



# Network Video Recorder User Manual

V5.10



## Safety Regulatory

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss. The precaution measures are divided into “Warnings” and “Cautions”

**Warnings:** Serious injury or death may be caused if any of these warnings is neglected.

**Cautions:** Injury or equipment damage may be caused if any of these cautions are neglected.

<p><b>Warnings:</b> Please follow these safeguards to prevent injury or death.</p>	<p><b>Cautions:</b> Please follow these safeguards to prevent potential injury or material damage.</p>



### Warnings

- ◆ This installation must be conducted by a qualified service person and should strictly comply with the electrical safety regulations of the local region
- ◆ To avoid risk of fire and electric shock, do keep the product away from rain and moisture
- ◆ Do not touch components such as heat sinks, power regulators, and processors, which may be hot
- ◆ Source with DC 12V or PoE
- ◆ Please make sure the plug is firmly inserted into the power socket
- ◆ When the product is installed on a wall or ceiling, the device should be firmly fixed
- ◆ If the product does not work properly, please contact your dealer. Never attempt to disassemble the camera by yourself



### Cautions

- ◆ Make sure that the power supply voltage is correct before using the camera
- ◆ Do not store or install the device in extremely hot or cold temperatures, dusty or damp locations, and do not expose it to high electromagnetic radiation
- ◆ Only use components and parts recommended by manufacturer
- ◆ Do not drop the camera or subject it to physical shock
- ◆ To prevent heat accumulation, do not block air circulation around the camera
- ◆ Laser beams may damage image sensors. The surface of image sensors

- should not be exposed to where a laser beam equipment is used
- ◆ Use a blower to remove dust from the lens cover
  - ◆ Use a soft, dry cloth to clean the surface of the camera. Stubborn stains can be removed using a soft cloth dampened with a small quantity of detergent solution, then wipe dry
  - ◆ Do not use volatile solvents such as alcohol, benzene or thinners as they may damage the surface finishes
  - ◆ Save the package to ensure availability of shipping containers for future transportation

## EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2004/30/EC, the LVD Directive 2014/35/EU, the RoHS Directive 2011/65/EU.



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info).



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

## Content

1. Product Introduction.....	7
1.1 Introduction.....	7
1.2 Product Key Functions.....	7
2. Hardware.....	10
2.1 Panel Buttons.....	10
2.2 Using a USB Mouse.....	12
2.3 Hard Disk Installation.....	13
2.3.1 MS-N7000 series Hard Disk Installation.....	13
2.3.2 MS-N8000 series Hard Disk Installation.....	14
3. Local Operation.....	16
3.1 Wizard Setting.....	16
3.2 Live View.....	21
3.3 Playback.....	27
3.3.1 General Playback.....	27
3.3.2 Event Playback.....	30
3.3.3 Tag Playback.....	32
3.3.4 Picture Playback.....	34
3.3.5 File Management.....	36
3.4 Retrieve.....	38
3.4.1 Common Backup.....	38
3.4.2 Event Backup.....	39
3.4.3 Picture Backup.....	41
3.5 Smart Analysis.....	42
3.5.1 ANPR.....	42
3.5.2 Heat Map.....	43
3.6 Camera Settings.....	44
3.6.1 Camera Management.....	45
3.6.2 Device Search.....	50
3.6.3 PTZ Configuration.....	50
3.6.4 Image.....	55
3.6.5 Heat Map.....	61
3.6.6 Camera Maintenance.....	62
3.7 Storage.....	64
3.7.1 Video Record.....	65
3.7.2 Snapshot.....	68
3.7.3 General Settings.....	70
3.7.4 Disk.....	71
3.7.5 RAID.....	72
3.7.6 Group.....	73
3.8 Event.....	74
3.8.1 Motion Detection.....	74
3.8.2 Video Loss.....	80



3.8.3 Alarm Input.....	84
3.8.4 Alarm Output.....	94
3.8.5 Exception.....	96
3.8.6 VCA.....	97
3.8.7 ANPR.....	139
3.9 Settings.....	147
3.9.1 General.....	147
3.9.2 Layout.....	148
3.9.3 Network.....	149
3.9.4 Holiday.....	154
3.9.5 User.....	155
3.9.6 Maintenance.....	157
3.9.7 Hot Spare.....	160
3.10 Status.....	161
3.10.1 Device Information.....	161
3.10.2 Network Status.....	161
3.10.3 Camera Status.....	162
3.10.4 Disk Status.....	162
3.10.5 Event Status.....	163
3.10.6 Group Status.....	165
3.10.7 Logs.....	165
3.11 Logout.....	166
4.WEB Settings.....	167
4.1 Account Setting.....	167
4.2 Login.....	168
4.3 Menu.....	170
4.4 Live View.....	170
4.4.1 Camera List.....	170
4.4.2 PTZ.....	172
4.4.3 Image Configuration.....	173
4.5 Playback.....	173
4.5.1 How to playback.....	173
4.5.2 Transcoding.....	175
4.5.3 Video Files Backup.....	176
4.5.4 Picture Files Backup.....	177
4.6 Smart Analysis.....	177
4.6.1 ANPR.....	178
4.6.2 Heat Map.....	179
4.7 Settings.....	180
4.7.1 Local Configuration.....	180
4.7.2 Camera.....	180
4.7.3 Storage.....	194
4.7.4 Event.....	202
4.7.5 System.....	260

4.8 Status.....	275
4.8.1 Device Information.....	275
4.8.2 Network Status.....	276
4.8.3 Camera Status.....	276
4.8.4 Disk Status.....	276
4.8.5 Event Status.....	277
4.8.6 Group Status.....	278
4.8.7 Packet Capture Tool.....	279
4.9 Logs.....	279
4.10 Logout.....	279
5. Services.....	280

# 1. Product Introduction

## 1.1 Introduction

Based on embedded Linux operation system, Milesight NVR Series manages and stores HD video data. It owns multi-disk management systems, front end HD device management system, HD video analysis system and high-capacity system for video. Also, it adopts the technology of high flow capacity data network transmitting&transmission, with multi-channel video decoding, to achieve functions like intelligent management, safe storage, HD decoding, etc.

## 1.2 Product Key Functions

### Basic Information

- Milesight NVR Series includes **NVR Series** (Mini NVR 1000 Series, Pro NVR 5000 Series, Pro NVR 7000 Series, Pro NVR 8000 Series), and **PoE NVR Series** (Mini PoE NVR 1000 Series, PoE NVR 5000 Series and PoE NVR 7000 Series), which can work with Milesight network cameras and connect with third party network cameras that support ONVIF.

### Monitoring

- Support HDMI video output, maximum to 3840\*2160 resolution.
- Support ANPR (Automatic Number Plate Recognition) function.
- Support PAL/NTSC adaptive video input.
- Support multiple screen displaying in live view.
- Support 1/4/8/9/12/14/16/32 screen live view. The channel sequence is adjustable.
- Support quick menu and tool bar in live view.
- Support batch IP editing, setting camera's video parameters and record schedule.
- Support the switch of Live View, manual switch and automatic patrol. The interval of automatic sequence is adjustable.
- Support motion detection and video loss alert.
- Support ANPR (Automatic Number Plate Recognition) function.
- Support various PTZ protocols and PTZ operations such as preset, patrol, etc.
- Support the configuration of **Auto Tracking** function on monitor directly.
- Support central zoom in by clicking the mouse at arbitrary area.
- Support 3D positioning control for the PTZ Camera Series and Fisheye Camera Series.
- Support to set privacy mask of camera.
- Support the configuration of Milesight PTZ cameras' Privacy Mask on monitor.
- Support OSD title and date configuration.
- Support instant playback.
- Support setting view to Original or Resize.
- Support playback on slave NVR when Milesight N+1 Hot Spare is enabled.

## HDD Management

- Support hard disk and NAS storage.
- Support S.M.A.R.T technology.
- Support RAID and Group management.
- Support to set HDD property, including read-only and read/write.
- Support eSATA disk for recording or backup of NVR Pro 8000 Series.

## Recording/Snapshot and Playback

- Support ANR (Automatic Network Replenishment) for replenishing the recording gap due to internet interruptions.
- Support Transcoding for remote playback.
- Support recording with Primary Stream, Secondary Stream and Primary + Secondary Stream.
- Support General Playback, Event Playback, Tag Playback and Picture Playback.
- Support to tag and lock video.
- Support holiday schedule.
- Support recycle and non-recycle recording mode.
- Support 12 recording time periods with separate recording types.
- Support pre-record and post-record time setting for motion detection, alarm and VCA recording. And support pre-record setting for manual and schedule recording.
- Support recording/snapshot manually.
- Support digital zoom function at arbitrary area in playback.
- Support pause, rewind, fast play, slow play, skip forward and skip backward when playback, locating in progress bar by dragging the mouse.
- Support up to 128x fast forward playback.

## Backup

- Support N+1 Hot Spare.
- Support Common Backup, Event Backup and Picture Back in Retrieve interface.
- Support export video files or snapshot to USB and eSATA device.
- Support backup device maintenance and management.

## Alarm & Exception

- Support motion detection configure and alarm.
- Support video loss alarm, alarm input and alarm output.
- Support Network Disconnected/Disk Full/Record Failed/Disk Error/Disk Uninitialized/No Disk alarms.
- Support VCA alarm, including Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering, Human Detection, People Counting and Object Left/Removed(Optional).
- Support various alarm response such as audible warning, sending email, recording, PTZ action and on/off relay out.

## Network

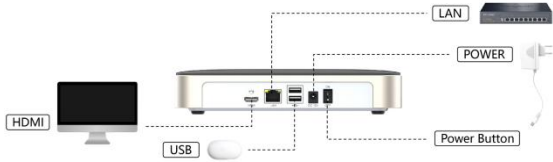
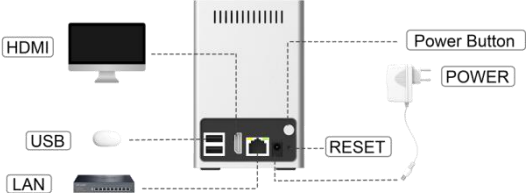
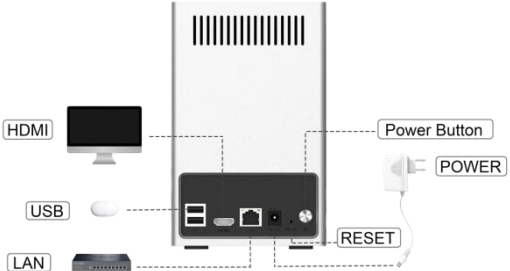
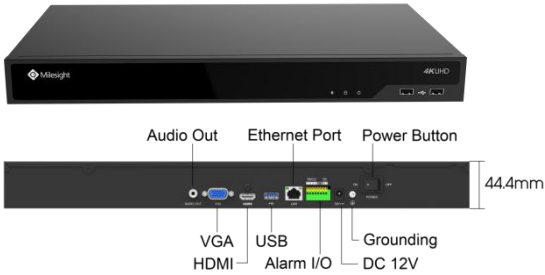

- Equipped with PoE ports for PoE cameras(only available for PoE NVR).
- Support remote search, playback and download of video files.
- Support remote acquiring and configuring of parameters.
- Support remote import and export of device parameters.
- Support P2P remote access.
- Support IPv4/IPv6, TCP, UDP, RTP, RTSP, RTCP, HTTP, HTTPS, DNS, DDNS, DHCP, NTP, SNTP, SMTP, SNMP, UPnP.
- Support remote acquiring of device status, system log and alarm status.
- Support remote operate system maintenance by initialize hard disk, add NAS, upgrade firmware and auto reboot, etc.
- Support upload alarm and exceptions to remote host.
- Support remote manual start or stop of recording.
- Support remote manual start or stop of alarm output.
- Support remote BMP image capturing.
- Support remote PTZ control.
- Support keyboard control.
- Built-in WEB Server.

## Other Functions

- Support multi-level user management, administrator can create multiple users with access rights.
- Support operating and configuring information import/export.
- Support auto reboot.
- Support CGI for Windows and Linux system.
- Support Plugin-Free mode.

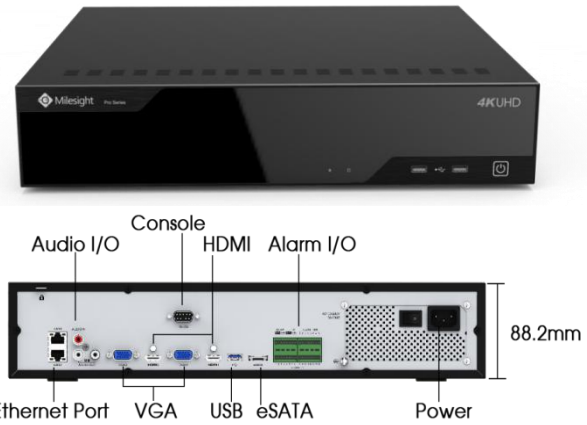
## 2. Hardware

### 2.1 Panel Buttons

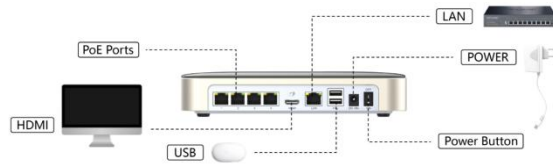
Model	Hardware/Interface
<b>4K H.265 Mini NVR 1000 Series</b>	<p><b>MS-N1004-UC:</b></p> 
	<p><b>MS-N1009-UT (Firmware version: 71.xx.xx.xx):</b></p> 
	<p><b>MS-N1009-UNT:</b></p> 
<b>4K H.265 Pro NVR 5000 Series</b>	<p><b>MS-N5008-UT/MS-N5016-UT:</b></p> 
<b>4K H.265 Pro NVR 7000 Series</b>	<p><b>MS-N7016-UH/MS-N7032-UH:</b></p> 

**4K H.265 Pro NVR 8000 Series**

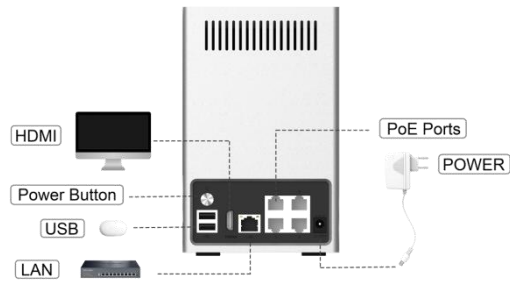
**MS-N8032-UH/MS-N8064-UH:**



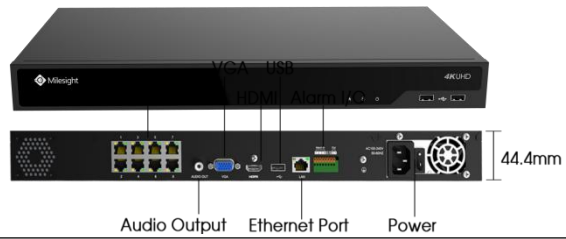
**MS-N1004-UPC:**



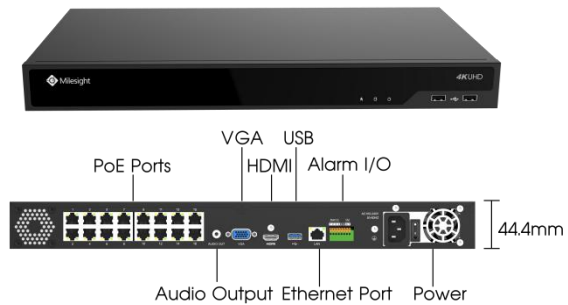
**MS-N1009-UPT:**



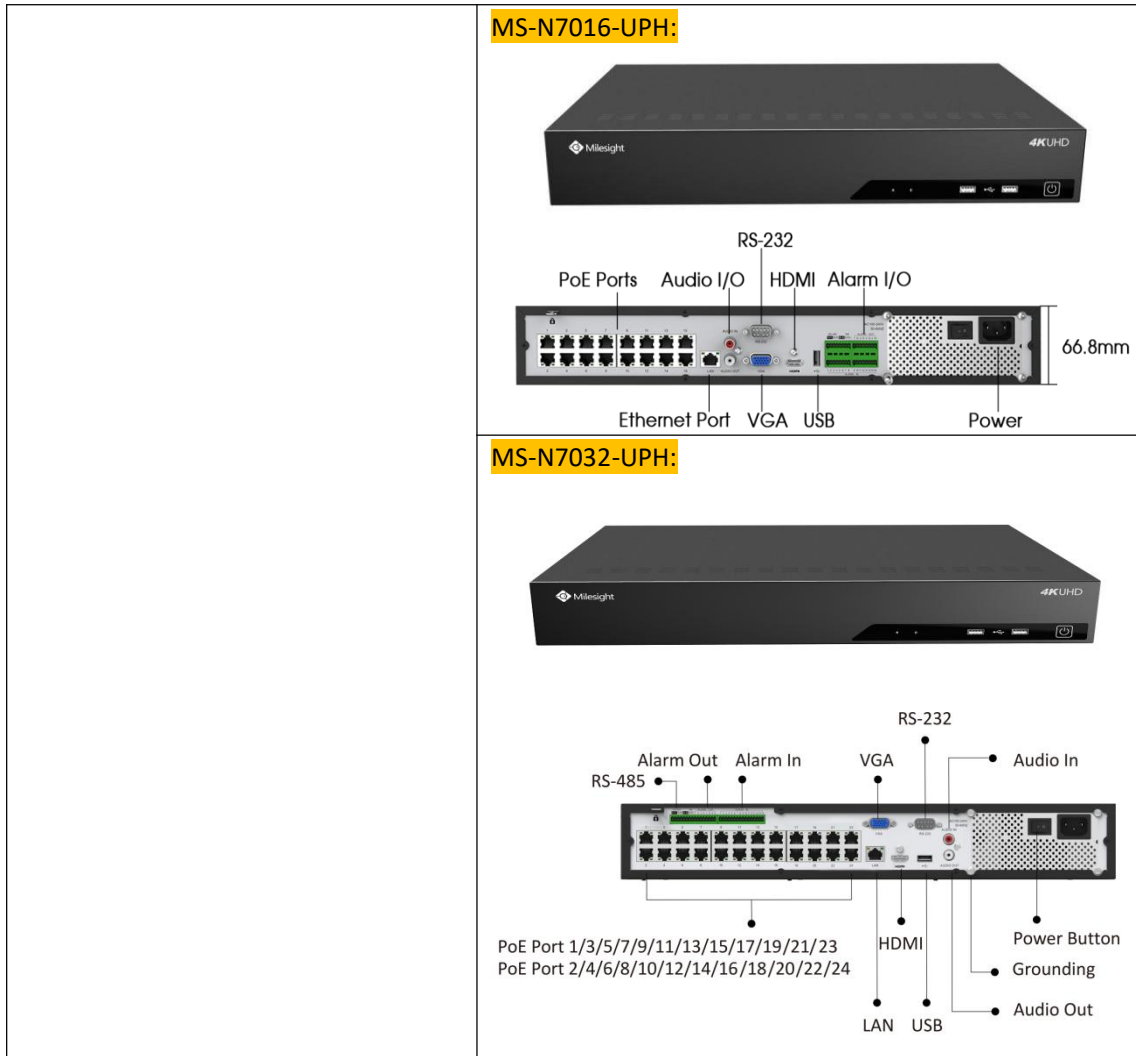
**MS-N5008-UPT:**



**MS-N5016-UPT:**



**4K H.265 PoE NVR Series**



## 2.2 Using a USB Mouse

Item	Click	Description
Left Button	Single- click	Live view: select the channel and show the toolbar of live view. Menu: select and confirm.
	Double-click	Switch between single screen to multi-screen when in live view mode and playback mode.
	Click and drag	(1) Control rotation direction in PTZ mode. (2) Set the target area in motion detection, VCA and privacy mask alarm settings. (3) Drag to set the digital zoom area. (4) Drag the channel and the time scroll bar.
Right Button	Single-click	Live view: shows pop-up menu. Menu: exit and go to Live View.
Scroll-wheel	Scroll up	Scroll up the page.
	Scroll down	Scroll down the page.



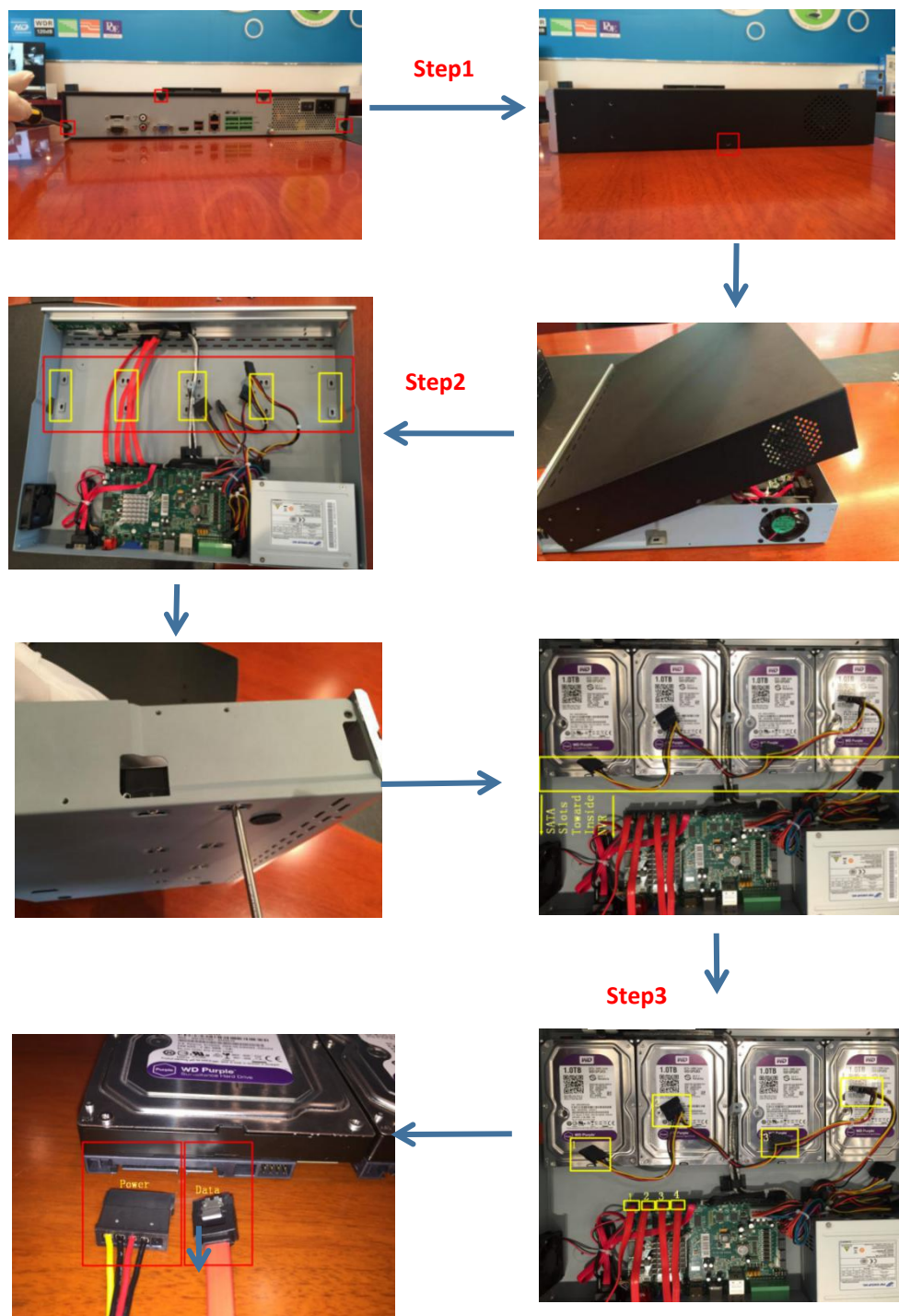
## 2.3 Hard Disk Installation

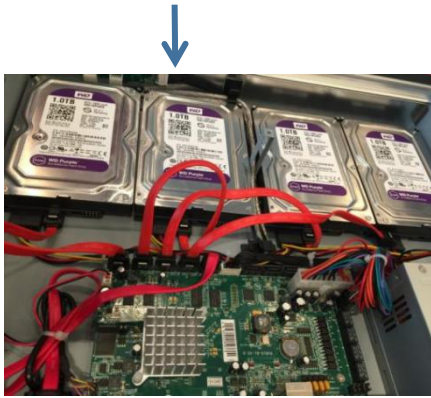
### 2.3.1 MS-N7000 series Hard Disk Installation

Step1. Unscrew the back and both sides' screws to open the upper lid.

Step2. Install the hard disks into NVR with screws shown in below pictures. (SATA Slots of hard disk should be toward inside NVR.)

Step3. Join the power and data connectors to corresponding hard disk.





## 2.3.2 MS-N8000 series Hard Disk Installation

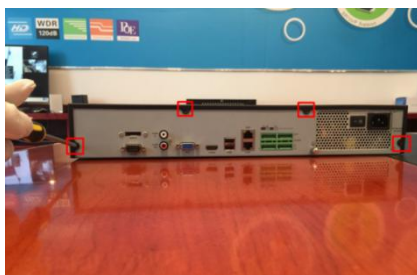
**Step1.** Unscrew the back and both sides' screws to open the upper lid.

**Step2.** Uninstall the upper hard disk panel.

**Step3.** Install the hard disks into NVR with screws shown in below pictures.(SATA slots of hard disks should be toward inside NVR)

**Step4.** Join the power connectors to corresponding hard disks.(Install lower hard disk panel before upper one)

**Step5.** Join the data connectors to corresponding hard disk.(Check the connection by below sequence)



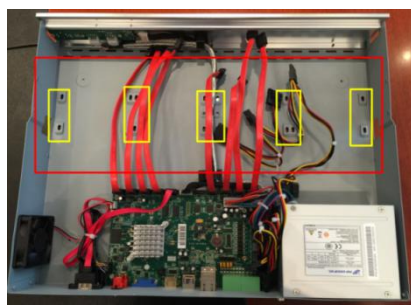
Step1

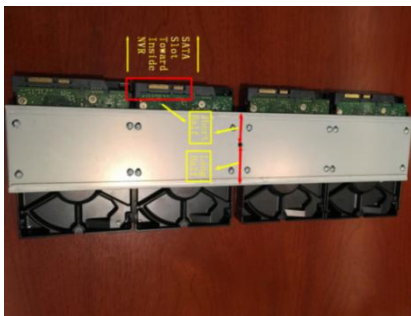


Step2



Step3





Step4 ↓



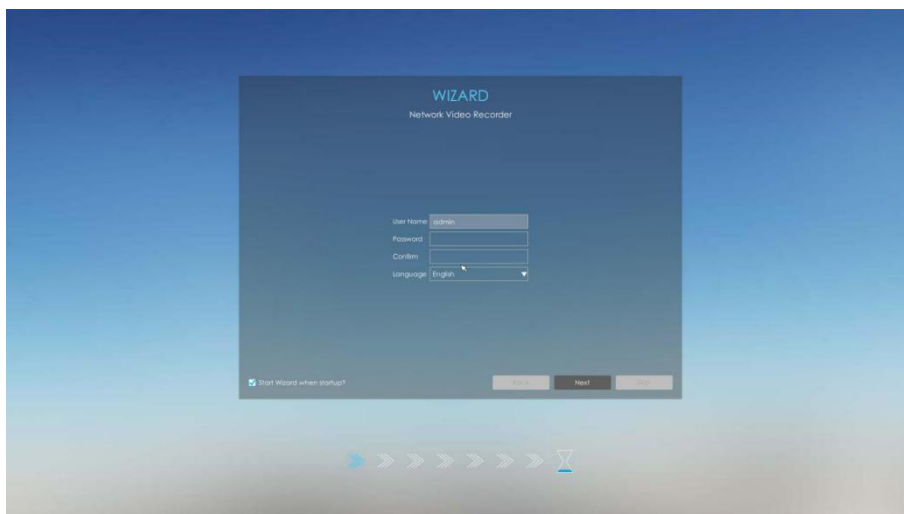
Step5 ↓



**Note:**

1. The SATA slots are in SHORT HALF side and the SATA slot toward inside NVR.
2. The data connector sequence of MS-N7000 series is different from MS-N8000 series'.

## 3. Local Operation



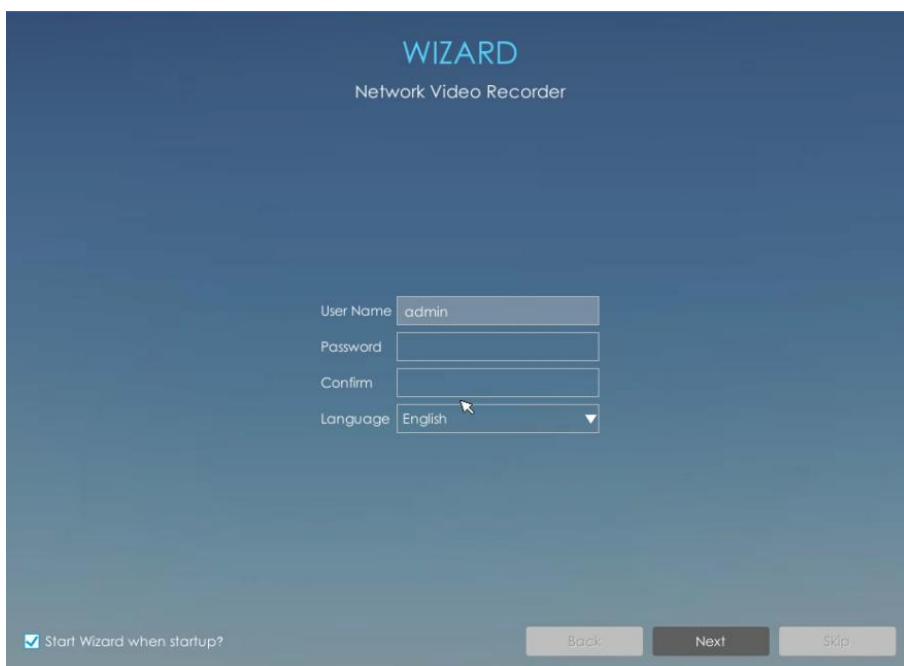
### 3.1 Wizard Setting

By default, the Setup Wizard will start once the NVR has been loaded. You can click check-box to turn off the Wizard when startup.

Start Wizard when startup?

The Setup Wizard will guide you to complete important settings, which makes NVR more user-friendly.

**Step1. Set password to active admin account.**



**Note:**



1. Only the NVR firmware version xx.9.0.3 or above supports activation function.
2. Password must be 8 to 32 characters long.
3. Password must contain at least one number and one letter.

**Step2. Set security questions which are used for resetting password.**

10 questions are provided, you can select any one to set answer. Beside, customized question is available.

If you skip this step, you can also set it again in Setting -> User interface.

The screenshot shows the 'WIZARD' setup screen for a Network Video Recorder. The title is 'WIZARD Network Video Recorder'. There are three security question entries, each with a dropdown menu for the question and a text input field for the answer. All three dropdown menus are currently set to 'What's your father's name?'. At the bottom left, there is a checkbox labeled 'Start Wizard when startup?' which is checked. At the bottom right, there are three buttons: 'Back', 'Next', and 'Skip'.

**Note:**

Only the NVR firmware version xx.9.0.3 or above supports.

**Step3. Date and time setting.**

Select the Time Zone and date via NTP or you can set date and time manually.

The screenshot shows the 'WIZARD' setup screen for a Network Video Recorder, specifically the date and time settings. The title is 'WIZARD Network Video Recorder'. There are two dropdown menus for 'Time Zone' (set to '(UTC-08:00) United States - Pacific Time') and 'Daylight Saving Time' (set to 'Auto'). There is a checked checkbox for 'Synchronize with NTP server' and a text input field for 'NTP Server' containing 'pool.ntp.org'. There is an unchecked checkbox for 'Set Date and Time Manually' and a date/time input field showing '2019-09-10 02:52:32'. At the bottom left, there is a checkbox labeled 'Start Wizard when startup?' which is checked. At the bottom right, there are three buttons: 'Back', 'Next', and 'Skip'.

**Step4. Network setting.**

Input the IP Address, Subnet Mask, Gateway and Preferred DNS Server.

PoE NIC IPv4 Address option is only for PoE NVR Series.

The screenshot shows the 'WIZARD' configuration interface for a Network Video Recorder. The title is 'WIZARD Network Video Recorder'. The configuration options are as follows:

- NIC: LAN (dropdown menu)
- Enable DHCP:
- IP Address: 192.168.7.111
- Subnet Mask: 255.255.240.0
- Gateway: 192.168.7.1
- Preferred DNS Server: 8.8.8.8
- Alternate DNS Server: . . .
- PoE NIC IPv4 Address: 192.168.20.1

At the bottom, there is a checkbox for 'Start Wizard when startup?' which is checked. Navigation buttons 'Back', 'Next', and 'Skip' are located at the bottom right.

**Step5. Disk Management.**

The screenshot shows the 'WIZARD' configuration interface for a Network Video Recorder, specifically the disk management section. The title is 'WIZARD Network Video Recorder'. A table displays the disk information:

<input type="checkbox"/>	Port	Vendor	Status	Total	Free	HDD Type
<input checked="" type="checkbox"/>	2	WDC WD2500BEVT-08A23T1	Normal	232.89 GB	0	LOCAL

Below the table, there are two progress bars:

- Total Capacity: 232.89 GB
- Available Capacity: 0

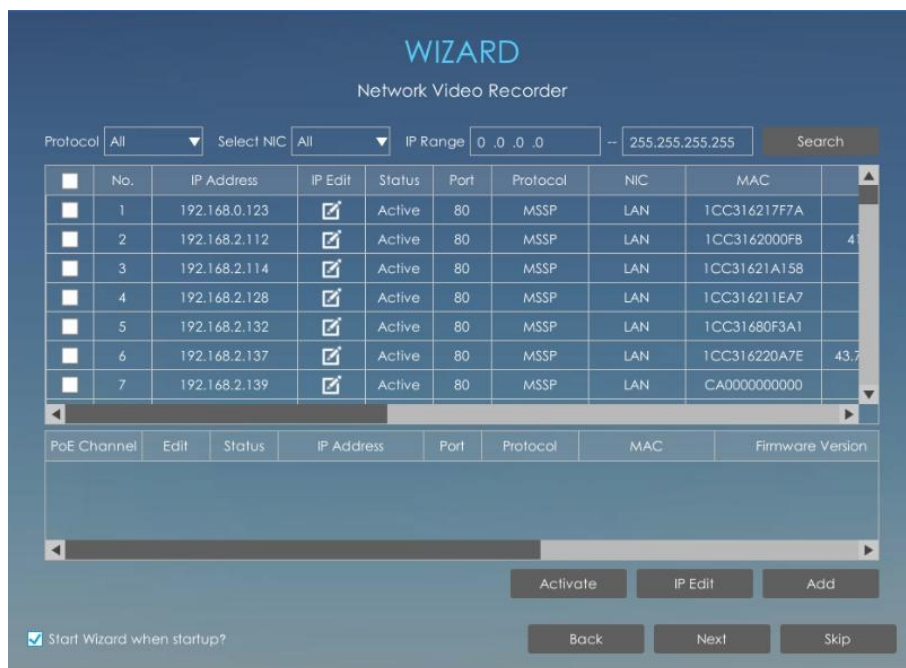
An 'Initialize' button is located to the right of the Available Capacity bar. At the bottom, there is a checkbox for 'Start Wizard when startup?' which is checked. Navigation buttons 'Back', 'Next', and 'Skip' are located at the bottom right.

**Step6. Camera Management.**

Search all the cameras in LAN by filtering Protocol and IP Range. Select cameras and click



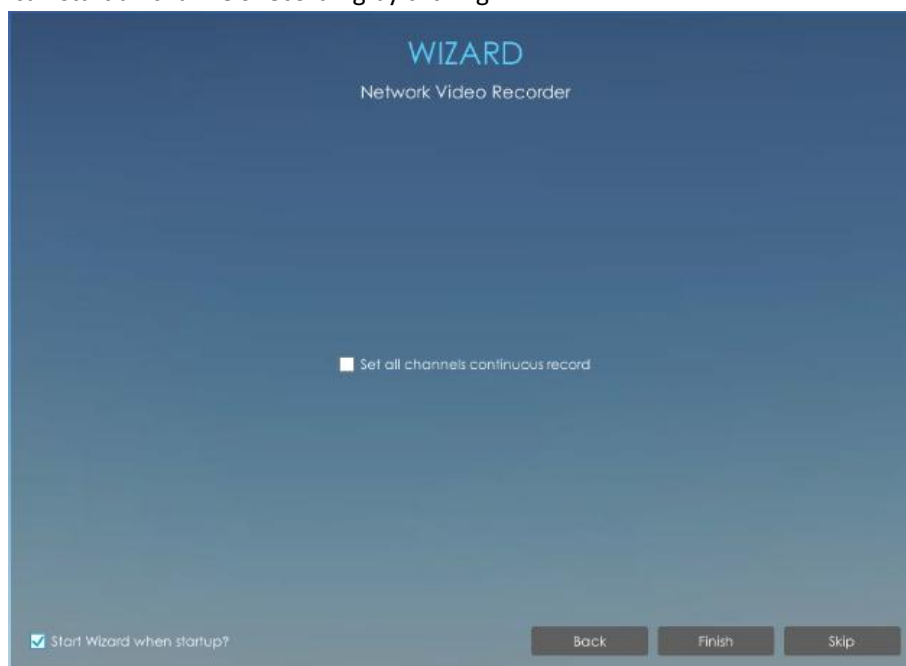
to add them to NVR.

**Note:**

1. It can auto detect cameras that connected to PoE ports (only for PoE NVR).
2. If camera status shows inactive, please click  to active it first.

**Step7. Record**


The user can start all channels recording by clicking .

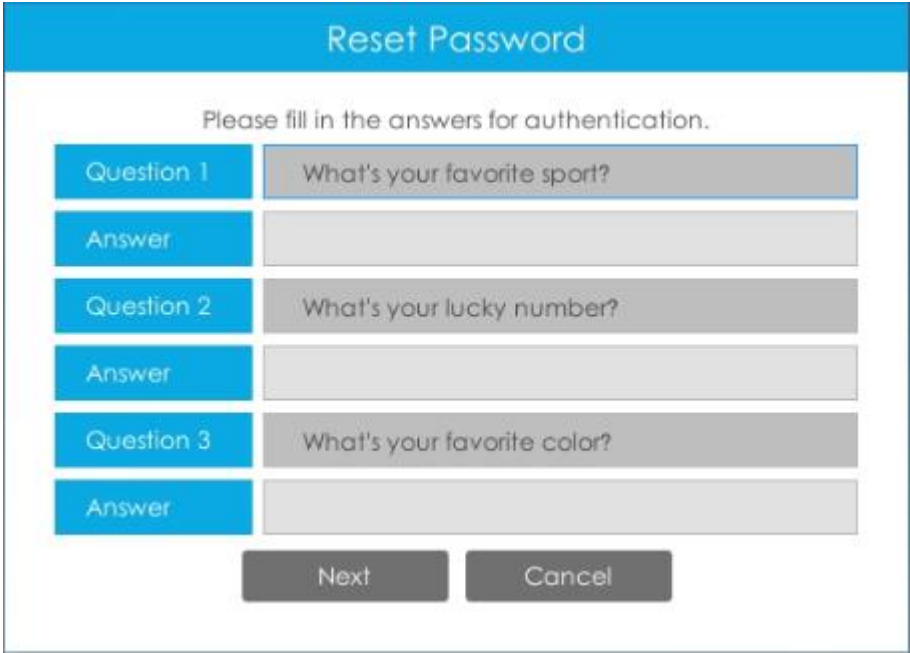
**Step8. Login**

Input the user name and password to login the system.



The image shows a 'User Login' interface for a 'Network Video Recorder'. The background is a dark blue gradient. At the top, the text 'User Login' is in a light blue font, and 'Network Video Recorder' is in a white font below it. There are two input fields: 'User Name' with a dropdown menu showing 'admin' and a small downward arrow, and 'Password' with a text box containing seven dots and a question mark icon to its right. A blue 'Login' button is centered at the bottom of the form.

If you forget the password, click  to reset password.



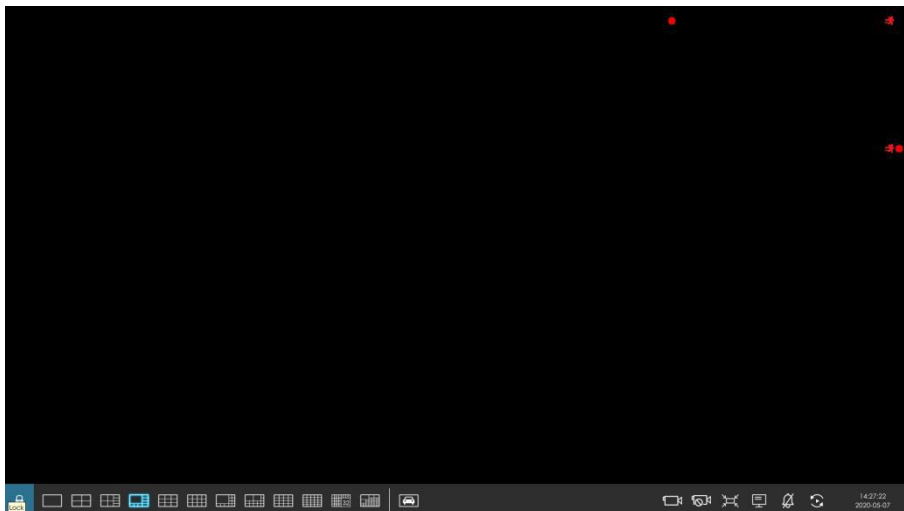
The image shows a 'Reset Password' screen. The title 'Reset Password' is in white on a blue header bar. Below the header, the text 'Please fill in the answers for authentication.' is centered. There are three sets of questions and answers. Each set consists of a blue box with the question number and a grey box with the question text, followed by a grey box for the answer. The questions are: 'Question 1: What's your favorite sport?', 'Question 2: What's your lucky number?', and 'Question 3: What's your favorite color?'. At the bottom, there are two grey buttons: 'Next' and 'Cancel'.

**Note:**

Only the NVR firmware version xx.9.0.3 or above supports password reset if you forget it.



### 3.2 Live View



Main Menu and Tool Bar can pop up and hide automatically at the right side or bottom of the interface.

**Note:**

Tool Bar won't be hidden if there is event notification.





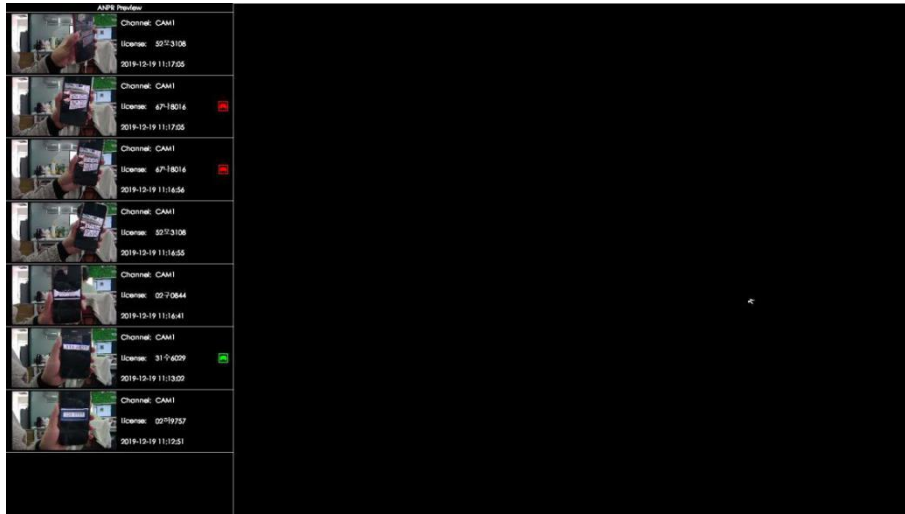
Icons	Descriptions	Icons	Descriptions
	Lock/Unlock the tool bar		One screen layout
	4 screen layout		8 screens layout
	1+7 screens layout		9 screens layout
	12 screen layout		1+11 screens layout
	2+10 screens layout		16 screen layout
	ANPR Mode		Start all channels recording (for all displaying channels)
	Stop all channels recording (for all displaying channels)		Adjust image in proportion (for all displaying channels)
	Display settings (for all displaying channels)		The Do Not Disturb function only turns off the notification of the Alarm Actions (for all displaying channels) <b>Note:</b> Do Not Disturb function is not valid for changing corresponding settings.
	Sequence		

**ANPR Mode:**

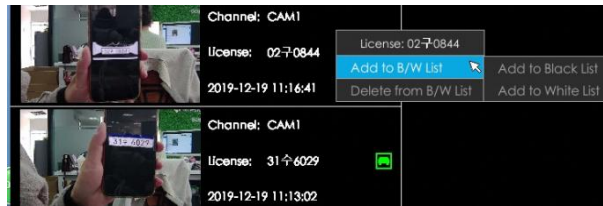
After entering ANPR mode, the real-time license plate information including Plate Snapshot,

Channel Name, License Plate Number, Detected Time and Plate Type will be shown on the left of the interface once it get detected. There are two license types:

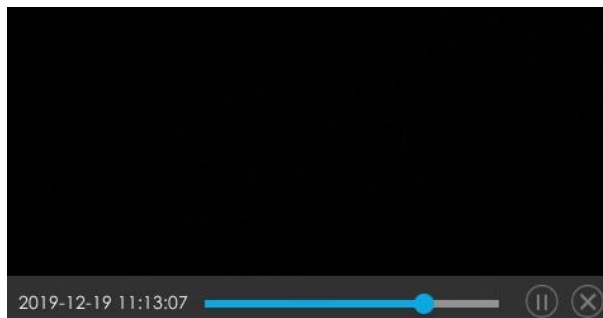
-  ---- License from Black List
-  ---- License form White List



No plate type will be shown if the license plate does not exist in Black/White list. However, you can right click the license plate information to quick add it to Black/White list or delete it from Black/White list.



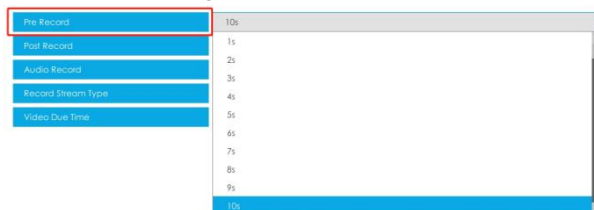
Besides, you can click the license plate information to check the latest X seconds (10s~20s) video.



**Note:**

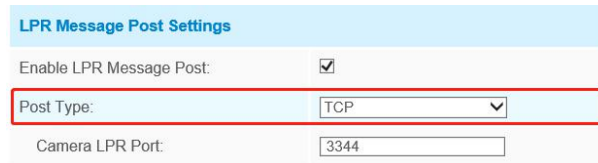
1.  $X = 10 + \text{Pre Record Time}$

You can set Pre Record Time in Storage -> Video Record -> Record Settings interface.



2. Ensure that there is available HDD on NVR and correct record settings is made, so that you can check the record on live view.

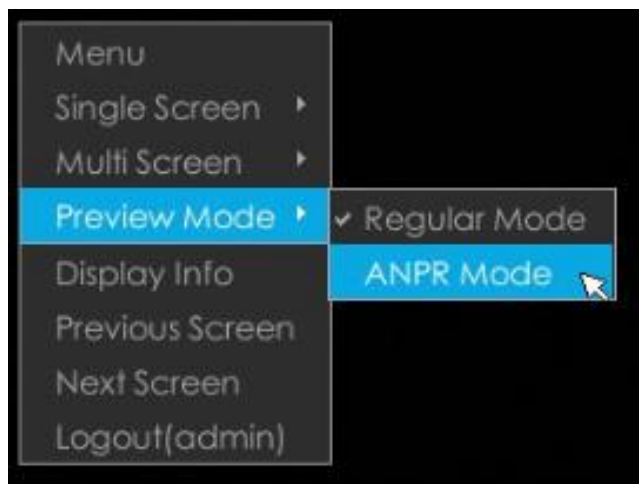
3. Ensure that NVR can get the license plate information. Please set TCP which is the default mode as Post Type. It can be set in Camera web page -> Advanced Settings -> ANPR -> Settings interface.



There are multiple icons on each channel displayed in live view, indicating different status of the channel.

Icons	Descriptions
	It indicates video loss
	It indicates motion detection alarm
	It indicates that the current channel is recording.
	It indicates exception alarm
	It indicates VCA alarm

Right click in the Live View and the quick operation menu pops up.

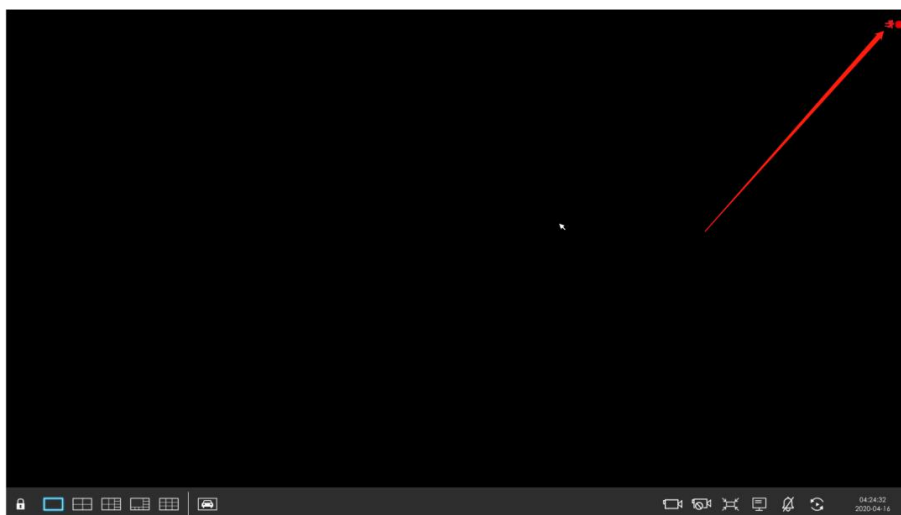


Item	Descriptions
Menu	Display Main Menu
Single Screen	The selected channel will be full screen. You could go back to previous screen layout by double clicking the channel
Sub Screen Ctrl	Switch to sub screen to operate (Only for Pro NVR 7000 Series, PoE NVR 7000 Series and Pro NVR 8000 Series)
Multi Screen	Switch to multiple screen layouts
Preview Mode	Regular Mode and ANPR Mode are available

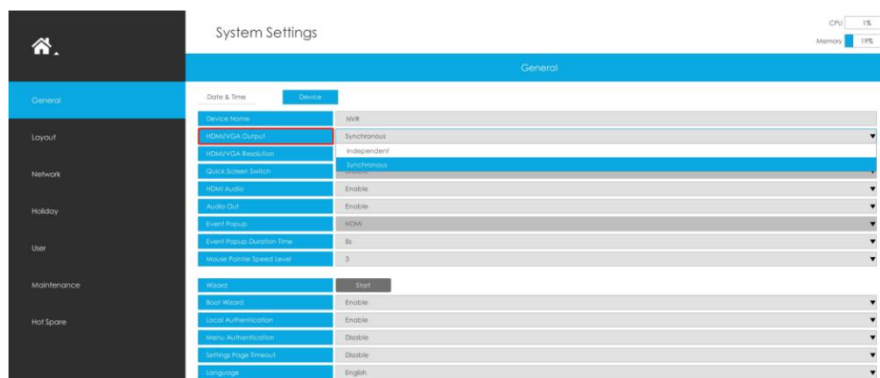
Display Info	Show channel information, including Camera Number, Bit Rate, Frame Rate and Frame Size
Previous Screen	Switch to previous screen
Next Screen	Switch to next screen
Logout	Log out current user account

**Note:**

1. The functions and channel status on the sub screen are the same as that on the main screen of both NVR 7000 Series and NVR 8000 Series.



2. For the Sub Screen Ctrl function of Pro/PoE NVR 7000 Series, you can choose whether these two outputs are independent or synchronous. And if you change the option, the modification will take effect after rebooting.



**Quick Operation for single channel**

In live view interface, left click the channel, the quick menu will appear.



Icons	Descriptions	Icons	Descriptions
	Manually record		Image Configure

	PTZ control		Original/Resize the image
	Audio on/off		Digital zoom
	Snapshot manually		Instant Playback
	Fisheye Mode		Close menu

**Note:**

You can right-click to exit the instant playback.

**Fisheye Mode:**

Click to enter Fisheye Mode, which will full screen fisheye channel. You can set installation modes and display modes for the camera on the Fisheye tool bar.



**Installation Mode:** Ceiling Mount/ Wall Mount/ Table Mount

**Display Mode:** Original Fisheye View/ 360° Panorama View/ Two 180° Panorama Views/ Four Regional Views/ One Original Fisheye View and Three Regional Views/ One 360° Panorama View and Three Regional Views

**Fisheye Auto Tracking:** Comprehensive Fisheye Auto Tracking avoids any details missing by performing the digital Pan/Tilt/Zoom to track the moving objects automatically.

**Note:**

Fisheye Auto Tracking function is only supported in On-board Dewarping and ceiling mode with Regional View on fisheye network camera.


Select a fisheye channel(except for the original view), and click to enter PTZ Mode. You can operate PTZ, Preset and Patrol of this channel separately.



**Note:**

Only for Milesight Fisheye Camera in Bundle-Stream Mode.

**PTZ Mode:**

Click  to enter PTZ mode, and the selected channel will be full screen.



You can do PTZ, Preset, Patrol, Pattern, Lighting for 30s, Lens Initialization and Auxiliary Focus operation in the PTZ panel.


Meanwhile, there are four icons in the tool bar. The descriptions are as below.

Icons	Descriptions	Icons	Descriptions
	Lock/Unlock the tool bar		Enable/Disable 3D positioning
	PTZ Manual Tracking		Show/Hide the PTZ control panel

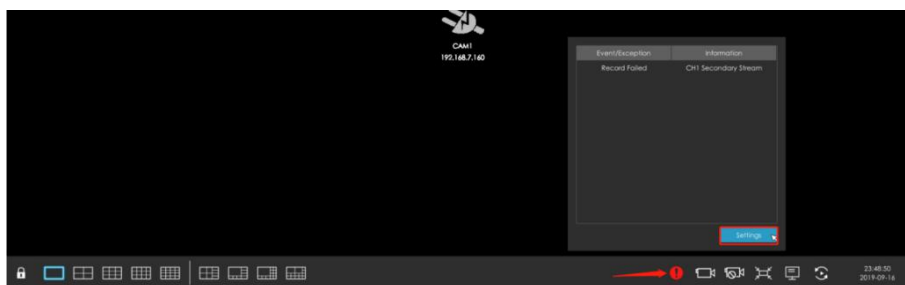
**Note:**

Ensure that your camera's version is 4X.7.0.74 or above before you use Lighting for 30s, Lens Initialization, Auxiliary Focus and PTZ Manual Tracking.

**Event Notification:**

The prompt icon  will automatically blink in the bottom bar when corresponding event is triggered. You can click it to check alarm details. And it can be unlocked manually.

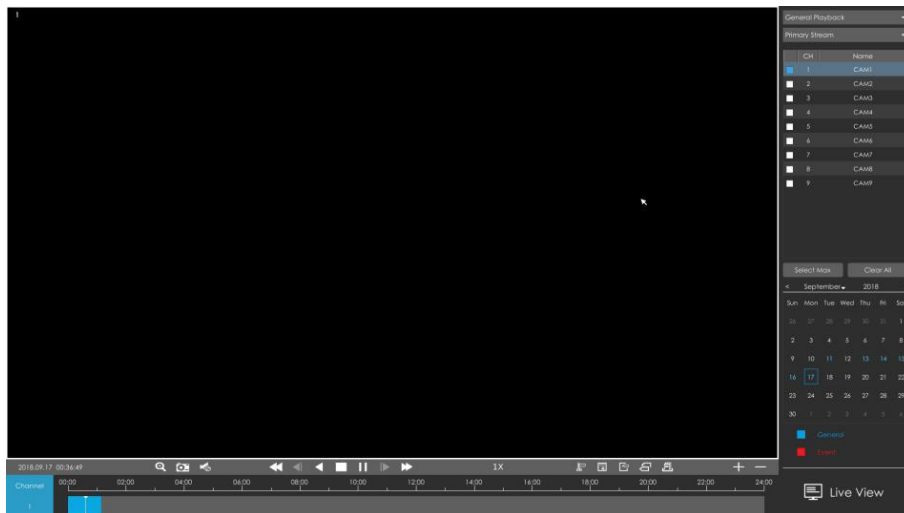
Also, you can select which alarm notification you want to get by click .



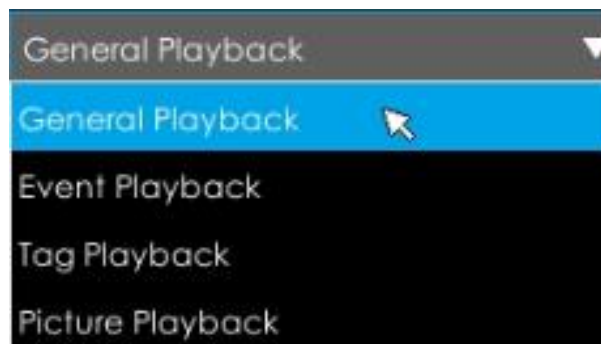
## 3.3 Playback

Playback supports to playback video according to recorded time and to play recorded video files in specified time period. Synchronous playback of multi-channel is supported.

### 3.3.1 General Playback

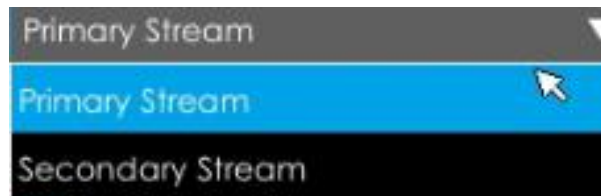


**Step1. Select General Playback as playback type.**




**Step2. Select Stream Type.**

Primary Stream and Secondary Stream are available.



**Step3. Select channel.**

Select channels you want to do playback. User can click  to select maximum channel for playback, 9 channels for Milesight Mini (PoE) NVR Series while 16 channels for other NVR. Layout of playback will be automatically adjusted according to the amount of the selected channels.

CH	Name
<input checked="" type="checkbox"/> 1	CAM1
<input checked="" type="checkbox"/> 2	CAM2
<input type="checkbox"/> 3	CAM3
<input type="checkbox"/> 4	CAM4
<input type="checkbox"/> 5	CAM5
<input type="checkbox"/> 6	CAM6
<input type="checkbox"/> 7	CAM7
<input type="checkbox"/> 8	CAM8
<input type="checkbox"/> 9	CAM9
<input type="checkbox"/> 10	CAM10
<input type="checkbox"/> 11	CAM11
<input type="checkbox"/> 12	CAM12
<input type="checkbox"/> 13	CAM13
<input type="checkbox"/> 14	CAM14
<input type="checkbox"/> 15	CAM15
<input type="checkbox"/> 16	CAM16

Select Max Clear All

**Step4. Select date.**

The day with blue letters means that there are record files.

< September 2019 >						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

**Video Playback Tool Bar Description**





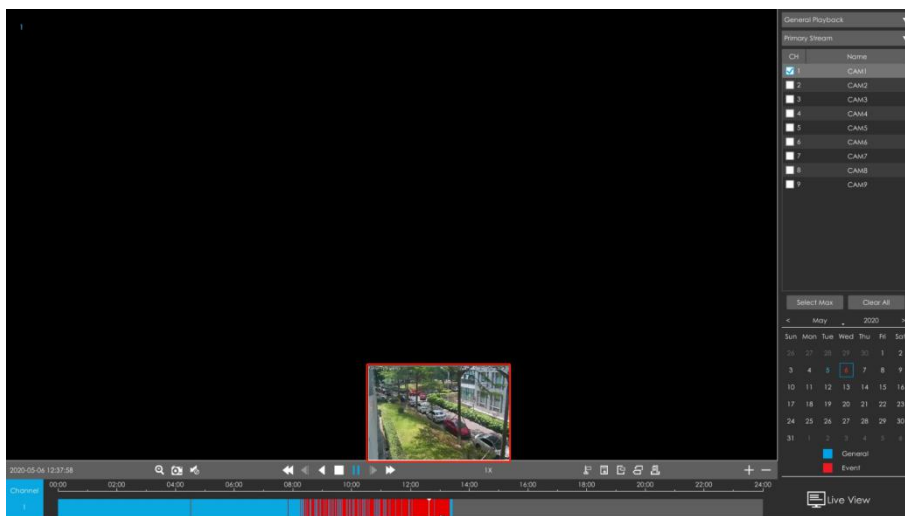
Every channel got their own file bar, and there is only one file bar matching with the selected channel. The tool bar can display multiple types record. It shows that in this record period what kind of event has happened. The symbolic meaning of each color is:

**Blue**—General

**Red** --- Event

Take this bar above as an example, it means that there are continuous recording and event recording in this period.

It is shown a thumbnail of what occurs at that given moment in the recorded video when you hover your mouse over the progress bar.



Icons	Descriptions	Icons	Descriptions
	Digital zoom		Snapshot
	Audio on		Audio off
	Speed down		Speed up
	Step reverse		Step forward
	Rewind		Play
	Stop		Pause
	Timeline cutting		Lock video file
	Quick tag		Custom tag
	File Management		Zoom in timebar
	Zoom out timebar		Best Decoding Performance

**Speed up/down:** You can adjust the speed even when playback is paused.

**Lock Video:** Once the video is locked, the whole file where the video located won't be overwritten. Milesight NVRs support the display of locked icon on the playback bar so that the corresponding files in the playback page can be identified directly. You can also change the lock status in Retrieve interface.

**Tag Video:** Quick Tag and Custom Tag are available for tag operation in Playback interface. Milesight NVRs support the display of tagged icon on the playback bar so that the corresponding files in the playback page can be identified directly. You can backup video via tag in Retrieve interface or do tag playback in Playback interface.

**Best Decoding Performance:** This function is supported for NVR 8000 Series, by which the decoding resources of the other screen can be used for playback when the decoding performance is insufficient. Here are some notes for using this feature below.

**Note:**

1. This button can be available only when HDMI2/VGA2 of NVR is enabled.
2. This button only exists in General Playback, Event Playback and Tag Playback.
3. Another screen will be black once this function is enabled.
4. The status of this option is temporary. Once you exit the playback interface, this function will automatically turn off. The other screen will restore preview, and the decoding resources of the two screens will be reassigned.

### 3.3.2 Event Playback

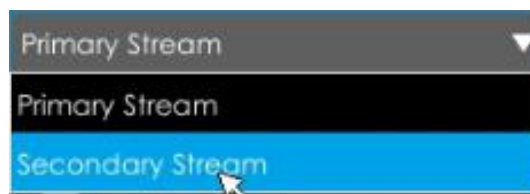


**Step1. Select Event Playback as playback type.**



**Step2. Select Stream Type.**

Primary Stream and Secondary Stream are available.

**Step3. Select channel.**

Select channels you want to do playback. Layout of playback will be automatically adjusted according to the amount of the selected channels.

<input type="checkbox"/>	CH	Name
<input checked="" type="checkbox"/>	1	CAM1
<input type="checkbox"/>	2	CAM2
<input type="checkbox"/>	3	CAM3
<input type="checkbox"/>	4	CAM4
<input type="checkbox"/>	5	CAM5
<input type="checkbox"/>	6	CAM6

**Step4. Select Event Type.**

**Step5: Select Start Time and End Time, click**  **to search the record.**

Start Time
2019-09-17
00:00:00
End Time
2019-09-17
23:59:59

Step6: It would list all videos after clicking  . Set pre playback and post playback time, then play the video by clicking .



Video Playback Tool Bar Description are the same as General Playback, except for those icons that are not locked or tagged on the playback bar.

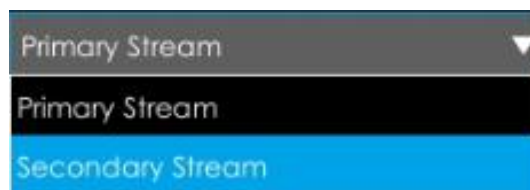
### 3.3.3 Tag Playback



Step1. Select Tag Playback as playback type.

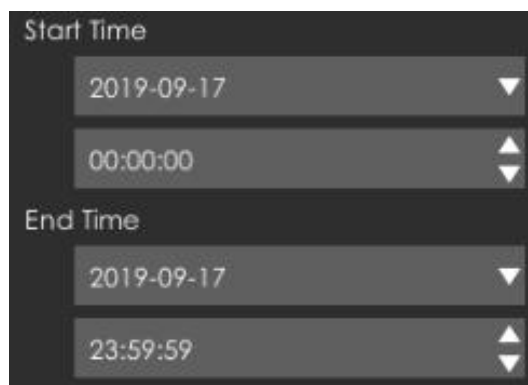
**Step2. Select Stream Type.**

Primary Stream and Secondary Stream are available.

**Step3. Select channel.**

Select channels you want to do playback. Layout of playback will be automatically adjusted according to the amount of the selected channels.

<input type="checkbox"/>	CH	Name
<input checked="" type="checkbox"/>	1	CAM1
<input type="checkbox"/>	2	CAM2
<input type="checkbox"/>	3	CAM3

**Step4. Input tag name or any key words of tag.****Step5: Select Start Time and End Time.**

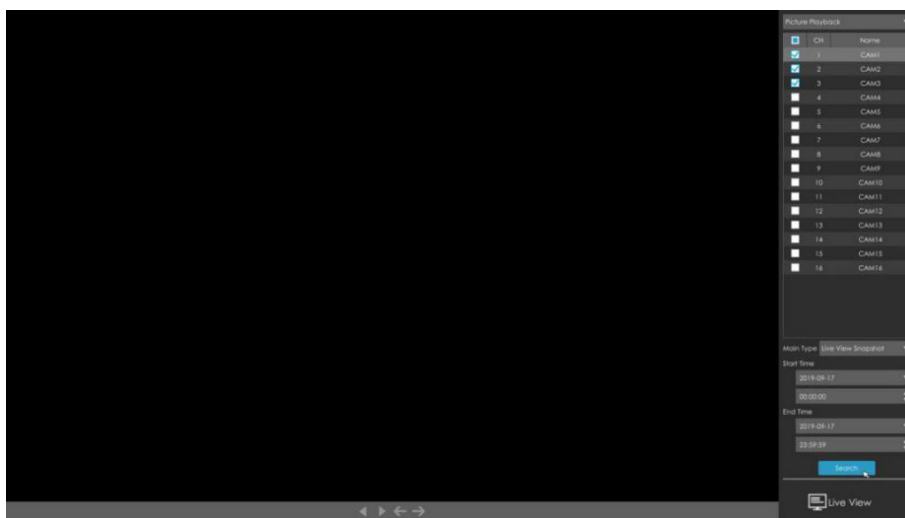
**Step6: It would list all tagged video after clicking**  **. Set pre playback and post**

**playback time, then play the tag video by clicking**  **.**

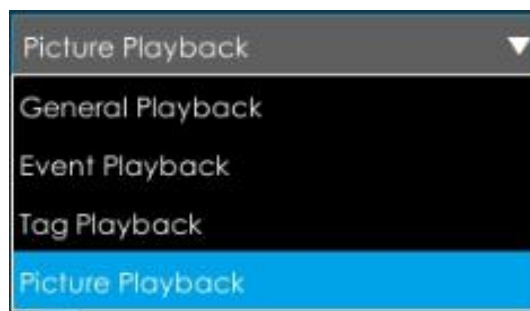


Video Playback Tool Bar Description are the same as General Playback, except for those icons that are not locked or tagged on the playback bar.

### 3.3.4 Picture Playback



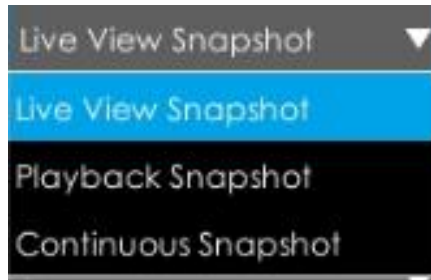
Step1. Select Picture Playback as playback type.



Step2. Select channel.

<input type="checkbox"/>	CH	Name
<input checked="" type="checkbox"/>	1	CAM1
<input checked="" type="checkbox"/>	2	CAM2
<input checked="" type="checkbox"/>	3	CAM3
<input type="checkbox"/>	4	CAM4

**Step3. Select Snapshot type, including Live View Snapshot and Playback Snapshot.**



**Step4: Select Start Time and End Time.**

Start Time

2019-09-17

00:00:00

End Time

2019-09-17

23:59:59

**Step5: It would list all snapshot after clicking .**

Click  to play the selected picture, or click  to auto play pictures.

**Note:**

1. You can export picture by clicking  or .



- You can get detailed information from the display of exporting pictures.

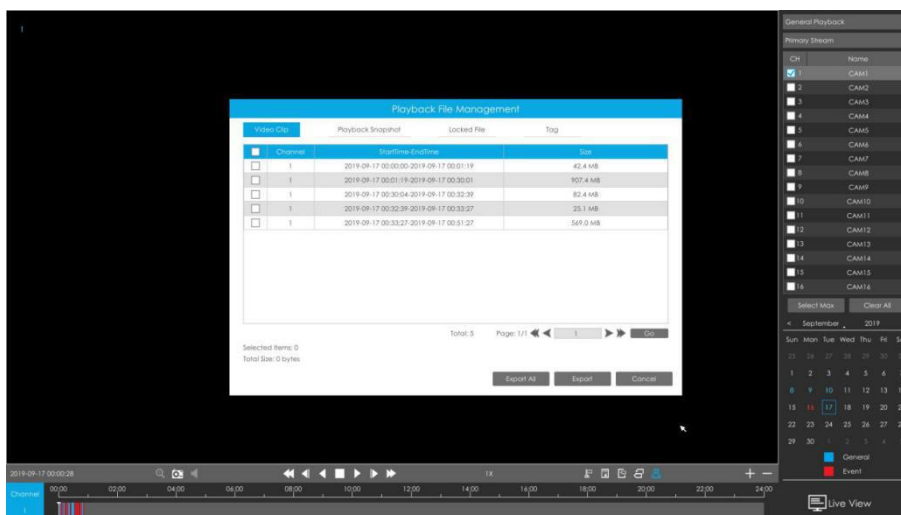


Icons	Descriptions	Icons	Descriptions
	Play backward		Play
	Previous picture		Next picture
	Back to search interface		

### 3.3.5 File Management


It would list all the operation you did this time until exit the Playback interface.

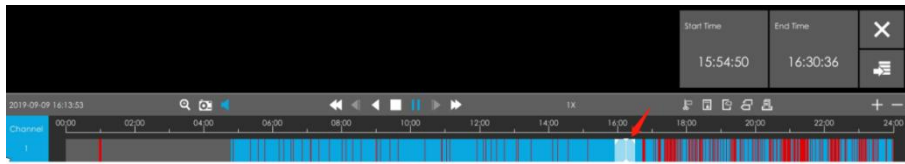
Operation includes clip video, snapshot, lock file and tag. Besides, you can export clipped video, playback snapshot and locked file to USB drives and eSATA.




- Take clip video as example.**  
**Step1. Cut recorded files.**



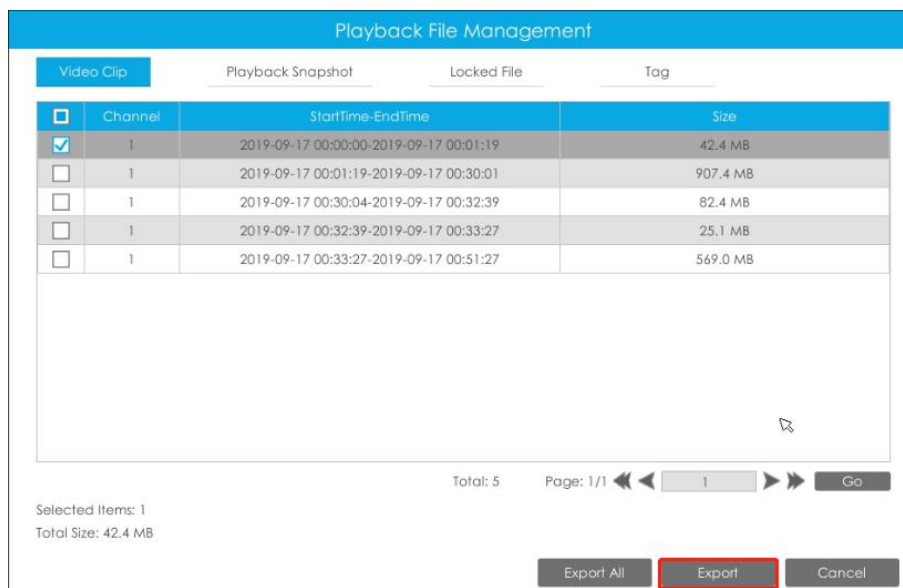
Select the channel and date you want to backup, then select the time at timeline and click , then drag the timeline to select the start time and end time of video.



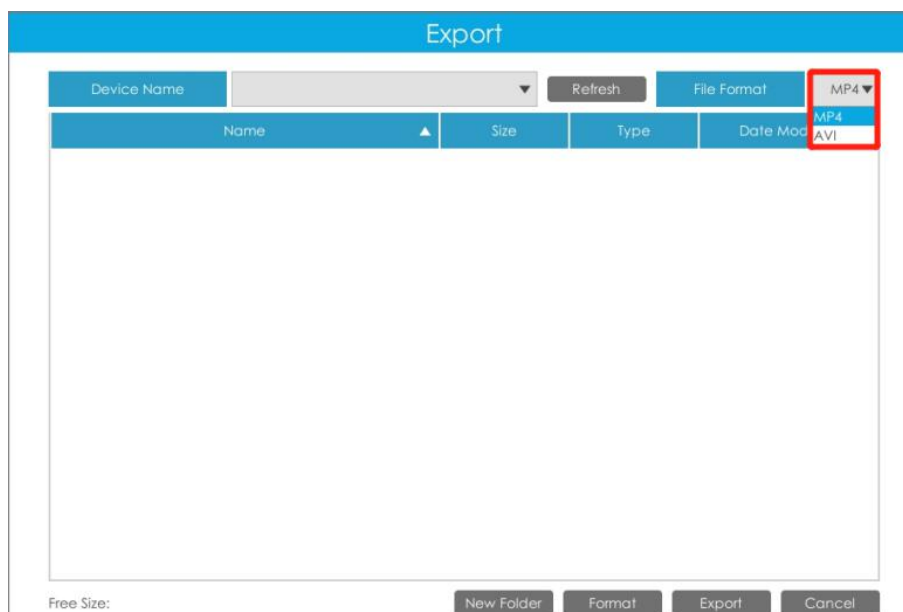
**Step2.** Click  to save the clipped video.

**Step3.** Click  to pop up File Management interface. Select the video you clipped and click

 to export video.



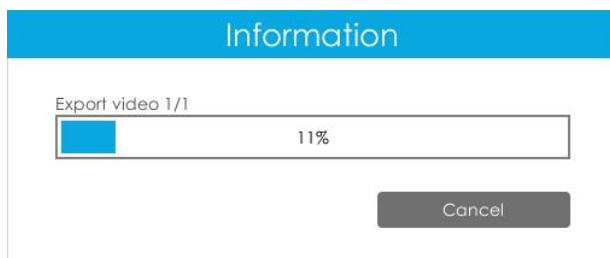
**Step4.** Select the device to storage exported video and then click .



**Note:**

You can also directly format and create new folder of storage device here.

**There is an information promoted showing the export progress.**



**Note:**

The download time of files depends on the time length of video you want to backup.

## 3.4 Retrieve

### 3.4.1 Common Backup

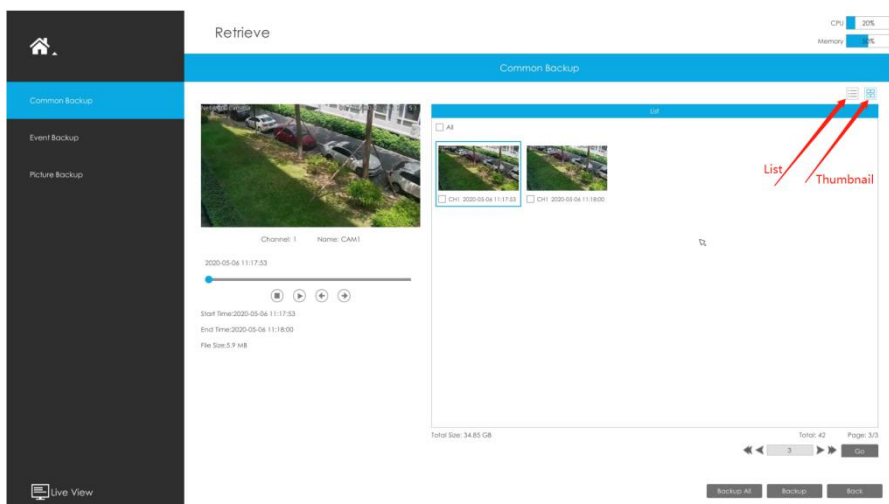
Support to search out record file according to different stream type, record type and file type you set.







**Step1:** Set the search condition and click  to search video.

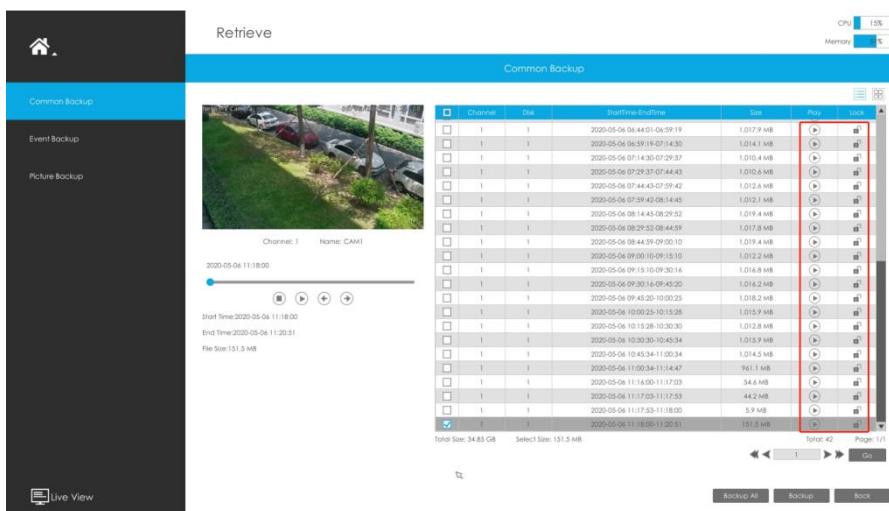


The search result can be chosen as a list or thumbnail. The default search result presents as a list.



**Step2: Select the file you want to backup and click  . Also, you can click  to backup all recorded videos.**

In Common Backup interface, play, lock and unlock video are supported. Click  to play and  to lock. Once the video is locked, the whole file where the video located won't be overwritten.



### 3.4.2 Event Backup

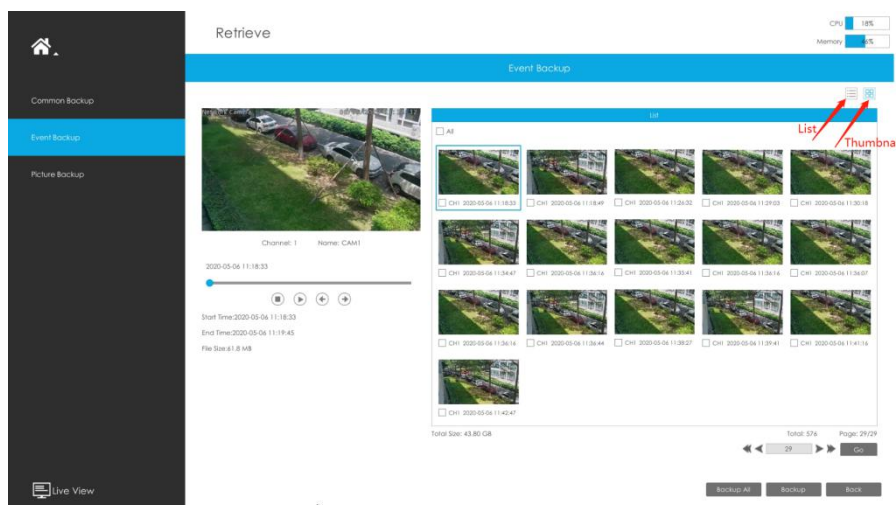
Support to search out and backup picture according to event type. The event type includes Motion Detection, Alarm Input, Alarm Output, VCA and Smart Analysis.



**Step1: Set the search condition and click  to search video.**




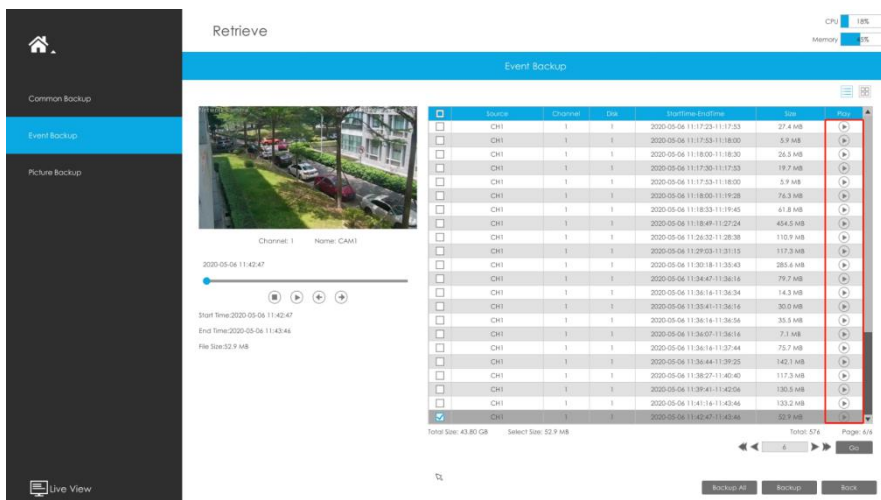
The search result can be chosen as a list or thumbnail. The default search result presents as a list.



**Step2: Select the file you want to backup and click . Also, you can click**

** to backup all recorded video.**

In Event Backup interface, you can click  to play the video.



### 3.4.3 Picture Backup

Support to search out and backup picture according to picture type. The picture type includes All, Live View Snapshot and Playback Snapshot.

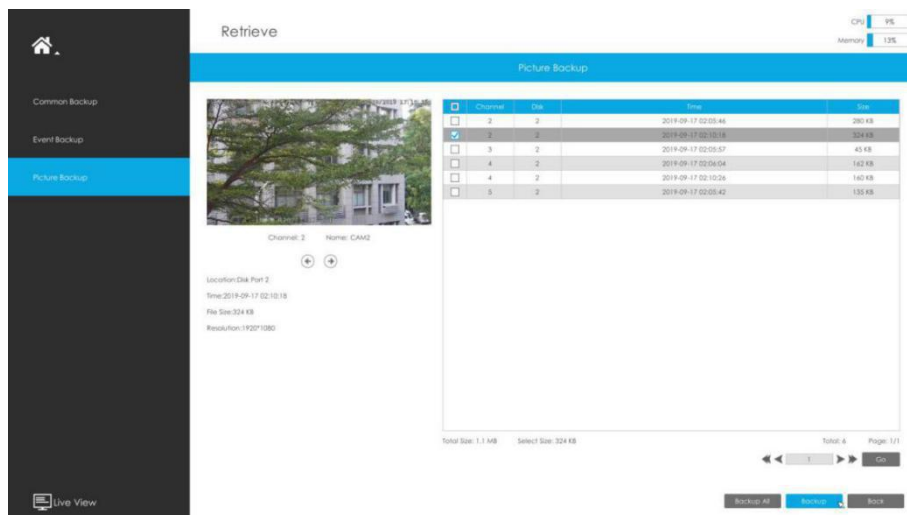


**Step1:** Set the search condition and click **Search** to search snapshot.



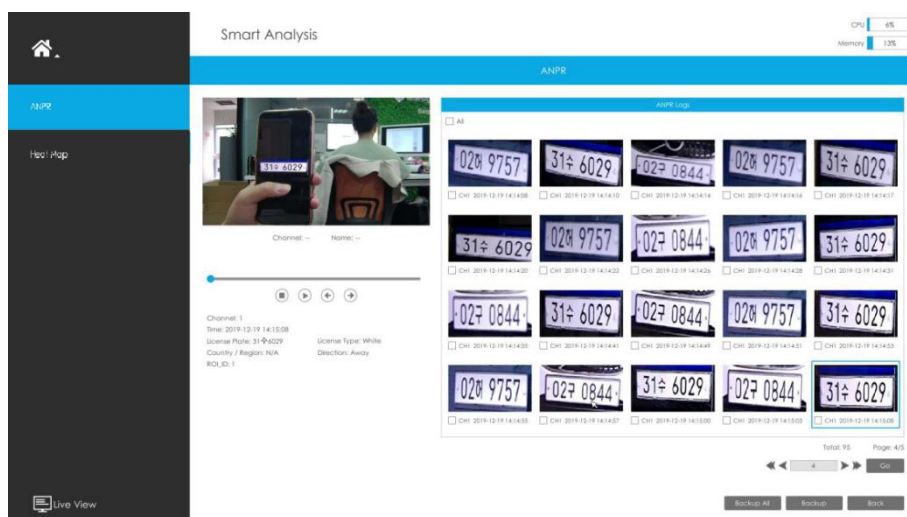
**Step2:** Select the file you want to backup and click **Backup**. Also, you can click

**Backup All** to backup all recorded videos.




### 3.5 Smart Analysis

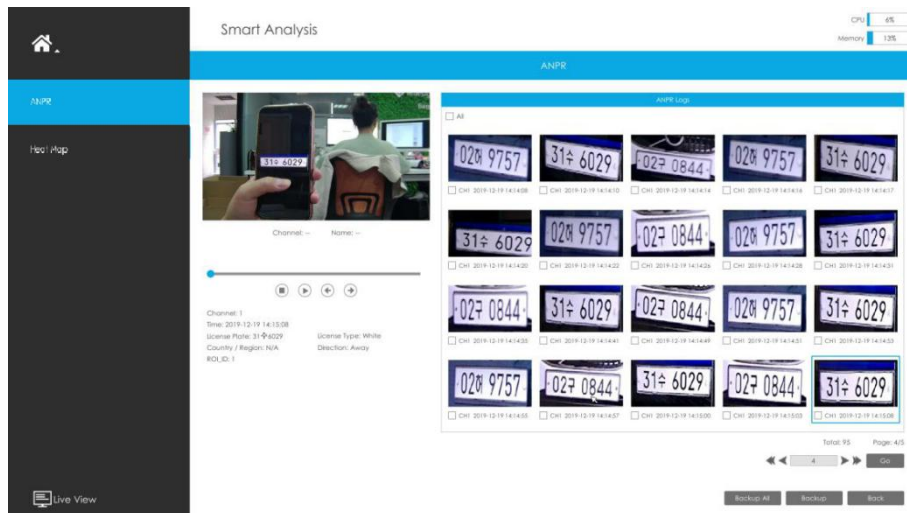
You can get both ANPR logs and Heat Map results in this page.




