

Uniden®

GNVR 86xx Series Network Video Recorder Security System

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OWNER'S MANUAL

IMPORTANT SAFEGUARDS



WARNING

**RISK OF ELECTRICAL SHOCK
DO NOT OPEN**



WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

**WARNING: TO PREVENT FIRE OR SHOCK HAZARD
DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

In addition to the careful attention devoted to quality standards in the manufacturing process of your product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This section lists important information that will help to ensure your enjoyment and proper use of the product and accessory equipment. Please read them carefully before operating and using your product.

GENERAL PRECAUTIONS

1. All warnings and instructions in this manual should be followed.
2. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use a water-dampened cloth for cleaning.
3. Do not use this product in humid or wet places.
4. Keep enough space around the product for ventilation. Slots and openings in the storage cabinet should not be blocked.
5. It is highly recommended to connect the product to a surge protector to protect from damage caused by electrical surges. It is also recommended to connect the product to an uninterruptible power supply (UPS), which has an internal battery that will keep the product running in the event of a power outage.

INSTRUCTIONS

1. **Read and Follow Instructions** - All the safety and operating instructions should be read before the product is set up and used. Follow all operating instructions.
2. **Retain Instructions** - These safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - Comply with all warnings on the product and in the operating instructions.
4. **Power Sources** - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your location, consult your video dealer or local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.
5. **Overloading** - Do not overload wall outlets or extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.
6. **Power-Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
7. **Surge Protectors** - It is highly recommended that the product be connected to a surge protector. Doing so will protect the product from damage caused by power surges.
8. **Uninterruptible Power Supplies (UPS)** - As this product is designed for continuous, 24/7 operation, it is recommended that you connect the product to an uninterruptible power supply. An uninterruptible power supply has an internal battery that will keep the product running in the event of a power outage.
9. **Ventilation** - Slots and openings in the case are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and the product manufacturer's instructions have been followed.

10. **Water and Moisture** - Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool, etc.
11. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.
12. **Accessories** - Do not place this product on an unstable cart, stand, tripod, or table. The product may fall, causing serious damage to the product. Use this product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.
13. **Camera Extension Cables** - Check the rating of your extension cable(s) to verify compliance with your local authority regulations prior to installation.
14. **Mounting** - The cameras provided with this system should be mounted only as instructed in this guide or the instructions that came with your cameras, using the provided mounting brackets.
15. **Camera Installation** - Cameras are not intended for submersion in water. Not all cameras can be installed outdoors. Check your camera environmental rating to confirm if they can be installed outdoors. When installing cameras outdoors, installation in a sheltered area is required.

SERVICE

1. **Servicing** - Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
2. **Conditions Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power supply cord or plug is damaged.
 - If liquid has been spilled or objects have fallen into the product.
 - If the product has been exposed to rain or water.
 - If the product has been dropped or the cabinet has been damaged.
 - If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.

- When the product exhibits a distinct change in performance. This indicates a need for service.
3. **Replacement Parts** - When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the product manufacturer can prevent fire, electric shock, or other hazards.
 4. **Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the product is in safe operating condition.

USE

1. **Cleaning** - Unplug the product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
2. **Product and Cart Combination** - When product is installed on a cart, product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
3. **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or “short-out” parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
4. **Lightning** - For added protection of this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power line surges.

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INTRODUCTION

OVERVIEW

This series NVR is a high performance network video recorder designed for security field. The GNVR series system operates with an embedded LINUX OS to maintain reliable operation.

This series NVR has several network functions to provide strong network data transmission and remote monitor operation.

ABOUT THIS MANUAL

This Owner's Manual provides operating procedures for the GNVR system.

Features

Real-time monitor

- It has analog output port, VGA port and HDMI port. You may use monitors to watch real time video. The system supports VGA/HDMI dual output at the same time.

Storage function

- Special data format to guarantee data security and avoid data modification.

Compression format

- Support multiple-channel audio and video (only when using camera with microphone). An independent hardware decodes the audio and video signal from each channel to maintain video and audio synchronization.

Backup function

- Support backup operation via USB port (such as USB drive, portable HDD).

Record playback function

- Support each channel real-time record independently, and at the same time it can support search, forward play, network monitor, record search, download and etc. It has various playback modes: slow play, fast play, backward play and frame by frame play.

- Support time title overlay so that you can view event accurate occurred time

- Support specified zone enlargement.

Network operation

- Support network remote real-time monitor, remote record search and remote PTZ control.

PTZ control

- Support PTZ decoder via RS485 port and various decode protocols to control the speed of the PTZ.

WHAT'S IN THE BOX?

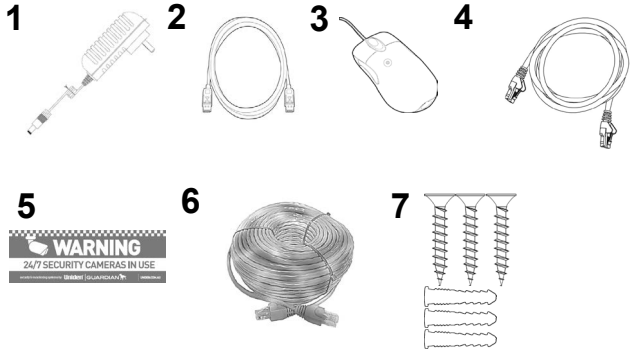
Model	GNVR86 8POE, 2TB HDD	GNC610 2MP IP Camera
GNVR 8640	1	4
GNVR 8680	1	8

Each NVR comes with:

1. NVR Power Supply
2. HDMI Cable
3. Mouse
4. 2m Ethernet Cable
5. Security stickers

Each Camera comes with:

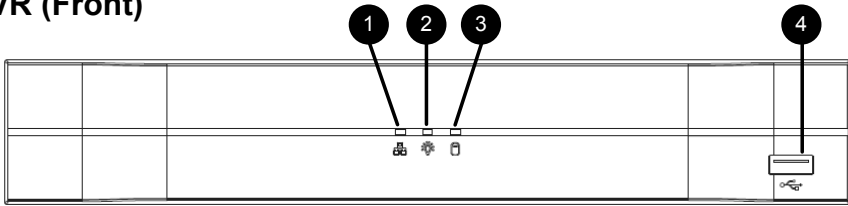
6. 30m Ethernet cable
7. Mounting Screw Kit



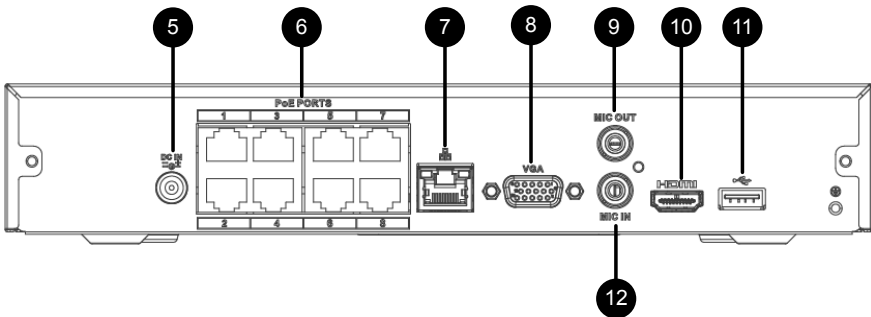
If any item is missing or damaged, contact your place of purchase immediately. **Never use damaged products!** Need help? Get answers at our website: www.uniden.com.au for Australian models.

GETTING TO KNOW YOUR NVR

NVR (Front)



NVR (Rear)



Indicators & Connectors

No.	Label	Function
1	Network LED indicator	The blue light is on when the network connection is abnormal.
2	Power LED indicator	The blue light is on when the power connection is good.
3	HDD LED indicator	The blue light is on when the HDD (Hard Disk Drive) is malfunctioning.
4	USB2.0 port	Connect to a mouse / USB storage device to back up files or upgrade firmware.
5	Power input port	Connect 48V DC adapter to power up the unit.
6	POE ports	Connect to IP Camera with Ethernet cable.
7	Network port	Connect to the internet with Ethernet cable.
8	VGA video output port	Connect to a monitor that has VGA input to view video.
9	Audio output port	Connect to speaker (not included) to listen audio.
10	HDMI video output port	Connect to a monitor/TV that has HDMI input to view HD video.
11	USB2.0 port	Connect to a mouse / USB storage device to back up files or upgrade firmware.
12	Mic input port	Connect to microphone (not included) to record audio. (optional)

INSTALLATION

PLACING THE NVR

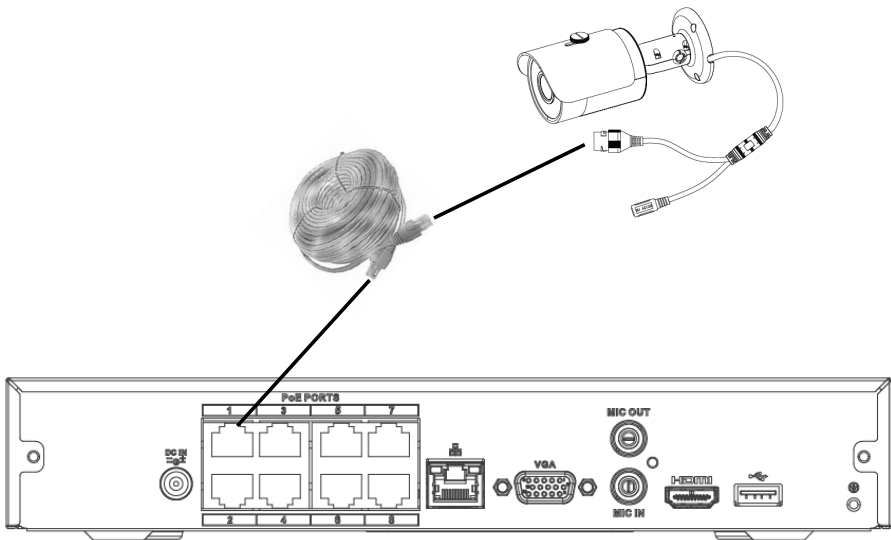
Please take into consideration the following when placing the NVR.

Ideally, choose a location that is central and has easy access to power sockets.

- Choose a secure location to avoid tampering, however, avoid enclosed areas as that might lead to overheating of the unit.
- Ensure that the ventilation holes at the side of the NVR are not blocked to avoid unit from overheating.

CAMERA CONNECTION

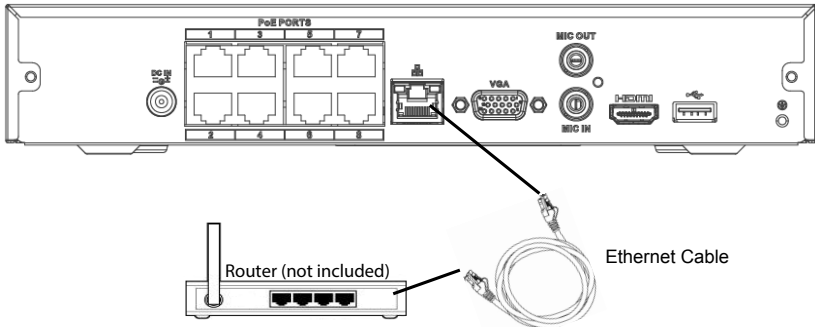
Connect the camera network port to the 30m Ethernet cable and plug the other end of the cable into the PoE port on the NVR.



