# HIKVISION

Mobile Video Recorder

User Manual

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The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (https://www.hikvision.com/).

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#### **FCC Information**

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **FCC Compliance**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### **FCC Conditions**

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

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

#### **EU Conformity Statement**

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the LVD Directive 2014/35/EU, the RoHS Directive 2011/65/EU, RE Directive 2014/53/EU.



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



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

### **Industry Canada ICES-003 Compliance**

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

### **Symbol Conventions**

The symbols that may be found in this document are defined as follows.

Symbol	Description	
Note	Provides additional information to emphasize or supplement important points of the main text.	
<b>!</b> Caution	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.	
<u> </u>	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.	

# Safety Instructions

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 9 to 36 VDC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.



It is recommended to use either 12 V or 24 V adapter when testing the device.

- Do not connect several devices to one power adapter as adapter overload may cause overheating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

# **Preventive and Cautionary Tips**

- Before connecting and operating your device, please be advised of the following tips:
- Ensure unit is installed in a well-ventilated, dust-free environment.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.

- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the device in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- A factory recommended HDD should be used for this device.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

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# **Chapter 1 Product Introduction**

### 1.1 Introduction

Adopting embedded Linux operating system, mobile video recorder (hereinafter referred to as the recorder) provides powerful monitoring functions. It can both work alone as a recorder and cooperate with other devices to build a comprehensive monitoring system. The recorder is widely applied to the monitoring projects of public transportation, school bus, etc.

# 1.2 Key Features

- User-friendly GUI providing easy and flexible operations.
- Pluggable 3G/4G module and built-in Wi-Fi module providing flexible data transmission solutions.
- Information collection interfaces collecting driving information such as left/right turn, braking, reversing, etc.
- Specialized aviation connectors ensuring signal stability.
- Ignition startup and delay (0 to 6h) shutdown.
- Battery protection avoids vehicle from running out of battery.
- Wide-range power input (+ 9 to + 32 VDC).
- Power-off protection avoids key data from loss.
- Tensile aluminum chassis with no fan design well adaptable to working environment.
- Software-based firewall supported.
- GNSS (Global Navigation Satellite System) module precisely positioning the vehicle via the satellite and recording the location information in the stream.

# Chapter 2 Start Up Device

#### 2.1 Activation

You can activate the recorder via the SADP software, the Web, the client software or the local menu.



If you want to activate the device via the SADP software or the Web, make sure that the device and your computer are in the same network segment.

If you want to activate the recorder via the local menu, you must connect the device to an external monitor.

For the first-time access, you need to activate the recorder by setting an admin password. No operation is allowed before activation.

#### 2.1.1 Default Information

The default setting of the recorder is as follows:

- Default IP: 192.168.1.64.
- Default user name: admin.

#### 2.1.2 Activate via Local Menu

You can activate the recorder via the local menu when it's connected to an external monitor.

Step 1 Enter the same password in **Password** and **Confirm Password**.



We highly recommend you to create a strong password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Step 2 Click **OK**.

#### 2.1.3 Activate via SADP

SADP software is used for detecting the online device, activating the device, and resetting the password. Get the SADP software from the supplied disk or the official website, and install the SADP according to the prompts. Follow the steps to activate the camera.

#### Before You Start

- Ensure your computer and the recorder are in the same network segment.
- Install the SADP software in your computer.

Step 1 Run the SADP software.

Step 2 Check the recorder status from the device list, and select the inactive recorder.



We highly recommend you to create a strong password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Step 3 Enter the same password in **Password** and **Confirm Password**.

Step 4 Click Activate.

#### 2.1.4 Activate via Web Browser

You can activate the device via a web browser.

#### Before You Start

Ensure your computer and the recorder are in the same network segment.

Step 1 Open web browser, input the IP address of the device and then press Enter.



We highly recommend you to create a strong password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Step 2 Enter the same password in **Password** and **Confirm**.

Step 3 Click OK.

### 2.2 Access Device via Web Browser

Get access to the recorder via web browser.

- Step 1 Open the web browser, enter the IP address of the recorder, and then press Enter.
- Step 2 Enter User Name and Password and click Login.
- Step 3 Install the plug-in before viewing the live video and managing the camera. Please follow the installation prompts to install the plug-in.

#### What to do next

Click **Logout** in top right corner to log out the recorder.

# **Chapter 3 Basic Operation**

You can perform the basic operations once the recorder is connected to an IP camera. All the operations from Chapter 3 to Chapter 11 is done via web browser.

# 3.1 Configure Date & Time

Configure time zone and time synchronization mode.

Step 1 Go to Configuration > System > System Settings > Time Settings.

Step 2 Select Time Zone according to the recorder location.

Step 3 Select time synchronization mode as NTP or Manual Time Sync.

- 1) If an NTP server is available, select **NTP** and enter NTP server information to synchronize NTP server time to your recorder.
- 2) Select Manual Time Sync. and set time to customize the recorder time.
- 3) Select **Manual Time Sync.** and check **Sync. with computer time** to synchronize the computer time to your recorder.

Step 4 Click Save.

# 3.2 Manage IP Camera

The section is only available for the recorder that supports network camera.

#### 3.2.1 Activate IP Camera

Before adding an IP camera, activate it by setting a password for it.

Step 1 Go to Configuration > System > Camera Management > IP Camera.

Step 2 Select an inactivated IP camera.



We highly recommend you to create a strong password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Step 3 Click Activation.

Step 4 Enter the same password in **New Password** and **Confirm**.

Step 5 Click OK.

#### 3.2.2 Add IP Camera

You can add the activated IP cameras. Ensure the device and IP cameras are in the same network segment.

#### **Before You Start**

The record and the camera to add must be in the same network segment.

Step 1 Go to Configuration > System > Camera Management > IP Camera.

Step 2 Optional: If the recorder and the camera are in different network segment, modify IP camera address.

- 1) Check the IP camera and click Modify.
- 2) Enter IP Address and Password.
- 3) Click OK.

Step 3 Select a camera and click Add.



If the recorder password is the same with the camera's, click **Quick Add** to add the camera.

Step 4 Enter IP camera information.

Step 5 Click **OK**.

#### 3.2.3 Edit IP Camera

You can visit, delete, and modify the added IP cameras.

#### **Before You Start**

If the recorder contains only one network card, you can visit IP camera via the recorder. If the recorder contains dual network card, you need to enable virtual host function before visiting IP camera via the recorder. Go to **Configuration** > **Network** > **Advanced Settings** > **Other** and check **Enable Virtual Host**.

Step 1 Go to Configuration > System > Camera Management > IP Camera.

Step 2 Optional: Click address of IP camera to visit.

Step 3 Optional: Check IP cameras and click **Delete** to delete added IP cameras.

# 3.3 Record and Capture

To record the videos for connected cameras, you need to install a storage media and format it, and configure the recording schedule.

# 3.3.1 Format Storage Media

A newly installed storage media must be initialized before it can be used.

#### Before You Start

Install a storage media.

Step 1 Go to Configuration > Storage > Storage Management.

Step 2 Check the storage media and click **Format**.

#### Result

After format, the storage media status should be Normal.

### 3.3.2 Configure Continuous Recording

The recorder is configured with all-day continuous recording by default.

#### **Before You Start**

Install and format a storage media.

