

Network Video Recorder User Manual

Milesight Technology Co.,Ltd.





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.





**Warnings:** Please follow these safeguards to prevent injury or death.

**Cautions:** Please follow these safeguards to prevent potential injury or material damage.



## 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

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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**



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.



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.



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# 1. Product Introduction

## 1.1 Introduction

Milesight NVR Series are based on embedded linux operating system, and they are positioned at management and storage application of HD video data, and own multi-disc management systems, front end HD device management system, HD video analysis system and high-capacity system for video. 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 MS-N1000-U(P)T, MS-N5000-U(P)T, MS-N5000-UH, MS-N7000-U(P)H, MS-N8000-UH, can work with network cameras and connect with third party network cameras which support ONVIF.

## **Monitoring**

- Support HDMI video output.
- For UHD HDMI display, maximum to 3840\*2160 resolution.
- Support 1/4/8/9/12/14/16/32 screen live view, channel sequence is adjustable.
- Support live view fast menu operation.
- 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, PTZ preset, auto patrol and pattern.
- Support central zoom in by clicking the mouse at arbitrary area.
- Support privacy mask.
- Support OSD title and date configuration.
- Equipped with PoE ports for PoE cameras(only available for PoE NVR).

# **HDD Management**

- Support S.M.A.R.T technology.
- Support RAID technology.

# **Recording/Snapshot and Playback**

- Support holiday schedule.
- Support recycle and non-recycle recording mode.
- Support multiple recording types, including timing, alarm, motion detection, motion or



- alarm, motion and alarm, etc.
- Support 12 recording time periods with separate recording types.
- Support pre-record and post-record time for motion detection, alarm recording, motion and alarm recording, motion or alarm recording. And support pre-record for manual and timing.
- Support recording/snapshot manually.
- Support digital zoom function at arbitrary area in playback.
- Support video data playback.
- Support pause, fast play, slow play, skip forward and skip backward when playback, locating in progress bar by dragging the mouse.

## Backup

- Support USB port backup.
- Support FAT32 format backup.
- Support backup device maintenance and management.

## **Alarm & Exception**

- Support video loss alarm.
- Support motion detect configure and alarm.
- Support Network Disconnected/HDD Full/Record Failed/HDD Failed/HDD Unformat/No Disk alarms.
- Support various alarm response such as audible warning, sending email, recording and on/off relay out.

### **Other Functions**

- Support multi-level user management, administrator can create multiple users with access rights.
- Support manual triggering and clearing of alarms.
- Support operating and configuring information import/export.

#### Network

- 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 remote acquiring of device status, system log and alarm status.
- Support remote operate system maintenance by format of hard disk, upgrade 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.
- Built-in WEB Server.





Model		NAC NIA OCO LIT	NAC NEGAC HE	MS-N5016-UH/	MS-N7016-UH/	MS-N8032-UH/		
	Wodel		MS-N1009-UT	MS-N5016-UT	MS-N5032-UH	MS-N7032-UH	MS-N8064-UH	
	Network Video Input		9	16	16/32	16/32	32/64	
Video/Audio	eo/Audio Max. Stream		90Mbps	160Mbps	160/320Mbps	160/320Mbps	320Mbps	
Input	Network A	udio Input	9	16	16/32	16/32	32/64	
	Analog Audio Input		_	_	1*RCA	1*RCA	1*RCA	
	HDMI Output		1	1	1	1	2	
	VGA O	utput	_	1	1	1	2	
	Audio (	Output	_	1*RCA	1*RCA	1*RCA	2*RCA	
		30fps@D1 (704×576)	9	16	16/32	16/32	32/64	
		30fps@720P (1280×720)	9	16	16/32	16/32	32	
	Synchronous Preview / Synchronous Playback	30fps@1080P (1920×1080)	8	8	16	16	16	
Video/Audio Output		30fps@3MP (2048×1536 /2304×1296)	5	5	10	10	10	
		20fps@4MP (2592×1520)	4	4	8	8	8	
		20fps@5MP (2560×1920)	3	3	6	6	6	
		30fps@6MP (3072×2048)	2	2	5	5	5	
		30fps@2160P (3840x2160)	2	2	4	4	4	
		30fps@2160P (4096×2160)	_	_	4	4	4	
	Video Con	npression	H.265(HEVC)/H.264					
Video/Audio	Recording I	Recording Resolution		8MP(UHD-2160P)/4MP/3MP/1080P/UXGA/720P/D1/VGA/CIF/QCIF				
Compression	Max Synchronous Recording		9 (5MP)	16 (5MP)	16/32 (5MP)	16/32 (5MP)	32/64 (5MP)	
Storage	SATA				2 SATA 3.5" HDD with 10TB each			
	External	Storage	_	_	_	_	1 eSATA	
Intorface	US	SB	2*USB 2.0		1*USB 3.0;	2*USB 2.0		
Interface	Alarm Inpu	ut/Output	_	4-CH/1-CH	_	16-CH	/4-CH	





Model			MS-N1009-UPT	MS-N5016-UPT	MS-N7032-UPH
	Network Video Input		9	16	32
Video/Audio Input	Max. S	tream	90Mbps	160Mbps	320Mbps
	Network A	udio Input	9	16	32
	Analog Au	idio Input	_	-	1*RCA
	HDMI Output		1	1	1
	VGA O	utput	_	1	1
	Audio (	Output	_	1*RCA	1*RCA
		30fps@D1 (704×576)	9	16	32
		30fps@720P (1280×720)	9	16	32
		30fps@1080P (1920×1080)	8	8	16
Video/Audio Output	Synchronous Preview / Synchronous Playback	30fps@3MP (2048×1536 /2304×1296)	5	5	10
		20fps@4MP (2592×1520)	4	4	8
		20fps@5MP (2560×1920)	3	3	6
		30fps@6MP (3072×2048)	2	2	5
		30fps@2160P (3840x2160)	2	2	4
	Video Compression		H.265(HEVC)/H.264	H.265(HEVC)/H.264	H.265(HEVC)/H.264
Video/Audio	Recording	Resolution	8MP(UHD-2160P)/4MP/3MP/1080P/UXGA/720P/D1/VGA/CIF/Q		
Compression	Max Synchronous Recording		9 (5MP)	16 (5MP)	32 (5MP)
Storage	SATA		1 SATA 3.5" HDD with 10TB each	2 SATA 3.5" HDD with 10TB each	4 SATA 3.5" HDD with 10TB each
	US	SB	2*USB 2.0	1*USB 3.0; 2*USB 2.0	1*USB 3.0; 2*USB 2.0
Interface	Alarm Inpu	ut/Output	_	_	16-CH/4-CH
	PoE Int	erface	4*RJ45 10M/100M	8*RJ45 10M/100M	16*RJ45 10M/100M



# 2. Hardware

# 2.1 Panel Buttons and Lights Instructions

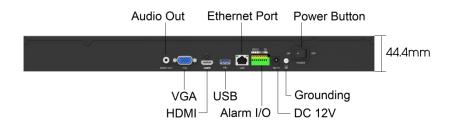
(1) MS-N1000-UT Series: MS-N1009-UT



MS-N1009-UT

(2) MS-N5000-UT Series: MS-N5016-UT

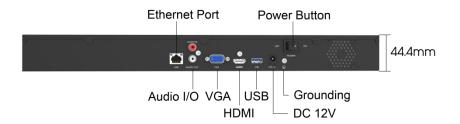




(3) MS-N5000-UH Series: MS-N5016-UH/MS-N5032-UH

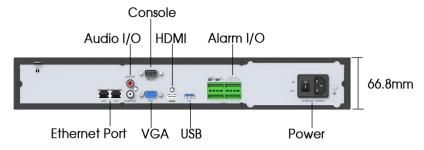






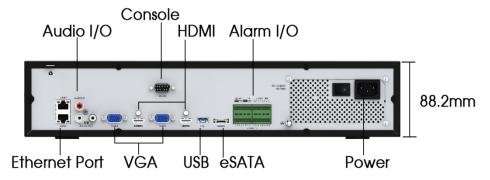
## (4) MS-N7000-UH Series: MS-N7016-UH/MS-N7032-UH





## (5) MS-N8000-UH Series: MS-N8032-UH/MS-N8064-UH







## (6) MS-N1000-UPT Series: MS-N1009-UPT

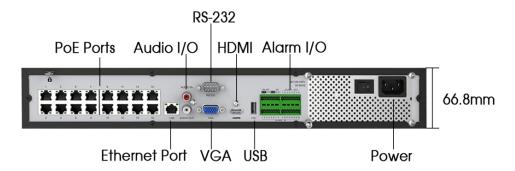


## (7) MS-N5000-UPT Series: MS-N5016-UPT



#### (8) MS-N7000-UPH Series: MS-N7032-UPH





#### Note:

The PoE ports of PoE NVR series only support Milesight network cameras.



# 2.2 Using a USB Mouse

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



F-2.5.1





F-2.5.2



F-2.5.3

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



F-2.5.4





F-2.5.5

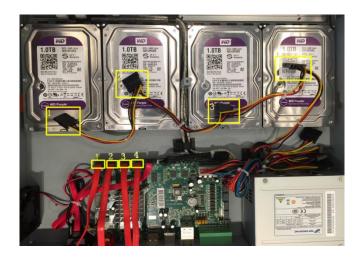


F-2.5.6

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



F-2.5.7



F-2.5.8



F-2.5.9



## 2.3.2 MS-N8000 series Hard Disk Installation

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



F-2.5.10



F-2.5.11



F-2.5.12

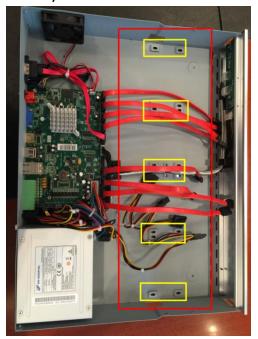
Step2. Uninstall the upper hard disk panel.





F-2.5.13

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



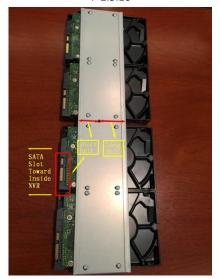
F-2.5.14



F-2.5.15



F-2.5.16



F-2.5.17

#### Note:

The SATA slots are in SHORT HALF side and the SATA slot toward inside NVR.

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



F-2.5.18





F-2.5.19

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



F-2.5.20

#### Note:

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 loaded. The Setup Wizard will guide you to complete important settings to make sure the device function well. You can choose if the Setup Wizard starts or not every time when the device powered.

Please complete the configuration as following:

#### Step1. Input the user name and password;

If you want to modify the admin password, input the new password.

#### Note:

- 1. If the NVR firmware version out of the factory is xx.7.0.6 or above, the default user name is "admin" and the default password is "ms1234";
- 2. If the NVR firmware is upgraded to xx.7.0.6 or above from a lower version, the default password will turn to "ms1234" after a reset, or it will keep the old default password "123456";
- 3. If the NVR firmware version is below xx.7.0.6, the default user name is "admin" and the default password is "123456".



F-3.1.1

#### Note:

For the safety of your equipment, please change the initial password.

#### Step2. Date and time setting

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



F-3.1.2



#### Step3. Network setting

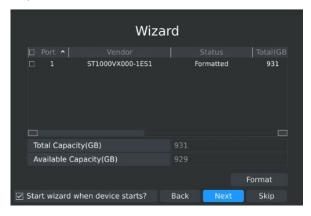
Input the IP Address, Subnet Mask, Gate Way and Preferred DNS Server. Internal NIC IPv4 Address option is only for PoE NVR.



F-3.1.3

#### Step4. Disk Management

Automatically detect the hard disk installed in NVR, and it supports formatting hard disk. You can create RAID in this page as well. (RAID is only supported on 7000-UH series, 7000-UPT series and 8000-UH series)



F-3.1.4

RAID will be available after after it was enabled and the device rebooted.



F-3.1.5

#### Step5. Camera Management

You can search all the cameras in LAN and select cameras to add to NVR. It can detect cameras that connected to PoE ports(only for PoE NVR).





F-3.1.6

#### Step6. Login

Input the user name and password to login the system.



F-3.1.7

# 3.2 Playback

To play and backup the recorded files.

# 3.2.1 Video Playback

It can support playback according to recorded time. Play recorded video files in specified time period; synchronous playback of multi-channel is supported.

Step1. Click Main menu  $\rightarrow$  Playback  $\rightarrow$  (F-3.2.1)





F-3.2.1

#### Step2. Select a desired channel and date

Select playback layout and channel. Click the date in red when there are recorded files of the selected channels, the record type with recording data will be shown as below, and then click

to playback.



F-3.2.2

#### Note:

- 1. The day in blue has recording files; please select the date in blue to playback.
- 2. Up to 16 channels can be selected to playback synchronously.

#### **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 Green --- Motion

Red --- Alarm Black --- Emergency

And take the bar for example, it represents the motions and timing events that have been triggered in this period.

Button	Description	Button	Description	Button	Description	Button	Description
•	Rewind		Stop	<b>&gt;</b>	Play	11	Pause
<b>∢</b> I	Reverse Step	I <b>≯</b>	Forward Step	*	Fast Backward	<b>*</b>	Fast Forward

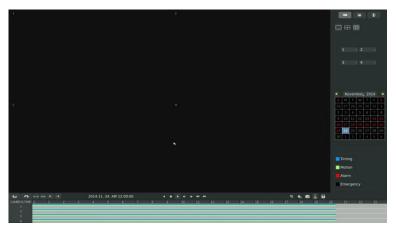


A =	Previous 4	1	Next 4	$\rightarrow$	Timeline	<b>←</b>	Timeline
4	Cams		Cams		Backward		Forward
→←	Timeline		Timeline	2 2	Timeline	2014.01. 04. AM 11:43:00	Playback
->-	Zoom In	$\leftarrow \rightarrow$	Zoom Out	<i>L</i> 3		2014.01. 04. HM 11.43.00	Position
v	Timeline	U	Timeline	•	Audio On	•	Audio Off
X	Cutting	A.	Cut Off	7		*	
	Snapshot		Backup				

# 3.2.2 Video Files Backup

Regular recorded files can be backed up by various devices, such as USB flash drives (USB flash disk, USB HDD, USB writer), eSATA etc.