NETWORK CONNECTION

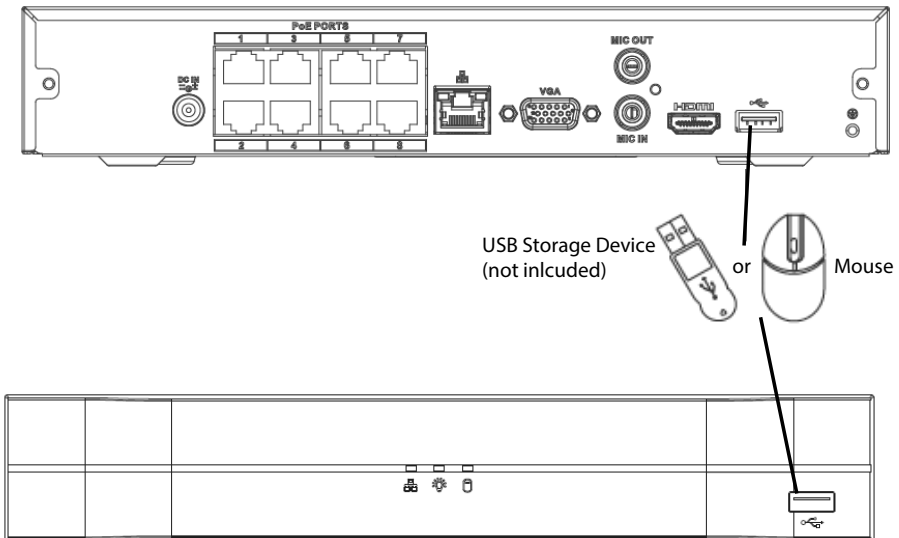
Connect the supplied Ethernet cable to the network port on the NVR unit.

1. Connect the other end of Ethernet cable to a router (not included). This will allow the NVR to be connected to the internet.



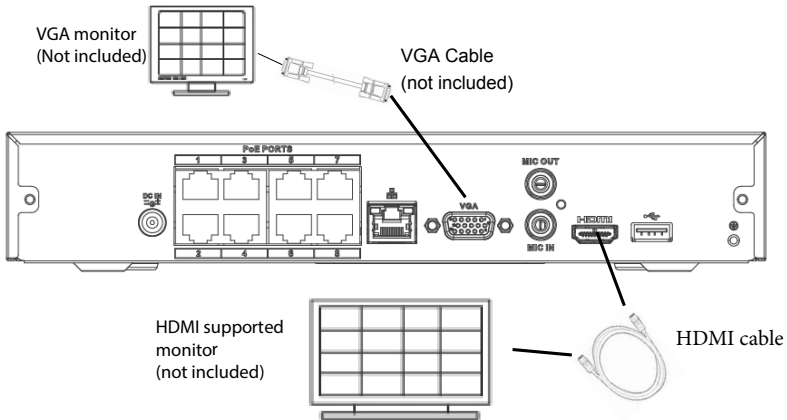
USB CONNECTION

1. Connect one of the USB ports on the NVR unit with the supplied mouse.
2. You can connect the other USB port with USB storage device (not included) to back up files or to perform firmware upgrades.



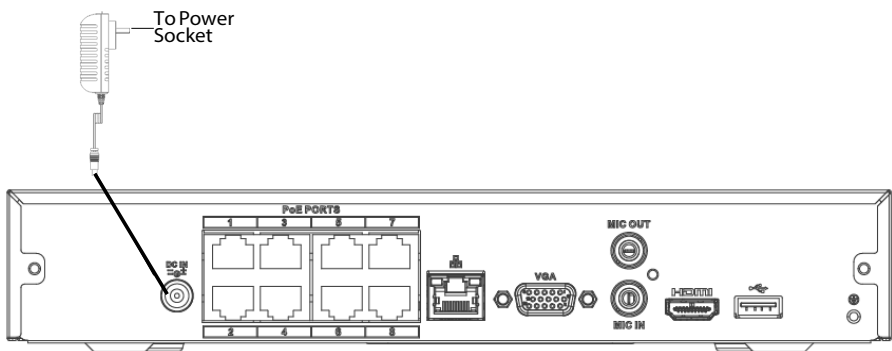
HDMI AND VGA CONNECTIONS

1. Connect the HDMI port on the NVR unit to a HDMI supported monitor or TV with the supplied HDMI cable.
2. If your TV or monitor only has VGA input port please connect it with a VGA cable (not included) to the VGA video output port on the NVR.



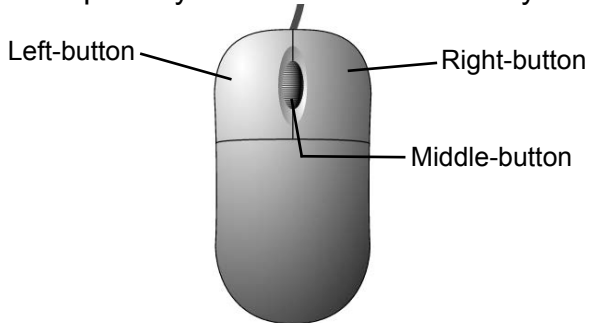
POWER CONNECTION

1. Connect the power input port on the NVR with supplied DC power cable.
2. Connect the power adapter to power outlet.
3. Ensure your connections are secured correctly, then switch on the power outlet to supply power.



MOUSE CONTROL

The mouse is the primary control device for the system.



Left-button	Click once to select an option.
	Click once to open navigation bar.
	Click once in live view mode go to main menu.
	Click once to open menu option.
	Double-click an individual channel to view it on full-screen.
	Double-click again to return to split-screen display.
	Click and drag to select privacy mask zone and motion detection zone.
Right-button	Click once in live view mode go to shortcut menu.
	Click once to exit current menu.
Middle-button	Click once in numeral input box to increase or decrease numeral value
	Scroll wheel to zoom in/out.

SETUP

WELCOME TO STARTUP WIZARD

After the NVR unit and cameras are powered up, Startup Wizard will automatically show up upon first start up. This wizard will guide you to set up Date & Time and P2P function.

Tick the box if you do want the startup wizard to shows on next boot up.

Click cancel to exit startup wizard; this window will show up on next boot up.

Clicking either cancel or next button will prompt SYSTEM LOGIN screen.

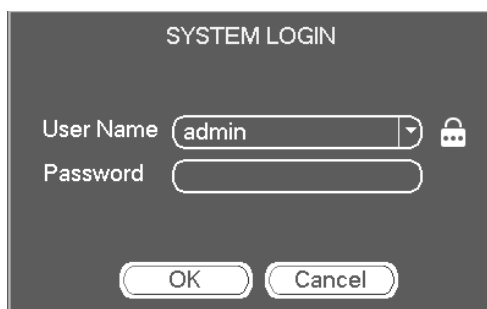


SYSTEM LOGIN

By default, the User Name is admin with no password. You can refer to online Owner's Manual to change or add more user name or modify the password for security reason in system setting.

Important! Do not enter the wrong password more than 5 times or the account will lock. If this happens, you can try again in 30 minutes!

Click OK button to continue to Date & Time setting page.



DATE & TIME

- DATE FORMAT: CHOOSE FROM THREE AVAILABLE DISPLAY, DD-MM-YYYY, YYYYY-MM-DD OR MM-DD-YYYYY.
 - Date Separator: Choose from three options to separate date, dot, dash or slash.
 - Time Format: Choose from 12-HOUR or 24-HOUR time format.
 - System Time: Set your current date, time and the correct GMT time zone
- Untick the DST box if Daylight Savings does not apply to you.

Tick DST box to allow the unit to adjust its time automatically for Daylight Savings in your time zone.

• DST: You can set the DST Start Time and End Time to function either via selecting 'week' or by manually inputting the date.

• **IMPORTANT! Do not skip this step! You must set the date and time for recorded video files to be correctly tagged. If they are not tagged correctly, the Search Files functions will not work properly.**

The screenshot shows a 'Date&Time' configuration screen with the following elements:

- Date Format:** DD MM Y...
- Time Format:** 12-HOUR
- Date Separator:** -
- System Time:** 15 - 06 - 2016 04 : 17 : 50 PM GMT+10:00
- DST:** DST
- DST Type:** Week Date
- Start Time:** Oct 1st Su 02 : 00 AM
- End Time:** Apr 1st Su 02 : 00 AM
- Buttons:** Default, Back, Next, Cancel

P2P

P2P is peer-to-peer function that requires internet. If you do not wish to use the remote viewing feature please untick the Enable box. Please click the Finished button to complete the Startup Wizard.

If you wish to use remote viewing feature, please tick the Enable box to enable P2P function if you want to use remote viewing feature.

If the status shows online, the network is connected to the internet.

If the status shows offline, the network is not connected to the internet. Please ensure your network connections are connected correctly.

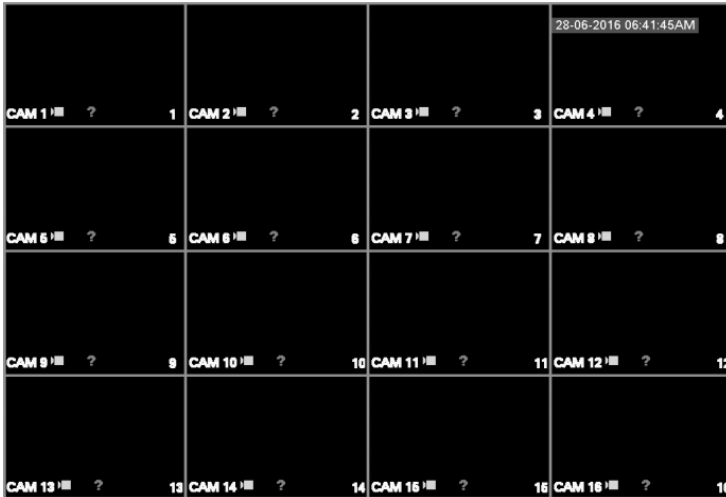
Use a Smartphone (not included) or Tablet (not included) to scan the QR code, it will lead you to download the app called 'Uniden Live Pro' or 'Uniden Live Pro HD' from App Store for iOS devices or Play Store for Android devices.



OPERATION

LIVE VIEWING

If all the connections correctly, the system will allow live viewing mode. The screen will display the date and time at the top right corner of the screen.



Display area:






Double click on a channel to view in full-screen and double click again to return to split screen.

Right-click to open shortcut menu.

Move the mouse to the top of a channel to view preview control bar.

Click and drag cameras to rearrange channel display but this does not change the channels of the camera connected.

