



# Network Video Recorder User Manual

V5.08



## 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 |
| 3.2.1 Live View.....                              | 21 |
| 3.2.2 Layout.....                                 | 25 |
| 3.3 Playback.....                                 | 26 |
| 3.3.1 General Playback.....                       | 26 |
| 3.3.2 Event Playback.....                         | 29 |
| 3.3.3 Tag Playback.....                           | 31 |
| 3.3.4 Picture Playback.....                       | 33 |
| 3.3.5 File Management.....                        | 35 |
| 3.4 Retrieve.....                                 | 37 |
| 3.4.1 Common Backup.....                          | 37 |
| 3.4.2 Event Backup.....                           | 39 |
| 3.4.3 Picture Backup.....                         | 40 |
| 3.5 Camera Settings.....                          | 41 |
| 3.5.1 Camera Management.....                      | 41 |
| 3.5.2 Device Search.....                          | 46 |
| 3.5.3 PTZ Configuration.....                      | 47 |
| 3.5.4 Image.....                                  | 51 |
| 3.6 Storage.....                                  | 57 |
| 3.6.1 Video Record.....                           | 58 |
| 3.6.2 Snapshot.....                               | 61 |
| 3.6.3 General Settings.....                       | 63 |
| 3.6.4 Disk.....                                   | 64 |
| 3.6.5 RAID.....                                   | 65 |
| 3.6.6 Group.....                                  | 67 |
| 3.7 Event.....                                    | 68 |
| 3.7.1 Motion Detection.....                       | 68 |
| 3.7.2 Video Loss.....                             | 73 |
| 3.7.3 Alarm Input.....                            | 76 |
| 3.7.4 Alarm Output.....                           | 80 |
| 3.7.5 Exception.....                              | 81 |

|                                 |     |
|---------------------------------|-----|
| 3.7.6 VCA.....                  | 82  |
| 3.8 Settings.....               | 120 |
| 3.8.1 General.....              | 120 |
| 3.8.2 Network.....              | 121 |
| 3.8.3 Holiday.....              | 126 |
| 3.8.4 User.....                 | 127 |
| 3.8.5 Maintenance.....          | 129 |
| 3.8.6 Auto Reboot.....          | 131 |
| 3.8.7 Hot Spare.....            | 131 |
| 3.9 Status.....                 | 132 |
| 3.9.1 Device Information.....   | 133 |
| 3.9.2 Network Status.....       | 133 |
| 3.9.3 Camera Status.....        | 133 |
| 3.9.4 Disk Status.....          | 134 |
| 3.9.5 Event Status.....         | 135 |
| 3.9.6 Group Status.....         | 137 |
| 3.9.7 Logs.....                 | 137 |
| 3.10 Logout.....                | 138 |
| 4.WEB Settings.....             | 139 |
| 4.1 Account Setting.....        | 139 |
| 4.2 Login.....                  | 140 |
| 4.3 Menu.....                   | 142 |
| 4.4 Live View.....              | 143 |
| 4.4.1 Camera List.....          | 143 |
| 4.4.2 PTZ.....                  | 144 |
| 4.4.3 Image Configuration.....  | 145 |
| 4.5 Playback.....               | 145 |
| 4.5.1 How to playback.....      | 146 |
| 4.5.2 Transcoding.....          | 147 |
| 4.5.3 Video Files Backup.....   | 148 |
| 4.5.4 Picture Files Backup..... | 149 |
| 4.6 Settings.....               | 150 |
| 4.6.1 Local Configuration.....  | 150 |
| 4.6.2 Camera.....               | 150 |
| 4.6.3 Storage.....              | 162 |
| 4.6.4 Event.....                | 170 |
| 4.6.5 System.....               | 214 |
| 4.7 Status.....                 | 228 |
| 4.7.1 Device Information.....   | 228 |
| 4.7.2 Network Status.....       | 229 |
| 4.7.3 Camera Status.....        | 229 |
| 4.7.4 Disk Status.....          | 229 |
| 4.7.5 Event Status.....         | 230 |
| 4.7.6 Packet Capture Tool.....  | 231 |

|                  |     |
|------------------|-----|
| 4.8 Logs.....    | 232 |
| 4.9 Logout.....  | 232 |
| 5. Services..... | 233 |

# 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 PAL/NTSC adaptive video input.
- Support multiple screen displaying in live view.
- Support 1/4/8/9/12/14/16/32 screen live view, 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 live view group switch, manual switch and automatic patrol. The interval of automatic sequence is adjustable.
- Support motion detection and video loss alert.
- Support various PTZ protocols and PTZ operations such as preset, patrol, etc.
- 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 OSD title and date configuration.
- Support instant playback.
- Support to set view to Original or Resize.

### 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.



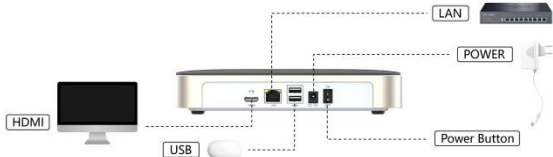
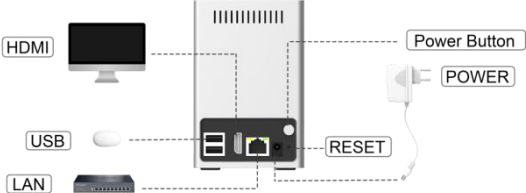
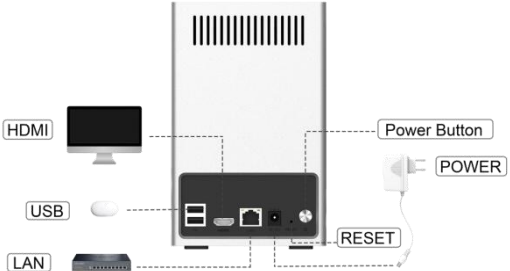
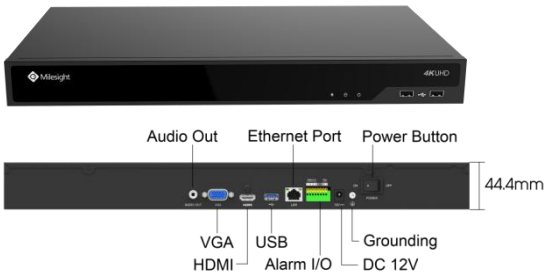

- Support IPv4/IPv6, TCP, UDP, RTP, RTSP, RTCP, HTTP, HTTPS, DNS, DDNS, DHCP, NTP, SNTP, SMTP, SNMP, UPnP.
- Support remote acquiring of device status, system log and alarm status.
- Support remote operate system maintenance by initialize hard disk, add NAS, upgrade firmware and auto reboot, etc.
- Support 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.

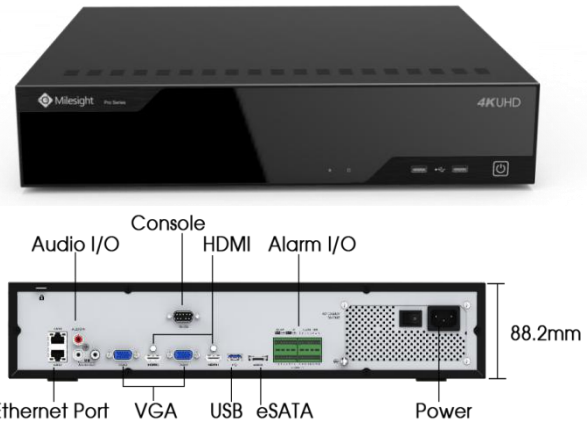
## 2. Hardware

### 2.1 Panel Buttons

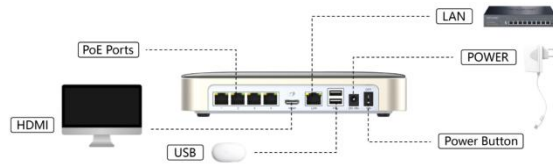
| Model                                | Hardware/Interface  |
|--------------------------------------|---|
| <b>4K H.265 Mini NVR 1000 Series</b> | <p><b>MS-N1004-UC:</b></p>                                  |
|                                      | <p><b>MS-N1009-UT (Firmware version: 71.xx.xx.xx):</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**

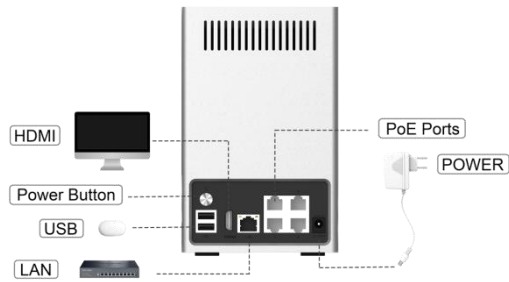
**MS-N8032-UH/MS-N8064-UH:**



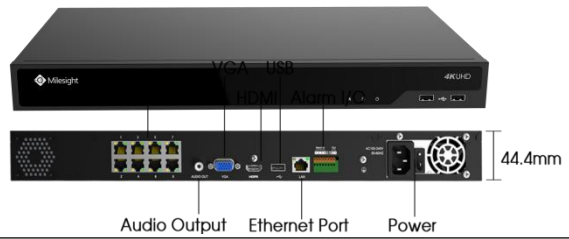
**MS-N1004-UPC:**



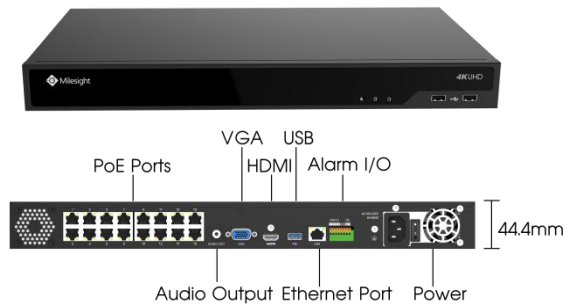
**MS-N1009-UPT:**



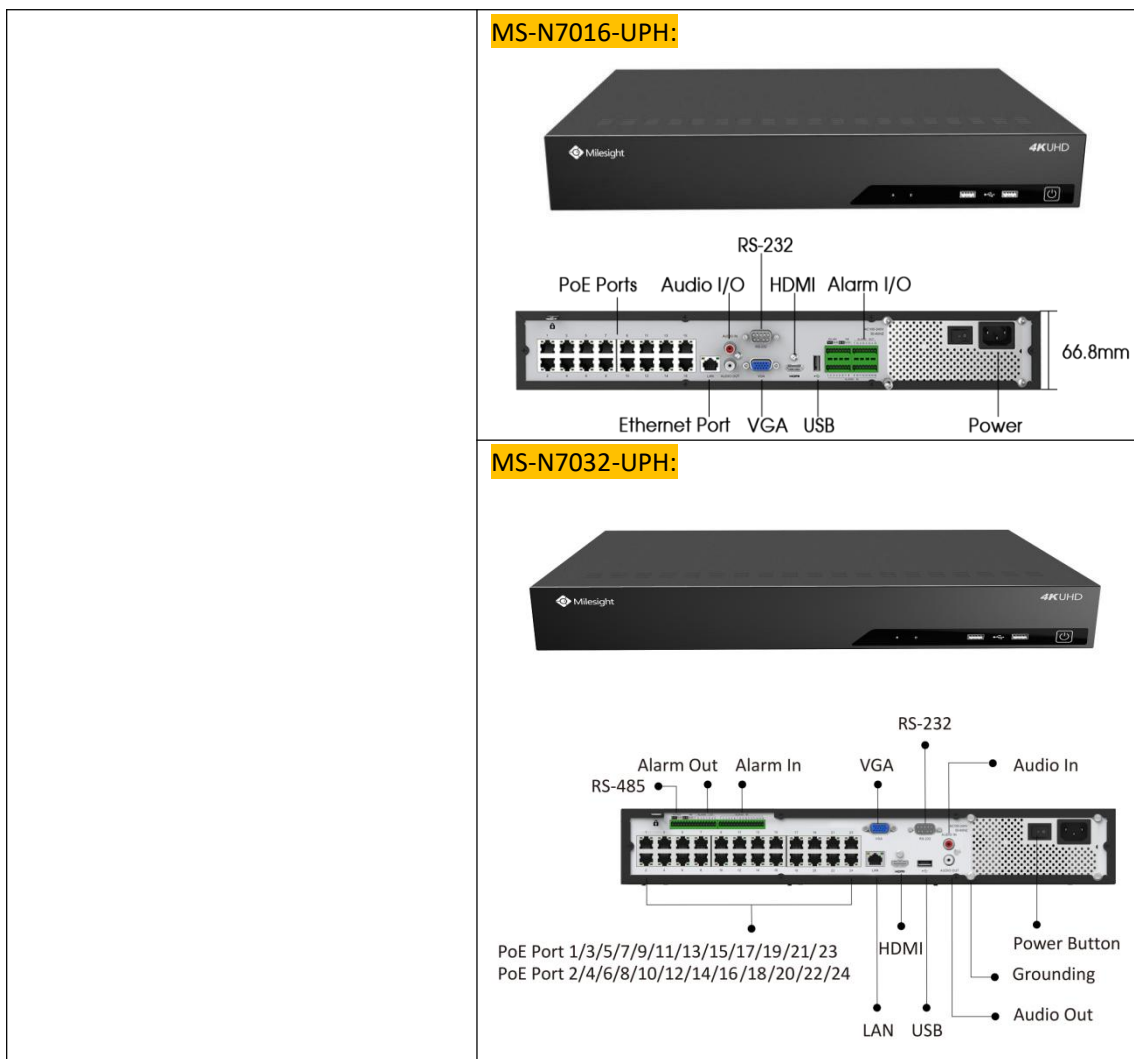
**MS-N5008-UPT:**



**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.<br>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.<br>(2) Set the target area in motion detection, VCA and privacy mask alarm settings.<br>(3) Drag to set the digital zoom area.<br>(4) Drag the channel and the time scroll bar. |
| Right Button | Single-click   | Live view: shows pop-up menu.<br>Menu: exit and go to Live View.  |
| Scroll-wheel | Scroll up      | Scroll up the page.   |
|              | Scroll down    | Scroll down the page.   |

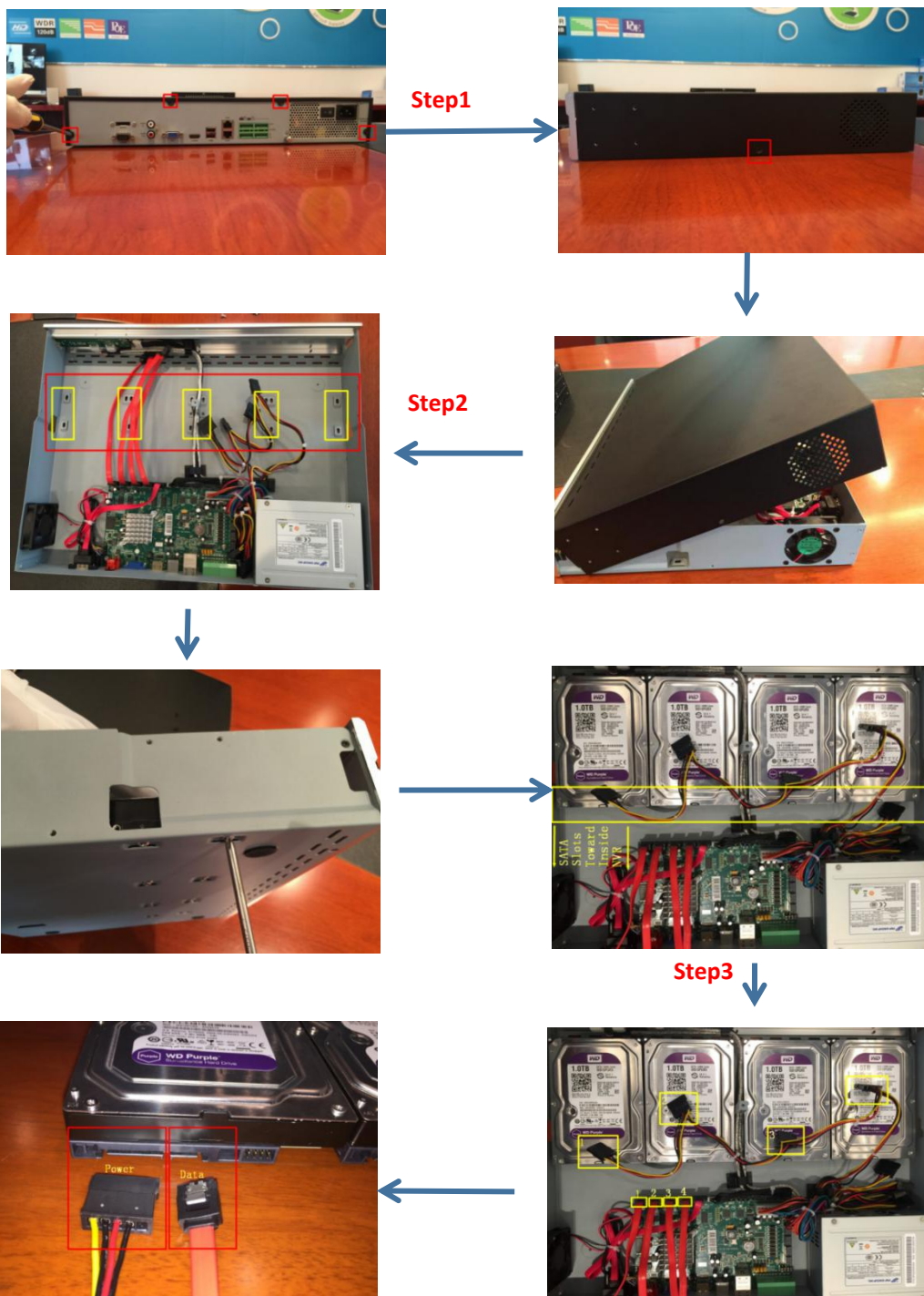
## 2.3 Hard Disk Installation

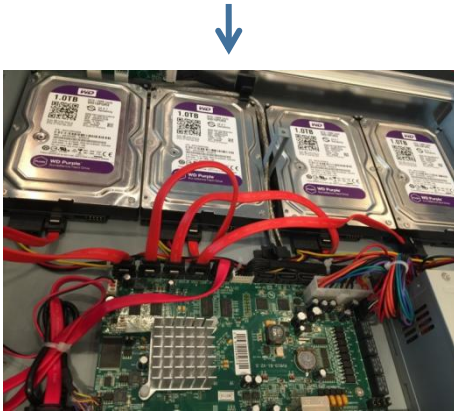
### 2.3.1 MS-N7000 series Hard Disk Installation

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

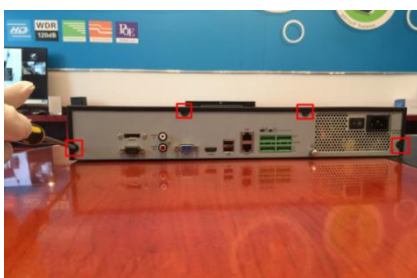
**Step1.** Unscrew the back and both sides' screws to open the upper lid.

**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)



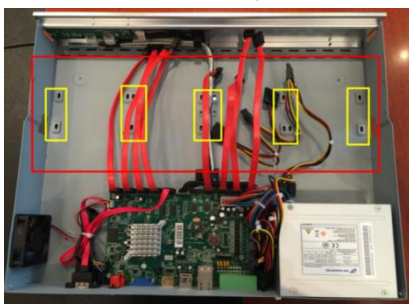
**Step1**



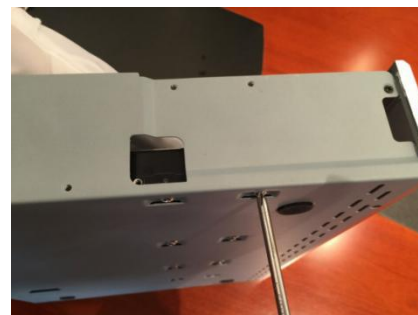
**Step2**

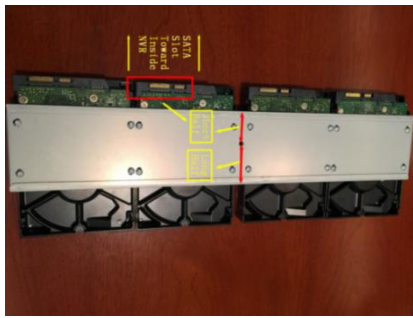


**Step3**



**Step4**





↓ Step4



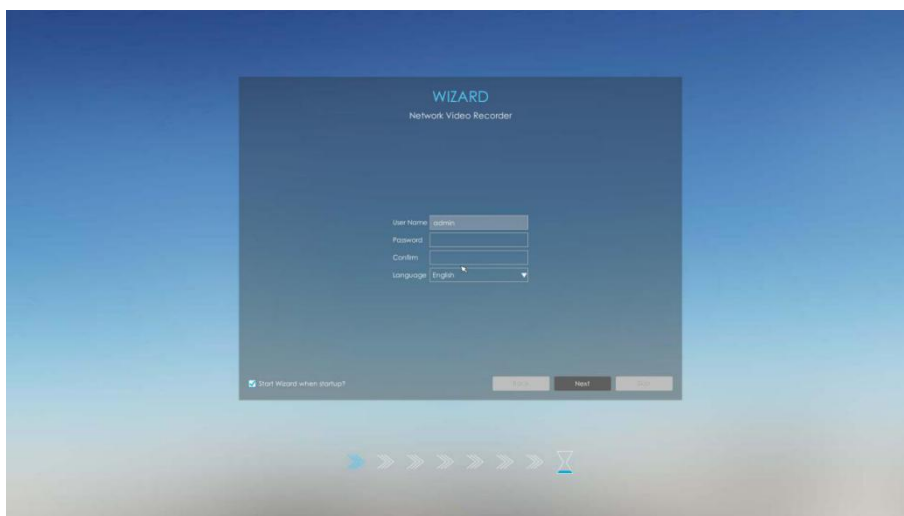
↓ Step5



**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



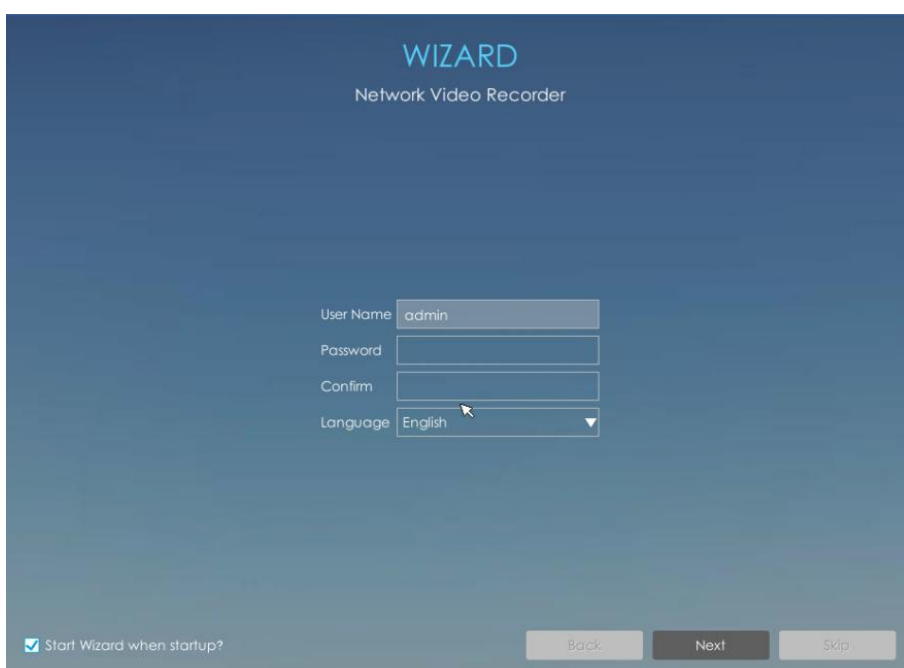
### 3.1 Wizard Setting

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.**





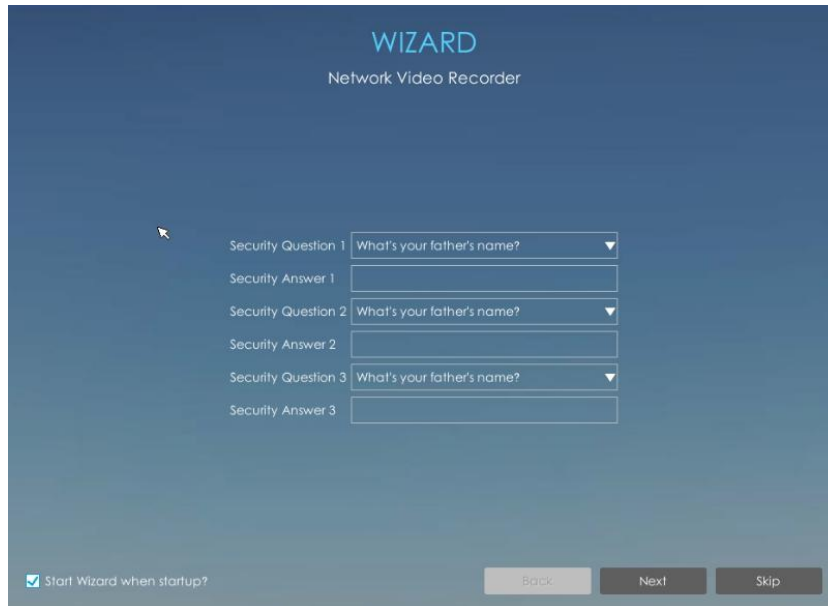
**Note:**

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.



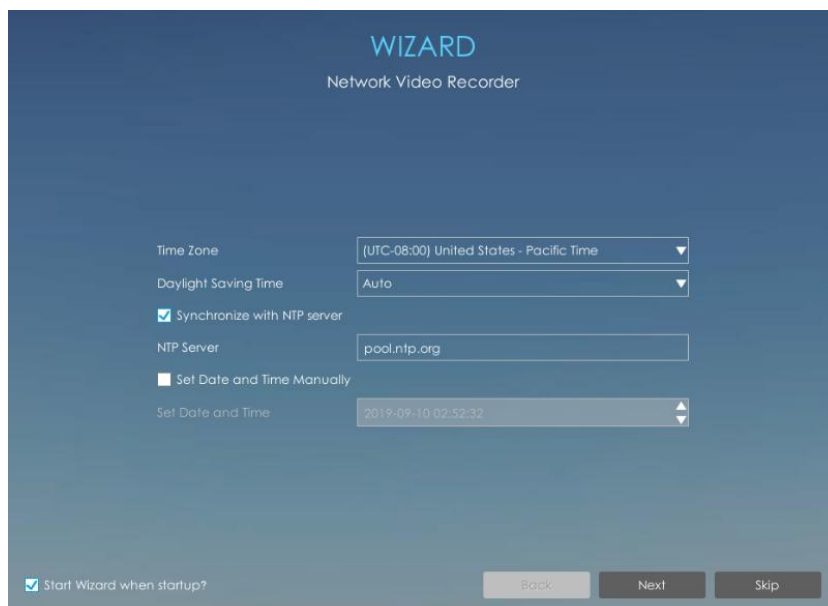
The screenshot shows the 'WIZARD' setup screen for a Network Video Recorder. The title is 'WIZARD Network Video Recorder'. The screen displays three security questions, each with a dropdown menu and a corresponding text input field for the answer. The questions are: 'Security Question 1: What's your father's name?', 'Security Question 2: What's your father's name?', and 'Security Question 3: 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'. The screen displays several settings: 'Time Zone' is set to '(UTC-08:00) United States - Pacific Time'; 'Daylight Saving Time' is set to 'Auto'; 'Synchronize with NTP server' is checked; 'NTP Server' is set to 'pool.ntp.org'; 'Set Date and Time Manually' is unchecked; and 'Set Date and Time' is set to '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 Network Video Recorder' interface. It features a form for network settings with the following fields and values:

- 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 Network Video Recorder' interface for disk management. It displays a table with the following data:

| <input type="checkbox"/> | Port | Vendor                 | Status | Total     | Free | HDD Type |
|--------------------------|------|------------------------|--------|-----------|------|----------|
| <input 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

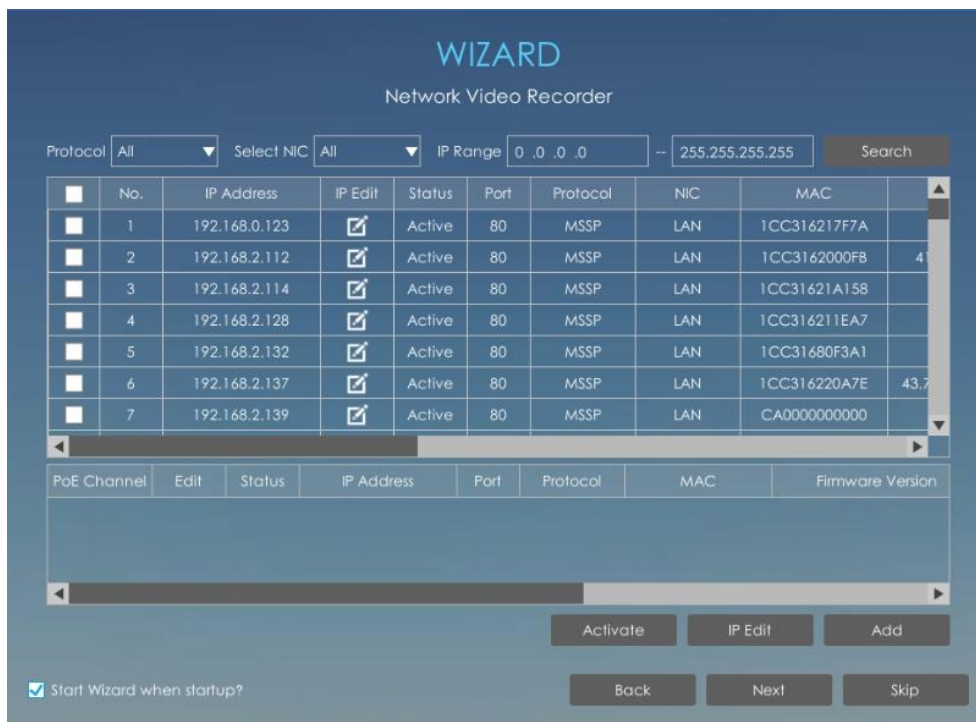
An 'Initialize' button is located at the bottom right of the progress bars. At the bottom of the screen, there is a checkbox for 'Start Wizard when startup?' which is checked, and navigation buttons 'Back', 'Next', and 'Skip'.

**Step6. Camera Management.**

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

**Add**

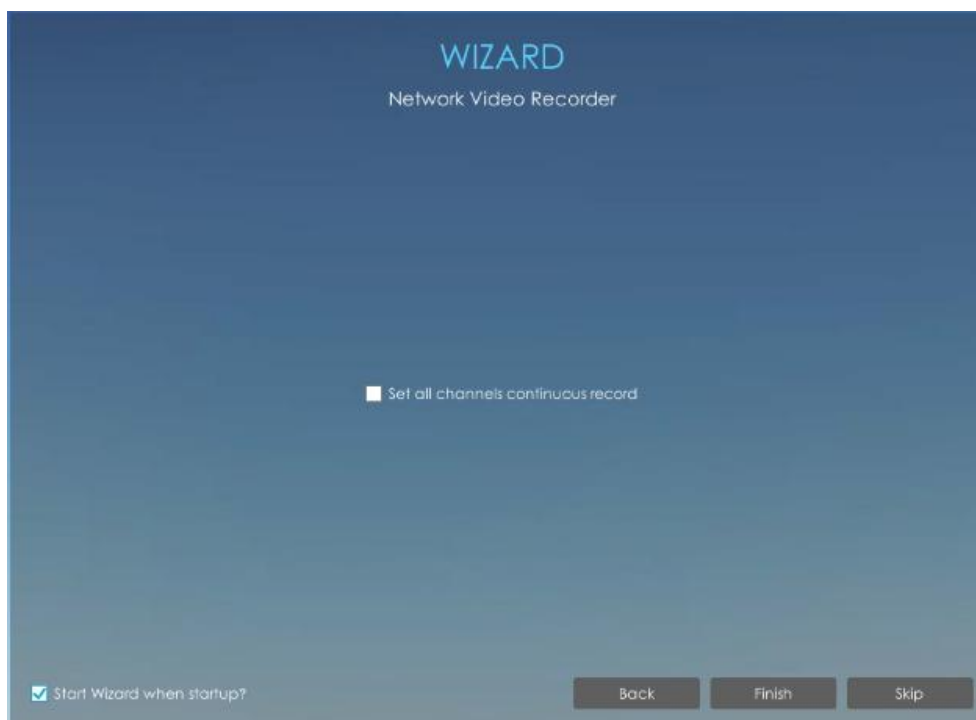
to add them to NVR.

**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 .

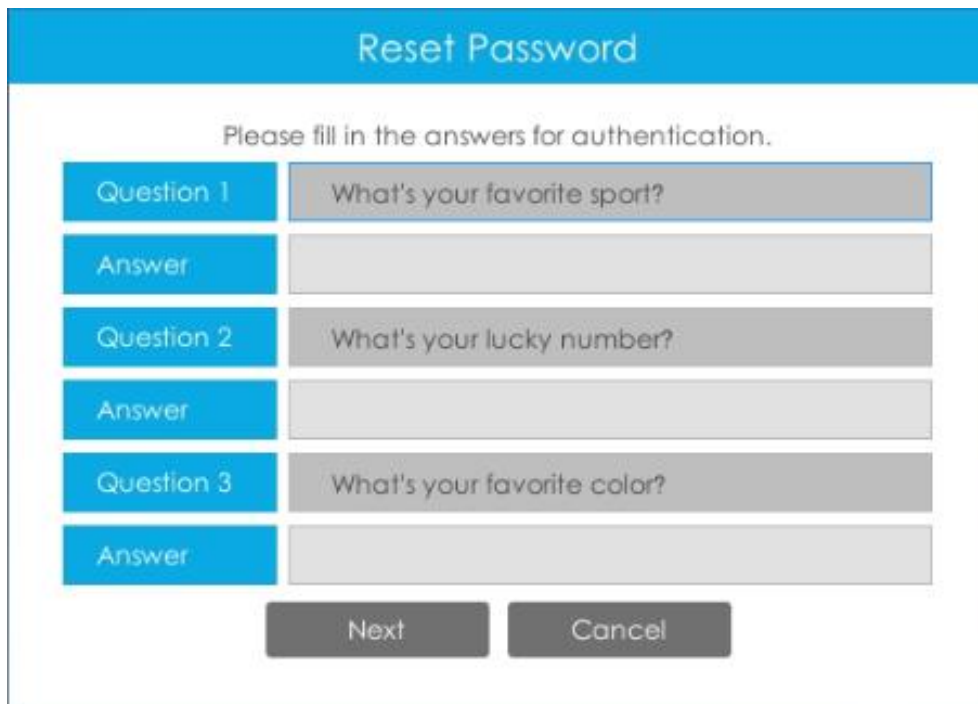
**Step8. Login**

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 masked field of seven dots and a question mark icon to its right. A blue 'Login' button is centered at the bottom, with a mouse cursor pointing at it.

If you forget the password, click  to reset password.



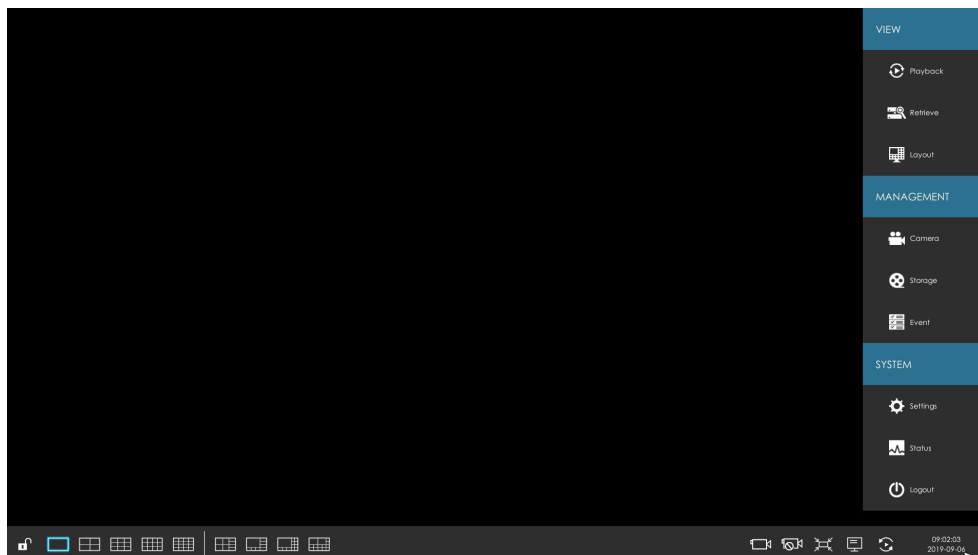
The image shows a 'Reset Password' interface. The title 'Reset Password' is in white on a blue header bar. Below the title, the text 'Please fill in the answers for authentication.' is displayed. There are three sets of questions and answers. Each set consists of a blue box with the question number and 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

### 3.2.1 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            |
|       | Start all channels recording |       | Stop all channels recording |
|       | Adjust image in proportion   |       | Display settings            |
|       | Sequence                     |       |                             |

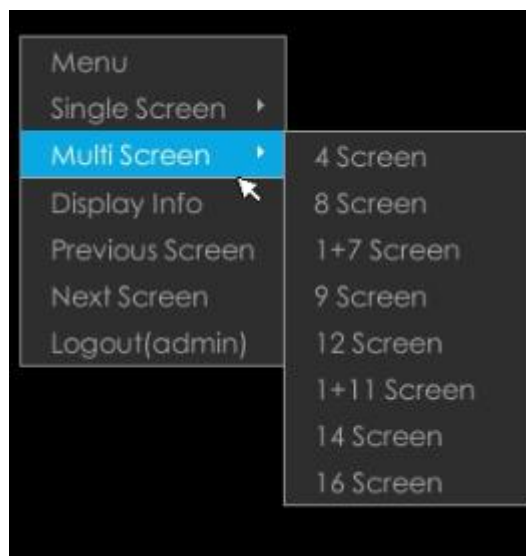
**Note:**

Start all channels recording, Stop all channels recording, Adjust image in proportion and Display settings are **for all displaying channels**.

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 8000 Series)   |
| Multi Screen    | Switch to multiple screen layouts  |

|                 |  |
|-----------------|--|
| 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   |

### 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:**

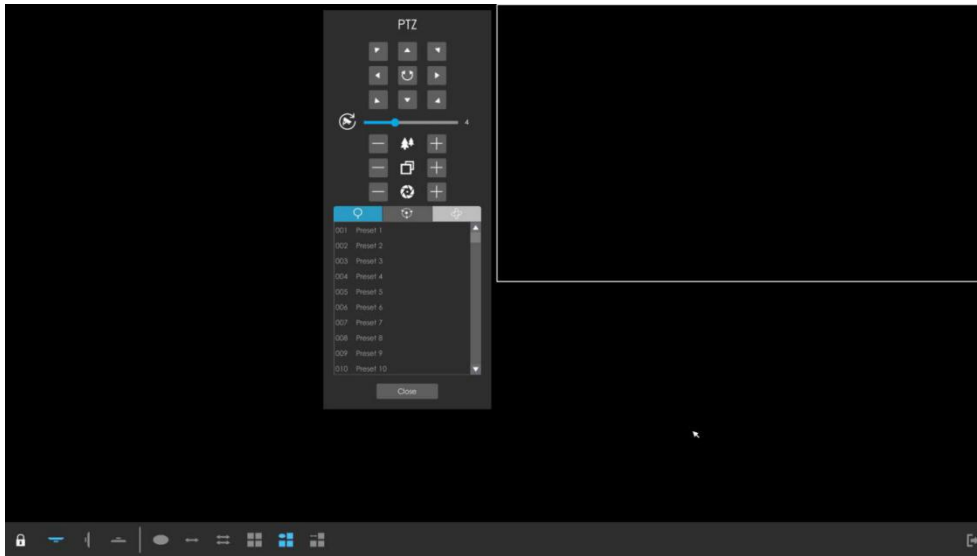
Click to enter Fisheye Mode, which will full screen fisheye channel. You can set installation modes and display modes for the camera on the Fisheye tool bar.



**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


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 and Pattern operation in the PTZ panel. Meanwhile, there are three icons in the tool bar. The descriptions are as below.

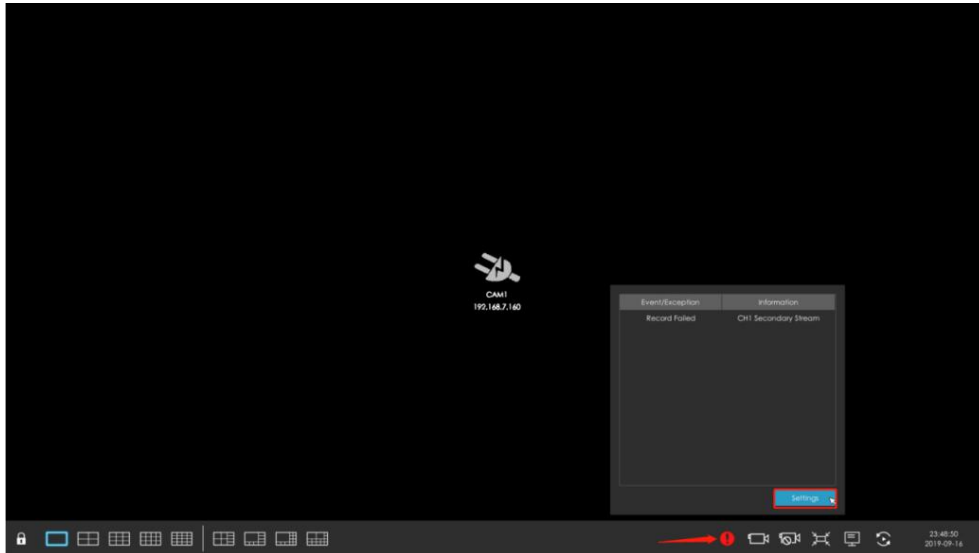
| Icons   | Descriptions                    | Icons   | Descriptions                  |
|---|---------------------------------|---|-------------------------------|
|  | Lock/Unlock the tool bar        |  | Enable/Disable 3D positioning |
|  | Show/Hide the PTZ control panel |   |                    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



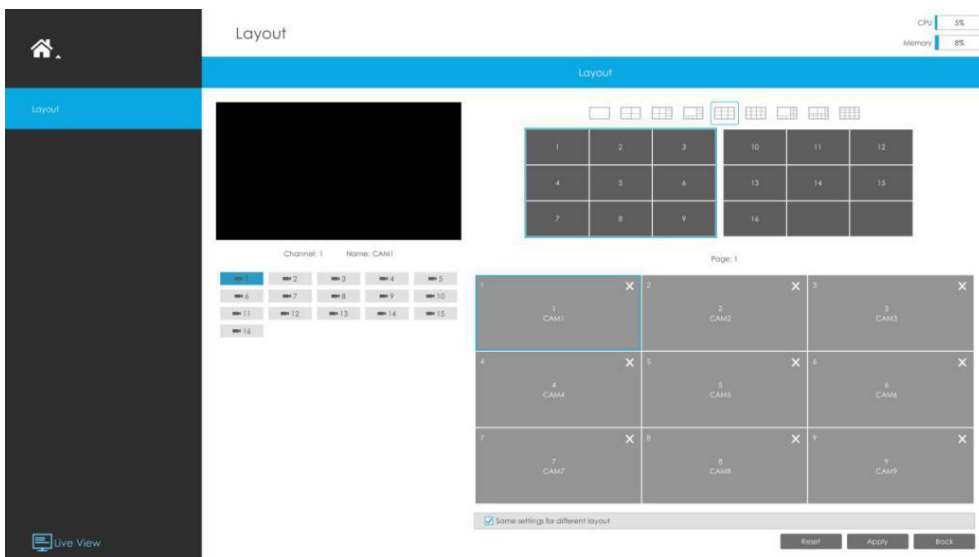
**Event Notification:**

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 .



### 3.2.2 Layout



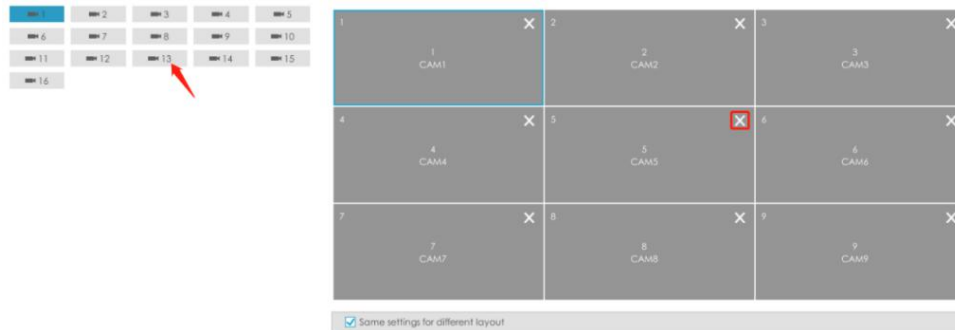
**Step1. Select a layout format.**



**Step2. Set desired channels.**

Click to close a channel. Select a window and then select a desired channel to add in.

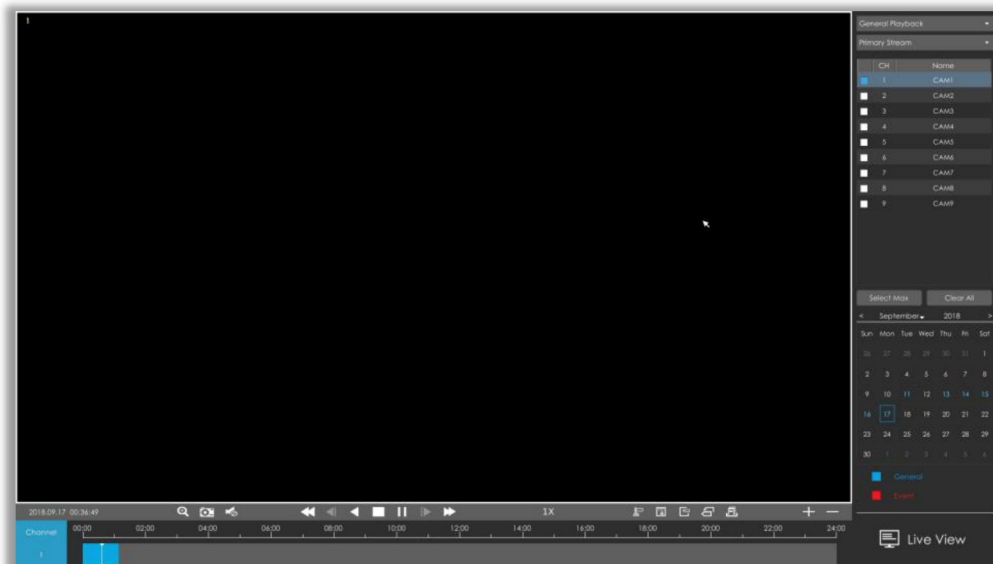
Click to save the settings or click to reset the layout.



### 3.3 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.

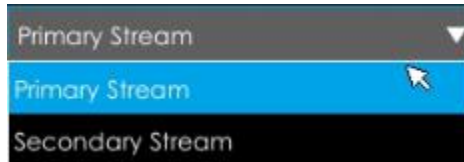
#### 3.3.1 General Playback

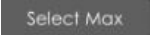


**Step1. Select General Playback as playback type.**

**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.

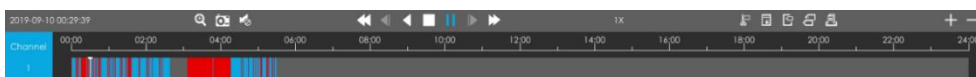


**Step4. Select date.**

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



**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

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

| 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. You can also change the lock status in Retrieve interface.

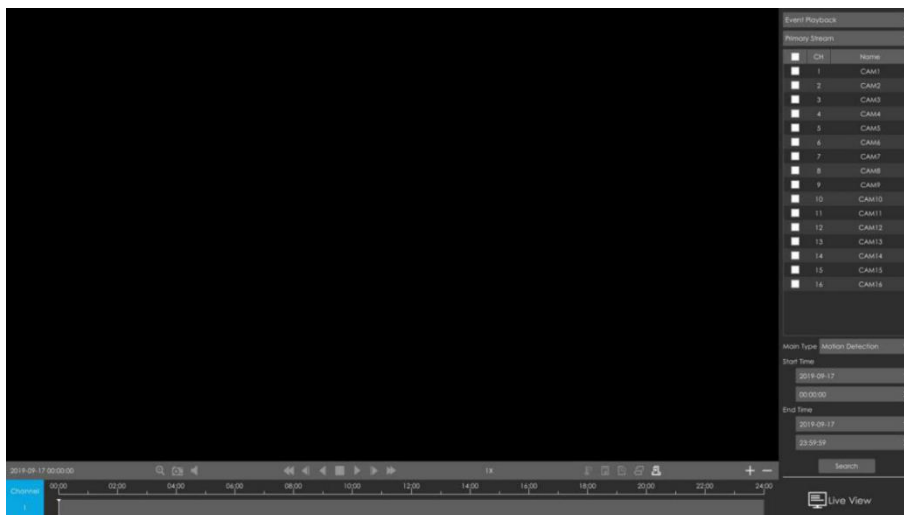
**Tag Video:** Quick Tag and Custom Tag are available for tag operation in Playback interface. You can backup video via tag in Retrieve interface or do tag playback in Playback interface.

**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

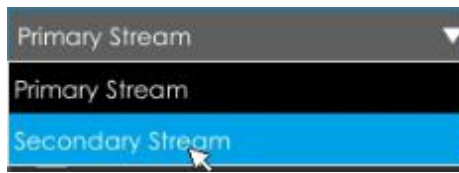


**Step1. Select Event Playback as playback type.**



**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  |
| <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 |

**Step4. Select Event Type.**



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

Start Time

2019-09-17

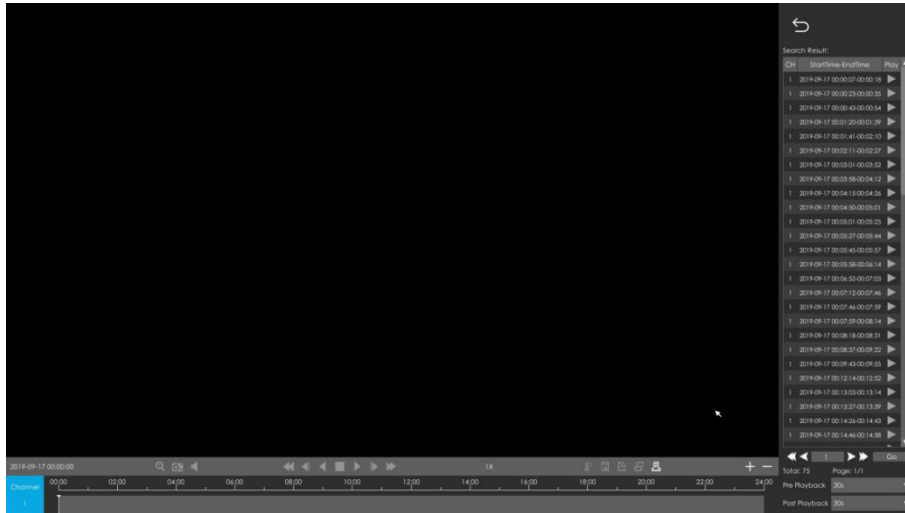
00:00:00

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.

### 3.3.3 Tag Playback

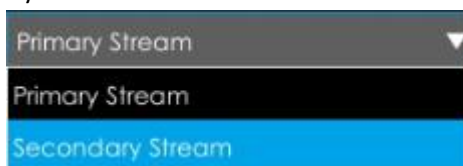


Step1. Select Tag Playback as playback type.



**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  |
| <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 |

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

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

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

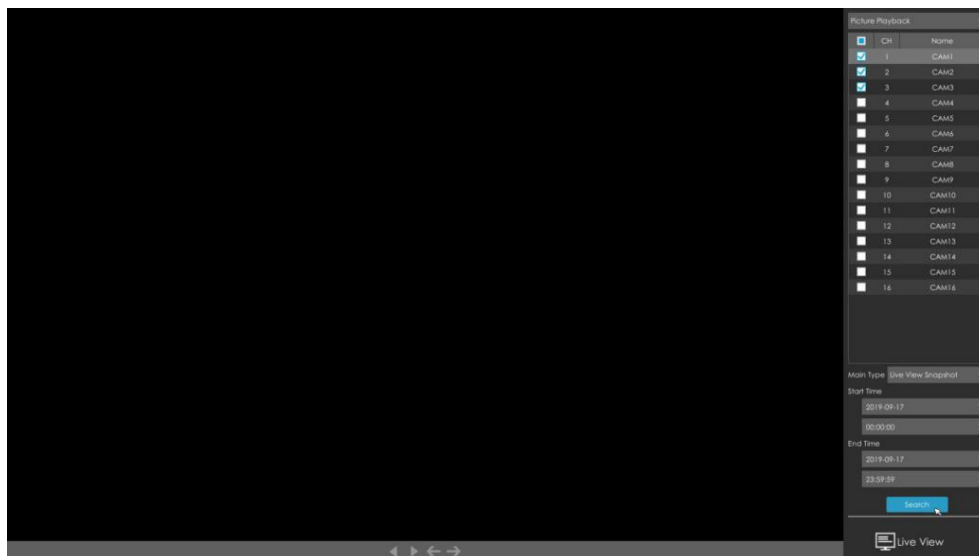


playback time, then play the tag video by clicking

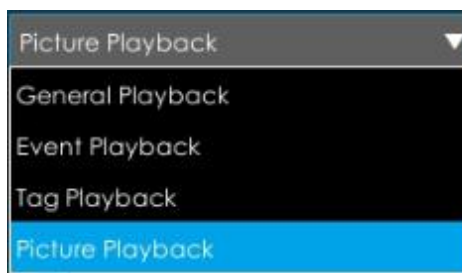


Video Playback Tool Bar Description are the same as General Playback.

### 3.3.4 Picture Playback



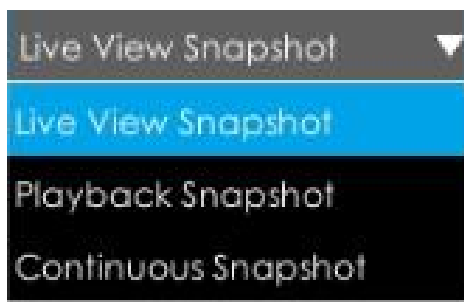
**Step1.** Select Picture Playback as playback type.



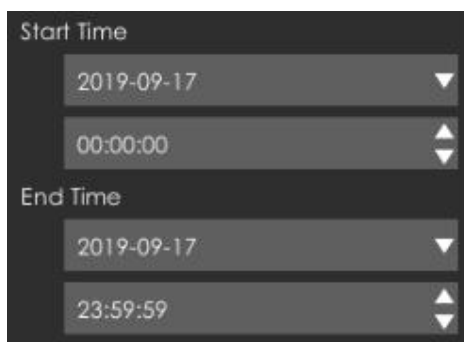
**Step2.** Select channel.


| <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  |
| <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 |

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



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



**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  .



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

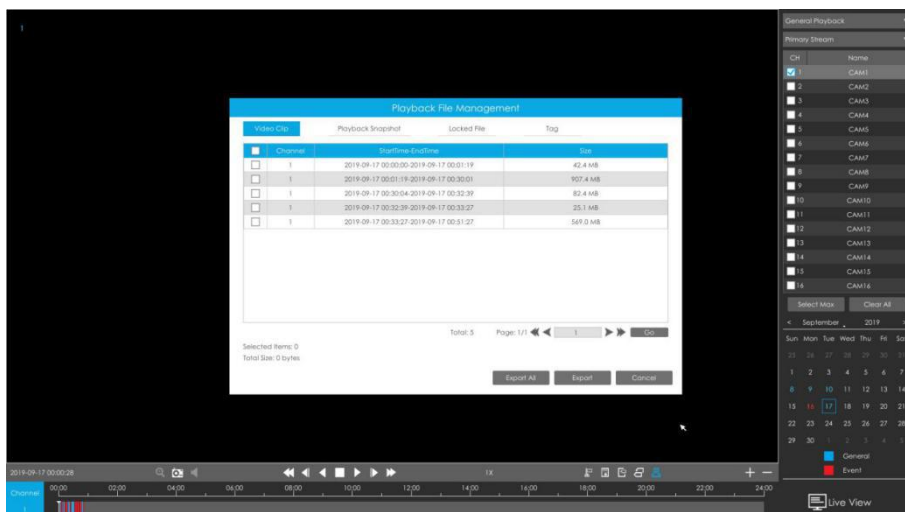


| Icons | Descriptions             | Icons | Descriptions |
|-------|--------------------------|-------|--------------|
|       | Play backward            |       | Play         |
|       | Previous picture         |       | Next picture |
|       | Back to search interface |       |              |

### 3.3.5 File Management


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

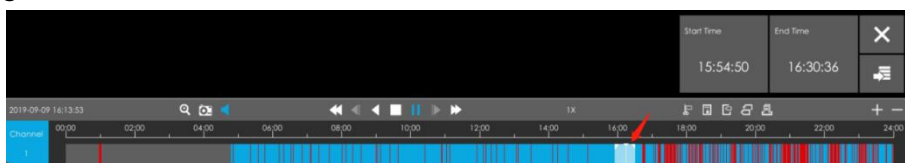
Operation includes clip video, snapshot, lock file and tag. Besides, you can export clipped video, playback snapshot and locked file to USB drives and eSATA.




Take clip video as example.

**Step1. Cut recorded files.**

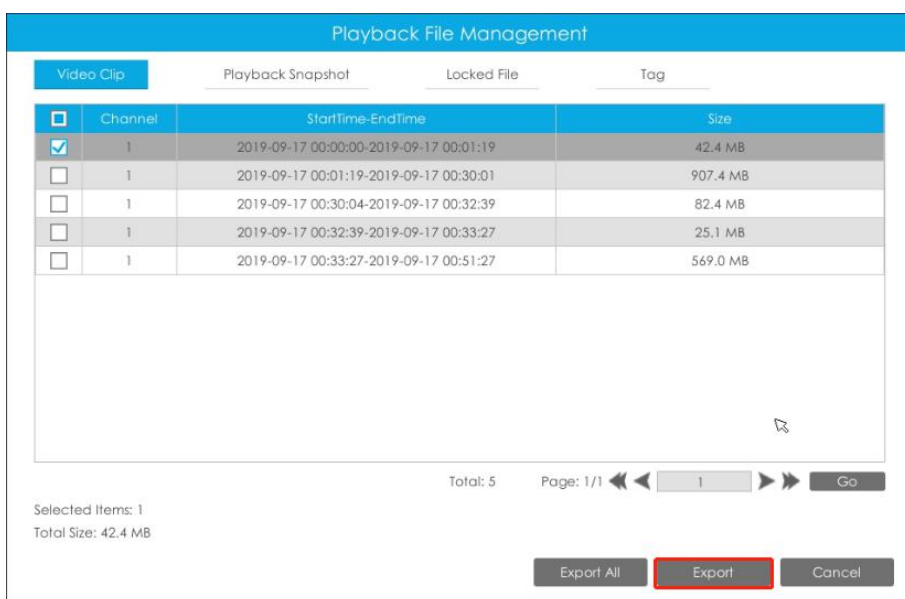
Select the channel and date you want to backup, then select the time at timeline and click , then drag the timeline to select the start time and end time of video.



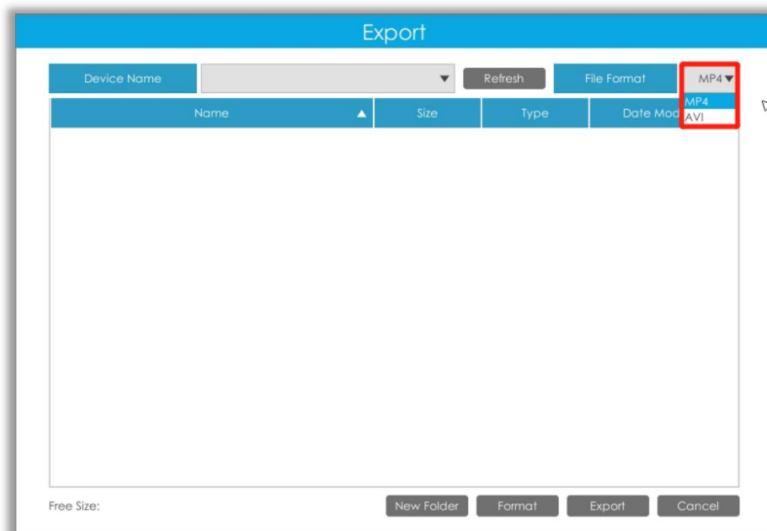
**Step2. Click**  **to save the clipped video.**

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

 **to export video.**



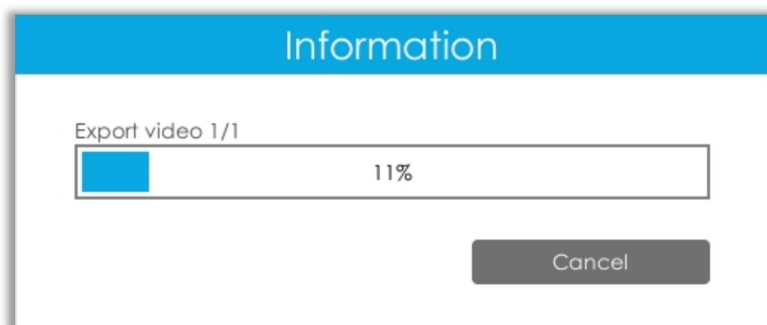
**Step4. Select the device to storage exported video and then click .**



**Note:**

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

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



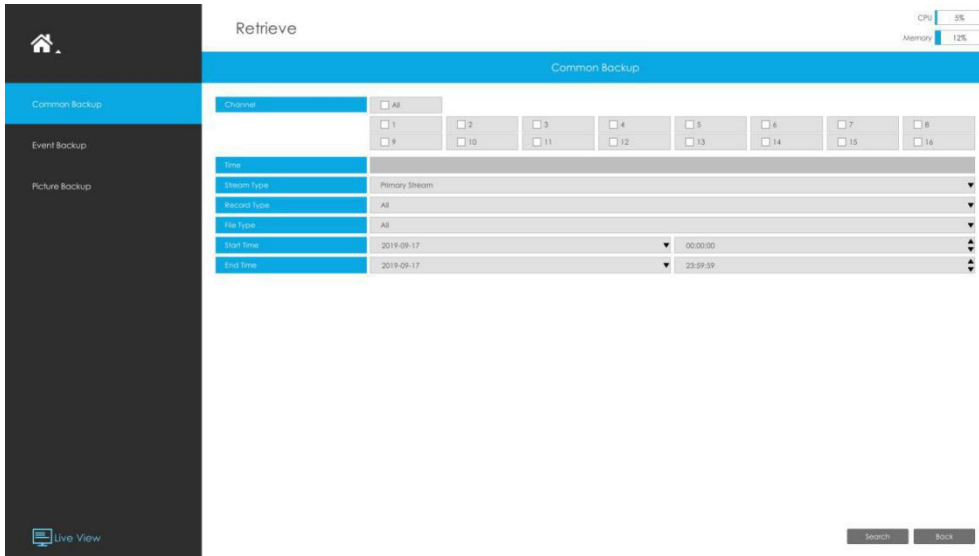
**Note:**

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.