Step1. Click Main menu  $\rightarrow$  Playback  $\rightarrow$ 



F-3.2.3

## Step2. Select Recorded files for Backup

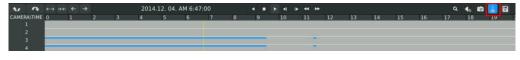
Select the channel and date you want to backup, then select the start time at time line and click





F-3.2.4

Select the end time at time line and click , it will change into , which means cut ends.



F-3.2.5

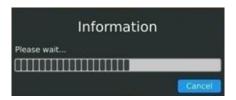
Step3. Click , select Backup media and click [Backup].





F-3.2.6

Step4. The pop-up window will prompt: Please wait...



F-3.2.7

Step5. When all backup files have been exported, 'Backup Success' will be prompted.



F-3.2.8

#### Note:

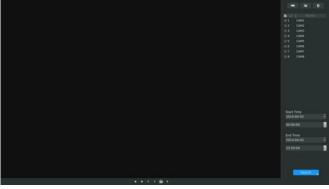
The file download time depends on the time of video you want to backup.

# 3.2.3 Picture Playback

Search and look for the snapshot files saved in HDD.

Step1. Click Main menu  $\rightarrow$  Playback  $\rightarrow$ 

Select a desired channel, start time and end time, click [Search]



F-3.2.9



## Step2. Enter Picture Info List and look up the pictures.

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



F-3.2.10

## **Picture Playback Tool Bar Description**



Button	Description	Button	Description	Button	Description	Button	Description
•	Backward Play	•	Play	<	Previous Picture	>	Next Picture
	Backup pictures	×	Close				

# 3.2.4 Picture Files Backup

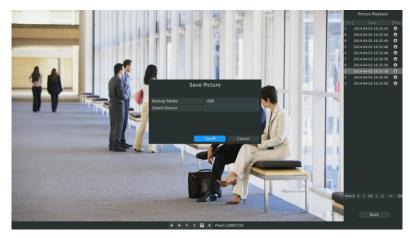
Step1. Select pictures you want to backup in picture playback interface.



F-3.2.11



Step2. Select backup media and click to save picture.



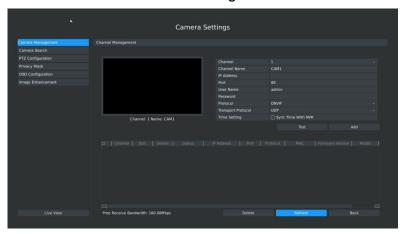
F-3.2.12

# 3.3 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 setup.

# 3.3.1 Camera Management

#### Step1. Click Main Menu → Camera → Camera Management



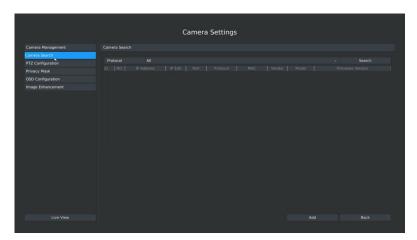
F-3.3.1

#### Step2. Add IP Channel

#### Method1. Add IP Channel in device search interface

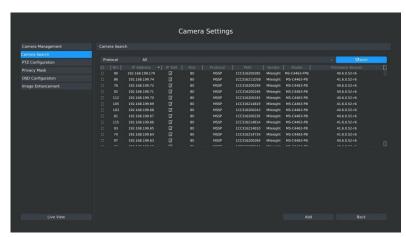
1. Click Main Menu → Camera → Device Search.





F-3.3.2

2. Click [search] button to quickly search the IP devices in LAN with different types: All, ONVIF, MSSP.



F-3.3.3

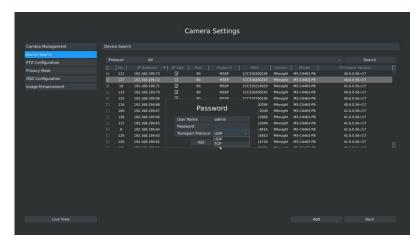
3. Double click the channel, input password and click [Add] button.



F-3.3.4

Or you can bulk adding the network cameras If they are with the same password, and you can choose TCP or UDP transport protocol for bulk adding. Click [OK] to finish bulk adding.

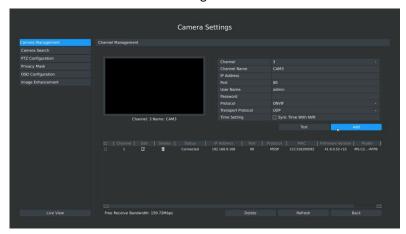




F-3.3.5

#### Method2. Add IP Channel in camera management interface

1. Click Main Menu → Camera → Camera Management



F-3.3.6

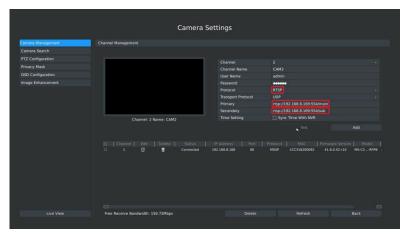
2. Select idle channel then input complete information, click [Add] button.

There are three protocols available for camera connection:

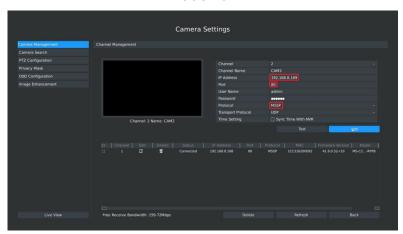
- **ONVIF:** You can add any IP cameras with ONVIF protocols if you selected this protocol. Details are shown in F-3.3.7;
- RTSP: You can add any IP cameras with RTSP protocol streams (Port: 554). You need to input complete resource path of the IP camera to add it. Take Milesight device for example, the resource path of main stream is "rtsp://IP:port/main" and of second stream is "rtsp://IP:port/sub". Details are shown in F-3.3.8;
- MSSP: You can add Milesight cameras which are in the same LAN by select this protocol.
   Details are shown in F-3.3.9;



F-3.3.7 ONVIF



F-3.3.8 RTSP

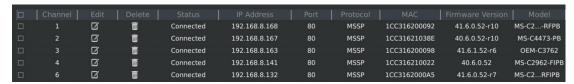


F-3.3.9 MSSP

## Step3. Check the connection status

After adding the IP channels, click [Refresh] button, then [connected] 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.

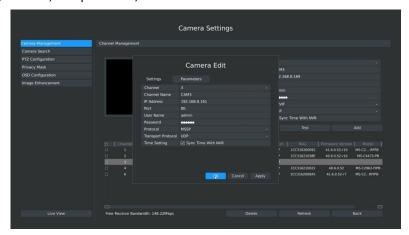




F-3.3.10

## **Step4. Configure IP Channel**

1. After successfully adding the channel, click or double-click this channel to re-edit the channel info, address, and password, etc.

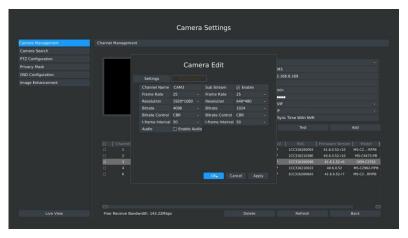


F-3.3.11

#### Note:

By default, 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.

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

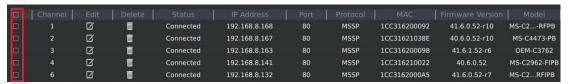


F-3.3.12

3. You can delete this IP channel by clicking , or you can multi-select the devices and then

click Delete to delete(PoE channel does not support deleting).





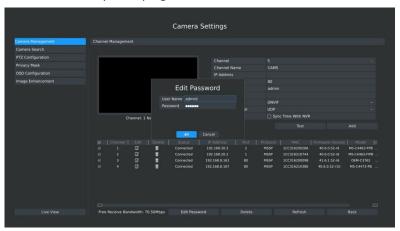


F-3.3.13

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

- 1. Connect camera to PoE port, it will detect the camera automatically.
- 2. If the camera's password is "ms1234", it will authenticate successfully and change the camera into the same network segment with internal NIC IPv4 address, then the camera will be connected successfully.
- 3. If the camera's password is not "ms1234", it will show disconnected status in the PoE channel.

You need to input the camera's password by clicking authentication (you can also multi-select the devices and then click this button to modify). Then it will change the camera into the same network segment with internal NIC IPv4 address and the camera will be connected successfully. In next time, NVR will use the password you input to authenticate this camera when you re-plug it.



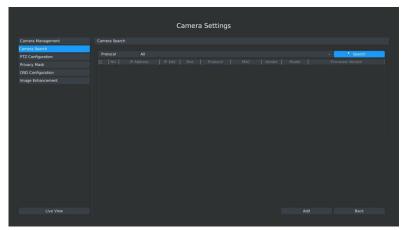
F-3.3.14



## 3.3.2 Device Search

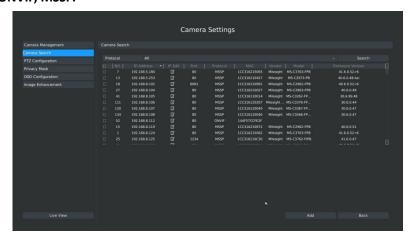
You can search and add IP cameras here

Step1. Click Main menu → Camera → Device Search



F-3.3.15

Step2. Click [search] to quickly search the IP devices in LAN, you can choose different type to search: All, ONVIF, MSSP.



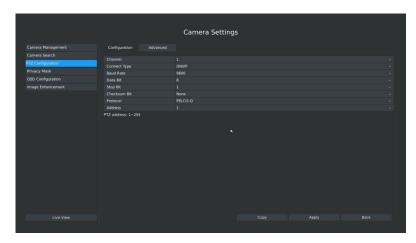
F-3.3.16

- ONVIF: Search the cameras that support ONVIF protocol and in the same network segment with NVR.
- MSSP: Search the Milesight cameras in LAN even with different network segments.

# 3.3.3 PTZ Configuration

# 3.3.3.1 PTZ control Parameters Configuration

Click Main Menu  $\rightarrow$  Camera  $\rightarrow$  PTZ Configuration, select "Configuration" page. Choose a channel and set the PTZ parameters. Besides you can click [Copy] to copy the same configuration to other channels.



F-3.3.17

#### Note:

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

## 3.3.3.2 Advanced Configuration

Main Menu → Camera → PTZ Configuration, select "Advanced" page. There are two patrol ways can be set: Pattern and Path.

#### Note:

- 1. IP channel does not support configuration and calling of presets, patrols and patterns.
- 2. The functioning of presets patrols and patterns need front PTZ decoder to support.

#### 1. Presets Point Setup

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

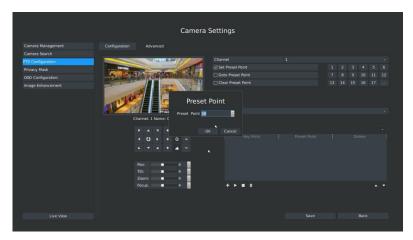
Step1. Use the PTZ direction key to rotate the position of preset. Then select "Set Preset Point" and select a preset number to finish a preset point setting. Repeat above steps to set more preset points.



F-3.3.18



Step2. Click to save or call more preset points after number 17.



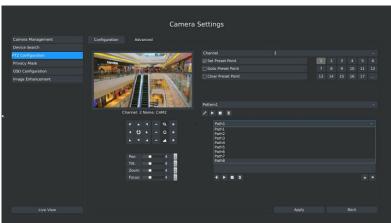
F-3.3.19

Step3. Select 'Clear Preset Point' and click a preset number to delete the preset point. Step4. Select "Goto Preset Point". Click a preset number to check the preset point.

#### 2. Track Patrol

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

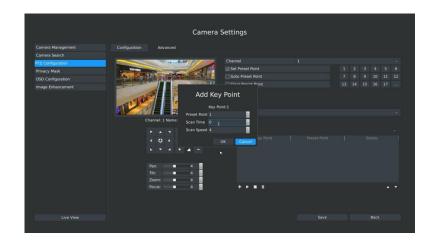
Step1. Select a path. Up to 8 paths could be set.



F-3.3.20

Step2. Click to add preset points which is up to 48. Set the preset point parameters (including preset point number, scan time and scan speed) and click [OK].





F-3.3.21

- Step3. Repeat the above steps to add more preset points to the Path patrol.
- Step4. Select a preset point, select [Delete] and select [Yes] in the dialog box to delete it.
- Step5. Click to preview the path patrol. Click to stop.
- Step6. Click and select [Yes] in the dialog box to delete all key points of the path patrol.

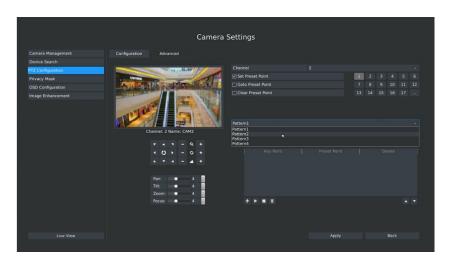
#### Note:

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

### 3. 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.



F-3.3.22



Step2. Drag the mouse or click 8 direction keys of mouse control field to rotate PTZ.

Step3. Click to save the PTZ movement patterns to the pattern.

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

# 3.3.3.3 PTZ Control Operation

In live view mode, select quick menu of live view channel to enter PTZ control mode. It can access PTZ control by PTZ control bar or panel PTZ control button.