Icon Labels:

1		Recording Status	3		Video Loss
2		Motion Detection	4		Camera Lock
5		Channel name			







PREVIEW CONTROL




The preview control has following features.

- Support preview playback.
- In the preview desktop, system can playback previous 5-60 minutes record of current channel.
- Support drag and play function. You can use your mouse to select any playback start time.
- Support playback, pause and exit function.
- Support digital zoom function.
- Support real-time backup function.

Digital channel bar (IP Camera connected)

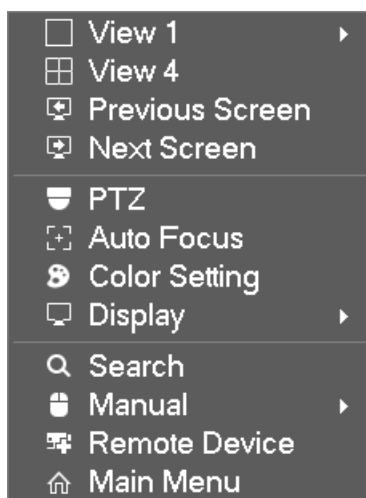


<p>Realtime playback</p> 	<p>It is to playback the previous 5-60 minutes record of current channel.</p> <p>Please go to the Main menu->Setting->System->General to set real-time playback time.</p> <p>System may pop up a dialogue box if there is no such record in current channel.</p>
<p>Digital zoom</p> 	<p>It is to zoom in specified zone of current channel. It supports zoom in function of multiple-channel.</p> <p>Click  , then it will change to .</p> <ul style="list-style-type: none"> • Click and drag the mouse to select a zone to zoom in.
<p>Manually record</p> 	<p>It is to backup the video of current channel to a USB drive. System can not backup the video of multiple-channel at the same time. Click to begin recording. Click again to stop recording. You can find the record file in the USB drive.</p>
<p>Manual snapshot</p> 	<p>Click to snapshot current channel. The snapshot file will be saved in the USB drive.</p>

<p>Mute</p> 	<p>Click to mute. Click again to enable audio function when preview.</p> <p>Please note this function is only for one-channel viewing mode.</p>
<p>Two-way talk</p> 	<p>If the connected camera supports bidirectional talk function, you can use this function. Click to start bidirectional talk function. Click again to cancel bidirectional talk. You need a microphone (not included) for this use this function</p>
<p>Remote device</p> 	<p>Click to go to the remote device interface to add/delete remote device or view its corresponding information</p>

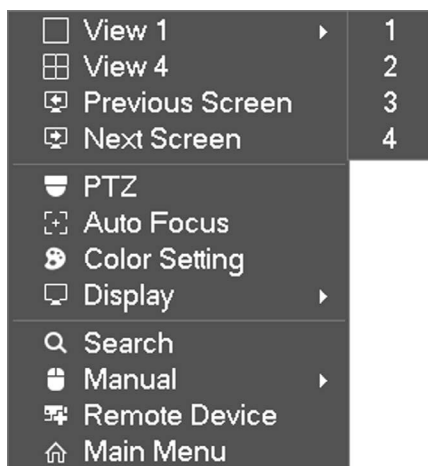
SHORTCUT MENU

Click right button of the mouse during live view mode to view shortcut menu.



Window Switch

System supports 1/4/8/9/16 window (The options depend on your product channel amount). You can select from the dropdown list.



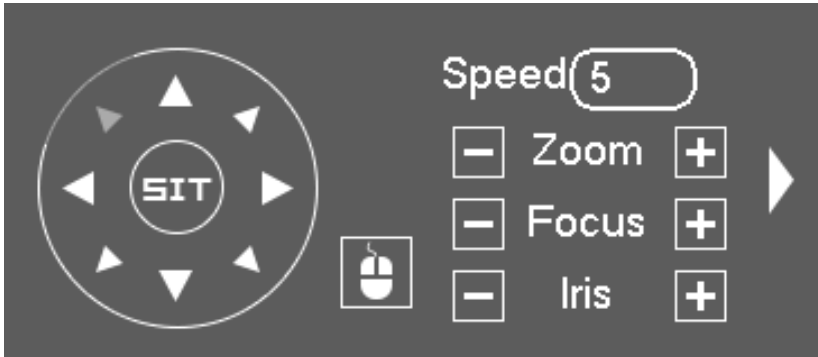
Previous Screen/Next Screen

Click to go to the previous screen/next screen.

PTZ Control (for PTZ camera only)



This function will only work with a PTZ camera. Some functions may not work with certain PTZ camera. Please refer to your PTZ camera owner's manual for compatibility.

Please note this function is only for one-channel viewing mode.



You can control PTZ direction, speed, zoom, focus, iris, preset, tour, scan, pattern aux function, light and wiper, rotation and etc.

Speed is to control PTZ movement speed. The value ranges from 1 to 8. The speed 8 is faster than speed 1. You can use the remote control to click the small keyboard to set.

You can click  and  of the zoom, focus and iris to zoom in/out, depth of field and aperture.

The PTZ rotation supports 8 directions.

In the middle of the eight direction arrows, there is a 3D intelligent positioning

key.



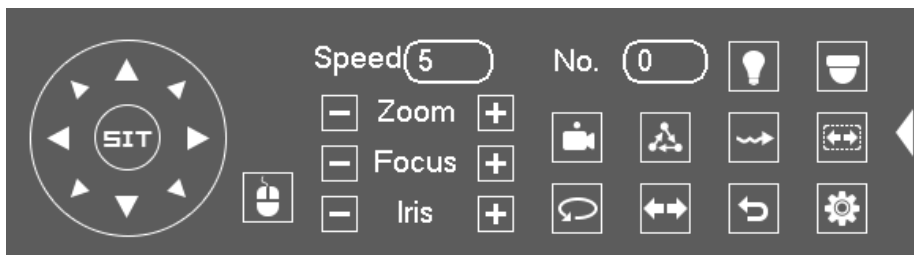
Please make sure your protocol supports this function and you need to use mouse to control.

Click this key, system goes back to the single screen mode. Drag the mouse in the screen to adjust section size. The dragged zone supports 4X to 16X speeds. It can realize PTZ automatically. The smaller zone you dragged, the higher the speed.











Click
etc.




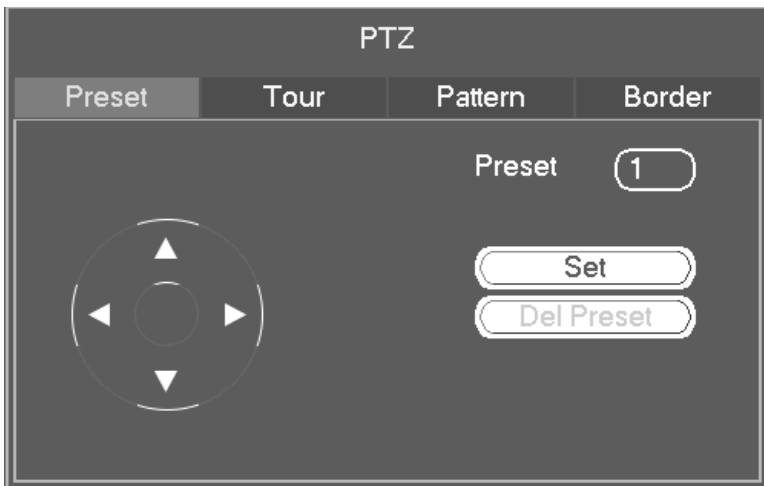
to open the menu, you can set preset, tour, pattern, scan and



Functions may vary between supported device. Please look into the device manufacturer for more details.

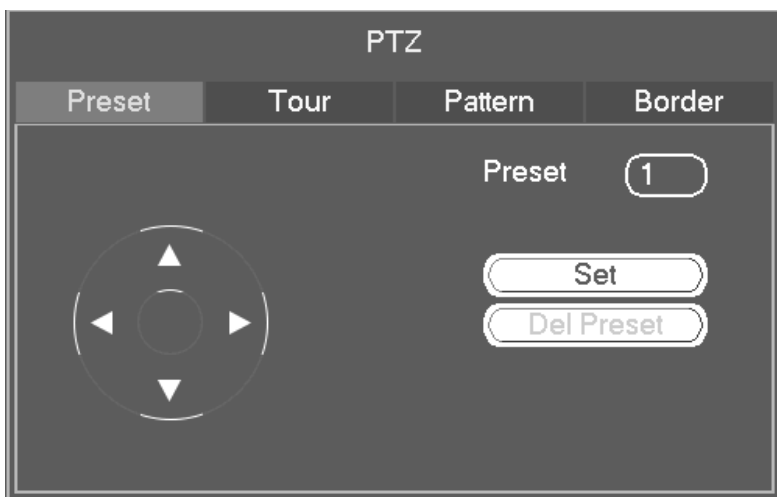
Icon	Function	Icon	Function
	Preset		Flip
	Tour		Reset
	Pattern		Setting
	Scan		AUX
	Rotate		Go to menu

PTZ Function Setup Click , you can go to the following interface to set preset, tour, pattern, and scan.



Preset Setup

Click preset button and use eight direction arrows to adjust camera to the proper position.

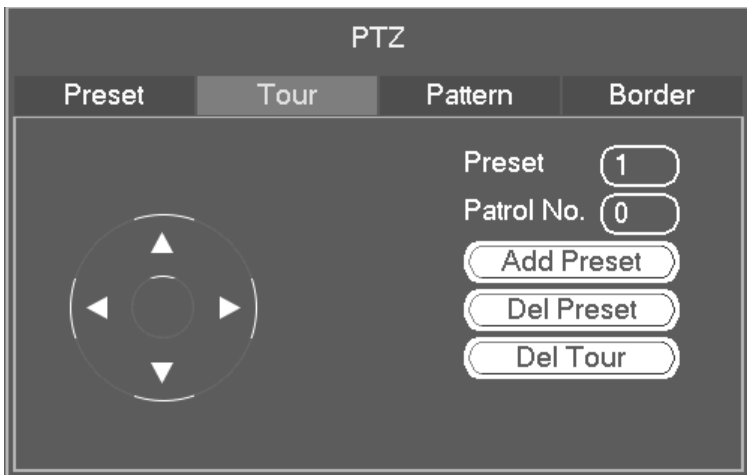


Click Set button and then input preset number.

Click Set button to save current preset.

Tour Setup

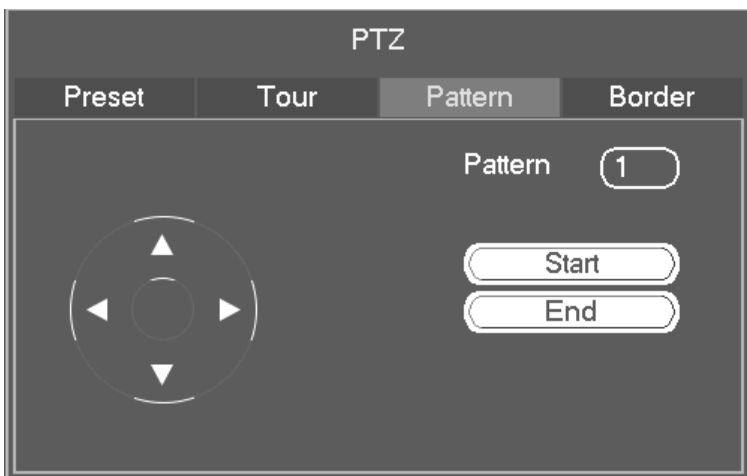
Input tour value and preset number. Click Add preset button to add current preset to the tour.



