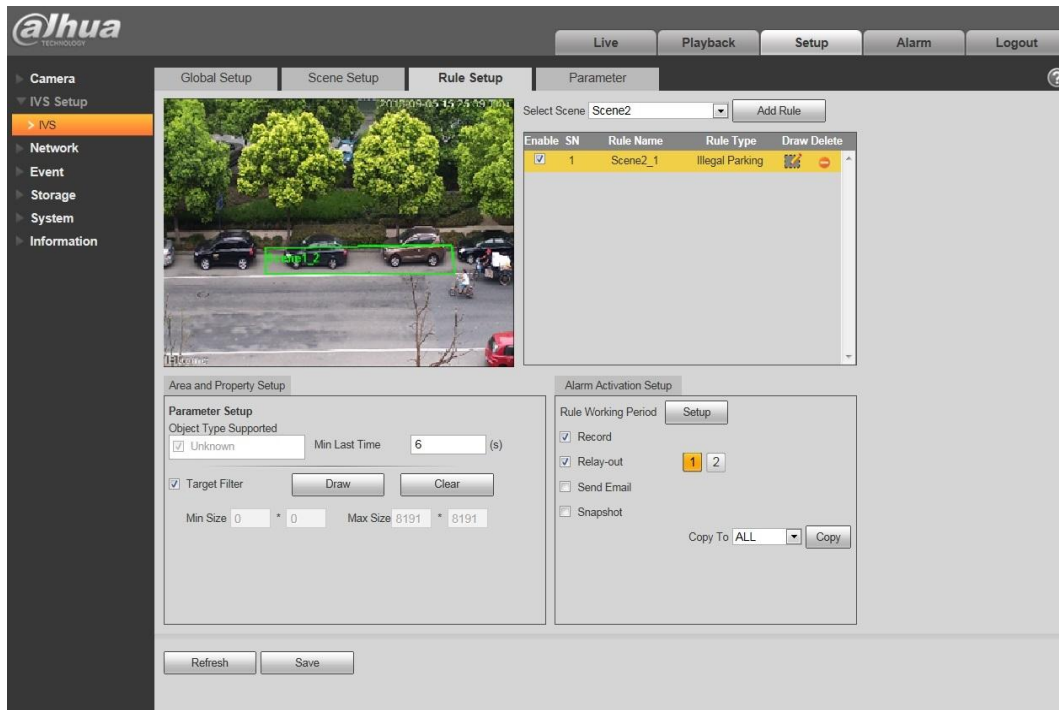




Figure 3-18

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Object type supported	You can select an object type here. The default setup is all types.
Min last time	It is to set the min time between the illegal parking occurrence and alarm activation.
Target filter	Check the box here to enable this function and then click button  , you can set the target filter model in this scene. Click the button  , you can remove selected target filter model.

3.2.3.9 Alarm Activation Setup

Alarm activation setup is shown as in Figure 3-19.

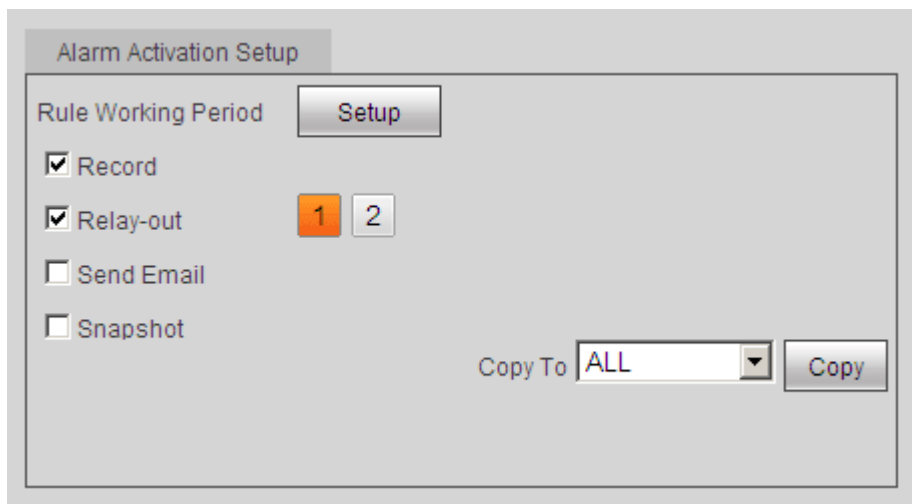



Figure 3-19

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Rule Working period	Here you can set rule arm and disarm period. Please click the Setup button to set.
Record	Check the box here so that the device can record when alarm activation occurred.
Relay output	Check the box here so that the device can output an alarm when alarm activation occurred.
Send e-mail	<ul style="list-style-type: none"> • Check the box here so that the device can send out an email when alarm activation occurred. • Please note current function is null when the device is offline, or IP conflict occurred.
Snapshot	Check the box here so that the device can snapshot when alarm activation occurred.
Copy	Select a rule name from the dropdown list and then click  button; you can copy the alarm activation setup of current rule to the selected rule.

3.2.4 Parameter

The parameter interface is shown as in Figure 3-20.

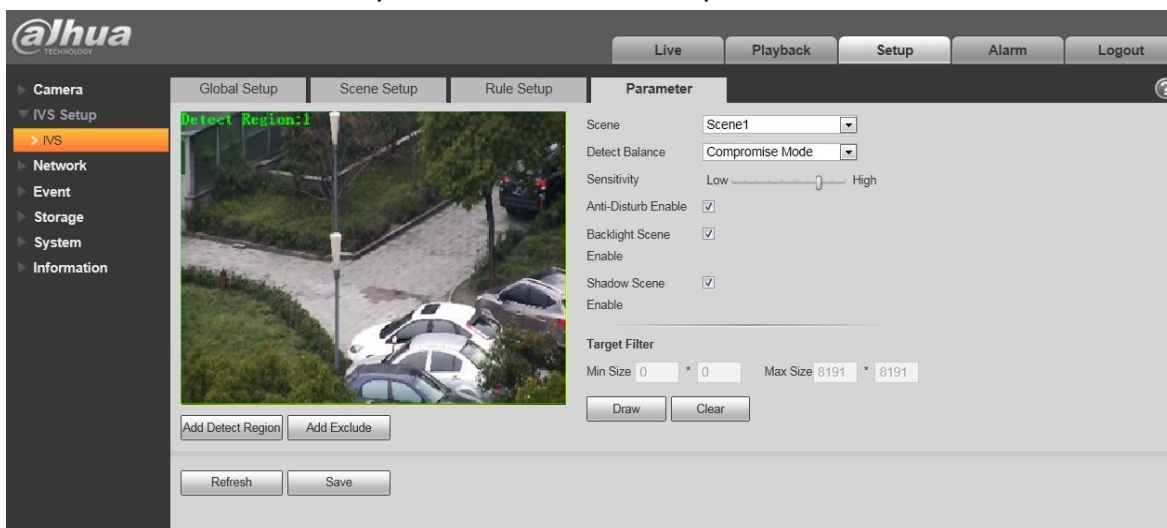


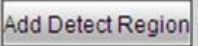



Figure 3-20

Please refer to the following sheet for detailed informaiton.

Parameter	Function
Scene	Please select a scene from the dropdown list you want to set.
Detect balance	There are three modes: compromise mode, omission detect less and error detect less.
Sensitivity	The level ranges from 1 to 10. The default setup is 5. The higher the sensitivity is, the easier for the device to detect the low contrast object and small object. At the same time, the error detect may become more.
Anti-disturbance mode	It is to control the random disturbance in the scene.
Backlight scene enable	Check the box here so that the device can have higher recognition capability in the backlight scene.
Shadow scene enable	Check the box here so that the device can have higher recognition capability in the shadow scene.
Target filter	Click button  , you can set the target filter model in this scene. Click the button  , you can remove selected target filter model.
Add detect region	Click button  , you can draw a detection zone.
Add excluded region	Click button  , you can draw the privacy mask (shield) zone.

3.3 Network

3.3.1 TCP/IP

The TCP/IP interface is shown as in Figure 3-21.

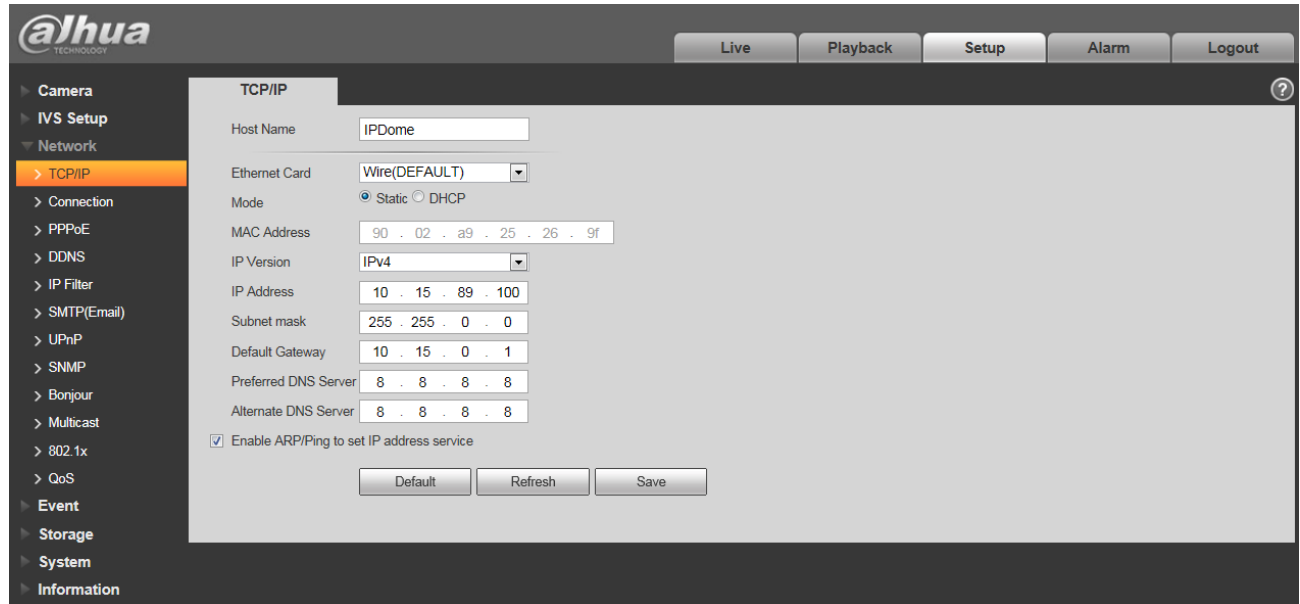


Figure 3-21

Please refer to the following sheet for detailed information.

Parameter	Function
Host Name	It is to set current host device name.
Ethernet Card	Please select the Ethernet port if the device has several network cards.
Mode	<p>There are two modes: static mode and the DHCP mode.</p> <ul style="list-style-type: none"> ● The IP/subnet mask/gateway are null when you select the DHCP mode to auto search the IP. ● If you select the static mode, you need to set the IP/subnet mask/gateway manually. ● Besides, IP/subnet mask/gateway and DHCP are read-only when the PPPoE dial is OK.
Mac Address	It is to display host Mac address. It is read-only.

IP Version	<p>It is to select IP version. IPV4 or IPV6.</p> <p>You can access the IP address of these two versions.</p> <ul style="list-style-type: none"> ● Please note system needs to check the validity of all IPv6 addresses. The IP address and the default gateway shall be in the same IP section. That is to say, the specified length of the subnet prefix shall have the same string. ● When PPPoE function is enabled, the IP/subnet mask/default gateway is read-only. You can not set or restore default setup.
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.
Default Gateway	It is the similar gateway of the IPv4. It shall not be left in blank.
Preferred DNS	DNS IP address. It is the similar DNS of the IPv4. It shall not be left in blank.
Alternate DNS	Alternate DNS IP address. It is the similar DNS of the IPv4. It shall not be left in blank.
Enable ARP/Ping set device IP address service.	<p>You can use ARP/Ping command to modify or set the device IP address if you know the device MAC address.</p> <p>Before the operation, please make sure the speed dome and the PC in the same LAN. This function is on by default.</p> <p>You can refer to the steps listed below.</p> <p>Step 1: Get an IP address. Set the speed dome and the PC in the same LAN.</p> <p>Step 2: Get the physical address from the label of the speed dome.</p> <p>Step 3: Go to the Run interface and then input the following commands.</p> <pre>arp -s <IP Address> <MAC> ping -l 480 -t <IP Address></pre> <p>Such as: arp -s 192.168.0.125 11-40-8c-18-10-11 ping -l 480 -t 192.168.0.125</p> <p>Step 4: Reboot the device.</p> <p>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.</p> <p>Step 6: Open the browse and then input http:// http://<IP address>. Click the Enter button, you can access now.</p>

3.3.2 Connection

The connection interface is shown as in Figure 3-22.

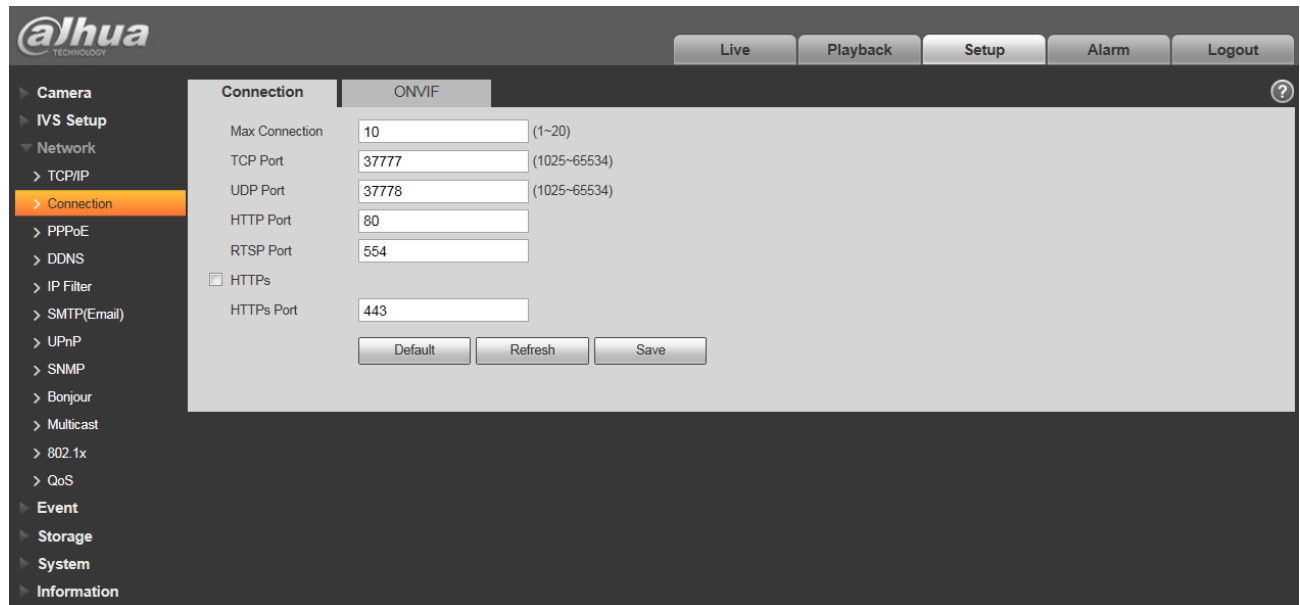


Figure 3-22

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. The default setup is 10.
TCP port	The value ranges from 1025 to 65535. The default value is 37777. You can input the actual port number if necessary.
UDP port	The value ranges from 1025 to 65535. The default value is 37778. You can input the actual port number if necessary.
HTTP port	The value ranges from 1025 to 65535. The default value is 80. You can input the actual port number if necessary.