## **Description of PTZ Control Bar**



F-3.3.23

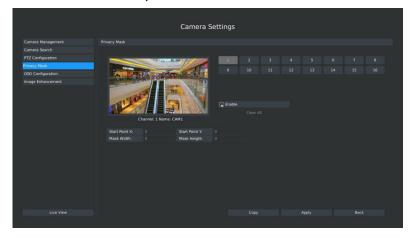
Icon	Description	Icon	Description	lcon	Description
FAT	PTZ Direction		Adjust Zoom+,		Adjust
<b>4</b> Ø ▶	Control and Auto	+	Focus+,		Zoom-,Focus-,
h   T   4	Scan Button		IRIS+		IRIS-
Q	Zoom: Zoom in		Focus	<b>S</b>	IRIS
	or out			- 500s	INIS
Pan:	•	4	Horizontal	Movement A	djustment
Tilt:	•	4	Vertical M	lovement Adj	ustment
Zoom:		4	Zoo	om Adjustmei	nt
Focus:		4	Foo	cus Adjustmei	nt

# 3.3.4 Privacy Mask

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



Click Main Menu → Camera → Privacy Mask.



F-3.3.24

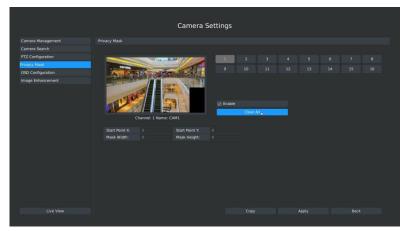
You can add a privacy mask by following steps:

**Step1.** Select channel on the right top of the interface, and enable it on the below of the channel;

Step2. Set the area of privacy mask:

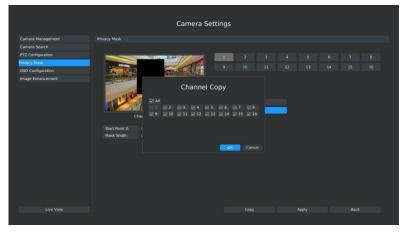
Way1: Drag the mouse to select the area which is privacy on the live window;

Way2: Set the coordinates of privacy area in the columns below the live window;



F-3.3.25

**Step3.** Copy the privacy area to the other channels by click the "copy" button on the bottom of the windows;



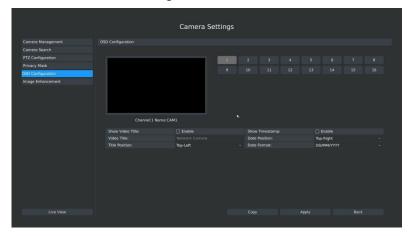
F-3.3.26



Step4. Select "Apply" to save the settings.

# 3.3.5 OSD configuration

You can set OSD (On Screen Display) on NVR, and the OSD will be synchronized to Camera. Click Main Menu  $\rightarrow$  Camera  $\rightarrow$  OSD Configuration.



F-3.3.27

**Step1.** Select channel by clicking the channel number on the right-top, the selected channel will change into gray and the channel number will change into yellow;



**Step2.** Enable video title and timestamp:

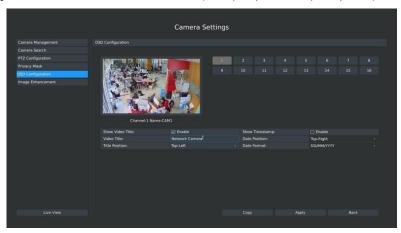
Show Video Title:	✓ Enable	Show Timestamp:	✓ Enable
Video Title:	Room1	Date Position:	Bottom-Left ~
Title Position:	Top-Right ~	Date Format:	MM/DD/YYYY ~

[Video Title]: Set the video title for the channel;

[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;



F-3.3.28



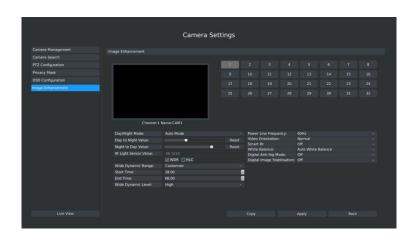


F-3.3.29

**Step3.** Select "Apply" to save the settings.

# 3.3.6 Image Enhancement

You can set Image Enhancement on NVR, and the configuration will be synchronized to Camera. Click Main Menu  $\rightarrow$  Camera  $\rightarrow$  Image Enhancement.



F-3.3.30

**Step1.** Select channel by clicking the channel number on the right-top, the selected channel will change into gray and the channel number will change into yellow;

**Step2.** Set the configuration;

[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;

[WDR/HLC]: Click to configure Wide Dynamic Range or High Light Control;

[Power Line Frequency]: 50Hz and 60Hz are available;

[Video Orientation]: Set the image rotation;

[Smart IR]: Set the Smart IR on and off;

[White Balance]: Choose a white balance mode for the channel;



[Digital Anti-fog Mode]: Set the Anti-fog function on and off;

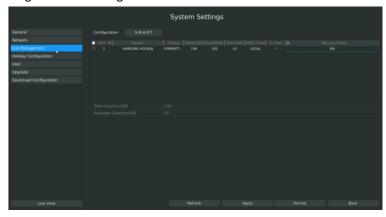
[Digital Image Stabilisation]: Set the Image Stabilisation on and off.

# 3.4 Record Settings

## **Preparation for Configuration**

### Step1. Ensure your NVR has installed and initialized the HDD.

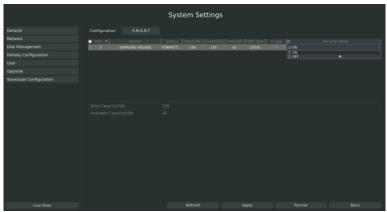
Click System Settings → Disk Management



F-3.4.1

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

Click System Setting → Disk Management. Select [Recycle Mode] to ON in the case of insufficient capacity of HDD.

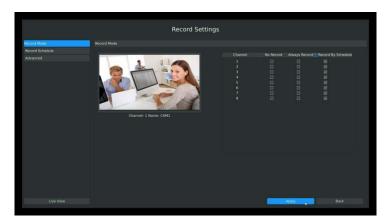


F-3.4.2

# 3.4.1 Record Mode

### Step1. Click Main Menu $\rightarrow$ Record $\rightarrow$ Record Mode.

There are three record modes: No Recording/Always Record/Record by Schedule. You can select desired one to every channel.



F-3.4.3

[No Record]: NVR will not record;

[Always Record]: NVR will always record the chosen channel;

[Record By Schedule]: NVR will record by schedule, details will be shown in 3.4.2;

Step2. Click [Apply] to save the configuration.

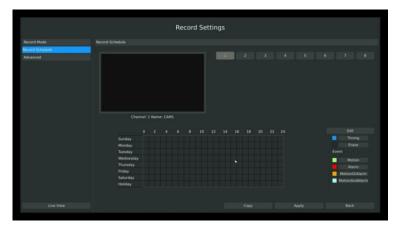
# 3.4.2 Record Schedule Setting

#### Note:

The days are divided as Holiday/Sunday/Monday/Tuesday/Wednesday/Thursday/Friday/Saturday. The schedule of Holiday is superior to other days. To set the holiday information, go to Chapter 3.8.4.

### Method1. General Setting

Step1. Click Record Settings → Record Schedule



F-3.4.4

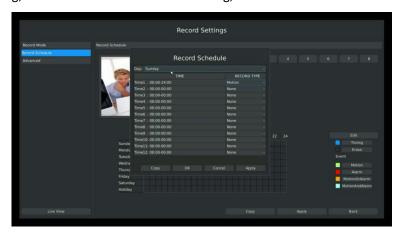
Step2. Select desired channel (e.g. Channel 1)and click [Edit] button



F-3.4.5

### Step3. Set record schedule

Select a day from the drop-down list of [Day], and select [Record Type] to setup the recording period, up to 12 periods can be set. (e.g.01:00 to 05:00 for none recording; 06:00 to 18:00 for timing recording; 19:00 to 21:00 for Motion recording; 22:00 to 24:00 for Alarm recording)

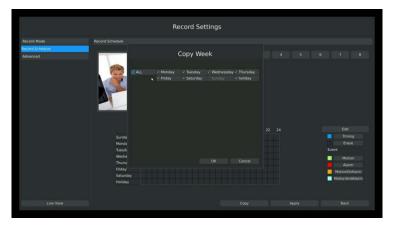


F-3.4.6

#### Note:

### Time periods cannot overlap with each other.

Step4. Click [Copy] to copy settings to other weekdays, and then click [Apply] to confirm the setting.



F-3.4.7



### Step5. Complete above steps, this channel will show as figure-3.4.8:



F-3.4.8

### Step6. Copy the recording settings to other channels

Select [Copy] to copy the same settings to other channels. And click [OK] to save the configuration.



F-3.4.9

## Step7. Save the configuration

Click [Apply] button to save the configuration, and then click [Back] to return to the previous menu.

## Method2.Set record schedule by drag the mouse

### Step1. Click Record Settings → Record Schedule



F-3.4.10



### Step2. Click desired channel and record type show as below:



F-3.4.11

Step3. Drag the mouse to draw certain areas in recording setting zone and then click [Apply] to save the configuration.



F-3.4.12

## Step4. Copy the recording settings to other channels.

Select [Copy] to copy the same settings to other channels. And click [OK] to save the configuration.

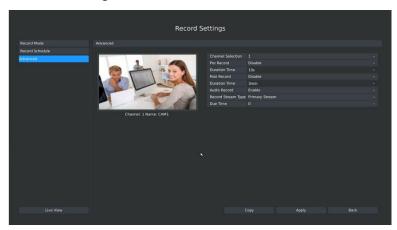


F-3.4.13



# 3.4.3 Advanced settings

You can set the advanced settings there.



F-3 /1 1/

[Channel Selection]: Select the channel which will be set.

[Pre Record]: Enable/Disable pre record before the event is triggered

[Duration Time]: Event pre-record duration time

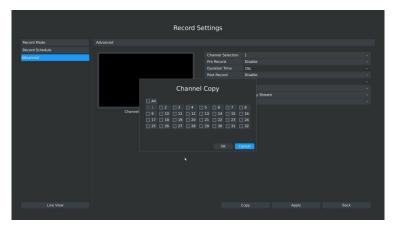
[Post Record]: Enable/Disable post record after the event is over

[Duration Time]: Event post-record duration time [Audio Record]: Select to record audio or not

[Record Stream Type]: Select Main stream or sub stream for record

[Due Time]: Select due time for record

Lastly choose you can choose the copy button to copy the settings of record for other channels.



F-3.4.15

# 3.5 Event Settings

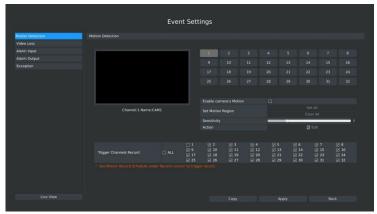
## 3.5.1 Motion Detection

Your NVR can be setup to motion detect and trigger an action. You can set the motion detection



on NVR or on IPC web, both sides' settings will be synchronous in both devices.

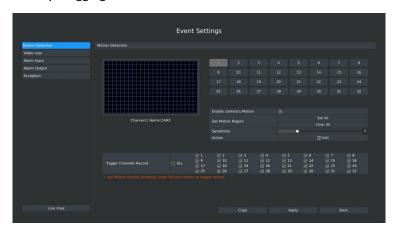
## Step1. Click Main Menu $\rightarrow$ Event $\rightarrow$ Motion Detection.



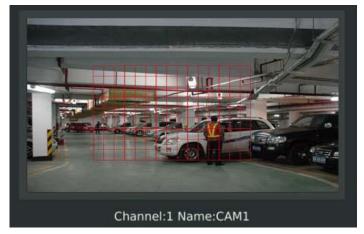
F-3.5.1

## Step2. Set the trigger area for motion detection.

You can set the area by dragging the mouse on live view window:



F-3.5.2



F-3.5.3

And meanwhile the area will be synchronized to Camera.



Step3. Select the schedule, sensitivity and trigger area for motion detection.



**[Enable camera's Motion]**: If it is enabled here, motion detect will take effect 7\*24h; If it is not enabled, motion detect will take effect as the schedule which is set on the camera web.

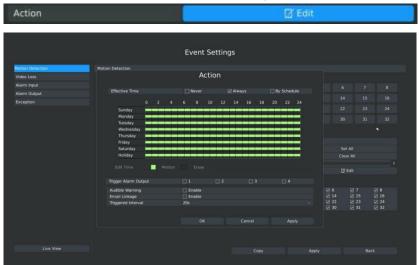
[Set All]: Set all area as the trigger area;

[Clear All]: Clear all trigger area;

[Sensitivity]: Set sensitivity for motion detection, range from 1 to 10.It will synchronize to IPC if you set sensitivity here;

[Action]: Edit action once motion is detected, refers to next step;

Step4. Select the desired channel and click [Edit] to configure motion detection action.



F-3.5.4

Step5. Select effective time to setup when you want to trigger actions once motion is detected.



[Never]: Your NVR will not trigger any actions when [Never] button is checked. No matter the [Audible Warning] or [Email Linkage] check-boxes are checked or not.

[Always]: Your NVR will always trigger actions when [Always] button is checked. Please make sure [Audible Warning] or [Email Linkage] is checked.

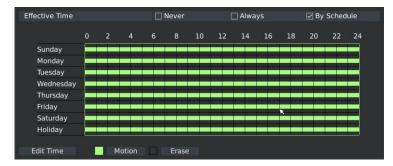
[By Schedule]: You can drag the mouse to draw certain area in schedule setting zone, see F-3.5.12:





F-3.5.5

After dragging, this channel will show as below:



F-3.5.6

Or click [Edit Time] to setup schedules. Schedule can be set for all week or any day of the week with up to 12 time periods per day. Motion detection actions take effect in the scheduled period only.



F-3.5.7

#### Note:

Time period cannot overlap with each other

Step6. Click [Copy] to copy the motion detection schedules to other weekdays.





F-3.5.8

Step7. Select actions you want when motion is detected

Trigger Alarm Output	□ 1	□ 2	□ 3	□ 4
Audible Warning	☐ Enable			
Email Linkage	☐ Enable			
Triggered Interval	20s			v

[Trigger Alarm Output]: Select whether trigger the alarm output or not when video loss is detected.