Repeat the above steps if you want to add more presets to the tour. Click Del preset button to remove it from the tour. Please note not all device support delete preset function.

Pattern Setup

Click Pattern button and input pattern number.



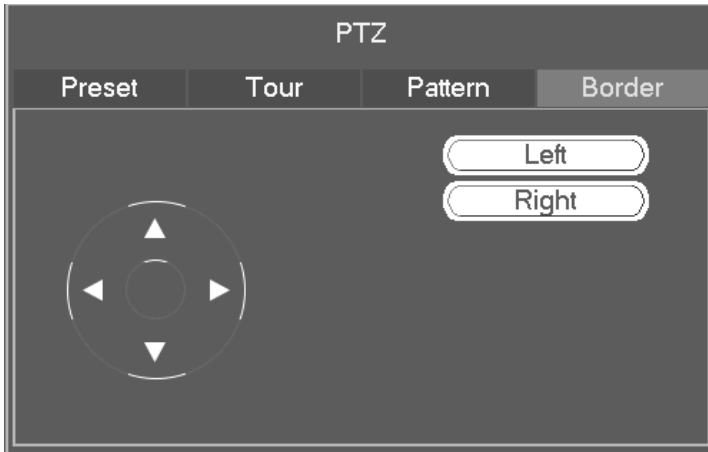
Click Start button to start direction operation.

Click End button to stop direction operation.

Scan Setup


Click Scan button.


Use direction buttons to set camera left limit and then click Left button.




Use direction buttons to set camera right limit and then click Right button. Now the scan setup process is complete.


Call PTZ Function

Call Preset: Input preset value and then click  to call a preset. Click again to stop call.

Call Pattern : Input pattern value and then click  to call a pattern. Click again to stop call.

Call Tour: Input tour value and then click  to call a tour. Click again to stop call.

Call Scan: Input Scan value and then click  to call a tour. Click again to stop call.


Rotate: Click  to enable the camera to rotate.

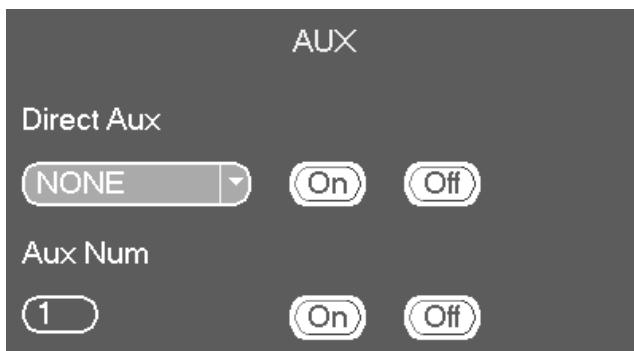
Note:

Preset, tour and pattern all need the value to be the control parameters. You can define it as you require.

App Cam 36 supports Speed, Zoom, Mouse control functions only. Please refer to camera owner's manual for supported functions.

AUX

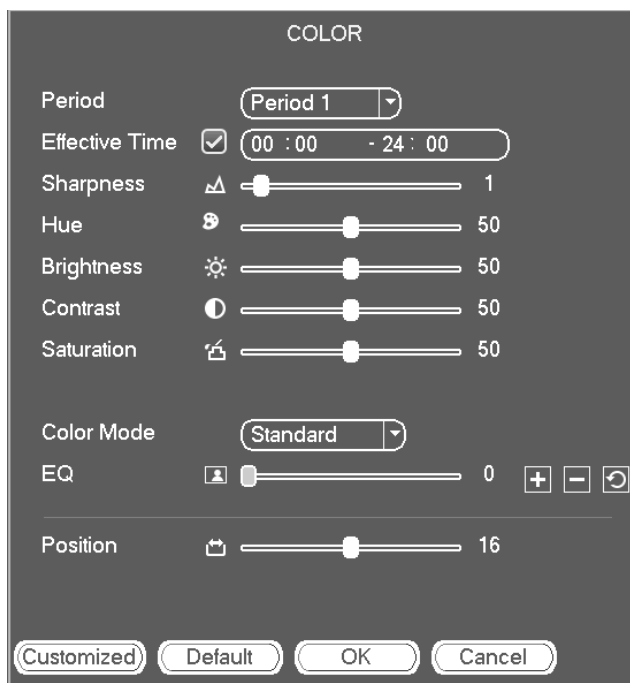
Click  , system goes to the following interface.



The options here are defined by the protocol. The aux number is corresponding to the aux on-off button of the decoder.

Color


You can set hue, brightness, contrast, saturation, gain, white level, color mode and etc.

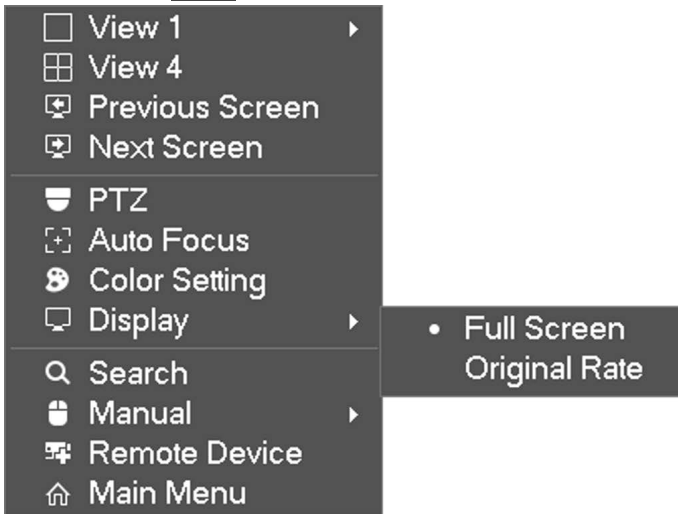


Item	Note
Period	There are two periods in one day. You can set different sharpness, brightness, and contrast setup for different periods.
Effective Time	Check the box here to enable this function and then set period time.
Sharpness	The value here is to adjust the edge of the video. The value ranges from 0 to 100. The larger the value is, the clear the edge is and vice versa. Please note there is noise if the value here is too high. The default value is 50 and the recommended value ranges from 40 to 60.
Brightness	It is to adjust monitor window bright. The value ranges from 0 to 100. The default value is 50. The larger the number, the bright the video is. When you input the value here, the bright section and the dark section of the video will be adjusted accordingly. You can use this function when the whole video is too dark or too bright. Please note the video may become hazy if the value is too high. The recommended value ranges from 40 to 60.
Contrast	It is to adjust monitor window contrast. The value ranges from 0 to 100. The default value is 50. The larger the number, the higher the contrast is. You can use this function when the whole video bright is OK but the contrast is not proper. Please note the video may become hazy if the value is too low. If this value is too high, the dark section may lack brightness while the bright section may over exposure .The recommended value ranges from 40 to 60.
Saturation	It is to adjust monitor window saturation. The value ranges from 0 to 100. The default value is 50. The larger the number, the strong the color is. This value has no effect on the general brightness of the whole video. The video color may become too strong if the value is too high. For the grey part of the video, the distortion may occur if the white balance is not accurate. Please note the video may not be attractive if the value is too low. The recommended value ranges from 40 to 60.

Color mode	It includes several modes such as standard, color, bright, gentle. Select a color mode, the sharpness, brightness, contrast and etc can automatically switch to corresponding setup.
EQ	Click reset button, device can automatically adjust to the best display effect.
Position	It is to adjust the image position on the screen.
Customized	Click it to set customized color mode.

Display

It is to set display output mode. There are two modes: full screen (4:3)/image original rate (16:9). Icon  means current display output mode.



Search

Please refer to page 36 for detailed information.

Manual Record

Please refer to page 111 for detailed information.

Remote Device

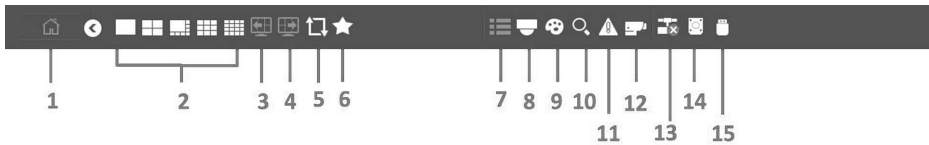
Please refer to page 59 for detailed information.

Main menu

Please refer to page 36 for detailed information.

Navigation Bar

You need to go to the Main menu->Setting->System->General to enable navigation bar function; otherwise you can not see the following interface.



1. **Main Menu:** Click to go to the main menu interface.
2. **Output Screen:** Select corresponding window-split mode and output channels.
3. **Previous screen:** Click to go to the previous screen.
4. **Next Screen:** Click it to go to the next screen.
5. **Tour:** Click to enable tour. You can see the tour is in process.
6. **Favorites:** Click to add/edit favorites.
7. **Channel:** Left click to select a channel and then drag it to the preview window on the left pane.
8. **PTZ:** Click to go to the PTZ control interface.
9. **Color:** Click to go to the color interface.
10. **Search:** Click to go to search interface.
11. **Alarm Status:** Click to go to alarm status interface. It is to view device status and channel status.

12. **Channel Info:** Click to go to the channel information setup interface. It is to view information of the corresponding channel.

CHANNEL INFO

Channel	Motion	Video Loss	Tampering	Record	Status	Record Mode	Resolution	Frame Rate	Bit Ra
1	●	⚠	●	●	●	Pre-record	1280*720	25	
2	●	⚠	●	●	●	Pre-record	1280*720	25	
3	●	⚠	●	●	●	Pre-record	1280*720	25	
4	●	⚠	●	●	●	Pre-record	1280*720	25	
5	●	⚠	●	●	●	Pre-record	1280*720	25	
6	●	⚠	●	●	●	Pre-record	1280*720	25	
7	●	⚠	●	●	●	Pre-record	1280*720	25	
8	●	⚠	●	●	●	Pre-record	1280*720	25	
9	●	⚠	●	●	●	Pre-record	1280*720	25	
10	●	⚠	●	●	●	Pre-record	1280*720	25	
11	●	⚠	●	●	●	Pre-record	1280*720	25	
12	●	⚠	●	●	●	Pre-record	1280*720	25	
13	●	⚠	●	●	●	Pre-record	1280*720	25	
14	●	⚠	●	●	●	Pre-record	1280*720	25	
15	●	⚠	●	●	●	Pre-record	1280*720	25	
16	●	⚠	●	●	●	Pre-record	1280*720	25	

Refresh

13. **Network:** Click to go to the network interface. It is to set network IP address, default gateway and etc.
14. **HDD Manager:** Click to go to the HDD manager interface. It is to view and manage HDD information.
15. **USB Manager:** Click to go to the USB Manager interface. It is to view USB information, backup and update.