RTSP port	<ul style="list-style-type: none"> Usually, the default value is 554. You do not need to input again if you are using the default value. When you are using QuickTime (Apple browser) or VLC play real-time video, you can use the following format to play. The Blackberry also supports this function. Real-time monitor bit stream Url format. Please specify the channel number, bit stream type in the Url if you are requesting real-time monitor bit stream Rtsp stream media service. You still need to provide user name or password if it has verification information. When you are using Blackberry phone to access, the bit stream mode shall be H.264B, resolution is CIF and the audio shall be disabled. The Url format is shown as below: rtsp://username:password@ip:port/cam/realmonitor?channel=1&subtype=0 You need to input the following items manually. Username/password/IP/port/subtype. The IP is device IP and the port default value is 554. You can leave it in blank if it is the default value. The channel number begins with 1. subtype: bit stream type, main stream is 0 (subtype=0) and extra stream is 1 (subtype=1) . You do not need to input the user name and password if you do not need the verification. Such as: Main stream: rtsp://ip:port/cam/realmonitor?channel=1&subtype=0
HTTPS Enable	It is to enable HTTPs communication service control. If you enable this function, you can use https://ip:port to login the device. In data encryption protection mode, you can use https://ip to login if you are using the default port.
HTTPS Port	The HTTPs communication port value ranges from 1025 to 65535.

Important

The value 0 to 1024 (excluding the default value of HTTP/RTSP/HTTPs), 1900, 3800, 5000, 5050, 9999, 37776, 37780-37880, 39999 and etc are the special ports value and they are not open for user to set.

3.3.3 ONVIF

ONVIF (Open Network Video Interface Forum) which describes the model, interface, data type of network video and the mode of data interaction. The target of ONVIF standard is to realize a network video frame protocol, which makes the network video products (including front end, record device) produced by different manufacturers completed compatible.

ONVIF function is disabled by default.

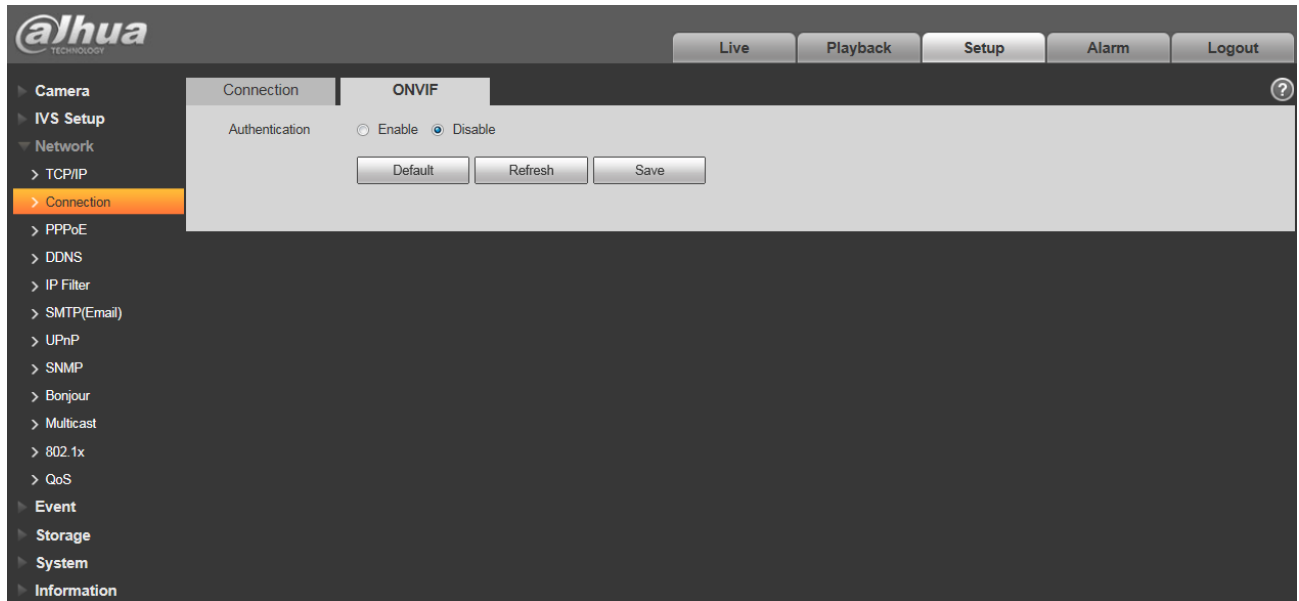


Figure 3-23

3.3.4 PPPoE

The PPPoE interface is shown as in Figure 3-23.

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.

PPPoE is set to connect to the internet. You can get an account from your IPS (Internet service provider), you can set here to dial to the interface. You can see the registered IP address in the interface if your setup is right.

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

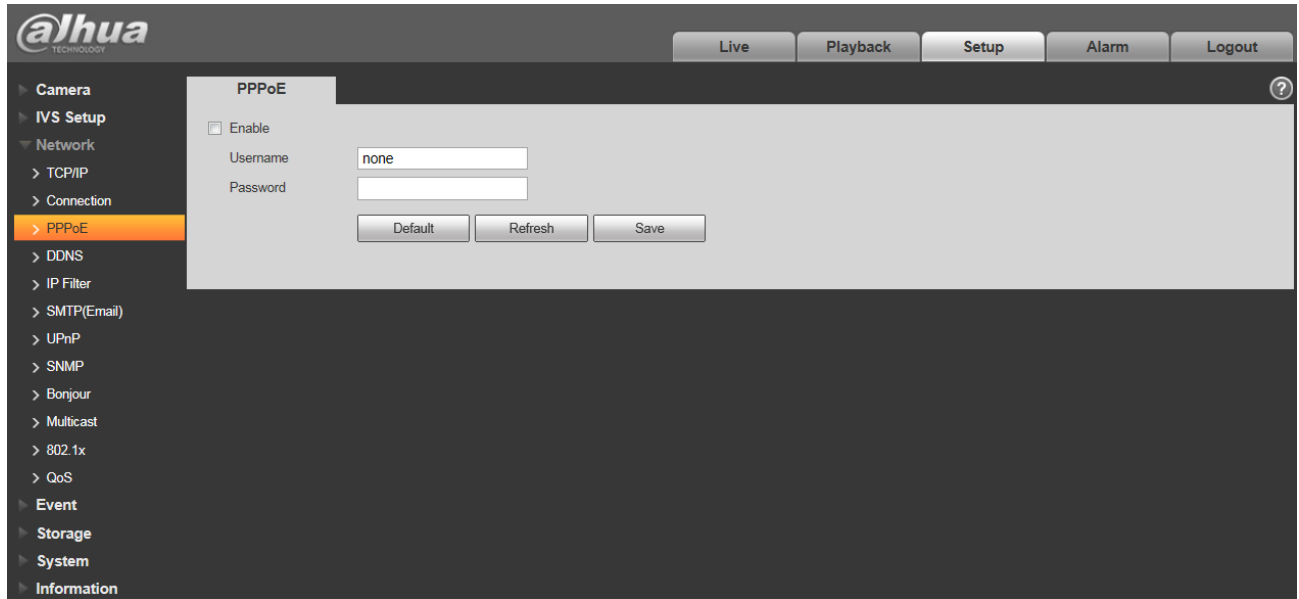


Figure 3-23

3.3.5 DDNS

The DDNS interface is shown as in Figure 3-24.

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 changes.

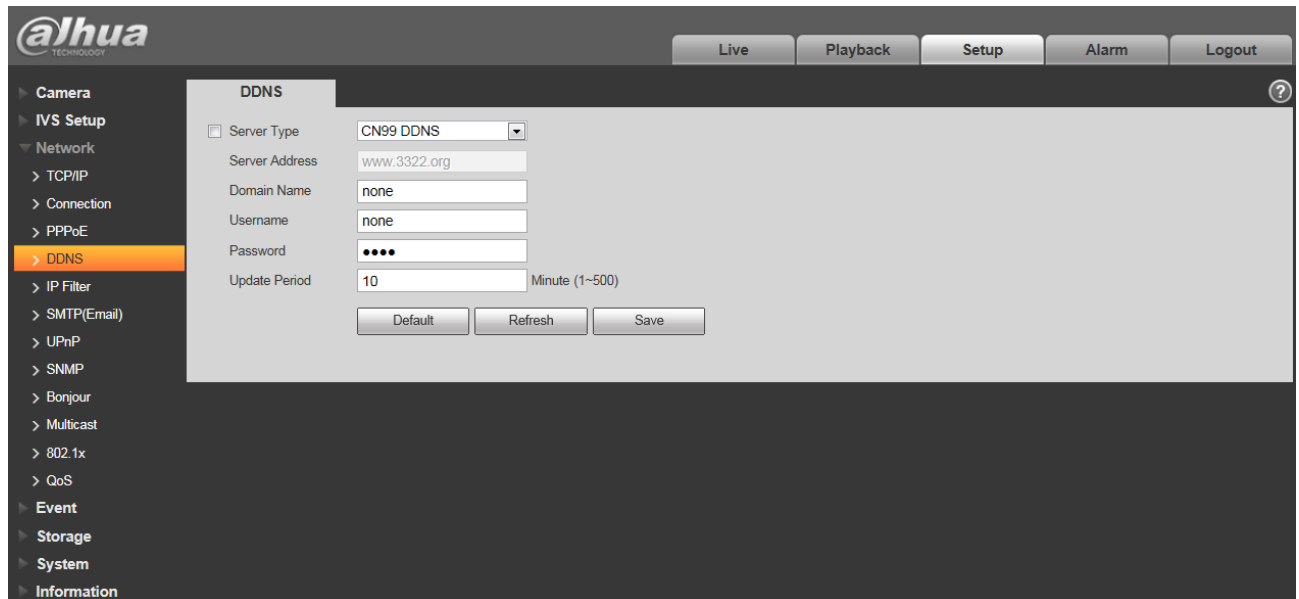


Figure 3-24

Please refer to the following sheet for detailed information.

Parameter	Function
Server Type	You can select DDNS protocol from the dropdown list and then enable DDNS function.
Server IP	DDNS server IP address
Server Port	DDNS server port.
Domain Name	Your self-defined domain name.
User	The user name you input to log in the server.
Password	The password you input to log in the server.
Update period	<ul style="list-style-type: none"> • Device IP and service connection refresh period. • The default setup is 10 minutes.

3.3.6 IP filter

The IP filter interface is shown as in Figure 3-25.

You can enable IP filter function so that some specified IP user can access the speed dome.

You can add IP address or IP address section.

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

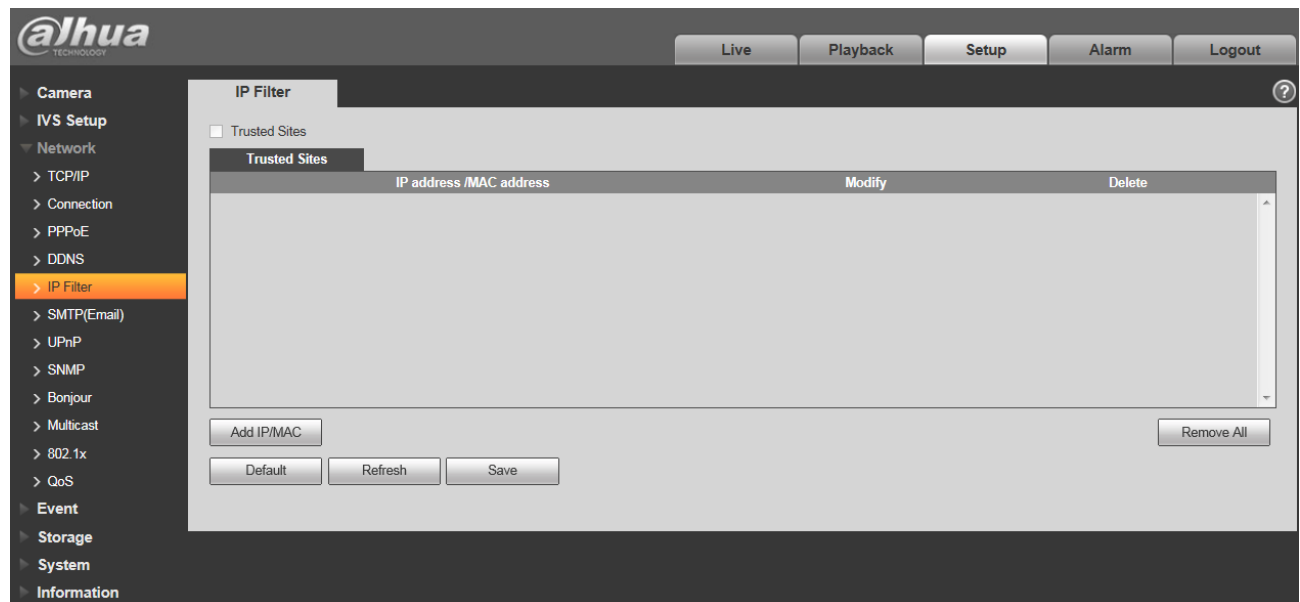


Figure 3-25

3.3.7 SMTP (e-mail)

The SMTP interface is shown as in Figure 3-26.

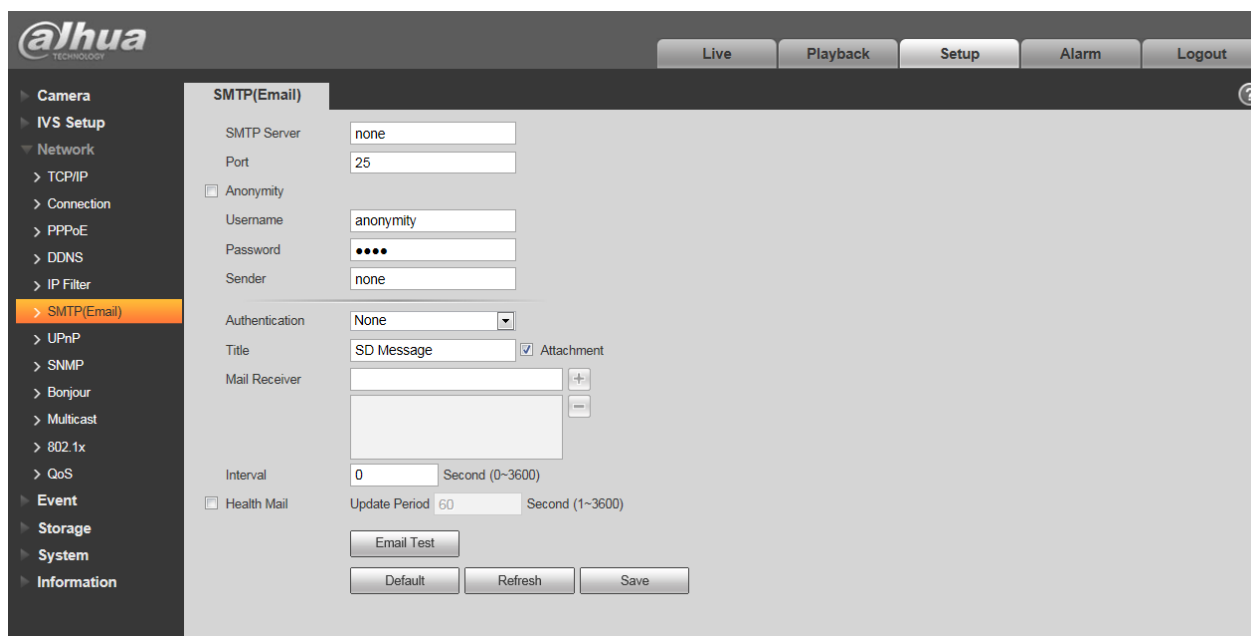


Figure 3-26

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 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.