Step 1 Go to Configuration > Storage > Schedule Settings.

Step 2 Select Channel No.

Step 3 Check Enable.

Step 4 Select recording type as **Continuous**.

Step 5 Optional: Click **Advanced** to configure Pre-record and Post-record.

#### Pre-record

The time you set to start recording before the scheduled time or the event. For example, if an alarm triggers recording at 10:00, and the pre-record time is set as 5 seconds, the device starts to record at 9:59:55.

#### Post-record

The time you set to stop recording after the scheduled time or the event. For example, if an alarm triggered recording ends at 11:00, and the post-record time is set as 5 seconds, the device records until 11:00:05.

Step 6 Set recording schedule. For detailed steps, refer to Configure Arming Schedule.

Step 7 **Optional:** Click **Copy to** to copy upper settings to other channel.

Step 8 Click Save.

# 3.3.3 Configure Event Triggered Recording

Trigger recording when an event is triggered.

#### **Before You Start**

- Install and format the storage media.
- Configure event parameters. For details, refer to Events and Alarms.

Step 1 Go to Configuration > Storage > Schedule Settings.

Step 2 Select Channel No.

Step 3 Check Enable.

Step 4 Select recording type as Motion | Alarm, Alarm, Motion, or Motion & Alarm.

#### Motion | Alarm

Trigger recording when either motion detection or alarm input is detected.

#### Alarm

Trigger recording when alarm input is detected.

#### Motion

Trigger recording when either motion detection detected.

#### **Motion & Alarm**

Trigger recording when both motion detection and alarm input are detected.

Step 5 Optional: Click Advanced to configure Pre-record and Post-record.

#### Pre-record

The time you set to start recording before the scheduled time or the event. For example, if an alarm triggers recording at 10:00, and the pre-record time is set as 5 seconds, the device starts to record at 9:59:55.

#### Post-record

The time you set to stop recording after the scheduled time or the event. For example, if an alarm triggered recording ends at 11:00, and the post-record time is set as 5 seconds, the device records until 11:00:05.

Step 6 Set recording schedule. For detailed steps, refer to Configure Arming Schedule.

Step 7 **Optional:** Click **Copy to** to copy upper settings to other channel.

Step 8 Click Save.

# 3.3.4 Configure Disaster Storage

The function is only available for recorder supporting mobile fireproof storage box. The recorder will save videos in both HDD and mobile fireproof storage box to ensure data security.

#### **Before You Start**

- Connect a mobile fireproof storage box to your recorder.
- Configure the recording schedule.

Step 1 Go to Configuration > Vehicle > Storage For Calamity.

Step 2 Check Enable.

Step 3 Check **Redundant Channel**. The recorder will save the videos of the selected channels in both HDD and mobile fireproof storage box.

Step 4 Click Save.

# 3.4 Playback

Play videos saved in storage media.

Step 1 Go to Playback.

Step 2 Select a channel in channel list.

Step 3 Select playback type.

- To search all the videos, select **Ordinary Search**.
- To search event videos, select **Event Search**.

Step 4 Set search conditions.

Step 5 Click Search.

Step 6 Click ▶ to start playback.

Н	Pause.	IÞ.	Single frame playback.
*	Fast forward.	44	Slow forward.
眼	Stop all playbacks.	IO	Capture a picture.  Note  For picture saving path, refer to  Configuration > Local > Save  snapshots when playback to.
<b>№</b> •	Turn on audio.	E N	Full screen.

# 3.5 Back up

# 3.5.1 Back up Videos

Download videos to a local path.

Step 1 Go to Playback.

Step 2 Click ±.

Step 3 Set search conditions.

Step 4 Click Search.

Step 5 Check videos to download and click **Download**.

Step 6 For the video saving path, refer to **Configuration** > **Local** > **Save Downloaded Files to**.

# 3.5.2 Back Up Clipped Videos

Clip videos and save them to a local path.

Step 1 Go to Playback.

Step 2 Start playback.

Step 3 Click \* to start clipping.

Step 4 Click \* to stop clipping.

Step 5 For clipped video saving path, refer to **Configuration** > **Local** > **Save clips to**.

# 3.5.3 Back up Pictures

Back up pictures to a local path.

Step 1 Go to **Picture**.

Step 2 Set search conditions.

Step 3 Click Search.

Step 4 Check pictures to download.

Step 5 Click **Download**.



For picture saving path, refer to Configuration > Local > Picture and Clip Settings.

# Chapter 4 Network

### 4.1 Network Connection

#### 4.1.1 Dial

Set dialing parameters.

#### **Before You Start**

Install 3G/4G SIM card and connect 3G/4G antenna to your recorder.

Step 1 Go to Configuration > Network > Basic Settings > 3G/4G.

Step 2 Check **Enable**.

Step 3 Click **Dial Parameters**.

Step 4 Select **Network Mode**. For now, only automatic mode is supported.

• Automatic:

The recorder will automatically switch to the strongest network.

• Auto-Search and Auto-Switch:

Network priority: 4G > 3G > 2G. The recorder will automatically connect the network of high priority.

• 3G

The recorder only connects 3G network.

4G

The recorder only connects 4G network.

Step 5 **Optional:** To connect private network, enter **Access Number**, **User Name**, **Password**, and **APN**.

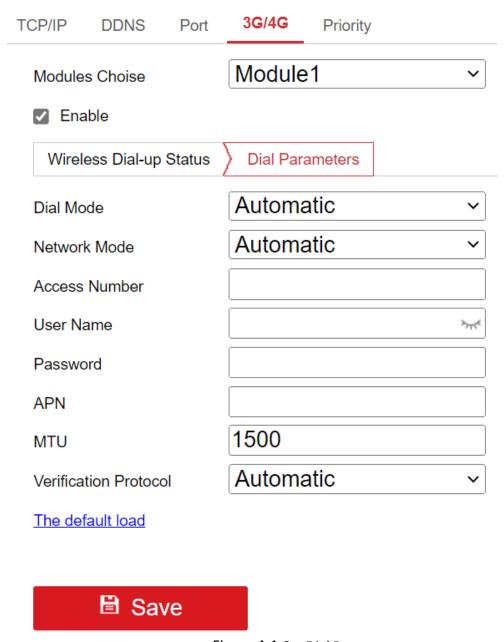


Figure 4-1 Set Dial Parameters

Step 6 Click Save.

Step 7 Optional: Click Wireless Dial-up Status to view dialing status.

#### 4.1.2 Connect to Wi-Fi

Configure Wi-Fi parameters to connect the device to the network via Wi-Fi.

Step 1 Go to Configuration > Network > Basic Settings > TCP/IP.

Step 2 Set WLAN parameters.

- 1) Click WLan 1.
- 2) Optional: Check DHCP. Use SADP tool to obtain the recorder IP address when DHCP is enabled.

# Note

If you want to enable DHCP, the network that the device is connected to should support DHCP (Dynamic Host Configuration Protocol).

- Enter wireless network IPv4 Address, IPv4 Subnet Mask, IPv4 Default Gateway, and DNS Server.
- 4) Click Save.

Step 3 Go to Configuration > Network > Advanced Settings > Wi-Fi.