#### 3.5.1 ANPR

You can Search and Backup ANPR logs.

Input corresponded information and click search button  to search and you will get a whole ANPR logs list. License plate snapshot will be shown on the logs list while the complete image video and license plate information will be shown on the left of the page.




You can click  to play the video.

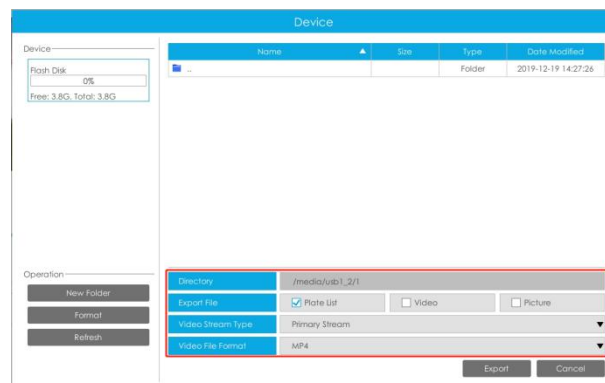


There are two methods to backup ANPR logs.

① Backup license plates you want.

**Step1:** Tick license plates you want to backup and click backup button ;

**Step2:** Select the export file type, video stream type and video file format, then click export button.



② Backup all.

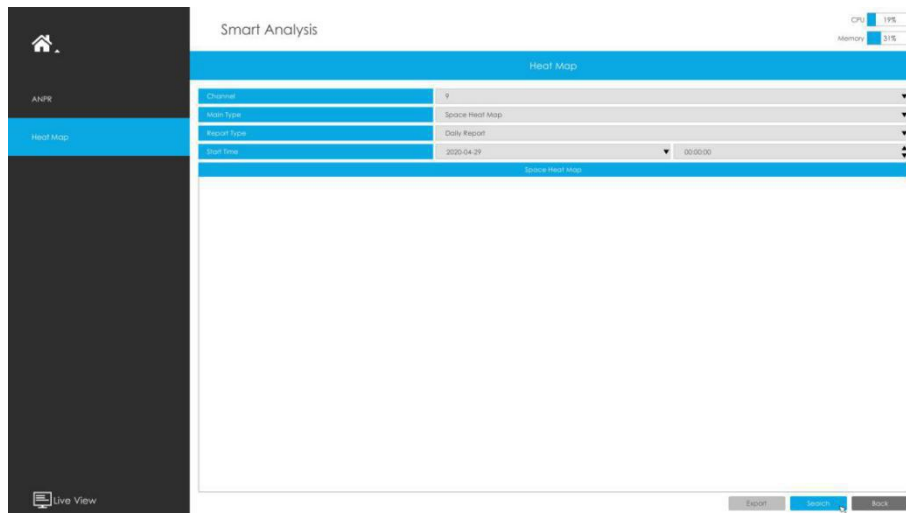
**Step1:** Click backup all  button;

**Step2:** Select the export file type, video stream type and video file format, then click export button.

Then you will get corresponded file as selected export file type.

### 3.5.2 Heat Map

You can Search and Export Heat Map results.

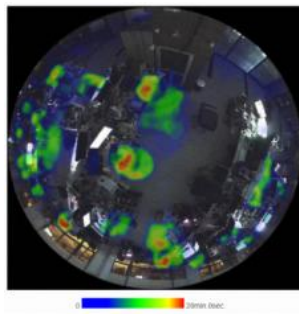


**Step1:** Entering search conditions.

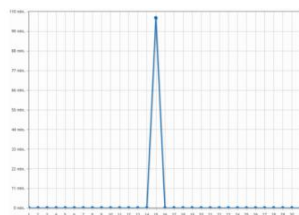
**Channel:** Select the channel first.

**Main Type:** Space Heat Map and Time Heat Map are available.

① Space Heat Map: Space Heat Map will be presented as a picture with different colors. Different colors represent different heat values. Red represents the highest and blue represents the lowest.





② Time Heat Map: Time heat map will be presented as a line chart to show the heat at different times.



**Report Type:** Daily Report, Weekly Report, Monthly Report and Annual Report are available.

**Start Time:** Input the time from which you want to Search.

**Step2:** Click  to obtain the corresponding result and then you can click  to export it.

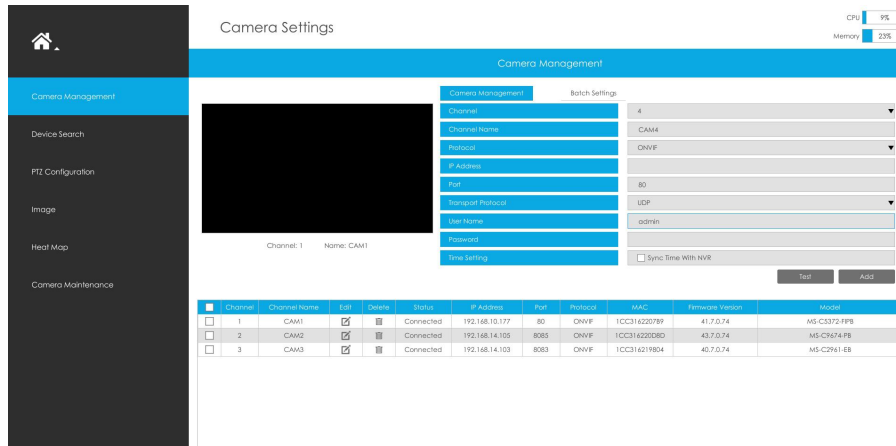
## 3.6 Camera Settings

Before configuration, please ensure that the camera is connected to the same network as your



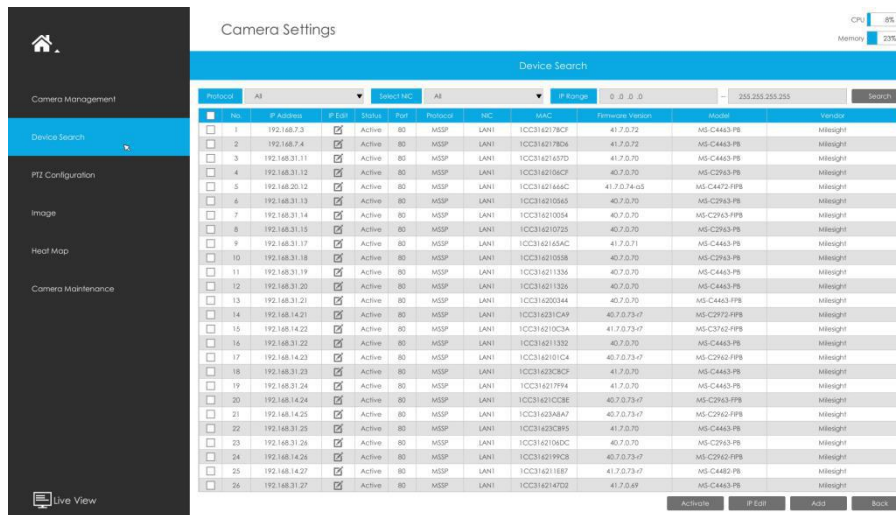
NVR and that the network setting for your NVR is properly set.

### 3.6.1 Camera Management

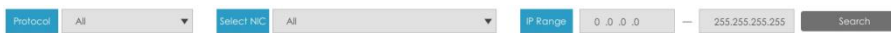


Step1. Add camera.

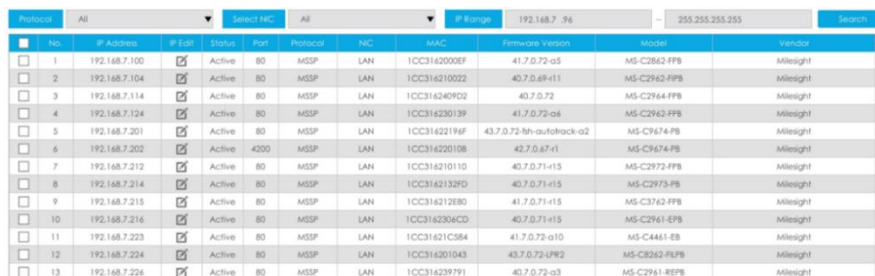
Method1. Add camera through Device Search interface. 'Settings' → 'Camera' → 'Device Search'.



1. Select IP Range, NIC and Protocol, which includes ALL, ONVIF and MSSP.



2. Click **Search** button to search cameras at the same LAN with NVR.



3. Select one channel, click **Add** button, input password and click **Add** button to

finish.

The 'Add' window contains the following fields:

- MAC: 1CC31621C584
- Channel: 4
- Channel Name: CAM4
- Protocol: MSSP
- IP Address: 192.168.7.223
- Port: 80
- Transport Protocol: UDP
- User Name: admin
- Password: (empty)
- Time Setting:  Sync Time With NVR

Buttons: OK, Cancel

4. Check  to **batch adding** the network cameras if they are with the same password, you can choose TCP or UDP transport protocol for it. Click **OK** to finish batch adding.

**MSSP:** You can search out all Milesight cameras which have different network segment in the LAN.

The 'Batch Add' window contains the following fields:

- User Name: admin
- Password: (masked with dots)
- Transport Protocol: UDP

Buttons: OK, Cancel

**Method2. Add camera through camera management interface. 'Settings' → 'Camera' → 'Camera Management'.**

The interface shows 'Camera Management' with a table of cameras and a configuration panel on the right.

Channel	Channel Name	ESD	Detail	Status	IP Address	Port	Protocol	MAC	Firmware Version	Model	
<input type="checkbox"/>	1	CAM1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Connected	192.168.10.177	80	ONVIF	1CC3162078F	41.7.0.74	MS-CS372-PP8
<input type="checkbox"/>	2	CAM2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Connected	192.168.14.105	8085	ONVIF	1CC3162208D	43.7.0.74	MS-C9674-P8
<input type="checkbox"/>	3	CAM3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Connected	192.168.14.105	8083	ONVIF	1CC3162198D4	40.7.0.74	MS-C2961-E8

The configuration panel on the right shows settings for Channel 4, including Channel Name (CAM4), Protocol (ONVIF), IP Address, Port (80), Transport Protocol (UDP), User Name (admin), Password, and Time Setting (Sync Time With NVR).

Select channel ID, input complete information, then click [Add] button.

There are three protocols available for camera connection:

- **ONVIF:** You can add any ONVIF IP cameras with ONVIF protocols.

Channel	4
Channel Name	CAM4
Protocol	ONVIF
IP Address	192.168.7.223
Port	80
Transport Protocol	UDP
User Name	admin
Password	*****
Time Setting	<input checked="" type="checkbox"/> Sync Time With NVR

Test Add

- **RTSP:** You can add any IP cameras with RTSP protocol streams (Port: 554). It needs you to input complete resource path of the IP camera to add it. Take Milesight device for example, the resource path of main stream is “rtsp://IP:port/main” and secondary stream is “rtsp://IP:port/sub”. The length of RTSP can be up to 128 bits.

Channel	4
Channel Name	CAM4
Protocol	RTSP
Primary	rtsp://192.168.7.223/main
Secondary	rtsp://192.168.7.223/sub
Transport Protocol	UDP
User Name	admin
Password	*****
Time Setting	<input checked="" type="checkbox"/> Sync Time With NVR

Test Add

- **MSSP:** You can add Milesight cameras which are in the same LAN with MSSP protocol.


Channel	4
Channel Name	CAM4
Protocol	MSSP
IP Address	192.168.7.223
Port	80
Transport Protocol	UDP
User Name	admin
Password	*****
Time Setting	<input checked="" type="checkbox"/> Sync Time With NVR

Test Add

You can add offline cameras to Milesight NVRs by method2. As long as the device information you fill in is correct, NVR will determine whether the device is connected and update the camera status automatically.

**Step2. Check the connection status.**

After adding the IP channels, click  button on Camera Management interface,

then  appears under Status. If it doesn't appear, you need to check if the network is connected or whether the user name or password is correct or not.

Channel	Channel Name	Edit	Delete	Status	IP Address	Port	Protocol	MAC	Firmware Version	Model	
<input checked="" type="checkbox"/>	1	CAM1			Connected	192.168.7.131	80	ONVIF	1CC314230139	40.7.0.73-r10	MS-C2962-FFB
<input checked="" type="checkbox"/>	2	CAM2			Connected	192.168.7.240	80	ONVIF	1CC316219CB4	40.7.0.66	MS-C2963-FB
<input checked="" type="checkbox"/>	3	CAM3			Connected	192.168.14.103	8083	ONVIF	1CC314219B04	40.7.0.747	MS-C2961-EB
<input type="checkbox"/>	5	CAM5			Connected	192.168.7.78	80	ONVIF	1CC314201043	43.7.0.73-1P92-rB	MS-C8262-FFB

### Step3. Configure camera.

#### Configure one camera

After successfully adding the camera, click to re-edit the channel info.

Camera Edit

Settings
Parameters

Channel	1	
Channel Name	CAM1	
Protocol	MSSP	
IP Address	192.168.14.102	
Port	8081	
Transport Protocol	UDP	
User Name	admin	
Password	*****	
Time Setting	<input checked="" type="checkbox"/> Sync Time With NVR	

OK
Cancel
Apply

Select Parameters page to re-edit parameters of this channel . Click [OK] to save the configuration.

Camera Edit

Settings
Parameters

Channel Name	CAM3	Secondary Stream	<input checked="" type="checkbox"/> Enable
Video Codec	H.265	Video Codec	H.265
Frame Size	4000*3000	Frame Size	1024*1024
Max Frame Rate	10	Max Frame Rate	10
Bit Rate	4096	Bit Rate	512
Bitrate Control	VBR	Bitrate Control	VBR
I-frame Interval	20	I-frame Interval	20
Smart Stream	Off	Smart Stream	Off
Audio	<input type="checkbox"/> Enable		

OK
Cancel
Apply

#### Batch configuring camera

Click Batch Settings , select multiple channels and set parameters of cameras.

- Home
- Camera Management
- Device Search
- PTZ Configuration
- Image
- Heat Map
- Camera Maintenance
- Live View

Camera Settings
CPU: 81%  
Memory: 22%

Camera Management

Camera Management
Batch Settings


Transport Protocol	UDP	Secondary Stream	<input checked="" type="checkbox"/> Enable
Video Codec	H.264	Video Codec	H.264
Frame Size	1920*1080	Frame Size	1407*800
Max Frame Rate	25	Max Frame Rate	25
Bit Rate	7148	Bit Rate	512
Bitrate Control	CBR	Bitrate Control	VBR
I-frame Interval	30	I-frame Interval	30
Audio	<input type="checkbox"/> Enable		

OK
Apply

Channel	Channel Name	Edit	Delete	Status	IP Address	Port	Protocol	MAC	Firmware Version	Model	
<input checked="" type="checkbox"/>	1	CAM1			Connected	192.168.8.177	80	ONVIF	1CC316219CB4	40.7.0.74	MS-C2962-FFB
<input checked="" type="checkbox"/>	2	CAM2			Connected	192.168.14.105	8085	ONVIF	1CC314230139	43.7.0.74	MS-C2963-FB
<input checked="" type="checkbox"/>	3	CAM3			Connected	192.168.14.103	8083	ONVIF	1CC314219B04	40.7.0.74	MS-C2961-EB

Delete
Refresh
Back

**Step4. Delete camera.**

You can delete this channel by clicking , or you can select multiple devices and then click

**Delete**

to delete.

Channel	Channel Name	Edit	Delete	Status	IP Address	Port	Protocol	MAC	Firmware Version	Model
2	CAM2			Connected	192.168.14.105	8085	ONVIF	1CC31622006D	43.7.0.73-e8	MS-C9474-FB
3	CAM3			Connected	192.168.14.103	8083	ONVIF	1CC316219804	40.7.0.73-47	MS-C2961-EB
5	CAM5			Connected	192.168.14.102	8081	ONVIF	1CC316210991	40.7.0.73-47	MS-C2962-FPB
6	CAM6			Connected	192.168.7.241	80	ONVIF	1CC316220553	43.7.0.74-1P63-e3	MS-C2961-QE1PB

Free Receiving Bandwidth: 293.50Mbps

**Delete** **Refresh** **Back**

**Step5. Configure PoE Channel (Only for PoE NVR)**

1. Connect Milesight camera to PoE port, it will detect the camera automatically.
2. If the camera's password is the same with NVR admin password, it will be successfully authenticated and be changed into the same network segment with internal NIC IPv4 address, then the camera will be connected successfully.
3. If the camera's password is different with NVR admin password, the PoE channel will show

disconnect status. You need to input the camera's password by clicking

**Edit Authentication**

to realize authentication ( you can also multi-select the devices and then click this button). Then the camera will be changed into the same network segment with internal NIC IPv4 address and will be successfully connected. Next time, NVR will use the password you input to authenticate this camera when you re-plug it.

**Note:**

1. When NVR detects the inactive camera connected via PoE port, the camera will synchronize the password of NVR, and then camera will be successfully connected.
2. The steps for adding the third party PoE cameras plugged into Milesight PoE NVR:
  - ① Set camera's IP segment to the same as NVR PoE NIC before plugging to PoE NVR;
  - ② Select PoE for NIC in Device Search interface, click **Search** to search out cameras;
  - ③ Select cameras and click **Add** to add them.

### Edit Authentication

User Name


Password

Note: Edit authentication for selected cameras.


OK

Cancel

### 3.6.2 Device Search

Select Protocol and NIC, then set the IP range, and click  to quickly search the IP devices that support selected protocol and NIC at the same LAN with NVR.

Device Search											
Protocol	All	Select NIC	All	IP Range	192.168.7 .96	-	255.255.255.255	Search			
No.	IP Address	IP Edit	Status	Port	Protocol	NIC	MAC	Firmware Version	Model	Vendor	
<input type="checkbox"/>	1	192.168.7.100	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC3162000EF	41.7.0.72-a5	MS-C2862-FPB	Milesight
<input type="checkbox"/>	2	192.168.7.104	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC316210022	40.7.0.69-r11	MS-C2962-FPB	Milesight
<input type="checkbox"/>	3	192.168.7.114	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC3162409D2	40.7.0.72	MS-C2964-FPB	Milesight
<input type="checkbox"/>	4	192.168.7.124	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC316230139	41.7.0.72-06	MS-C2962-FPB	Milesight
<input type="checkbox"/>	5	192.168.7.201	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC31622196F	43.7.0.72-fb-autotrack-a2	MS-C9674-FB	Milesight
<input type="checkbox"/>	6	192.168.7.202	<input checked="" type="checkbox"/>	Active	4200	MSSP	LAN	1CC316220108	42.7.0.47-r1	MS-C9674-FB	Milesight
<input type="checkbox"/>	7	192.168.7.212	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC316210110	40.7.0.71-r15	MS-C2973-FPB	Milesight
<input type="checkbox"/>	8	192.168.7.214	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC3162132FD	40.7.0.71-r15	MS-C2973-FPB	Milesight
<input type="checkbox"/>	9	192.168.7.215	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC316212E90	41.7.0.71-r15	MS-C3762-FPB	Milesight
<input type="checkbox"/>	10	192.168.7.216	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC3162306CD	40.7.0.71-r15	MS-C2961-FPB	Milesight
<input type="checkbox"/>	11	192.168.7.223	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC31621C584	41.7.0.72-a10	MS-C4461-EB	Milesight
<input type="checkbox"/>	12	192.168.7.224	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC316201043	43.7.0.72-4FR2	MS-C8262-FRFB	Milesight
<input type="checkbox"/>	13	192.168.7.226	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC316239791	40.7.0.72-a3	MS-C2961-REPFB	Milesight
<input type="checkbox"/>	14	192.168.7.240	<input checked="" type="checkbox"/>	Active	80	MSSP	LAN	1CC316219CB4	40.7.0.72	MS-C2963-FB	Milesight

If the camera status shows Inactive, please select camera and click  to active it first before adding to NVR

Besides, you can select channels and click  to **batch editing** their IP information.

#### IP Edit

MAC	1CC316220108
Protocol	MSSP ▼
IP Address	192.168.7 .202
Subnet Mask	255.255.240.0
Gateway	192.168.7 .2
DNS	8 .8 .8
Port	4200
User Name	admin
Password	

OK
Cancel

### 3.6.3 PTZ Configuration

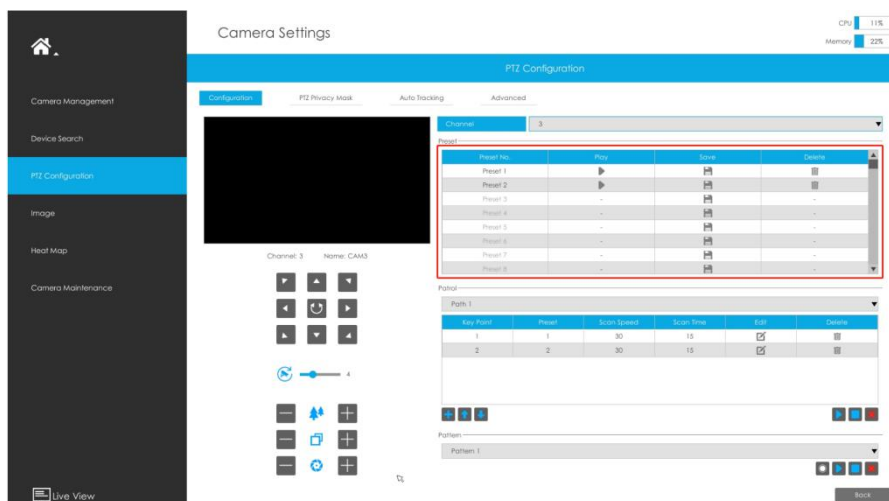
#### Configuration

##### [Preset]

Preset can be set to move your PTZ camera to a desired preset position. The preset position is the preparation for Patrol.

**Step1.** Use the PTZ direction key to rotate the position of preset. Then choose a preset number

and click  to save a preset position.



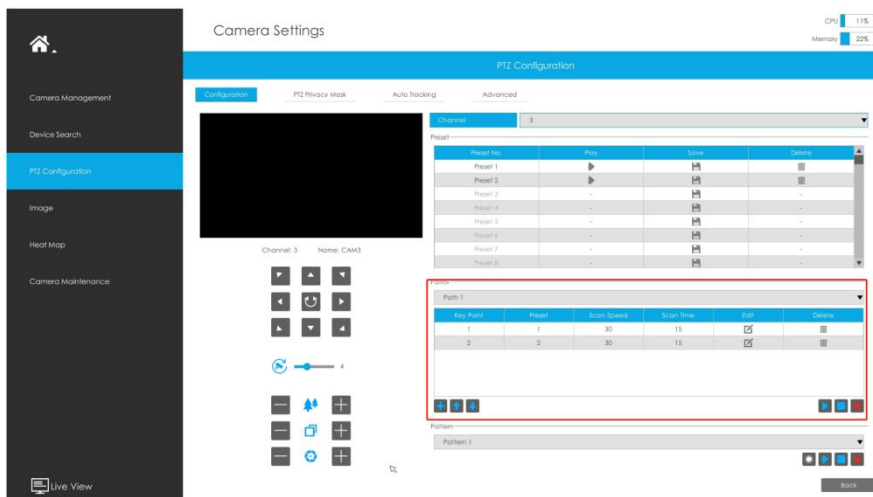
**Step2.** Choose a preset number and click  to delete the preset position.



**Step3.** Choose a preset number and click  to check the preset position.

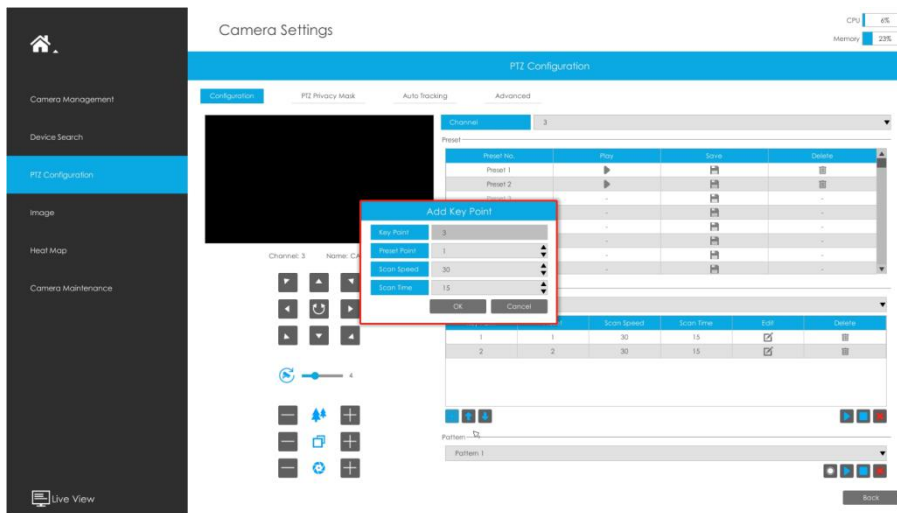
**[Patrol]**

The camera will patrol according to the preset positions. The total time and patrol speed of the path is variable.

**Step1.** Select a path. Up to 8 paths could be set.



**Step2.** Click  to add preset position (up to 48 positions could be added). Set the parameters of preset positions, including preset position number, scan time and scan speed, then click .



**Step3.** Click to delete the preset position.

**Step4.** Click to preview the path patrol. Click to stop.

**Step5.** Click to delete all preset positions of the path patrol.

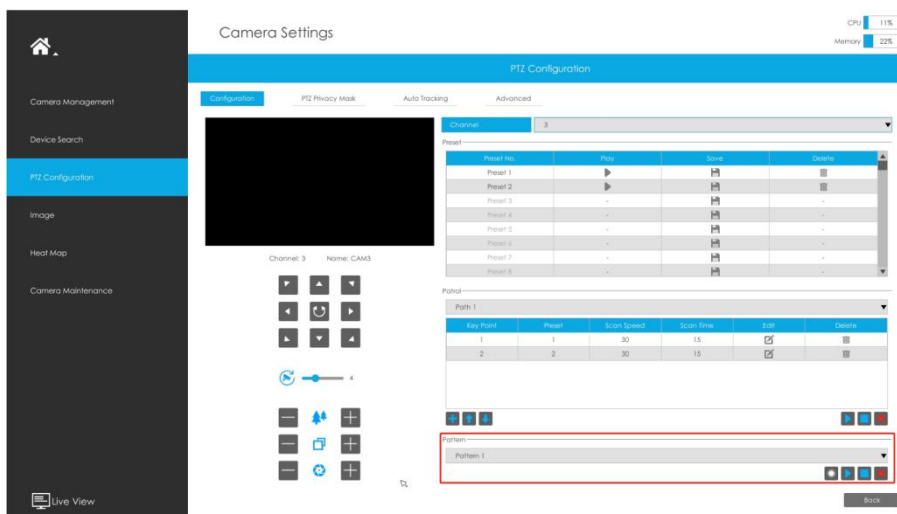
**Note:**

1. The preset positions decide the patrol path, which will run according to numerical order of the preset positions.
2. Scan time is how long the patrol stays on the preset position.
3. Scan speed is the rotate speed of speed dome from one preset position to the next.

**[Pattern]**

The camera will patrol back and forth in a constant speed. There is only one start point and one end point.

**Step1.** Select a pattern and click . Up to 4 patterns could be set.



**Step2.** Drag the mouse or click 8 direction keys by mouse to rotate PTZ.










Step3. Click  to save the PTZ movement patterns.

Step4. Click  to preview the pattern. Click  to stop.

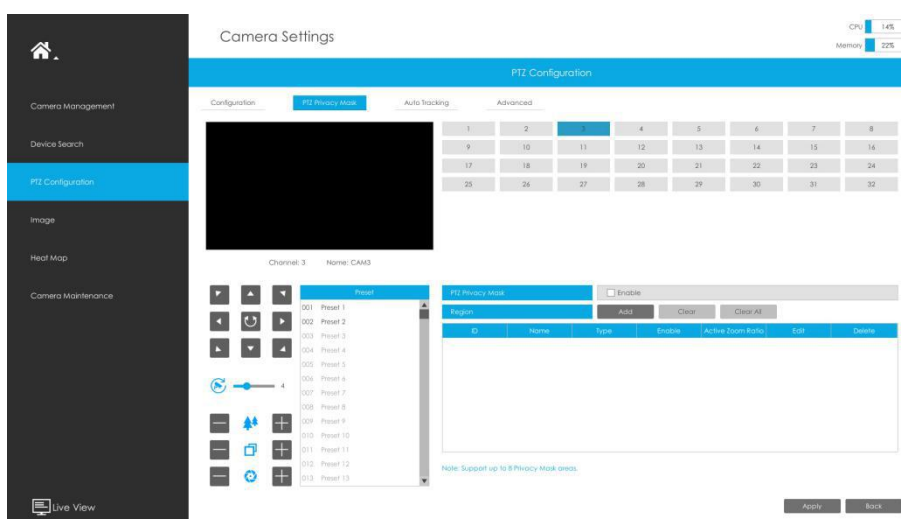
[PTZ Operation]



Icons	Descriptions	Icons	Descriptions
	PTZ direction control and auto scan button		PTZ speed
	Zoom +, Focus +, Iris +		Zoom -, Focus -, Iris -
	Zoom		Focus
	Iris		


**PTZ Privacy Mask**

Milesight NVR supports setting privacy mask for PTZ camera. Different from the general Privacy Mask, it is featured with a 3D coordinate system to protect object's privacy and keep the specified area masked through manual operations from monitoring no matter how cameras pan/tilt/zoom.

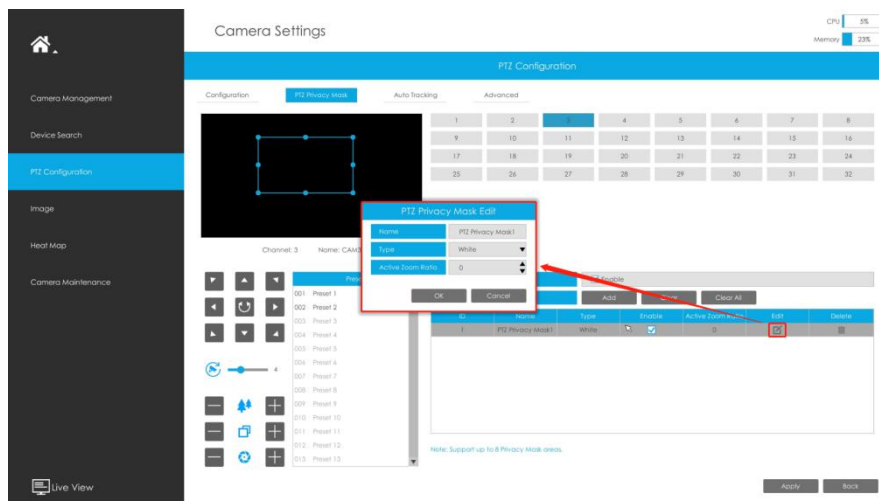


You can add a privacy mask by following steps:

**Step1. Select channel and enable Privacy Mask.**

**Step2. Drag the mouse to select the area which needs to be protected on the live view window and click  to save the selected areas. You can add 8 areas at most and each zone can be enabled and disabled.**

**Step3. Click  to edit PTZ Privacy Mask Name, the Privacy Mask Type and Active Zoom Ratio.**



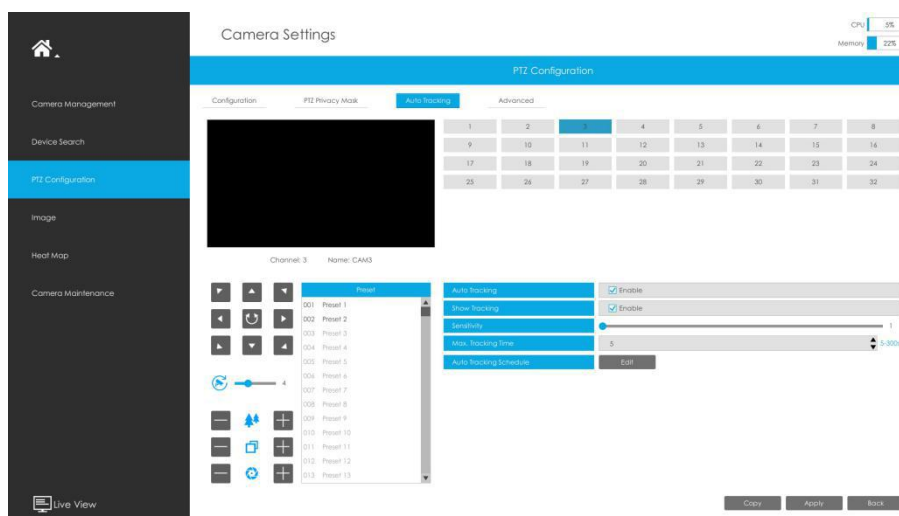
**Step4. Select “” to save the settings.**

**Note:**

1. Ensure that your camera’s version is 4X.7.0.73 or above.
2. There are two interfaces for Privacy Mask configuration. PTZ Privacy Mask is only applied in PTZ cameras while Privacy Mask can also be applied in other cameras.

**Auto tracking**

PTZ camera series supports to track the moving objects automatically after you configure this function.



**Step1. Check the checkbox to enable Auto Tracking.**

**Step2. Enable “Show Tracking” to show tracking in Auto Tracking function.**

**Step3. Set detecting sensitivity.**


**Step4. Set Max. Tracking Time which must be between 5~300s. The camera will stop tracking when the tracking time is used up.**

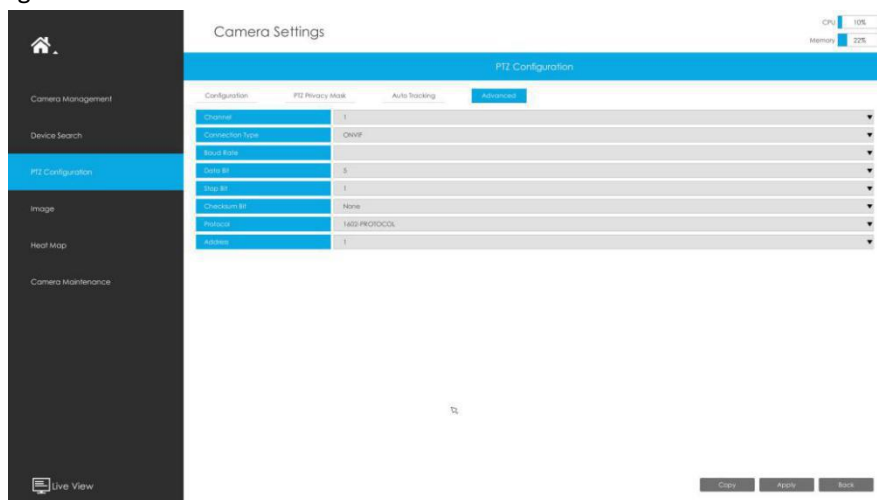
**Step5. Click  to edit Auto Tracking Schedule which will be synchronized to IP Camera.**

**Note:**

Ensure that your camera’s version is 4X.7.0.73 or above.

**Advanced**

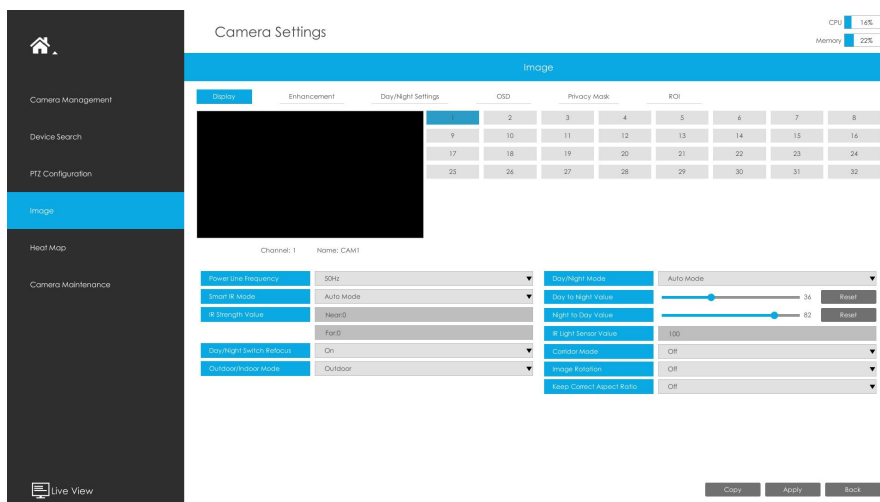
Choose a channel and set the PTZ parameters. Besides, you can click  to copy the same configuration to other channels.



**Note:**

1. Settings for a PTZ camera must be configured before it can be used. Make sure that the PTZ and RS-485 of the NVR are connected properly.
2. The PTZ protocol and address of IP channel must be consistent with those of the PTZ decoder.

### 3.6.4 Image



### 3.6.4.1 Display



**Step1. Select channel.**

**Step2. Set the configuration.**

**Power Line Frequency:** 50Hz and 60Hz are available.

**Smart IR Mode:** With the combination of the High Beam and Low Beam, The IR LEDs technology has been upgraded to provide better image clarity and quality regardless of the object distance. Also, the Low Beam and High Beam's brightness can be adjusted manually or automatically on the basis of the Zoom ratio. Moreover, with the IR anti-reflection panel, the infrared light transmittance is highly increased. Support to set the strength of the IR to Auto Mode or Customize to achieve the best effect.

**Near view IR level:** Adjust the light strength of Low-Beams LED light level from 0 to 100.

**Far view IR level:** Adjust the light strength of High-Beams LED light level from 0 to 100.

**IR Strength Value:** The current value of Low-Beams LED and High-Beams LED light value.

**IR LED Level:** Adjust the IR LED level from 0 to 100.

**White LED Level:** Adjust the White LED level from 0 to 100.

**Day/Night Switch Refocus:** With this option enabled, the camera will refocus when switching between day mode and night mode.

**Outdoor/Indoor Mode:** Set Outdoor/Indoor mode for the channel.

**Day/Night Mode:** Set the Day/Night mode for the channel.

**Day to Night Value:** Set the Minimum illumination intensity to trigger Night Mode.

**Night to Day Value:** Set the Maximum illumination intensity to trigger Day Mode.

**IR Light Sensor Value:** Shows the current value of IR light sensor.

**Corridor Mode:** Set corridor mode.

**Image Rotation:** Set image rotation.

**Smoked Dome Cover:** This function is only for Pro Dome. If Pro Dome is equipped with a Smoked Dome Cover, enable this function to display a normal image.

**Local Display Video:** Select NTSC or PAL for local display.

**Keep Correct Aspect Ratio:** With this option enabled, the camera will prevent the image from distortion when resolution ratio is changed.

**Note:**

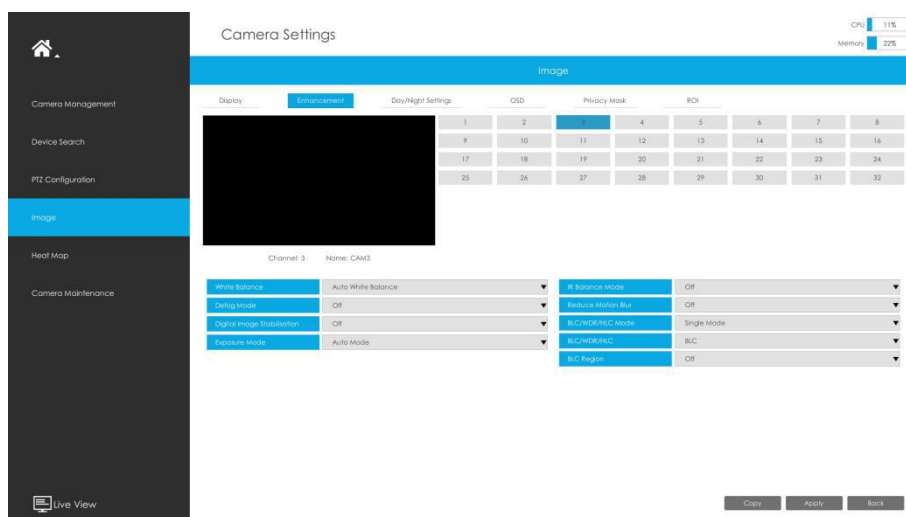
1. Smoked Dome Cover is only supported for Pro Dome and PTZ Dome cameras.
2. Smart IR Mode and IR LED Level are supported for cameras with IR LEDs.
3. White LED Level is only supported for PTZ Bullet cameras.

**Step3. Copy the image settings to other channels by clicking**  **on the bottom of the windows.**

**Step4. Select**  **to save the settings.**

### 3.6.4.2 Enhancement

You can set Image Enhancement on NVR, and the configuration will be synchronized to Camera.



**Step1. Select channel.**

**Step2. Set the configuration.**

**Reduce Motion Blur:** Enable this function to reduce the motion blur of objects effectively. You can adjust the deblur level from 1 to 100.

**Reduce Video Stuttering:** This function is only supported by the cameras of 5MP@20fps to decrease the unstable phenomenon.

**White Balance:** Choose a white balance mode for the channel.

**Defog Mode:** Better image effect in foggy weather.

**Digital Image Stabilization:** Decrease the blur and shakiness of the image.

**Exposure Mode:** Auto Mode, Manual Mode, and Schedule Mode are available.

**IR Balance Mode:** Turn on to avoid IR overexposure.

**BLC/WDR/HLC Mode:** Click to choose Single Mode, Day/Night Mode or Schedule Mode.

**BLC/WDR/HLC:** Click to configure Back Light Compensation, Wide Dynamic Range or High Light Control.

**Wide Dynamic Range:** Off, Customize, and On are available.

**Wide Dynamic Level:** Set WDR with Low/High/Auto level.

**BLC Region:** Off, Customize, and Centre are available (in single mode, only enable when WDR is

disable).

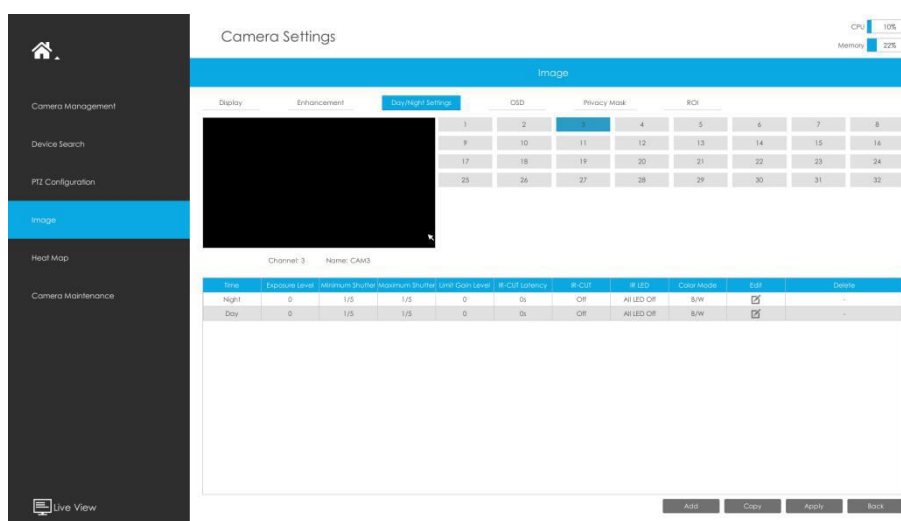
**HLC Level:** Select level for HLC.

**Anti-flicker Level:** Reduce flickers that appear on screen in some lighting conditions and there are 10 levels of anti-flicker adjustments.

**Step3.** Copy the image settings to other channels by clicking  on the bottom of the windows.

**Step4.** Select  to save the settings.

### 3.6.4.3 Day/Night Settings



**Step1.** Select channel.

**Step2.** Set the configuration.

**Exposure Level:** Level 0~10 are available to meet your need.

**Minimum Shutter:** Set the Minimum Shutter to 1~1/100000s.

**Maximum Shutter:** Set the Maximum Shutter to 1~1/100000s.

**Limit Gain Level:** Set the Limit Gain Level to 1~100.

**IR-CUT Latency:** The interval time of switching one mode to another.

**IR-CUT:** Turn on or turn off IR-CUT.

**IR LED:** Turn on or turn off IR-LED.

**Color Mode:** Select B/W or Color mode under Day/Night mode.

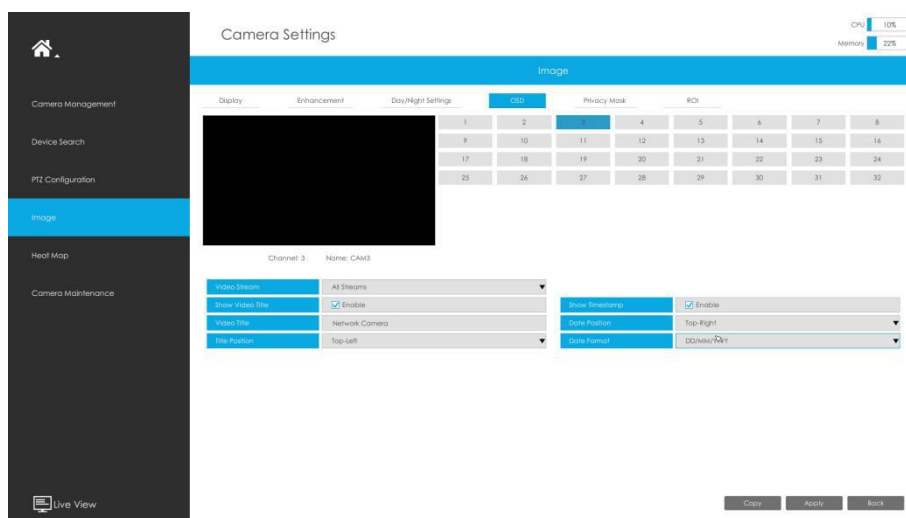
**Edit:** Edit the parameters above.

**Step3.** Copy the image settings to other channels by clicking  on the bottom of the windows.

**Step4.** Select  to save the settings.

### 3.6.4.4 OSD

You can set OSD (On Screen Display) on NVR, and the OSD will be synchronized to Camera.



**Step1. Select channel.**

**Step2. Select Video Stream, including All Streams, Primary Stream and Secondary Stream.**

**Step3. Enable video title and timestamp.**



**Show Video Title:** Enable it and the video title will be shown on screen.

**Title Position:** Set the position for the video title: Top-Left or Top-Right.

**Date Position:** Set the position for the date: Top-Left, Top-Right, Bottom-Left or Bottom-Right.

**Date Format:** Set format for date: YYYY-MM-DD, MM/DD/YY or DD/MM/YYYY.

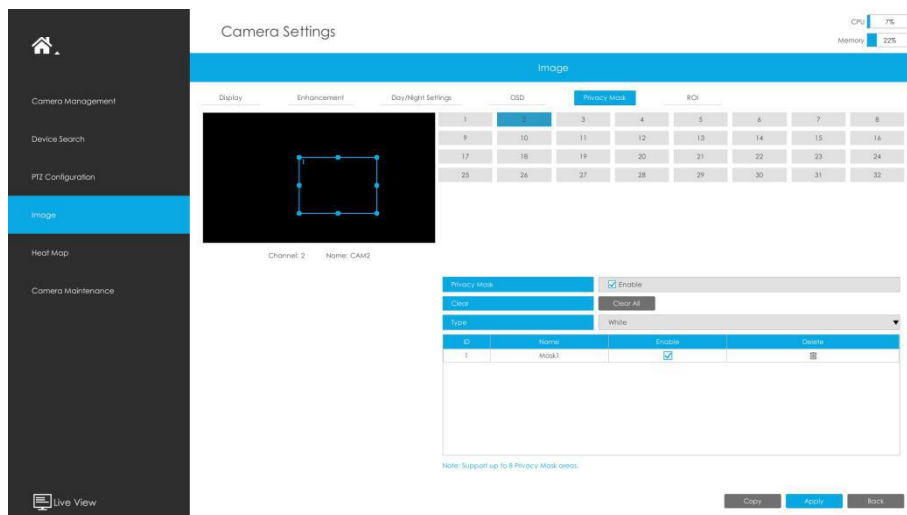
**Step4. Copy the OSD settings to the other channels by clicking the “” button on the bottom of the windows.**

**Step5. Select “” to save the settings.**



### 3.6.4.5 Privacy Mask

Milesight NVR supports to set privacy mask. It is used to cover some privacy area which is not proper to appear on monitor.



You can add a privacy mask by following steps:

**Step1.** Select channel and enable privacy mask.

**Step2.** Set the privacy mask type and drag the mouse to select the area which is privacy on the live window. You can add **8 areas** at most and each zone can be enabled and disabled.

**Step3.** Copy the privacy area to the other channels by clicking the “” button on the bottom of the windows.

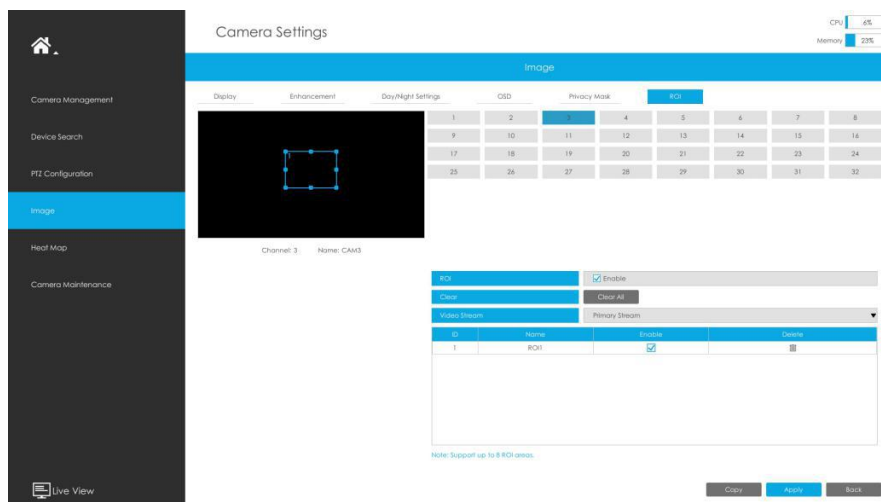
**Step4.** Select “” to save the settings.

**Note:**

Ensure the firmware version of the network camera is 4X.7.0.70 or above.

### 3.6.4.6 ROI

Milesight NVR supports to set ROI (Region Of Interest). It is an image cropping feature designed to assist users in achieving bandwidth and storage optimization.



You can add a ROI by following steps:



**Step1. Select channel and enable ROI.**

**Step2. Set the video stream type and drag the mouse to select the area in the preview window.**

**You can add 8 areas at most and each zone can be enabled and disabled.**

**Step3. Copy the ROI area to the other channels by clicking the “[Copy](#)” button on the bottom of the windows.**

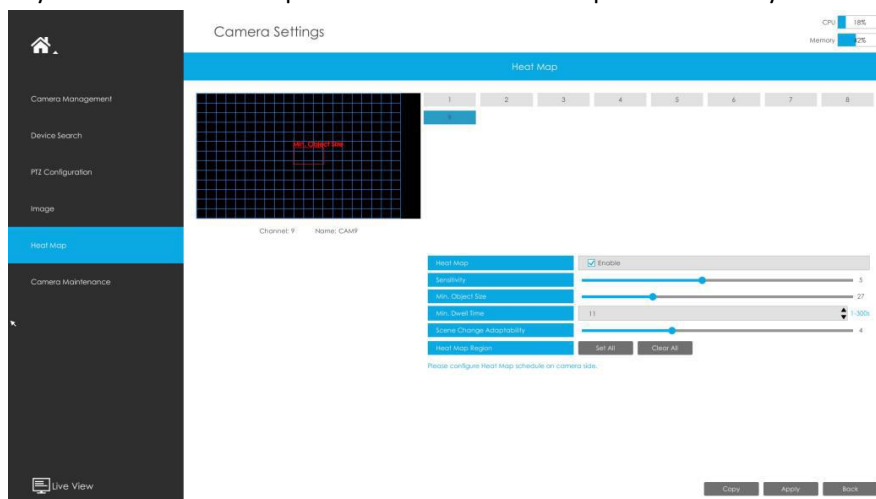
**Step4. Select “[Apply](#)” to save the settings.**

**Note:**

Ensure the firmware version of the network camera is 4X.7.0.70 or above.

## 3.6.5 Heat Map

Milesight NVRs support the configuration of the Heat Map function of Milesight cameras on NVR directly and you can search and export the results of Heat Map in Smart Analysis.



**Sensitivity:** Level 1~10 are available, the default level is 5. The higher the sensitivity, the easier the moving subjects to be recorded in the result.

**Min. Object Size:** Set the minimum object size from 1 to 100, the default value is 10. Objects smaller than this value will not be recorded in the result.

**Min. Dwell Time:** Set the minimum dwell time from 1 to 300, the default value is 30. If the object stays in the area longer than the set "Minimum Dwell Time", it will not be recorded in the result.

**Scene Change Adaptability:** Level 1~10 are available, the default level is 5. Scene Change Adaptability indicates the camera's adaptability to scene changes, which can increase the accuracy of detection. The camera adapts better to faster changing scenes if the value is higher.

**Heat Map Region:** Draw the screen to set the detection area. You can click “Set All” button to select all areas, or "Clear All" button to remove the current drawn area.

**Note:**

1. Ensure that your camera's version is 4X.7.0.74 or above.
2. Please configure Heat Map schedule on camera side.
3. The Heat Map function only works on the following cameras:

Fisheye: Ensure that the dewarping mode is 10 and the dewarping rule is On-board Dewarping.

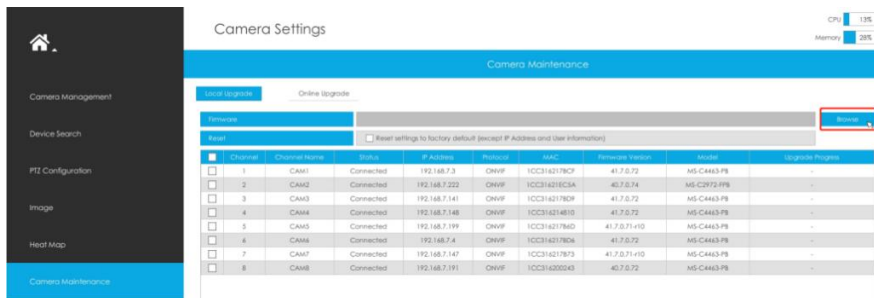
Panoramic Mini Bullet: Ensure to turn on the Lens Distort Correct function.

## 3.6.6 Camera Maintenance

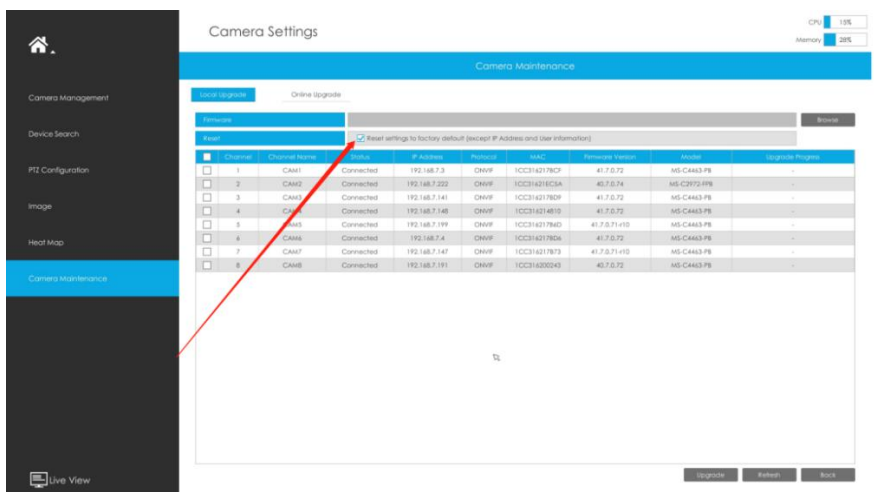
Milesight NVRs support both Online Upgrade and Local Upgrade of Milesight Cameras.

### Local Upgrade

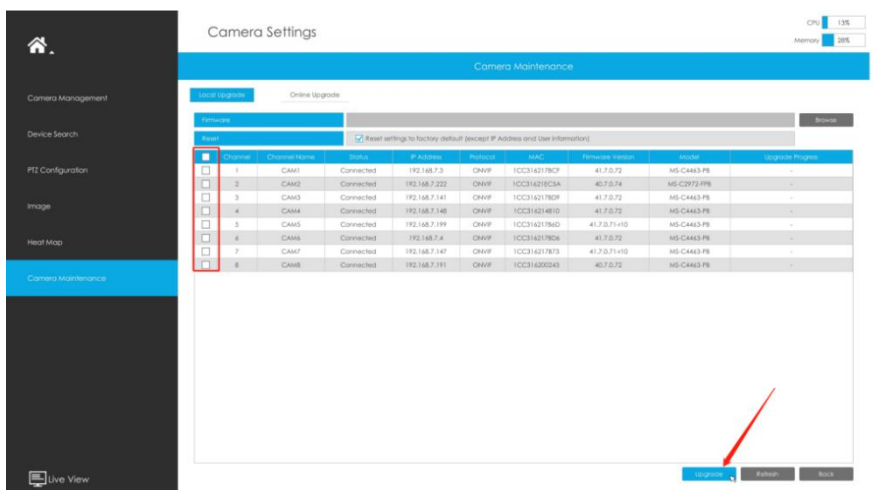
**Step1.** Click **Browse** and select the corresponding firmware you downloaded in your USB;



**Step2.** Check if you need to reset settings to factory default (except IP Address and User Information) after upgrade;

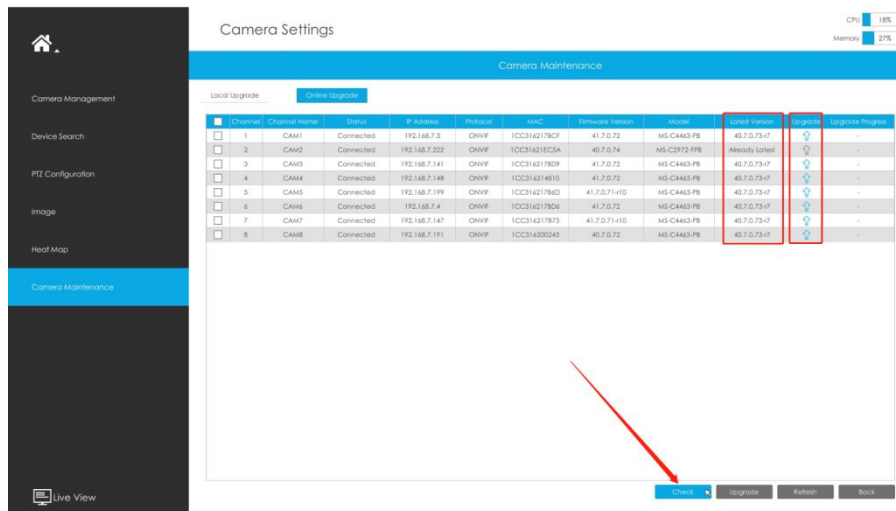


**Step3.** Choose the corresponding channel you want to upgrade and click **Upgrade** to upgrade the camera.



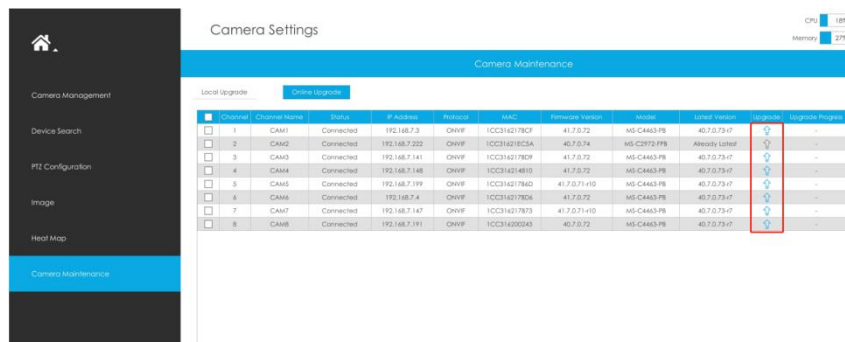
## Online Upgrade

**Step1.** Click **Check** to confirm whether there is a new version for the camera added to NVR; If there is a new version for camera, the icon in corresponding Upgrade column will turn blue and the latest version will be displayed in Latest Version column.

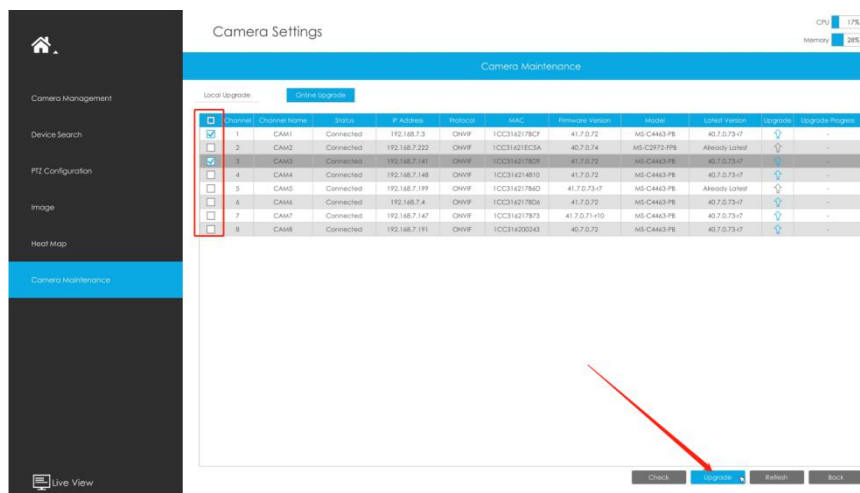


**Step2.** There are two ways to confirm the upgrade.

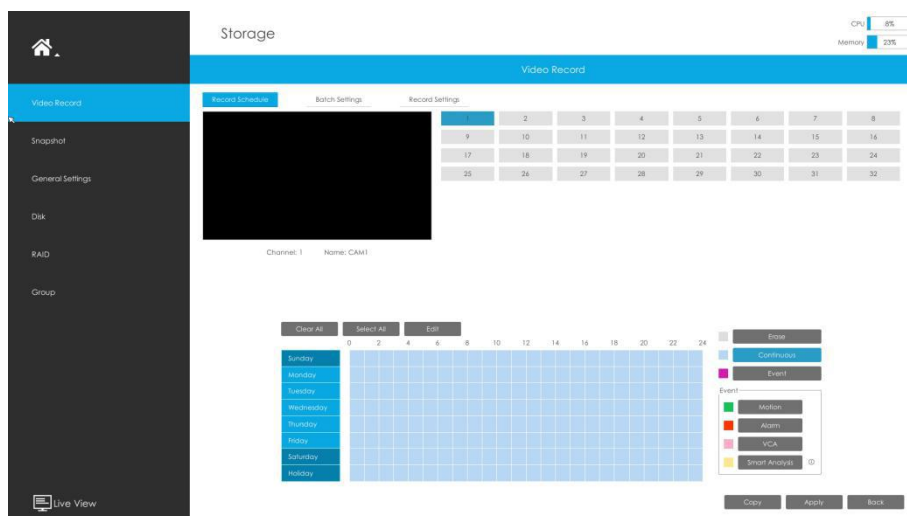
① Click the blue icon in corresponding Upgrade column to upgrade camera.



② A way to achieve batch upgrade. Just select the cameras you want to upgrade and then click **Upgrade** button.

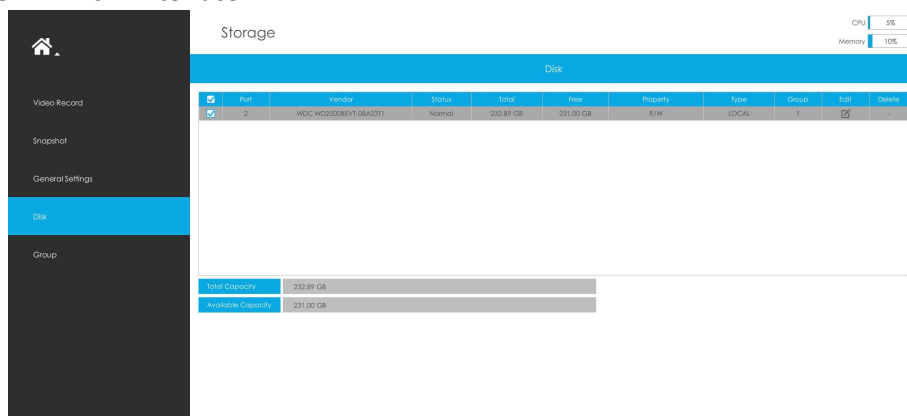


### 3.7 Storage



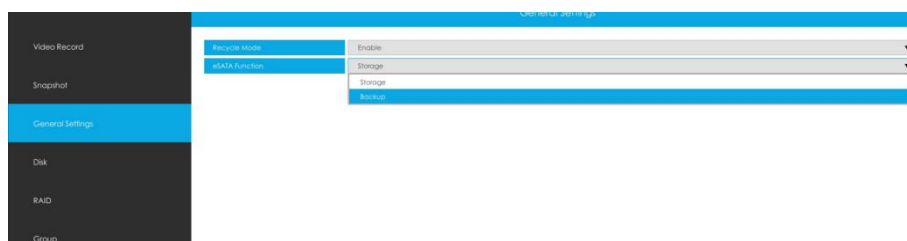
#### Preparation for Record

**Step1.** Ensure your NVR has been installed and the HDD has been initialized, please check it on “Storage” -> ”Disk” interface.



**Step2.** Ensure that the HDD has sufficient storage space.

Enable [Recycle Mode] in the case of insufficient capacity of storage device on Storage -> General Settings interface .



**Recycle Mode:** You can enable or disable Recycle Mode for all storage device.

**eSATA Function:** Both storage and backup are available.

**Note:**


eSATA Function is only available for NVR 8000 Series.

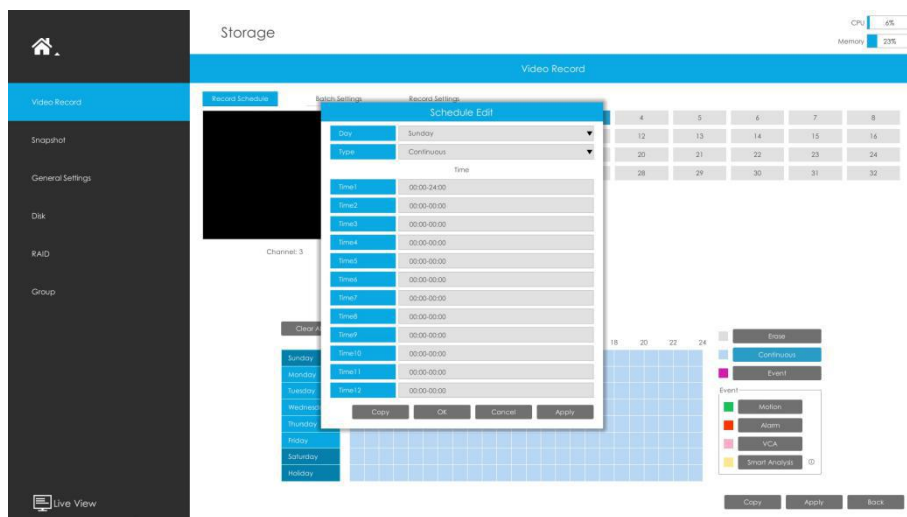
### 3.7.1 Video Record


#### Record Schedule

**Step1. Select channel.**

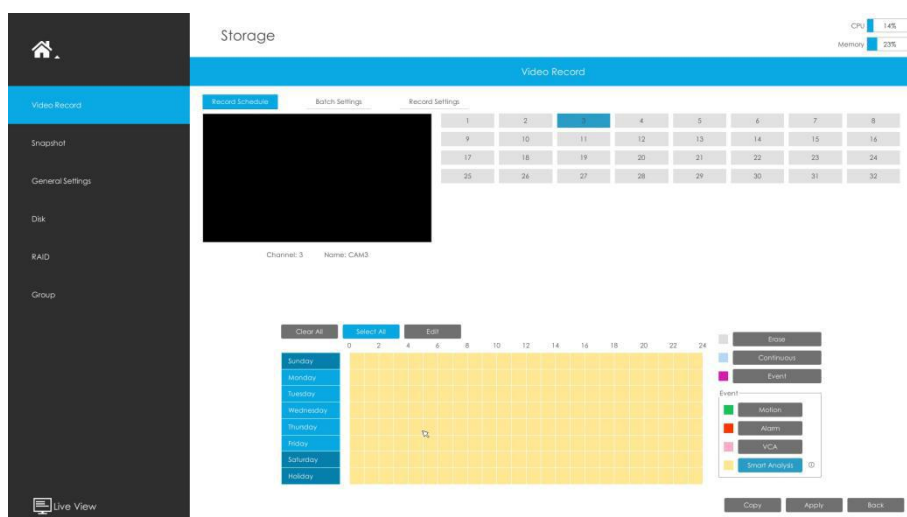
**Step2. Set record schedule.**

**Method 1:** Click  to edit schedule. Select Day, Record Type and Time to finish editing.



**Method 2:** Select operation type: Continuous, Event (including Motion, Alarm, VCA and Smart Analysis) or Erase. Then drag a square in the time table to set record effective time. It is convenient for you to set or clear all corresponding schedule by clicking  or





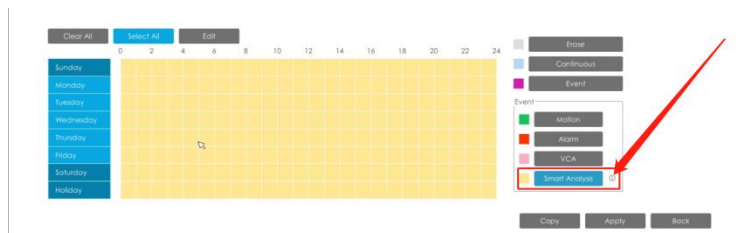
**Step3.** Click  to copy the same record configuration to other channels.



**Note:**

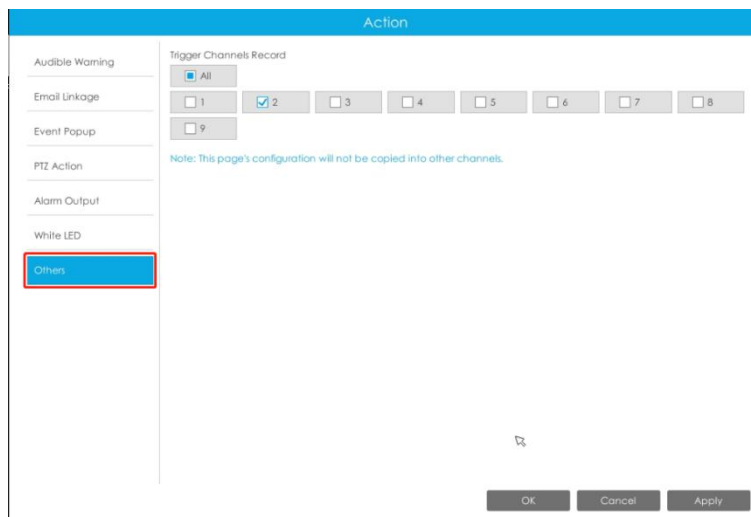
Here are steps for setting ANPR record correctly so that NVR will record when license plate is detected.

**Step1:** Set Smart Analysis as Record Type in Storage -> Video Record -> Record Schedule interface; The exclamation mark next to Smart Analysis is used to indicate that Smart Analysis includes ANPR.



**Step2:** Ensure Black List Mode or White List Mode or Visitor Mode is enabled as your demand.

**Step3:** Effective time and Trigger Channels Record action of Black List Mode/White List Mode/Visitor Mode are set (Full effective time and trigger channel record are set by default).

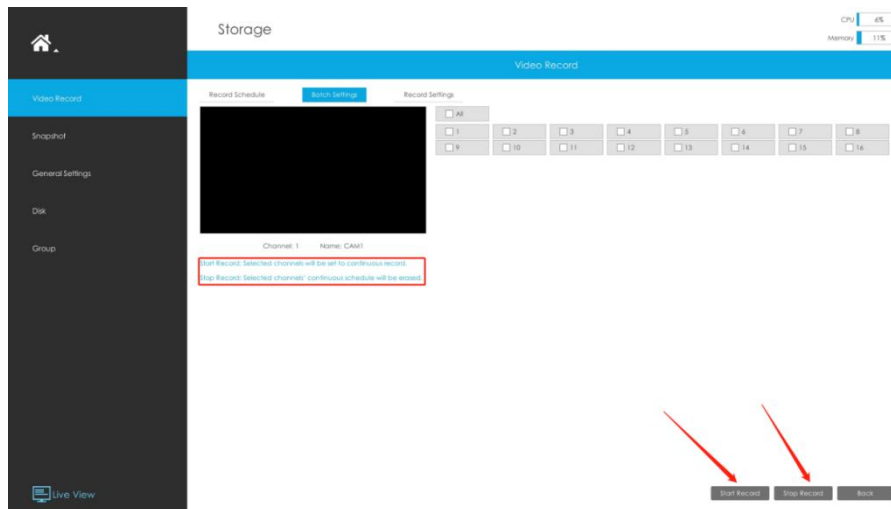


**Batch Settings**

**Step1.** Click [Batch Settings](#) to enter Batch Settings interface.

**Step2. Select channels and click Start Record to start always record.**

**Step3. Select channels and click Stop Record to stop record.**



### Record Settings

Make general configuration for selected channels. Click Copy to copy the same configuration to other channels.

**Channel:** Select the channel which will be set.

**Pre Record :** Event pre-record duration time. It will start recording before the event is triggered. Note that only NVR model ends with letter H support pre record.

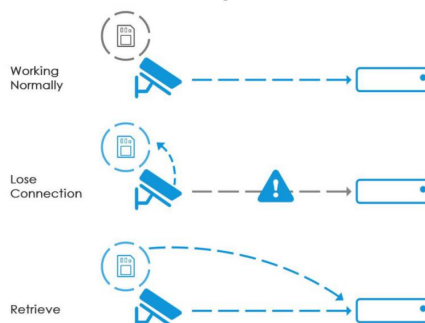
**Post Record:** Event post-record duration time. It will keep recording after the event is over.

**Audio Record:** Select to record audio or not.

**Record Stream Type:** Select Main stream or sub stream for record. Primary+Secondary Stream is available for NVR model ends with T only. If secondary stream is selected for recording while it is disabled, a prompt indicating that the secondary stream is unavailable will pop up.

**Video Due Time:** Set the due time of recording files, 1~120days or unlimit are available.

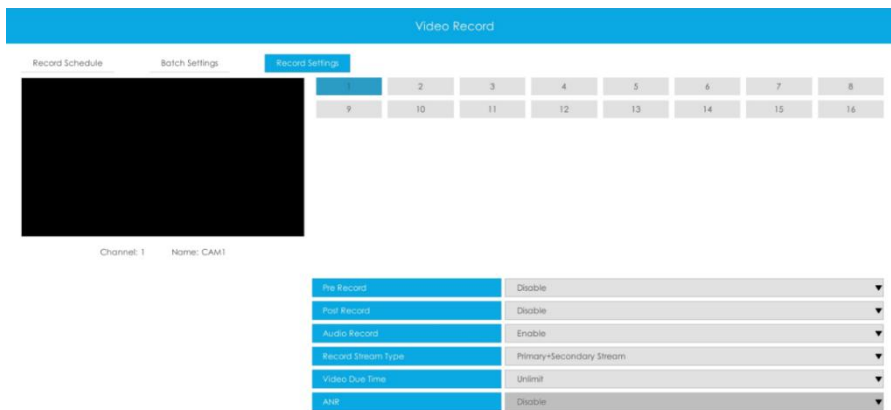
**ANR (Automatic Network Replenishment) :** Can automatically replenish the recording gap due to internet interruptions. As the picture shows below, NVR stores videos when the network connection between NVR and cameras is normal. When the connection lost, the camera would start continuous recording and store videos in SD card instead. Then after reconnection, NVR automatically retrieves the missed videos from camera's SD card in a period of time to prevent data missing.



Here are some notes for using ANR below:

**Note:**

1. Ensure that your devices are with the correct firmware versions.  
Camera: V4X.7.0.72 or above  
NVR: V7X.9.0.6 or above  
Firmware download link: <https://www.milesight.com/support/download#firmware>
2. Camera should equipped with on-board SD card.
3. Camera should be added to NVR by MSSP protocol.
4. No matter whether NVR has recording schedule or not, camera will do ANR recording and then retrieve back to NVR after reconnection.



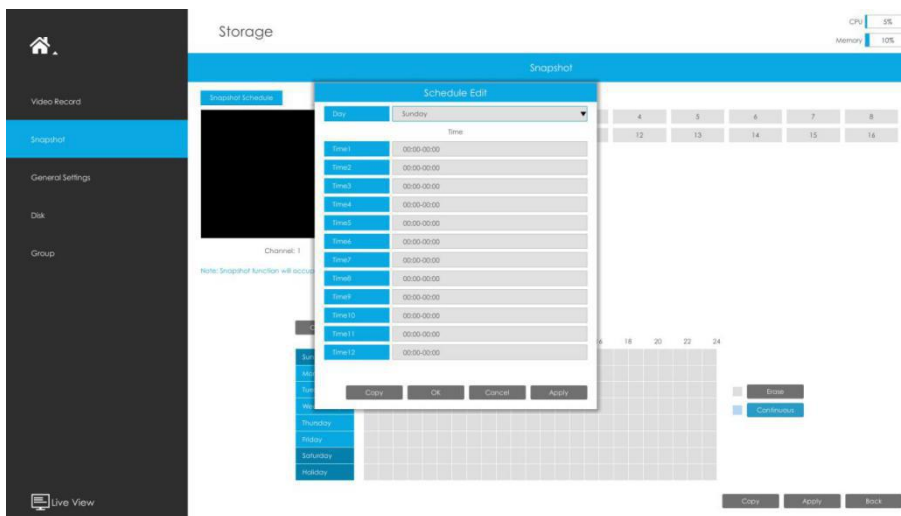
### 3.7.2 Snapshot

#### Snapshot Schedule

**Step1. Select channel.**

**Step2. Set snapshot schedule.**

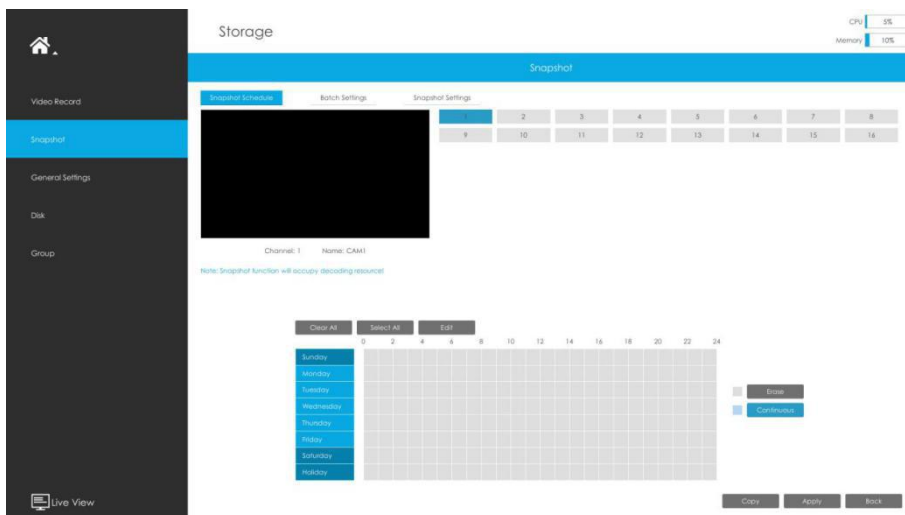
**Method 1:** Click Edit to edit schedule. Select Day and Time to finish editing.



**Method 2:** Select operation type: Continuous or Erase. Then drag a square in the time table to set record effective time. It is convenient for you to set or clear all corresponding schedule by



clicking **Select All** or **Clear All**.



**Step3.** Click **Copy** to copy the same snapshot configuration to other channels.

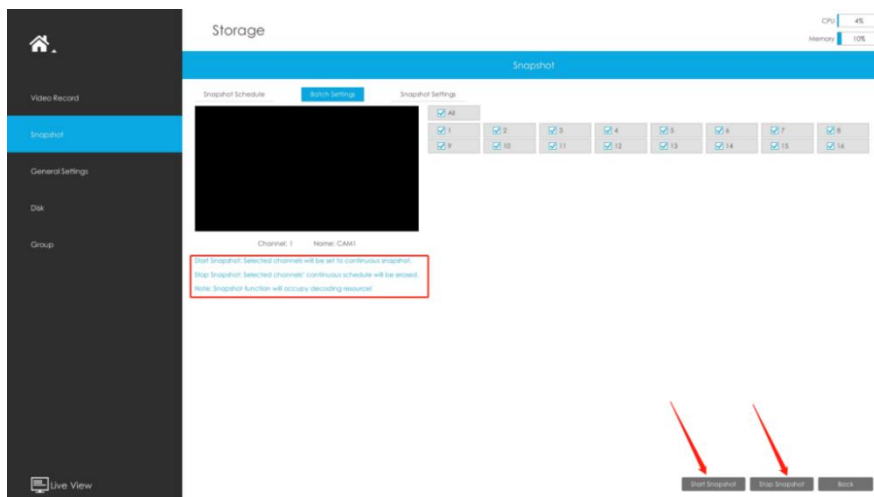


### Batch Settings

**Step1.** Click **Batch Settings** to enter Batch Settings interface.

**Step2.** Select channels and click **Start Snapshot** to start always record.

**Step3.** Select channels and click **Stop Snapshot** to stop record.



## Snapshot Settings

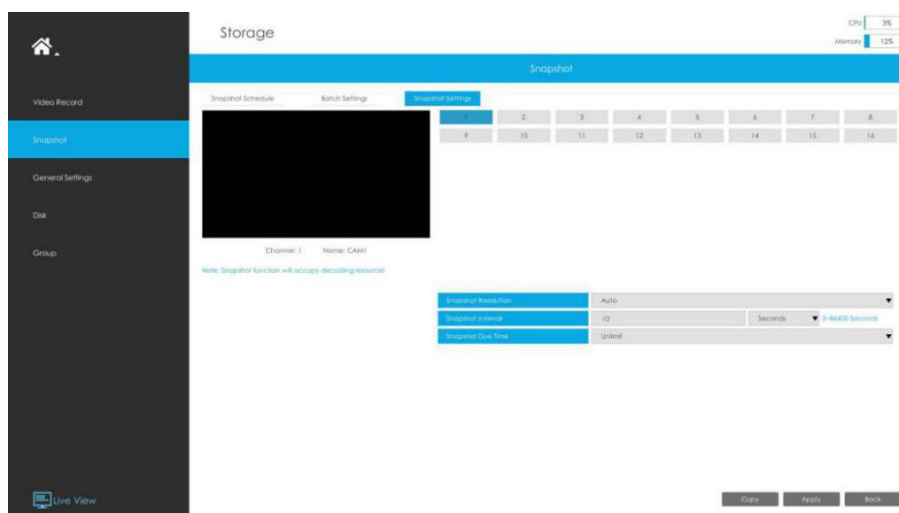
Make general configuration for selected channels. Click [Copy](#) to copy the same configuration to other channels.

**Channel:** Select the channel which will be set.

**Snapshot Resolution:** Set the snapshot resolution.

**Snapshot Interval:** Set the snapshot Interval, 3~86400 seconds are available.

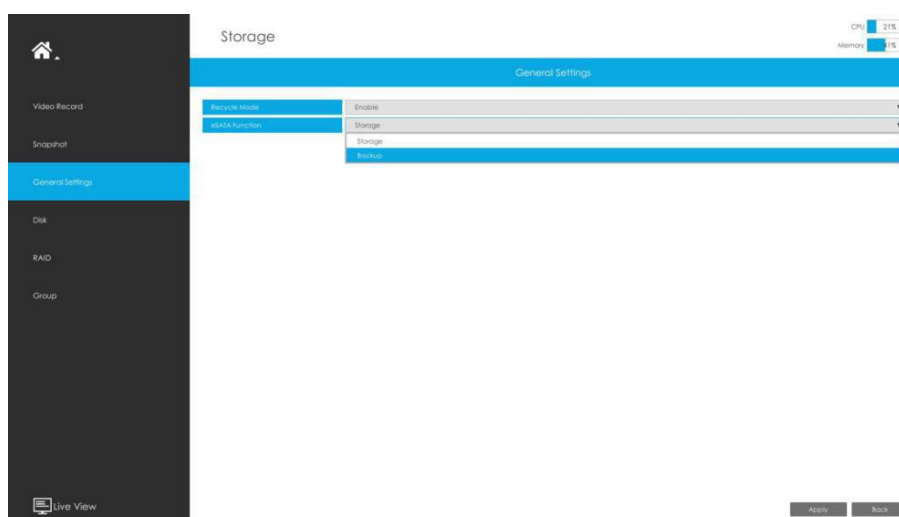
**Snapshot Due Time:** Set the due time of snapshot files, 1~120days or unlimit are available.



### Note:

Some models support continuous snapshot function.