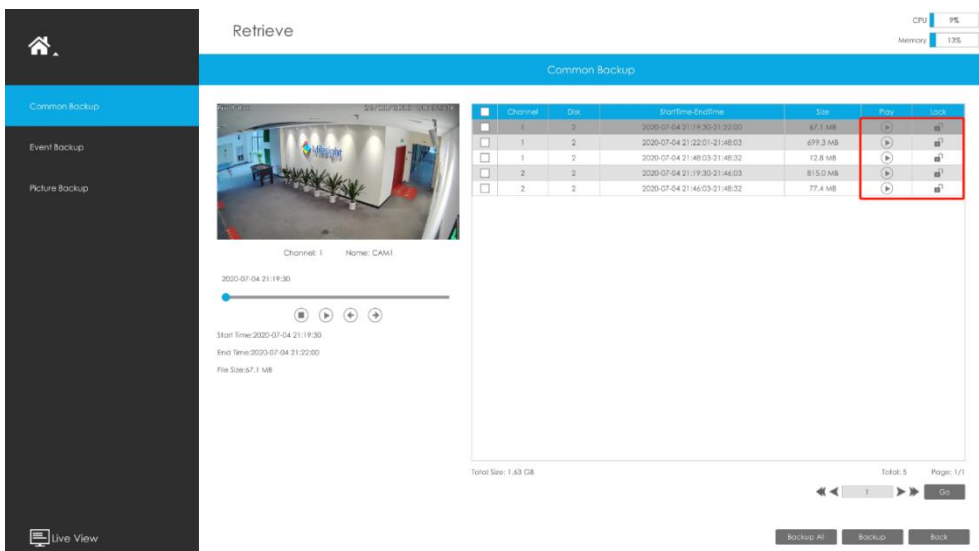


**Step1: Set the search condition and click  to search video.**



**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 and VCA.




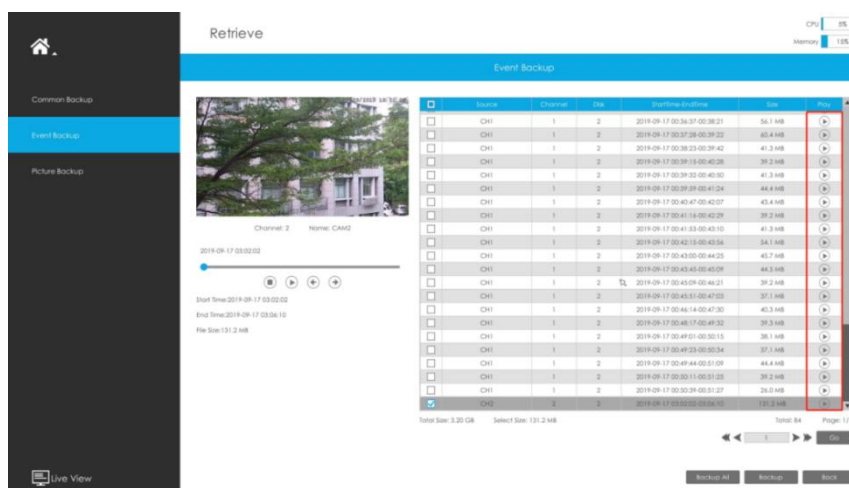
**Step1: Set the search condition and click  to search video.**



**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.

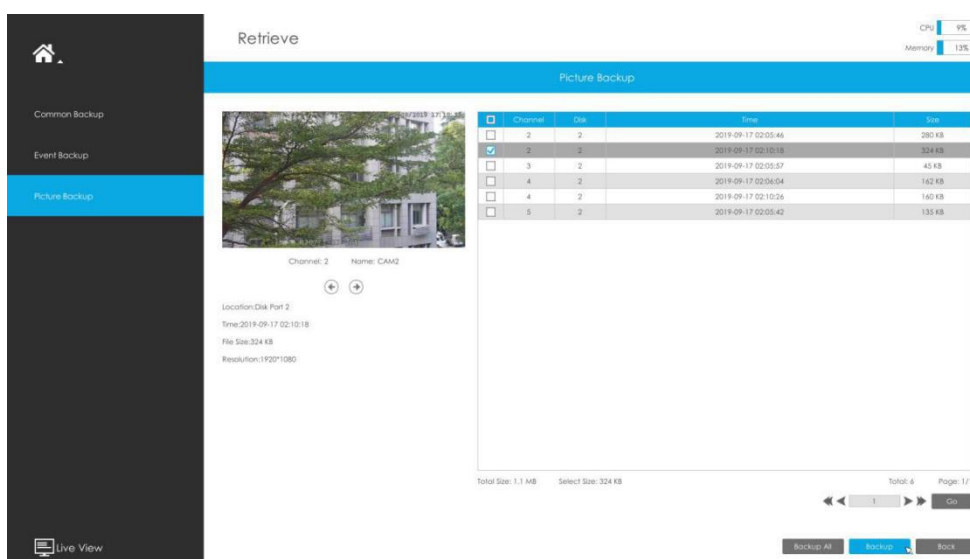


**Step1:** Set the search condition and click  to search snapshot.



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

 to backup all recorded videos.

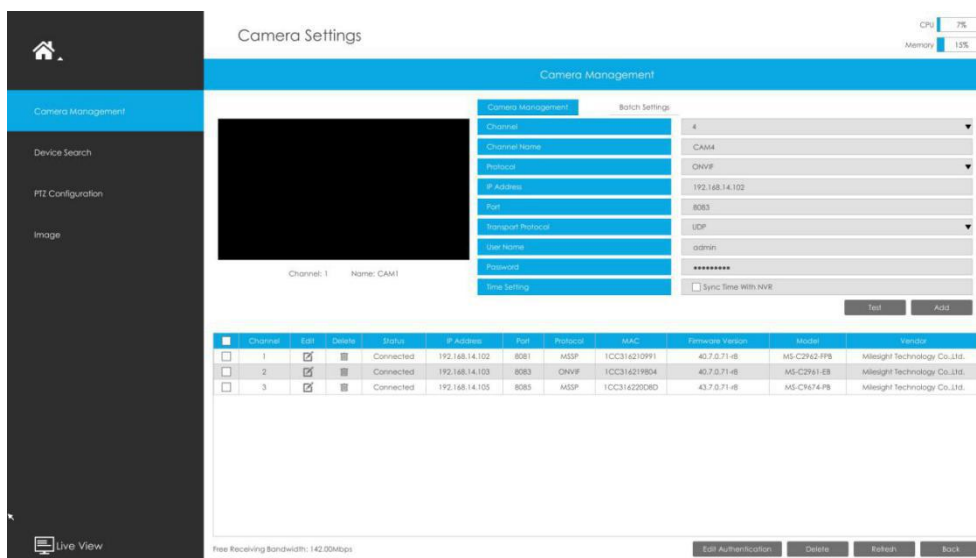




## 3.5 Camera Settings

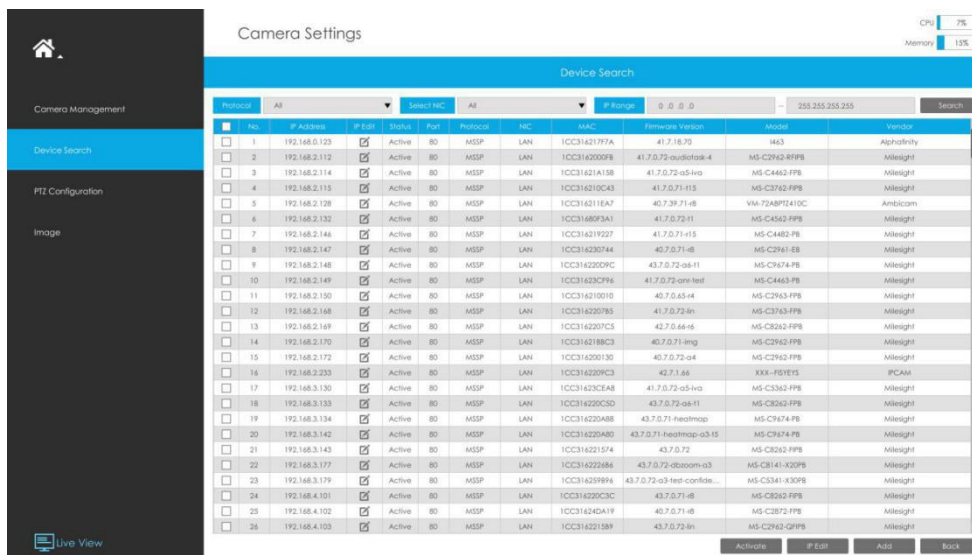
Before configuration, please ensure that the camera is connected to the same network as your NVR and that the network setting for your NVR is properly set.

### 3.5.1 Camera Management

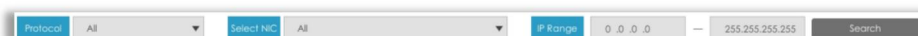


#### Step1. Add camera.

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



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



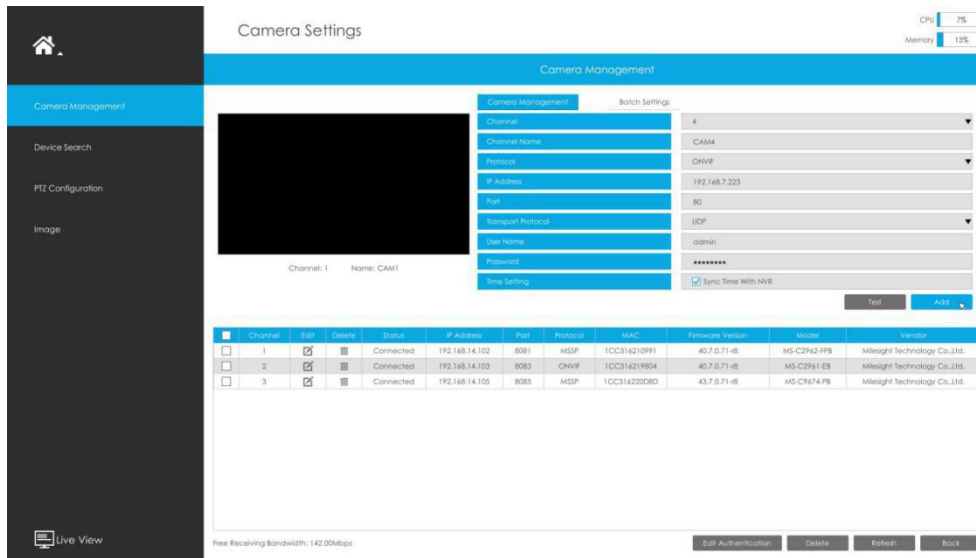
2. Click  button to search cameras at the same LAN with NVR.

| No. | IP Address    | IP Edit                             | Status | Port | Protocol | NIC | MAC          | Firmware Version        | Model         | Vendor    |
|-----|---------------|-------------------------------------|--------|------|----------|-----|--------------|-------------------------|---------------|-----------|
| 1   | 192.168.7.100 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC3162000EF | 41.7.0.72-a5            | MS-C2862-FPB  | Milesight |
| 2   | 192.168.7.104 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC316210022 | 40.7.0.69-r11           | MS-C2962-FPB  | Milesight |
| 3   | 192.168.7.114 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC3162409D2 | 40.7.0.72               | MS-C2964-FPB  | Milesight |
| 4   | 192.168.7.124 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC316230139 | 41.7.0.72-a6            | MS-C2962-FPB  | Milesight |
| 5   | 192.168.7.201 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC3162219AF | 43.7.0.72-tn-outback-a2 | MS-C9674-PB   | Milesight |
| 6   | 192.168.7.202 | <input checked="" type="checkbox"/> | Active | 4200 | MSSP     | LAN | 1CC316220108 | 42.7.0.67-r1            | MS-C9674-PB   | Milesight |
| 7   | 192.168.7.212 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC316210110 | 40.7.0.71-r15           | MS-C2972-FPB  | Milesight |
| 8   | 192.168.7.214 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC3162132FD | 40.7.0.71-r15           | MS-C2973-PB   | Milesight |
| 9   | 192.168.7.215 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC316212E80 | 41.7.0.71-r15           | MS-C3762-FPB  | Milesight |
| 10  | 192.168.7.216 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC3162306CD | 40.7.0.71-r15           | MS-C2961-EPB  | Milesight |
| 11  | 192.168.7.223 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC31621C584 | 41.7.0.72-a10           | MS-C4461-EB   | Milesight |
| 12  | 192.168.7.224 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC316201043 | 43.7.0.72-1PR2          | MS-C8262-FLPB | Milesight |
| 13  | 192.168.7.226 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC316239791 | 40.7.0.72-a3            | MS-C2961-9FPB | Milesight |
| 14  | 192.168.7.240 | <input checked="" type="checkbox"/> | Active | 80   | MSSP     | LAN | 1CC316219CB4 | 40.7.0.72               | MS-C2963-PB   | Milesight |

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

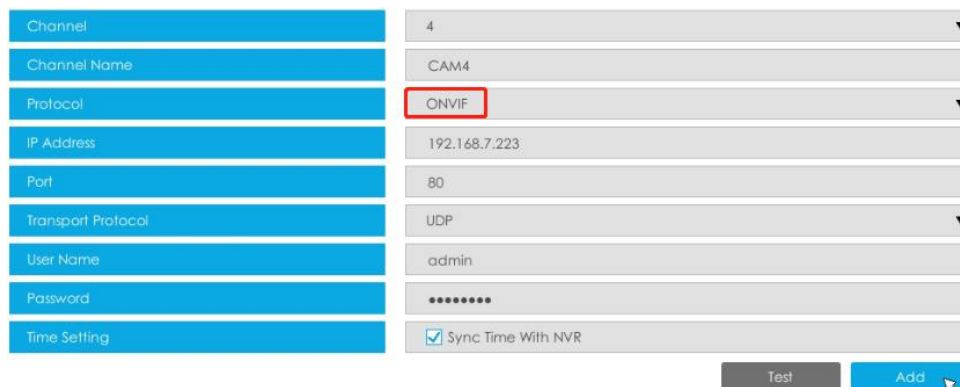
4. Check  to **batch adding** the network cameras if they are with the same password, you can choose TCP or UDP transport protocol for it. Click **OK** to finish batch adding  
**MSSP:** You can search out all Milesight camera which has different network segment in the LAN.

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

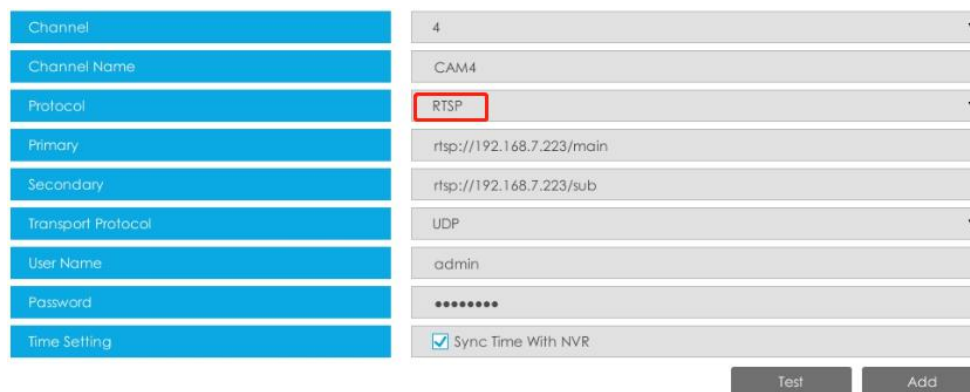


Select channel ID, input complete information, then click [Add] button.  
There are three protocols available for camera connection:

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



- **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.



- **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 |

**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 | Edit                                | Delete                   | Status    | IP Address     | Port | Protocol | MAC          | Firmware Version | Model        | Vendor                        |
|---------|-------------------------------------|--------------------------|-----------|----------------|------|----------|--------------|------------------|--------------|-------------------------------|
| 1       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Connected | 192.168.14.102 | 8081 | MSSP     | 1CC316210991 | 40.7.0.71-r8     | MS-C2962-FF8 | Milesight Technology Co.,Ltd. |
| 2       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Connected | 192.168.14.103 | 8083 | ONVIF    | 1CC316219804 | 40.7.0.71-r8     | MS-C2961-E8  | Milesight Technology Co.,Ltd. |
| 3       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Connected | 192.168.14.105 | 8085 | MSSP     | 1CC316220D8D | 43.7.0.71-r8     | MS-C9674-P8  | Milesight Technology Co.,Ltd. |

**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 |

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.

- Camera Management
- Device Search
- PTZ Configuration
- Image

#### Camera Settings

CPU 7%
Memory 12%

Camera Management
Admin Settings

|                   |                                 |                  |   |
|-------------------|---------------------------------|------------------|---|
| Terminal Protocol | ISCP                            | Secondary Stream | <input checked="" type="checkbox"/> Enable    |
| Video Codec       | H.264                           | Video Codec      | H.264   |
| Frame Size        | 1920*1080                       | Frame Size       | 754*576                                       |
| Max Frame Rate    | 25                              | Max Frame Rate   | 25  |
| Bit Rate          | 4096                            | Bit Rate         | 512   |
| Bitrate Control   | CBR                             | Bitrate Control  | VBR   |
| I-frame Interval  | 30                              | I-frame Interval | 30  |
| Audio             | <input type="checkbox"/> Enable | Smart Stream     | <input type="checkbox"/> Sync Size with H.264 |

| Channel | Edit                                | Delete                              | Status    | IP Address     | Port | Protocol | MAC          | Firmware Version | Model        | Vendor                        |
|---------|-------------------------------------|-------------------------------------|-----------|----------------|------|----------|--------------|------------------|--------------|-------------------------------|
| 1       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Connected | 192.168.14.102 | 8081 | MSP      | 1CC3162109F1 | 40.7.0.71-65     | MS-C2962-PPS | Milesight Technology Co.,Ltd. |
| 2       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Connected | 192.168.14.103 | 8083 | ONVP     | 1CC316219804 | 40.7.0.71-65     | MS-C2961-EB  | Milesight Technology Co.,Ltd. |
| 3       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Connected | 192.168.14.105 | 8085 | MSP      | 1CC316220D8D | 43.7.0.71-68     | MS-C9674-PB  | Milesight Technology Co.,Ltd. |

### Step4. Delete camera.

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


Delete to delete.

| Channel | Edit                                | Delete                              | Status    | IP Address     | Port | Protocol | MAC          | Firmware Version | Model        | Vendor                        |
|---------|-------------------------------------|-------------------------------------|-----------|----------------|------|----------|--------------|------------------|--------------|-------------------------------|
| 1       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Connected | 192.168.14.102 | 8081 | MSP      | 1CC3162109F1 | 40.7.0.71-65     | MS-C2962-PPS | Milesight Technology Co.,Ltd. |
| 2       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Connected | 192.168.14.103 | 8083 | ONVP     | 1CC316219804 | 40.7.0.71-65     | MS-C2961-EB  | Milesight Technology Co.,Ltd. |
| 3       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Connected | 192.168.14.105 | 8085 | MSP      | 1CC316220D8D | 43.7.0.71-68     | MS-C9674-PB  | Milesight Technology Co.,Ltd. |



EDF Authentication 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  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.

**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  to search out cameras;
  - ③ Select cameras and click  to add them.



### 3.5.2 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 | 1CC316240R02     | 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-a6              | 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-hh-au/otrack-a2 | MS-C9674-PB   | Milesight |
| <input type="checkbox"/> | 6          | 192.168.7.202 | <input checked="" type="checkbox"/> | Active   | 4200                           | MSSP   | LAN | 1CC316220108     | 42.7.0.67-r1              | MS-C9674-PB   | Milesight |
| <input type="checkbox"/> | 7          | 192.168.7.212 | <input checked="" type="checkbox"/> | Active   | 80                             | MSSP   | LAN | 1CC316210110     | 40.7.0.71-r15             | MS-C2972-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-C2972-FPB  | Milesight |
| <input type="checkbox"/> | 9          | 192.168.7.215 | <input checked="" type="checkbox"/> | Active   | 80                             | MSSP   | LAN | 1CC316212E80     | 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-EPB  | 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-LP92            | MS-C8362-FPB  | 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-REPb | Milesight |
| <input type="checkbox"/> | 14         | 192.168.7.240 | <input checked="" type="checkbox"/> | Active   | 80                             | MSSP   | LAN | 1CC316219CB4     | 40.7.0.72                 | MS-C2963-PB   | Milesight |

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.




The IP Edit dialog box contains the following fields:

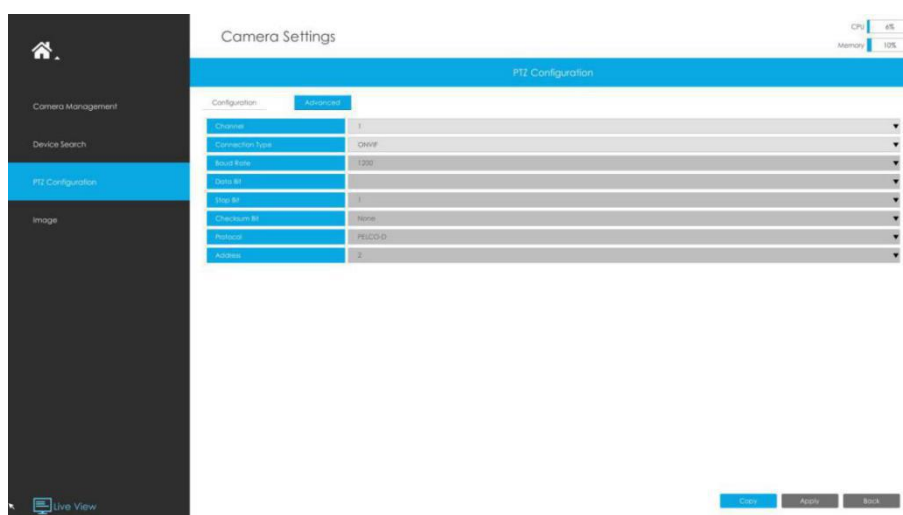
|             |                |
|-------------|----------------|
| MAC         | 1CC31622010B   |
| Protocol    | MSSP           |
| IP Address  | 192.168.7 .202 |
| Subnet Mask | 255.255.240.0  |
| Gateway     | 192.168.7 .2   |
| DNS         | 8 .8 .8 .8     |
| Port        | 4200           |
| User Name   | admin          |
| Password    |                |

Buttons: OK, Cancel

### 3.5.3 PTZ Configuration

#### Advanced

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



The PTZ Configuration screen shows the following settings:

|                 |         |
|-----------------|---------|
| Channel         | 1       |
| Connection Type | ONVIF   |
| Stream Profile  | H264    |
| Data Bit        |         |
| Stop Bit        | 1       |
| Channel #1      | None    |
| Protocol        | PELCO-D |
| Address         | 2       |

Buttons: Copy, Reset, Back

#### Note:


- 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.

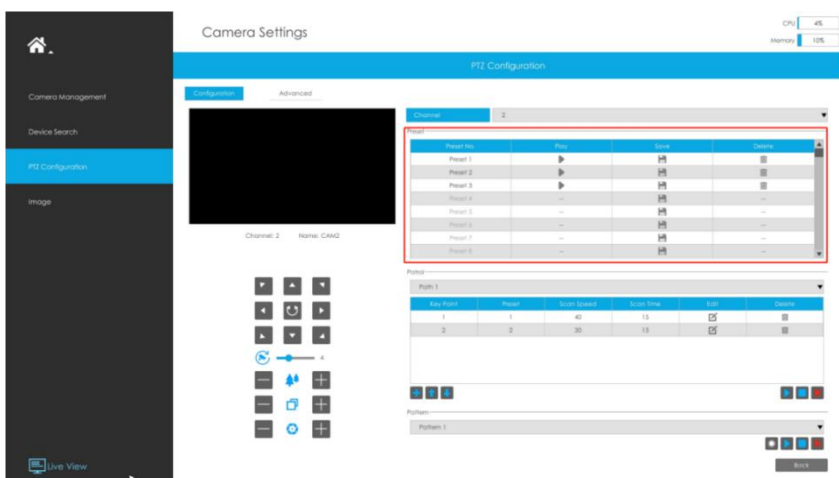
2. The PTZ protocol and address of IP channel must be consistent with those of the PTZ decoder.

### 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.



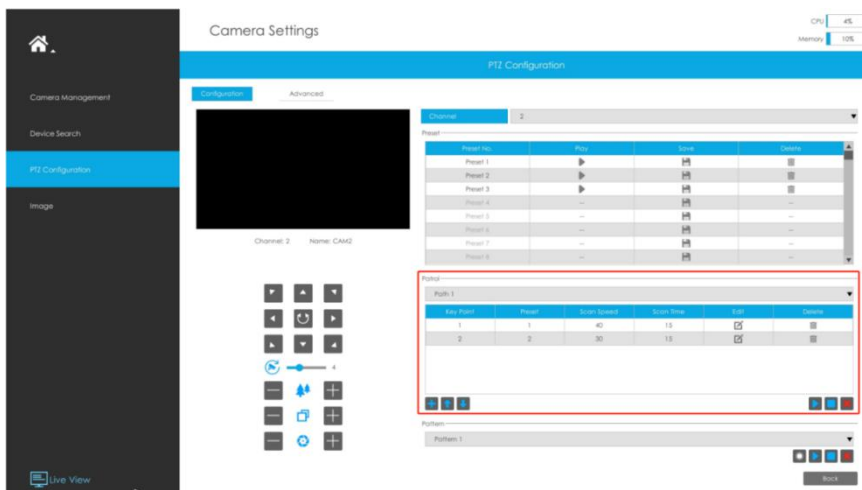
**Step2.** Choose a preset number and click  to delete the preset position.

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



#### [Patrol]

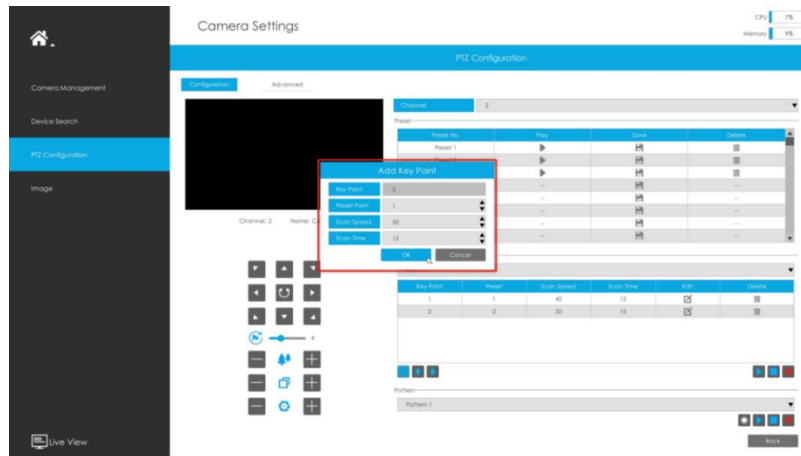
The camera will patrol according to the preset positions. The total time and patrol speed of the path is variable.

**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.

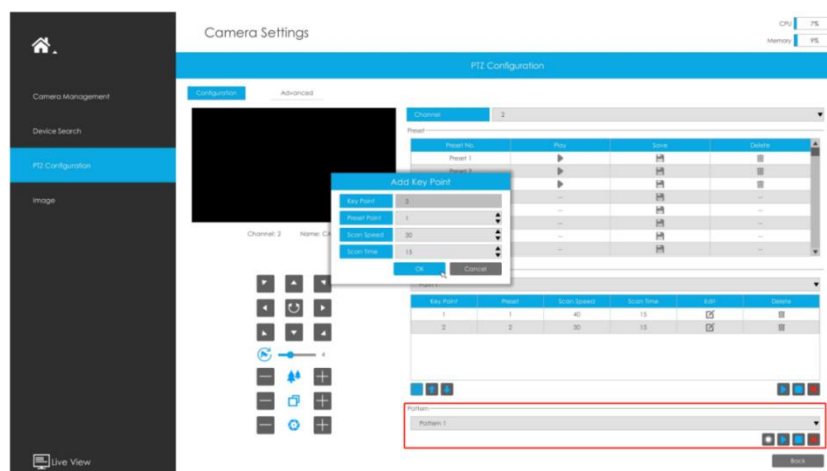
**Note:**

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.

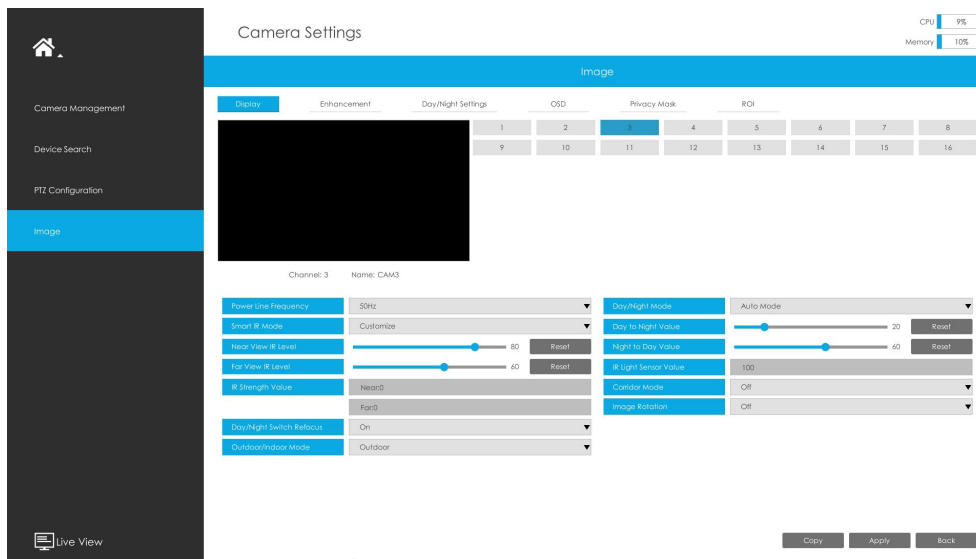
Step4. Click  to preview the pattern. Click  to stop.

[PTZ Operation]



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

### 3.5.4 Image



#### 3.5.4.1 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.

#### Note:

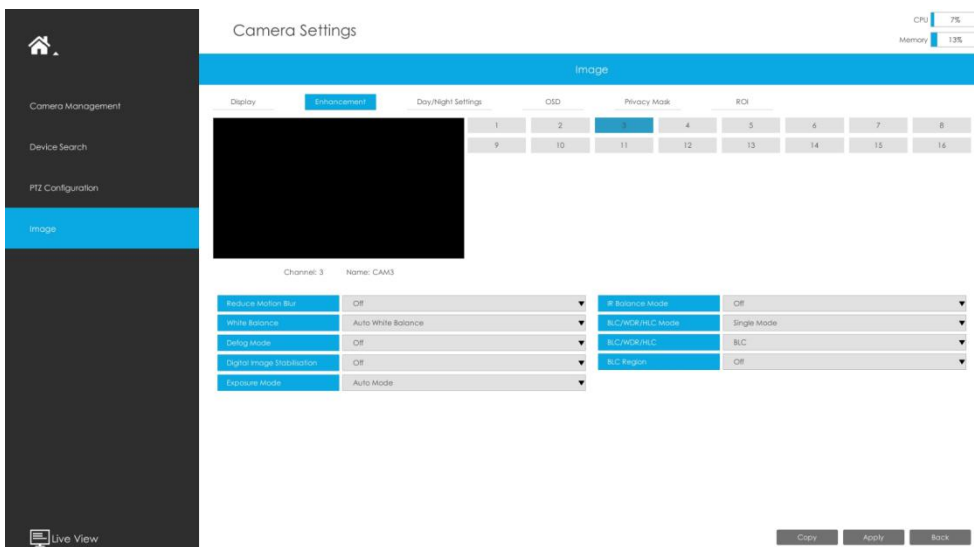
1. Smoked Dome Cover is only supported for Pro Dome and PTZ Dome cameras.
2. Smart IR Mode and IR LED Level are supported for cameras with IR LEDs.
3. White LED Level is only supported for PTZ Bullet cameras.

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

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

## 3.5.4.2 Enhancement

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



The screenshot displays the 'Camera Settings' interface for 'Image' enhancement. The 'Enhancement' tab is selected, showing a grid of 16 channels (1-16) with channel 3 highlighted. Below the grid, settings for 'Channel: 3 Name: CAM3' are shown. The settings include:

- Reduce Motion Blur: OFF
- White Balance: Auto White Balance
- Day/Night Mode: OFF
- Digital Image Stabilization: OFF
- Exposure Mode: Auto Mode
- IR Balance Mode: OFF
- S/C/MOD/REC Mode: Single Mode
- S/C Mode: S/C
- S/C Frame: OFF

At the bottom right, there are buttons for 'Copy', 'Apply', and 'Back'.

**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.

**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).

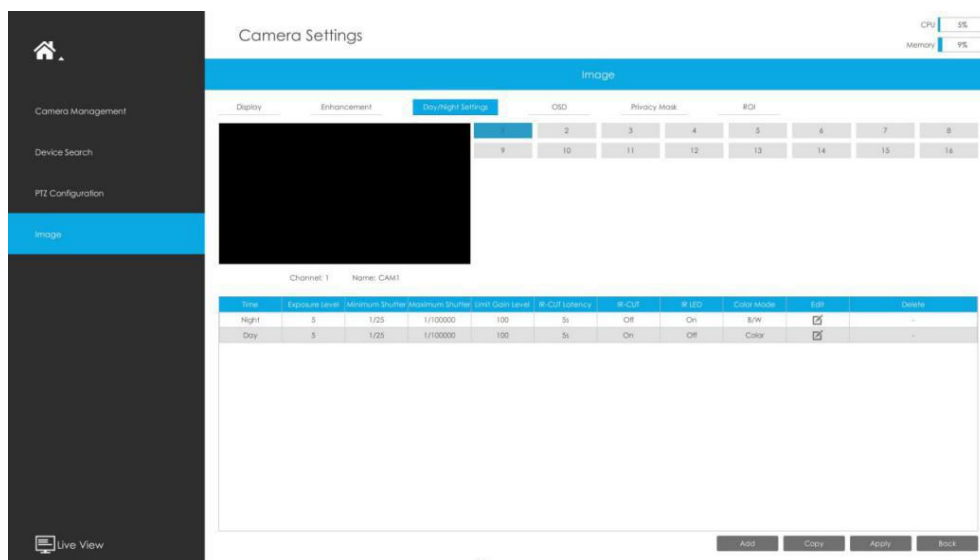
**HLC Level:** Select level for HLC.

**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.**

### 3.5.4.3 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.

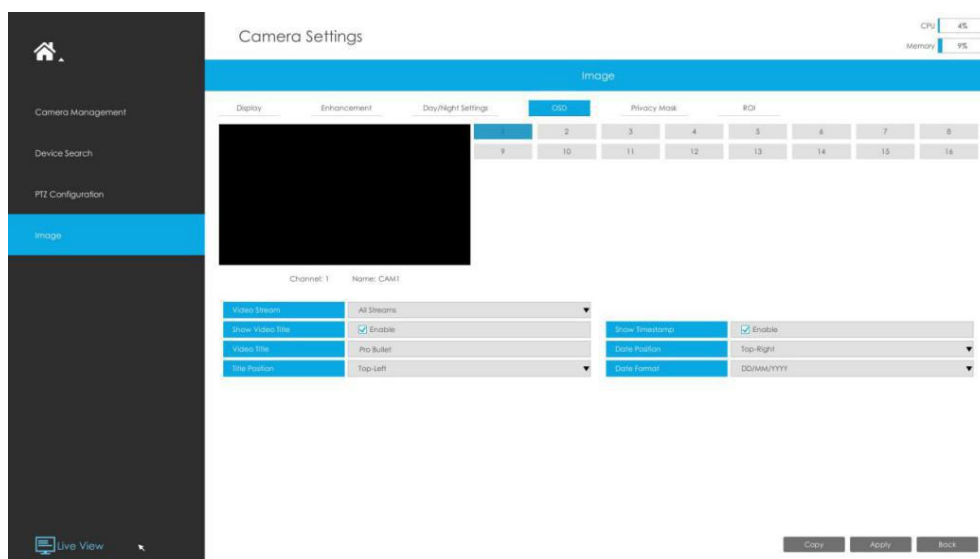
**Edit:** Edit the parameters above.

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

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

### 3.5.4.4 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 “**Copy**” button on the bottom of the windows.

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



### 3.5.4.5 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.

Camera Settings

Image

Display Enhancement Day/Night Settings OSD Privacy Mask ROI

Channel: 4 Name: CAM4

Privacy Mask  Enable

Clear

Type: White

| ID | Name  | Enable                              | Delete                           |
|----|-------|-------------------------------------|----------------------------------|
| 1  | mask1 | <input checked="" type="checkbox"/> | <input type="button" value="X"/> |
| 2  | mask2 | <input checked="" type="checkbox"/> | <input type="button" value="X"/> |
| 3  | mask3 | <input checked="" type="checkbox"/> | <input type="button" value="X"/> |
| 4  | mask4 | <input checked="" type="checkbox"/> | <input type="button" value="X"/> |
| 5  | mask5 | <input checked="" type="checkbox"/> | <input type="button" value="X"/> |
| 6  | mask6 | <input checked="" type="checkbox"/> | <input type="button" value="X"/> |
| 7  | mask7 | <input checked="" type="checkbox"/> | <input type="button" value="X"/> |
| 8  | mask8 | <input checked="" type="checkbox"/> | <input type="button" value="X"/> |

Note: Support up to 8 Privacy Mask areas.

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.

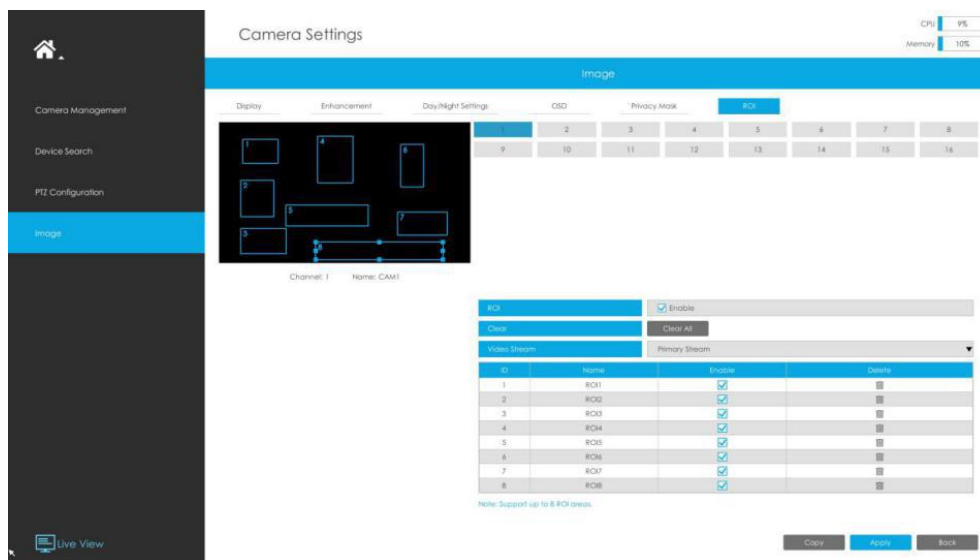
**Step4.** Select “” to save the settings.

**Note:**

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

### 3.5.4.6 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 “” button on the bottom of the windows.

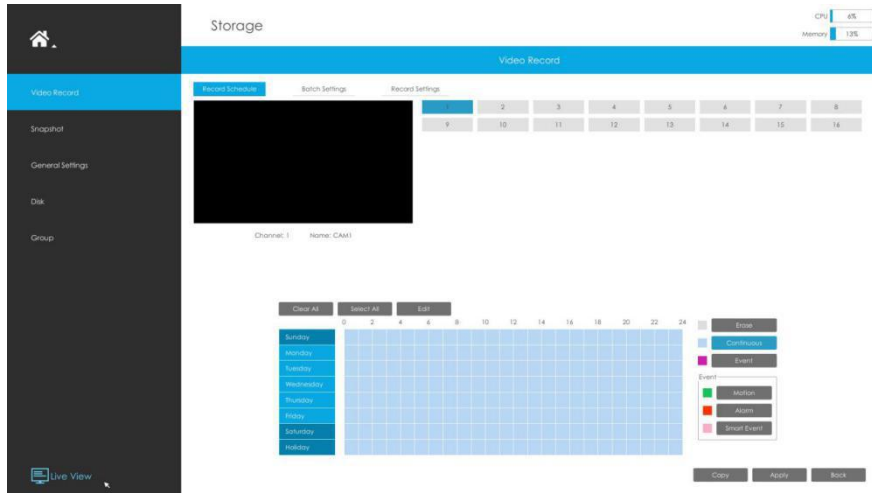
**Step4.** Select “” to save the settings.

**Note:**

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

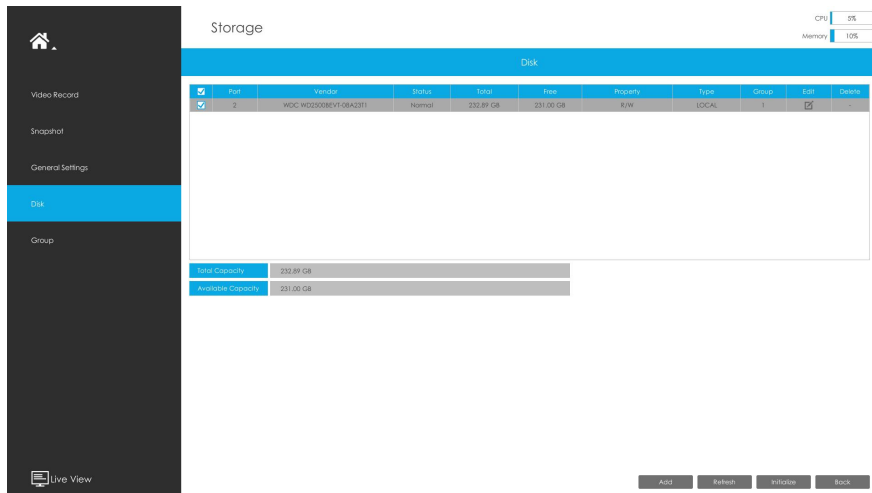


### 3.6 Storage



#### 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.

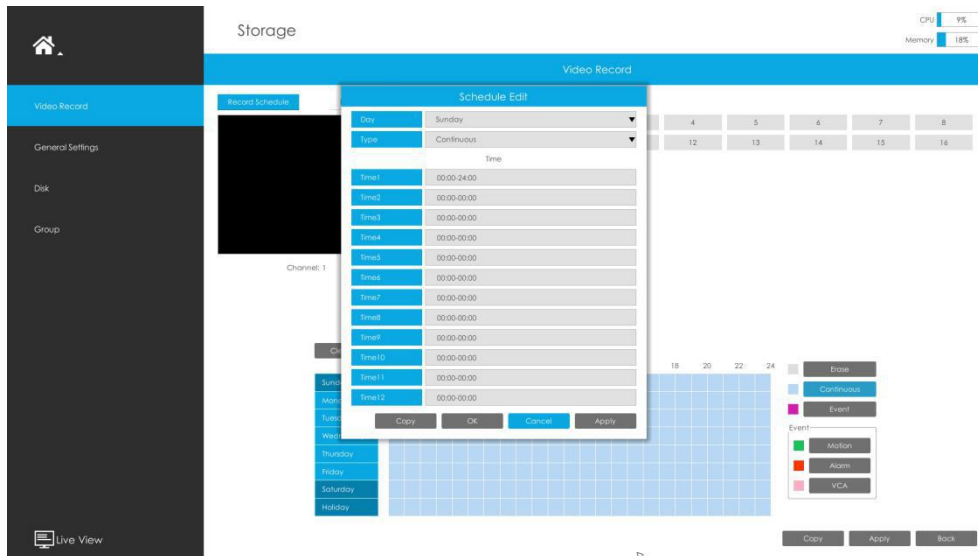
### 3.6.1 Video Record

#### Record Schedule

**Step1. Select channel.**

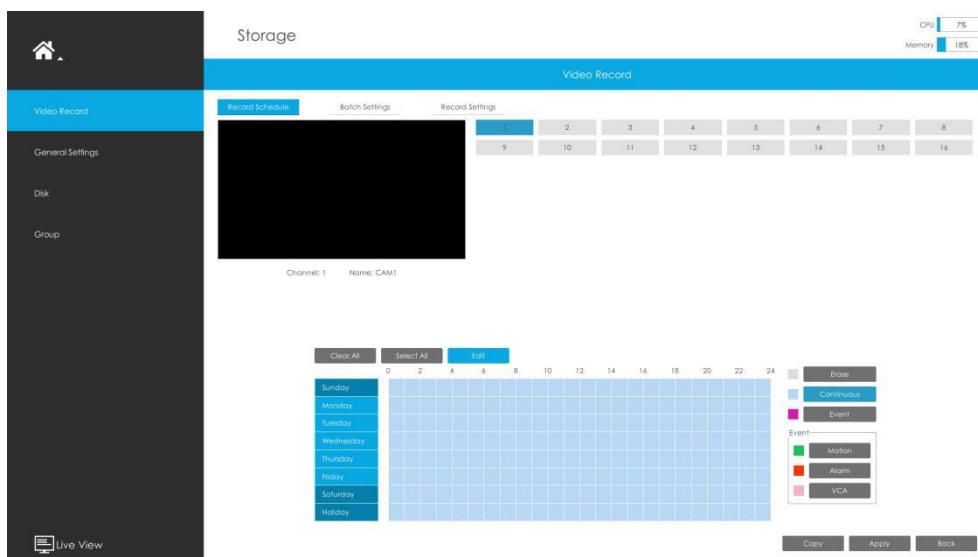
**Step2. Set record schedule.**

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

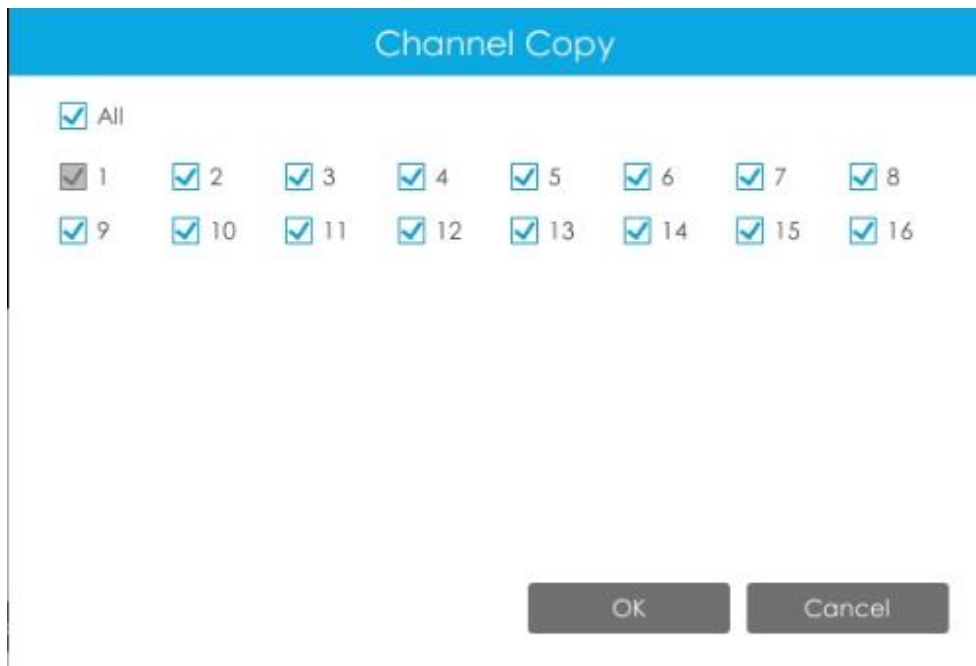


**Method 2:** Select operation type: Continuous, Event (including Motion, Alarm and VCA) or Erase. Then drag a square in the time table to set record effective time. It is convenient for you to set or

clear all corresponding schedule by clicking  or .



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

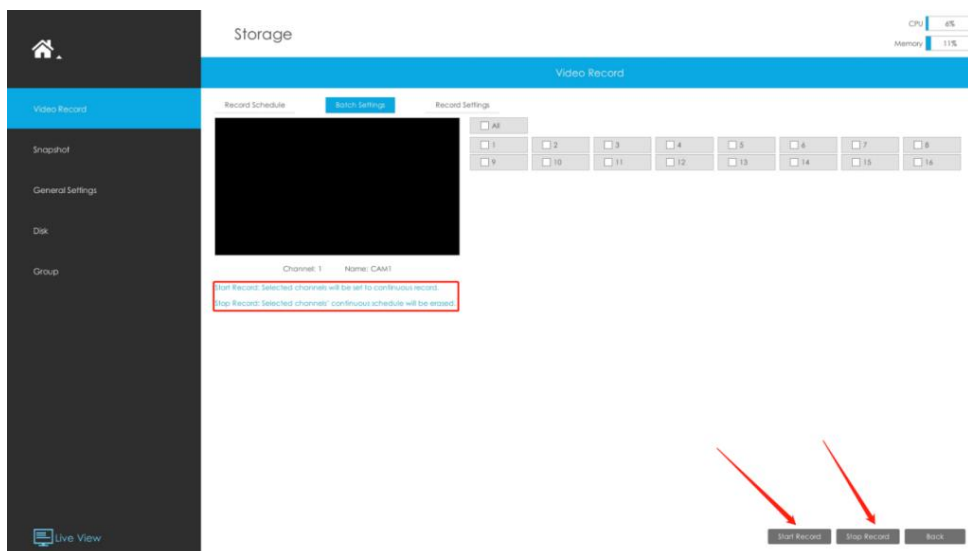


### Batch Settings

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.

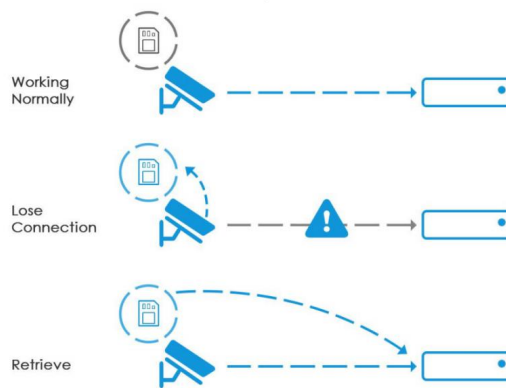
**Post Record:** Event post-record duration time. It will keep recording after the event is over.

**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.

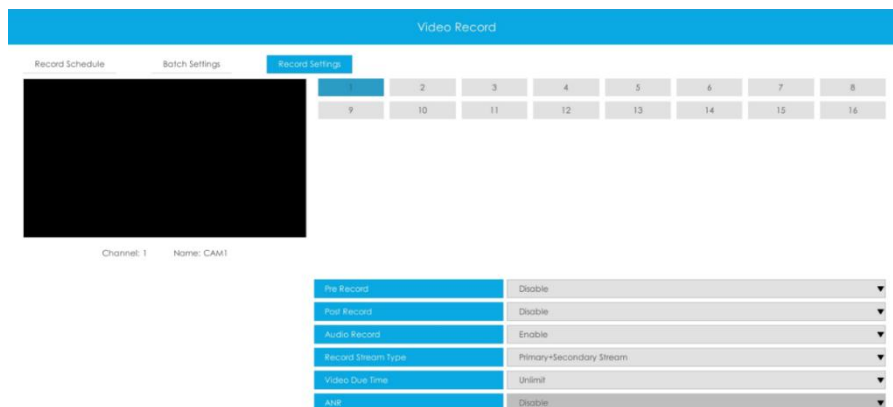
**ANR (Automatic Network Replenishment) :** Can automatically replenish the recording gap due to internet interruptions. As the picture shows below, NVR stores videos when the network connection between NVR and cameras is normal. When the connection lost, the camera would start continuous recording and 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.




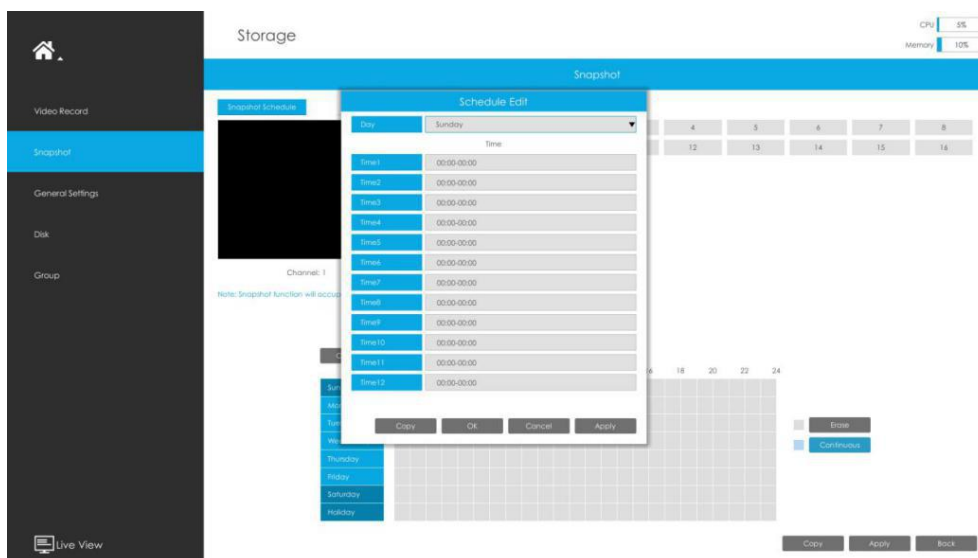
### 3.6.2 Snapshot

#### Snapshot Schedule

**Step1. Select channel.**

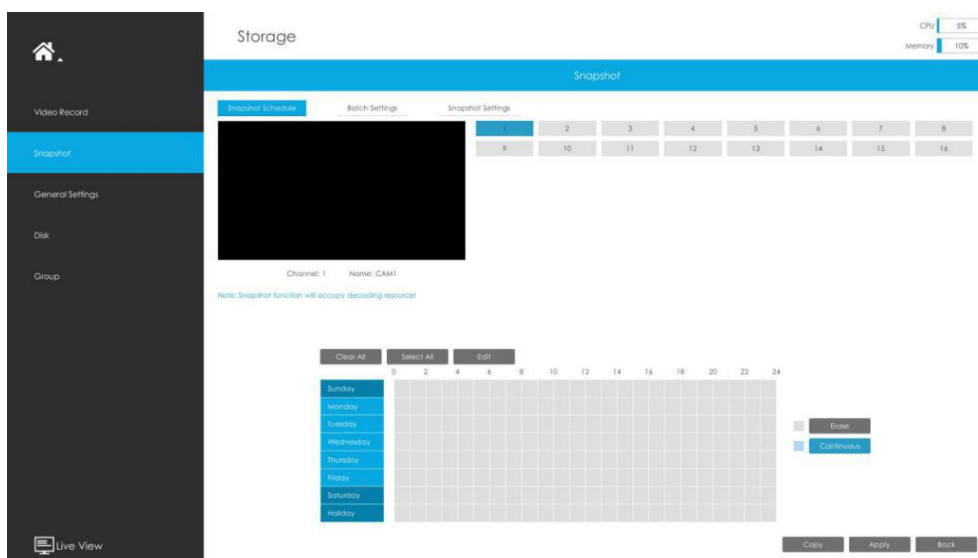
**Step2. Set snapshot schedule.**

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

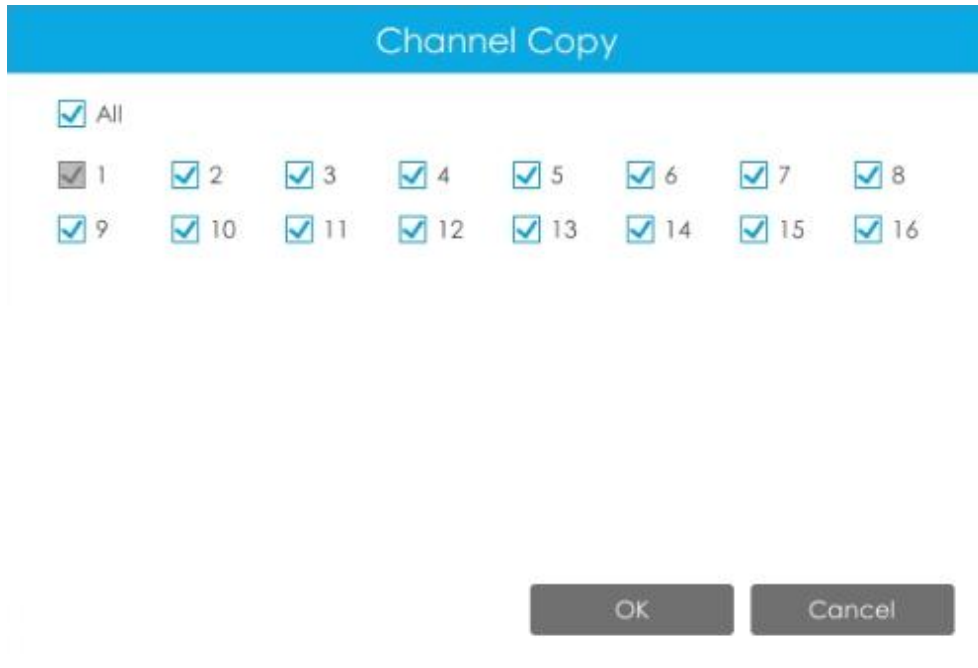


**Method 2:** Select operation type: Continuous or Erase. Then drag a square in the time table to set record effective time. It is convenient for you to set or clear all corresponding schedule by

clicking  or .



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

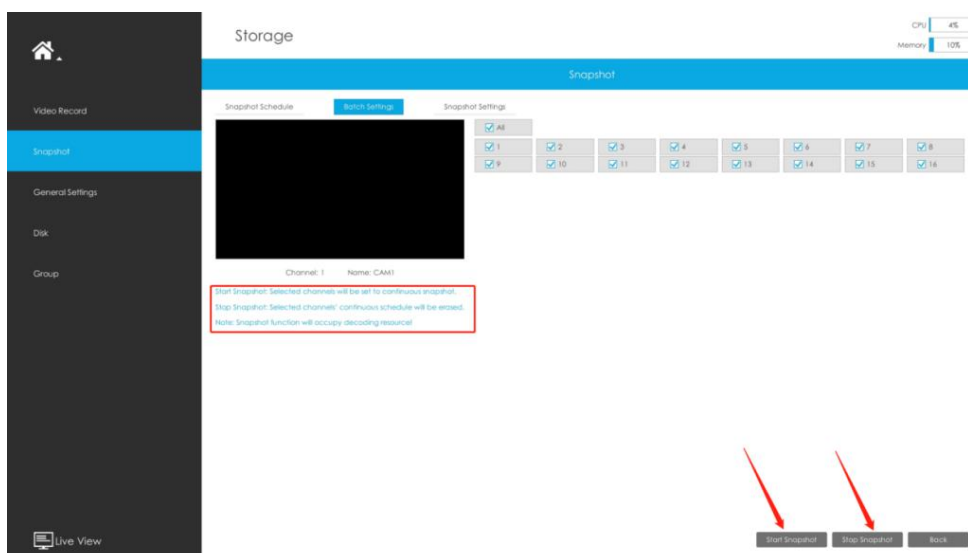


### Batch Settings

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

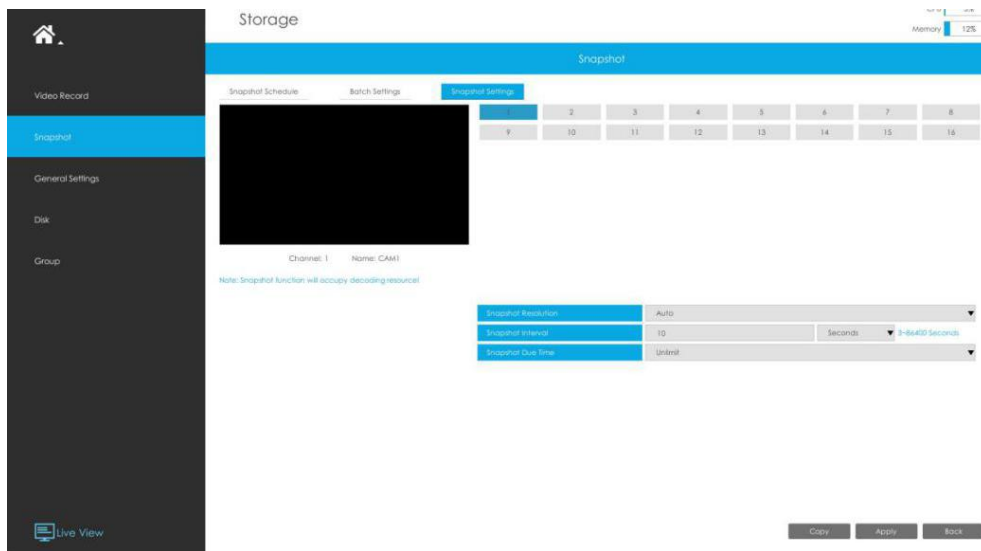
Make general configuration for selected channels. Click **Copy** to copy the same configuration to other channels.

**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.

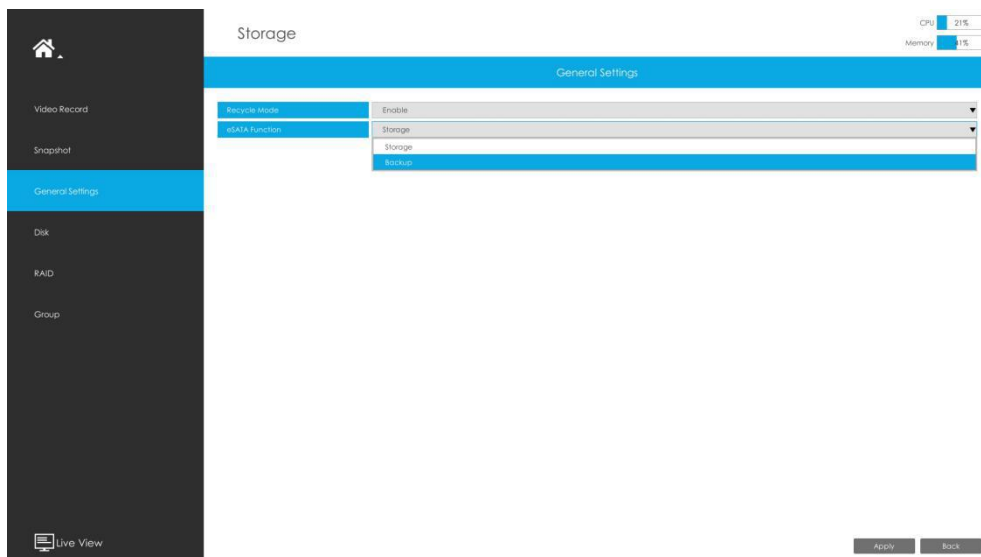
**Snapshot Due Time:** Set the due time of snapshot files, 1~120days or unlimit are available.



**Note:**

Some models support continuous snapshot function.