- 1) Click Wi-Fi Configuration.
- 2) Check Enable Wi-Fi.
- 3) Click **Search** to search available wireless networks.
- 4) Select a wireless network in Wireless List.
- 5) Enter SSID.
- 6) Select Network Mode as Managed.
- 7) Select **Security Mode** and enter Wi-Fi key.

Step 4 Click Save.

Step 5 Optional: Go to **Configuration** > **Network** > **Advanced Settings** > **Wi-Fi** > **Wi-Fi** Status to view Wi-Fi status.

#### 4.1.3 Set Local Network

Configure local network parameters.

Step 1 Go to Configuration > Network > Basic Settings > TCP/IP.

Step 2 Click Lan.

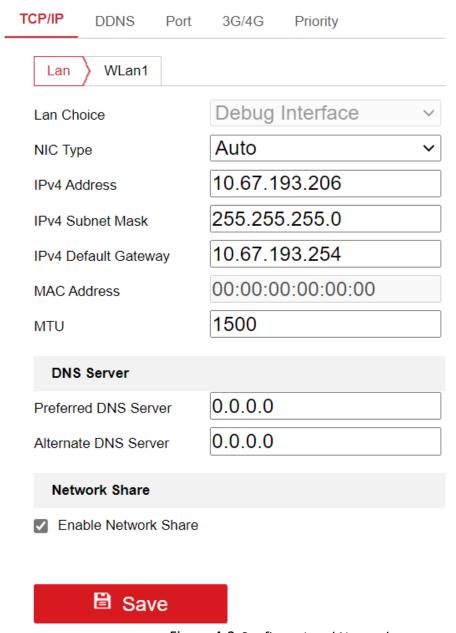


Figure 4-2 Configure Local Network

### Step 3 Select LAN Choice.

- Debug Interface: Used to debug the recorder.
- Front Interface: Used to connect network cameras.



Do not set the debug and rear net to the same network segment. Otherwise, it will lead to conflict.

Step 4 Enter network parameters: IPv4 Address, IPv4 Subnet Mask, and IPv4 Default Gateway.

Step 5 Optional: To access the recorder via internet, configure DNS server.

Step 6 Click **Save**.

### 4.1.4 Configure Port

Go to **Configuration > Network > Basic Settings > Port** to set the following parameters.

#### **HTTP Port**

To access the recorder via web browser.

#### **RTSP Port**

To get stream.

#### **HTTPS Port**

To secure communication over a network.

#### Server Port

To access the recorder via client software.

# 4.1.5 DDNS Configuration

If your recorder external network is a dynamic IP address, you can use the Dynamic DNS (DDNS) for network access.

#### Before You Start

- Register your recorder on the DDNS server.
- Configure local network IP address, subnet mask, gateway, and DNS server.
- Create port mapping, default port: 80, 8000, and 554.

Step 1 Go to Configuration > Network > Basic Settings > DDNS.

Step 2 Select **DDNS Type**.

Step 3 Enter Server information.

Step 4 Click Save.

#### What to do next

Open the web browser and enter the recorder domain name to visit it.

# 4.1.6 Configure Priority

The device will automatically connect network of high priority.

Step 1 Go to Configuration > Network > Basic Settings > Priority.

Step 2 Check Enable NetPriority.

Step 3 Set the priority of the network.

# 4.2 Platform Connection

# 4.2.1 Connect to Mobile Monitoring Platform

The device can be remotely accessed via mobile monitoring platform.

#### **Before You Start**

Create the device ID on mobile monitoring platform.

Step 1 Go to Configuration > Network > Advanced Settings > Platform Access.

Step 2 Check **Enable**.

Step 3 Select **Platform Access Mode** as Ehome Platform.

Step 4 Select Platform Version.

Step 5 Select **Server Address Type**, and enter Server Address, Server Port, and Device ID.

#### **Server Address**

Enter the static IP address of mobile monitoring platform.

#### **Server Port**

The default value is 7660.

#### **Device ID**

The ID of the device registered on the mobile monitoring platform. If you leave it empty, device logs in to the platform with serial No.

Step 6 Click OK.

# 4.2.2 Connect to Guarding Vision

The device can be remotely accessed via guarding vision platform.

#### **Before You Start**

- Connect your recorder to internet.
- Configure IP address, sub-netmask, gateway, and DNS server of LAN port.

Step 1 Go to Configuration > Network > Advanced Settings > Platform Access.

Step 2 Check Enable.

Step 3 Select Platform Access Mode as Guarding Vision.

Step 4 Enter a customized **Security Code**. You need to enter the security code when adding the device in **Guarding Vision**.



Valid security code range [6-12]. You can use a combination of numbers, lowercase, and uppercase.

Step 5 Click Save.

Step 6 Visit guarding vision platform.

- For computer user: Visit dev.Quardingvision.com.
- For mobile phone user: Download Guarding Vision application in App Store (iOS system) or Google Play(TM) (Android system).

Step 7 Register an account.

Step 8 Add the recorder by its serial number (a 9-bit character printed in device label) and security code.

Step 9 Start live view of your camera.

# 4.3 Network Sharing

#### 4.3.1 Share Network via Wi-Fi AP

The recorder can work as a wireless router, via which -other devices can access via the network.



You can only turn on one function between Wi-Fi AP and Wi-Fi. Turning on one of them will turn off the other.

Step 1 Go to Configuration > Network > Advanced Settings > Wi-Fi AP.

Step 2 Check Enable Wi-Fi AP, Enable AP Broadcast, and Enable WLAN HotSpot.

Step 3 Configure hotspot parameters.

- 1) Enter **SSID** (hotspot name).
- 2) Select Security Mode.
- 3) Enter IP Address and Sub-net Mask.



The IP address must be in different network segment with TCP/IP address.

Step 4 Check Enable DHCP and enter Start IP Address and End IP Address.

Step 5 Click Save.

#### 4.3.2 Share Network via Cable

Connect a peripheral device to your recorder with a network cable. The peripheral device can access internet after the recorder successfully dialed to internet.

#### **Before You Start**

Configure the IP address, gateway, etc. of the peripheral device.

Step 1 Go to Configuration > Network > Basic Settings > TCP/IP > Lan.

Step 2 Check Enable Network Share.

Step 3 Configure the network parameters for the peripheral device.

- 1) Set its IP address in the same network segment with your recorder.
- 2) Set its network gateway IP as the recorder IP address.

#### Step 4 Click Save.

The peripheral device can access internet after the recorder successfully dialed to internet.

# Chapter 5 Live View and Configuration

### 5.1 Live View

# 5.1.1 Start/Stop Live View

Start/stop the live view of cameras.

Step 1 Go to **Live View**.

Step 2 Click • to se006Cect window division and click to select a window to display the live view image.

Step 3 Double click a camera in the camera list to display its live image in selected window. Or click to start the live view of all cameras.

Step 4 Double click the camera again to stop its live view. Or click stop the live view of all cameras.

### 5.1.2 Split Screen

Live view window division is selectable.

#### **Window Division**

Click ■ \* to select live view window division.

#### **Paging**

Click to turn to previous/next window.

#### 5.1.3 Select Live View Stream

The recorder supports main stream and sub-stream. Main stream is used for continuous recording and sub-stream is used for network transmission.

Click in camera list to select live view stream.

# 5.1.4 Manual Capture

Capture live view pictures and save them to your computer.

Step 1 Go to Live View.

Step 2 Start live view of a camera.

Step 3 Click 🔼.