## 3.7.3 General Settings



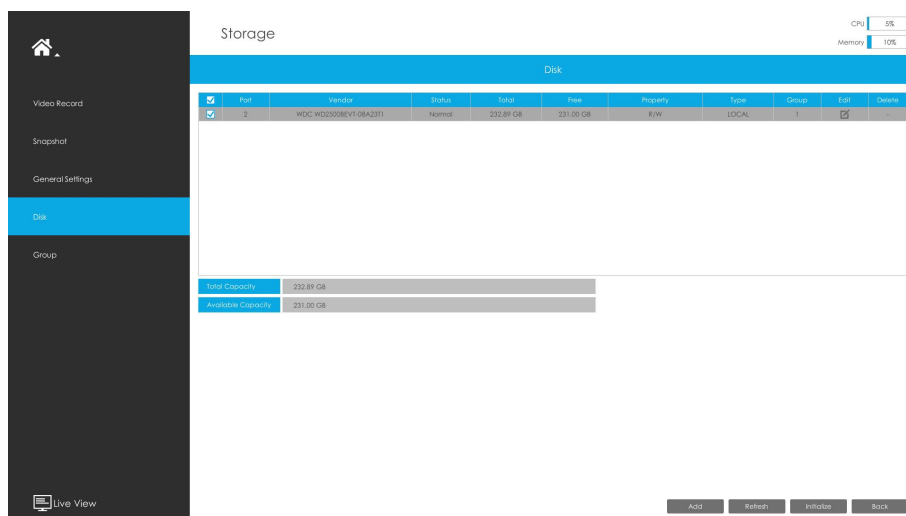
**Recycle Mode:** You can enable or disable Recycle Mode for all storage device.

**eSATA Function:** Both storage and backup are available.

### Note:

eSATA Function is only available for NVR 8000 Series.

## 3.7.4 Disk

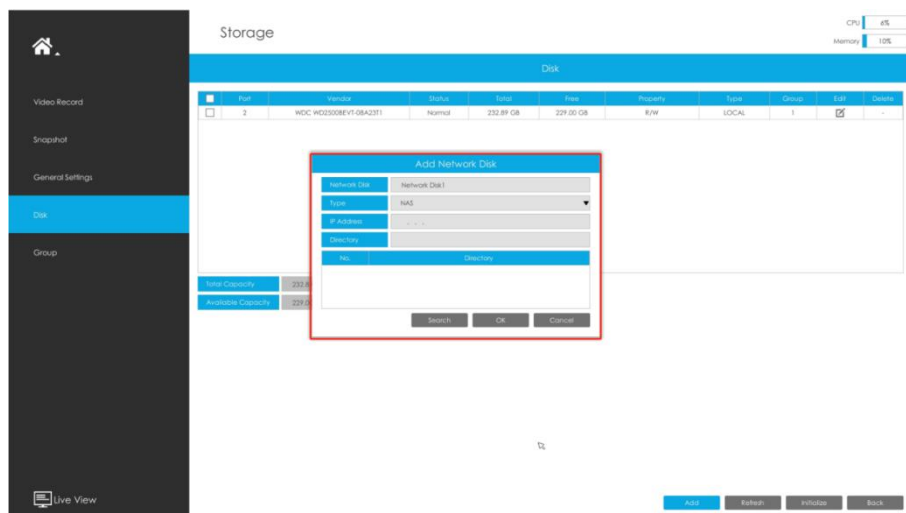



### Network Disk

NAS (Network-Attached Storage) should be available within the network and properly configured to store the recorded files and snapshots. You can click and then input corresponded NAS information to add NAS.

#### Note:

1. NAS with NFS format is the only type for network disk adding.
2. It's recommended to use Hard Disk rather than Network Disk.



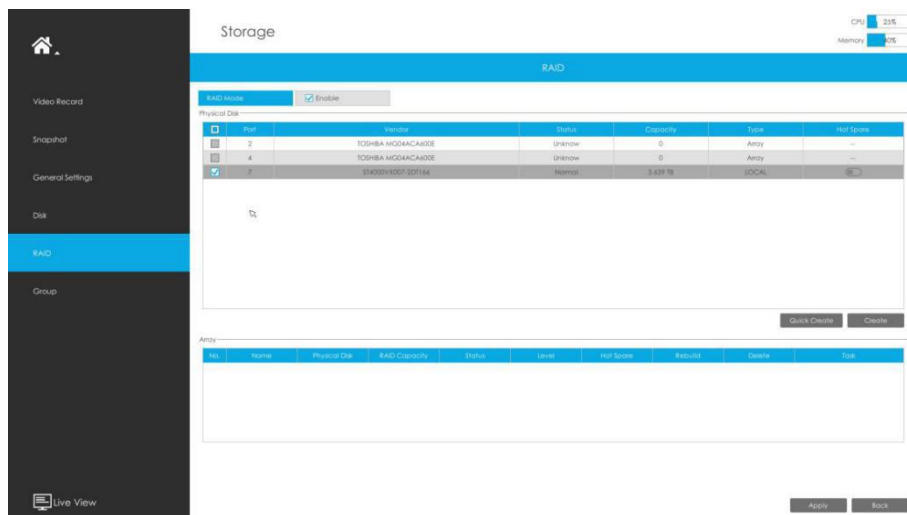
Select a storage device and click **Initialize** to initialize it, edit the Property by clicking .

After that the storage device will be ready.

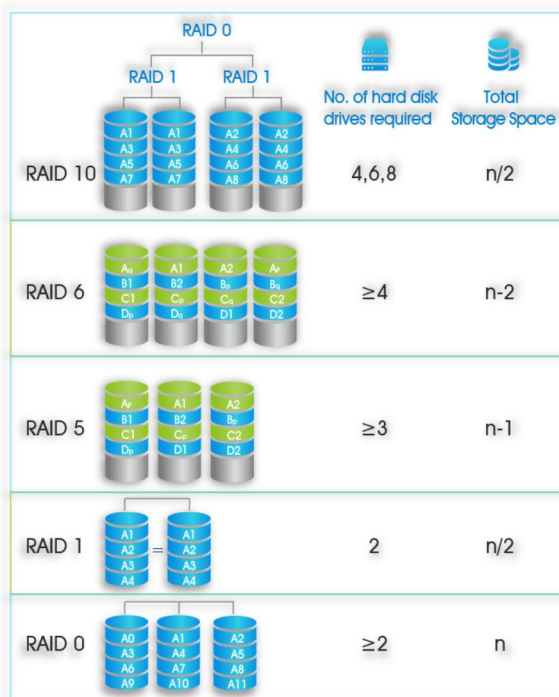


**HDD Type:** RAID means RAID, NAS means network attached storage while LOCAL means normal disk mode.

### 3.7.5 RAID

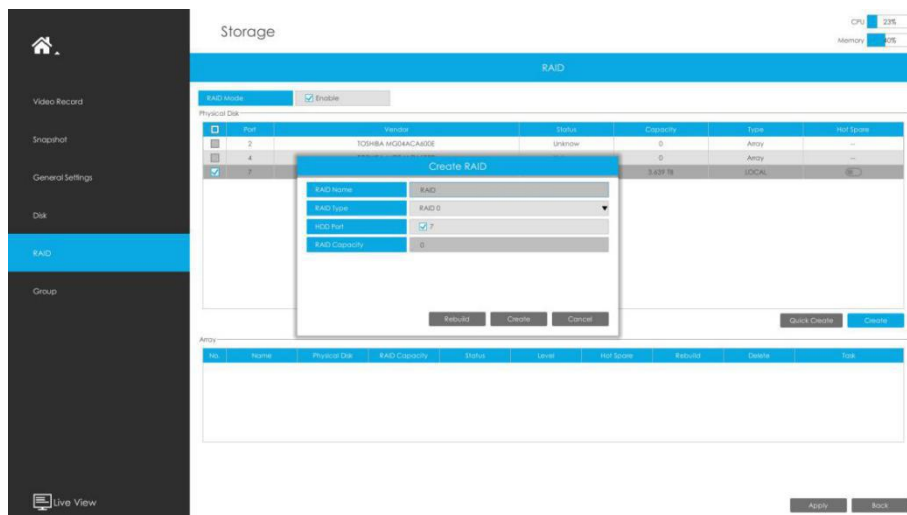


RAID (Redundant Array of Independent Disks) is a storage technology that combines multiple disk drive components into a logical unit. A RAID setup stores data over multiple hard disk drives to provide enough redundancy so that data can be recovered if one disk fails.



**Step1. Enable RAID. NVR will reboot after enabling.**

**Step2. Select HDD and click Create or Quick Create to create a new array. New array will be available after a while.**



**Hot Spare:** A disk can be used as the hot spare for any array created in the system.

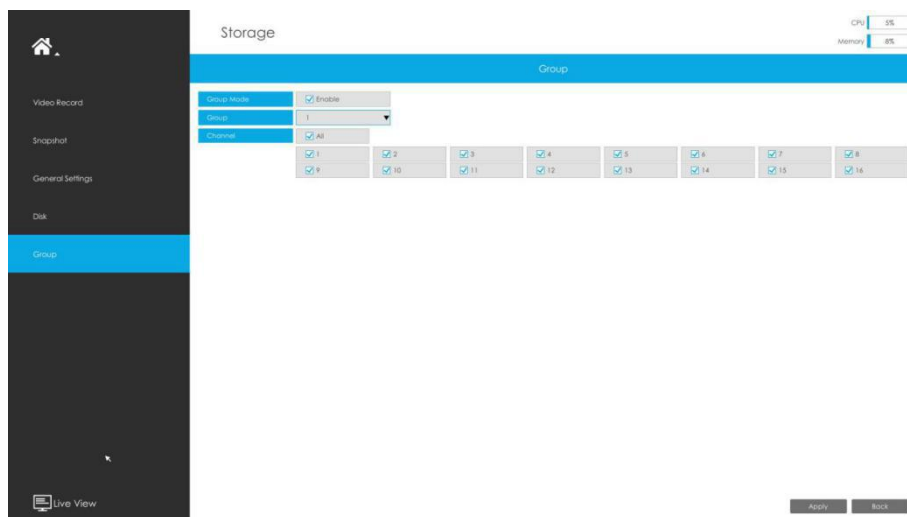
**Rebuild:** When the array is in Degraded status, the device can start rebuilding the array automatically with the hot spare disk to ensure the high security and reliability of the data.

**Note:**

1. RAID only available for 4K H.265 NVR 7000/8000 Series and 4K H.265 PoE NVR 7000 Series.
2. RAID capacity can not larger than 16TB.
3. Quick Create only for RAID5.

### 3.7.6 Group

You can divide disks into different groups, which is able to storage different channels' recorded files into different groups.



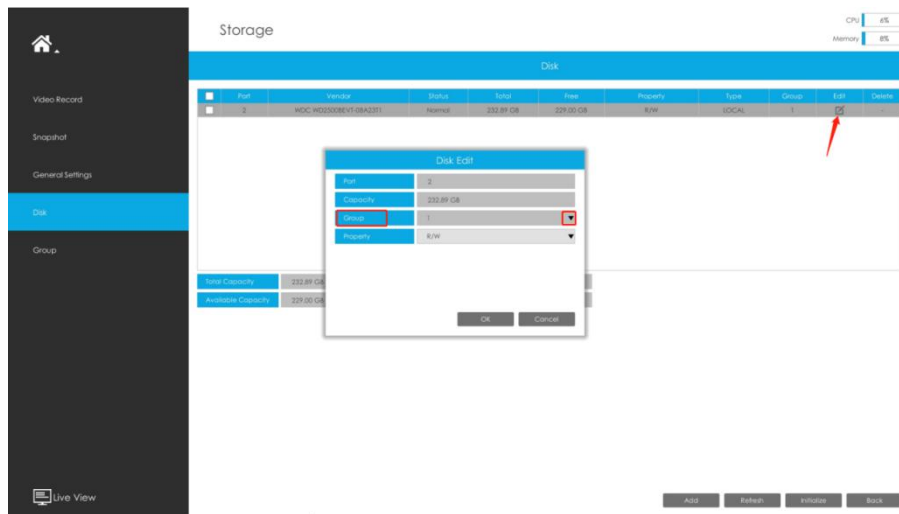
**Step 1. Enable Group.**



**Step 2. Switch to Disk interface. Click  and set the group number of every disk.**

**Note:**

You can add 16 groups at most.

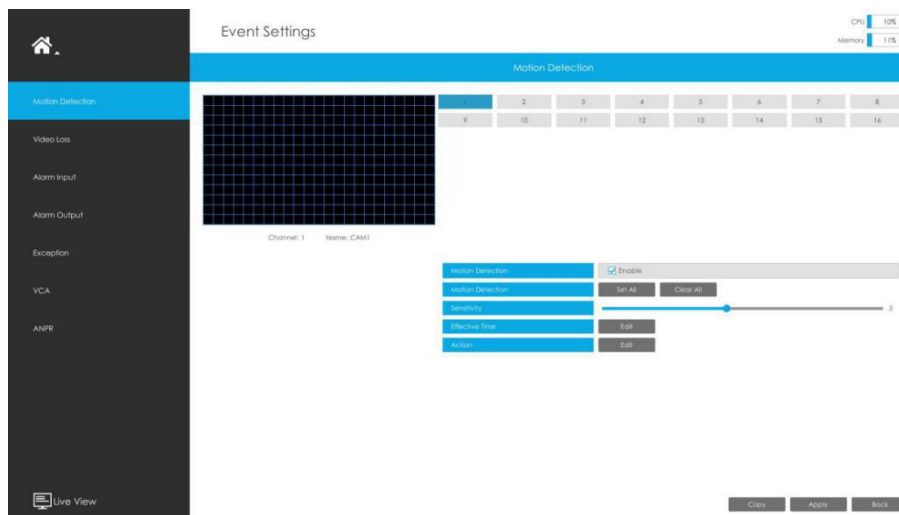


**Step 3. Select group and channels which you want to record into this group.**



## 3.8 Event

### 3.8.1 Motion Detection



**Step 1. Enable Motion Detection.**

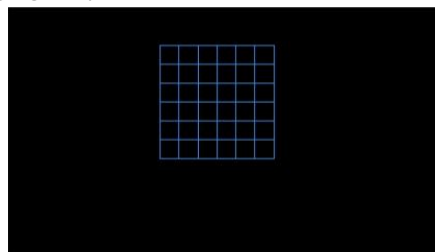
Select channel , Sensitivity and click  to enable Motion Detection.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

Motion Detection	<input checked="" type="checkbox"/> Enable
Motion Detection	Set All Clear All
Sensitivity	<input type="range" value="5"/>
Effective Time	Edit
Action	Edit

**Step2: Set the area for triggering motion detection.**

You can set the area by dragging a square on live view window.



Channel: 1 Name: CAM1

**Note:**

The motion detection area will be synchronized to Camera.

**Step 3. Set Effective Time of motion detection by clicking** Edit.

It will be more convenient by clicking Select All or Clear All to set or clear all time settings.

Effective Time

Clear All	Select All	Edit											
	0	2	4	6	8	10	12	14	16	18	20	22	24
Sunday	Effective Time												
Monday													
Tuesday													
Wednesday													
Thursday													
Friday													
Saturday													
Holiday	Erase												
			OK	Cancel	Apply								

**Step 4. Set Action for motion detection alarm by clicking** Edit.

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

The user can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

The screenshot shows the 'Action' configuration window. On the left, a sidebar lists action types: Audible Warning, Email Linkage, Event Popup, PTZ Action, Alarm Output, White LED, and Others. The 'Audible Warning' option is selected. The main area features a time table grid with columns for hours (0-24) and rows for days (Sunday-Holiday). Above the grid are buttons for 'Clear All', 'Select All', and 'Edit'. Below the grid are radio buttons for 'Audible' (checked) and 'Erase', and a 'Triggered Interval' dropdown menu set to '20s'. At the bottom right, there are 'OK', 'Cancel', and 'Apply' buttons.

**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

The screenshot shows the 'Action' configuration window. On the left, a sidebar lists action types: Audible Warning, Email Linkage, Event Popup, PTZ Action, Alarm Output, White LED, and Others. The 'Email Linkage' option is selected. The main area features a time table grid with columns for hours (0-24) and rows for days (Sunday-Holiday). Above the grid are buttons for 'Clear All', 'Select All', and 'Edit'. Below the grid are radio buttons for 'Email' (checked) and 'Erase', and a 'Triggered Interval' dropdown menu set to '20s'. At the bottom right, there are 'OK', 'Cancel', and 'Apply' buttons.

**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set

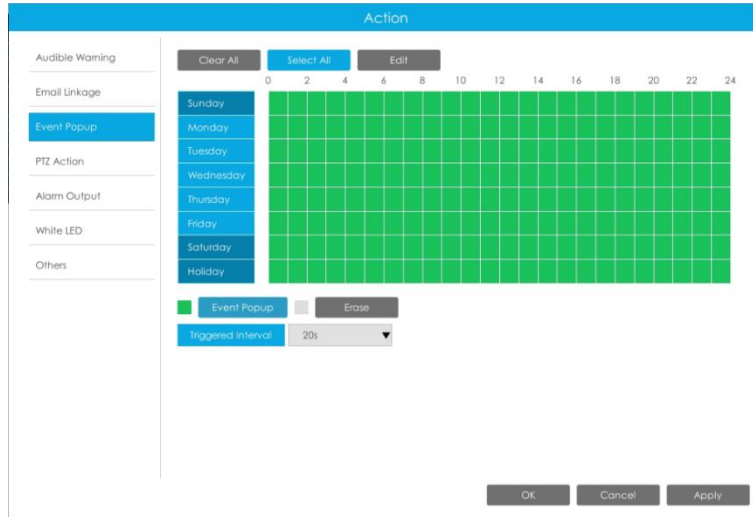


display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



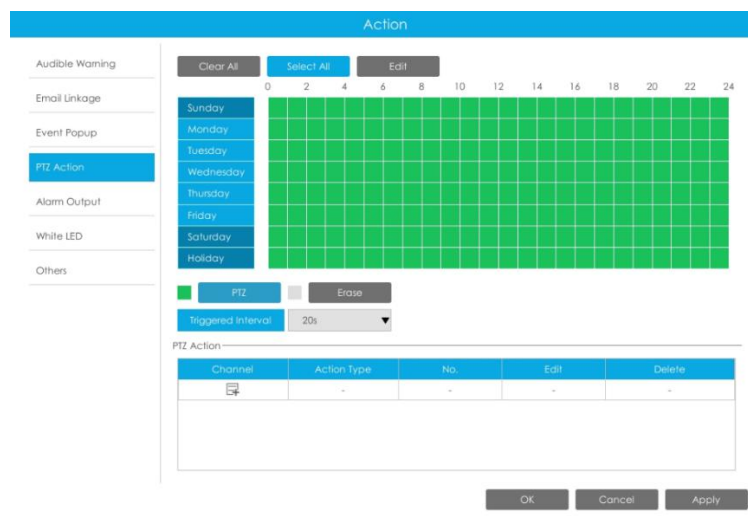
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

The user can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking  .



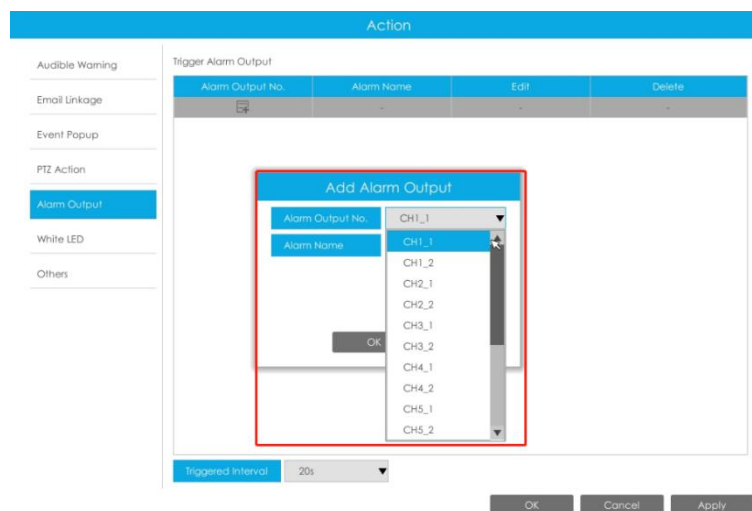
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



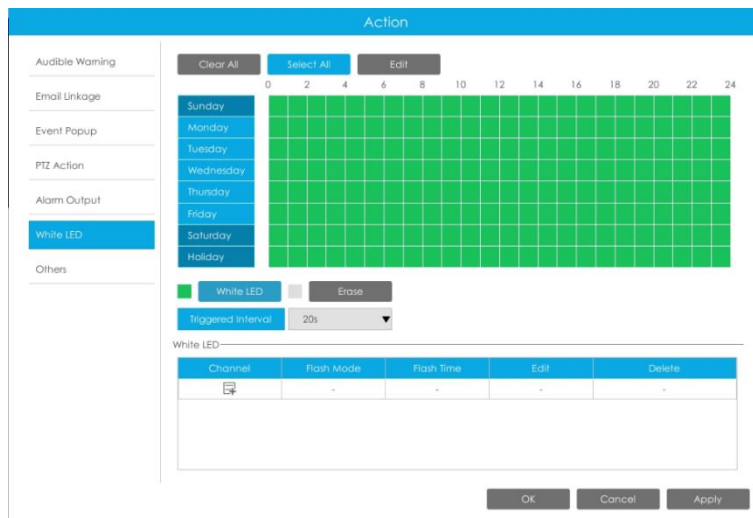
**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

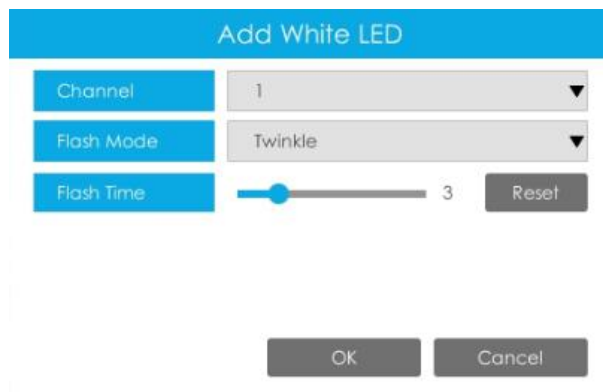
① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

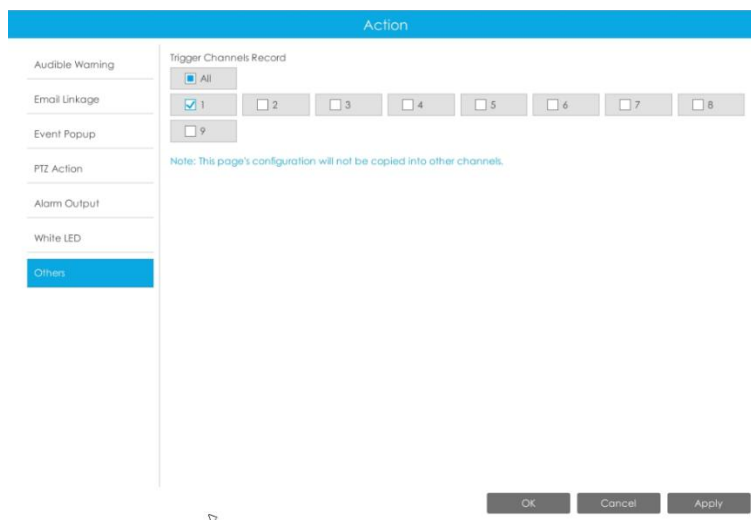


**Channel:** Select the channel which supports this function.

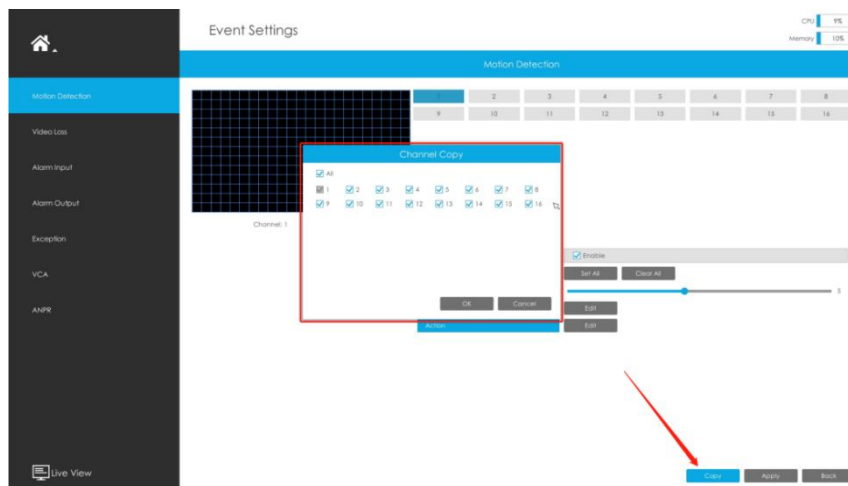
**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.

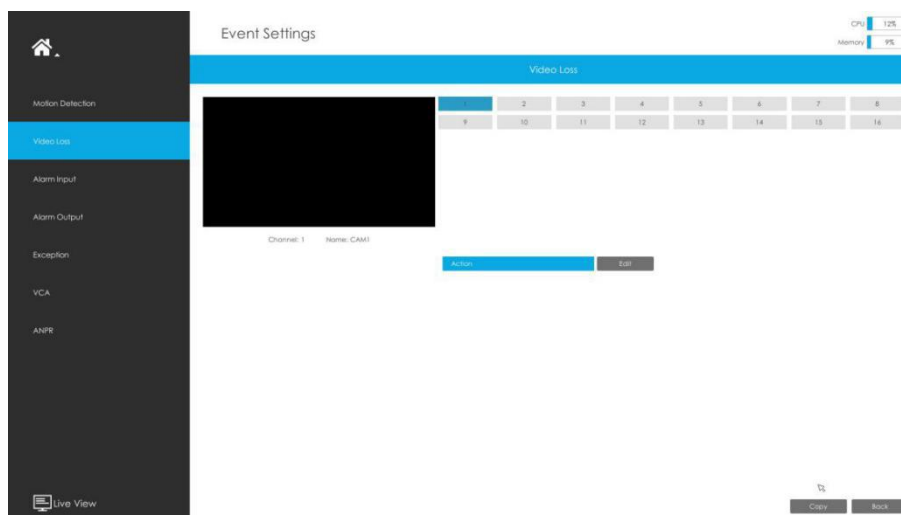


Step 5. Click  and  to copy the same configuration to other channels.



## 3.8.2 Video Loss

### Step 1. Select a channel.



### Step 2. Set Action for video loss by clicking **Edit**.

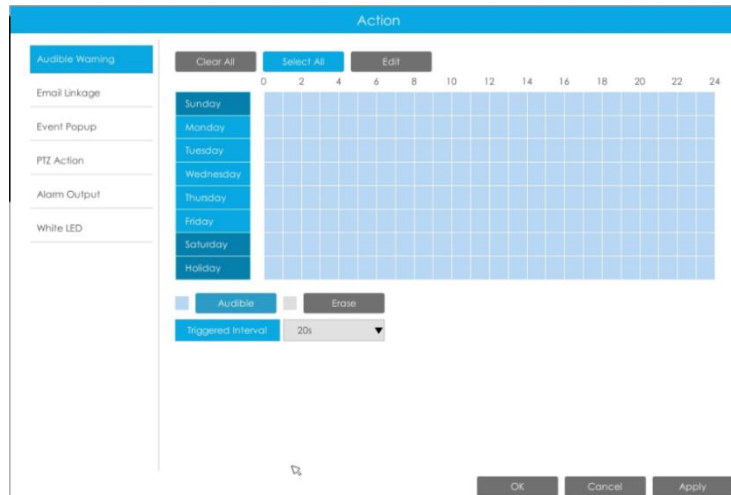
**Audible Warning:** NVR will trigger an audible beep when motion is detected.

The user can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

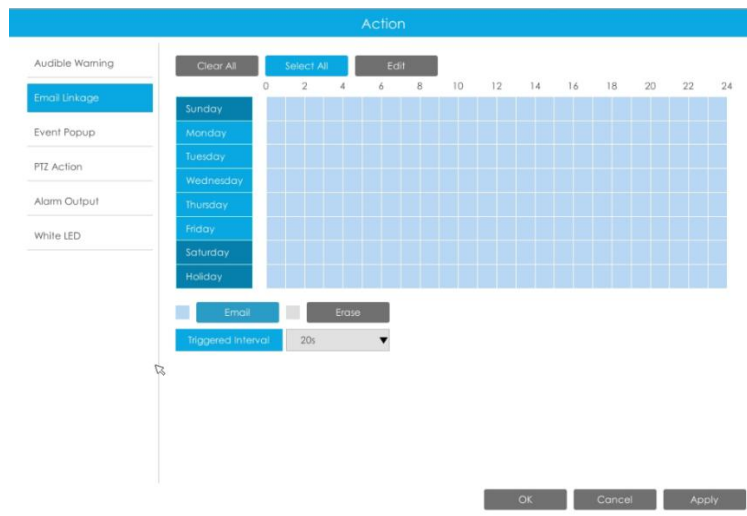


**Email Linkage:** NVR will send an email to the address you set before.

User can set effective schedule as following two ways:

- ① Select the operation type: Email or Erase. Then drag a rectangle on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.
- ② Click **Edit** to edit record effective time manually.

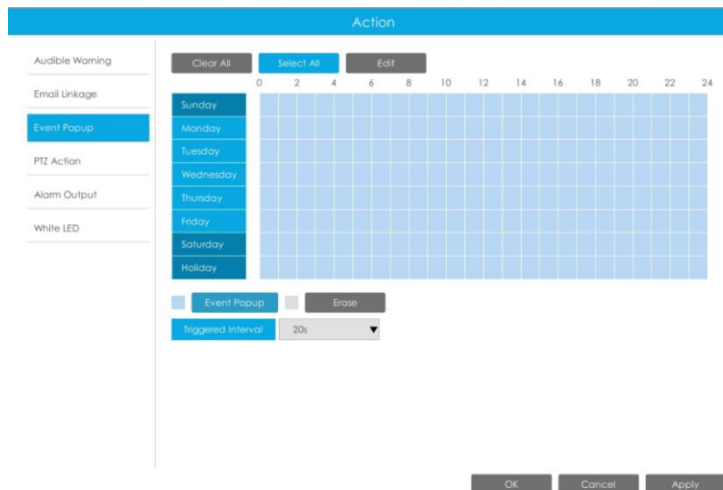
**Triggered Interval:** The effective interval between two actions when event triggered.



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

- ① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.
- ② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



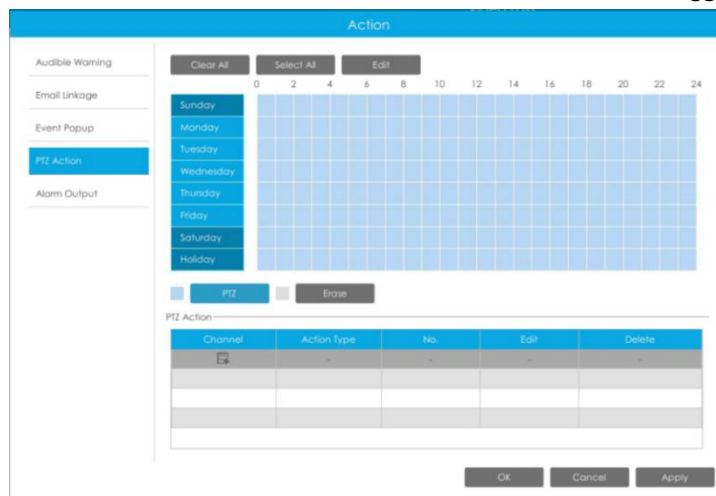
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking .



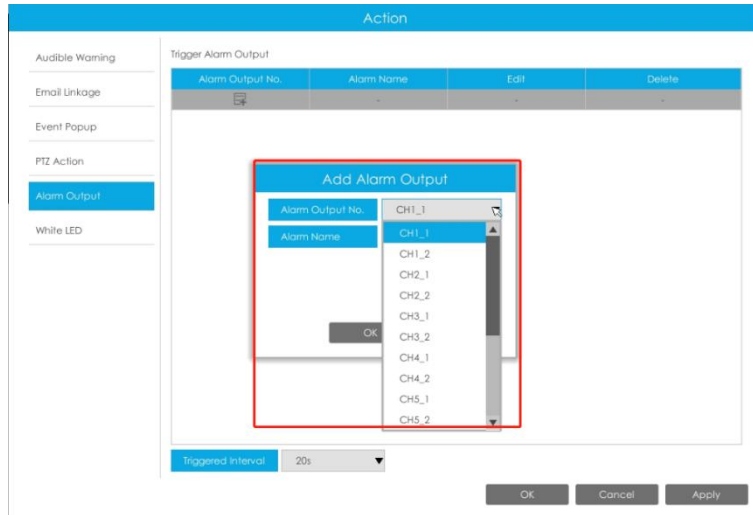
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



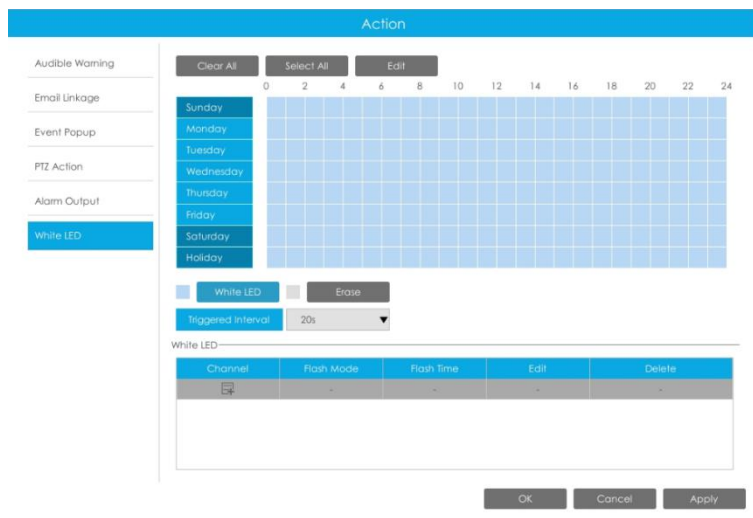
**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

Add White LED

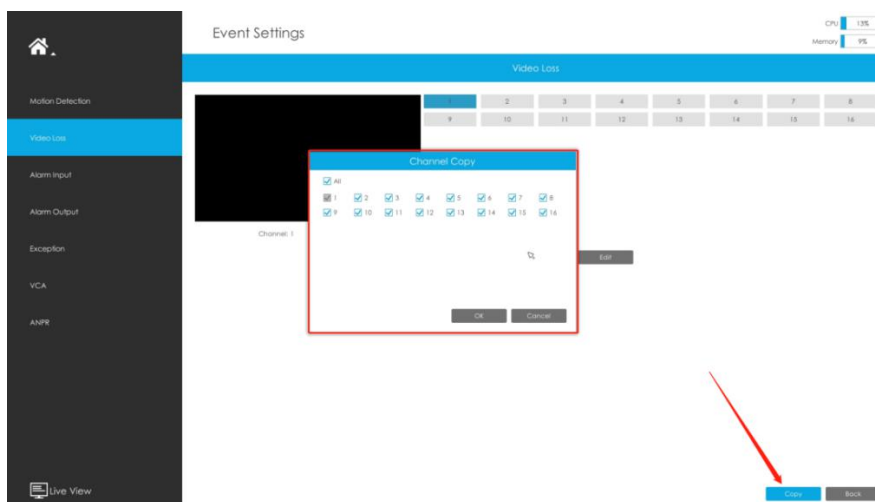
Channel	1	▼
Flash Mode	Twinkle ▼	
Flash Time	<input type="range" value="3"/>	3
<input type="button" value="Reset"/>		
<input type="button" value="OK"/> <input type="button" value="Cancel"/>		

**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Step 3.** Click  and  to copy the same configuration to other channels.



### 3.8.3 Alarm Input

#### 3.8.3.1 NVR Alarm Input

NVR Alarm Input function is supported by MS-N5008-UT, MS-N5016-UT, MS-N7016-UH, MS-N7032-UH, MS-N8032-UH, MS-N8064-UH, MS-N5008-UPT, MS-N5016-UPT, MS-N7016-UPH and MS-N7032-UPH.

**Step 1. Set Alarm input Number, Alarm Name and Alarm Type.**

Alarm Input

NVR Alarm Input	Camera Alarm Input																
Alarm Input No.	<table style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 12.5%; border: 1px solid #ccc;">1</td> <td style="width: 12.5%; border: 1px solid #ccc;">2</td> <td style="width: 12.5%; border: 1px solid #ccc;">3</td> <td style="width: 12.5%; border: 1px solid #ccc;">4</td> <td style="width: 12.5%; border: 1px solid #ccc;">5</td> <td style="width: 12.5%; border: 1px solid #ccc;">6</td> <td style="width: 12.5%; border: 1px solid #ccc;">7</td> <td style="width: 12.5%; border: 1px solid #ccc;">8</td> </tr> <tr> <td style="border: 1px solid #ccc;">9</td> <td style="border: 1px solid #ccc;">10</td> <td style="border: 1px solid #ccc;">11</td> <td style="border: 1px solid #ccc;">12</td> <td style="border: 1px solid #ccc;">13</td> <td style="border: 1px solid #ccc;">14</td> <td style="border: 1px solid #ccc;">15</td> <td style="border: 1px solid #ccc;">16</td> </tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8										
9	10	11	12	13	14	15	16										
Alarm Name	<input type="text"/>																
Alarm Type	NO ▼																
Effective time	<input type="button" value="Edit"/>																
Action	<input type="button" value="Edit"/>																

Note: Alarm Name will not be copied into other channels.




**Alarm Input No.:** The channel which has input signal.

**Alarm Name:** Set a name for the alarm.

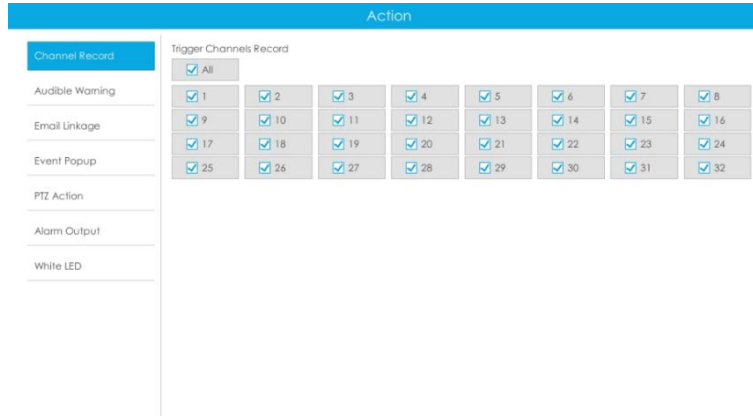
**Alarm Type:** Choose NO or NC alarm type for the alarm.

**Step 2. Set effective time for alarm input by clicking corresponding** 

**Step 3. Set action for alarm input by clicking corresponding** 



**Channel Record:** Start recording when alarm is triggered.


**Trigger Channels Record:** Trigger selected channels to record when alarm is triggered.



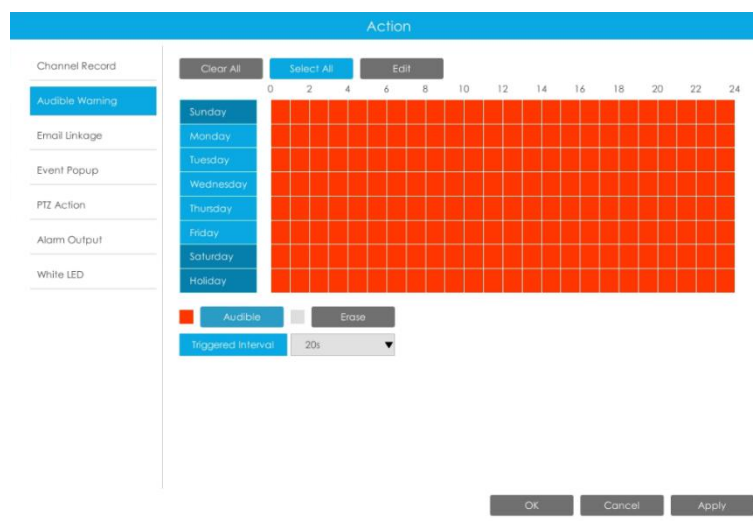
**Audible Warning:** NVR will trigger an audible beep when alarm is triggered.

User can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking  or  to set or clear all time settings.

② Click  to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



**Email Linkage:** NVR will send an email to the address you set before.

User can set effective schedule as following two ways:

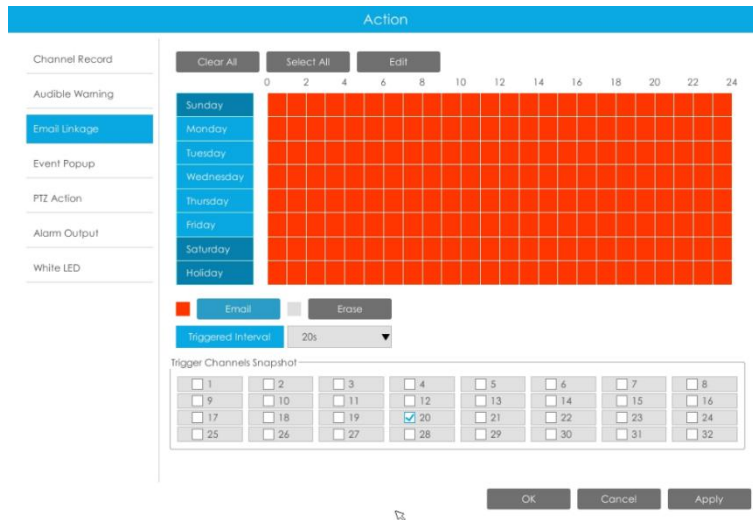
① Select the operation type: Email or Erase. Then drag a square on the time table for time

setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

**Trigger Channels Snapshot:** The snapshot of selected channels will be sent when alarm is triggered.

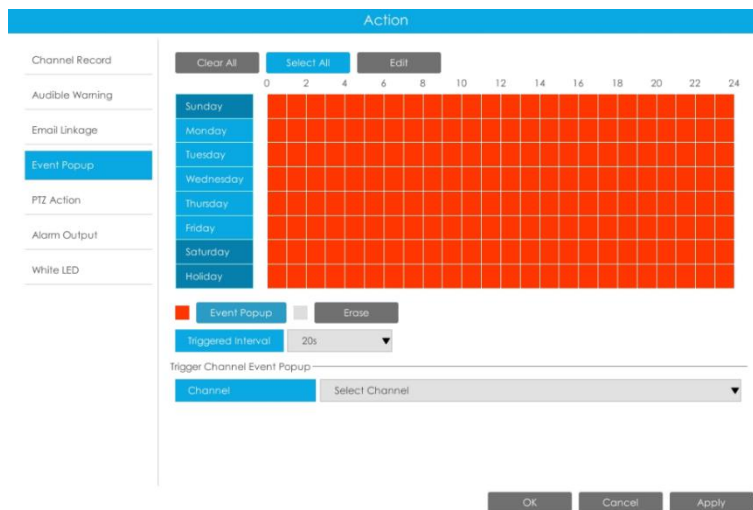


**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

- ① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.
- ② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

The screenshot shows the 'Action' configuration window. On the left is a sidebar with options: Channel Record, Audible Warning, Email Linkage, Event Popup, **PTZ Action**, Alarm Output, and White LED. The main area features a 24-hour time table with days of the week listed on the left. A legend below the table shows 'PTZ' (orange square) and 'Erase' (grey square). The 'Triggered Interval' is set to '20s'. Below the table is a table for PTZ Action records:

Channel	Action Type	No.	Edit	Delete
	-	-	-	-

Buttons for 'Clear All', 'Select All', and 'Edit' are at the top. 'OK', 'Cancel', and 'Apply' buttons are at the bottom.

And you can add PTZ Action by clicking .

The 'Add PTZ Action' dialog box contains three dropdown menus:

- Channel: 1
- Action Type: Preset
- No.: 1

Buttons for 'OK' and 'Cancel' are at the bottom.

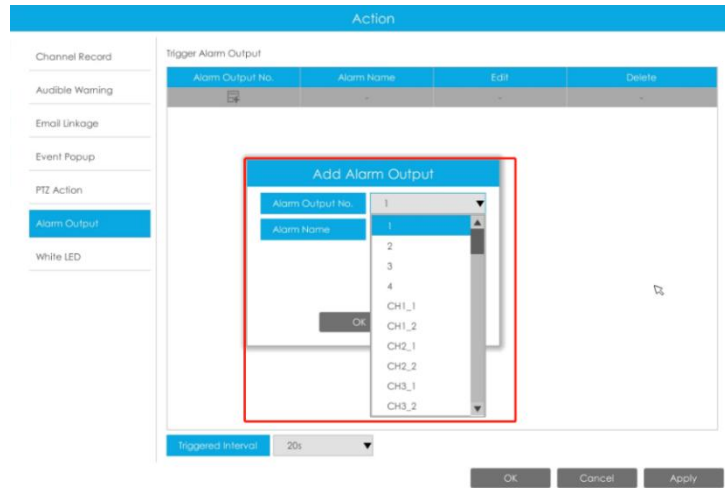
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



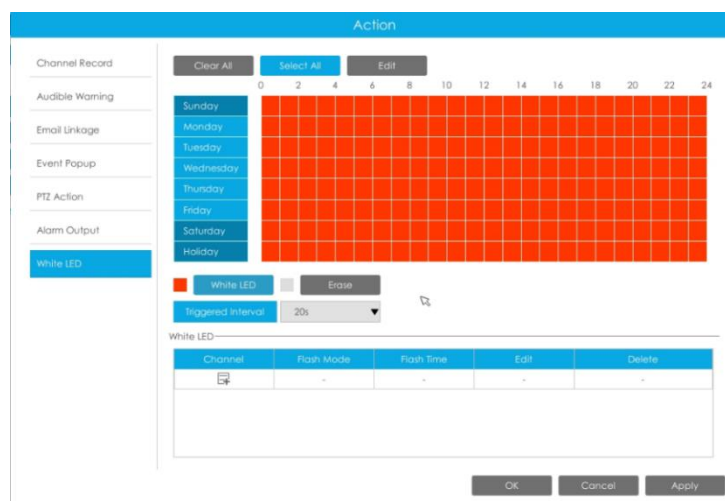
**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

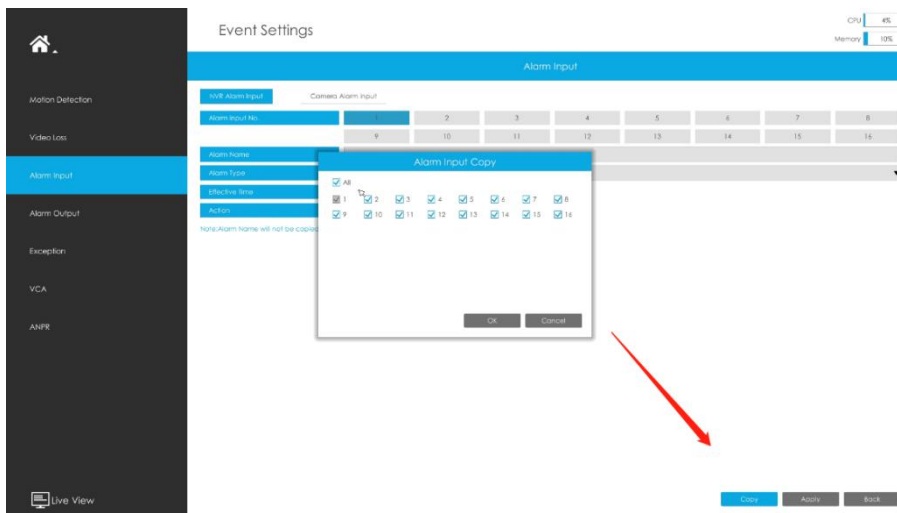


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

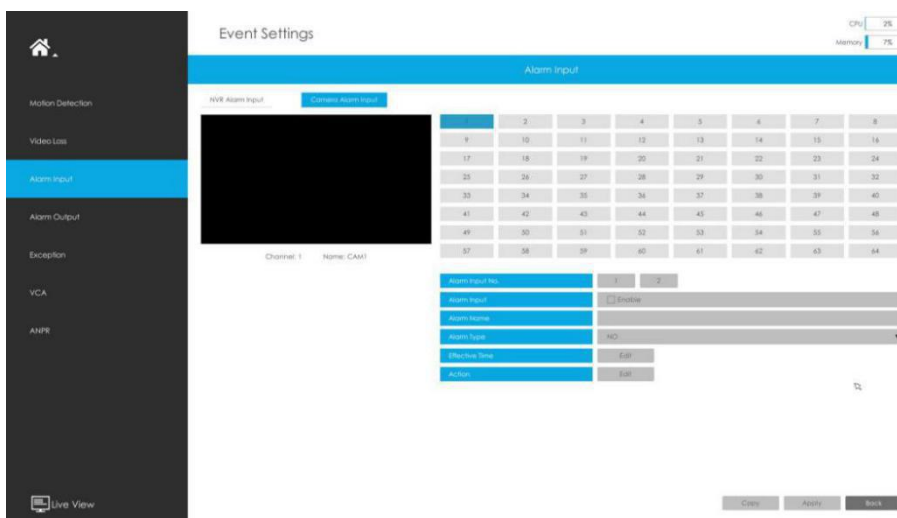
**Step 4: Copy alarm input settings to other input interface by clicking**  .



### 3.8.3.2 Camera Alarm Input

Milesight NVRs support configuring the Alarm Input of Milesight cameras directly.

**Step 1. Set Alarm Input Number, Enable Alarm Input, Set Alarm Name and Alarm Type**



**Alarm Input No.:** The channel which has input signal.

**Alarm Input:** Click "Enable" to enable alarm input of this channel.

**Alarm Name:** Set a name for the alarm.

**Alarm Type:** Choose NO or NC alarm type for the alarm.

**Step 2. Set effective time for Alarm Input by clicking corresponding**  .

### Step 3. Set action for alarm input by clicking corresponding

Edit

**Audible Warning:** NVR will trigger an audible beep when camera alarm is triggered.

User can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

**Email Linkage:** NVR will send an email to the address you set before.

User can set effective schedule as following two ways:

① Select the operation type: Email or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

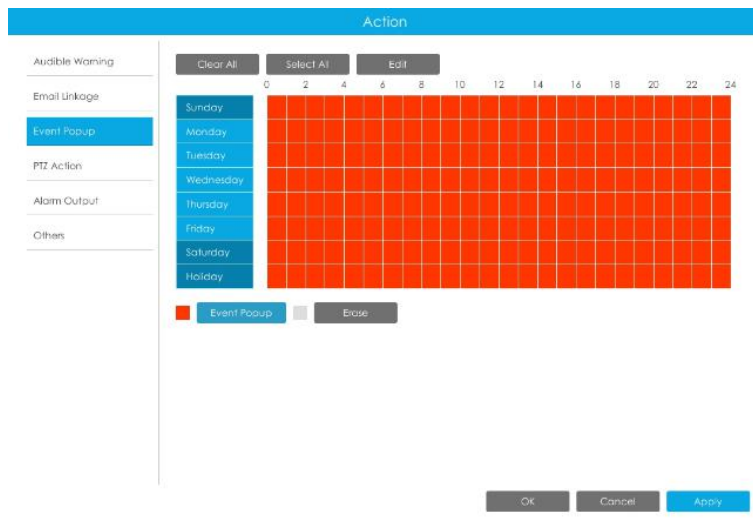
**Triggered Interval:** The effective interval between two actions when event triggered.

**Event Popup:** Trigger alarm screen popup to full-screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

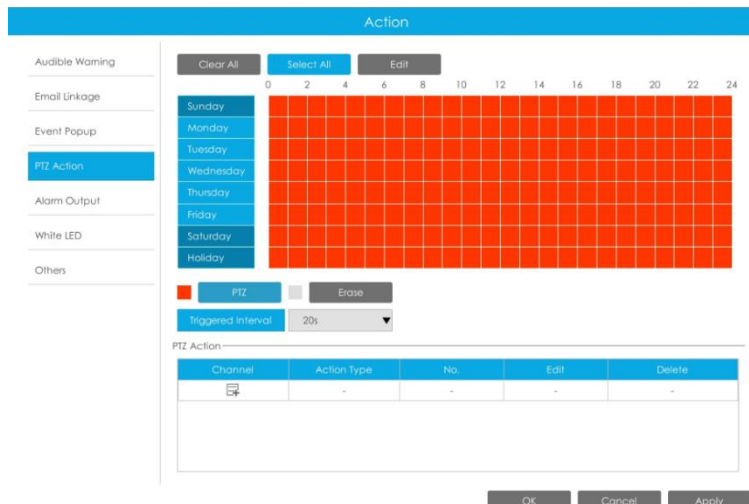


**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**. User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.


② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.





And you can add PTZ Action by clicking  .



The 'Add PTZ Action' dialog box contains three dropdown menus: 'Channel' set to '1', 'Action Type' set to 'Preset', and 'No.' set to '1'. At the bottom are 'OK' and 'Cancel' buttons.

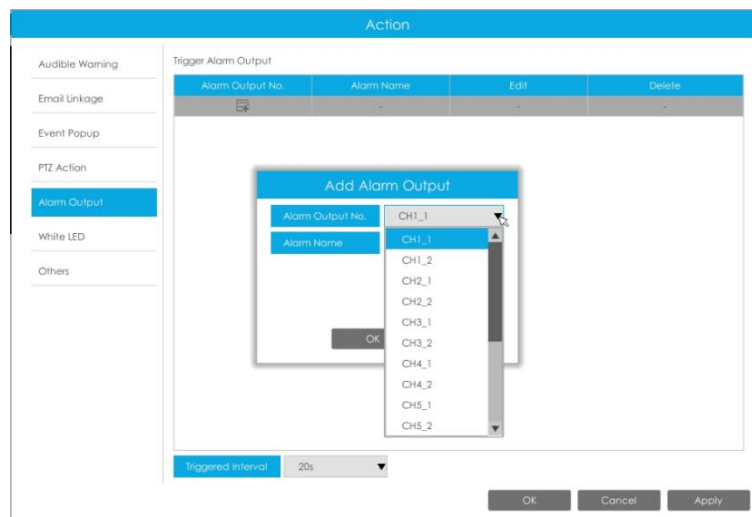
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



The 'Action' configuration interface shows a sidebar with 'Alarm Output' selected. The main area displays a table for 'Trigger Alarm Output' with columns for 'Alarm Output No.', 'Alarm Name', 'Edit', and 'Delete'. An 'Add Alarm Output' dialog is open, showing a list of alarm outputs (CH1\_1 to CH5\_2) and a 'Triggered Interval' set to '20s'. 'OK', 'Cancel', and 'Apply' buttons are visible at the bottom.

**White LED:** Trigger White LED flashing when alarm is triggered.

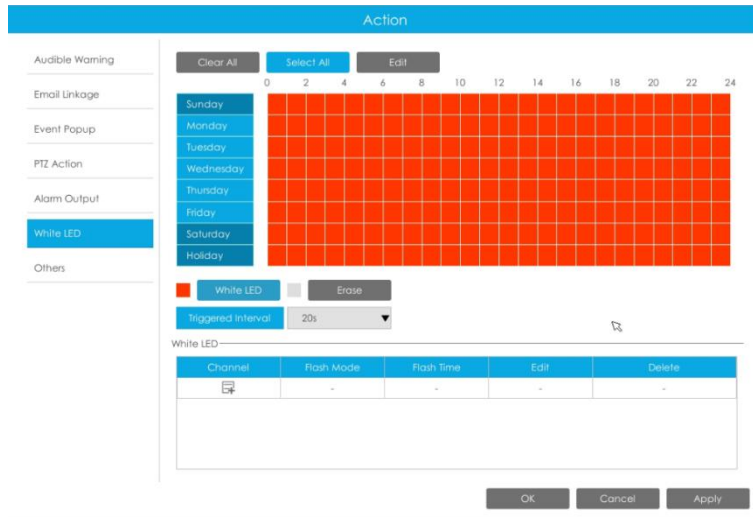
The user can set effective schedule as following two ways:

① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.





And you can add White LED by clicking .

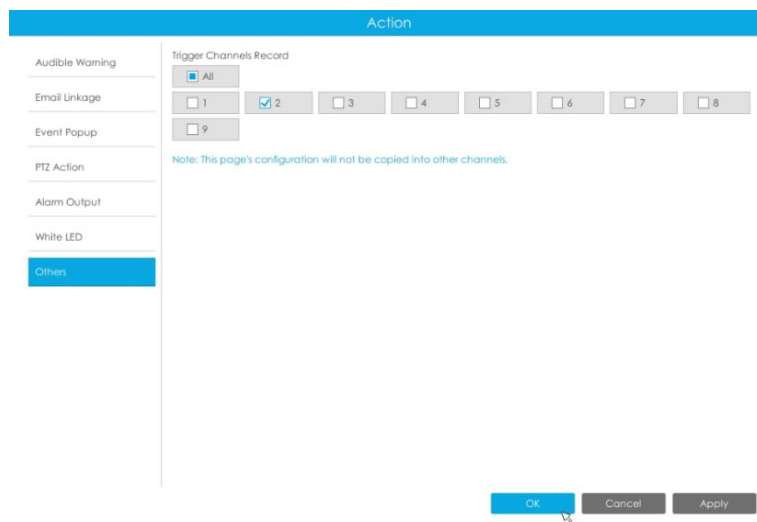


**Channel:** Select the channel which supports this function.

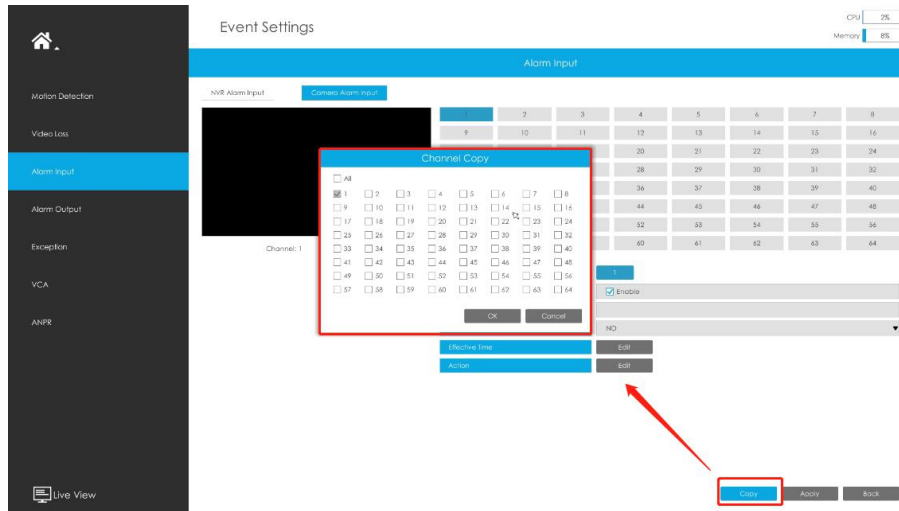
**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.



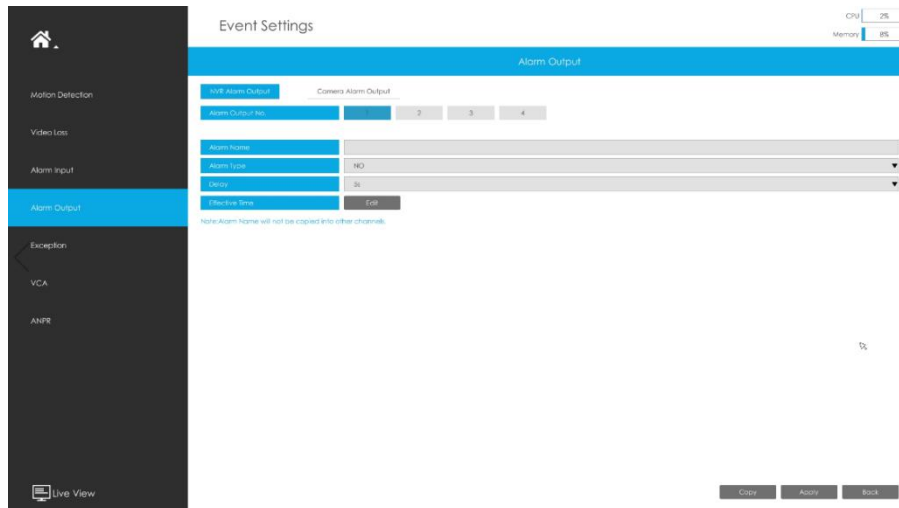
**Step 3:** Copy alarm input settings to other input interface by clicking .



### 3.8.4 Alarm Output

#### 3.8.4.1 NVR Alarm Output

Alarm Output function is supported by MS-N5008-UT, MS-N5016-UT, MS-N7016-UH, MS-N7032-UH, MS-N8032-UH, MS-N8064-UH, MS-N5008-UPT, MS-N5016-UPT, MS-N7016-UPH and MS-N7032-UPH.



**Step 1. Set Alarm output channel, Alarm Name, Alarm Type and Record Channels.**



**Alarm Output No.:** The channel which will output the alarm signal.




**Alarm Name:** Set a name for the alarm.

**Alarm Type:** Choose NO or NC alarm type for the alarm.

**Delay:** The output time for alarm. If the output alarm lasts too long, you can select the Manually Clear to stop it.

**Step 2. Set effective time for alarm output by clicking corresponding** .

The user can set effective schedule as following two ways:

- ① Select the operation type: Alarm Output or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking  or  to set or clear all time settings.
- ② Click  to edit record effective time manually.

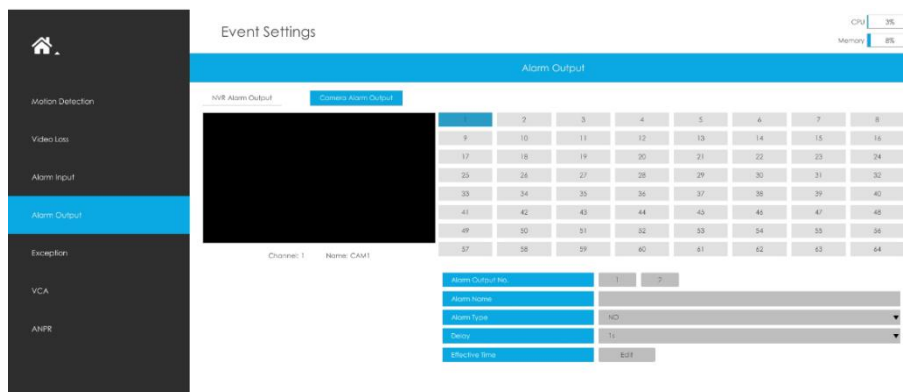


**Step 3: Copy alarm output settings to other output interface by clicking** .

### 3.8.4.2 Camera Alarm Output

Milesight NVRs support the upgrade of Milesight Cameras.

**Step 1. Set Alarm output channel, Alarm Name, Alarm Type and Record Channels.**



**Alarm Output No.:** The alarm output number of the corresponding channel which has input signal.



**Alarm Name:** Set a name for the alarm.

**Alarm Type:** Choose NO or NC alarm type for the alarm.

**Delay:** The output time for alarm. If the output alarm lasts too long, you can select the Manually Clear to stop it.

**Step 2. Set effective time for Alarm Output by clicking corresponding**  .

The user can set effective schedule as following two ways:

① Select the operation type: Alarm Output or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking  or  to set or clear all time settings.

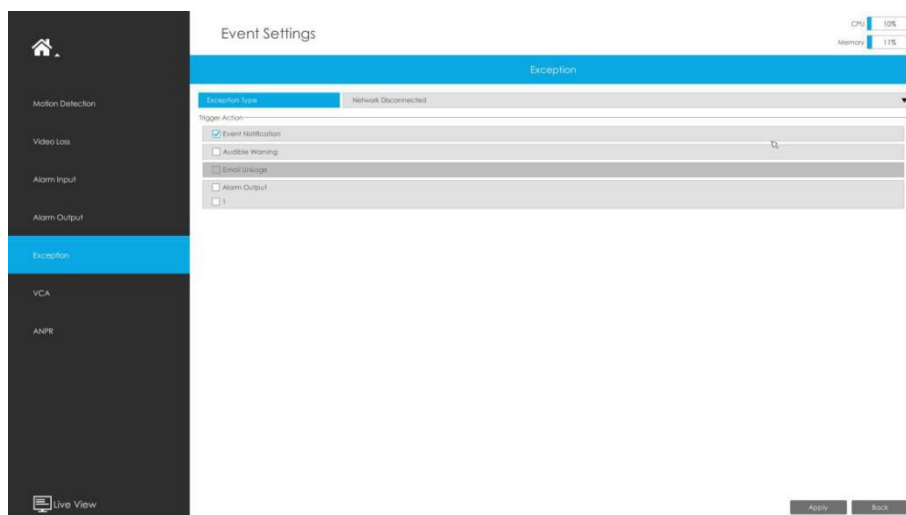
② Click  to edit record effective time manually.



**Step 3: Copy alarm output settings to other output interface by clicking**  .

## 3.8.5 Exception

**Step1. Select Exception Type.**



**Network Disconnected:** Loss of network.

**Disk Full:** Disk full. It usually happens when recycle Mode is OFF.

**Record Failed:** Recording fails, including HDD Failed, HDD Full and so on.

**Disk Error:** Failed to recognize HDD.

**Disk Uninitialized:** Disk is uninitialized.

**No Disk:** There is no storage device.

**Step2. Select Action includes Event Notification, Audible Warning, Email Linkage and Alarm Output.**

**Event Notification:** You will get a notification in Live View if an alarm is triggered.

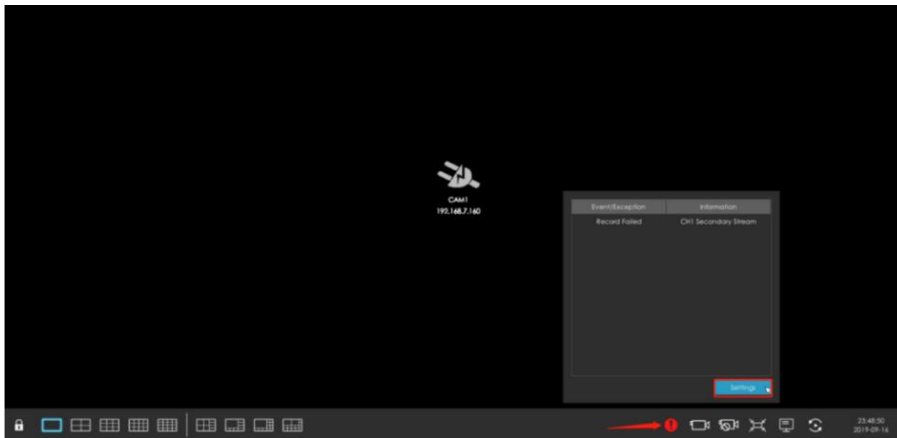
**Audible Warning:** NVR will trigger an audible beep.

**Email Linkage:** An alarm Email will be sent if an alarm is triggered.

**Alarm Output:** NVR will trigger the corresponding Alarm Output.

Trigger Action	
<input checked="" type="checkbox"/>	Event Notification
<input type="checkbox"/>	Audible Warning
<input type="checkbox"/>	Email Linkage
<input type="checkbox"/>	Alarm Output
<input type="checkbox"/>	

The prompt icon will automatically blink in the bottom bar when corresponding event is triggered. And it can be unlocked manually.



### 3.8.6 VCA

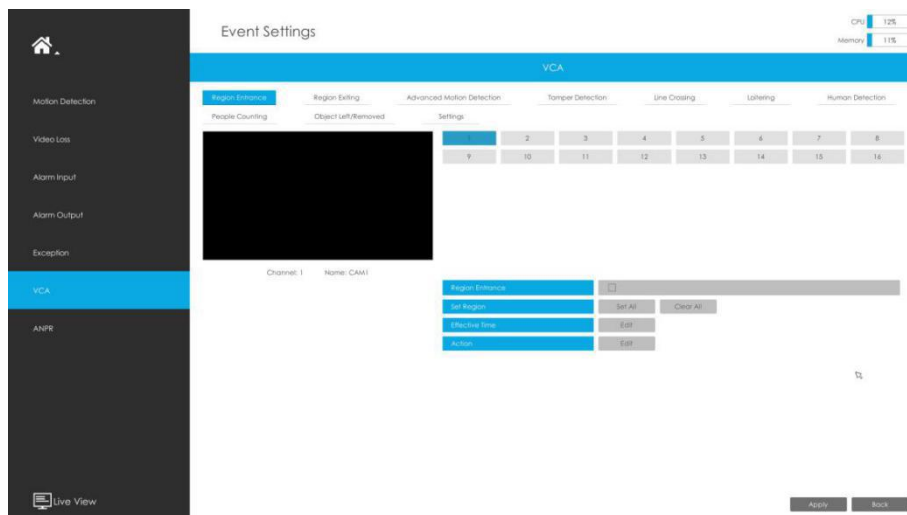
It uses Milesight Video Content Analysis technology which is applied in a wide range of domains including entertainment, health-care, retail, automotive, transport, home automation, safety and security. Milesight VCA provides advanced, accurate smart video analysis for Milesight network cameras. It enhances the performance of network cameras through 10 detection modes which are divided into basic function and advanced function, enabling the comprehensive surveillance function and quicker response of cameras to different monitoring scenes.

**Note:**

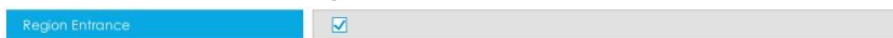
Please input license of selected channel in Settings page to activate VCA first.

#### Region Entrance

Region entrance helps to protect a specific area from potential threat of suspicious person's or object's entrance. An alarm will be triggered when objects enter the selected regions by enabling region entrance.



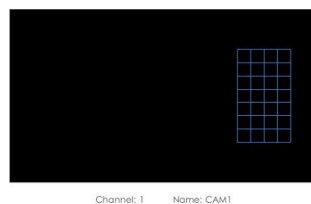
**Step 1. Select channel and enable Region Entrance.**



**Step 2. Set entrance detection region.**

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking **Set All**

or **Clear All**.



**Step 3. Set Effective Time of region entrance by clicking **Edit**.**

NVR receives the alarm when effective time has been set. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.



**Step 4. Set Action for region entrance alarm by clicking **Edit**.**

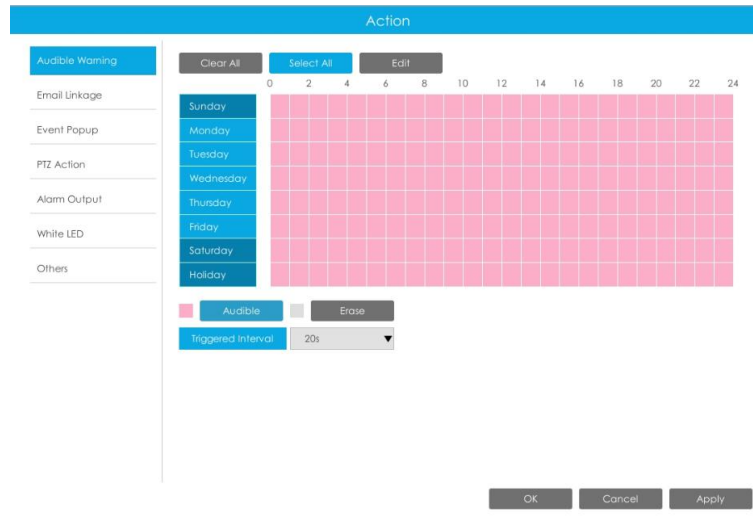
**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

The user can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



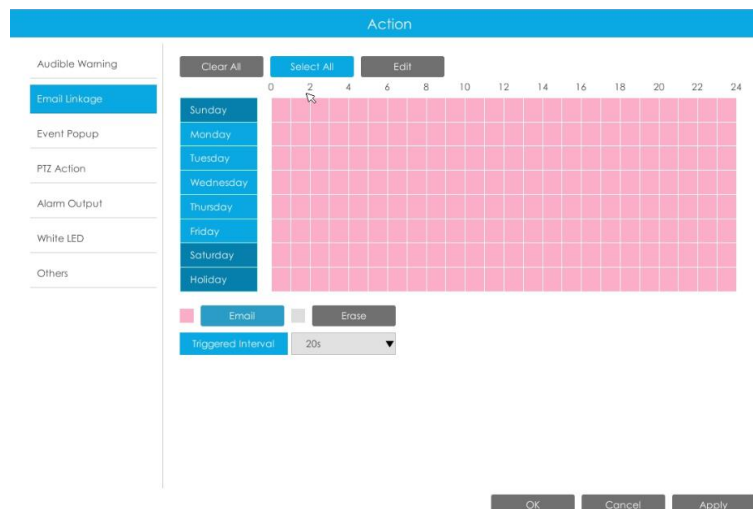
**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

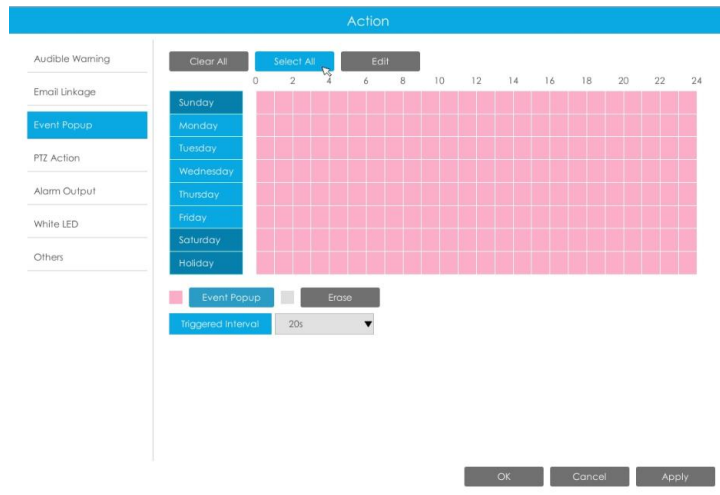


**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



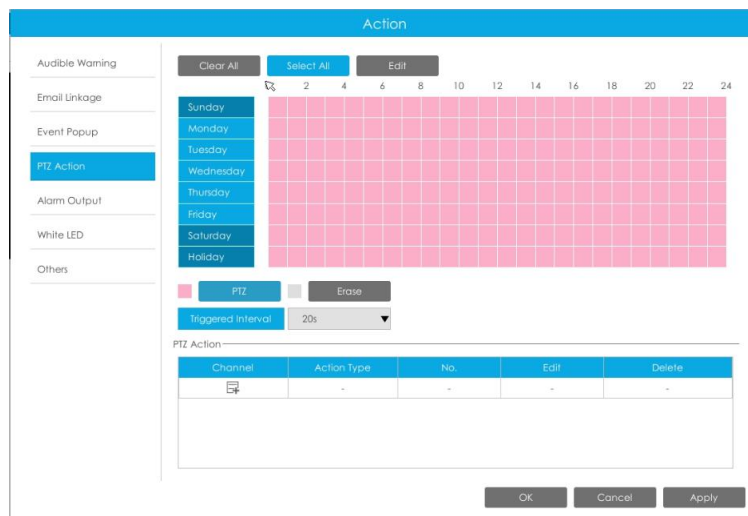
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.


② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.





And you can add PTZ Action by clicking  .



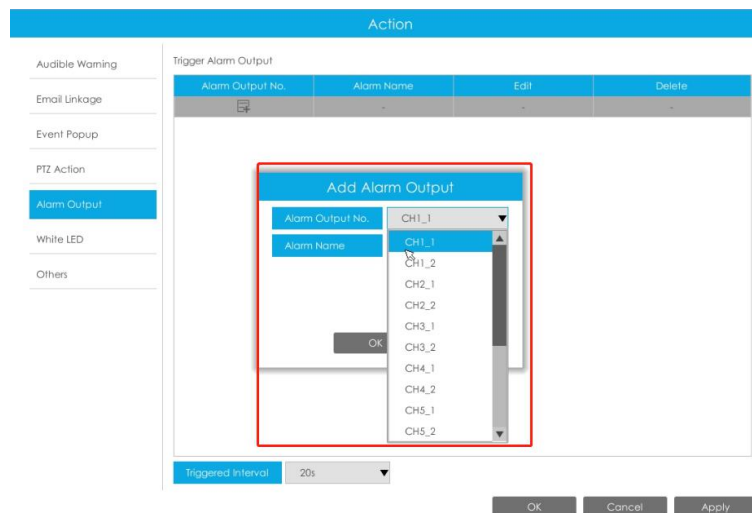
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



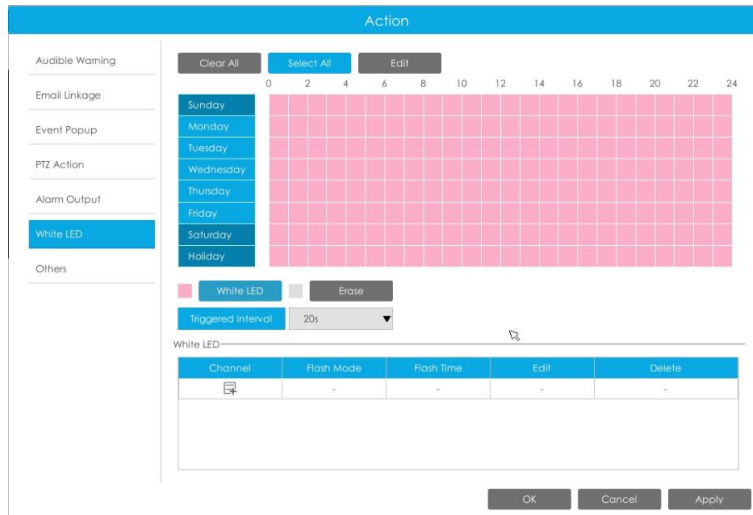
**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

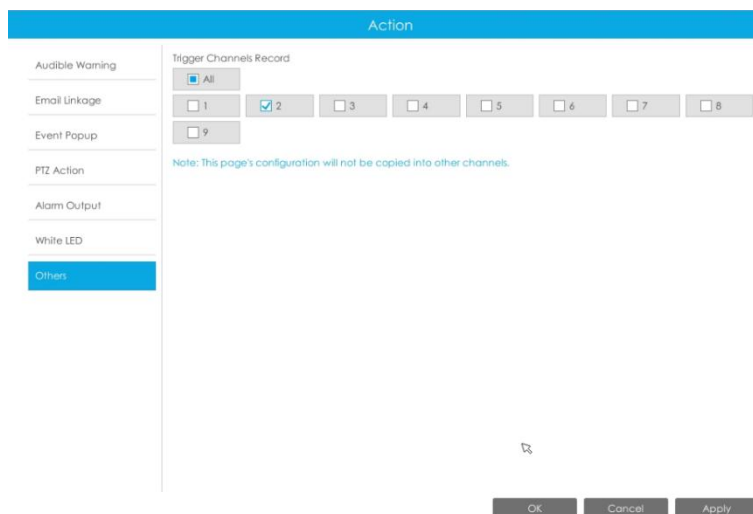


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

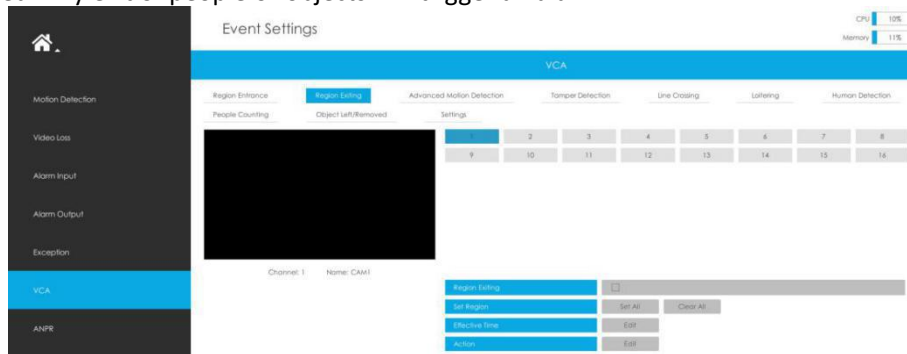
**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.

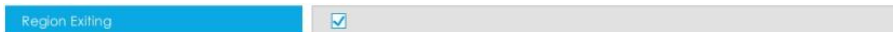


## Region Exiting

Region exiting is to make sure that any person or object won't exit the area that is being monitored. Any exit of people or objects will trigger an alarm.



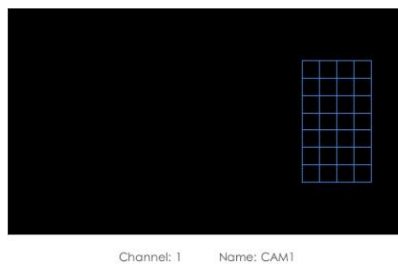
**Step 1. Select channel and enable Region Exiting.**



**Step 2. Set exit detection region.**

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking **Set All**

or **Clear All**.



**Step 3. Set Effective Time of region exiting by clicking **Edit**.**

NVR receives the alarm when effective time has been set. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.



**Step 4. Set Action for region exiting alarm by clicking **Edit**.**

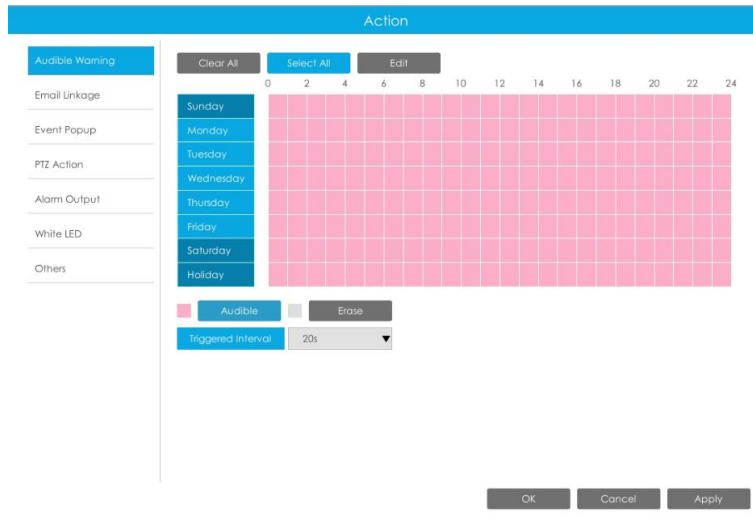
**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

The user can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



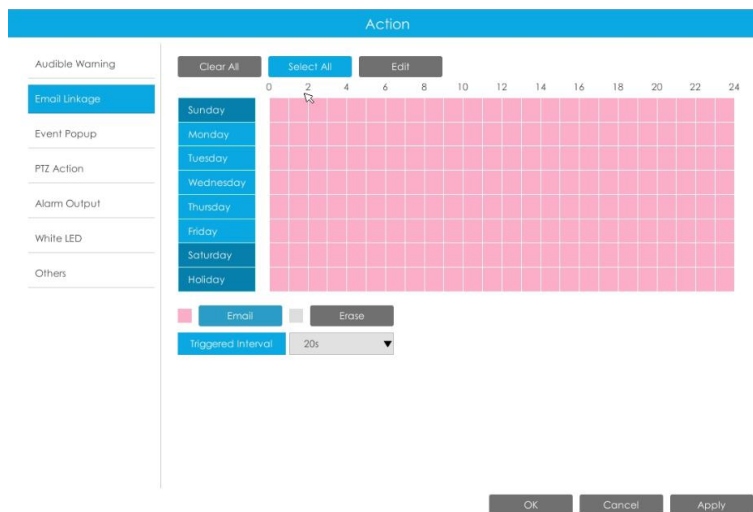
**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

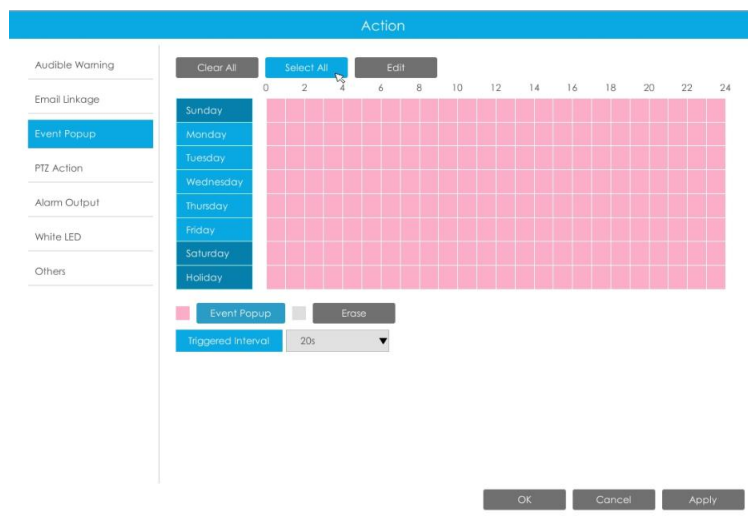


**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

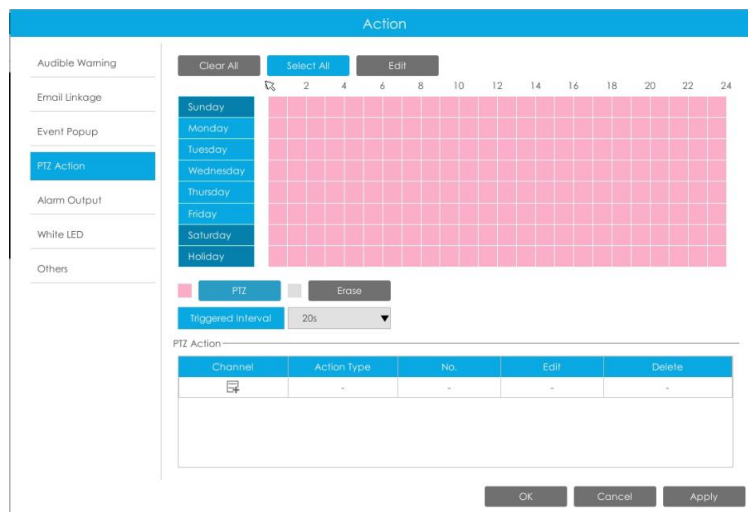


**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**. User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking  .



The 'Add PTZ Action' dialog box contains three dropdown menus: 'Channel' set to '1', 'Action Type' set to 'Preset', and 'No.' set to '1'. At the bottom are 'OK' and 'Cancel' buttons.