Parameter	Function
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.
Update period (interval)	This function allows the system to send out the test email to check the connection is OK or not. Please check the box to enable this function and then set the corresponding interval. System can send out the email regularly as you set here.
Email test	The system will automatically sent out an email once to test the connection is OK or not .Before the email test, please save the email setup information.

3.3.8 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. See Figure 3-27.

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 speed dome can auto detect it via the “My Network Places”

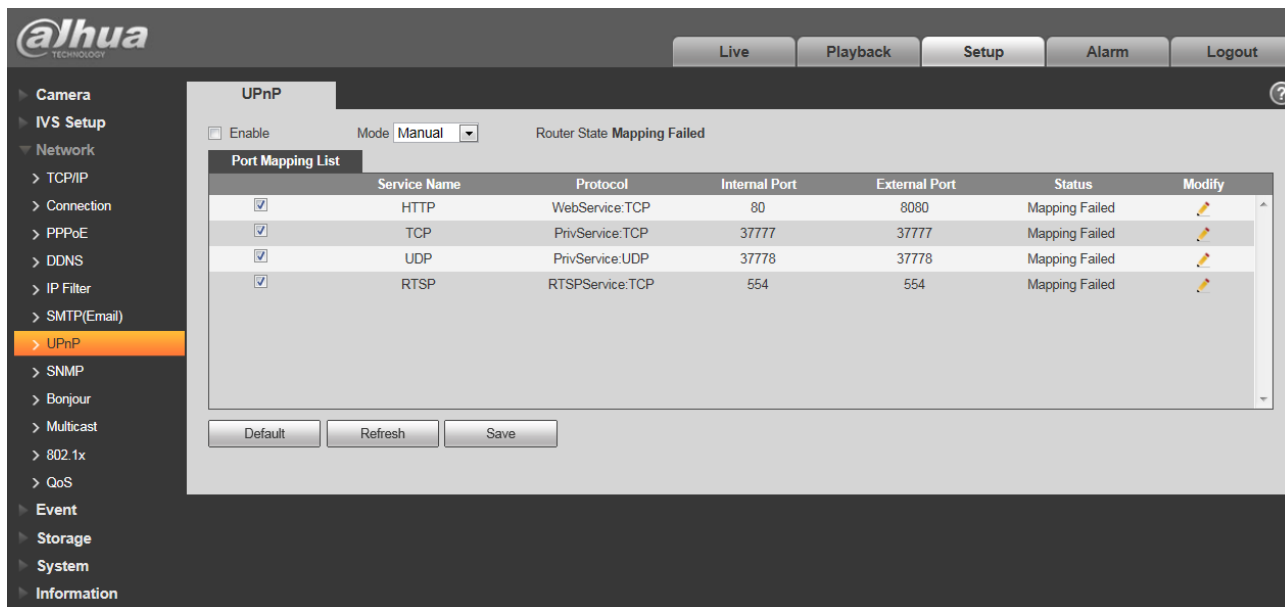


Figure 3-27

3.3.9 SNMP

The SNMP interface is shown as in Figure 3-28.

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.

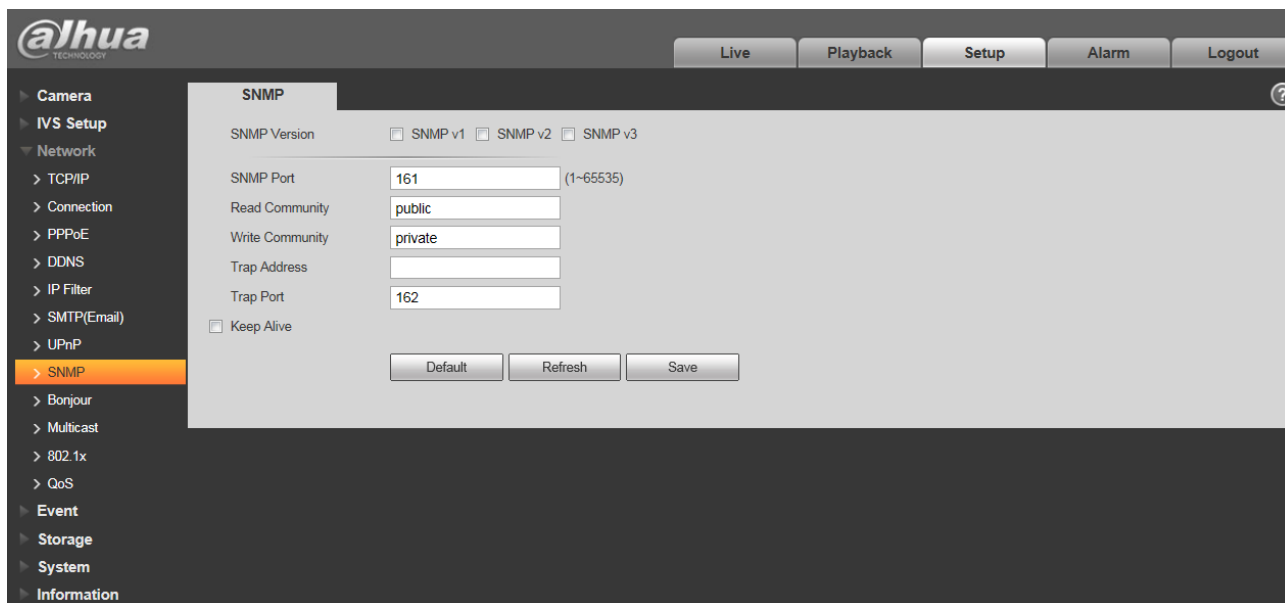


Figure 3-28

Please refer to the following sheet for detailed information.

Parameter	Function
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
Read Community	It is a string. It is a command between the manage process and the proxy process. It defined the authentication, access control and the management relationship between one proxy and one group of the managers. Please make sure the device and the proxy are the same. The read community will read all the objects the SNMP supported in the specified name. The default setup is public.
Write Community	It is a string. It is a command between the manage process and the proxy process. It defined the authentication, access control and the management relationship between one proxy and one group of the managers. Please make sure the device and the proxy are the same. The read community will read/write/access all the objects the SNMP supported in the specified name. The default setup is write.
Trap address	The destination address of the Trap information from the proxy program of the device.
Trap port	The destination port of the Trap information from the proxy program of the device. It is for the gateway device and the client-end PC in the LAN to exchange the information. It is a non-protocol connection port. It has no effect on the network applications. It is a UDP port not TCP port. The value ranges from 1 to 165535. The default value is 162.
SNMP version	<ul style="list-style-type: none"> ● Check SNMP v1, system only processes the information of V1. ● Check SNMP v2, system only processes the information of V2. ● Check SNMP v3, you can set account and password. You need to set the corresponding account and password for security verification when the server wants to access the device. At the same time, the V1 and V2 option is null.

3.3.10 Bonjour

The Bonjour interface is shown as below. See Figure 3-29.

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 speed dome device and then access if you do not know the speed dome information such as IP address.

You can view the server name when the speed dome 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 speed dome of the Bonjour function in the LAN.

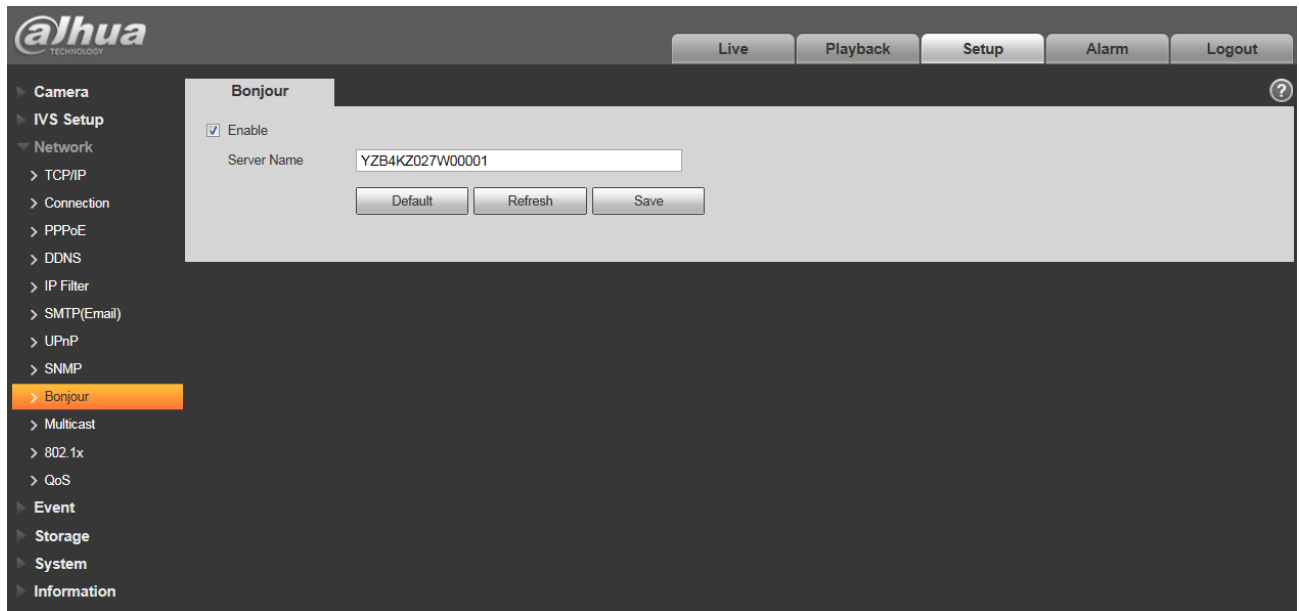


Figure 3-29

3.3.11 Multicast

The multicast interface is shown as in Figure 3-30.

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.

Here you can set multicast address and port. You also need to go to Live interface to set the protocol as Multicast.

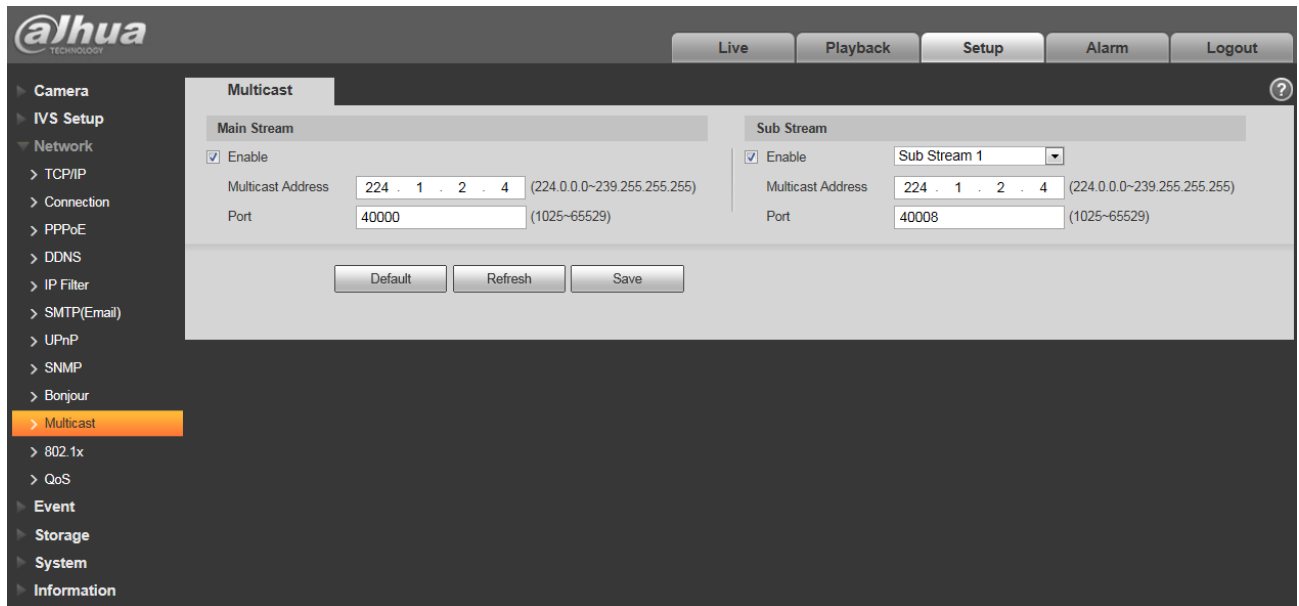


Figure 3-30

3.3.12 IEEE802

IEEE802.1X works standing for local and metropolitan area networks and port based network access control protocol. It supports manual operation of the client to choose means of authenticating by which to control it to access to the Local Area Networks or not. It supports the ability to authenticate, to calculate fee, to ensure security and to maintain requirements. See Figure 3-31.

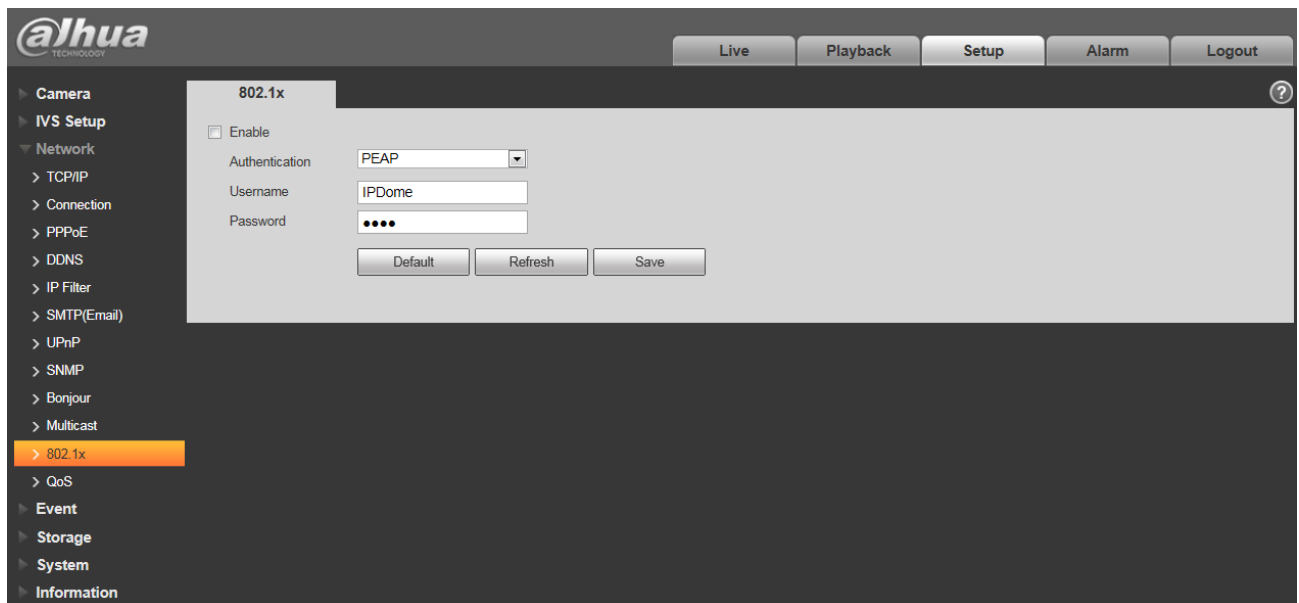


Figure 3-31

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.

3.3.13 Qos

The QoS interface is shown as below. See Figure 3-32.

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, and 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 of the packets and select the bandwidth of the each queue. It can also discard at the different ratio when the broad bandwidth is jam.