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

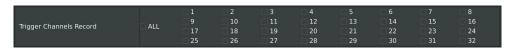
**[Email Linkage]**: Send video loss note to specified email address when video loss is detected. (Please refer to 3.8.2.4 Mail configuration for mail address setting).

[Triggered Interval]: Set the interval between two events.

#### Note:

These actions will only take response according to effective time you choose.

**Step8.** [Trigger Channels Record]: Select the channels that you want to trigger recording when motion is detected by checking the check-boxes with corresponded channel numbers. Please make sure that the checked channels have setup motion detection record schedule. (Refer to 3.4 Record settings)



Step9. Click [Apply] or [OK] to confirm settings. Repeat above steps to other channel. Or click [Copy] to copy settings to other channel.

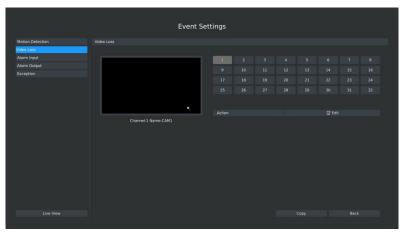


F-3.5.9

# 3.5.2 Video Loss

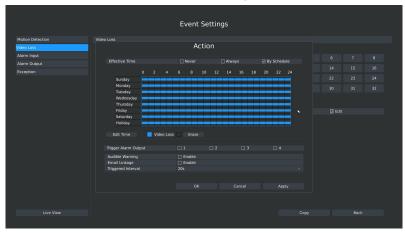
Your NVR can be setup to detect video loss and trigger an action.

Step1. Click Main Menu  $\rightarrow$  Event  $\rightarrow$  Video Loss.



F-3.5.10

Step2. Select a desired channel and click [Edit] to configure video loss.



F-3.5.11

Step3. Select effective time to setup when you want to trigger actions once video loss is



#### detected.

[Never]: Your NVR will not trigger any actions when [Never] button is checked. No matter the [Audible Warning] or [Email Linkage] check-boxes are checked or not.

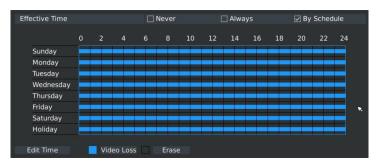
[Always]: Your NVR will always trigger actions when [Always] button is checked. Please make sure [Audible Warning] or [Email Linkage] is checked.

[By Schedule]: You can drag the mouse to draw certain area in schedule setting zone, show as below:



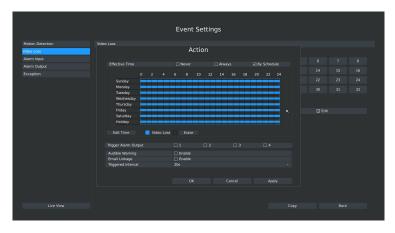
F-3.5.12

After dragging this will show as below:



F-3.5.13

Or click [Edit Time] to set schedules. Schedule can be set for all week or any day of the week with up to 12 time periods per day. Video loss actions take effect in the scheduled period only.



F-3.5.14



#### Note:

Time periods cannot overlap with each other.

Step4. Click [Copy] to copy the video loss schedule to other weeks, and then click [OK].



F-3.5.15

Step5. Select actions you want when video loss is detected.



[Trigger Alarm Output]: Select whether trigger the alarm output or not when video loss is detected.

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

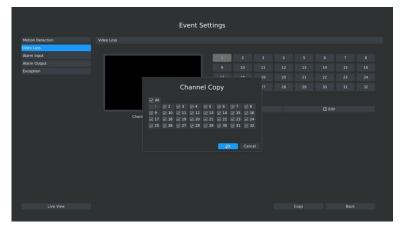
**[Email Linkage]**: Send video loss note to specified email address when video loss is detected. (Please refer to 3.8.2.4 Mail configuration for mail address setting).

[Triggered Interval]: Set the interval between two events.

### Note:

These actions will only take response according to effective time you choose

Step6. Click [OK] or [Apply] to confirm the settings. Repeat above steps for other channels. Or click [Copy] to copy settings to other channels.



F-3.5.16



# 3.5.3 Alarm Input

Alarm Input function is supported in some specific models. Please make sure your NVR has such function first.

Step1. Select Main Menu - Event - Alarm Input.



F-3.5.17

Step2. Set Alarm input channel, Alarm Name, Alarm Type and Record Channels.

Alarm Input NO.	18	2 3	4 5	6 7	8 9	10	11 12	13 14	15 16
Alarm Name									
Alarm Type									
Trigger Channels Record		1 9 17 25	2 10 18 26	3 11 19 27	4 12 20 28	5 13 21 29	6 14 22 30	□ 7 □ 15 □ 23 □ 31	8 16 24 32
		☑ Ed							

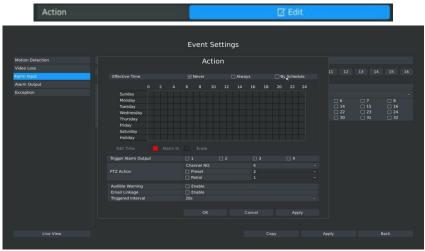
F-3.5.18

[Alarm Input NO]: The channel which has input signal;

[Alarm Name]: Set a name for the alarm; [Alarm Type]: Select alarm type: NO or NC;

[Trigger Channels Record]: Once the channel in the [Alarm Input No] has alarm input, which channels will be triggered to record. Refer to 3.4 Record Settings;

Step3. Set action for alarm input.



F-3.5.19



You need to set 1.Effective time and 2.Action on this Action Interface:

#### 1. Effective time:



F-3.5.20

You can set three different modes for effective time:

[Never]: Will have no action triggered if it is checked;

[Always]: Will always trigger the action if checked;

[By Schedule]: Will take effect by the schedule you set.

If you choose By Schedule, you need to set schedule by 1.drag the mouse on the time schedule area or 2.by click the "Edit Time" button.

#### 2. Action



F-3.5.21

[Trigger Alarm Output]: Select whether trigger the alarm output or not when video loss is detected.

[PTZ Action]: NVR will trigger a linkage function of PTZ network camera when alarm is detected.

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

**[Email Linkage]**: Send video loss note to specified email address when video loss is detected. (Please refer to 3.8.2.4 Mail configuration for mail address setting).

[Triggered Interval]: Set the interval between two events.

### Note:

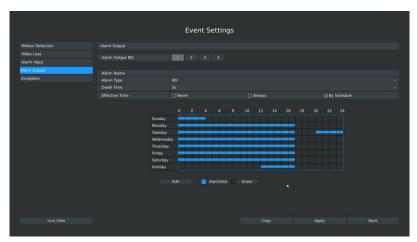
These actions will only take response according to effective time you choose.

Lastly need to APPLY these settings to take effect.

# 3.5.4 Alarm Output

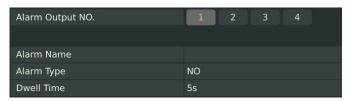
Alarm Input function is supported in some specific models. Please make sure your NVR has such function first.

Step 1. Select Main Menu-Event-Alarm Output:



F-3.5.22

**Step 2. Set Alarm output channel, Alarm Name, Alarm Type and Record Channels:** 



F-3.5.23

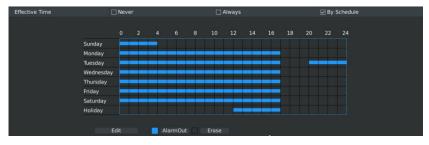
[Alarm Output NO]: The channel which will output the alarm signal;

[Alarm Name]: Set a name for the alarm; [Alarm Type]: Select alarm type: NO or NC;

[Dwell Time]: Set the output time for alarm, if that is too long when alarm out is outputting, you

can select the Manually Clear to stop it.

Step3. Select Effective Time for alarm output:



F-3.5.24

You can set three different modes for effective time:

[Never]: Will have no action triggered if it is checked;

[Always]: Will always trigger the action if checked;

[By Schedule]: Will take effect by the schedule you set.

If you choose By Schedule, you need to set schedule by 1.drag the mouse on the time schedule area or 2.by click the "Edit Time" button.

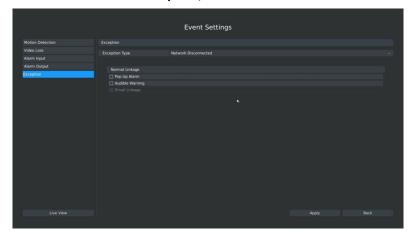
Lastly need to APPLY these settings to take effect.



# 3.5.5 Exception

Milesight NVR support exception alarm for 1. Network Disconnected; 2.HDD Full; 3.Record Failed; 4.HDD Failed; 5.HDD Unformat; 6.No Disk;

#### Step1. Click Main Menu $\rightarrow$ Event $\rightarrow$ Exception;



F-3.5.25

### Step2. Select Exception Type;

There are 4 kinds of alarm type:

[Network Disconnected]: Lost of network;

[HDD Full]: HDD full, it usually happens when Recycle Mode is OFF.

[Record Failed]: Recording fails, including HDD Failed, HDD Full, No Disk and so on.

[HDD Failed]: Failed to recognize HDD.

[HDD Unformat]: When HDD unformat.

[No Disk]: When there is no disk.

### Step3. Select Alarm Type;

[Pop Up Alarm]: Will pop up a window if checked;

[Audible Warning]: NVR will trigger an audible beep when motion is detected;

[Email Linkage]: Will send alarm Email if checked.

## 3.6 Status

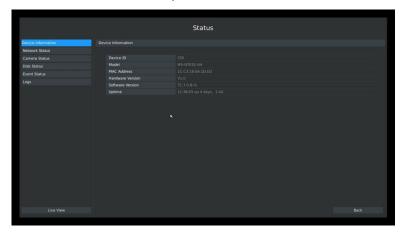
You can have a quick view of the information of the device, network, camera, disk and event. This part is only for your rapid reference. If you want to make any configuration, please go to corresponding parts accordingly.

## 3.6.1 Device Information

Click Main Menu → Status → Device Information



It will show you information in F-3.6.1, including: Device ID, Device Name, MAC Address, Hardware Version, Software Version, and Up Time.



F-3.6.1

## 3.6.2 Network Status

#### Click Main Menu → Status → Network Status

It will show you information in F-3.6.2, including: Connection, Mode, DHCP, MTU(B), IP Address, Net mask, Gateway, MAC, Preferred DNS Server, Alternate DNS Server, Receive Rate, and Send Rate.

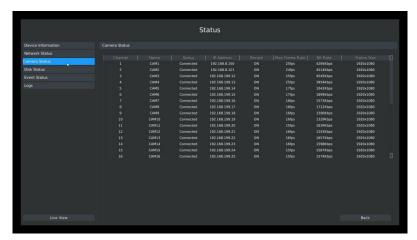


F-3.6.2

# 3.6.3 Camera Status

### Click Main Menu → Status → Camera Status

It will show you information in F-3.6.3, including: Channel, Name, Status, IP Address, Record, Frame Rate, Bit rate, and Resolution. The PoE Channel Status is only for PoE NVR, it will show you the connection status of PoE ports.

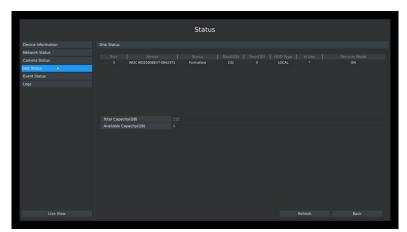


F-3.6.3

## 3.6.4 Disk Status

### Click Main Menu → Status → Disk Status

It will show you information in F-3.6.4, including: Port, Vendor, Status, Total(GB), Free(GB), HDD Type, In Use, and Recycle Mode. You can see the Total Capacity (GB) and Available Capacity (GB) as below:



F-3.6.4

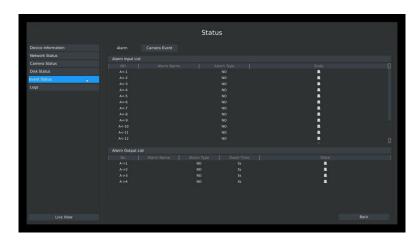
# 3.6.5 Event Status

## 3.6.5.1 Alarm Status

### Click Main Menu → Status → Event Status

It will show you the Alarm Input List in F-3.6.5.



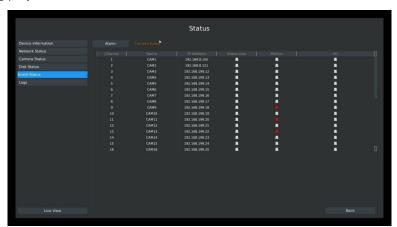


F-3.6.5

### 3.6.5.2 Camera Event Status

### Click Main Menu → Status → Event Status.

It will show you the camera event status in F-3.6.6. If the shows in red, it means the corresponding project is active.



F-3.6.6

# 3.7 Live View Settings

## **3.7.1 Live View**

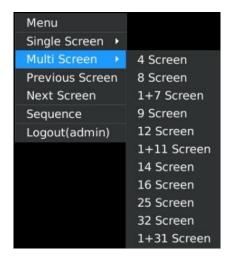
## Watching a Live View

It can display rotating mode of cameras on the Live View interface. There are multiple icons on each channel displayed in live view mode, indicating the recording and alarm status of the channel.



Icons	Descriptions
AV	Indicates video loss
₹	Indicates motion detection alarm
	Indicates that the current channel is recording. The recording may be started manually, or triggered by record schedule(Motion Detection, Alarm, Motion Detection or Alarm, Motion Detection and Alarm).
A*	Indicates exception alarm and recording.

## Use the Right Button of the Mouse in Live View



F-3.7.1

Item	Description
Menu	Enter main menu
Single Screen	The channel chosen will spread the whole screen. You could also reveal this
Single Screen	function by double clicking the channel
Sub Screen Ctrl	Switch to sub screen to operate(only for MS-N8000 series)
Multi Screen	Change the screen layouts
Previous Screen	Switch to the previous screen
Next Screen	Switch to the next screen
Sequence	Enable single/multi-screen cruise in live view mode
Sub Sequence	Enable single/multi-screen cruise for sub screen(only for MS-N8000 series)
Logout	Click it to log out current user account

## **Quick Operation for Live View**

In live view interface; left click the channel, the quick menu will appear. Quick menu operations include recording manually, image configuration, PTZ, original/resize(resize mode can adjust the video to adapt to the screen), audio, digital zoom, and snapshot.