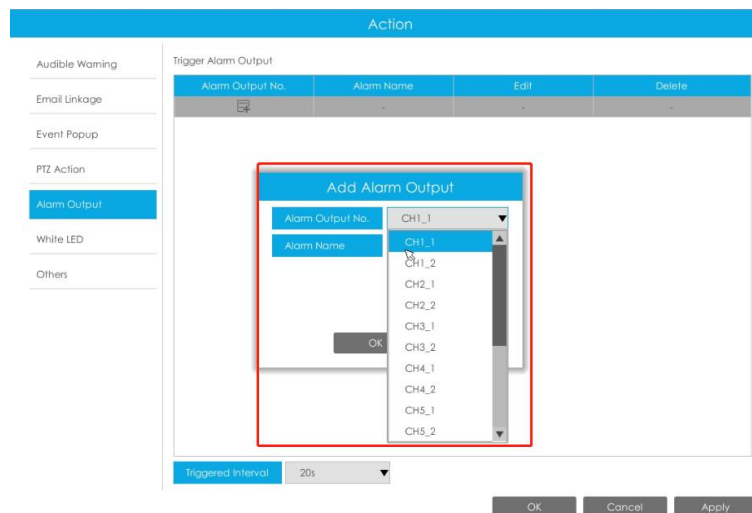
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



The 'Action' configuration interface shows a sidebar with 'Alarm Output' selected. The main area displays a table for 'Trigger Alarm Output' with columns for 'Alarm Output No.', 'Alarm Name', 'Edit', and 'Delete'. An 'Add Alarm Output' dialog box is open, showing a list of alarm outputs: CH1\_1, CH1\_2, CH2\_1, CH2\_2, CH3\_1, CH3\_2, CH4\_1, CH4\_2, CH5\_1, and CH5\_2. The 'Triggered Interval' is set to 20s. At the bottom are 'OK', 'Cancel', and 'Apply' buttons.

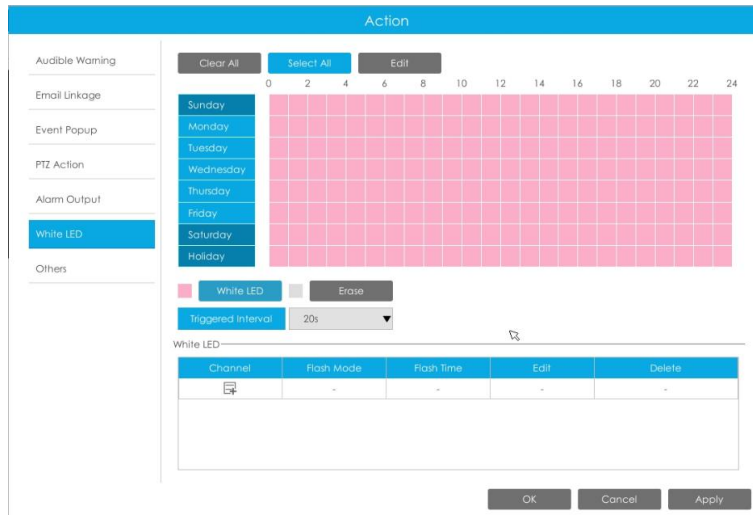
**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

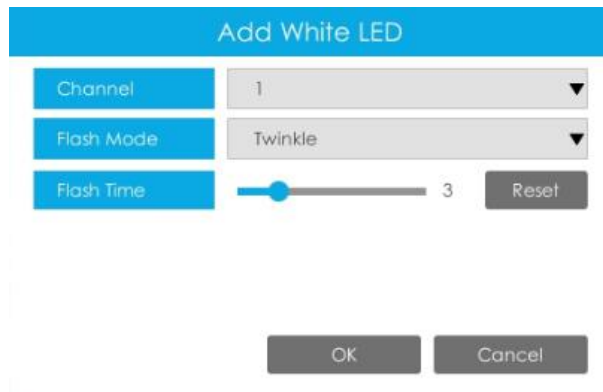
① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

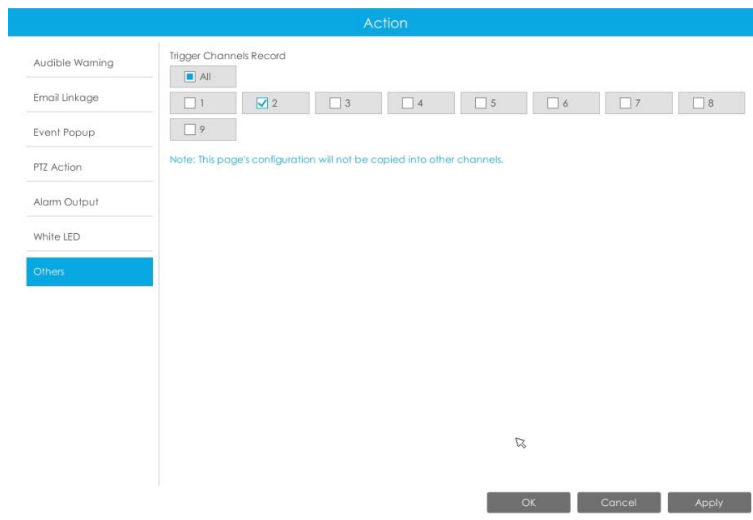


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

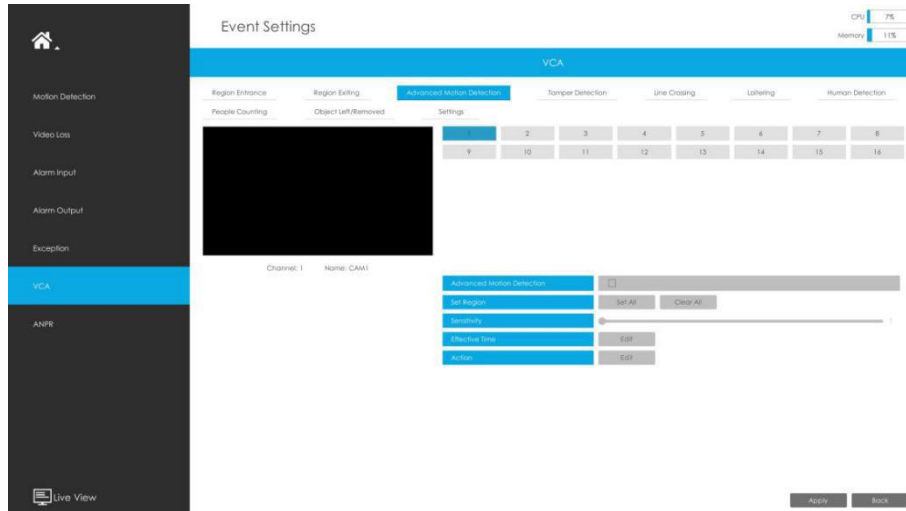
**Others:** Trigger other channels record when alarm is triggered.



## Advanced Motion Detection

Different from traditional motion detection, Milesight advanced motion detection can filter out “noise” such as lighting changes, natural tree movements, etc. When an object moves in the selected area, it will trigger alarm.

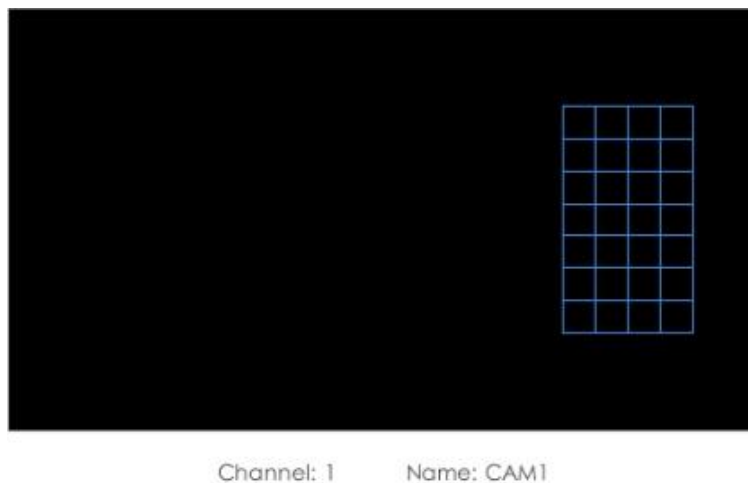
### Step 1. Select channel and enable Advanced Motion Detection.



### Step 2. Set advanced motion detection region.

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking **Set All**

or **Clear All**.



### Step 3. Set Sensitivity.

The sensitivity can be configured to detect various movement according to different requirements. When the level of sensitivity is low, slight movement won't trigger the alarm.



### Step 4. Set Effective Time of advance motion detection by clicking **Edit**.

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.





**Step 5. Set Action for advanced motion detection alarm by clicking **Edit**.**

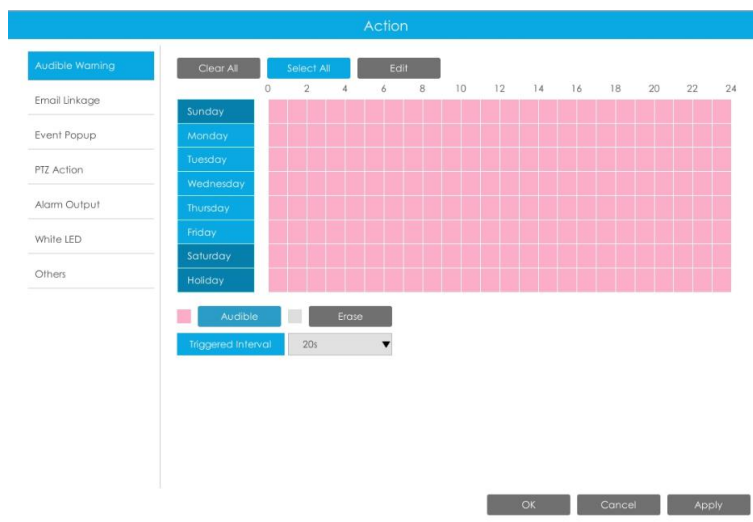
**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

The user can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



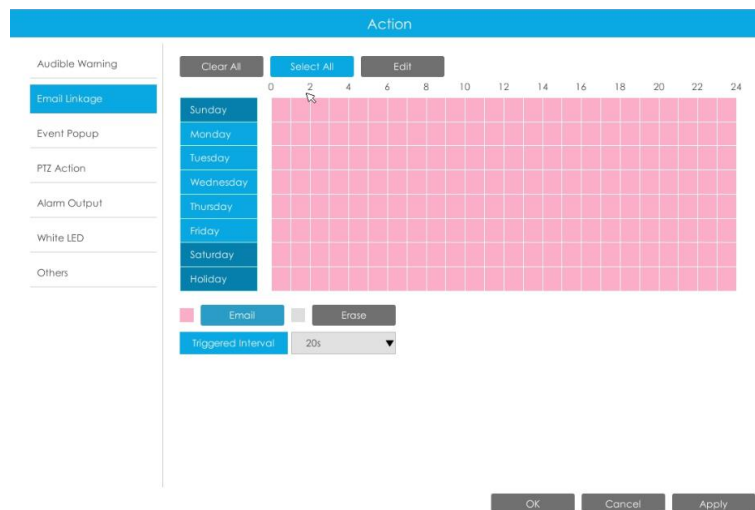
**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

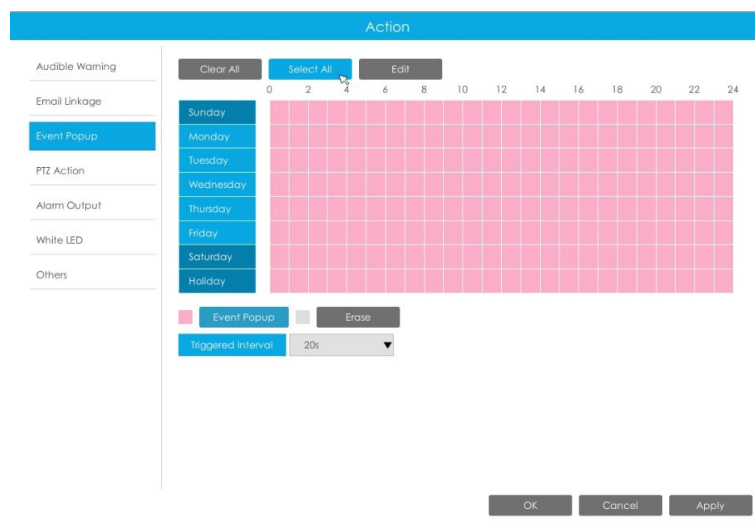


**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



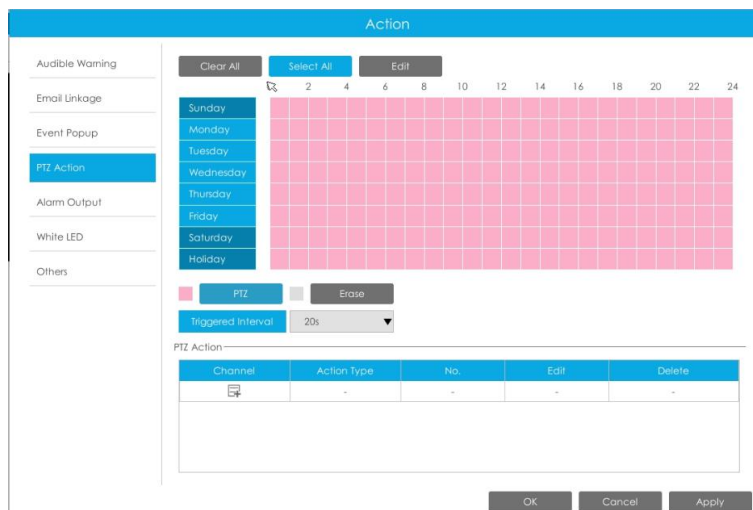
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking .



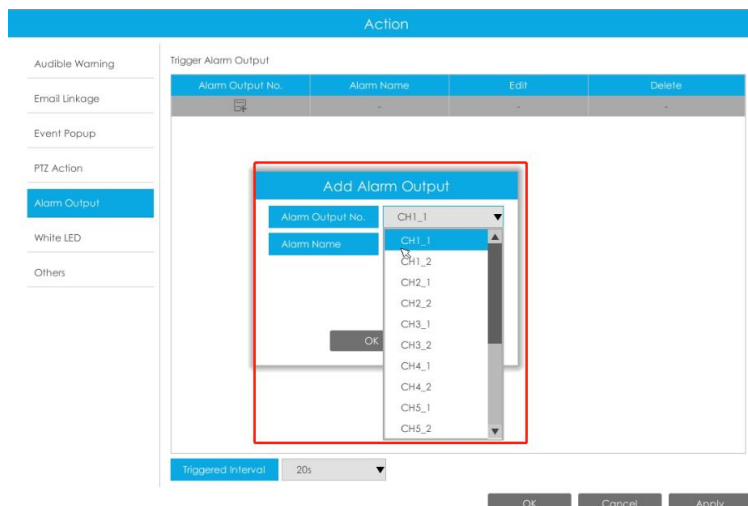
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.

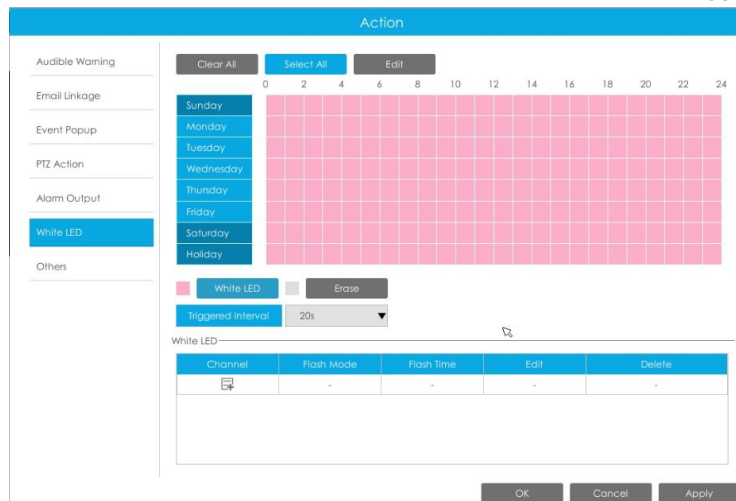


**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

- ① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.
- ② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

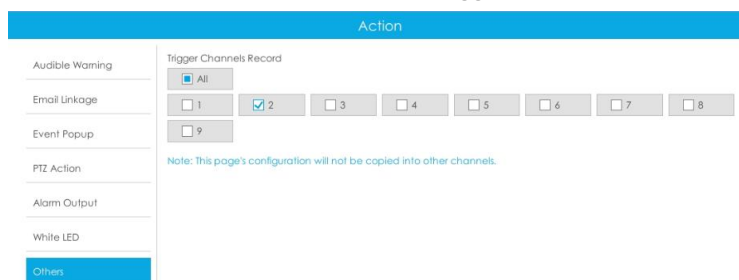


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

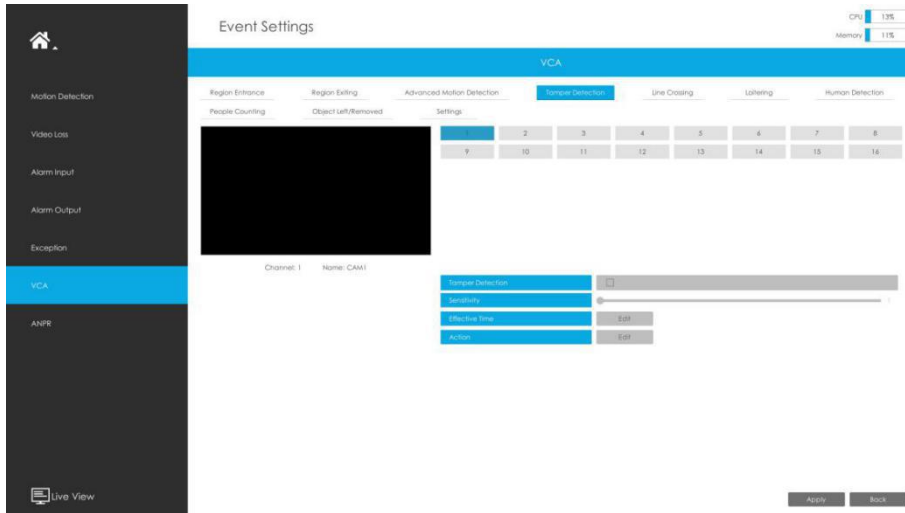
**Others:** Trigger other channels record when alarm is triggered.



## Tamper Detection

Tamper Detection is used to detect possible tampering like the camera being unfocused, obstructed or moved. This functionality alerts security staff immediately when any above-mentioned actions occur.

### Step 1. Select channel and enable Tamper Detection.



### Step 2. Set Sensitivity.

The sensitivity can be configured to detect various movement according to different requirements. When the level of sensitivity is low, slight movement won't trigger the alarm.



### Step 3. Set Effective Time of tamper detection by clicking Edit.

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

Select All or Clear All to set or clear all time settings.



### Step 4. Set Action for tamper detection alarm by clicking Edit.

**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

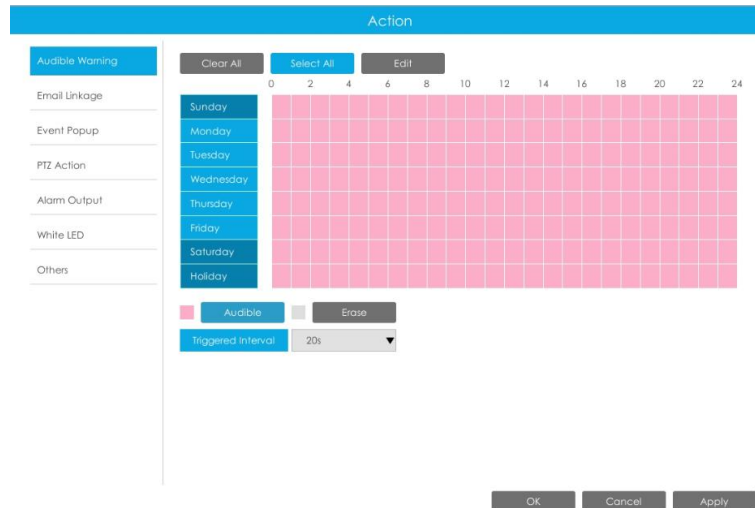
The user can set effective schedule as following two ways:

- ① Select the operation type: Audible or Erase. Then drag a square on the time table for time

setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



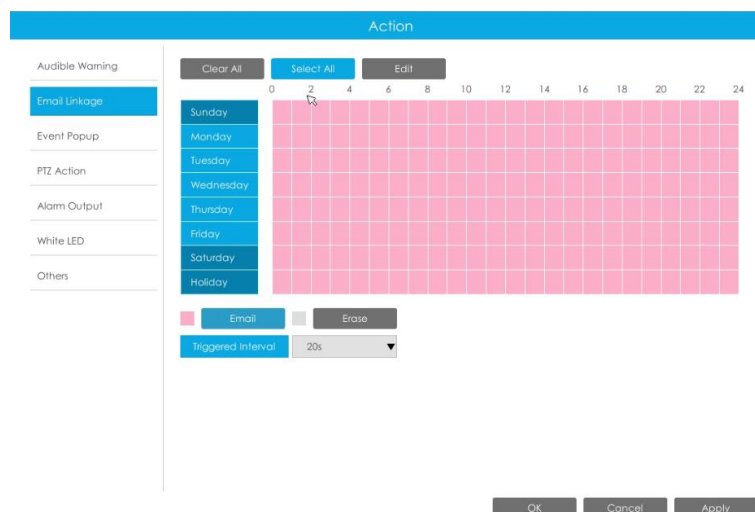
**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

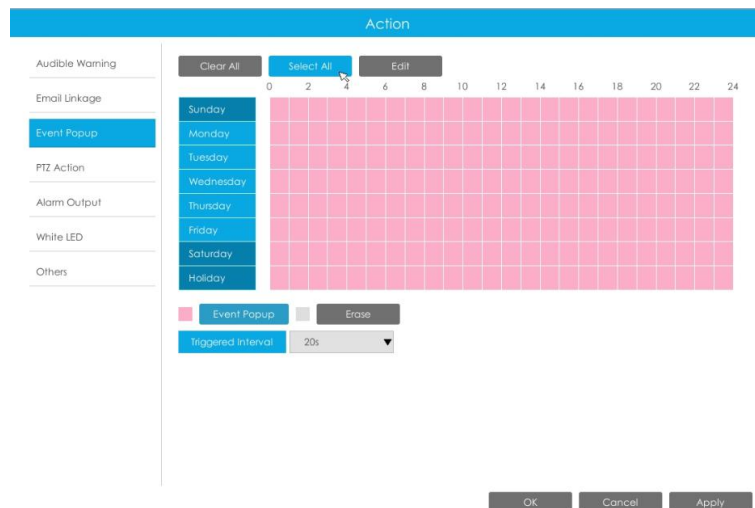


**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



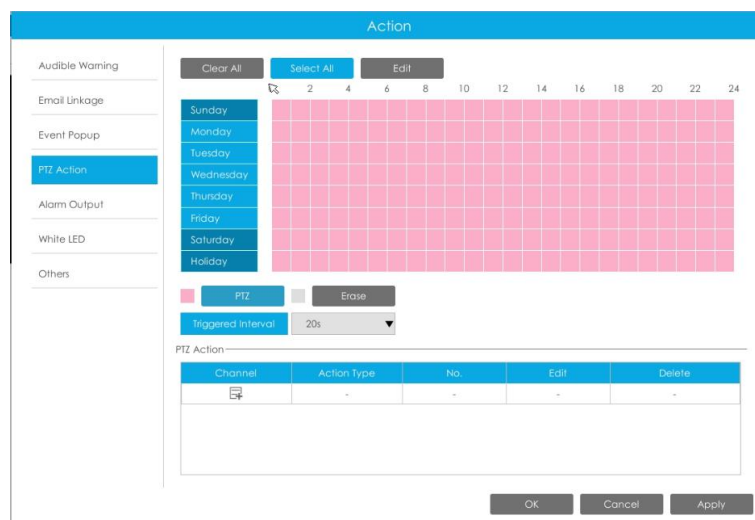
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking .

**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.

**White LED:** Trigger White LED flashing when alarm is triggered.

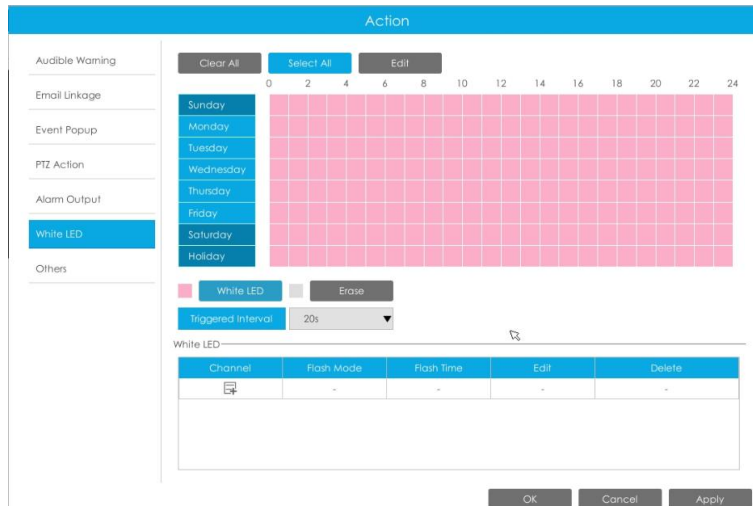
The user can set effective schedule as following two ways:

① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

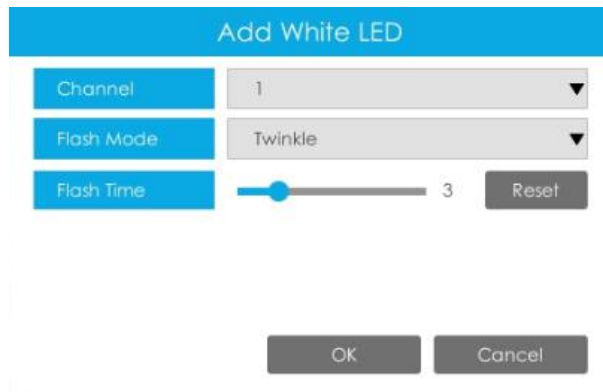
② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.





And you can add White LED by clicking .

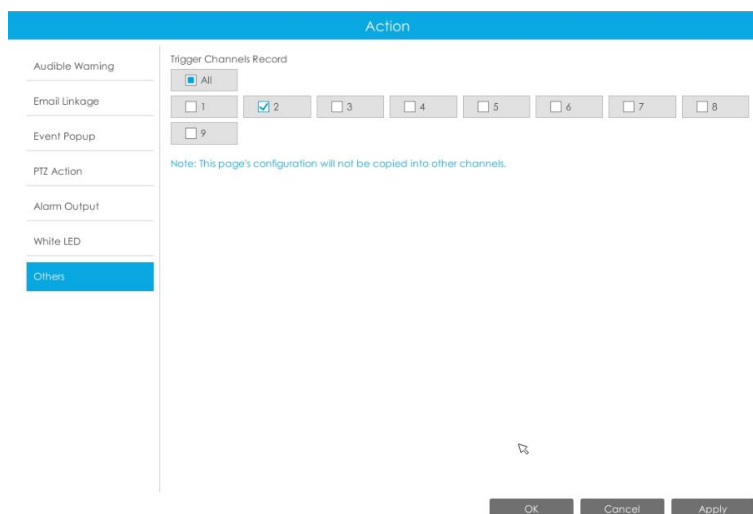


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

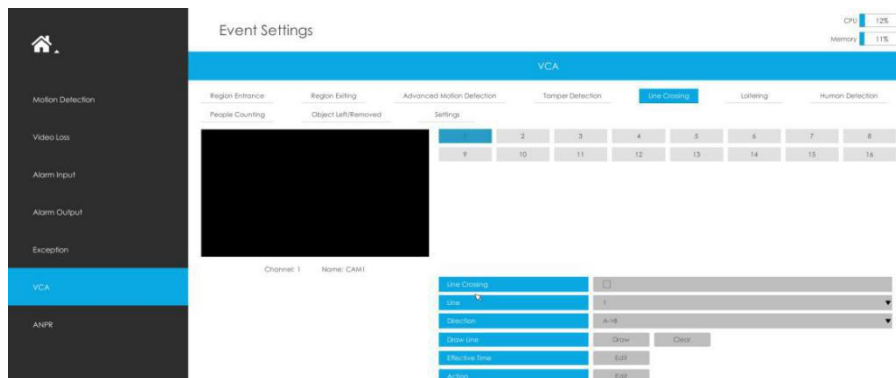
**Others:** Trigger other channels record when alarm is triggered.



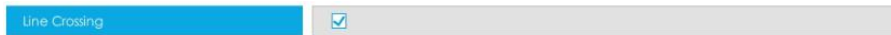
**Line Crossing**

Line Crossing detection is designed to work in most indoor and outdoor environment. An event will be triggered every time when the camera detects objects crossing a defined virtual line.

Settings steps are shown as follows:

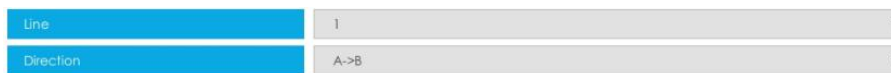


**Step 1. Select channel and enable Line Crossing.**

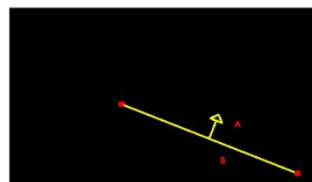


**Step 2. Choose detection line number and define its direction.**


It allows to set up to four lines at a time. There are three direction modes to choose for triggering alarm. "A→B" means when there is any object crossing the line from the "A" side to the "B" side, the alarm will be triggered. "B→A" vice versa. "A ↔ B" means that the alarm will be triggered when objects cross line from either side.



**Step 3. Draw detection lines.**



Channel: 1 Name: CAM1

**Step 4. Set Effective Time of line crossing by clicking .**

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

 or  to set or clear all time settings.



### Step 5. Set Action for line crossing alarm by clicking

Edit

**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

The user can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

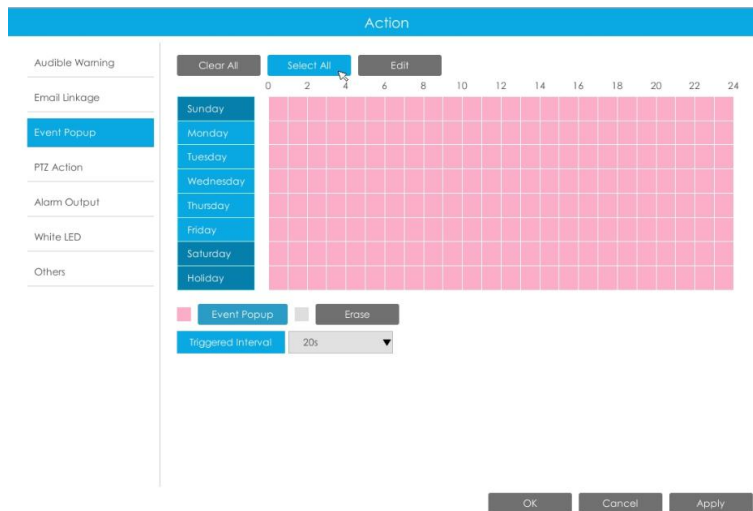
**Triggered Interval:** The effective interval between two actions when event triggered.

**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



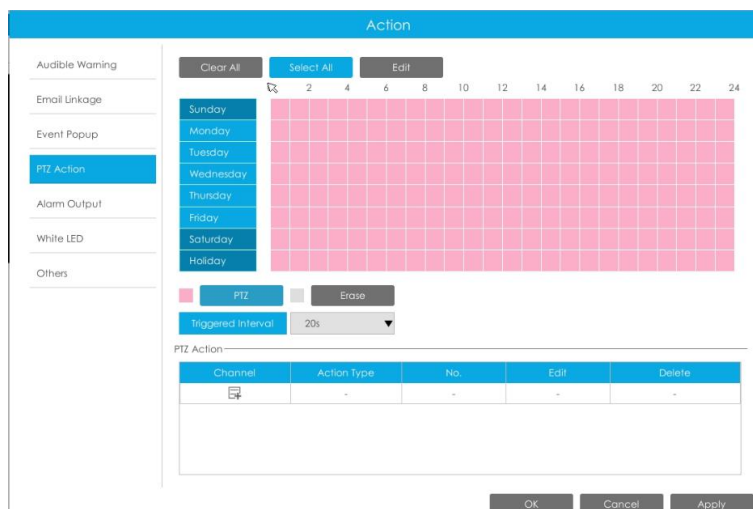
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking  .



The 'Add PTZ Action' dialog box contains three dropdown menus: 'Channel' set to '1', 'Action Type' set to 'Preset', and 'No.' set to '1'. At the bottom are 'OK' and 'Cancel' buttons.

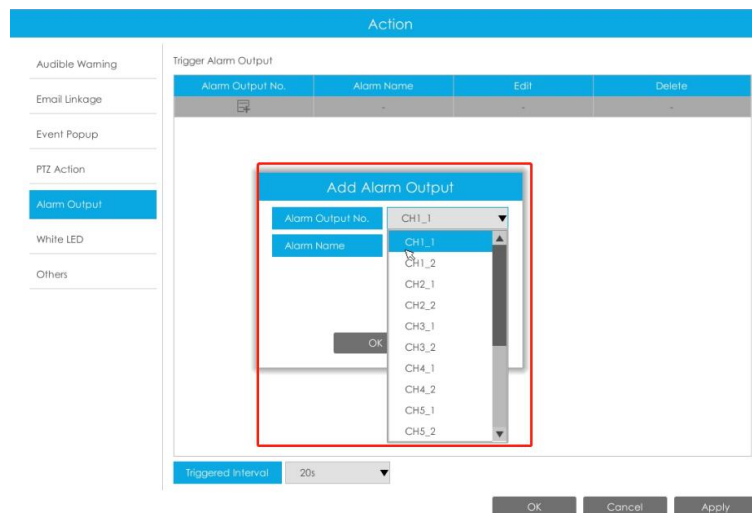
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



The 'Action' configuration interface shows a sidebar with 'Alarm Output' selected. The main area displays a table for 'Trigger Alarm Output' with columns for 'Alarm Output No.', 'Alarm Name', 'Edit', and 'Delete'. An 'Add Alarm Output' dialog is open, showing a list of alarm outputs: CH1\_1, CH1\_2, CH2\_1, CH2\_2, CH3\_1, CH3\_2, CH4\_1, CH4\_2, CH5\_1, and CH5\_2. The 'Triggered Interval' is set to 20s. 'OK', 'Cancel', and 'Apply' buttons are at the bottom.

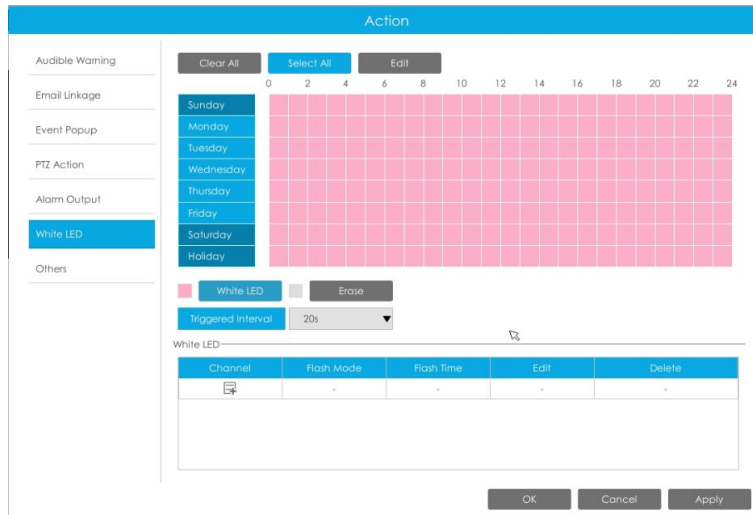
**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

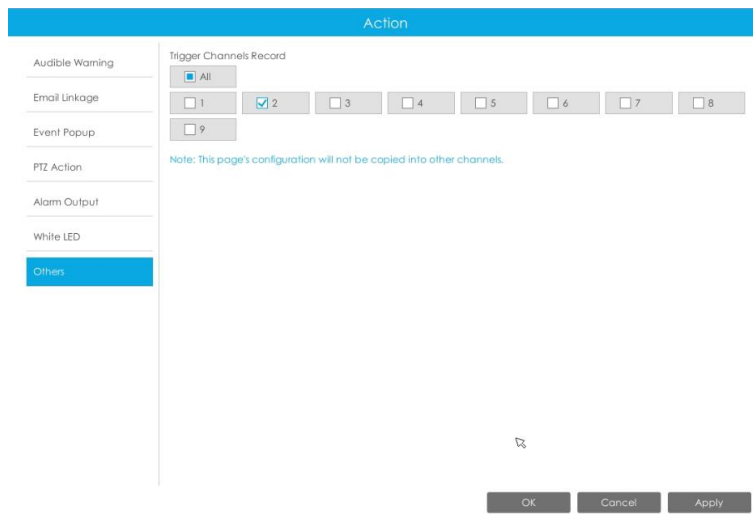


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

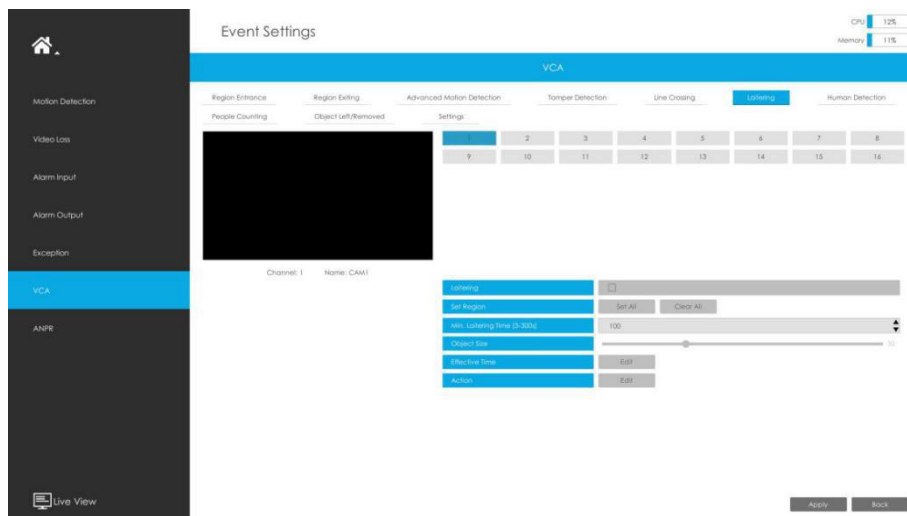
**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.

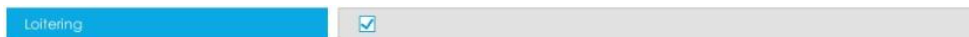


## Loitering

When objects are loitering in a defined area for a specific period of time, it would trigger an alarm.



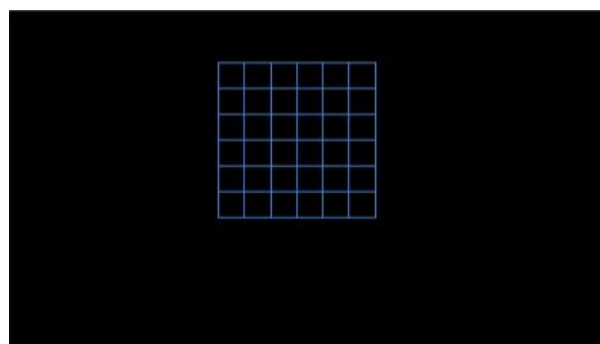
### Step 1. Select channel and enable Loitering.



### Step 2. Set Loitering detected region.

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking **Set All**

and **Clear All**.



Channel: 1 Name: CAM1

### Step 3. Set Min. Loitering Time and Object Size.

After setting minimum loitering time from 3s to 1800s, any objects loitering in the selected area over the minimum loitering time will trigger the alarm. Also Milesight loitering allows to set "Object Size". Only the object bigger than the set size will trigger the alarm.



### Step 4. Set Effective Time of loitering by clicking **Edit**.

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.



**Step 5. Set Action for loitering alarm by clicking **Edit**.**

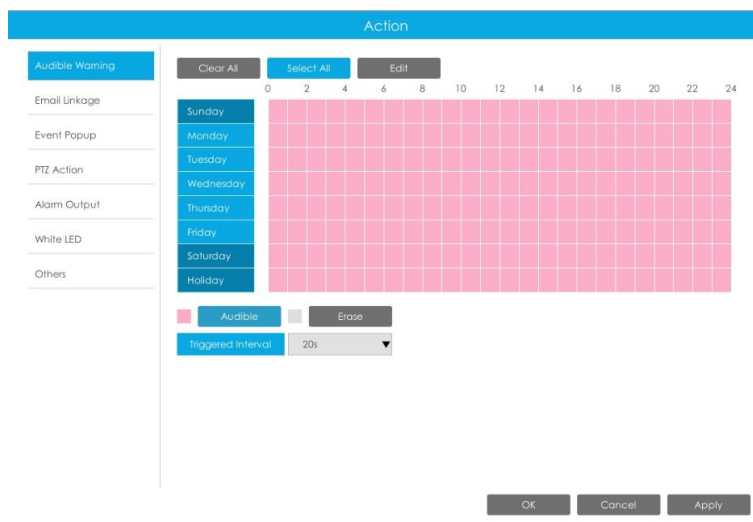
**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

The user can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



**Email Linkage:** NVR will send an email to the address you set before.

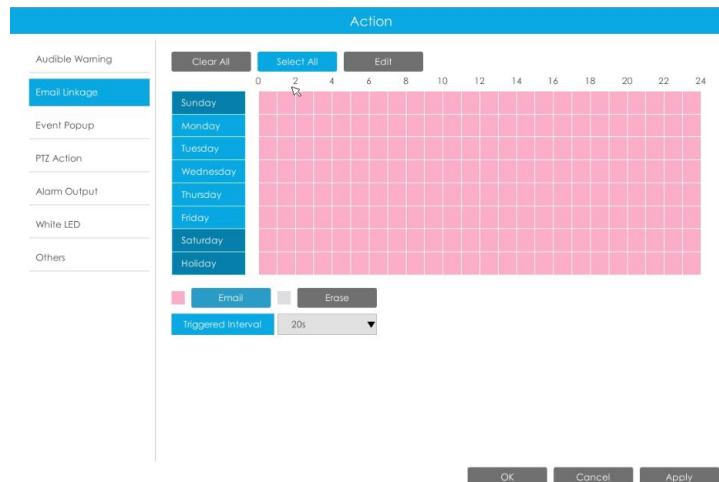
The user can set effective schedule as following two ways:

① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.



**Triggered Interval:** The effective interval between two actions when event triggered.

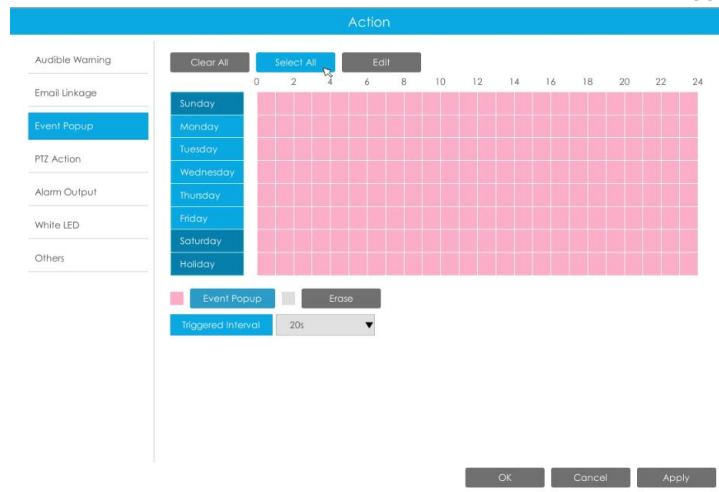


**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



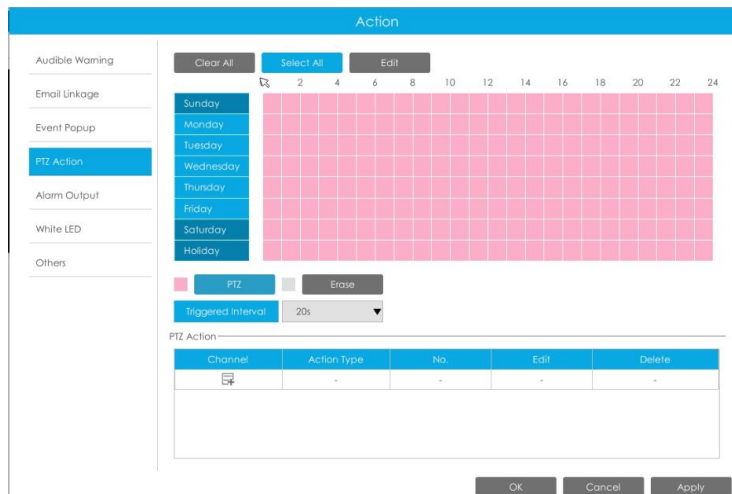
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Presets and Patrol**.

User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking .



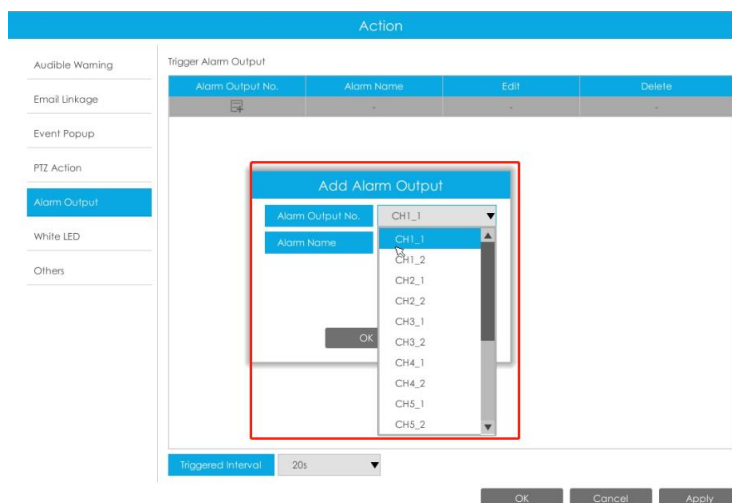
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.

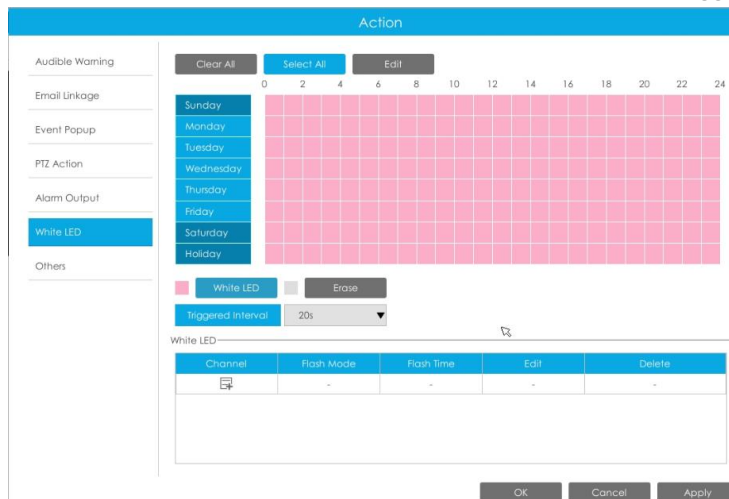


**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

- ① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.
- ② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

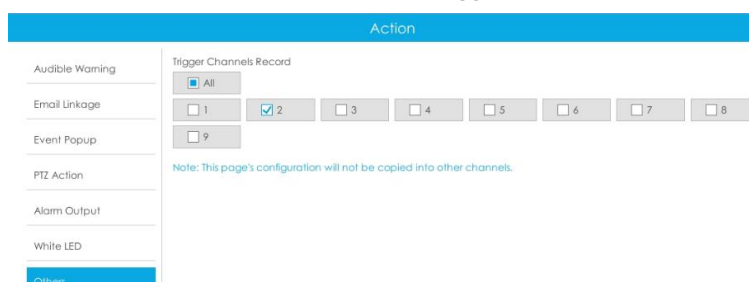


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

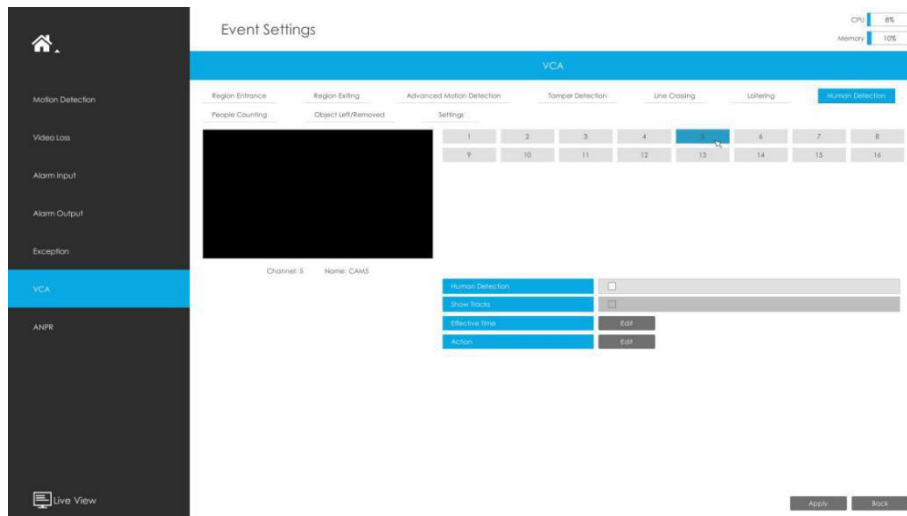
**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.

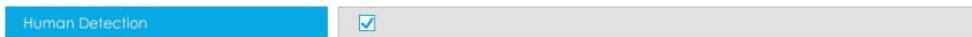


## Human Detection

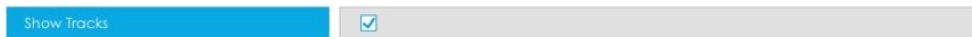
Human detection is used for figuring out whether an object is a human or not.



**Step 1. Select channel and enable Human Detection.**



**Step 2. Enable Show Tracks or not.**



**Step 3. Set Effective Time of human detection by clicking **Edit**.**

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.



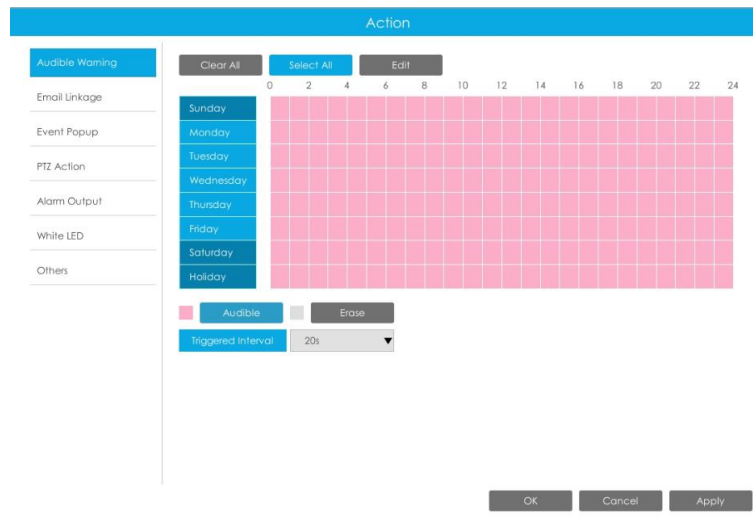
**Step 4. Set Action for human detection alarm by clicking **Edit**.**

**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

The user can set effective schedule as following two ways:

- ① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.
- ② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



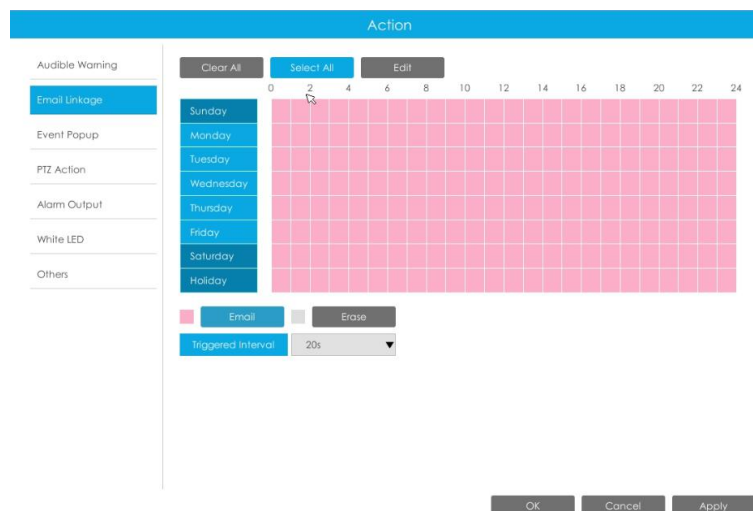
**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

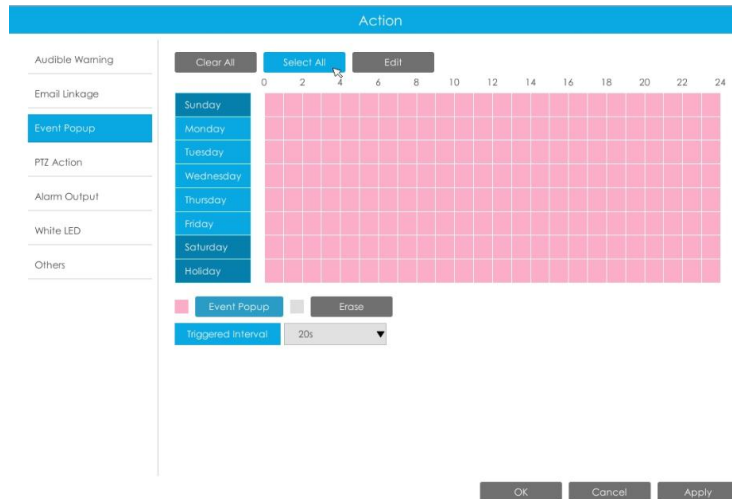


**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



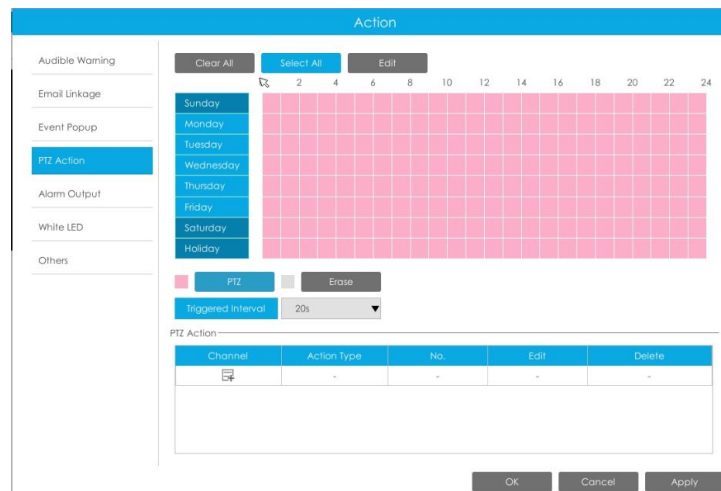
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking .



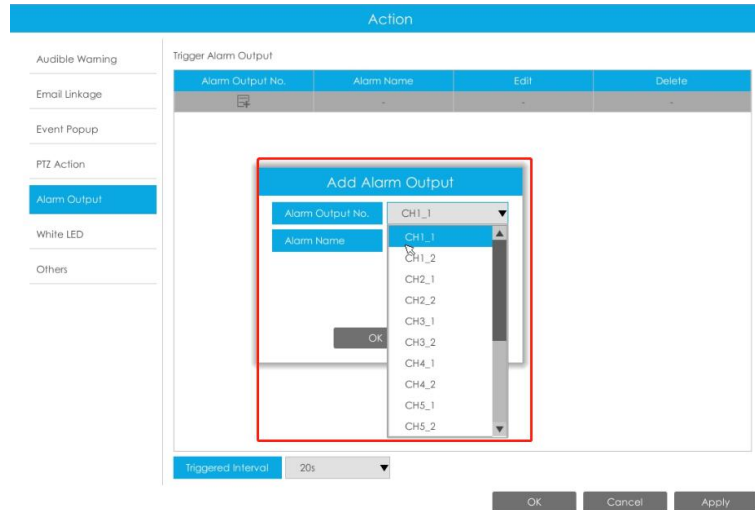
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



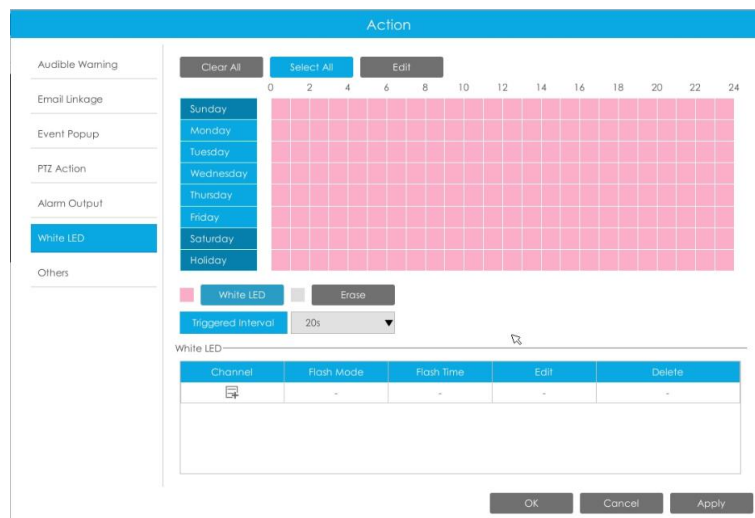
**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

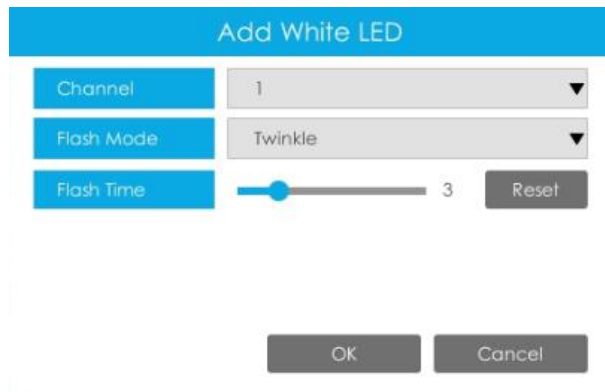
① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

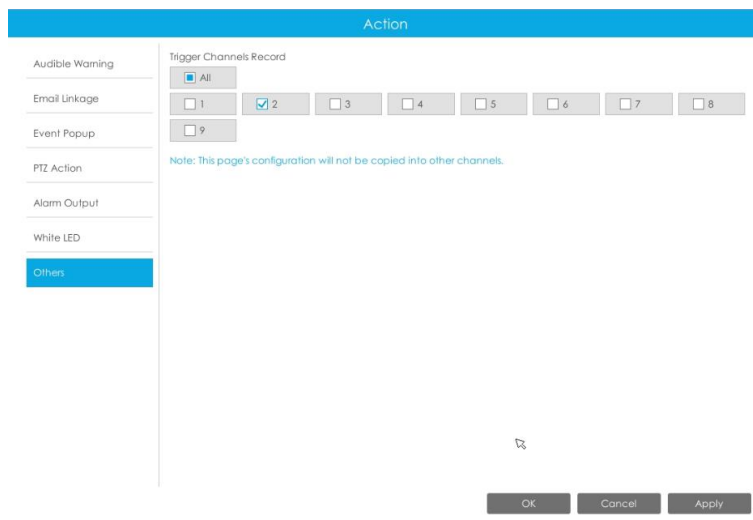


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

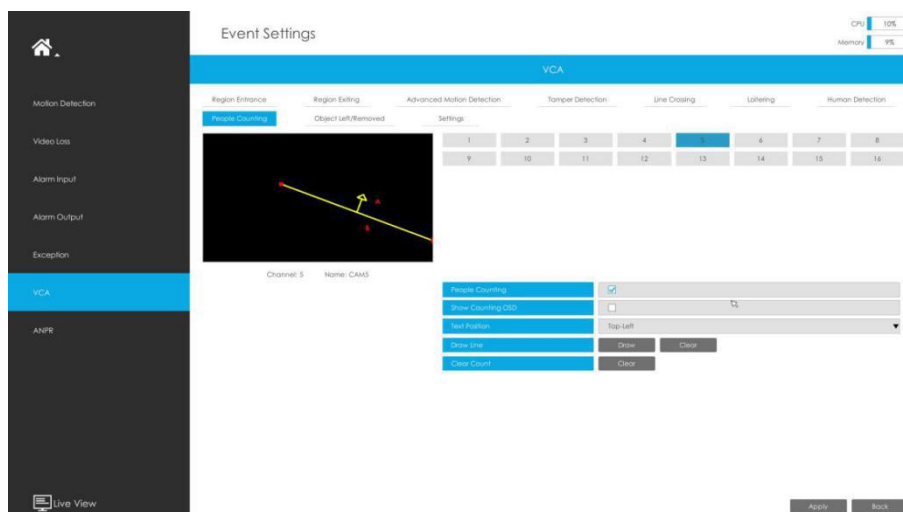
**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.



## People Counting

People counting is able to count that how many people enter or exit during the setting period.





**Step 1. Select channel and enable People Counting.**

People Counting

**Step 2. Set counting OSD.**

It shows the number of counted people, including in and out number.

Besides, you can clear count by clicking .

Show Counting OSD

Text Position: Top-Left

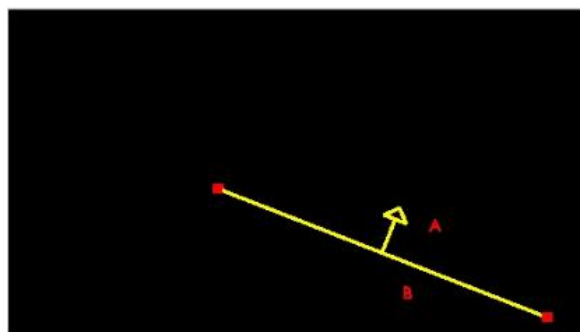
Draw Line

Clear Count

**Note:**

- To enable people counting, human detection should be enabled first.
- Crossing along the direction of the arrow will record as "In", opposite is "Out".

**Step 3. Draw detection line.**



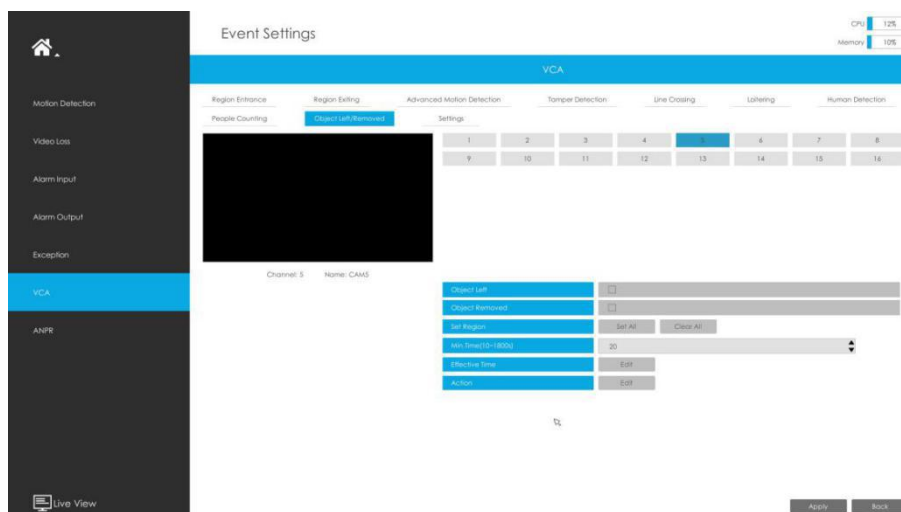
**Object Left/Removed(Optional)**

Object Left can detect and prompt an alarm if an object is left in a pre-defined region. Object Removed can detect and prompt an alarm if an object is removed from a pre-defined region.

**Note:**

- Object Left/Removed is optional, if you need this function, please contact Milesight sales first.
- You need to upgrade the NVR to V7x.9.0.4-r2 or above to support this function.

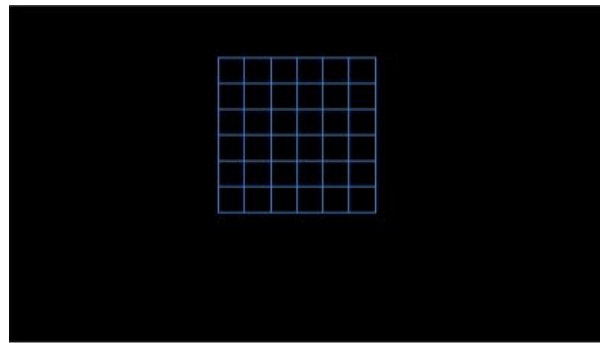
**Step 1. Select channel and enable Object Left or Object Removed(Or you can enable both features at the same time).**



**Step 2. Set detection region.**

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking **Set All**

and **Clear All**.



Channel: 1      Name: CAM1

**Step 3. Set Min. Time.**

After setting minimum time from 3s to 1800s, any objects are left in the selected area or removed from the selected area over the minimum time will trigger the alarm.



**Step 4. Set Effective Time of object left/removed by clicking **Edit****.

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.



**Step 5. Set Action for object left/removed alarm by clicking **Edit****.

**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

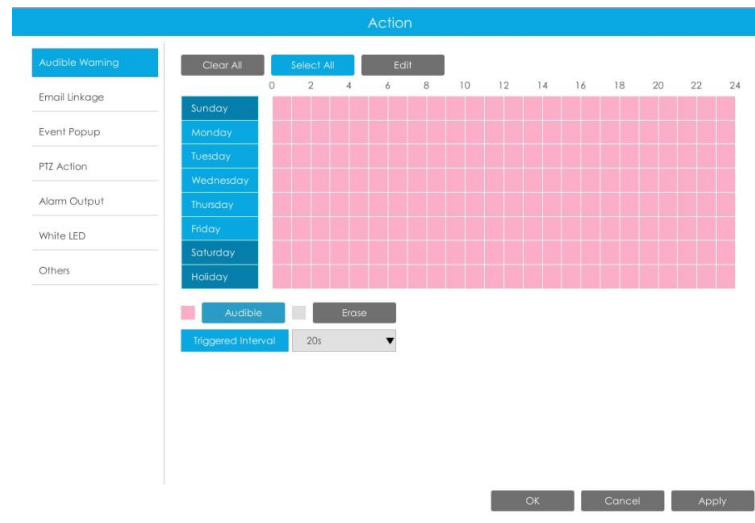
The user can set effective schedule as following two ways:

- ① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all

time settings.

- ② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



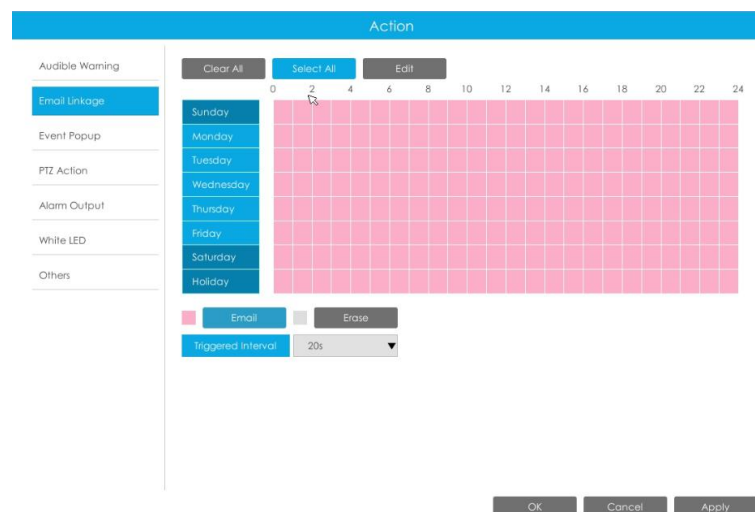
**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

- ① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

- ② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



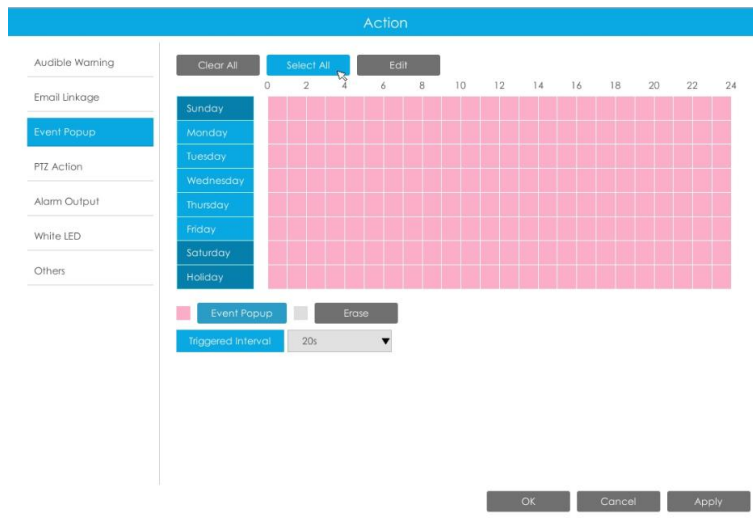
**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

- ① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear

all time settings.

- ② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



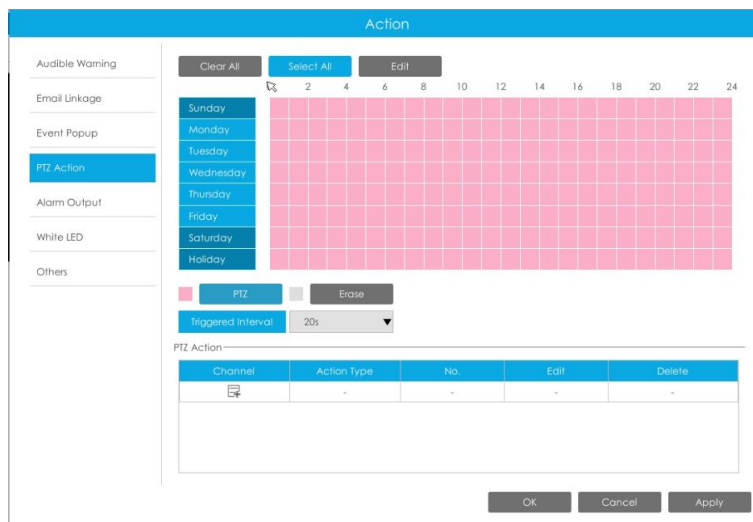
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

- ① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

- ② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking .

**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.

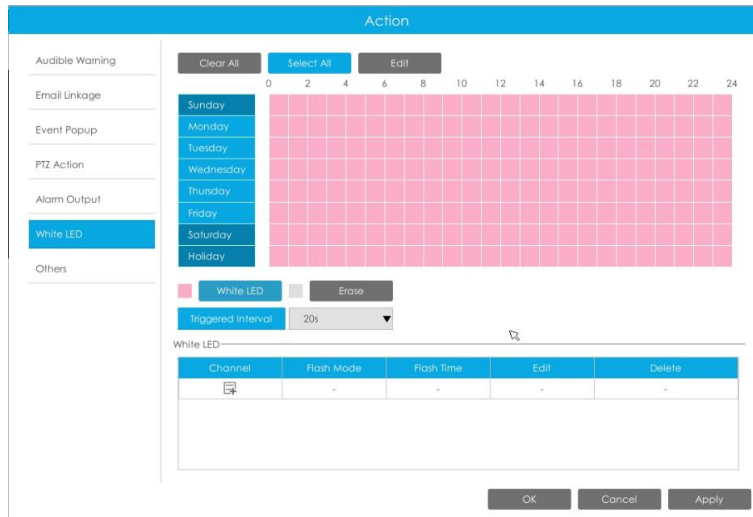
**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

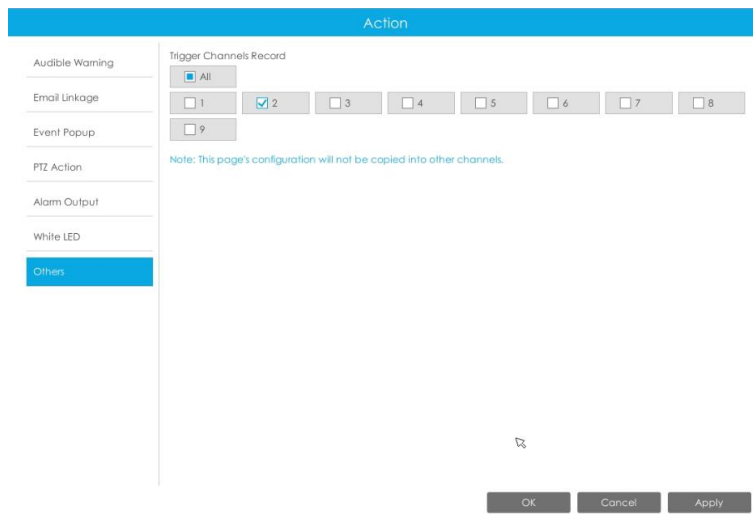


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.



**Settings**



Post Type. It can be set in Camera web page -> Advanced Settings -> ANPR -> Settings interface.

**LPR Message Post Settings**

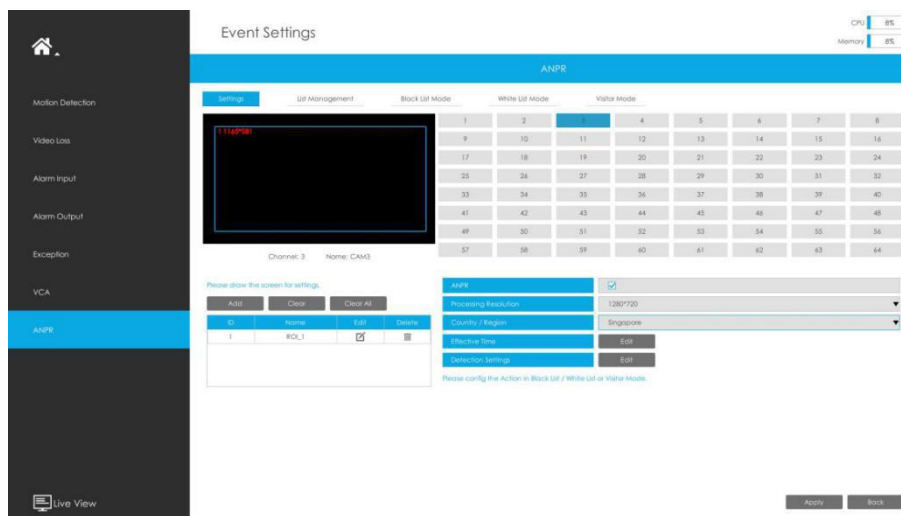
Enable LPR Message Post:

Post Type: TCP

Camera LPR Port:

## Settings

Do as following 5 steps to enable ANPR function. Camera will start to detect license plate and NVR will start to receive license plate information once these steps are done.



**Step1:** Select a channel and enable ANPR function;

**Step2:** Select processing resolution. The further distance you detected, the higher resolution is needed. 1280\*720 by default;

**Step3:** Set ANPR function effective time;

**Step4:** Set detection parameters including detection trigger, confidence level, repeat plate checktime and features identification;

**Detection Settings**

Detection Trigger: Always

Confidence Level: 7

Repeat Plate Checktime: 5000 Milliseconds (0~60000ms)

Features Identification:  All

Direction  ROL\_ID

**Detection Trigger:** Always and Alarm Input are available. It will only detect when alarm input is triggered if you select Alarm Input.

**Confidence Level:** Set the degree of reliability according to the actual situation.

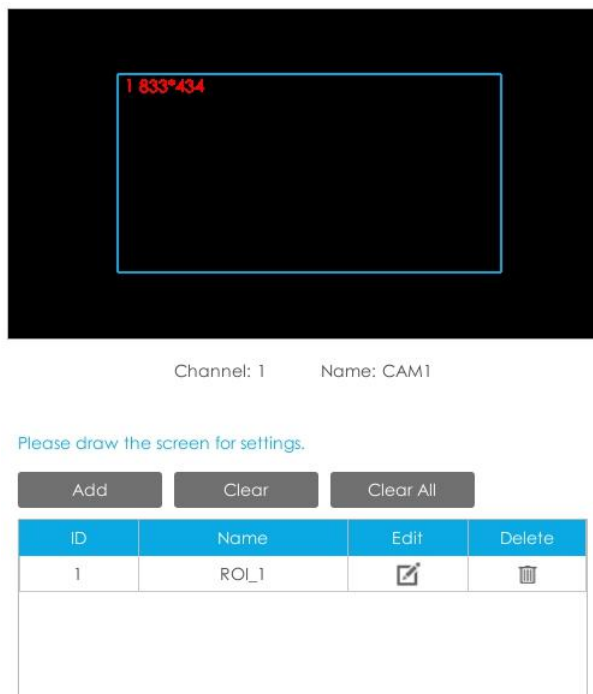
**Repeat Plate Checktime:** The same license plate information won't be received on NVR within



the time you set.

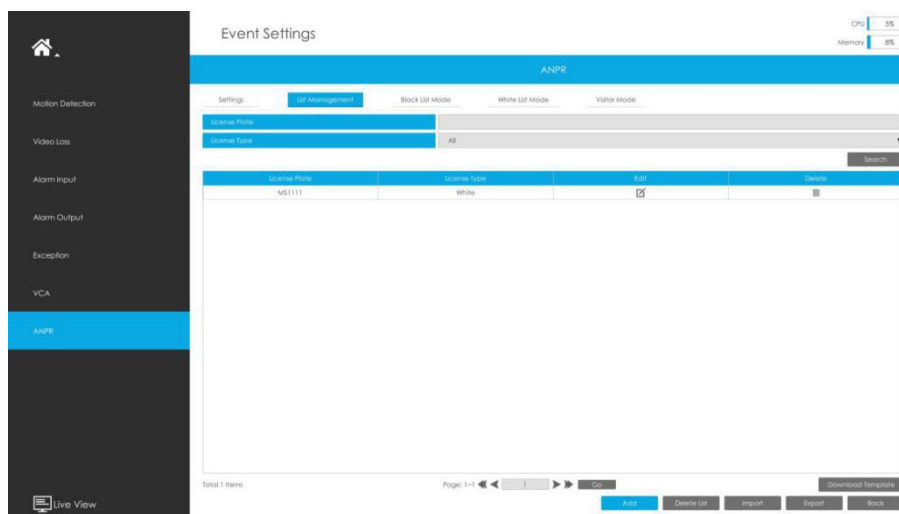
**Features Identification:** The selected features identification will be shown in ANPR logs interface.

**Step5:** Set the detected ROI region which can be up to 4 regions. License plate will only be detected in the ROI regions.



## List Management

Make a license plate list for your own NVR ANPR system. You can upload license plates and set them with different license type here. 10000 plates can be added at most.



There are two methods to add license plates:

① Add one by one.

**Step1:** Click Add button ;

**Step2:** Input the license plate and select license type;

**Step3:** Click OK and then the license plate will be added into the list;



Output, White LED and Trigger Channels Record.

**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

The user can set effective schedule as following two ways:

① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

The screenshot shows the 'Action' configuration window for 'Audible Warning'. On the left, a sidebar lists various actions: Audible Warning (selected), Email Linkage, Event Popup, PTZ Action, Alarm Output, White LED, and Others. The main area features a 24-hour time table with a yellow grid. Above the grid are buttons for 'Clear All', 'Select All', and 'Edit'. Below the grid, there are radio buttons for 'Audible' (selected) and 'Erase', and a 'Triggered Interval' dropdown menu set to '20s'. At the bottom right, there are 'OK', 'Cancel', and 'Apply' buttons.

**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

① Select the operation type, Email and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

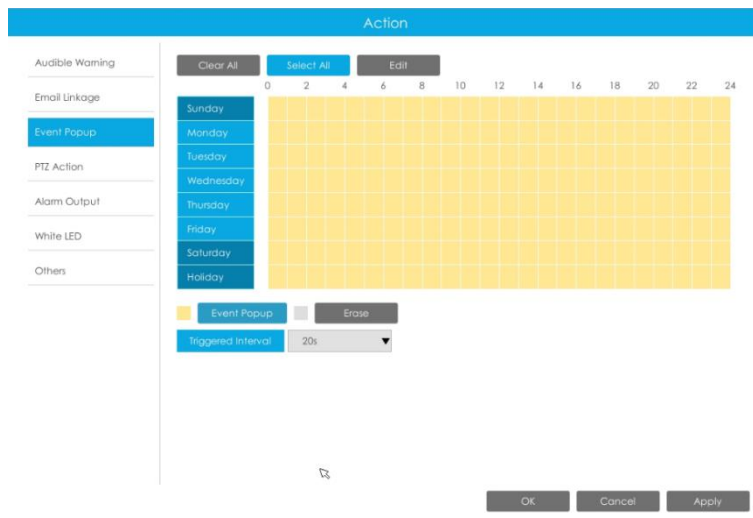
The screenshot shows the 'Action' configuration window for 'Email Linkage'. The sidebar on the left has 'Email Linkage' selected. The main area features a 24-hour time table with a yellow grid. Above the grid are buttons for 'Clear All', 'Select All', and 'Edit'. Below the grid, there are radio buttons for 'Email' (selected) and 'Erase', and a 'Triggered Interval' dropdown menu set to '20s'. At the bottom right, there are 'OK', 'Cancel', and 'Apply' buttons.

**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered. And you can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

① Select the operation type, Event Popup and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.

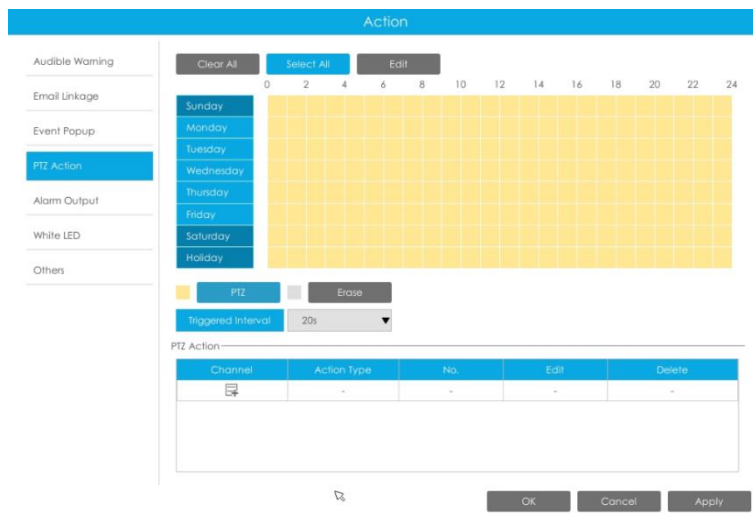


**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**. User can set effective schedule as following two ways:

① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click **Edit** to edit record effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action by clicking  .



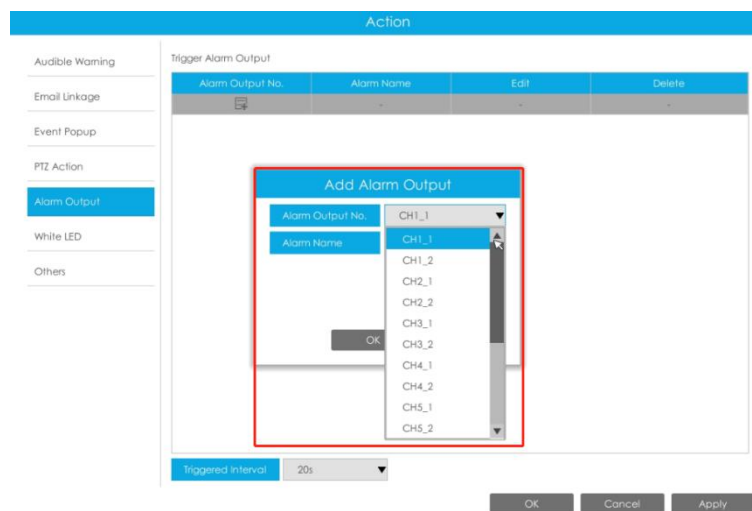
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



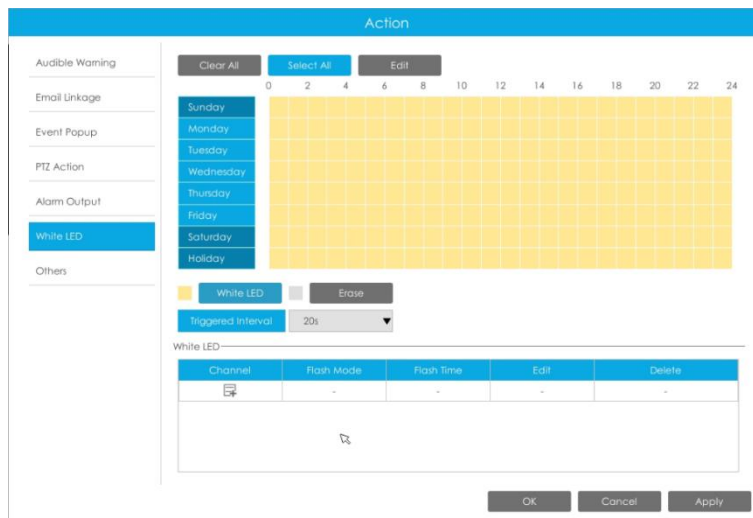
**White LED:** Trigger White LED flashing when alarm is triggered.

The user can set effective schedule as following two ways:

① Select the operation type, White LED and Erase. Then drag a square on the time table for time setting. It will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.

② Click **Edit** to edit effective time manually.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED by clicking .

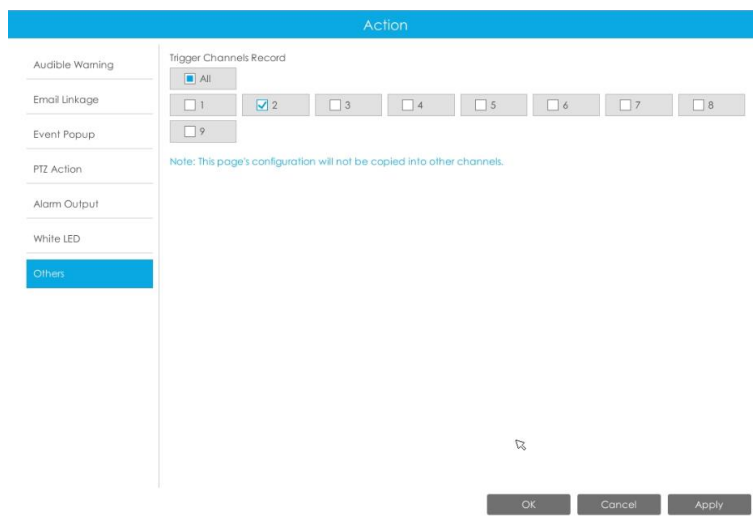


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.