USB DEVICE AUTO POP-UP

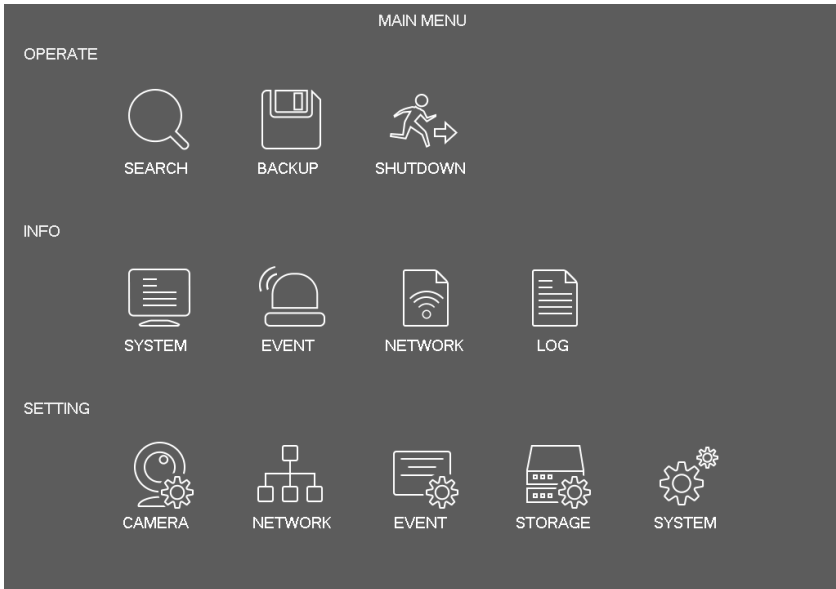
After a USB drive inserted, system can auto detect it and pop up the following dialogue box.



It allows you to conveniently backup file, log, configuration or update system.

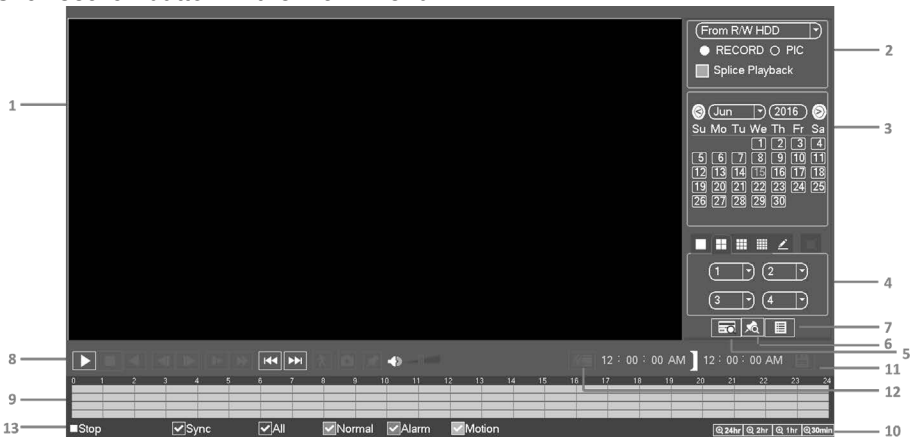
MAIN MENU

Right-click during live video mode and select Main Menu.



SEARCH





Click search button in the main menu.











Usually there are three file types:

- R: Regular recording file.
- A: External alarm recording file.
- M: Motion detection recording file

NO.	Name	Function
1	Display window	<ul style="list-style-type: none"> • Here is to display the searched picture or file. • Support 1/4/8 window playback.
2	Search type	<ul style="list-style-type: none"> • Here you can select to search the picture or the recorded file. • You can select to play from the read-write HDD, from peripheral device or from redundancy HDD. • Before you select to play from the peripheral device, please connect the corresponding peripheral device. You can view all record files of the root directory of the peripheral device. Click the Browse button; you can select the file you want to play. • Important! Redundancy HDD does not support picture backup function, but it supports picture playback function. You can select to play from redundancy HDD if there are pictures on the redundancy HDD.
3	Calendar	<ul style="list-style-type: none"> • The blue highlighted date means there is picture or file. Otherwise, there is no picture or file. • In any play mode, click the date you want to see, you can see the corresponding record file trace in the time bar.
4	Playback mode and channel selection pane.	<ul style="list-style-type: none"> • Playback mode:1/4/9. (It may vary due to different channel output) • In 1-window playback mode: you can select 1-16 channels. • In 4-window playback mode: you can select 4 channels according to your requirement. • In 9-window playback mode, you can switch between 1-8 and 9-16 channels. • In customized mode, you can select one or more channel(s) you want to playback at the same time.
5	Card number search	Not available for current system

6	Mark file list button	Click it to go to mark file list interface. You can view all mark information of current channel by time. Please note only the product of this icon supports mark function.	
7	File list switch button	<ul style="list-style-type: none"> • Double click it, you can view the picture/record file list of current day. • The file list is to display the first channel of the record file. • The system can display max 128 files in one time. Select one item, and then double click the mouse or click the ENTER button to playback. • You can input the period in the following interface to begin accurate search. • File type R—regular record A—external alarm record M—Motion detect record. <div data-bbox="468 659 808 721" style="border: 1px solid black; padding: 2px; display: inline-block;"> 12 : 00 : 00 AM  </div> <ul style="list-style-type: none"> • Lock file. Click the file you want to lock and click  to lock. The file you locked will not be overwritten. • Search locked file: Click  to view the locked file. • Return: Click , system goes back to the calendar and channel setup interface. 	
8	Playback control pane.	▶ /	Play/Pause There are three ways for you to begin playback. <ul style="list-style-type: none"> • The play button. • Double click the valid period of the time bar. • Double click the item in the file list.
		■	Stop


8	Playback control pane.		<p>Backward play</p> <p>In normal play mode, left click the button, the file begins backward play. Click it again to pause current play. In backward play mode, click ► / to restore normal play.</p>
			<p>In playback mode, click it to play the next or the previous section. You can click continuously when you are watching the files from the same channel.</p> <p>In normal play mode, when you pause current play, you can click ◀ and ▶ to begin frame by frame playback.</p> <p>In frame by frame playback mode, click ► / to restore normal playback.</p>
			<p>Slow play</p> <p>In playback mode, click it to realize various slow play modes such as slow play 1, slow play 2, and etc.</p>
			<p>Fast forward</p> <p>In playback mode, click to realize various fast play modes such as fast play 1, fast play 2 and etc.</p>
			<p>Smart search.</p>
			<p>The volume of the playback.</p>
			<p>Click the snapshot button in the full-screen mode, the system can snapshot 1 picture at a time.</p>
			<p>Mark button.</p> <p>Please note this function is for some series product only. Please make sure there is a mark button in the playback control pane.</p>

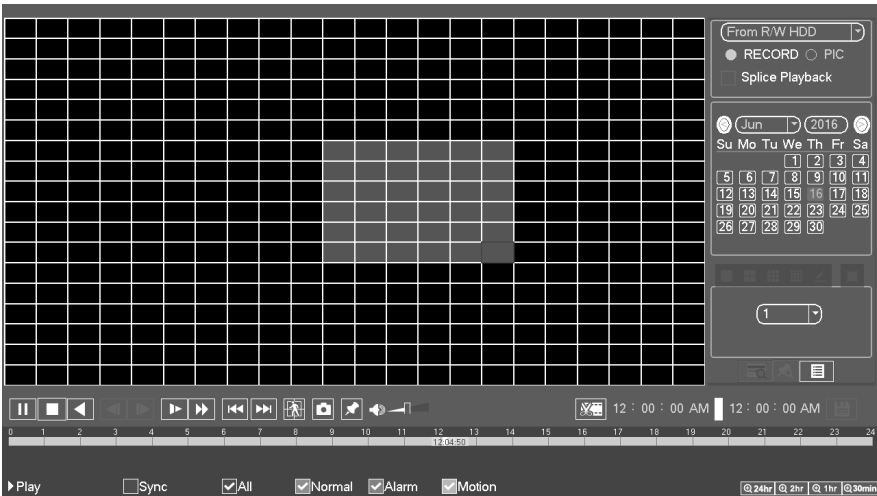
9	Time bar	<ul style="list-style-type: none"> • It is to display the record type and its period in current search criteria. • In 4-window playback mode, there are corresponding four time bars. In other playback mode, there is only one time bar. • Use the mouse to click one point of the color zone in the time bar, system begins playback. • The time bar is beginning with 0 o'clock when you are setting the configuration. The time bar zooms in the period of the current playback time when you are playing the file. • The green color stands for the regular record file. The red color stands for the external alarm record file. The yellow stands for the motion detect record file.
10	Time bar unit	<ul style="list-style-type: none"> • The option includes: 24H, 12H, 1H and 30M. The smaller the unit, the larger the zoom rate. You can accurately set the time in the time bar to playback the record. • The time bar is beginning with 0 o'clock when you are setting the configuration. The time bar zooms in the period of the current playback time when you are playing the file.
11	Backup	<ul style="list-style-type: none"> • Select the file(s) you want to backup from the file list. You can check from the list. Then click the backup button, now you can see the backup menu. System supports customized path setup. After select or create new folder, click the Start button to begin the backup operation. The record file(s) will be saved in the specified folder. • Check the file again you can cancel current selection. System max supports to display 32 files from one channel. • After you clip on record file, click Backup button you can save it. • For one device, if there is a backup in process, you can not start a new backup operation.


12	Clip	<ul style="list-style-type: none"> • It is to edit the file. • Please play the file you want to edit and then click this button when you want to edit. You can see the corresponding slide bars in the time bar of the corresponding channel. You can adjust the slide bar or input the accurate time to set the file end time. • After you set, you can click Clip button again to edit the second period. You can see the slide bar restore its previous position. • Click Backup button after clip, you can save current contents in a new file. • You can clip for one channel or multiple-channel. The multiple-channel click operation is similar with the one-channel operation. <p>Please note: System max supports 1024 files backup at the same time. You can not operate clip operation if there is any file has been checked in the file list.</p>
13	Record type	In any play mode, the time bar will change once you modify the search type.
Other Functions		
14	Smart search	<ul style="list-style-type: none"> • When system is playing, you can select a zone in the window to begin smart search. Click the motion detect button to begin play. • Once the motion detect play has begun, click button again will terminate current motion detect file play. • There is no motion detect zone by default. • If you select to play other file in the file list, system switches to motion detect play of other file. • During the motion detect play process, you can not implement operations such as change time bar, begin backward playback or frame by frame playback.
15	Other channel synchronization switch to play when playback	When playing the file, click the number button, system can switch to the same period of the corresponding channel to play.