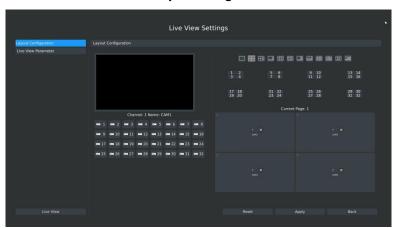
### **Quick Menu Instructions for Main Output Live View**



Icon	Description	Icon	Description	Icon	description
•	Manually recording	24	Image configure		PTZ Control
+1+	Original/Resize	•••	Sound on/off	ď	Electronic Amplification
0	Snapshot manually	X	Close		

# 3.7.2 Layout Configuration

### Step1. Click Main Menu → Live View → Layout configuration



F-3.7.2

You can choose single screen/4/8/1+7/9/12/1+11/14/16/32 screens for layout configuration according to the model and your need.

Step2. Click to close a channel, or click a desired channel (see F-3.7.3)to add in and then click "Apply" to confirm settings. Click "Reset" to reset the layout.

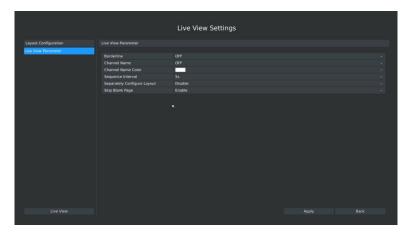




## 3.7.3 Live View Parameter

## **Live View Parameters Settings**

Click Main Menu  $\rightarrow$  Live View  $\rightarrow$  Live View Parameter



F-3.7.4

Item	Description			
Borderline	Borderline ON/OFF			
Channel Name	Display the channel name			
Channel Name Color	To change the color of the channel name			
Sequence Interval	Set sequence interval in live view mode			
Congratoly Configure Layout	To configure channel order of all layouts			
Separately Configure Layout	respectively			
Skip Blank Page	Skip blank page in sequence mode			

# 3.8 System Settings

# 3.8.1 General Setting

### Click Main Menu → System Settings → General Settings

To setup the general parameters of NVR, including modify the host name, device ID, select resolution, and set system time manually, etc.4





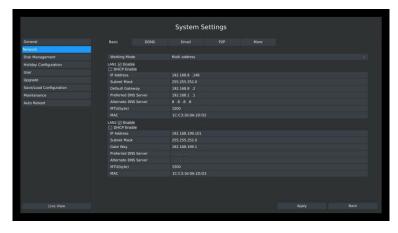
F-3.8.1

# 3.8.2 Network Settings

# 3.8.2.1 Basic Configuration

### Click Main Menu → System Settings → Network, select "Basic" page

Basic configuration includes working mode, IP address, subnet mask, gateway, MTU, DNS server, Internal NIC IPv4 Address, etc.



F-3.8.2

## Note:

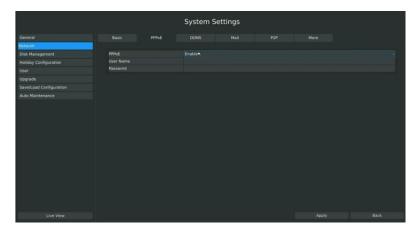
- 1. Check the DHCP check-box when there is a DHCP server running in the networks.
- 2. The valid range of MTU is 500~9676.
- 3. Do not input an IP address conflict with another device.
- 4. Working mode option is only for NVR 7000/8000 series. Internal NIC IPv4 Address is only for PoE NVR.

# 3.8.2.2 PPPoE Configuration

Click Main Menu → System Settings → Network. Select "PPPoE" page



Check the PPPoE check-box to enable the feature, and then input user name, password and confirm password for PPPoE access.



F-3.8.3

#### Note:

- 1. PPPoE user name and password can be obtained from your service provider. Once the setup is completed, a connected status will be shown.
- 2. PPPoE function is not available for 4K/H.265 series NVR.

# 3.8.2.3 DDNS Configuration

If your NVR is setup to use PPPoE to connect public network, you may need to use DDNS (Dynamic Domain Name System) to solve the problems from dynamic IP address.

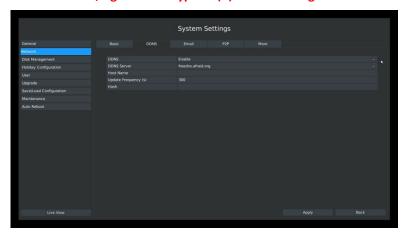
### Click Main Menu → System Settings → Network, Select "DDNS" page

Check the DDNS check-box to enable the feature. Select "DDNS Server", and input user name, password and host name, and then confirm.

Click [Apply] for application.

#### Note:

"host name" can use letters, figures and hyphen (- ) and must begin with letters.



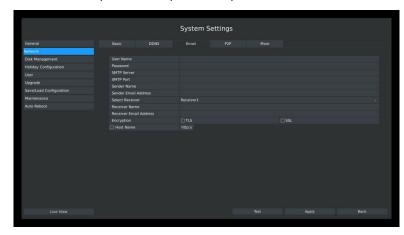
F-3.8.4



## 3.8.2.4 EMAIL Configuration

### Click Main Menu → System Settings → Network → Email

Set the Sender E-mail Address, User Name, Password, and SMTP Server:



F-3.8.5

[User name]: The E-mail address you choose to send emails.

[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 Name]: Named by yourself for the Sender E-mail.

[Sender E-mail Address]: It must be same with [User name].

[Select Receiver]: You can have 3 receivers at the same time.

[Receiver Name]: Named by yourself for the Receiver E-mail.

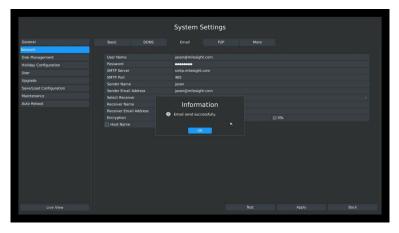
[Receiver E-mail Address]: E-mail Address for the receivers.

[Encryption]: Security Protocol of email sending, includes TLS and SSL.

[Host Name]: For attaching URL when sending emails. Please enable SSL/TLS according to actual

mailbox. (Some SMTP server needs to secure connection)

Select [Test] to check if the Mail function is workable

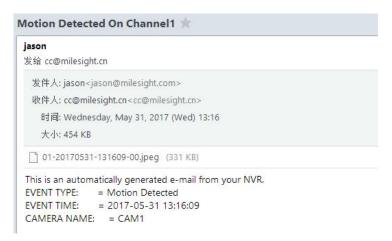


F-3.8.6



#### Note:

- 1. Email will send you a screenshot when motion detection is triggered;
- 2. If your NVR has a port forwarding IP for Host Name, please input the complete address that contains the port;



F-3.8.7

## 3.8.2.5 P2P

You can watch remote NVR live view in WAN by P2P on M-Sight Pro or M-VMS and there is no necessary to port forwarding any router.

**Step1.** Right click on the live view and choose Menu  $\rightarrow$  System  $\rightarrow$  Network  $\rightarrow$  P2P



F-3.8.8

Step2. Choose "Enable" from the drop-down list of "P2P";

Step3. Apply the settings.

#### Note:

For security reasons, P2P function need to be registered before being used if your NVR is:

**①MS-Nxxxx-UH/UPH** and the firmware version is 71.7.0.5-r13 or above;

②MS-Nxxxx-UT/UPT and the firmware version is 72.7.0.5-r13 or above.

You can contact your reseller for help.

If not, just save the information you filled in on "P2P" page.

If NVR failed to save configuration, check these possibilities:

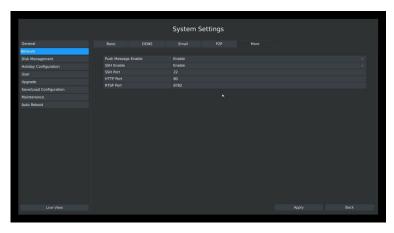


Marked Words	Description
Network Error.	Check the network condition.
Register failed.	MAC address doesn't register the P2P.
Unknown Error.	Need to contact with Milesight Support.

After enabling, you can add the NVR on the APP M-Sight Pro or M-VMS for live view via scanning the QR code on the "P2P" page directly, or inputting the MAC address manually.

## 3.8.2.6 More

### Click Main Menu → System Settings → Network → More



F-3.8.9

### **Push Message Enable**

With this option enabled, you can receive the alarm message on the mobile application(M-Sight Pro or M-VMS).

### **SSH Port Setting**

Secure Shell (SSH) has many functions; it can replace Telnet and also provides a secure channel for FTP, POP, even for PPP.

#### Note:

The default SSH port is 22.

### **HTTP Port Setting**

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.
- 3. The valid range of HTTP port is 80 or 1024~65535.

#### **RTSP Port Setting**

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. The valid range of RTSP port is 554 or 1024~65535.

### **Service Port Setting**

Service Port is used to get remote access when you add NVR by mobile devices.

The default service port is 1100. Please modify service port according to actual application.

#### Note:

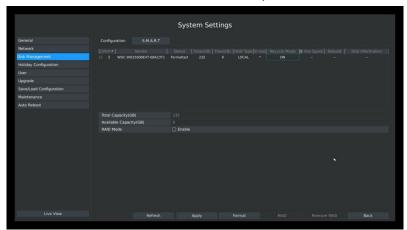
- 1. This option is not available for 4K/H.265 series NVR.
- 2. You can add this port when using P2P/port mapping/LAN IP to add NVR, but you need to use port 80 to add 4K/H.265 series NVR.
- 3. For port mapping, you still need map 554 to 554. Only then you can use 1100 or 80 to watch the live view by remote WAN.

## 3.8.3 Disk Management

## 3.8.3.1 Disk Configuration

### Click Main Menu → System Settings → Disk Management → Configuration

Configuration page contains the basic information of the disk, see F-3.8.10. Select a disk and click **[Format]** to format the disk. After that the disk will stand by.



F-3.8.10

### 3.8.3.2 RAID Mode

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.

RAID(only for MS-N7000 series and MS-N8000 series) will be available after you enable it and reboot the device, including RAID0, RAID1, RAID5 and RAID10.



#### Note:

**RAID 0:** With RAID 0, Should one of the disks be damaged, the recordings on all disks will be lost and are not recoverable. It has fastest possible writing and reading speed.

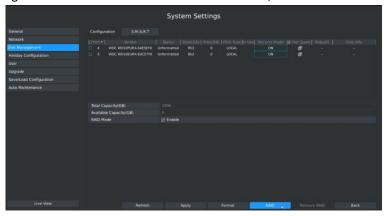
**RAID 1:** RAID 1 is a solution designed to make mirror copy of from one disk onto one or more disks for recovery purposes, the total available storage will be twice smaller compared to RAID 0.

**RAID 5:** The check code will store in each disk. Should one of the disks be damaged, it can use the data and check code from other disks to recover the data on the damaged disk.

**RAID 10:** Combines RAID 1 and RAID 0 configurations — think of it as a group of mirrored disks.

### Click Main Menu → System Settings → Disk Management → Configuration

Configuration page contains the basic information of the disks, see F-3.8.11.



F-3.8.11

### Step2. Creat a new array by clicking RAID button

Choose the "RAID Type" / "HDD Port", and then check the total capacity. If the "RAID Capacity" is 0, that means the number of HDD is incorrect. Click "Create" to finish the configuration. New array will be available after a while. RAID Create page, see F-3.8.12.



F-3.8.12

#### Note:

RAID0/RAID1 requires at least 2 hard disks; RAID5 requires at least 3 hard disks; RAID10 requires 4 hard disks.



[HDD Type]: Show RAID\* means RAID, show LOCAL means normal disk mode.

[Recycle Mode]: Enable recycle mode to enable the full disk recycle.

[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.

[Disk info]: Click to show the detail information of disk in this array.

#### Note:

- 1. RAID\* stands for RAID0/RAID1/RAID5/RAID10.
- 2. The hot spare disk will be automatically used for rebuilding when array is in Degraded status.
- 3. Currently RAID the capacity can not support larger than 16TB.

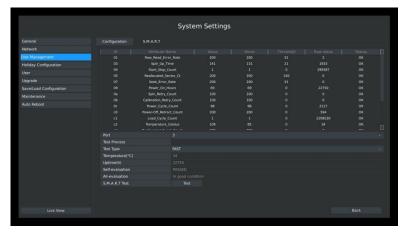
### 3.8.3.3 S.M.A.R.T Detection

### Click Main Menu → System Settings → Disk Management → S.M.A.R.T

S.M.A.R.T detection is a monitoring system of HDD that detects anticipating failures of HDD and reports them with various indicators.

You can command S.M.A.R.T self-checking function to check the HDD status.

Select "Test type", and click "apply" for S.M.A.R.T detection.



F-3.8.13

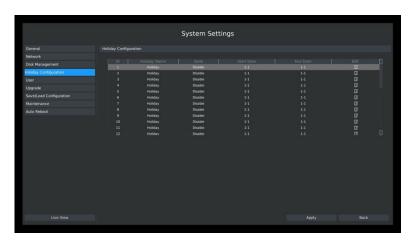
#### Note:

- 1. Test type has [fast] and [full] options.
- 2. Test Status can be [status good], [status bad] and [bad tracks exist].
- 3. Test result can be [passed] or [failed].

# 3.8.4 Holiday Configuration

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

Step1. Click System Setting → Holiday Configuration.



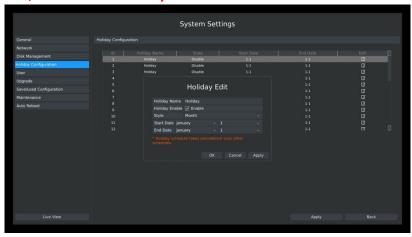
F-3.8.14

#### Step2. Edit the holiday schedule.

Click to open holiday configuration page to modify holiday name, check the 'Holiday Enable' check-box, and then select [style] to setup Start/End date. Then click [OK] to save the configuration and return to holiday configuration page. Click [Apply] to confirm settings.