Step 4 View captured pictures.

- Enter the path popped up in the lower right corner.
- Go to Configuration > Local > Picture and Clip Settings for the saving path of captured pictures.

### 5.1.5 Manual Recording

Record videos in live view and save them to your computer.

Step 1 Go to Live View.

Step 2 Start live view of a camera.

Step 3 Click for to start recording.

Step 4 Click for to stop recording.

Step 5 Go to the set saving path to view recorded videos.

- Enter the path popped up in the lower right corner of the interface.
- Go to Configuration > Local > Record File Settings for the saving path of record files.

# 5.1.6 Start/Stop Two-Way Audio

You can have real-time two-way audio between your computer and the recorder.

#### **Before You Start**

Connect the audio input and output devices to the recorder and computer.

Step 1 Start the live view of a camera.

Step 2 Click .

#### Result

- At computer end, you can hear the audio from recorder.
- At recorder end, you can hear the audio from computer.

#### 5.1.7 Set Live View Volume

Turn on audio and adjust audio volume.

Click **\*** to turn on audio.

Drag the slider to adjust volume.

#### 5.1.8 Full-Screen Live View

Display the live view image in full screen.

Start the live view and click to display the live view image in full screen.

Press **Esc** to exit from the full-screen mode.

#### 5.1.9 Channel-Zero

Channel-zero, known as virtual channel, can show the videos from all channels of the recorder, reducing the bandwidth while simultaneously previewing from multi-channel.

Step 1 Go to Configuration > Video/Audio > Channel-zero.

Step 2 Check **Enable Channel-zero Encoding.** 

Step 3 Select Max. Bitrate and Max. Frame Rate.

Step 4 Click Save.

Step 5 Go to Live View.

Step 6 Double click **Zero Channel 01** in the camera list to start live view of channel-zero.

# 5.2 PTZ Operation

Configure PTZ parameters and control PTZ.

# 5.2.1 Configure PTZ

Follow the steps to set PTZ parameters. The configuration of the PTZ parameters should be done before you control the PTZ camera.

#### Before You Start

Connect the RS-485 cables of the PTZ camera to EXT.DEV interface of the device.

Step 1 Go to Configuration > System > System Settings > PTZ Config.

Step 2 Select Channel No. of PTZ camera.

Step 3 Configure the parameters of the PTZ camera.



All the parameters should be exactly the same with those of the PTZ camera.

Step 4 Click Save.

#### 5.2.2 PTZ Control Panel

Go to Live View. Control PTZ camera via PTZ panel.



PTZ control panel may vary with recorder model.

Table 5-1 PTZ Icon and Description

lcon	Description	lcon	Description
* A *	Direction buttons.	Ω	Auto-scan button.
Q_	Zoom	ď	Zoom +.
<u>D</u>	Focus +.	ੂ	Focus
0	Iris +.	0	Iris
···	Turn on /off light.	ç	Start/stop wiper.

# 5.3 Local Configuration

Go to **Configuration** > **Local** to configure the parameters of live view, record files, pictures, and clips.

Table 5-2 Local Configurations

Options	Descriptions
Stream Type	Main Stream: The stream stands for the best stream performance the device supports. It usually offers the best resolution and frame rate the device can do. But high resolution and frame rate usually means larger storage space and higher bandwidth requirements in transmission.  Sub Stream: The stream usually offers comparatively low resolution options, which consumes less bandwidth and storage space.
Play Performance	Shortest Delay: The recorder ensures real-time capacity in priority.  Auto: Automatically adjust the live view stream to balance real-time capacity and fluency.
Rules	If you enable the function, after the connected camera has been set motion detection alarm and enabled VCA function, the rule information will be displayed on the live view image (e.g., marked with a green rectangle).
Image Size	Select the image aspect ratio.
Auto Start Live View	Select <b>Yes</b> if you want to enable live view automatically after login.
Image Format	Select the captured picture format in live view.
Record File Size	Select the packed size of the manually recorded and downloaded video files. After the selection, the maximum record file size is the value you selected.
Save record files to	Set the saving path for the manually recorded video files. You can click <b>Browse</b> to change the saving path.

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Save downloaded files to	Set the saving path for the downloaded video files. You can click <b>Browse</b> to change the saving path.
Save snapshots in live view to	Set the saving path for the manually captured pictures in live view mode. You can click <b>Browse</b> to change the saving path.
Save snapshots when playback to	Set the saving path for the manually captured pictures in playback mode. You can click <b>Browse</b> to change the saving path.
Save clips to	Set the saving path for the clipped video files in playback mode. You can click <b>Browse</b> to change the saving path.

# Chapter 6 Mobile Device Features

### 6.1 Timed Shutdown

The recorder will automatically start up/shut down according the schedule.

#### **Before You Start**

Wire power cord. For details, refer to the Quick Start Guide.

- Step 1 Go to **Configuration** > **Vehicle** > **Startup**.
- Step 2 Select **Auto Work Type** as Scheduled Startup/shutdown.
- Step 3 Set the shutdown schedule. For detailed steps, refer to Configure Arming Schedule.
- Step 4 Optional: Check Low Power Protect and select Low Power Protect Limit. If the voltage of the recorder reaches the selected threshold, the recorder will shut down automatically.

Step 5 Click Save.

# 6.2 Delayed Shutdown

You can set the shutdown delay time (Vehicle Ignition Startup and Shutdown) for the recorder.

#### Before You Start

Wire power cord. For details, refer to quick start guide.

- Step 1 Go to Configuration > Vehicle > Startup.
- Step 2 Select Auto Work Type as Halt Delay.
- Step 3 Select **Delay Time**.
- Step 4 Click Save.
- Step 5 Optional: Check Low Power Protect and select Low Power Protect Limit. If the voltage of the recorder reaches the selected percentage, the recorder will shut down automatically.

# 6.3 Configure Satellite Positioning

The built-in GNSS module supports GPS (Global Positioning System), enabling device positioning and speed limit alarm.

#### **Before You Start**

Install the positioning antenna.

Step 1 Go to Configuration > Vehicle > Position Settings > Location Configuration.

Step 2 Select Position Module.

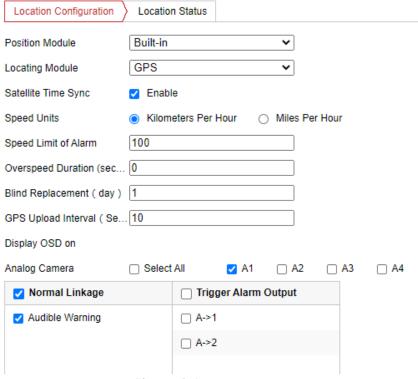


Figure 6-1 Configure Satellite Positioning

#### **Built-in**

Obtain data from the satellite positioning module built in the recorder.

#### **Intelligent Display Terminal**

Obtain data from display terminal.

#### Step 3 Select **Locating Module**.

Step 4 **Optional:** Check **Enable** of **Satellite Timing** to synchronize recorder time with satellite time.

Step 5 Configure speed limit.

- 1) Select Speed Units.
- 2) Enter Speed Limit of Alarm.
- 3) Enter Overspeed Duration (seconds).

If vehicle speed exceeds the set value, the recorder will alarm.

Step 6 Check the channels you want the positioning information to be displayed.