### 3.6.3 General Settings



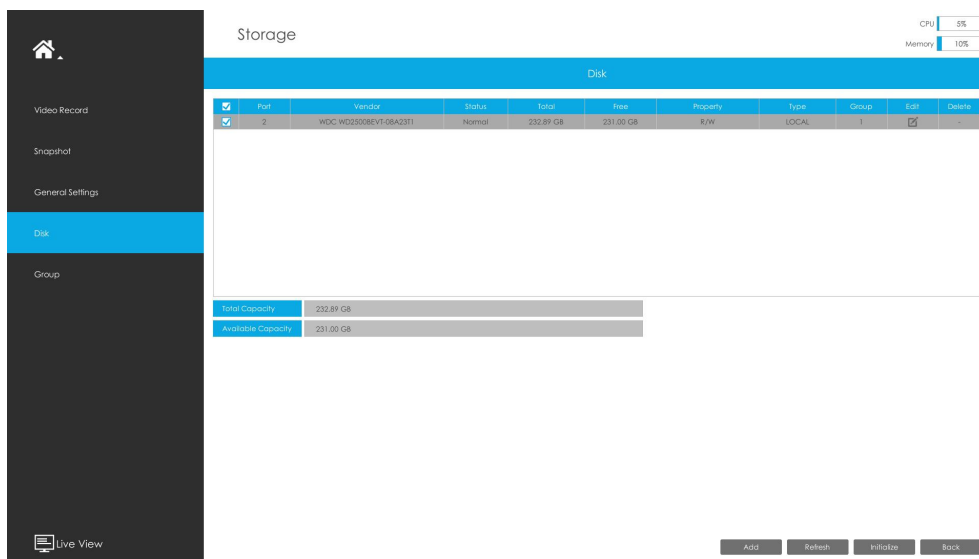
**Recycle Mode:** You can enable or disable Recycle Mode for all storage device.

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

**Note:**

eSATA Function is only available for NVR 8000 Series.

## 3.6.4 Disk

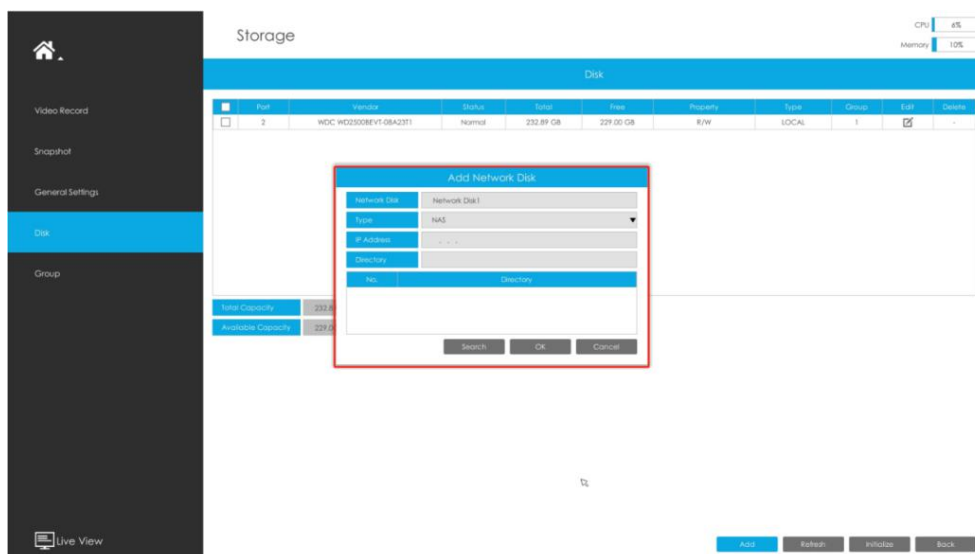


### Network Disk

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:

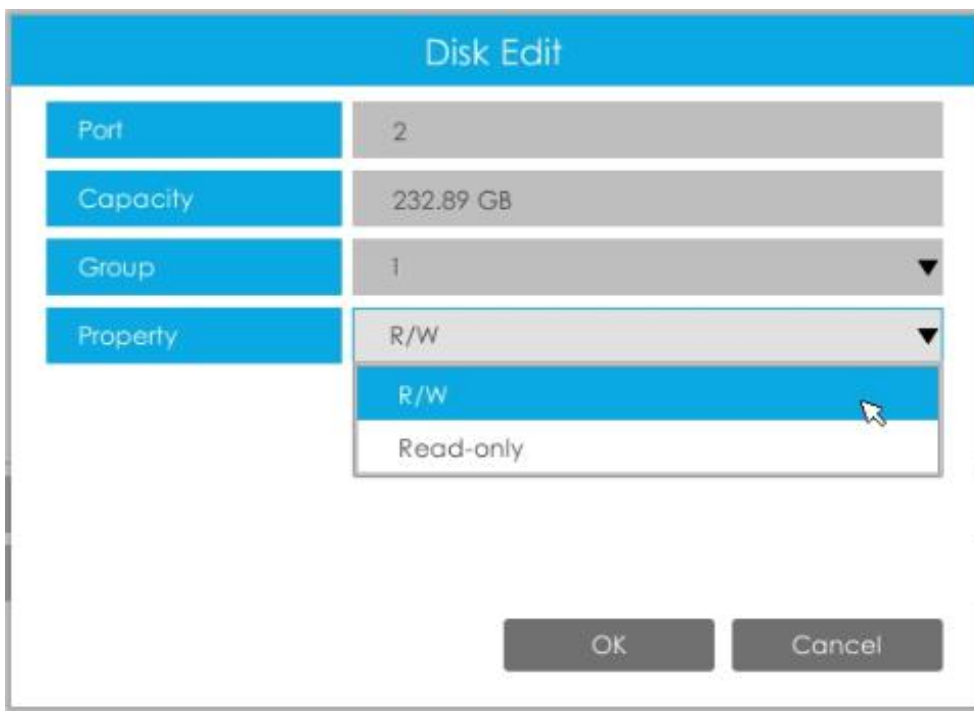
1. NAS with NFS format is the only type for network disk adding.
2. It's recommended to use Hard Disk rather than Network Disk.



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

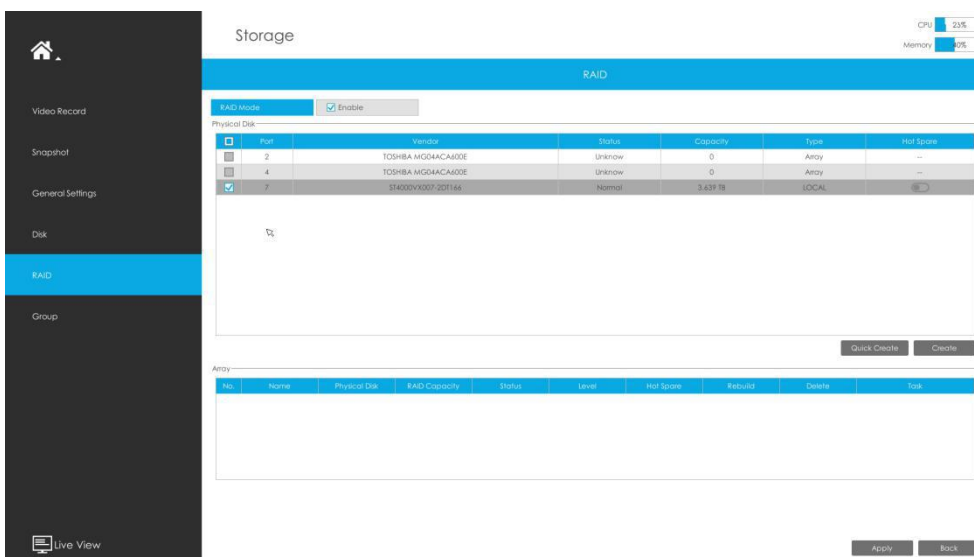
After that the storage device will be ready.



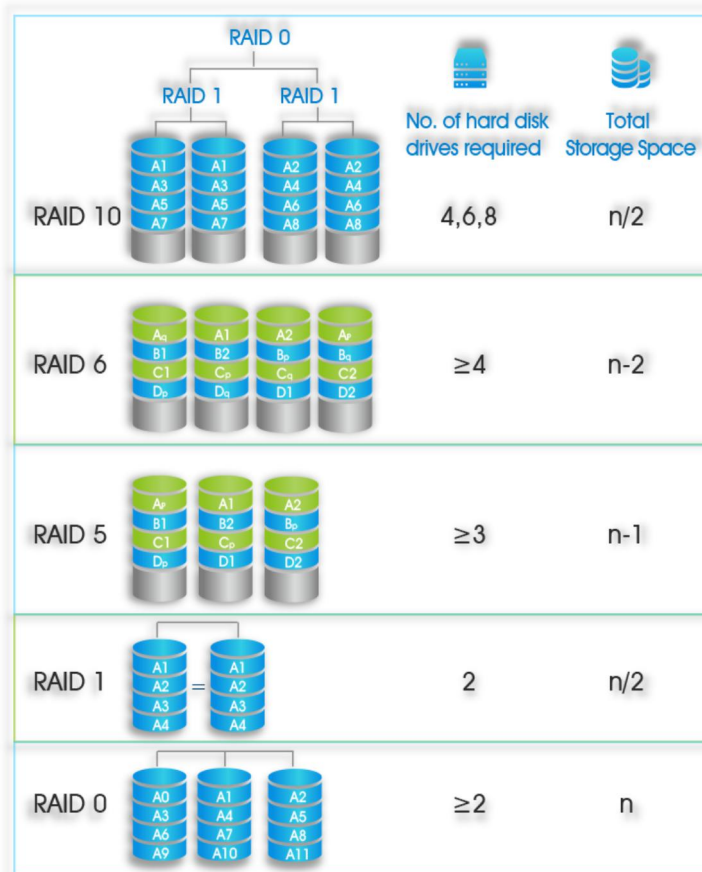


**HDD Type:** RAID means RAID, NAS means network attached storage while LOCAL means normal disk mode.

### 3.6.5 RAID

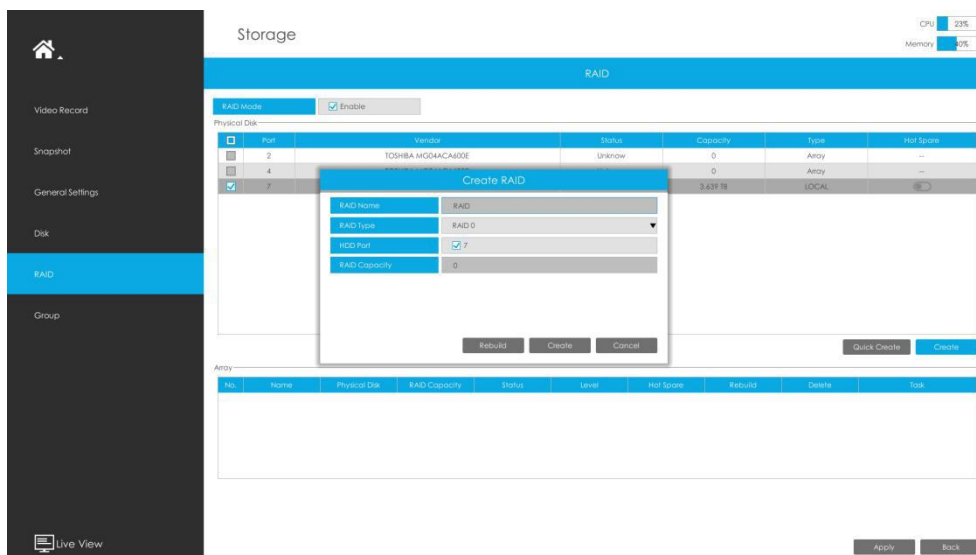


RAID (Redundant Array of Independent Disks) is a storage technology that combines multiple disk drive components into a logical unit. A RAID setup stores data over multiple hard disk drives to provide enough redundancy so that data can be recovered if one disk fails.



**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.

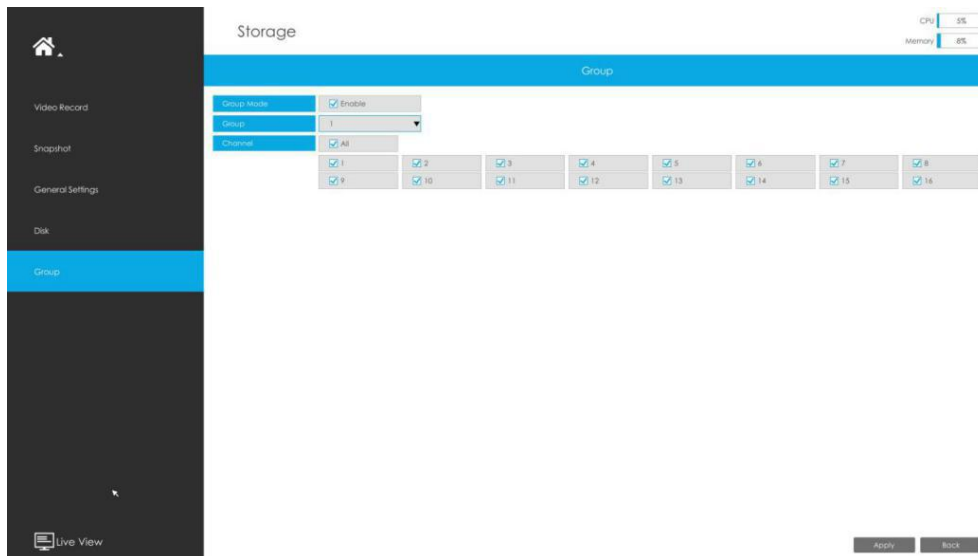
**Rebuild:** When the array is in Degraded status, the device can start rebuilding the array automatically with the hot spare disk to ensure the high security and reliability of the data.

**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.

### 3.6.6 Group

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



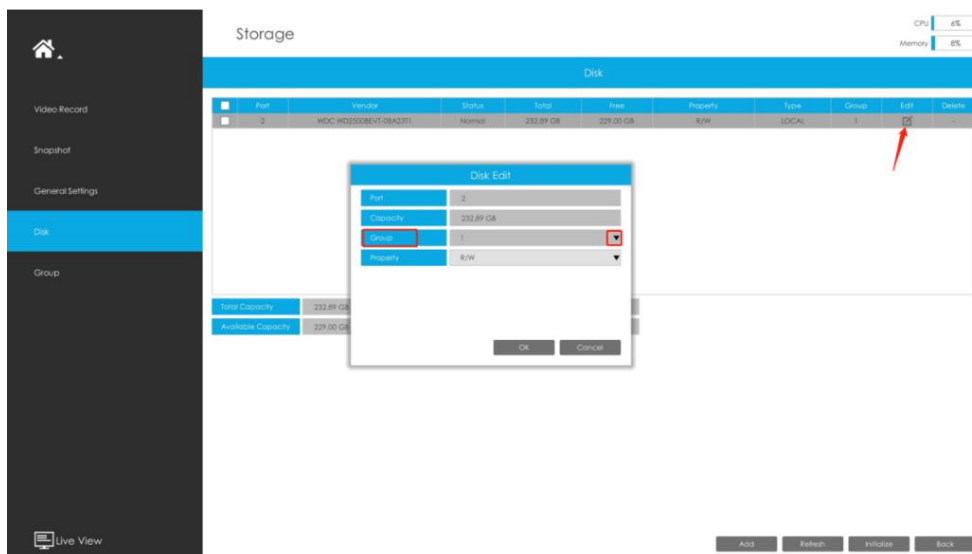
#### Step 1. Enable Group.



#### 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.

|            |   |
|------------|---|
| Group Mode | <input checked="" type="checkbox"/> Enable  |
| Group      | 1   |
| Channel    | <input checked="" type="checkbox"/> All   |
|            | <input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input checked="" type="checkbox"/> 5 <input checked="" type="checkbox"/> 6 <input checked="" type="checkbox"/> 7 <input checked="" type="checkbox"/> 8<br><input checked="" type="checkbox"/> 9 <input checked="" type="checkbox"/> 10 <input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12 <input checked="" type="checkbox"/> 13 <input checked="" type="checkbox"/> 14 <input checked="" type="checkbox"/> 15 <input checked="" type="checkbox"/> 16 |

## 3.7 Event

### 3.7.1 Motion Detection

**Step 1. Enable Motion Detection.**

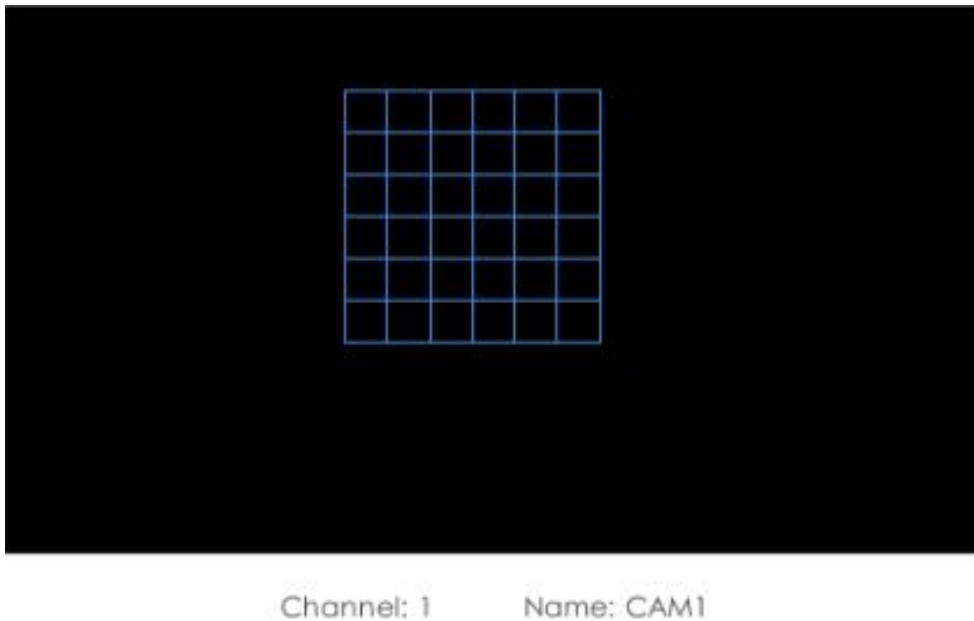
Select channel , Sensitivity and click  to enable Motion Detection.

|   |    |    |    |    |    |    |    |
|---|----|----|----|----|----|----|----|
| 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      | 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.

**Note:**

The motion detection area will be synchronized to Camera.

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

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



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

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

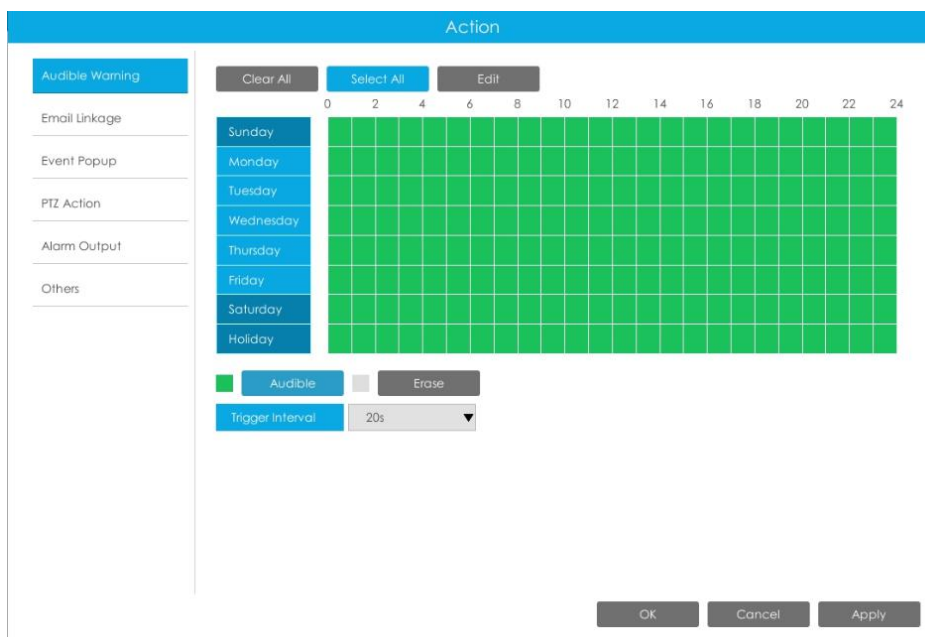
The user can set effective schedule as following two ways:

- 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  or  to set or clear all

time settings.

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

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



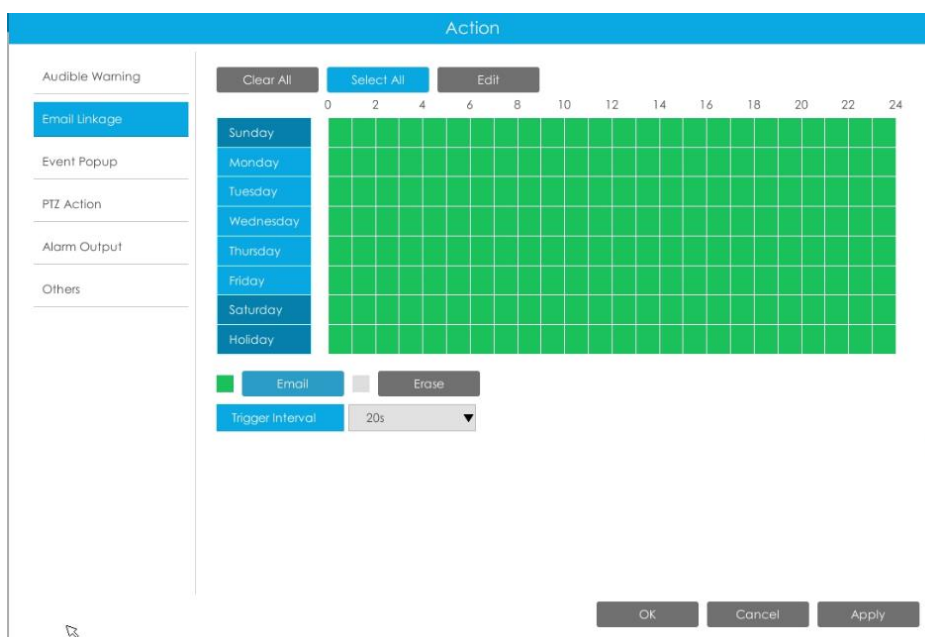
**Email Linkage:** NVR will send an email to the address you set before.

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.

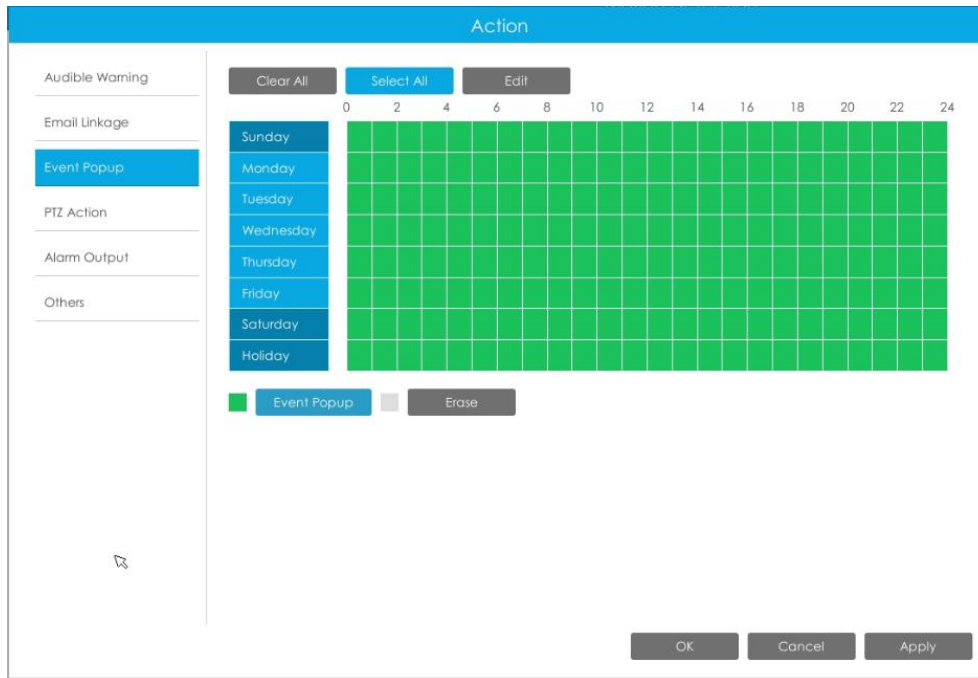
- ② Click **Edit** to edit effective time manually.

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



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

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.

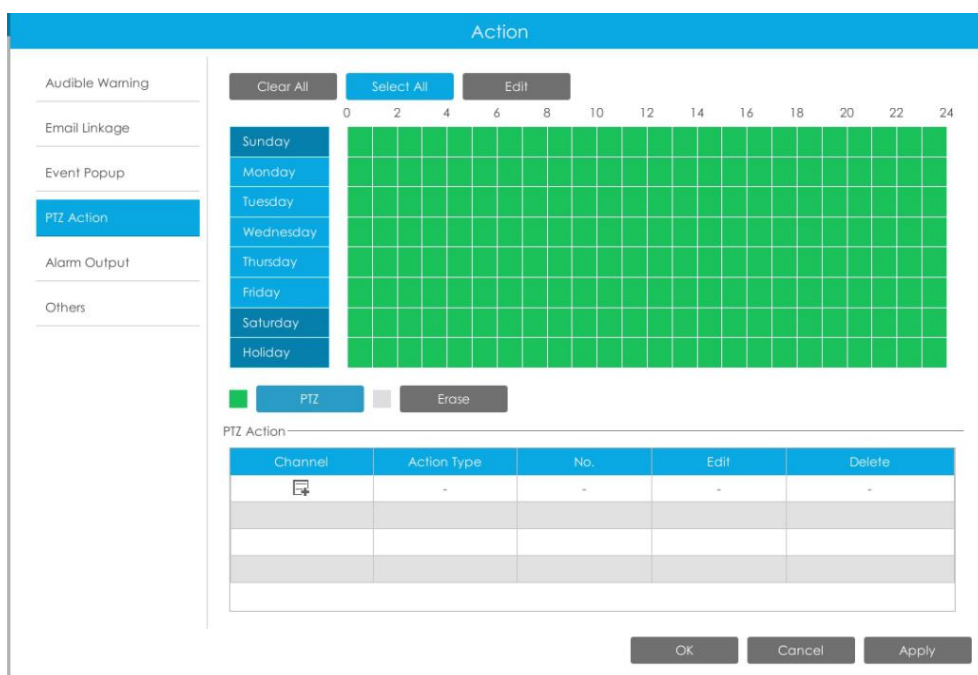


**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

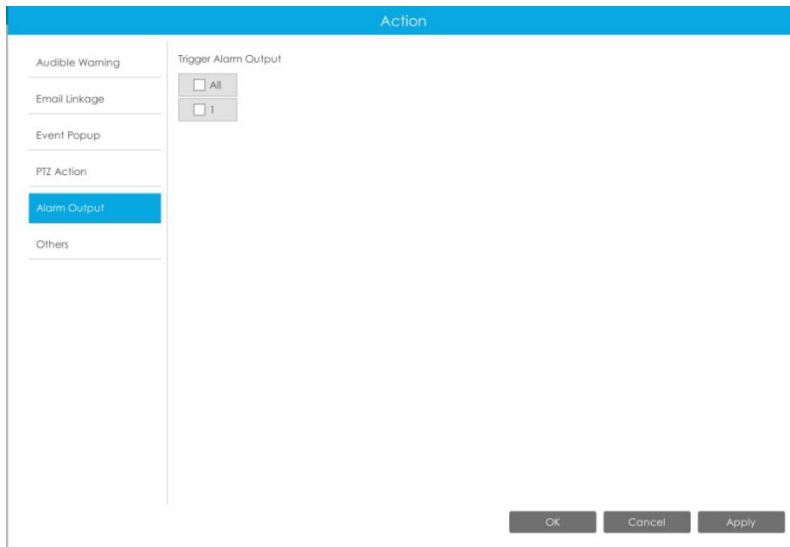
User can set effective schedule as following two ways:

① Select the operation type: 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 to set or clear all time settings.

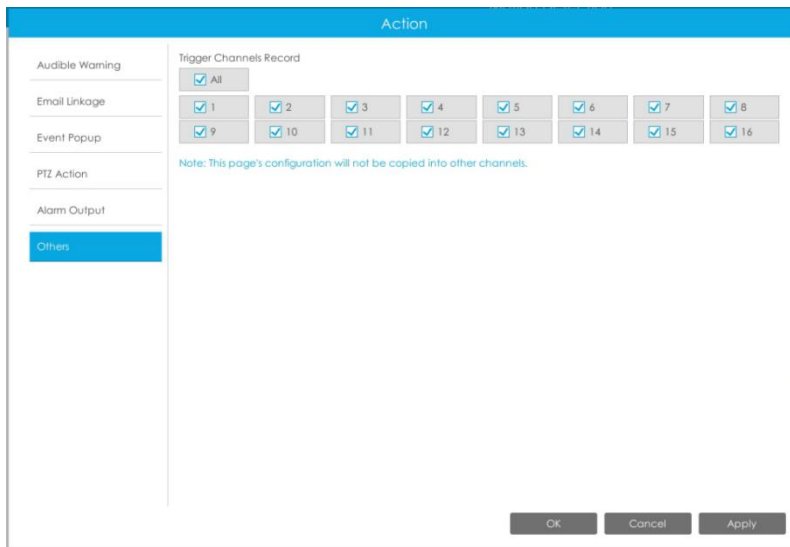
② Click **Edit** to edit record effective time manually.





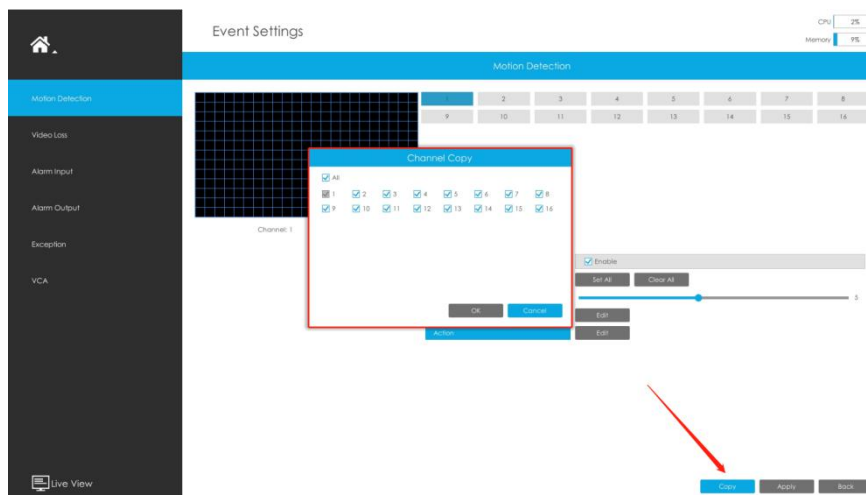
**Alarm Output:** Trigger alarm output when alarm is triggered.



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



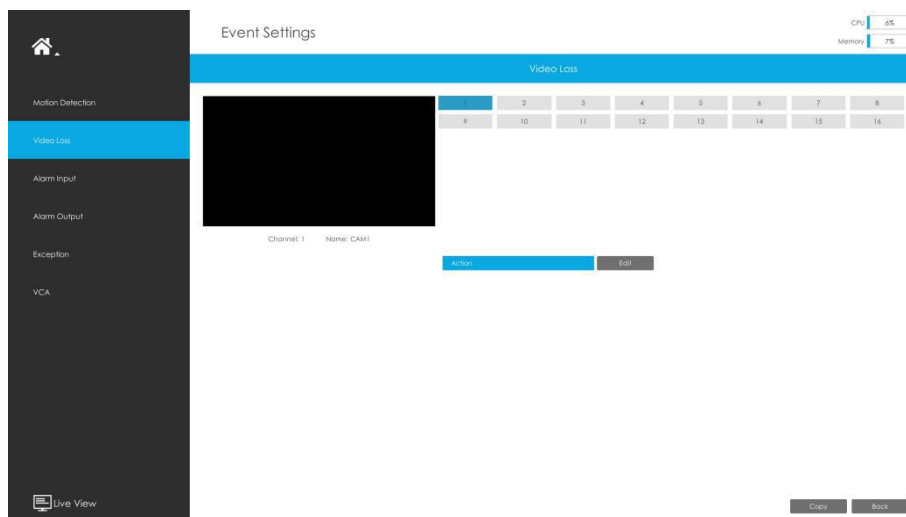
**Step 5.** Click  and  to copy the same configuration to other channels.





## 3.7.2 Video Loss



### Step 1. Select a channel.




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

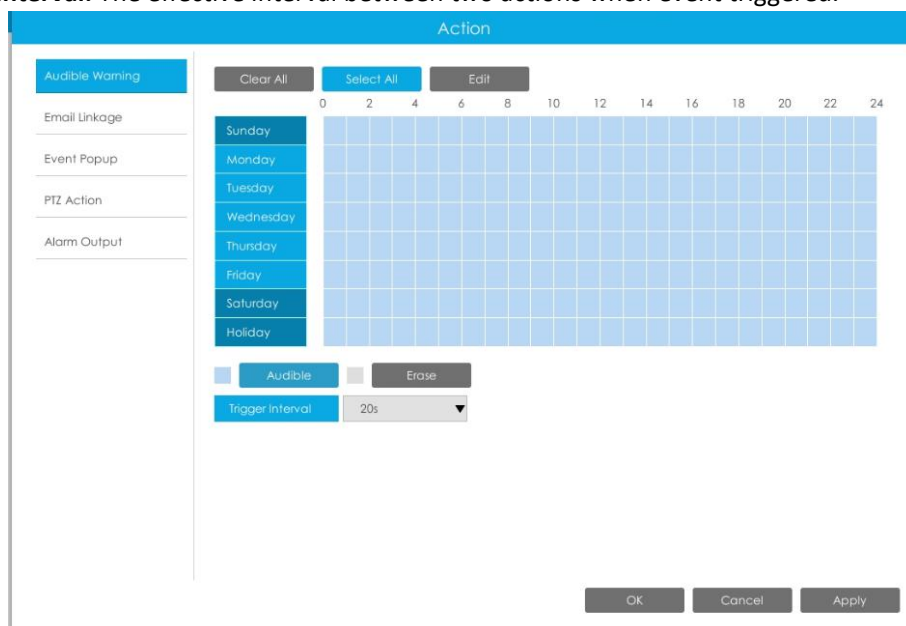
**Audible Warning:** NVR will trigger an audible beep when motion is detected.

The user can set effective schedule as following two ways:

① Select the operation type: Email 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.

**Trigger 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.

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

The screenshot shows the 'Action' configuration window for 'Email Linkage'. On the left, a sidebar lists 'Audible Warning', 'Email Linkage' (selected), 'Event Popup', 'PTZ Action', and 'Alarm Output'. The main area features a 24-hour grid with days of the week on the y-axis. Above the grid are 'Clear All', 'Select All', and 'Edit' buttons. Below the grid are 'Email' and 'Erase' checkboxes, and a 'Trigger interval' dropdown set to '20s'. At the bottom right are 'OK', 'Cancel', and 'Apply' buttons.

**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

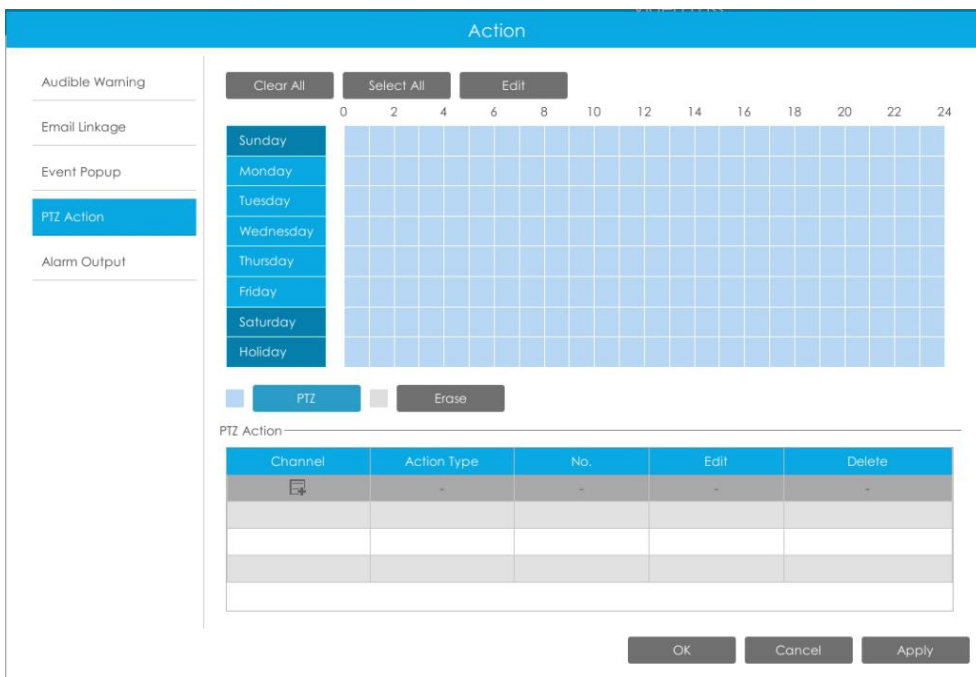
You can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

The screenshot shows the 'Action' configuration window for 'Event Popup'. The sidebar on the left has 'Event Popup' selected. The main area features the same 24-hour grid and 'Clear All', 'Select All', and 'Edit' buttons. Below the grid are 'Event Popup' and 'Erase' checkboxes. The 'Trigger interval' dropdown is not visible. At the bottom right are 'OK', 'Cancel', and 'Apply' buttons.

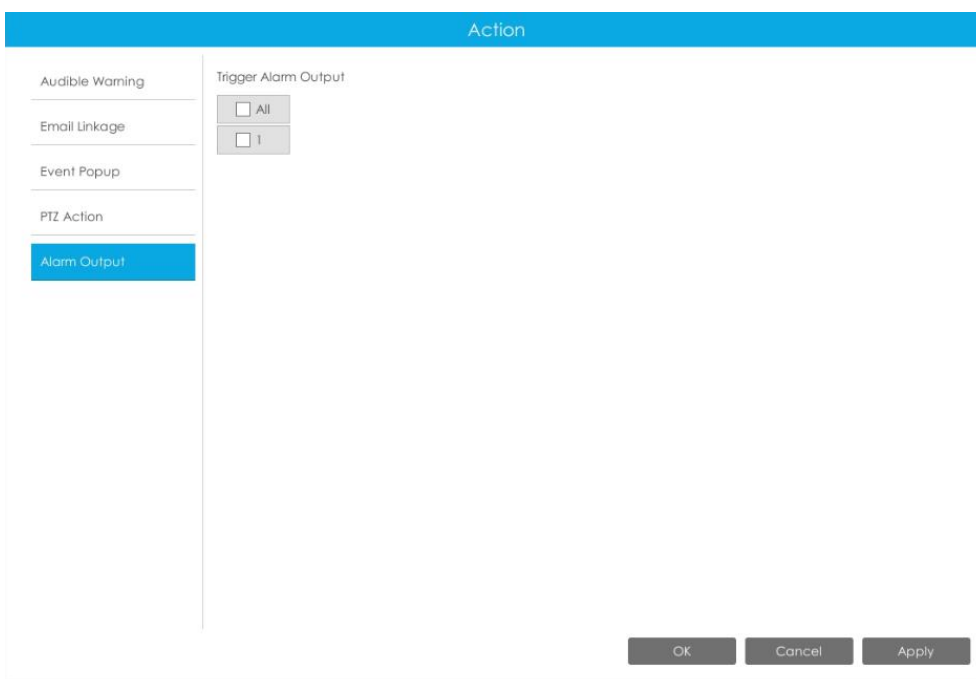
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset** and **Patrol**.

User can set effective schedule as following two ways:

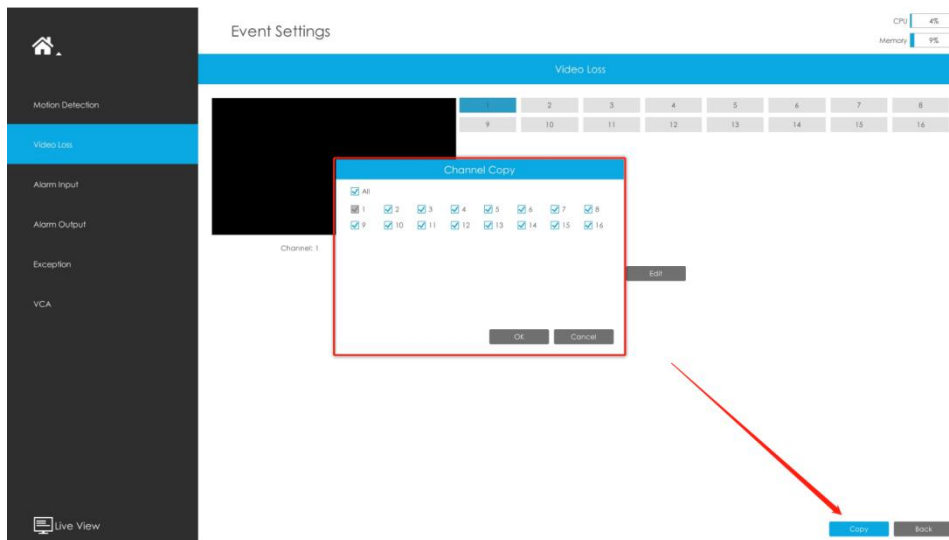
- ① Select the operation type: Email or Erase. Then drag a square on the time table for time setting, it will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.
- ② Click **Edit** to edit record effective time manually.



**Alarm Output:** Trigger alarm output when alarm is triggered.



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



### 3.7.3 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.

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

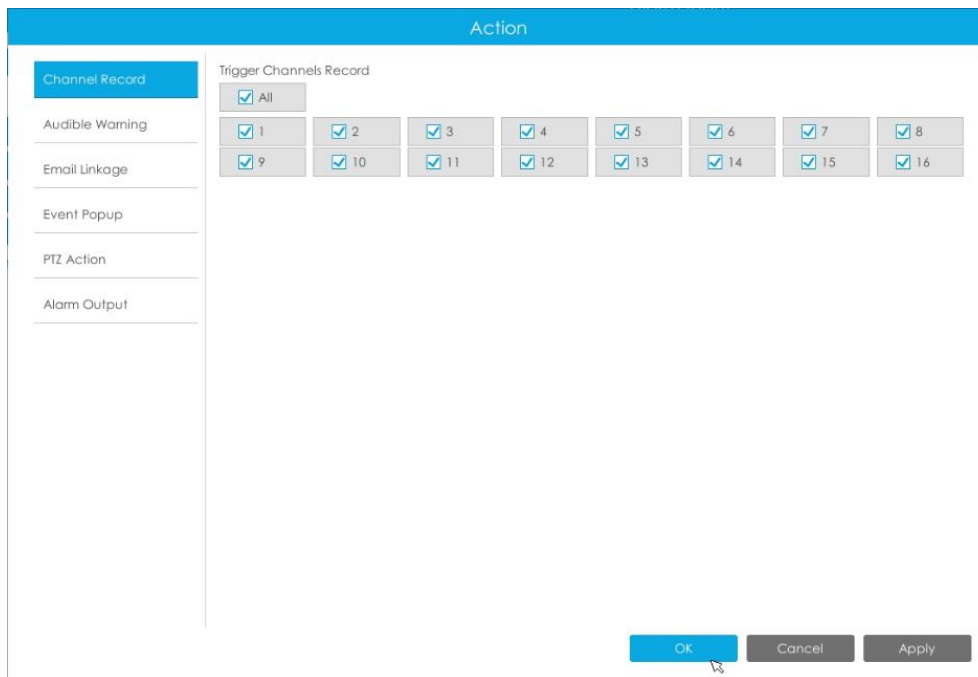
**Step 2. Set effective time for alarm input by clicking corresponding ** .

**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.

**Copy to Channels:** Copy record schedule to other channels by clicking  .



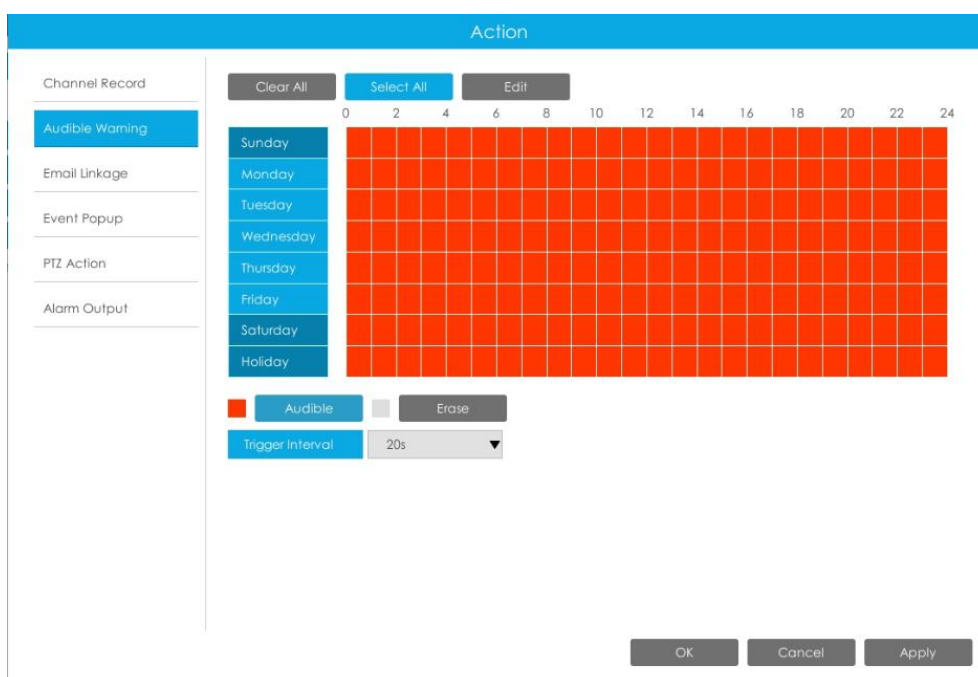
**Audible Warning:** NVR will trigger an audible beep when alarm is triggered.

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

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

**Trigger 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.

**Trigger 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.

The screenshot shows the 'Action' configuration window. On the left, there is a 'Channel Record' sidebar with options: Audible Warning, Email Linkage (selected), Event Popup, PTZ Action, and Alarm Output. The main area features a time table with columns for hours (0-24) and rows for days (Sunday-Holiday). A grid of orange squares represents the schedule. Above the table are buttons for 'Clear All', 'Select All', and 'Edit'. Below the table are radio buttons for 'Email' (selected) and 'Erase', a 'Trigger Interval' dropdown set to '20s', and a 'Trigger Channels Snapshot' section with checkboxes for channels 1-16. At the bottom right are 'OK', 'Cancel', and 'Apply' buttons.

**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

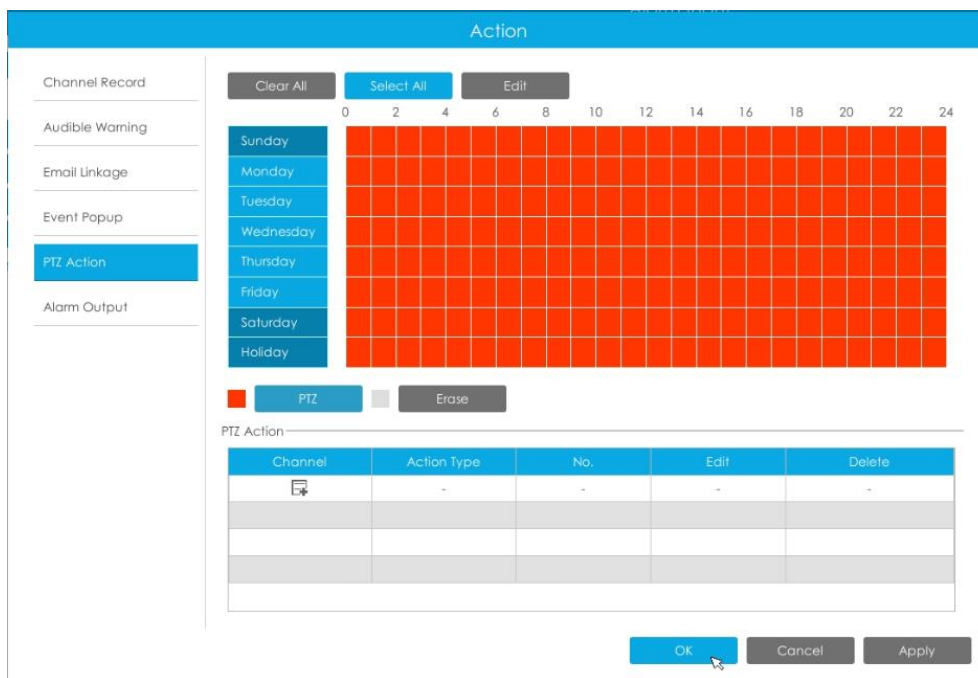
You can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.

This screenshot shows the 'Action' configuration window with 'Event Popup' selected in the sidebar. The time table is visible but mostly obscured by a configuration panel. This panel includes radio buttons for 'Event Popup' (selected) and 'Erase'. Below it is a 'Trigger Channel Event Popup' section with a 'Channel' dropdown menu. The dropdown is open, showing a list of channels from 1 to 9. At the bottom right are 'OK', 'Cancel', and 'Apply' buttons.

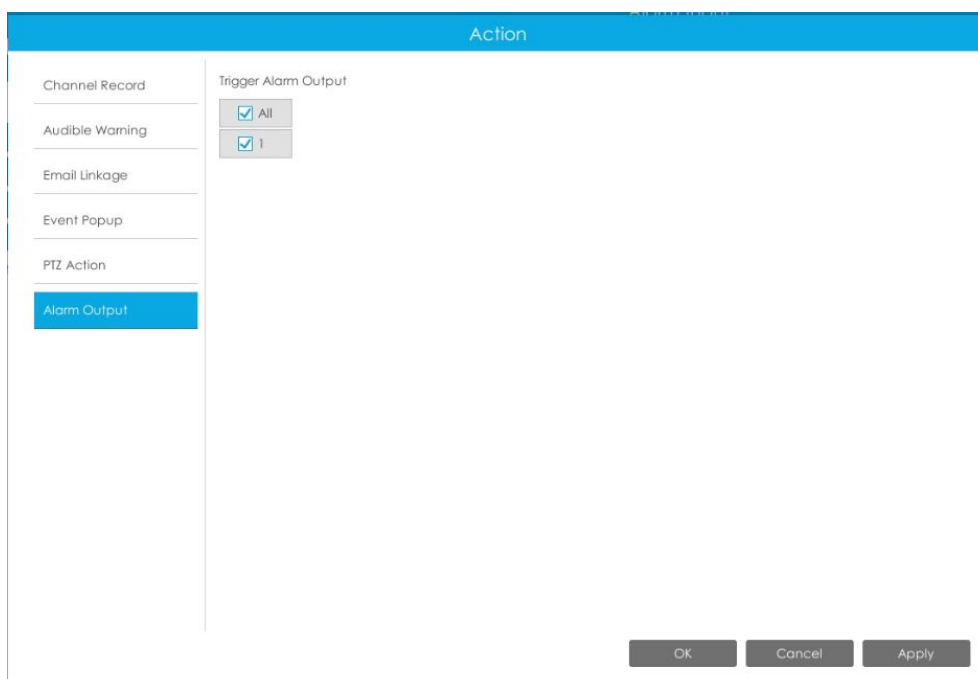
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

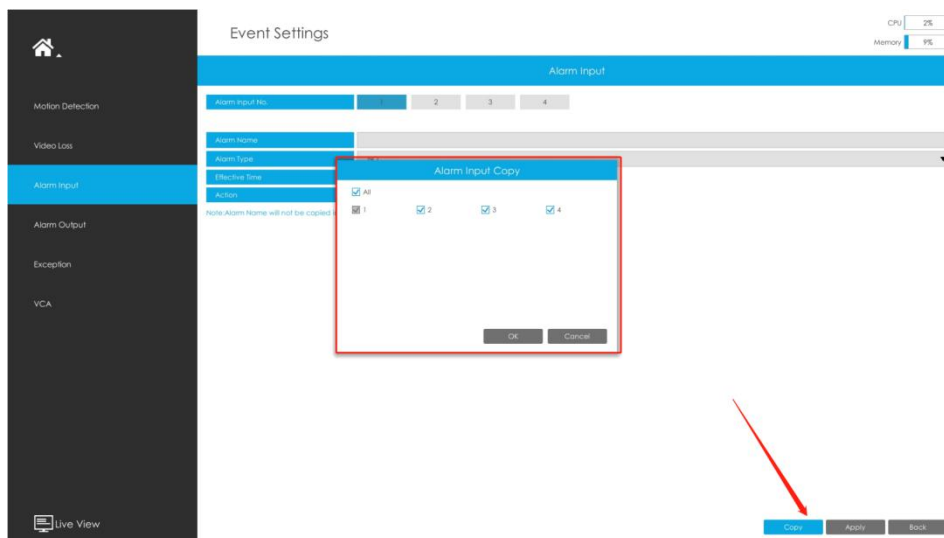
- ① Select the operation type: Email or Erase. Then drag a square on the time table for time setting, it will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.
- ② Click **Edit** to edit record effective time manually.



**Alarm Output:** Trigger alarm output when alarm is triggered.

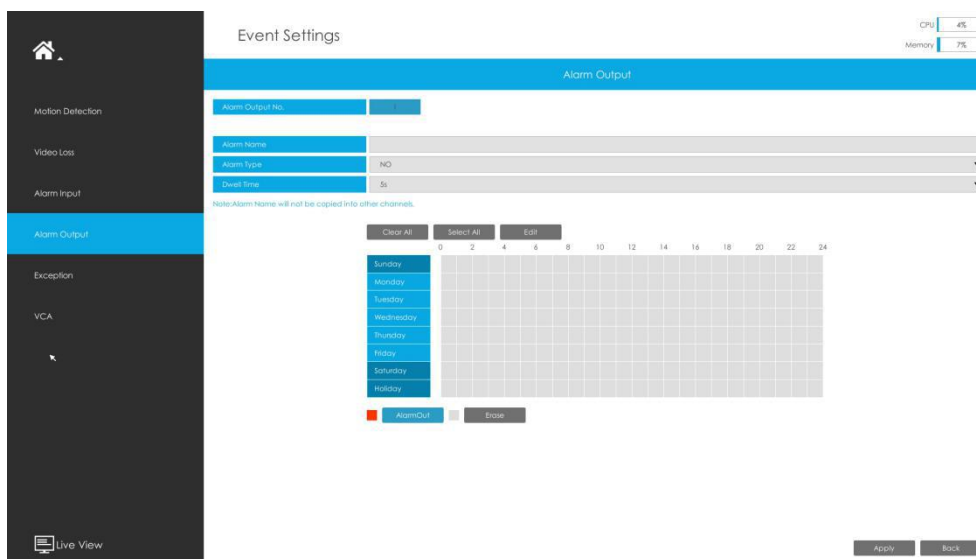


**Step 3:** Copy alarm input settings to other input interface by clicking **Copy**.

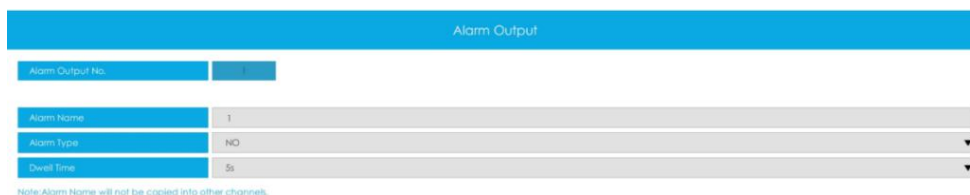


### 3.7.4 Alarm Output

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.

**Dwell Time:** The output time for alarm. If the output alarm lasts too long, you can select the



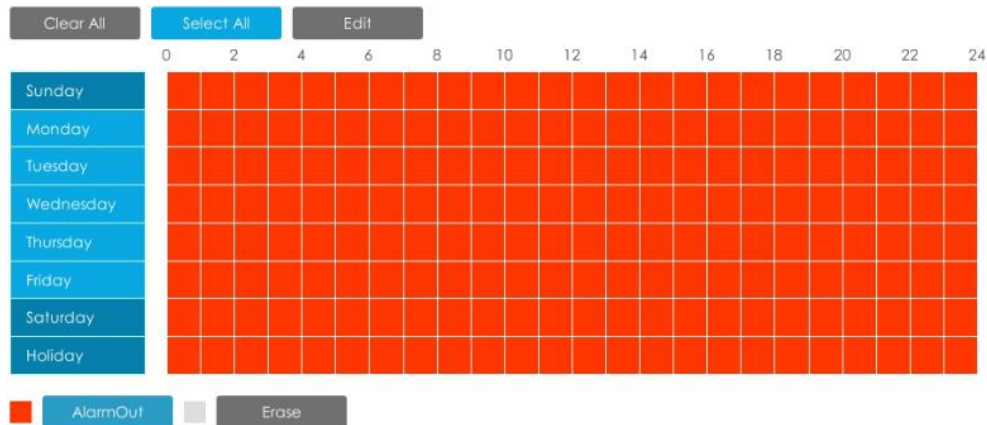
Manually Clear to stop it.

### Step 2. Select effective Time for alarm output.

The user can set effective schedule as following two ways:

① Select the operation type: AlarmOut 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.

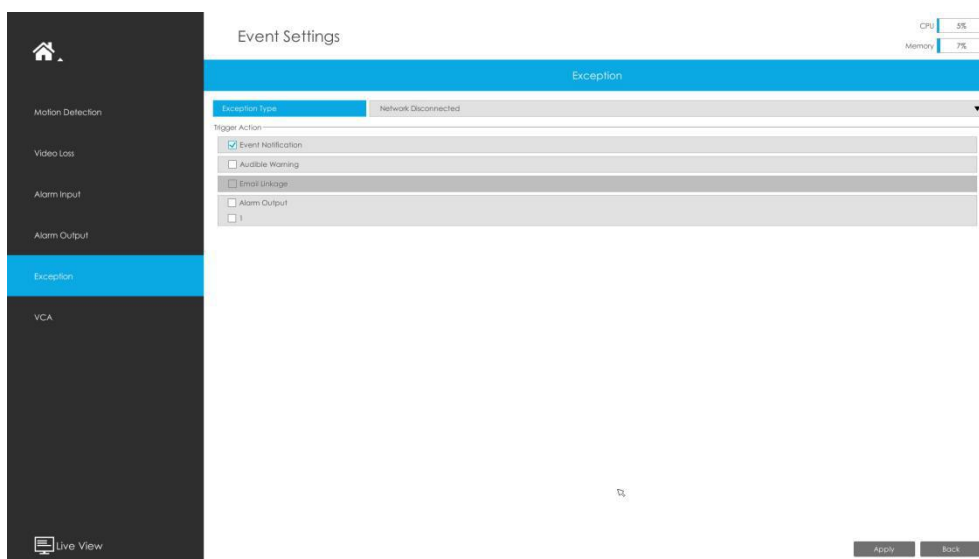
② Click **Edit** to edit record effective time manually.



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

## 3.7.5 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.

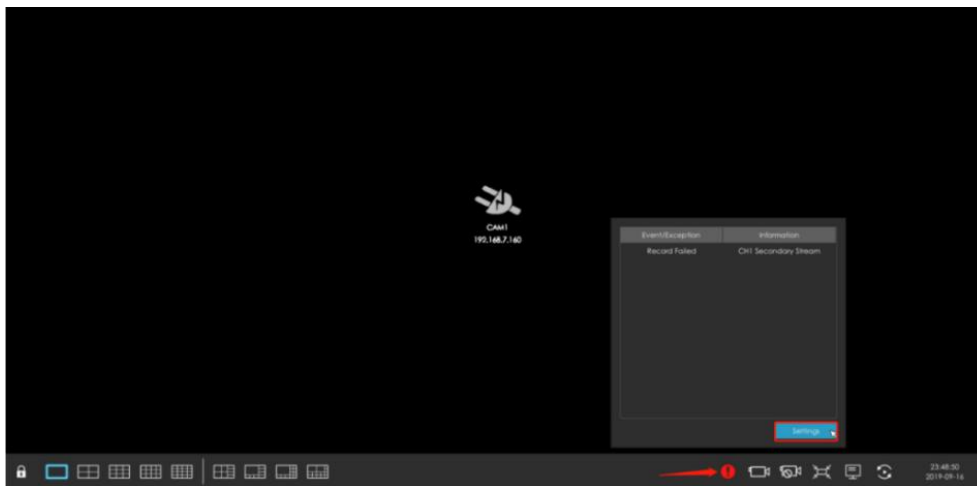
**Email Linkage:** An alarm Email will be sent if an alarm is triggered.

**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"/> 1                             |

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



### 3.7.6 VCA

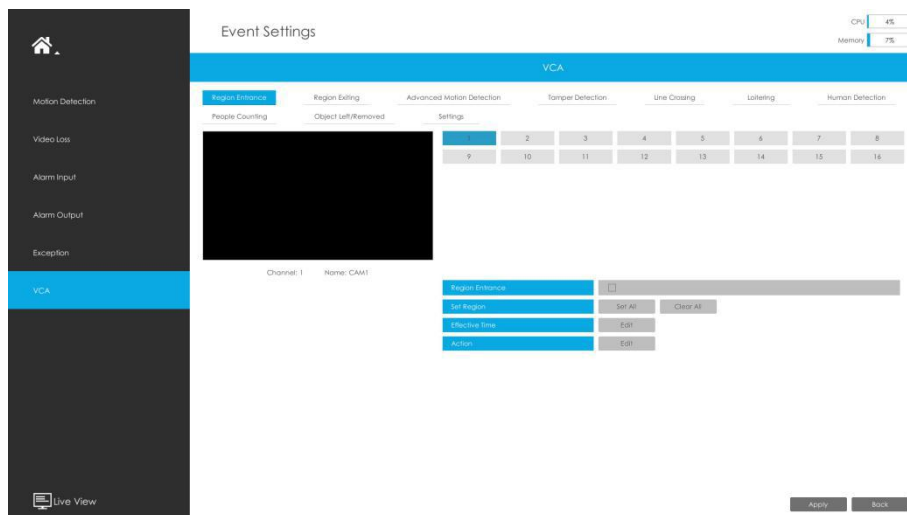
It uses Milesight Video Content Analysis technology which is applied in a wide range of domains including entertainment, health-care, retail, automotive, transport, home automation, safety and security. Milesight VCA provides advanced, accurate smart video analysis for Milesight network cameras. It enhances 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:**

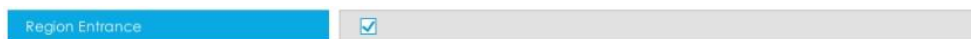
Please input license of selected channel in Settings page to activate VCA first.