16	Digital zoom	When the system is in full-screen playback mode, left click the mouse in the screen. Drag your mouse in the screen to select a section and then left click mouse to realize digital zoom. You can right click mouse to exit.
17	Manually switch channel when playback	During the file playback process, you can switch to other channel via the dropdown list or rolling the mouse. This function will not work if there is no record file or system is in smart search process.

Smart Search

During the multiple-channel playback mode, double click a channel and then click , system begins smart search. Please left click mouse to select smart search zones.



Click , you can go to the smart search playback. Click it again, system stops smart search playback.

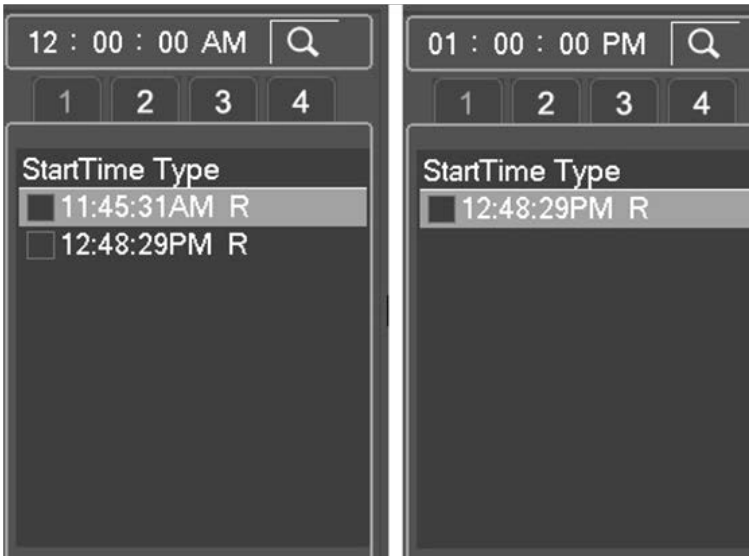
Important! System does not support motion detect zone setup during the full-screen mode. During the multiple-channel playback, system stops playback of rest channels if you implement one-channel smart search.

Accurate playback by time

Select records from one day, click the list, you can go to the file list interface. You can input time at the top right corner to search records by time. See image on the left side of the Figure 4-32 For example, input time 11:00.00 and then click Search button , you can view all the record files after 11:00.00 (The records includes current time.). See image on the right side of the Figure 4-32 Double click a file name to playback.


Note

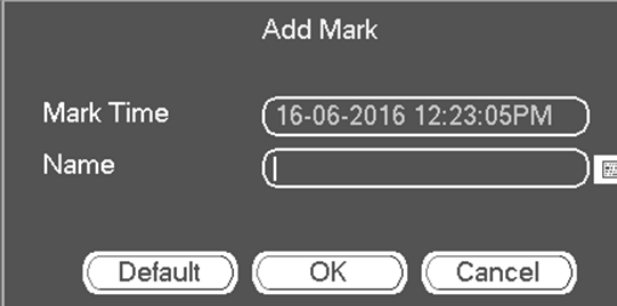
- After you searched files, system implement accurate playback once you click Play for the first time.
- System does not support accurate playback for picture.
- System supports synchronization playback and non-synchronous playback. The synchronization playback supports all channels and non-synchronous playback only supports accurately playback of current select channel.




Mark Playback

When playback recorded file, you can mark the record when there is important information. After playback, you can use time or the mark key words to search corresponding record and then play. It is very easy for you to get the important video information.

Add Mark: When system is playback, click  , you can go to the following interface.




The screenshot shows a dark-themed dialog box titled "Add Mark". It features two input fields: "Mark Time" containing the text "16-06-2016 12:23:05PM" and "Name" which is currently empty. Below the input fields are three buttons: "Default", "OK", and "Cancel".

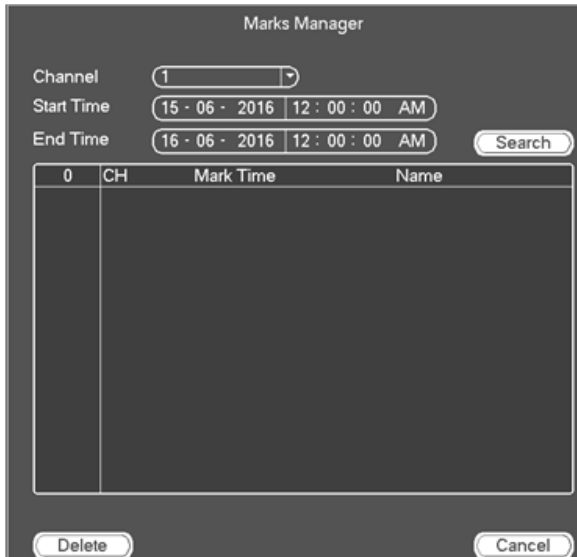
Playback Mark: During 1-window playback mode, click  , you can go to mark file list interface. Double click one mark file, you can begin playback from the mark time.

Play before mark time: Here you can set to begin playback from previous N seconds of the mark time.

Note

Usually, the system can playbacks previous N seconds record if there is such kind of record file. Otherwise, system playbacks from the previous X seconds when there is such as kind of record.

Mark Manager: Click  on the Search interface. System will manage all the record mark information of current channel by default. You can view all mark information of current channel by time.



The screenshot shows the 'Marks Manager' dialog box. At the top, it has a title bar 'Marks Manager'. Below the title bar, there are four input fields: 'Channel' with a dropdown menu showing '1', 'Start Time' with a date and time picker showing '15 - 06 - 2016 12 : 00 : 00 AM', 'End Time' with a date and time picker showing '16 - 06 - 2016 12 : 00 : 00 AM', and a 'Search' button. Below these fields is a table with the following headers: '0', 'CH', 'Mark Time', and 'Name'. The table is currently empty. At the bottom of the dialog, there are two buttons: 'Delete' and 'Cancel'.

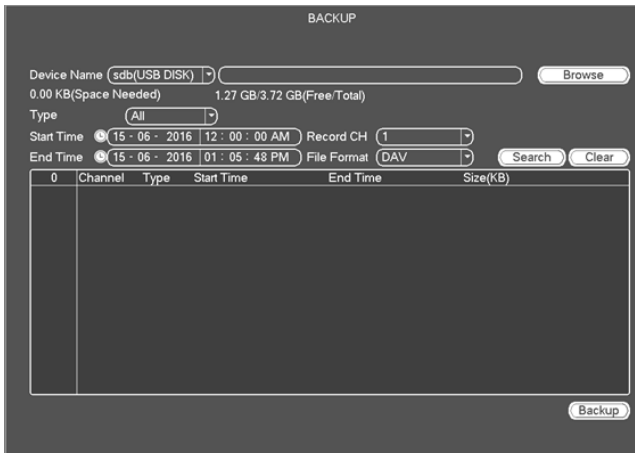
Modify: Double click one mark information item, you can see system pops up a dialogue box for you to change mark information. You can only change mark name here.

Delete: Here you can check the mark information item you want to delete and then click Delete button, you can remove one mark item.

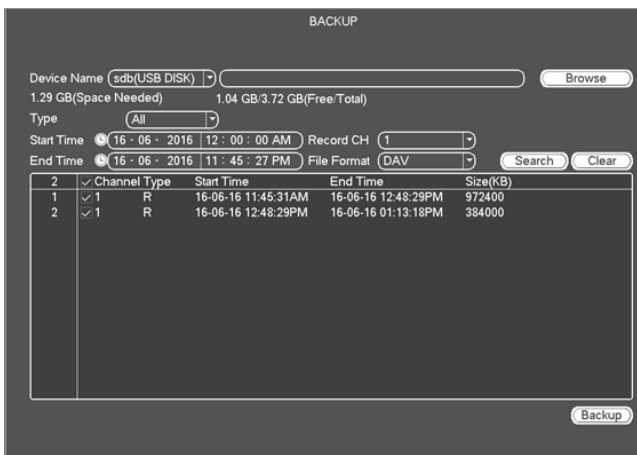
Note: After you go to mark management interface, system will pause current playback. System will resume playback after you exit mark management interface. If the mark file you want to playback has been removed, system begin playback from the first file in the list.

BACKUP

GCVR support USB drive backup. Click backup button and you can view devices information. Select backup device and then set channel, file start time and end time.



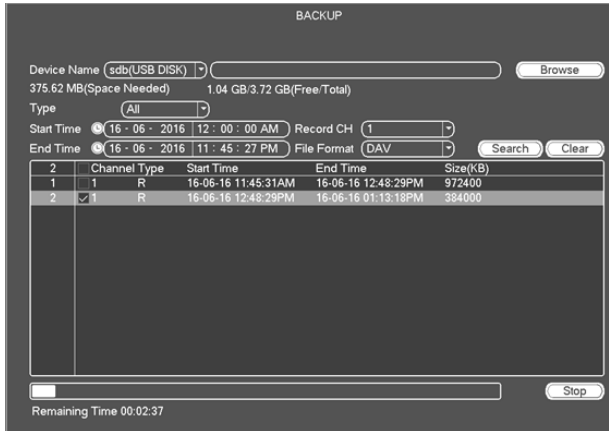
Click add button, system begins search. All matched files are listed below. System automatically calculates the capacity needed and remained.



System only backup files after the file is ticked. You can click Clear to clear cancel ticked file.

Click Backup button, system begins copy. At the same time, the backup button becomes stop button.

You can view the remaining time and process bar at the left bottom.



When the backup completed backup, you can see a dialogue box showing backup successful.

File format: Click the file format; and select ASF file format. ASF file can be played with VLC player.

The file name format usually is: Channel number+Record type+Time. In the file name, the YDM format is Y+M+D+H+M+S. File extension name is .asf.

Note: When you click stop button during the backup duration, the stop function will activated immediately. For example, if there are ten files, when you click stop system just backup five files, system only save the previous 5 files in the device (But you can view ten file names).

SHUT DOWN

Select Shut Down and there are three options: Shutdown/logout/reboot. For the user who does not have the shut down right, please input corresponding password to shut down.

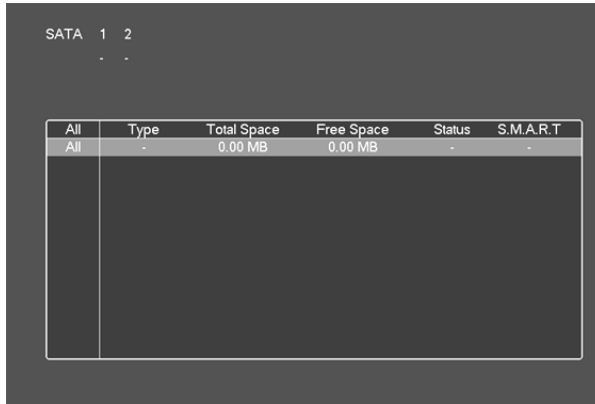


INFORMATION

It is for you to view system info, event info, and network info and log info.

SYSTEM INFO

Here is for you to view system information. There are total four items: HDD (hard disk information), record, BPS (data stream statistics), version.