Step 7 Enter Blind Replacement and GPS Upload Interval.

#### **Blind Replacement**

In the area without network signal, after the signal restores, the positioning information from the start time without network signal to the current time will be uploaded. For example, if you enter 3, after the network signal restores, the data from 3 days ago to now will be uploaded.

#### **GPS Upload Interval**

The positioning information will be uploaded according to the set interval.

Step 8 The positioning information will be displayed in the live view and playback mode of the selected channel.

Step 9 Configure linkage actions.

- If you want the speeding vehicle to trigger the speed alarm, check Trigger Alarm Output.
- If you want the speeding vehicle to trigger the system to beep, check **Audible Warning**.

Step 10 Click Save.

# 6.4 Configure G-Sensor Alarm

G-Sensor detects and records acceleration information in 3-axial (X, Y, Z) directions.

#### **Before You Start**

Connect a G-sensor to the recorder.

Step 1 Go to **Configuration** > **Vehicle** > **G-Sensor**.

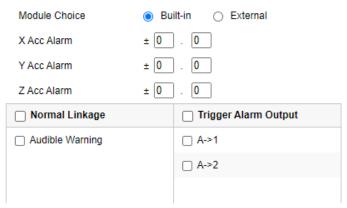


Figure 6-2 Configure G-Sensor

Step 2 Select module according to actual situation.

- External: The G-sensor is connected to the device through RS-232/RS-485 interface.
- Built-in: The G-sensor is a built-in module of the device.

Step 3 Set the limit value for acceleration alarm in X, Y and Z directions.



X, Y and Z represent the direction of acceleration and the unit of alarm value is G ( $G=9.8 \text{ m/s}^2$ ). During driving, the recorder will alarm when acceleration of any direction exceeds the set value.

Step 4 Set the linkage actions for acceleration alarm, including **Audible Warning** and **Alarm Output**. Step 5 Click **Save**.

# 6.5 Configure Sensor-in

Sensor-in detects and records the vehicle's driving information, including pedal braking, turning left/right, reversing, etc.

#### **Before You Start**

Connect the recorder sensor-in interface and vehicle corresponding interface. For details, refer to quick user guide.

 $\square$ i Note

If sensor-in is disabled, you can configure it via alarm input. For example, for the recorder with 4-ch alarm inputs, according to the sequence of the parameters on the interface, braking corresponds to No. 5 alarm input (A<-5), turning left corresponds to No. 6 alarm input (A<-6), and so on. Refer to "Configure Alarm Input" for details.

Step 1 Go to Configuration > Vehicle > Sensor-In.

Step 2 Check Enable.

Step 3 Select Trigger Level and Pop Channel according to actual situation.

The image of selected channel will be displayed in full screen when sensor-in is triggered.

Step 4 Click Save.

# Chapter 7 Camera Management

# 7.1 Configure Encoding Parameters

Configure encoding parameters to adjust live view image and video parameters. Go to **Configuration** > **Video/Audio** > **Video.** 

In good network situation, you can set high resolution and bitrate to improve image quality. In bad network situation, you can set low resolution, bitrate, and frame rate to get fluent image.

- In good network situation, you can set high resolution and bitrate to improve image quality.
- In bad network situation, you can set low resolution, bitrate, and frame rate to get fluent image.
- In bad network situation, if you want to guarantee the resolution, you can set low bitrate and frame rate to get fluent image.

Table 7-1 Encoding Parameters

Options	Descriptions
Stream Type	Main Stream: The stream stands for the best stream performance the device supports. It usually offers the best resolution and frame rate the device can do. But high resolution and frame rate usually means larger storage space and higher bandwidth requirements in transmission.
	<b>Sub Stream:</b> The stream usually offers comparatively low resolution options, which consumes less bandwidth and storage space.
Video Type	If you want to record both video and audio, select <b>Video&amp;Audio</b> . If you just want to record video, select <b>Video Stream</b> .
Resolution	The higher the resolution, the clearer the image, and the higher the requirement of network bandwidth.
Bitrate Type	You can select <b>Variable</b> or <b>Constant</b> .
Video Quality	If the bitrate is variable, you can select video quality according to your needs. The higher the video quality, the higher the requirement of network bandwidth.
Frame Rate	The higher the frame rate, the higher the requirement of network bandwidth, and the higher the needed storage capacity.
Max. Bitrate	If the bitrate is variable, enter the max. bitrate. The bitrate will change automatically below the max. value.

Select <b>H.265</b> (only supported by some models) or <b>H.264</b> according to
the actual needs.

# 7.2 Configure Audio Parameters

You can configure the audio encoding format.

The device supports embedded audio or peripheral audio device has been connected

Step 1 Go to Configuration > Video/Audio > Audio.

Step 2 Select Analog Channel Audio Coding and Intercom Audio Coding.



The selected encoding format should be the same with that of the embedded audio or peripheral audio device.

Step 3 Click Save.

# 7.3 Image Settings

# 7.3.1 Set Image Parameters

You can adjust image parameters including brightness, contrast, etc.

Step 1 Go to Configuration > Image > Display Settings.

Step 2 Select Channel No.

Step 3 Set image parameters.

Table 7-2 Image Parameters

Options	Descriptions
Scene	Select <b>Standard</b> , <b>Indoor</b> , <b>Outdoor</b> or <b>DimLight</b> according to the actual situation.
Brightness	It refers to the max. brightness of the image.
Contrast	It refers to the contrast of the image. Set it to adjust the levels and permeability of the image.
Saturation	It refers to the colorfulness of the image color.

Hue	It refers to the hue of the image.
Sharpness	It refers to the edge contrast of the image.
Denoising	If refers to reduce video noise reduction of the image.
Mirror Type	When the visual angle of the live view image deviates with that of the actual covered area, you can set the mirror type to adjust the image to the normal visual angle.



The supported parameters may vary with different models. The actual device prevails.

Step 4 Optional: When the image color is imbalanced, or the lens cannot be controlled, click **Default** to improve the image.

# 7.3.2 Set Mirror Type

You can enable mirror image and set mirror type to get suitable image.

Step 1 Go to Configuration > Image > Display Settings.

Step 2 Select Mirror Type as desired.



The function varies with recorder model.

#### 7.3.3 Restore Default Parameters

You can restore image parameters to defaults.

Go to **Configuration > Image > Display Settings**, select **Channel No.**, and click **Default**.

### 7.4 Set OSD Parameters

Configure the camera name, OSD (On Screen Display) settings, etc.

Step 1 Go to Configuration > Image > OSD Settings.

Step 2 Select Channel No.

Step 3 Select **Display Mode** and **OSD Size**.

Step 4 Set the display content.

- Check **Display Name** and enter **Camera Name**, and enter **Time Format and Date Format**.
- Check **Display Date**, and enter **Time Format and Date Format**.
- Check Display Week.

Step 5 Set OSD Display Mode.

Step 6 Optional: To display text on OSD, check one of the Text Overlay and enter text.

Step 7 Drag the red frame on live view window to adjust OSD position.

Step 8 Click Save.

#### Result

The check display contents will be overlaid on the live view image and videos.

### 7.5 Set Privacy Mask

The privacy mask can be used to protect personal privacy by concealing parts of the image from view or recording with a masked area.

Step 1 Go to Configuration > Image > Privacy Mask.

