Parameter	Function
Working Period	**Note:** It is to set the alarm period, it can enable alarm event only during the period range which has been set. 1. Click "Setup" and the system will pop out the interface of "Working Period". 2. It is to set working period according to the following methods: ● You can input time numerical value or press the left mouse button to drag on the setup interface to set. ● There are six periods to be set every day, select the check box in front of the period, and then the period is valid. ● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days). 3. Click "Save" to complete the setup of working period.
Record	Check it and so when alarm occurs, system will auto record. You shall set record period in Storage>Schedule and select auto record in record control interface.
Record Delay	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Relay out	Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs.
Alarm Delay	System can delay the alarm output for specified time after alarm ended. The value ranges from 10s to 300s.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends. User can set email address in Network>SMTP.
Audio linkage	Check it and the system will play alarm audio file when alarm occurs. User can set the recorded or uploaded audio file in "camera setting $>$ audio $>$ alarm audio".
Flash linkage	Check it and the flash will be on when alarm occurs, and the flash will be off until the end of alarm after corresponding delay.
PTZ	● Here you can set PTZ movement when alarm occurs. Such as go to preset x when there is an alarm. ● The event type includes: preset, tour and pattern.
Snapshot	You need to check the box here so that system can backup motion detection snapshot file. You shall set snapshot period in Storage>Schedule.

Step 3

Click "Save" to complete the setup of video tampering.

6.3.1.3 Scene Changing

Step 1

Select "Setup > Event > Video Detection > Scene Changing" and the system will display the interface of "Scene Changing" which is shown in Figure 6-67.

Figure 6-67

Step 2

Check "Enable" to enable the function of scene changing.

Step 3

It is to set the parameters of scene changing, please refer to the following sheet for more details.

Parameter	Function
Working Period	**Note:** It is to set the alarm period, it can enable alarm event only during the period range which has been set. 1. Click "Setup" and the system will pop out the interface of "Working Period". 2. It is to set working period according to the following methods: ● You can input time numerical value or press the left mouse button to drag on the setup interface to set. ● There are six periods to be set every day, select the check box in front of the period, and then the period is valid. ● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days). 3. Click "Save" to complete the setup of working period.
Record	Check it and so when alarm occurs, system will auto record. You shall set record period in Storage>Schedule and select auto record in record control interface.
Record Delay	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Relay out	Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs.
Alarm Delay	System can delay the alarm output for specified time after alarm ended. The value ranges from 10s to 300s.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends. User can set email address in Network>SMTP.

Parameter	Function
PTZ	• Here you can set PTZ movement when alarm occurs. Such as go to preset x when there is an alarm. • The event type includes: preset, tour and pattern.
Snapshot	You need to check the box here so that system can backup motion detection snapshot file. You shall set snapshot period in Storage>Schedule.

Step 4

Click "Save" to complete the setup of scene changing.

6.3.2 Audio Detection

Step 1

Select "Setup > Event > Audio Detection" and the system will display the interface of "Audio Detection" which is shown in Figure 6-68.
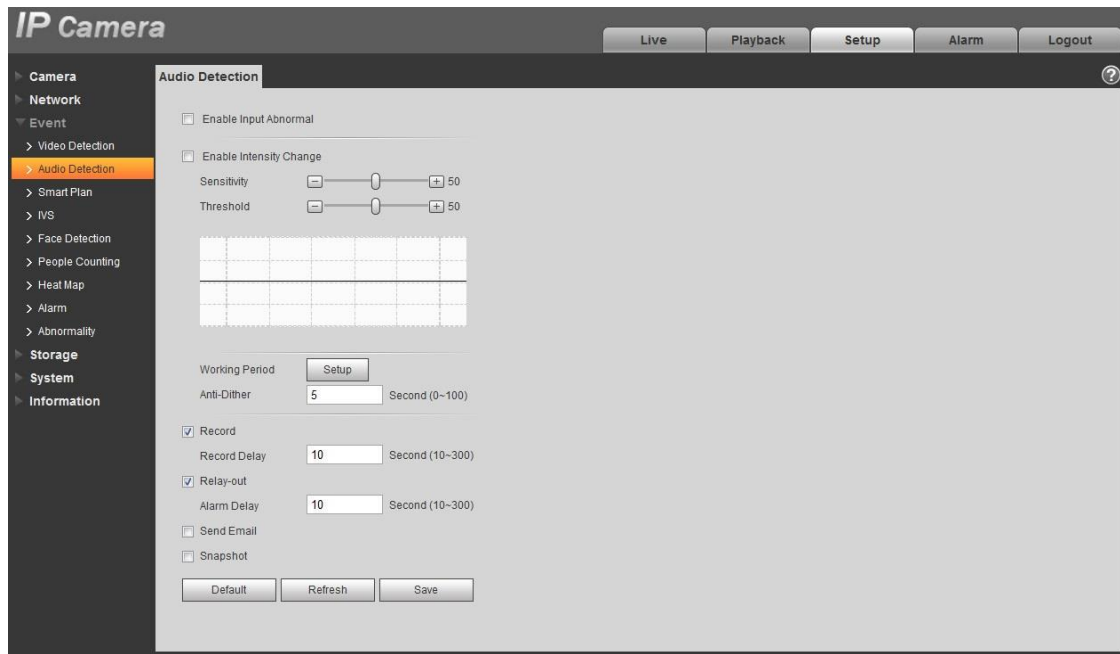
Figure 6-68

Step 2

It is to set the parameters of audio detect, please refer to the following sheet for more details.

Parameter	Function
Enable input abnormal	Select "Enable Input Abnormal" and it will trigger alarm when it detects audio input abnormity.
Enable intensity change	Select "Enable Intensity Change" and it will trigger alarm when it detects that audio intensity change exceeds the threshold.

Parameter	Function
Sensitivity	It can be judged as audio abnormity when the input volume change exceeds continuous environment volume; users need to adjust according to the actual environment test.
Threshold	It is to set the filtered environment volume intensity, if the environmental noise is too big, then the value needs to be set higher, users can adjust according to the actual environment test.
Working Period	**Note:** It is to set the alarm period, it can enable alarm event only during the period range which has been set. 1. Click "Setup" and the system will pop out the interface of "Working Period". 2. It is to set working period according to the following methods: ● You can input time numerical value or press the left mouse button to drag on the setup interface to set. ● There are six periods to be set every day, select the check box in front of the period, and then the period is valid. ● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days). 3. Click "Save" to complete the setup of working period.
Anti-dither	System only memorizes one event during the anti-dither period. 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. User can set email address in Network>SMTP.
PTZ	● Here you can set PTZ movement when alarm occurs. Such as go to preset x when there is an alarm. ● The event type includes: preset, tour and pattern.
Snapshot	You need to check the box here so that system can backup motion detection snapshot file. You shall set snapshot period in Storage>Schedule.

Step 3
Click "Save" to complete the setup of audio detection.

6.3.3 Smart Plan

Smart plan is the master switch for intelligent analysis such as "Face Detection", "Heat Map", "IVS", "People Counting" and so on, the corresponding intelligent functions can be valid after smart plan is enabled.

Step 1

Select "Setup > Event > Smart Plan". The system will display the interface of "Smart Plan", which is shown in Figure 6-69.

Figure 6-69

Step 2

Click "Save" to complete the config of smart plan.

6.3.4 Intelligence Behavior Analytics

The basic requirements of scene selection

● The total proportion of the target shall not exceed 10% of the image.

● The target size in the image can't be less than 10 pixel ×10 pixel, the size of abandoned target can't be less than 15 pixel × 15 pixel (CIF image); The height and width of the target can't exceed 1/3 of the image; it is recommended that the target height is about 10% of the image height.

● The difference of brightness value between target and background can't be less than 10 gray levels.

● Make sure the target appears at least over 2 seconds continuously in the field; the movement distance has to be bigger than the width of the target itself and makes sure it is no less than 15 pixels (CIF image).

● Try to lower the complexity of the monitoring scene analysis if it is possible; it is not advised to use IVS functions in the environment where the targets are dense and light change is very frequent.

● Try to keep away from the areas such as glass, ground reflected light, water surface, branch, shadow, mosquito disturbance and etc.; try to keep away from the backlight scene to avoid direct light.

6.3.4.1 **IVS**

6.3.4.1.1   Tripwire

It will trigger alarm when the target crosses the warning line according to the movement direction which has been set.

It needs some time from when the target appears to when the target is confirmed, so it has to leave some space on both sides of the warning line when setting the warning line, please do not set the warning line near the obstructions.

Application scene: it can be applied to the scene with sparse target and there is barely any blocks between the targets, such as the unmanned perimeter defense.

Step 1

Select "Setup > Event > IVS > IVS" and the system will display the interface of "IVS".

Step 2

Click " ➕ " to set rule name and select the rule type as "Tripwire" which is shown in Figure 6-70.
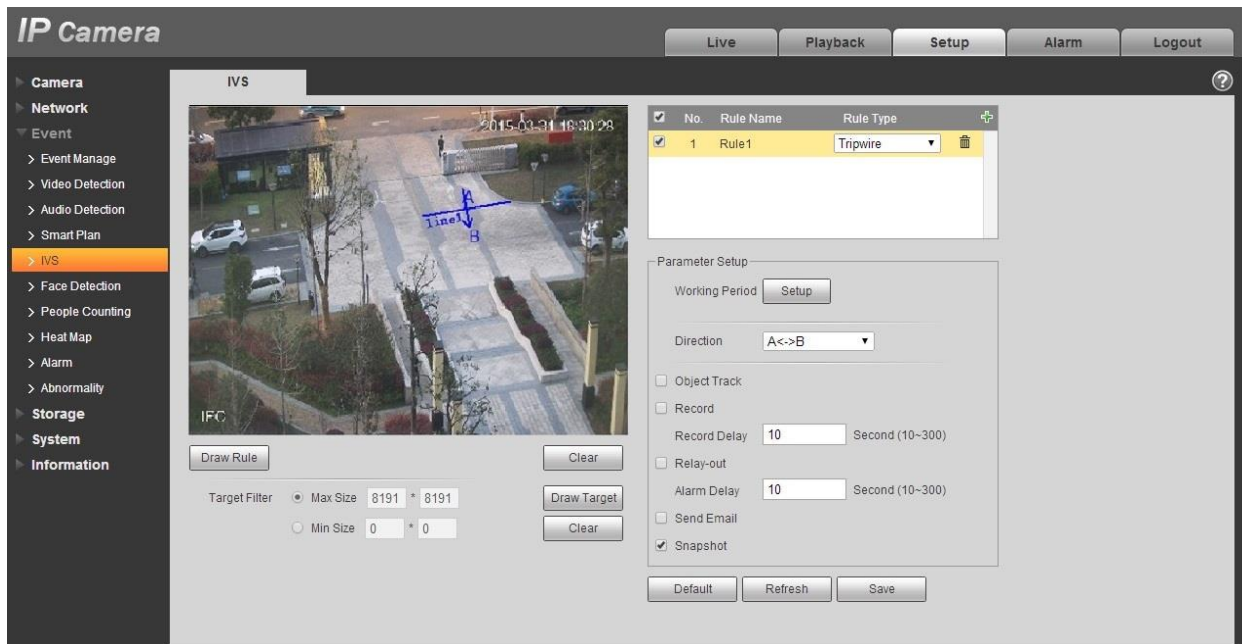
Figure 6-70

Step 3

Click "Draw Rule" to draw tripwire in the monitoring scene, click the right mouse button to complete tripwire setting.

Step 4

Click "Draw Target" to draw the size model of filtered target in the video image.

Step 5

It is to set the parameters of tripwire, please refer to the following sheet for more details.

Parameter	Function
Object tracking	Select "Object tracking" to enable the function, refer to "2.4 Video Window Adjustment" for more details. **Note:** The function is only supported by some models.
Working Period	**Note:** It is to set the alarm period, it can enable alarm event only during the period range which has been set. 1. Click "Setup" and the system will pop out the interface of "Working Period". 2. It is to set working period according to the following methods: ● You can input time numerical value or press the left mouse button to drag on the setup interface to set. ● There are six periods to be set every day, select the check box in front of the period, and then the period is valid. ● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days). 3. Click "Save" to complete the setup of working period.
Direction	It is to set the direction of tripwire, you can select A->B、B->A、A<->B.
Object Track	Select "Object Track" and it will enable the function of object track; when the moving object triggers rule and generates alarm, it will select the display mode of object track such as 1P+3 or 1P+5 in the preview interface, the scene of tracking window will follow the moving object till the object leaves the view range of the camera. Please refer to "2.4.8 Fisheye/Trigger Track" for more details.
Record	Check it and so when alarm occurs, system will auto record.
Record Delay	System can delay the record for specified time after alarm ended.
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.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends. User can set email address in Network>SMTP.
Snapshot	Select "Snapshot" and the system will auto trigger alarm and snapshot when alarm occurs.

Step 5
Click "Save" to complete the setup of tripwire.

6.3.4.2 **Intrusion**
Intrusion includes cross and appears.

- Cross means that it will trigger alarm when the target enters or exits the area.
- Appears means that it will trigger alarm when the target appears in the area.
- As for the report interval of the IVS function in the area, the system will trigger an alarm if it detects same event happened during the interval; the alarm counter will become zero if there is no same event happened in the interval.

It needs to leave some space for target movement for the area periphery if it is to detect enter & exit event, which is similar to the warning line.

Application scene; it can be applied to the scene where the target is sparse and there is barely any obstruction between the targets, such as the unmanned perimeter defense.

Step 1

Select "Setup > Event > IVS > IVS" and the system will display the interface of "IVS".