**Note:**

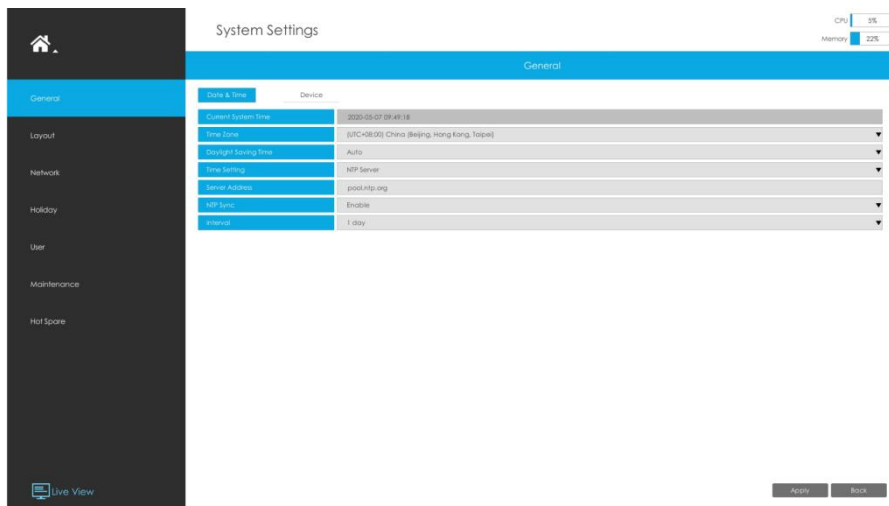
1. The list is exclusive for NVR, working with all LPR cameras you add. It won't synchronize with the list on camera side.
2. Do not forget to enable these modes, set effective time and record action for corresponded mode, ensuring that you can get real-time video when license plate is detected (Effective time and record action is enabled by default.).

## 3.9 Settings

### 3.9.1 General

#### Date & Time

It is for setting up the Time parameters of NVR, including Time Zone, Daylight Saving Time, Time Setting, Server Address, NTP Sync, Interval, etc.



**Server Address:** Support to Enter the address of NTP Server manually.

**NTP Sync:** Set the time of NVR to synchronize with the NTP server.

**Interval:** The interval for synchronizing with NTP server can be set.

#### Device

It is for setting up the general parameters of NVR, including Device Name, Device ID, HDMI Resolution, Language, System time, HDMI2/VGA2, HDMI Audio, Audio Out, etc.

**Event Popup Duration Time:** The display duration time for Motion Detection popup screen.

**Mouse Pointer Speed Level:** Adjust the speed of mouse on monitor. From 1 to 5, there are 5 levels to choose.

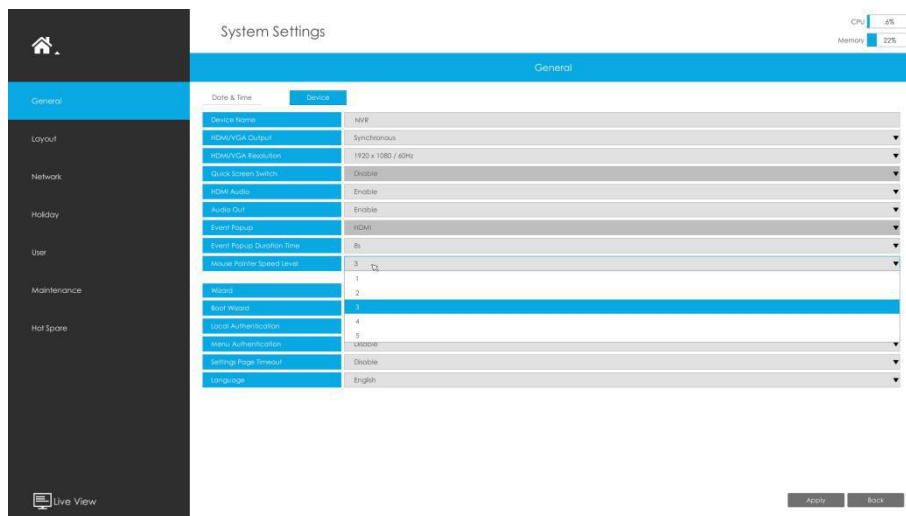
Level	Adjusted speed
1	0.5 times the current speed
2	0.7 times the current speed
3	the current speed
4	1.5 times the current speed
5	2 times the current speed

**Boot Wizard:** Enable it to pop up boot wizard after rebooting.

**Local Authentication:** Enable it to authenticate the user after rebooting.

**Menu Authentication:** Enable it to authenticate the user every time when you click menu.

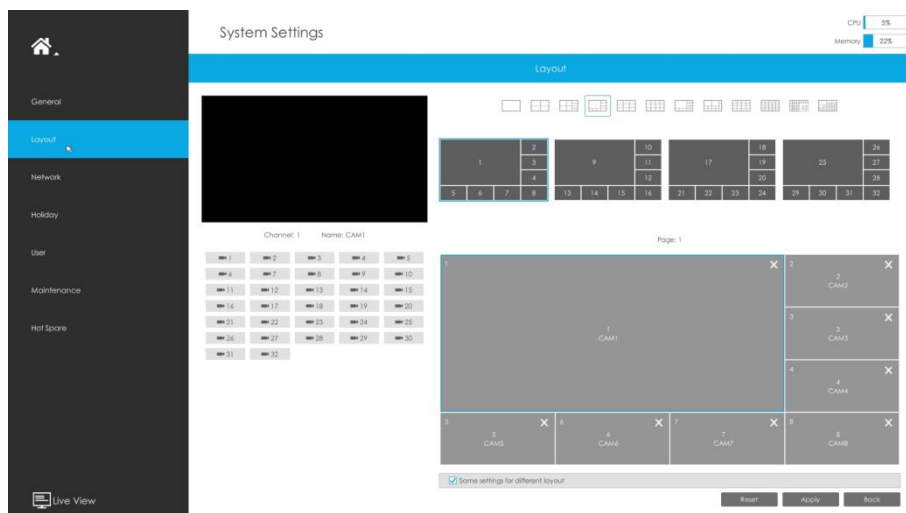
**Settings Page Timeout:** The interface will switch to Live View automatically according to the time you set.



**Note:**

Not all NVR supports all the configurations above. For example, only NVR 8000 Series supports HDMI2/VGA2, Event Popup options and switching between the main-screen and sub-screen , which can be controlled by double-click the mouse wheel after enabling Quick Screen Switch function.

### 3.9.2 Layout



**Step1. Select a layout format.**



**Step2. Set desired channels.**



Click to close a channel. Select a window and then select a desired channel to add in.

Click to save the settings or click to reset the layout.



### 3.9.3 Network

#### 3.9.3.1 Basic

The system supports two IP address format: IPv4 and IPv6

##### IPv4

Enable IPv4 DHCP to auto search IP. When enable DHCP function, you can not modify IP/ Subnet mask/ Gateway.

Disable IPv4 DHCP to modify IP/ Subnet mask/ Gateway manually.

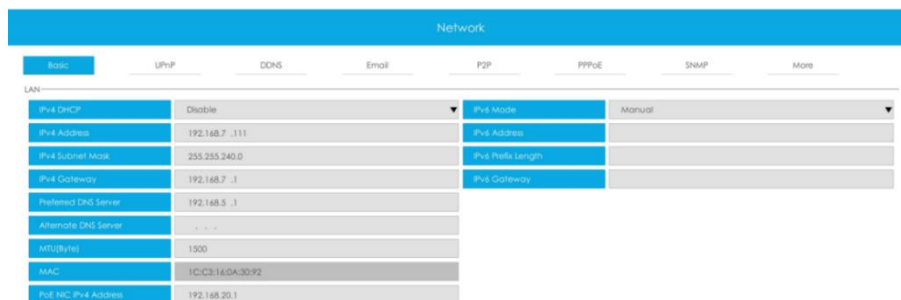
##### IPv6

Manual/ Router Advertisement/ DHCPv6 are available.

##### DNS Server

Preferred DNS Server: DNS server IP address.

Alternate DNS Server: DNS server alternate address.



##### Note:

1. Check the DHCP check-box when there is a DHCP server running in the networks.
2. Once DHCP is enabled, DNS will change accordingly.
3. The valid range of MTU is 500~1500.
4. Do not input an IP address conflicting with another device.
5. Working mode option is only for NVR 7000/8000 Series. Internal NIC IPv4 Address is only for PoE NVR Series.

### 3.9.3.2 UPnP

With the function enabled, you don't need to configure the port mapping for each port in router, it will do the port mapping in router automatically once **router supports UPnP**.

Port Type	Eds	External Port	Internal Port	Status
HTTP	<input checked="" type="checkbox"/>	21302	80	Invalid
RTSP	<input checked="" type="checkbox"/>	23302	554	Invalid

### 3.9.3.3 DDNS

Using DDNS to solve the dynamic IP address problem.

Check DDNS check-box to enable it, then select a DDNS Server and input the user name, password and host name. Do not forget to save the configuration.

Milesight has its own DDNS server. Please do port forwarding for HTTP port and RTSP port before enabling **Milesight DDNS**. Then input corresponding information and you can use <http://ddns.milesight.com:MAC> to access device remotely.

**Note:**

“Host Name” must begin with letters, and it can only contain number, letters, and hyphen.

DDNS	Disable
Provider	ddns.milesight.com
External HTTP Port	80
External RTSP Port	554
DDNS URL	http://ddns.milesight.com/DA3092

### 3.9.3.4 Email

A screenshot will be sent to the receivers when alarm is triggered.

User Name	eva@milesight.cn
Password	*****
SMTP Server	smtp.milesight.com
SMTP Port	465
Sender Email Address	eva@milesight.cn
Receiver Email Address 1	wen1104@126.com
Receiver Email Address 2	
Receiver Email Address 3	
Encryption	<input checked="" type="radio"/> TLS <input type="radio"/> SSL
Host Name	http://

**User name:** The E-mail address you choose to send emails. Please input **full email address**.

**Password:** The password of the E-mail.

**SMTP Server:** The SMTP Server of your E-mail.

**SMTP Port:** The port of SMTP Server. It's usually 25.

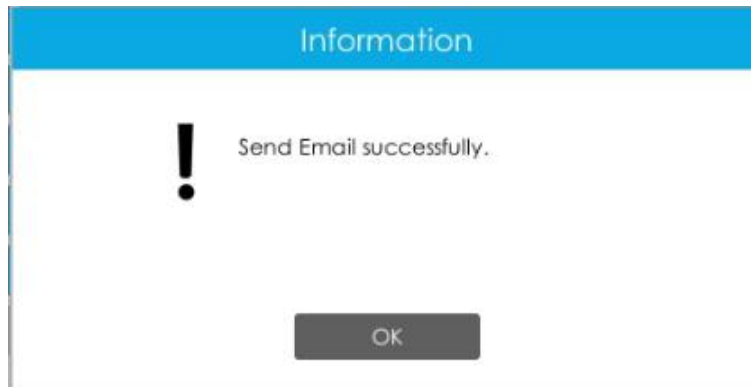
**Sender Email Address:** It must be same as [User name].

**Receiver Email Address:** E-mail Address for the receivers.

**Encryption:** Security Protocol of email sending, including TLS and SSL.

**Host Name:** It will be attached in the email.

Select Test to check if the Mail function is workable.



**Note:**

If your NVR has a port forwarding IP for Host Name, please input the complete address that contains the port.

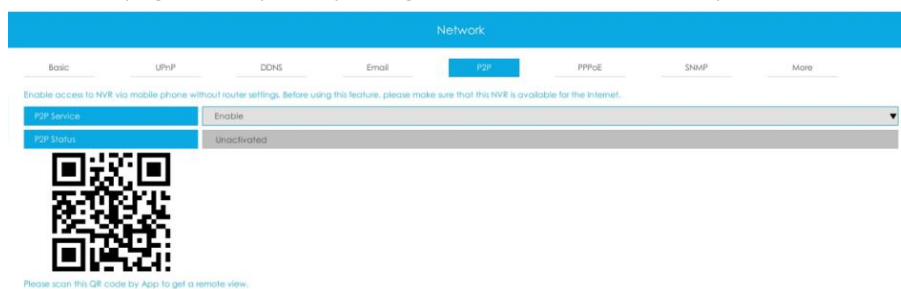
### 3.9.3.5 P2P

You can watch remote NVR live view in WAN by P2P on M-Sight Pro without doing port forwarding on router.

Click “Enable” and “Save” to enable P2P.

**P2P is enabled successfully when P2P Status shows “Activated”.**

After enabling, you can add the NVR on the APP M-Sight Pro for live view via scanning the QR code on the “P2P” page directly, or inputting the MAC address manually.



There are several status shows on P2P Status after clicking Saving, please check corresponded possibilities below:

P2P Status	Description
Network unavailable	Failed to connect with internet
Authentication request failed	Failed to authenticate P2P encryption
No idle UUID	Please contact Milesight if this status shows up
Activated	P2P is available
Login failed	Failed to login P2P server

Initialization failed	Failed to initialize P2P
Unactivated	P2P is disabled
Unknown error	Other error

**Note:**

1. Please make sure that NVR is available for internet before enabling.
2. If your NVR firmware version is not 7x.7.0.9-r2 or above, please contact Milesight to registered P2P first.

### 3.9.3.6 PPPoE

PPPoE combines PPP protocol with Ethernet, by which Ethernet hosts can connect to a remote access concentrator via a simple bridging device.



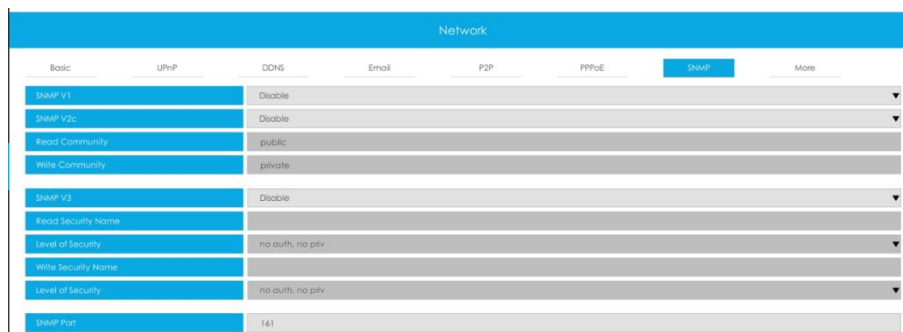
**Note:**

If both UPnP and PPPoE are enabled, only PPPoE will take effect.

### 3.9.3.7 SNMP

SNMP is an abbreviation of Simple Network Management Protocol, which is convenient for NVR to be monitored and managed in the whole network environment. The SNMP is widely used in many network devices, software and systems.

Before setting the SNMP, please download the SNMP software and manage to receive the NVR information via SNMP port. By setting the Trap Address, the NVR can send the alarm event and exception messages to the surveillance center.



**SNMP v1/2c/3:** The version of SNMP. Please select the version of your SNMP software.

SNMP v1: No security protection

SNMP v2c: Require password for access

SNMP v3: Support encryption on the premise that the HTTPS protocol must be

enabled.

**Read Community:** Input the name of Read Community

**Write Community:** Input the name of Write Community

**Read Security Name:** Input the name of Read Security Community

**Level of Security:** There are three levels available: (auth, priv), (auth, no priv) and (no auth, no priv)

**Write Security Name:** Input the name of Write Security Community

**Level of Security:** There are three levels available: (auth, priv), (auth, no priv) and (no auth, no priv)

**SNMP Port:** The default of the SNMP port is 161.

### 3.9.3.8 More

Network							
Basic	UPnP	DHCP	Email	P2P	PPPoE	SNMP	More
SSH		Enable					
SSH Port		22					
HTTP Port		80					
HTTPS Port		443					
RTSP Port		554					
Push Message		Enable					
Push Stream Type		Auto					
Push Message Settings		Edit					

#### SSH

Enable or disable SSH access. Secure Shell (SSH) has many functions; it can replace Telnet, and also provides a secure channel for FTP, POP, even for PPP.

#### SSH Port

The default SSH port is 22. Only for Milesight R&D debugging.

#### HTTP Port

The default HTTP port is 80. Please modify HTTP ports according to actual application.

#### Note:

1. The default HTTP port for IE browser is 80.
2. HTTP port is used for remote network access for 4k/H.265 NVR Series.

#### HTTPS Port

The default HTTPS port is 443. Please modify HTTPS ports according to actual application.

#### Note:

1. The default HTTPS port for IE browser is 443.
2. HTTPS port is used for remote network access for 4k/H.265 NVR Series.

#### RTSP Port

Real Time Streaming Protocol (RTSP) is an application layer protocol in TCP/IP protocol system.

The default RTSP port is 554. Please modify RTSP port according to actual application.

#### Note:

1. RTSP port is used for remote network live view.
2. RTSP port valid range is 554 or 1024~65535.

#### Push Message

With this option enabled, you can receive the alarm message on the mobile application.

### Push Stream Type

Select which video stream will be pushed to APP M-Sight Pro. Auto, Primary Stream and Secondary Stream are available.

#### Note:

Only NVR model ends with letter T support this option.

### Push Message Settings

Click **Edit** to select which alarm type will be pushed to APP M-sight Pro. There are different Push Event Types for every channel to choose, which means every camera added in this NVR can choose what Event Type it wants to push, like Motion Detection, Video Loss, Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering and Human Detection.

## 3.9.4 Holiday

It can configure the record or image capture schedule for holidays of the current year.

ID	Holiday Name	Status	Start Date	End Date	Edit
1	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
2	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
3	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
4	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
5	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
6	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
7	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
8	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
9	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
10	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
11	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
12	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
13	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
14	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
15	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
16	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
17	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
18	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
19	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
20	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
21	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
22	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
23	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
24	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
25	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
26	Holiday	Disable	1-1	1-1	<input type="checkbox"/>
27	Holiday	Disable	1-1	1-1	<input type="checkbox"/>

Click  to edit holiday information, including Holiday Name, Holiday Enable, Style, Start Date and End Date. Then click **OK** to save the configuration.

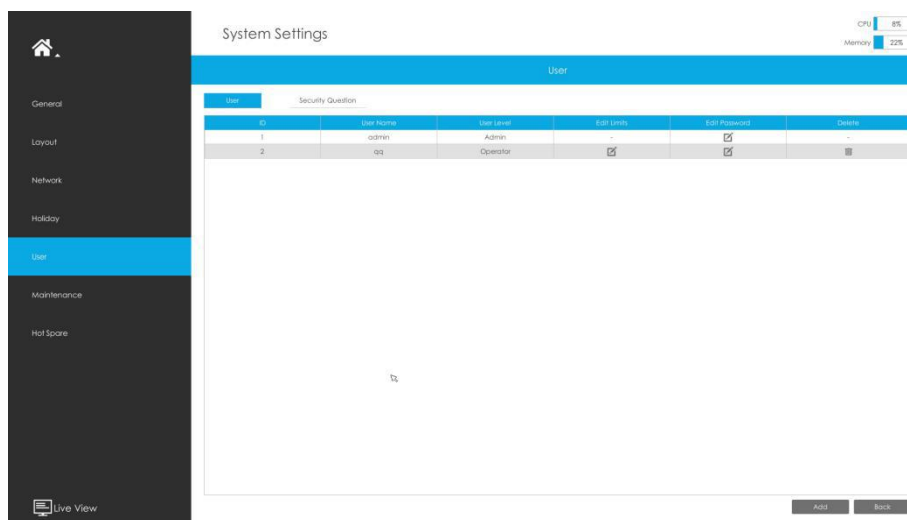
**Holiday Edit**

<b>Holiday Name</b>	Holiday
<b>Holiday</b>	<input checked="" type="checkbox"/> Enable
<b>Style</b>	By Month ▼
<b>Start Date</b>	January ▼ 1 ▼
<b>End Date</b>	February ▼ 1 ▼

\* Holiday schedule takes precedence over other schedules.

OK
Cancel
Apply

## 3.9.5 User



### Note:

1. If the NVR firmware version is below xx.7.0.6, the default user name is “admin” and the default password is “123456”.
2. If the NVR firmware version is between xx.7.0.6 and xx.9.0.3, the default user name is “admin” and the default password is “ms1234”.
3. If the NVR firmware version is xx.9.0.3 or above, please set the password before login.

### Add a new user

Click **Add**, then input user information and click **OK** to add a new user.

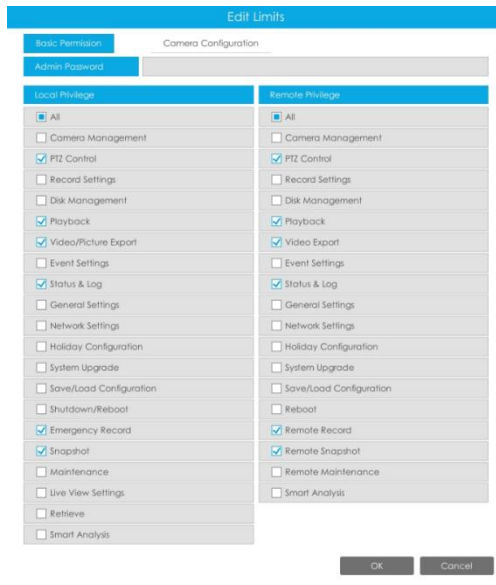
### Note:

The user name can only contain letters and number. There are two user levels with different authority: Operator and Viewer.

### Edit user limits

Select a user, when the background color changes into dark gray, click  to edit user privileges.

- ① Local Privilege means that the privilege to the monitor connected with NVR.
- ② Remote Privilege means that the privilege to web settings.



### Edit user password

Select a user, when the background color changes into dark gray, click to modify password.

Sync new password to current connected PoE channels is available for PoE NVR Series.

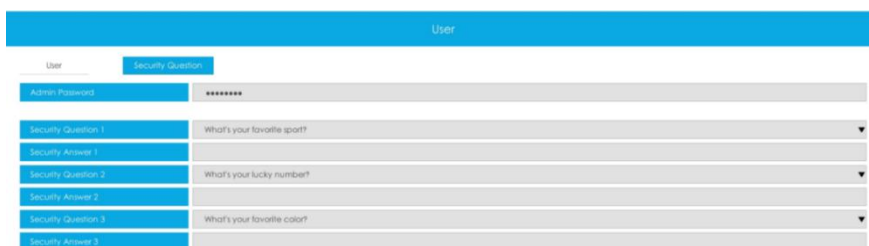


### Delete user

Select a user and click to delete a user.

### Modify Security Question

Input Admin Password, select security question and answer. Click to save.



**Note:**

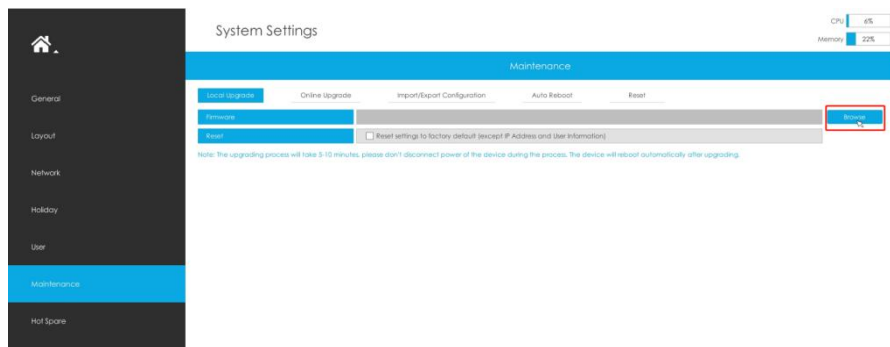
1. This option is available for the NVR firmware version xx.9.0.3 or above.
2. Security question is used for resetting admin password if you forget current one.



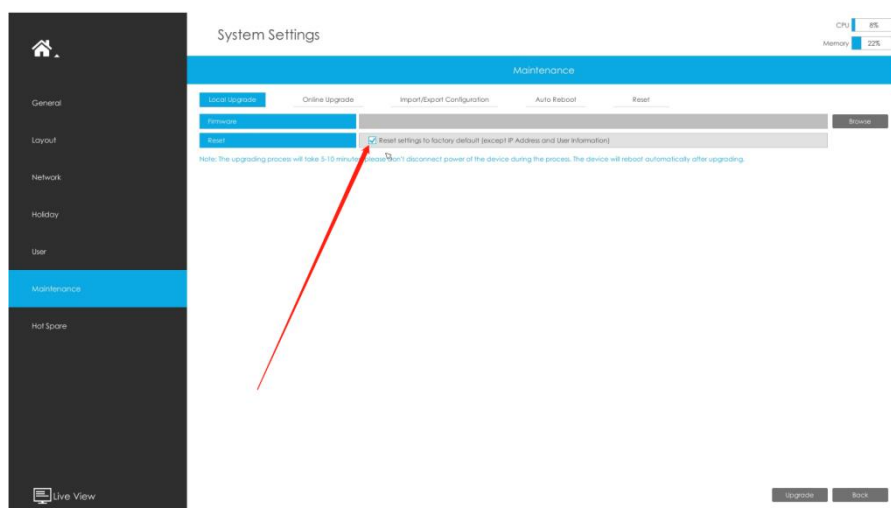
## 3.9.6 Maintenance

### Local Upgrade

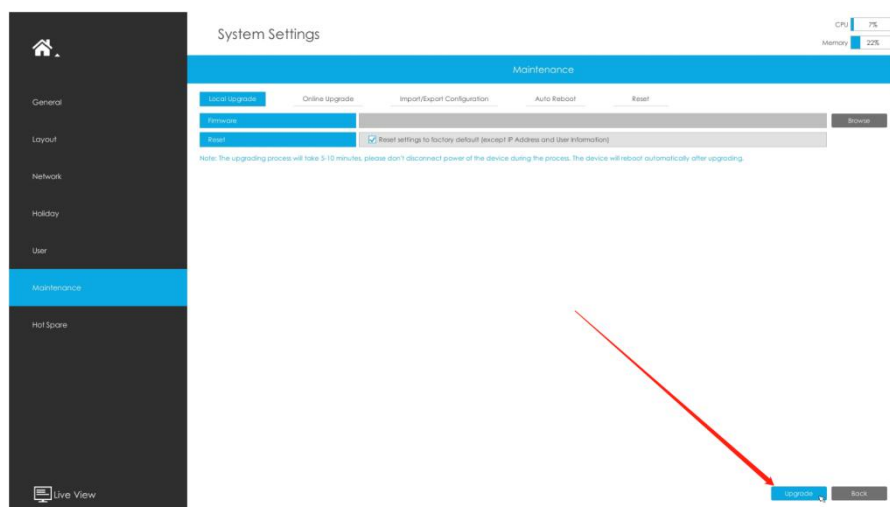
**Step1.** Click **Browse** and select the corresponding firmware you downloaded in your USB;



**Step2.** Check if you need to reset settings to factory default (except IP Address and User Information) after upgrade;



**Step3.** Click **Upgrade** to confirm the upgrade.



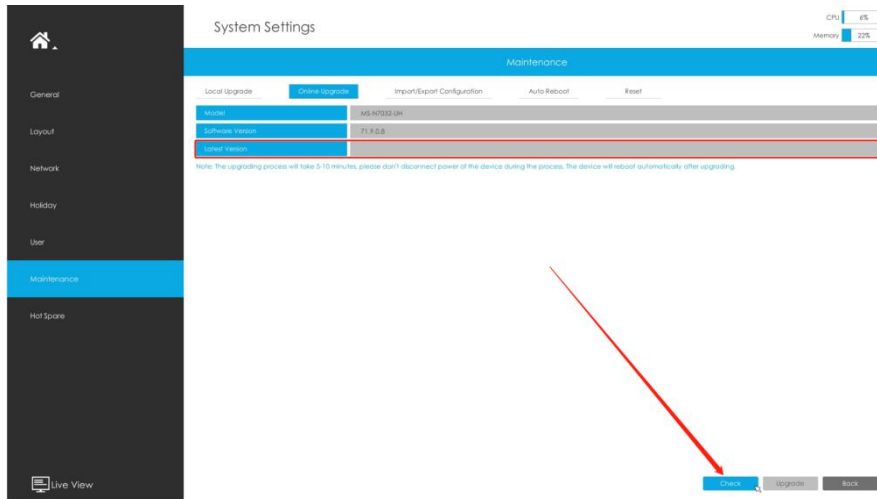
**Note:**

The system will auto reboot after confirming upgrade.

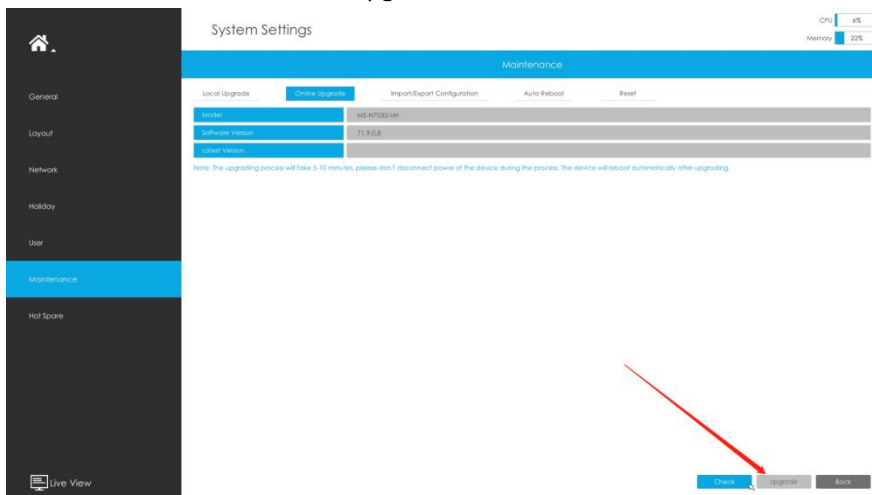
**Online Upgrade**

**Step1.** Click **Check** to confirm whether there is a new version;

If there is a new version, the Latest Version column will display corresponding information.



**Step2.** Click **Upgrade** to confirm the upgrade.

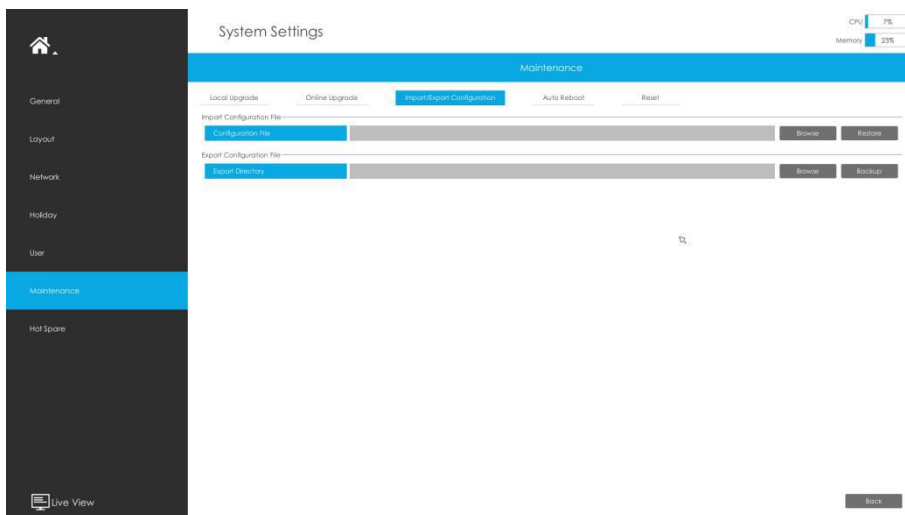
**Note:**

The system will auto reboot after confirming upgrade.

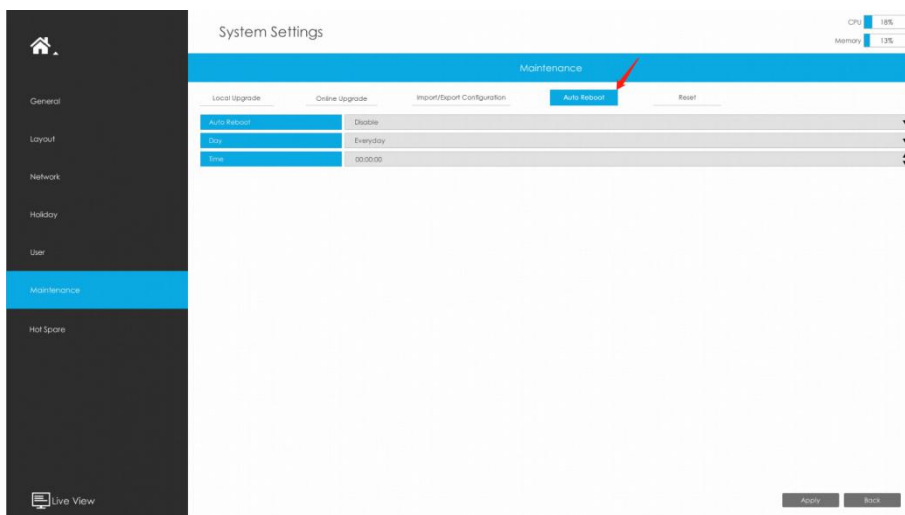
**Import/Export Configuration**

**Import Configuration File:** Select a .cfg file and then click **Restore** to import configuration to your NVR.

**Export Configuration File:** Select a folder and then click **Backup** to export configuration to USB device.



### Auto Reboot



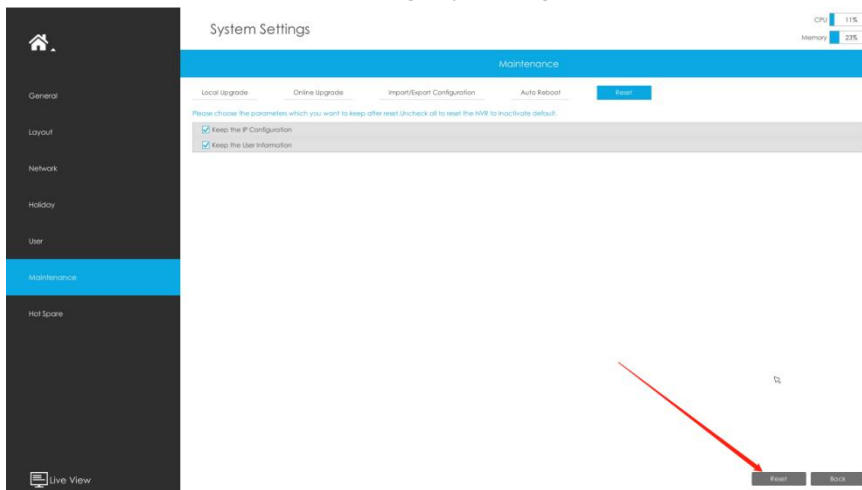
You can set day and time for reboot, and **the NVR will reboot automatically at the time you set.**

**Day:** Everyday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.

**Time:** Adjustable range from 00:00:00 to 23:59:59.

### Reset

All parameters can be reset to default settings by clicking **Reset**.



### 3.9.7 Hot Spare

Configured as the architecture of **N pcs Master NVRs and 1 hot spare Slave NVR**, Milesight N+1 Hot Spare guarantees the data integrity and reliability of video surveillance system. If any one of the Master NVRs fails, the Slave NVR can take over the channel information to ensure video recording. Meanwhile, when the failed NVR recovered, the Slave NVR will send the recorded data back.

#### Master Mode:

**Step 1:** Select Master Mode as Hot Spare Mode.

**Step 2:** Input Slave IP Address, Slave Admin Password and Apply.

Hot Spare	
Hot Spare Mode	Master Mode
Slave IP Address	192.168.40.42
Slave Admin Password	*****
Slave Status	Link is up (Ready)

#### Slave Mode:

**Step 1:** Select Slave Mode as Hot Spare Mode and click Apply. NVR will change to Slave mode successfully after rebooting.

**Step 2:** Add Master which is up to 32.

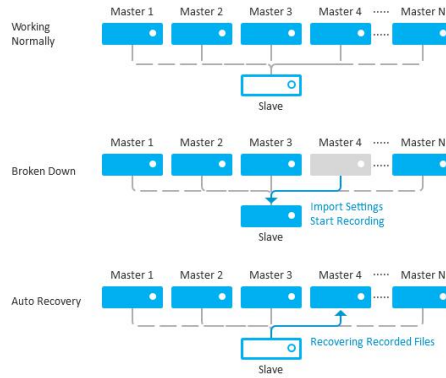
Hot Spare						
Hot Spare Mode	Slave Mode					
Master List						
No.	IP Address	MAC Address	Model			
Refresh <input type="button" value="Apply"/>						
Master Status						
No.	IP Address	MAC Address	Model	Connection Status	Working Status	Delete
1	192.168.40.44	1CC3160A7EF4	MS-N7032-UH	Online	Normal	<input type="button" value="Delete"/>

For example, there are three NVRs in LAN, 192.168.5.200, 192.168.5.201 and 192.168.5.202.

If you want to set 192.168.5.200 and 192.168.5.201 as Master NVR, and set 192.168.5.202 as Slave NVR. You can operate as following steps.

- ① Set 192.168.5.200 and 192.168.5.201 to Master Mode. And then input the IP and account information of 192.168.5.202 as Slave.
- ② Set 192.168.5.202 to Slave Mode. And then add 192.168.5.200 and 192.168.5.201 to its Master List.

After Master and Slave match successfully, Hot Spare function begins to work.



**Note:**

1. Only MS-N7016-UH, MS-N7032-UH, MS-N8032-UH and MS-N8064-UH support N+1 Hot Spare function.
2. It is recommended to set Master NVR and Slave NVR up with the same NVR model.

### 3.10 Status

You can have a quick view of the information of the device, network, camera, disk and event. This part is only for your rapid reference. If you want to make any configuration, please go to corresponding parts accordingly.

#### 3.10.1 Device Information

Device Information include Model, MAC Address, Hardware Version, Software Version, and Uptime.

Device Information	
Model	MS-N8016-LPT
MAC Address	1C:CB:14:0A:30:92
Hardware Version	V1.1
Software Version	72.9.0.6-05
Uptime	01:34:31 up 8:51

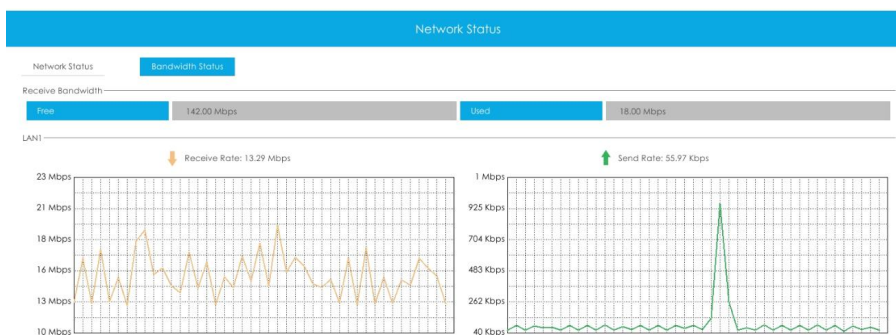
#### 3.10.2 Network Status

Network Status includes three main parts: Network Status and Bandwidth Status.

**Network Status**

Network Status			
Network Status		Bandwidth Status	
LAN1			
Connection	Link is up	Mode	100 Mbps Full
IPv4 DHCP	Disable	IPv4 Mode	Manual
IPv4 Address	192.168.7.111	IPv4 Address	
IPv4 Subnet Mask	255.255.240.0	IPv4 Prefix Length	
IPv4 Gateway	192.168.7.1	IPv4 Gateway	
Preferred DNS Server	192.168.5.1	Mtu(Bytes)	1500
Alternate DNS Server		MAC	1C:CB:14:0A:30:92

## Bandwidth Status



## 3.10.3 Camera Status

Camera Status includes Channel, Name, IP Address, Record, Frame Rate, Bit Rate, Frame Size and Status.

Camera Status

Channel Status | PoE Port Status

Channel	Name	IP Address	Record	Frame Rate	Bit Rate	Frame Size	Status
1	CAM1	192.168.14.102	On	25 fps	4.13 Mbps	1920x1080	Connected
2	CAM2	192.168.14.103	Off	25 fps	4.13 Mbps	1920x1080	Connected
3	CAM3	192.168.14.105	Off	25 fps	3.90 Mbps	2560x1440	Connected
4	CAM4	192.168.7.161	Off	0 fps	0 bps	0x0	Disconnected
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-

The **PoE Port Status** is only for PoE NVR, it will show you the current power and connection status of PoE ports.

Camera Status

Channel Status | PoE Port Status

Port	IP Address	Current Power Consumption	Status
1	--	--	--
2	--	--	--
3	--	--	--
4	--	--	--
5	--	--	--
6	--	--	--
7	--	--	--
8	--	--	--

Total Power Consumption: 0.00W

Remaining Power Consumption: 120.00W

Note:

- The rated power consumption of all PoE ports is 120.00W.
- When the total power consumption exceeds the rated value, the system will close PoE ports in the order of channel numbers from large to small until the total power is less than the rated power.

## 3.10.4 Disk Status

### Disk Status

Disk Status includes Port, Vendor, Status, Total(GB), Free(GB), HDD Type and Group. The user can see the Total Capacity (GB) and Available Capacity (GB) as well.

Disk Status							
S.M.A.R.T							
Part	Vendor	Status	Total	Free	Property	HDD Type	Group
2	WDC WD2500BEVT-08A23T1	Normal	232.89 GB	217.00 GB	R/W	LOCAL	I
Total Capacity			232.89 GB				
Available Capacity			217.00 GB				

### S.M.A.R.T

S.M.A.R.T is a monitoring system of HDD that detects anticipating failures of HDD and reports them with various indicators.

**Test Type:** Fast and Full are available.

**Self-evaluation:** If the HDD is in good condition, it will pass the self-evaluation.

Disk Status						
S.M.A.R.T						
ID	Attribute Name	Value	Warn	Threshold	Raw Value	Status
01	Raw_Read_Error_Rate	200	200	51	2	OK
03	Spin_Up_Time	142	131	21	1864	OK
04	Start_Stop_Count	1	1	0	516529	OK
05	Reallocated_Sector_Ct	200	200	140	0	OK
07	Seek_Error_Rate	100	253	51	0	OK
09	Power_On_Hours	49	49	0	37264	OK
0A	Spin_Retry_Count	100	100	0	0	OK

Part	2
Test Process	
Test Type	FAST
Temperature(°C)	35
Uptime	37264
Self-evaluation	PASSED
All-evaluation	In good condition
S.M.A.R.T Test	Test

## 3.10.5 Event Status

### Camera Event

The user can check Camera Event here, including Video Loss, Motion and I/O. will turn into when the corresponding alarm is triggered.

Event Status						
Channel	Name	IP Address	Video Loss	Motion	I/O	
1	CAM1	192.168.7.222				
2	CAM2	--				
3	CAM3	--				
4	CAM4	--				
5	CAM5	--				
6	CAM6	--				
7	CAM7	--				
8	CAM8	--				
9	CAM9	--				
10	CAM10	--				
11	CAM11	--				
12	CAM12	--				
13	CAM13	--				
14	CAM14	--				
15	CAM15	--				
16	CAM16	--				

### Alarm

The user can check Alarm Input and Output list here if NVR has corresponded interface. will turn into when the corresponding alarm is triggered. For NVR alarm input or output, the

relevant alarm input or output will be firstly listed, such as, 1, 2.etc, as for camera alarm input or output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

The screenshot shows the 'Status' page with the 'Event Status' tab selected. It displays two tables: 'Alarm Input List' and 'Alarm Output List'. The 'Alarm Input List' table has columns: No., Alarm Name, Alarm Type, and Status. The 'Alarm Output List' table has columns: No., Alarm Name, Alarm Type, Delay, and Status.

No.	Alarm Name	Alarm Type	Status
12		NO	🟢
13		NO	🟢
14		NO	🟢
15		NO	🟢
CH1_1		NO	🟢
CH1_2	--	--	--
CH2_1		NO	🟢
CH2_2	--	--	--
CH3_1		NO	🟢
CH3_2	--	--	--

No.	Alarm Name	Alarm Type	Delay	Status
1		NO	5s	🟢
2		NO	5s	🟢
3		NO	5s	🟢
4		NO	5s	🟢
CH1_1		NO	5s	🟢
CH1_2	--	--	--	--
CH2_1		NC	5s	🟢
CH2_2	--	--	--	--
CH3_1		NC	5s	🟢
CH3_2	--	--	--	--
CH4_1	--	--	--	--

**VCA**

It shows the VCA status. will turn into when alarm is triggered.

The screenshot shows the 'Status' page with the 'VCA' tab selected. It displays a table with columns: Channel, Name, IP Address, Region Distance, Region Entry, Advanced Motion Detect, Tamper Detection, Line Crossing, Loitering, and Human Detection.

Channel	Name	IP Address	Region Distance	Region Entry	Advanced Motion Detect	Tamper Detection	Line Crossing	Loitering	Human Detection
1	CAM1	192.168.7.222	🟢	🟢	🟢	🟢	🟢	🟢	🟢
2	CAM2	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
3	CAM3	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
4	CAM4	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
5	CAM5	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
6	CAM6	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
7	CAM7	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
8	CAM8	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
9	CAM9	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
10	CAM10	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
11	CAM11	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
12	CAM12	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
13	CAM13	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
14	CAM14	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
15	CAM15	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢
16	CAM16	--	🟢	🟢	🟢	🟢	🟢	🟢	🟢

**People Counting**

It shows every camera's current In/Out number of people counting.

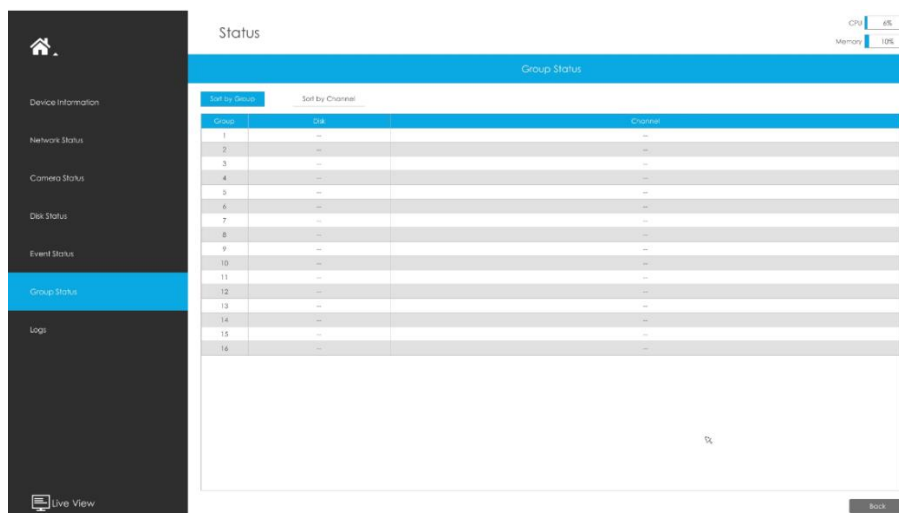
The screenshot shows the 'Status' page with the 'People Counting' tab selected. It displays a table with columns: Channel, Name, IP Address, In Count, and Out Count.

Channel	Name	IP Address	In Count	Out Count
1	CAM1	192.168.7.222	--	--
2	CAM2	--	--	--
3	CAM3	--	--	--
4	CAM4	--	--	--
5	CAM5	--	--	--
6	CAM6	--	--	--
7	CAM7	--	--	--
8	CAM8	--	--	--
9	CAM9	--	--	--
10	CAM10	--	--	--
11	CAM11	--	--	--
12	CAM12	--	--	--
13	CAM13	--	--	--
14	CAM14	--	--	--
15	CAM15	--	--	--
16	CAM16	--	--	--



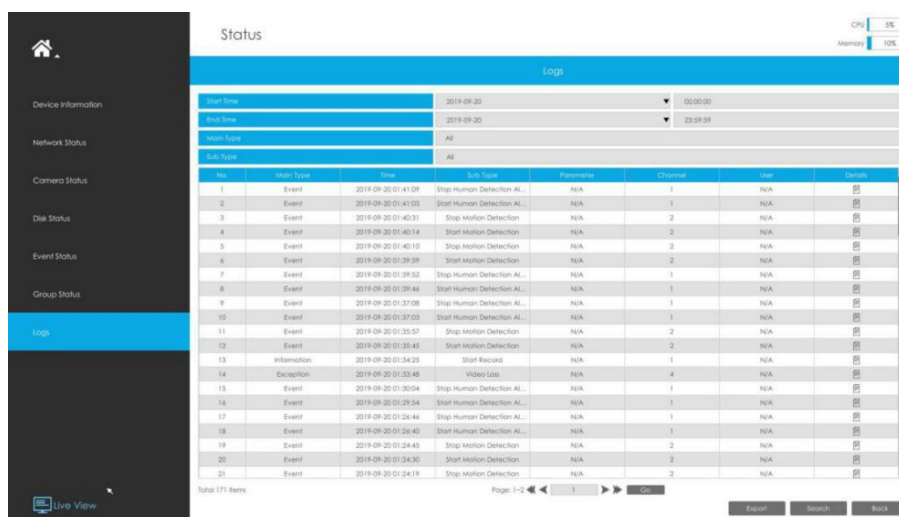
### 3.10.6 Group Status

Check Group Status. The status of the all created Groups can be sorted by Group or Channel.

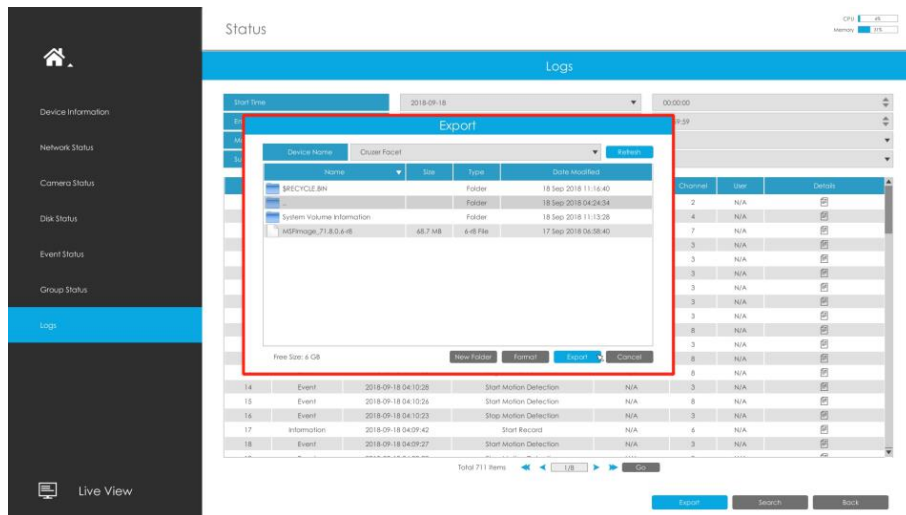


### 3.10.7 Logs

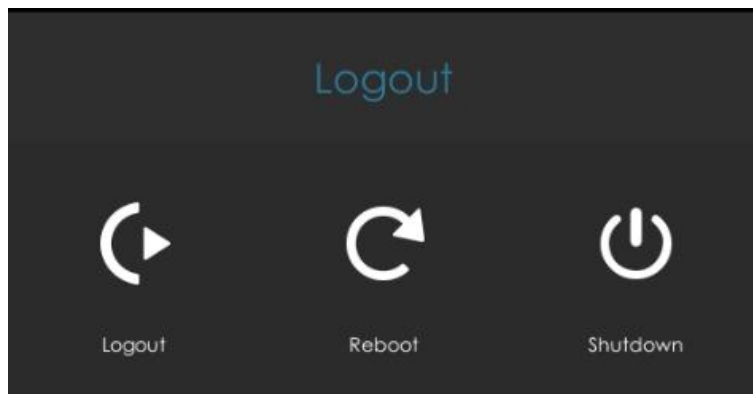
The user can check, search and export logs in Logs interface. By selecting the Start Time, End Time, Main Type and Sub Type, which can narrow down the scale of logs, you can search for logs that you need.



Click **Export** to export searched logs to media device.



### 3.11 Logout



**Logout:** Exit the current login account.

**Reboot:** Restart the NVR.

**Shutdown:** Close the NVR.

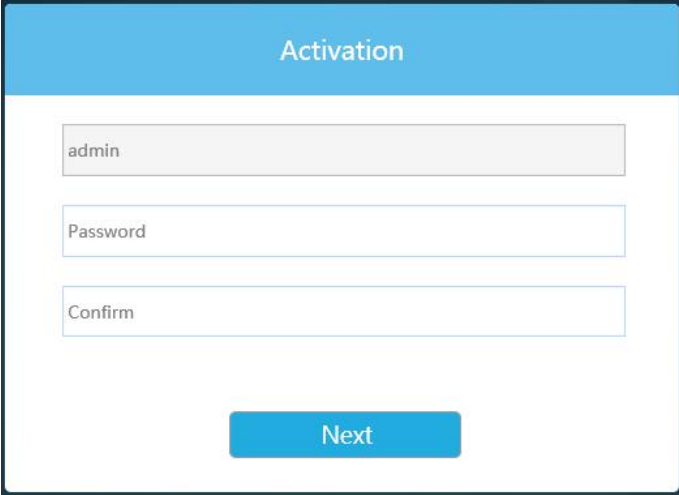
## 4.WEB Settings

### 4.1 Account Setting

**Note:**

Only the NVR firmware version xx.9.0.3 or above supports account activation.

**Step1. Set password to active admin account.**



**Note:**

1. Password must be 8 to 32 characters long.
2. Password must contain at least one number and one letter.

**Step2. Set security questions which are used for resetting password to finish account setting.**

10 questions are provided, you can select any one to set answer. Beside, customized question is available.

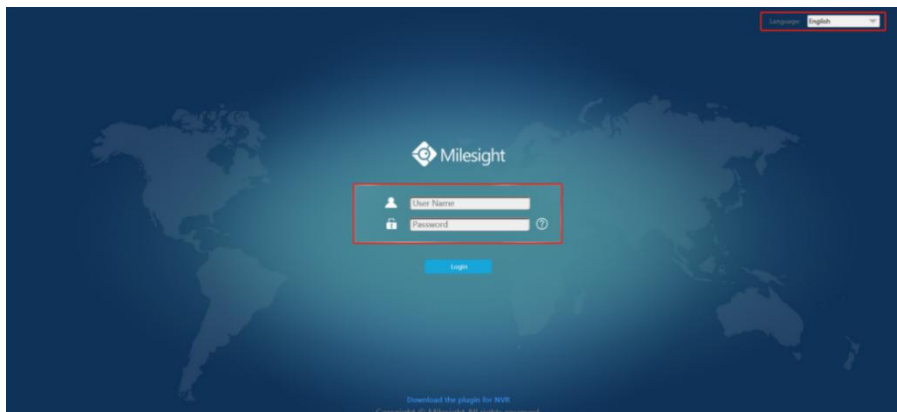
If you skip this step, you can also set it again in Setting -> User interface.



## 4.2 Login

Select Language on the top-right of interface.

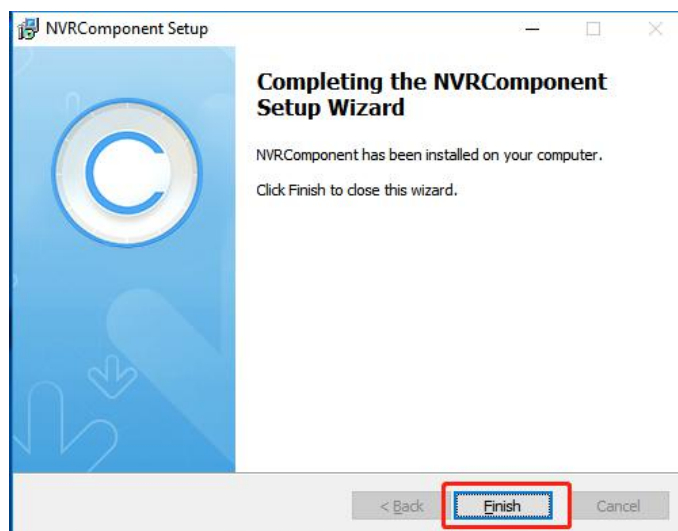
Input the user name, password and click Login to login NVR web page.



The browser will prompt to install the plugin when first logging in the device. Please click

“[Download the plugin for NVR](#)” to download the plugin for NVR.

Follow the prompts to install the plugin. When it's finished, it will pop out a window as shown below. Please click “Finish” and refresh the browser, then you will see the video.



**Note:**

During installing the plugin, please keep the browsers close.

If the firmware version of NVR is V7x.9.0.4 and above, you can preview the video on the browser without plugin in Plugin-Free mode.

1. For Windows system, Plugin-Free mode is supported in Chrome/Firefox/Microsoft Edge browser.
  2. For MAC system, Plugin-Free mode is supported in Chrome/Firefox/Safari browser.
- Only H.264 video codec are supported on Plugin-Free Mode for NVR. For better user experience, we recommend that you set the "profile" option to "main" on camera as shown below.

Basic Settings >> Video

Primary Stream    Secondary Stream    Tertiary Stream

Video Codec :	H.264
Frame Size :	1080P(1920*1080)
Maximum Frame Rate :	25 fps
Bit Rate :	4096 kbps
Smart Stream :	Off
Bit Rate Control :	CBR
Profile :	Main
I-frame Interval :	50 frame (1-120)

Save

**Note:**

1. Plugin-Free mode is only supported when Chrome version is above V45, Firefox version is above V52, Microsoft Edge version is above V11 and Safari version is above V11.
2. When you use plugin-free mode, it will display “Plugin-Free” mode in “Settings” - “Local Configuration” interface.

**Local Configuration**


Plugin Mode	Plugin-free
-------------	-------------

Primary Stream When Fullscreen

Note: Plugin-Free mode only supports H.264.

Save



If you forget the password, click  to reset password (Only the NVR firmware version xx.9.0.3 or above supports this.).

### Reset Password

Please fill in the answers for authentication.

Question1:

Answer1:

Question2:

Answer2:

Question3:

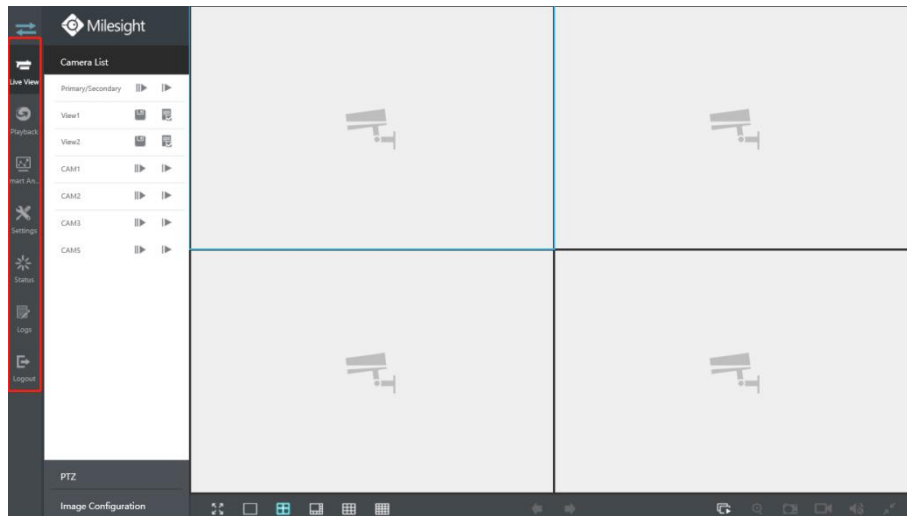
Answer3:

Next
Cancel

**Note:**

1. If the NVR firmware version is below xx.7.0.6, the default user name is “admin” and the default password is “123456”.
2. If the NVR firmware version is between xx.7.0.6 and xx.9.0.3, the default user name is “admin” and the default password is “ms1234”.
3. If the NVR firmware version is xx.9.0.3 or above, please set the password before login.

## 4.3 Menu



Icons	Descriptions
	Hide or show secondary menu
	Live view
	Play back the video
	Smart Analysis
	Make settings for Camera, Record, Event and System
	Check Device Information, Network Status, Camera Status, Disk Status and Event Status
	Check all operation logs
	Log out NVR

## 4.4 Live View

### 4.4.1 Camera List

List and play added cameras on Camera List page.

Select one window one camera to play. Or click to get all cameras' live video.






Icons' descriptions of Live View

Icons	Descriptions	Icons	Descriptions
	Play Primary Stream		Play Secondary Stream
	Save View		Play default view
	Full screen		1 screen mode
	4 screens mode		8 screens mode
	9 screens mode		16 screens mode
	Previous page		Next page
	Stop all live view		Start all live view
	Digital zoom		Snapshot
	Record		Audio on
	Audio off		Original Image
	Resize Image		

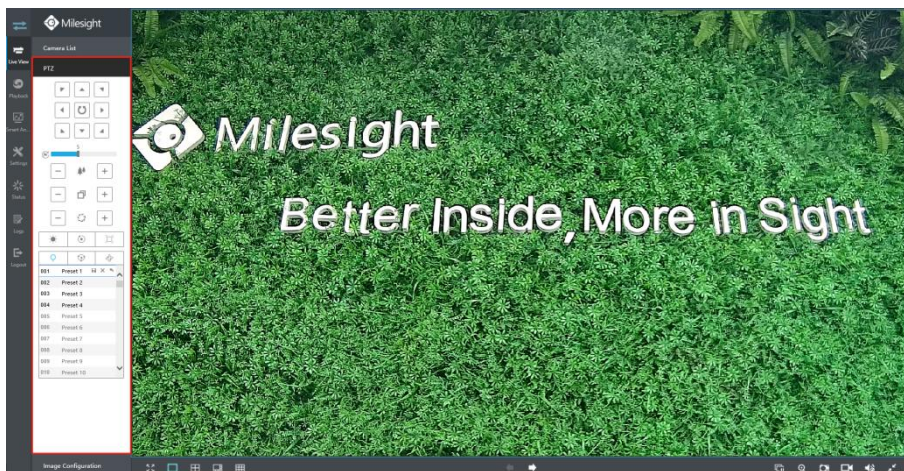
And there are multiple icons on each channel displayed in live view, indicating video loss and alarm status of the channel.



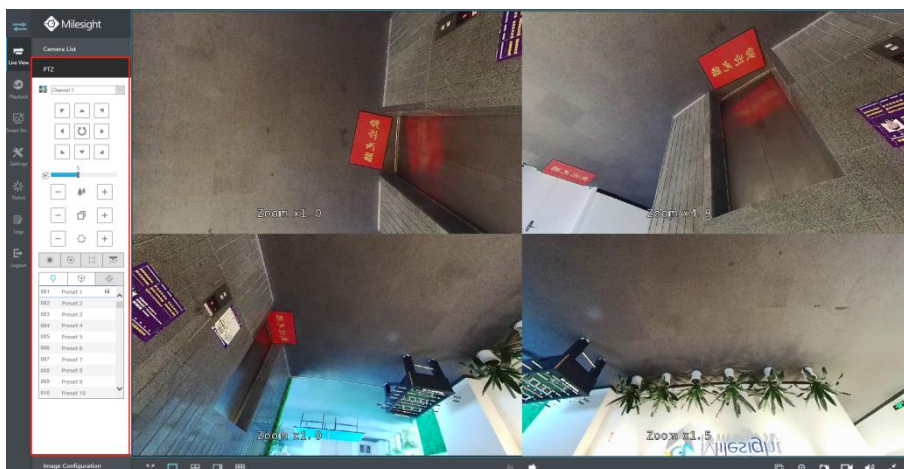
Icons	Descriptions
	It indicates video loss
	It indicates motion detection alarm
	It indicates VCA alarm

## 4.4.2 PTZ

For PTZ cameras, you can operate PTZ, Preset, Patrol, Pattern, Lighting for 30s, Lens Initialization and Auxiliary Focus on PTZ page directly.



For the Fisheye camera, select a Fisheye channel, and you can operate PTZ, Preset, Patrol, Lighting for 30s, Lens Initialization, Auxiliary Focus and Fisheye Auto Tracking of this channel separately.



**Note:**

1. Only for Milesight Fisheye Camera with Bundle-Stream Mode.



2. Ensure that your camera's version is 4X.7.0.74 or above before you use Lighting for 30s, Lens Initialization, Auxiliary Focus and Fisheye Auto Tracking.

### 4.4.3 Image Configuration

Adjust image Brightness, Contrast, Saturation, Sharpness and Noise Reduction Level on Image Configuration page.



### 4.5 Playback

To play and backup the recorded files.



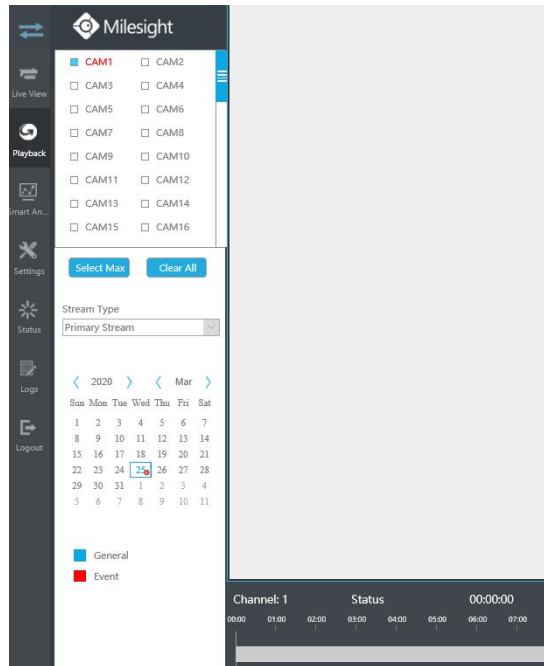
#### 4.5.1 How to playback

**Step1.** Select channel you want to do playback.

**Step2.** Select Stream Type, including Primary Stream and Secondary Stream.

**Note:**

The playback stream you selected will be remembered when you reenter the web playback page.

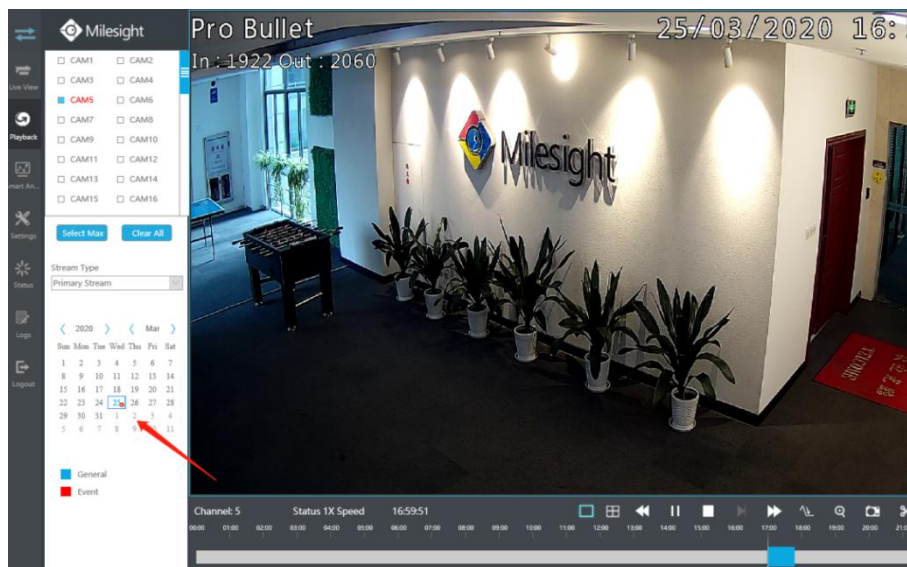


**Step3. Select Date.**

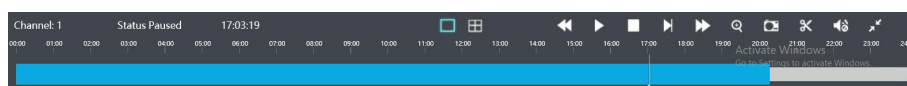
**Step4. Click  to play.**

**Note:**

Only the day with a red mark means that there are recorded files.



### Video Playback Tool Bar Description



The tool bar can display multi-event record. It shows that in this record period what kind of event has happened. The symbolic meaning of each color is shown below:

**Blue**—Timing

**Red** --- Event

And take this bar above as an example, it means that there is continuously recording in this period.

Icons	Descriptions	Icons	Descriptions
	1 screen mode		4 screens mode
	Speed Down		Play
	Pause		Stop
	Step Forward		Speed Up
	Transcoding		Digital Zoom
	Snapshot		Backup
	Audio On		Audio Off
	Original Image		Resize Image

**Note:**

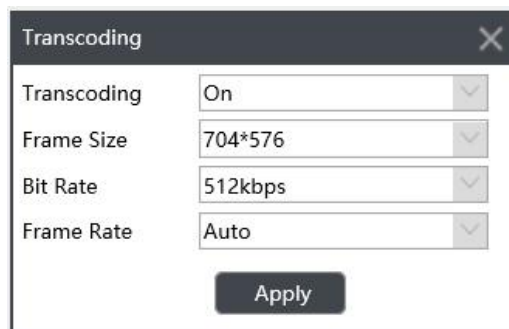
1. You can adjust the speed even when playback is paused.
2. The playback time bar on web page also shows the locked and tagged icons, which is the same as on the monitor.

## 4.5.2 Transcoding

With transcoding function, remote playback will have a better performance no matter what network environment is.

**Step1. After successfully search out or play video, select the channel you want to transcoding**

**and click to expand transcoding panel.**



**Step2. Set Transcoding parameters.**

Set Transcoding, Frame Size, Bitrate and Frame Rate according to the network situation. The worse network situation, the lower transcoding parameter.


**Step3.** Click  to make transcoding take effect.

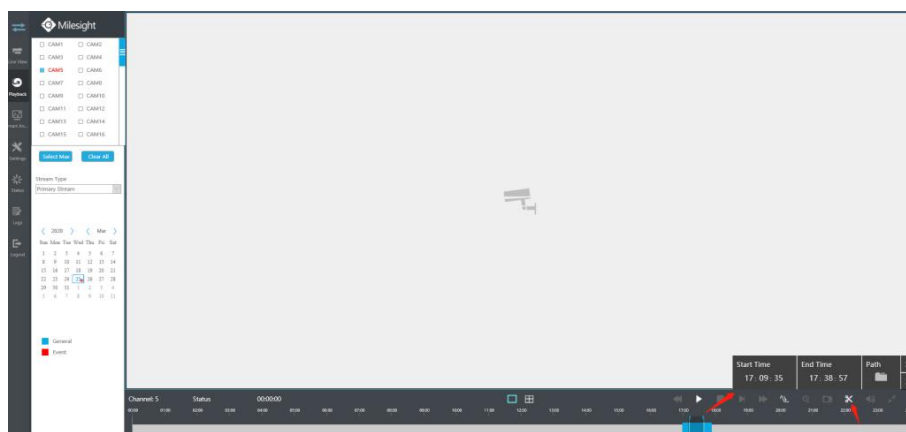
## 4.5.3 Video Files Backup

Recorded files can be cut and backed up from WEB.



**Step1.** In playback interface, select camera, stream type, the date and time to search record video.

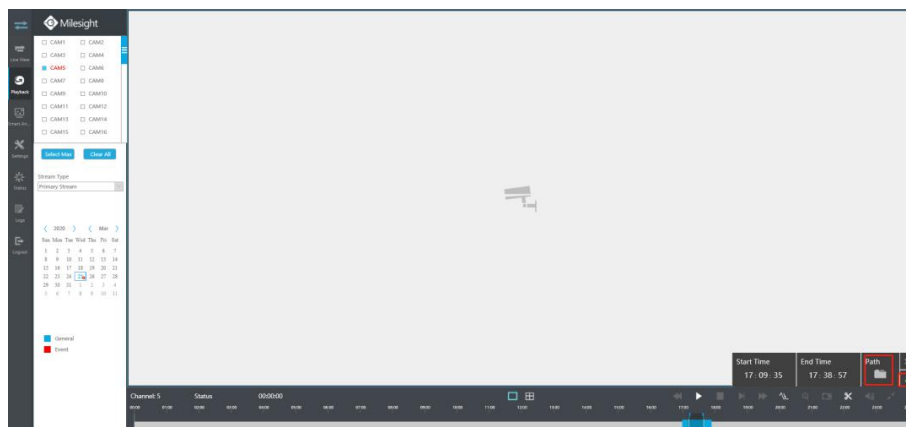
**Step2.** Select Recorded files for Backup.

Click , then select start time and end time by dragging the vertical line on the time bar.



**Step3.** Backup the recorded files.

Click  to select file path, then click  to back up recorded files.



## 4.5.4 Picture Files Backup

**Step1. Browse a playback picture path in Local Configuration interface.**

**Local Configuration**

Record File Path

Preview Picture Path


**Playback Picture Path**

Connection Type

Play Mode

Auto Logout

Primary Stream When Fullscreen

**Step2. Click  to save the picture during video playback. Then the backup picture can be found in the files path you set before.**

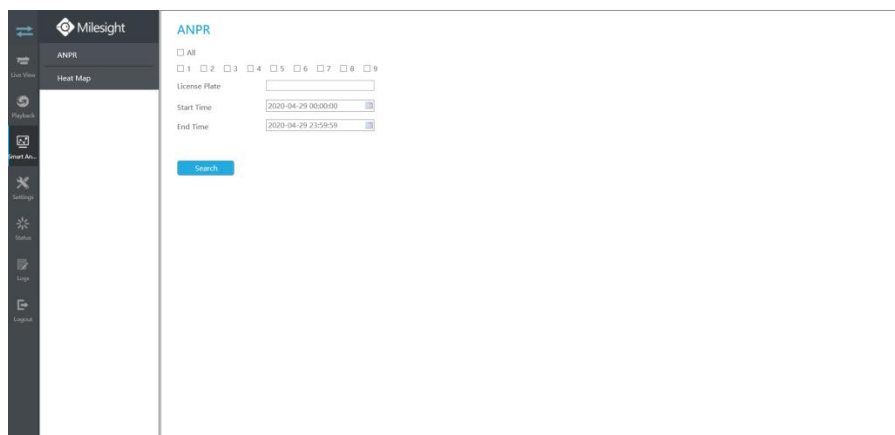
**Note:**

It is recommended to run browser as administrator before getting playback snapshot.




## 4.6 Smart Analysis

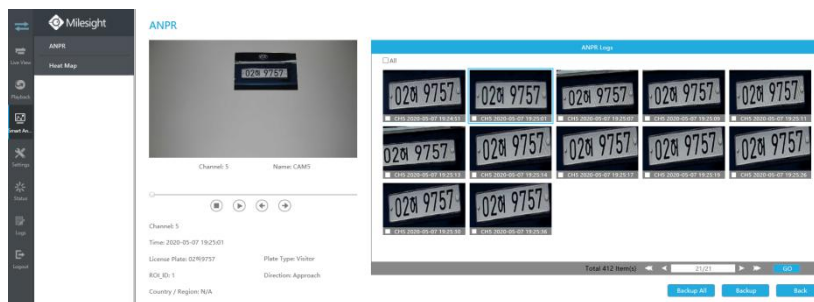
You can get both ANPR logs and Heat Map results in this page.



## 4.6.1 ANPR

You can Search and Backup ANPR logs.

Input corresponding information and click search button  to search and you will get a whole ANPR logs list. License plate snapshot will be shown on the logs list while the complete image video and license plate information will be shown on the left of the page.




You can click  to play the video.



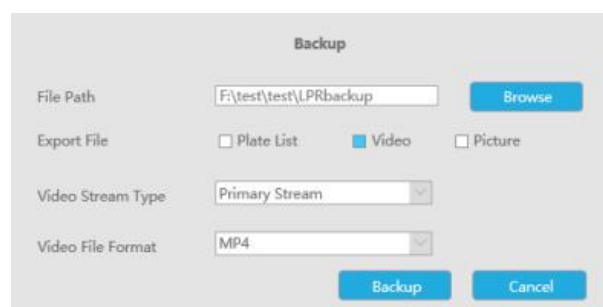
There are two methods to backup ANPR logs.

① Backup license plates you want.

**Step1:** Tick license plates you want to backup and click ;

**Step2:** Select the export file type, video stream type and video file format, and then click

.



② Backup all.

**Step1:** Click backup all  button;

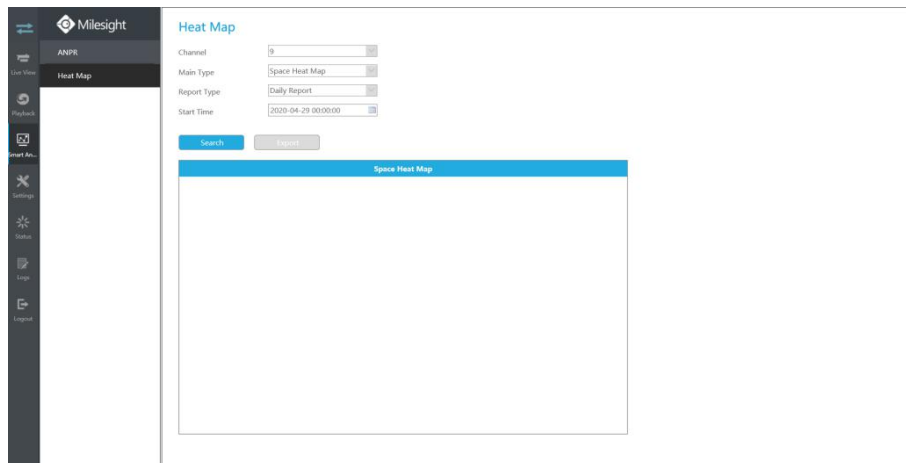
**Step2:** Select the export file type, video stream type and video file format, then click export button.

Then you will get corresponding file as selected export file type.

Picture	12/19/2019 6:49 AM	File folder
Plate List	12/19/2019 6:48 AM	File folder
Video	12/19/2019 6:49 AM	File folder

## 4.6.2 Heat Map

You can Search and Export Heat Map results.

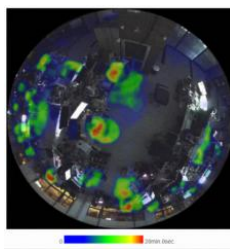


**Step1:** Entering search conditions.

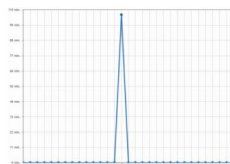
**Channel:** Select the channel first.

**Main Type:** Space Heat Map and Time Heat Map are available.

① Space Heat Map: Space Heat Map will be presented as a picture with different colors. Different colors represent different heat values. Red represents the highest and blue represents the lowest.





② Time Heat Map: Time heat map will be presented as a line chart to show the heat at different times.



**Report Type:** Daily Report, Weekly Report, Monthly Report and Annual Report are available.

**Start Time:** Input the time from which you want to Search.

**Step2:** Click  to obtain the corresponding result and then you can click  to export it.



## 4.7 Settings

### 4.7.1 Local Configuration

Local Configuration includes Record File Path, Preview Picture Path, Playback Preview Path, Connection Type, Play Mode and Primary Stream When Fullscreen option.

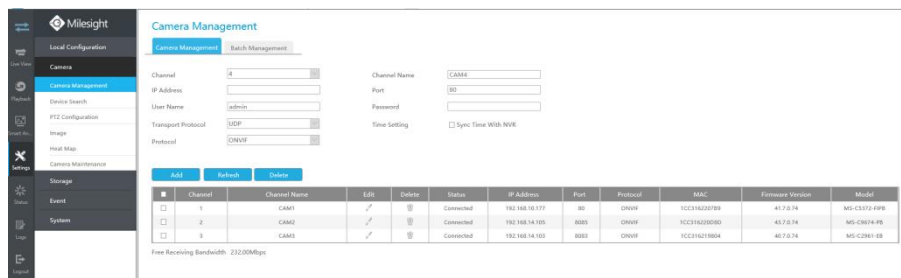
#### Local Configuration

Record File Path	<input type="text" value="C:\Users\Eva\Webview\RecordFile"/>	<input type="button" value="Browse"/>
Preview Picture Path	<input type="text" value="C:\Users\Eva\Webview\LiveCaptureFile"/>	<input type="button" value="Browse"/>
Playback Picture Path	<input type="text" value="C:\Users\Eva\Webview\PlaybackFile"/>	<input type="button" value="Browse"/>
Connection Type	<input type="text" value="HTTP"/>	
Play Mode	<input type="text" value="Least Delay"/>	
Auto Logout	<input type="text" value="15 minutes"/>	
Primary Stream When Fullscreen	<input type="checkbox"/>	

### 4.7.2 Camera

Before configuration, please ensure that camera is connected to the same network as your NVR and the network setting for your NVR is properly setup.

#### 4.7.2.1 Camera Management



#### Step1. Add Camera.

**Method1. Add IP Channel in Device Search interface. 'Settings' → 'Camera' → 'Device Search'.**

1. Select IP Range, NIC and Protocol, which includes ALL, ONVIF and MSSP.

**MSSP:** You can search out all Milesight camera which has different network segment in the LAN.



2. Click  to search cameras at the same network segment with NVR.



Device Search

Protocol: ALL | NIC: ALL | IP Range: 0 | 0 | 0 | 255 | 255 | 255 | 255 | Search | Add

No.	IP Address	Edit	Status	Port	Protocol	NIC	MAC	Firmware Version	Model	Vendor
1	192.168.2.111	/	Active	80	MSSP	LAN1	1CC3162000A1	40.7.0.4-mp-14	MS-C264-4PB	Milesight
2	192.168.2.112	/	Active	80	MSSP	LAN1	1CC3162000B8	41.7.0.14	MS-C262-6PB	Milesight
3	192.168.2.114	/	Active	80	MSSP	LAN1	1CC31620016F	43.7.0.71-020	MS-C267-4PB	Milesight
4	192.168.2.115	/	Active	80	MSSP	LAN1	1CC31621001F	41.7.0.14-021	MS-C262-4PB	Milesight
5	192.168.2.119	/	Active	80	MSSP	LAN1	1CC316211005	43.7.0.14-01-0a	MS-C261-4B1B	Milesight
6	192.168.2.121	/	Active	80	MSSP	LAN1	1CC3162A091A	43.7.0.14-010-0m-10a3	MS-C264-4PB	Milesight
7	192.168.2.132	/	Active	80	MSSP	LAN1	1CC3162093A1	41.7.0.12-01	MS-C462-4PB	Milesight
8	192.168.2.133	/	Active	80	MSSP	LAN1	1CC31621A15B	41.7.0.71-020	MS-C462-4PB	Milesight
9	192.168.2.139	/	Active	80	MSSP	LAN1	1CC316211000	43.7.0.14-023	MS-C262-4PB	Milesight
10	192.168.2.140	/	Active	80	MSSP	LAN1	1CC316210027	41.7.0.14	MS-C462-4PB	Milesight
11	192.168.2.147	/	Active	80	MSSP	LAN1	1CC316230744	40.7.0.14	MS-C261-4B	Milesight
12	192.168.2.148	/	Active	80	MSSP	LAN1	1CC31623090C	43.7.0.14-17-01	MS-C267-4PB	Milesight
13	192.168.2.149	/	Active	80	MSSP	LAN1	1CC316230F96	41.7.0.14-05	MS-C460-4PB	Milesight
14	192.168.2.150	/	Active	80	MSSP	LAN1	1CC316220795	43.7.0.14-01-0a	MS-C263-4PB	Milesight
15	192.168.2.169	/	Active	80	MSSP	LAN1	1CC3162207C5	42.7.0.06-06	MS-C262-4PB	Milesight
16	192.168.2.170	/	Active	80	MSSP	LAN1	1CC3162188C3	40.7.0.71-0mg	MS-C262-4PB	Milesight

Activate | IP List

3. Select one channel, click  button, input password and click  to finish.

Add Camera

MAC: 1CC3162000A1

IP Address: 192.168.10.220

Channel: 5

User Name: admin

Transport Protocol: UDP



Port: 80



Protocol: MSSP

Channel Name: CAM5

Password: [ ]

Time Setting:  Sync Time With NVR



3. Or you can check  to **batch adding** the network cameras if they are of the same password, and you can choose TCP or UDP transport protocol for it. Click  to finish batch adding.

Add Camera

User Name: admin

Password: [ ]

Transport Protocol: UDP


 

**Method2. Add camera through camera management interface. 'Settings' → 'Camera' → 'Camera Management'.**

### Camera Management

Camera Management | Batch Management

Channel	5	Channel Name	CAM5
IP Address		Port	80
User Name	admin	Password	
Transport Protocol	UDP	Time Setting	<input type="checkbox"/> Sync Time With NVR
Protocol	ONVIF		

Select channel id, input complete information, then click  button.

There are three protocols available for camera connection:

- **ONVIF:** You can add any IP cameras with ONVIF protocols.

### Camera Management

Camera Management | Batch Management

Channel	5	Channel Name	CAM5
IP Address		Port	80
User Name	admin	Password	
Transport Protocol	UDP	Time Setting	<input type="checkbox"/> Sync Time With NVR
Protocol	ONVIF		

- **RTSP:** You can add any IP cameras with RTSP protocol streams (Port: 554). It needs you to input complete resource path of the IP camera to add it. Take Milesight device for example, the resource path of main stream is “rtsp://IP:port/main” and second stream is “rtsp://IP:port/sub”. The length of RTSP can be up to 128 bits.

### Camera Management

Camera Management | Batch Management

Channel	5	Channel Name	CAM5
User Name	admin	Password	*****
Transport Protocol	UDP	Time Setting	<input type="checkbox"/> Sync Time With NVR
Protocol	RTSP		
Primary	rtsp://192.168.7.222:554/main	Secondary	rtsp://192.168.7.222:554/sub

- **MSSP:** You can add Milesight cameras which are in the same LAN with this protocol.

### Camera Management

Camera Management | Batch Management


Channel	5	Channel Name	CAM5
IP Address	192.168.7.222	Port	80
User Name	admin	Password	*****
Transport Protocol	UDP	Time Setting	<input type="checkbox"/> Sync Time With NVR
Protocol	MSSP		

You can add offline cameras to Milesight NVRs by method2. As long as the device information

you fill in is correct, NVR will determine whether the device is connected and update the camera status automatically.

**Step2. Check the connection status.**

After adding the IP channels, click  on Camera Management interface, then


 appears under Status. If it doesn't appear, you need to check if the network is connected or whether the user name, password is correct or not.


Channel	Edit	Delete	Status	IP Address	Port	Protocol	MAC	Firmware Version	Model	Vendor
1			Connected	192.168.8.150	80	ONVIF	1CC3162000EF	41.7.0.60	MS-C2862-4PB	Milesight Technology Co.,Ltd.
2			Connected	192.168.8.135	80	ONVIF	1CC316211E78	41.7.0.60-r11-a1	MS-C4482-PB	Milesight Technology Co.,Ltd.