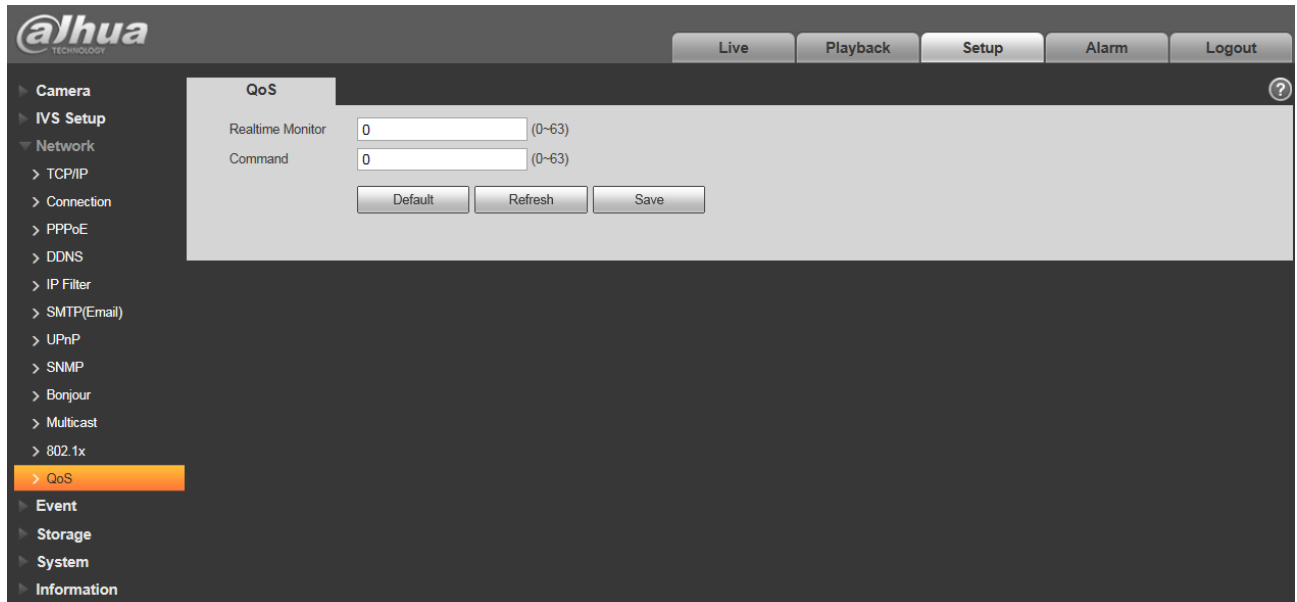


Figure 3-32

Please refer to the following sheet for detailed information.

Parameter	Function
Real-time monitor	The data packet of the network video monitor.
Command	The non-monitor packet such as device setup and search.

3.4 Event

3.4.1 Video detect

3.4.1.1 Motion Detect

The motion detect interface is shown as in Figure 3-33.

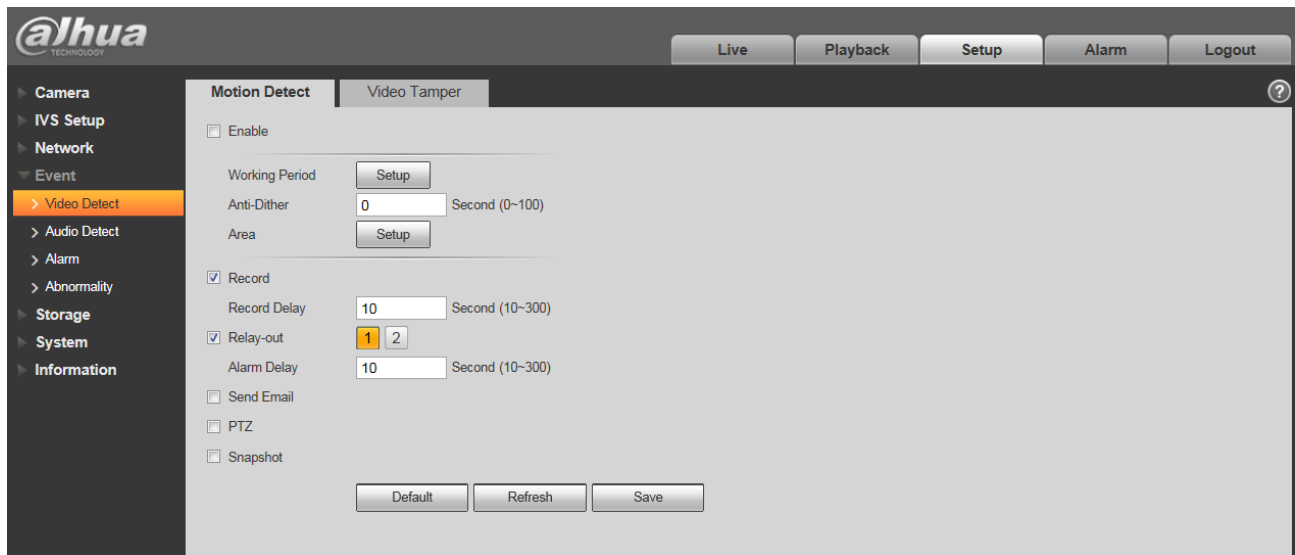
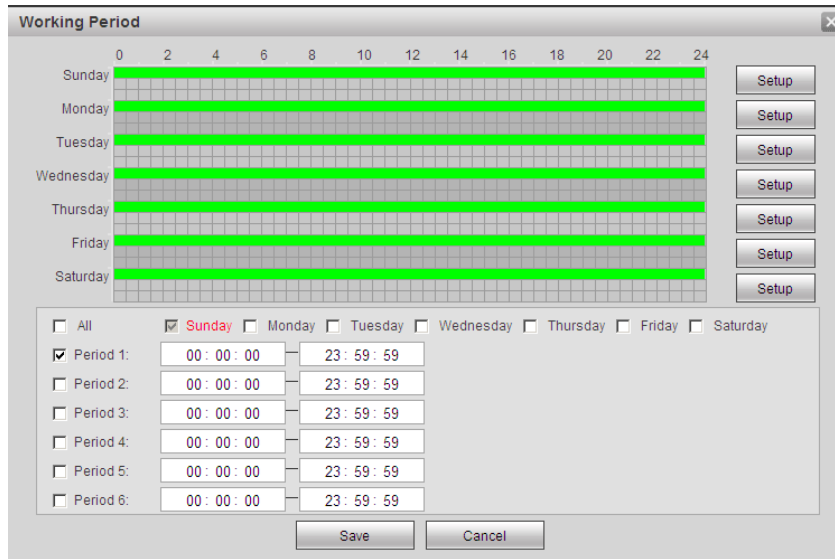
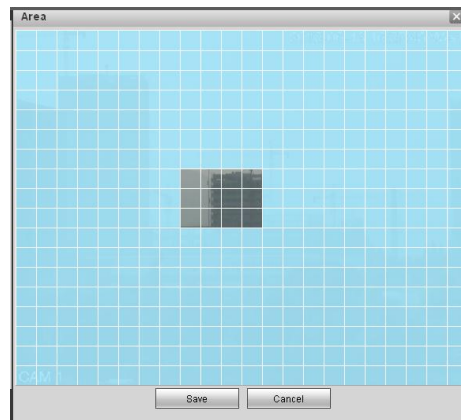


Figure 3-33



The 'Working Period' window displays a 24-hour timeline at the top. Below it, seven rows represent the days of the week (Sunday through Saturday). Each row has a green bar spanning the entire 24-hour period, indicating that motion detection is enabled for all days. To the right of each day's bar is a 'Setup' button. Below the day bars, there are checkboxes for each day: ☐ All, ☒ Sunday, ☐ Monday, ☐ Tuesday, ☐ Wednesday, ☐ Thursday, ☐ Friday, and ☐ Saturday. Underneath these are six 'Period' settings (Period 1 to Period 6). Each period has a checkbox and two time input fields (start and end times). Period 1 is currently selected with its start time at 00:00:00 and end time at 23:59:59. At the bottom of the window are 'Save' and 'Cancel' buttons.

Figure 3-34



The 'Area' window shows a large blue grid representing the camera's field of view. In the center of the grid, a small 3x3 area is highlighted with a darker, greyish-blue color, indicating the selected region for motion detection. At the bottom of the window are 'Save' and 'Cancel' buttons.

Figure 3-35

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	You need to check the box to enable motion detection function.
Sensitivity	There are six levels. The sixth level has the highest sensitivity.

Parameter	Function
Region	<ul style="list-style-type: none"> • There are six levels. The sixth level has the highest sensitivity. • Region: If you select motion detection type, you can click this button to set motion detection zone. The light blue zones are the valid motion detect area. All area are the valid motion detect zone by default. You can use mouse to set invalid area. • Do remember clicking OK button to save your motion detection zone setup.
Working Period	<ul style="list-style-type: none"> • Motion detection function becomes activated in the specified periods. See Figure 3-34. • 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.
Anti-dither	System only memorizes one event during the anti-dither period. The value ranges from 0s to 100s.
Relay out	<p>Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs.</p> <p>Please note the relay output number here is for reference only. The alarm output number may vary due to different series products.</p>
Alarm Delay	System can delay the alarm output for specified time after motion detect alarm ended. The value ranges from 10s to 300s.
Record channel	System auto activates motion detection channel to record once motion detect alarm occurs (working with motion detection function). Please note you need to go to Storage-> Schedule to set motion detect record period and go to Storage->Record control to set current channel as auto record.
Record Delay	System can delay the record for specified time after motion detect 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.
PTZ	<ul style="list-style-type: none"> • 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 and etc.
Snapshot	It is snapshot activation function.

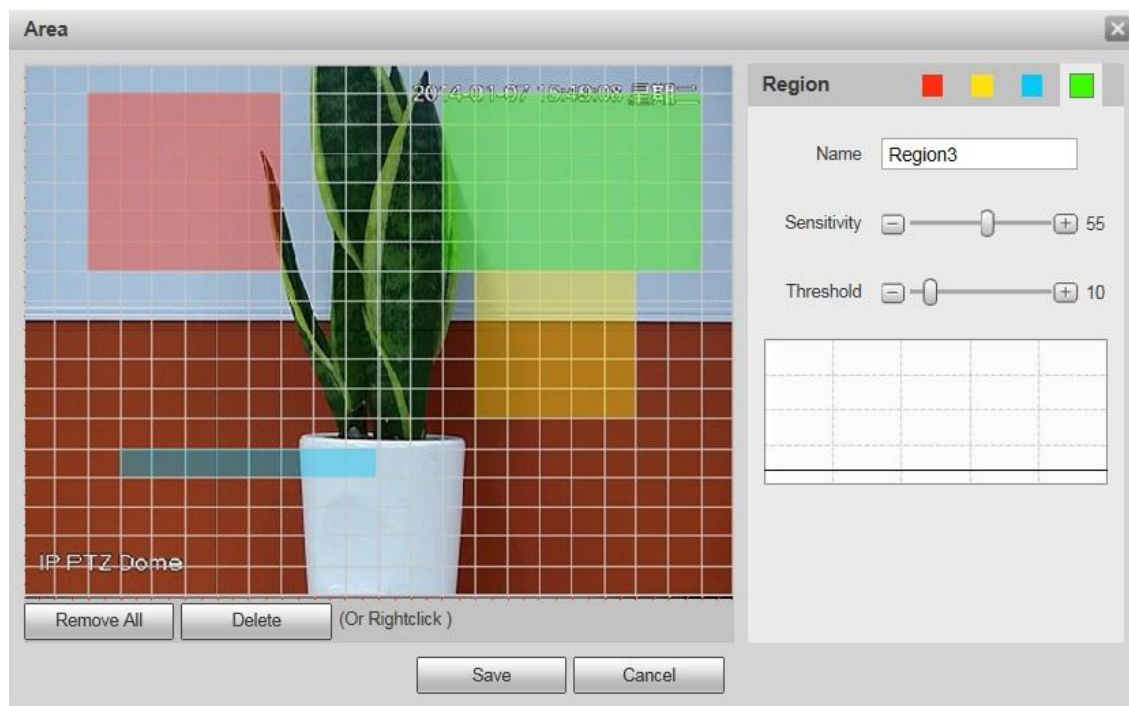


Figure 3-36

Different colors represent different areas; each area can set different detection area, which can be irregular and discontinuous. If the monitoring range of the device is very large, it can divide the big range into several areas to enhance the result of motion detect.

Parameter	Note
Name	Default name is Region0 、 Region1 、 Region2 、 Region3, it also can be customized.
Sensitivity	The sensitivity of the brightness change, for the same brightness change, the bigger sensitivity is, the easier it will be to generate motion detect; each area can set different sensitivity. Range is 0~100, suggested 30~70.
Threshold	It is to detect the relationship between the object and the area. It will generate motion detect when the lower limit percentage of moving object area covering detection area reaches the set area threshold; each area can set different area thresholds. Ranging from 0~100, suggested 0~10.
Oscillogram	Red line means triggering motion detect, green line means not triggering motion detect.

3.4.1.2 Video Masking

The video masking interface is shown as in Figure 3-36.