#### 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.



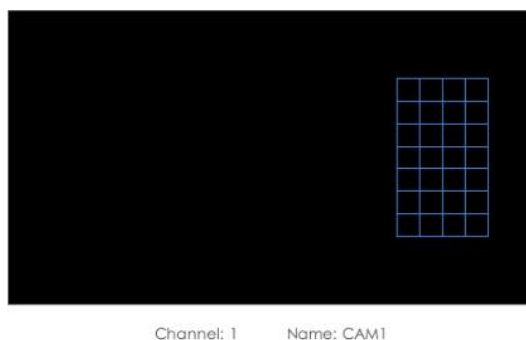
**Step 1. Select channel and enable Region Entrance.**



**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**  .

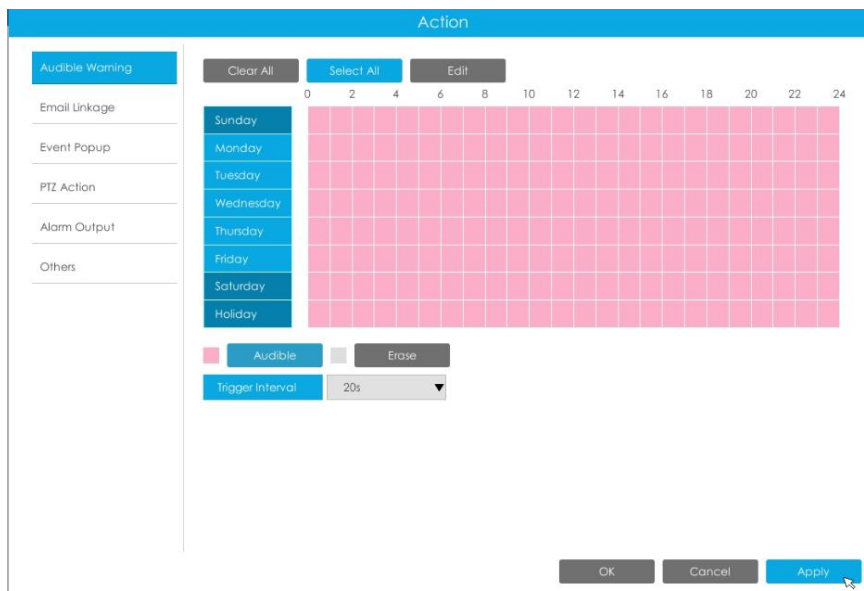
**Audible Warning:** NVR will trigger an audible beep when region entrance is detected.

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  or  to set or clear all time settings.



② Click  to edit record effective time manually.

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



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

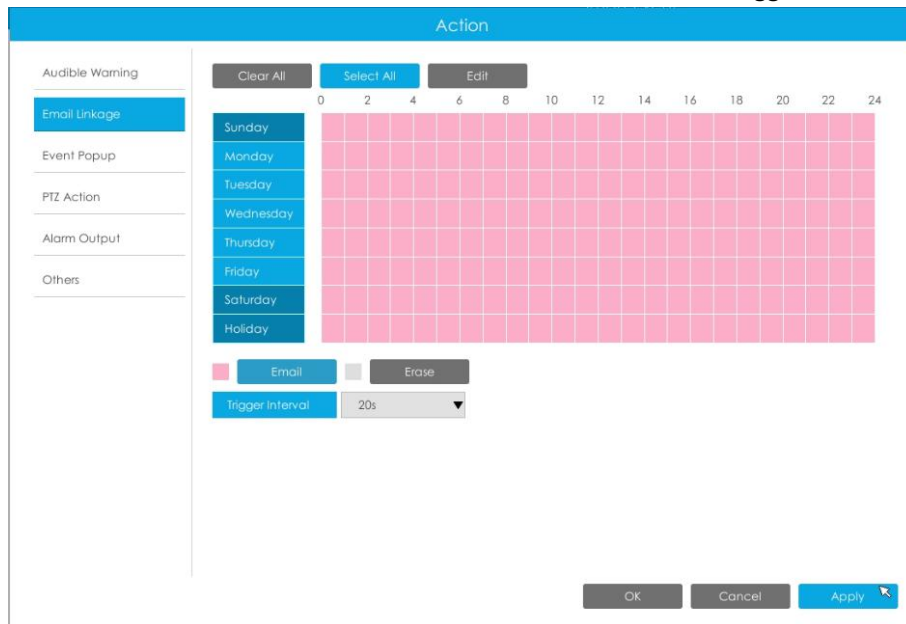
The user can set effective schedule as following two ways:

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  or  to set or clear all

time settings.

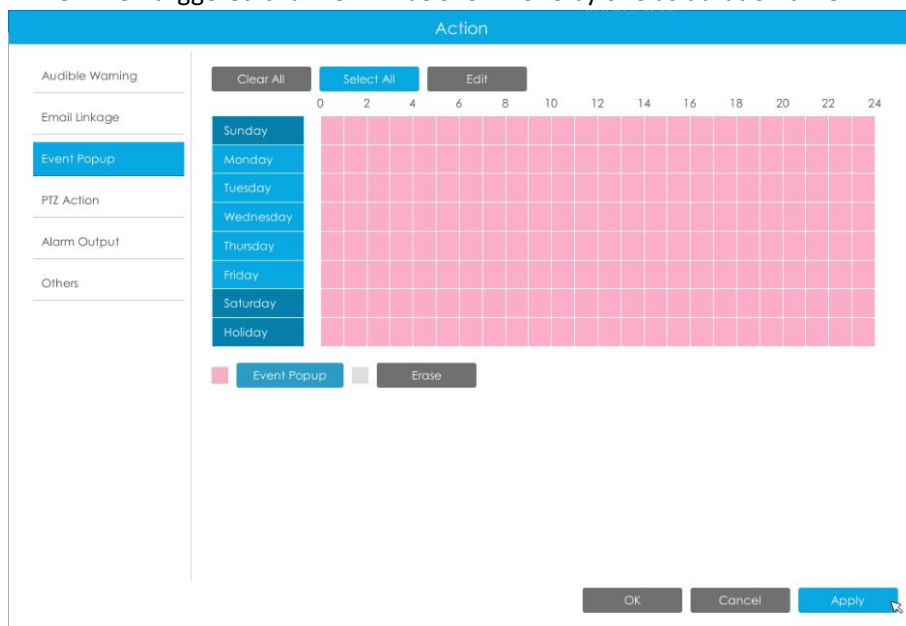
- ② Click **Edit** to edit effective time manually.

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



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

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.



**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.

Action

- Audible Warning
- Email Linkage
- Event Popup
- PTZ Action
- Alarm Output
- Others

Clear All
Select All
Edit

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

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Holiday

PTZErase

| Channel | Action Type | No. | Edit | Delete |
|---------|-------------|-----|------|--------|
| 📄       | -           | -   | -    | -      |
|         |             |     |      |        |
|         |             |     |      |        |
|         |             |     |      |        |

OK Cancel Apply

**Alarm Output:** Trigger alarm output when alarm is triggered.

Action

- Audible Warning
- Email Linkage
- Event Popup
- PTZ Action
- Alarm Output
- Others

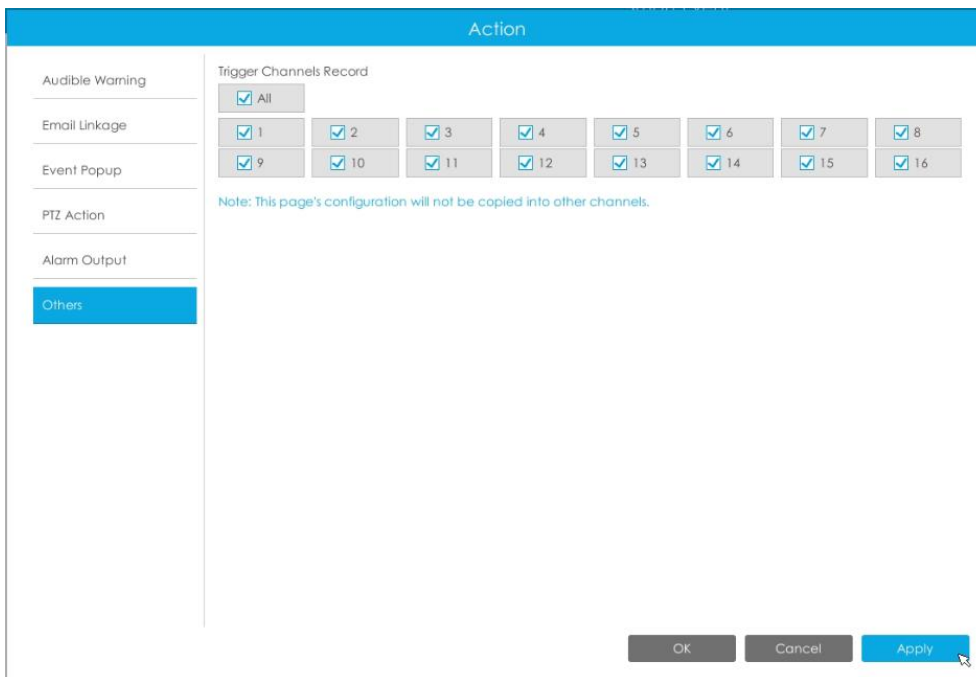
Trigger Alarm Output

All
 

1

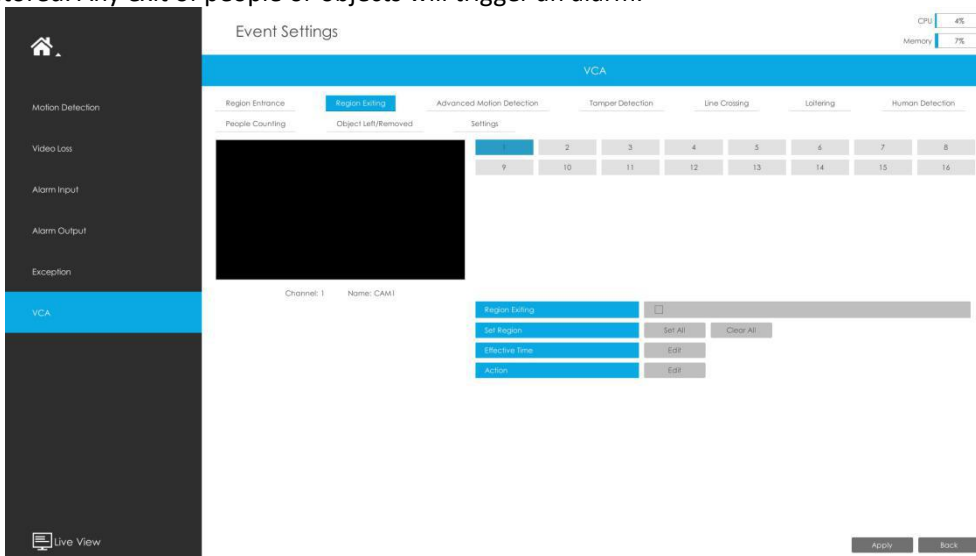
OK Cancel Apply

**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.



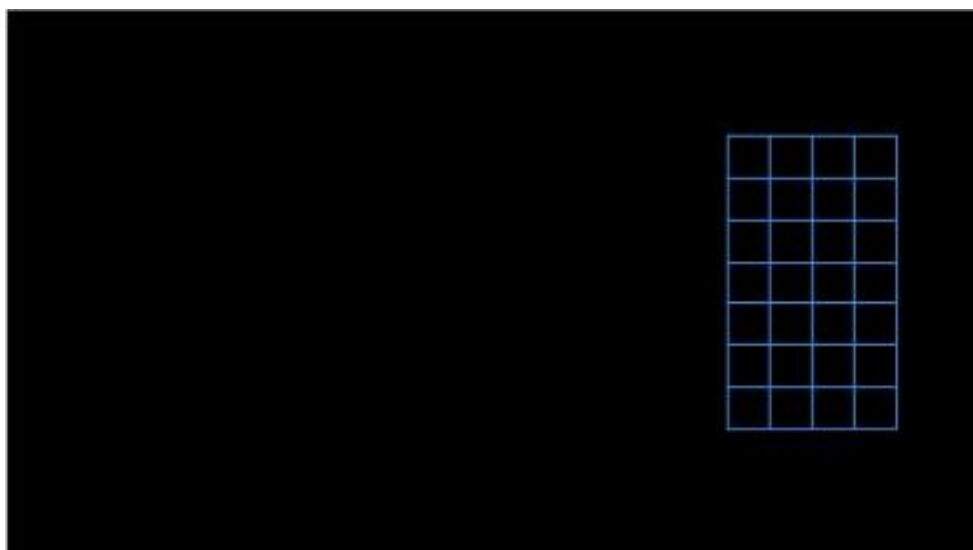
**Step 1. Select channel and enable Region Exiting.**



**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 

or 



Channel: 1

Name: CAM1

**Step 3. 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



or





to set or clear all time settings.



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

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

The user can set effective schedule as following two ways:

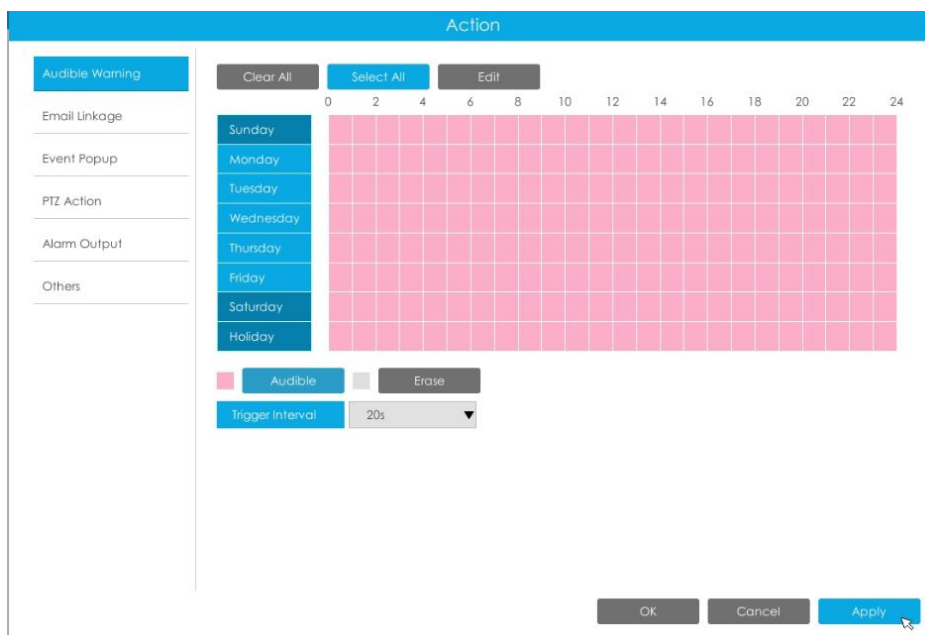
- ① Select the operation type: Audible or Erase. Then drag a square on the time table for time setting, it will be more convenient by clicking  or  to set or clear all



time settings.

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

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



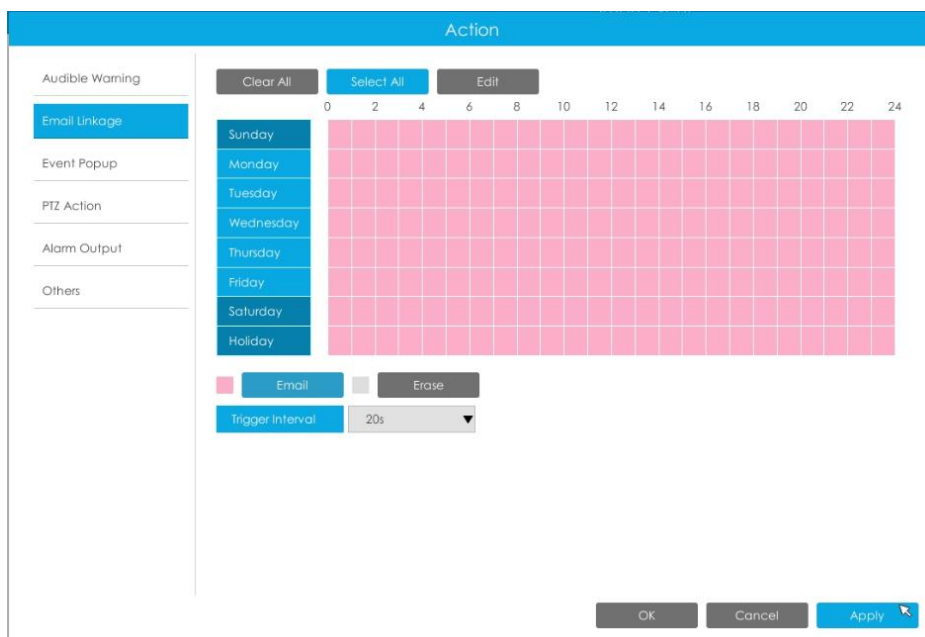
**Email Linkage:** NVR will send an email to the address you set before.

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.

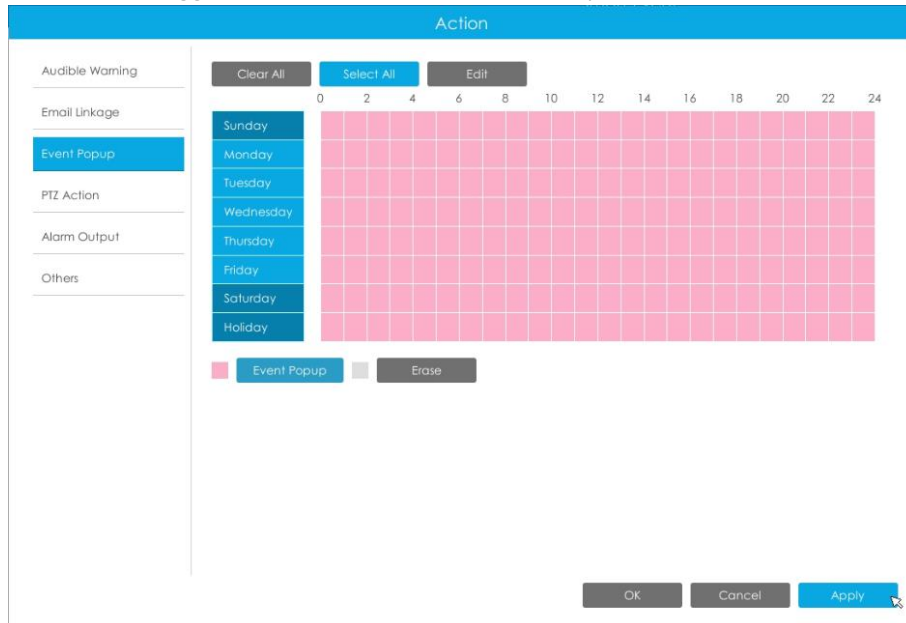
- ② Click **Edit** to edit effective time manually.

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



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

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.

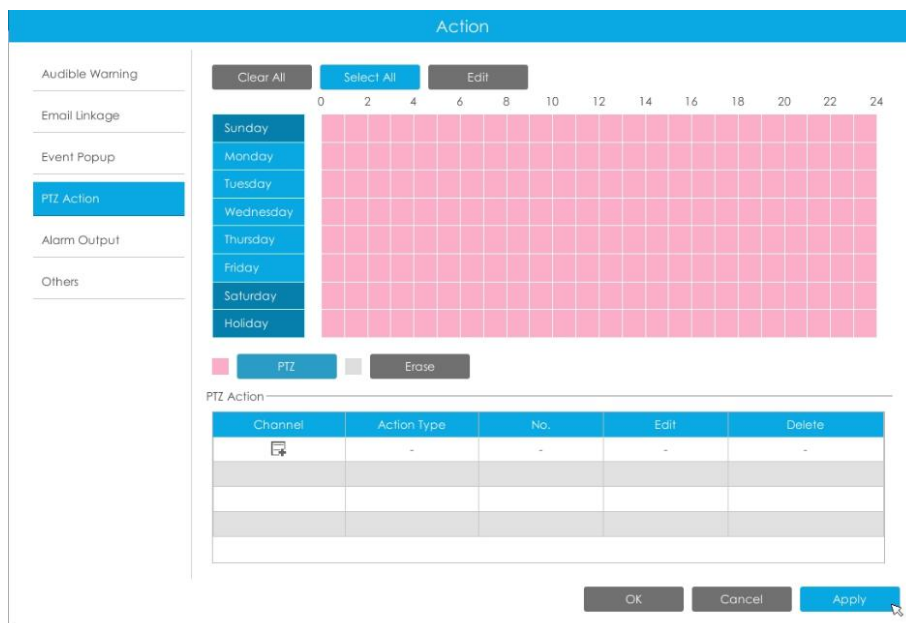


**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

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.



**Alarm Output:** Trigger alarm output when alarm is triggered.

The screenshot shows the 'Action' configuration page. On the left, there is a vertical menu with options: Audible Warning, Email Linkage, Event Popup, PTZ Action, Alarm Output (highlighted in blue), and Others. The main area is titled 'Trigger Alarm Output' and contains two checkboxes: 'All' and '1', both of which are checked. At the bottom right, there are three buttons: 'OK', 'Cancel', and 'Apply'.

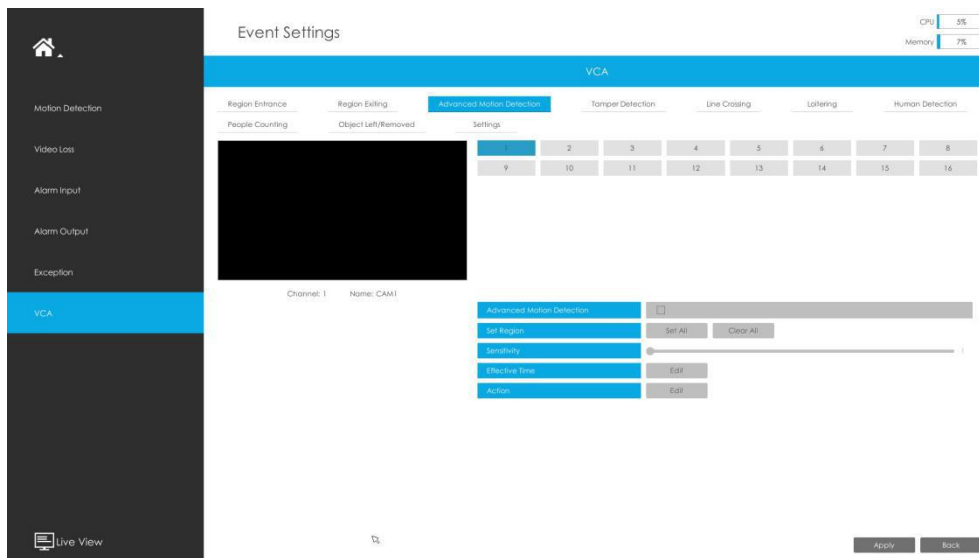
**Others:** Trigger other channels record when alarm is triggered.

The screenshot shows the 'Action' configuration page. On the left, there is a vertical menu with options: Audible Warning, Email Linkage, Event Popup, PTZ Action, Alarm Output, and Others (highlighted in blue). The main area is titled 'Trigger Channels Record' and contains a grid of checkboxes numbered 1 through 16, all of which are checked. There is also an 'All' checkbox at the top left of the grid. Below the grid, there is a note: 'Note: This page's configuration will not be copied into other channels.' At the bottom right, there are three buttons: 'OK', 'Cancel', and 'Apply'.

### 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.

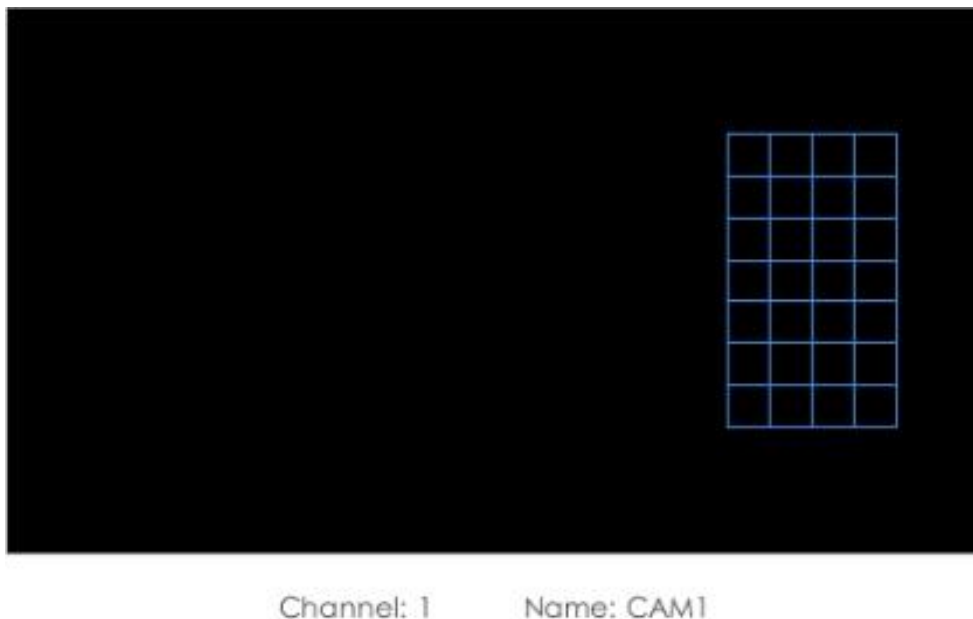
**Step 1. Select channel and enable Advanced Motion Detection.**



### 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** .

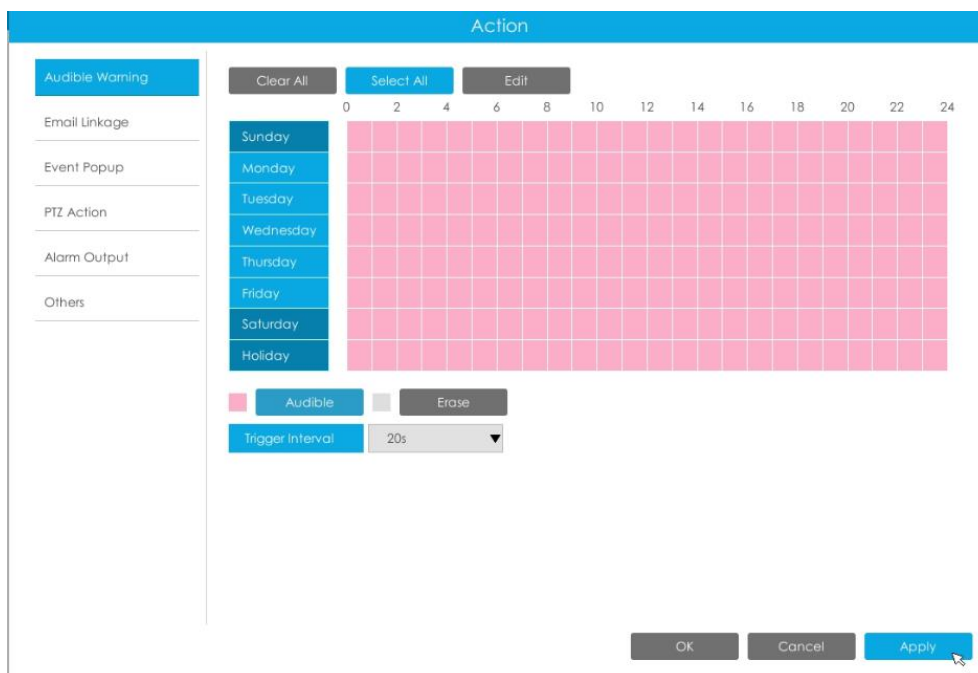
**Audible Warning:** NVR will trigger an audible beep when advanced motion is detected.

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.

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



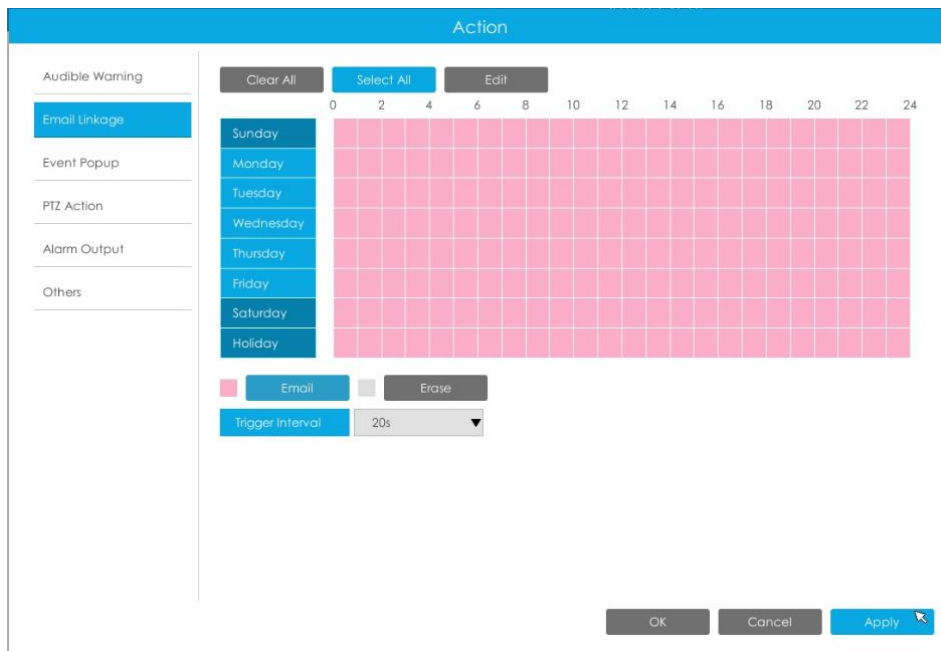
**Email Linkage:** NVR will send an email to the address you set before.

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.

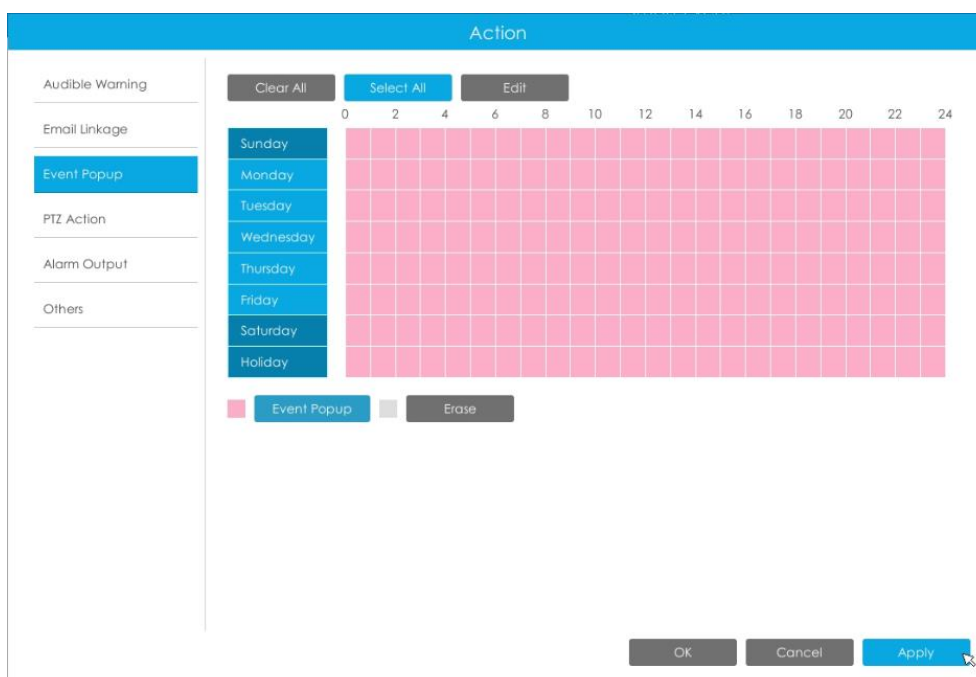
② Click **Edit** to edit effective time manually.

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



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

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.



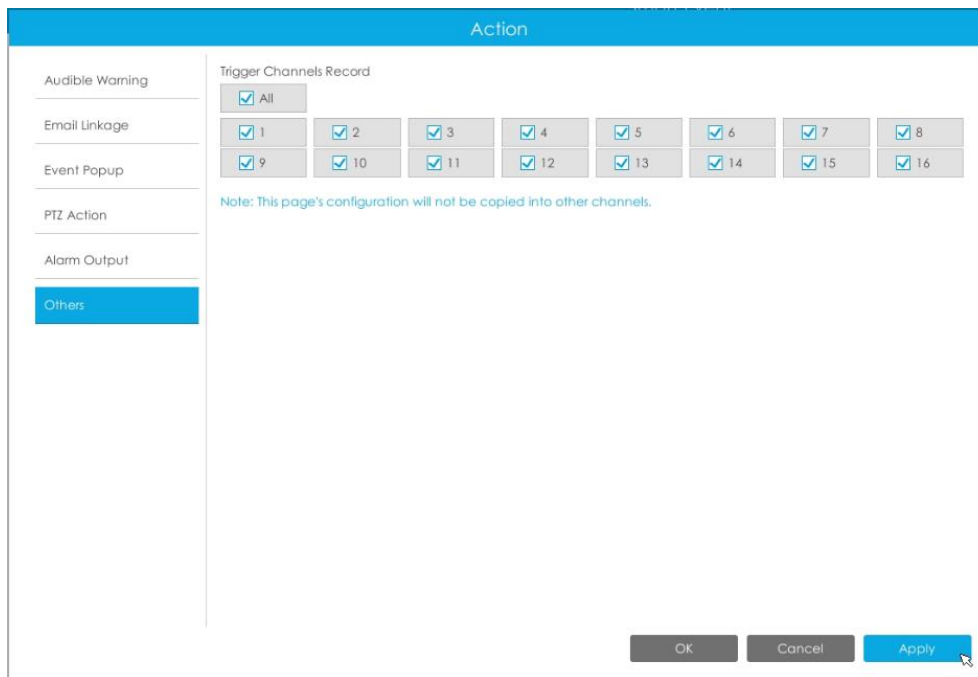
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

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.

**Alarm Output:** Trigger alarm output when alarm is triggered.

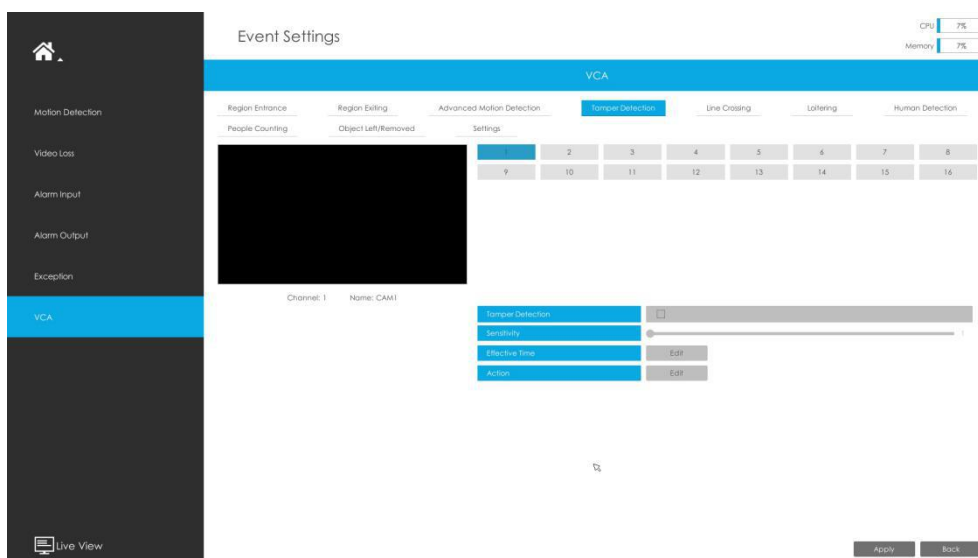
**Others:** Trigger other channels record when alarm is triggered.



### 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** .

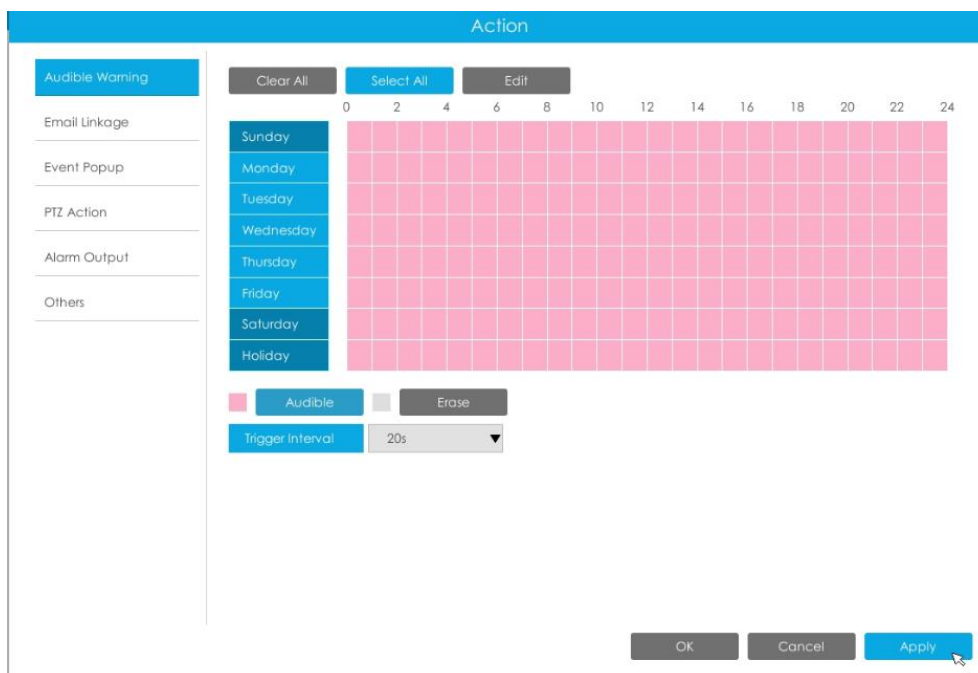
**Audible Warning:** NVR will trigger an audible beep when tamper is detected.

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.

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

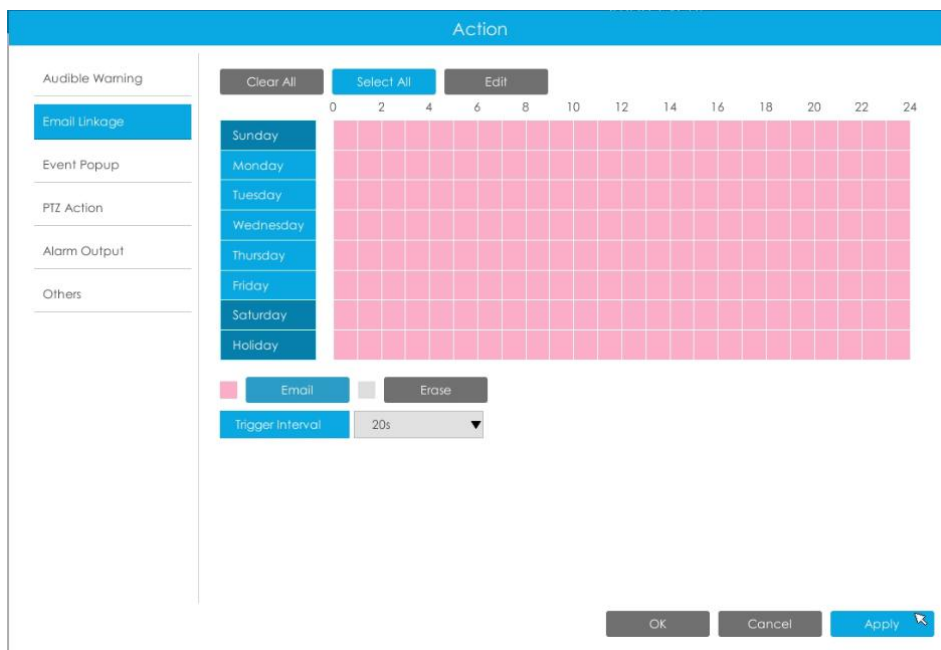


**Email Linkage:** NVR will send an email to the address you set before.

The user can set effective schedule as following two ways:

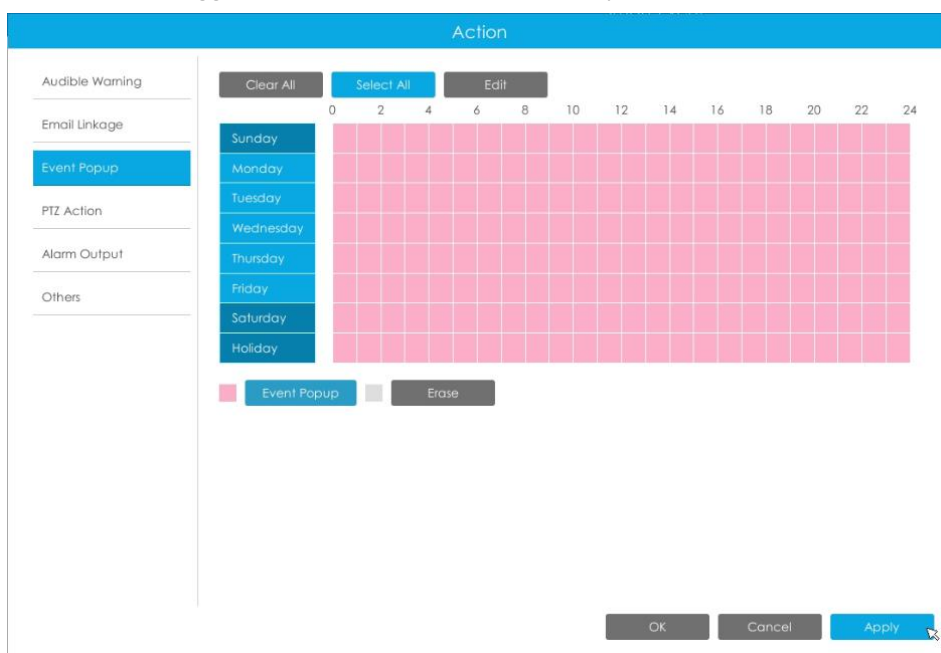
- ① Select the operation type, Email and Erase. Then drag a square on the time table for time setting, it will be more convenient by clicking **Select All** or **Clear All** to set or clear all time settings.
- ② Click **Edit** to edit effective time manually.

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



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

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.



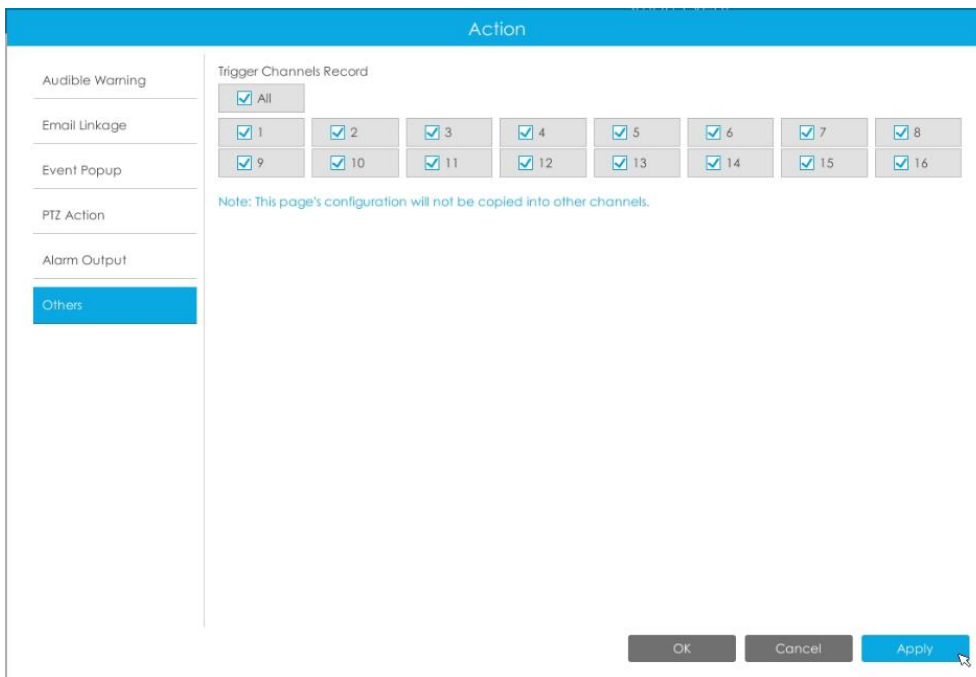
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

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.

**Alarm Output:** Trigger alarm output when alarm is triggered.

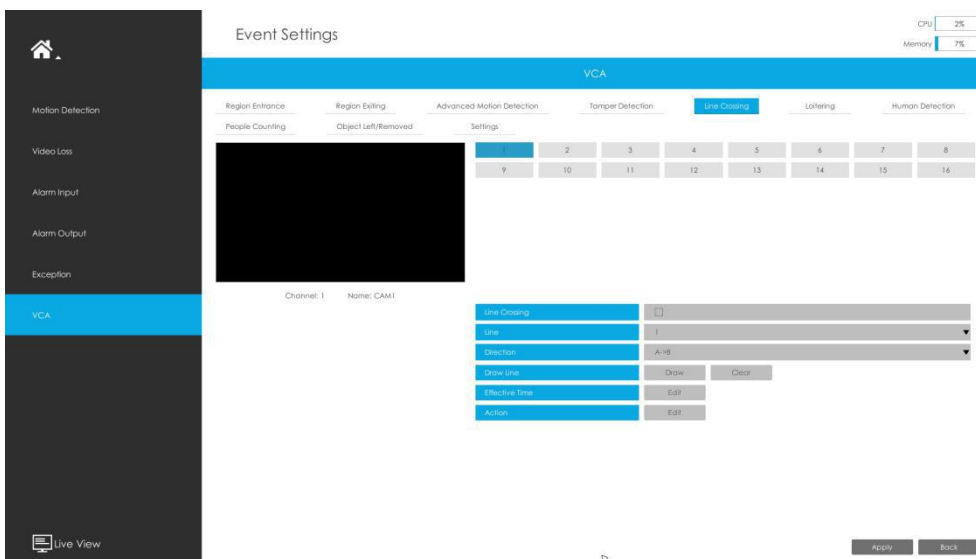
**Others:** Trigger other channels record when alarm is triggered.



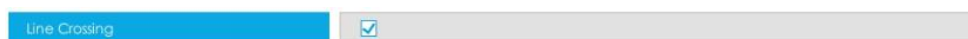
## Line Crossing

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:



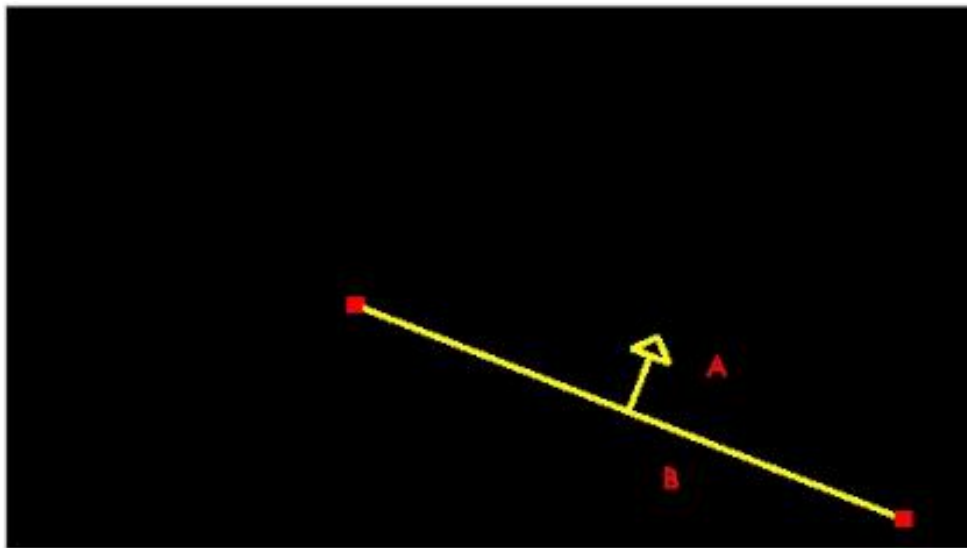
**Step 1. Select channel and enable Line Crossing.**



**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.

|           |      |
|-----------|------|
| Line      | 1    |
| Direction | A->B |

**Step 3. Draw detection lines.**

Channel: 1

Name: CAM1

**Step 4. 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 5. Set Action for line crossing alarm by clicking** Edit.

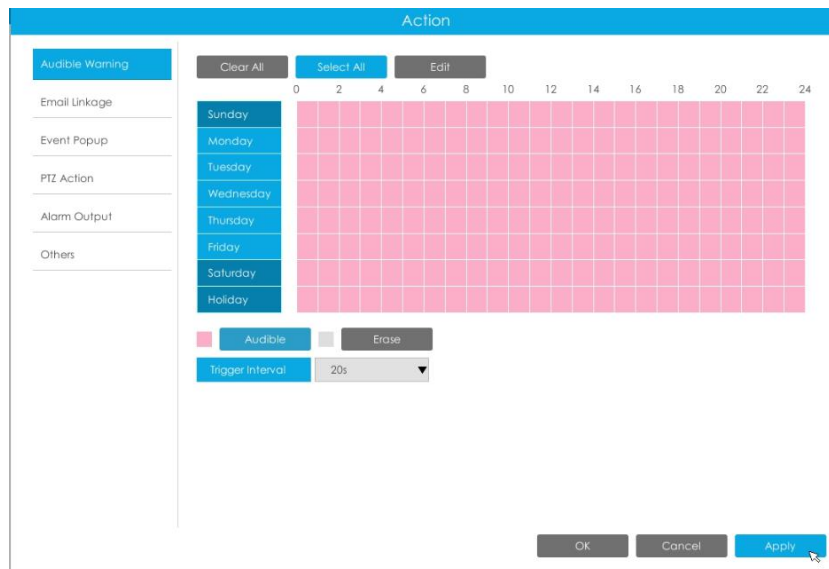
**Audible Warning:** NVR will trigger an audible beep when line crossing is detected.

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.

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



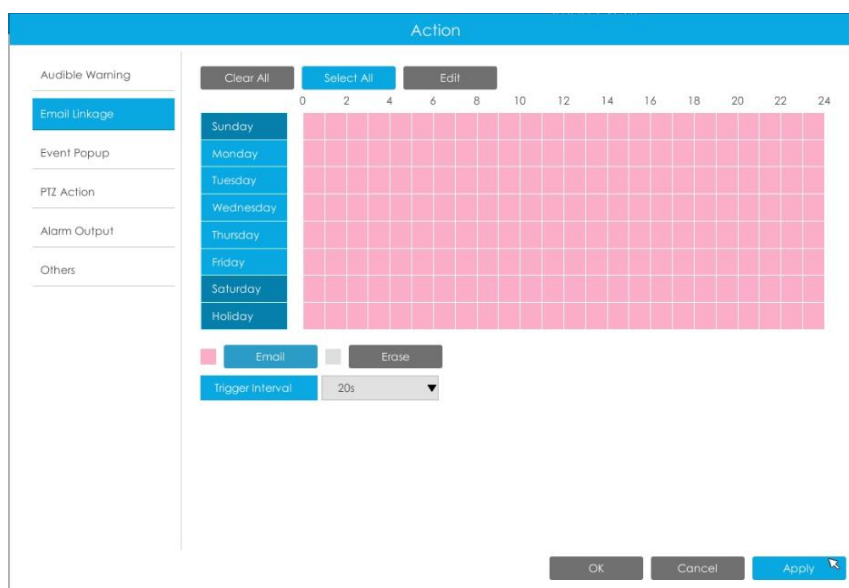
**Email Linkage:** NVR will send an email to the address you set before.

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.

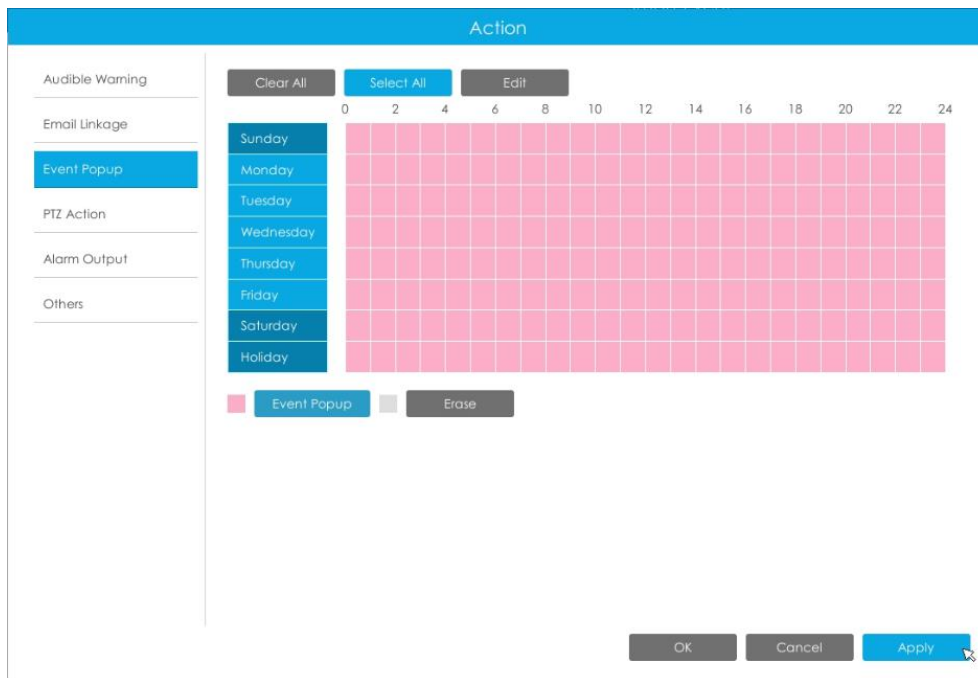
② Click **Edit** to edit effective time manually.

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



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

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.

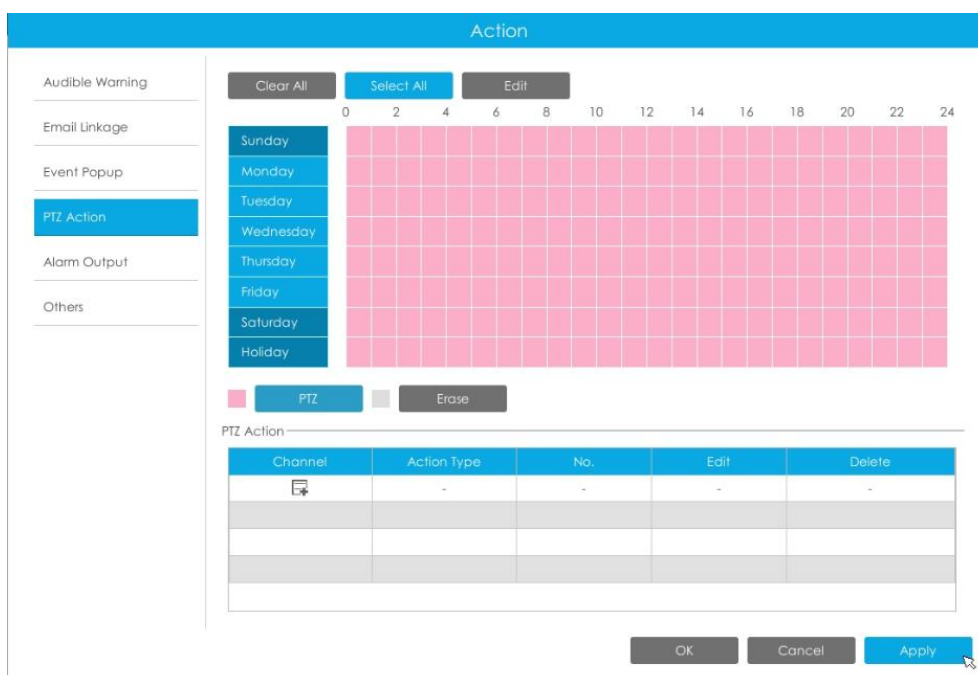


**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

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.



**Alarm Output:** Trigger alarm output when alarm is triggered.

The screenshot shows a configuration window titled "Action". On the left, there is a vertical menu with options: Audible Warning, Email Linkage, Event Popup, PTZ Action, Alarm Output (highlighted in blue), and Others. The main area is titled "Trigger Alarm Output" and contains two checkboxes: "All" and "1", both of which are checked. At the bottom right, there are three buttons: "OK", "Cancel", and "Apply".

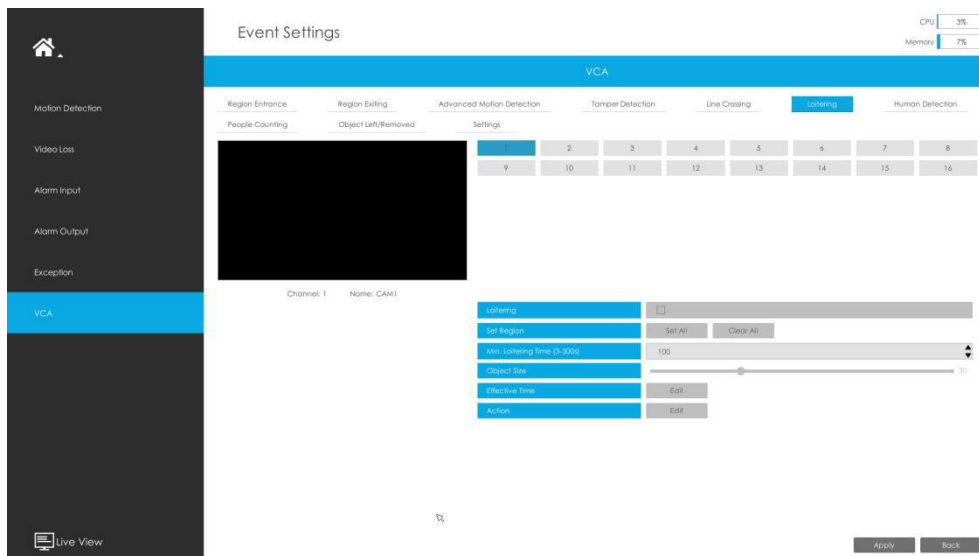
**Others:** Trigger other channels record when alarm is triggered.

The screenshot shows a configuration window titled "Action". On the left, there is a vertical menu with options: Audible Warning, Email Linkage, Event Popup, PTZ Action, Alarm Output, and Others (highlighted in blue). The main area is titled "Trigger Channels Record" and contains a grid of checkboxes numbered 1 through 16, all of which are checked. Above the grid is an "All" checkbox, also checked. Below the grid, there is a note: "Note: This page's configuration will not be copied into other channels." At the bottom right, there are three buttons: "OK", "Cancel", and "Apply".

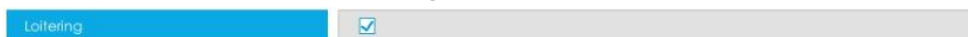
**Loitering**

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





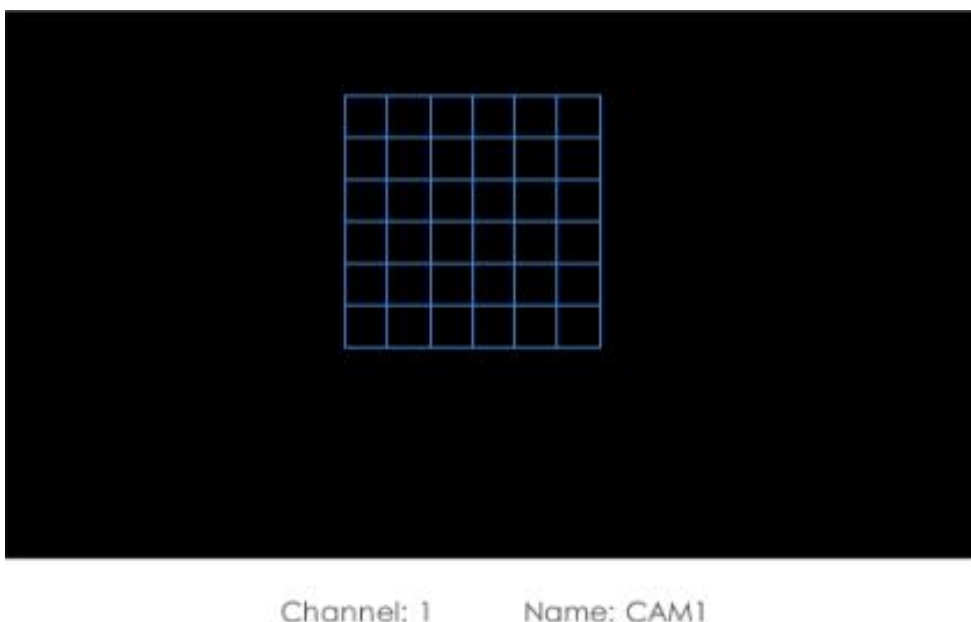
### Step 1. Select channel and enable Loitering.



### 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**.



### 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 loitering 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.

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

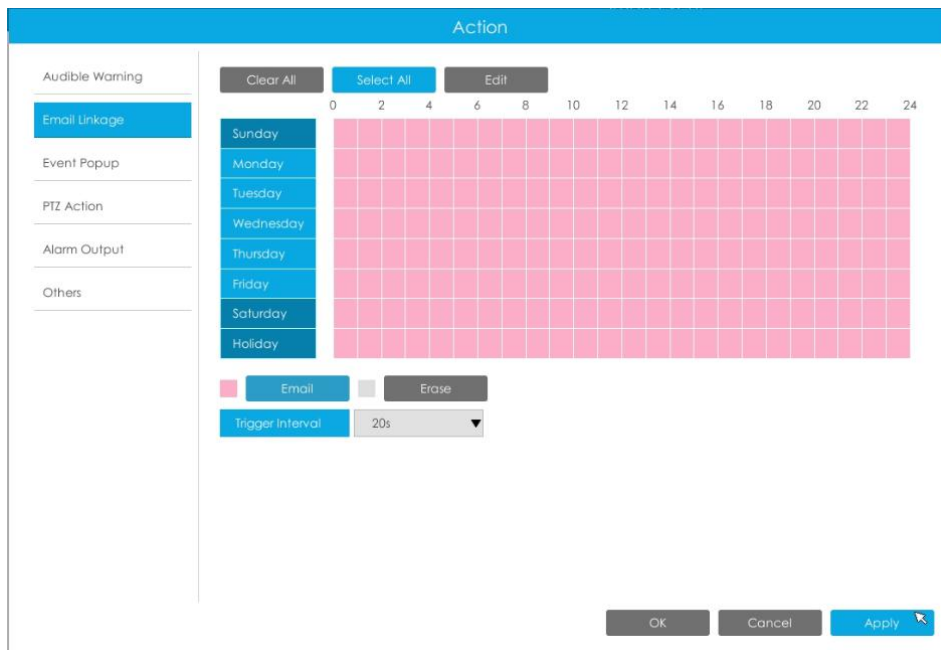
**Email Linkage:** NVR will send an email to the address you set before.

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.

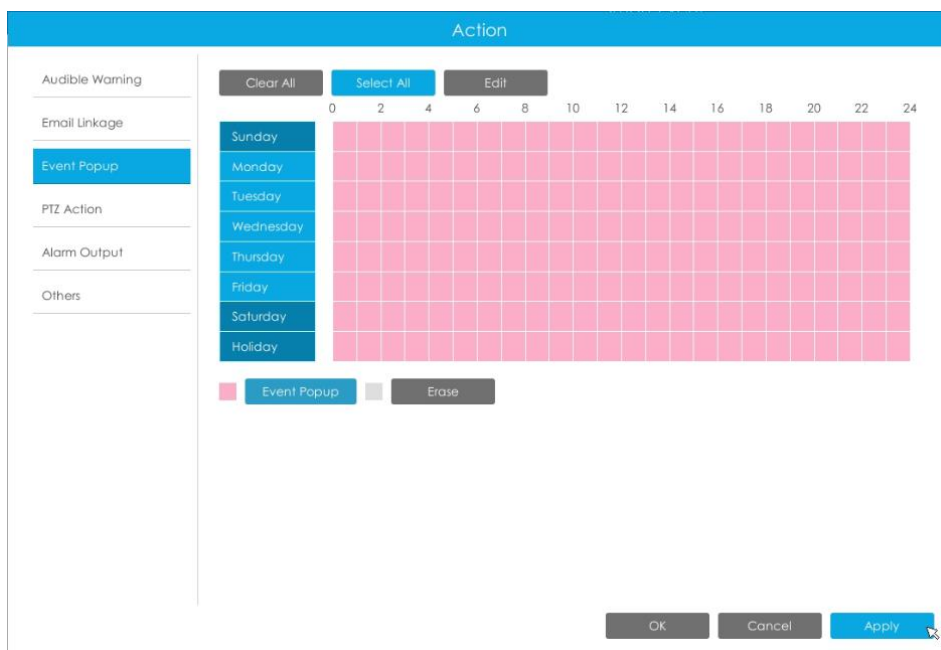
② Click **Edit** to edit effective time manually.