Step 2

Click " ⊕ " to set rule name, select the rule type as "Intrusion" which is shown in Figure 6-71.
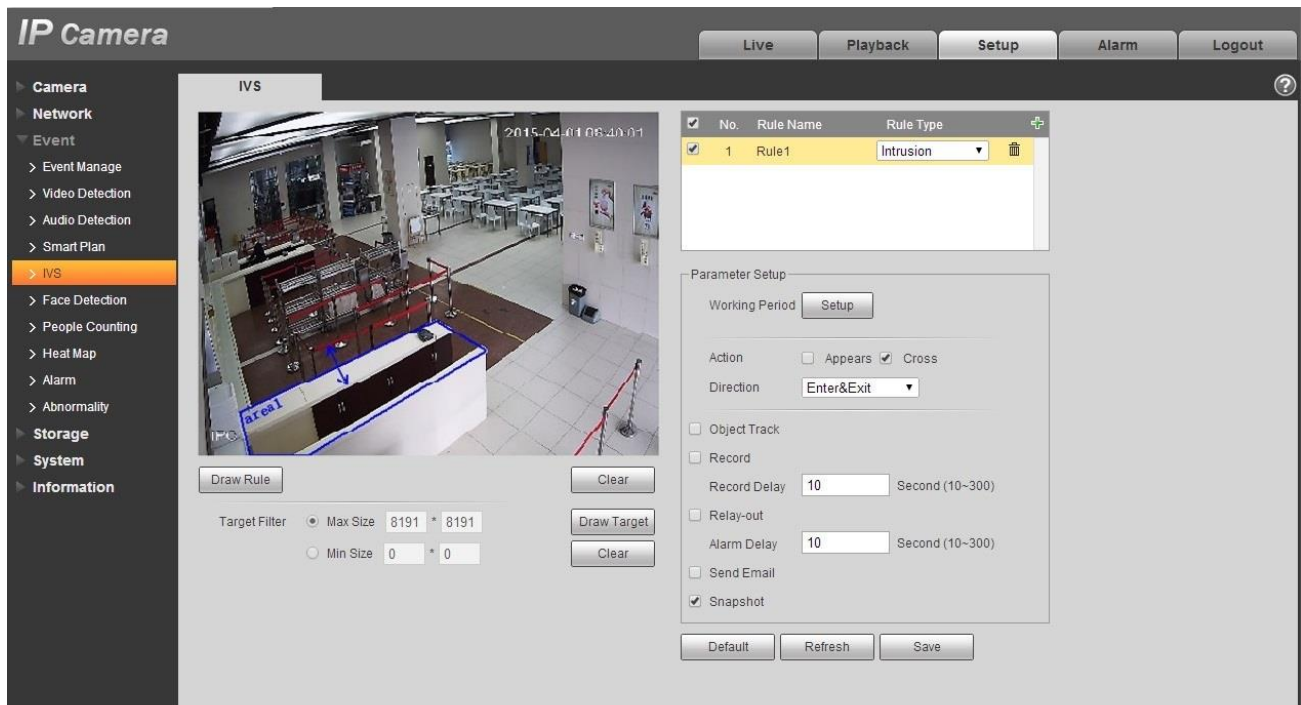
Figure 6-71

Step 3

Click "Draw Rule" to draw an area in the monitoring image.

Step 4

Click "Draw Target" to draw the size model of filtered target in the video image.

Step 5

It is to set the parameters of intrusion, please refer the following sheet for more details.

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Parameter	Function
Object tracking	Select "Object tracking" to enable the function, refer to "2.4 Video Window Adjustment" for more details. **Note:** The function is only supported by some models.
Working Period	**Note:** It is to set the alarm period, it can enable alarm event only during the period range which has been set. 1. Click "Setup" and the system will pop out the interface of "Working Period". 2. It is to set working period according to the following methods: ● You can input time numerical value or press the left mouse button to drag on the setup interface to set. ● There are six periods to be set every day, select the check box in front of the period, and then the period is valid. ● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days). 3. Click "Save" to complete the setup of working period.
Action	It is to set the action of intrusion, you can select appears and cross.
Direction	It is to set the direction of intrusion, you can select enter, exit and enter&exit.
Object Track	Select "Object Track" and it will enable the function of object track; when the moving object triggers rule and generates alarm, it will select the display mode of object track such as 1P+3 or 1P+5 in the preview interface, the scene of tracking window will follow the moving object till the object leaves the view range of the camera. Please refer to "2.4.8 Fisheye/Trigger Track" for more details.
Record	Check it and so when alarm occurs, system will auto record.
Record Delay	System can delay the record for specified time after alarm ended.
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.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends. User can set email address in Network>SMTP.
Snapshot	Select "Snapshot" and the system will auto trigger alarm and snapshot when alarm occurs.

Step 5

Click "Save" to complete the setup of intrusion.

6.3.4.3 **Abandoned Object**

Abandoned object means the system will trigger alarm if the abandoned object in the monitoring scene exceeds the time which has been set by the users.

Abandoned object and missing object can be confusing in a situation where both foreground and background are complicated.

It also triggers alarm as abandoned object if there is pedestrian or vehicle staying still for too long. In order to filter this kind of alarm, generally the abandoned object is smaller than people and vehicle; therefore it can filter the people and vehicle via setting size. Besides, it can avoid the false alarm caused by short stay of people via extending alarm time properly.

Application scene: It can be applied to the scene where the target is sparse and there is no obvious and frequent light change. False alarm will be increased in the scene with high target density and frequent blocking; false alarm will be increased in the scene where there are more people staying. As for the detection area, try to make it simple, the function is not suitable for the area which is too complicated.

Step 1

Select "Setup > Event > IVS > IVS" and the system will display the interface of "IVS".

Step 2

Click "➕" to set rule name, select the rule type as "Abandoned Object" which is shown in Figure 6-72.
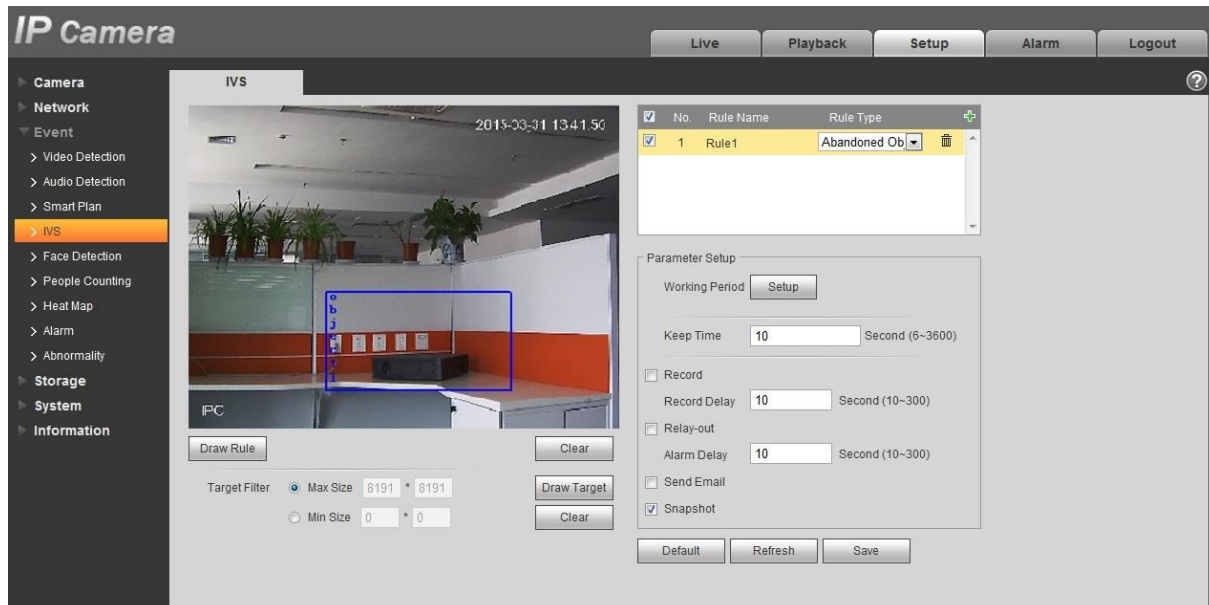
Figure 6-72

Step 3

Click "Draw Rule" to draw an area in the monitoring area.

Step 4

Click "Draw Target" to draw the size model of filtered target in the video image.

Step 5

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It is to set the parameter of abandoned object, please refer to the following sheet for more details.

Parameter	Function
Working Period	**Note:** It is to set the alarm period, it can enable alarm event only during the period range which has been set. 1. Click "Setup" and the system will pop out the interface of "Working Period". 2. It is to set working period according to the following methods: ● You can input time numerical value or press the left mouse button to drag on the setup interface to set. ● There are six periods to be set every day, select the check box in front of the period, and then the period is valid. ● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days). 3. Click "Save" to complete the setup of working period.
Keep time	It is to set the shortest time from when the object is abandoned to when it triggers alarm.
Record	Check it and so when alarm occurs, system will auto record.
Record Delay	System can delay the record for specified time after alarm ended.
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.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends. User can set email address in Network>SMTP.
Snapshot	Select "Snapshot" and the system will auto trigger alarm and snapshot when alarm occurs.

Step 5
Click "Save" to complete the setup of abandoned object.

6.3.4.4 **Missing Object**
Missing object means the system will trigger alarm if it exceeds certain amount of time after the target is taken away from the original scene.
The system can make statistics of the still areas in the foreground area and distinguish if it is missing object or abandoned object according to the similarity between foreground and background, it will trigger alarm when it exceeds the time which is set by users.
Because the system distinguishes abandoned object from missing object according to the similarity of foreground and background, it may cause error between abandoned object and missing object in a situation where both foreground and background are complicated.

Application scene: it can be applied to the scene where the target is sparse and there is no obvious and frequent light change. False alarm will be increased in the scene where the target density is high and there is frequent obstruction; the false alarm will be increased in the scene where there are more people staying. As for the detection area, try to make it simple, the function is not suitable for the area which is too complicated.

Step 1

Select "Setup > Event > IVS > IVS" and the system will display the interface of "IVS".

Step 2

Click " ➕ " to set rule name and select rule type as "Missing Object", which is shown in Figure 6-73.
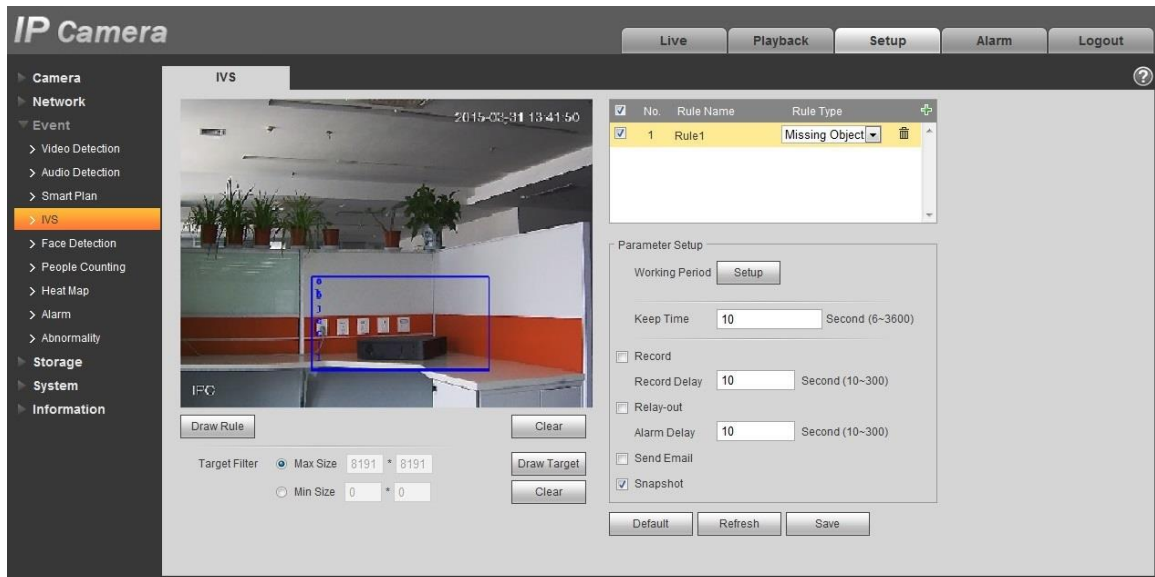
Figure 6-73

Step 3

Click "Draw Rule" to draw an area in the monitoring scene.

Step 4

Click "Draw Target" to draw the size model of filtered target in the video image.

Step 5

It is to set the parameters of missing object, please refer to the following sheet for more details.

Parameter	Function
Working Period	**Note:** It is to set the alarm period, it can enable alarm event only during the period range which has been set. 1. Click "Setup" and the system will pop out the interface of "Working Period". 2. It is to set working period according to the following methods: ● You can input time numerical value or press the left mouse button to drag on the setup interface to set. ● There are six periods to be set every day, select the check box in front of the period, and then the period is valid. ● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days). 3. Click "Save" to complete the setup of working period.
Keep time	It is to set the shortest time from when the object is missing to when it triggers alarm.
Record	Check it and so when alarm occurs, system will auto record.
Record Delay	System can delay the record for specified time after alarm ended.
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.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends. User can set email address in Network>SMTP.
Snapshot	Select "Snapshot" and the system will auto trigger alarm and snapshot when alarm occurs.

Step 5

Click "Save" to complete the setup of missing object.

6.3.5 Face Detection

Step 1

Select "Setup > Event > Face Detection" and the system will display the interface of "Face Detection", which is shown in Figure 6-74.
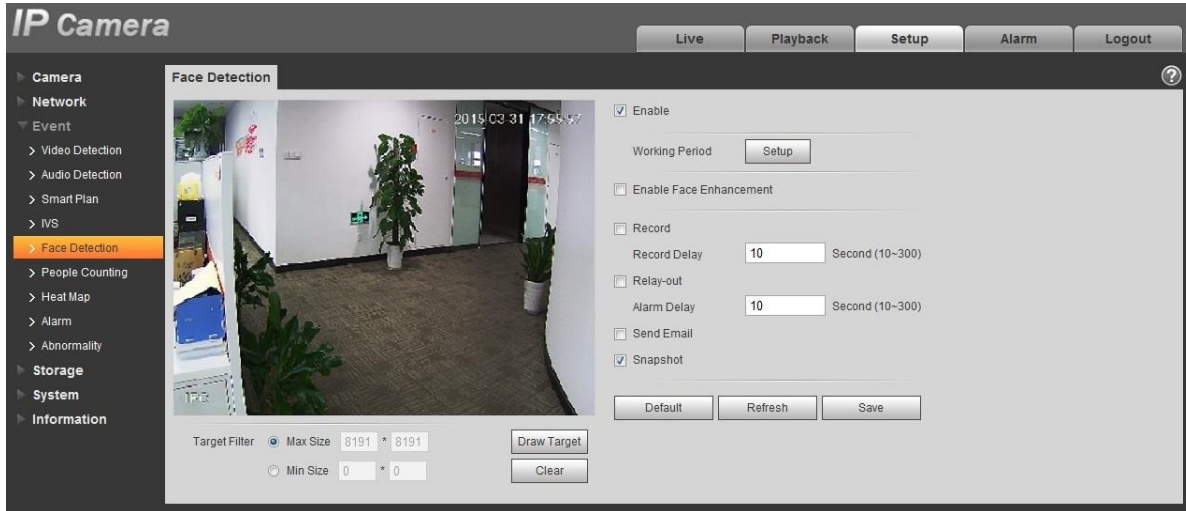
Figure 6-74

Step 2

Select "Enable" to enable face detection function.