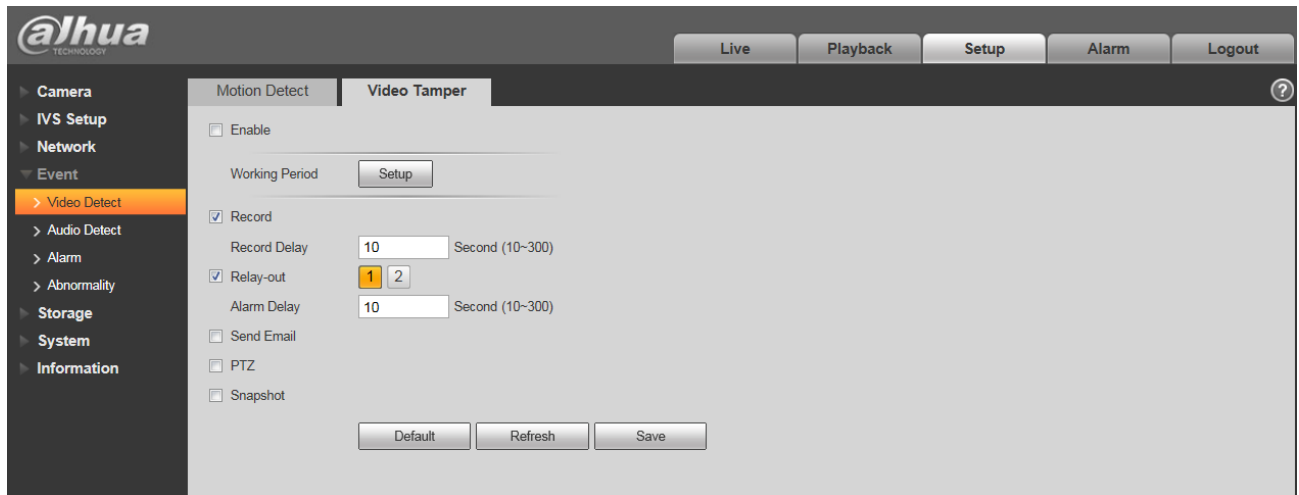


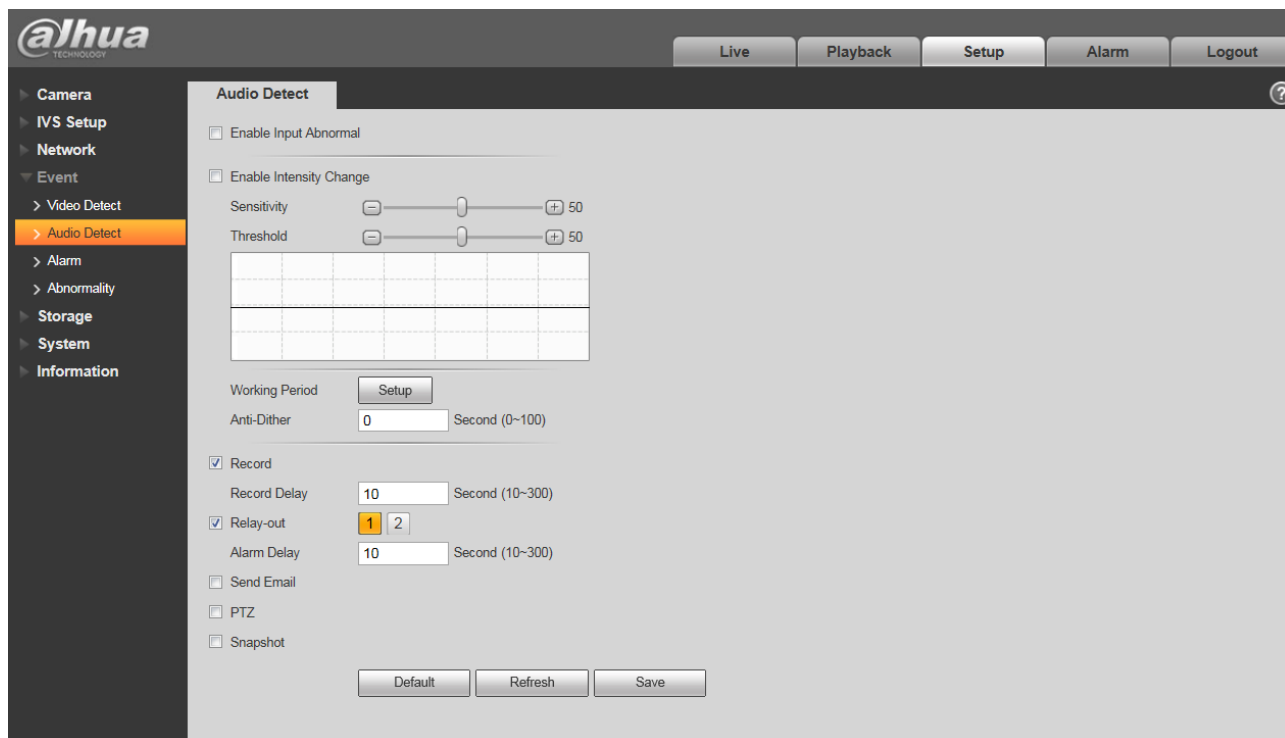
Figure 3-36

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	You need to check the box to enable video masking function.
Sensitivity	There are six levels. The sixth level has the highest sensitivity.
Working Period	<ul style="list-style-type: none"> Video masking 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.
Anti-dither	System only memorizes one event during the anti-dither period. The value ranges from 0s to 100s.
Relay out	<p>Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when video masking alarm occurs.</p> <p>Please note the relay output number here is for reference only. The alarm output number may vary due to different series products.</p>
Alarm Delay	System can delay the alarm output for specified time after video masking alarm ended. The value ranges from 10s to 300s.

Parameter	Function
Record channel	System auto activates motion detection channel to record once video masking alarm occurs (working with motion detection function). Please note you need to go to Storage-> Schedule to set motion detect record period and go to Storage->Record control to set current channel as auto record.
Record Delay	System can delay the record for specified time after video masking alarm ended. The value ranges from 10s to 300s.
Email	If you enabled this function, System can send out email to alert you when alarm occurs.
PTZ	<ul style="list-style-type: none"> 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 and etc.
Snapshot	It is snapshot activation function.

3.4.2 Audio Detect



Audio Detect

☐ Enable Input Abnormal

☐ Enable Intensity Change

Sensitivity

Threshold

Working Period

Anti-Dither Second (0-100)

☒ Record

Record Delay Second (10-300)

☒ Relay-out

Alarm Delay Second (10-300)

☐ Send Email

☐ PTZ

☐ Snapshot

Figure 3-37

Parameter	Note
Enable Input Abnormal	Check “Enable Input Abnormal”, it will trigger alarm when it detects audio input abnormal.
Enable Intensity Change	Check “Enable Intensity Change”, it will trigger alarm when it detects the audio intensity change exceeds the threshold.
Sensitivity	1~100 level adjustable, only when the volume change of input sound surpasses the volume of continuous environment, then it can be judged as audio abnormality when the value is smaller. Users need to adjust according to the actual environmental test.
Threshold	1~100 level adjustable, it can be used to set the intensity of filtered environmental sound. If the environmental noise is louder, then it needs to set the value higher. Users need to adjust according to the actual environmental test.
Working Period	<ul style="list-style-type: none"> ● This function becomes activated in the specified periods. Click setup to open working period menu to set. ● 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.
Anti-Dither	System only memorizes one event during the anti-dither period. The unit is second. The value ranges from 0s to 100s.
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.
PTZ	<ul style="list-style-type: none"> ● 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	Activate snapshot function.

3.4.3 Alarm

The alarm activation interface is shown as in Figure 3-37.

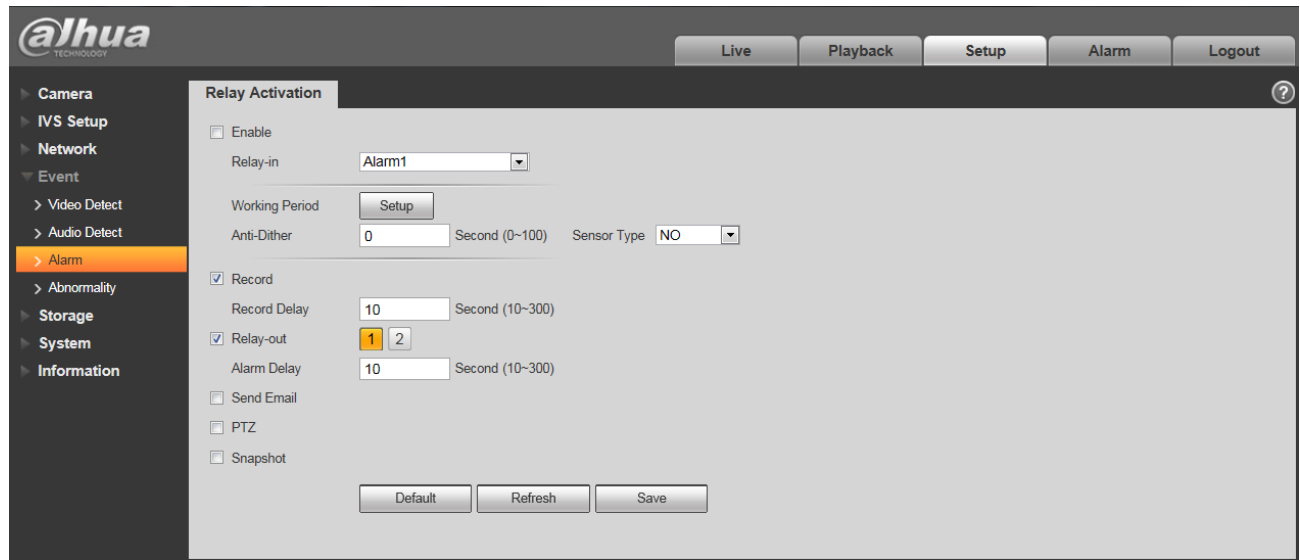


Figure 3-37

Please refer to the following sheet for detailed information.

Parameter	Function
Enable	You need to check the box to enable this function.
Working Period	<ul style="list-style-type: none"> 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.
Anti-dither	System only memorizes one event during the anti-dither period. The value ranges from 0s to 100s.
Sensor type	There are two options: NO/NC. From NO to NC, system enables alarm. From NC to NO, system disables alarm.
Relay out	<ul style="list-style-type: none"> Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs. Please note the relay output number here is for reference only. The alarm output number may vary due to different series products.
Alarm Delay	System can delay the alarm output for specified time after alarm ended. The value ranges from 10s to 300s.

Parameter	Function
Record Channel	System auto activates motion detection channel to record once alarm occurs (working with motion detection function). Please note you need to go to Storage-> Schedule to set current channel as general record.
Record Delay	System can delay the record 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.
PTZ	<ul style="list-style-type: none"> 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 input capture channel number so that system can backup motion detection snapshot file.

3.4.4 Abnormality

It includes five statuses: No SD card, capacity warning, SD card error, and disconnection, IP conflict and illegal access.

Note:

The device which supports SD card has the abnormality function of “NO SD Card”, “Capacity Warning” and “SD card error”.

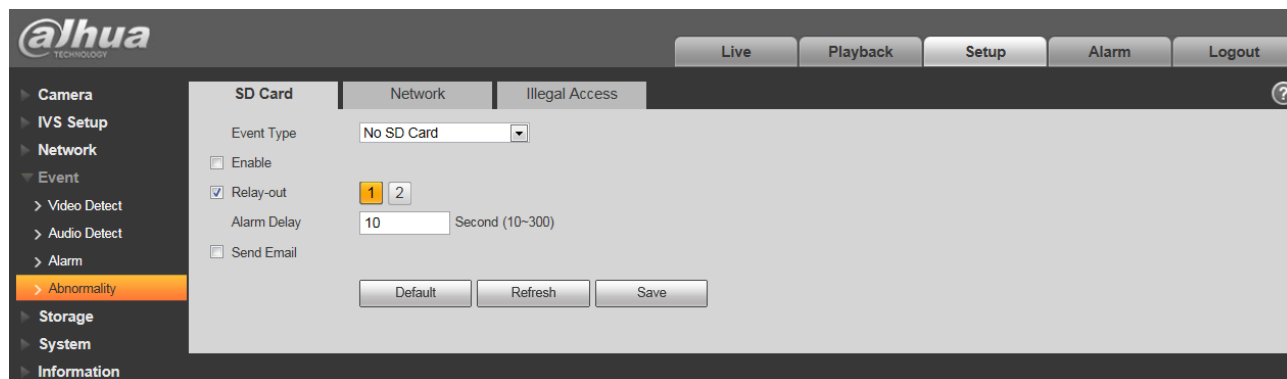


Figure 3-38

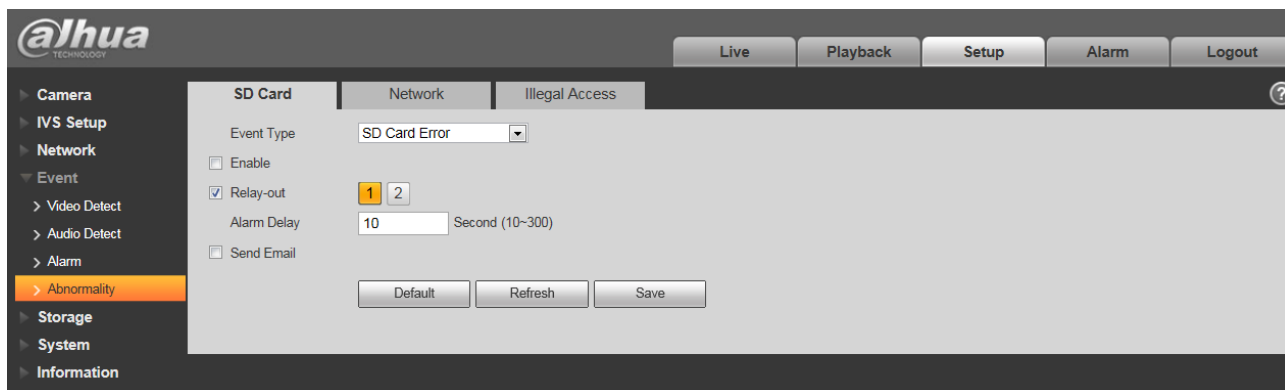


Figure 3-39



Figure 3-40

Parameter	Note
Event Type	SD card abnormality alarm event includes: no SD card, capacity warning, SD card error.
Enable	Check it to enable SD card abnormality alarm.
Relay out	Check it to enable alarm activation output interface, it can activate corresponding alarm output device when alarm occurs.
Alarm Delay	Alarm delays a certain period of time after alarm ended, the unit is second, ranging from 10s to 300s. Note: No SD card, capacity warning, SD card error, alarm delay starts from the beginning of alarm.
Send email	Check it to send email to users when alarm occurs, users can set email address in "Network > SMTP".

Parameter	Note
SD Card Capacity Limit	It can set the remaining capacity of SD card; alarm will occur when the remaining capacity of SD card is less than the percentage.

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

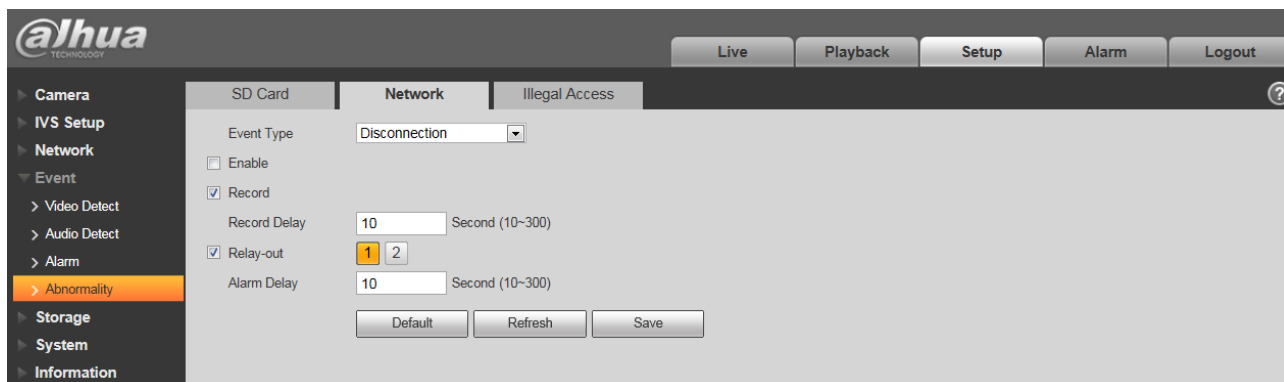


Figure 3-41

When login password keep been wrong for a few times, illegal 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 3-42

3.5 Storage

3.5.1 Record schedule and snapshot schedule

In these two interfaces, you can add or remove the schedule record/snapshot setup. See Figure 3-41. There are three record modes: general (auto), motion detect and alarm. There are six periods in one day. Please make sure you have enabled the corresponding record mode in the Setup->Storage->Conditions.

You can view the current time period setup from the color bar.

- 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.