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



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

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.



**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.

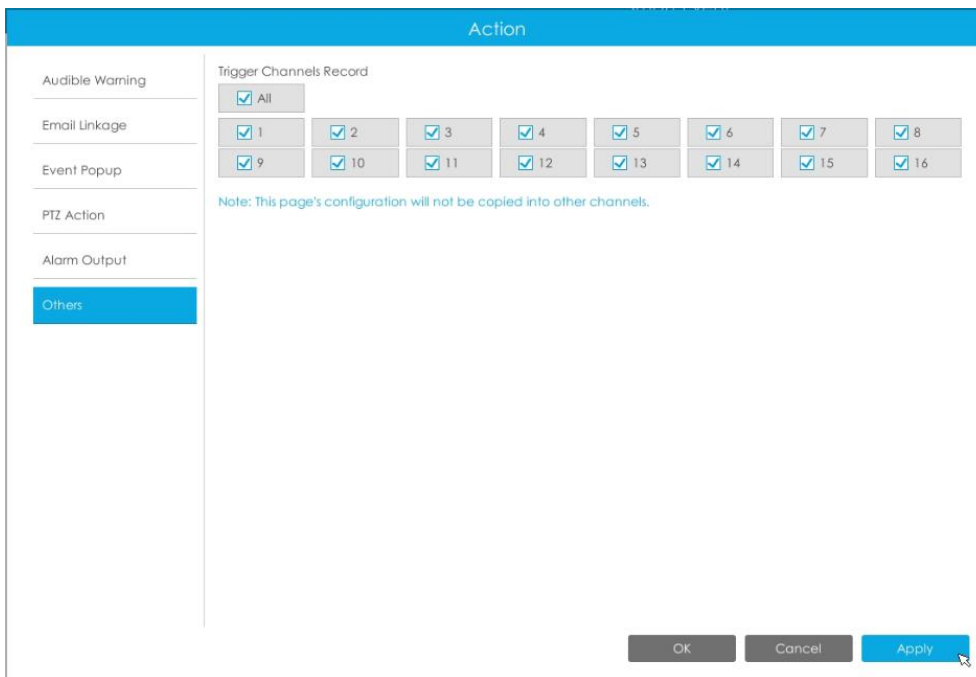
② Click **Edit** to edit record effective time manually.

The screenshot shows the 'Action' configuration window. On the left, a sidebar lists various actions: Audible Warning, Email Linkage, Event Popup, **PTZ Action**, Alarm Output, and Others. The main area features a time table with days of the week (Sunday to Holiday) on the y-axis and hours (0 to 24) on the x-axis. Above the table are buttons for 'Clear All', 'Select All', and 'Edit'. Below the table are buttons for 'PTZ' (highlighted in pink) and 'Erase'. A table titled 'PTZ Action' is shown below, with columns for Channel, Action Type, No., Edit, and Delete. The table contains one row with a minus sign in the Action Type column. At the bottom right, there are 'OK', 'Cancel', and 'Apply' buttons.

**Alarm Output:** Trigger alarm output when alarm is triggered.

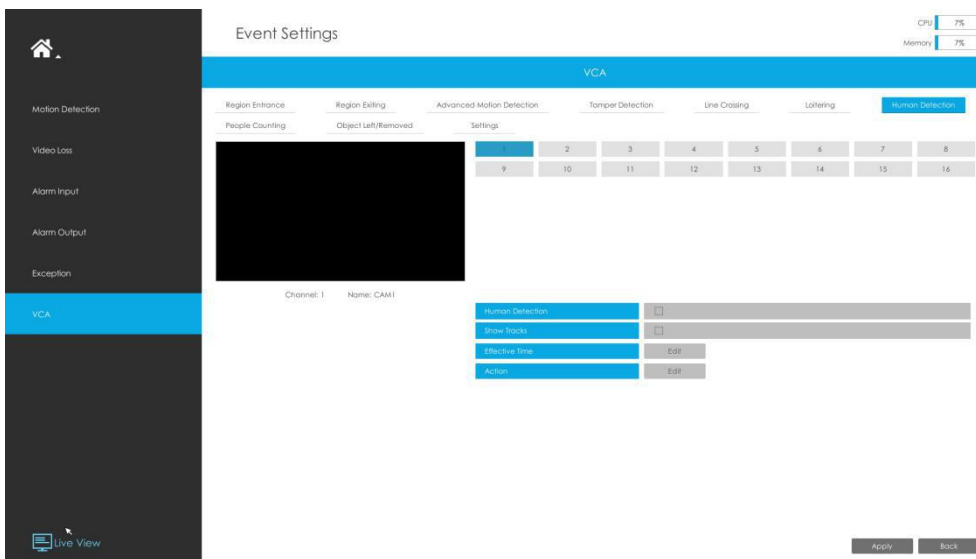
The screenshot shows the 'Action' configuration window with the 'Alarm Output' tab selected in the sidebar. The main area is titled 'Trigger Alarm Output' and contains two checkboxes: 'All' and 'I', both of which are checked. At the bottom right, there are 'OK', 'Cancel', and 'Apply' buttons.

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

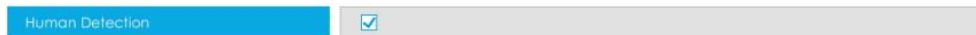


## Human Detection

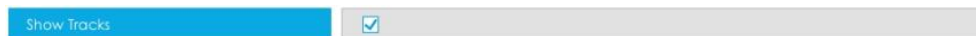
Human detection is used for figuring out whether an object is a human or not.



**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**  **.**

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

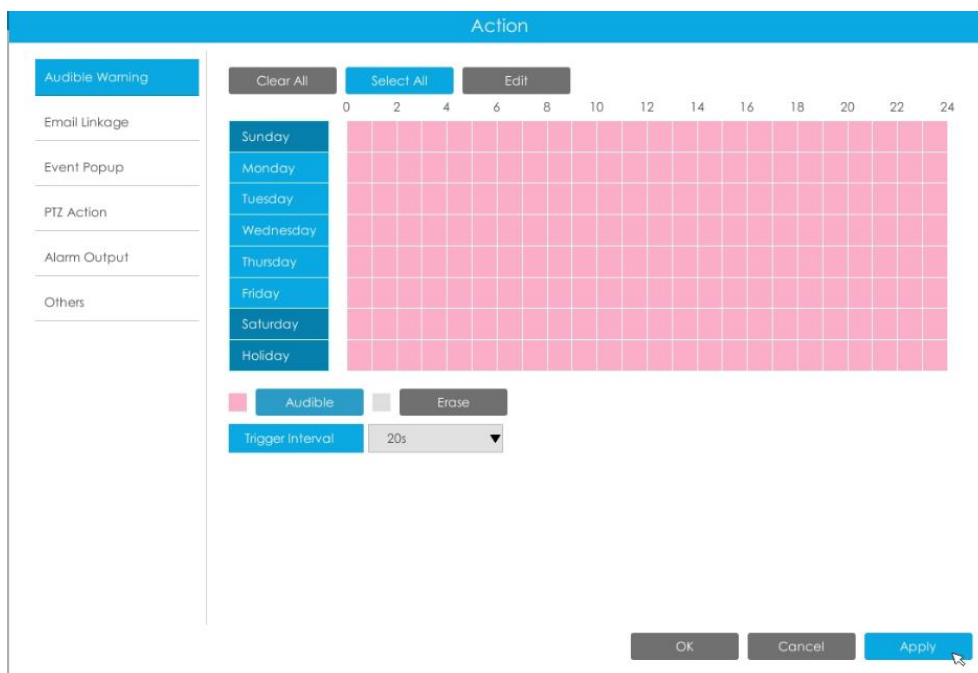
**Audible Warning:** NVR will trigger an audible beep when human is detected.

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  or  to set or clear all time settings.

② Click  to edit record effective time manually.

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



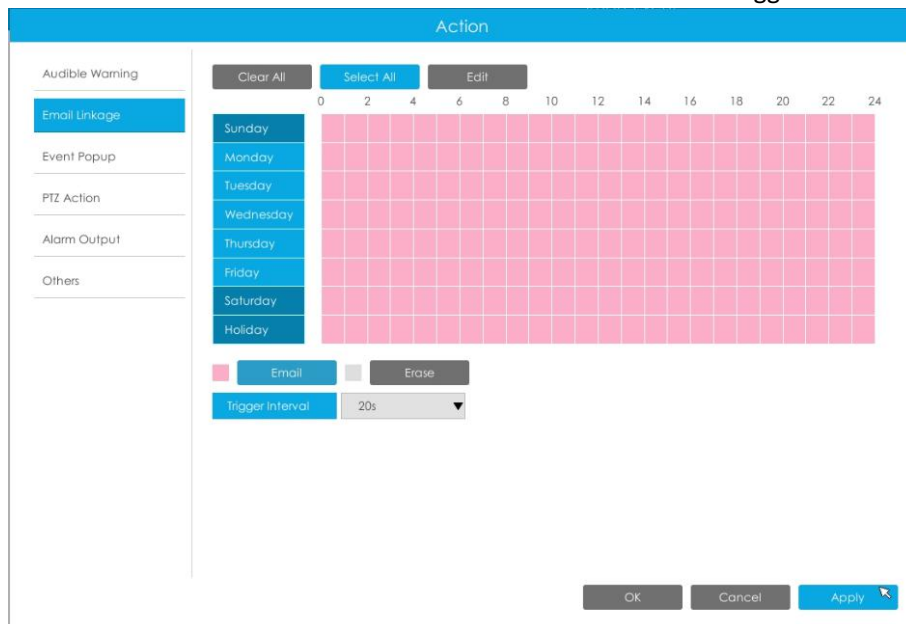
**Email Linkage:** NVR will send an email to the address you set before.

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.

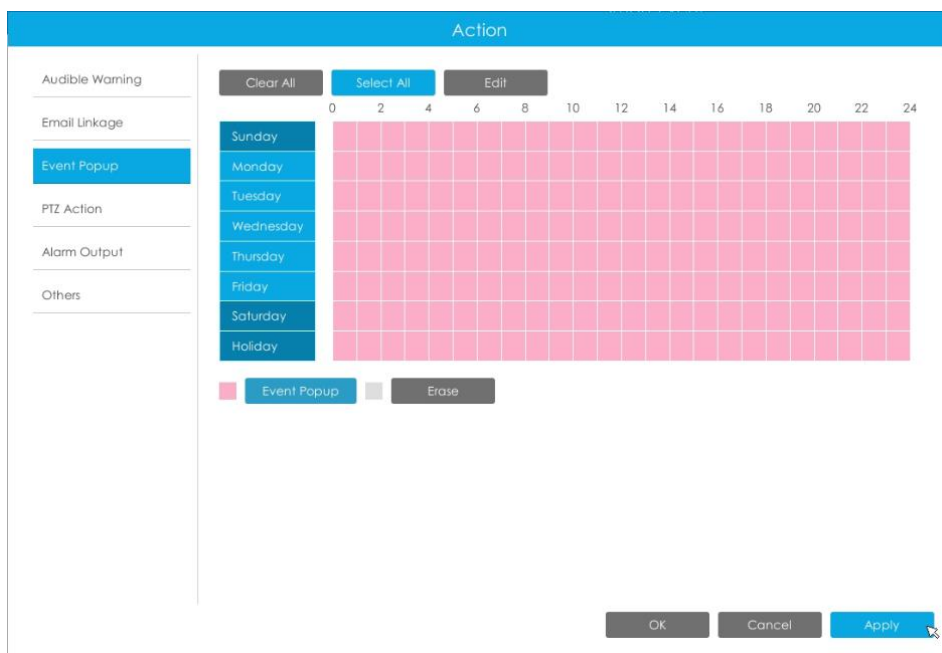
② Click **Edit** to edit effective time manually.

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



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

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.



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

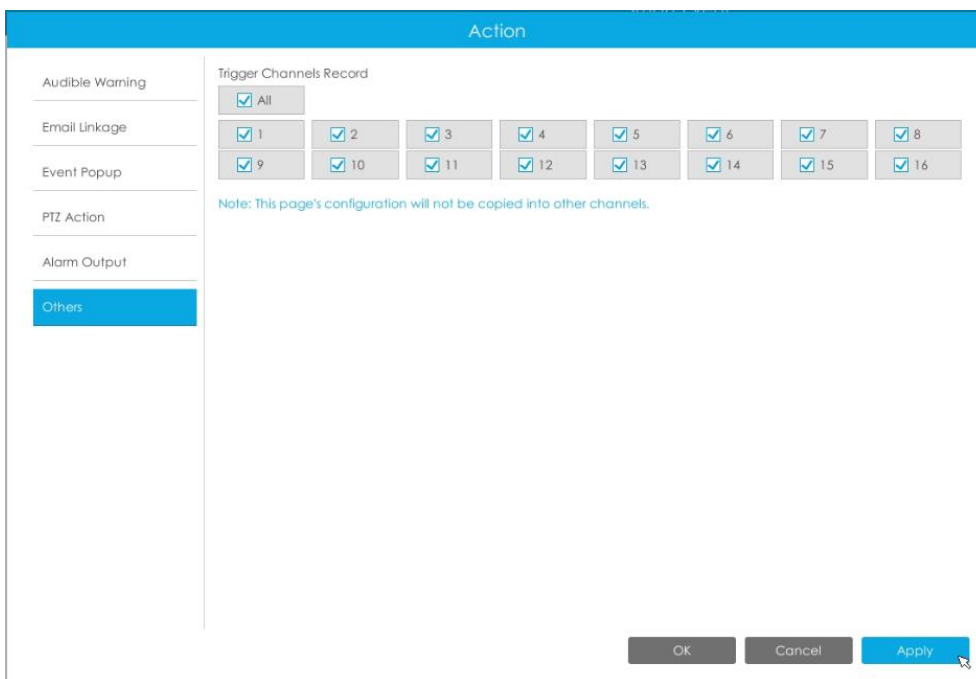
User can set effective schedule as following two ways:

- 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.

**Alarm Output:** Trigger alarm output when alarm is triggered.

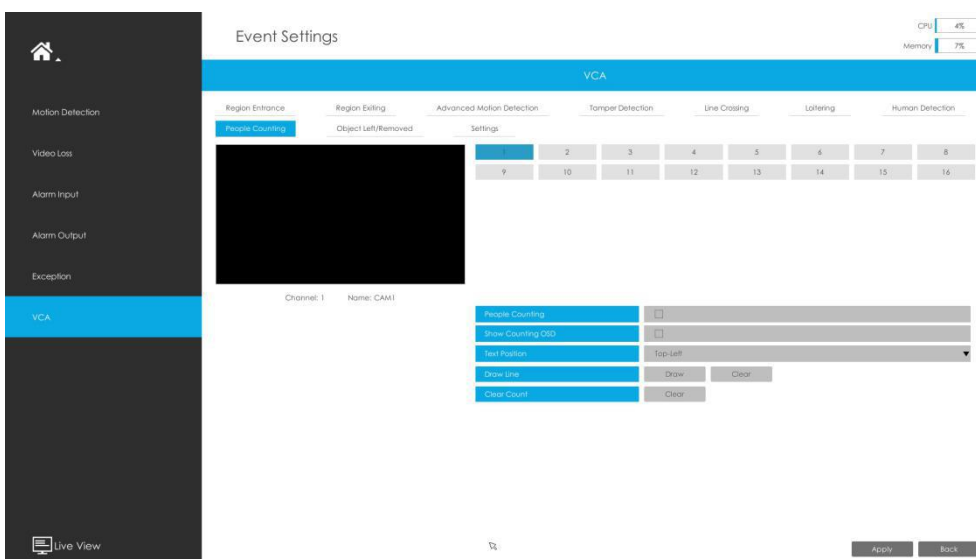
**Others:** Trigger other channels record when alarm is triggered.



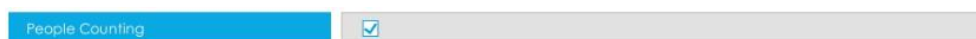


## People Counting

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.**



**Step 2. Set counting OSD.**

It shows the number of counted people, including in and out number.

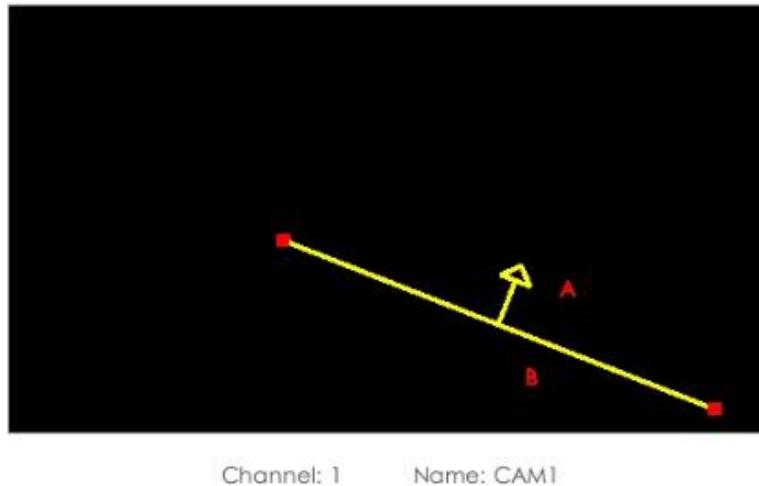
Besides, you can clear count by clicking .

|                   |                                     |
|-------------------|-------------------------------------|
| Show Counting OSD | <input checked="" type="checkbox"/> |
| Text Position     | Top-Left                            |
| Draw Line         | Draw Clear                          |
| Clear Count       | Clear                               |

**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”.

**Step 3. Draw detection line.**



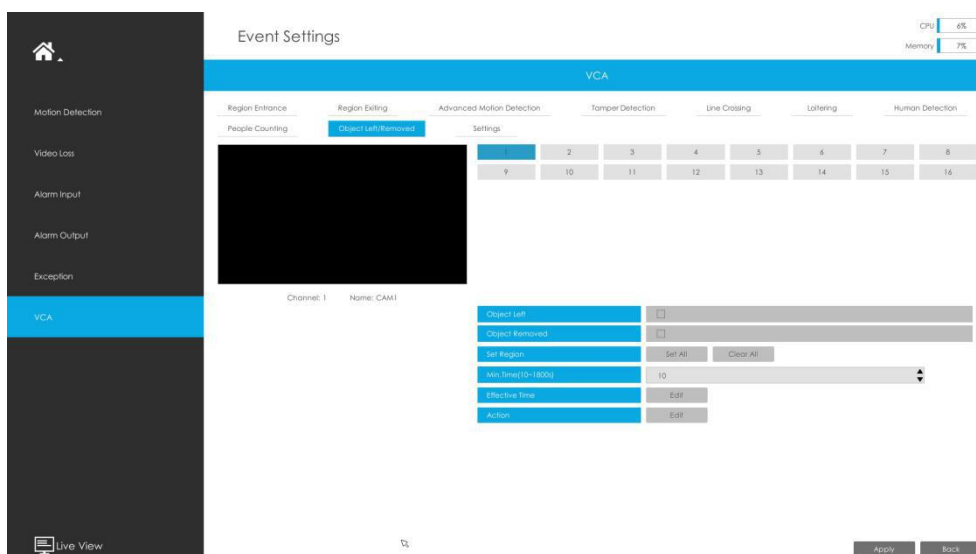
**Object Left/Removed(Optional)**

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:**

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.

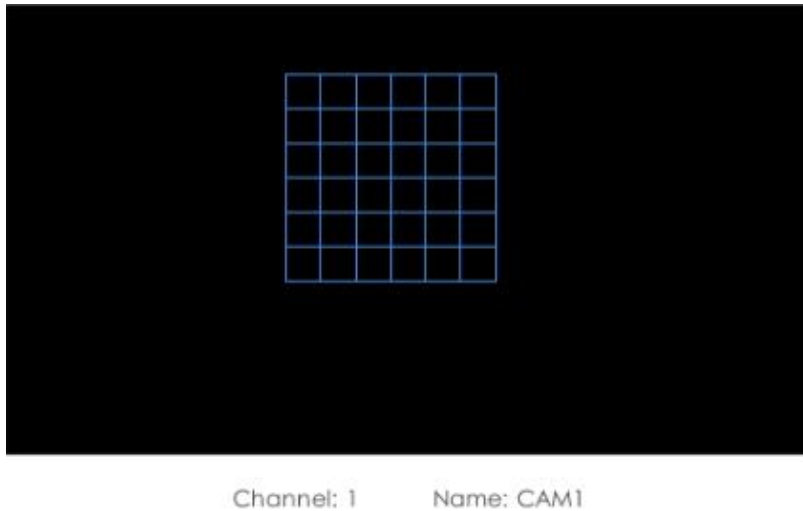
**Step 1. Select channel and enable Object Left or Object Removed(Or you can enable both features at the same time).**



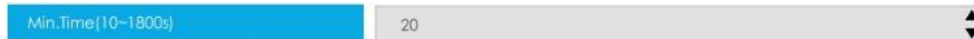
**Step 2. Set detection region.**

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.

**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** .

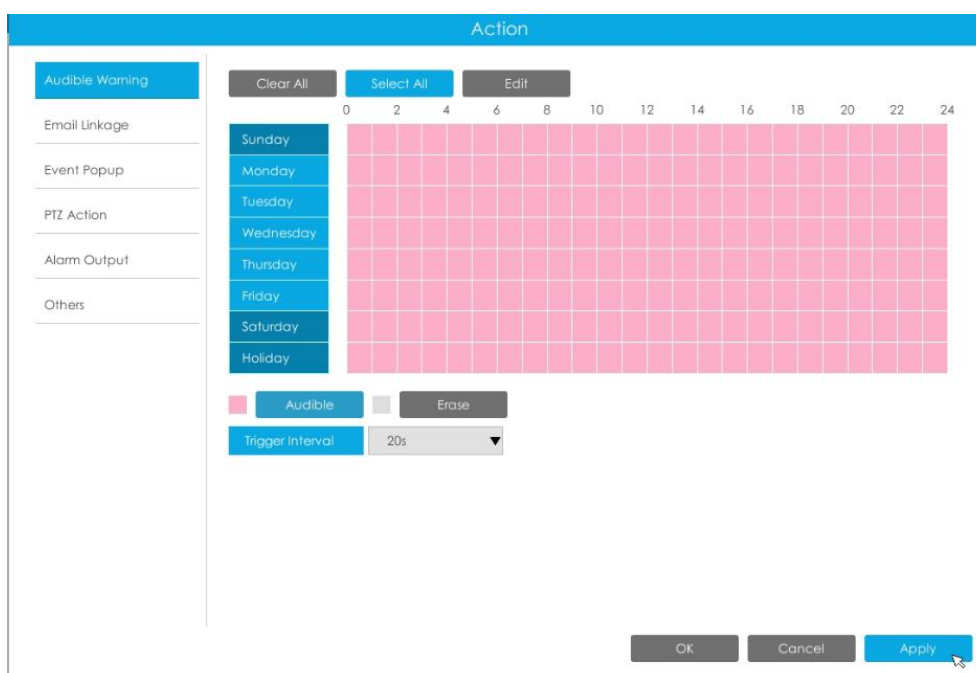
**Audible Warning:** NVR will trigger an audible beep when human is detected.

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  or  to set or clear all time settings.



② Click  to edit record effective time manually.


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



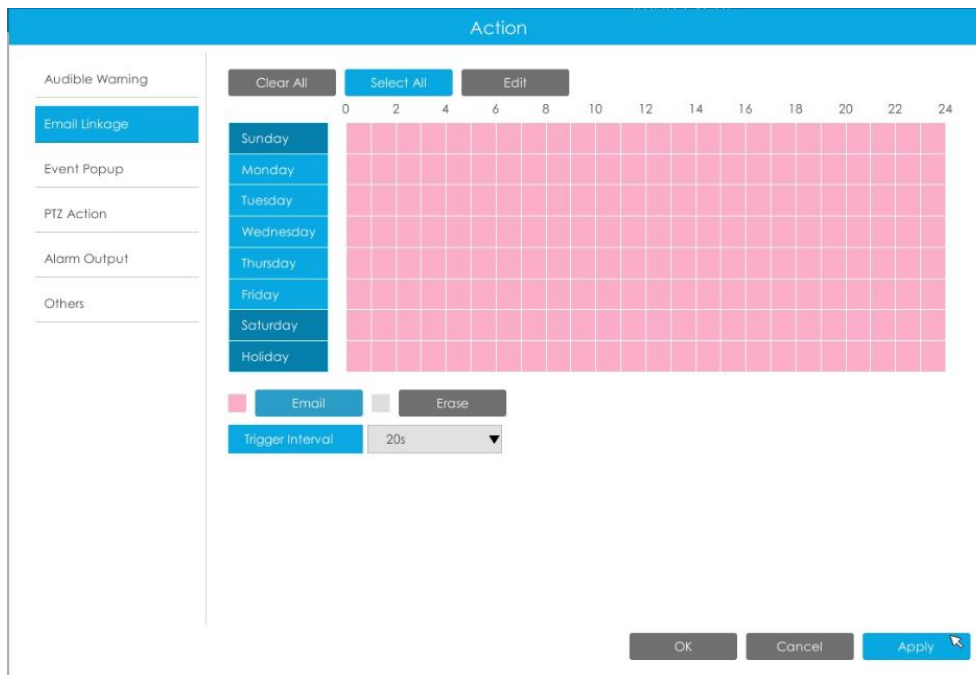
**Email Linkage:** NVR will send an email to the address you set before.

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  or  to set or clear all time settings.

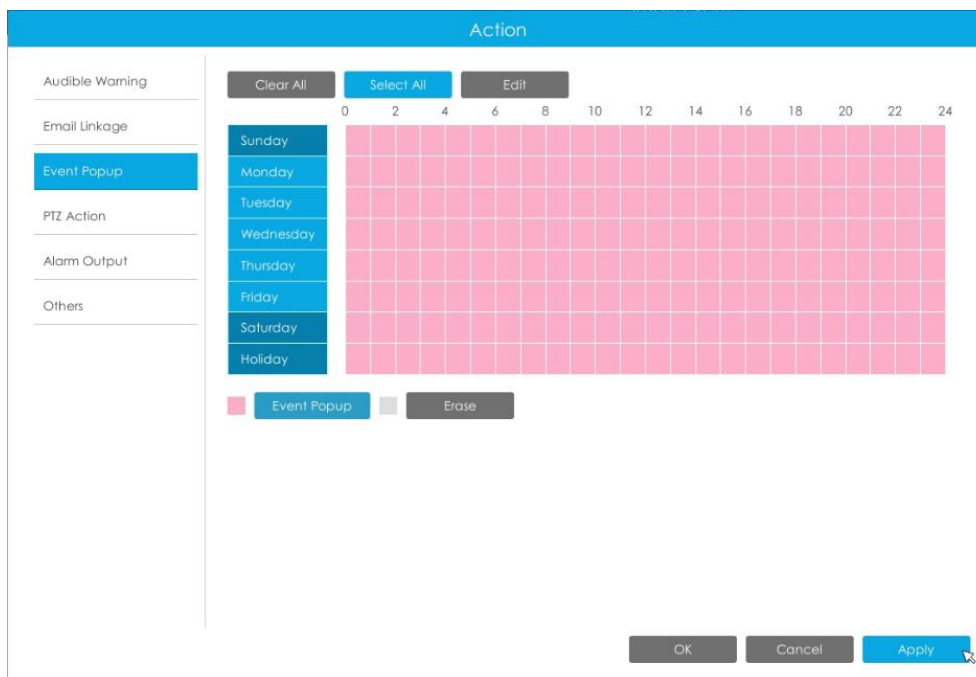
② Click  to edit effective time manually.

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



**Event Popup:** Trigger alarm screen popup to full screen when alarm is triggered.

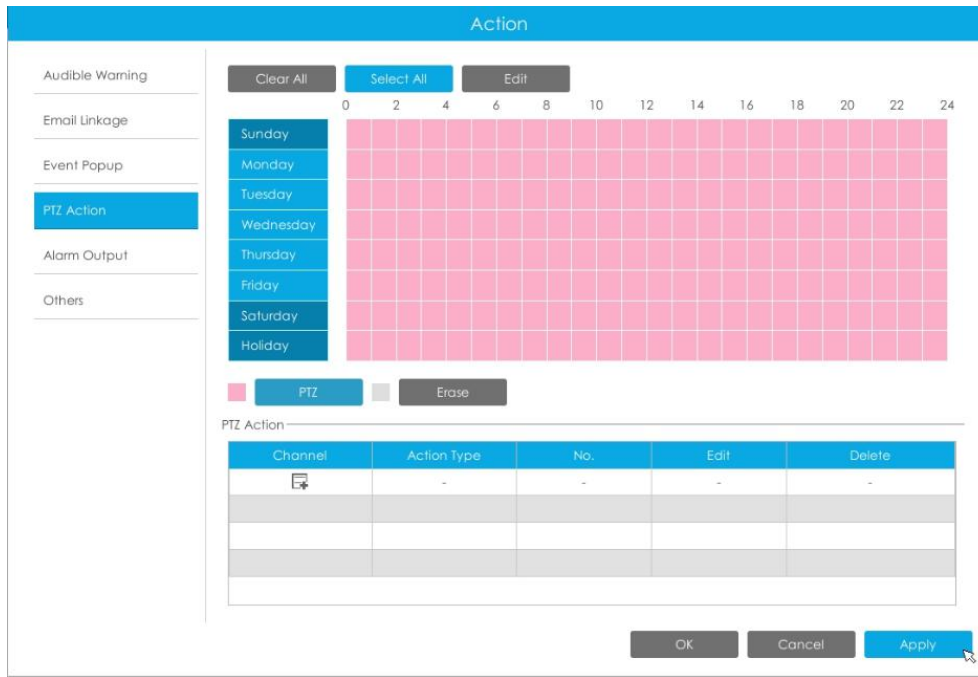
You can set display duration time of all triggered channel in 'Settings'->'General'->'Event Popup Duration Time'. Then triggered channel will be shown one by one as duration time.



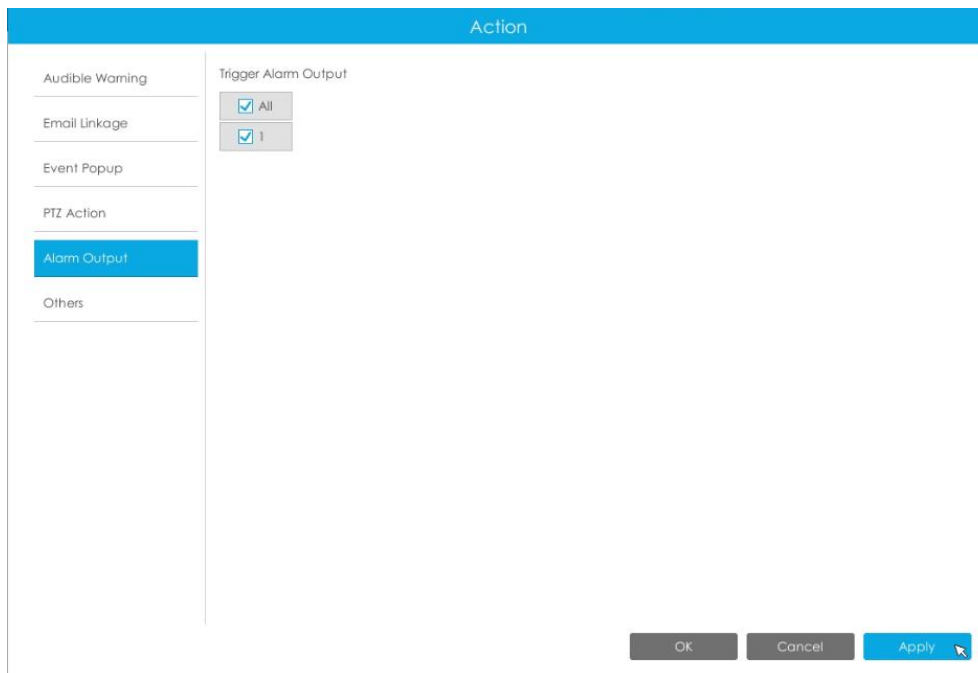
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

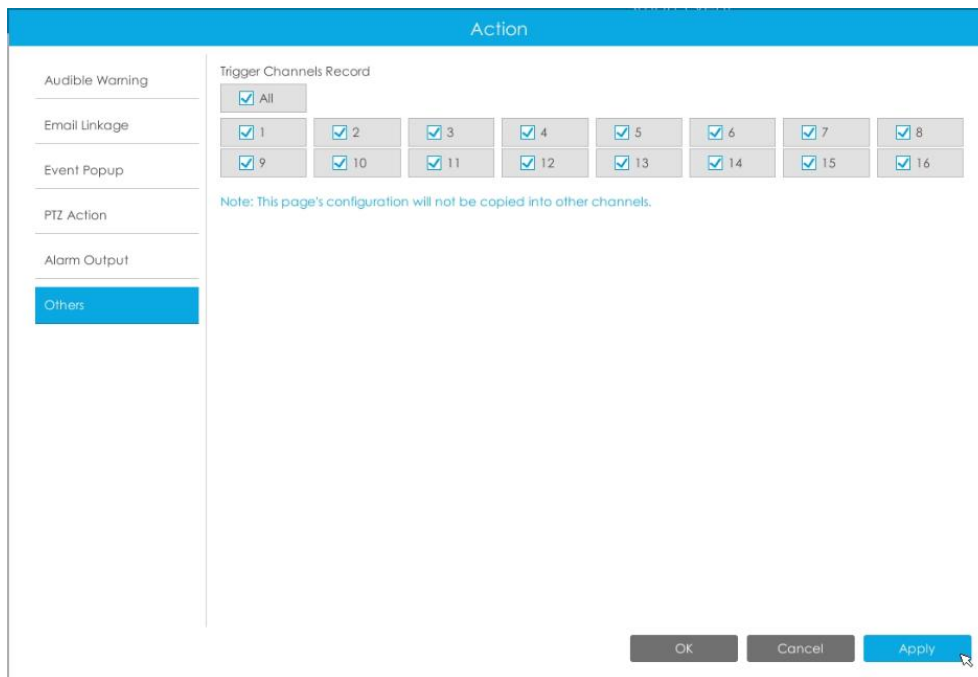
- ① Select the operation type: PTZ or Erase. Then drag a square on the time table for time setting, it will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.
- ② Click **Edit** to edit record effective time manually.



**Alarm Output:** Trigger alarm output when alarm is triggered.



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

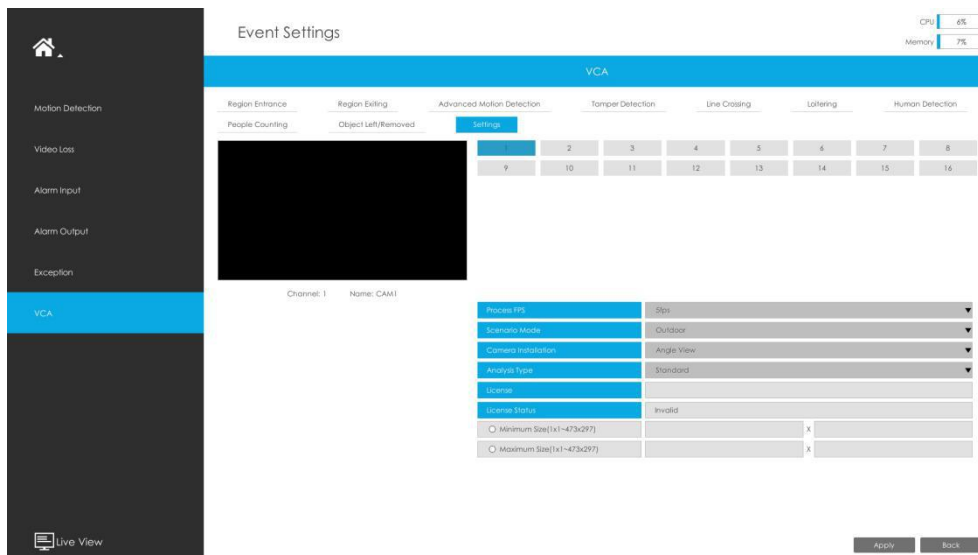


## Settings

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   |
|-------------|--|
| Process FPS | Five different periods are available(5, 10, 15, 20, 25, fps) for process fps |

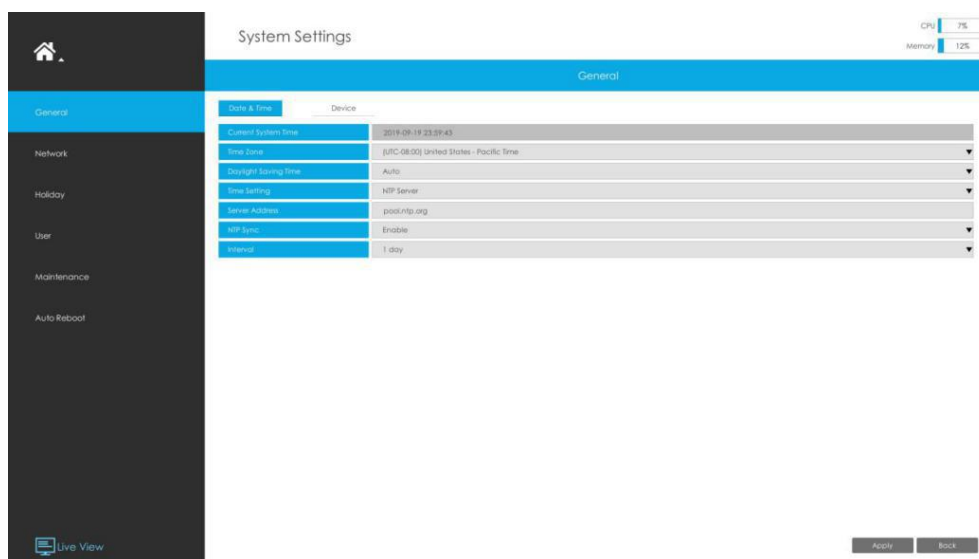
|                            |   |
|----------------------------|---|
| <b>Scenario Mode</b>       | Select <b>Indoor</b> or <b>Outdoor</b> mode to meet your needs                                  |
| <b>Camera Installation</b> | Select camera installation view, including <b>Angle View, Horizontal View 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>              |

## 3.8 Settings

### 3.8.1 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.

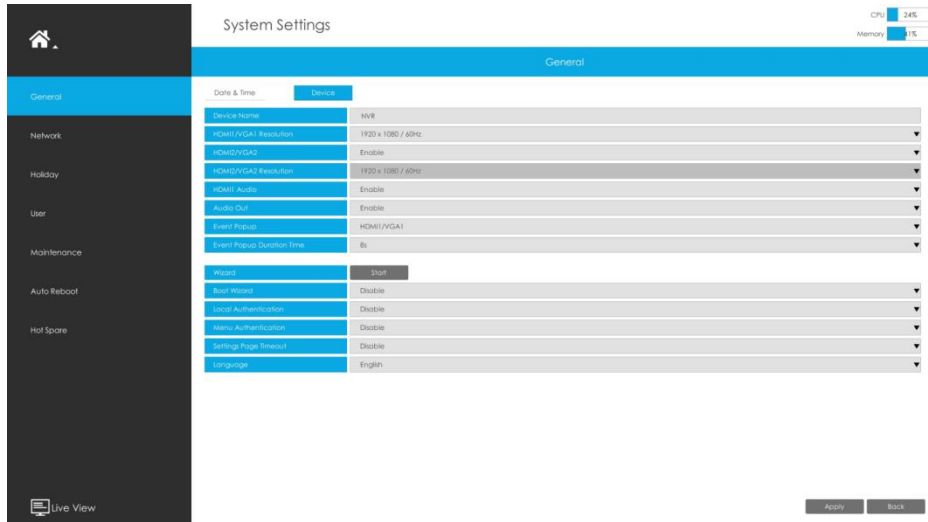
**Boot Wizard:** Enable it to pop up boot wizard after rebooting.



**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 support HDMI2/VGA2 and Event Pop-up options.

## 3.8.2 Network

### 3.8.2.1 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.

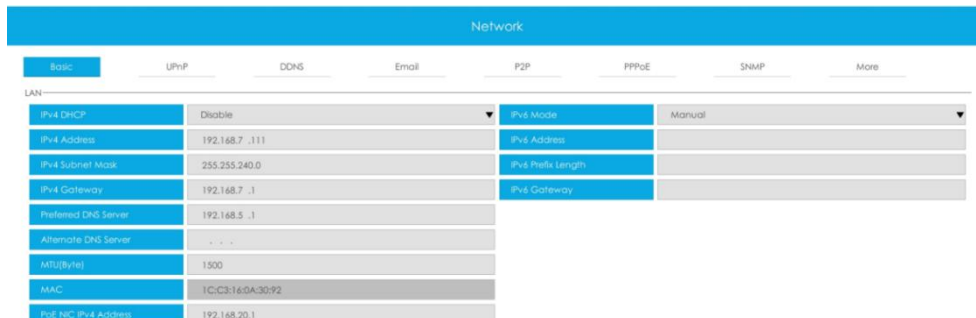
**IPv6**

Manual/ Router Advertisement/ DHCPv6 are available.

**DNS Server**

Preferred DNS Server: DNS server IP address.

Alternate DNS Server: DNS server alternate address.

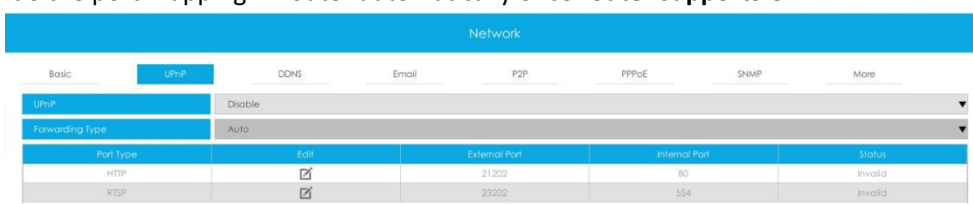


**Note:**

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.

### 3.8.2.2 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**.



### 3.8.2.3 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.



### 3.8.2.4 Email

A screenshot will be sent to the receivers when alarm is triggered.

**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.

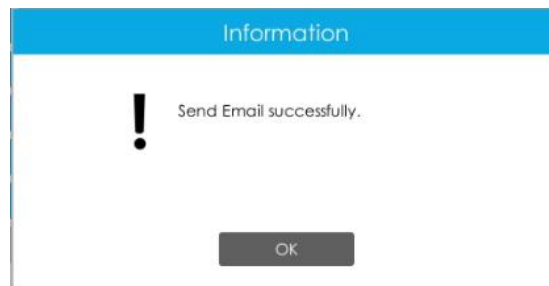
**Sender Email Address:** It must be same as [User name].

**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.

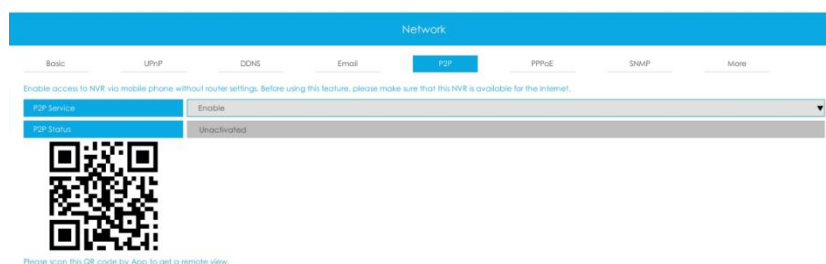
### 3.8.2.5 P2P

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:

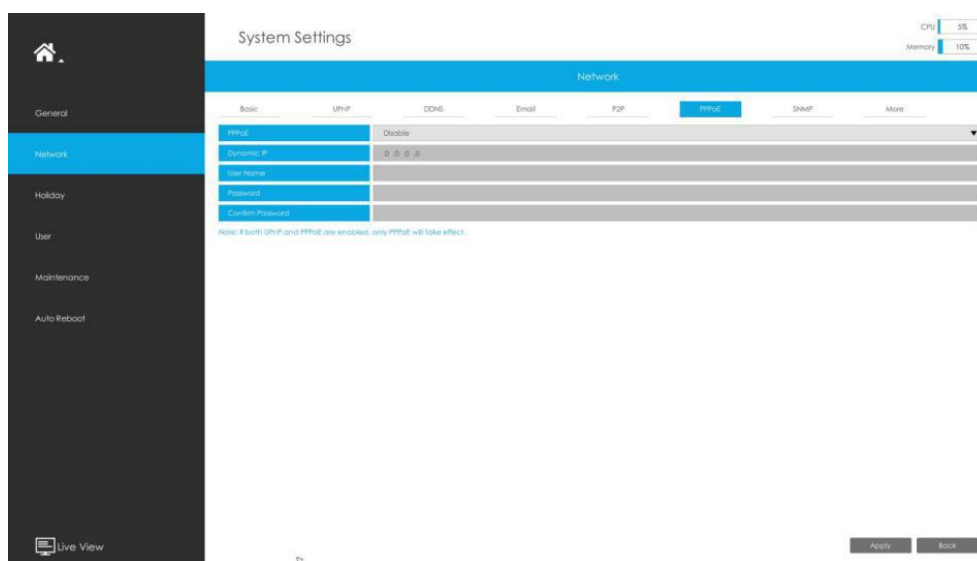
| P2P Status                    | Description                                      |
|-------------------------------|--|
| Network unavailable           | Failed to connect with internet                  |
| Authentication request failed | Failed to authenticate P2P encryption            |
| No idle 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.

### 3.8.2.6 PPPoE

PPPoE combines PPP protocol with Ethernet, by which Ethernet hosts can connect to a remote access concentrator via a simple bridging device.



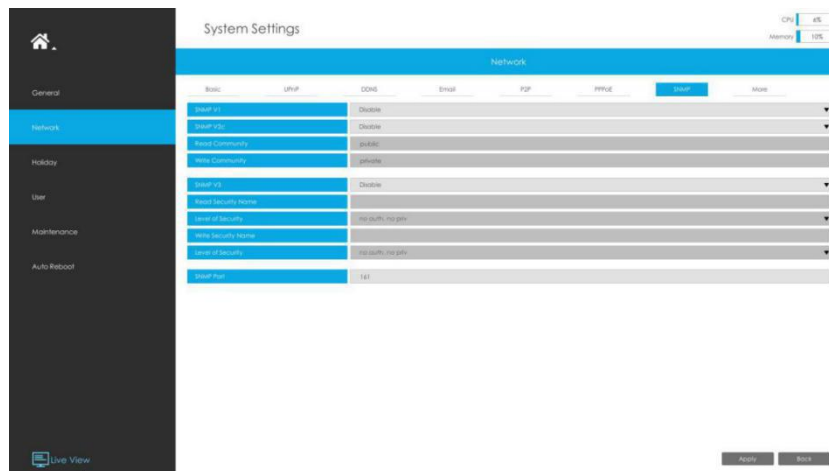
**Note:**

If both UPnP and PPPoE are enabled, only PPPoE will take effect.

### 3.8.2.7 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.



**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.

### 3.8.2.8 More



**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 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 this option.

**Push Event Type**

Select which alarm type will be pushed to APP M-sight Pro. It includes Motion Detection, Video Loss, Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering and Human Detection.

### 3.8.3 Holiday

It can configure the record or image capture schedule for holidays of the current year.

System Settings

CPU 35%  
Memory 10%

Holiday

| 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"/> |

Back

Click  to edit holiday information, including Holiday Name, Holiday Enable, Style, Start Date and End Date. Then click  to save the configuration.

Holiday Edit

|              |  |     |
|--------------|--|-----|
| Holiday Name | Holiday                                    |     |
| Holiday      | <input checked="" type="checkbox"/> Enable |     |
| Style        | By Month ▼                                 |     |
| Start Date   | January ▼                                  | 1 ▼ |
| End Date     | February ▼                                 | 1 ▼ |

\* Holiday schedule takes precedence over other schedules.

### 3.8.4 User

System Settings

CPU 46%  
Memory 10%

User

| ID | User Name | User Level | Edit Login | Edit Password            | Delete |
|----|-----------|------------|------------|--------------------------|--------|
| 1  | admin     | Admin      | -          | <input type="checkbox"/> | -      |

Add Back

**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.

The 'Add User' dialog box has a blue header with the title 'Add User'. Below the header are five input fields, each with a blue label on the left and a gray input area on the right. The fields are: 'Admin Password' with a masked password '.....'; 'User Name' with the text 'qq'; 'Password' with a masked password '.....'; 'Confirm' with a masked password '.....'; and 'User Level' with a dropdown menu showing 'Operator'. At the bottom of the dialog are two buttons: a blue 'OK' button and a gray 'Cancel' button.

**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.

The 'Edit Limits' dialog box has a blue header with the title 'Edit Limits'. Below the header are two tabs: 'Basic Permission' and 'Camera Configuration'. The 'Basic Permission' tab is active. Below the tabs are two columns of settings, each with a blue header and a list of checkboxes. The 'Local Privilege' column has checkboxes for: Camera Management, PTZ Control, Record Settings, Disk Management, Video/Picture Export (checked), Event Settings, Status & Log, General Settings, Network Settings, Holiday Configuration, System Upgrade, Save/Load Configuration, Shutdown/Reboot, Emergency Record, Snapshot (checked), Maintenance, Live View Settings, Auto Reboot, and Retrieve. The 'Remote Privilege' column has checkboxes for: Camera Management, PTZ Control (checked), Record Settings, Disk Management, Video Export (checked), Event Settings, Status & Log (checked), General Settings, Network Settings, Holiday Configuration, System Upgrade, Save/Load Configuration, Reboot, Remote Record (checked), Remote Snapshot (checked), Remote Auto Maintenance, and Auto Reboot. At the bottom of the dialog are two buttons: a gray 'OK' button and a gray 'Cancel' button.



### 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.

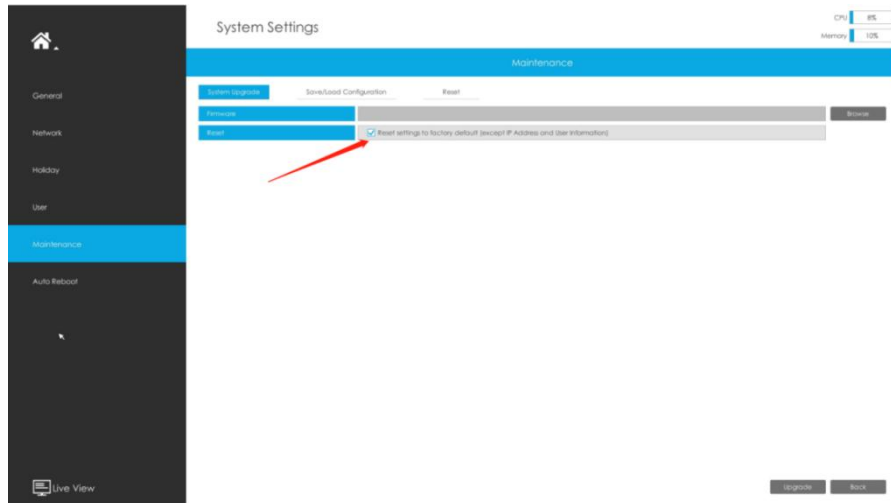
## 3.8.5 Maintenance

### Upgrade

**Step1.** Search for USB device, and select the corresponding firmware.

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


**Step3.** Click  confirm the upgrade.




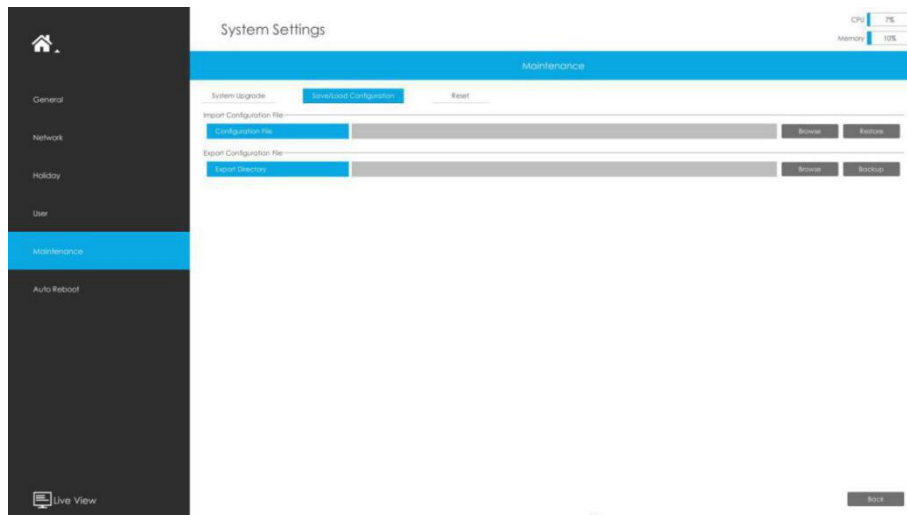
**Note:**

The system will auto reboot after confirming upgrade.


**Save/Load Configuration**

**Export Configuration File:** Select a folder and then click  to export configuration to USB device.

**Import Configuration File:** Select a .cfg file and then click  to import configuration to your NVR.



**Reset**

All parameters can be reset to default settings by clicking .



### 3.8.6 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.

### 3.8.7 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.

**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.

| No. | IP Address | MAC Address | Model |
|-----|------------|-------------|-------|
|     |            |             |       |

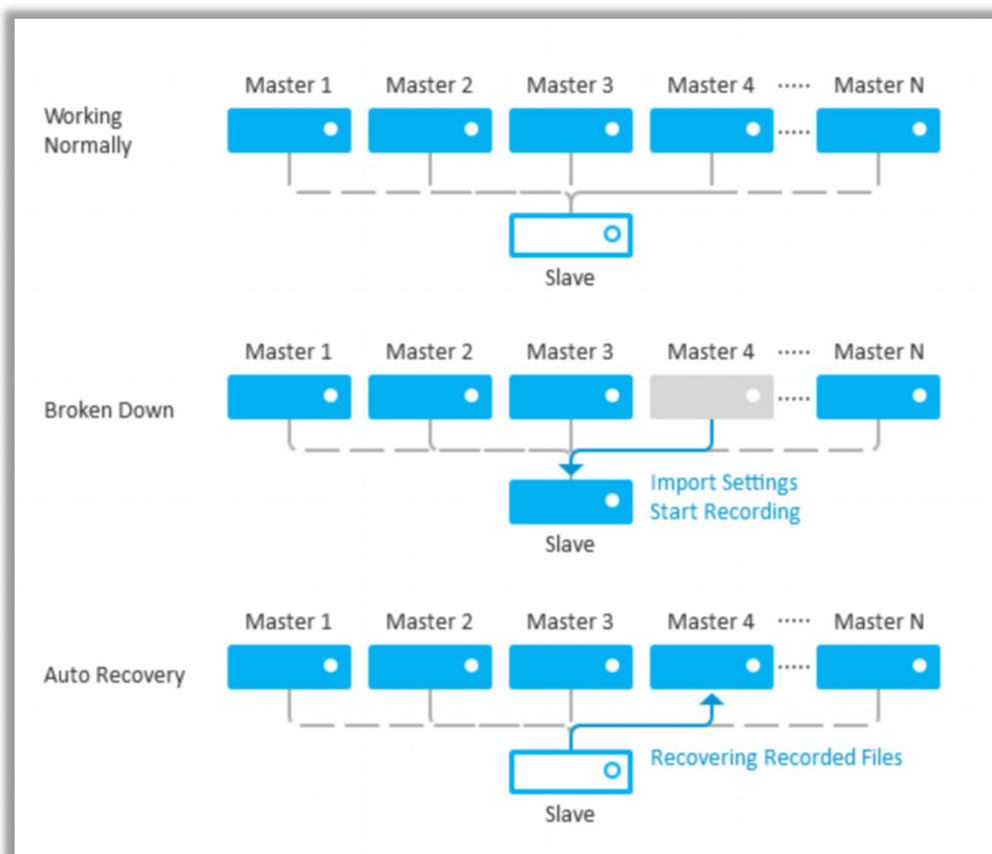
| No. | IP Address    | MAC Address  | Model       | Connection Status | Working Status | Delete |
|-----|---------------|--------------|-------------|-------------------|----------------|--------|
| 1   | 192.168.40.44 | 1CC3160A7EF4 | MS-N7032-UH | Online            | Normal         |        |

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.

### 3.9 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.

### 3.9.1 Device Information

Device Information include Model, MAC Address, Hardware Version, Software Version, and Uptime.

| Device Information |                   |
|--------------------|-------------------|
| Model              | M5-N016-UPT       |
| MAC Address        | TC:C3:16:0A:30:92 |
| Hardware Version   | V1.1              |
| Software Version   | 72.9.0.6-a5       |
| Uptime             | 01:34:31 up 6:51  |

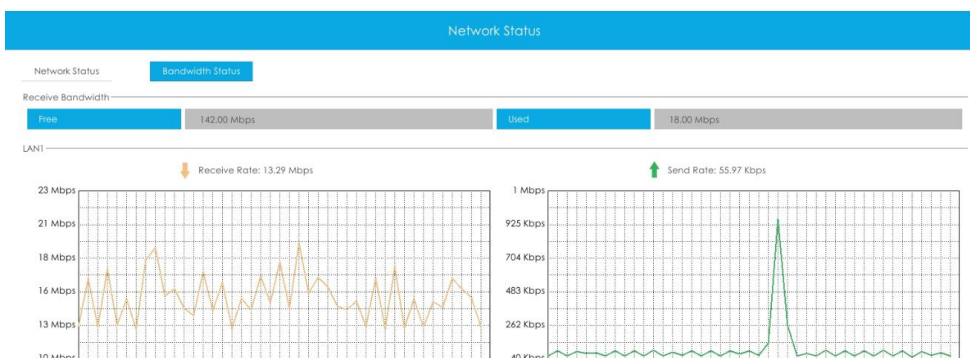
### 3.9.2 Network Status

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       | IPv6 Mode          | Manual            |
| IPv4 Address         | 192.168.7.111 | IPv6 Address       |                   |
| IPv4 Subnet Mask     | 255.255.240.0 | IPv6 Prefix Length |                   |
| IPv4 Gateway         | 192.168.7.1   | IPv6 Gateway       |                   |
| Preferred DNS Server | 192.168.3.1   | MTU(Byte)          | 1500              |
| Alternate DNS Server |               | MAC                | TC:C3:16:0A:30:92 |

#### Bandwidth Status



### 3.9.3 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     | 26 fps     | 4.13 Mbps | 1920x1080  | Connected    |
| 2              | CAM2 | 192.168.14.103  | Off    | 25 fps     | 4.15 Mbps | 1920x1080  | Connected    |
| 3              | CAM3 | 192.168.14.105  | Off    | 25 fps     | 3.90 Mbps | 2560x640   | Connected    |
| 4              | CAM4 | 192.168.7.161   | Off    | 0 fps      | 0 bps     | 0x0        | Disconnected |
| 5              | -    | -               | -      | -          | -         | -          | -            |
| 6              | -    | -               | -      | -          | -         | -          | -            |
| 7              | -    | -               | -      | -          | -         | -          | -            |
| 8              | -    | -               | -      | -          | -         | -          | -            |
| 9              | -    | -               | -      | -          | -         | -          | -            |
| 10             | -    | -               | -      | -          | -         | -          | -            |
| 11             | -    | -               | -      | -          | -         | -          | -            |
| 12             | -    | -               | -      | -          | -         | -          | -            |
| 13             | -    | -               | -      | -          | -         | -          | -            |
| 14             | -    | -               | -      | -          | -         | -          | -            |
| 15             | -    | -               | -      | -          | -         | -          | -            |
| 16             | -    | -               | -      | -          | -         | -          | -            |

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           |        |  |
| PoE 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:  
 1.The rated power consumption of all PoE ports is 120.00W.  
 2.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.

### 3.9.4 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 |                        |           |           |           |          |          |       |
|-------------|------------------------|-----------|-----------|-----------|----------|----------|-------|
| Disk Status |                        | S.M.A.R.T |           |           |          |          |       |
| Port        | Vendor                 | Status    | Total     | Free      | Property | HDD Type | Group |
| 2           | WDC WD2500BEVT-08A23T1 | Normal    | 232.89 GB | 217.00 GB | R/W      | LOCAL    | 1     |

|                    |           |
|--------------------|-----------|
| 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 |                       |           |       |           |           |        |
|-------------|-----------------------|-----------|-------|-----------|-----------|--------|
| Disk Status |                       | S.M.A.R.T |       |           |           |        |
| ID          | Attribute Name        | Value     | Worst | Threshold | Raw Value | Status |
| 01          | Raw_Read_Error_Rate   | 200       | 200   | 51        | 2         | OK     |
| 03          | Spin_Up_Time          | 142       | 131   | 21        | 1866      | 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         | 37266     | OK     |
| 0A          | Spin_Retry_Count      | 100       | 100   | 0         | 0         | OK     |

|                 |                   |
|-----------------|-------------------|
| Port            | 2                 |
| Test Process    |                   |
| Test Type       | FAST              |
| Temperature[C]  | 35                |
| Uptime          | 37266             |
| Self-evaluation | PASSED            |
| All-evaluation  | In good condition |
| S.M.A.R.T Test  | Test              |

### 3.9.5 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.

**Status** CPU: 4% Memory: 9%

Event Status

Camera Event Alarm VCA People Counting

Alarm Input List

| No.  | Alarm Name | Alarm Type | Status |
|------|------------|------------|--------|
| AK-1 |            | NO         | 🔍      |
| AK-2 |            | NO         | 🔍      |
| AK-3 |            | NO         | 🔍      |
| AK-4 |            | NO         | 🔍      |

Alarm Output List

| No.  | Alarm Name | Alarm Type | Event Time | Status |
|------|------------|------------|------------|--------|
| AK-1 |            | NO         |            | 🔍      |

Back

**VCA**

It shows the VCA status. will turn into when alarm is triggered.

**Status** CPU: 3% Memory: 9%

Event Status

Camera Event Alarm VCA People Counting

| Channel | Name  | IP Address    | Region Entrance | Region Exiting | Unusual Motion Detect | Stamp 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 | --            | 🔍               | 🔍              | 🔍                     | 🔍               | 🔍             | 🔍         | 🔍               |

Back

**People Counting**

It shows every camera's current In/Out number of people counting.