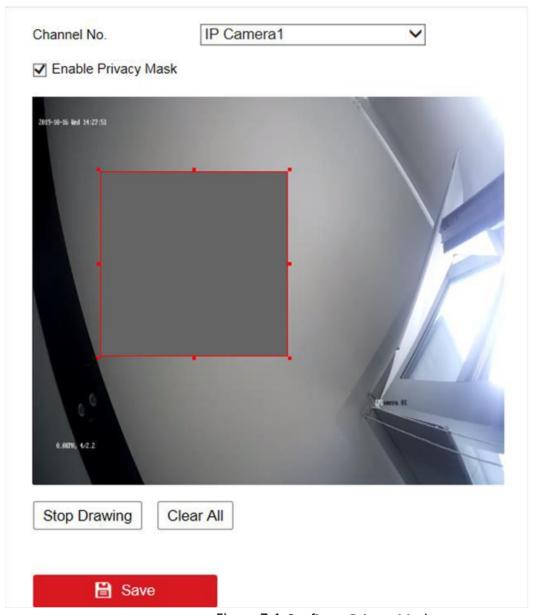


Figure 7-1 Configure Privacy Mask

Step 2 Select Channel No.

Step 3 Check Enable Privacy Mask.

Step 4 Draw detection area.

- 1) Click Draw Area.
- 2) In preview area, drag to draw the detection area.
- 3) Click Stop Drawing.

 $\bigcap_{\mathbf{i}}$ Note

Up to four privacy mask areas are supported for each channel.

Step 5 Optional: Click Clear All to clear all the drawn areas.

### Step 6 Click Save.

### Result

The image of drawn area will be shield in the live view and videos.

# **Chapter 8 Abnormal Detection Configuration**

The function analyzing driver's behavior, including smoking, fatigue driving, talking on phone, etc. The recorder will trigger warning when these behaviors are detected.

### 8.1 Configurations

Only the recorder with A in model name supports abnormal driving detection function. One recorder supports analyzing one channel at a time.

### 8.1.1 Calibrate Camera Position

Calibrate network camera position before enabling abnormal driving detection.

#### Before You Start

Add the network camera in your recorder.

Step 1 Go to Configuration > VCA > Abnormal detection > IPC Position Calibration.

Step 2 Select Channel No.

Step 3 Adjust the network camera position to make the driver face image appear in the red frame and his chin is above the yellow line.

### 8.1.2 Configure Abnormal Detection Analysis

Set the abnormal detection analysis parameters according to actual situation to lower false detection rate.

Step 1 Go to Configuration > VCA > Abnormal detection > Abnormal detection.

Step 2 Select Camera No.

Step 3 Check behaviors to analyze and configure their parameters.

Alarm Time

Device alarms when the corresponding abnormal detection lasts for the set time.

Constant Alarm Filter Interval

Available for on-the-phone detection and smoking detection. The higher the value is, the lower the false detection rate. You are recommended to use the default value.

Stop Detections when Driving in Low-Speed

The feature is valid when GPS positioning succeeded. When the vehicle speed is lower than the set value, all the abnormal detection analyses will stop.

Voice Alarm

When it is checked, device will send out voice alarm when a checked behavior is detected.

### Capture

When it is checked, device will make a capture when a checked behavior is detected.

 $\bigcap_{\mathbf{i}}$ Note

One recorder supports analyze abnormal detection for one channel at a time. Enabling the abnormal detection analysis will disable abnormal detection analysis of other channels.

Step 4 Click Save.

#### Result

When a concerned abnormal detection is detected, the connected intercom will automatically send out audio broadcast.

### 8.1.3 Play Videos and Pictures

We take the example of playing videos to describe the steps.

Step 1 Go to Playback.

Step 2 Select a channel in channel list.

Step 3 Click Event **Search**.

Step 4 Select Event Type as Driver Behavior.

Step 5 Set search conditions.

Step 6 Click Search.

Step 7 Select videos to play.

# **Chapter 9 Events and Alarms**

### 9.1 Configure Motion Detection Alarm

When motion detection alarm is configured, once a motion event is detected, the device starts to record and multiple linkage actions will be triggered.

Step 1 Go to Configuration > Event > Basic Event > Motion Detection.

Step 2 Select Channel No.

Step 3 Draw detection area.

- 1) Click Draw Area.
- 2) In preview area, drag to draw the detection area.
- 3) Click Stop Drawing.

Step 4 Set Sensitivity.

Step 5 Configure arming schedule. For detailed steps, refer to Configure Arming Schedule.

Step 6 Configure linkage method. For detailed steps, refer to Configure Linkage Actions.

Step 7 Click Save.

## 9.2 Configure Video Tampering Alarm

A tampering alarm is triggered when the camera is covered and the monitoring area cannot be viewed. Linkage actions, including audible warning, alarm output, can be set to respond.

Step 1 Go to Configuration > Event > Basic Event > Video Tampering.

Step 2 Select Channel No.

Step 3 Draw detection area.

- 1) Click Draw Area.
- 2) In preview area, drag to draw the detection area.
- 3) Click Stop Drawing.

Step 4 Configure arming schedule. For detailed steps, refer to Configure Arming Schedule.

Step 5 Configure linkage method. For detailed steps, refer to *Configure Linkage Actions*.

Step 6 Set Sensitivity.

Step 7 Click Save.

## 9.3 Configure Video Loss Alarm

When the recorder cannot receive video signal from the analog cameras, the video loss alarm will be triggered. Linkage actions, including audible warning and alarm output, can be set to respond.

- Step 1 Go to Configuration > Event > Basic Event > Video Loss.
- Step 2 Check Enable Video Loss Detection.
- Step 3 Configure arming schedule. For detailed steps, refer to Configure Arming Schedule.
- Step 4 Configure linkage method. For detailed steps, refer to Configure Linkage Actions.
- Step 5 Click Save.

## 9.4 Configure Alarm Input

Configure the settings for alarm input, including trigger level, arming schedule and alarm linkage actions, etc.

#### Before You Start

Connect an alarm device to your recorder.

Step 1 Go to Configuration > Event > Basic Event > Alarm Input.

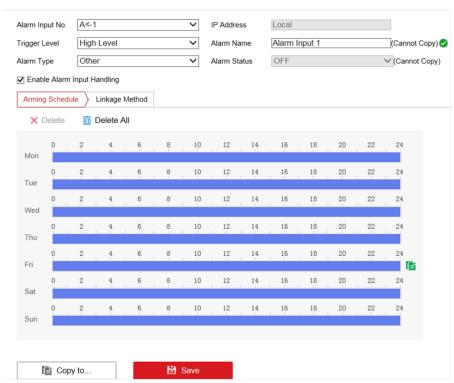


Figure 9-1 Configure Alarm Input

Step 2 Select Alarm Input No. and enter Alarm Name.

Step 3 Select Alarm Type according to alarm device type.

### Step 4 Check Enable Alarm Input Handling.

- Step 5 Configure arming schedule. For detailed steps, refer to Configure Arming Schedule.
- Step 6 Configure linkage method. For detailed steps, refer to Configure Linkage Actions.
- Step 7 Optional: Click **Copy to** and select desired channels to copy the above settings to other alarm inputs.

Step 8 Click Save.

# 9.5 Configure Alarm Output

Configure the arming schedule, alarm duration time and alarm name for alarm output.