#### Note:

There are Month, Week and Date in "Style" mode.



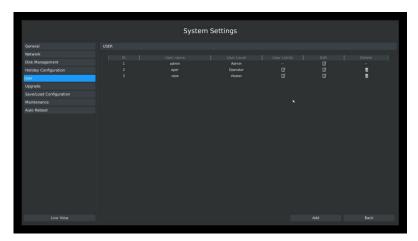
F-3.8.15

## 3.8.5 User Account Settings

#### **Add New User**

#### Step1. Click Main Menu $\rightarrow$ System Settings $\rightarrow$ User.

Click [Add] to enter the user add menu, input information for the new user, select user level and click [OK].



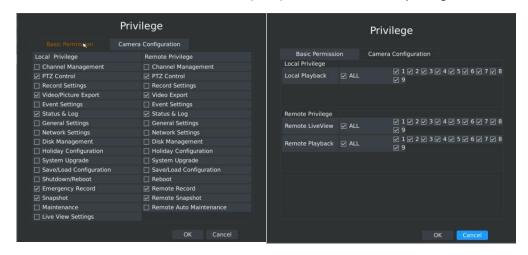
F-3.8.16

#### Note:

- 1. If the NVR firmware version out of the factory is xx.7.0.6 or above, the default user name is "admin" and the default password is "ms1234";
- If the NVR firmware is upgraded to xx.7.0.6 or above from a lower version, the default password will turn to "ms1234" after a reset, or it will keep the old default password "123456";
- 3. If the NVR firmware version is below xx.7.0.6, the default user name is "admin" and the default password is "123456".

#### Step2. Set user privileges

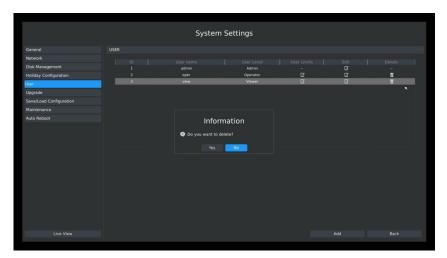
Select the user that has been added and click [limit] button to enter user privilege menu.



F-3.8.17

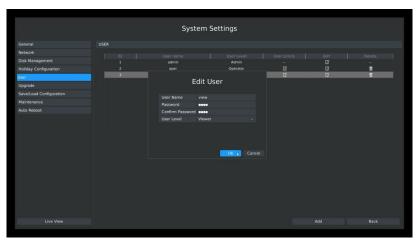


# Step3. Click to delete a user.



F-3.8.18

# Step4. Click to edit a user.



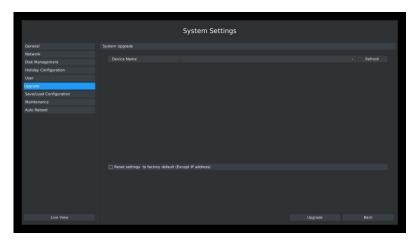
F-3.8.19

## 3.8.6 Upgrade

Your NVR supports firmware upgrade.

Step1. Click Main Menu  $\rightarrow$  System Settings  $\rightarrow$  Upgrade.





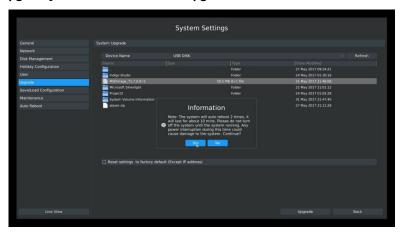
F-3.8.20

#### Step2. Search for device, and select the .bin file.



F-3.8.21

#### Step3. Click [Upgrade] button to confirm the upgrade.



F-3.8.22

#### Note:

The system will auto reboot after confirming upgrade.

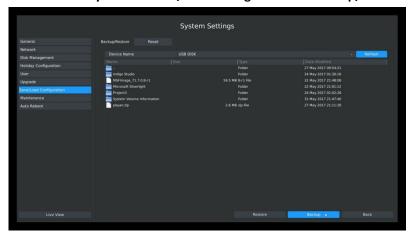


## 3.8.7 Save/Load Configuration

## 3.8.7.1 Backup/Restore

Your NVR supports backup and restore configuration.

Step1: Click Main Menu  $\rightarrow$  System  $\rightarrow$  Save/Load Configuration  $\rightarrow$  Backup/Restore.



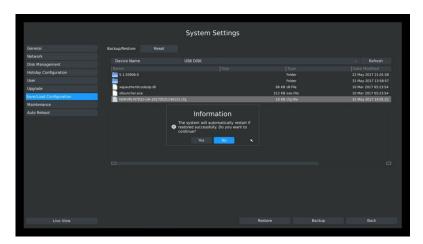
F-3.8.23

Step2. Select a folder and then click [Backup] to export configuration to USB device.



F-3.8.24

Step3. Select a .cfg file and then click [Restore] to import configuration to your NVR.

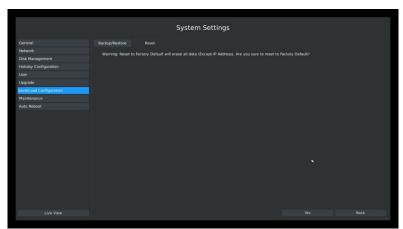


F-3.8.25

### 3.8.7.2 Reset

All parameters can be reset to default settings.

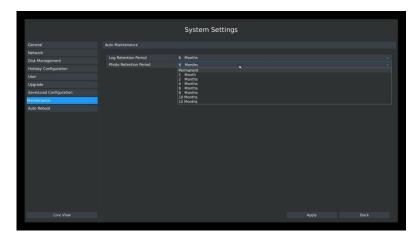
Click Main Menu  $\to$  System  $\to$  Save/Load Configuration  $\to$  Reset. Click "yes" to confirm reset.



F-3.8.26



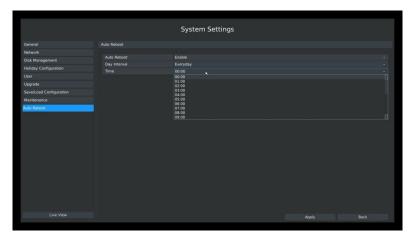
#### 3.8.8 Auto Maintenance



F-3.8.27

You can set the Log and Photo Retention Period (from 1 to 12 months or permanently) in the Auto Maintenance interface. According to your configuration, the NVR will automatically delete your logs and photos after the retention period or permanently keep the Log and Photo.

#### 3.8.8 Auto Reboot



F-3.8.28

You can set day interval and time for reboot, and the NVR will reboot automatically on the time you set.

[Day Interval]: Everyday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday. [Time]: 00:00, 01:00, 02:00 ....... 22:00, 23:00.



## 3.9 Shutdown



F-3.9.1

## **3.9.1 Logout**

Click [Logout] to exit the current logon account.

## **3.9.2 Reboot**

Click [Reboot] to restart the NVR.

## 3.9.3 Shutdown

Click [Shutdown] to close the NVR.

## 3.9.4 Close

Click [Close] to exit.



# 4. WEB Settings

## 4.1 Login

Input the user name and password.



F-4.1.1

#### Note:

- 1. If the NVR firmware version out of the factory is xx.7.0.6 or above, the default user name is "admin" and the default password is "ms1234";
- 2. If the NVR firmware is upgraded to xx.7.0.6 or above from a lower version, the default password will turn to "ms1234" after a reset, or it will keep the old default password "123456";
- 3. If the NVR firmware version is below xx.7.0.6, the default user name is "admin" and the default password is "123456".

#### 4.2 Live View

#### 4.2.1 Camera List

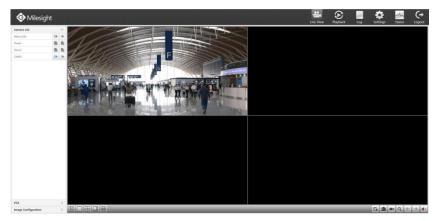
There are multiple icons on each channel displayed in live view mode, indicating the recording and alarm status of the channel.

Icons	Descriptions				
A	ndicates video loss				
₹	Indicates motion detection alarm				

Step1: Enter Live View by clicking one window, and go for camera list.

Click to show the main stream and click to the sub stream.





F-4.1.2

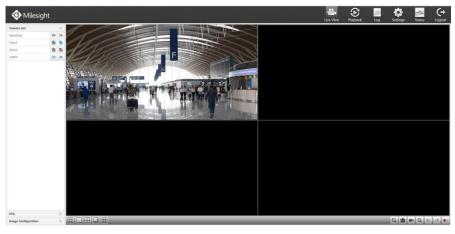
## **Quick Operation**



Icon	Description	Icon	Description	lcon	description
	Stop All Live View		Start All Live View	9	Snapshot by manually
<b>←</b>	Front Page	<b>→</b>	Next Page	40)	Sound off/on
×	Full Screen		Window 1		Window 4
	Window 8		Window 9		

## 4.2.2 Play View

## Click Live View $\rightarrow$ Camera List. Choose the View1 or View2 to play;



F-4.1.3



## 4.2.3 PTZ

#### Click Live View → PTZ



F-4.1.4

## 4.2.4 Video Parameters

#### Click Live View → Video Parameters



F-4.1.5

# 4.3 Playback

To play and backup the recorded files.

# 4.3.1 Playback

It can support playback according to recorded time. Play recorded files in specified time period.

Step1. Click Playback → (shown in F-4.3.1).

Step2. Select a desired channel and date.

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Select playback layout and channel. Click the date in red when there are recorded files of the selected channels, the record type with recording data will be show as below, and then click

to playback.

#### Note:

The day with a blue mark has recording files; please select the date in red to playback.



F-4.3.1

#### **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 Green --- Motion
Red --- Alarm Grey --- Emergency

And take this bar above as an example, it means in this recording period there are motion and timing event which have triggered.

Button	Description	Button	Description	Button	Description	Button	Description
•	Rewind		Stop	<b>&gt;</b>	Play	Ш	Pause
<b>4</b> I	Reverse Step	IÞ	Forward Step	<b>**</b>	Fast Backward	<b>&gt;&gt;</b>	Fast Forward
X	Timeline Cutting	4	Timeline Cut Off	•	Audio On	4	Audio Off
	Snapshot	2 3	Timeline	2014.01. 04. AM 11:43:00	Playback Position		



## 4.3.2 Video Files Backup

Recorded files can be cut and backed up from WEB.

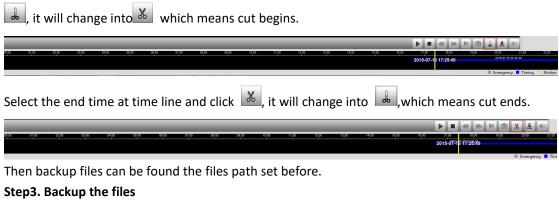
Step1. In playback interface, select the date and time to playback



F-4.3.2

#### Step2. Select Recorded files for Backup.

Select the channel and date you want to backup, then select the start time at time line and click



Click the button and choose the path to save the file





## 4.3.3 Picture Files Backup

#### Step1. Click Settings → Local Configuration

Choose Playback Picture Path.



F-4.3.3

Step2. Pause first when you want backup a special scene during video playback.

Step3. Click is to save picture. Then backup picture can be found the files path set before.



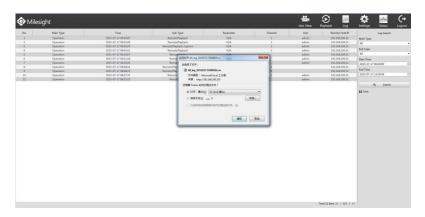
F-4.3.4

## **4.4 Logs**

In Log interface, you can check, search and save important 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 save them locally.

Click Logs  $\Rightarrow$  Main Type  $\Rightarrow$  Sub Type  $\Rightarrow$  Start Time  $\Rightarrow$  End Time  $\Rightarrow$  Search  $\Rightarrow$ 



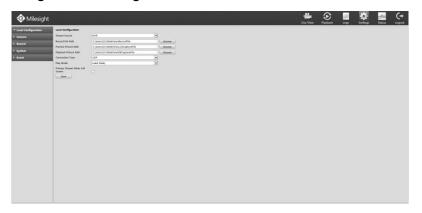


F-4.4.1

## 4.5 Settings

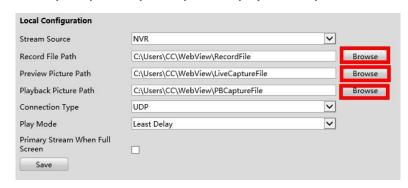
## 4.5.1 Local Configuration

Step1. Click Settings → Local Configuration.



F-4.5.1

Step2. Set record file path, preview picture path and playback file path.



F-4.5.2

Step3. Set connection type and play mode, then save configuration.

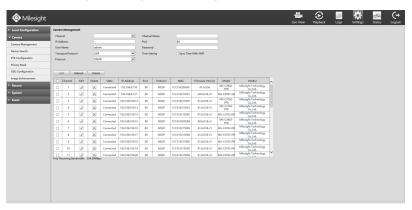


#### **4.5.2 Camera**

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

## 4.5.2.1 Camera Management

Step1. Enter Camera Management by Click Settings → Camera.



F-4.5.3

#### Step2. Add IP Channel.

#### Method1. Add IP Channel in device search interface

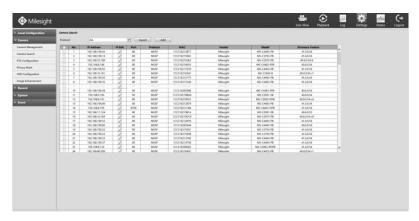
1. Click Settings → Camera → Device Search.



F-4.5.4

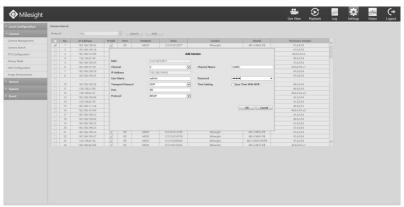
2. Click [Search] button to quickly search the IP devices that support ONVIF at the same network segment with NVR.