**Status** CPU: 3% Memory: 9%

Event Status

Camera Event Alarm VCA People Counting

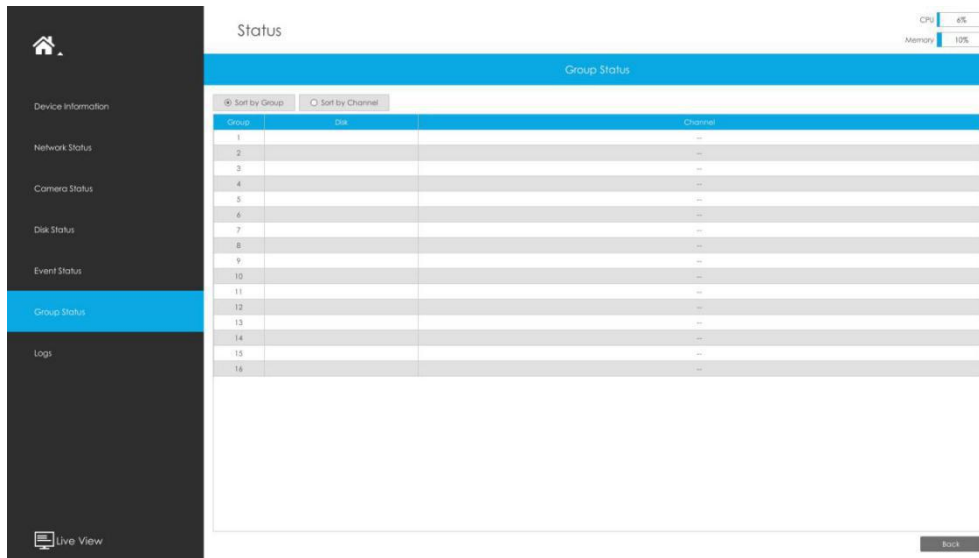
| Channel | Name  | IP Address    | In Count | Out Count |
|---------|-------|---------------|----------|-----------|
| 1       | CAM1  | 192.168.7.222 | --       | --        |
| 2       | CAM2  | --            | --       | --        |
| 3       | CAM3  | --            | --       | --        |
| 4       | 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 | --            | --       | --        |

Back



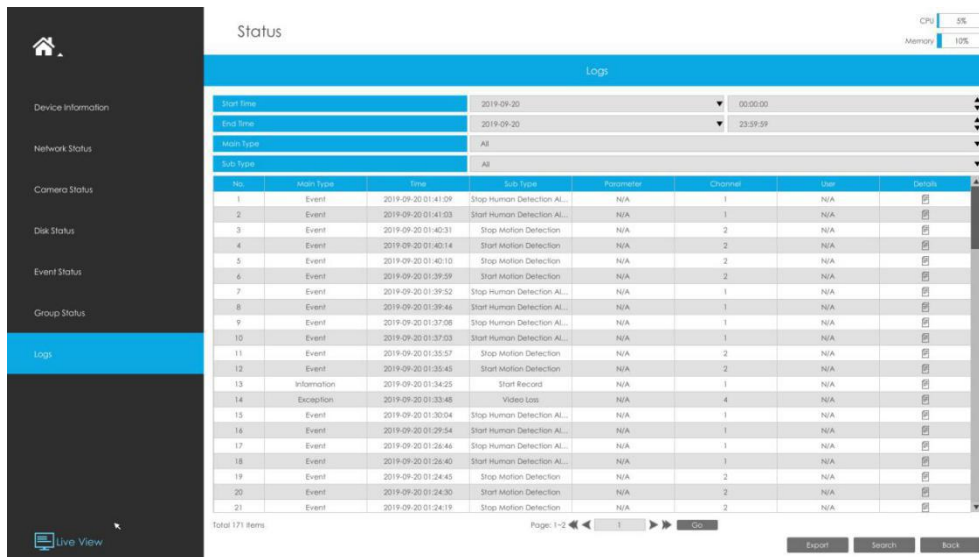
### 3.9.6 Group Status

Check Group Status. The status of the all created Groups can be sorted by Group or Channel.

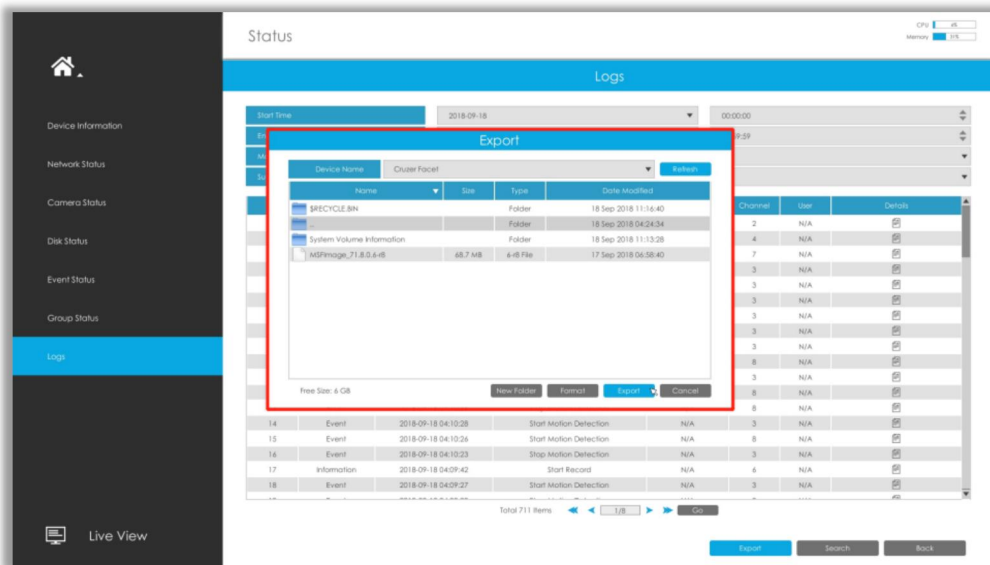


### 3.9.7 Logs

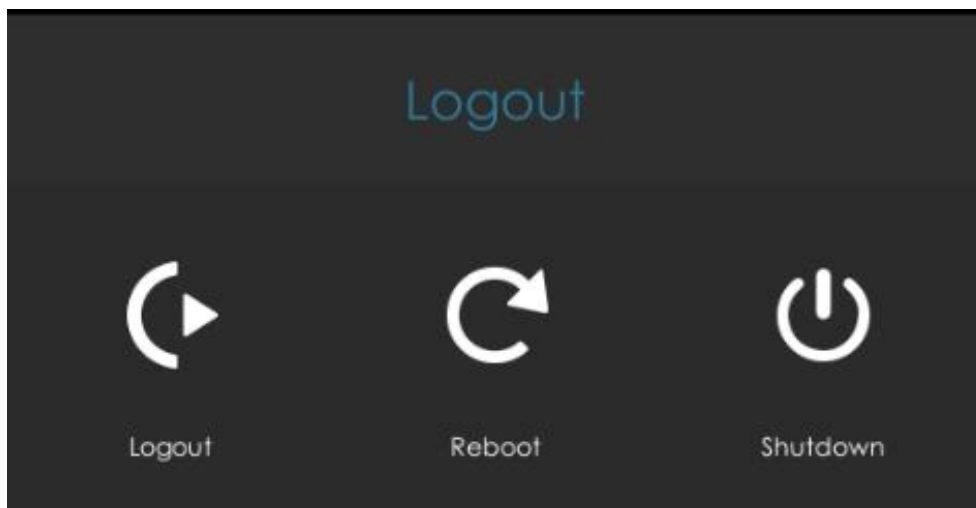
The user can check, search and export logs in Logs interface. By selecting the Start Time, End Time, Main Type and Sub Type, which can narrow down the scale of logs, you can search for logs that you need.



Click **Export** to export searched logs to media device.



### 3.10 Logout



**Logout:** Exit the current login account.

**Reboot:** Restart the NVR.

**Shutdown:** Close the NVR.

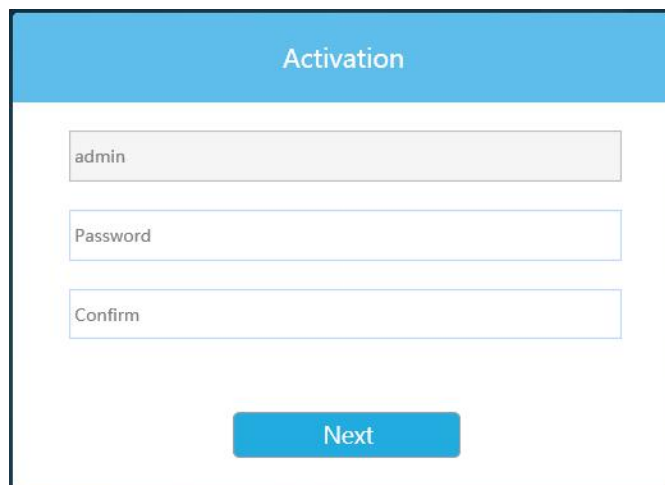
## 4.WEB Settings

### 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.

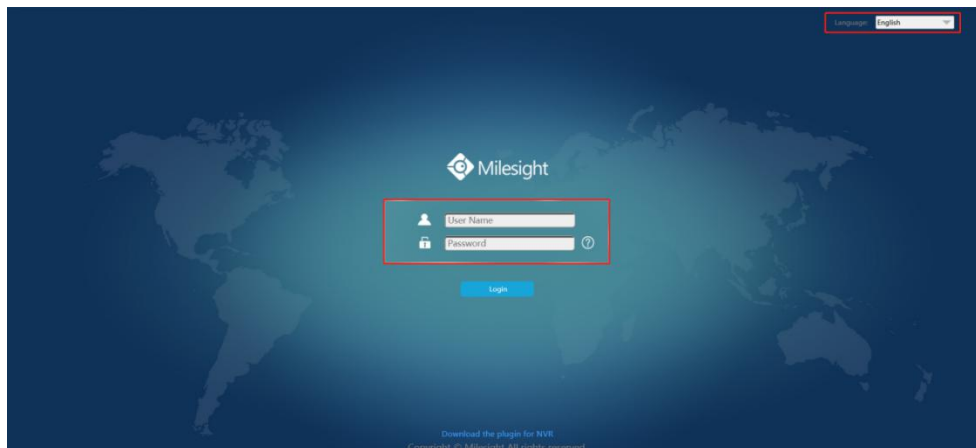
If you skip this step, you can also set it again in Setting -> User interface.



## 4.2 Login

Select Language on the top-right of interface.

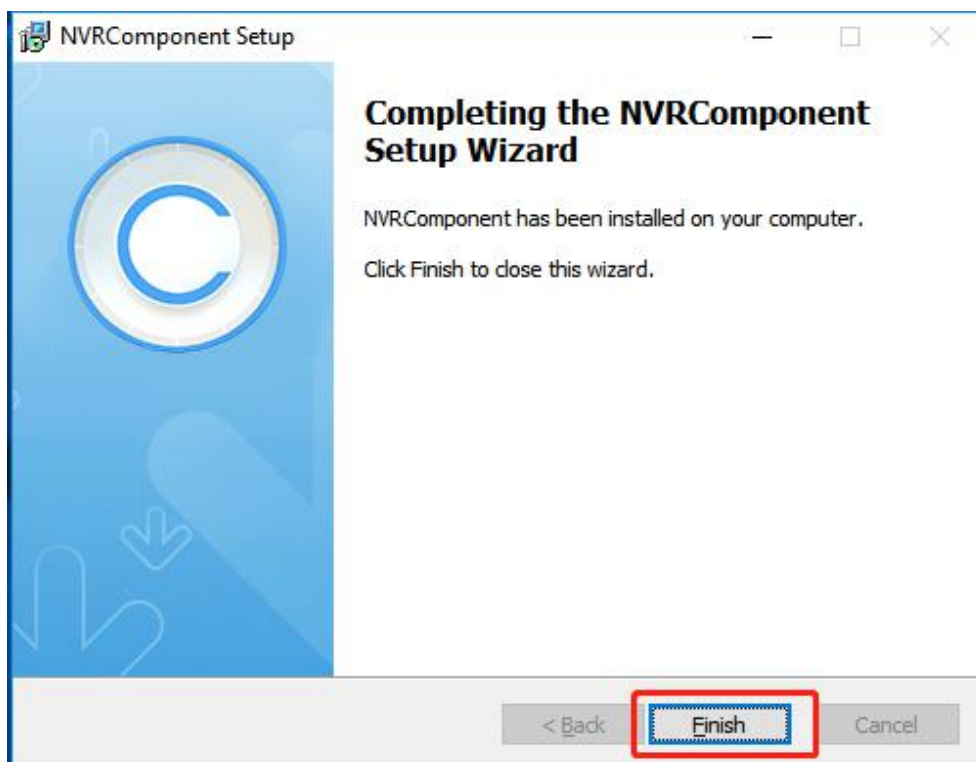
Input the user name, password and click Login to login NVR web page.



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: What's your favorite sport?  
Answer1:

Question2: What's your lucky number?  
Answer2:

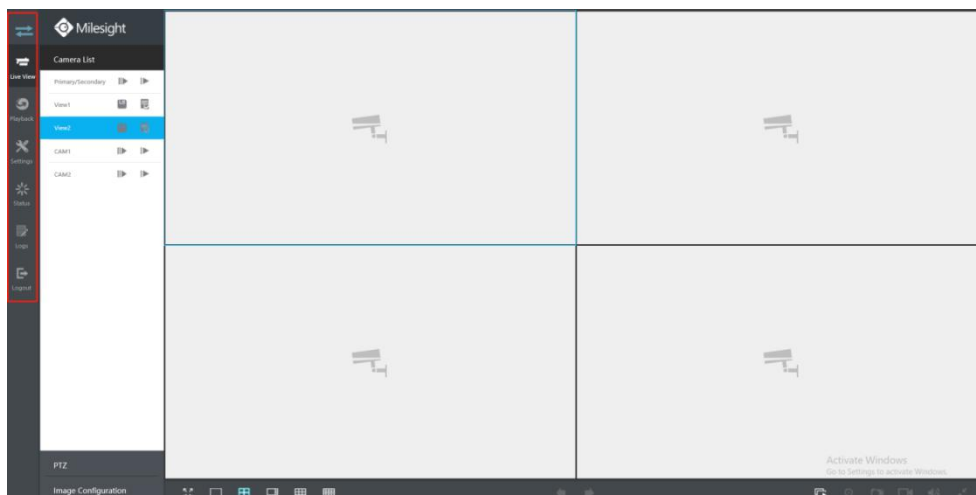
Question3: What's your favorite food?  
Answer3:

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



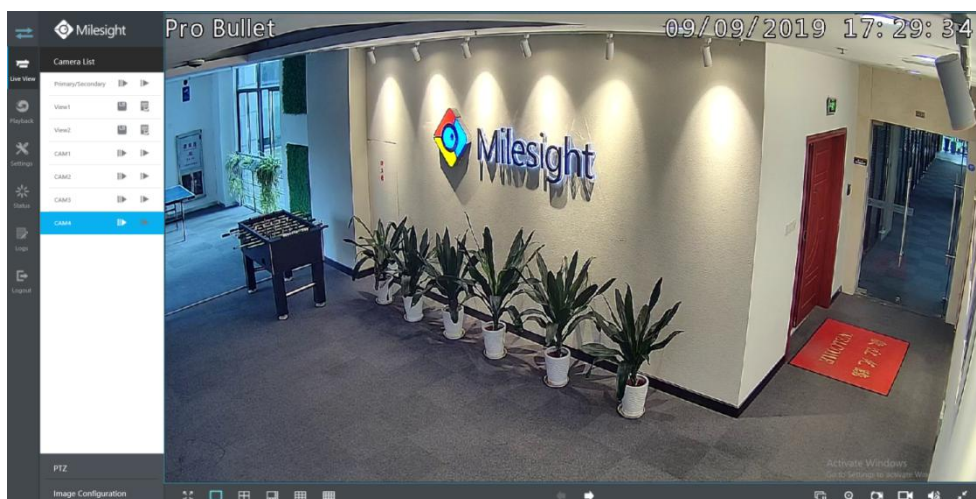
| Icons | Descriptions  |
|-------|---|
|       | Hide or show secondary menu   |
|       | Live view   |
|       | Play back the video   |
|       | Make settings for Camera, Record, Event and System                                    |
|       | Check Device Information, Network Status, Camera Status, 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 and Pattern on PTZ page directly.

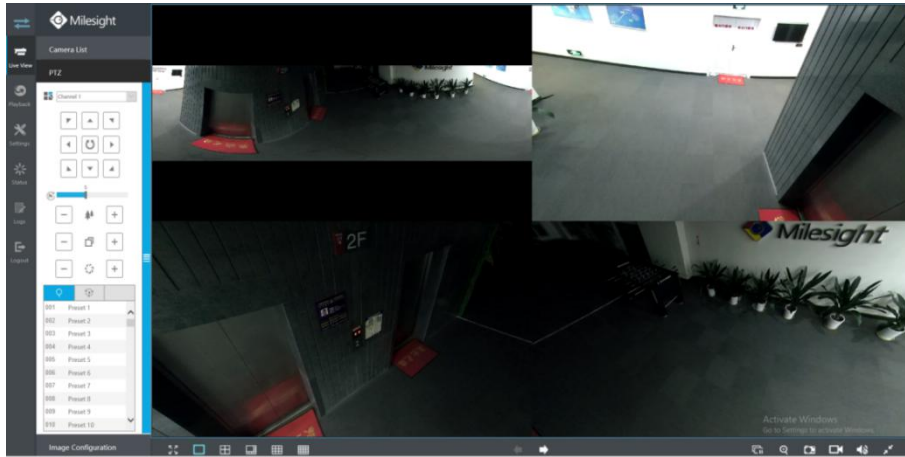


For the Fisheye camera, select a Fisheye channel, and you can operate PTZ, Preset and Patrol of this channel separately.

**Note:**

Only for Milesight Fisheye Camera with Bundle-Stream Mode.





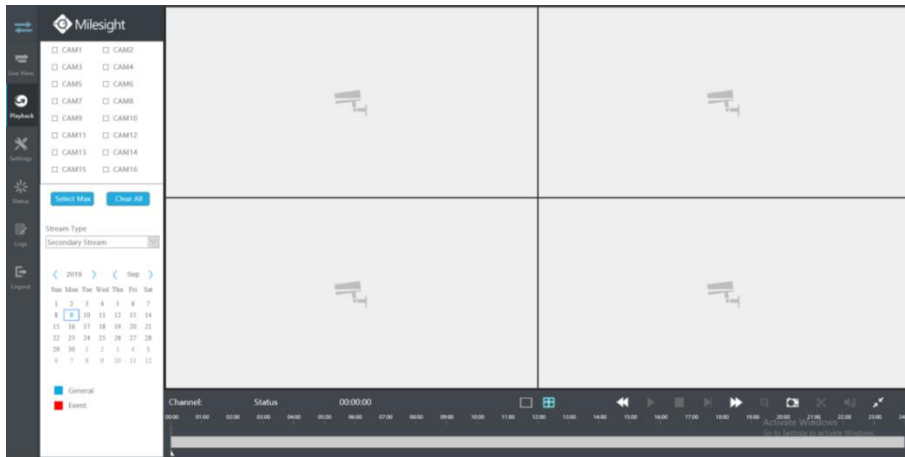
### 4.4.3 Image Configuration

Adjust image Brightness, Contrast, Saturation, Sharpness and Noise Reduction Level on Image Configuration page.



### 4.5 Playback

To play and backup the recorded files.



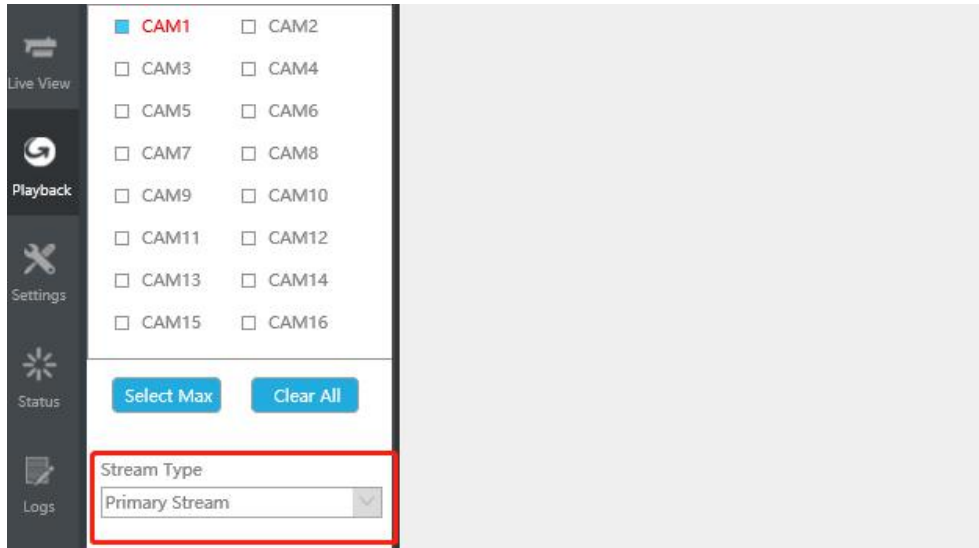
## 4.5.1 How to playback

**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.

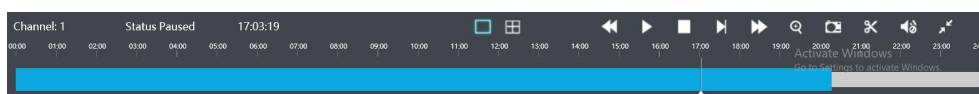
**Step4.** Click to play.

**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:**

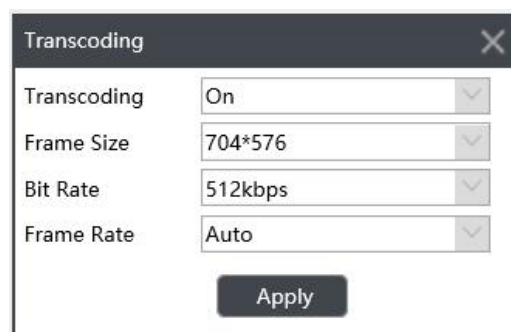
You can adjust the speed even when playback is paused.

## 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.**

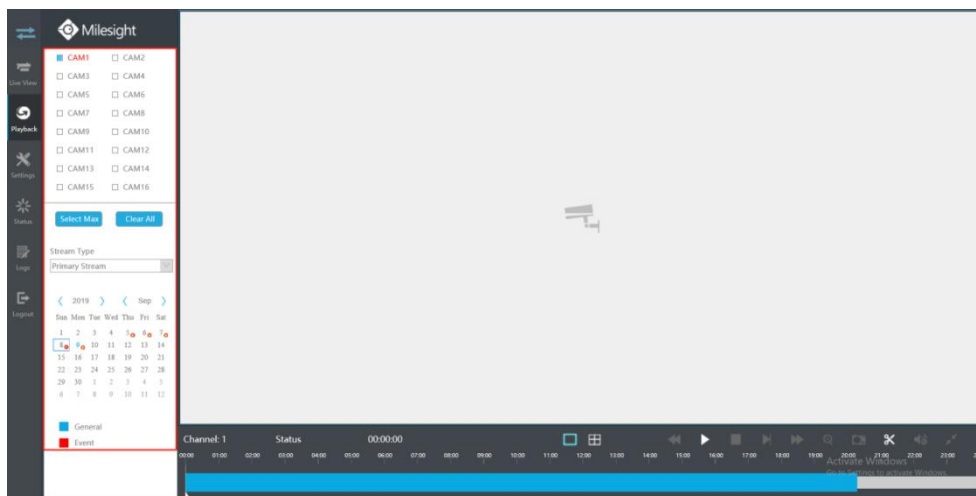
Set Transcoding, Frame Size, Bitrate and Frame Rate according to the network situation. The worse network situation, the lower transcoding parameter.

**Step3. Click  to make transcoding take effect.**


## 4.5.3 Video Files Backup

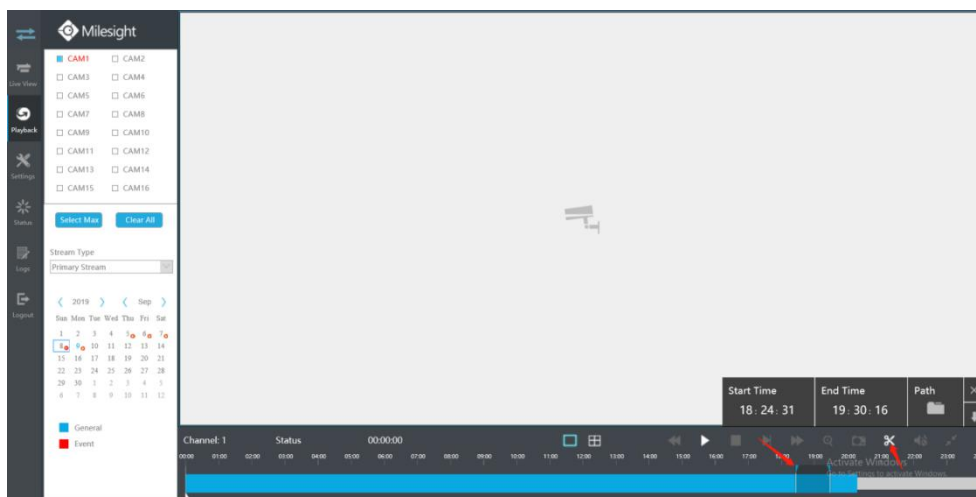
Recorded files can be cut and backed up from WEB.

**Step1. In playback interface, select camera, stream type, the date and time to search record video.**





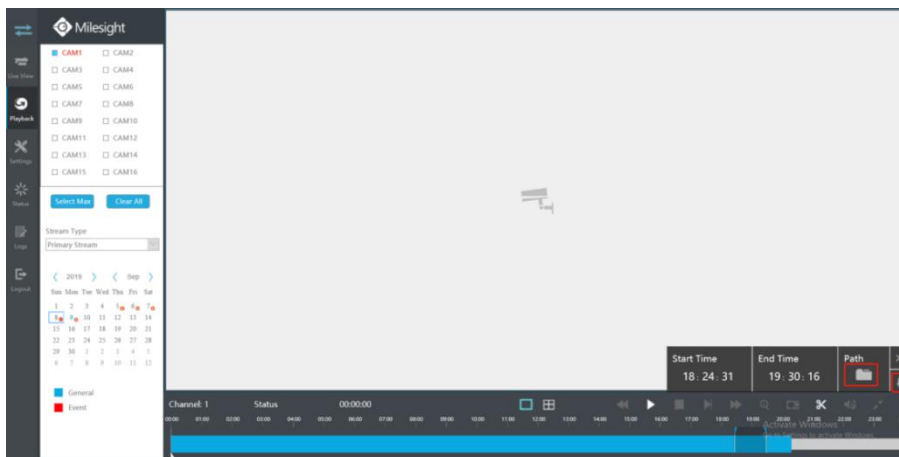
**Step2. Select Recorded files for Backup.**

Click , then select start time and end time by dragging the vertical line on the time bar.



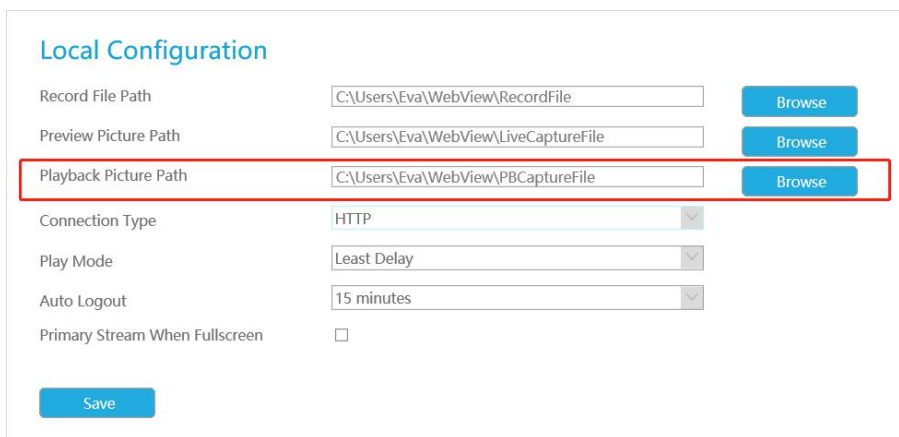
**Step3. Backup the recorded files.**

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.**



**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 Settings

### 4.6.1 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\WebVew\RecordFile"/>      | <input type="button" value="Browse"/> |
| Preview Picture Path           | <input type="text" value="C:\Users\Eva\WebVew\LiveCaptureFile"/> | <input type="button" value="Browse"/> |
| Playback Picture Path          | <input type="text" value="C:\Users\Eva\WebVew\PBCaptureFile"/>   | <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"/>   |                                       |

### 4.6.2 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.

#### 4.6.2.1 Camera Management

| 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. |
| 4       |      |        | Connected | 192.168.14.105 | 8085 | MSSP     | 1CC3162008D  | 43.7.0.71-r8     | MS-C9674-PB  | Milesight Technology Co.,Ltd. |

Free Receiving Bandwidth: 141.00Mbps

#### 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.

| No. | IP Address     | Edit | Status | Port | Protocol | NIC | MAC          | Firmware Version  | Model           | Vendor    |
|-----|----------------|------|--------|------|----------|-----|--------------|-------------------|-----------------|-----------|
| 1   | 192.168.10.206 | ✎    | Active | 80   | MSSP     | LAN | 1CC3162388FB | 43.0.71-r8        | MS-C3374-FB     | Milesight |
| 2   | 192.168.7.222  | ✎    | Active | 80   | MSSP     | LAN | 1CC31621ECSA | 40.0.71-r10       | MS-C3263-FPB    | Milesight |
| 3   | 192.168.10.209 | ✎    | Active | 80   | MSSP     | LAN | 1CC316207124 | 43.0.71-r25       | MS-C2863-RFPB   | Milesight |
| 4   | 192.168.10.205 | ✎    | Active | 80   | MSSP     | LAN | 1CC316258A8C | 40.0.71-r8        | MS-C2863-FPB    | Milesight |
| 5   | 192.168.14.24  | ✎    | Active | 80   | MSSP     | LAN | 1CC31621CCBE | 40.0.71           | MS-C2963-FPB    | Milesight |
| 6   | 192.168.10.220 | ✎    | Active | 80   | MSSP     | LAN | 1CC3162000A1 | 41.0.72-r8        | MS-C3863-FPB    | Milesight |
| 7   | 192.168.10.217 | ✎    | Active | 80   | MSSP     | LAN | 1CC3162098FB | 42.0.0.71-r1      | MS-C9674-FB     | Milesight |
| 8   | 192.168.4.205  | ✎    | Active | 80   | MSSP     | LAN | 1CC316236CEB | 40.0.71-r8        | MS-C2961-FB     | Milesight |
| 9   | 192.168.10.222 | ✎    | Active | 80   | MSSP     | LAN | 1CC3162207BF | 42.0.66           | MS-C2862-FPB    | Milesight |
| 10  | 192.168.2.170  | ✎    | Active | 80   | MSSP     | LAN | 1CC3162198C3 | 40.0.71-Img       | MS-C2962-FPB    | Milesight |
| 11  | 192.168.10.204 | ✎    | Active | 80   | MSSP     | LAN | 1CC3162228BF | 43.0.71-r8        | MS-C2971-X2JQP8 | Milesight |
| 12  | 192.168.7.76   | ✎    | Active | 80   | MSSP     | LAN | 1CC31621669C | 41.0.71-r32       | MS-C4472-FPB    | Milesight |
| 13  | 192.168.2.169  | ✎    | Active | 80   | MSSP     | LAN | 1CC3162207C5 | 42.0.66-r6        | MS-C2862-FPB    | Milesight |
| 14  | 192.168.10.215 | ✎    | Active | 80   | MSSP     | LAN | 1CC316211EA8 | 40.0.72-r8        | MS-C2982-FPB    | Milesight |
| 15  | 192.168.10.224 | ✎    | Active | 80   | MSSP     | LAN | 1CC31621671  | 43.0.71-LPR1-r22  | MS-C2961-TELFB  | Milesight |
| 16  | 192.168.10.216 | ✎    | Active | 80   | MSSP     | LAN | 1CC316210457 | 40.0.67.72-ane-s2 | WEB-C87VD       | IPCAM     |

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

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.

**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 |              |   |

Add Refresh Delete Edit Authentication

Select channel id, input complete information, then click **Add** 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                |

Add Refresh Delete Edit Authentication

- **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          |              |   |

Add Refresh Delete Edit Authentication

**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

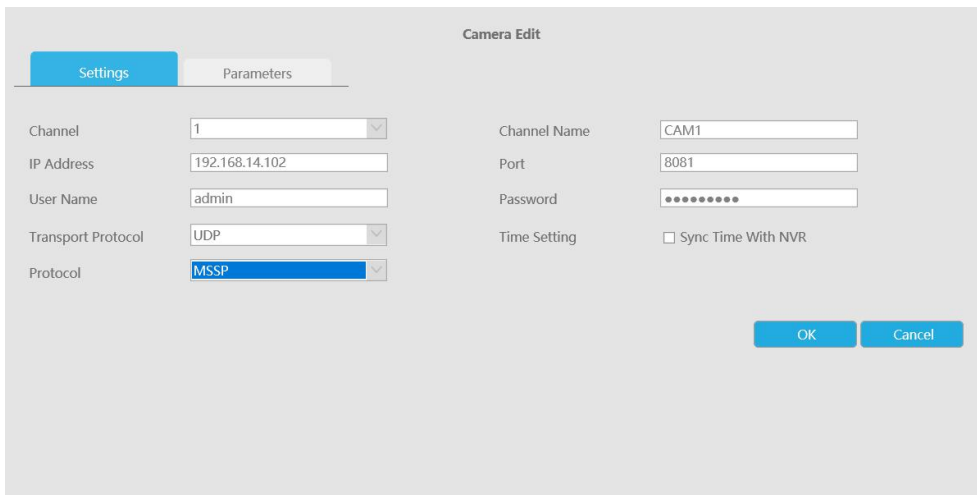
connected or whether the user name, password is correct or not.

| 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-FPB | 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.

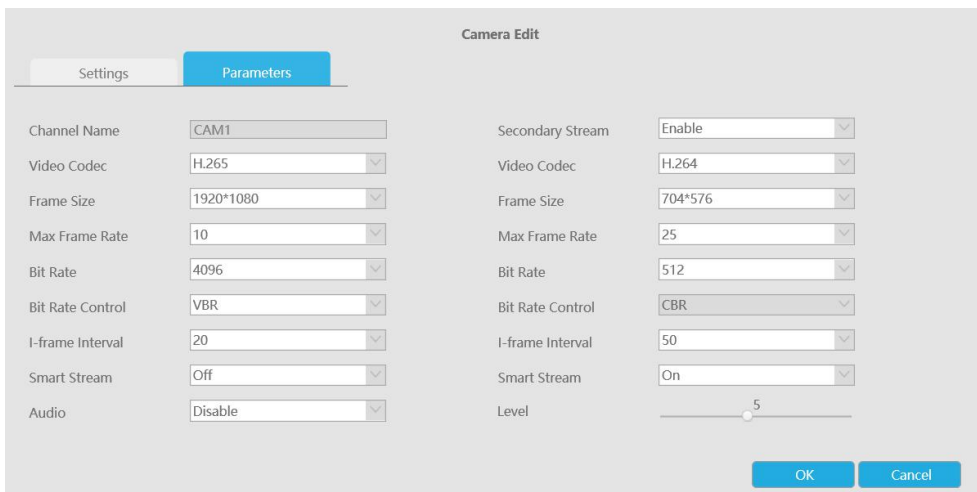
#### Configure one camera

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




The 'Camera Edit' window shows the 'Settings' tab. Fields include: Channel (1), IP Address (192.168.14.102), User Name (admin), Transport Protocol (UDP), Protocol (MSSP), Channel Name (CAM1), Port (8081), Password (masked), and Time Setting (Sync Time With NVR checkbox). 'OK' and 'Cancel' buttons are at the bottom right.

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



The 'Camera Edit' window shows the 'Parameters' tab. Fields include: Channel Name (CAM1), Video Codec (H.265), Frame Size (1920\*1080), Max Frame Rate (10), Bit Rate (4096), Bit Rate Control (VBR), I-frame Interval (20), Smart Stream (Off), Audio (Disable), Secondary Stream (Enable), Video Codec (H.264), Frame Size (704\*576), Max Frame Rate (25), Bit Rate (512), Bit Rate Control (CBR), I-frame Interval (50), Smart Stream (On), and Level (5). 'OK' and 'Cancel' buttons are at the bottom right.

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.

**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.

**Note:**

- 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.
- The steps for adding the **third party PoE cameras** plugged into Milesight PoE NVR:
  - Set camera's IP segment to the same as NVR PoE NIC before plugging into PoE NVR;
  - Select PoE for NIC in Device Search interface, click  to search out cameras;
  - Select cameras and click  to add them.
- 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-PB  | Milesight Technology Co.,Ltd. |
| <input type="checkbox"/> | 5       |      |        | Connected | 192.168.20.2   |        | 1    | MSSP     | 1CC31621ECSA | 40.7.0.71-r10    | MS-C3263-FPB | Milesight Technology Co.,Ltd. |

Free Receiving Bandwidth 136.50Mbps

**Note:**


- Please enable Channel Access in Network->More first;
- Please select HTTP as transport protocol for PoE-connected cameras;
- Please upgrade the NVR firmware version to xx.8.0.6 or above.

### 4.6.2.2 Device Search

**Device Search**

Protocol:  NIC:  IP Range:

| No.                      | IP Address | Edit | Status | Port | Protocol | NIC | MAC          | Firmware Version   | Model           | Vendor    |
|--------------------------|------------|------|--------|------|----------|-----|--------------|--------------------|-----------------|-----------|
| <input type="checkbox"/> | 1          |      | Active | 80   | MSSP     | LAN | 1CC316258BF8 | 43.7.0.71-r8       | MS-C3374-PB     | Milesight |
| <input type="checkbox"/> | 2          |      | Active | 80   | MSSP     | LAN | 1CC31621ECSA | 40.7.0.71-r10      | MS-C3263-FPB    | Milesight |
| <input type="checkbox"/> | 3          |      | Active | 80   | MSSP     | LAN | 1CC316267124 | 43.7.0.71-r25      | MS-C2863-8FPB   | Milesight |
| <input type="checkbox"/> | 4          |      | Active | 80   | MSSP     | LAN | 1CC316258A8C | 40.7.0.71-r8       | MS-C2983-PB     | Milesight |
| <input type="checkbox"/> | 5          |      | Active | 80   | MSSP     | LAN | 1CC31621CCBE | 40.7.0.71          | MS-C2963-FPB    | Milesight |
| <input type="checkbox"/> | 6          |      | Active | 80   | MSSP     | LAN | 1CC3162000A1 | 41.7.0.72-r8       | MS-C3863-FPB    | Milesight |
| <input type="checkbox"/> | 7          |      | Active | 80   | MSSP     | LAN | 1CC31622098F | 42.7.0.67-r1       | MS-C9674-PB     | Milesight |
| <input type="checkbox"/> | 8          |      | Active | 80   | MSSP     | LAN | 1CC316236CE8 | 40.7.0.71-r8       | MS-C2961-EB     | Milesight |
| <input type="checkbox"/> | 9          |      | Active | 80   | MSSP     | LAN | 1CC3162207BF | 42.7.0.66          | MS-C8262-FPB    | Milesight |
| <input type="checkbox"/> | 10         |      | Active | 80   | MSSP     | LAN | 1CC3162188C3 | 40.7.0.71-img      | MS-C2962-FPB    | Milesight |
| <input type="checkbox"/> | 11         |      | Active | 80   | MSSP     | LAN | 1CC3162288F  | 43.7.0.71-r8       | MS-C2971-X230PB | Milesight |
| <input type="checkbox"/> | 12         |      | Active | 80   | MSSP     | LAN | 1CC31621666C | 41.7.0.71-r32      | MS-C4472-FPB    | Milesight |
| <input type="checkbox"/> | 13         |      | Active | 80   | MSSP     | LAN | 1CC3162207C5 | 42.7.0.66-r8       | MS-C3262-FPB    | Milesight |
| <input type="checkbox"/> | 14         |      | Active | 80   | MSSP     | LAN | 1CC3162115A8 | 40.7.0.72-r8       | MS-C2962-PB     | Milesight |
| <input type="checkbox"/> | 15         |      | Active | 80   | MSSP     | LAN | 1CC316221671 | 43.7.0.71-LPR1-r22 | MS-C2961-TELPB  | Milesight |
| <input type="checkbox"/> | 16         |      | Active | 80   | MSSP     | LAN | 1CC316210457 | 40.7.67.72-ane-32  | WEB-C67VD       | IPCAM     |

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 active 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"/>                   |

### 4.6.2.3 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"/>       |

**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.

## 4.6.2.4 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.

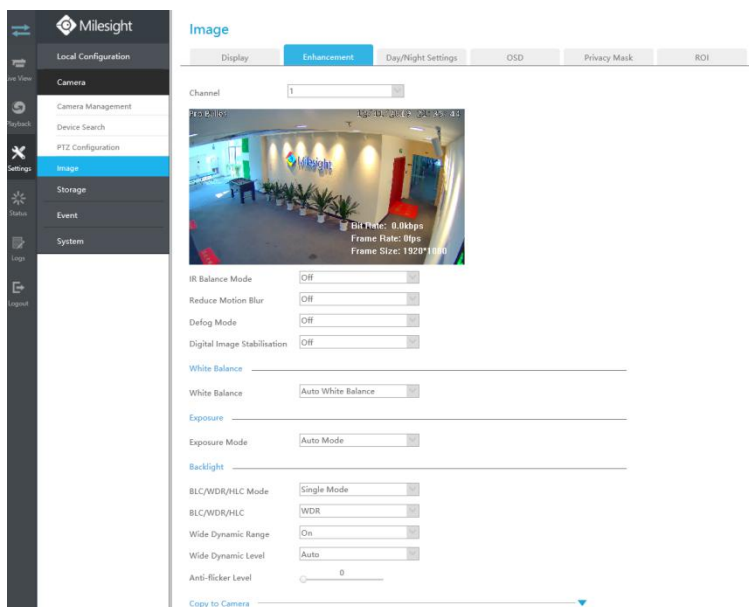
**Step3. You can click [Copy to Camera] to copy the same configuration to other channels.**



**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.

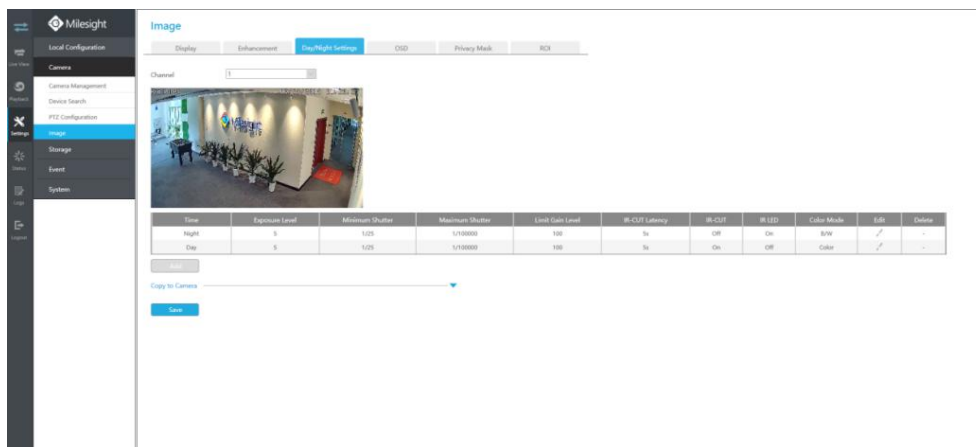
**Anti-flicker Level:** Reduce flickers that appear on screen in some lighting conditions and there are 10 levels of anti-flicker adjustments.

**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.

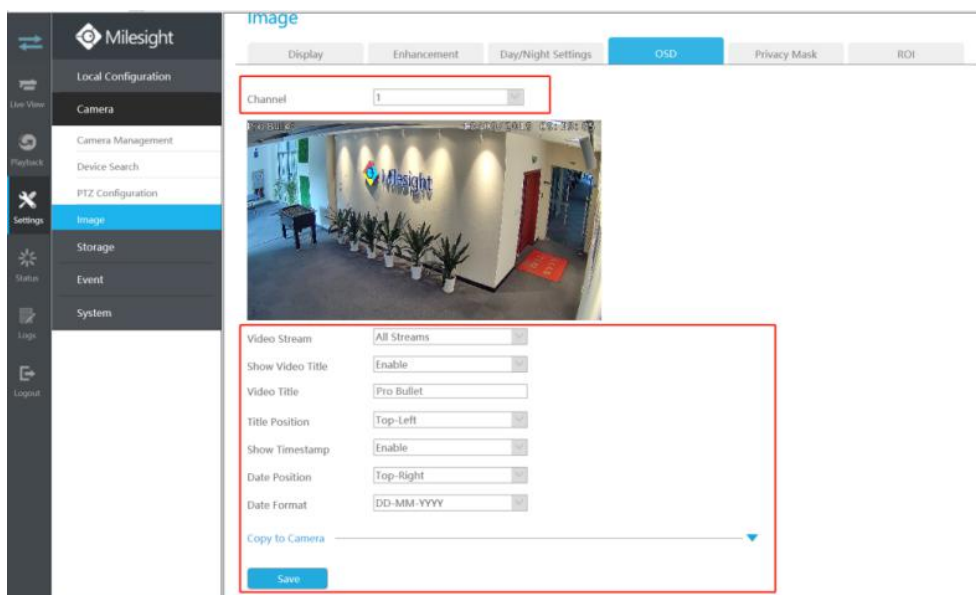
**Step3.** You can click [Copy to Camera] to copy the same configuration to other channels.



**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.

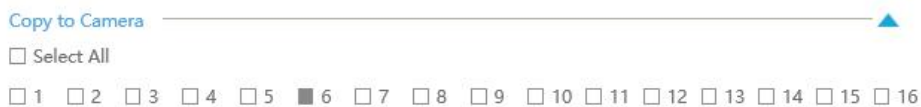
**[Title Position]:** Set the position for the video title: Top-Left, Top-Right, Bottom-Left or Bottom-Right.

**[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.**

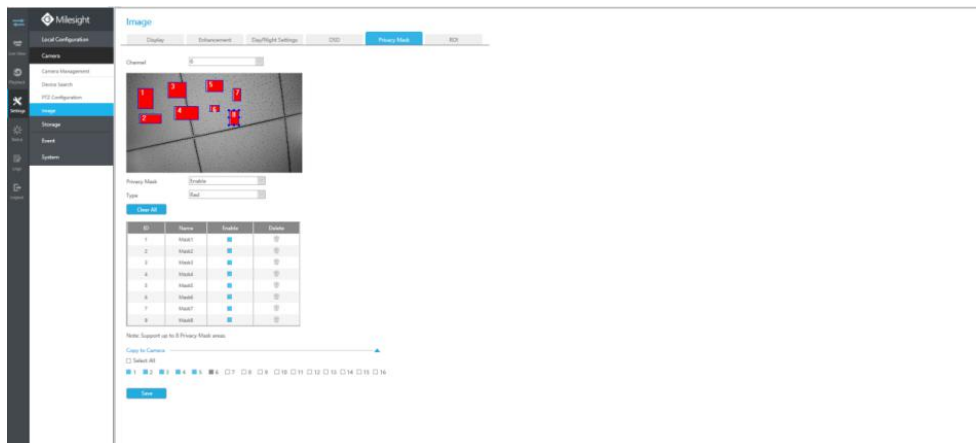


**Step4. Click save to save the settings.**

## 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.

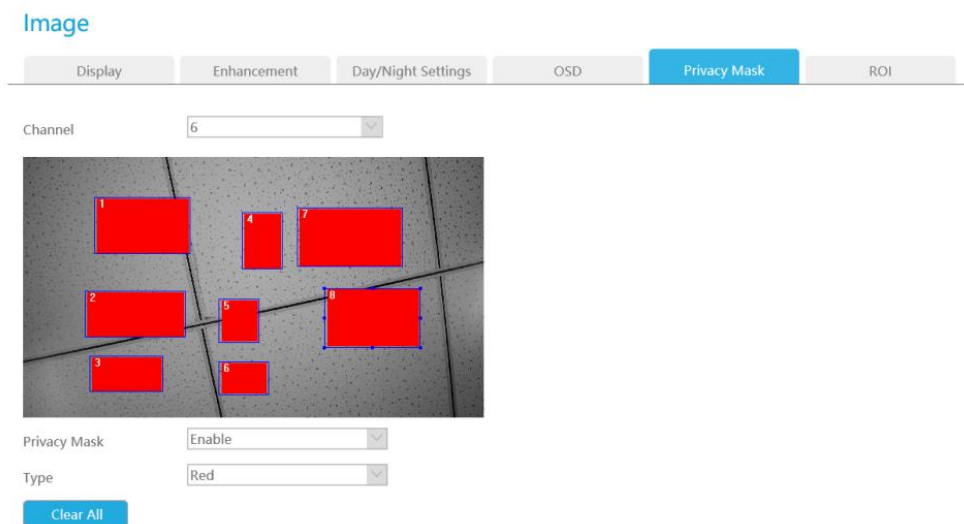




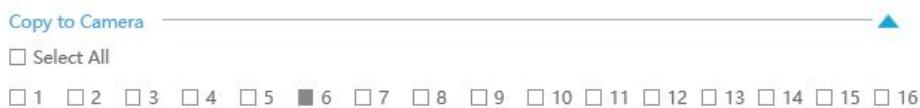
You can add a privacy mask by following steps:

**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.

Channel: 1

ROI: Enable

Video Stream: Primary Stream

Clear All

| ID | Name | Enable                              | Delete |
|----|------|-------------------------------------|--------|
| 1  | ROI1 | <input checked="" type="checkbox"/> |        |
| 2  | ROI2 | <input checked="" type="checkbox"/> |        |
| 3  | ROI3 | <input checked="" type="checkbox"/> |        |
| 4  | ROI4 | <input checked="" type="checkbox"/> |        |
| 5  | ROI5 | <input checked="" type="checkbox"/> |        |
| 6  | ROI6 | <input checked="" type="checkbox"/> |        |
| 7  | ROI7 | <input checked="" type="checkbox"/> |        |
| 8  | ROI8 | <input checked="" type="checkbox"/> |        |

Note: Support up to 8 ROI areas.

Copy to Camera

Save  Save Successfully!

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.**

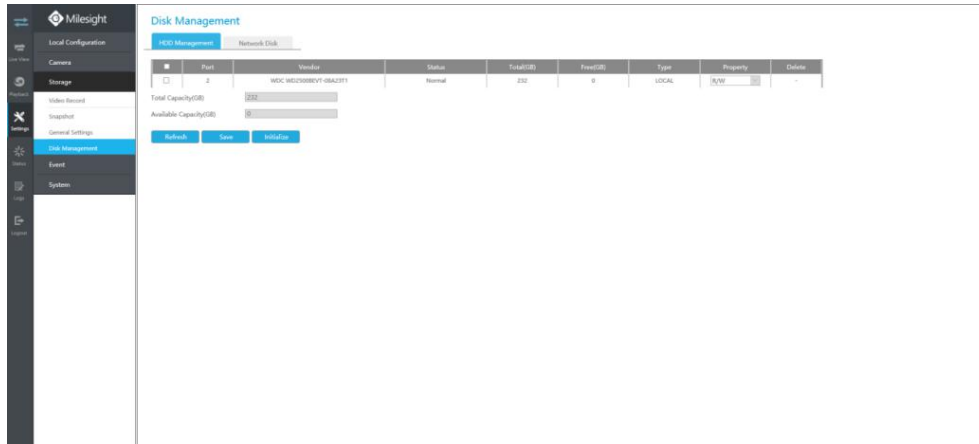
**Note:**

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

## 4.6.3 Storage

### Preparation for Configuration

**Step1. Ensure that your NVR has installed and initialized the HDD or Network Disk.**

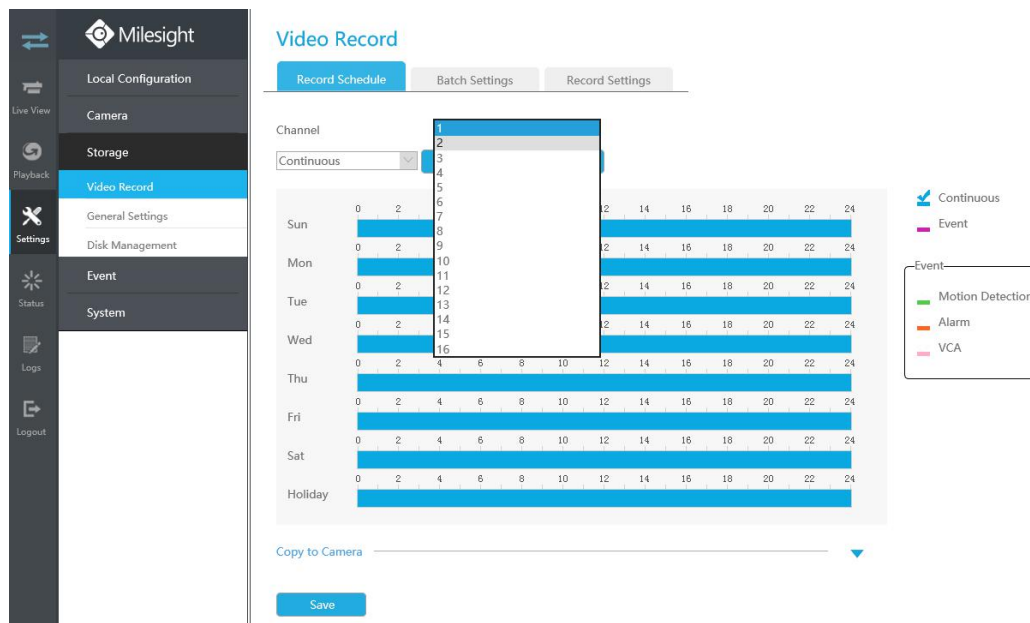


### 4.6.3.1 Video Record

#### 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 and VCA), 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.

## Video Record

Record Schedule    Batch Settings    Record Settings

Channel: 1

Continuous    Select All    Clear All

Legend:

- Continuous
- Event
  - Motion Detection
  - Alarm
  - VCA

Copy to Camera

Save

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.

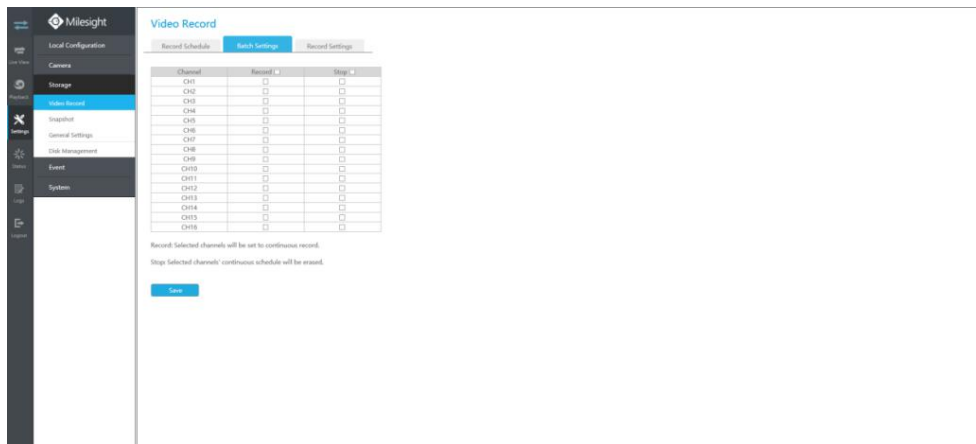
Copy to Camera

Select All

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

## Batch Settings

Record and Stop are available for user to set for selected channels.



## Record Settings

Make record settings for selected channels.

### Video Record

Record Schedule    Batch Settings    **Record Settings**

Channel:

Pre Record:

Post Record:

Audio Record:

Record Stream Type:

Video Due Time:

ANR:

Copy to Camera

**Save**

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

**Pre Record :** Event pre-record duration time. It will start recording before the event is triggered.

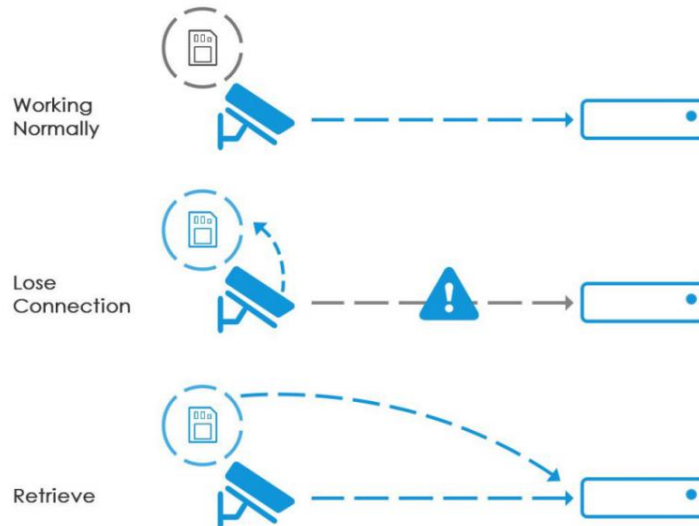
**Post Record:** Event post-record duration time. It will keep recording after the event is over.

**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

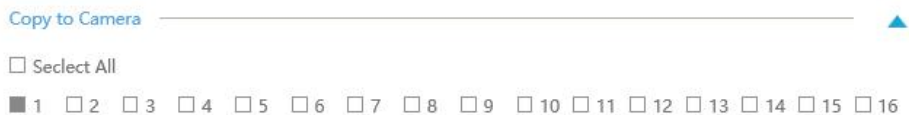
Firmware download link: <https://www.milesight.com/support/download#firmware>

2. Camera should be 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.



### 4.6.3.2 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


Select All

or

Clear All



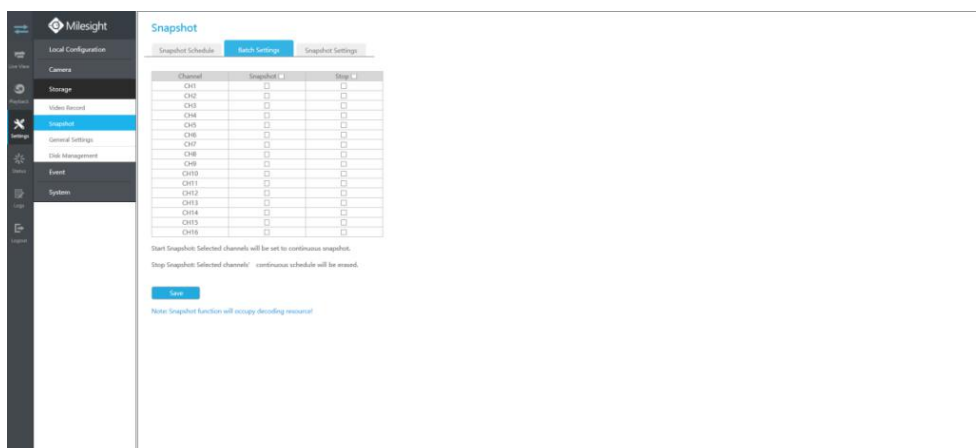
Also, you can click the time bar and reedit the record time

Click  to copy time setting to other days.

Click [Copy to Camera] to copy the same configuration to other channels.

### Batch Settings

Snapshot and Stop are available for user to set for selected channels.



### Snapshot Settings

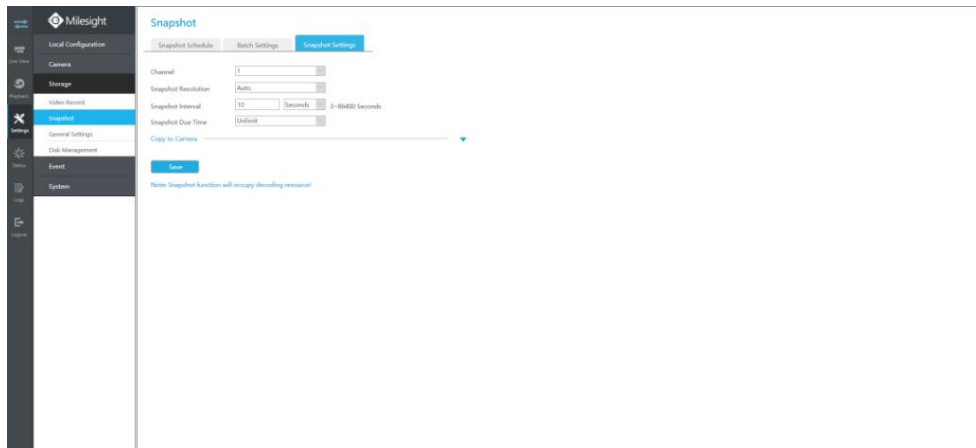
Make general configuration for selected channels. Click [Copy to Camera] to copy the same configuration to other channels.

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

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

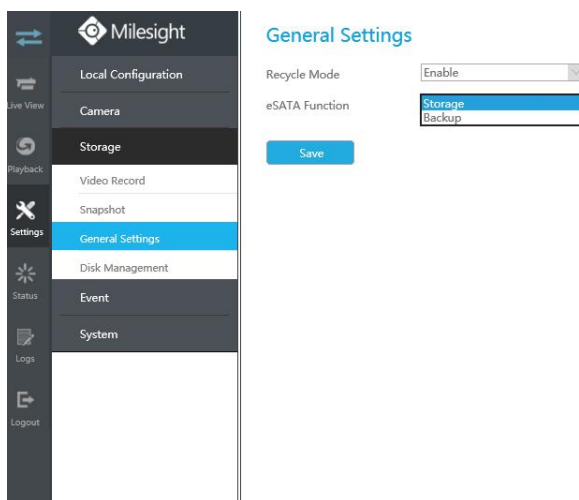
**Snapshot Interval:** Set the snapshot Interval, 3~86400 seconds are available.

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

**Note:**

Some models support continuous snapshot function.

### 4.6.3.3 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.

### 4.6.3.4 Disk Management

You can check Disk status and add Network Disk here.

#### HDD Management

**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.



### Disk Management

HDD Management | Network Disk

|                          | Port | Vendor                 | Status | Total(GB) | Free(GB) | Type  | Property | Delete |
|--------------------------|------|------------------------|--------|-----------|----------|-------|----------|--------|
| <input type="checkbox"/> | 2    | WDC WD2500BEVF-GBA23T1 | Normal | 232       | 0        | LOCAL | R/W      | -      |

Total Capacity(GB): 232  
Available Capacity(GB): 0

Buttons: Refresh, Save, Initialize

## Network Disk

NAS (Network-Attached Storage) should be available within the network and properly configured to store the recorded files and snapshots.

**Note:**

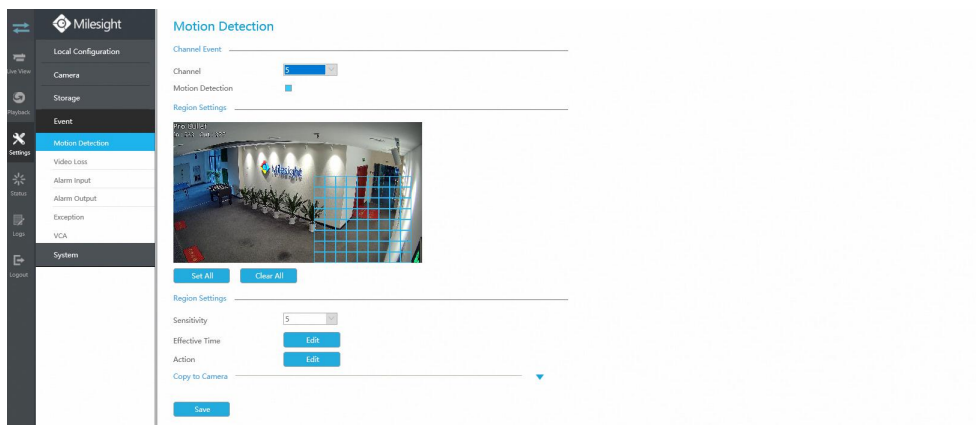
1. NAS with NFS format is the only type for network disk adding.
2. It's recommended to use Hard Disk rather than Network Disk.