#### **Before You Start**

Connect alarm output device to your recorder. For details, refer to installation guide.

Step 1 Go to Configuration > Event > Basic Event > Alarm Output.

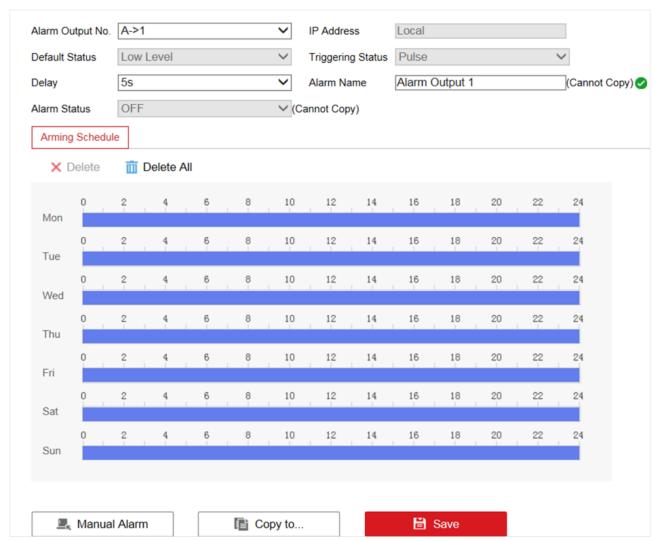


Figure 9-2 Configure Alarm Output

- Step 2 Select Alarm Output No. and enter Alarm Name.
- Step 3 Select **Delay** to set dwell time.

Alarm output will continue for the set time.

- Step 4 Configure arming schedule. For detailed steps, refer to Configure Arming Schedule.
- Step 5 **Optional:** Click **Manual Alarm** to trigger alarm manually. Click **Stop Alarm** to stop manual alarm.
- Step 6 **Optional:** Click **Copy to** and select desired channels to o copy the above settings to other alarm outputs.

Step 7 Click Save.

## 9.6 Configure Exception Alarm

Configure alarms which are triggered by exceptions to take necessary actions in time.

- Step 1 Go to Configuration > Event > Basic Event > Exception.
- Step 2 Select Exception Type.
- Step 3 Configure linkage method. For detailed steps, refer to Configure Linkage Actions.
- Step 4 Click Save.

### 9.7 Configure Arming Schedule

Step 1 Drag in time line to draw an arming period.

Step 2 Adjust the set arming period.

- 1) Click a period and adjust its length.
- Click a period, enter start time and end time, and click Save.
- 3) Click **Delete All** to delete all periods.



Up to 8 time periods can be set for each day and each of the time periods cannot be overlapped.

Step 3 Optional: Click Copy to and select desired days to copy the above settings to other days.

Step 4 Click Save.

## 9.8 Configure Linkage Actions

Check the linkage action(s) when events occur, and click Save.



Linkage actions vary with event type.

Table 9-1 Linkage Actions

	Table 3-1 Linkage Actions
Options	Descriptions
Audible Warning	The device will trigger an audible beep when events occur.
Send Email	The device will send an Email alarm host when events occur.
Notify Monitoring Center	The device will send an exception or alarm signal to the remote alarm host when events occur.  The alarm host refers to the computer installed with the remote client.
Full Screen Monitoring	The image of the alarm channel will pop up on the connected external monitor when events occur, and be displayed in full screen.
Trigger Alarm Output	Check the alarm output channel(s) to trigger the alarm of the connected alarm output device(s).

# Chapter 10 User Management

### 10.1 Manage User Account

You can add and delete users, and modify the password and permission of users.

Step 1 Go to Configuration > System > User Management.

Step 2 Click Add.

Step 3 Edit new user parameters and click **OK** to create the user.



We highly recommend you to create a strong password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Delete

Select a user and click **Delete** to delete the user.

Modify

Select a user and click **Modify** to modify the user information.

# 10.2 Configure Security Question

If you forgot the admin password, you can reset password by answering security questions. Follow the steps to set security questions.

#### Before You Start

Your computer and recorder must be in the same network segment.

Step 1 Go to Configuration > System > User Management.

Step 2 Click **Security Question**.

Step 3 Enter Admin Password.

Step 4 Set security questions.

Step 5 Click **OK**.

#### Result

If you forgot admin password, you can visit the recorder via computer in the same network segment with your recorder and click **Forgot Password** to reset password.

# **Chapter 11 Security**

# 11.1 Configure Allowlist

Only the trusted IP addresses on the allow list can access the device via the network.

Step 1 Go to Configuration > System > Security > Allowlist.

Step 2 Check Enable Allowlist.

Step 3 Click Add and enter desired IP Address, and click OK.

Step 4 Optional: Edit or delete the IP address.

- 1) Select an IP address and click **Modify** to edit the IP address.
- 2) Select an IP address and click **Delete** to delete the IP address.

Step 5 Click Save.

# 11.2 Configure SSH

SSH is disabled by default for security reasons. This setting is reserved for professional maintenance personnel only.

Step 1 Go to Configuration > System > Security > Security Service.

Step 2 Uncheck Enable SSH.

Step 3 Click Save.

# Chapter 12 Maintenance

### 12.1 View System Information

You can view your recorder system information and edit recorder name and record number. Go to **Configuration** > **System** > **System** Settings > **Basic Information** to view the recorder information. You can edit **Device Name** and **Device No.** 

### 12.2 Search Log File

You can view and export logs saved in the recorder storage media.

Go to **Configuration** > **System** > **Maintenance** > **Log** to search or export logs.

### 12.3 Upgrade the System

You are recommended to upgrade the recorder with the help of professional technical support.

#### **Before You Start**

Save the upgrade file in computer.

Step 1 Go to Configuration > System > Maintenance > Upgrade & Maintenance.

Step 2 Click Browse and select upgrade file.

Step 3 Click **Upgrade** and click **OK** in popup message box to start upgrading.



The upgrading process will be 1 to 10 minutes, please don't disconnect power to the recorder during the process. The recorder reboots automatically after upgrading.

## 12.4 Configure Image Partition

Configure image partition value if you want to change the reserved image storage capacity.

#### Before You Start

The storage media has been formatted.

Step 1 Go to Configuration > Storage > Advanced Settings.

Step 2 Enter Image Partition.

Step 3 Click Save.

## 12.5 Configure Overwritten Recording

You can enable overwritten recording if you want to overwrite the former record files when the storage media is full. Or disable overwritten record if you want to stop recording when the storage media is full.

Step 1 Go to Configuration > Storage > Advanced Settings.

Step 2 Check or uncheck Enable Overwriting according to your needs.

Step 3 Click **Save**.

## 12.6 Print Log

If you need to debug the device, you can enable printing log.

Step 1 Go to Configuration > Storage > Advanced Settings.

Step 2 Check Enable Print Log.

Step 3 Click Save.

### 12.7 Rebooting

Reboot your recorder via menu instead of disconnecting power from the recorder.

Go to **Configuration > System > Maintenance > Upgrade & Maintenance.** Click **Reboot** and click **OK** in popup message box to start rebooting.

## 12.8 Restore Default Settings

If your recorder is abnormal, you can restore recorder to defaults settings.

Go to Configuration > System > Maintenance > Upgrade & Maintenance.