**Step3. Configure IP Channel.**

**Configure one camera**

After successfully adding the channel, click  to re-edit the channel info.

Select [Parameters] page to re-edit this channel parameters. Click  to save the configuration.

You can delete this channel by clicking , or you can select multiple devices and then click

 to delete.

Channel	Edit	Delete	Status	IP Address	Port	Protocol	MAC	Firmware Version	Model	Vendor
1			Connected	192.168.14.102	8081	MSSP	1CC316210991	40.7.0.71-r8	MS-C2962-FPB	Milesight Technology Co.,Ltd.
2			Connected	192.168.14.103	8083	MSSP	1CC316219804	40.7.0.71-r8	MS-C2961-EB	Milesight Technology Co.,Ltd.
3			Connected	192.168.14.104	8084	MSSP	1CC316238D13	40.7.0.71-r8	MS-C2942-B	Milesight Technology Co.,Ltd.

### Batch configuring camera

Click **Batch Management** , select multiple channels and set cameras parameters.

The screenshot shows the 'Camera Management' interface. On the left is a sidebar with navigation options. The main area is titled 'Camera Management' and has a 'Batch Management' tab selected. Below the tab are various configuration settings for transport protocol, video codec, frame size, max frame rate, bit rate, and audio. At the bottom, there is a table of channels with columns for Channel, Channel Name, Edit, Delete, Status, IP Address, Port, Protocol, MAC, Firmware Version, and Model. A red box highlights the 'Batch Management' tab and the configuration settings area.

### Note:

The user name and password entered here are the default user name and password. The management port is 80 and the default Transport protocol is UDP.

### Step5. Configure PoE Channel(Only for PoE NVR)

1. Connect Milesight camera to PoE port, it will detect the camera automatically.
2. If the camera's password is the same with NVR admin password, it will be successfully authenticated and be changed into the same network segment with internal NIC IPv4 address, then the camera will be connected successfully.
3. If the camera's password is different with NVR admin password, the PoE channel will show

disconnect status. You need to input the camera's password by clicking **Edit Authentication** to realize authentication (you can also multi-select the devices and then click this button). Then the camera will be changed into the same network segment with internal NIC IPv4 address and will be successfully connected. In next time, NVR will use the password you input to authenticate this camera when you re-plug it;

### Edit Authentication

User Name

Password

Note: Edit authentication for selected cameras.


OK
Cancel

### Note:


1. When NVR detects the inactive camera connected via PoE port, the camera will synchronize the password of NVR, and then camera will be successfully connected.

2. The steps for adding the **third party PoE cameras** plugged into Milesight PoE NVR:

① Set camera's IP segment to the same as NVR PoE NIC before plugging into PoE NVR;

② Select PoE for NIC in Device Search interface, click  to search out cameras;

③ Select cameras and click  to add them.

4. You can **access to cameras website** directly by clicking , which can save much steps to configure cameras with complete settings which were unavailable.

**Camera Management**

Camera Management | Batch Management

Channel:  Channel Name:   
 IP Address:  Port:   
 User Name:  Password:   
 Transport Protocol:  Time Setting:  Sync Time With NVR  
 Protocol:

No.	Channel	Edit	Delete	Status	IP Address	Access	Port	Protocol	MAC	Firmware Version	Model	Vendor
<input type="checkbox"/>	1			Connected	192.168.14.102		8081	MSSP	1CC316210991	40.7.0.71-r8	MS-C2962-FPB	Milesight Technology Co.,Ltd.
<input type="checkbox"/>	2			Connected	192.168.14.103		8083	MSSP	1CC316219804	40.7.0.71-r8	MS-C2961-EB	Milesight Technology Co.,Ltd.
<input type="checkbox"/>	3			Connected	192.168.14.104		8084	MSSP	1CC316238D13	40.7.0.71-r8	MS-C2942-B	Milesight Technology Co.,Ltd.
<input type="checkbox"/>	4			Connected	192.168.14.105		8085	MSSP	1CC316220DBD	43.7.0.71-r8	MS-C9674-FPB	Milesight Technology Co.,Ltd.
<input type="checkbox"/>	5			Connected	192.168.20.2		1	MSSP	1CC31621EC5A	40.7.0.71-r10	MS-C3263-FPB	Milesight Technology Co.,Ltd.

Free Receiving Bandwidth 136.50Mbps

**Note:**


1. Please enable Channel Access in Network->More first;
2. Please select HTTP as transport protocol for PoE-connected cameras;
3. Please upgrade the NVR firmware version to xx.8.0.6 or above.

### 4.7.2.2 Device Search


**Device Search**

Protocol: ALL | NIC: ALL | IP Range: 0 . 0 . 0 . 0 - 255 . 255 . 255 . 255

No.	IP Address	EGD	Status	Port	Protocol	NIC	MAC	Firmware Version	Model	Vendor
<input type="checkbox"/>	1	192.168.2.111		Active	80	MSSP	LAN1 1CC31644889	40.7.0.74-mp-44	MS-C2964-FPB	Milesight
<input type="checkbox"/>	2	192.168.2.112		Active	80	MSSP	LAN1 1CC31610098	41.7.0.74	MS-C2962-80PB	Milesight
<input type="checkbox"/>	3	192.168.2.114		Active	80	MSSP	LAN1 1CC3162704F	41.7.0.73-02b	MS-C9674-FPB	Milesight
<input type="checkbox"/>	4	192.168.2.115		Active	80	MSSP	LAN1 1CC316213C1E	41.7.0.74-02b	MS-C3162-FPB	Milesight
<input type="checkbox"/>	5	192.168.2.119		Active	80	MSSP	LAN1 1CC3162210D5	41.7.0.74-45-5a	MS-C2961-801B	Milesight
<input type="checkbox"/>	6	192.168.2.121		Active	80	MSSP	LAN1 1CC3162A091A	41.7.0.74-dgq-2m-1e4d3	MS-C9674-FPB	Milesight
<input type="checkbox"/>	7	192.168.2.132		Active	80	MSSP	LAN1 1CC31680581	41.7.0.71-01	MS-C9674-FPB	Milesight
<input type="checkbox"/>	8	192.168.2.133		Active	80	MSSP	LAN1 1CC316214151	41.7.0.71-02b	MS-C9674-FPB	Milesight
<input type="checkbox"/>	9	192.168.2.139		Active	80	MSSP	LAN1 1CC31621980	41.7.0.74-02b	MS-C9674-FPB	Milesight
<input type="checkbox"/>	10	192.168.2.146		Active	80	MSSP	LAN1 1CC316219227	41.7.0.74	MS-C4462-FPB	Milesight
<input type="checkbox"/>	11	192.168.2.147		Active	80	MSSP	LAN1 1CC316210744	40.7.0.74	MS-C2961-EB	Milesight
<input type="checkbox"/>	12	192.168.2.148		Active	80	MSSP	LAN1 1CC316220B9C	41.7.0.73-07-4f	MS-C9674-FPB	Milesight
<input type="checkbox"/>	13	192.168.2.149		Active	80	MSSP	LAN1 1CC31623CF96	41.7.0.74-45	MS-C4463-FPB	Milesight
<input type="checkbox"/>	14	192.168.2.168		Active	80	MSSP	LAN1 1CC316220785	41.7.0.74-45-5a	MS-C3162-FPB	Milesight
<input type="checkbox"/>	15	192.168.2.169		Active	80	MSSP	LAN1 1CC3162207C5	42.7.0.66-46	MS-C9674-FPB	Milesight
<input type="checkbox"/>	16	192.168.2.170		Active	80	MSSP	LAN1 1CC3162198C3	40.7.0.71-mp	MS-C2962-FPB	Milesight

Select Protocol and NIC, set the IP range, then click  to quickly search the IP devices that support selected protocol and NIC at the same LAN with NVR.

Protocol:  NIC:  IP Range:  -

If the camera status shows Inactive, please select camera and click  to activate it first before adding to NVR.

Besides, you can select channels and click  to **batch editing** their IP information.

**IP Edit**

MAC	<input type="text" value="1CC31621EC5A"/>
IP Address	<input type="text" value="192.168.7.222"/>
Subnet Mask	<input type="text" value="255.255.240.0"/>
Gateway	<input type="text" value="192.168.7.1"/>
DNS	<input type="text" value="8.8.8.8"/>
Port	<input type="text" value="80"/>
User Name	<input type="text" value="admin"/>
Password	<input type="password"/>

### 4.7.2.3 PTZ Configuration

Select a channel and set the PTZ parameters. You can select [Copy to Camera] to copy the same configuration to other channels.

**PTZ Configuration**

Channel	<input type="text" value="1"/>
Connection Type	<input type="text" value="ONVIF"/>
Baud Rate	<input type="text" value="9600"/>
Data Bit	<input type="text" value="8"/>
Stop Bit	<input type="text" value="1"/>
Checksum Bit	<input type="text" value="None"/>
PTZ Protocol	<input type="text" value="PELCO_D"/>
PTZ Address	<input type="text" value="1"/>

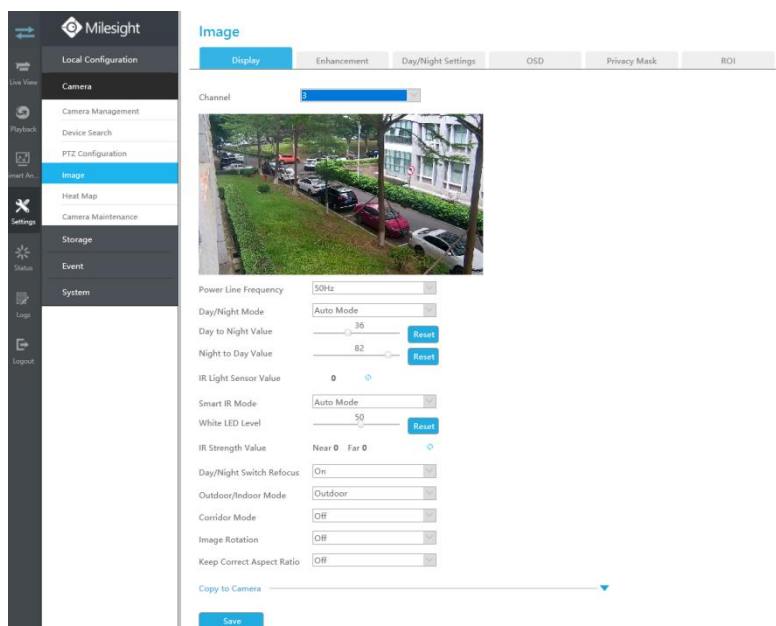
Copy to Camera

**Note:**

1. The PTZ protocol and address of IP channel must be consistent with those of the PTZ decoder.
2. Settings for a PTZ camera must be configured before it can be used. Make sure that the PTZ and RS-485 of the NVR are connected properly.

## 4.7.2.4 Image

### Display



**Step1. Select channel.**

**Step2. Set the configuration.**

**Power Line Frequency:** 50Hz and 60Hz are available.

**Day/Night Mode:** Set the Day/Night mode for the channel.

**Day to Night Value:** Set the Minimum illumination intensity to trigger Night Mode.

**Night to Day Value:** Set the Maximum illumination intensity to trigger Day Mode.

**IR Light Sensor Value:** Shows the current value of IR light sensor.

**IR LED Level:** Adjust the IR LED level from 1 to 100.

**White LED Level:** Adjust the White LED level from 0 to 100.

**Smart IR Mode:** With the combination of the High Beam and Low Beam, The IR LEDs technology has been upgraded to provide better image clarity and quality regardless of the object distance. Also, the Low Beam and High Beam's brightness can be adjusted manually or automatically on the basis of the Zoom ratio. Moreover, with the IR anti-reflection panel, the infrared light transmittance is highly increased. Support to set the strength of the IR to Auto Mode or Customize to achieve the best effect.

**Near view IR level:** Adjust the light strength of Low-Beams LED light level from 0 to 100.

**Far view IR level:** Adjust the light strength of High-Beams LED light level from 0 to 100.

**IR Strength Value:** The current value of Low-Beams LED and High-Beams LED light value.

**Day/Night Switch Refocus:** With this option enabled, the camera will refocus when switching between day mode and night mode.

**Outdoor/Indoor Mode:** Set Outdoor/Indoor mode for the channel.

**Corridor Mode:** Set corridor mode.

**Image Rotation:** Set image rotation.

**Local Display Video:** Select NTSC or PAL for local display.

**Smoked Dome Cover:** This function is only for Pro Dome. If Pro Dome is equipped with a Smoked Dome Cover, enable this function to display a normal image.

**Note:**

1. Smoked Dome Cover is only supported for Pro Dome and PTZ Dome cameras.
2. Smart IR Mode and IR LED Level are supported for cameras with IR LEDs.
3. White LED Level is only supported for PTZ Bullet cameras.

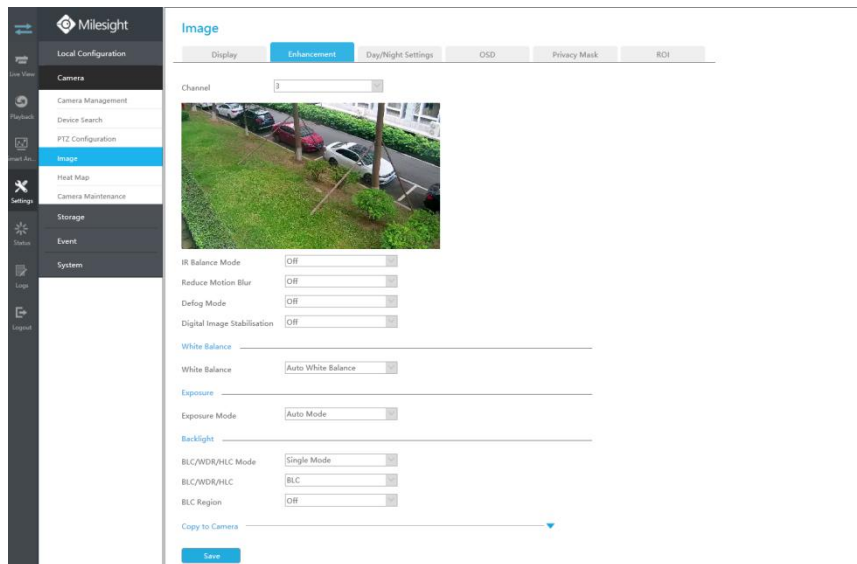
**Step3. You can click [Copy to Camera] to copy the same configuration to other channels.**



**Step4. Click save to save the settings.**

**Enhancement**

You can set Image Enhancement on NVR, and the configuration will be synchronized to Camera.



**Step1. Select channel.**

**Step2. Set the configuration.**

**IR Balance Mode:** Turn on to avoid IR overexposure.

**Reduce Motion Blur:** Enable this function to reduce the motion blur of objects effectively. You can adjust the deblur level from 1 to 100.

**Defog Mode:** Better image effect in foggy weather.

**Digital Image Stabilization:** Decrease the blur and shakiness of the image.

**White Balance:** Choose a white balance mode for the channel.

**Exposure Mode:** Auto Mode, Manual Mode, and Schedule Mode are available.

**BLC/WDR/HLC Mode:** Click to choose Single Mode, Day/Night Mode or Schedule Mode.

**BLC/WDR/HLC:** Click to configure Back Light Compensation, Wide Dynamic Range or High Light Control.

**Wide Dynamic Range:** Off, Customize, and On are available.

**Wide Dynamic Level:** Set WDR with Low/High/Auto level.

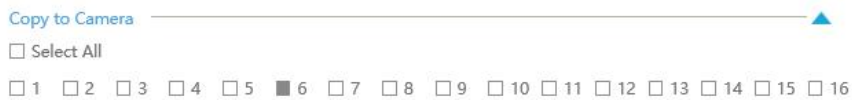
**BLC Region:** Off, Customize, and Centre are available (in single mode, only enable when WDR is disable).



**HLC Level:** Select level for HLC.

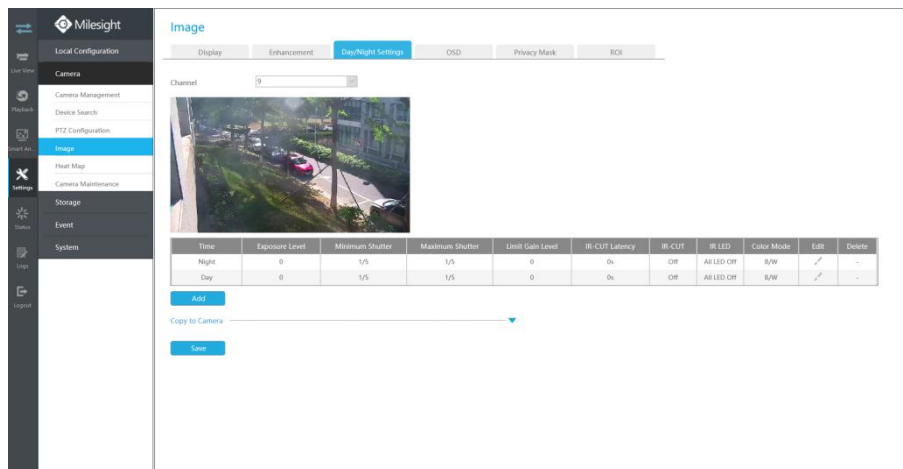
**Anti-flicker Level:** Reduce flickers that appear on screen in some lighting conditions and there are 10 levels of anti-flicker adjustments.

**Step3.** You can click [Copy to Camera] to copy the same configuration to other channels.



**Step4.** Click save to save the settings.

**Day/Night Settings**



**Step1.** Select channel.

**Step2.** Set the configuration.

**Exposure Level:** Level 0~10 are available to meet your need.

**Minimum Shutter:** Set the Minimum Shutter to 1~1/100000s.

**Maximum Shutter:** Set the Maximum Shutter to 1~1/100000s.

**Limit Gain Level:** Set the Limit Gain Level to 1~100.

**IR-CUT Latency:** The interval time of switching one mode to another.

**IR-CUT:** Turn on or turn off IR-CUT.

**IR LED:** Turn on or turn off IR-LED.

**Color Mode:** Select B/W or Color mode under Day/Night mode.

**Edit:** Edit the parameters above.

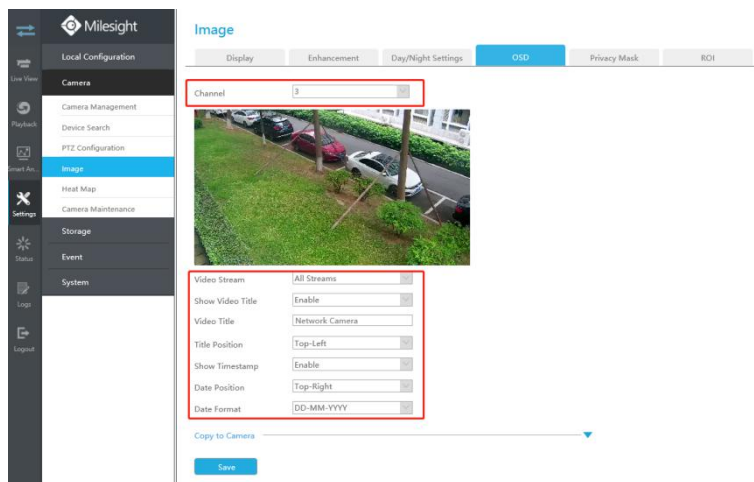
**Step3.** You can click [Copy to Camera] to copy the same configuration to other channels.



**Step4.** Click save to save the settings.

**OSD**

You can set OSD (On Screen Display) on NVR, and the OSD will be synchronized to Camera.



Select channel and finish the info and save.

**[Video Stream]:** Select stream. All Streams, Primary Stream and Secondary Stream are available.

**[Show Video Title]:** Enable it and the video title will be shown on screen.

**[Video Title]:** Set the video title for the channel.

**[Title Position]:** Set the position for the video title: Top-Left, Top-Right, Bottom-Left or Bottom-Right.

**[Show Timestamp]:** Enable or disable timestamp.

**[Date Format]:** Set format for date: YYYY-MM-DD, MM/DD/YY or DD/MM/YYYY.

**[Date Position]:** Set the position for the date: Top-Left, Top-Right, Bottom-Left or Bottom-Right.

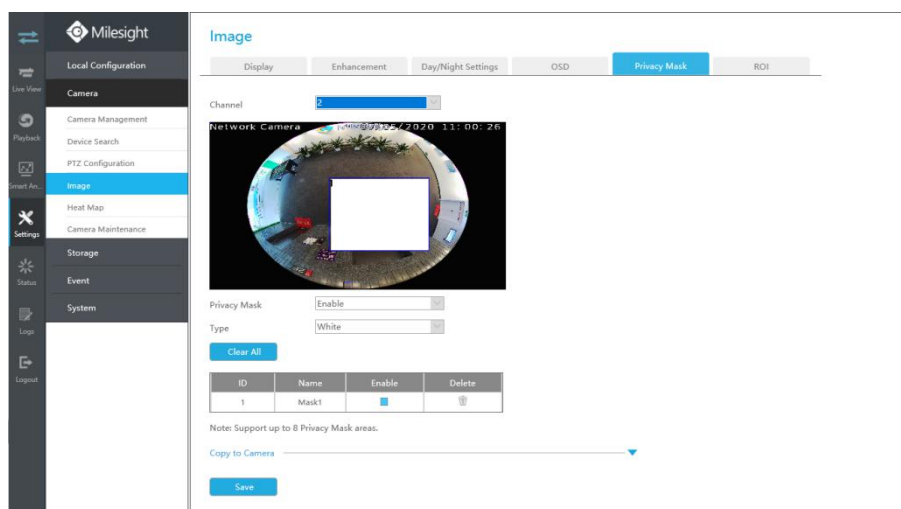
**Step3.** You can click **[Copy to Camera]** to copy the same configuration to other channels.



**Step4.** Click save to save the settings.

## Privacy Mask

Milesight NVR support to set privacy masks. It is used to cover some privacy area which is not proper to appear on monitor.



You can add a privacy mask by following steps:

**Step1. Select channel and enable privacy mask.**

**Step2. Set the privacy mask type and drag the mouse to select the area which is privacy on the live window. You can add 8 areas at most and each zone can be enabled and disabled.**

**Step3. You can click [Copy to Camera] to copy the same configuration to other channels.**



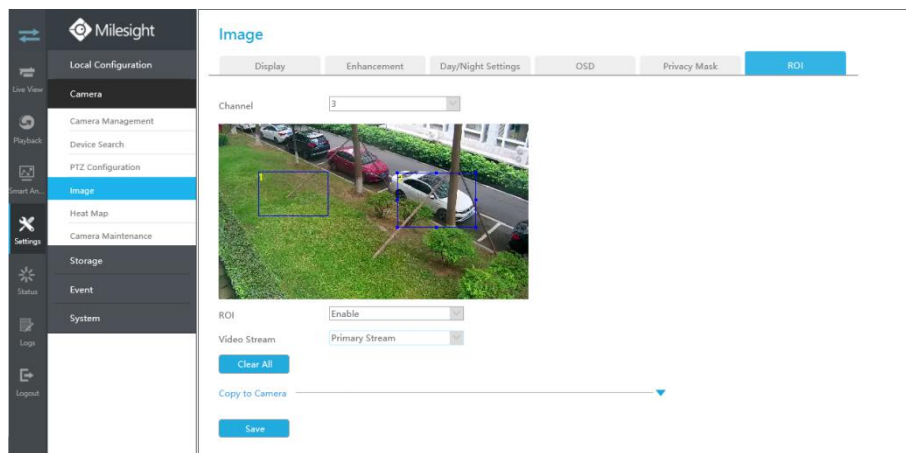
**Step4. Click save to save the settings.**

**Note:**

Ensure the firmware version of the network camera is 4X.7.0.70 or above.

**ROI**

Milesight NVR supports to set ROI (Region Of Interest). It is an image cropping feature designed to assist users in achieving bandwidth and storage optimization.



You can add a ROI by following steps:

**Step1. Select channel and enable ROI.**

**Step2. Set the video stream type and drag the mouse to select the area in the preview window. You can add 8 areas at most and each zone can be enabled and disabled.**

**Step3. You can click [Copy to Camera] to copy the same configuration to other channels.**



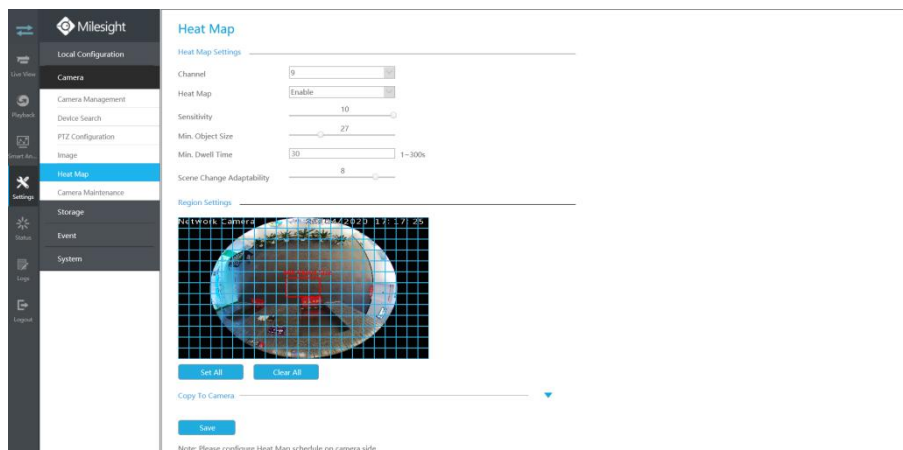
**Step4. Click save to save the settings.**

**Note:**

Ensure the firmware version of the network camera is 4X.7.0.70 or above.

### 4.7.2.5 Heat Map

Milesight NVRs support the configuration of the Heat Map function of Milesight cameras on NVR directly and you can search and export the results of Heat Map in Smart Analysis.



**Sensitivity:** Level 1~10 are available, the default level is 5. The higher the sensitivity, the easier the moving subjects to be recorded in the result.

**Min. Object Size:** Set the minimum object size from 1 to 100, the default value is 10. Objects smaller than this value will not be recorded in the result.

**Min. Dwell Time:** Set the minimum dwell time from 1 to 300, the default value is 30. If the object stays in the area longer than the set "Minimum Dwell Time", it will not be recorded in the result.

**Scene Change Adaptability:** Level 1~10 are available, the default level is 5. Scene Change Adaptability indicates the camera's adaptability to scene changes, which can increase the accuracy of detection. The camera adapts better to faster changing scenes if the value is higher.

**Heat Map Region:** Draw the screen to set the detection area. You can click "Set All" button to select all areas, or "Clear All" button to remove the current drawn area.

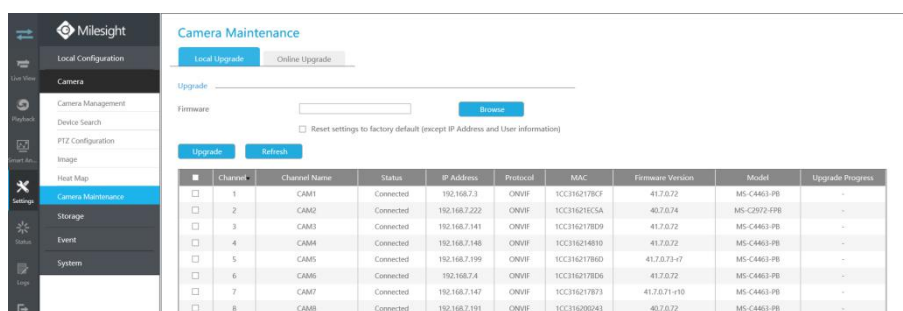
**Note:**

1. Ensure that your camera's version is 4X.7.0.74 or above.
2. Please configure Heat Map schedule on camera side.
3. The Heat Map function only works on the following cameras:

Fisheye: Ensure that the dewarping mode is 10 and the dewarping rule is On-board Dewarping.

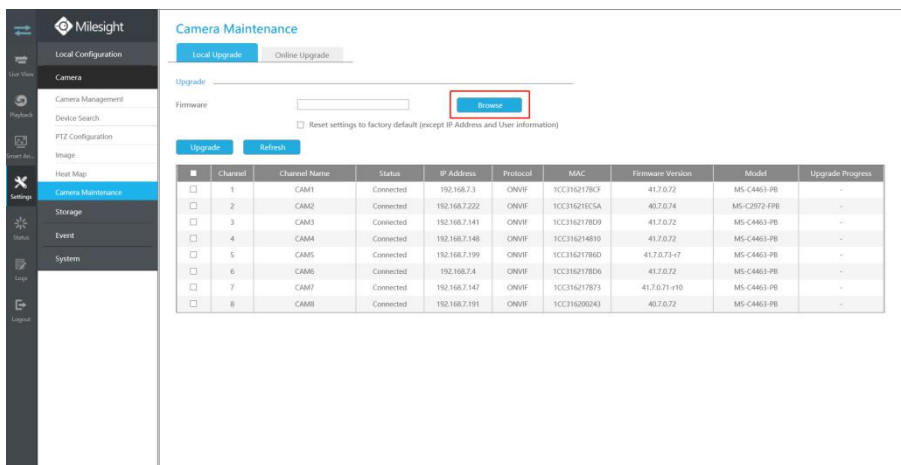
Panoramic Mini Bullet: Ensure to turn on the Lens Distort Correct function.

### 4.7.2.6 Camera Maintenance

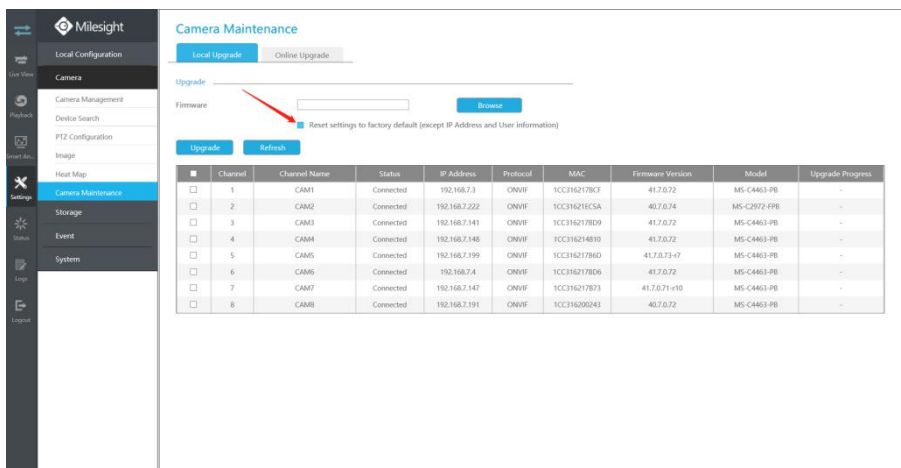


## Local Upgrade

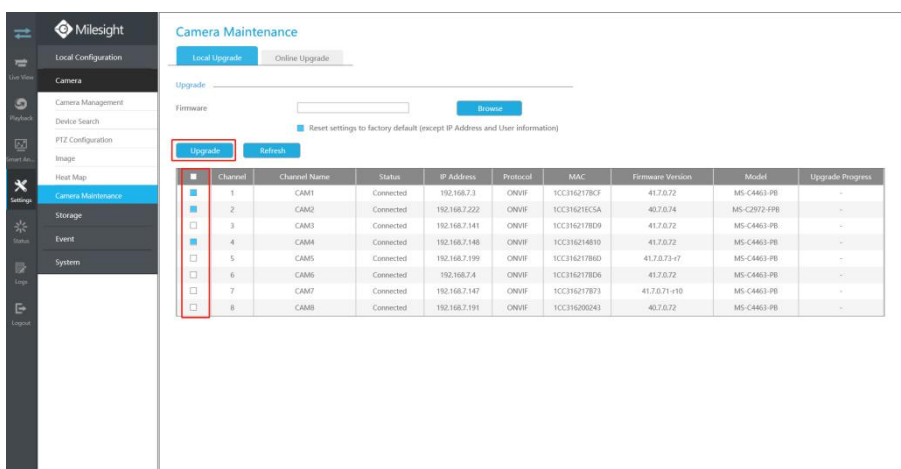
**Step1.** Click **Browse** to select the corresponding firmware.



**Step2.** Check if you need to reset settings to factory default (except IP Address and User Information) after upgrade.

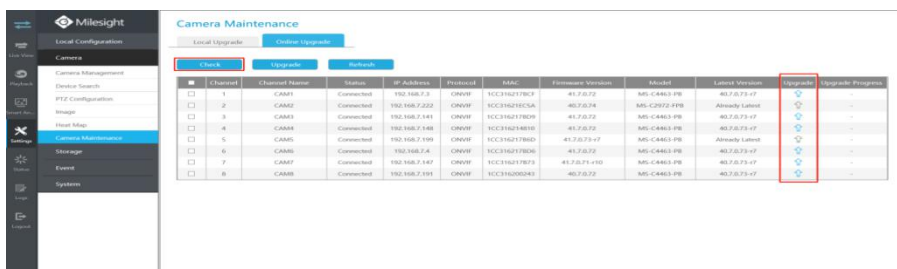


**Step3.** Choose the corresponding channel you want to upgrade and click **Upgrade** to upgrade the camera.



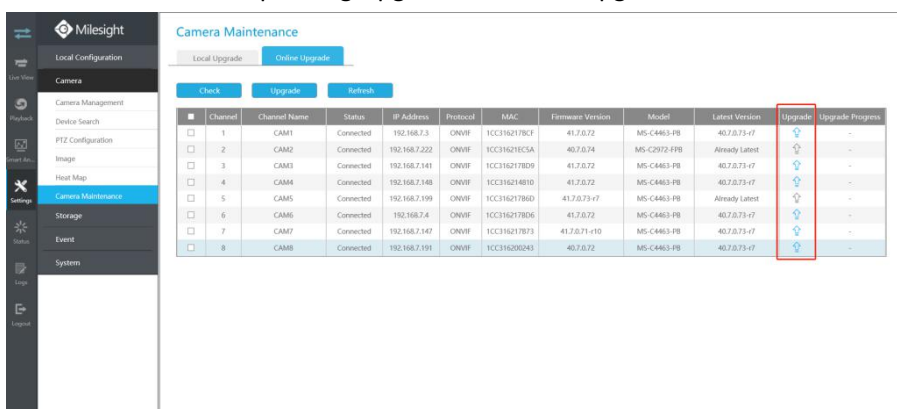
## Online Upgrade

**Step1.** Click **Check** to confirm whether there is a new version for the camera added to NVR; If there is a new version for camera, the icon in corresponding Upgrade column will turn blue and the latest version will be displayed in Latest Version column.

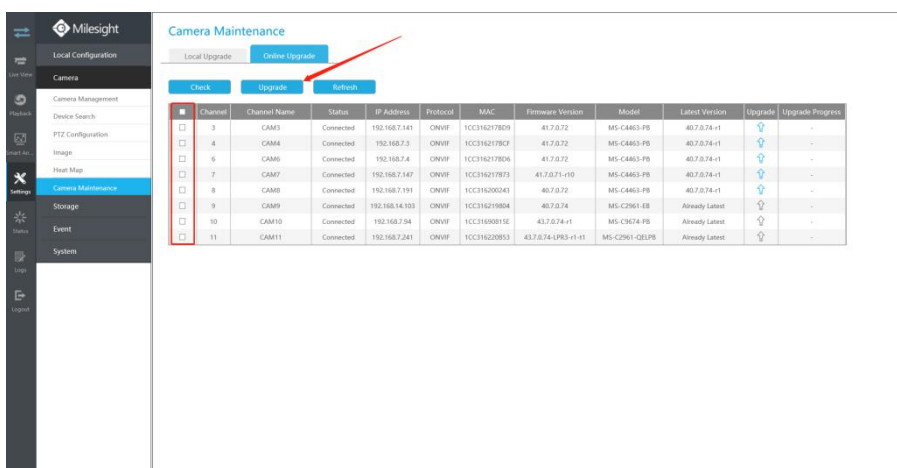


**Step2.** There are two ways to confirm the upgrade.

① Click the blue icon in corresponding Upgrade column to upgrade camera.



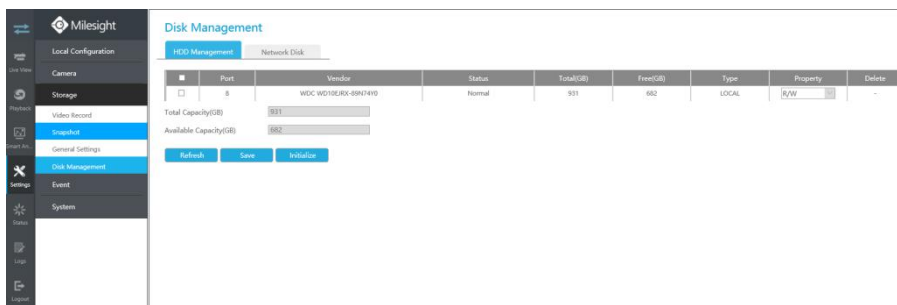
② A way to achieve batch upgrade. Just select the cameras you want to upgrade and then click **Upgrade** button.



### 4.7.3 Storage

#### Preparation for Configuration

**Step1. Ensure that your NVR has installed and initialized the HDD or Network Disk.**

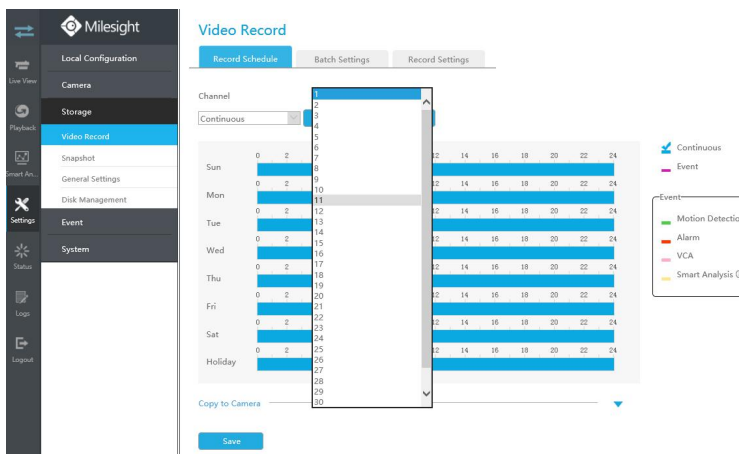


### 4.7.3.1 Video Record

#### Record Schedule

**Step1. Select Record Schedule.**

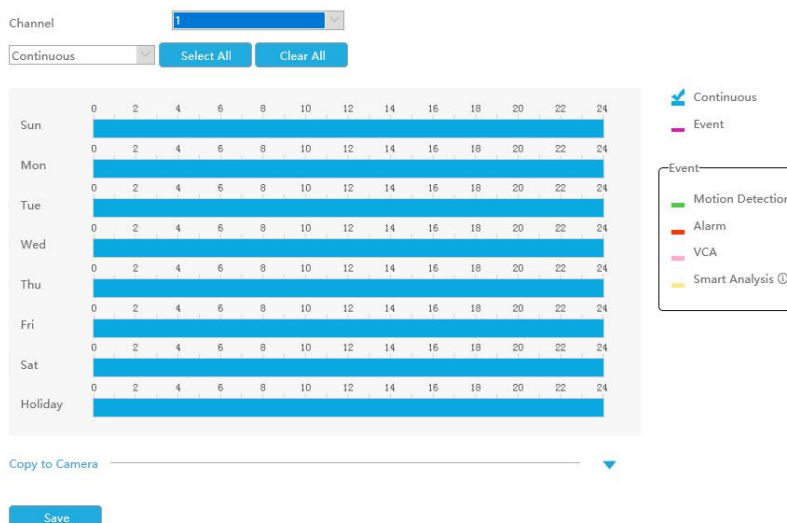
**Step2. Select the desired channel.**



**Step3. Set record schedule.**

Select record type including Continuous, Event (including Motion Detection, Alarm, VCA and Smart Analysis), then set the time you want to record. It is convenient for you to set or clear all


schedule by clicking **Select All** or **Clear All**.





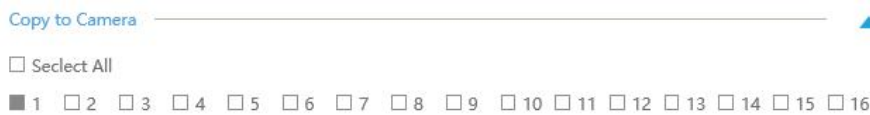
Also, you can click the time bar and reedit the record time



Click  to copy time setting to other days.



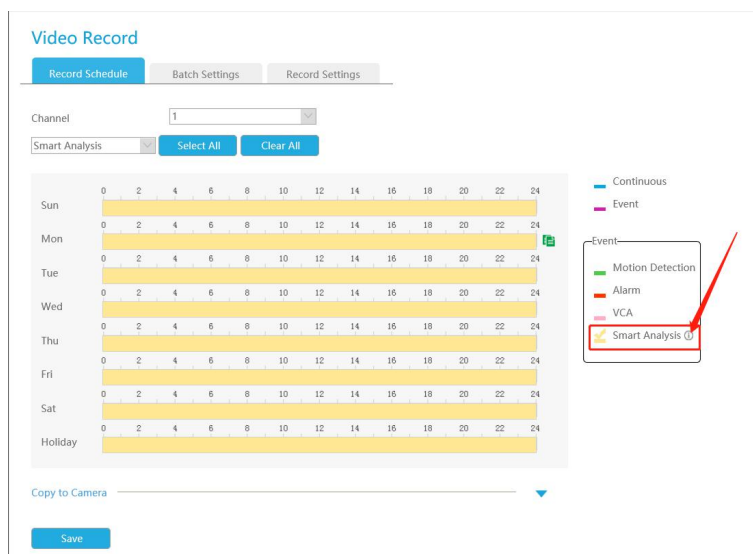
Click [Copy to Camera] to copy the same configuration to other channels.



**Note:**

Here are steps for setting ANPR record correctly so that NVR will record when license plate is detected.

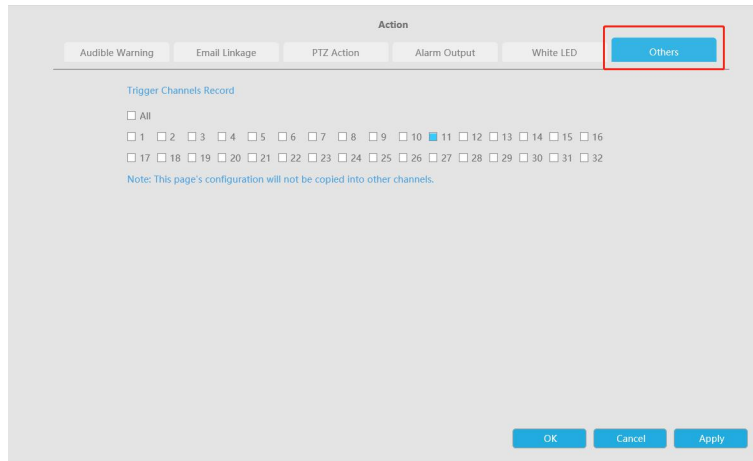
**Step1:** Set Smart Analysis as Record Type in Storage -> Video Record -> Record Schedule interface; The exclamation point next to Smart Analysis is used to indicate that Smart Analysis includes ANPR.



**Step2:** Ensure Black List Mode or White List Mode or Visitor Mode is enabled as your demand.

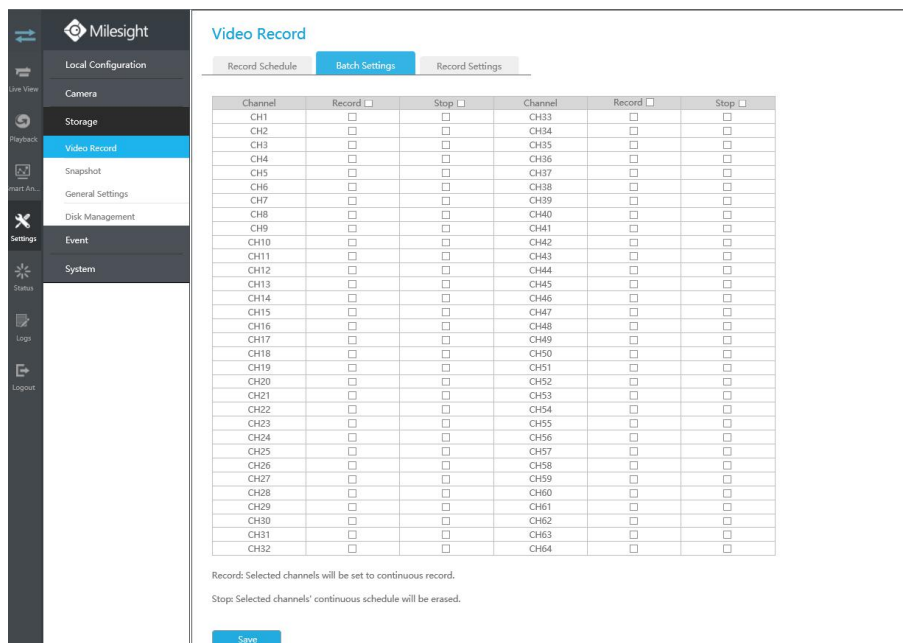
**Step3:** Effective time and Trigger Channels Record action of Black List Mode/White List Mode/Visitor Mode are set (Full effective time and trigger channel record are set by default).





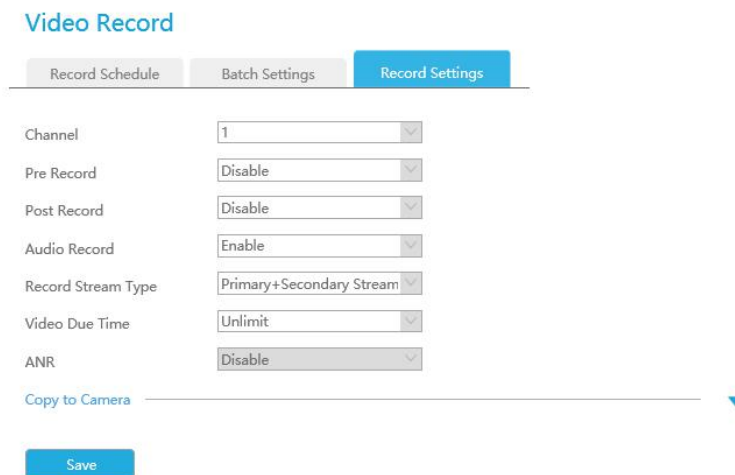
### Batch Settings

Record and Stop are available for user to set for selected channels.



### Record Settings

Make record settings for selected channels.



**Channel:** Select the channel which will be set.

**Pre Record :** Event pre-record duration time. It will start recording before the event is triggered.

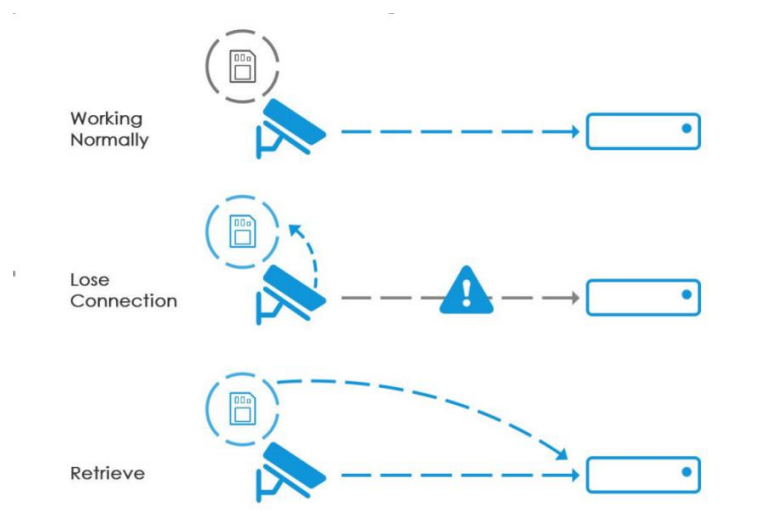
**Post Record:** Event post-record duration time. It will keep recording after the event is over.

**Audio Record:** Select to record audio or not.

**Record Stream Type:** Select Main stream or sub stream for record. **Primary+Secondary Stream is available for NVR model ends with T only.** If secondary stream is selected for recording while it is disabled, a prompt indicating that the secondary stream is unavailable will pop up.

**Video Due Time:** Set the due time of recording files, 1~120days or unlimit are available.

**ANR (Automatic Network Replenishment) :** Can automatically replenish the recording gap due to internet interruptions. As the picture shows below, NVR stores videos when the network connection between NVR and cameras is normal. When the connection lost, the camera would start continuous recording and store videos in SD card instead. Then after reconnection, NVR automatically retrieves the missed videos from camera's SD card in a period of time to prevent data missing.



Here are some notes for using ANR below:

**Note:**

1. Ensure that your devices are with the correct firmware versions.

Camera: V4X.7.0.72 or above

NVR: V7X.9.0.6 or above

Firmware download link: <https://www.milesight.com/support/download#firmware>

2. Camera should equipped with on-board SD card.

3. Camera should be added to NVR by MSSP protocol.

4. No matter whether NVR has recording schedule or not, camera will do ANR recording and then retrieve back to NVR after reconnection.

Click [Copy to Camera] and  to copy the same configuration to other channels.



## 4.7.3.2 Snapshot

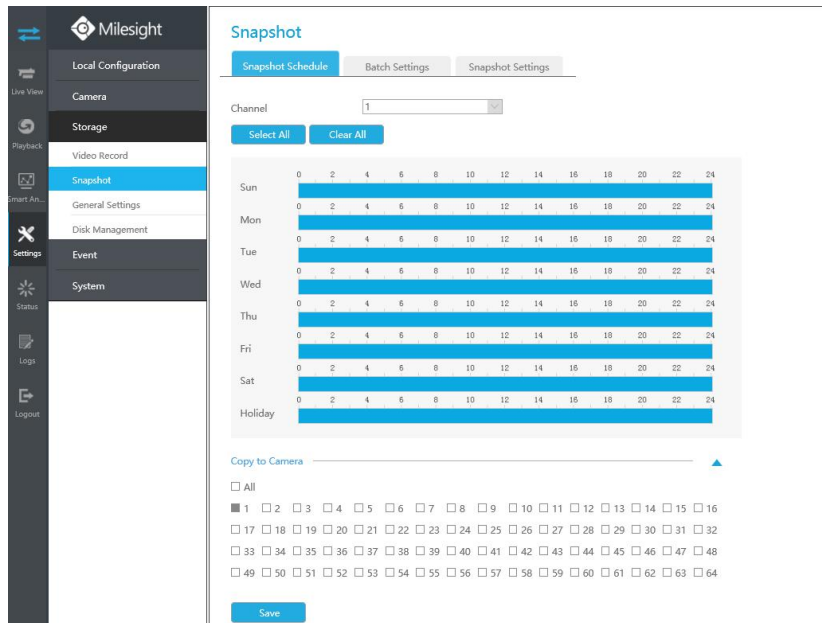
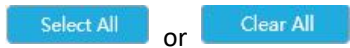
### Snapshot Schedule

**Step1. Select Record Schedule.**

**Step2. Select the desired channel.**

**Step3. Set record schedule.**

Set the time you want to snapshot. It is convenient for you to set or clear all schedule by clicking



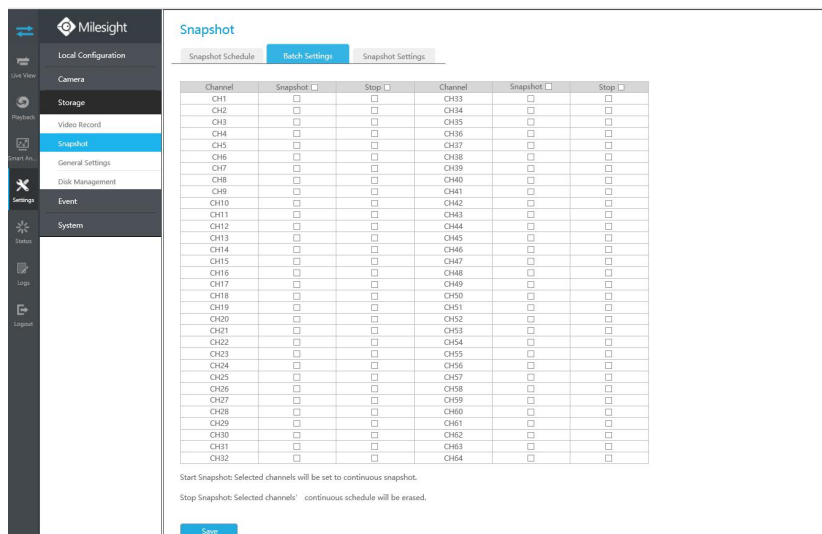
Also, you can click the time bar and reedit the record time

Click to copy time setting to other days.

Click [Copy to Camera] to copy the same configuration to other channels.

### Batch Settings

Snapshot and Stop are available for user to set for selected channels.



### Snapshot Settings

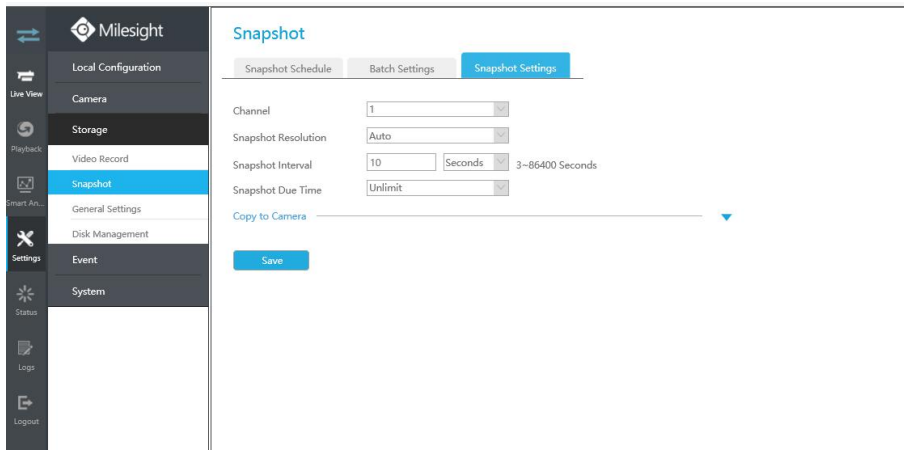
Make general configuration for selected channels. Click [Copy to Camera] to copy the same configuration to other channels.

**Channel:** Select the channel which will be set.

**Snapshot Resolution:** Set the snapshot resolution.

**Snapshot Interval:** Set the snapshot Interval, 3~86400 seconds are available.

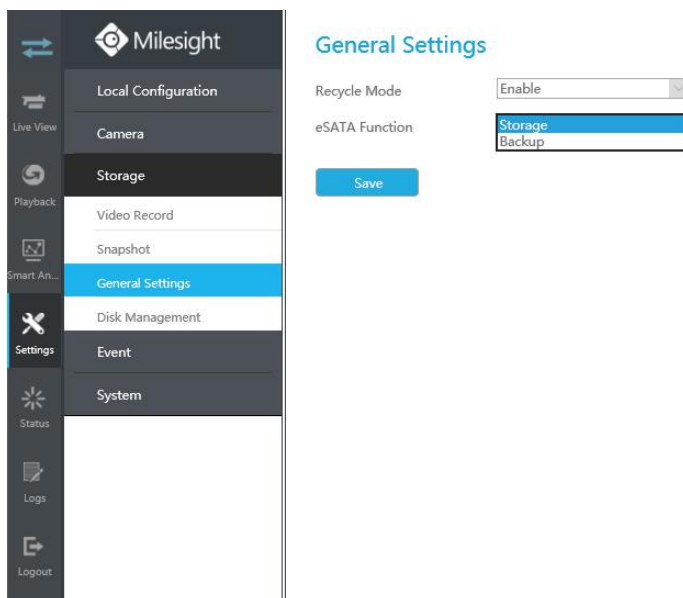
**Snapshot Due Time:** Set the due time of snapshot files, 1~120days or unlimit are available.



**Note:**

Some models support continuous snapshot function.

### 4.7.3.3 General Settings



**Recycle Mode:** You can enable or disable Recycle Mode for all storage device.

**eSATA Function:** Both storage and backup are available.

**Note:**

eSATA Function is only available for NVR 8000 Series.

### 4.7.3.4 Disk Management

You can check Disk status and add Network Disk here.

#### HDD Mangement

**Property:** R/W and Read-only are available for this option.

**Note:**

Initializing the HDD before you set record schedule to ensure that record properly works.



#### Network Disk

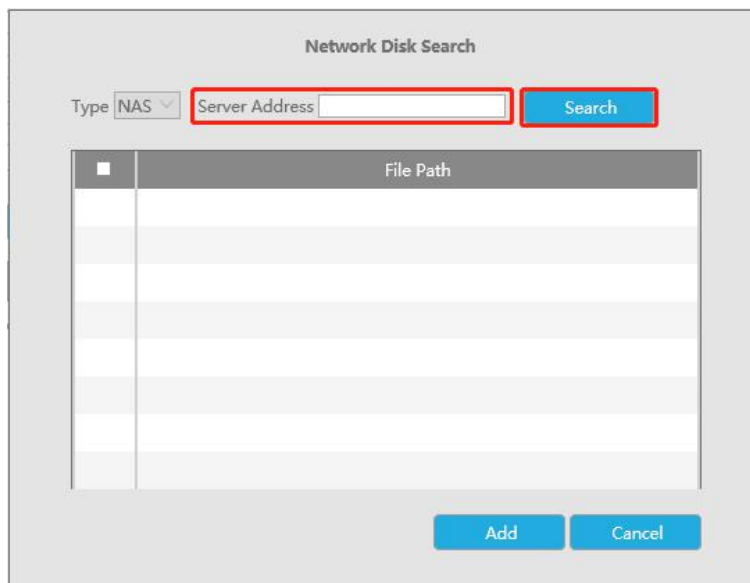
NAS (Network-Attached Storage) should be available within the network and properly configured to store the recorded files and snapshots.

**Note:**

1. NAS with NFS format is the only type for network disk adding.
2. It's recommended to use Hard Disk rather than Network Disk.

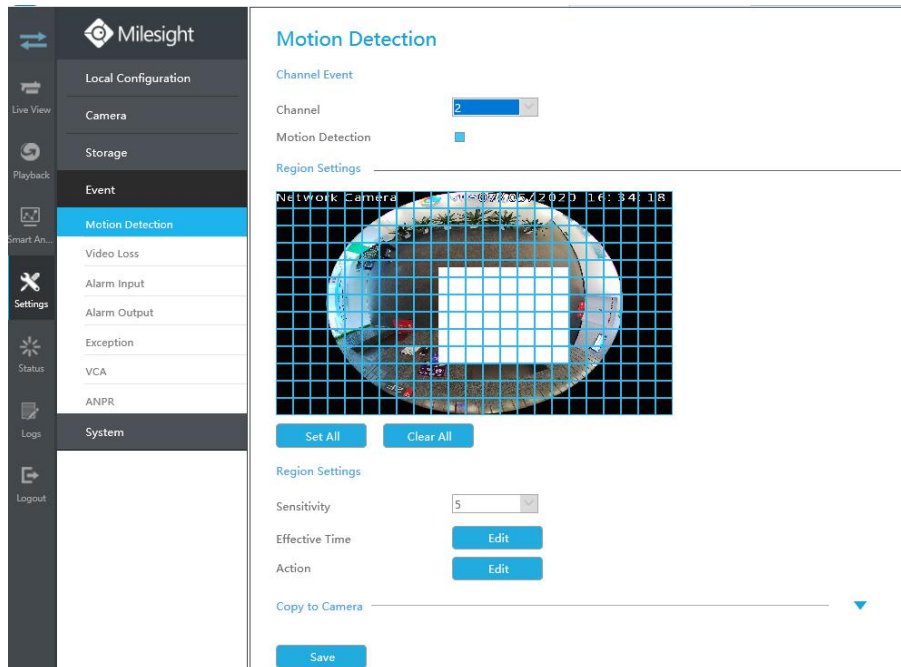


You can add it manually or search local NAS by clicking



## 4.7.4 Event

### 4.7.4.1 Motion Detection



#### Step 1. Enable Motion Detection.

Select channel , Sensitivity and click  to enable Motion Detection.

#### Motion Detection



#### Step2: Set the area for triggering motion detection.

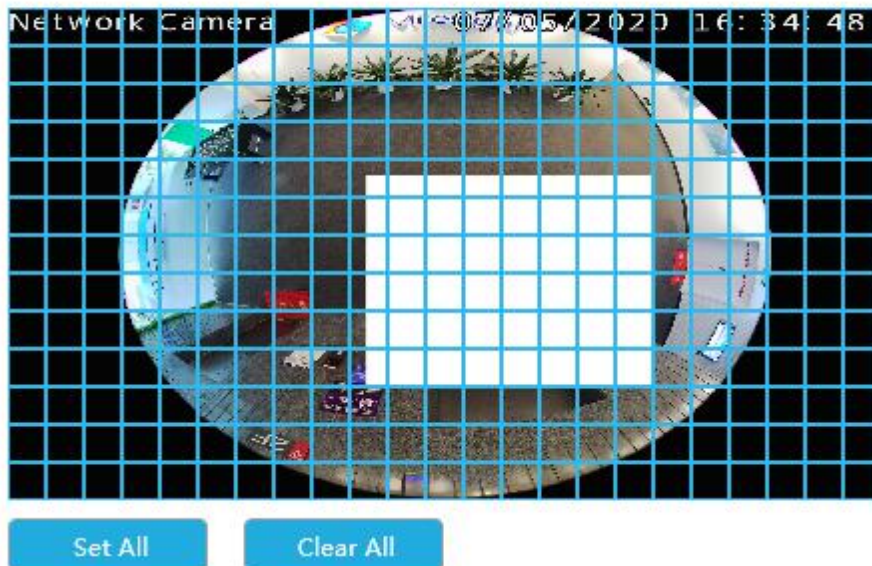
You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking

Set All

and

Clear All

## Region Settings



**Step 3. Set Effective Time of motion detection by clicking**

Edit

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

Select All

or

Clear All

to set or clear all time settings.



**Step 4. Set Action for motion detection alarm by clicking**

Edit

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

Drag a line on the time table for time setting. It will be more convenient by clicking

Select All

or

Clear All

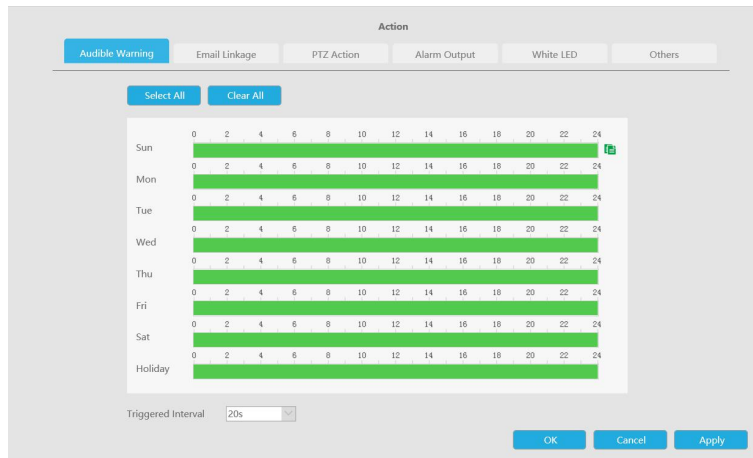
to set or clear all time settings.



Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**Email Linkage:** NVR will send an email to the address you set before.

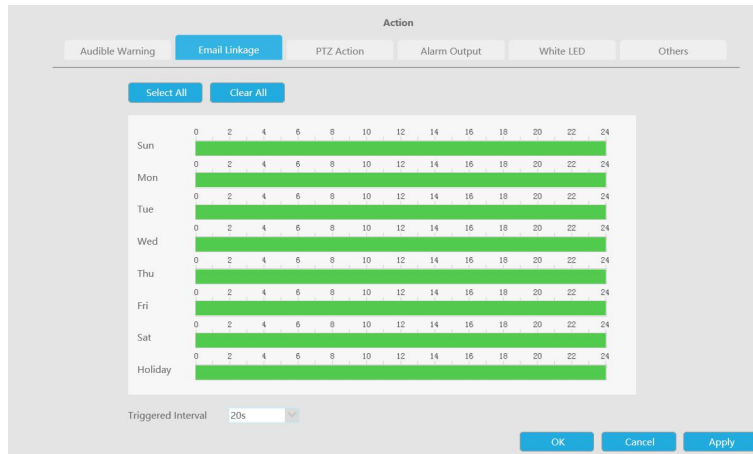
Drag a line on the time table for time setting. It will be more convenient by clicking

or to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

Drag a line on the time table for time setting. It will be more convenient by clicking

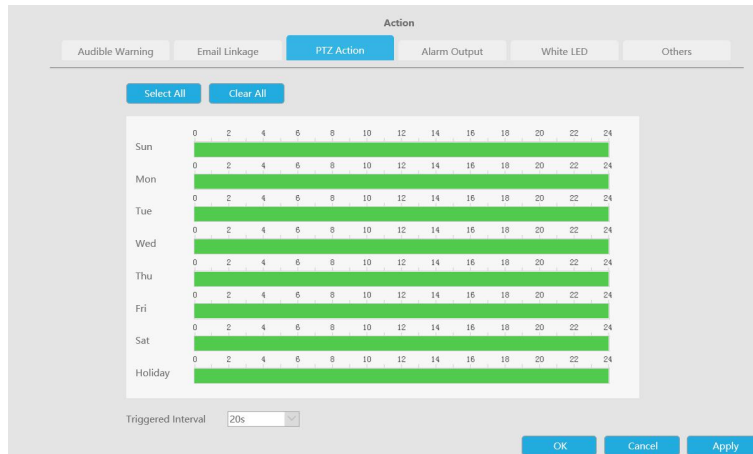
or to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

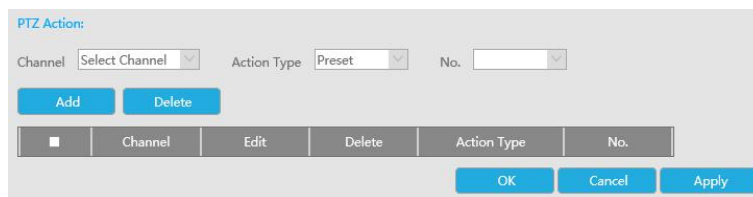
Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.





And you can add PTZ Action.



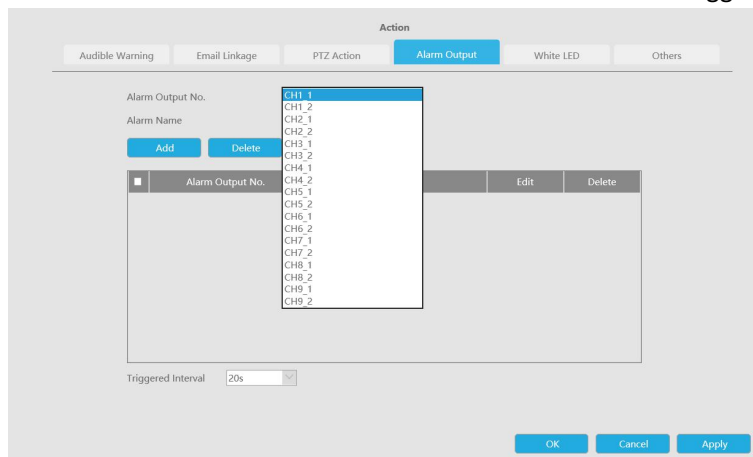
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

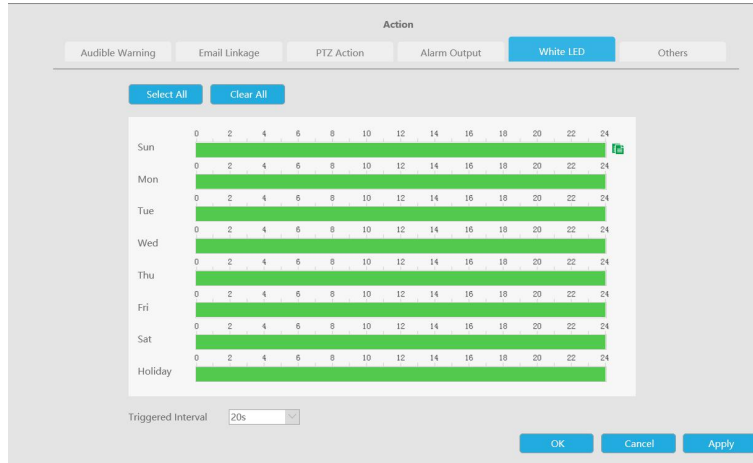
Drag a line on the time table for time setting. It will be more convenient by clicking



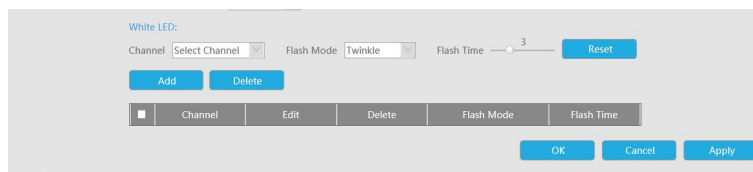
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.

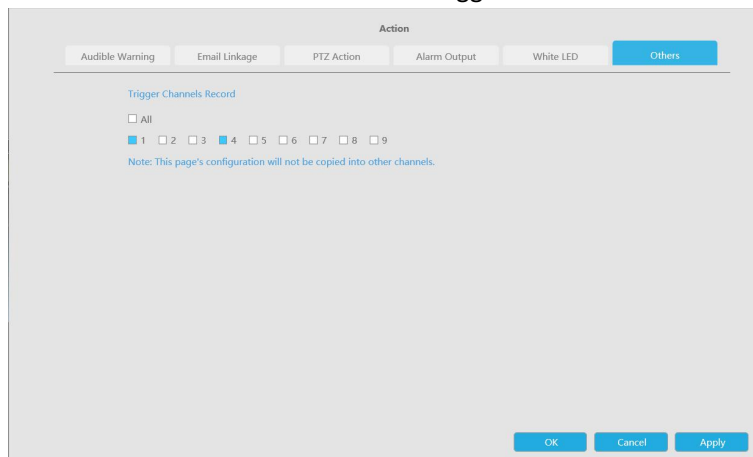


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.

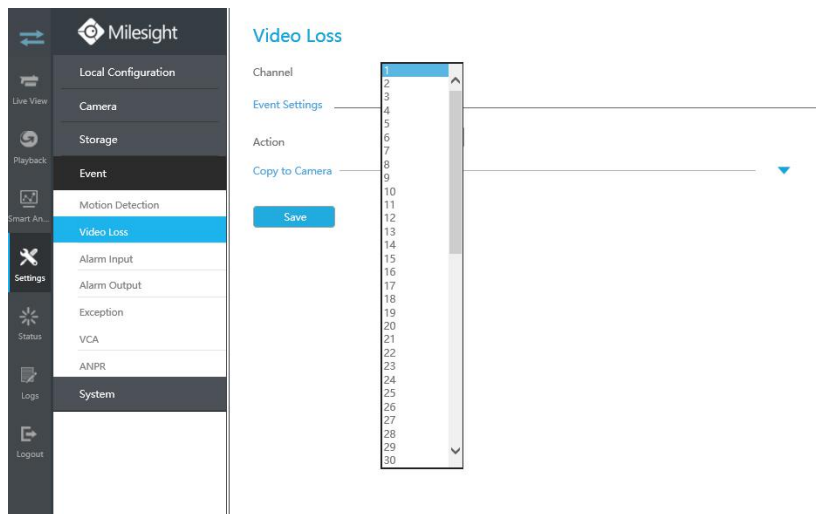


**Step 5.** Click [Copy to Camera] and to copy the same configuration to other channels.



## 4.7.4.2 Video Loss

### Step1. Select a channel




### Step2. Set Action for video loss.

**Audible Warning:** NVR will trigger an audible beep when alarm is triggered.

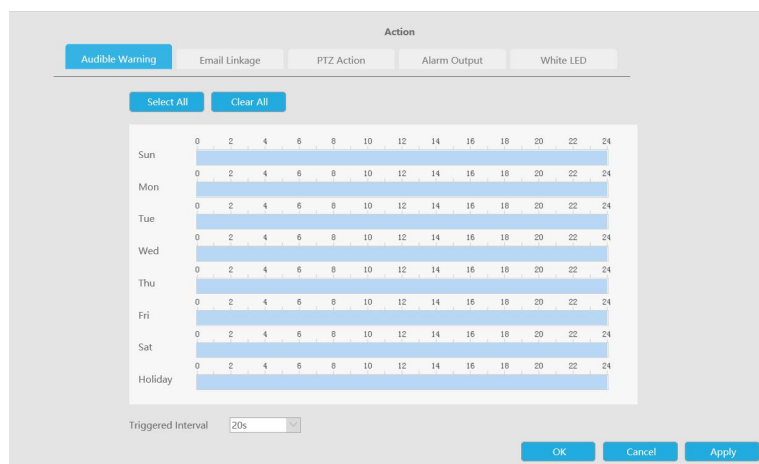
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.




**Email Linkage:** NVR will send an email to the address you set before.

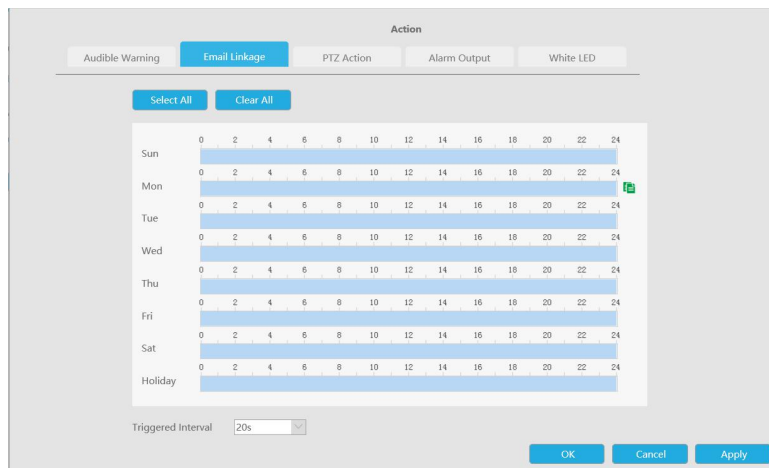
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

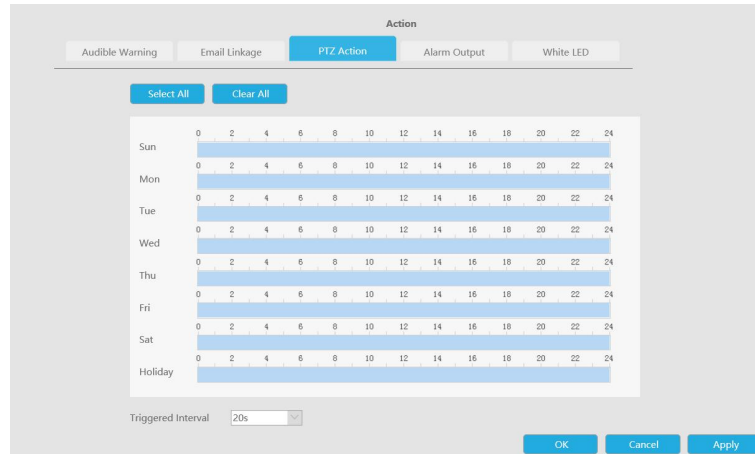
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

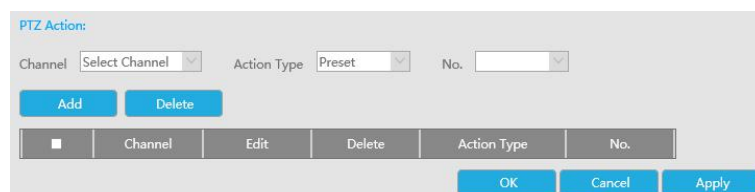
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



**Channel:** Select the channel which supports this function.

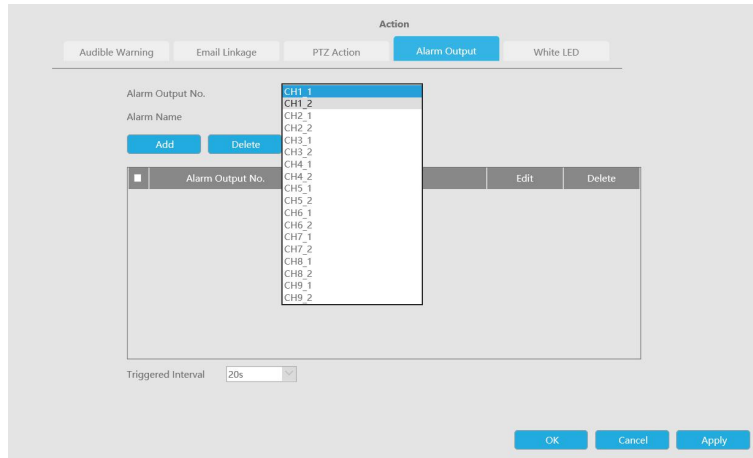
**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR alarm output, the relevant

alarm output will be firstly listed, such as, 1, 2.etc. As for camera alarm output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

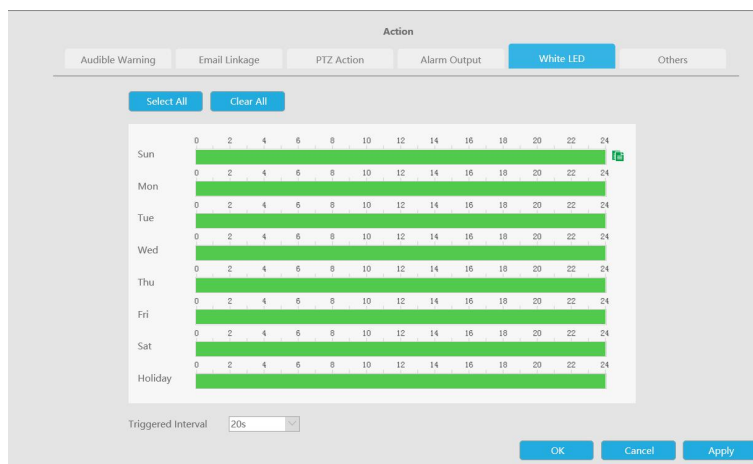
Drag a line on the time table for time setting. It will be more convenient by clicking



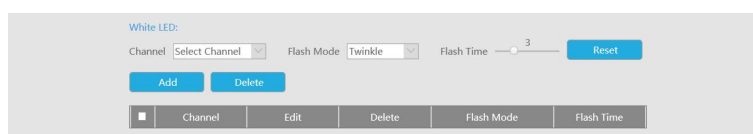
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.



**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Step 3.** Click [Copy to Camera] and  to copy the same configuration to other channels.

Copy to Camera 

All

1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16

17  18  19  20  21  22  23  24  25  26  27  28  29  30  31  32

33  34  35  36  37  38  39  40  41  42  43  44  45  46  47  48

49  50  51  52  53  54  55  56  57  58  59  60  61  62  63  64

## 4.7.4.3 Alarm Input

### 4.7.4.3.1 NVR Alarm Input

Alarm Input function is supported by MS-N5008-UT, MS-N5016-UT, MS-N7016-UH, MS-N7032-UH, MS-N8032-UH, MS-N8064-UH, MS-N5008-UPT, MS-N5016-UPT, MS-N7016-UPH and MS-N7032-UPH.

**Step1. Set Alarm input Number, Alarm Name and Alarm Type.**

### Alarm Input Settings

**NVR Alarm Input** | Camera Alarm Input

Alarm Input No.

Alarm Name  (cannot copy)

Alarm Type

**Alarm Input No.:** The channel which has input signal.

**Alarm Name:** Set a name for the alarm.

**Alarm Type:** Choose NO or NC alarm type for the alarm.

**Step 2. Set effective time for alarm input by clicking**  .


**Step3. Set action for alarm input.**

**Audible Warning:** NVR will trigger an audible beep when alarm is triggered.

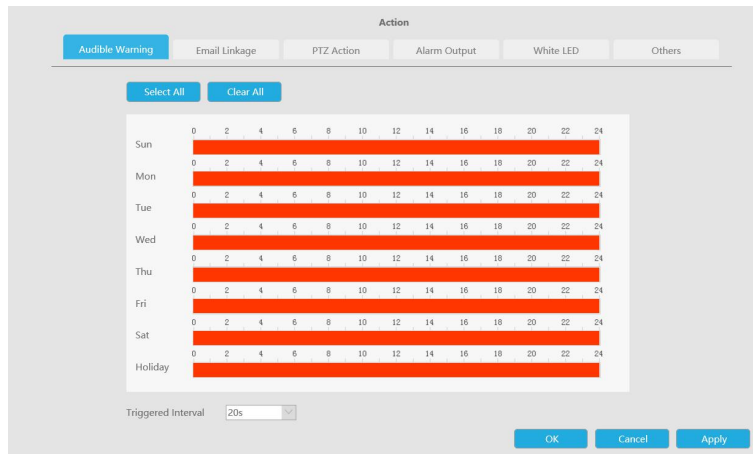
Drag a line on the time table for time setting. It will be more convenient by clicking

 or  to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**Email Linkage:** NVR will send an email to the address you set before.

Drag a line on the time table for time setting. It will be more convenient by clicking

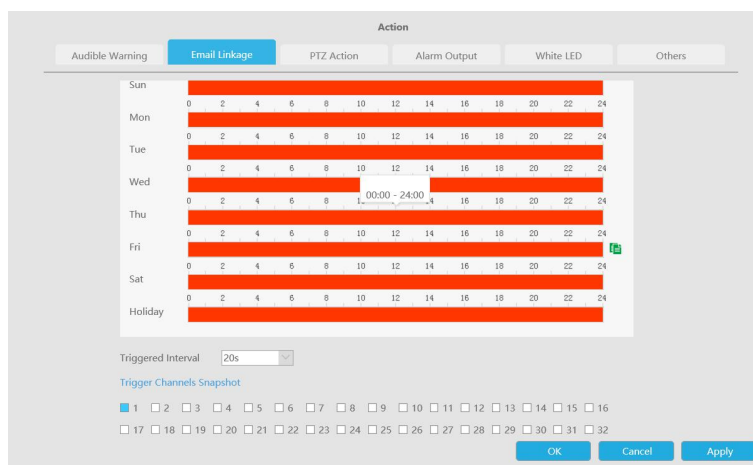
**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.

**Trigger Channels Snapshot:** The snapshot of selected channels will be sent when alarm is triggered.



**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

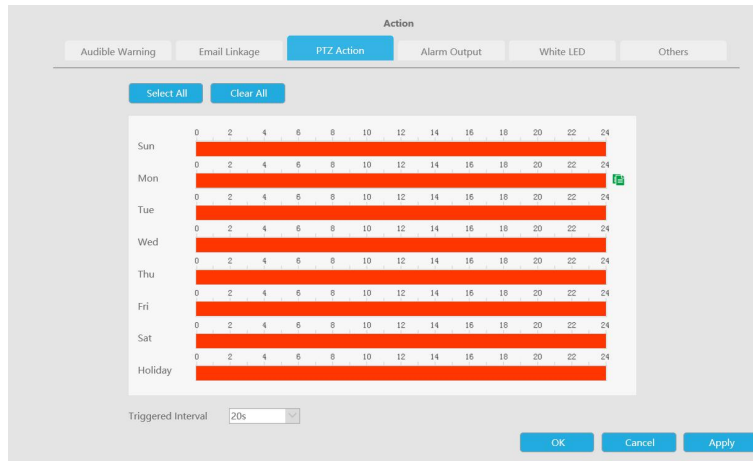
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

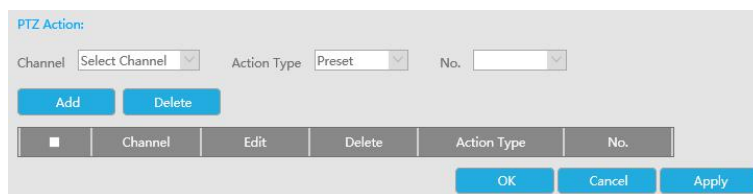
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



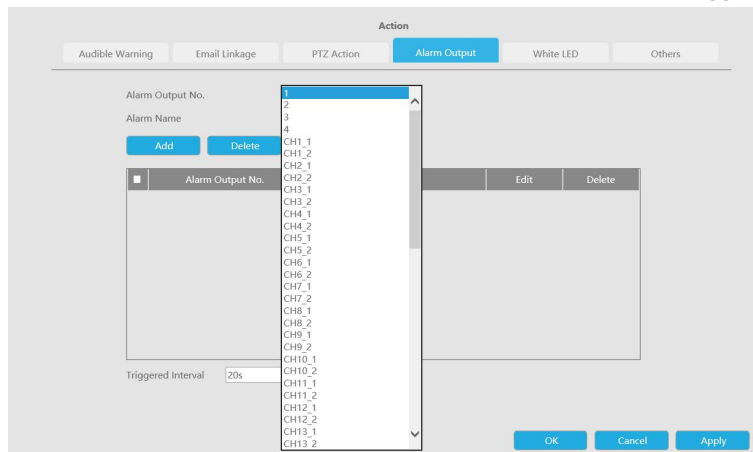
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR alarm output, the relevant alarm output will be first listed, that is, 1,2.etc, as for camera alarm output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

Drag a line on the time table for time setting. It will be more convenient by clicking

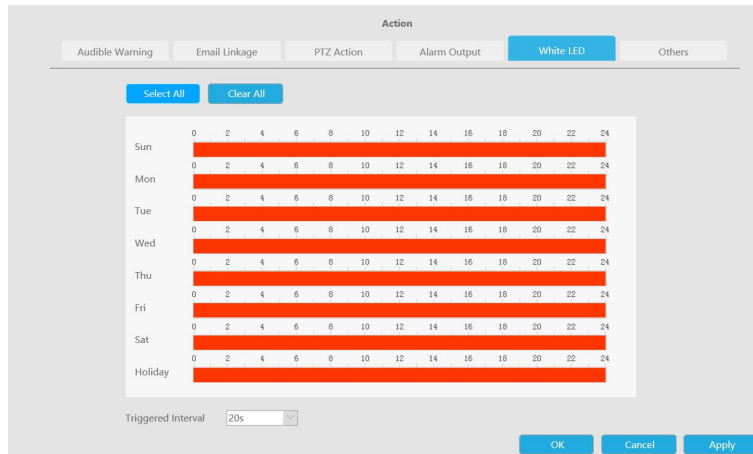


Moreover, you can click time bar to edit the time accurately.