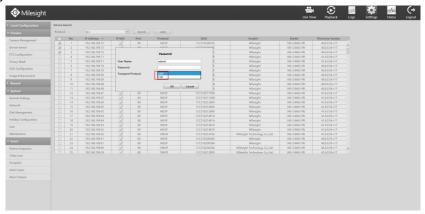
F-4.5.5

3. Click the channel, click [Add] button, input password and click [OK] button to finish or click [Cancel] button to cancel.



F-4.5.6

4. Or you can Check to bulk adding the network cameras If they are with the same password, and you can choose TCP or UDP transport protocol for bulk adding. Click [OK] to finish bulk adding.



F-4.5.7

#### Method2. Add IP Channel in camera management interface

1. Click Settings → Camera → Camera Management





F-4.5.8

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

There are three protocols available for camera connection:

- ONVIF: You can add any IP cameras with ONVIF protocols if you selected this protocol.
   Details are shown in F-4.5.9;
- RTSP: You can add any IP cameras with RTSP protocol streams (Port: 554). You need 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 of second stream is "rtsp://IP:port/sub". Details are shown in F-4.5.10;
- MSSP: You can add Milesight cameras which are in the same LAN by select this protocol.
   Details are shown in F-4.5.11.

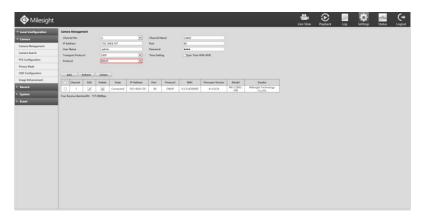


F-4.5.9



F-4.5.10

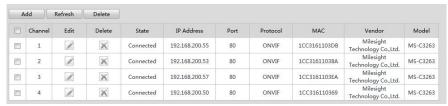




F-4.5.11

#### Step3. Check the connection status.

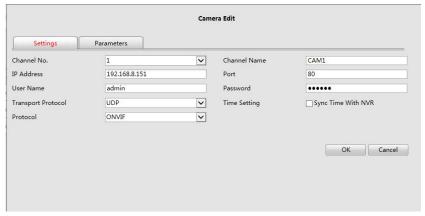
After adding the IP channels, click [Refresh] button, then [connected] appears under[status]. If it doesn't appear, you need to check if the network is connected or whether the user name, password is correct or not.



F-4.5.12

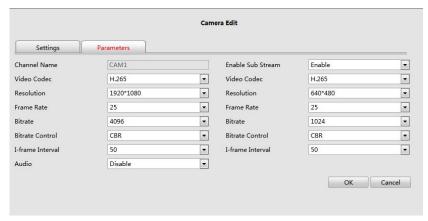
#### **Step4. Configure IP Channel**

After successfully adding the channel, click of to re-edit the channel info, address, and password, etc.



F-4.5.13

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



F-4.5.14

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





#### 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.

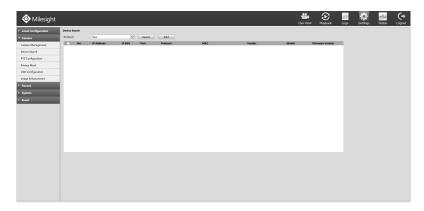


F-4.5.15

#### 4.5.2.2 Device Search

Step1. Click Settings → Camera → Device Search.



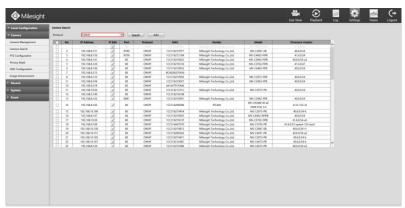


F-4.5.16

Step2. Choose [All], then click [search] to quickly search the IP devices that support ONVIF at the same LAN with NVR; switch Protocol into [ONVIF] to search the IP devices that support ONVIF at the same network segment with NVR, or switch Protocol into [MILESIGHT] to search the IP devices that support MILESIGHT at the same LAN with NVR.

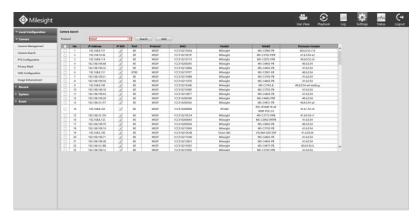


F-4.5.17



F-4.5.18



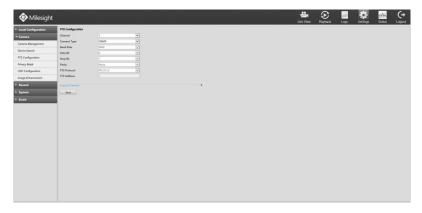


F-4.5.19

## 4.5.2.3 PTZ Configuration

#### Click Settings → Camera → PTZ Configuration

Select a channel and set the PTZ parameters. You can click [Copy] to copy the same configuration to other channels.



F-4.5.20

#### 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.

## 4.5.2.4 Privacy Mask

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

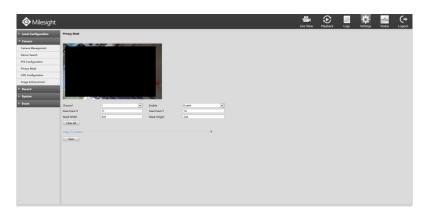
You can add a privacy mask by following steps:

Step1. Click Settings → Camera → Privacy Mask.

Step2. Select a channel, then select [enable].

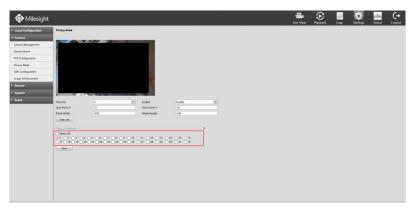
Step3. To set a Privacy Mask, you can set values or draw a cover area on objects in the view.





F-4.5.21

Step4. You can click [Copy] to copy the same configuration to other channels.



F-4.5.22

Step5. Select "Save" to save the settings.

#### Note:

[Start Point X] and [Start Point Y] determine the point where the area starts, [Mask Width] and [Mask Height] determine the size of the area.

## 4.5.2.5 OSD Configuration

You can set OSD (On Screen Display) on NVR, and the OSD will be synchronized to Camera. Click Settings  $\rightarrow$  Camera  $\rightarrow$  OSD Configuration.



F-4.5.23



Select channel and finish the info and save.

[Video Title]: Set the video title for the channel;

[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.

## 4.5.2.6 Image Enhancement

You can set Image Enhancement on NVR, and the configuration will be synchronized to Camera. **Step1.** Click Settings  $\rightarrow$  Camera  $\rightarrow$  Image Enhancement.



F-4.5.24

**Step2.** Select channel by clicking the channel number on the right-top, the selected channel will change into gray and the channel number will change into yellow;

Step3. Set the configuration;

[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;

[WDR/HLC]: Click to configure Wide Dynamic Range or High Light Control;

[Power Line Frequency]: 50Hz and 60Hz are available;

[Video Orientation]: Set the image rotation;

[Smart IR]: Set the Smart IR on and off;

[White Balance]: Choose a white balance mode for the channel;

[Digital Anti-fog Mode]: Set the Anti-fog function on and off;

[Digital Image Stabilisation]: Set the Image Stabilisation on and off.

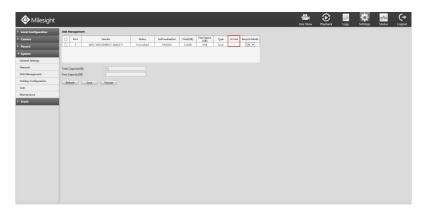
#### **4.5.3 Record**

#### **Preparation for Configuration**

Step1. Ensure your NVR has installed and initialized the HDD.

Click Settings → System → Disk Management

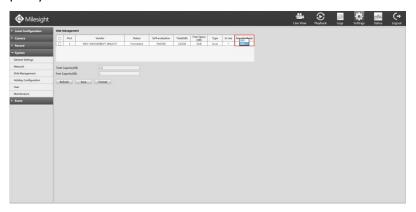




F-4.5.25

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

Click Settings → System → Disk Management. Select [Recycle Mode] to "ON" in the case of insufficient capacity of HDD.



F-4.5.26

#### 4.5.3.1 Record Mode

#### Step1. Click Settings $\rightarrow$ Record $\rightarrow$ Record Mode.

There are three record modes: No Recording/Always Record/Record by Schedule. You can select the desired one for every channel.



F-4.5.27

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[No Record]: NVR will not record;

[Always Record]: NVR will always record the chosen channel;

[Record By Schedule]: NVR will record by schedule, details will be shown in 4.5.3.2;

Step2. Click [OK] to save the configuration.

#### 4.5.3.2 Record Schedule

#### Note:

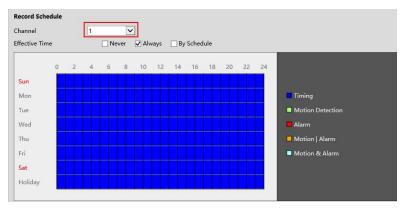
The days are divided as

Holiday/Sunday/Monday/Tuesday/Wednesday/Thursday/Friday/Saturday. The schedule of Holiday is superior to other days. To set the holiday information, go to Chapter 4.5.4.4

Method1. General Setting

Step1. Click Record Settings → Record Schedule.

Step2. Select the desired channel (e.g. Channel 1).



F-4.5.28

#### Step3. Set record schedule.

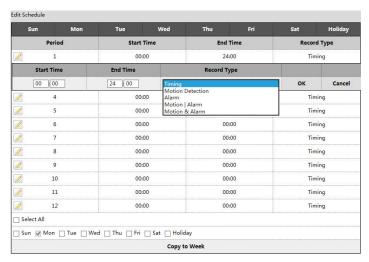
Never, Always and By Schedule are available for time setting. If you choose By Schedule, select a

day from the drop-down list of [Day], click to set a period, up to 12 periods can be set. (e.g.01:00 to 05:00 for none recording; 06:00 to 18:00 for timing recording; 19:00 to 21:00 for Motion recording; 22:00 to 24:00 for Alarm recording)

Sun	Mon	Tue	Wed	Thu	Fri	Sat	Holiday		
	Period	Star	t Time	End	Time	Reco	rd Type		
<u>/</u>	1	00:00		24	24:00		Timing		
<u>/</u>	2	00:00		00:00		Timing			
<u>/</u>	3	00:00		00	00:00		Timing		
_	4	00:00		00	00:00		Timing		
<u>/</u>	5	00:00		00	:00	Timing			
<u>/</u> ]	6	00:00		00	00:00		Timing		
<u>/</u>	7	00:00		00:00		Timing			
<u>/</u>	8	00:00		00:00		Timing			
<u>/</u> ]	9	00:00		00	00:00		Timing		
<u>/</u>	10	00:00		00:00		00	:00	Tir	ming
<u>/</u>	11	00:00		00:00 00:00		:00	Timing		
/	12	00:00		00	:00	Tir	ming		
Select All									
Sun 🕡 I	Mon Tue Wed	Thu 🗆 Fri	Sat Holid	ay					
			Copy to						

F-4.5.29





F-4.5.30

Click and check to copy to other channels.



#### **4.5.3.3** Advanced

Make advanced configuration for selected channels. Click and check to copy configurations to other channels.



F-4.5.31

[Channel]: Select the channel which will be set.

[Pre Record ]: Enable/Disable pre record before the event is triggered

[Duration Time]: Event post-record duration time

[Post Record ]: Enable/Disable post record after the event is over

[Duration Time]: Event post-record duration time [Audio Record]: Select to record audio or not

[Record Stream Type]: Select Main stream or sub stream for record



Lastly, you can choose the copy button to copy the settings of record to other channels. [Due Time]: Set the due time of recording files.

## **4.5.4 System**

### 4.5.4.1 General Settings

#### Click Settings → System → General Settings

To setup the general parameters of NVR, including modify the host name, device ID, select resolution, and set system time manually, etc.



F-4.5.32

## 4.5.4.2 Network Settings

## 4.5.4.2.1 Basic Configuration

#### Click Settings → System → Network, select "Basic" page

Basic configuration includes working mode, IP address, subnet mask, gateway, MTU, DNS server, etc.



F-4.5.33



#### Note:

- 1. Check the DHCP check-box when there is a DHCP server running in the networks.
- 2. The valid range of MTU is 500~9676.
- 3. Do not input an IP address conflict with another device.

#### 4.5.4.2.2 PPPoE

#### Click Settings → System → Network. Select "PPPoE" page

Check the PPPoE check-box to enable the feature, and then input user name, password and confirm password for PPPoE access.



F-4.5.34

#### Note:

- 1. User name and password of PPPoE can be obtained from your service provider. Once the setup is completed, a connected status will be shown.
- 2. PPPoE function is not available for 4K/H.265 series NVR.

#### 4.5.4.2.3 DDNS

#### Click Settings → System → Network, Select "DDNS"

If your NVR connected to network through PPPoE, you may need DDNS to solve the dynamic IP address problem. You need to 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.

#### Note:

"Host Name" must begin with letters, and it can only contain number, letters, and hyphen.



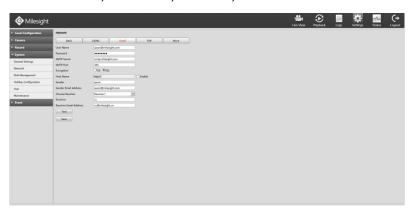


F-4.5.35

#### 4.5.4.2.4 Email

#### Click Settings → System → Network → Email

Set the Sender E-mail Address, User Name, Password, and SMTP Server:



F-4.5.36

[User name]: The E-mail address you choose to send emails.

[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, includes TLS and SSL.

[Host Name]: For attaching URL when sending emails.

[Sender]: Named by yourself for the Sender E-mail.