You can add it manually or search local NAS by clicking



## 4.6.4 Event

### 4.6.4.1 Motion Detection



#### Step 1. Enable Motion Detection.

Select channel , Sensitivity and click  to enable Motion Detection.

#### Motion Detection

Channel Event \_\_\_\_\_

Channel

Motion Detection

Region Settings \_\_\_\_\_

Pre-Bulletin: 10:50:2018 10:51:21



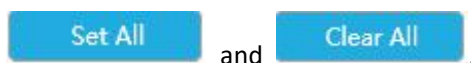
Set All Clear All

Region Settings \_\_\_\_\_

Sensitivity

#### 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



and

## Region Settings



Set All

Clear All

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



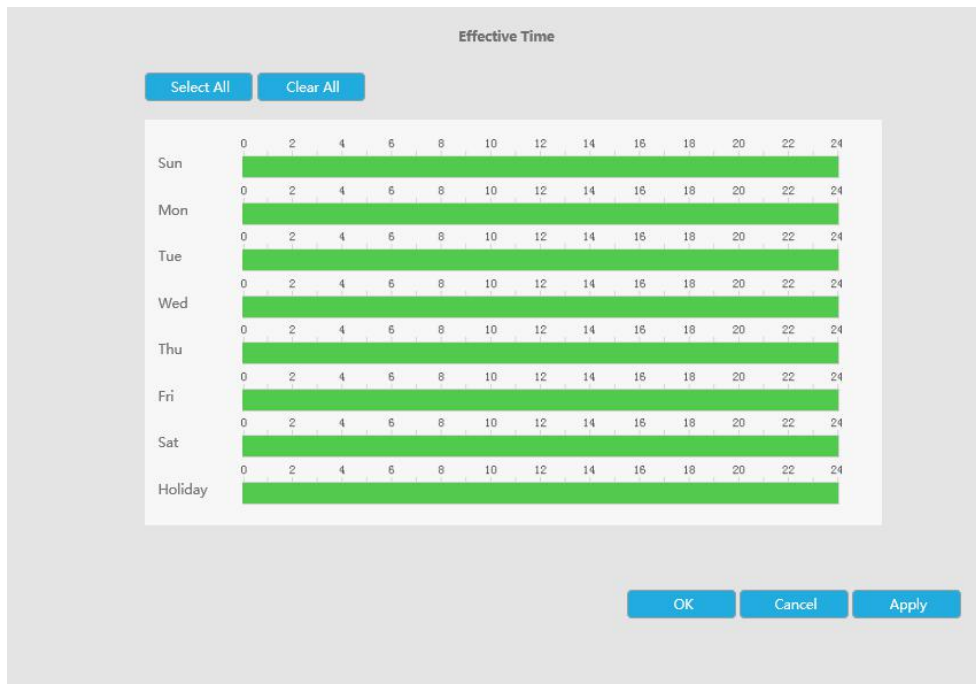
NVR receives the alarm when effective time has been set. It will be more convenient by clicking



or



to set or clear all time settings.



**Step 4. Set Action for motion detection 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

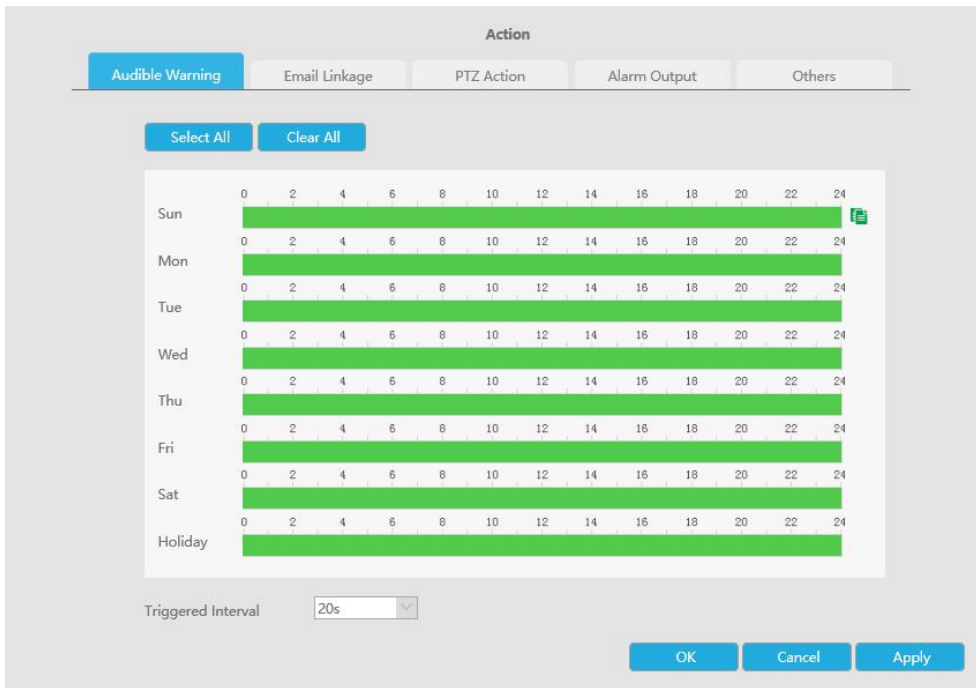


to set or clear all time settings.

What's more, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

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



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

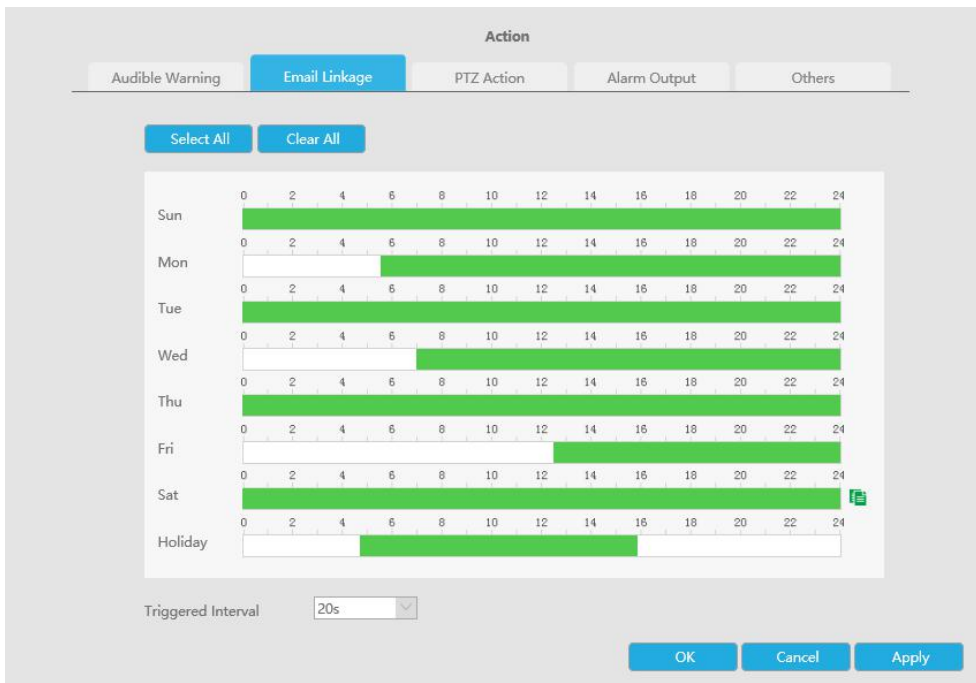
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Trigger 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 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 apply to make configurations take effect.

Action

Audible Warning
Email Linkage
PTZ Action
Alarm Output
Others

Select All
Clear All

|         |                                 |   |   |   |   |    |    |    |    |    |    |    |    |
|---------|---------------------------------|---|---|---|---|----|----|----|----|----|----|----|----|
|         | 0                               | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| Sun     | [Green bar from 10:00 to 14:00] |   |   |   |   |    |    |    |    |    |    |    |    |
| Mon     | [Green bar from 4:00 to 6:00]   |   |   |   |   |    |    |    |    |    |    |    |    |
| Tue     | [Green bar from 16:00 to 20:00] |   |   |   |   |    |    |    |    |    |    |    |    |
| Wed     | [Green bar from 18:00 to 20:00] |   |   |   |   |    |    |    |    |    |    |    |    |
| Thu     | [Green bar from 18:00 to 20:00] |   |   |   |   |    |    |    |    |    |    |    |    |
| Fri     |                                 |   |   |   |   |    |    |    |    |    |    |    |    |
| Sat     |                                 |   |   |   |   |    |    |    |    |    |    |    |    |
| Holiday |                                 |   |   |   |   |    |    |    |    |    |    |    |    |

PTZ Action:

OK
Cancel
Apply

PTZ Action:

Channel Select Channel
Action Type Preset
No.

Add
Delete

| ■ | Channel | Edit | Delete | Action Type | No. |
|---|---------|------|--------|-------------|-----|
|---|---------|------|--------|-------------|-----|

OK
Cancel
Apply

**Alarm Output:** Trigger alarm output when alarm is triggered.

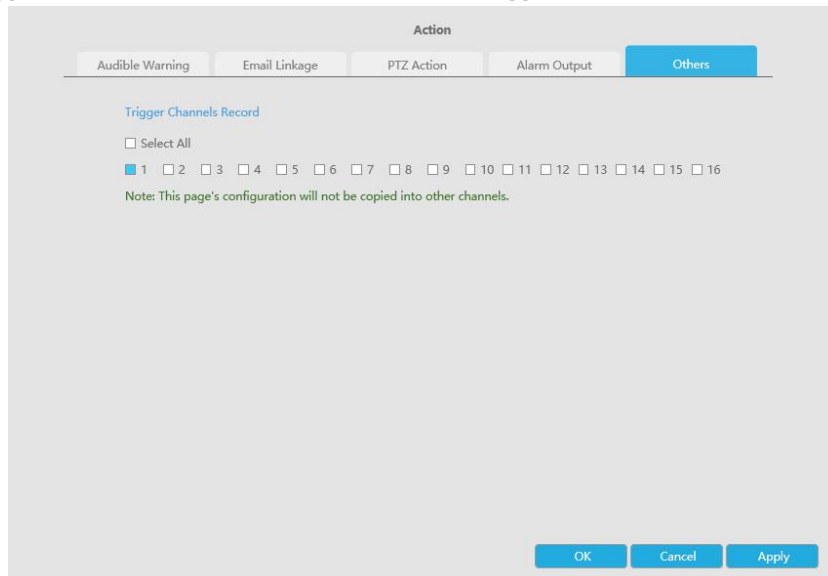
Action

Audible Warning
Email Linkage
PTZ Action
Alarm Output
Others

Trigger Alarm Output
 1

OK
Cancel
Apply

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

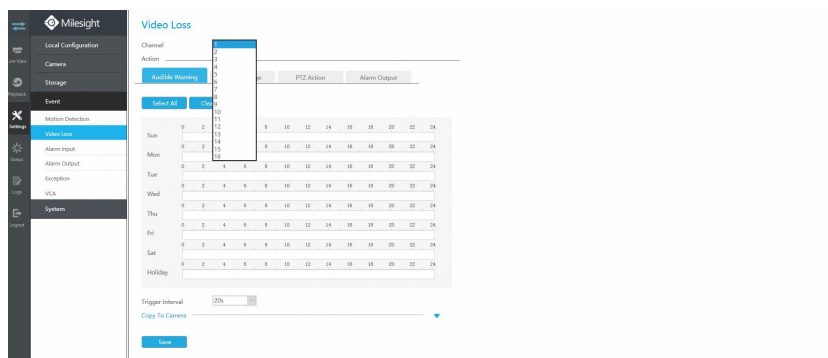


**Step 5.** Click [Copy to Camera] and to copy the same configuration to other channels.



### 4.6.4.2 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



What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

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

### Video Loss

Channel

Action \_\_\_\_\_

Copy To Camera \_\_\_\_\_

**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.

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

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

Video Loss

Channel

Action \_\_\_\_\_

Copy To Camera \_\_\_\_\_

**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 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 apply to make configurations take effect.

**Video Loss**

Channel

Action \_\_\_\_\_

**Audible Warning** | **Email Linkage** | **PTZ Action** | **Alarm Output**

**Select All** | **Clear All**

|         |   |   |   |   |   |    |    |    |    |    |    |    |    |
|---------|---|---|---|---|---|----|----|----|----|----|----|----|----|
| 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 |

**PTZ Action:**

Channel  Action Type  No.

**Add** | **Delete**

| <input type="checkbox"/> | Channel | Edit | Delete | Action Type | No. |
|--------------------------|---------|------|--------|-------------|-----|
| <input type="checkbox"/> |         |      |        |             |     |

Copy To Camera \_\_\_\_\_

**Save**

**Alarm Output:** Trigger alarm output when alarm is triggered.

**Video Loss**

Channel


Action \_\_\_\_\_

**Audible Warning** | **Email Linkage** | **PTZ Action** | **Alarm Output**

Trigger Alarm Output  1

Copy To Camera \_\_\_\_\_

**Save**

**Step 3.** Click [Copy to Camera] and  to copy the same configuration to other channels.



Copy To Camera ▲

Select All

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

### 4.6.4.3 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

Alarm Input No.  Alarm Type

Alarm Name  (cannot copy)

**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.

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

##### Trigger Channels Record

Select All

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

**Trigger Channels Record:** Trigger selected to record when alarm is triggered. Don't forget to set record schedule in Storate -> Record Schedule interface.

**Copy to Alarm:** Copy alarm settings to other channels which has alarm input.

Copy to Alarm ▲

Select All

A<-1  A<-2  A<-3  A<-4

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

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

Action ▲

Channel Record  Audible Warning  Email Linkage  PTZ Action  Alarm Output

Select All  Clear All

|         |   |   |   |   |   |    |    |    |    |    |    |    |    |
|---------|---|---|---|---|---|----|----|----|----|----|----|----|----|
| 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

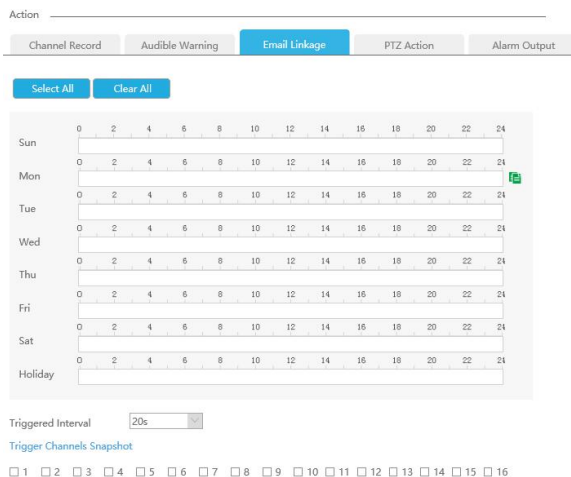
Click [Copy to Alarm] and to copy the same configuration to other channels.



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

**Trigger 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.



Click [Copy to Alarm] and to copy the same configuration to other alarm channels.



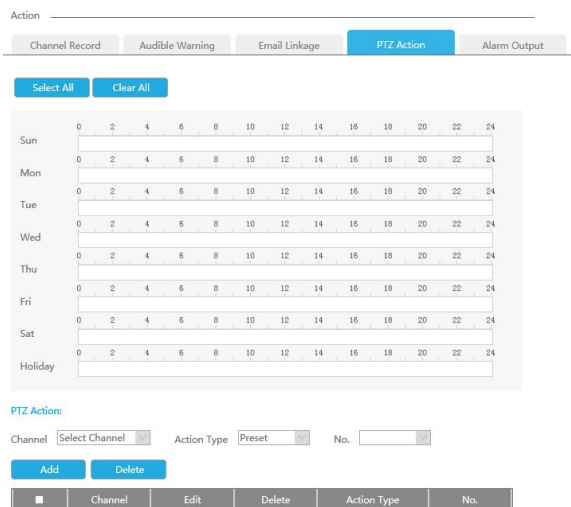
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

① Drag a square on the time table for time setting, it will be more convenient by clicking

or to set or clear to set or clear all time settings.

② Click apply to make configurations take effect.



Click [Copy to Alarm] and to copy the same configuration to other alarm channels.

Copy to Alarm

Select All

A<-1  A<-2  A<-3  A<-4

**Alarm Output:** Trigger alarm output when alarm is triggered.

Action

Channel Record Audible Warning Email Linkage PTZ Action **Alarm Output**

Trigger Alarm Output  1

Copy to Alarm

Select All

A<-1  A<-2  A<-3  A<-4

**Save**

Step 3. Set effective time for alarm input by clicking **Edit**.

Step 4. Click [Copy to Alarm] and to copy the same configuration to other alarm channels.

Copy to Alarm

Select All

A<-1  A<-2  A<-3  A<-4

### 4.6.4.4 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 Settings

Alarm Output:  Alarm Type:

Delay:  Alarm Name:  (cannot copy)

**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.**

|         |   |   |   |   |   |    |    |    |    |    |    |    |    |
|---------|---|---|---|---|---|----|----|----|----|----|----|----|----|
| 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 |

**Step3.** Click [Copy to Alarm] and  to copy the same configuration to other alarm channels.

Select All

1  2  3  4

### 4.6.4.5 Exception

**Step1.** Select Exception Type.

Exception Type

Trigger Action

|                      |
|----------------------|
| Network Disconnected |
| 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 Uninitilized:** HDD is uninitialized.

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

## Exception

Exception Type

Trigger Action

|                      |
|----------------------|
| Network Disconnected |
| 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

Event Notification

Audible Warning

Email Linkage

Alarm Output

1

#### 4.6.4.6 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.

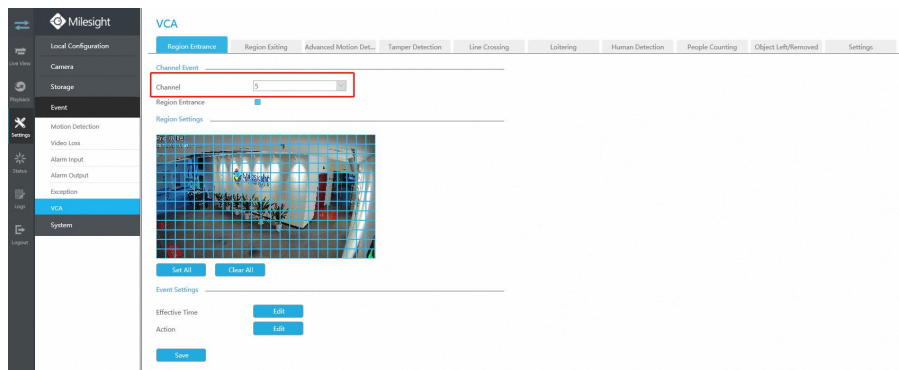
**Note:**

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.

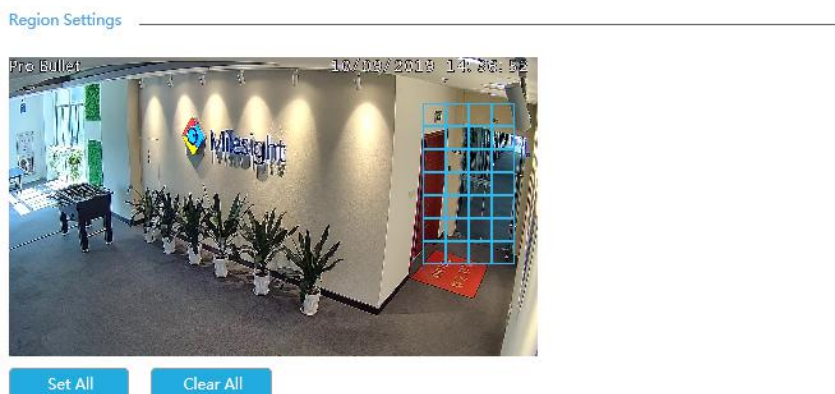


##### Step 2. Enable Region Entrance.

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



##### Step 4. 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 5. Set Action for region entrance alarm by clicking**



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

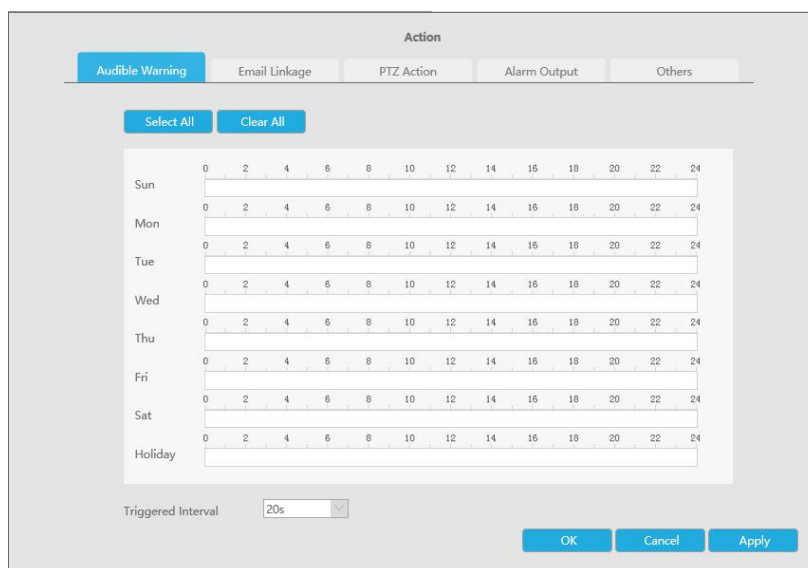
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

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



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

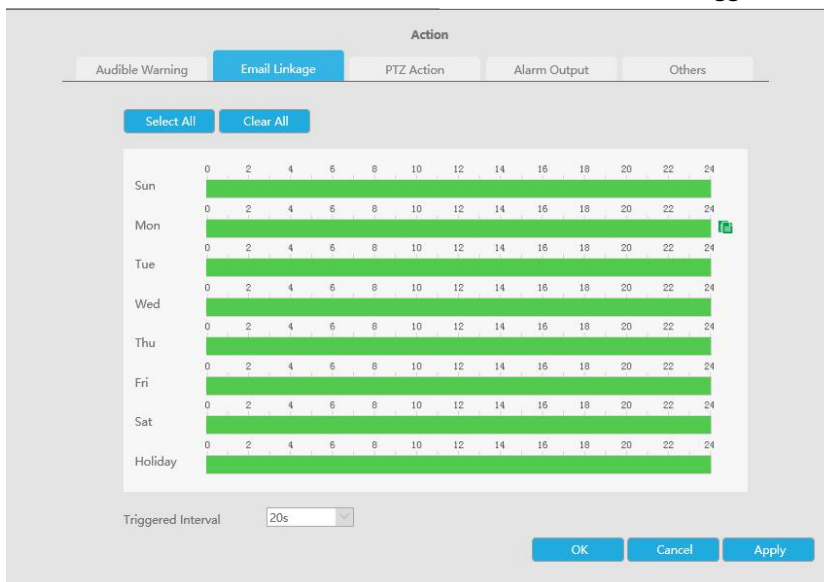
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

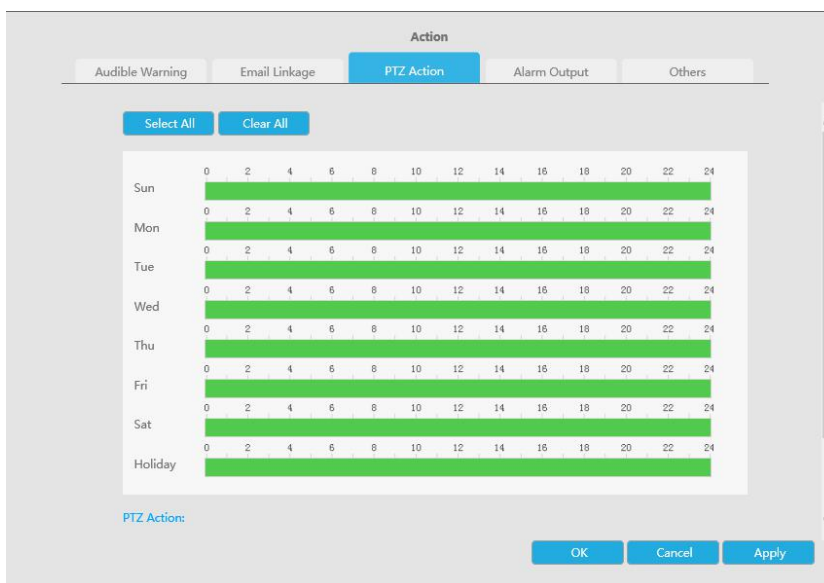
**Trigger Interval:** The effective interval between two actions when event triggered.



**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 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 apply to make configurations take effect.





PTZ Action:

Channel  Action Type  No.

|                          | Channel | Edit | Delete | Action Type | No. |
|--------------------------|---------|------|--------|-------------|-----|
| <input type="checkbox"/> |         |      |        |             |     |

**Alarm Output:** Trigger alarm output when alarm is triggered.

Action

Trigger Alarm Output  1

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

Action

Trigger Channels Record

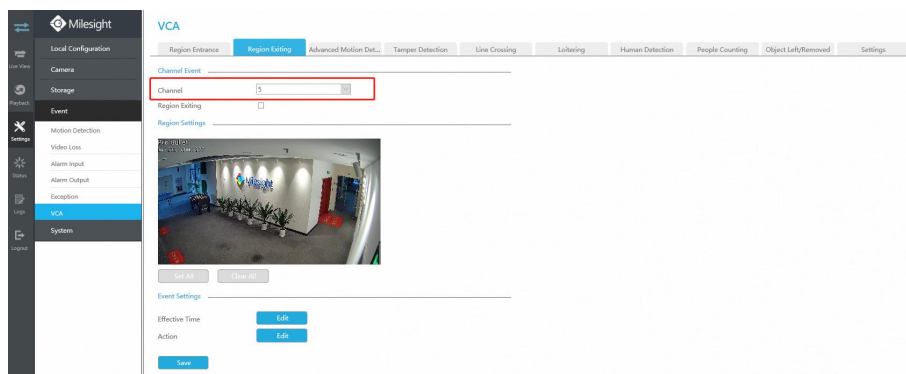
Select All

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

### 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.**

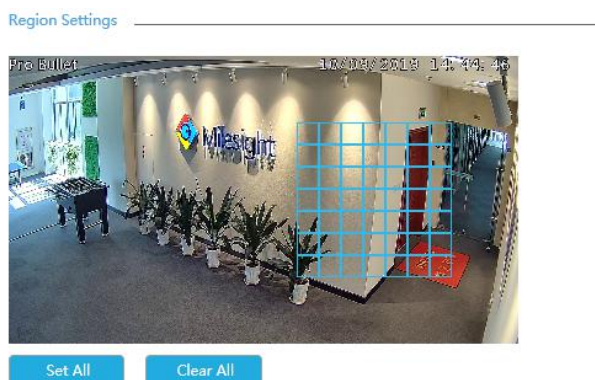
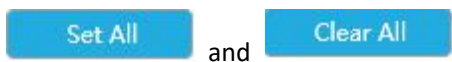


**Step 2. Enable Region Exiting.**

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



to set or clear all time settings.



**Step 5. Set Action for region exiting alarm by clicking**



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

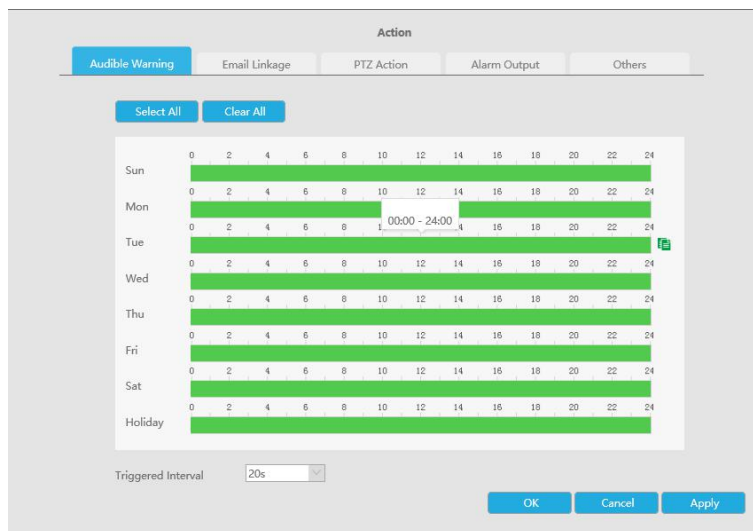
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

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



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

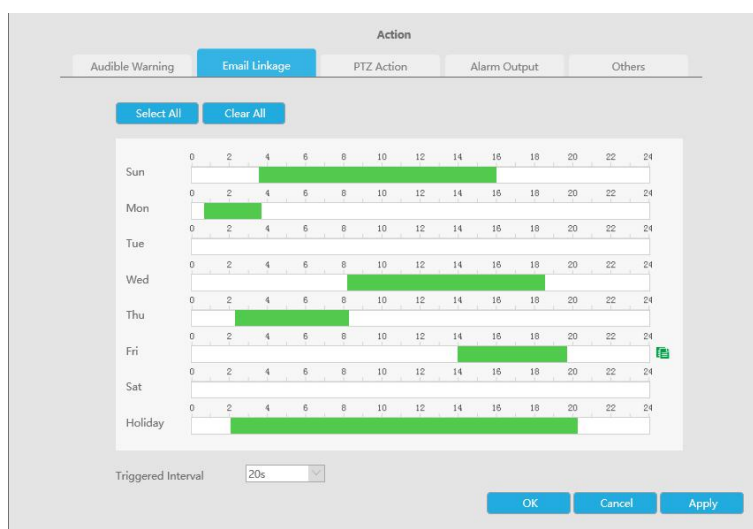
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

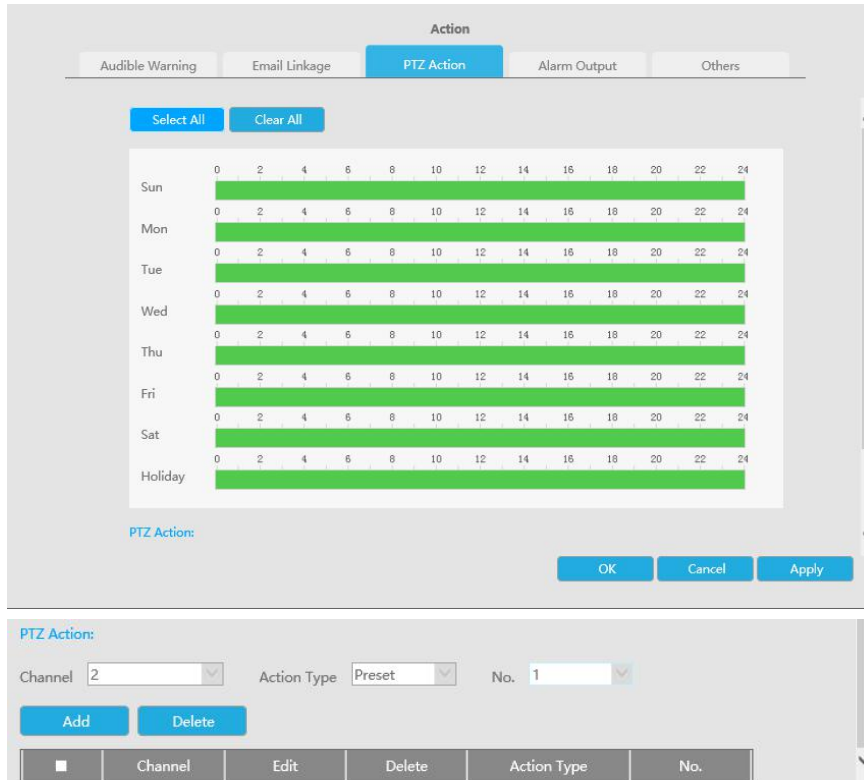
**Trigger Interval:** The effective interval between two actions when event triggered.



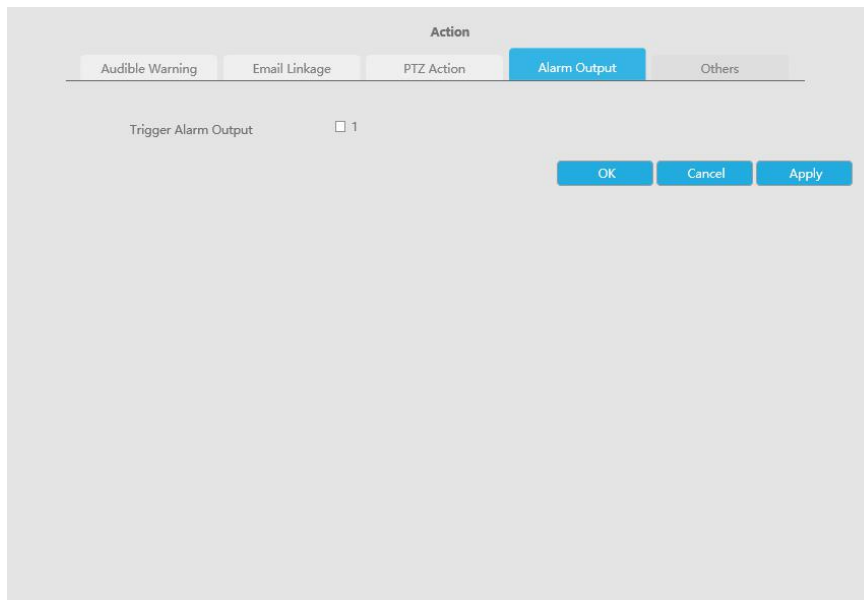
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

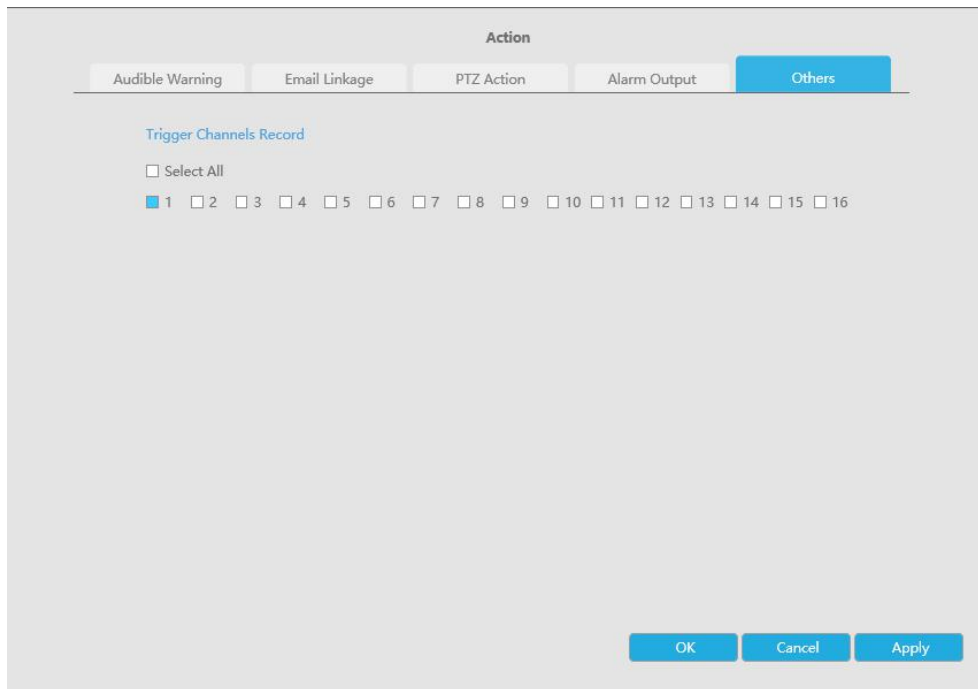
- ① Drag a square on the time table for time setting, it will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.
- ② Click apply to make configurations take effect.



**Alarm Output:** Trigger alarm output when alarm is triggered.



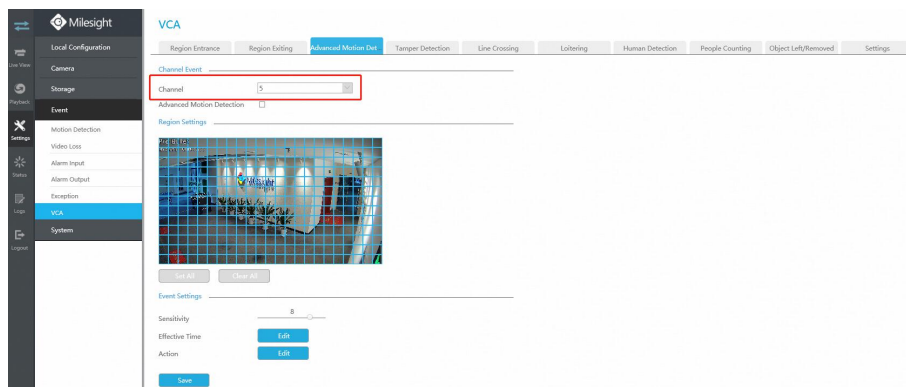
**Others:** Trigger other channels record when alarm is triggered.



## 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.

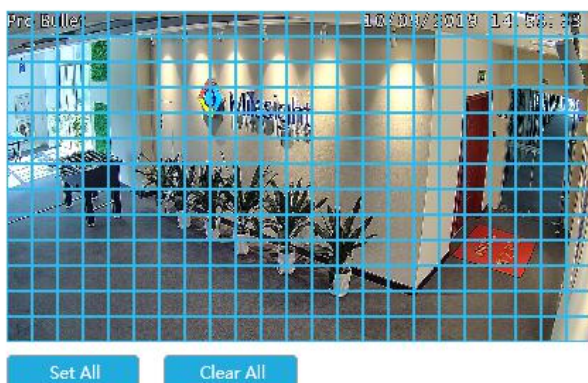
## Advanced Motion Detection

### 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**



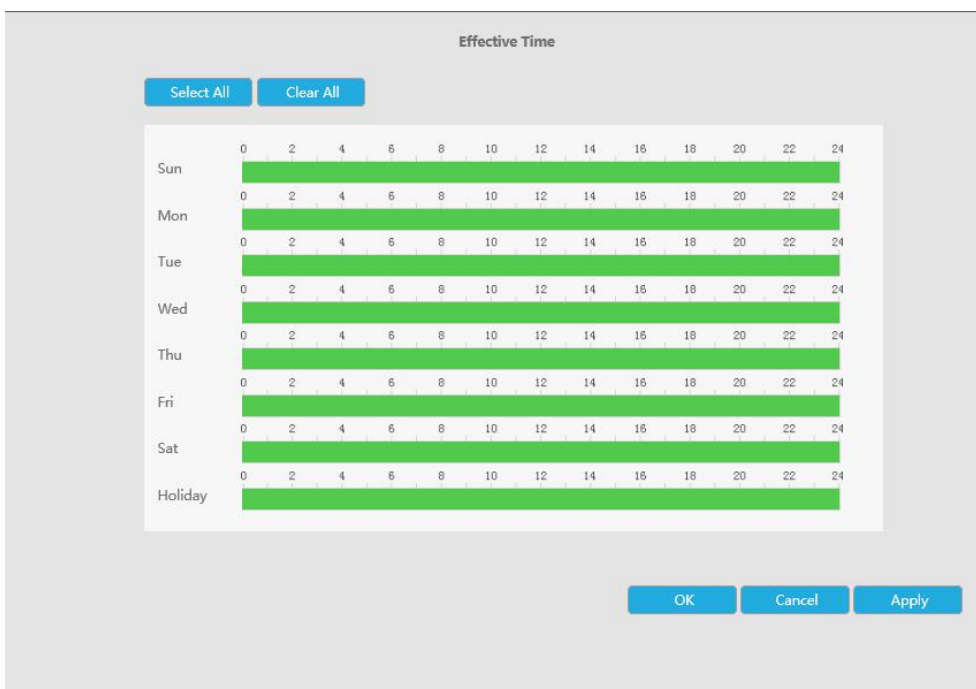
NVR receives the alarm when effective time has been set. It will be more convenient by clicking



or



to set or clear all time settings.



**Step 6. Set Action for advanced motion detection alarm by clicking**



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

Drag a line on the time table for time setting, it will be more convenient by clicking



or

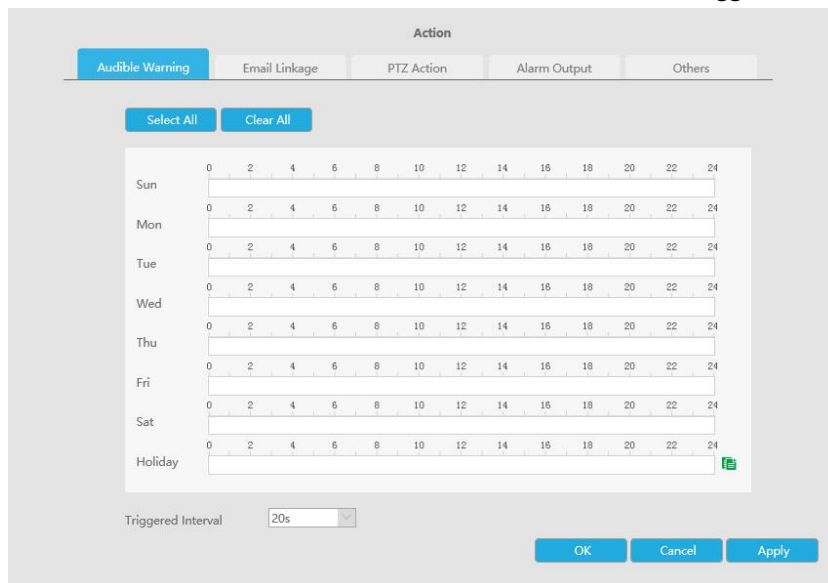


to set or clear all time settings.

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

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



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

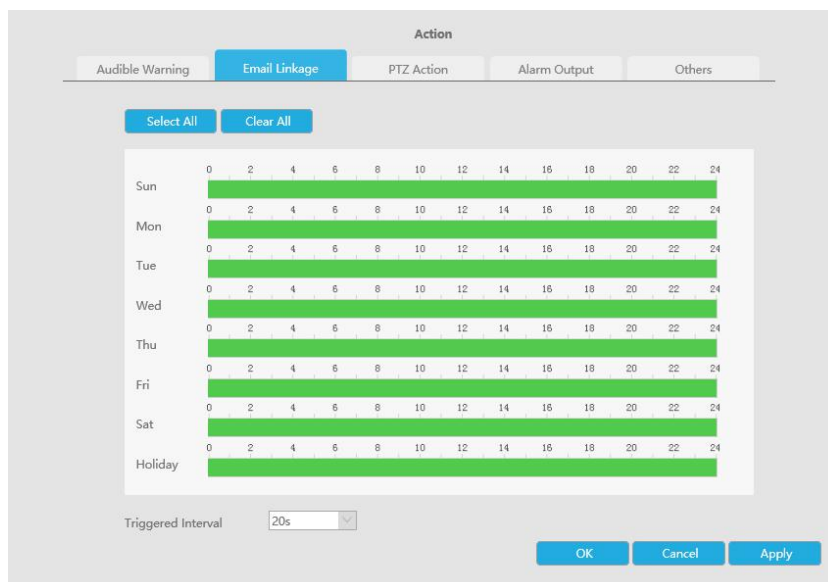
Drag a line on the time table for time setting, it will be more convenient by clicking

or to set or clear all time settings.

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

**Trigger 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 Drag a square on the time table for time setting, it will be more convenient by clicking

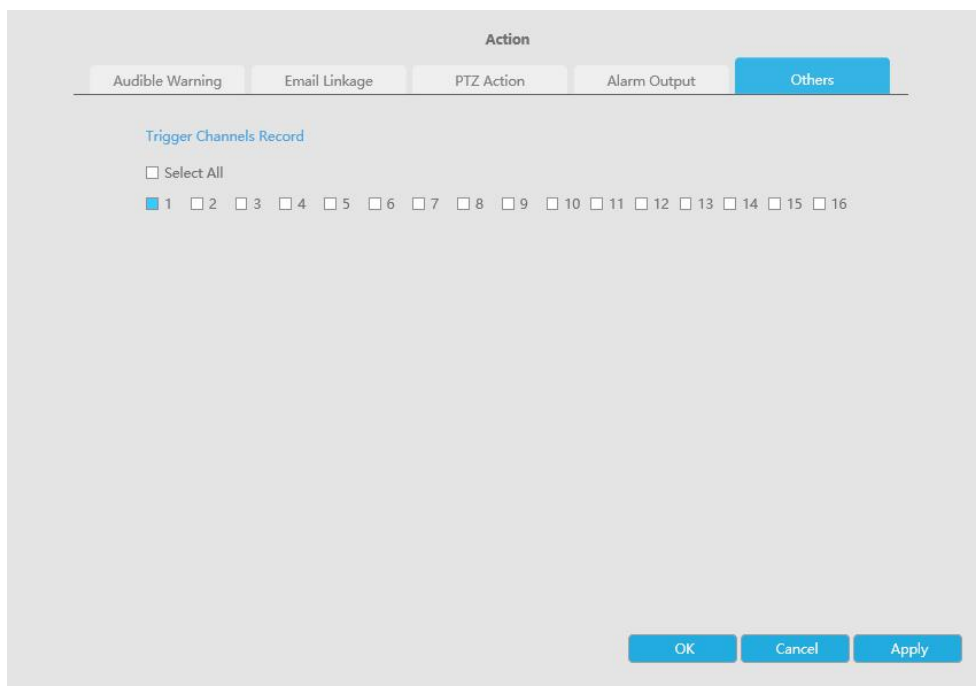
**Select All** or **Clear All** to set or clear to set or clear all time settings.

② Click apply to make configurations take effect.

**Alarm Output:** Trigger alarm output when alarm is triggered.



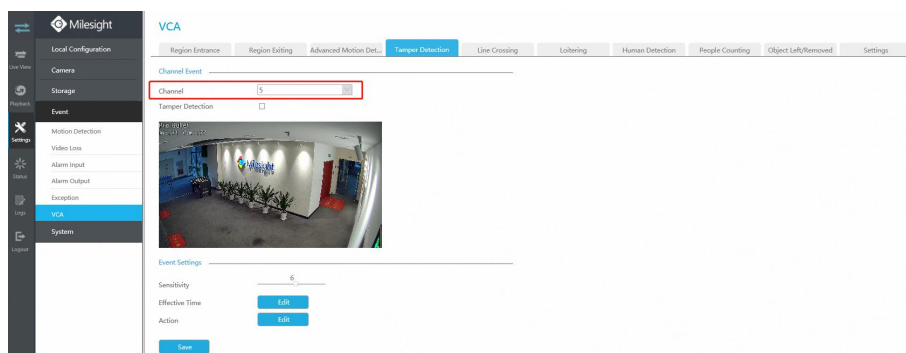
**Others:** Trigger other channels record when alarm is triggered.



### 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.

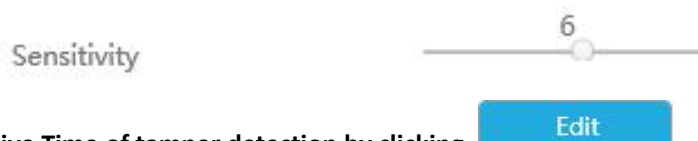


#### Step 2. Enable Tamper Detection.



#### 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 tamper detection 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 tamper detection alarm by clicking**



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

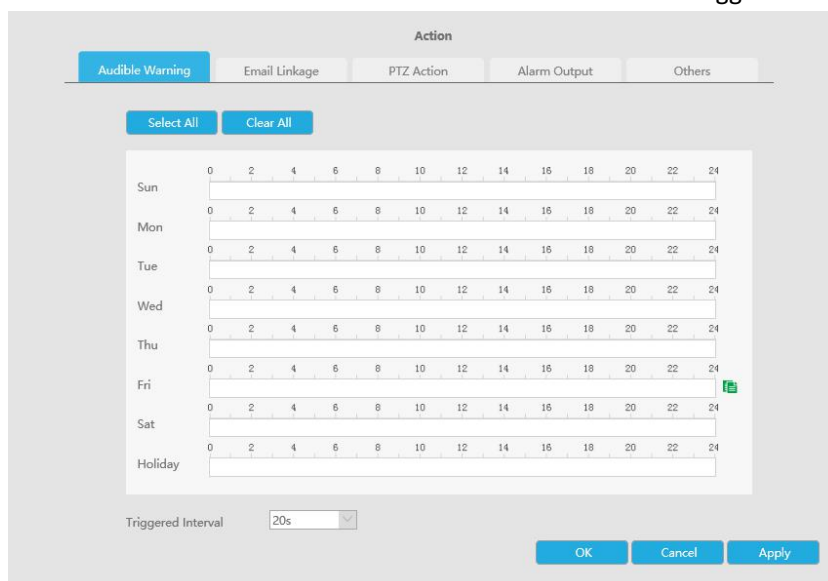
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

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



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

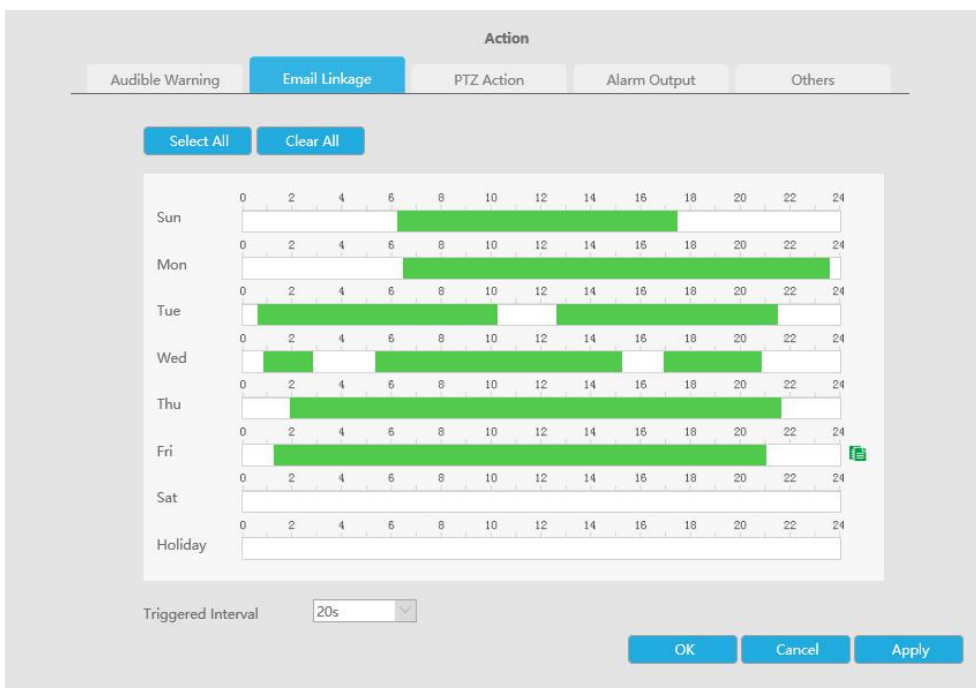
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

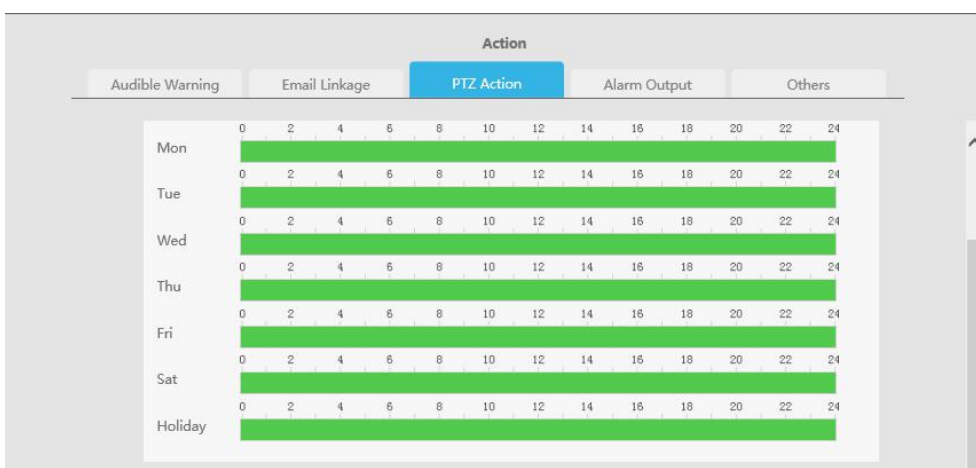
**Trigger Interval:** The effective interval between two actions when event triggered.



**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 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 apply to make configurations take effect.



PTZ Action:

Channel  Action Type  No.

| <input type="checkbox"/> | Channel | Edit | Delete | Action Type | No. |
|--------------------------|---------|------|--------|-------------|-----|
|                          |         |      |        |             |     |

**Alarm Output:** Trigger alarm output when alarm is triggered.

Action

---

Trigger Alarm Output  1

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

Action

---

Trigger Channels Record

Select All

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

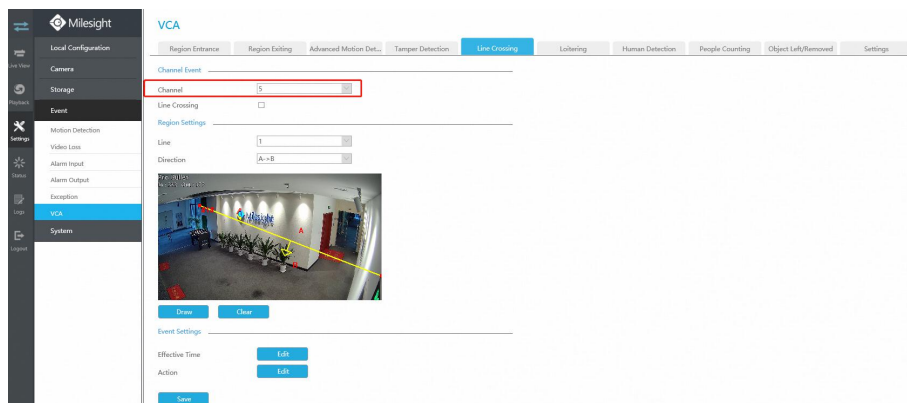
### Line Crossing

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



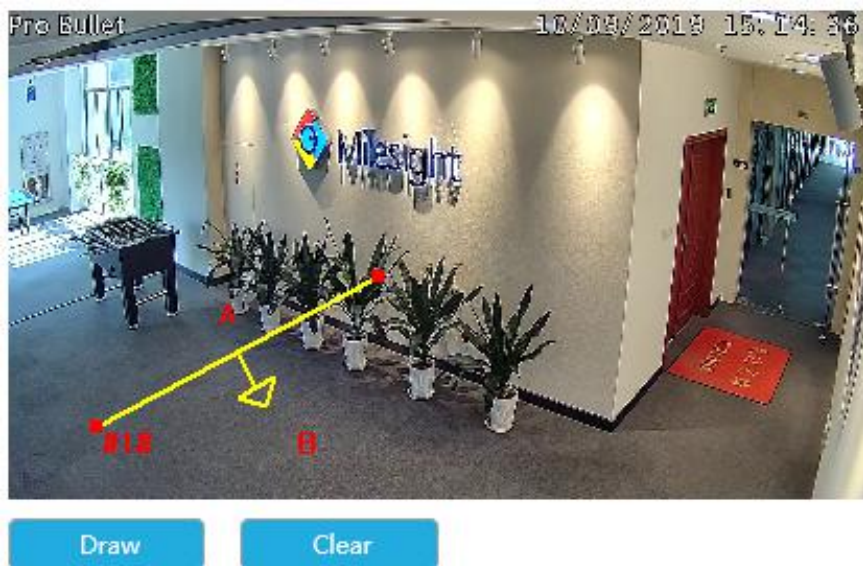
**Step 3. Choose detection line number and define its direction.**

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.

Line

Direction

**Step 4. Draw detection lines.**

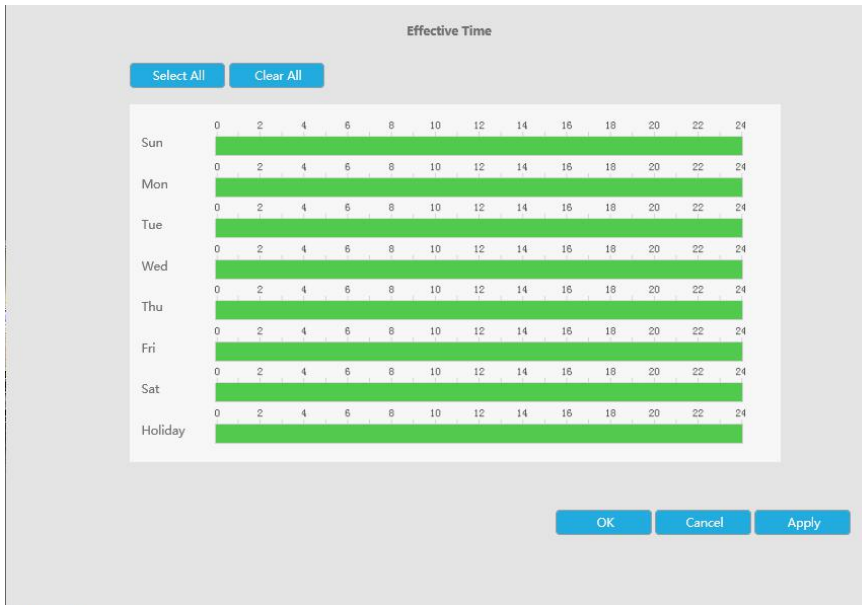


**Step 5. Set Effective Time of line crossing by clicking**



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

**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 line crossing is detected.

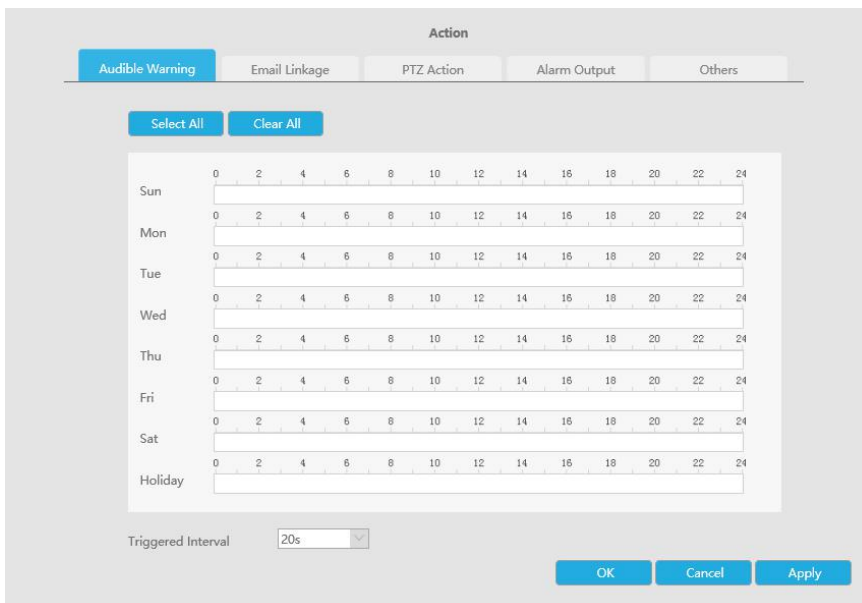
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

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



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

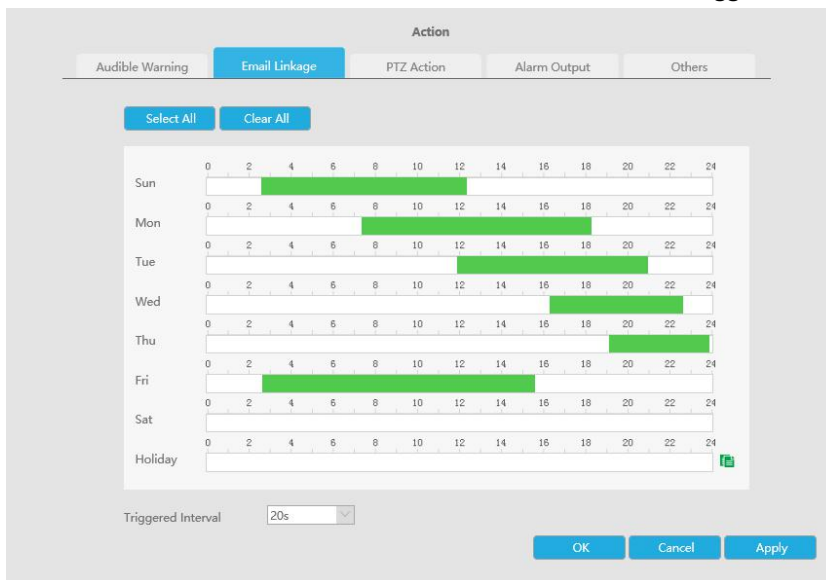
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

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



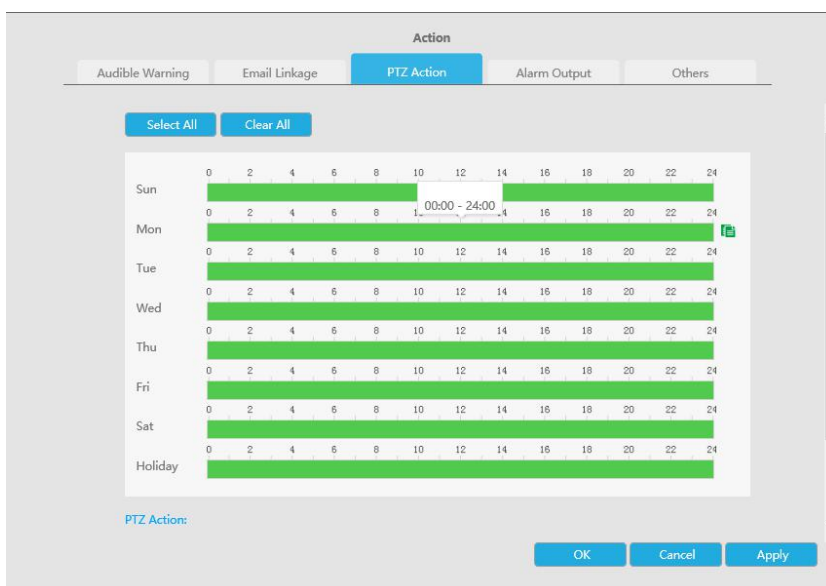
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

① 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 apply to make configurations take effect.