Step 3

Click "Draw Target" to draw the size model of target filter in the video image.

Step 4

It is to set the parameters of face detection, please refer to the following sheet for more details.

Parameter	Function
Working Period	**Note:** It is to set the alarm period, it can enable alarm event only during the period range which has been set. 1. Click "Setup" and the system will pop out the interface of "Working Period". 2. It is to set working period according to the following methods: ● You can input time numerical value or press the left mouse button to drag on the setup interface to set. ● There are six periods to be set every day, select the check box in front of the period, and then the period is valid. ● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days). 3. Click "Save" to complete the setup of working period.
Enable Face Enhancement	Select "Enable Face Enhancement" and it will guarantee that the face is clear by priority when the stream is set very low.
Record	Check it and so when alarm occurs, system will auto record.
Record Delay	System can delay the record for specified time after alarm ended.

Parameter	Function
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.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends. User can set email address in Network>SMTP.
Snapshot	Select "Snapshot" and the system will auto trigger alarm and snapshot when alarm occurs.

Step 5

Click "Save" to complete the setup of face detection.

6.3.6 People Counting

6.3.6.1 People Counting

Step 1

Select "Setup > Event > People Counting > People Counting" and the system will display the interface of "Entrance/Exit", which is shown in Figure 6-75.
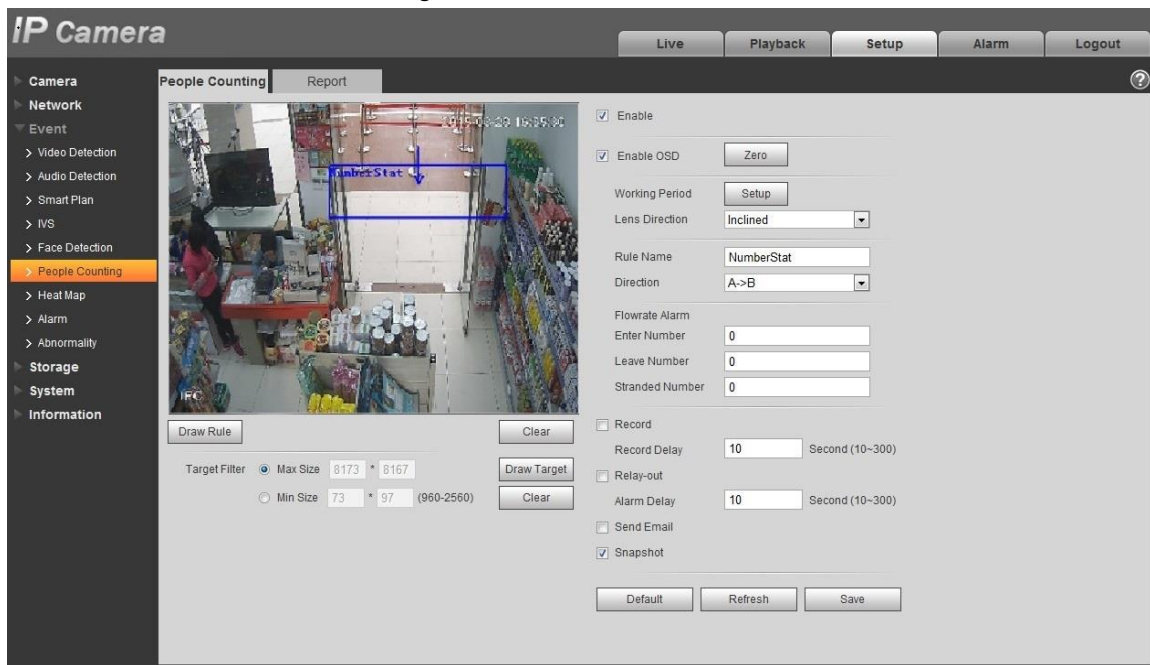
Figure 6-75

Step 2

Select "Enable" to enable statistics function of entrance and exit.

Step 3

Click "Draw Rule" to draw an area in the monitoring image.

Step 4

Click "Draw Target" to draw the size model of filtered target in the video image.

Step 5

It is to set the parameters of entrance and exit, please refer to the following sheet for more details.

Parameter	Function
Enable OSD	Select "Enable OSD" and it will display the people number statistics of entrance and exit in the monitoring image.
Working Period	**Note:** It is to set the alarm period, it can enable alarm event only during the period range which has been set. 1. Click "Setup" and the system will pop out the interface of "Working Period". 2. It is to set working period according to the following methods: ● You can input time numerical value or press the left mouse button to drag on the setup interface to set. ● There are six periods to be set every day, select the check box in front of the period, and then the period is valid. ● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days). 3. Click "Save" to complete the setup of working period.
Installation Mode	It is to select wall mount if there is an angle between device lens and horizontal surface, select ceiling if the device lens face downward vertically.
Rule Name	It is to set the name of rule.
Direction	It is to select the direction of entrance and exit statistics; A->B or B->A, the arrow direction always means the entrance direction.
Flowrate Alarm	It is to set the enter number, leave number, stranded number; it will trigger alarm when it exceeds the limited number.
Record	Check it and so when alarm occurs, system will auto record.
Record Delay	System can delay the record for specified time after alarm ended.
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.
Send Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends. User can set email address in Network>SMTP.
Snapshot	Select "Snapshot" and the system will auto trigger alarm and snapshot when alarm occurs.

Step 6

Click "Save" to complete the setup of people counting.

6.3.6.2 **Report**

It is to generate a form of report according to the number statistics.

Step 1

Select "Setup > Event > People Counting > Report "and the system will display the interface of "Report',
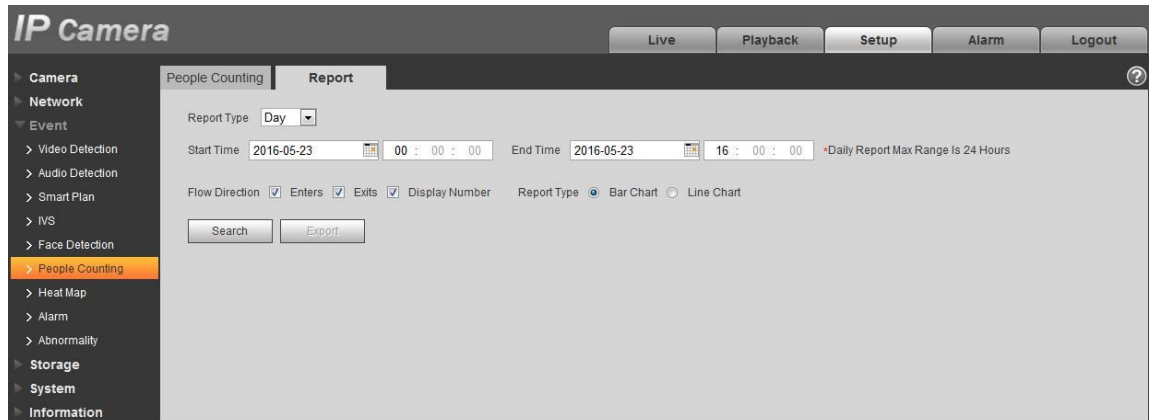which is shown in Figure 6-76.

Figure 6-76

Step 2

It is to set search condition, please refer to the following sheet for more details.

Parameter	Note
Report Type	Can select day report, month report and year report; also can select bar chart or line chart to display the report.
Time	It can set the begin /end time within the range of statistics time.
Flow Direction	It can select enter, leave and display number; the data of checked item can be displayed in the report.
Search	Search flow statistics data according to the setting to form report.
Export	Export the saved report.

Step 3

Click "Search" to complete report statistics, click "Export" to export the report.

6.3.7 Heat Map

6.3.7.1 **Heat Map**

It is the density statistics of moving object that can generate report, the color range is from blue to red,
blue means the min heat value and red means the max heat value.

Mirroring, view angle change and heat map original data will be cleared.

Step 1

Select "Setup > Event > Heat Map > Heat Map" and the system will display the interface of "Heat Map", which is shown in Figure 6-77.
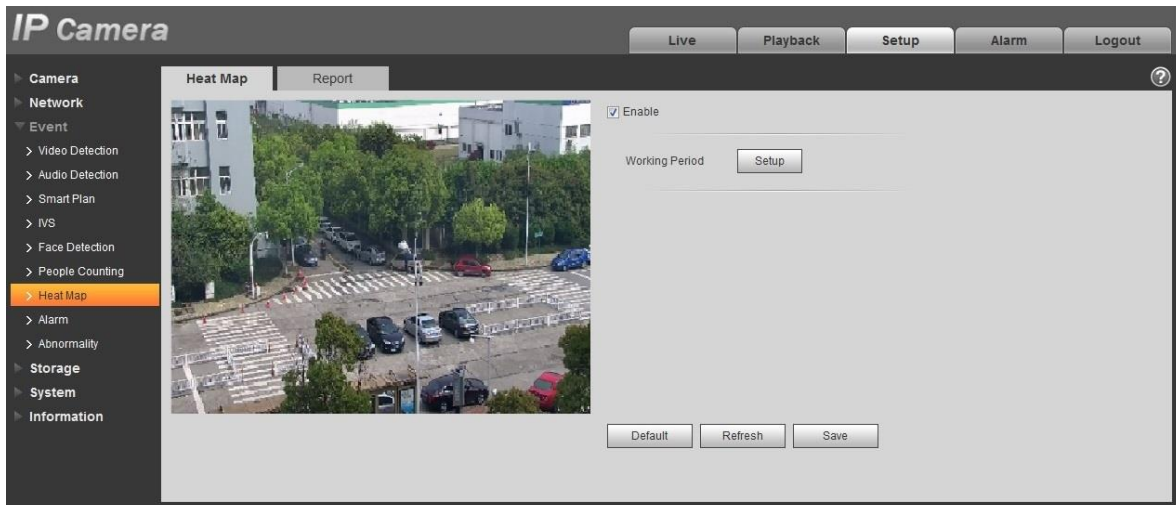
Figure 6-77

Step 2

Select "Enable" to enable heat map function.

Step 3

It is to set the working period.

1. Click "Setup" and the system will display the interface of "Working Period", which is shown in Figure 6-78.
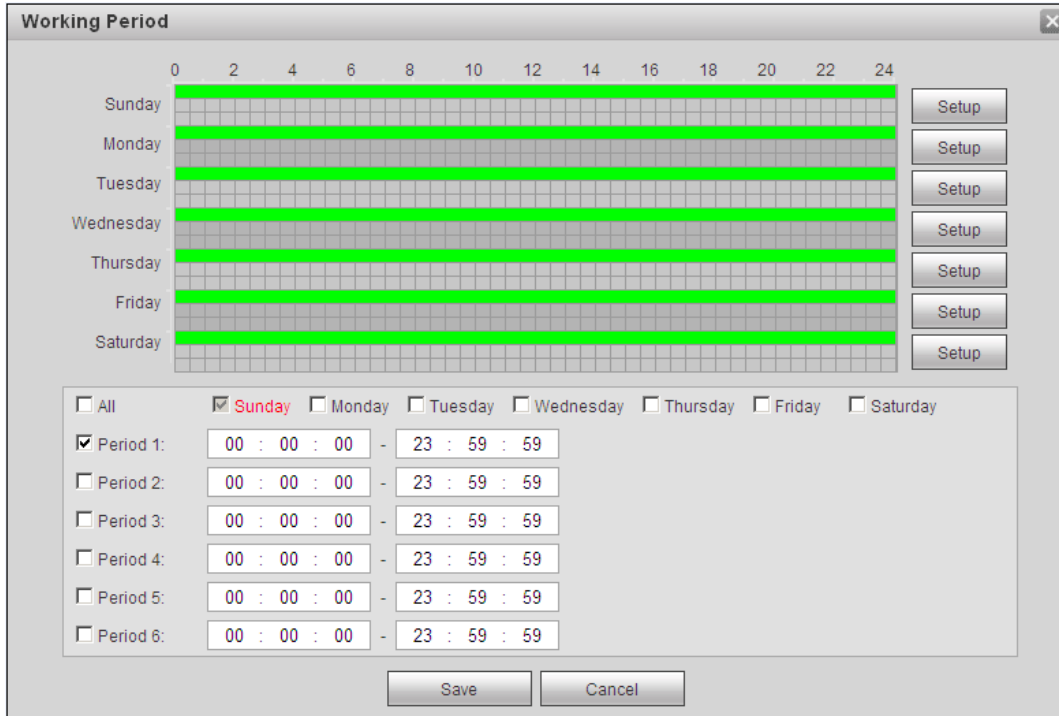
Figure 6-78

2. It is to set working period according to the following methods:

● You can input time numerical value or press the left mouse button to drag on the setup interface to set.

● There are six periods to be set every day, select the check box in front of the period, and then the period is valid.

● Select week number (it selects Sunday by default, if it selects the whole week, then it means the setup can be applied to the whole week, you can also select the check box in front of the week number to implement independent setting for some days).

3. Click "Save" to complete the setup of working period.

Step 4
Click "Save" to complete the setup of heat map.