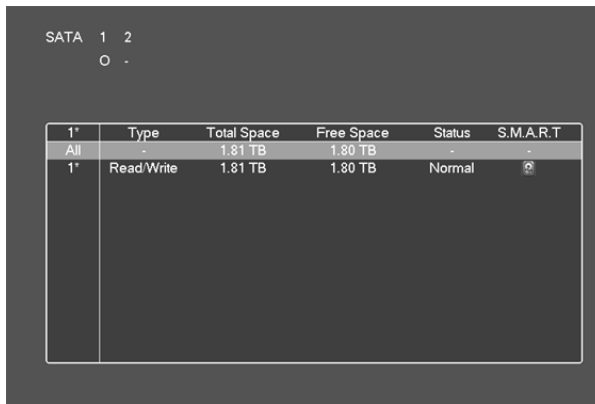


SATA 1 2
- -

All	Type	Total Space	Free Space	Status	S.M.A.R.T
All	-	0.00 MB	0.00 MB	-	-

HDD Information

It will list out hard disk type, total space, free space, video start time and status.



SATA 1 2
o -

1*	Type	Total Space	Free Space	Status	S.M.A.R.T
All	-	1.81 TB	1.80 TB	-	-
1*	Read/Write	1.81 TB	1.80 TB	Normal	🔍

SATA: 1 here means system max supports 1 HDD. o means current HDD is normal. X means there is error. - means there is no HDD. If disk is damaged, system shows as “?”. Please remove the broken hard disk before you add a new one.

Type: The corresponding HDD properties.

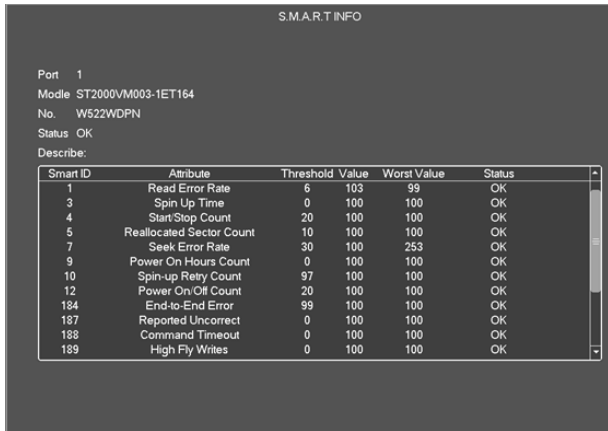
Total space: The HDD total capacity.

Free space: The HDD free capacity.

Status: HDD can work properly or not.

SMART: Display HDD information.

Double click one HDD information; you can see the HDD SMART information.



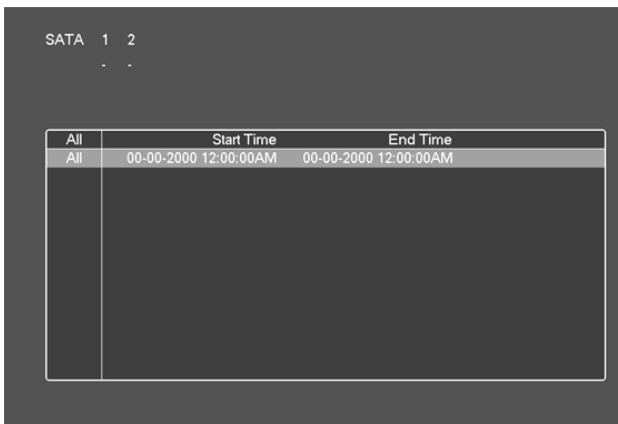
S.M.A.R.T. INFO

Port 1
Module ST2000VM003-1ET164
No. W522WDPN
Status OK
Describe:

Smart ID	Attribute	Threshold	Value	Worst Value	Status
1	Read Error Rate	6	103	99	OK
3	Spin Up Time	0	100	100	OK
4	Start/Stop Count	20	100	100	OK
5	Reallocated Sector Count	10	100	100	OK
7	Seek Error Rate	30	100	253	OK
9	Power On Hours Count	0	100	100	OK
10	Spin-up Retry Count	97	100	100	OK
12	Power On/Off Count	20	100	100	OK
184	End-to-End Error	99	100	100	OK
187	Reported Uncorrect	0	100	100	OK
188	Command Timeout	0	100	100	OK
189	High Fly Writes	0	100	100	OK

Record Info

It is to view record start time and end time.

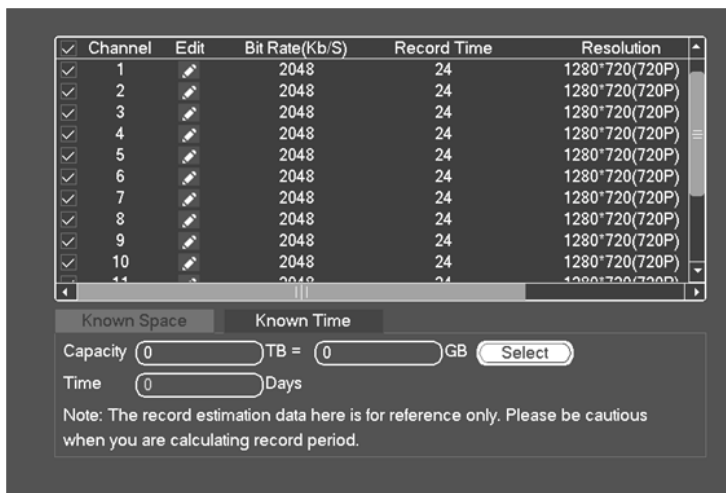



SATA 1 2

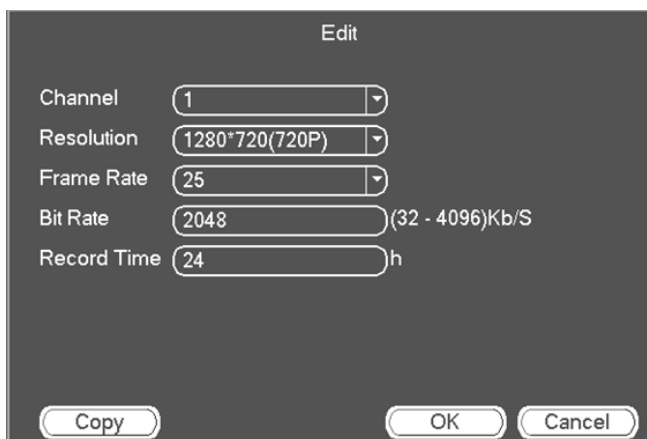
All	Start Time	End Time
All	00-00-2000 12:00:00AM	00-00-2000 12:00:00AM

Record Estimate

System can calculate the record time based on the HDD space, or you can input the record time you want to calculate the HDD space you need.



Click  after the channel name, system pops up Edit dialogue box.

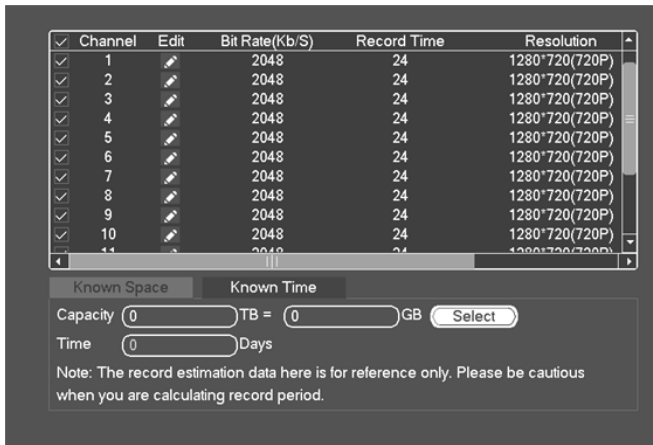


You can input resolution, frame rate, bit stream, record time of the corresponding channel, system can calculate the record time based on the channel setup and HDD space.

Calculate the record period based on the HDD space

Check the channel you want to record file.

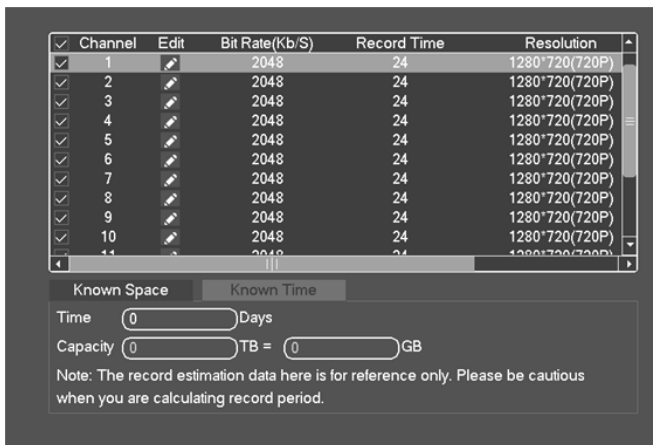
Click Known Space and then click the button to set HDD. Click OK button.



Now you can see the record period (such as 5 days).

Calculate the HDD space based on the record period

Tick the channel you want to record file.



Input days(s) you want to records, system can auto calculate the HDD space needed (such as 5.109TB).

BPS

Here is for you to view current video stream bit rate (Kb/s) and resolution.

Channel	Kb/S	Resolution	Wave
1	89	1280*720	1280x720
2	91	1280*720	1280x720
3	91	1280*720	1280x720
4	90	1280*720	1280x720
5	90	1280*720	1280x720
6	91	1280*720	1280x720
7	91	1280*720	1280x720
8	92	1280*720	1280x720
9	91	1280*720	1280x720
10	91	1280*720	1280x720
11	90	1280*720	1280x720
12	91	1280*720	1280x720
13	91	1280*720	1280x720
14	91	1280*720	1280x720
15	92	1280*720	1280x720
16	91	1280*720	1280x720

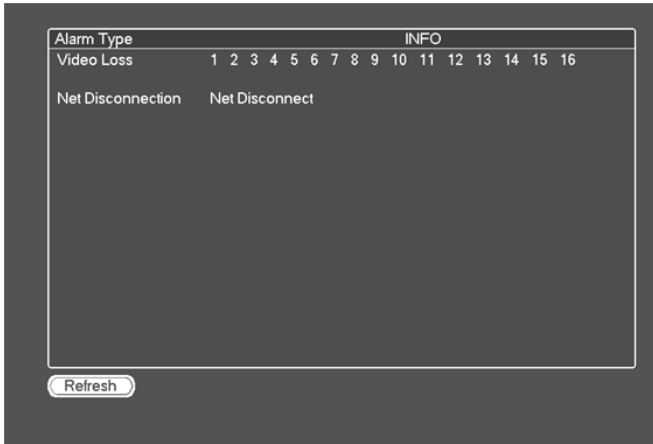
Version

Here is for you to view some version information such as version number, built date, serial number and etc.