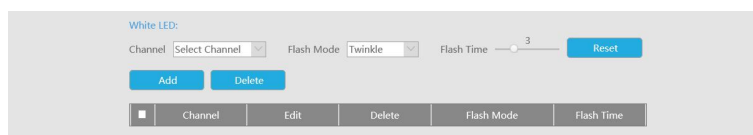
Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.





And you can add White LED.



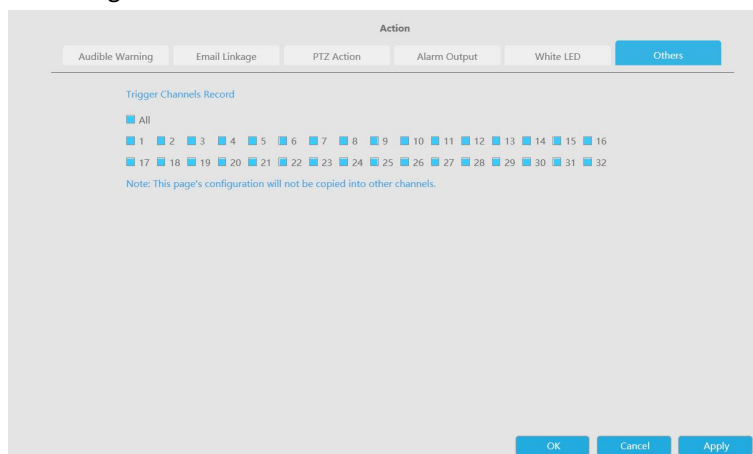
**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Start recording when alarm is triggered.

**Trigger Channels Record:** Trigger selected to record when alarm is triggered. Don't forget to set record schedule in Storage -> Record Schedule interface.



Step 4. Click [Copy to Alarm] and to copy the same configuration to other alarm channels.



### 4.7.4.3.2 Camera Alarm Input

Milesight NVRs support the upgrade of Milesight Cameras.

**Step1. Set Alarm Input Number, Alarm Name and Alarm Type.**

**Alarm Input Settings**

NVR Alarm Input | **Camera Alarm Input**

Channel: 2

Alarm Input No.: 1

Alarm Input:

Alarm Name: (cannot copy)

Alarm Type: NO

**Alarm Input No.:** The channel which has input signal.

**Alarm Name:** Set a name for the alarm.

**Alarm Type:** Choose NO or NC alarm type for the alarm.


**Step2. Set action for Alarm Input.**

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.

**Action**

Audible Warning | Email Linkage | PTZ Action | Alarm Output | White LED | Others

Select All | Clear All

Day	0	2	4	6	8	10	12	14	16	18	20	22	24
Sun	0	2	4	6	8	10	12	14	16	18	20	22	24
Mon	0	2	4	6	8	10	12	14	16	18	20	22	24
Tue	0	2	4	6	8	10	12	14	16	18	20	22	24
Wed	0	2	4	6	8	10	12	14	16	18	20	22	24
Thu	0	2	4	6	8	10	12	14	16	18	20	22	24
Fri	0	2	4	6	8	10	12	14	16	18	20	22	24
Sat	0	2	4	6	8	10	12	14	16	18	20	22	24
Holiday	0	2	4	6	8	10	12	14	16	18	20	22	24

Triggered Interval: 20s

OK | Cancel | Apply

**Email Linkage:** NVR will send an email to the address you set before.

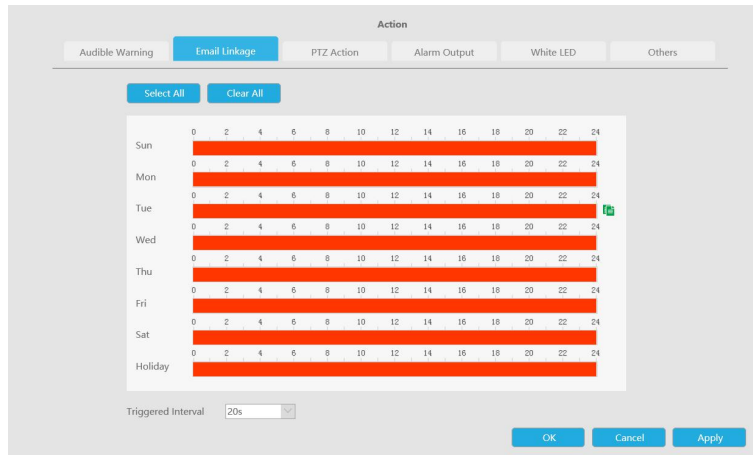
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



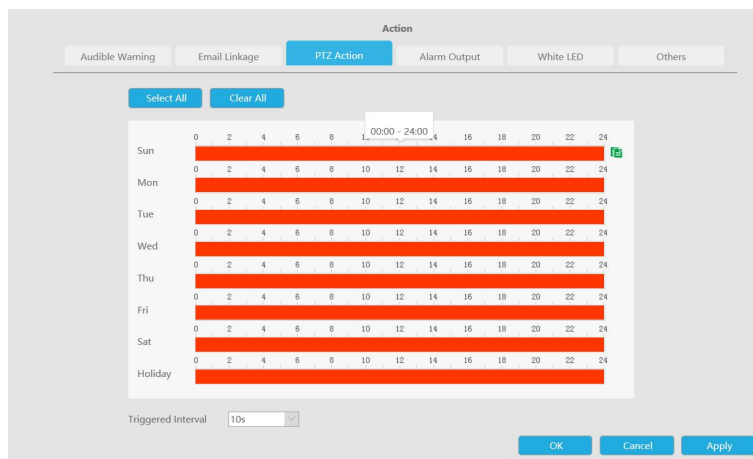
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset** and **Patrol**. Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

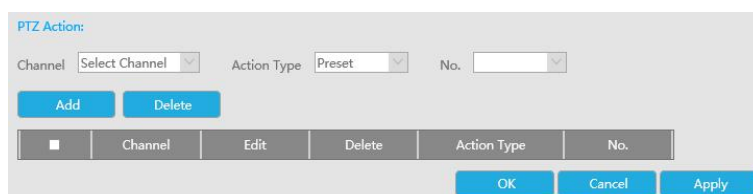
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



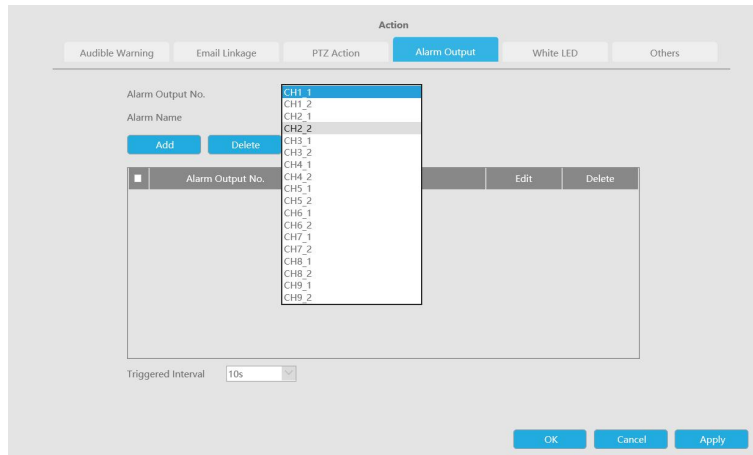
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

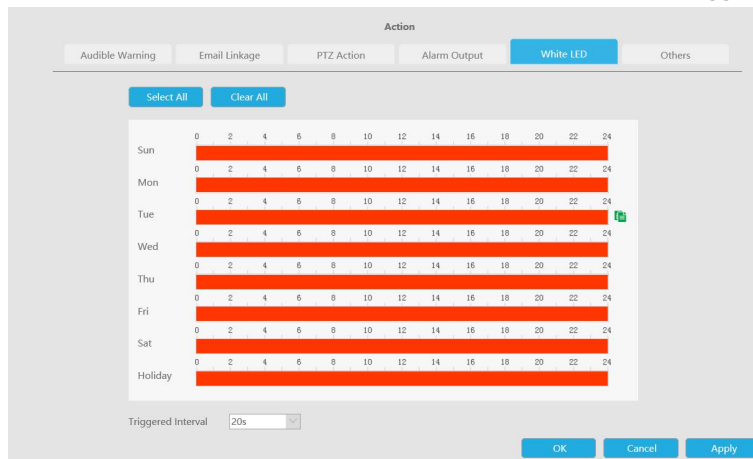
Drag a line on the time table for time setting. It will be more convenient by clicking



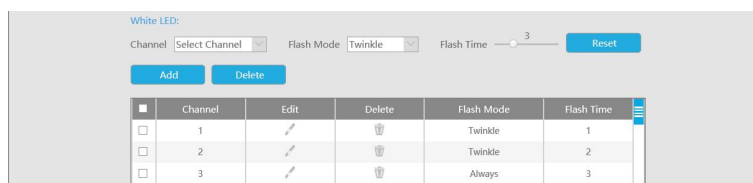
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.



**Channel:** Select the channel which supports this function.

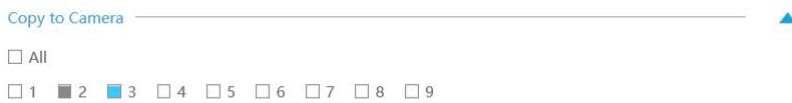
**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.



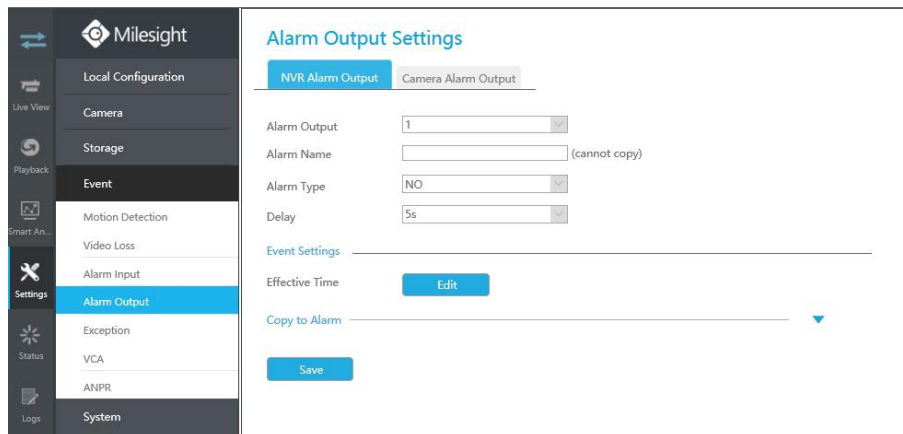
**Step 3.** Click [Copy to Camera] and to copy the same configuration to other channels.



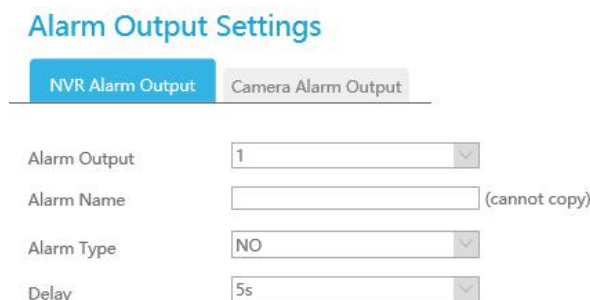
## 4.7.4.4 Alarm Output

### 4.7.4.3.1 NVR Alarm Output

Alarm Output function is supported by MS-N5008-UT, MS-N5016-UT, MS-N7016-UH, MS-N7032-UH, MS-N8032-UH, MS-N8064-UH, MS-N5008-UPT, MS-N5016-UPT, MS-N7016-UPH and MS-N7032-UPH.



**Step 1.** Set Alarm output channel, Alarm Type, Delay and Alarm Name.



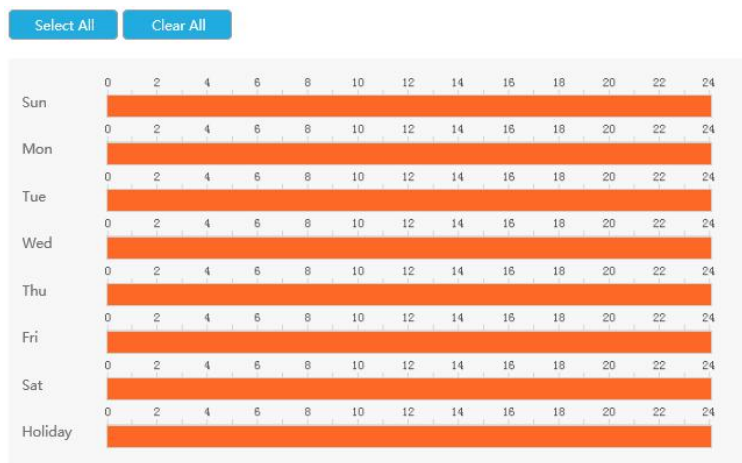
**Alarm Output:** The channel which will output the alarm signal.

**Alarm Type:** Select alarm type: NO or NC.

**Delay:** Set the output time for alarm. If the output alarm lasts too long, you can select the Manually Clear to stop it.

**Alarm Name:** Set a name for the alarm.

**Step 2: Set effective time.**

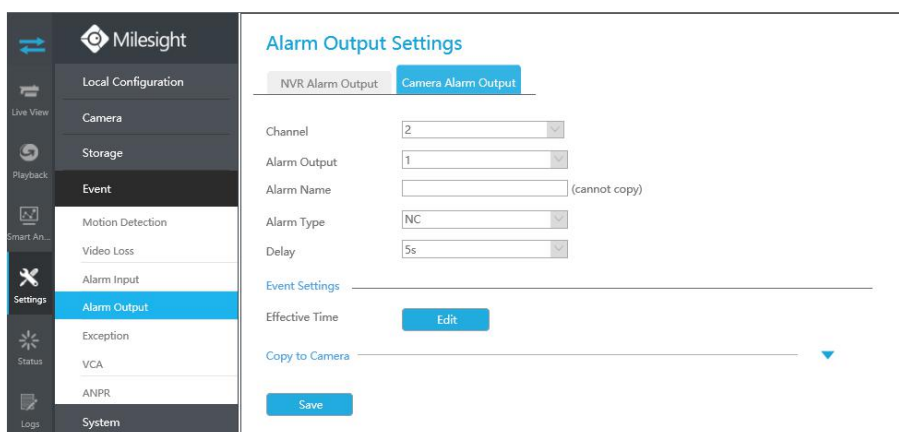


**Step3.** Click [Copy to Alarm] and to copy the same configuration to other alarm channels.



### 4.7.4.3.2 Camera Alarm Output

Milesight NVRs support the upgrade of Milesight Cameras.



**Step 1.** Set Alarm Output Channel, Alarm Type, Delay and Alarm Name.

## Alarm Output Settings

Channel:

Alarm Output:

Alarm Name:  (cannot copy)

Alarm Type:

Delay:

**Alarm Output:** The alarm output number of the corresponding channel which has input signal.

**Alarm Type:** Select Alarm Type: NO or NC.

**Delay:** Set the output time for alarm. If the output alarm lasts too long, you can select the Manually Clear to stop it.

**Alarm Name:** Set a name for the alarm.

**Step 2: Set effective time.**

	0	2	4	6	8	10	12	14	16	18	20	22	24
Sun	[Orange bar]												
Mon	[Orange bar]												
Tue	[Orange bar]												
Wed	[Orange bar]												
Thu	[Orange bar]												
Fri	[Orange bar]												
Sat	[Orange bar]												
Holiday	[Orange bar]												

**Step3.** Click [Copy to Alarm] and  to copy the same configuration to other alarm channels.

Copy to Alarm

Select All

1
  2
  3
  4

### 4.7.4.5 Exception

**Step1. Select Exception Type.**

Exception Type	Network Disconnected
Trigger Action	Disk Full Record Failed Disk Error Disk Uninitialized No Disk

**Network Disconnected:** Loss of network.

**Disk Full:** HDD full, it usually happens when Recycle Mode is OFF.

**Record Failed:** Recording fails, including HDD Failed, HDD Full and so on.

**Disk Error:** Failed to recognize HDD.

**Disk Uninitialized:** HDD is uninitialized.

**No Disk:** There is no Disk.

**Exception**

Exception Type	Network Disconnected
Trigger Action	Disk Full Record Failed Disk Error Disk Uninitialized No Disk

**Step 2. Select Action includes Event Notification, Audible Warning, Email Linkage and Alarm Output.**

**Event Notification:** You will get a notification in Live View if an alarm is triggered.

**Audible Warning:** NVR will trigger an audible beep.

**Email Linkage:** An alarm Email will be sent if an alarm is triggered.

**Alarm Output:** NVR will trigger the corresponding Alarm Output.

Trigger Action	<input checked="" type="checkbox"/> Event Notification <input type="checkbox"/> Audible Warning <input type="checkbox"/> Email Linkage <input type="checkbox"/> Alarm Output
	<input type="checkbox"/> 1

**4.7.4.6 VCA**

It uses Milesight Video Content Analysis technology which is applied in a wide range of domains including entertainment, health-care, retail, automotive, transport, home automation, safety and security. Milesight VCA provides advanced, accurate smart video analysis for Milesight network cameras. It enhances the performance of network cameras through 10 detection modes which are divided into basic function and advanced function, enabling the comprehensive surveillance function and quicker response of cameras to different monitoring scenes.

**Note:**

**Please input license of selected channel in Settings page to activate VCA first.**

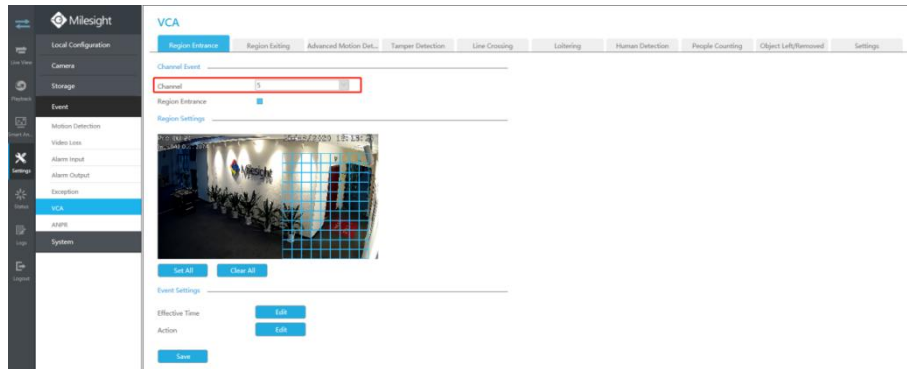
**Region Entrance**

Region entrance helps to protect a specific area from potential threat of suspicious person's or object's entrance. An alarm will be triggered when objects enter the selected regions by enabling



region entrance.

**Step 1. Select channel.**



**Step 2. Enable Region Entrance.**

Region Entrance



**Step 3. Set entrance detection region.**

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking

Set All

and

Clear All

Region Settings



Set All

Clear All

Edit

**Step 4. Set Effective Time of region entrance by clicking**

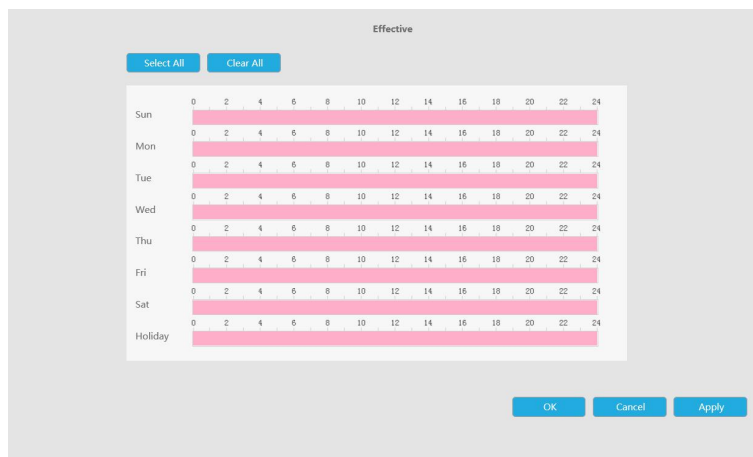
NVR receives the alarm when effective time has been set. It will be more convenient by clicking

Select All

or

Clear All

to set or clear all time settings.



Step 5. Set Action for region entrance alarm by clicking

Edit

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

Drag a line on the time table for time setting. It will be more convenient by clicking


Select All

or

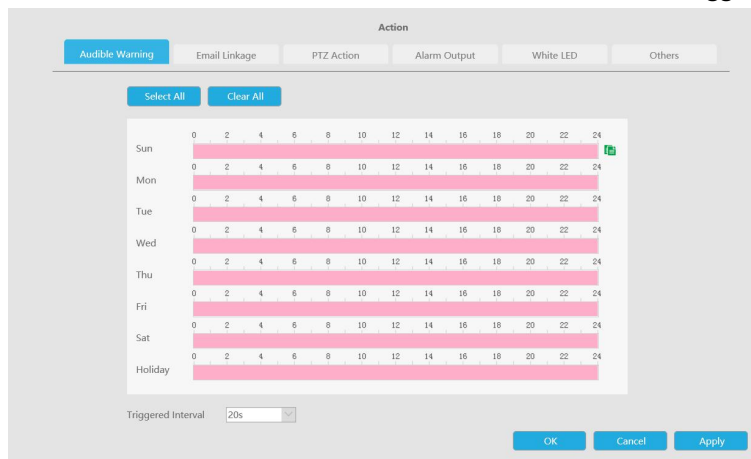
Clear All

to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**Email Linkage:** NVR will send an email to the address you set before.

Drag a line on the time table for time setting. It will be more convenient by clicking

Select All

or

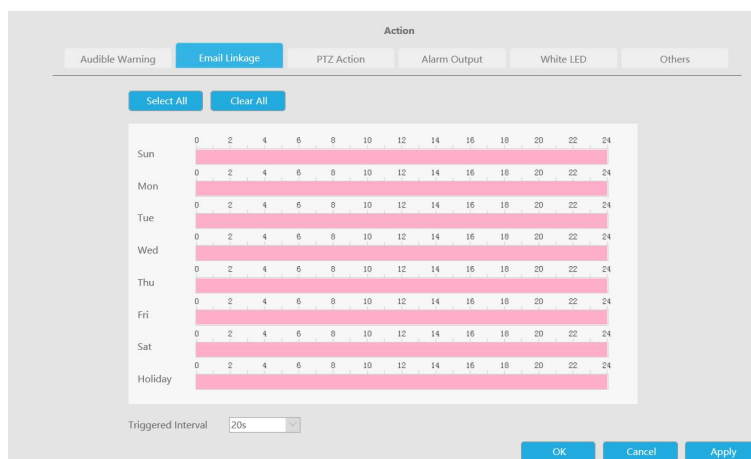
Clear All

to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset** and **Patrol**.

Drag a line on the time table for time setting. It will be more convenient by clicking

Select All

or

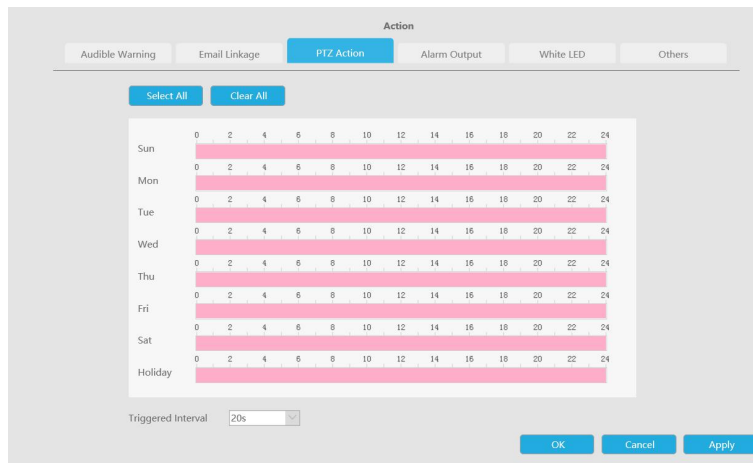
Clear All

to set or clear all time settings.

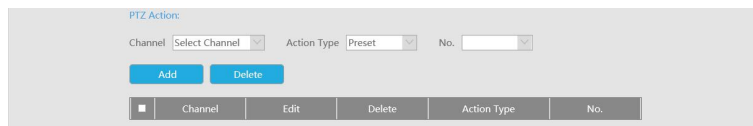
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



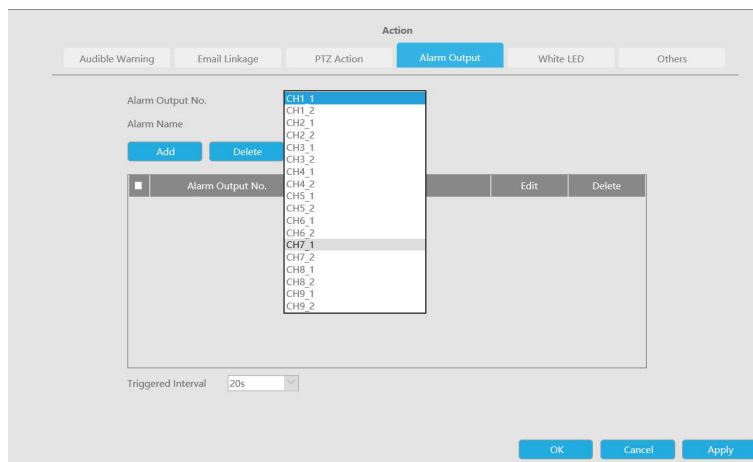
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

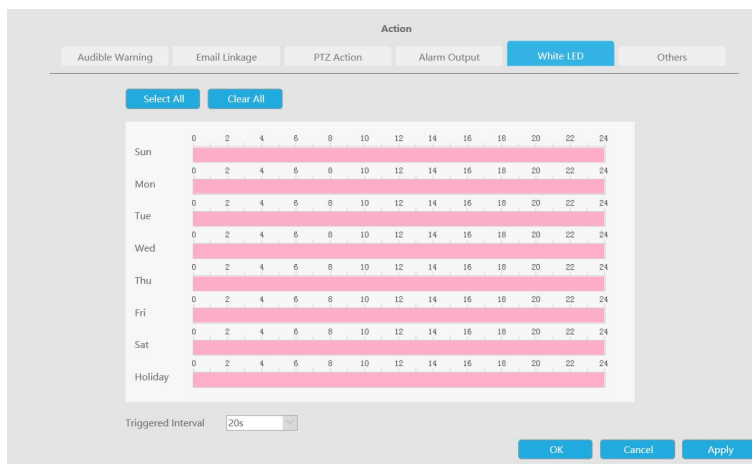
Drag a line on the time table for time setting. It will be more convenient by clicking

or to set or clear all time settings.

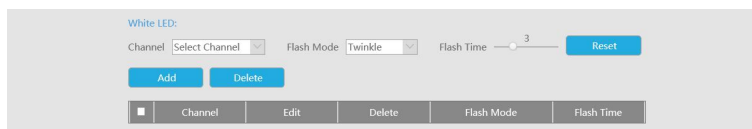
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.

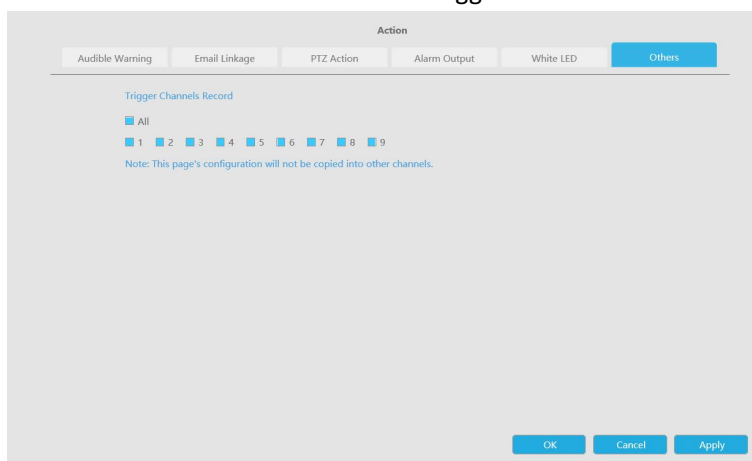


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

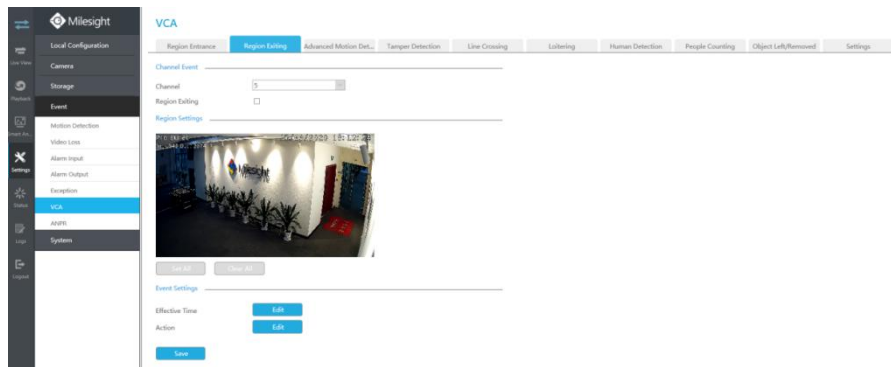
**Others:** Trigger other channels record when alarm is triggered.



**Region Exiting**

Region exiting is to make sure that any person or object won't exit the area that is being monitored. Any exit of people or objects will trigger an alarm.

**Step 1. Select channel.**

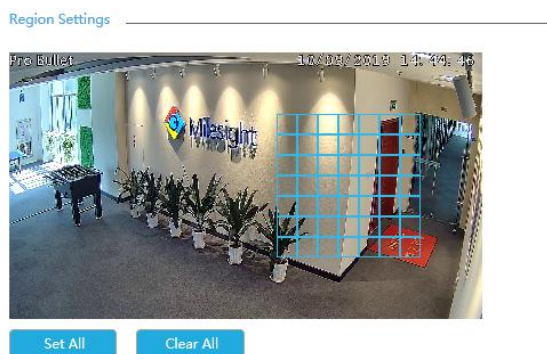
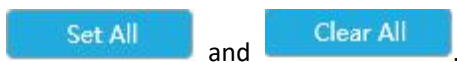


**Step 2. Enable Region Exiting.**



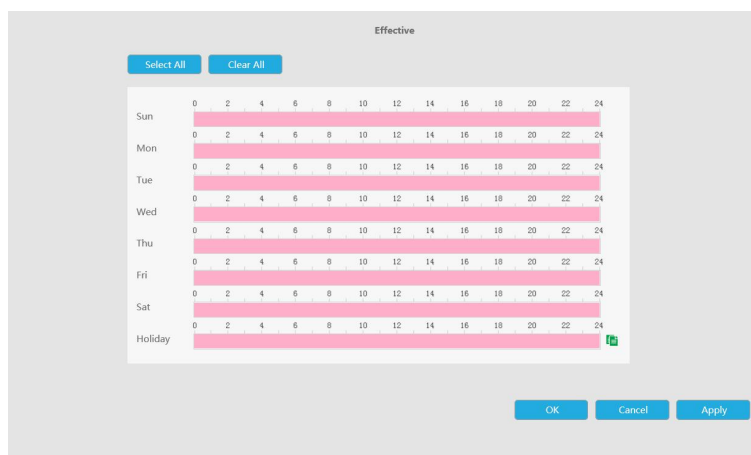
**Step 3. Set exit detection region.**

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking



**Step 4. Set Effective Time of region exiting by clicking** 

NVR receives the alarm when effective time has been set. It will be more convenient by clicking



**Step 5. Set Action for region exiting alarm by clicking** 

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

Drag a line on the time table for time setting. It will be more convenient by clicking


Select All

or

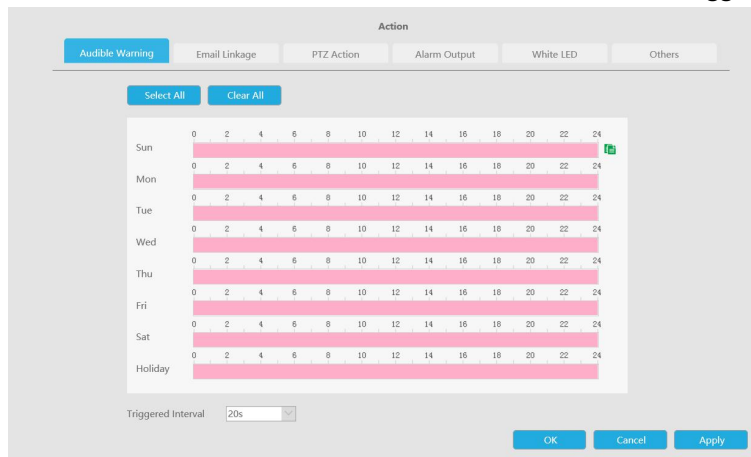
Clear All

to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**Email Linkage:** NVR will send an email to the address you set before.

Drag a line on the time table for time setting. It will be more convenient by clicking


Select All

or

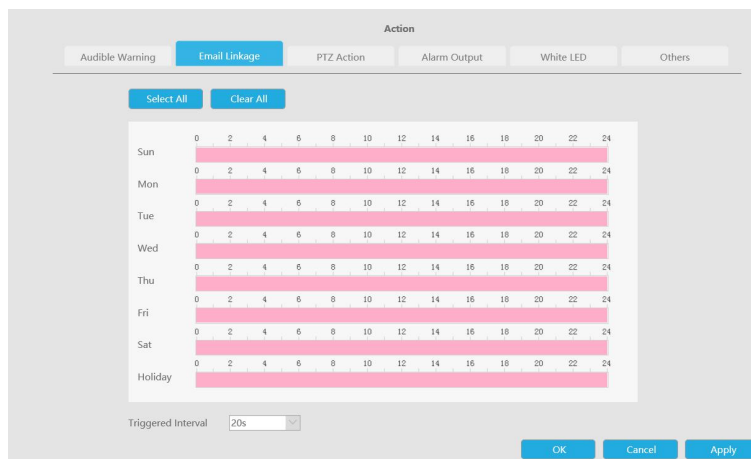
Clear All

to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

Drag a line on the time table for time setting. It will be more convenient by clicking

Select All

or

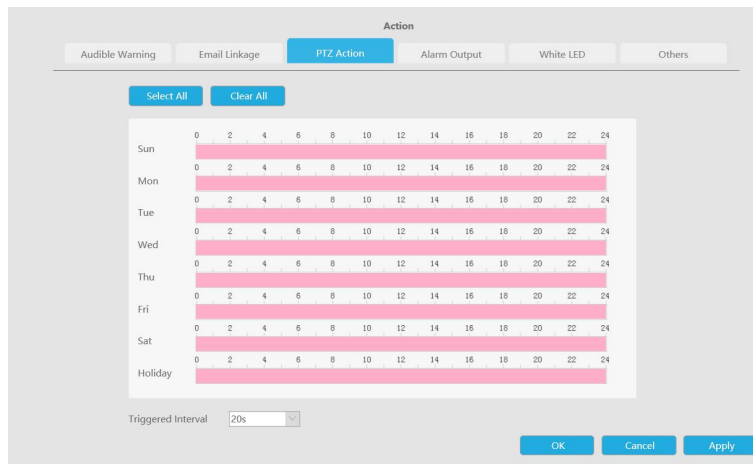
Clear All

to set or clear all time settings.

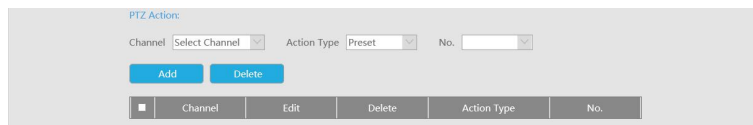
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



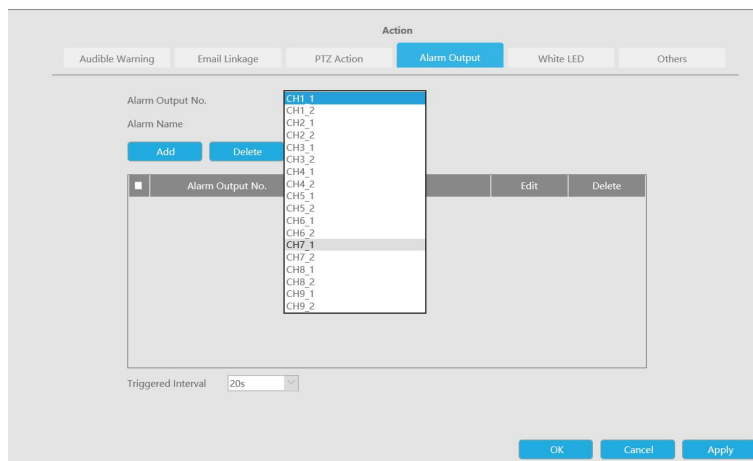
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

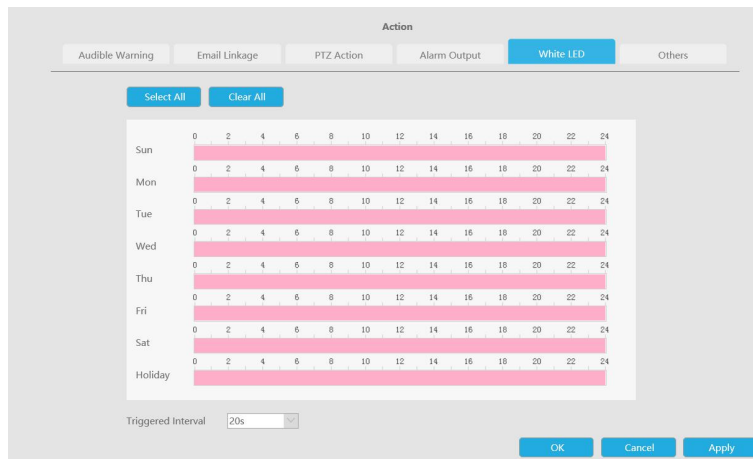
Drag a line on the time table for time setting. It will be more convenient by clicking

or to set or clear all time settings.

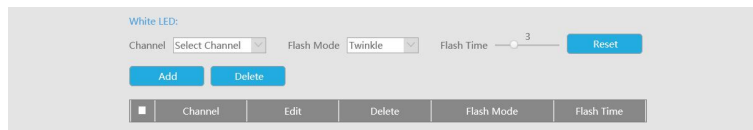
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.

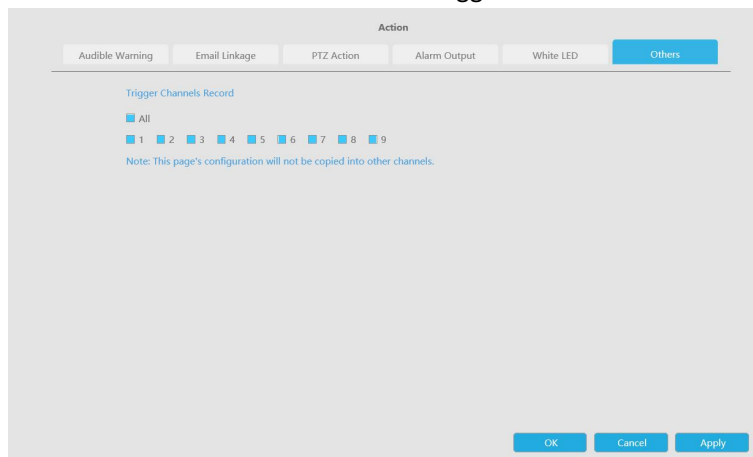


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.

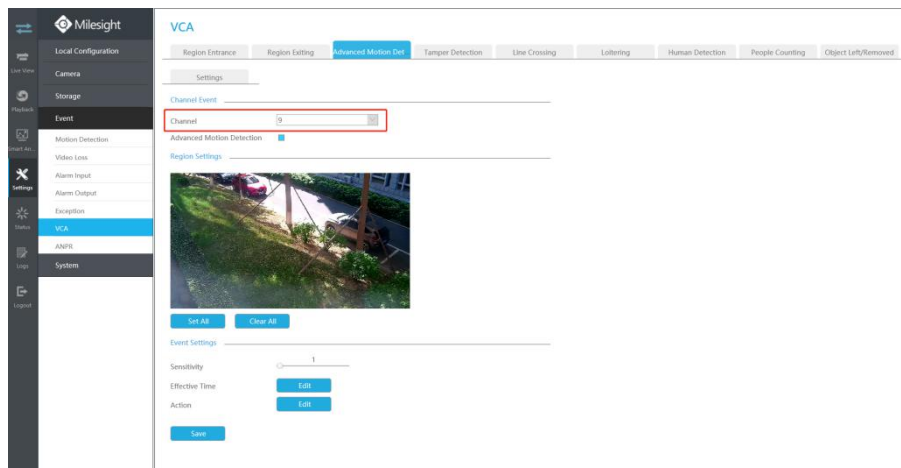


### Advanced Motion Detection

Different from traditional motion detection, Milesight advanced motion detection can filter out “noise” such as lighting changes, natural tree movements, etc. When an object moves in the selected area, it will trigger alarm.

**Step 1. Select channel.**



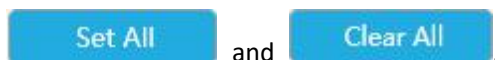


### Step 2. Enable Advanced Motion Detection.

## Advanced Motion Detection

### Step 3. Set advanced motion detection region.

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking



#### Region Settings



### Step 4. Set Sensitivity.

The sensitivity can be configured to detect various movement according to different requirements. When the level of sensitivity is low, slight movement won't trigger the alarm.

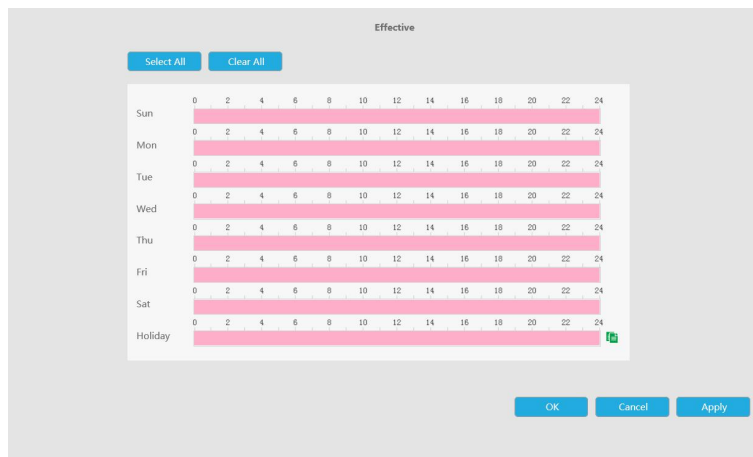


### Step 5. Set Effective Time of advance motion detection by clicking

Edit

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.



**Step 6. Set Action for advanced motion detection alarm by clicking **Edit**.**

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

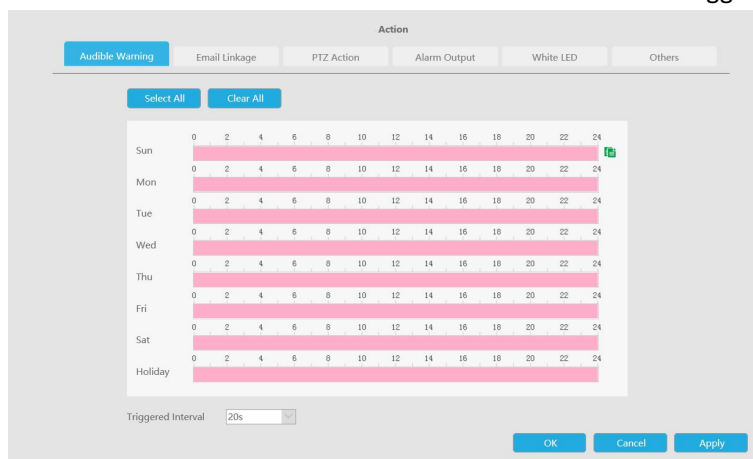
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**Email Linkage:** NVR will send an email to the address you set before.

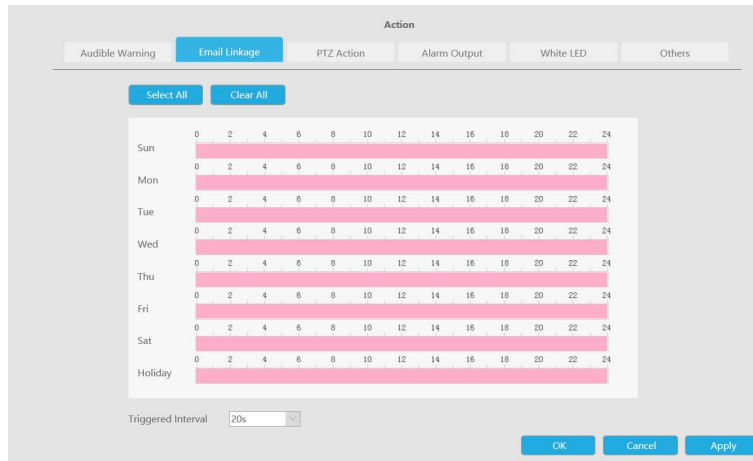
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



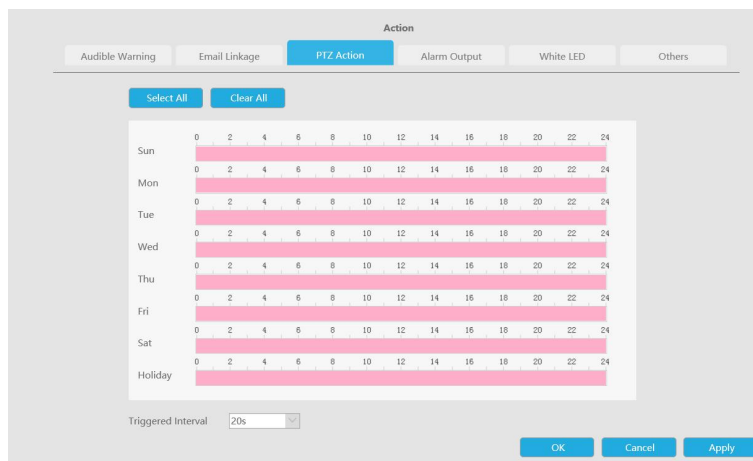
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**. Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

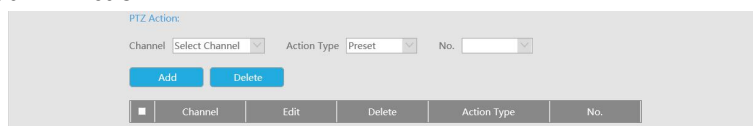
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



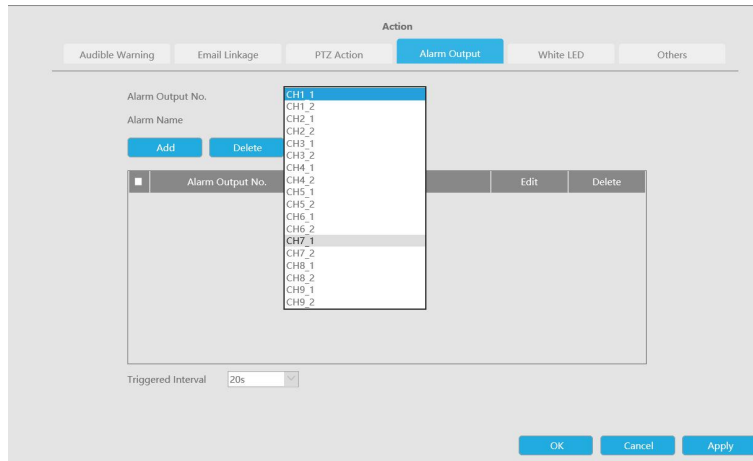
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

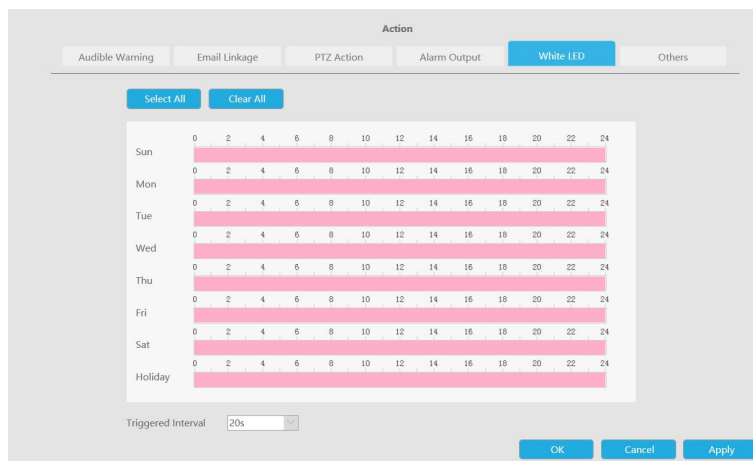
Drag a line on the time table for time setting. It will be more convenient by clicking



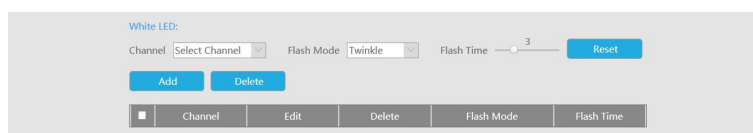
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.

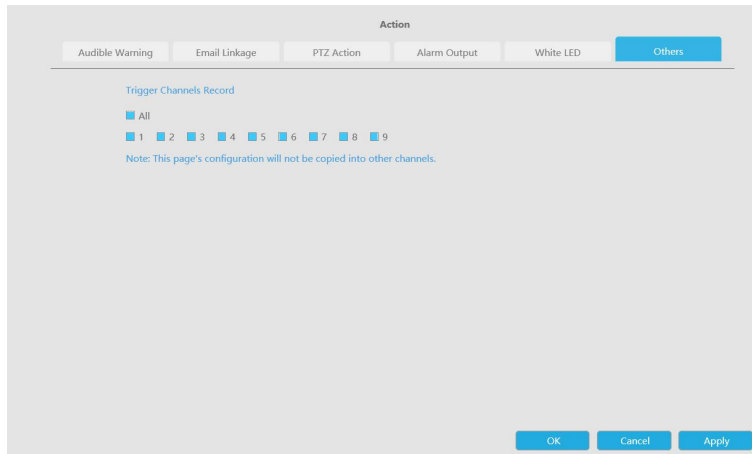


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

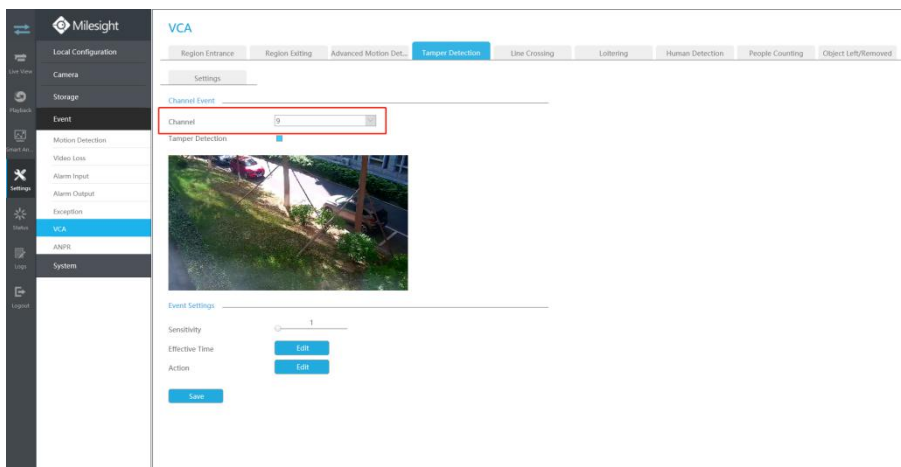
**Others:** Trigger other channels record when alarm is triggered.



### Tamper Detection

Tamper Detection is used to detect possible tampering like the camera being unfocused, obstructed or moved. This functionality alerts security staff immediately when any above-mentioned actions occur.

#### Step 1. Select channel.



#### Step 2. Enable Tamper Detection.

Tamper Detection



#### Step 3. Set Sensitivity.

The sensitivity can be configured to detect various movement according to different requirements. When the level of sensitivity is low, slight movement won't trigger the alarm.

Sensitivity



#### Step 4. Set Effective Time of tamper detection by clicking



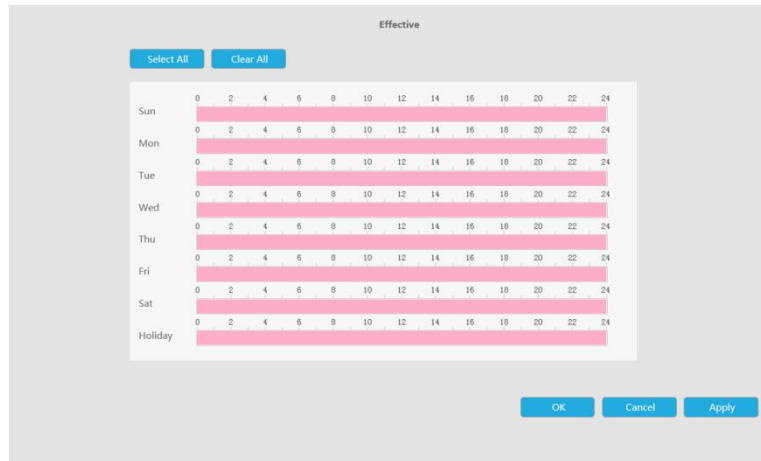
NVR receives the alarm when effective time has been set. It will be more convenient by clicking



or



to set or clear all time settings.



Step 5. Set Action for tamper detection alarm by clicking

**Edit**

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

Drag a line on the time table for time setting. It will be more convenient by clicking


**Select All**

or

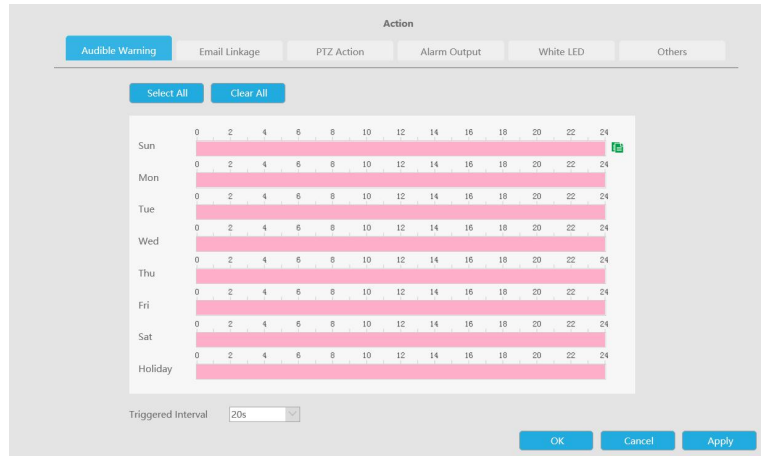
**Clear All**

to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



**Email Linkage:** NVR will send an email to the address you set before.

Drag a line on the time table for time setting. It will be more convenient by clicking


**Select All**

or

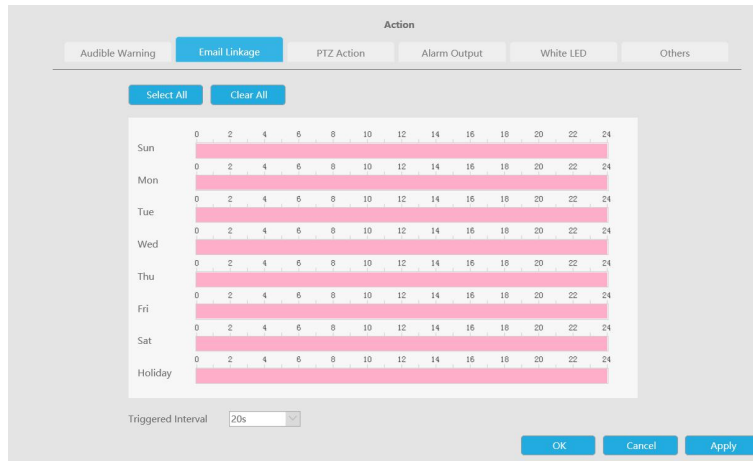
**Clear All**

to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



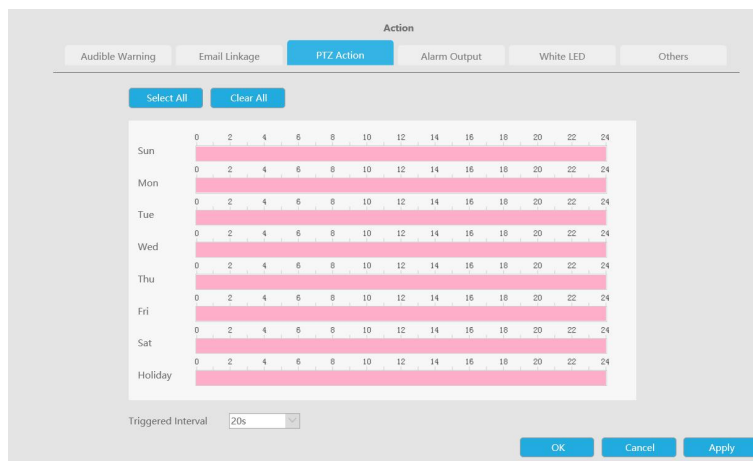
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**. Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

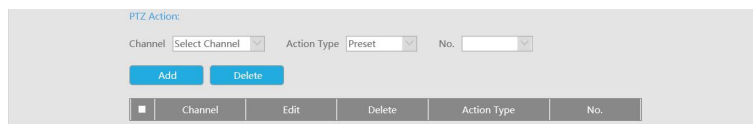
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



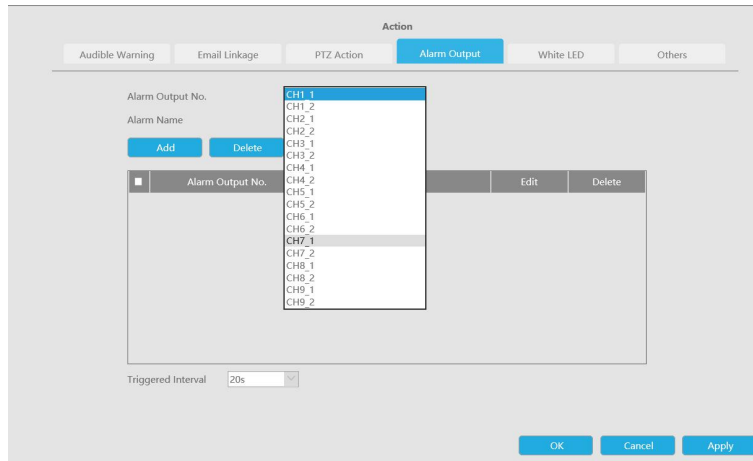
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

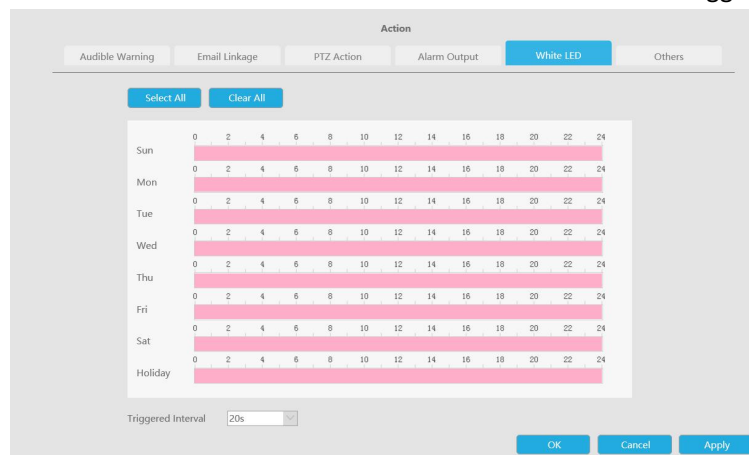
Drag a line on the time table for time setting. It will be more convenient by clicking



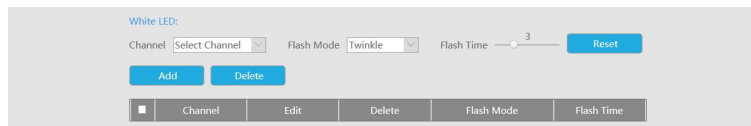
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.



**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.



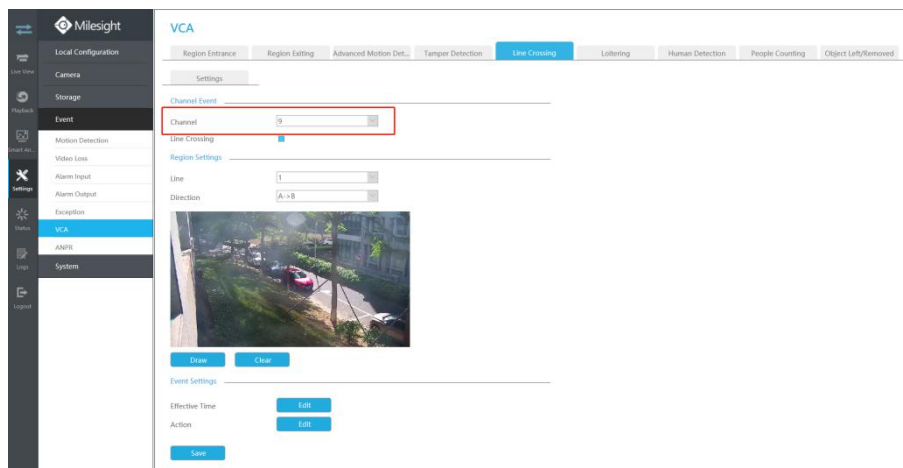


## Line Crossing

Line Crossing detection is designed to work in most indoor and outdoor environment. An event will be triggered every time when the camera detects objects crossing a defined virtual line.

Settings steps are shown as follows:

### Step 1. Select channel.



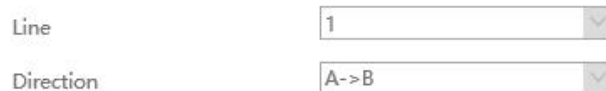
### Step 2. Enable Line Crossing.

Line Crossing

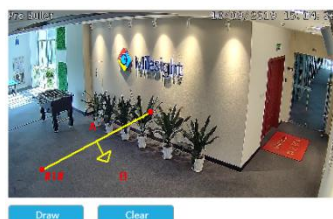


### Step 3. Choose detection line number and define its direction.

It allows to set up to four lines at a time. There are three direction modes to choose for triggering alarm. "A→B" means when there is any object crossing the line from the "A" side to the "B" side, the alarm will be triggered. "B→A" vice versa. "A ↔ B" means that the alarm will be triggered when objects cross line from either side.



### Step 4. Draw detection lines.

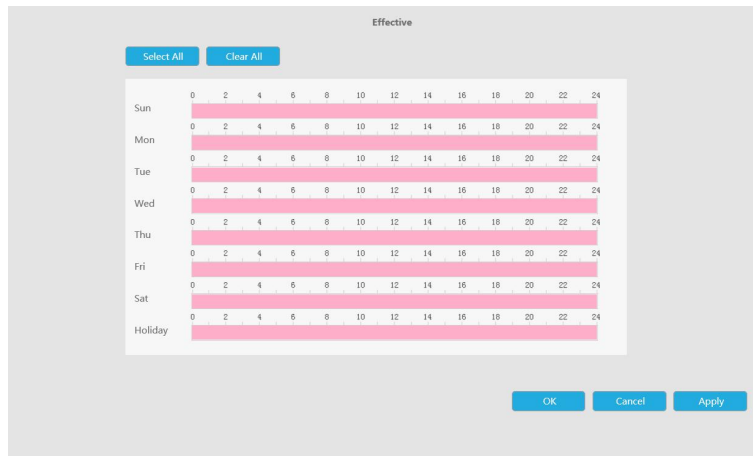


### Step 5. Set Effective Time of line crossing by clicking

Edit

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.




**Step 6. Set Action for line crossing alarm by clicking **Edit**.**

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

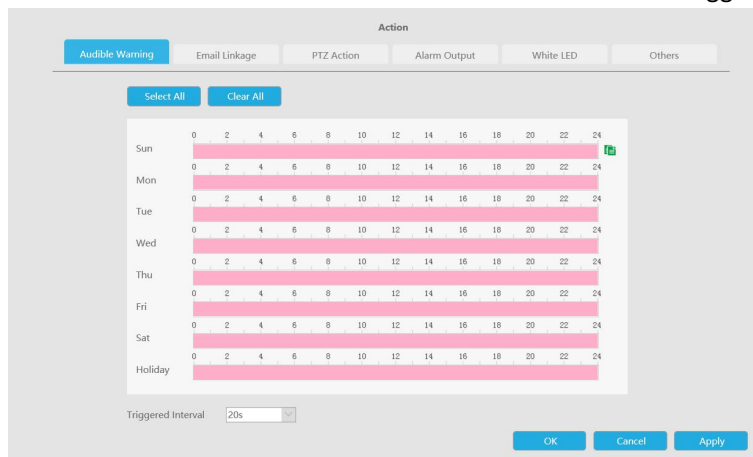
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.




**Email Linkage:** NVR will send an email to the address you set before.

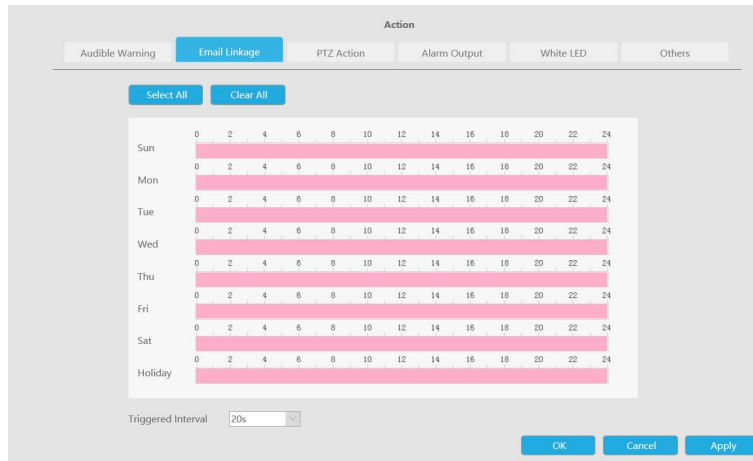
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



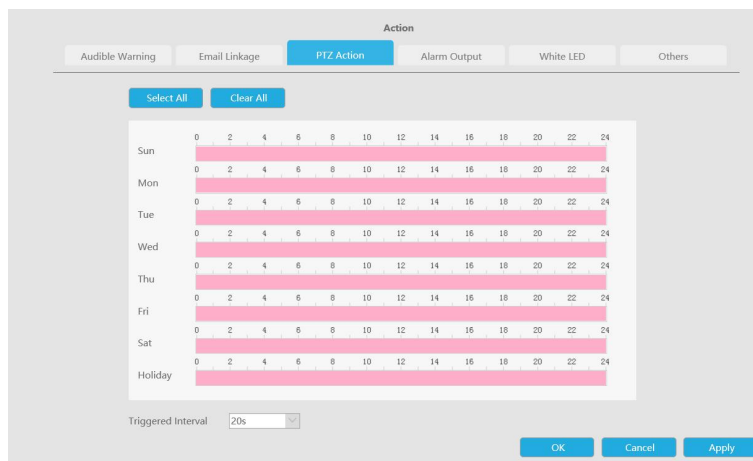
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**. Drag a line on the time table for time setting. It will be more convenient by clicking



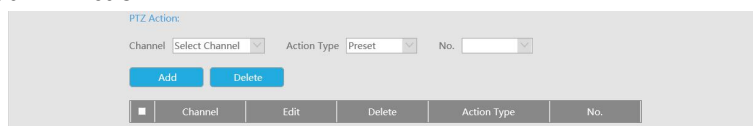
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



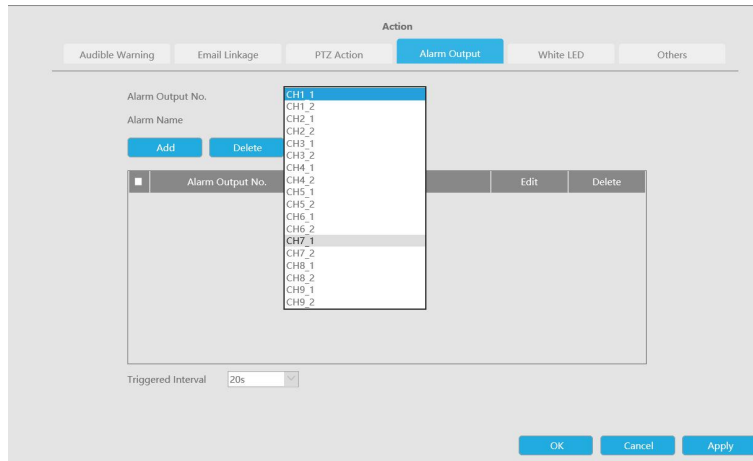
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

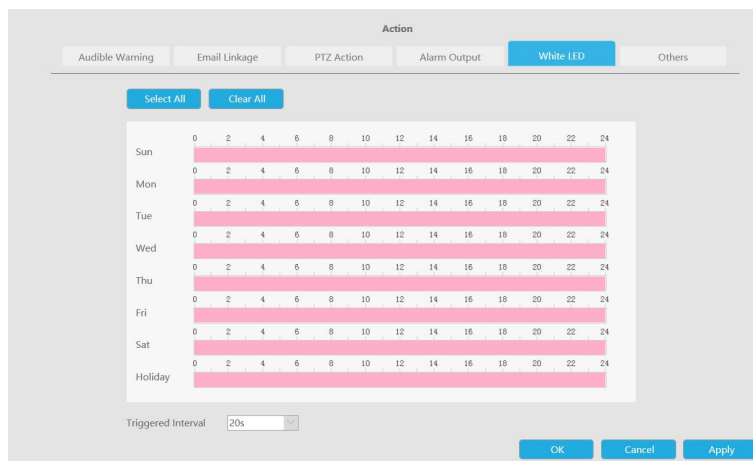
Drag a line on the time table for time setting. It will be more convenient by clicking



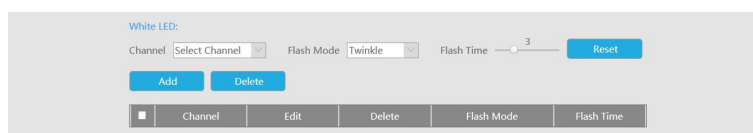
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.

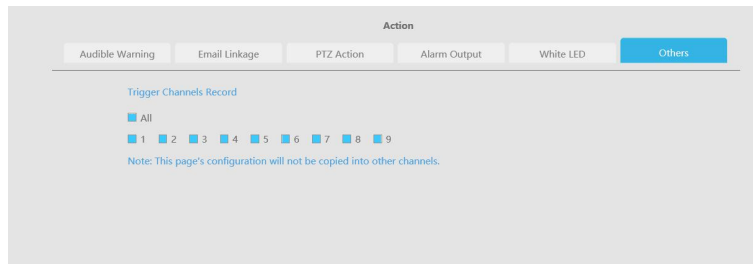


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

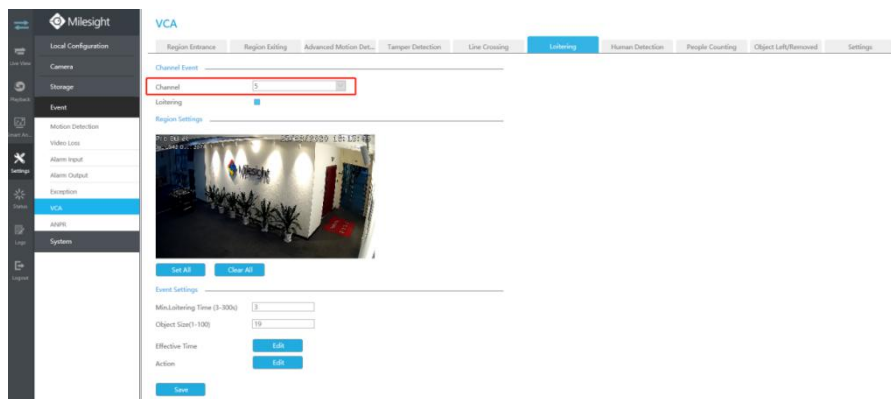
**Others:** Trigger other channels record when alarm is triggered.



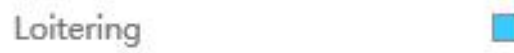
## Loitering

When objects are loitering in a defined area for a specific period of time, it would trigger an alarm.

### Step 1. Select channel.

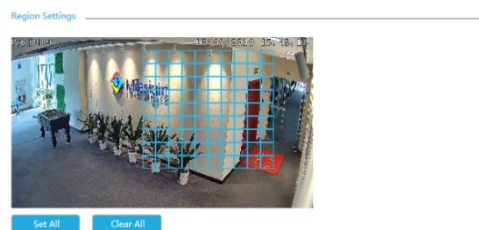


### Step 2. Enable Loitering.



### Step 3. Set Loitering detected region.

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking



### Step 4. Set Min. Loitering Time and Object Size.

After setting minimum loitering time from 3s to 1800s, any objects loitering in the selected area over the minimum loitering time will trigger the alarm. Also Milesight loitering allows to set "Object Size". Only the object bigger than the set size will trigger the alarm.

Min.Loitering Time (3-300s)

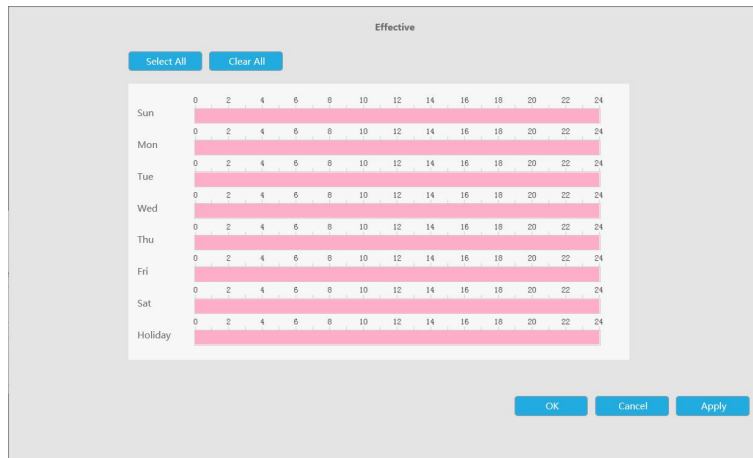
Object Size(1-100)

### Step 5. Set Effective Time of loitering by clicking



NVR receives the alarm when effective time has been set. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.



**Step 6. Set Action for loitering alarm by clicking**


**Edit**

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

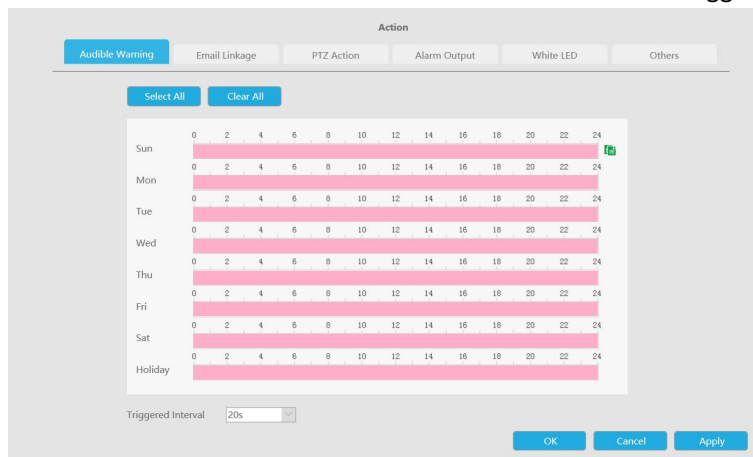
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.




**Email Linkage:** NVR will send an email to the address you set before.

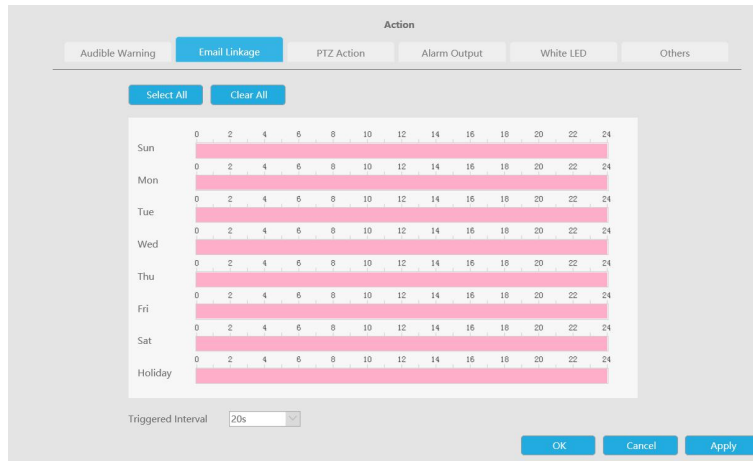
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



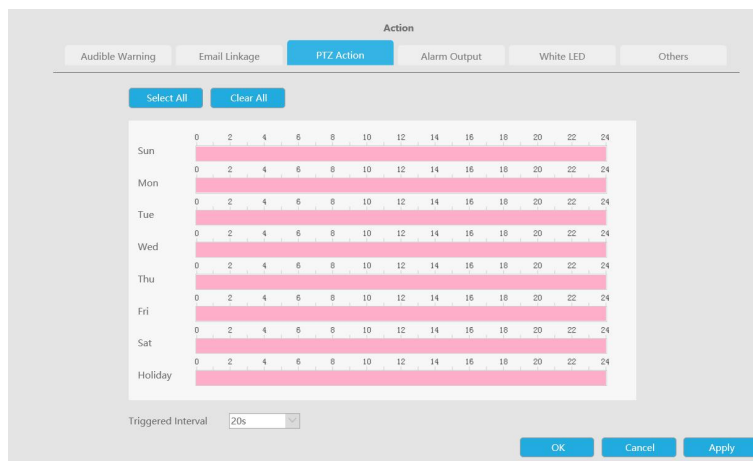
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**. Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

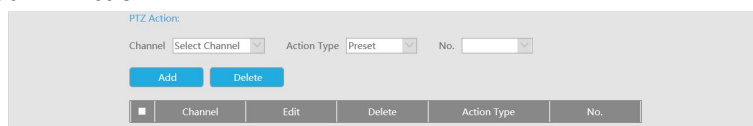
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



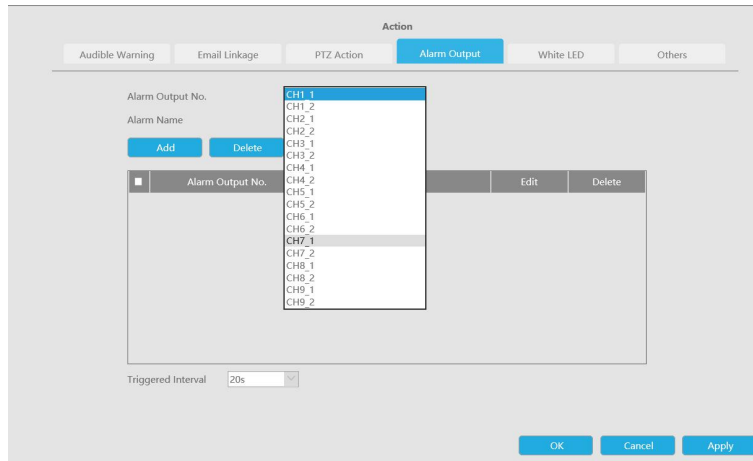
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

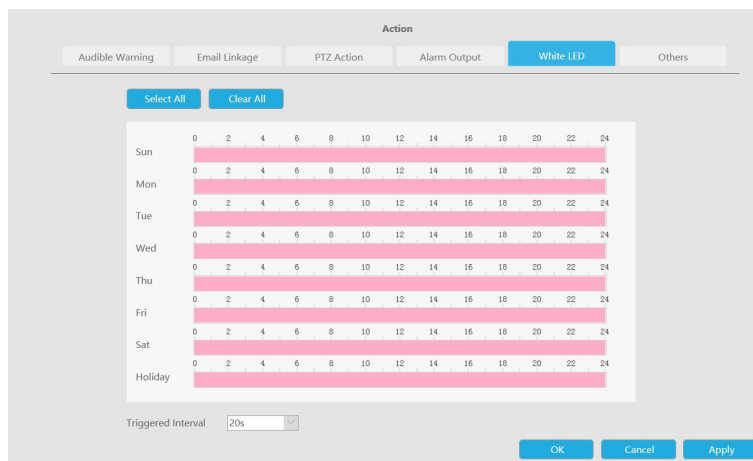
Drag a line on the time table for time setting. It will be more convenient by clicking



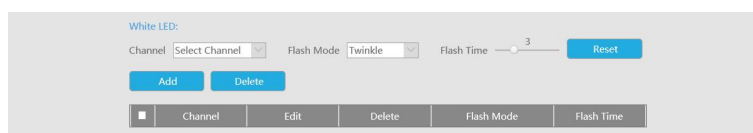
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.



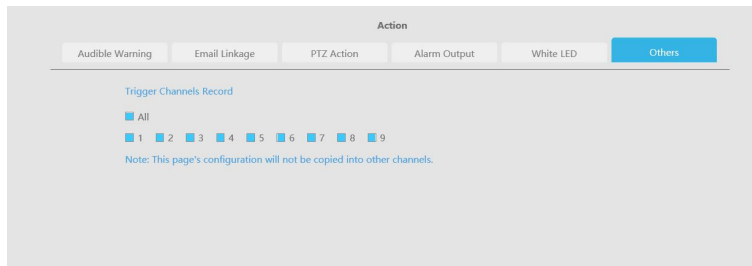
**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.

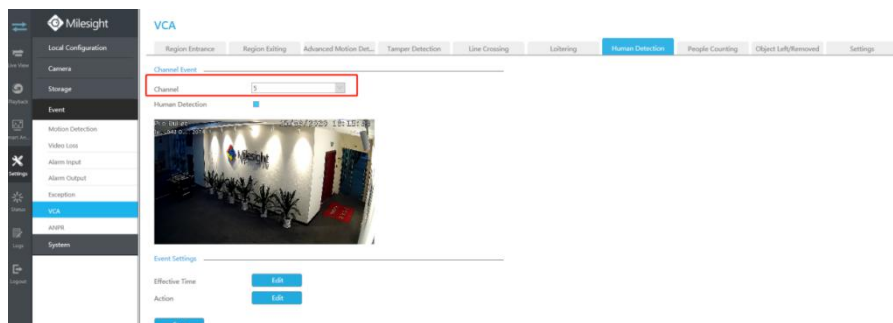




## Human Detection

Human detection is used for figuring out whether an object is a human or not.

### Step 1. Select channel.



### Step 2. Enable Human Detection.

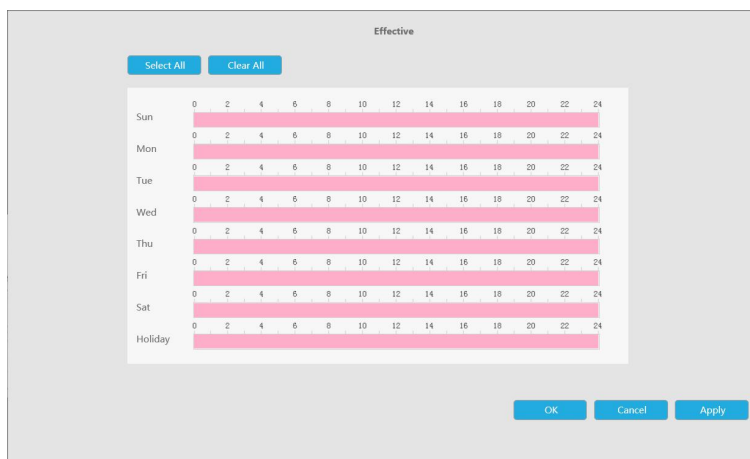
Human Detection



### Step 3. Set Effective Time of human detection by clicking [Edit](#).

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

[Select All](#) or [Clear All](#) to set or clear all time settings.




### Step 4. Set Action for human detection alarm by clicking [Edit](#).

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

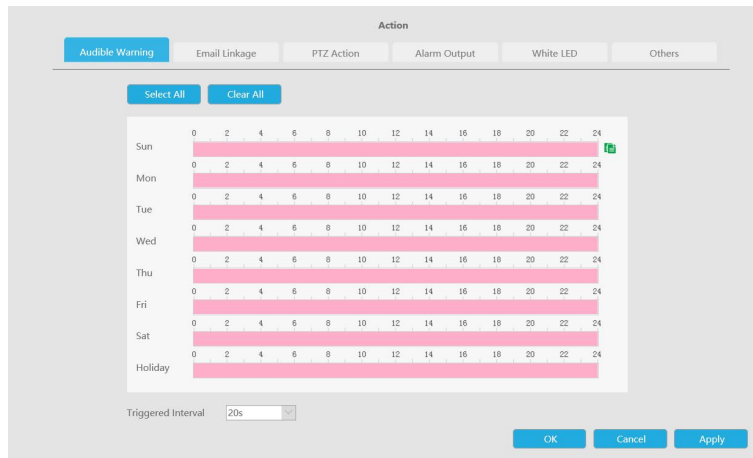
Drag a line on the time table for time setting. It will be more convenient by clicking

[Select All](#) or [Clear All](#) to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.




**Email Linkage:** NVR will send an email to the address you set before.

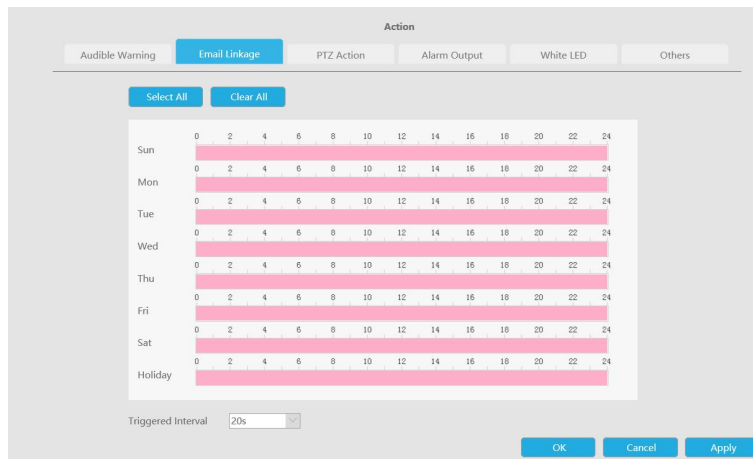
Drag a line on the time table for time setting. It will be more convenient by clicking

 or  to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.