6.3.7.2 Report

It is to generate the form of report according to the heat map data.
Step 1
Select "Setup > Event > Heat Map > Report" and the system will display the interface of "Report", which is shown in Figure 6-79.
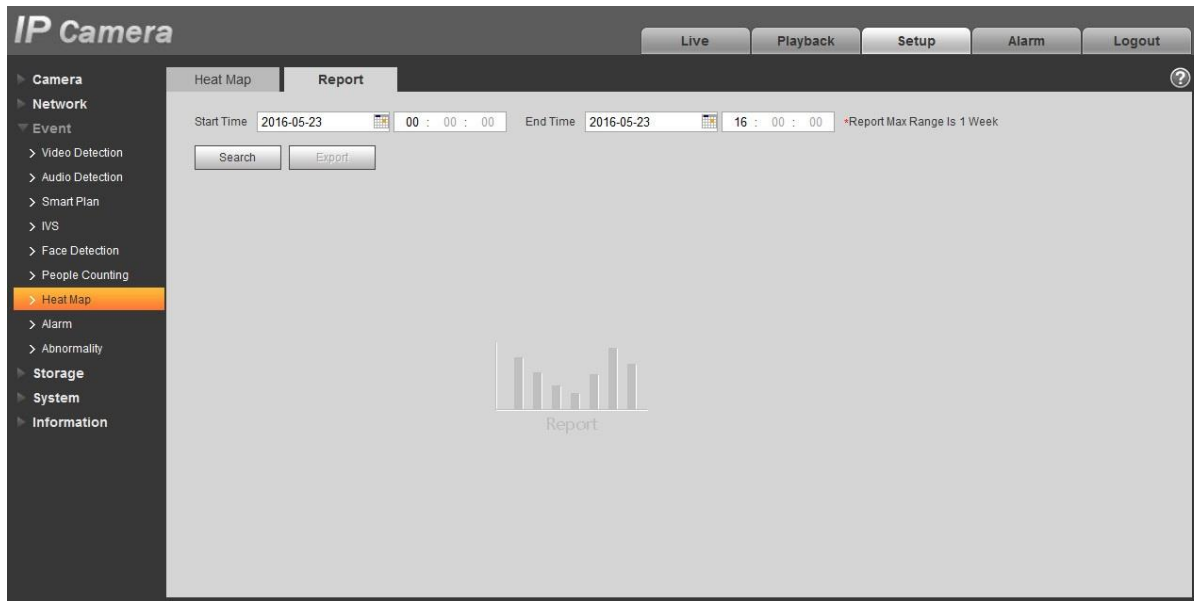
Figure 6-79

Step 2

It is to set begin time and end time.

Step 3

Click "Search" to complete report statistics, click "Export" to export the statistics report.

6.3.8 Alarm

Please note some series products do not support this function.

5.3.2.1 PIR alarm

The alarm activation interface PIR alarm is shown as in figure 6-80.
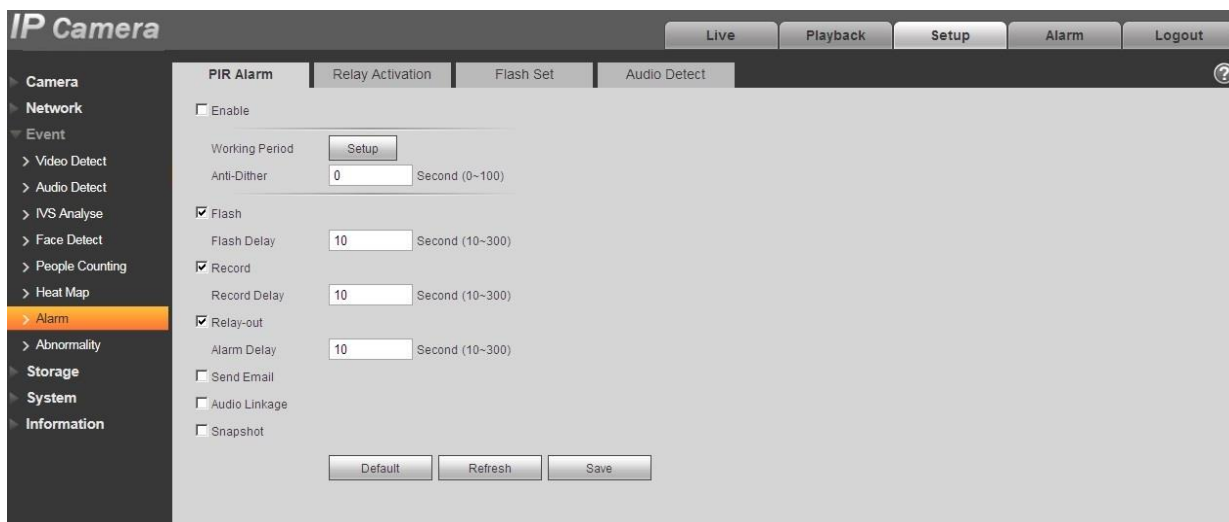
Figure 6-80

Please refer to the following sheet for detailed information.

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

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Parameter	Function
Relay out	Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs.
Alarm delay	System can delay the alarm output for specified time after alarm ended. The value ranges from 10s to 300s.
Send Email	After this function is enabled, system can send out email to alert you when alarm occurs and ends.
Audio Linkage	Check it and the system will play alarm audio file when alarm occurs. Users can set recorded audio file in "Camera Setting > Audio >Alarm Audio".
Snapshot	After you enabled snapshot, the system will automatically snapshot if alarm occurs.

6.3.8.1 Alarm Linkage

Figure 6-81

Parameter	Function
Enable	Check it and enable the alarm linkage.
Relay-in	The default alarm 1，some products can choose alarm 2.
Sensor Type	Two types of sensor which are normally open (NO) and normally closed (NC), switch from normally open to normally closed, open the alarm. Switch from normally closed to normally open, shut the alarm.

Parameter	Function
PTZ	Check it and set PTZ movement when alarm occurs. Such as go to preset x when there is an alarm.
	The event type includes: preset, tour and pattern and so on.

6.3.8.2 Flash Set
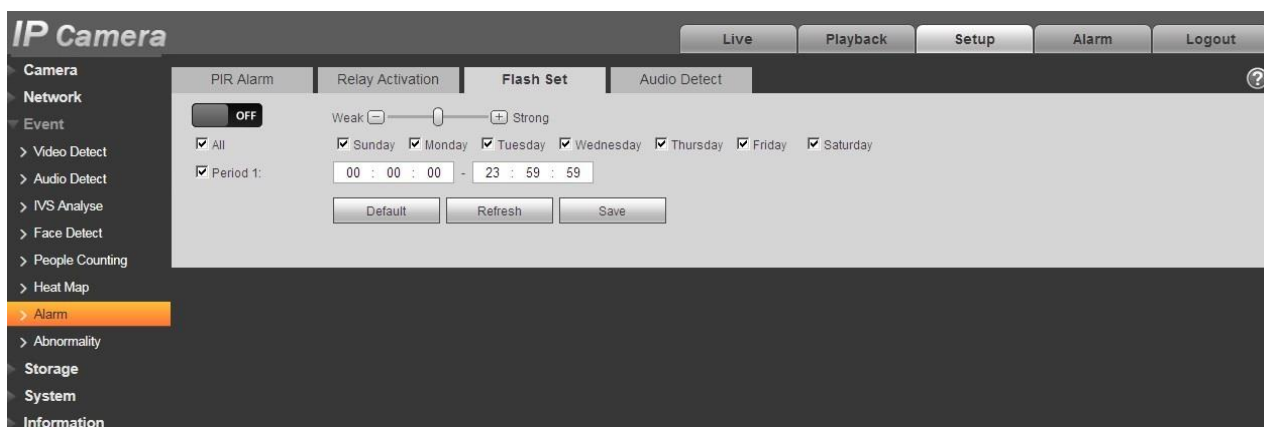
Figure 6-82

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

6.3.8.3 Audio detection

Note: Audio detection won't work when "Talk" is enabled on the preview interface.
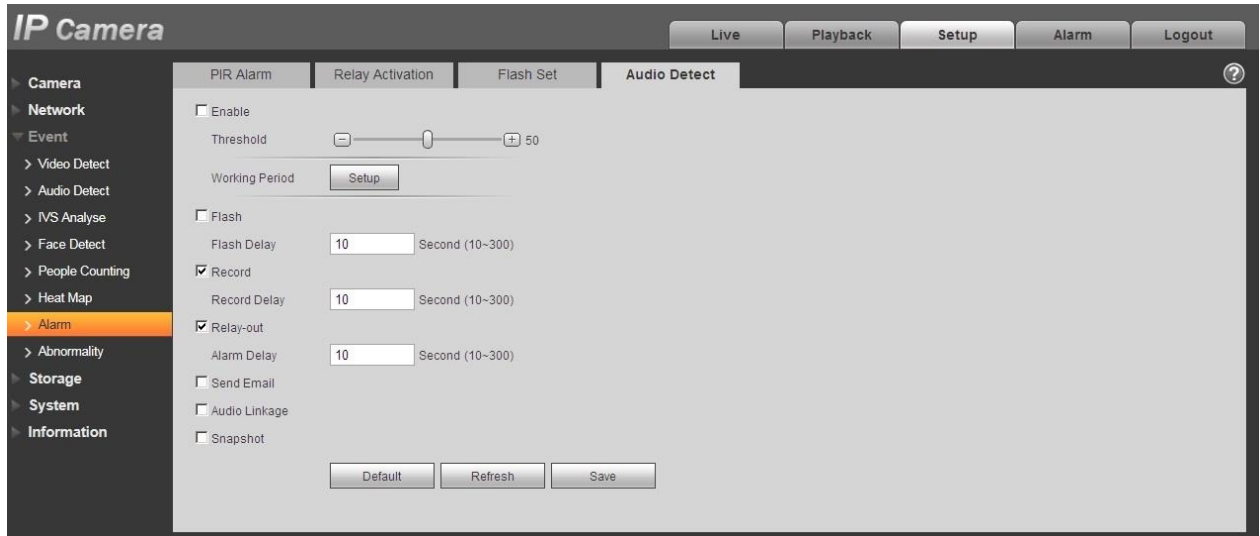
Figure 6-83

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

6.3.9 Abnormity

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

Note:

Only device with SD card function has these three statuses: No SD card, capacity warning, and SD card error. Device without SD card function does not have the above three statuses. See Figure 6-84 to Figure 6-86.

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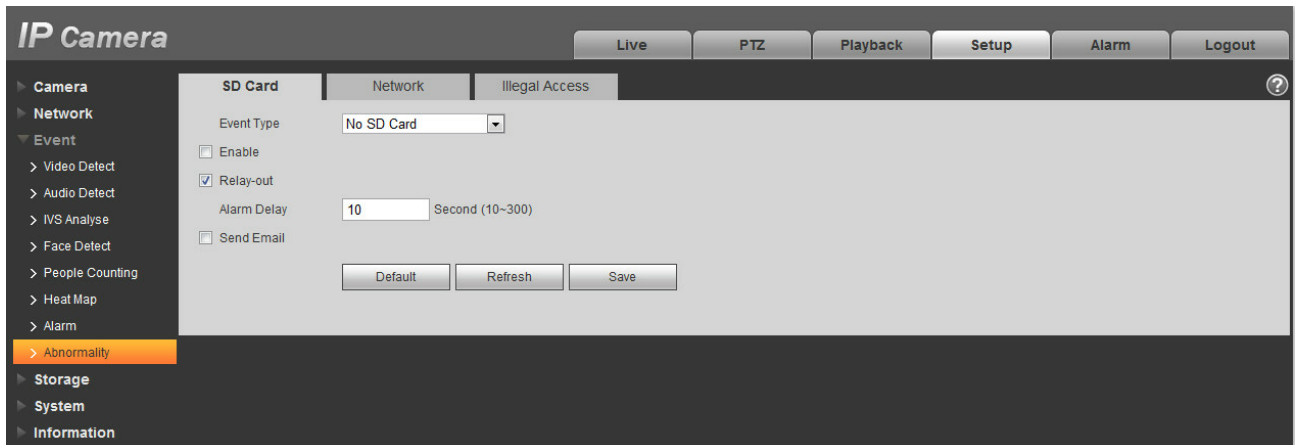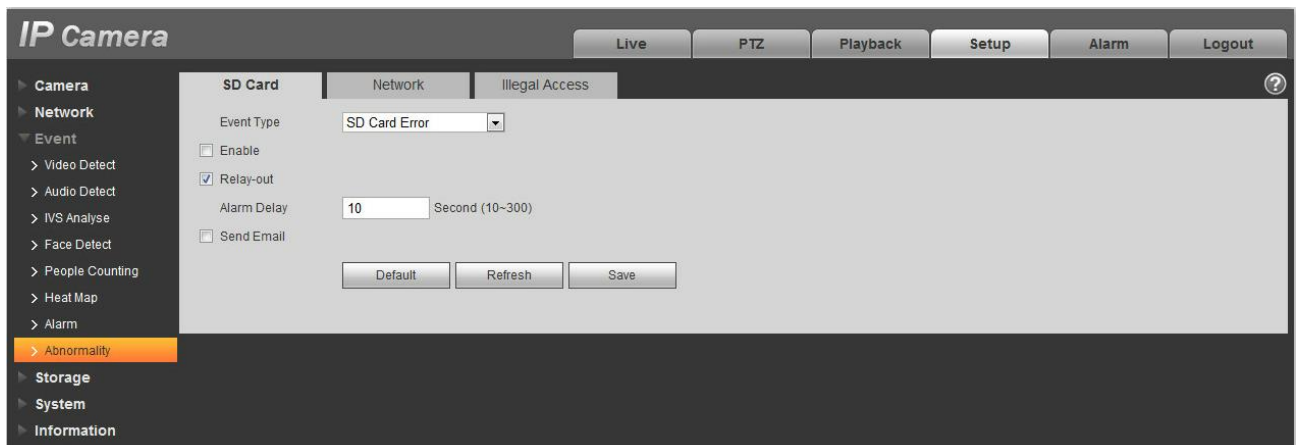
Figure 6-84

Figure 6-85
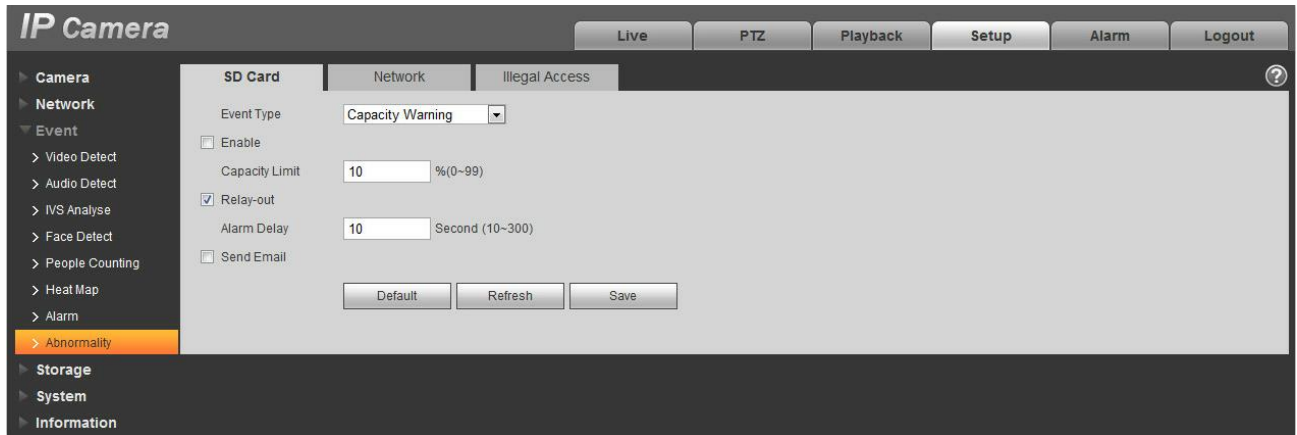
Figure 6-86

Please refer to the following sheet for detailed information.