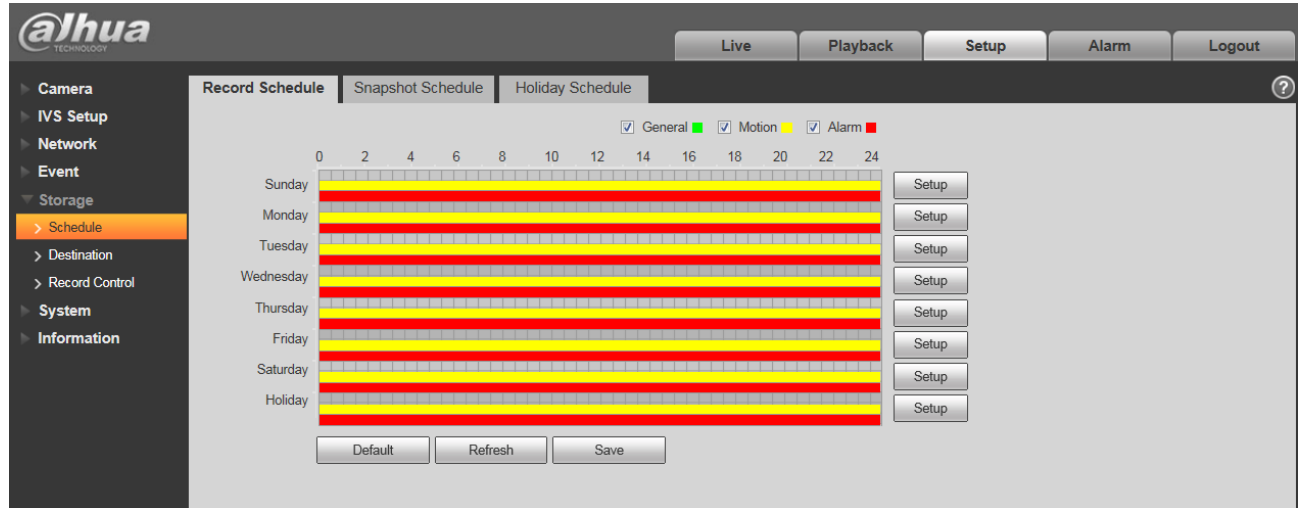


Figure 3-41

3.5.2 Destination

The destination interface is shown as in Figure 3-42.

It is to set the storage mode of the speed dome record file or snapshot pictures. There are two options: local storage/FTP. 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.

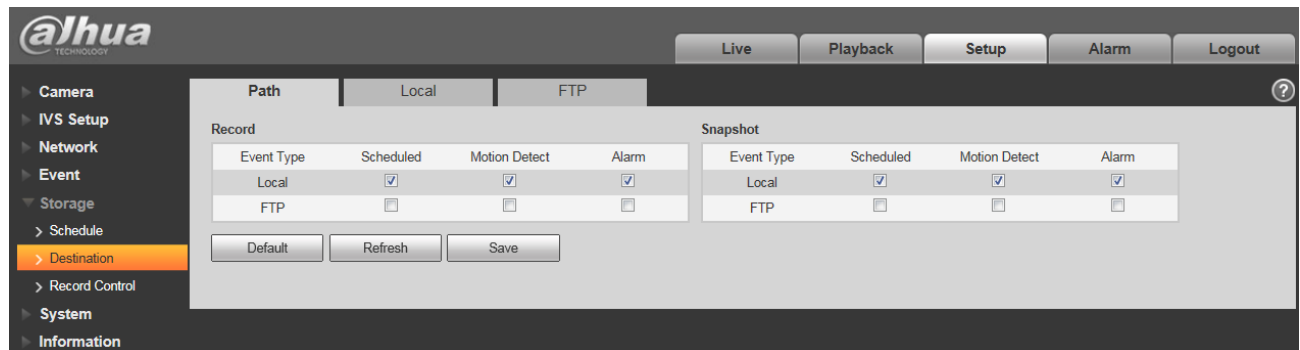


Figure 3-42

Please refer to the following sheet for detailed information.

Parameter	Function
Event Type	It includes: general, motion detect and alarm.
Local	It is to save in the SD card.
FTP	It is to save in the FTP server.

The local interface is shown as in Figure 3-43. Here you can view local SD card information. You can also operate the read-only, write-only, hot swap and format operation.



Figure 3-43

The FTP interface is shown as in Figure 3-44. 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.

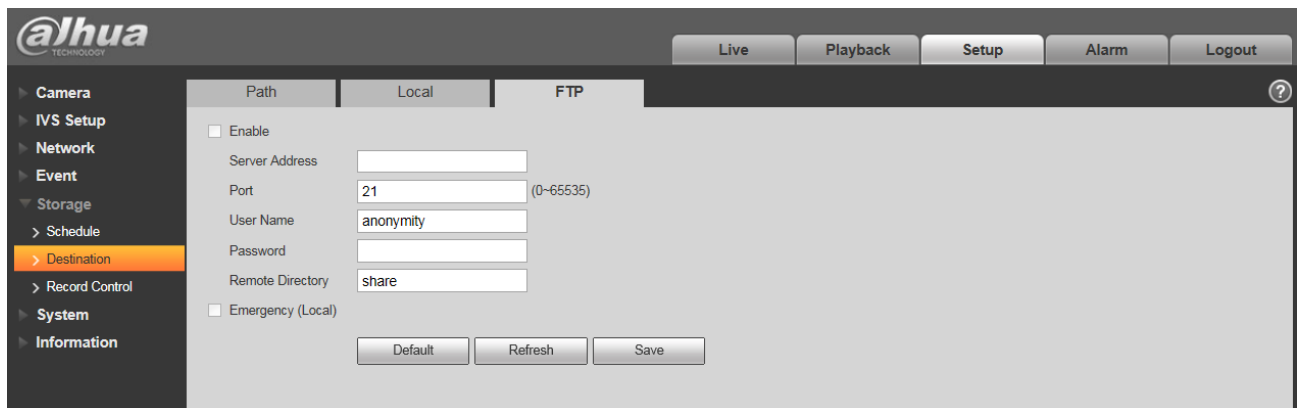


Figure 3-44

3.5.3 Record control

The record control interface is shown as in Figure 3-45.

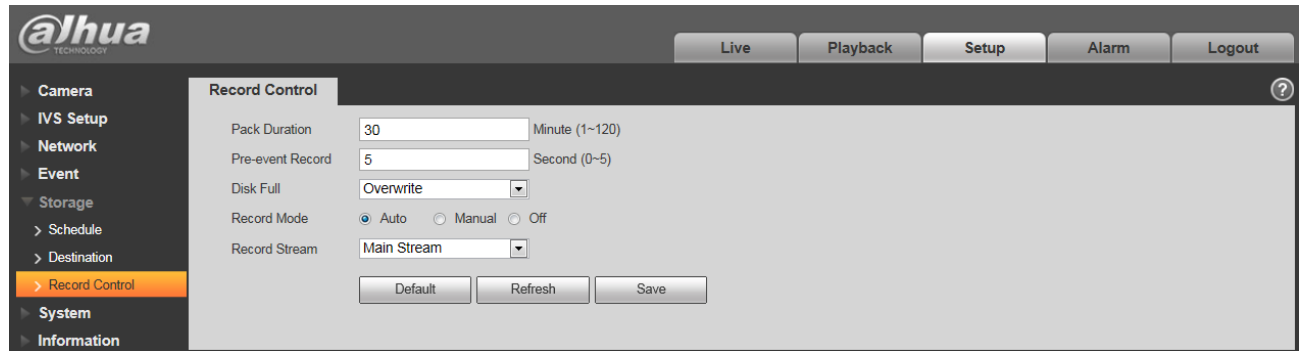


Figure 3-45

Please refer to the following sheet for detailed information.

Parameter	Function
Pack Duration	Here you can select file size. Default setup is 60 minutes.
Pre-record	<p>Please input pre-record value here.</p> <p>For example, you can input 4 here so that system can read the previous four seconds video before the alarm occurrence from the buffer and record the 4 seconds video in the file.</p> <p>Please note, if there is no record when alarm record or motion detect record occurred, system can record the N seconds' video before the event occurrence in the file.</p>
Disk Full	<p>There are two options: stop recording or overwrite the previous files when HDD is full.</p> <ul style="list-style-type: none"> ● 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 Bit Stream	You can select main stream or extra stream.

3.6 System

3.6.1 General

The general interface includes the general setup and the date/time setup.

3.6.1.1 General

The general interface is shown as in Figure 3-46.

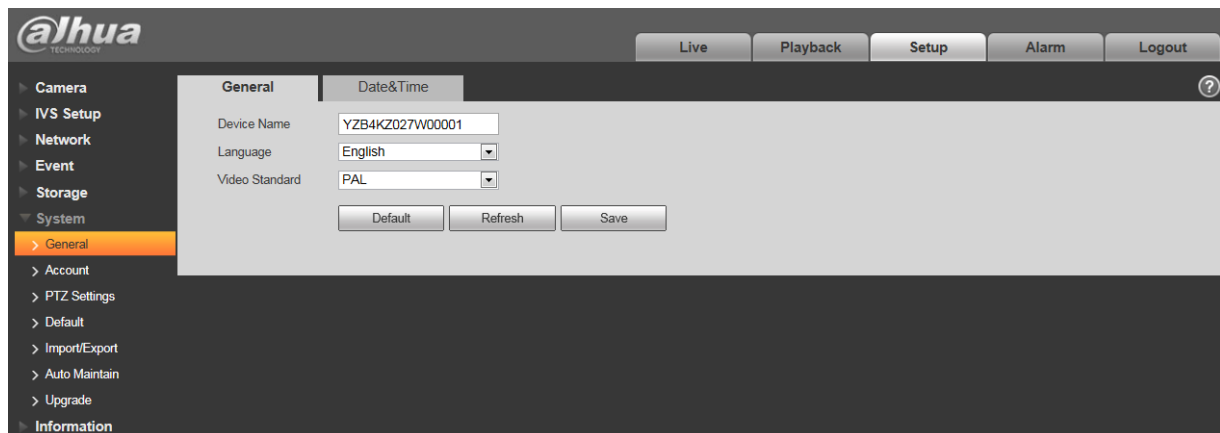


Figure 3-46

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.
Language	You can select the language from the dropdown list. Please note the device needs to reboot to get the modification activated.

3.6.1.2 Date and time

The date and time interface is shown as in Figure 3-47

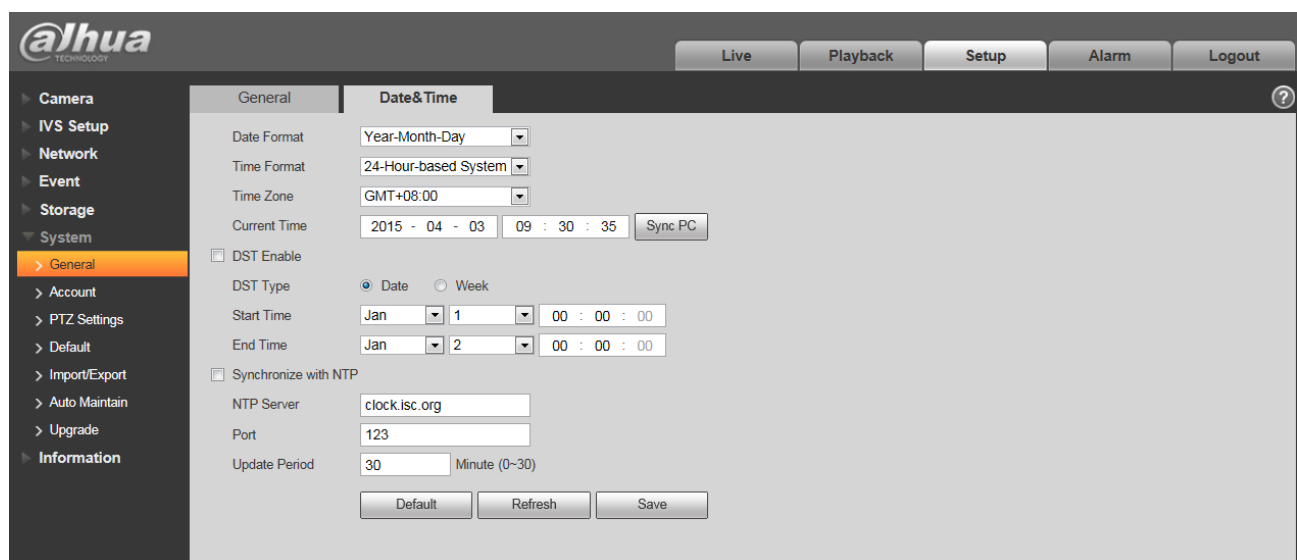


Figure 3-47

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. The update function is null if the value is 0.

3.6.2 Account

Note:

- For the character in the following user name or the user group name, system max supports 15-digit. The space in the front or at the end of the string is null. The valid string includes: character, number, space and underline.
- The max user amount is 20 and the max group amount is 8. You can add or delete user group.
- The factory default setup includes two levels: user and admin. .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.

3.6.2.1 User name

In this interface you can add/remove user and modify user name. See Figure 3-48.

Once you check the box here to enable anonymous login function, you can go to the preview interface after you input address in the browser to login.

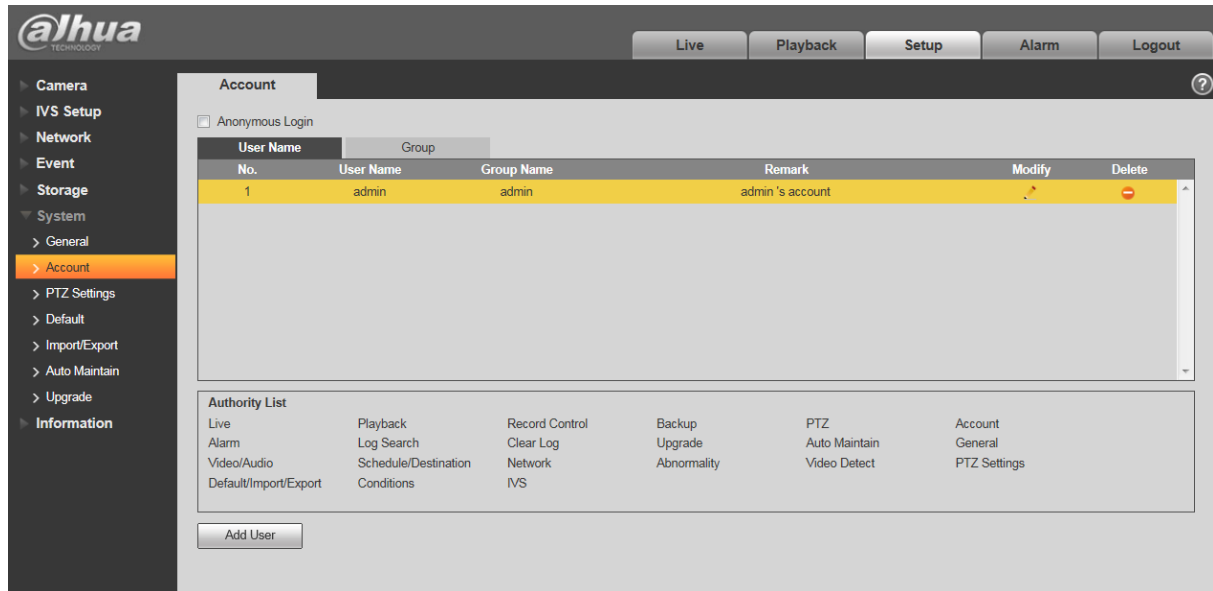


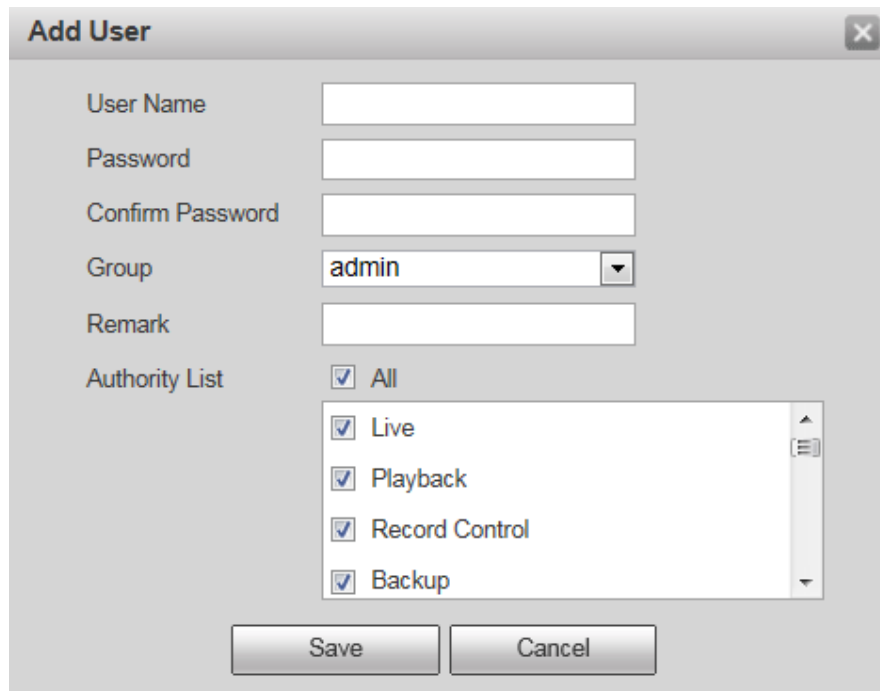
Figure 3-48

Add user: It is to add a name to group and set the user rights. See Figure 3-49.