#### Restore

Restore all parameters, except the network (including IP address, subnet mask, gateway, MTU, NIC working mode, default route, server port, etc.) and user account parameters, to the factory default settings.

#### **Default**

Restore all parameters to the factory default settings.

## 12.9 Export Configuration File

The configuration files of the recorder can be exported to your computer for backup.

Step 1 Go to Configuration > System > Maintenance > Upgrade & Maintenance.

Step 2 Click Device Parameters and select the configuration file saving path.

# 12.10 Import Configuration File

The configuration file of one device can be imported to multiple devices if they are to be configured with the same parameters.



Only devices of the same model can share configuration file.

Step 1 Go to Configuration > System > Maintenance > Upgrade & Maintenance.

Step 2 Click Browse of Import Config. File and select configuration file.

Step 3 Click Import and click **OK** in popup message box to start importing.

## 12.11 Configure DST Settings

Configure DST (Daylight Saving Time) settings for the system.

Step 1 Go to Configuration > System > System Settings > Time Settings.

Step 2 Check Enable DST.

Step 3 Set Start Time and End Time for DST.

Step 4 Select **DST Bias**.

Step 5 Click Save.

## 12.12 Synchronize Time

Synchronize the device time when it is inconsistent with the actual time.

Step 1 Go to Configuration > System > System Settings > Time Settings.

Step 2 Select Time Zone according to the device location.

Step 3 Select the time synchronization mode.

- If an NTP server is available, select **NTP** and enter NTP server information to synchronize the device time with that of the NTP server.
- Select **Manual Time Sync.** and set time to customize the device time.
- Select **Manual Time Sync.** and check **Sync. with computer time** to synchronize the device time with that of the computer.

Step 4 Click Save.

## 12.13 Configure Menu Output

You can configure local output and resolution remotely.

Go to Configuration > System > System Settings > Menu Output to configure Menu Output and Resolution.



The function varies with model.

## 12.14 Configure RS-232

To debug recorder via serial port or connect serial device, you can configure RS-232 parameters.

#### Before You Start

Connect a serial device to your recorder RS-232 interface.

Step 1 Go to Configuration > System > System Settings > Serial Config.

Step 2 Select COM port the serial device connects to.

Step 3 Edit Bit rate, Data Bit, Stop Bit, Parity, and Flow Control.

Step 4 Select Usage.

#### Console

Connect a computer to the recorder through the computer serial port. Recorder parameters can be configured by using software such as HyperTerminal. The serial port parameters must be the same as of the recorder when connecting with the computer serial port.

#### **Transparent Channel**

Connect a serial device directly to the recorder. The serial device will be controlled remotely by the computer through the network and the protocol of the serial device. If alarm button is connected, select RS-232 usage as Transparent Channel.

Step 5 Click Save.

# Chapter 13 Local Menu Operation

Connect a display and a mouse to recorder, and you can operate the recorder locally.

### 13.1 Preview Settings

### Purpose:

Configure the dwell time of live view, set the camera order, enable/disable the audio preview, etc.

Step 1 Go to Menu > Other Settings > Preview.

Step 2 Select the Video Output according to the actual needs.

Step 3 Configure the Preview Mode, Dwell Time, and Enable Audio Output.

- 1. Preview Mode: Select the window division mode for live view.
- 2. **Dwell Time**: The switch interval of the live view screen. The screen will be switched to the next one after the selected dwell time.
- 3. Enable Audio Output: Enable/disable audio output for the selected video output.

Step 4 Click **OK**.

**UD Number** 

# 13.2 Manage IP Camera

The section is only available for the recorder that supports network camera.

### 13.2.1 Activate IP Camera

Before adding an IP camera, activate it by setting a password for it.

#### Before You Start

Connect the IP camera to IP camera interface in the recorder rear panel.

Step 1 Go to Menu > Other Settings > IPC Settings.

Step 2 Click Manual Management.

Step 3 Select an inactivated IP camera.

Step 4 Activate the selected IP camera.

- Click **Quick Active**. The IP camera password will be set as the same with the device password.
- Click Manu Active and enter the same password in New Password and Confirm.

# Note

We highly recommend you to create a strong password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

#### 13.2.2 Add IP Camera

#### **Before You Start**

The IP camera is active.

#### Step 1 Go to Menu > Other Settings > IPC Settings

Step 2 Uncheck Auto Add and click Manage IP Camera.

Step 3 Edit camera IP address.

- 1) Select an IP camera and click Edit.
- 2) Enter an IP address that is in the same network segment with the recorder.

Step 4 Add the IP camera.

Step 5 Click Manual Add.

Step 6 Select IP channel No. for the IP camera.

Step 7 Edit the required information.

Step 8 Click OK.

#### 13.2.3 Edit IP Camera

You can edit or delete added IP cameras.

Step 1 Go to Menu > Other Settings > IPC Settings.

Step 2 Optional: You can change the parameters of the added IP cameras.

- 1) Select an IP camera.
- 2) Edit the parameters. If you change the IP address, you will connect to another IP camera.
- 3) Click OK.

Step 3 **Optional:** Select an IP camera, click **Delete** to delete the IP camera.

## 13.3 Recording

To record the videos for connected cameras, you need to install a storage media and format it, and configure the recording schedule.

### 13.3.1 Format Storage Media

A newly installed storage media must be formatted before it can be used.

#### Before You Start

Install storage media.

Step 1 Go to Menu > Storage.

Step 2 Check storage media to format.

Step 3 Click Format.

After formatting, the storage media **Status** should be **Normal**.

Step 4 Click OK.

### 13.3.2 Configure Recording Schedule

All-day recording is on by default. Device will start and stop recording according to the configured recording schedule.

#### Before You Start

Install storage media and format it.

Step 1 Go to Menu > Basic Settings > Record.

Step 2 Select the camera to set recording schedule.

Step 3 Click **Set** of **Schedule**.

Step 4 Check Enable Schedule.

Step 5 Select the day from the dropdown list for settings.

Step 6 Configure all day schedule or custom schedule.

- Check All Day to enable all-day recording, and then select the recording type from the dropdown list.
- Uncheck All Day, customize the time period for recording, and select the recording type for each time period.



Up to 8 time periods can be set for each day and each of the time periods cannot be overlapped.

Step 7 Click OK.

## 13.4 Playback

You can search and play back the videos stored on the recorder.

Step 1 Go to Menu > Video Search.

Step 2 Select Search Mode.

#### General

Normal videos.

#### **Event**

Motion detection, alarm, motion alarm, motion&alarm videos.

Step 3 Select Camera, Video Type, Start Time, and End Time.

Step 4 Click Search.

Step 5 Select a video and click Play.

- Click III to pause.
- Click I to turn on the volume.

# 13.5 Back up

Back up the videos stored on the recorder.

#### Before You Start

Connect a USB storage device to your recorder.

Step 1 Go to Menu > Video Search.

Step 2 Select Search Mode.

#### General

Normal videos.

#### **Event**

Motion detection, alarm, motion alarm, motion&alarm videos.

Step 3 Select Camera, Video Type, Start Time, and End Time.

Step 4 Click Search.

Step 5 Select the videos and click **Export**.



The number of USB interface varies with recorder model. If your recorder contains only one USB interface, you can back up videos via remote control or touchscreen.