**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

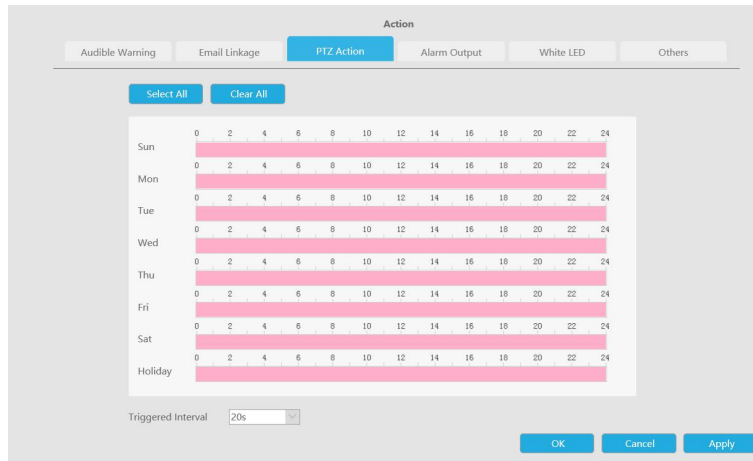
Drag a line on the time table for time setting. It will be more convenient by clicking

 or  to set or clear all time settings.

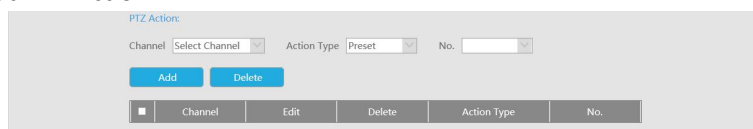
Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



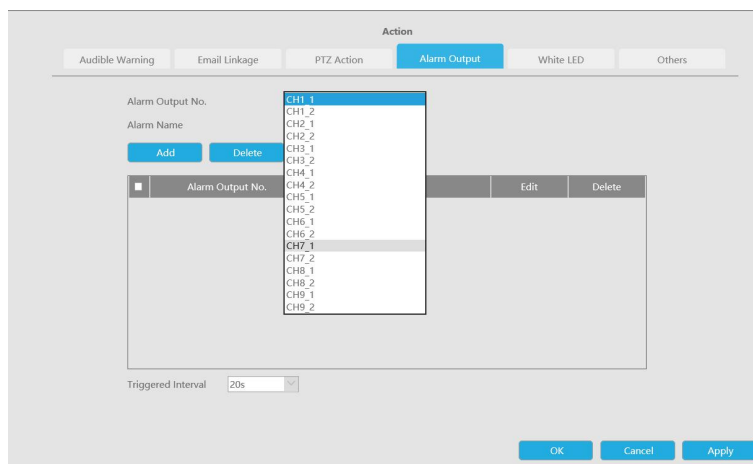
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

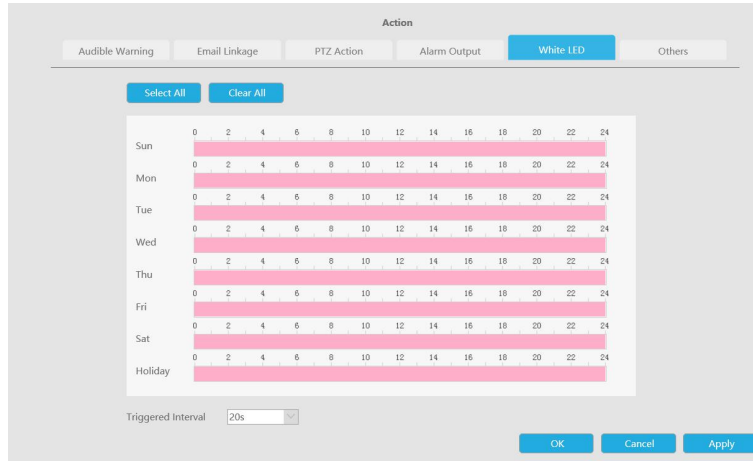
Drag a line on the time table for time setting. It will be more convenient by clicking

or to set or clear all time settings.

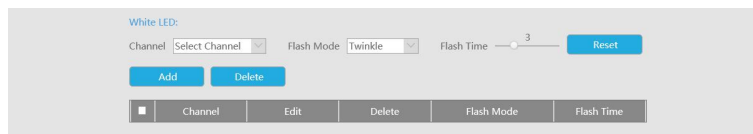
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.

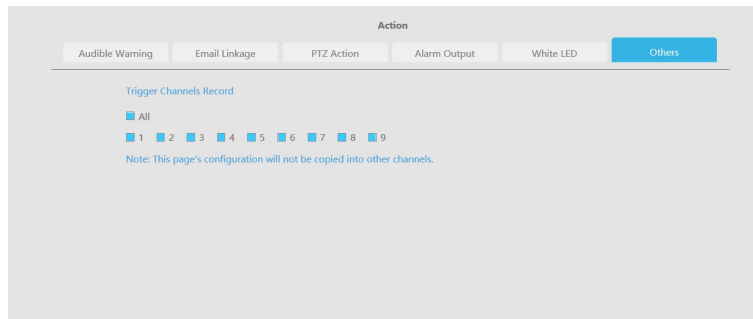


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

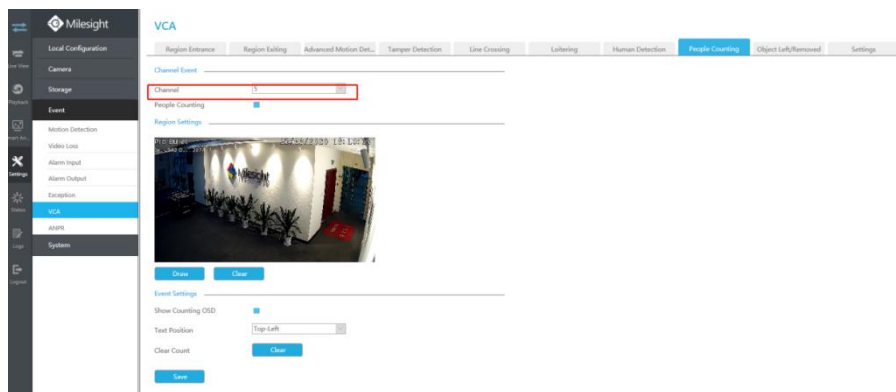
**Others:** Trigger other channels record when alarm is triggered.



## People Counting

People counting is able to count that how many people enter or exit during the setting period.

**Step 1. Select channel.**

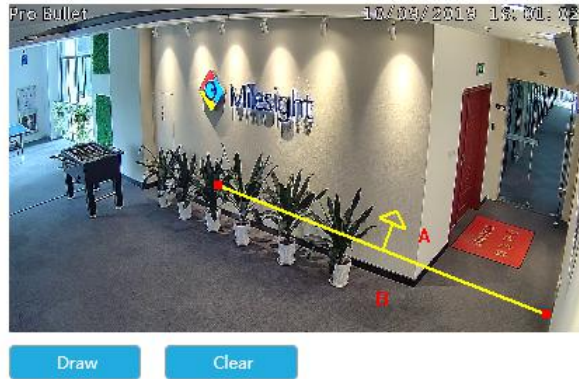


**Step 2. Enable People Counting.**

People Counting



**Step 3. Draw detection line.**



**Step 4. Set counting OSD.**

It shows the number of counted people, including in and out number.

Besides, you can clear count by clicking



Show Counting OSD

Text Position

Top-Left

**Note:**

1. To enable people counting, human detection should be enabled first.
2. Crossing along the direction of the arrow will record as “In”, opposite is “Out”.

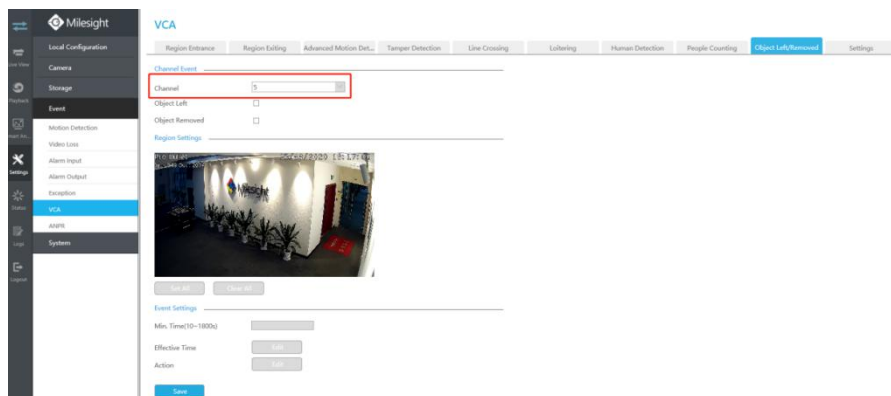
**Object Left/Removed(Optional)**

Object Left can detect and prompt an alarm if an object is left in a pre-defined region. Object Removed can detect and prompt an alarm if an object is removed from a pre-defined region.

**Note:**

1. Object Left/Removed is optional, if you need this function, please contact Milesight sales first.
2. You need to upgrade the NVR to V7x.9.0.4-r2 or above to support this function.

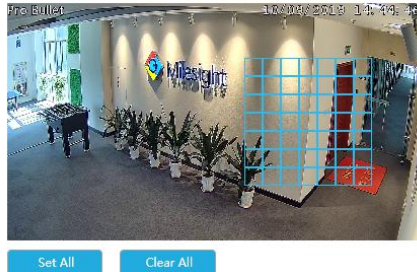
**Step 1. Select channel and enable Object Left or Object Removed(Or you can enable both features at the same time).**



**Step 2. Set detection region.**

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera. Also, you can set or clear all set region by directly clicking **Set All**

and **Clear All**.

**Step 3. Set Min. Time.**

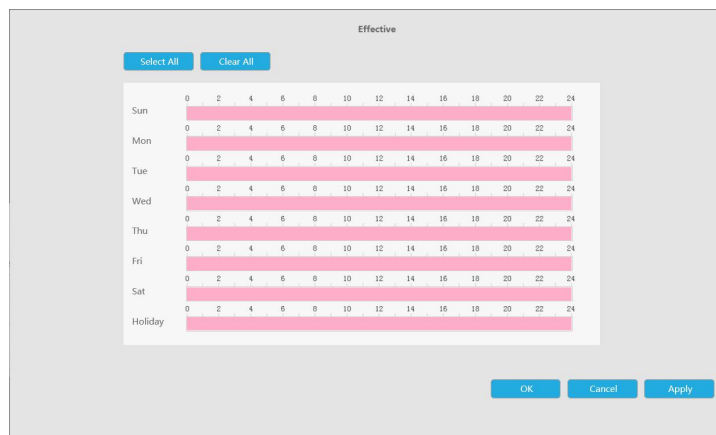
After setting minimum time from 3s to 1800s, any objects are left in the selected area or removed from the selected area over the minimum time will trigger the alarm.

Min. Time(10~1800s)

**Step 4. Set Effective Time of object left/removed by clicking **Edit**.**

NVR receives the alarm when effective time has been set. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

**Step 5. Set Action for object left/removed alarm by clicking **Edit**.**

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

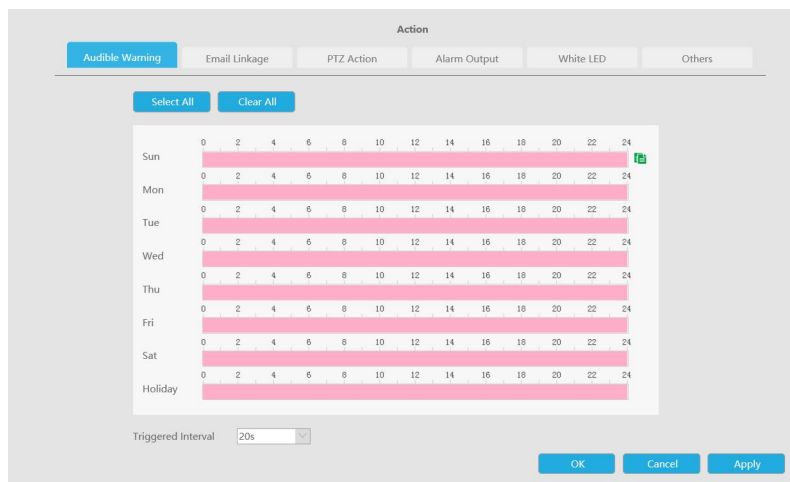
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.




**Email Linkage:** NVR will send an email to the address you set before.

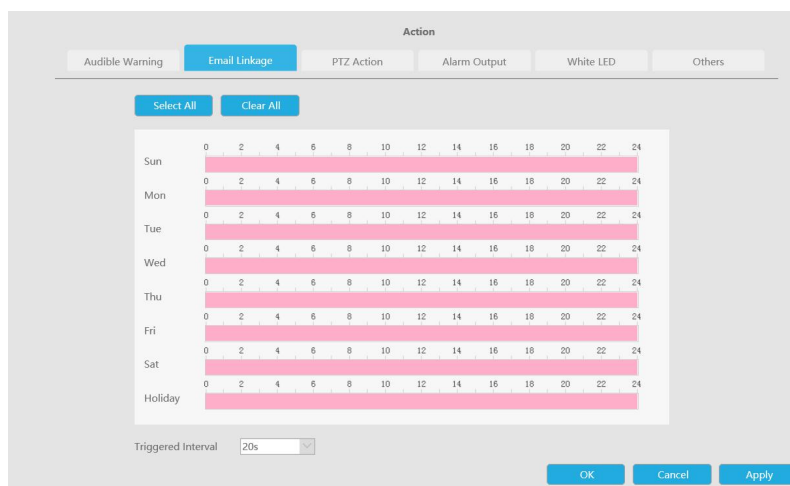
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.




**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset** and **Patrol**.

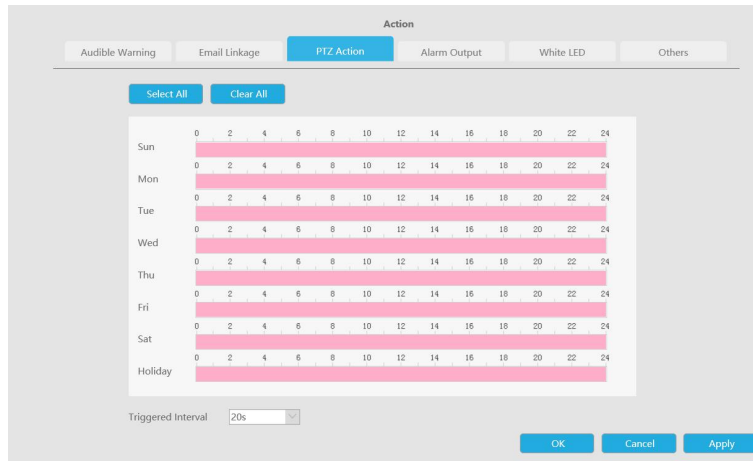
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

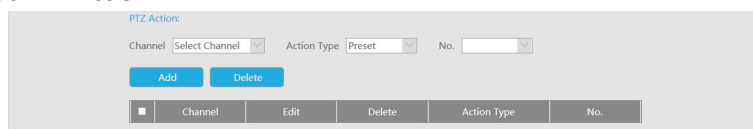
Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



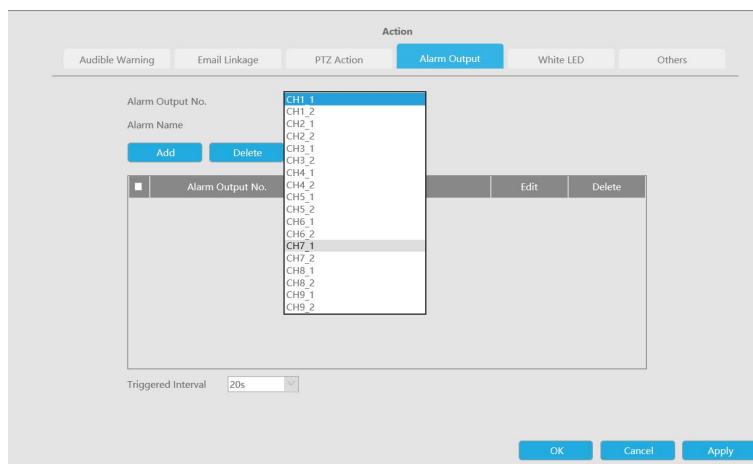
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

Drag a line on the time table for time setting. It will be more convenient by clicking

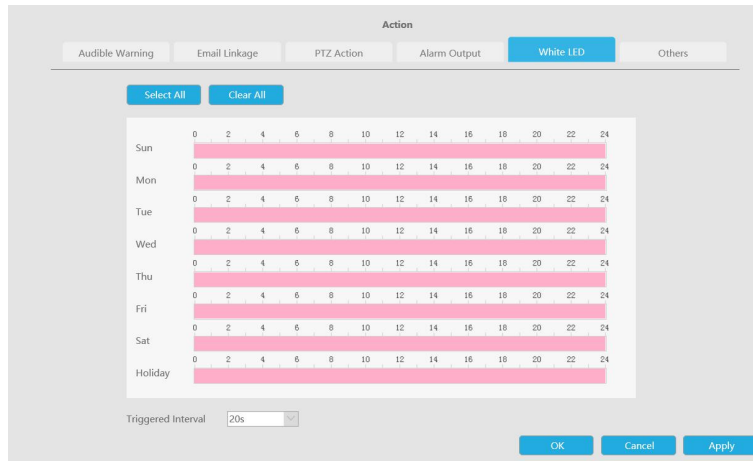
or to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

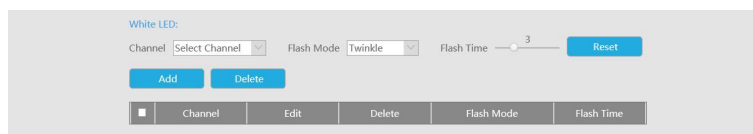
Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.





And you can add White LED.

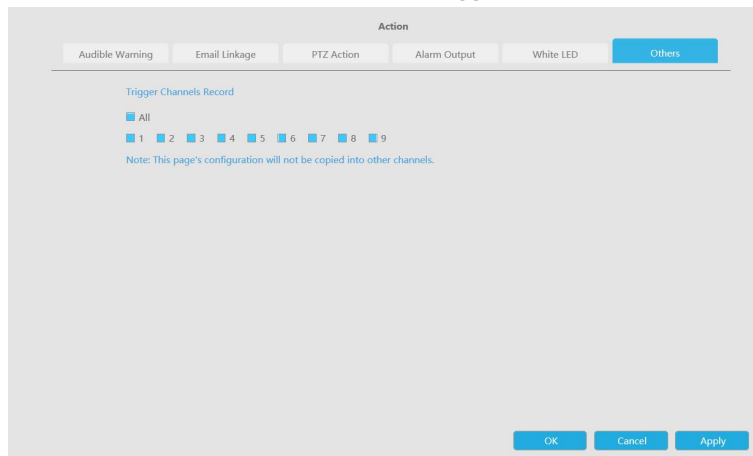


**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.

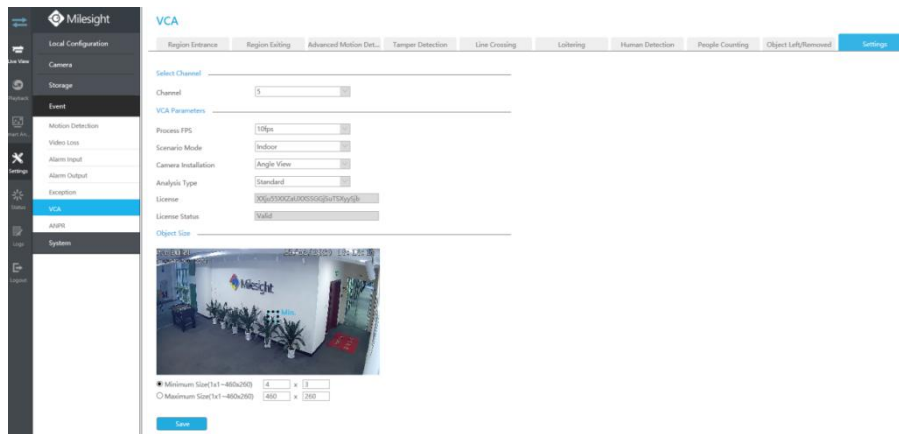


## Settings

Milesight VCA provides the primary setting for the whole VCA functions.

Draw Min. is to set the whether an object is big enough to trigger other settings. The frame you draw on the screen means that only if the object size is bigger than the frame, the settings for other VCA functions will take effect.

Draw Max. means opposite, the frame you draw on the screen stands for that only if the object size is smaller than the frame, the settings for other VCA functions will take effect.



Parameters	Descriptions
<b>Process FPS</b>	Five different periods are available(5, 10, 15, 20, 25, fps) for process fps
<b>Scenario Mode</b>	Select <b>Indoor</b> or <b>Outdoor</b> mode to meet your needs
<b>Camera Installation</b>	Select camera installation view, including <b>Angle View, Horizontal View and Overhead View</b>
<b>Analysis Type</b>	Select <b>Standard</b> or <b>Advanced</b> analysis type
<b>License</b>	Generated by camera’s information
<b>License Status</b>	Show present license status, including <b>Valid, Invalid, Expired, Unactivated</b>

### 4.7.4.7 ANPR

ANPR settings consist of Settings, List Management, Black List Mode, White List Mode and Visitor Mode. Here are some notes for using ANPR function.

**Note:**

- Upgrade your device to corresponded firmware version.  
 Camera: V4X.7.0.73 or above.  
 NVR: V7X.9.0.7-r7 or above.  
 Firmware download link: <http://www.milesight.com/support/download#firmware>
- Ensure both camera and NVR support LPR/ANPR function. Up to 16 ANPR channels are supported for Milesight NVR.
- Ensure that NVR can get license plate information. Please set TCP which is the default mode as Post Type. It can be set in Camera web page -> Advanced Settings -> ANPR -> Settings interface.

**LPR Message Post Settings**

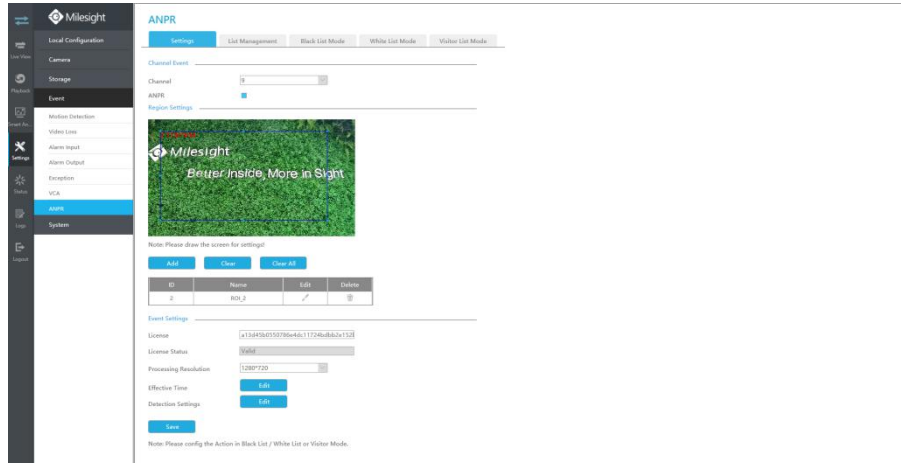
Enable LPR Message Post:

Post Type: TCP

Camera LPR Port:

**Settings**

Do as following 5 steps to enable ANPR function. Camera will start to detect license plate and NVR will start to receive license plate information once these steps are done.



- Step1:** Select a channel and enable ANPR function;
- Step2:** Select processing resolution. The further distance you detected, the higher resolution is needed. 1280\*720 by default;
- Step3:** Set ANPR function effective time;
- Step4:** Set detection parameters including Detection Trigger, Confidence Level, Repeat Plate Checktime and Features Identification;

Detection Trigger: Always

Confidence Level:

Repeat Plate Checktime:  Milliseconds (0~60000ms)

Features Identification:

- All
- Region       Direction
- ROI\_ID

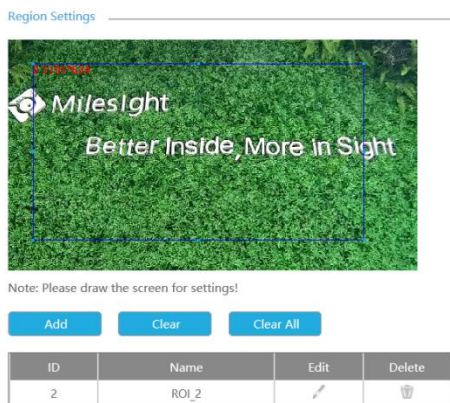
**Detection Trigger:** Always and Alarm Input are available. It will only detect when alarm input is triggered if you select Alarm Input.

**Confidence Level:** Set the degree of reliability according to the actual situation.

**Repeat Plate Checktime:** The same license plate information won't be received on NVR within the time you set.

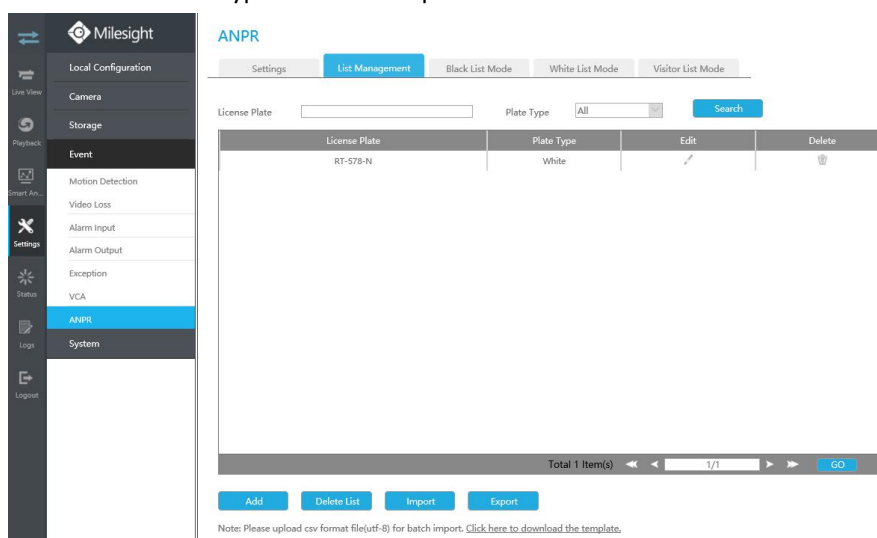
**Features Identification:** The selected features identification will be shown in ANPR logs interface.

**Step5:** Set the detected ROI region which can be up to 4 regions. License plate will only be detected in the ROI regions.



## List Management

Make a license plate list for your own NVR ANPR system. You can upload license plates and set them with different license type here. 10000 plates can be added at most.



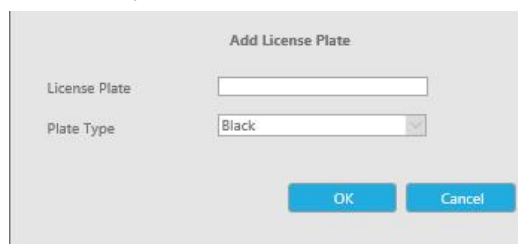
There are two methods to add license plates:

① Add one by one.

**Step1:** Click Add button ;

**Step2:** Input the License Plate and select License Type;


**Step3:** Click OK and then the license plate will be added into the list;

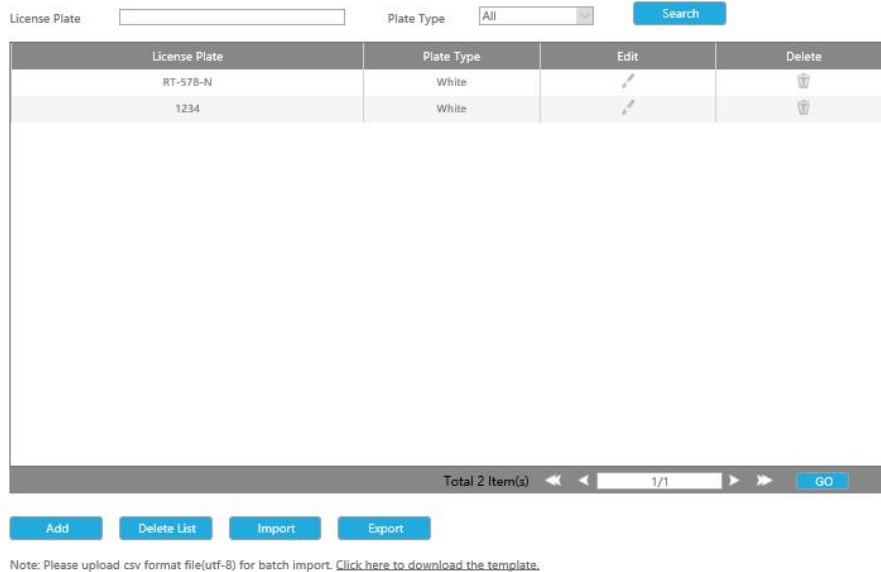


② Batch adding by importing template.

**Step1:** Input all license type and license plate number as Template shows;

	A	B	C
1	Type	Plate	
2	White	RT-578-N	
3	White	1234	
4			

**Step2:** Click Import button , select the file and click Upload to add all license plates into list.



Note: Please upload csv format file(utf-8) for batch import. [Click here to download the template.](#)

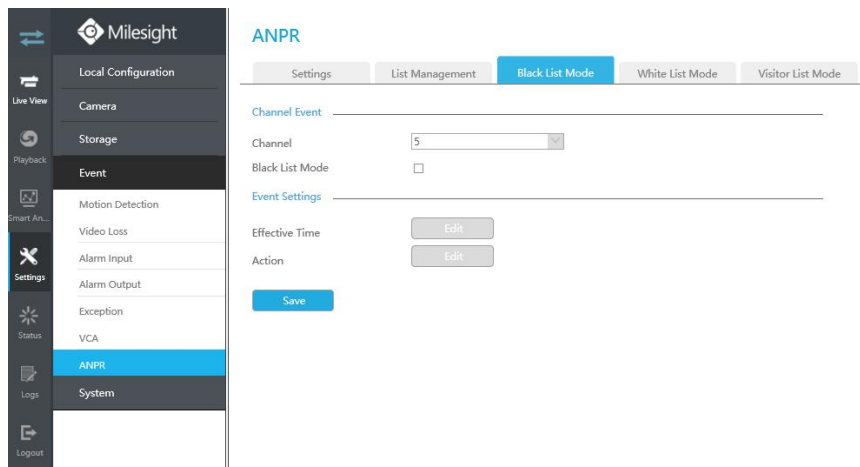
### Black List Mode/White List Mode/Visitor Mode

We provide you three modes for better event management, which is based on two license types.

**Black List Mode:** Manage event for license plates in black list.

**White List Mode:** Manage event for license plates in white list

**Visitor Mode:** Manage event for those license plates that do not have license type.



**Step1:** Enable Black List Mode/White List Mode/Visitor Mode as your demand;

**Step2:** Set effective time the Mode you chose will work during that;

**Step 3:** Set Action for ANPR alarm by clicking .

**Audible Warning:** NVR will trigger an audible beep when motion is detected.

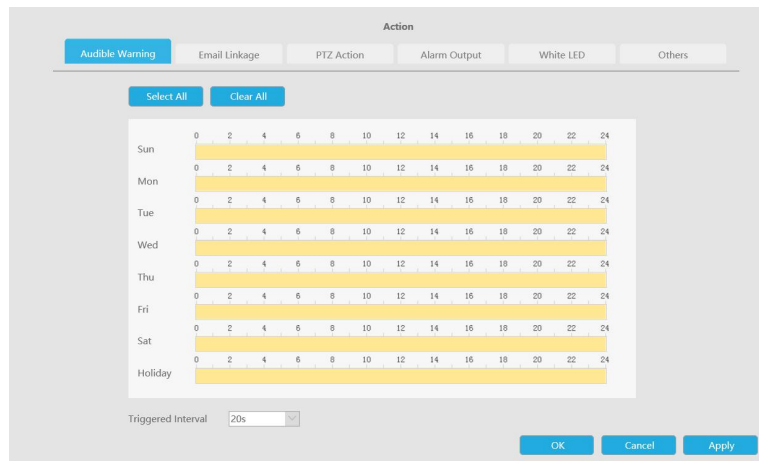
Drag a line on the time table for time setting. It will be more convenient by clicking

 or  to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.




**Email Linkage:** NVR will send an email to the address you set before.

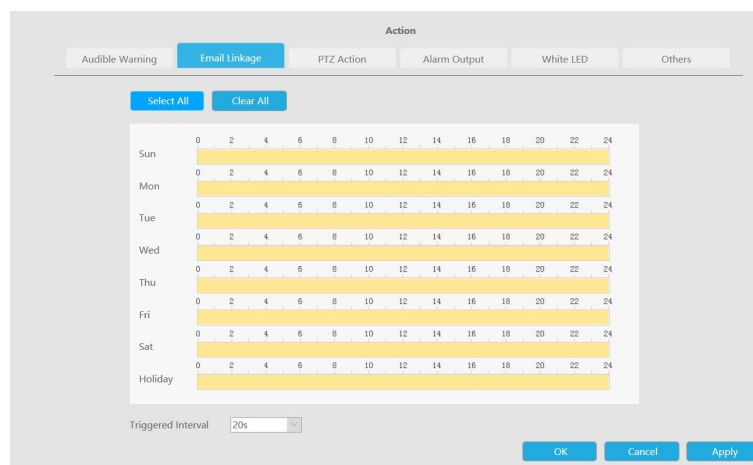
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.




**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

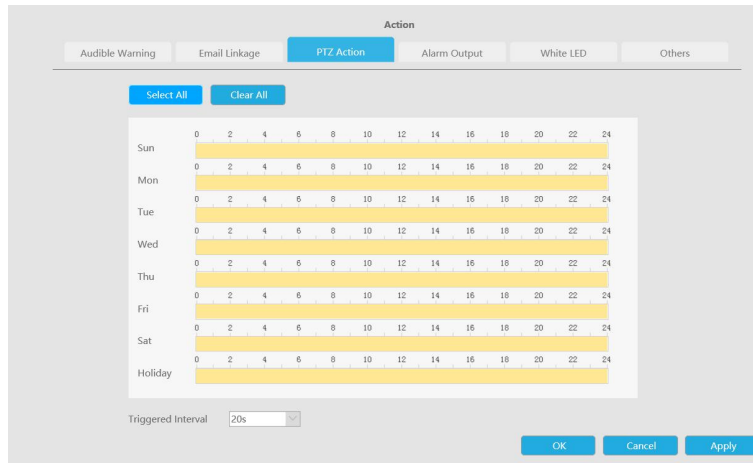
Drag a line on the time table for time setting. It will be more convenient by clicking

**Select All** or **Clear All** to set or clear all time settings.

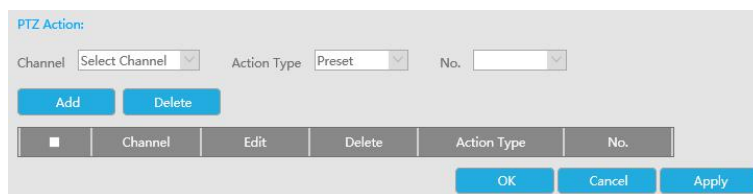
Moreover, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add PTZ Action.



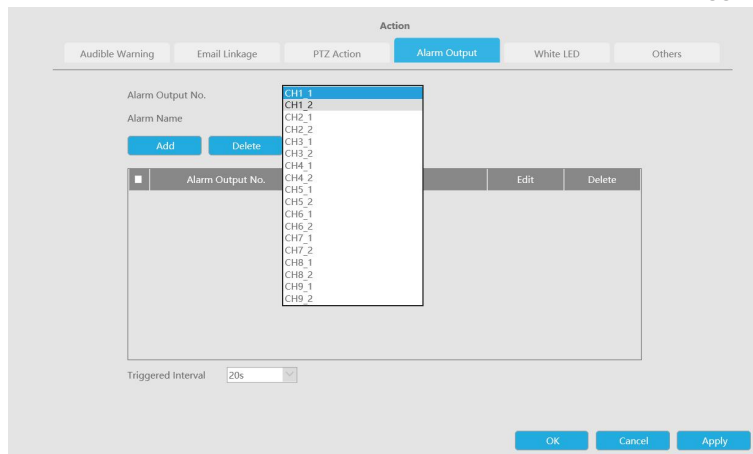
**Channel:** Select the channel which supports this function.

**Action Type:** Preset and Patrol are available.

**No.:** Select the number of Preset or Patrol.

**Alarm Output:** Trigger alarm output when alarm is triggered. For NVR Alarm Output, the relevant alarm output will be firstly listed, such as, 1, 2.etc. As for camera Alarm Output, it will display as CHx\_x (such as CH1\_1) according to the camera channel and corresponding alarm number.

**Triggered Interval:** The effective interval between two actions when event triggered.



**White LED:** Trigger White LED flashing when alarm is triggered.

Drag a line on the time table for time setting. It will be more convenient by clicking

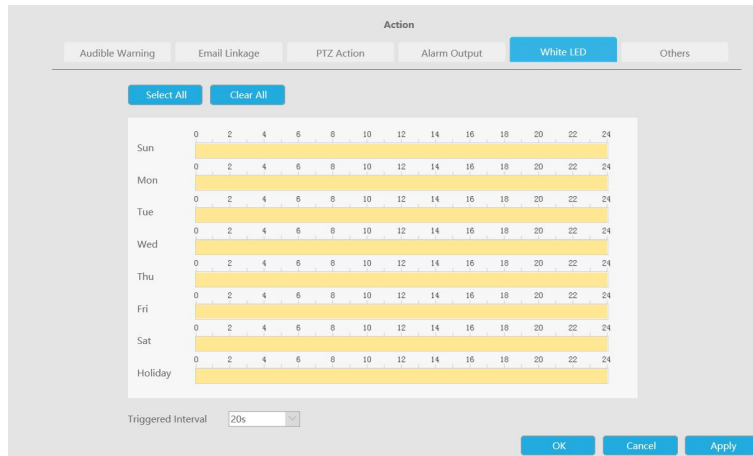


to set or clear all time settings.

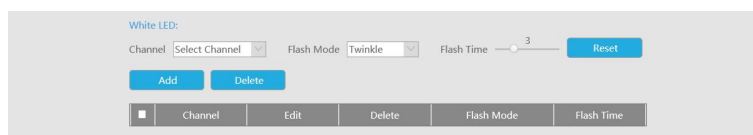
Moreover, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Triggered Interval:** The effective interval between two actions when event triggered.



And you can add White LED.



**Channel:** Select the channel which supports this function.

**Flash Mode:** Twinkle and Always are available.

**Flash Time:** Set the time for White LED flashing. When the Flash Mode is Twinkle, the range of Flash Time is 1~10 and the default value is 3. When the Flash Mode is Always, the range of Flash Time is 1~60 and the default value is 5.

**Others:** Trigger other channels record when alarm is triggered.



**Note:**

1. The list is exclusive for NVR, working with all LPR cameras you add. It won't synchronize with the list on camera side.
2. Do not forget to enable these modes, set effective time and record action for corresponded mode, ensuring that you can get real-time video when license plate is detected (Effective time and record action is enabled by default.).

## 4.7.5 System

### 4.7.5.1 General Settings

To setup the general parameters of NVR, including modify the Device Name, Boot Wizard, set system time manually and auto logout, etc.

**Date & Time**

It is for setting up the Time parameters of NVR, including Time Zone, Daylight Saving Time, Server



Address, NTP Sync, the interval for synchronizing with NTP server, Sync with computer time, etc.

### General Settings

Date & Time
Device

**Current System Time**

Date: 10/09/2019  
Time: 01:11:55

**Set The System Time**

Time Zone: (UTC-08:00) United States - Pacific T

Daylight Saving Time: Auto

NTP Server

Server Address: pool.ntp.org

NTP Sync: Enable

Interval: 1 day

Manual

Time: 10/09/2019 01:11:52

Sync with computer time

Date: 10/09/2019  
Time: 16:11:55

Save

### Device

It is for setting up the general parameters of NVR, including Device Name, HDMI Audio, HDMI Compatible Mode, etc.

### General Settings

Date & Time
Device

Device Name: NVR

HDMI Audio: Enable

Audio Out: Enable

Boot Wizard: Enable

HDMI Compatible Mode: Enable

Stream Information: Disable

Save

**Audio Out:** This option will be hidden if NVR does not have Audio Out function.

**Boot Wizard:** Enable it to pop up boot wizard after rebooting.

**Stream Information:** Enable it to see bit rate, frame rate and frame size in both live view and playback interface.



**Note:**

1. For some models, the stream information will reveal synchronously while transcoding is enabled.
2. Channels that play H.265 in plugin-free mode will not display the stream information.

## 4.7.5.2 Network

### 4.7.5.2.1 Basic

The system supports two IP address format: IPv4 and IPv6

#### IPv4

Enable IPv4 DHCP to auto search IP. When enable DHCP function, you can not modify IP/ Subnet mask/ Gateway.

Disable IPv4 DHCP to modify IP/ Subnet mask/ Gateway manually.

#### IPv6

Manual/ Router Advertisement/ DHCPv6 are available.

#### DNS Server

Preferred DNS Server: DNS server IP address.

Alternate DNS Server: DNS server alternate address.

The screenshot shows the 'Network' configuration page with the 'Basic' tab selected. The 'NIC Settings' section includes:

- IPv4 DHCP:  (checked)
- IPv4 Address: 192 | 168 | 7 | 111
- IPv4 Subnet Mask: 255 | 255 | 240 | 0
- IPv4 Gateway: 192 | 168 | 7 | 1
- IPv6 Mode:  (checked)
- IPv6 Address: [empty]
- IPv6 Prefix Length: [empty]
- IPv6 Gateway: [empty]
- MAC: 1C:C3:16:0A:30:92
- MTU(Byte): 1500

The 'DNS Server' section includes:

- Preferred DNS Server: 8 | 8 | 8 | 8
- Alternate DNS Server: [empty]
- PoE NIC IPv4 Address: 192 | 168 | 20 | 1

A 'Save' button is located at the bottom of the form.

**Note:**

1. Check the DHCP check-box when there is a DHCP server running in the networks.
2. Once DHCP is enabled, DNS will change accordingly.
3. The valid range of MTU is 500~1500.
4. Do not input an IP address conflicting with another device.

### 4.7.5.2.2 UPnP

With the function enabled, you don't need to configure the port mapping for each port in router, it will do the port mapping in router automatically once **router supports UPnP**.

**Network**

Basic | **UPnP** | DDNS | Email | P2P | PPPoE | SNMP | HTTPS | More

UPnP:

Forwarding Type:

Port Type	Edit	External Port	Internal Port	Status
HTTP		21202	80	Invalid
RTSP		23202	554	Invalid

### 4.7.5.2.3 DDNS

Using DDNS to solve the dynamic IP address problem.

Check DDNS check-box to enable it, then select a DDNS Server, input the user name, password and host name. Do not forget to save the configuration.

Milesight has its own DDNS server. Please do port forwarding for HTTP port and RTSP port before enabling **Milesight DDNS**. Then input corresponding information and you can use <http://ddns.milesight.com:MAC> to access device remotely.

**Note:**

“Host Name” must begin with letters, and it can only contain number, letters, and hyphen.

**Network**

Basic | UPnP | **DDNS** | Email | P2P | PPPoE | SNMP | HTTPS | More

Enable DDNS:

Provider:

External HTTP Port:

External RTSP Port:

DDNS URL:

### 4.7.5.2.4 Email

Email will send receivers a screenshot when the alarm is triggered.

**Network**

Basic | UPnP | DDNS | **Email** | P2P | PPPoE | SNMP | HTTPS | More

User Name:

Password:

SMTP Server:

SMTP Port:

Encryption:  TLS  SSL

Host Name:   Enable

Sender Email Address:

Receiver Email Address 1:

Receiver Email Address 2:

Receiver Email Address 3:

**User name:** The E-mail address you choose to send emails. Please input **full email address** into it.

**Password:** The password of the E-mail.

**SMTP Server:** The SMTP Server of your E-mail.

**SMTP Port:** The port of SMTP Server, it's usually 25.

**Encryption:** Security Protocol of email sending, including TLS and SSL.

**Host Name:** It will be attached in the email.

**Sender Email Address:** It must be same with [User name].

**Receiver Email Address:** E-mail Address for the receivers.

Select **Test** to check if the Mail function is workable.

**Note:**

If your NVR has a port forwarding IP for Host Name, please input the complete address that contains the port.

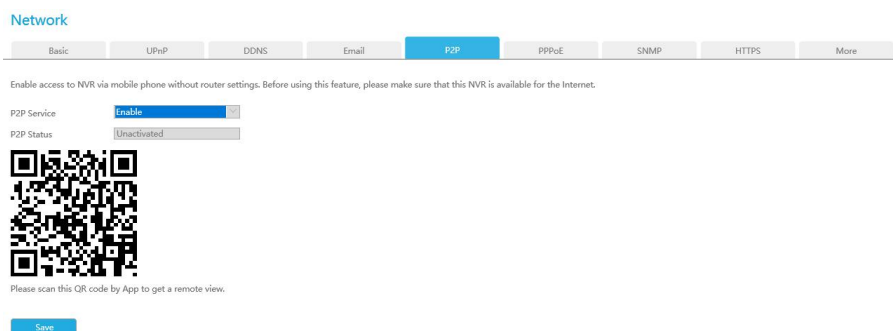
#### 4.7.5.2.5 P2P

You can watch remote NVR live view in WAN by P2P on M-Sight Pro without doing port forwarding on router.

Click “Enable” and “Save” to enable P2P.

**P2P is enabled successfully when P2P Status shows “Activated”.**

After enabling, you can add the NVR on the APP M-Sight Pro for live view via scanning the QR code on the “P2P” page directly, or inputting the MAC address manually.



There are several status shows on P2P Status after clicking Saving, please check corresponded possibilities below:

P2P Status	Description
Network unavailable	Failed to connect with internet. Please check again for the network settings, like Gateway or DNS, make sure the NVR is able to the Internet.
Authentication request failed	Failed to authenticate P2P encryption. Please contact with Milesight.
No idle UUID	Please contact Milesight if this status shows up
Activated	P2P is available
Login failed	Failed to login P2P server. Please contact with Milesight.
Initialization failed	Failed to initialize P2P. Please contact with Milesight.
Unactivated	P2P is disabled
Unknown error	Other error. Please contact with Milesight.

**Note:**

1. Please make sure that NVR is available for internet before enabling.
2. If your NVR firmware version is not 7x.7.0.9-r2 or above, please contact Milesight to registered P2P first.

#### 4.7.5.2.6 PPPoE

PPPoE combines PPP protocol with Ethernet, by which Ethernet hosts can connect to a remote access concentrator via a simple bridging device.

Network

Basic UPNP DDNS Email P2P **PPPoE** SNMP HTTPS More

PPPoE

Dynamic IP

User Name

Password

Confirm Password

Note: If both UPNP and PPPoE are enabled, only PPPoE will take effect.

#### Note:

If both UPNP and PPPoE are enabled, only PPPoE will take effect.

#### 4.7.5.2.7 SNMP

SNMP is an abbreviation of Simple Network Management Protocol, which is convenient for NVR to be monitored and managed in the whole network environment. The SNMP is widely used in many network devices, software and systems.

Before setting the SNMP, please download the SNMP software and manage to receive the NVR information via SNMP port. By setting the Trap Address, the NVR can send the alarm event and exception messages to the surveillance center.

Network

Basic UPNP DDNS Email P2P PPPoE **SNMP** HTTPS More

SNMP V1 / V2c

SNMP V1

SNMP V2c

Read Community

Write Community

SNMP V3

SNMP V3

Read Security Name

Level of Security

Write Security Name

Level of Security

SNMP Port

SNMP Port

**SNMP v1/2c/3:** The version of SNMP, please select the version of your SNMP software.

SNMP v1: No security protection

SNMP v2c: Require password for access

SNMP v3: Support encryption on the premise that the HTTPS protocol must be enabled

**Read Community:** Input the name of Read Community

**Write Community:** Input the name of Write Community

**Read Security Name:** Input the name of Read Security Community

**Level of Security:** There are three levels available: (auth, priv), (auth, no priv) and (no auth, no priv)

**Write Security Name:** Input the name of Write Security Community

**Level of Security:** There are three levels available: (auth, priv), (auth, no priv) and (no auth, no

priv)

**SNMP Port:** The default of the SNMP port is 161

### 4.7.5.2.8 HTTPS

Set in the interface to make sure getting access to NVR successfully via HTTPS, which is able to guarantee communication data security. The reliable and stable technology can secure the user information security and device safety.

The screenshot shows the 'Network' configuration page with the 'HTTPS' tab active. The 'HTTPS' status is set to 'Disable'. Under 'Installation Type', 'Create a Private Certificate' is selected. There are buttons for 'Create', 'Clear', and 'Save'.

There are three certificate installation types:

#### Create a Private Certificate

Click “Create” to create the following dialog box. And then enter Country, Common Name, Period of Validity and other information. And then click “OK” to generate a private certificate.

The dialog box titled 'Create a Private Certificate' contains the following fields: Country, Common Name, Period of Validity (1~999 days), Password, Province, Region, Organization, Company, and Email. There are 'OK' and 'Cancel' buttons at the bottom.

#### Direct Installation

Click “Browse” to select a signed certificate locally and click “Install” to install it.

The screenshot shows the 'Network' configuration page with the 'HTTPS' tab active. The 'HTTPS' status is set to 'Enable'. Under 'Installation Type', 'Direct Installation' is selected. There is a 'Browse' button next to the 'Install Signed Certificate' field. There are buttons for 'Install', 'Clear', and 'Save'. The 'Attributes' section shows: Awarded to: C=CN, H/IP=cn; Issuer: C=CN, H/IP=cn; Period of Validity: Jun 6 16:21:28 2018 ~ Jan 14 16:21:28 2019.

### Create a Certificate Request

Firstly, click “Create” button. And then enter Country, Common Name and other information to create the certificate request;  
 Download the certificate request and submit it to the trusted certificate authority for signature;  
 After receiving the signed valid certificate, import the certificate to the device.

HTTPS	Enable
Installation Type	Create a Certificate Request
Create a Certificate Request	<input type="button" value="Create"/> <a href="#">Request Content</a>
Download the Certificate Request	<input type="button" value="Download"/>
Delete the Certificate Request	<input type="button" value="Delete"/>
Installed Certificate	C=CN, H/IP=cn <input type="button" value="Clear"/>
Attributes	Awarded to: C=CN, H/IP=cn Issuer: C=CN, H/IP=cn Period of Validity: Jun 6 16:21:28 2018 ~ Jan 14 16:21:28 2019

After creating and installing the certificate successfully, you can check the certificate information and clear the information on the following interface. And you can access the NVR by inputting <https://ip:port> via the web browser.

Installed Certificate	C=CN, H/IP=cn <input type="button" value="Clear"/>
Attributes	Awarded to: C=CN, H/IP=cn Issuer: C=CN, H/IP=cn Period of Validity: Jun 6 16:21:28 2018 ~ Jan 14 16:21:28 2019

**Note:**

The default HTTPS port is 443, you can modify it on the “More” interface.

### 4.7.5.2.9 More

Network

Basic UPnP DDNS Email P2P PPPoE SNMP HTTPS **More**

Channel Access	Enable
Enable SSH	Disable
SSH Port	22
HTTP Port	80
HTTPS Port	443
RTSP Port	554
Push Message	Enable
Push Video Stream	Auto
Push Event Type	<input type="button" value="Edit"/>
<input type="button" value="Save"/>	

### Channel Access

With this option enabled, you can access PoE-connected cameras website directly in Camera

Management.

#### Enable SSH

Enable or disable SSH access. Secure Shell (SSH) has many functions; it can replace Telnet, and also provides a secure channel for FTP, POP, even for PPP.

#### SSH Port

The default SSH port is 22. Only for Milesight R&D debugging.

#### HTTP Port

The default HTTP port is 80. Please modify HTTP ports according to actual application.

#### Note:

1. The default HTTP port for IE browser is 80.
2. HTTP port is used for remote network access for 4k/H.265 NVR Series.

#### HTTPS Port

The default HTTPS port is 443. Please modify HTTPS ports according to actual application.

#### Note:

1. The default HTTPS port for IE browser is 443.
2. HTTPS port is used for remote network access for 4k/H.265 NVR Series.

#### RTSP Port

Real Time Streaming Protocol (RTSP) is an application layer protocol in TCP/IP protocol system.

The default RTSP port is 554. Please modify RTSP port according to actual application.

#### Note:

1. RTSP port is used for remote network live view.
2. RTSP port valid range is 554 or 1024~65535.

#### Push Message Enable

With this option enabled, you can receive the alarm message on the mobile application.


#### Push Video Stream

Select which video stream will be pushed to APP M-Sight Pro. Auto, Primary Stream and Secondary Stream are available.

#### Note:

Only NVR model ends with letter T support.

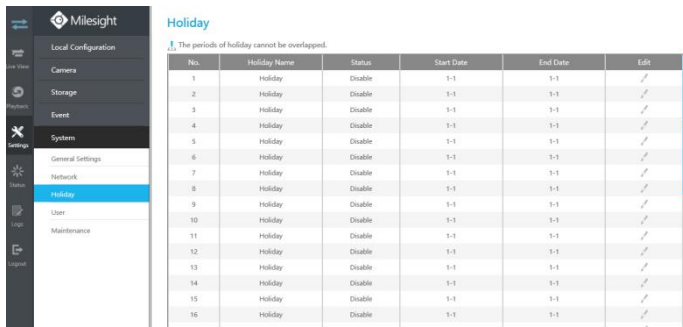
#### Push Event Type

Click  to select which alarm type will be pushed to APP M-sight Pro. There are different Push Event Types for every channel to choose, which means every camera added in this NVR can choose what Event Type it wants to push, like Motion Detection, Video Loss, Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering and Human Detection..

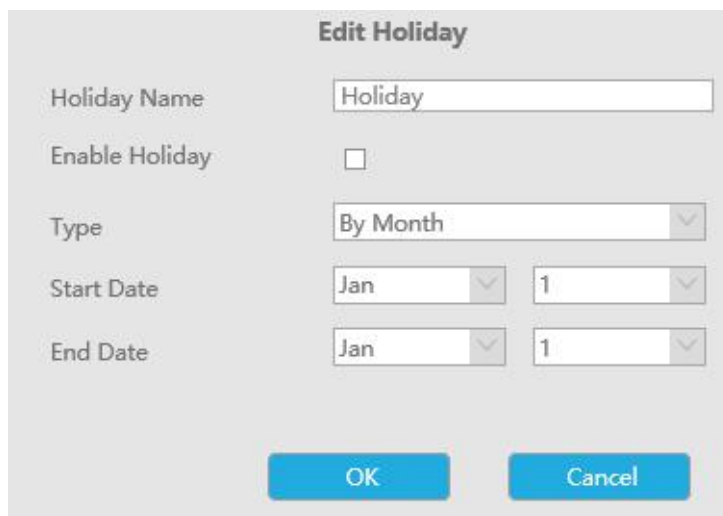
### 4.7.5.3 Holiday

It can configure the record or image capture schedule for holidays of the current year.

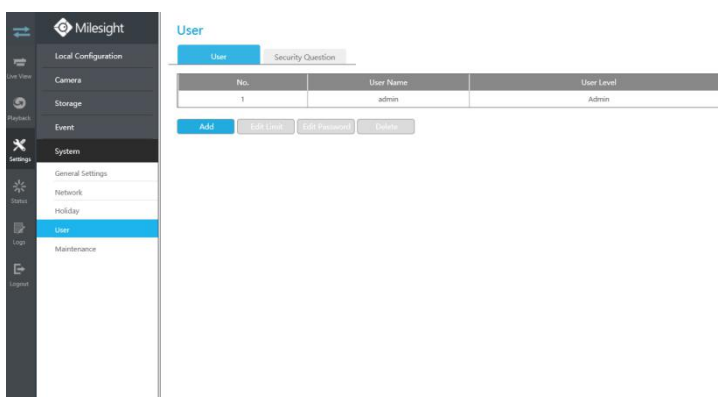




Click to open holiday configuration page to modify holiday name, check the 'Enable Holiday' check-box, and then select [Type] to setup Start/End date. There are By0 Month, By Week, and By Date in [Type] mode. Then click [OK] to save the configuration and return to holiday page.



### 4.7.5.4 User





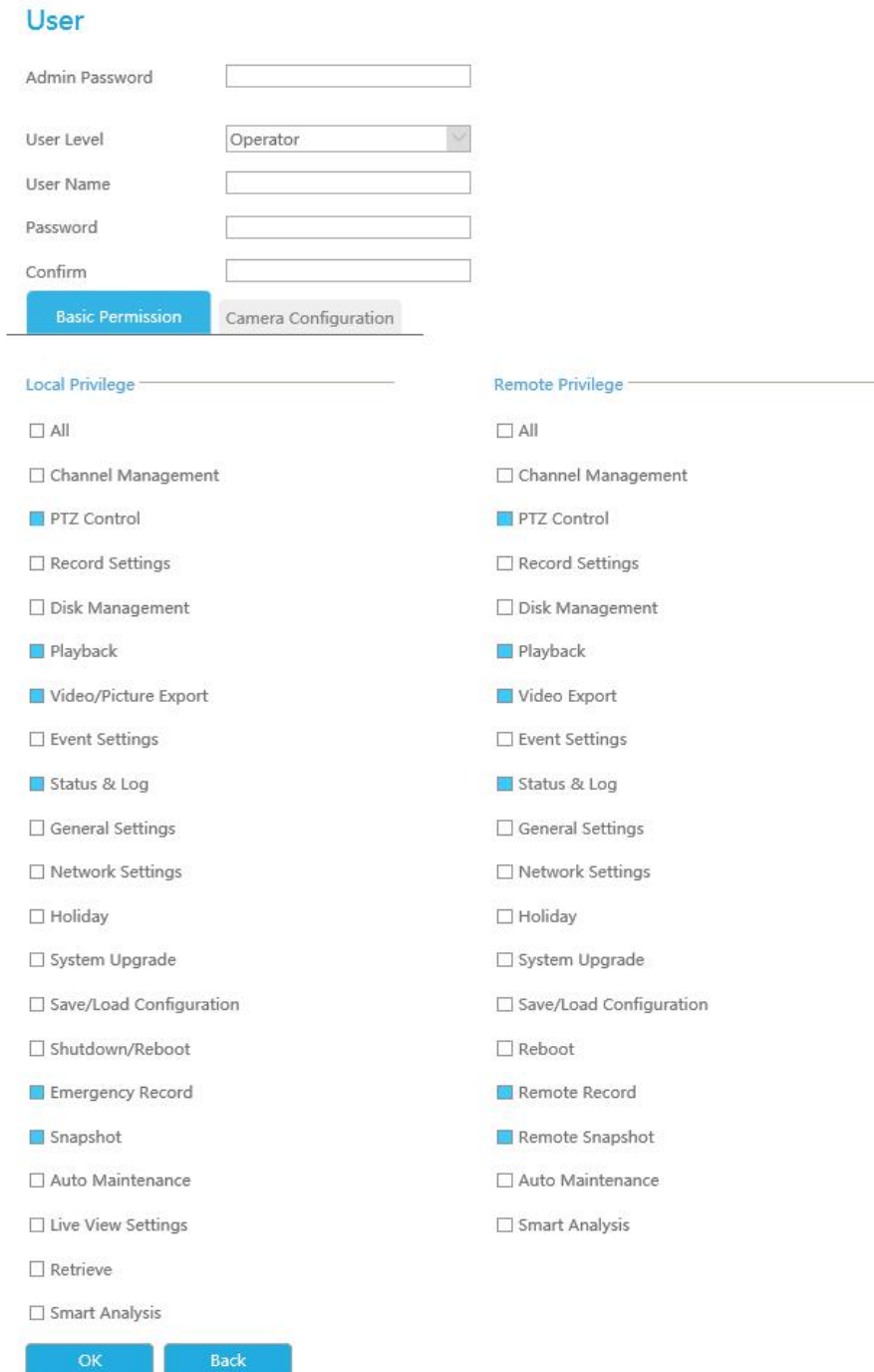
**Note:**

1. If the NVR firmware version is below xx.7.0.6, the default user name is "admin" and the default password is "123456".
2. If the NVR firmware version is between xx.7.0.6 and xx.9.0.3, the default user name is "admin" and the default password is "ms1234".

3. If the NVR firmware version is xx.9.0.3 or above, please set the admin password before login.

### Add a new user

Click  to enter the user add interface, input information for the new user, select user level and set user privileges, then click  to save settings.



**User**

Admin Password

User Level

User Name

Password

Confirm

**Basic Permission** Camera Configuration

**Local Privilege**

- All
- Channel Management
- PTZ Control
- Record Settings
- Disk Management
- Playback
- Video/Picture Export
- Event Settings
- Status & Log
- General Settings
- Network Settings
- Holiday
- System Upgrade
- Save/Load Configuration
- Shutdown/Reboot
- Emergency Record
- Snapshot
- Auto Maintenance
- Live View Settings
- Retrieve
- Smart Analysis

**Remote Privilege**

- All
- Channel Management
- PTZ Control
- Record Settings
- Disk Management
- Playback
- Video Export
- Event Settings
- Status & Log
- General Settings
- Network Settings
- Holiday
- System Upgrade
- Save/Load Configuration
- Reboot
- Remote Record
- Remote Snapshot
- Auto Maintenance
- Smart Analysis

**OK** **Back**

#### Note:

User name can only contain letters and number. There are two user levels with different authority: Operator and Viewer.

### Edit user limits

Click a user, when the background color changes into blue, click **Edit Limit** to edit user privileges.

- ① Local Privilege means the privilege to the monitor connected with NVR
- ② Remote Privilege means the privilege to web settings.

#### User

Admin Password

Basic Permission

Camera Configuration

**Local Privilege**

- All
- Channel Management
- PTZ Control
- Record Settings
- Disk Management
- Playback
- Video/Picture Export
- Event Settings
- Status & Log
- General Settings
- Network Settings
- Holiday
- System Upgrade
- Save/Load Configuration
- Shutdown/Reboot
- Emergency Record
- Snapshot
- Auto Maintenance
- Live View Settings
- Retrieve
- Smart Analysis

**Remote Privilege**

- All
- Channel Management
- PTZ Control
- Record Settings
- Disk Management
- Playback
- Video Export
- Event Settings
- Status & Log
- General Settings
- Network Settings
- Holiday
- System Upgrade
- Save/Load Configuration
- Reboot
- Remote Record
- Remote Snapshot
- Auto Maintenance
- Smart Analysis

**OK**

**Back**

### Edit user password

Click **Edit Password** to modify password.

Sync new password to current connected PoE channels is available for PoE NVR Series.

#### User

Admin Password

User Level Admin

User Name admin

New Password

Confirm

Sync new password to current connected PoE channels


**OK**

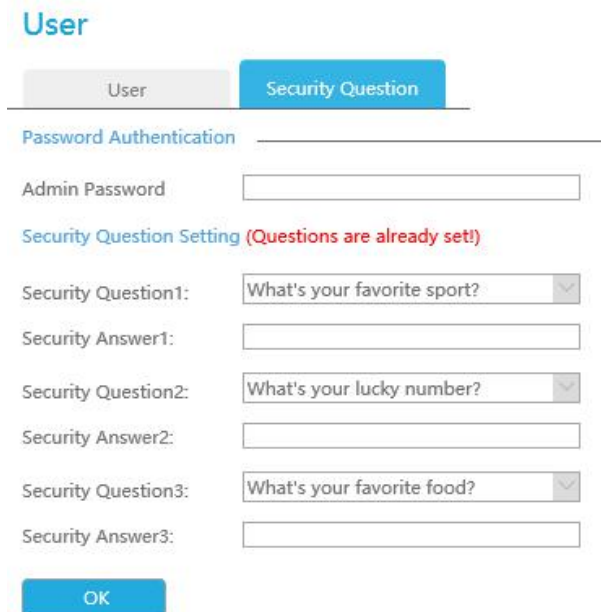
**Back**

**Delete user**

Select a user and click  to delete a user.

**Modify Security Question**

Input Admin Password, select security question and answer. Click  to save.



**User**

User Security Question

Password Authentication

Admin Password

Security Question Setting (Questions are already set!)

Security Question1:

Security Answer1:

Security Question2:

Security Answer2:

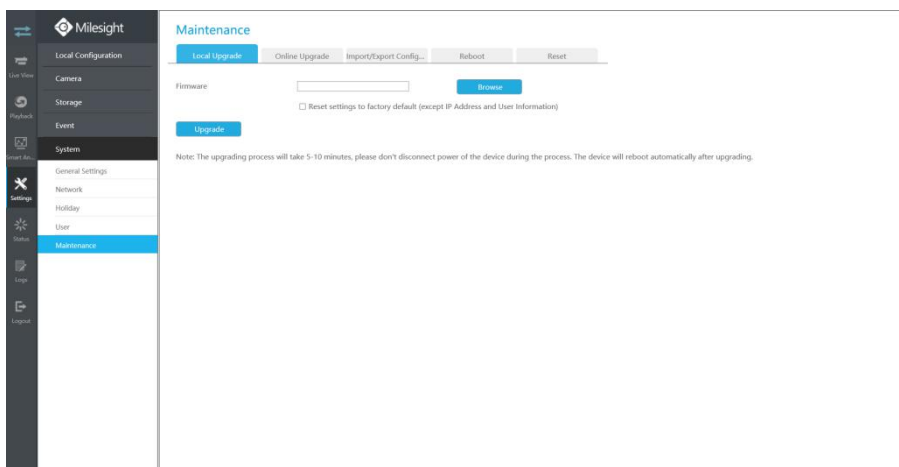
Security Question3:

Security Answer3:

OK

**Note:**

1. This option is available for the NVR firmware version xx.9.0.3 or above only.
2. Security question is used for resetting admin password if you forget current one.

**4.7.5.5 Maintenance**


**Maintenance**

Local Upgrade Online Upgrade Import/Export Config... Reboot Reset

Firmware

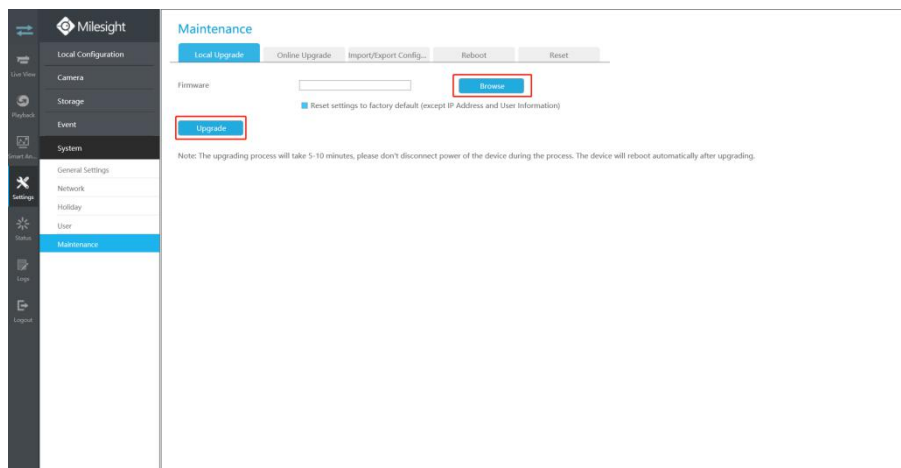
Reset settings to factory default (except IP Address and User Information)

Note: The upgrading process will take 5-10 minutes, please don't disconnect power of the device during the process. The device will reboot automatically after upgrading.

**Local Upgrade**

**Step1.** Click **Browse** to select the firmware file, and you can check  to reset configuration to factory defaults;

**Step2.** Click **Upgrade** to confirm the upgrade.



**Note:**

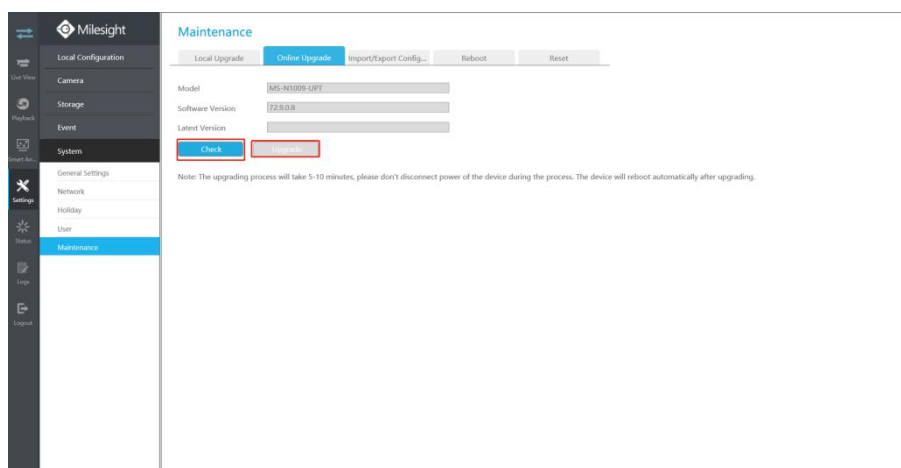
It will take 5 to 10 minutes to upgrade, please do not disconnect the device power during the process. The device will reboot automatically after upgrading.

**Online Upgrade**

**Step1.** Click **Check** to confirm whether there is a new version;

If there is a new version, the Latest Version column will display corresponding information.

**Step2.** Click **Upgrade** to confirm the upgrade.

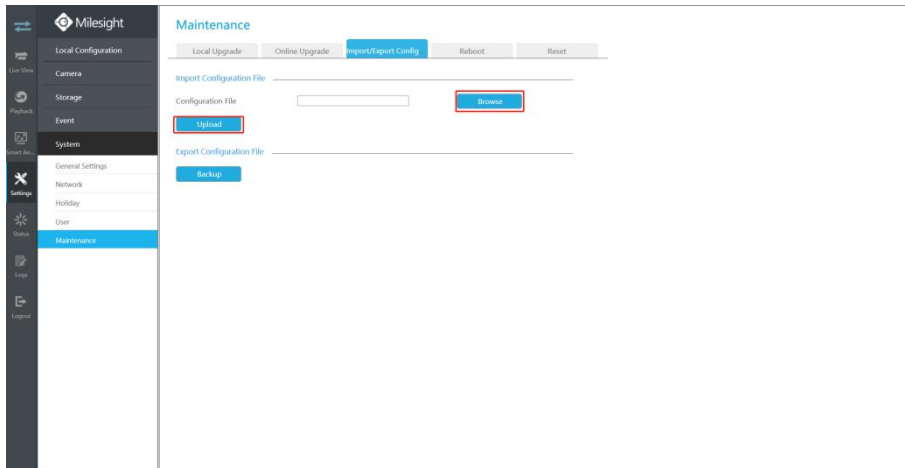


**Note:**

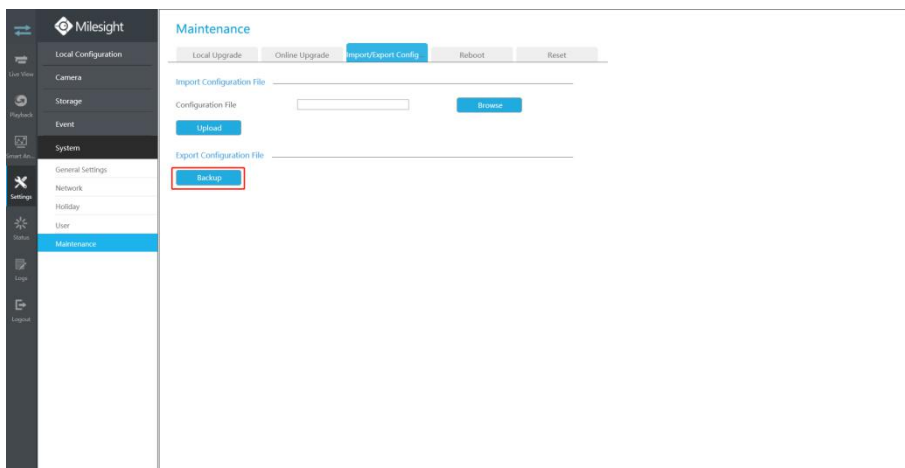
It will take 5 to 10 minutes to upgrade, please do not disconnect the device power during the process. The device will reboot automatically after upgrading.

**Import/Export Configuration**

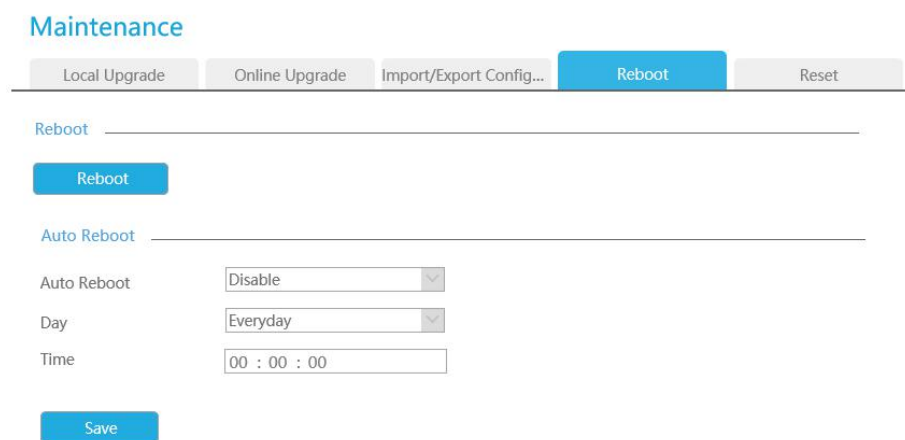
**Import Configuration File:** Click **Browse** to select one file and click **Upload** to import the NVR configuration.



**Export Configuration File:** Click **Backup** to backup current NVR settings.



## Reboot



## Reboot

Click  to reboot the NVR.

### Auto Reboot

You can set day and time for reboot, and **the NVR will reboot automatically at the time you set.**

**Day:** Everyday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.

**Time:** Adjustable range from 00:00:00 to 23:59:59.

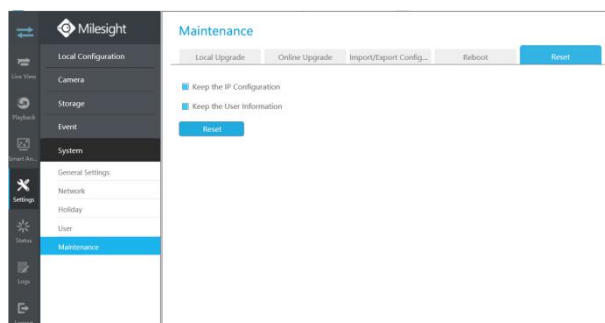
#### Note:

1. Some models support this function.
2. Auto Reboot can be enabled in User -> Edit Limit -> Remote Privilege.
3. The record will display in the log when Auto Reboot takes effect.
4. If a user without Auto Reboot permission logs in, the function will be hidden.

### Reset

Click  to reset the NVR to factory defaults.

Keeping the IP parameters and Keeping the User information are available.



## 4.8 Status

You can have a quick view of the information of the device, network, camera, disk and event. This part is only for your rapid reference. If you want to make any configuration, please go to corresponding interfaces accordingly.

### 4.8.1 Device Information

Device information includes Model, MAC Address, Hardware Version, Software Version and Uptime.

#### Device Information

Model	MS-N5016-UPT
MAC Address	1C:C3:16:0A:30:92
Hardware Version	V1.1
Software Version	72.9.0.6-a3
Uptime	01:39:00 up 7:53

## 4.8.2 Network Status

Network Status includes three main parts: Receive Bandwidth, LAN.

### Network Status

Receive Bandwidth			
Free	145Mbps	Used	15Mbps

LAN			
Connection	Link is up - 100Mbps Duplex		
IPv4 DHCP	Disable	IPv6 Mode	Manual
IPv4 Address	192.168.7.111	IPv6 Address	
IPv4 Netmask	255.255.240.0	IPv6 Prefix Length	
IPv4 Gateway	192.168.7.1	IPv6 Gateway	
Preferred DNS Server	8.8.8.8	Alternate DNS Server	
MAC	1C:C3:16:0A:30:92	MTU	1500
Receive Rate	17.45Mbps	Send Rate	429.66Kbps

## 4.8.3 Camera Status

Camera status includes Channel, Name, IPv4 Address, Record, Frame Rate, Bit rate, Resolution and Status.

### Camera Status

Channel	Name	IPv4 Address	Record	Frame Rate	Bit Rate	Resolution	Status
1	CAM1	192.168.14.102	On	10fps	890Kbps	1920x1080	Connected
2	CAM2	192.168.14.103	On	25fps	3996Kbps	1920x1080	Connected
3	CAM3	192.168.14.105	On	24fps	9951Kbps	3840x2160	Connected
4	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--

## 4.8.4 Disk Status

Disk status includes Port, Vendor, status, Total(GB), Free(GB), Type, In Use and Recycle Mode. You also can check the Total Capacity (GB) and Free Capacity.

### Disk Status

Port	Vendor	Status	Total(GB)	Free(GB)	Type	Property
2	WDC WD2500BEVT-08A23T1	Normal	232	0	LOCAL	R/W

Total Capacity(GB)

Available Capacity(GB)

[Refresh](#)



## 4.8.5 Event Status

### Camera Event

Camera Event shows camera event, including Video Loss, Motion and I/O. turns into when alarm is triggered.

Event Status

Camera Event Alarm VCA People Counting

Channel	Name	IPv4 Address	Video Loss	Motion
1	CAM1	192.168.7.131		
2	CAM2	192.168.14.105		
3	CAM3	192.168.14.103		
4	CAM4			
5	CAM5	192.168.14.102		
6	CAM6	192.168.7.241		
7	CAM7			
8	CAM8			
9	CAM9			
10	CAM10			

### Alarm

Alarm shows the Alarm Input and Alarm Output status. turns into when alarm is triggered.

Event Status

Camera Event Alarm VCA People Counting

Alarm Input List

No.	Alarm Name	Alarm Type	Status
1		NO	
2		NO	
3		NO	
4		NO	
5		NO	
6		NO	
7		NO	
8		NO	

Alarm Output List

No.	Alarm Name	Alarm Type	Dwell Time	Status
1		NO	5s	
2		NO	5s	
3		NO	5s	
4		NO	5s	
CH1_1		NO	5s	
CH1_2		--	--	--
CH2_1		NC	5s	
CH2_2		--	--	--

### VCA

It shows the VCA status. turns into when alarm is triggered.

Event Status

Channel	Name	IPv4 Address	Region Entrance	Region Exiting	Advanced Motion Detection	Tamper Detection	Line Crossing	Loitering	Human Detection	Object Left/Removed
1	CAM1		▣	▣	▣	▣	▣	▣	▣	▣
2	CAM2		▣	▣	▣	▣	▣	▣	▣	▣
3	CAM3		▣	▣	▣	▣	▣	▣	▣	▣
4	CAM4		▣	▣	▣	▣	▣	▣	▣	▣
5	CAM5		▣	▣	▣	▣	▣	▣	▣	▣
6	CAM6		▣	▣	▣	▣	▣	▣	▣	▣
7	CAM7		▣	▣	▣	▣	▣	▣	▣	▣
8	CAM8		▣	▣	▣	▣	▣	▣	▣	▣
9	CAM9		▣	▣	▣	▣	▣	▣	▣	▣
10	CAM10		▣	▣	▣	▣	▣	▣	▣	▣
11	CAM11		▣	▣	▣	▣	▣	▣	▣	▣
12	CAM12		▣	▣	▣	▣	▣	▣	▣	▣
13	CAM13		▣	▣	▣	▣	▣	▣	▣	▣
14	CAM14		▣	▣	▣	▣	▣	▣	▣	▣
15	CAM15		▣	▣	▣	▣	▣	▣	▣	▣
16	CAM16		▣	▣	▣	▣	▣	▣	▣	▣

People Counting

It shows every camera's current In/Out number of people counting.

Event Status

Channel	Name	IPv4 Address	In	Out
1	CAM1	--	--	--
2	CAM2	--	--	--
3	CAM3	--	--	--
4	CAM4	--	--	--
5	CAM5	--	--	--
6	CAM6	--	--	--
7	CAM7	--	--	--
8	CAM8	--	--	--
9	CAM9	--	--	--
10	CAM10	--	--	--
11	CAM11	--	--	--
12	CAM12	--	--	--
13	CAM13	--	--	--
14	CAM14	--	--	--
15	CAM15	--	--	--
16	CAM16	--	--	--

### 4.8.6 Group Status

Check Group Status. The status of the all created Groups can be sorted by Group or Channel.

## 4.8.7 Packet Capture Tool

Input IP and Port, then click [Start] to start capture and click [End] to stop. Click [Download] to backup the captured packet locally.

### Packet Capture Tool

IP

192.168.14.103

Port

8083

NIC

eth0

Start

End

Download

## 4.9 Logs

In Log interface, you can check, search and export logs. By selecting the Main Type, Sub Type, Start Time and End Time which can narrow down the scale of logs, you can search for logs that you need and then export them locally.

No.	Alarm Type	Alarm	Sub Type	Parameter	Channel	Level	Alarm/Event ID	Details
1	Information	2020-01-25 18:29:42	Start Record	N/A	0	N/A	N/A	☰
2	Information	2020-01-25 18:29:42	Start Record	N/A	1	N/A	N/A	☰
3	Event	2020-01-25 18:29:20	Start Motion Detection	N/A	5	N/A	N/A	☰
4	Event	2020-01-25 18:29:20	Stop Motion Detection	N/A	5	N/A	N/A	☰
5	Event	2020-01-25 18:29:20	Start Motion Detection	N/A	5	N/A	N/A	☰
6	Event	2020-01-25 18:28:48	Stop Motion Detection	N/A	5	N/A	N/A	☰
7	Event	2020-01-25 18:28:48	Start Motion Detection	N/A	5	N/A	N/A	☰
8	Information	2020-01-25 18:27:22	Start Record	N/A	1	N/A	N/A	☰
9	Event	2020-01-25 18:27:10	Start Motion Detection	N/A	3	N/A	N/A	☰
10	Event	2020-01-25 18:27:10	Stop Motion Detection	N/A	3	N/A	N/A	☰
11	Event	2020-01-25 18:26:21	Start Motion Detection	N/A	3	N/A	N/A	☰
12	Event	2020-01-25 18:25:06	Stop Motion Detection	N/A	3	N/A	N/A	☰
13	Event	2020-01-25 18:24:55	Start Motion Detection	N/A	3	N/A	N/A	☰
14	Event	2020-01-25 18:24:47	Stop Motion Detection	N/A	3	N/A	N/A	☰
15	Event	2020-01-25 18:24:47	Start Motion Detection	N/A	3	N/A	N/A	☰
16	Event	2020-01-25 18:24:13	Stop Motion Detection	N/A	3	N/A	N/A	☰
17	Event	2020-01-25 18:24:13	Start Motion Detection	N/A	3	N/A	N/A	☰
18	Information	2020-01-25 18:23:46	Start Record	N/A	2	N/A	N/A	☰
19	Information	2020-01-25 18:23:16	Start Record	N/A	2	N/A	N/A	☰
20	Event	2020-01-25 18:21:45	Start Motion Detection	N/A	3	N/A	N/A	☰
21	Event	2020-01-25 18:21:45	Stop Motion Detection	N/A	3	N/A	N/A	☰
22	Information	2020-01-25 18:21:45	Start Record	N/A	3	N/A	N/A	☰
23	Event	2020-01-25 18:20:26	Stop Motion Detection	N/A	3	N/A	N/A	☰
24	Event	2020-01-25 18:19:21	Start Motion Detection	N/A	3	N/A	N/A	☰
25	Event	2020-01-25 18:18:44	Stop Motion Detection	N/A	3	N/A	N/A	☰
26	Event	2020-01-25 18:18:17	Start Motion Detection	N/A	5	N/A	N/A	☰
27	Event	2020-01-25 18:18:06	Stop Motion Detection	N/A	5	N/A	N/A	☰
28	Event	2020-01-25 18:17:37	Start Motion Detection	N/A	5	N/A	N/A	☰
29	Event	2020-01-25 18:17:45	Stop Motion Detection	N/A	5	N/A	N/A	☰
30	Event	2020-01-25 18:17:42	Start Motion Detection	N/A	3	N/A	N/A	☰
31	Event	2020-01-25 18:17:42	Stop Motion Detection	N/A	3	N/A	N/A	☰
32	Event	2020-01-25 18:17:54	Start Motion Detection	N/A	5	N/A	N/A	☰
33	Event	2020-01-25 18:17:52	Stop Motion Detection	N/A	5	N/A	N/A	☰
34	Event	2020-01-25 18:17:55	Start Motion Detection	N/A	3	N/A	N/A	☰
35	Event	2020-01-25 18:17:42	Stop Motion Detection	N/A	3	N/A	N/A	☰
36	Event	2020-01-25 18:16:51	Start Motion Detection	N/A	3	N/A	N/A	☰
37	Event	2020-01-25 18:16:49	Stop Motion Detection	N/A	3	N/A	N/A	☰
38	Event	2020-01-25 18:16:28	Start Motion Detection	N/A	3	N/A	N/A	☰
39	Event	2020-01-25 18:16:17	Stop Motion Detection	N/A	3	N/A	N/A	☰
40	Event	2020-01-25 18:16:01	Start Motion Detection	N/A	3	N/A	N/A	☰
41	Event	2020-01-25 18:15:40	Stop Motion Detection	N/A	3	N/A	N/A	☰
42	Event	2020-01-25 18:15:34	Start Motion Detection	N/A	5	N/A	N/A	☰
43	Event	2020-01-25 18:15:08	Stop Motion Detection	N/A	3	N/A	N/A	☰
44	Event	2020-01-25 18:15:01	Start Motion Detection	N/A	5	N/A	N/A	☰
45	Event	2020-01-25 18:14:55	Stop Motion Detection	N/A	3	N/A	N/A	☰
46	Event	2020-01-25 18:14:52	Start Motion Detection	N/A	3	N/A	N/A	☰
47	Event	2020-01-25 18:14:43	Stop Motion Detection	N/A	3	N/A	N/A	☰

## 4.10 Logout

Click Logout to exit the current account.



## 5. Services

Milesight Technology Co., Ltd provides customers with timely and comprehensive technical support services. End-users can contact your local dealer to obtain technical support. Distributors and resellers can contact directly with Milesight for technical support.

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