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

When device is offline or IP conflicts, the abnormal alarm is similar with case of SD card error.
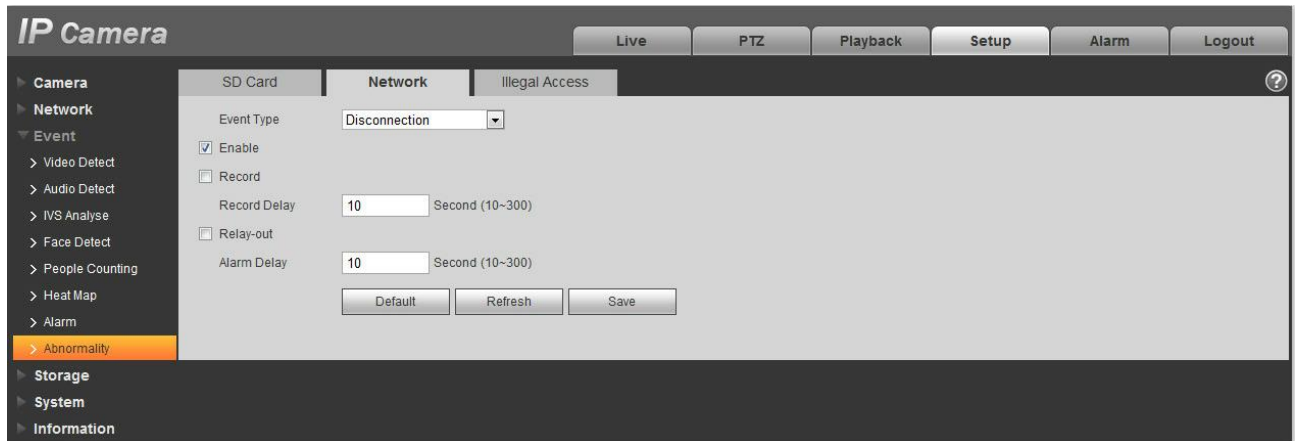
Figure 6-87

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

Figure 6-88

6.4 Storage Management

6.4.1 Schedule

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

Note:

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

6.4.1.1 Record Schedule

Record schedule steps:

Step 1. Click on Record Schedule, see Figure 6-89.
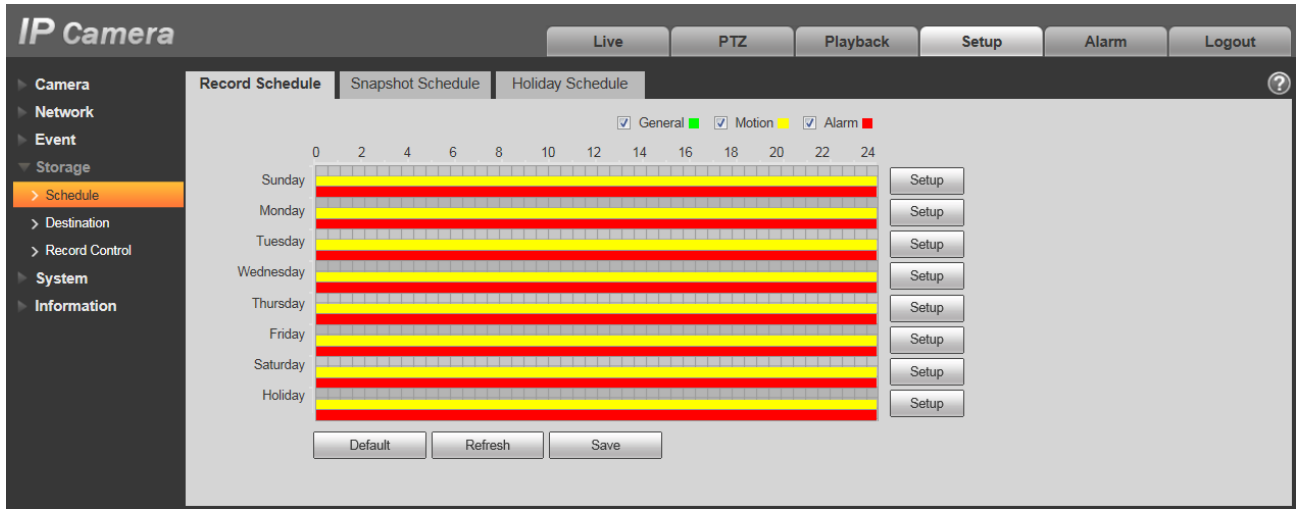
Figure 6-89

Step 2. From Monday to Sunday select record time, click on setup on the right, see Figure 6-90.

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

Note:

Period setup can be done by dragging in record schedule interface while not releasing left mouse.
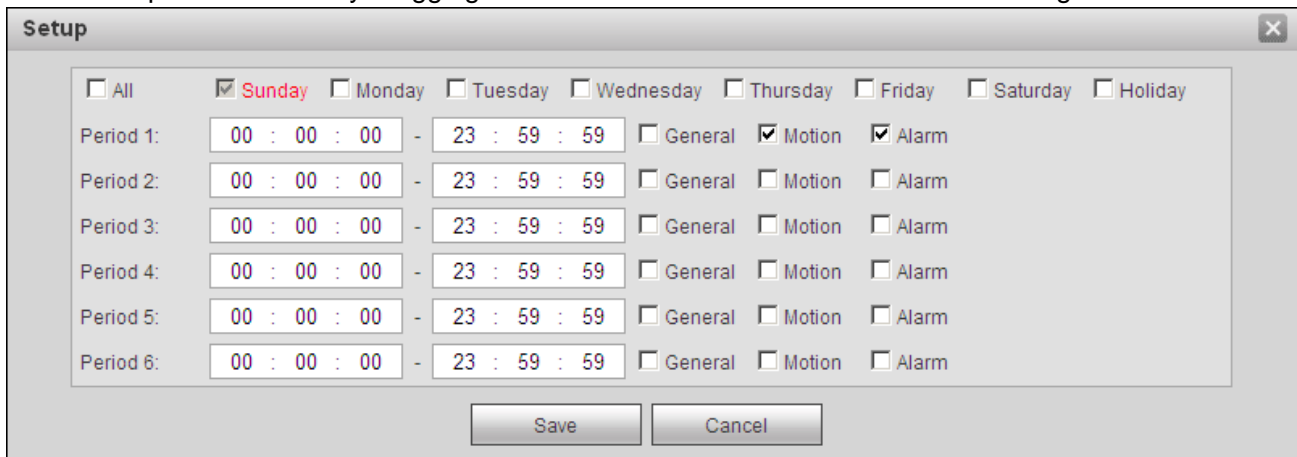
Figure 6-90

Step 3. Click on OK, return to record schedule interface. See Figure 6-91.

● 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.
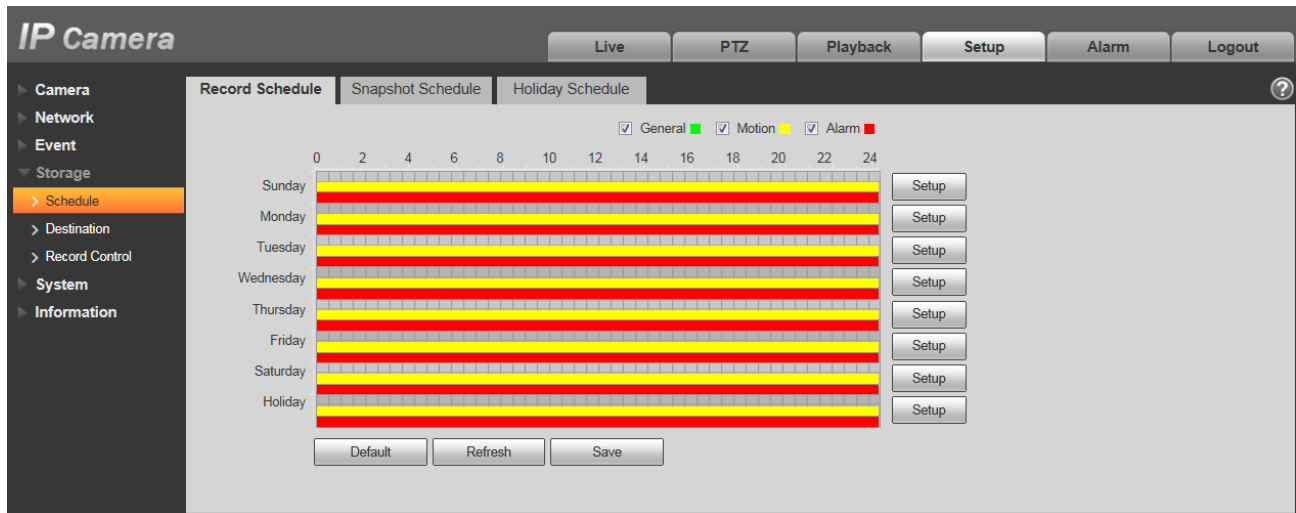
Figure 6-91

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

6.4.1.2 Snapshot Schedule

Snapshot setup as:

Step 1. Click on Snapshot Schedule tab, see Figure 6-92.
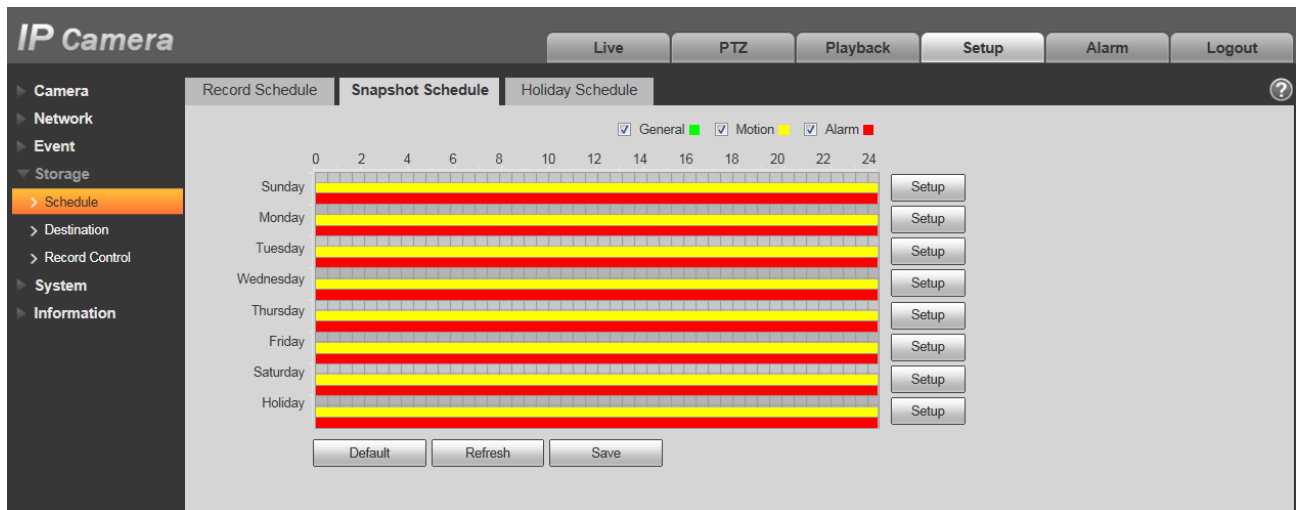
Figure 6-92

Step 2. From Monday to Sunday select snapshot time, click on setup on the right. See Figure 6-93.
● Set snapshot period according to actual need. There are six periods available each day.

- By checking or unchecking, user can add or delete three types of snapshot schedule: General, Motion and Alarm.