PTZ Action:

Channel  Action Type  No.

| <input type="checkbox"/> | Channel | Edit | Delete | Action Type | No. |
|--------------------------|---------|------|--------|-------------|-----|
|--------------------------|---------|------|--------|-------------|-----|

**Alarm Output:** Trigger alarm output when alarm is triggered.

Action

Trigger Alarm Output  1

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

Action

Trigger Channels Record

Select All

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

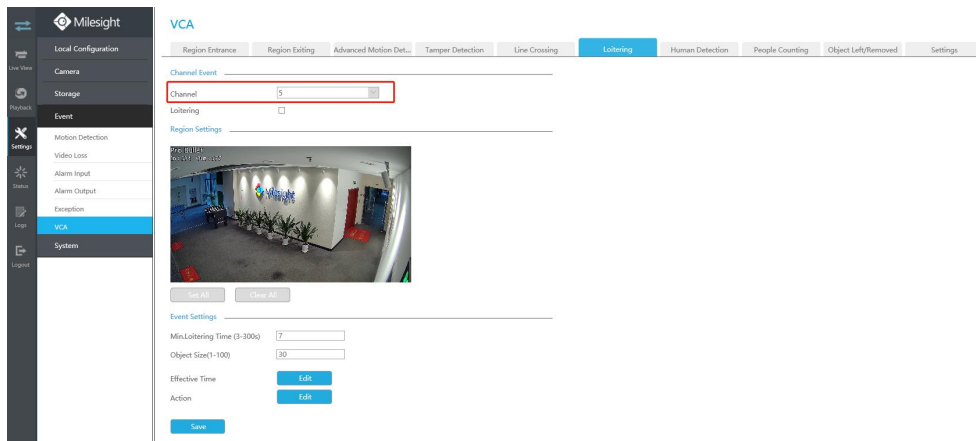
### Loitering

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



alarm.

**Step 1. Select channel.**

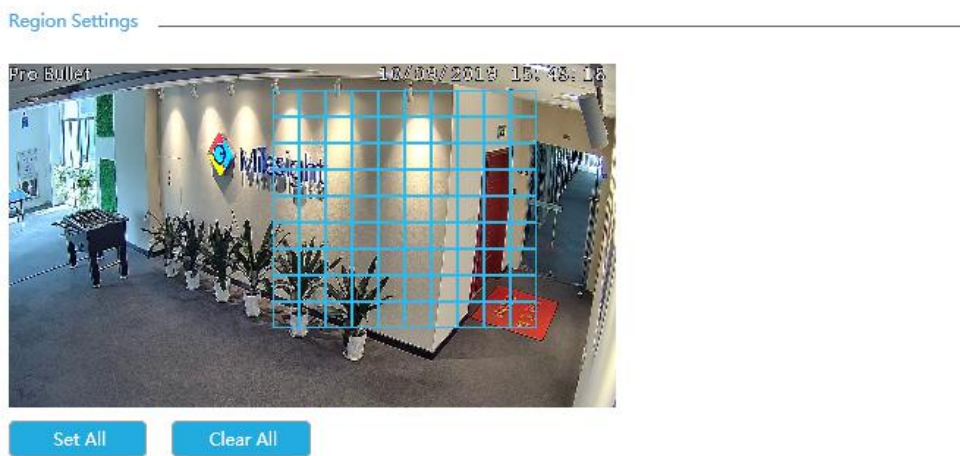
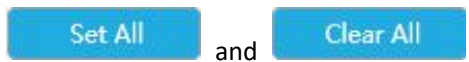


**Step 2. Enable Loitering.**



**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.



**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 loitering is detected.

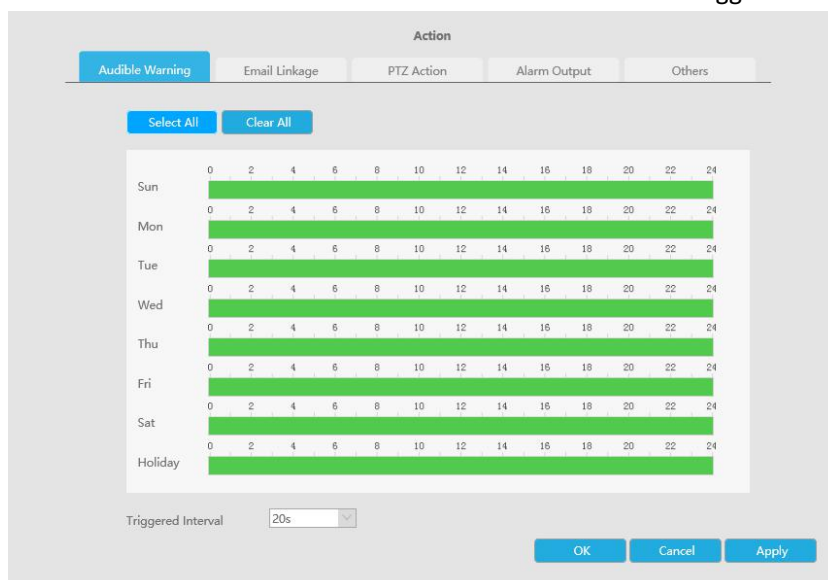
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

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




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

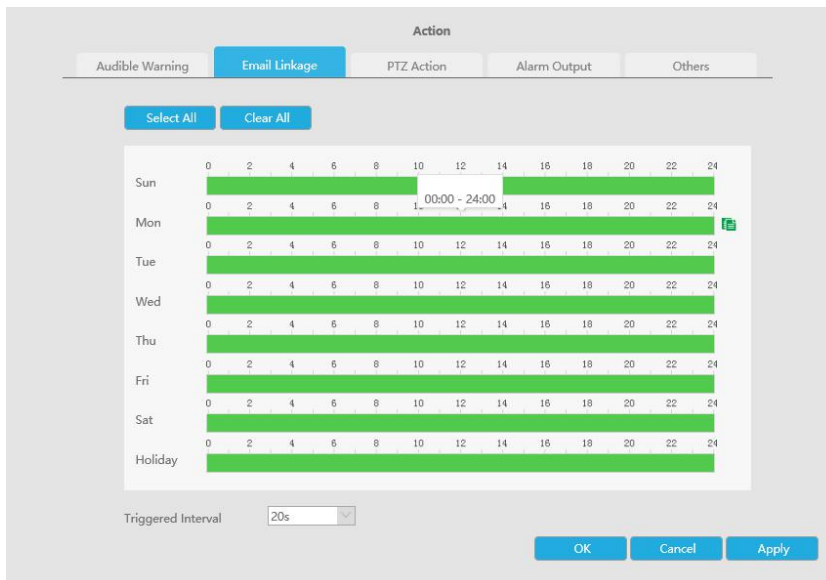
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

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



The screenshot shows the 'Action' configuration window with the 'Email Linkage' tab selected. The time table is as follows:

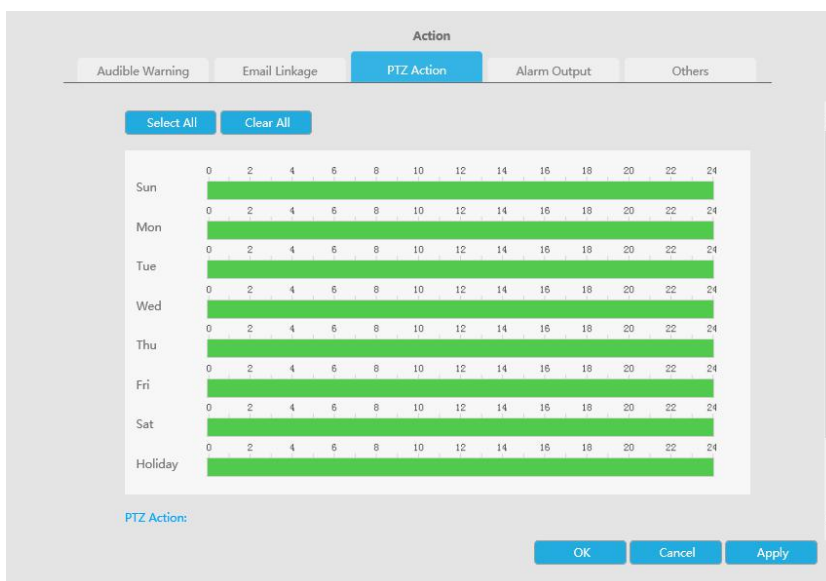
| Day     | 0 | 2 | 4 | 6 | 8 | 10               | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
|---------|---|---|---|---|---|------------------|----|----|----|----|----|----|----|
| Sun     | 0 | 2 | 4 | 6 | 8 | 10               | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| Mon     | 0 | 2 | 4 | 6 | 8 | 10:00:00 - 24:00 | 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

**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 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 apply to make configurations take effect.



The screenshot shows the 'Action' configuration window with the 'PTZ Action' tab selected. The time table is as follows:

| 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 |

PTZ Action:

PTZ Action:

Channel  Action Type  No.

| <input type="checkbox"/> | Channel | Edit | Delete | Action Type | No. |
|--------------------------|---------|------|--------|-------------|-----|
|--------------------------|---------|------|--------|-------------|-----|

**Alarm Output:** Trigger alarm output when alarm is triggered.

**Action**

Trigger Alarm Output  1

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

**Action**

Trigger Channels Record

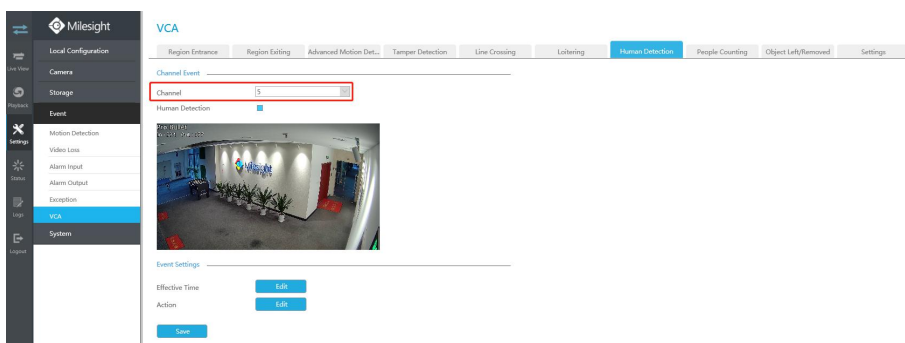
Select All

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

### 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**



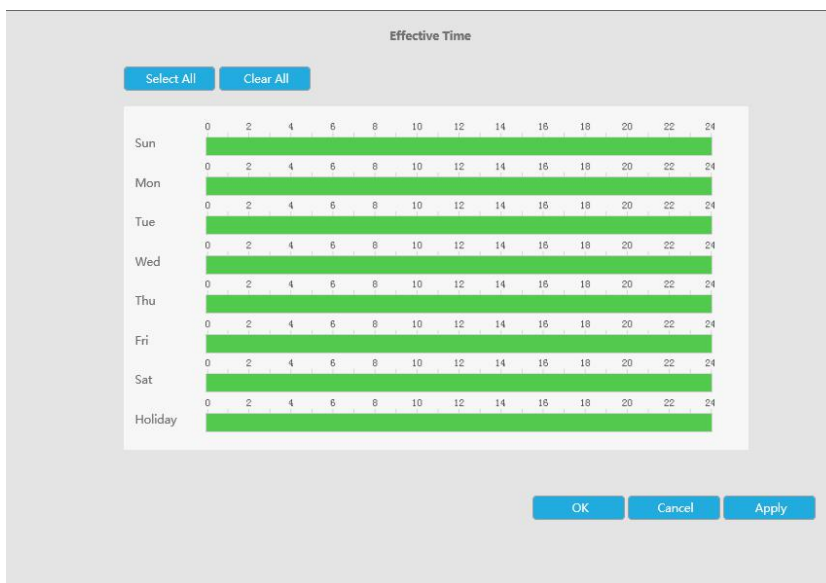
NVR receives the alarm when effective time has been set. It will be more convenient by clicking



or



to set or clear all time settings.



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



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

Drag a line on the time table for time setting, it will be more convenient by clicking




or

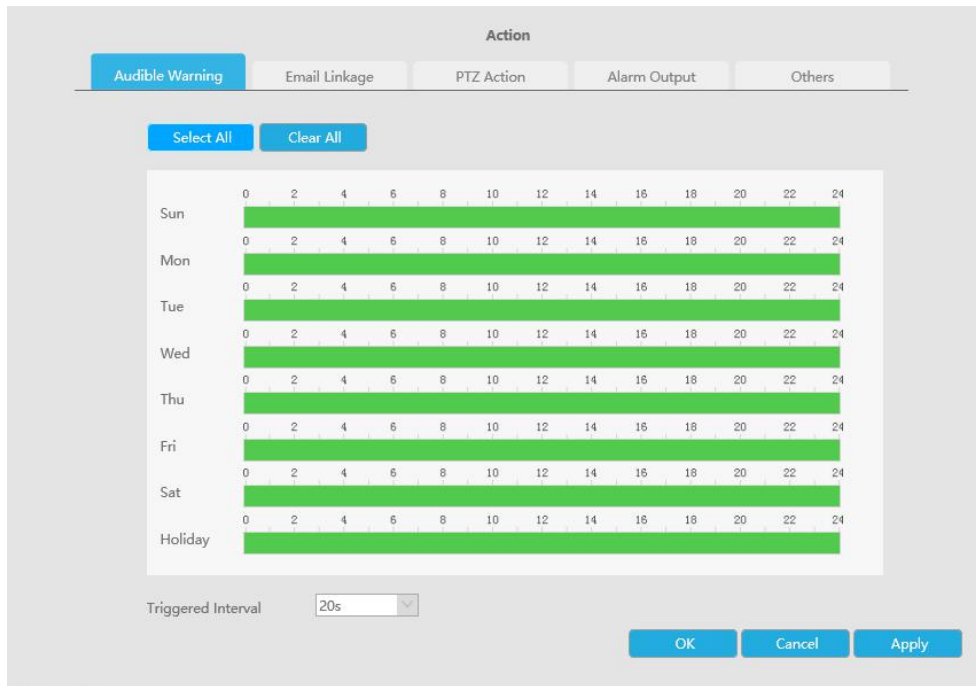


to set or clear all time settings.

What's more, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

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



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

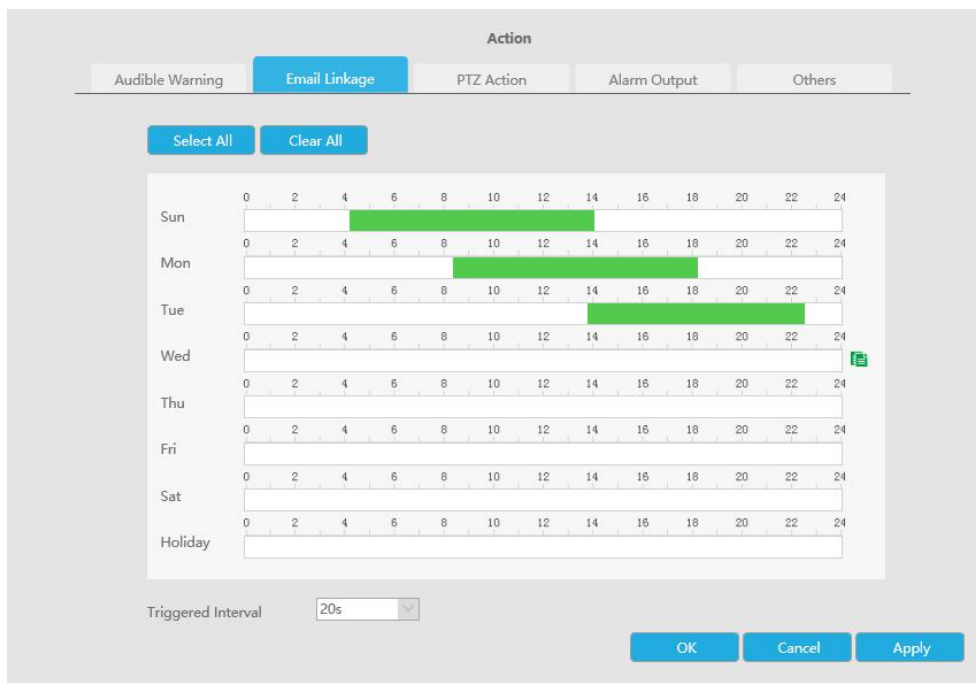
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

Click to copy time setting to other day.

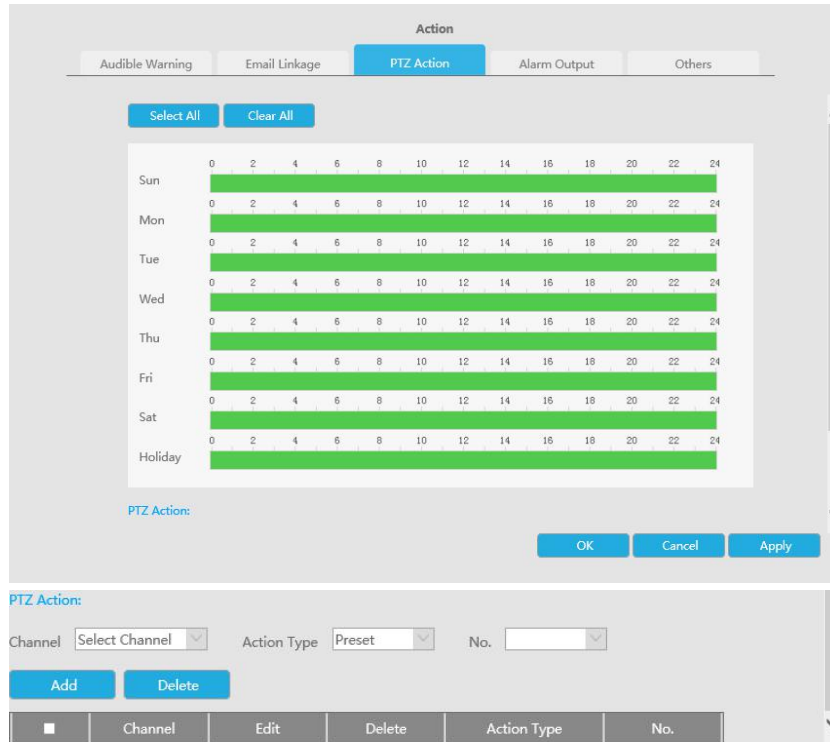
**Trigger Interval:** The effective interval between two actions when event triggered.



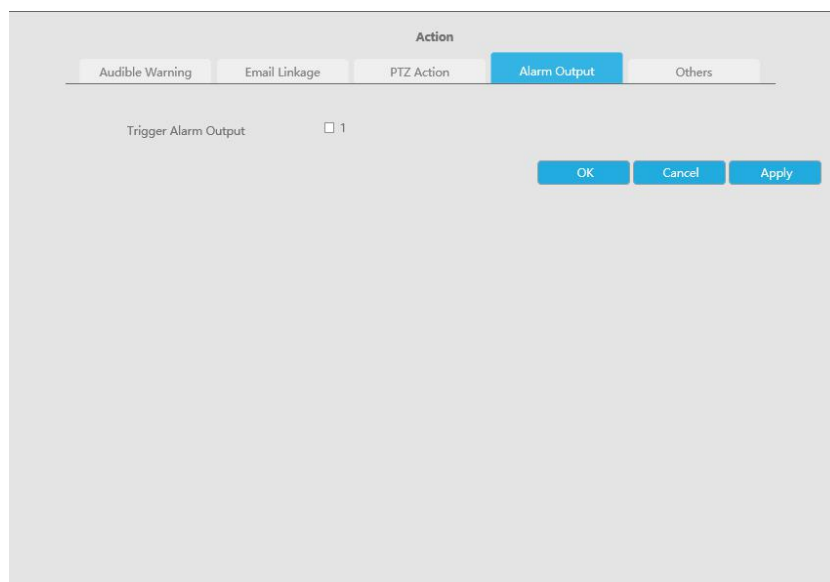
**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**.

User can set effective schedule as following two ways:

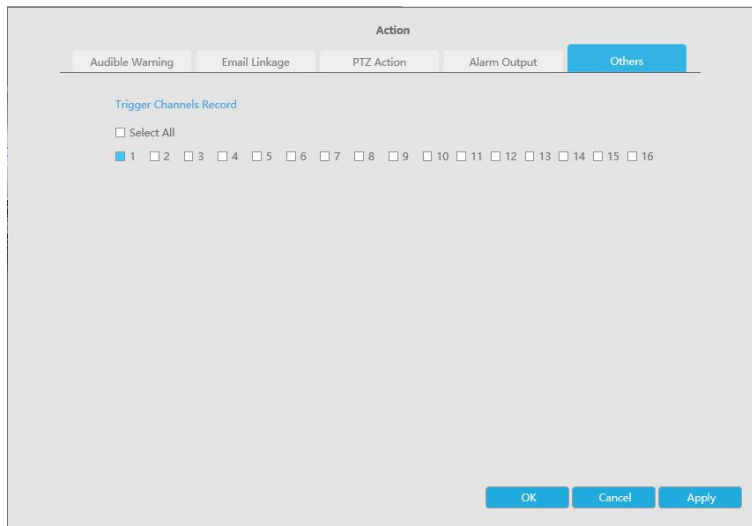
- ① Drag a square on the time table for time setting, it will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.
- ② Click apply to make configurations take effect.



**Alarm Output:** Trigger alarm output when alarm is triggered.



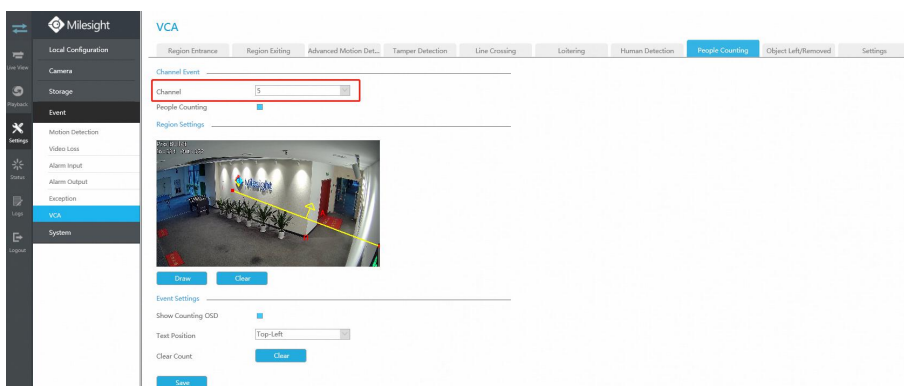
**Others:** Trigger other channels record when alarm is triggered.



## People Counting

People counting is able to count that how many people enter or exit during the setting period.

### Step 1. Select channel.

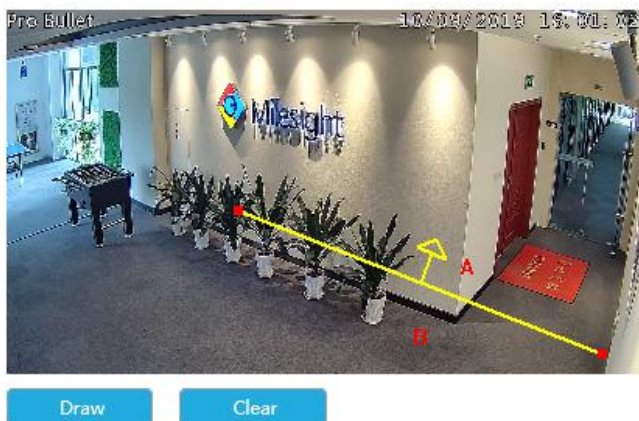


### Step 2. Enable People Counting.

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

Clear

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”.

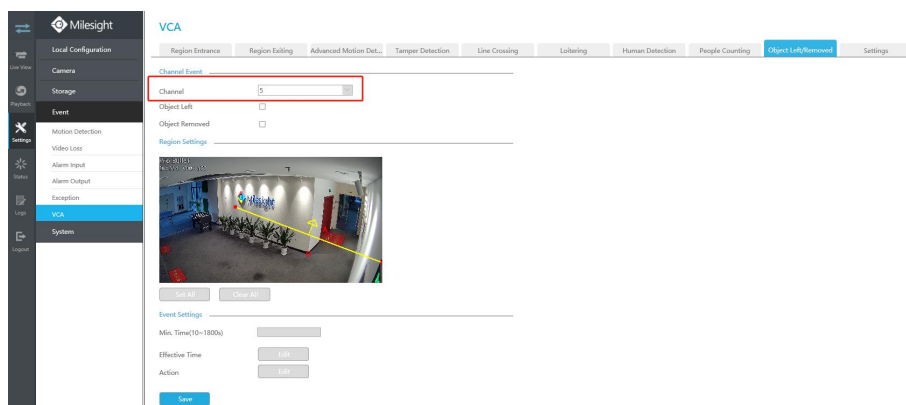
**Object Left/Removed(Optional)**

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).**



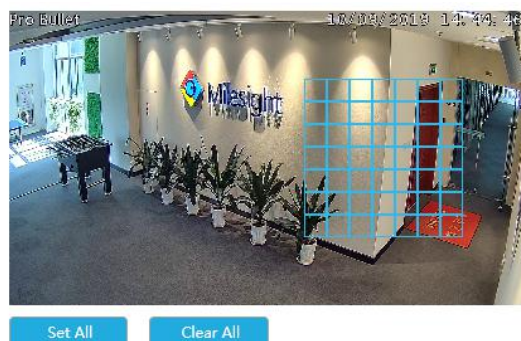
**Step 2. Set detection region.**

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)

20

**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.

Effective Time

Select All Clear All

|         |   |   |   |   |   |    |    |    |    |    |    |    |    |
|---------|---|---|---|---|---|----|----|----|----|----|----|----|----|
| 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 |

OK Cancel Apply

**Step 5. Set Action for object left/removed alarm by clicking**

Edit

**Audible Warning:** NVR will trigger an audible beep when object left/removed is detected.

Drag a line on the time table for time setting, it will be more convenient by clicking


Select All

or

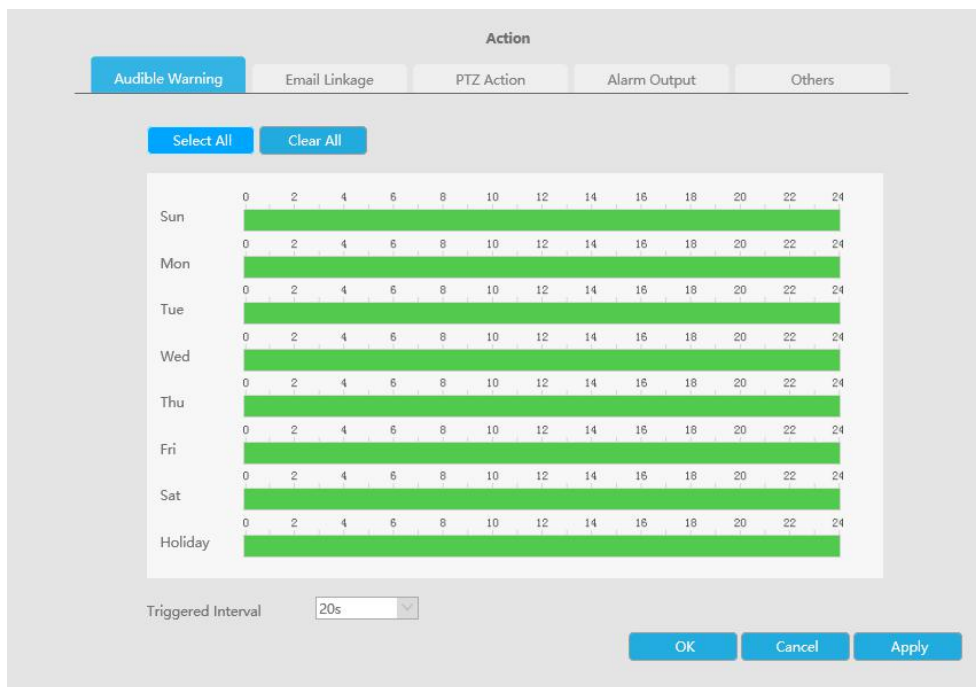
Clear All

to set or clear all time settings.

What's more, you can click time bar to edit the time accurately.

Click  to copy time setting to other day.

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



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

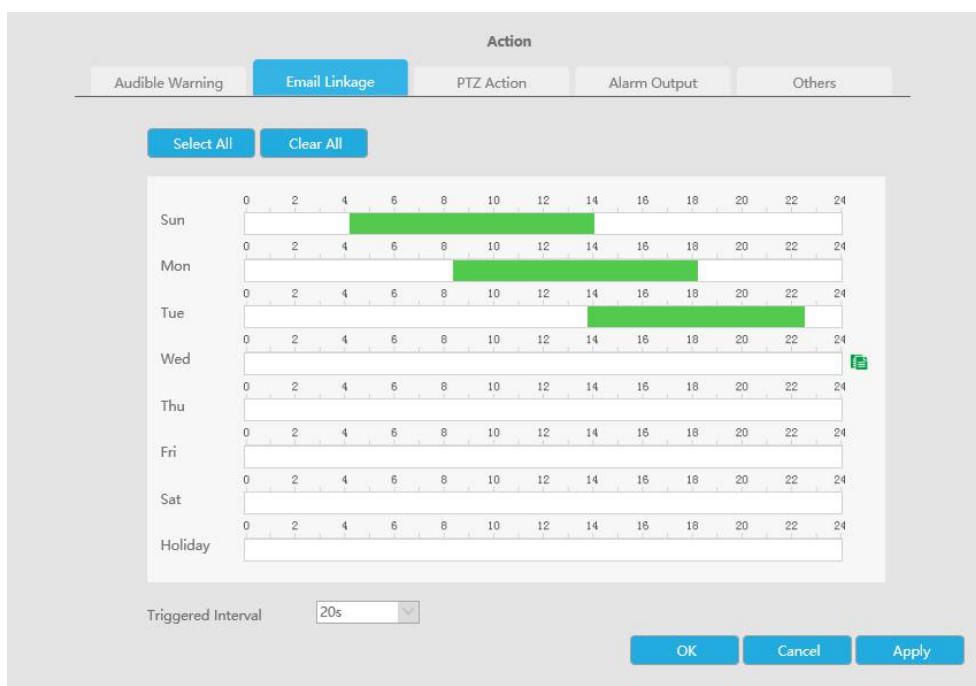
Drag a line on the time table for time setting, it will be more convenient by clicking

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

What's more, you can click time bar to edit the time accurately.

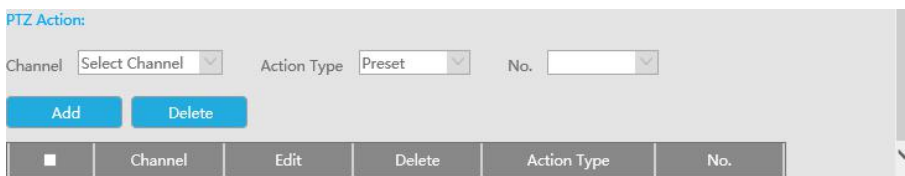
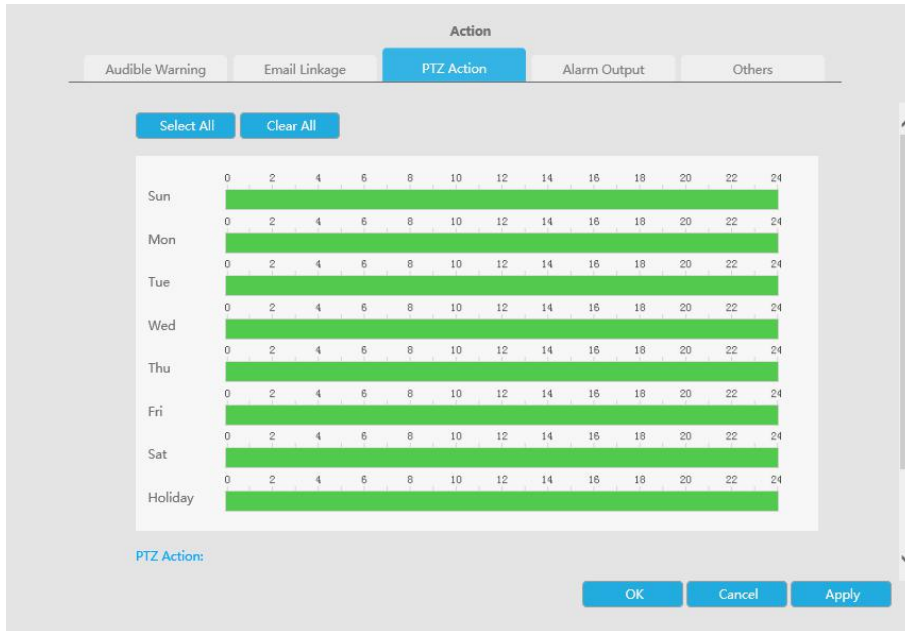
Click to copy time setting to other day.

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

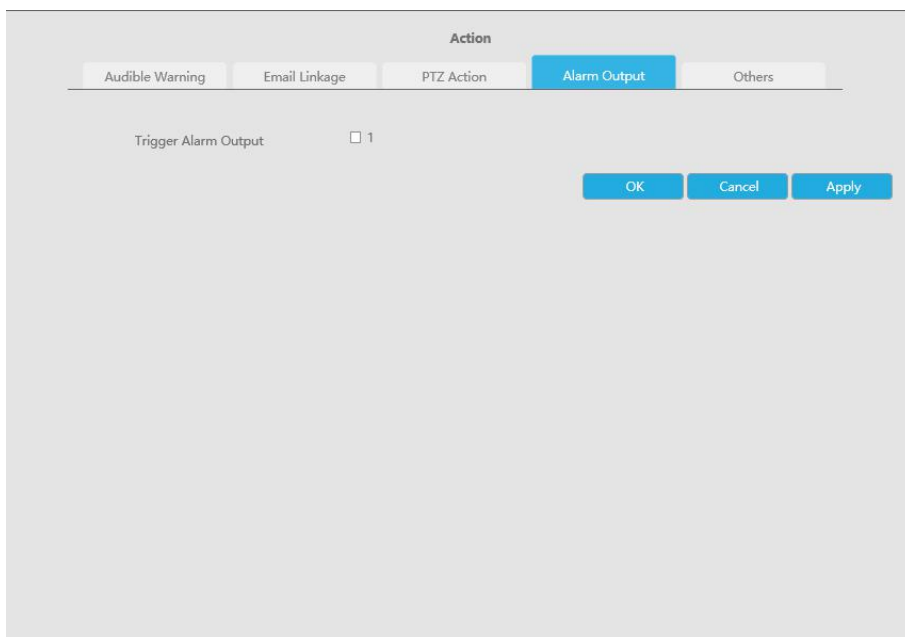


**PTZ Action:** Trigger PTZ action when alarm is triggered. PTZ action includes **Preset and Patrol**. User can set effective schedule as following two ways:

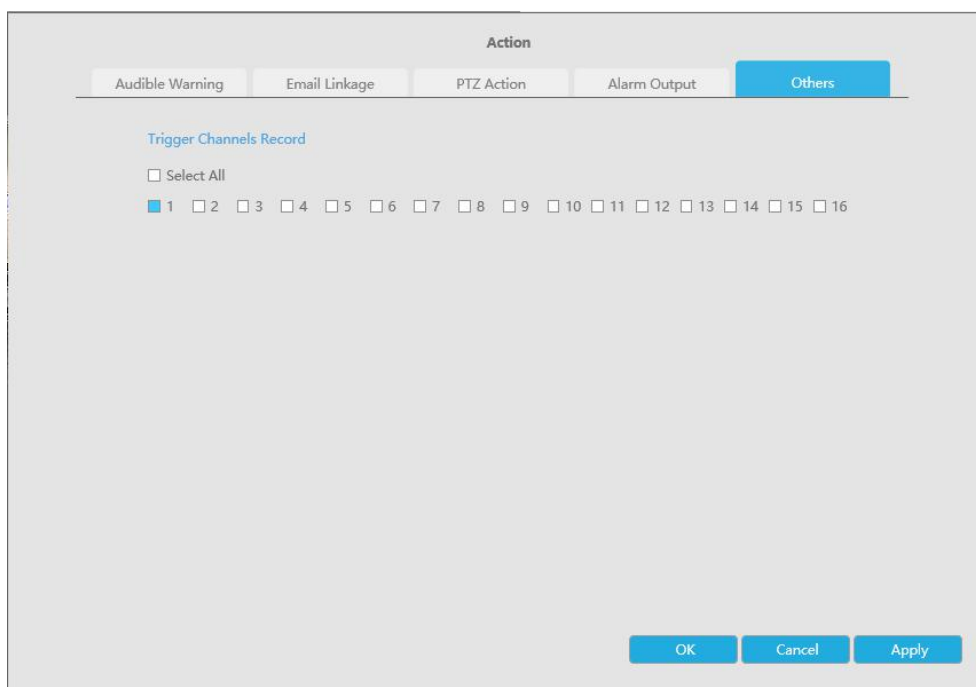
- ① Drag a square on the time table for time setting, it will be more convenient by clicking **Select All** or **Clear All** to set or clear to set or clear all time settings.
- ② Click apply to make configurations take effect.



**Alarm Output:** Trigger alarm output when alarm is triggered.



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

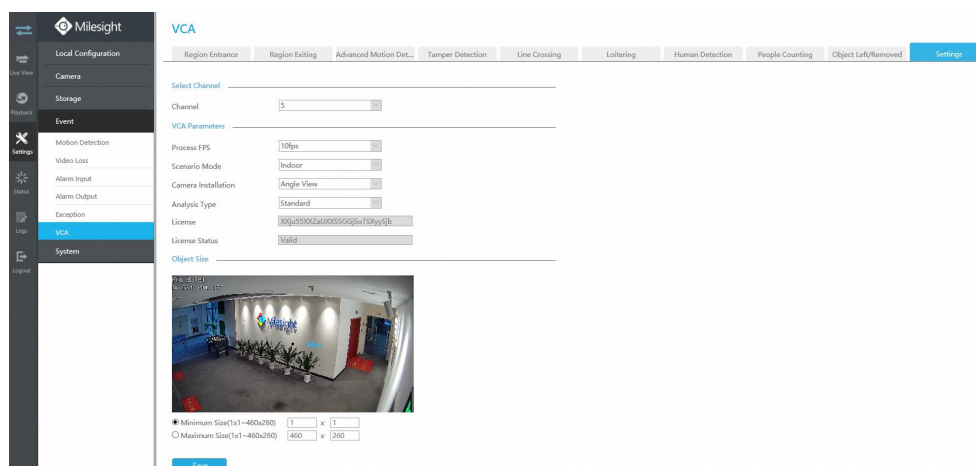


**Settings**

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>              |

## 4.6.5 System

### 4.6.5.1 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          | <input type="text" value="NVR"/>     |
| HDMI Audio           | <input type="text" value="Enable"/>  |
| Audio Out            | <input type="text" value="Enable"/>  |
| Boot Wizard          | <input type="text" value="Enable"/>  |
| HDMI Compatible Mode | <input type="text" value="Enable"/>  |
| Stream Information   | <input type="text" value="Disable"/> |

**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.

## 4.6.5.2 Network

### 4.6.5.2.1 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.

Network

Basic UPnP DDNS Email P2P PPPoE SNMP HTTPS More

NIC Settings

IPv4 DHCP

IPv4 Address

IPv4 Subnet Mask

IPv4 Gateway

IPv6 Mode

IPv6 Address

IPv6 Prefix Length

IPv6 Gateway

MAC

MTU(Byte)

DNS Server

Preferred DNS Server

Alternate DNS Server

PoE NIC IPv4 Address

Save

#### 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.

### 4.6.5.2.2 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      |      | 23702         | 554           | Invalid |

Save



### 4.6.5.2.3 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.

### 4.6.5.2.4 Email

Email will send receivers a screenshot when the alarm is triggered.

**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  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.

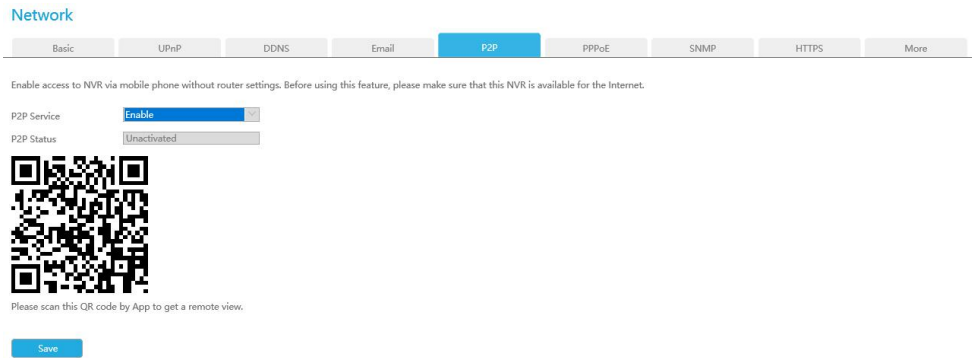
#### 4.6.5.2.5 P2P

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.

#### 4.6.5.2.6 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:

Notes: 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.

**4.6.5.2.7 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

### 4.6.5.2.8 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 selected. The 'HTTPS' dropdown is set to 'Disable'. The 'Installation Type' dropdown is set to 'Create a Private Certificate'. Below this, there is a 'Create a Private Certificate' button, an 'Installed Certificate' field with a 'Clear' button, and an 'Attributes' section. A 'Save' button is located at the bottom left of the configuration area.

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
- Email

At the bottom right, there are 'OK' and 'Cancel' buttons.

#### Direct Installation

Click "Browse" to select a signed certificate locally and click "Install" to install it.

|                            |  |                        |
|----------------------------|--|------------------------|
| HTTPS                      | Enable   |                        |
| Installation Type          | Direct Installation  |                        |
| Install Signed Certificate | <input type="text"/>   | <a href="#">Browse</a> |
|                            | <a href="#">Install</a>  |                        |
| Installed Certificate      | C=CN, H/IP=cn  | <a href="#">Clear</a>  |
| Attributes                 | Awarded to:<br>C=CN, H/IP=cn<br>Issuer:<br>C=CN, H/IP=cn<br>Period of Validity:<br>Jun 6 16:21:28 2018 ~<br>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;

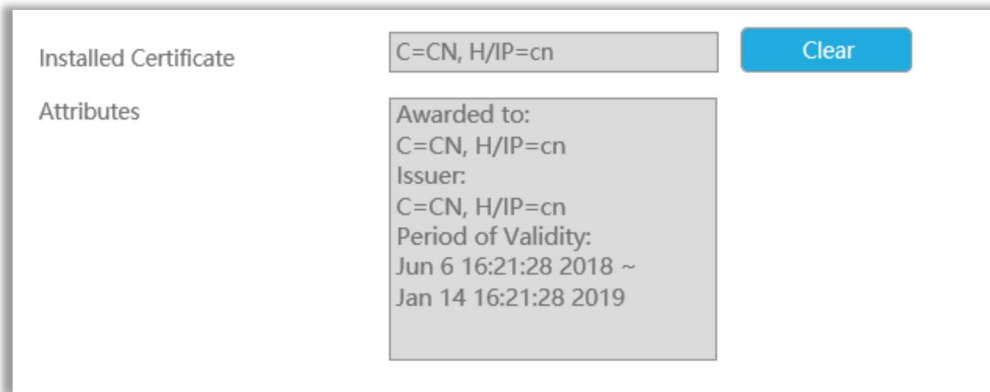
Download the certificate request and submit it to the trusted certificate authority for signature;

After receiving the signed valid certificate, import the certificate to the device.

|                                  |  |                                 |
|----------------------------------|--|---------------------------------|
| HTTPS                            | Enable   |                                 |
| Installation Type                | Create a Certificate Request   |                                 |
| Create a Certificate Request     | <a href="#">Create</a>   | <a href="#">Request Content</a> |
| Download the Certificate Request | <a href="#">Download</a>   |                                 |
| Delete the Certificate Request   | <a href="#">Delete</a>   |                                 |
| Installed Certificate            | C=CN, H/IP=cn  | <a href="#">Clear</a>           |
| Attributes                       | Awarded to:<br>C=CN, H/IP=cn<br>Issuer:<br>C=CN, H/IP=cn<br>Period of Validity:<br>Jun 6 16:21:28 2018 ~<br>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

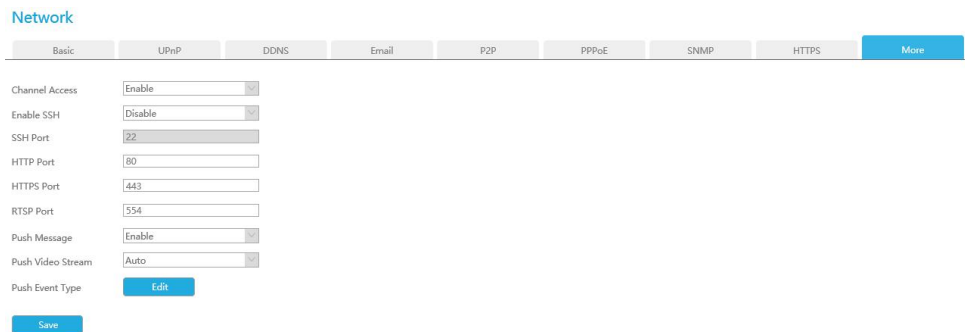
<https://ip:port> via the web browser.



**Note:**

The default HTTPS port is 443, you can modify it on the “More” interface.

#### 4.6.5.2.9 More



#### 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**


Select which alarm type will be pushed to APP M-sight Pro. It includes Motion Detection, Video Loss, Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering and Human Detection.

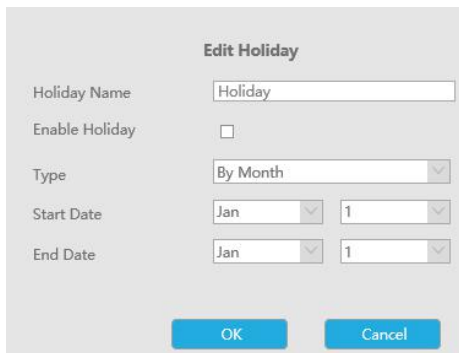
## 4.6.5.3 Holiday

It can configure the record or image capture schedule for holidays of the current year.



| No. | Holiday Name | Status  | Start Date | End Date | Edit |
|-----|--------------|---------|------------|----------|------|
| 1   | Holiday      | Disable | 1-1        | 1-1      |      |
| 2   | Holiday      | Disable | 1-1        | 1-1      |      |
| 3   | Holiday      | Disable | 1-1        | 1-1      |      |
| 4   | Holiday      | Disable | 1-1        | 1-1      |      |
| 5   | Holiday      | Disable | 1-1        | 1-1      |      |
| 6   | Holiday      | Disable | 1-1        | 1-1      |      |
| 7   | Holiday      | Disable | 1-1        | 1-1      |      |
| 8   | Holiday      | Disable | 1-1        | 1-1      |      |
| 9   | Holiday      | Disable | 1-1        | 1-1      |      |
| 10  | Holiday      | Disable | 1-1        | 1-1      |      |
| 11  | Holiday      | Disable | 1-1        | 1-1      |      |
| 12  | Holiday      | Disable | 1-1        | 1-1      |      |
| 13  | Holiday      | Disable | 1-1        | 1-1      |      |
| 14  | Holiday      | Disable | 1-1        | 1-1      |      |
| 15  | Holiday      | Disable | 1-1        | 1-1      |      |
| 16  | Holiday      | Disable | 1-1        | 1-1      |      |

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.



**Edit Holiday**

Holiday Name:

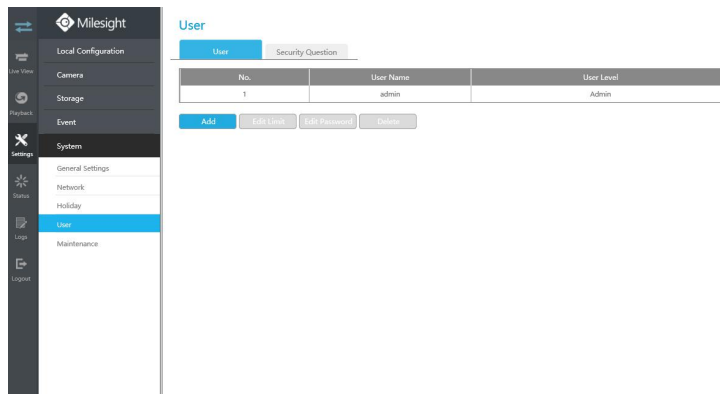
Enable Holiday:

Type:

Start Date:

End Date:



## 4.6.5.4 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.



**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  | Remote Privilege                                    |
|--|---|
| <input type="checkbox"/> Channel Management              | <input type="checkbox"/> Channel Management         |
| <input checked="" type="checkbox"/> PTZ Control          | <input checked="" type="checkbox"/> PTZ Control     |
| <input type="checkbox"/> Record Settings                 | <input type="checkbox"/> Record Settings            |
| <input type="checkbox"/> Disk Management                 | <input type="checkbox"/> Disk Management            |
| <input checked="" type="checkbox"/> Playback             | <input checked="" type="checkbox"/> Playback        |
| <input checked="" type="checkbox"/> Video/Picture Export | <input checked="" type="checkbox"/> Video Export    |
| <input type="checkbox"/> Event Settings                  | <input type="checkbox"/> Event Settings             |
| <input checked="" type="checkbox"/> Status & Log         | <input checked="" type="checkbox"/> Status & Log    |
| <input type="checkbox"/> General Settings                | <input type="checkbox"/> General Settings           |
| <input type="checkbox"/> Network Settings                | <input type="checkbox"/> Network Settings           |
| <input type="checkbox"/> Holiday                         | <input type="checkbox"/> Holiday                    |
| <input type="checkbox"/> System Upgrade                  | <input type="checkbox"/> System Upgrade             |
| <input type="checkbox"/> Save/Load Configuration         | <input type="checkbox"/> Save/Load Configuration    |
| <input type="checkbox"/> Shutdown/Reboot                 | <input type="checkbox"/> Reboot                     |
| <input checked="" type="checkbox"/> Emergency Record     | <input checked="" type="checkbox"/> Remote Record   |
| <input checked="" type="checkbox"/> Snapshot             | <input checked="" type="checkbox"/> Remote Snapshot |
| <input type="checkbox"/> Auto Maintenance                | <input type="checkbox"/> Auto Maintenance           |
| <input type="checkbox"/> Live View Settings              | <input type="checkbox"/> Auto Reboot                |
| <input type="checkbox"/> Auto Reboot                     |   |
| <input type="checkbox"/> Retrieve                        |   |

**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

User Name

New Password

Confirm


Sync new password to current connected PoE channels

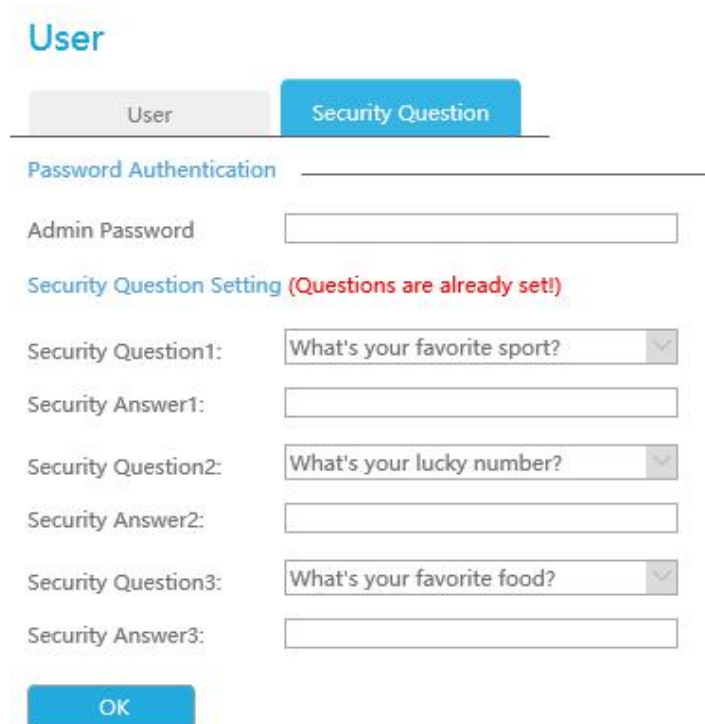
**OK** **Back**

## 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:

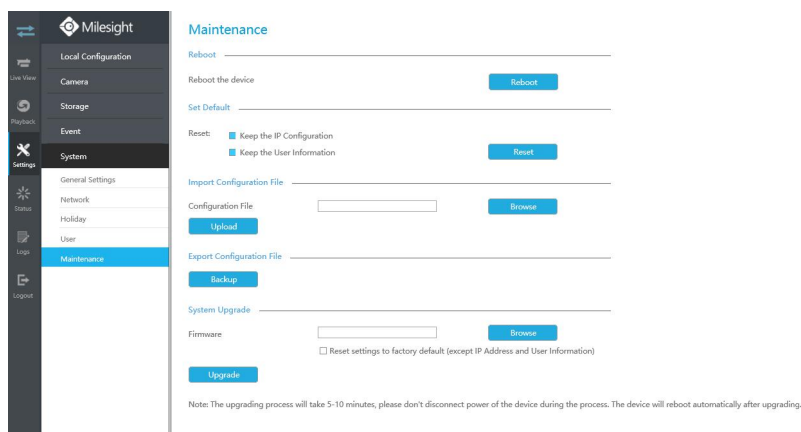
Security Answer3:

**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.

## 4.6.5.5 Maintenance




**Maintenance**



Reboot

Reboot the device 


Set Default

Reset:  Keep the IP Configuration  Keep the User Information 



Import Configuration File

Configuration File   

Export Configuration File



System Upgrade

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.

## Reboot

Click **Reboot** to reboot the NVR.

Reboot

Reboot the device

Reboot

### Set Default

Click **Reset** to reset the NVR to factory defaults.

Keeping the IP parameters and keeping the User information are available.

Set Default

Reset:  Keep the IP Configuration

Keep the User Information

Reset

### Import Configuration File

Click **Browse** to select one file and click **Upload** to import the NVR configuration.

Import Configuration File

Configuration File

Upload

Browse

### Export Configuration File

Click **Backup** to backup current NVR settings.

Export Configuration File

Backup

### System Upgrade

Click **Browse** to select the firmware file, and you can check  to reset configuration to factory defaults.

Click **Upgrade** to upgrade.

System Upgrade

Firmware

Browse

Reset settings to factory default (except IP Address and User Information)

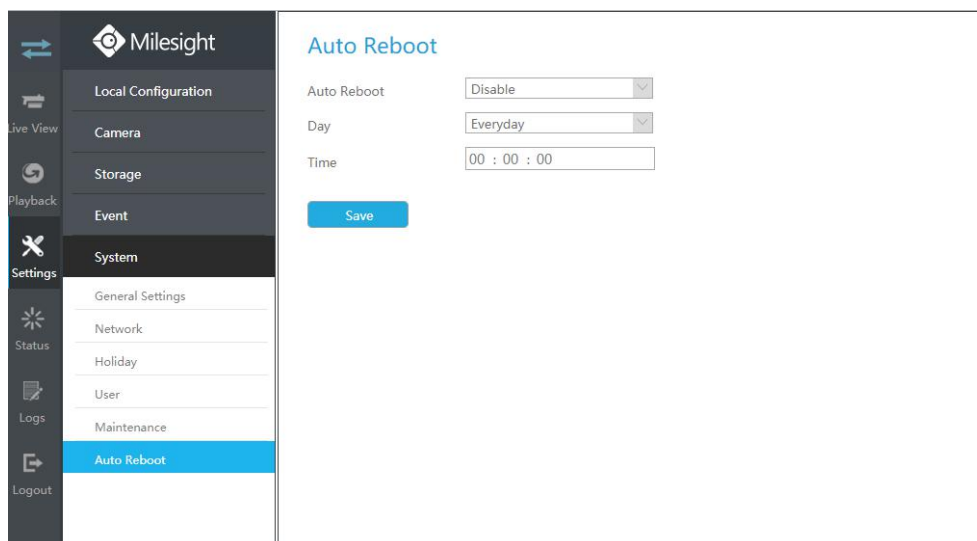
Upgrade

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.

#### 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.

## 4.6.5.6 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 enable 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.

## 4.7 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.

### 4.7.1 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  |

## 4.7.2 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 |

## 4.7.3 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       | --   | --             | --     | --         | --       | --         | --        |
| 10      | --   | --             | --     | --         | --       | --         | --        |
| 11      | --   | --             | --     | --         | --       | --         | --        |
| 12      | --   | --             | --     | --         | --       | --         | --        |
| 13      | --   | --             | --     | --         | --       | --         | --        |
| 14      | --   | --             | --     | --         | --       | --         | --        |
| 15      | --   | --             | --     | --         | --       | --         | --        |
| 16      | --   | --             | --     | --         | --       | --         | --        |

## 4.7.4 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](#)

## 4.7.5 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 | I/O |
|---------|-------|--------------|------------|--------|-----|
| 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 |              |            |        |     |

### 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         |        |

#### Alarm Output List

| No. | Alarm Name | Alarm Type | Dwell Time | Status |
|-----|------------|------------|------------|--------|
| 1   |            | NO         | 5s         |        |

### VCA

It shows the VCA status. turns into when alarm is triggered.

Event Status

Camera Event Alarm **VCA** People Counting

| 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

Camera Event Alarm VCA **People Counting**

| 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 | --           | -- | --  |

## 4.7.6 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

Port

NIC

## 4.8 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. | Main Type   | Time                | Sub Type               | Parameter  | Channel | User  | Remote Host IP | Details |
|-----|-------------|---------------------|------------------------|------------|---------|-------|----------------|---------|
| 1   | Event       | 2019-09-10 01:44:34 | Start Motion Detection | N/A        | 2       | N/A   | N/A            | ☰       |
| 21  | Information | 2019-09-10 01:44:32 | Start Record           | N/A        | 1       | N/A   | N/A            | ☰       |
| 3   | Event       | 2019-09-10 01:44:06 | Stop Motion Detection  | N/A        | 1       | N/A   | N/A            | ☰       |
| 4   | Event       | 2019-09-10 01:43:55 | Stop Motion Detection  | N/A        | 1       | N/A   | N/A            | ☰       |
| 5   | Event       | 2019-09-10 01:43:50 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 6   | Event       | 2019-09-10 01:43:41 | Start Motion Detection | N/A        | 2       | N/A   | N/A            | ☰       |
| 7   | Event       | 2019-09-10 01:43:38 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 8   | Information | 2019-09-10 01:43:18 | Start Record           | N/A        | 1       | N/A   | N/A            | ☰       |
| 9   | Event       | 2019-09-10 01:41:47 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 10  | Event       | 2019-09-10 01:41:28 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 11  | Event       | 2019-09-10 01:41:25 | Stop Motion Detection  | N/A        | 1       | N/A   | N/A            | ☰       |
| 12  | Information | 2019-09-10 01:41:17 | Start Record           | N/A        | 3       | N/A   | N/A            | ☰       |
| 13  | Information | 2019-09-10 01:41:14 | Removal of IP Channel  | Add IPC    | 3       | admin | 192.168.7.23   | ☰       |
| 14  | Event       | 2019-09-10 01:41:12 | Start Motion Detection | N/A        | 1       | N/A   | N/A            | ☰       |
| 15  | Event       | 2019-09-10 01:40:56 | Removal of IP Channel  | Delete IPC | 4       | admin | 192.168.7.23   | ☰       |
| 16  | Information | 2019-09-10 01:40:56 | Stop Record            | N/A        | 4       | N/A   | N/A            | ☰       |
| 17  | Information | 2019-09-10 01:40:56 | Stop Record            | N/A        | 4       | N/A   | N/A            | ☰       |
| 18  | Information | 2019-09-10 01:40:55 | Stop Record            | N/A        | 4       | N/A   | N/A            | ☰       |
| 19  | Operation   | 2019-09-10 01:40:51 | Removal of IP Channel  | Delete IPC | 6       | admin | 192.168.7.23   | ☰       |
| 20  | Exception   | 2019-09-10 01:40:51 | Record Failed          | N/A        | 6       | N/A   | N/A            | ☰       |
| 21  | Exception   | 2019-09-10 01:40:51 | Record Failed          | N/A        | 6       | N/A   | N/A            | ☰       |
| 22  | Exception   | 2019-09-10 01:40:45 | Video Loss             | N/A        | 6       | N/A   | N/A            | ☰       |
| 23  | Event       | 2019-09-10 01:39:33 | Start Motion Detection | N/A        | 2       | N/A   | N/A            | ☰       |
| 24  | Event       | 2019-09-10 01:39:15 | Start Motion Detection | N/A        | 2       | N/A   | N/A            | ☰       |
| 25  | Event       | 2019-09-10 01:37:23 | Start Motion Detection | N/A        | 2       | N/A   | N/A            | ☰       |
| 26  | Event       | 2019-09-10 01:37:23 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 27  | Event       | 2019-09-10 01:37:22 | Stop Motion Detection  | N/A        | 1       | N/A   | N/A            | ☰       |
| 28  | Event       | 2019-09-10 01:37:11 | Start Motion Detection | N/A        | 1       | N/A   | N/A            | ☰       |
| 29  | Event       | 2019-09-10 01:36:53 | Start Motion Detection | N/A        | 2       | N/A   | N/A            | ☰       |
| 30  | Event       | 2019-09-10 01:36:27 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 31  | Event       | 2019-09-10 01:36:18 | Stop Motion Detection  | N/A        | 1       | N/A   | N/A            | ☰       |
| 32  | Event       | 2019-09-10 01:35:48 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 33  | Event       | 2019-09-10 01:35:43 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 34  | Event       | 2019-09-10 01:35:23 | Start Motion Detection | N/A        | 1       | N/A   | N/A            | ☰       |
| 35  | Exception   | 2019-09-10 01:35:21 | Record Failed          | N/A        | 6       | N/A   | N/A            | ☰       |
| 36  | Exception   | 2019-09-10 01:35:21 | Record Failed          | N/A        | 6       | N/A   | N/A            | ☰       |
| 37  | Exception   | 2019-09-10 01:35:15 | Video Loss             | N/A        | 6       | N/A   | N/A            | ☰       |
| 38  | Event       | 2019-09-10 01:35:09 | Start Motion Detection | N/A        | 2       | N/A   | N/A            | ☰       |
| 39  | Event       | 2019-09-10 01:34:59 | Stop Motion Detection  | N/A        | 1       | N/A   | N/A            | ☰       |
| 40  | Event       | 2019-09-10 01:34:37 | Start Motion Detection | N/A        | 1       | N/A   | N/A            | ☰       |
| 41  | Event       | 2019-09-10 01:34:31 | Stop Motion Detection  | N/A        | 1       | N/A   | N/A            | ☰       |
| 42  | Event       | 2019-09-10 01:33:45 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 43  | Event       | 2019-09-10 01:33:27 | Start Motion Detection | N/A        | 2       | N/A   | N/A            | ☰       |
| 44  | Event       | 2019-09-10 01:33:21 | Stop Motion Detection  | N/A        | 2       | N/A   | N/A            | ☰       |
| 45  | Event       | 2019-09-10 01:33:10 | Start Motion Detection | N/A        | 2       | N/A   | N/A            | ☰       |

## 4.9 Logout

Click to exit the current account.

Message from webpage

Log out?



## 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.

Technical Support Mailbox: [support@milesight.com](mailto:support@milesight.com)

Web: <http://www.milesight.com>

Online Problem Submission System: <http://www.milesight.com/support/feedback.asp>

### MILESIGHT USA

TEL: +1-800-561-0485

Add: 220 NE 51st ST, Oakland Park, Florida 33334, USA

### MILESIGHT KOREA

TEL: +82-2-839-3335

Add: 9F/925, 25-32, Anyang SK V1 Center, LS-ro 116beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, Korea

### MILESIGHT CHINA

TEL: +86-592-5922772

Add: No.23 Wanghai Road,2nd Software Park, Xiamen, China

Milesight  
Better Inside, More in Sight