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.



The 'Add User' dialog box contains the following fields and options:

- User Name:** Text input field.
- Password:** Text input field.
- Confirm Password:** Text input field.
- Group:** Dropdown menu with 'admin' selected.
- Remark:** Text input field.
- Authority List:** A list of permissions with checkboxes:
 - ☒ All
 - ☒ Live
 - ☒ Playback
 - ☒ Record Control
 - ☒ Backup

At the bottom are 'Save' and 'Cancel' buttons.

Figure 3-49

Modify user

It is to modify the user property, belonging group, password and rights. See Figure 3-50.

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.

For the user of the account rights, he can modify the password of other users.

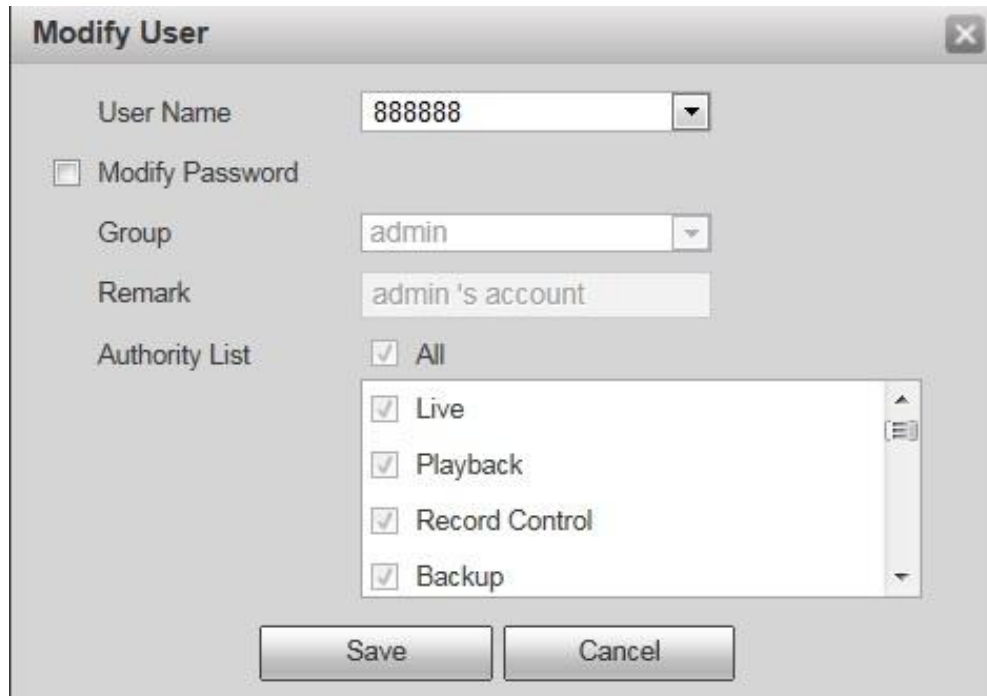


Figure 3-50

3.6.2.2 Group

The group management interface can add/remove group, modify group password and etc.

The interface is shown as in Figure 3-51.

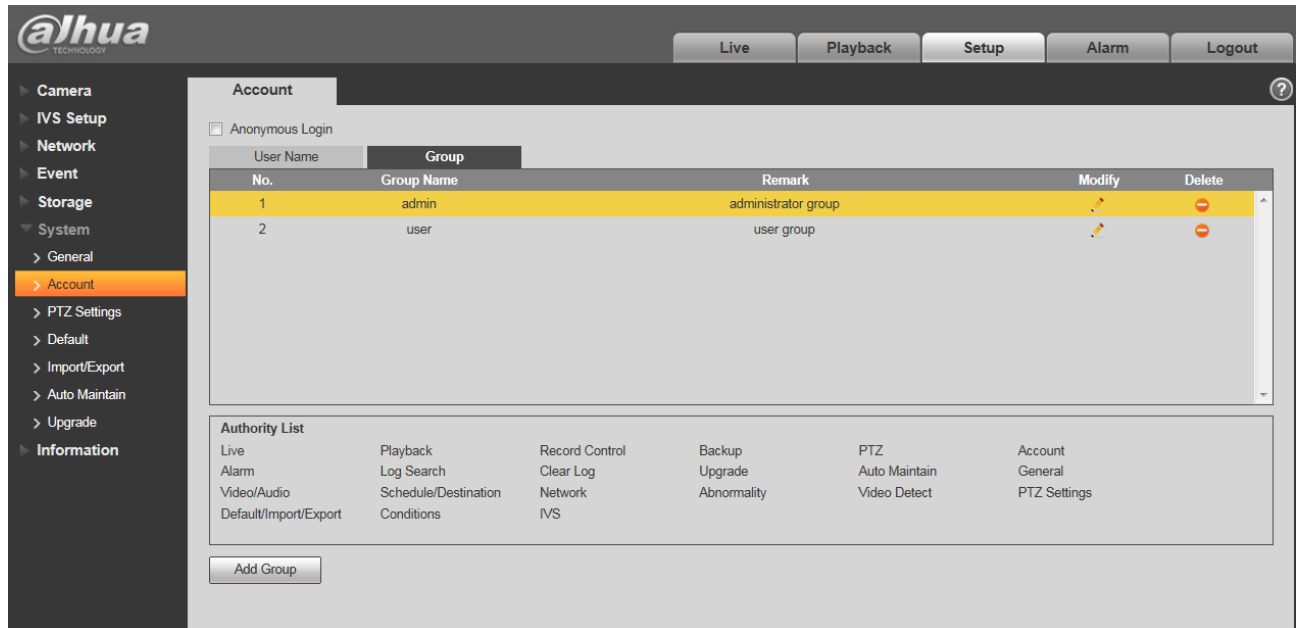


Figure 3-51

Add group: It is to add group and set its corresponding rights. See Figure 3-52.

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

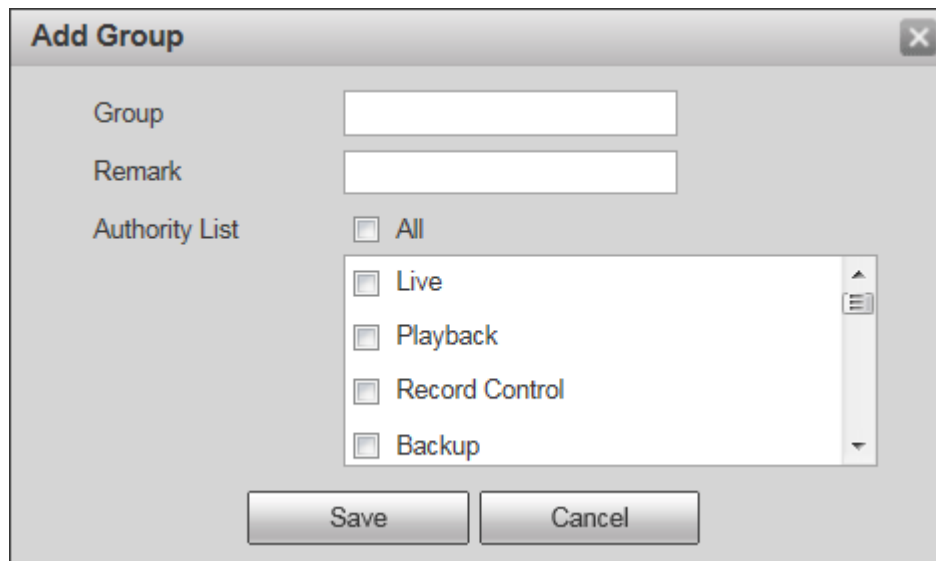
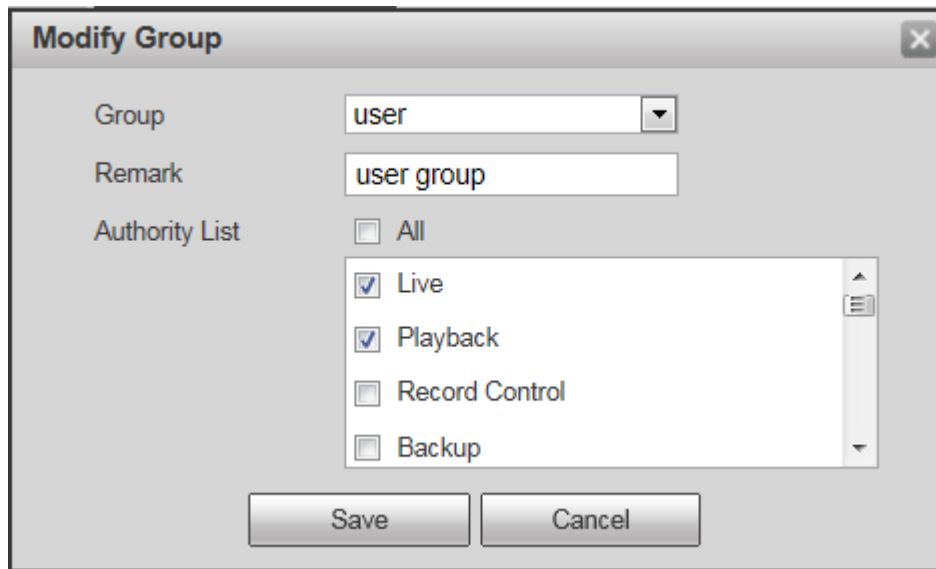


Figure 3-52

Modify group

Click the modify group button, you can see an interface is shown as in Figure 3-53.

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



The 'Modify Group' dialog box contains the following fields and controls:

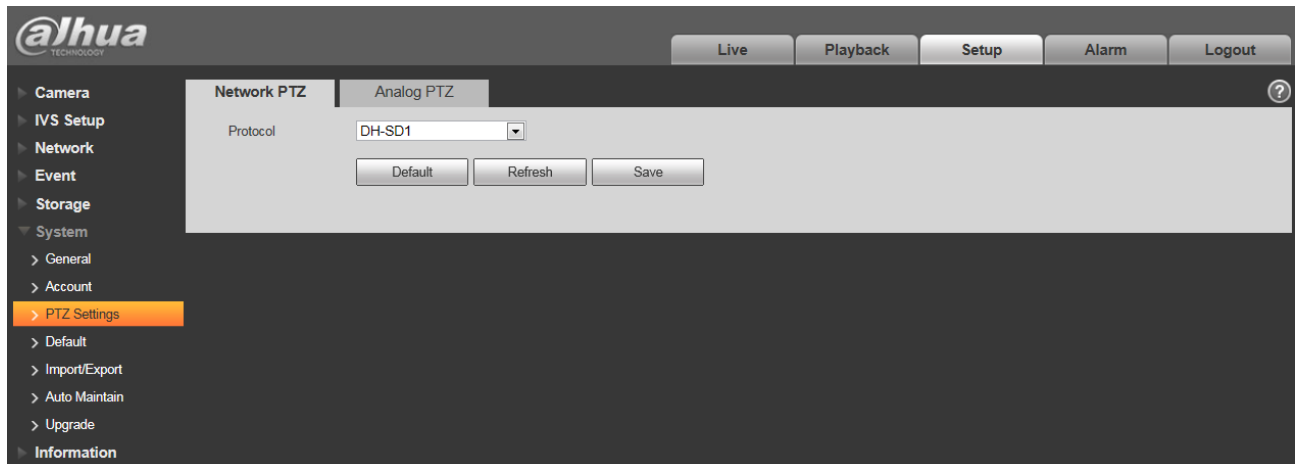
- Group:** A dropdown menu with 'user' selected.
- Remark:** A text input field containing 'user group'.
- Authority List:** A list of permissions with checkboxes:
 - ☐ All
 - ☒ Live
 - ☒ Playback
 - ☐ Record Control
 - ☐ Backup
- Buttons:** 'Save' and 'Cancel' buttons at the bottom.

Figure 3-53

3.6.3 PTZ

3.6.3.1 Network PTZ

The network PTZ interface is shown as in Figure 3-54.



The 'Network PTZ' interface includes the following elements:

- Top Bar:** Navigation tabs for 'Live', 'Playback', 'Setup', 'Alarm', and 'Logout'.
- Left Sidebar:** A menu with categories like Camera, IVS Setup, Network, Event, Storage, System, and Information. 'PTZ Settings' is highlighted.
- Main Content Area:**
 - Tabs for 'Network PTZ' and 'Analog PTZ'.
 - A 'Protocol' dropdown menu with 'DH-SD1' selected.
 - 'Default', 'Refresh', and 'Save' buttons.

Figure 3-54

Please refer to the following sheet for detailed information.

Parameter	Function
Protocol	Select the corresponding dome protocol.

3.6.3.2 Analog PTZ

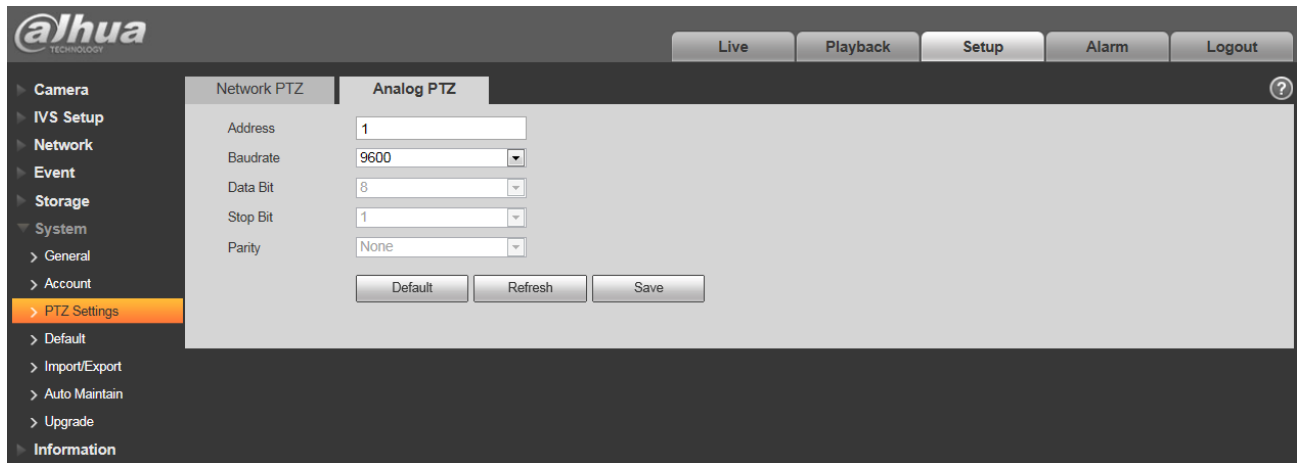


Figure 3-57

Parameter	Note
Address	It is set as the address of the corresponding Speed Dome, it is 1 by default.
Baud rate	It is to select the Baud rate for camera, default is 9600
Data Bit	It is 8 by default
Stop Bit	It is 1 by default
Parity	It is to set parity mode of the protocol, it is none by default.