Note: Period setup can be done by dragging in snapshot schedule interface while not releasing left mouse.
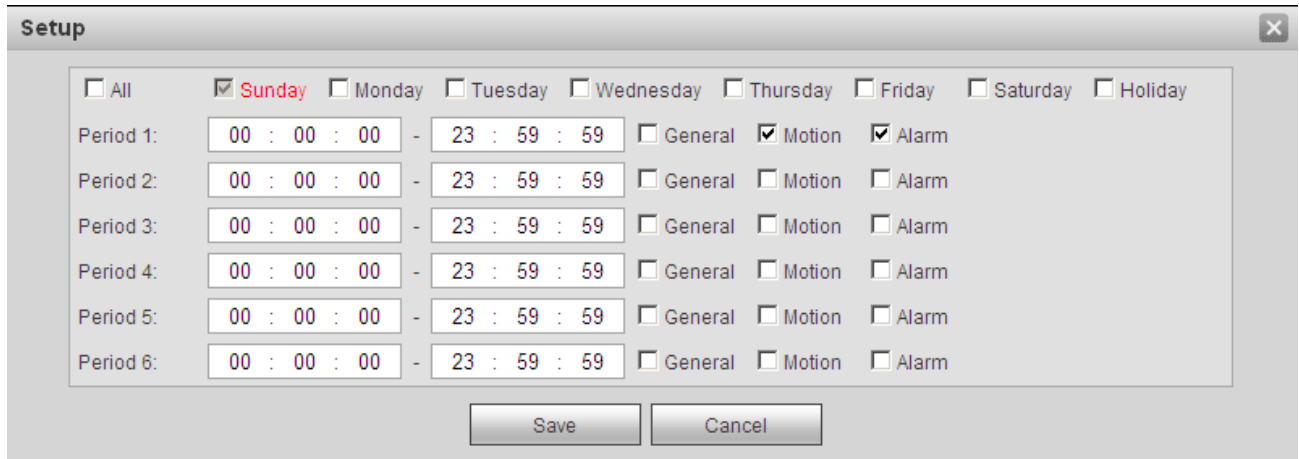
Figure 6-93

Step 3. Click on OK, return to snapshot schedule interface. See Figure 6-94.
- 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.
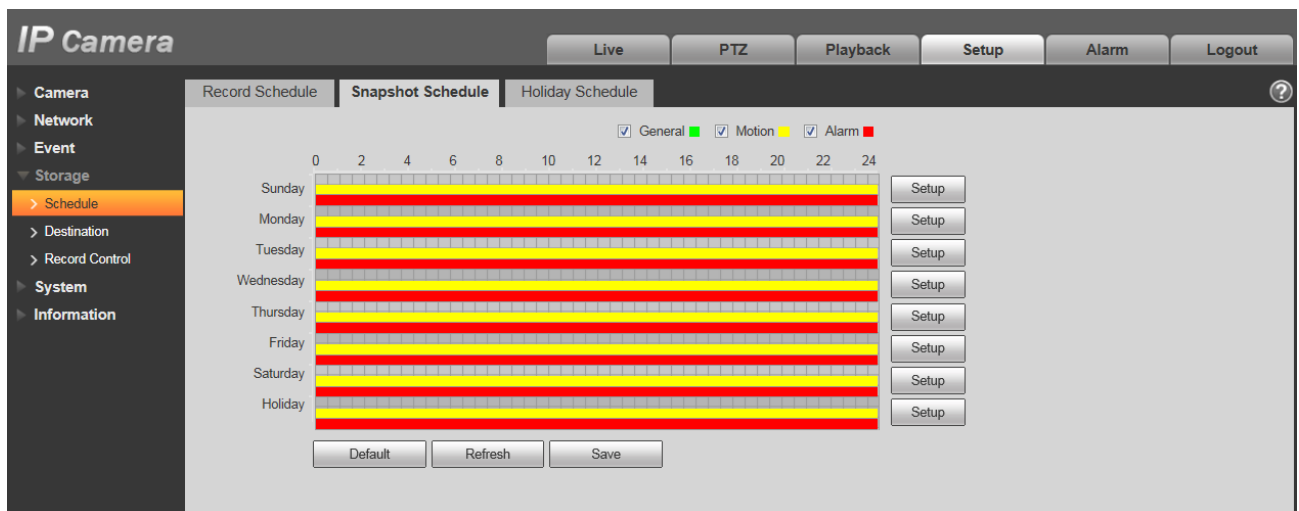
Figure 6-94

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

6.4.1.3 Holiday Schedule

Holiday schedule can set specific date as holiday.

Step 1. Click on Holiday Schedule tab, see Figure 6-95.
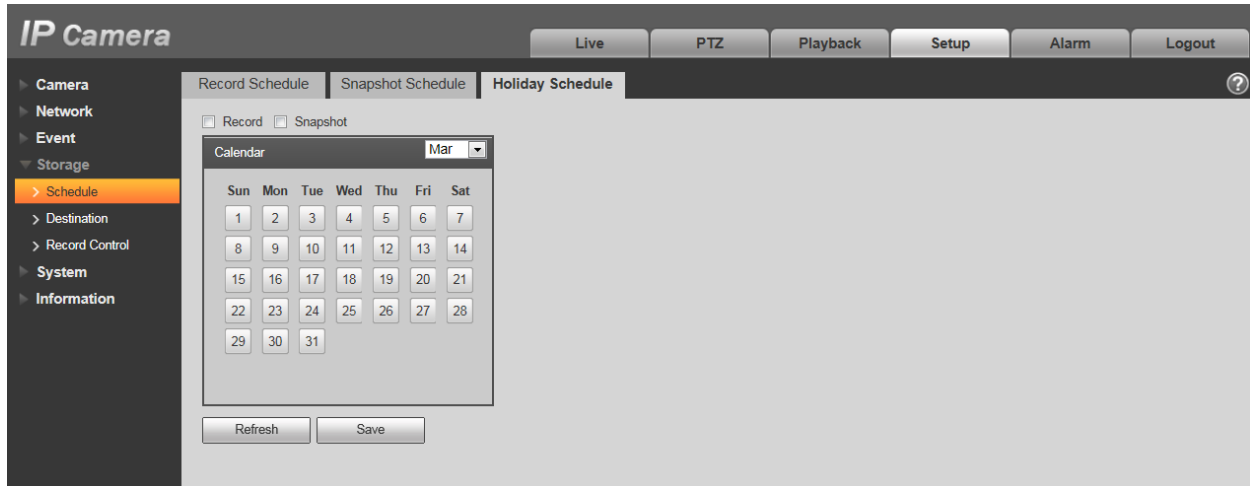
Figure 6-95

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

Step 3. Check Record/Snapshot, click on Save. System prompts it is successfully saved.

Step 4. Check Record Schedule/Snapshot Schedule interface, click on setup next to Holiday, and refer to setup of Monday to Sunday.

Step 5. Complete setup of holiday, then it records/snapshots according to date in holiday schedule.

6.4.2 Destination

6.4.2.1 Path

The destination interface is shown as in Figure 6-96.

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

Note: Only device supports SD card has local.
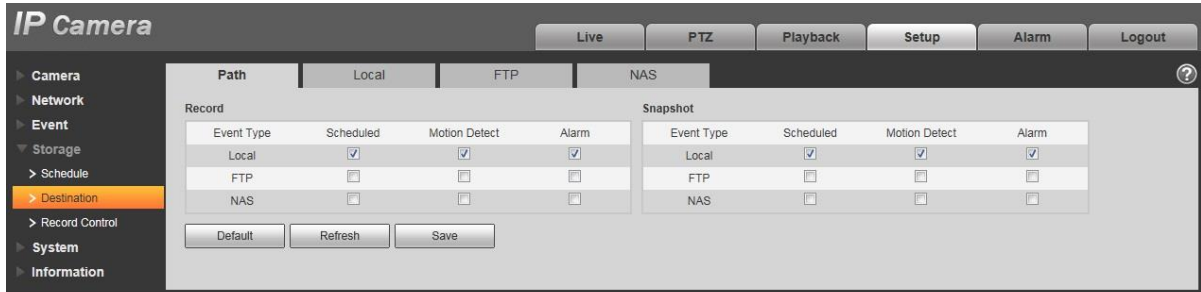
Figure 6-96

Please refer to the following sheet for detailed information.

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

6.4.2.2 Local

The local interface is shown as in Figure 6-97.

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

Figure 6-97

6.4.2.3 FTP

The FTP interface is shown as in Figure 6-98.

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. Click the test button to check if the FTP server can be connected for test.
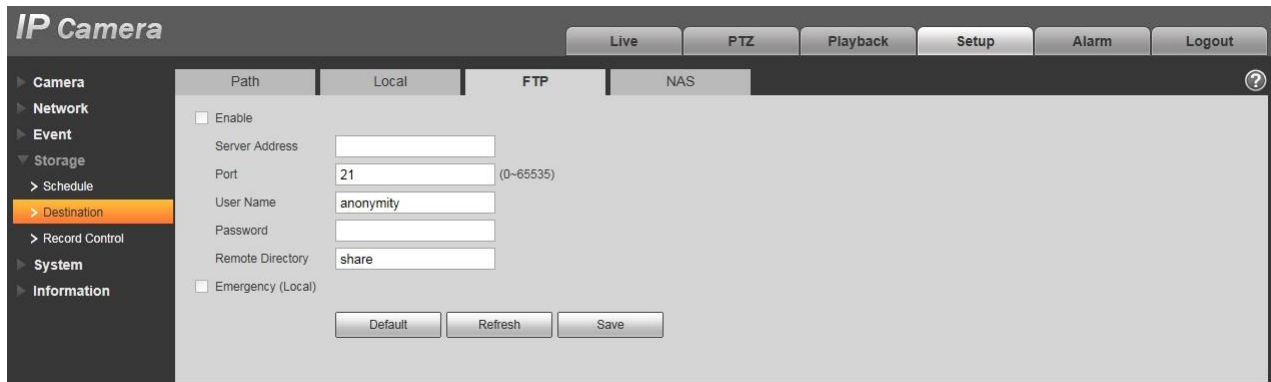
Figure 6-98

6.4.2.4 NAS

You need to check the box to enable the NAS function. Select NAS storage, fill in NAS server address and corresponding store path, then you can store video file or pictorial information in the NAS server. See Figure 6-99.
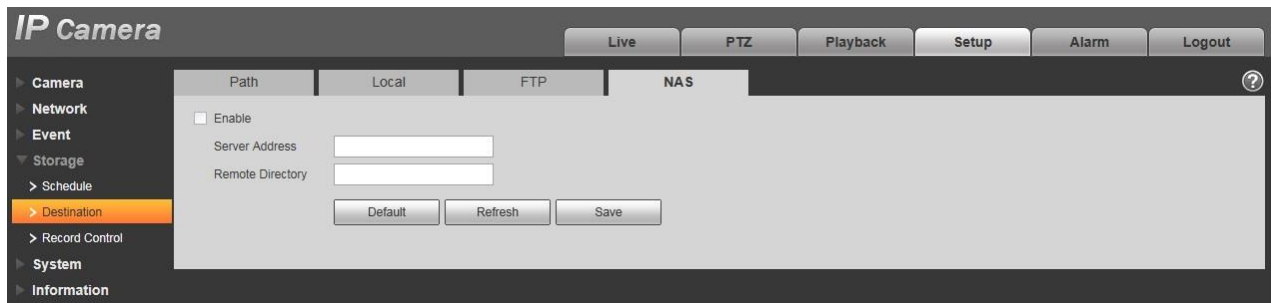
Figure 6-99

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

6.4.3 Record control

The record control interface is shown as in Figure 6-100.

Figure 6-100

Please refer to the following sheet for detailed information.

Parameter	Function
Pack Duration	Here you can select file size within 1min~120min. Default setup is 8 minutes.
Pre-record	Please input pre-record value here. For example, system can record the four seconds video in the buffer. The record begins from the fifth second. Note: Configure pre-record time, when alarm or motion detection occurs, if there is no record, system will record the preceding n seconds record.
Disk Full	There are two options: stop recording or overwrite the previous files when HDD is full. ● Stop: Current working HDD is overwriting or current HDD is full, it will stop record. ● Overwrite: Current working HDD is full; it will overwrite the previous file.
Record mode	There are three modes: Auto/manual/close.
Record stream	There are two options: main stream and sub stream.

6.5 System

6.5.1 General

The General interface is shown as in Figure 6-101.

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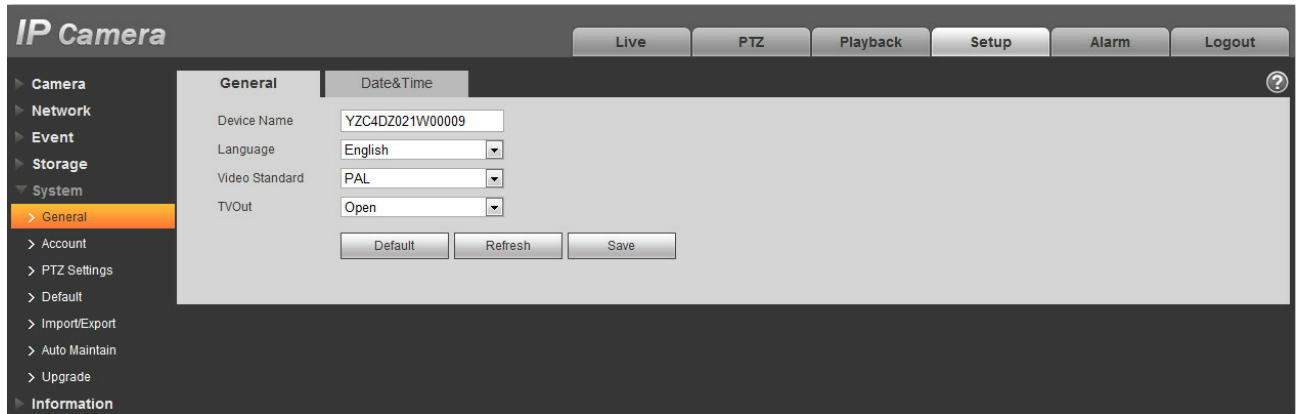
Figure 6-101

Please refer to the following sheet for detailed information.

Parameter	Function
Device Name	It is to set device name. Note: Different devices have different names.
Video Standard	This is to display video standard such as PAL.
Language	You can select the language from the dropdown list.
TV Out	You can open or close the function; it can only be supported by the devices with TV Out. ● Intelligent function will be disabled when TV Out is opened. ● It will auto close TV Out when intelligent function is enabled. ● Some devices support SDI and HDCVI.

The date and time interface is shown as in Figure 6-102.
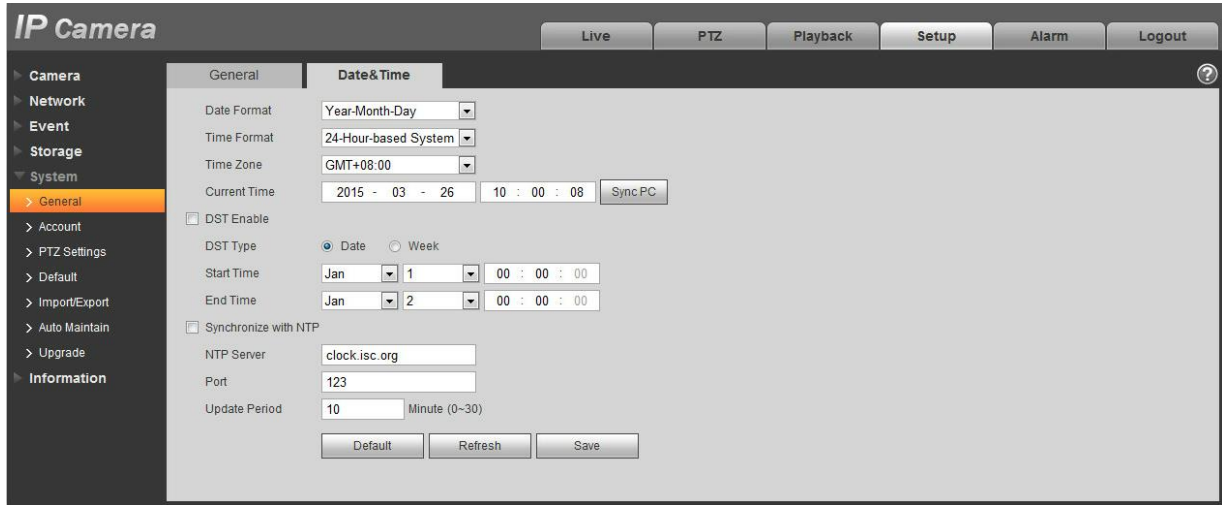
Figure 6-102

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.
Current 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 Enable	Here you can set both begin and end time of daylight saving time. You can set according to the date format or the week format.
Synchronize with 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.