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

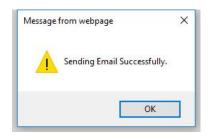
[Choose Receiver]: You can have 3 receivers once.

[Receiver]: Named by yourself for the Receiver E-mail.

[Receiver Email Address]: E-mail Address for the receivers.

Select [Test] to check if the Mail function is workable





#### Note:

- 1. Email will send you a screenshot when motion detection is triggered.
- 2. If your NVR has a port forwarding IP for Host Name, please input the complete address that contains the port.

#### 4.5.4.2.5 P2P

You can watch remote NVR live view in WAN by P2P on M-Sight Pro or M-VMS and there is no necessary to port forwarding any router.

**Step1.** Click Settings  $\rightarrow$  System  $\rightarrow$  Network  $\rightarrow$  P2P.



F-4.5.37

**Step2.** Click "Enable" to enable the function;

**Step3.** Click "Save" to save the configuration.

Note: For security reasons, P2P function need to be registered before being used if your NVR is:

①MS-Nxxxx-UH/UPH and the firmware version is 71.7.0.5-r13 or above;

②MS-Nxxxx-UT/UPT and the firmware version is 72.7.0.5-r13 or above.

You can contact your reseller for help.

If NVR failed to save configuration, check these possibilities:

Marked Words	Description		
Network Error.	Check the network condition.		
Register failed.	MAC address doesn't register the P2P.		
Unknown Error.	Need to contact with Milesight Support.		

After enabling, you can add the NVR on the APP M-Sight Pro or M-VMS for live view via scanning the QR code on the "P2P" page directly, or inputting the MAC address manually.



#### 4.5.4.2.6 More

#### Click Settings → System → Network → More



F-4.5.38

#### **Push Message Enable**

With this option enabled, you can receive the alarm message on the mobile application(M-Sight Pro or M-VMS).

#### **SSH Port Setting**

Secure Shell (SSH) has many functions; it can replace Telnet, and also provides a secure channel for FTP, POP, even for PPP.

#### Note:

The default SSH port is 22.

#### **HTTP Port Setting**

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.

#### **RTSP Port Setting**

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.

#### **Service Port Setting**

Service Port is used to get remote access when you add NVR by mobile devices.

The default Service port is 1100. Please modify Service port according to actual application.

#### Note:

- 1. This option is not available for 4K/H.265 series NVR.
- 2. You can add this port when using P2P/port mapping/LAN IP to add NVR, but you need to



use port 80 to add 4K/H.265 series NVR.

3. For port mapping, you still need map 554 to 554. Only then. Only then you can use 1100 to watch the live view by remote WAN.

## 4.5.4.3 Disk Management

#### Click Settings → System → Disk Management

Configuration page contains the basic information of the disk, see F-4.5.40. Select a disk and click [Format] to format the disk.



F-4.5.39

[RAID Mode]: Enable/Disable to open/close RAID function.

[HDD Type]: Show RAID\* means RAID, show LOCAL means normal disk mode.

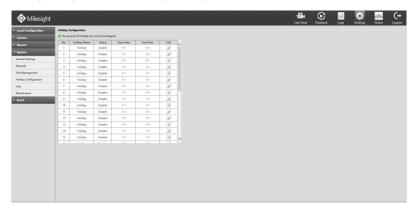
Note:

RAID\* stands for 0/1/5/10

## 4.5.4.4 Holiday Configuration

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

Step1. Click Setting  $\rightarrow$  System  $\rightarrow$  Holiday Configuration.



F-4.5.40

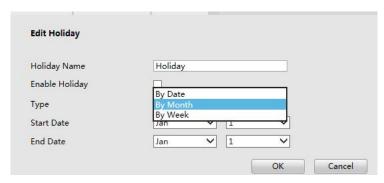
#### Step2. Edit the holiday schedule.

Click to open holiday configuration page to modify holiday name, check the 'Holiday Enable'

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check-box, and then select [Type] to setup Start/End date. There are Month, Week, and Date in [Type] mode. Then click [OK] to save the configuration and return to holiday configuration page.



F-4.5.41

#### 4.5.4.5 User

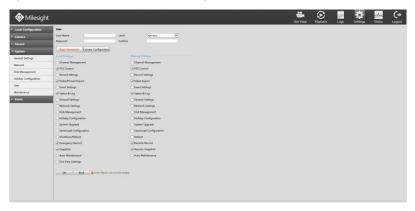
#### Step1. Click Settings $\rightarrow$ System $\rightarrow$ User.

#### Note:

- 1. If the NVR firmware version out of the factory is xx.7.0.6 or above, the default user name is "admin" and the default password is "ms1234";
- 2. If the NVR firmware is upgraded to xx.7.0.6 or above from a lower version, the default password will turn to "ms1234" after a reset, or it will keep the old default password "123456";
- 3. If the NVR firmware version is below xx.7.0.6, the default user name is "admin" and the default password is "123456".

#### Step2. Add a new user.

Click [Add] to enter the user add menu, input information for the new user, select user level and set user privileges, then click [OK] to save settings.



F-4.5.42





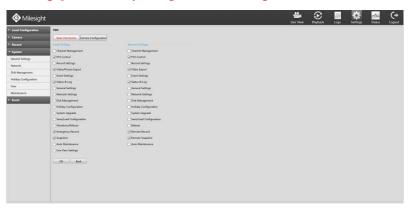
F-4.5.43

#### Step3. Edit user.

Select a desired user and click, when the color below changes into blue, click [Edit Limit] to edit user privileges, click [Edit Password] to change password.

#### Note:

- 1. User name can only contain letters and number. There are two user levels with different authority: Operator and Viewer;
- 2. [Local Privilege] means the privilege to the monitor connected with NVR, while the [Remote Privilege] means the privilege to web settings.



F-4.5.44



F-4.5.45

Step4. Click Delete to delete a user.



#### 4.5.4.6 Maintenance



F-4.5.46

#### 4.5.4.6.1 Auto Maintenance

You can set the Log and Photo Retention Period (from 1 to 12 months or permanently) in the Auto Maintenance interface. According to your configuration, the NVR will automatically delete your logs and photos after the retention period or permanently keep the Log and Photo.

#### 4.5.4.6.2 Reboot

Click Reboot to reboot the NVR.

#### 4.5.4.6.3 Reset

Click Reset to reset the NVR to factory defaults.



## 4.5.4.6.4 Import Configuration File

Click Browse to select one desired file and click Restore to restore the NVR configuration.



F-4.5.47

## 4.5.4.6.5 Export Configuration File

Click Backup present settings.



F-4.5.48

### 4.5.4.6.6 System Upgrade

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

Click Upgrade to upgrade.



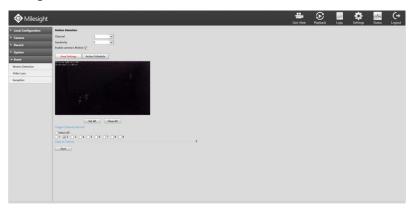
#### Note:

It will take 5 to 10 minutes to upgrade, please do not cut off the device power during the upgrade. After upgrading, the device will reboot automatically.

#### 4.5.5 **Event**

#### 4.5.5.1 Motion Detection

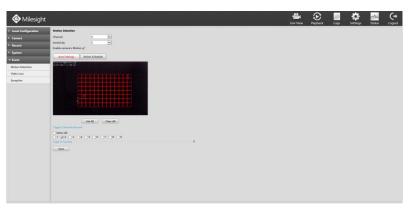
#### Step 1. Click Settings $\rightarrow$ Event $\rightarrow$ Motion Detection.



F-4.5.49

#### Step 2. Set the trigger area for motion detection.

You can select an area by dragging the mouse to set the trigger area, and this area will be synchronized to camera.



F-4.5.50

#### Step 3. Select the schedule, sensitivity and trigger area for motion detection.

**[Enable camera's Motion]**: If it is enabled here, motion detect will take effect 7\*24h; If it is not enabled, motion detect will take effect as the schedule which is set on the camera web.

[Set All]: Set all area as the trigger area;

[Clear All]: Clear all trigger area;

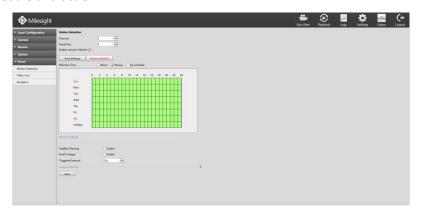
[Sensitivity]: Set sensitivity for motion detection, range from 1 to 10.It will synchronize to IPC if you set sensitivity here;



Step 4. Select the desired channel and check to configure motion detection action.



Step 5. Click the [Action Schedule] to edit effective time and action once motion is detected. Edit the schedule and action.



F-4.5.51

[Audible Warning]: NVR will trigger an audible beep when motion is detected;

[Email Linkage]: NVR will send an email to the address set before;

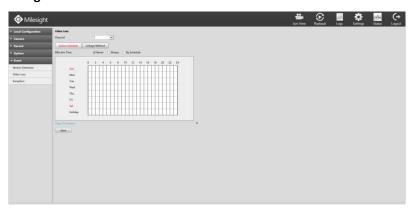
[Triggered Interval]: Set the interval between two events.

#### Note:

Motion record schedule is different from the schedule of the [Audible] and [Email Linkage]. Enter the Record Schedule by clicking Settings→Record→Record Schedule. Confirm the time to enable Motion Record.

#### **4.5.5.2 Video Loss**

Step1. Click Settings→Event→Video Loss.



F-4.5.52

Step2. Select a desired channel

Step3. Select effective time to setup when you want to trigger actions once video loss is



#### detected.

[Never]: Your NVR will not trigger any actions when [Never] button is checked. No matter the [Audible Warning] or [Email Linkage] check-boxes are checked or not.

[Always]: Your NVR will always trigger actions when [Always] button is checked. Please make sure [Audible Warning] or [Email Linkage] is checked.

[By Schedule]: Schedule can be set for all week or any day of the week with up to 12 time periods per day. Video loss actions take effect in the scheduled period only.

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

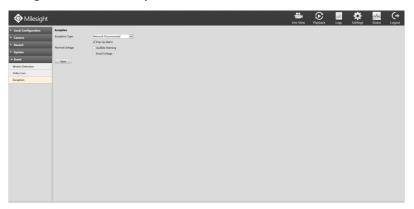
**[Email Linkage]:** Send video loss note to specified email address when video loss is detected. (Please refer to 4.5.4.2.4 Email configuration for mail address setting)

[Trigger Interval]: Set the interval between two events.



## **4.5.5.3 Exception**

#### Step1. Click Settings $\rightarrow$ Event $\rightarrow$ Exception.



F-4.5.53

Step2. Select Exception Type. There are 4 kinds of alarm types.

[Network Disconnected]: Loss of network;

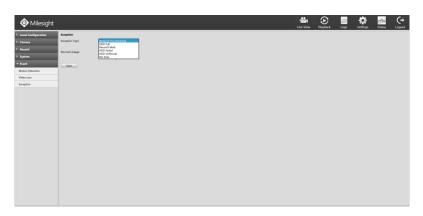
[HDD Full]: HDD full, it usually happens when Recycle Mode is OFF.

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

[HDD Failed]: Failed to recognize HDD. [HDD Unformat]: HDD is unformat.

[No Disk]: There is no HDD.





F-4.5.54

#### Step3. Select alarm type.

[Pop Up Alarm]: Will pop up a window if checked;

[Audible Warning]: NVR will trigger an audible beep when motion is detected;

[Email Linkage]: Email will be ready to sent if checked.

#### 4.6 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.

#### 4.6.1 Device Information

#### Click Status → Device Information

It will show you information in F-4.6.1, including: Device ID, Model, MAC Address, Hardware Version, Software Version and Uptime.



F-4.6.1



#### 4.6.2 Network Status

#### Click Status → Network Status

It will show you information in F-4.6.2, including: Free bandwidth, Used bandwidth, Connection, Mode, DHCP, MTU(B), IP Address, Net mask, Gateway, MAC, Preferred DNS Server, Alternate DNS Server, Receive Rate, and Send Rate.

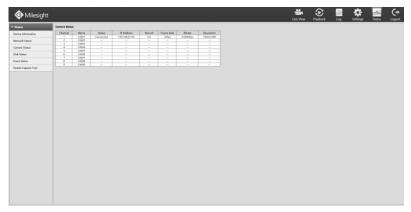


F-4.6.2

#### 4.6.3 Camera Status

#### Click Status → Camera Status

It will show you information in F-4.6.3, including: Channel, Name, Status, IP Address, Record, Frame Rate, Bit rate and Resolution.



F-4.6.3

#### 4.6.4 Disk Status

#### Click Status → Disk Status

It will show you information in F-4.6.4, including: Port, Vendor, status, Total(GB),Used(GB) Free



space(GB), HDD Type, In Use, and Recycle Mode. You can see the Total Capacity (GB) and Available Capacity (GB) as below:

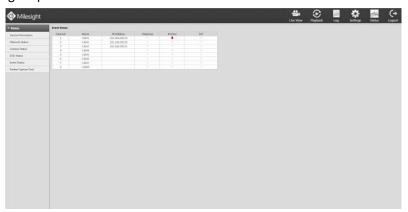


F-4.6.4

## 4.6.5 Event Status

#### Click Status → Event Status

It will show you information in F-4.6.5, including: Channel, Name, IP Address, Videoloss, Motion, I/O. Icon will light up as below:



F-4.6.5

## 4.6.6 Packet Capture Tool

#### Click Status → 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.

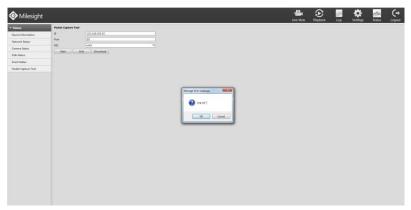




F-4.6.6

# 4.7 Logout

Click [Logout] to exit the current account.



F-4.7.1

# M ilesight Technology Co.,Ltd.



# 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

Web: http://www.milesight.com

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

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

Zip Code: 361006 TEL: +86-592-5922772 FAX: +86-592-5922775

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