3.6.4 Default

The default setup interface is shown as in Figure 3-55.

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

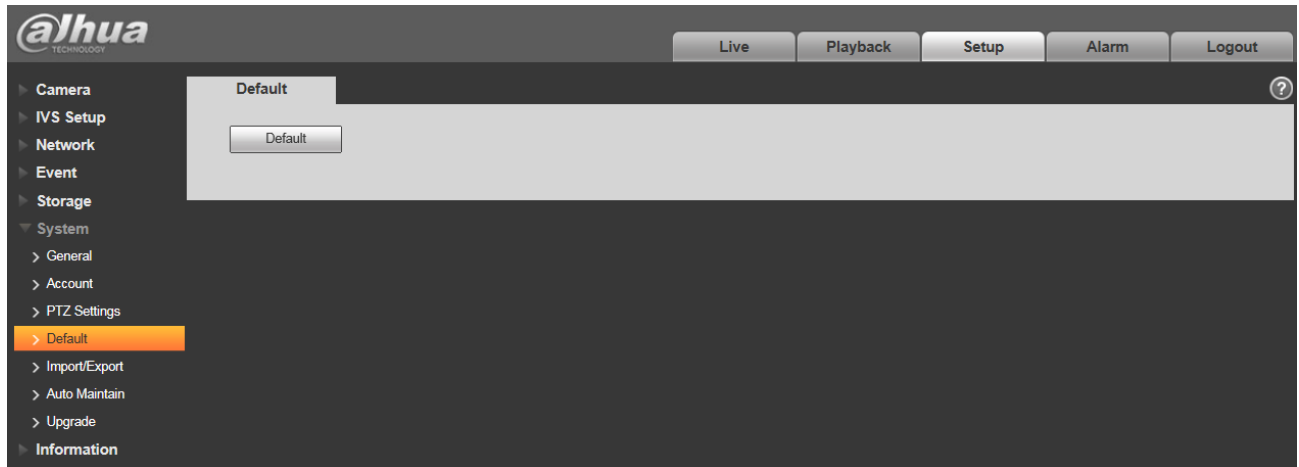


Figure 3-55

3.6.5 Import/Export

The interface is shown as in Figure 3-56.

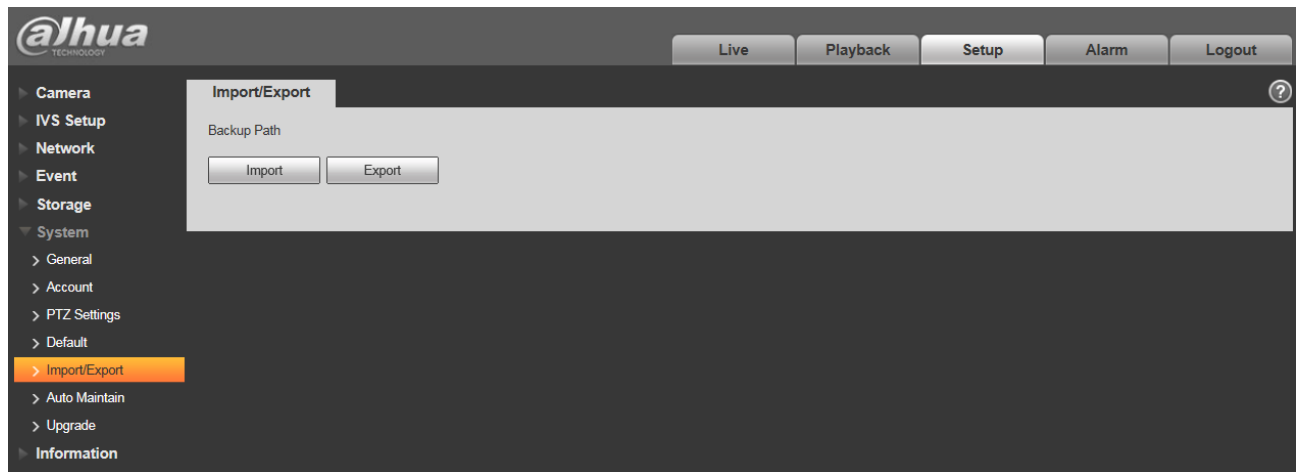


Figure 3-56

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.

3.6.6 Auto maintenance

The auto maintenance interface is shown as in Figure 3-57.

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 3-57

3.6.7 Upgrade

The upgrade interface is shown as in Figure 3-58.

Please select the upgrade file and then click the update button to begin firmware update.

Important

Do not turn off the device power, disconnect the device, reboot or shutdown the device during the update period.

Please reboot the device if you update the improper program, otherwise some function module of the device may become null!

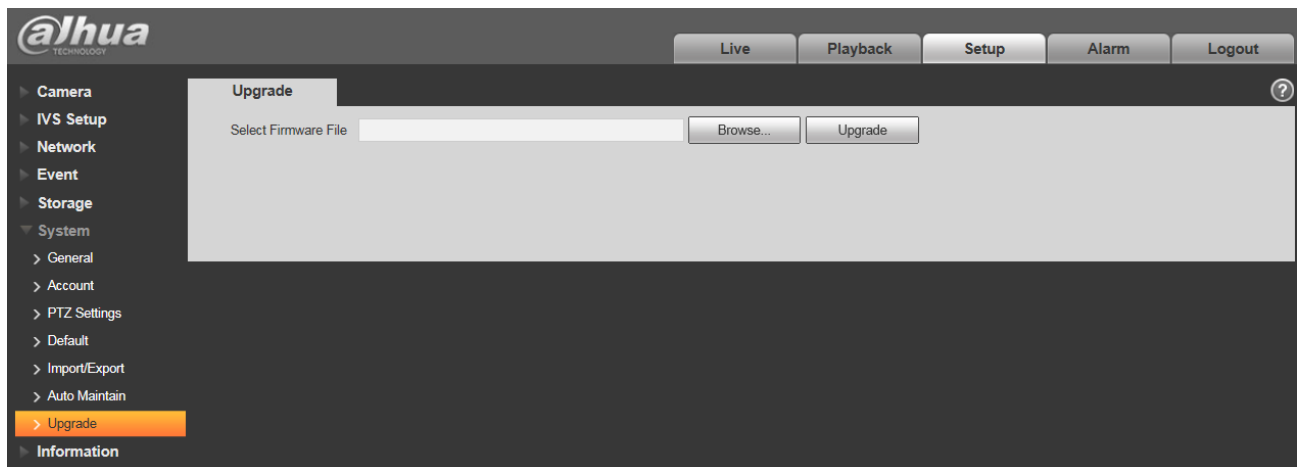


Figure 3-58

3.7 Information

3.7.1 Version

The version interface is shown as in Figure 3-59.

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



Figure 3-59

3.7.2 Log

Here you can view system log. See Figure 3-60.

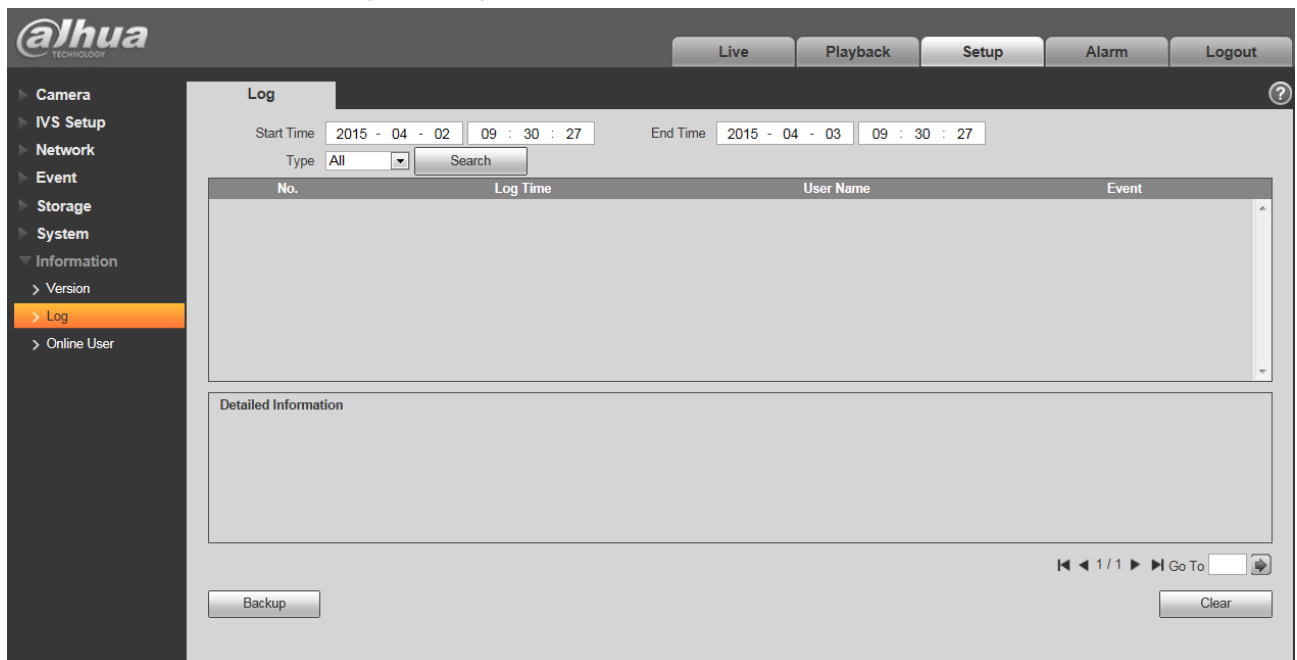


Figure 3-60

Please refer to the following sheet for log parameter information.

Parameter	Function
Type	Log types include: system operation, configuration operation, data operation, alarm event, record operation, and user management, log clear.
Start time	Set the start time of the requested log.
End time	Set the end time of the requested log.
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.
Detailed information	You can select one item to view the detailed information.
Clear	You can click this button to delete all displayed log files.
Backup	You can click this button to backup log files to current PC.

3.7.3 Online User

The online user interface is shown as in Figure 3-61.

Here you can view online user name, group name, IP address and login time.

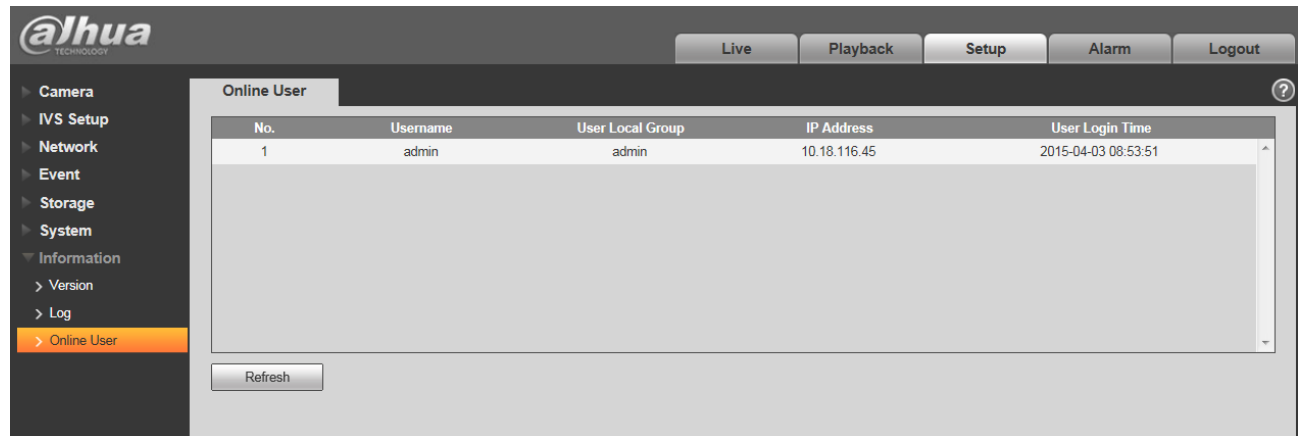


Figure 3-61

4 Alarm

Click alarm function, you can see an interface is shown as in Figure 4-1.

Here you can set device alarm type and alarm sound setup. When the specified alarm occurred (you have subscribed), system can record the corresponding alarm information on the right pane of the alarm list.

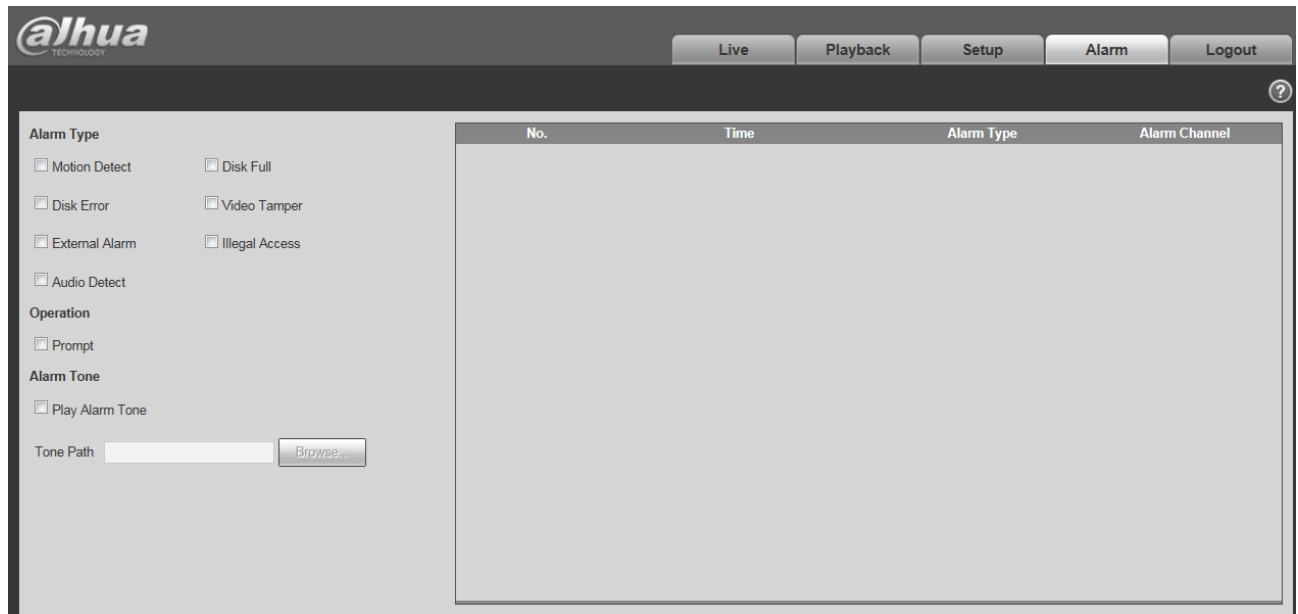


Figure 4-1

Please refer to the following sheet for detailed information.

Type	Parameter	Function
Alarm type	Motion detect	System alarms when motion detection alarm occurs,
	Disk full	System alarms when disk is full.
	Disk Error	System triggers alarm when disk error happens.
	Video Tamper	System alarms when video is tampering.
	External alarm	Alarm input device sends out alarm.
	Illegal Access	System alarms when the times of password error is over the set number.
	Audio Detect	System alarms when audio detect occurs.
Operation	Prompt	System automatically pops up alarm dialogue box.
Alarm audio	Audio	When alarm occurs, system auto generates alarm audio. The audio supports customized setup.
	Path	Here you can specify alarm sound file.

5 Log out

Click log out button, system goes back to log in interface. See Figure 5-1.

You need to input user name and password to login again.



Figure 5-1

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 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.