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6.5.2 Account

● For user name and user group, the max length is 31 characters, which can be made up of digit, letter, underline, hyphen, dot and @.
● Password can be 0~32 characters in number and letter only. User can modify other user's password.
● User and group can be manually added to 18 and 8 respectively.
● User management adopts group/user modes. The user name and the group name shall be unique. One user shall be included in only one group.
● Currently logged in user cannot change his/her own right.

6.5.2.1 Username

In this interface you can enable anonymity login, add/remove user and modify user name. See Figure 6-103.
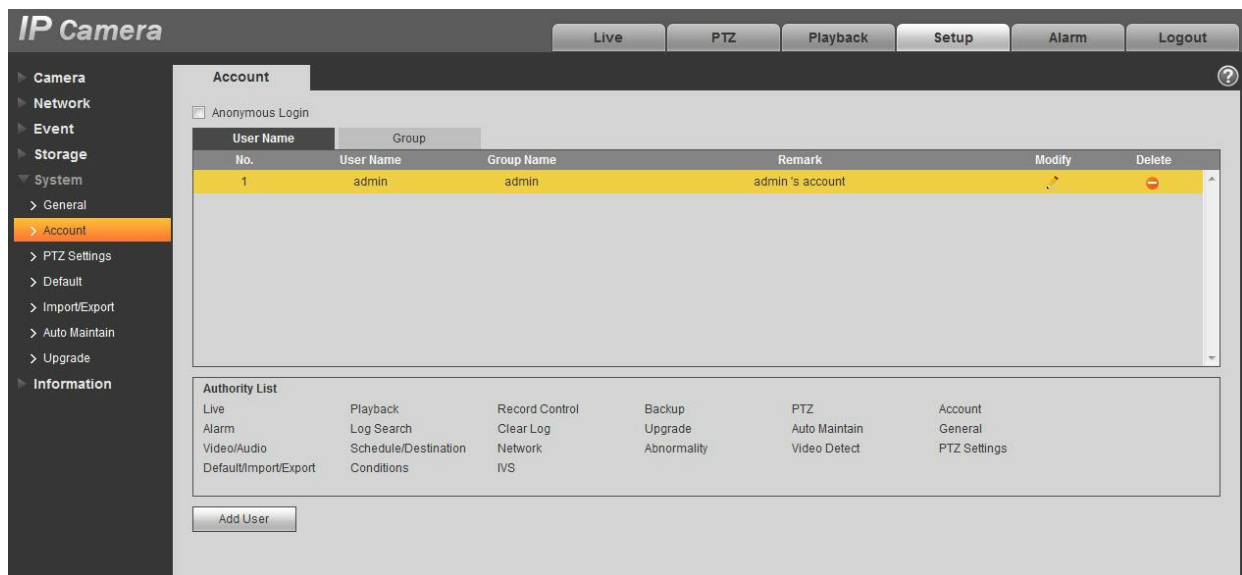
Figure 6-103

Enable anonymity login: Enable anonymity login, and input IP. No username or password is required, you can log in by anonymity (with limited rights). You can click logout to end your session.
Add user: It is to add a name to group and set the user rights. See Figure 6-104.
Hidden user "default" is for system interior use only and cannot be deleted. When there is no login user, hidden user "default" automatically login. You can set some rights such as monitor for this user so that you can view some channel view without login.
Here you can input the user name and password and then select one group for current user.
Please note the user rights shall not exceed the group right setup.
For convenient setup, please make sure the general user has the lower rights setup than the admin.

Figure 6-104

Modify user

It is to modify the user property, belonging group, password and rights. See Figure 6-105.

Modify password

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

Please note, the password ranges from 0-digit to 32-digit. It shall include the number and letter only. For the user who has the account rights, he can modify the password of other users.
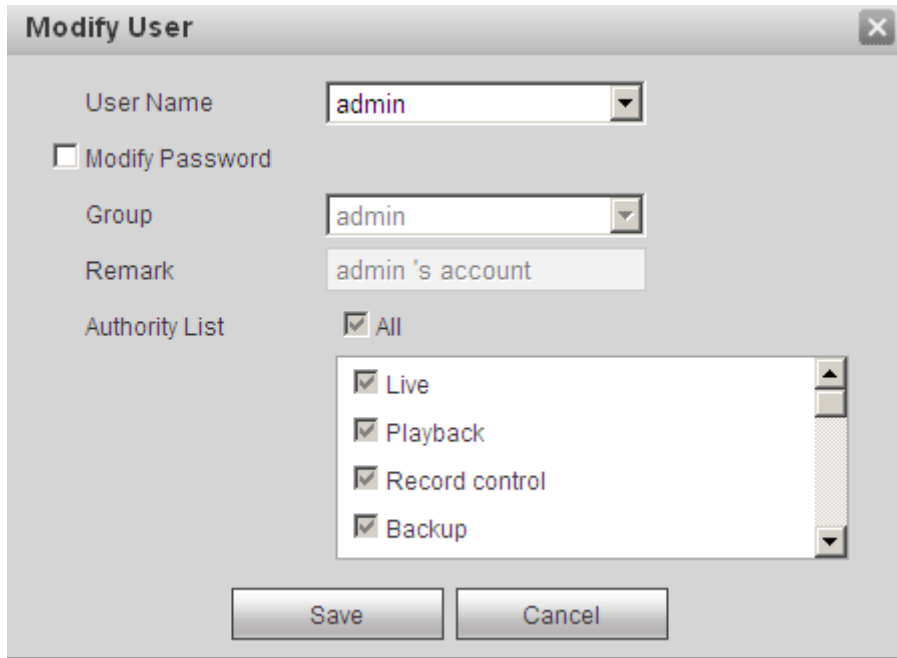
Figure 6-105

6.5.2.2 Group

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

The interface is shown as in Figure 6-106.
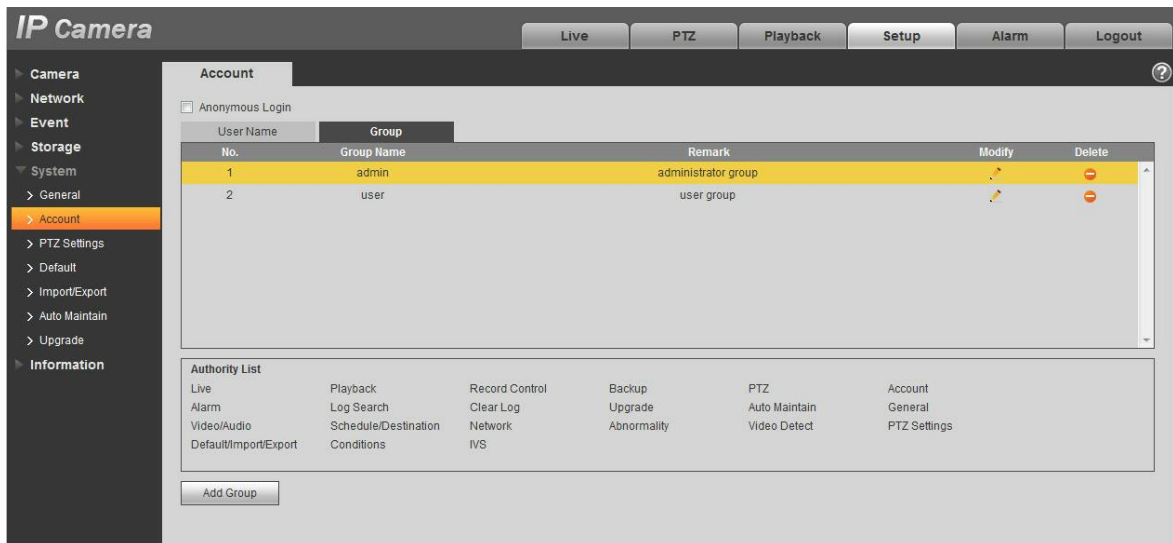
Figure 6-106

Add group: It is to add group and set its corresponding rights. See Figure 6-107.

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

Figure 6-107

Modify group

Click the modify group button, you can see an interface is shown as in Figure 6-108.
Here you can modify group information such as remarks and rights.

Figure 6-108

6.5.3 PTZ

Please note only some series products support this function.

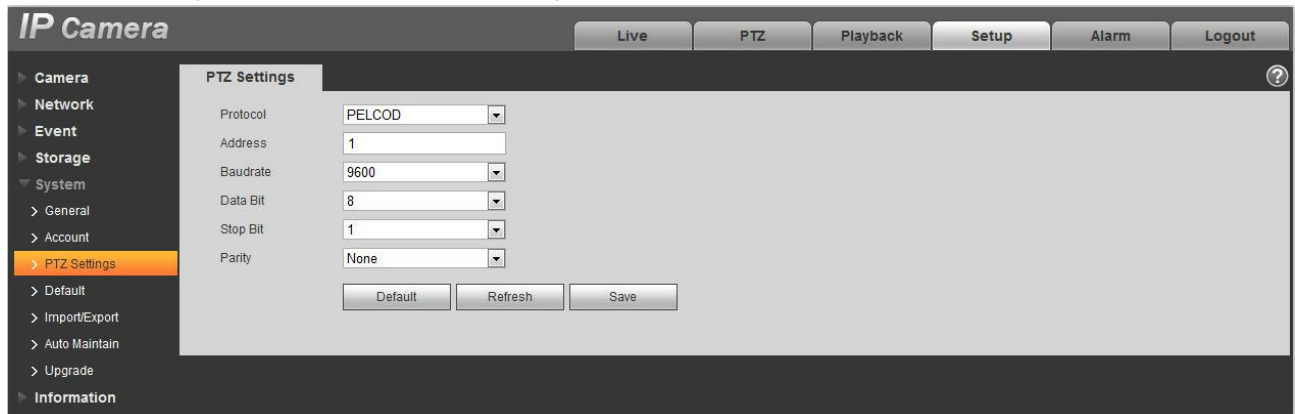The PTZ settings interface is shown as in Figure 6-109.

Figure 6-109

Please refer to the following sheet for detailed information.

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

6.5.4 Default

The default setup interface is shown as in Figure 6-110.

Please note system cannot restore some information such as network IP address, account and so on.
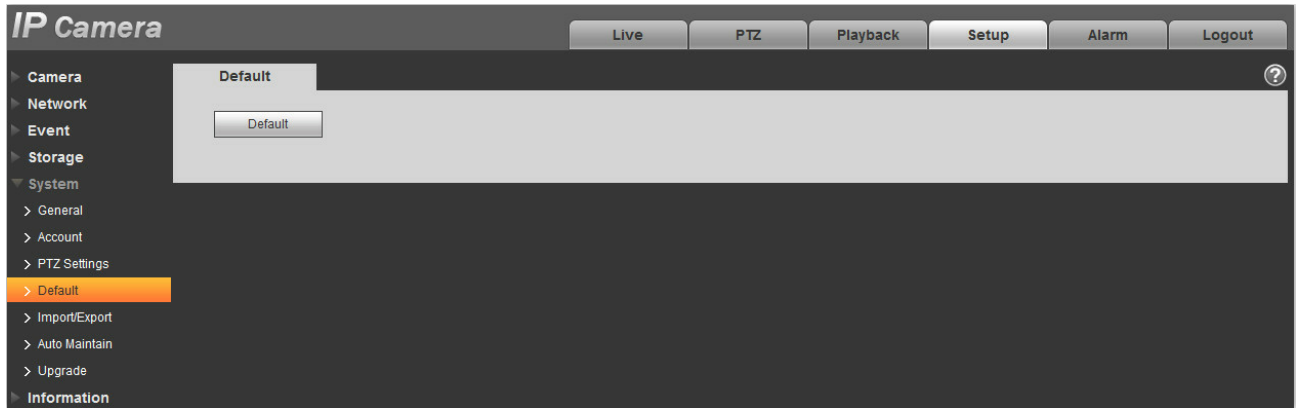
Figure 6-110

6.5.5 Import/Export

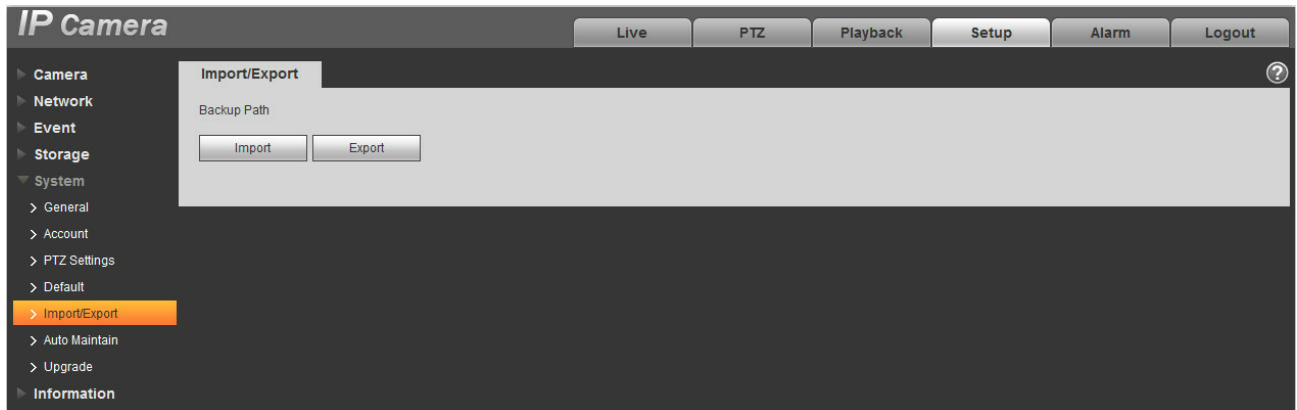The interface is shown as in Figure 6-111.

Figure 6-111

Please refer to the following sheet for detailed information.

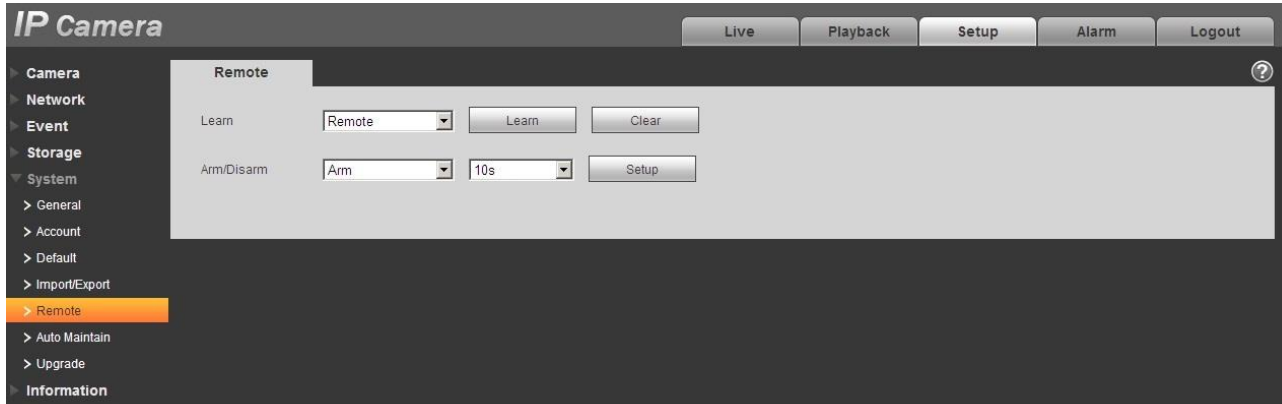| Parameter	Function
Import	It is to import the local setup files to the system.
Export	It is to export the corresponding system setup to your local PC.

5.5.6 Remote control

Note:

It is supported by some devices.

Figure 6-112

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

6.5.6 Auto Maintenance

The auto maintenance interface is shown as in Figure 6-113.

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.
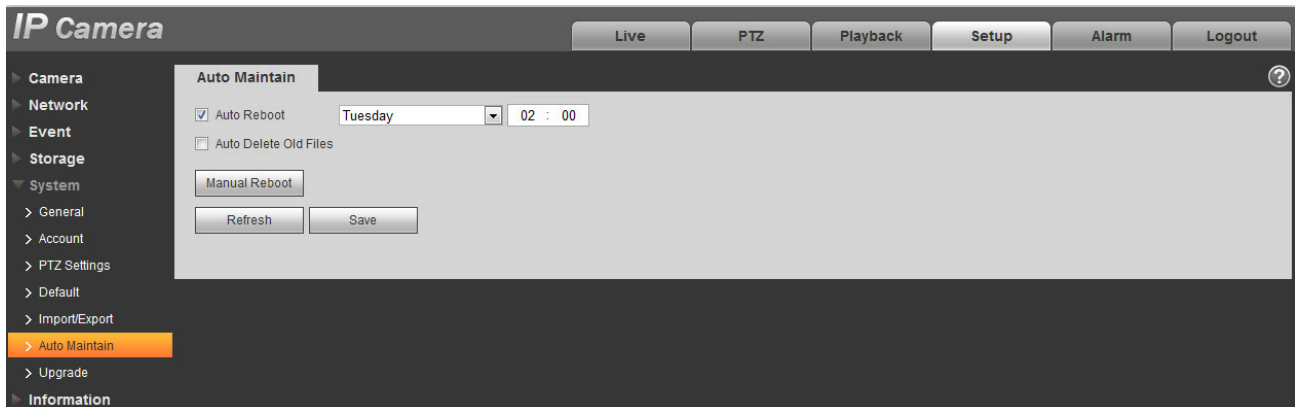

Figure 6-113

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

6.5.7 Upgrade

The upgrade interface is shown as in Figure 6-114.

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

Important

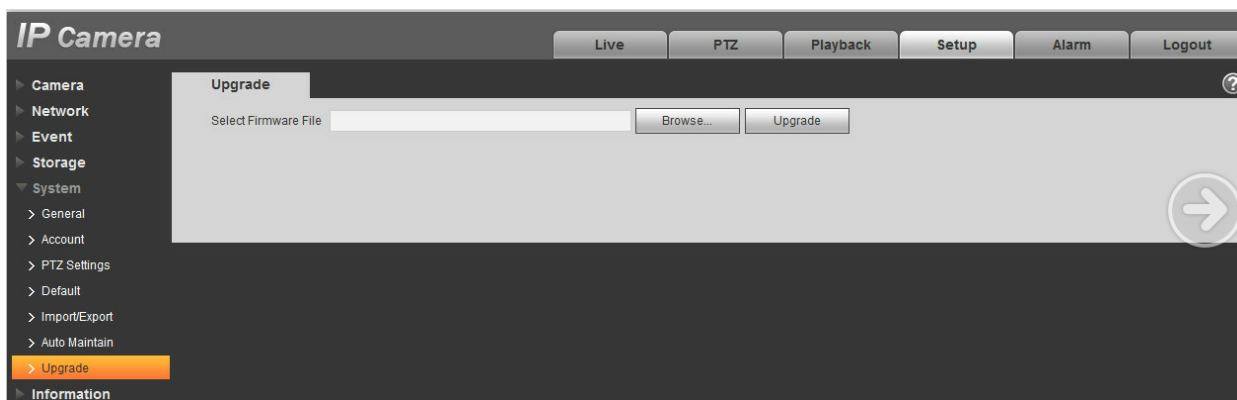**Improper upgrade program may result in device malfunction!**

Figure 6-114

6.6 Information

6.6.1 Version

The version interface is shown as in Figure 6-115.

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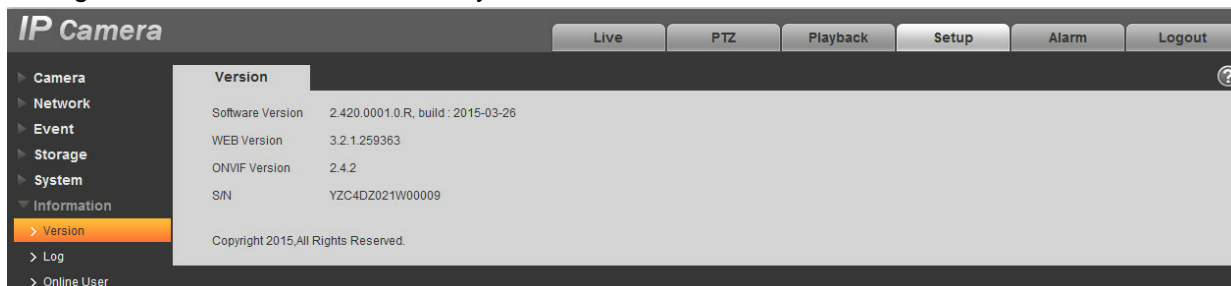

Figure 6-115

6.6.2 Log

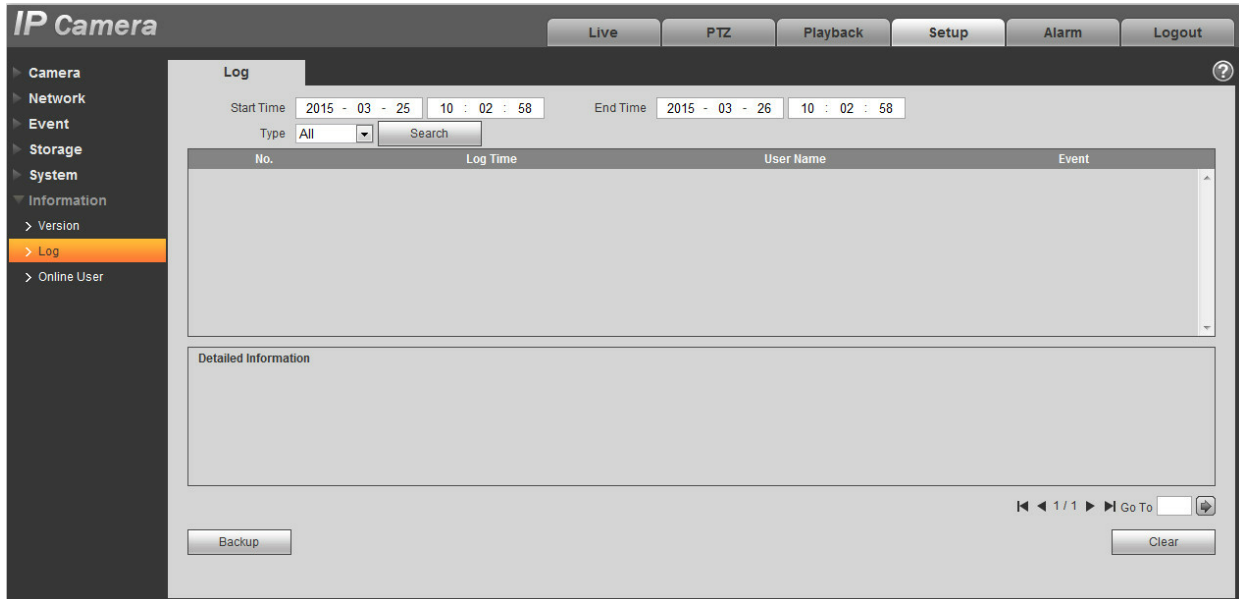Here you can view system log. See Figure 6-116.

Figure 6-116

Please refer to the following sheet for log parameter information.

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

6.6.3 Online User

The online user interface is shown as in Figure 6-117.

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

Figure 6-117

7 Alarm

Please note some series product does not support this function.

Click alarm function, you can see an interface is shown as in Figure 7-1.

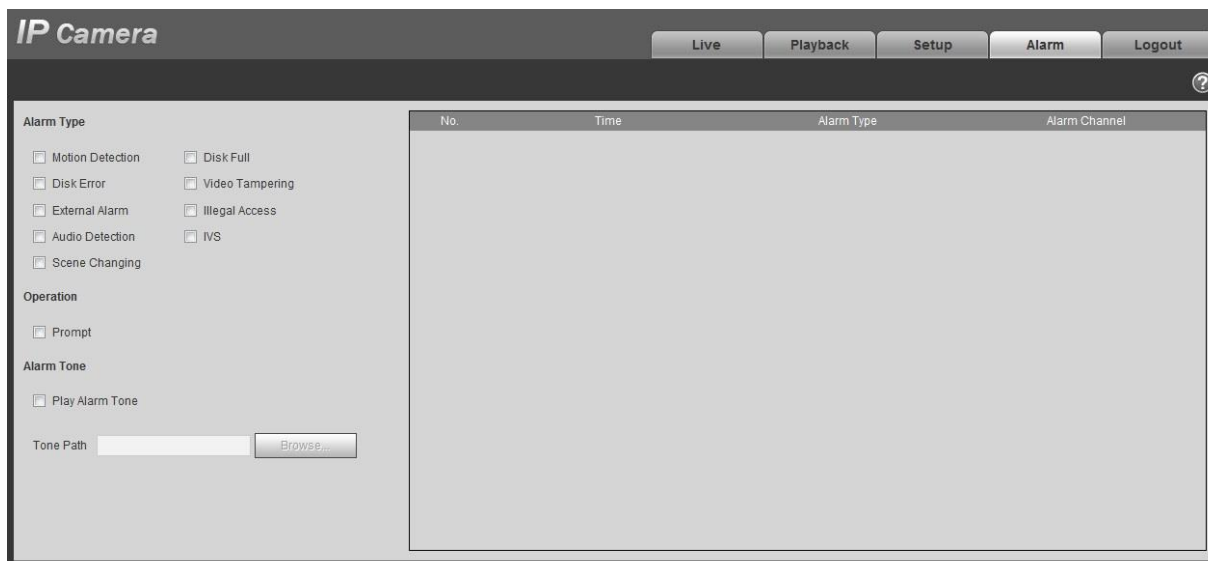Here you can set device alarm type and alarm sound setup.

Figure 7-1

Please refer to the following sheet for detailed information.

Type	Parameter	Function
Alarm type	Motion detection	System alarms when motion detection alarm occurs,
	Disk full	System alarms when disk is full.
	Disk Error	System records alarm info when disk error happens.
	Video Tampering	System alarms when video is tampering.
	External alarm	Alarm input device sends out alarm.
	Illegal Access	System alarms when there is illegal access.
	Audio Detection	System alarms when there is audio detect.
	IVS	System alarms when IVS event is triggered.
	Scene Changing	System will record alarm info when triggering scene changing.

Type	Parameter	Function
Operation	Prompt	When alarm is triggered, there will be s ![bell icon] inmain menu of alarm interface and system automatically records alarm info. The icon disappears when user click on alarm menu bar. Note: If alarm interface is displayed, when alarm is triggered, there will be no image prompt, but alarm record will be in list on the right.
Alarm Tone	Play Alarm Tone	Click it and select the path of audio file to be played in the tone path, when the subscribed alarm event triggers, it will play the selected audio file to prompt that there is alarm event which has been triggered.
	Tone Path	You can customize the storage path of the alarm tone.

8 Log out

Click log out button, system goes back to log in interface. See Figure 8-1.

Figure 8-1

Note

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

Regulatory Information

The regulatory information herein might vary according to the model you purchased. Some information is only applicable for the country or region where the product is sold.

FCC Information

⚠ CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC conditions:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

FCC compliance:

This equipment has been tested and found to comply with the limits for a digital device, pursuant to part 15 of the FCC Rules. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication.

For class B device, these limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

Battery Replacement and Disposal

Applicable to products with battery.

⚠ CAUTION

Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Privacy Protection Notice

As the device user or data controller, you might collect personal data of others such as face, fingerprints, car plate number, Email address, phone number, GPS and so on. You need to be in compliance with the local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures include but not limited to: providing clear and visible identification to inform data subject the existence of surveillance area and providing related contact.