Device Model	HCVR
Record Channel	16
Hardware Version	V1.0
System Version	3.210.0001.4
Build Date	08-06-2016
Web	3.2.7.65490
SN	1M05026YAZQA516
Onvif Server Version	2.4.1

Event

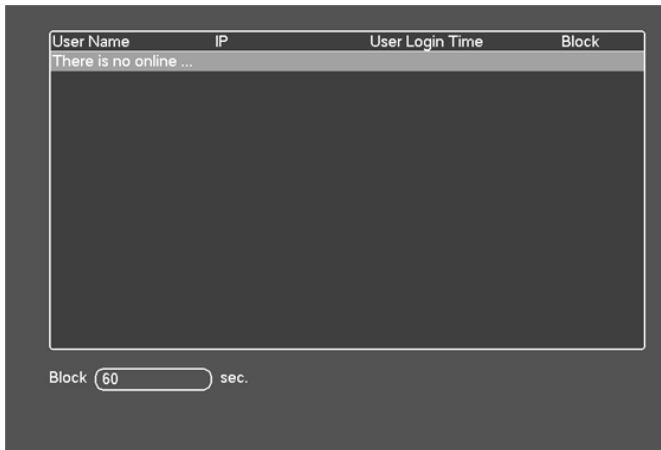
It is to display device status and channel status.



Network

Online Users

Here is for you to manage online users.

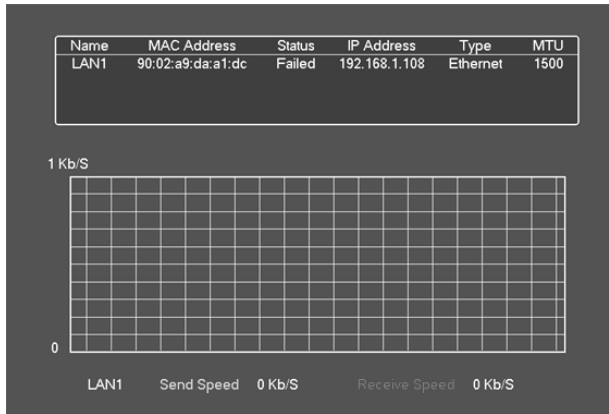


You can disconnect one user or block one user if you have proper system right. Max disconnection setup is 65535 seconds.

System detects there is any newly added or deleted user in each five seconds and refresh the list automatically.


Network Load

You can view the follow statistics of the device network adapter.



Here you can view information of all connected network adapters. The connection status is shown as offline if connection is disconnected. Click one network adapter, you can view the flow statistics such as send rate and receive rate at the top panel.

Network Test

You can view all connected network adapter names (including Ethernet, PPPoE, WIFI, and 3G), you can click  on the right panel to begin Sniffer. Click the grey stop button to stop. Please note system can not Sniffer several network adapters at the same time.

The screenshot shows two panels. The top panel is titled 'Network Test' and contains a 'Destination IP' input field with a 'Test' button. The bottom panel is titled 'Network Sniffer Packet Backup' and contains a 'Device Name' dropdown menu (set to 'sdb(USB DISK)'), a 'Refresh' button, an 'Address' input field with a 'Browse' button, and a table with the following columns: Name, IP, Sniffer Packet Size, and Sniffer Packet Backup.

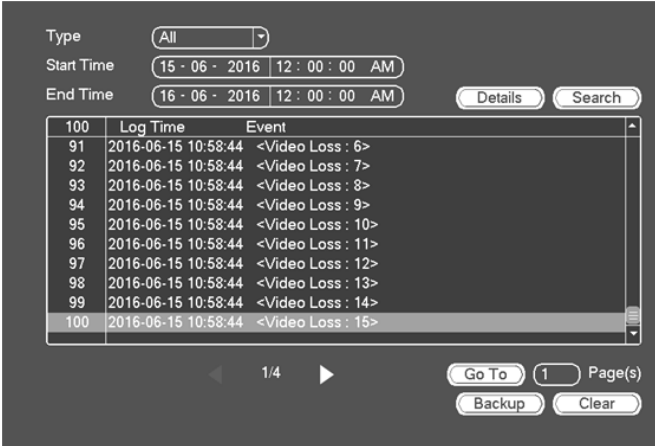
Destination IP: Please input valid IPV4 address or domain name.

Test: Click it to test the connection with the destination IP address. The test results can display average delay and packet loss rate and you can also view the network status as OK, bad, no connection and etc.

Network Sniffer backup: Please insert USB2.0 device and click the Refresh button, you can view the device on the following column. You can use the dropdown list to select peripheral device. Click Browse button to select the snap path. The steps here are same as preview backup operation.

LOG

Here is for you to view system log file. System lists the following information.



The screenshot shows a log viewer interface with the following elements:

- Type: All
- Start Time: 15 - 06 - 2016 12 : 00 : 00 AM
- End Time: 16 - 06 - 2016 12 : 00 : 00 AM
- Buttons: Details, Search
- Table with columns: Log Time, Event
- Page indicator: 1/4
- Buttons: Go To, 1 Page(s), Backup, Clear

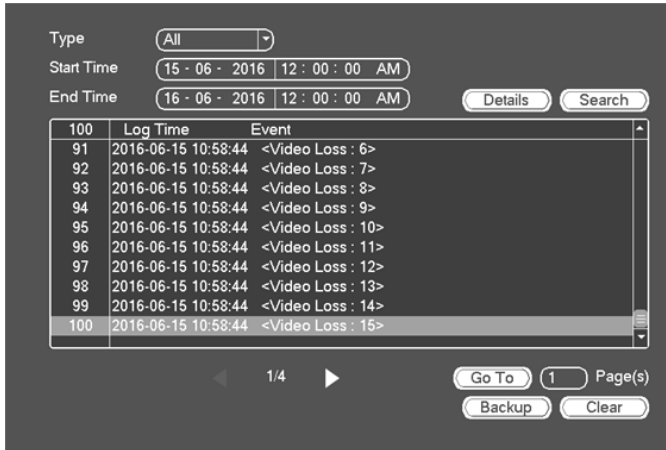
	Log Time	Event
100	2016-06-15 10:58:44	<Video Loss : 6>
91	2016-06-15 10:58:44	<Video Loss : 7>
92	2016-06-15 10:58:44	<Video Loss : 8>
93	2016-06-15 10:58:44	<Video Loss : 9>
94	2016-06-15 10:58:44	<Video Loss : 10>
95	2016-06-15 10:58:44	<Video Loss : 11>
96	2016-06-15 10:58:44	<Video Loss : 12>
97	2016-06-15 10:58:44	<Video Loss : 13>
98	2016-06-15 10:58:44	<Video Loss : 14>
99	2016-06-15 10:58:44	<Video Loss : 15>

Log types include system operation, configuration operation, data management, alarm event, record operation, account manager, log clear, file operation and etc. It optimized reboot log. There are only three types: normal reboot, abnormal reboot and protection reboot. 0x02, 0x03, 0x04 is included in the protection reboot type.

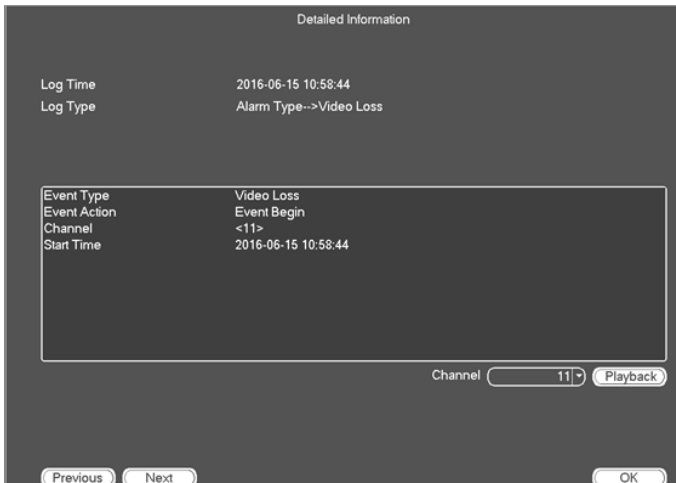
Start time/end time: Pleased select start time and end time, then click search button. You can view the log files in a list. System max displays 100 logs in one page. It can max save 1024 log files. Please use page up/down button on the interface or the front panel to view more.

Backup: Please select a folder you want to save; you can click the backup button to save the log files. After the backup, you can see there is a folder named Log_time on the backup path. Double click the folder, you can see the log file

Details: Click the Details button or double click the log item, you can view the detailed information. You can use rolling bar to view information, or you can use Page up/Page down to view other log information.



Select an item on the list and then click the Details button or double click the log item, you can view the detailed information such as log time, log type, log user, IP address and etc.



SETTING

It is for you to set camera, network, event, storage, system and etc.

CAMERA

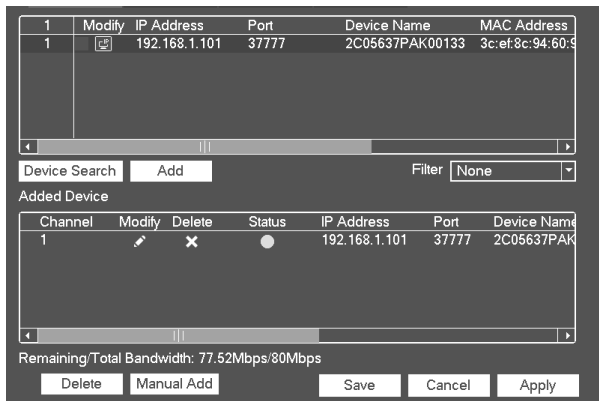
Here you can set audio/video property, camera property and channel name, channel type.

Remote Device

System supports ONVIF standard protocol.

Remote Device

In the main menu, from Camera ->Remote. Here you can add/delete remote device and view its corresponding information.




Device search: Click to search available camera in the same network. It will show device IP address, port, Device ID, and MAC address. System will displays IP address from small to large. For the device that has been added to the system will display a small icon “*” after the number.

Add: Click to connect to the selected device(s) and add it to the Added Device list.

Note: System can not add new device if the device you want to add has the same IP and TCP port as the device in the list.

Show filter: You can use it to display the specified devices from the added device.

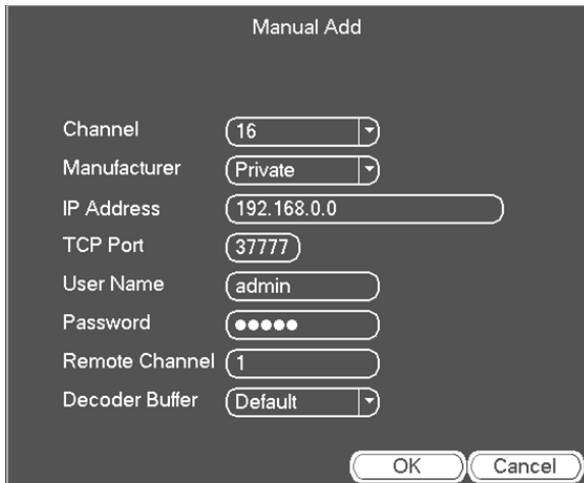
Modify: Click button  or double click a device in the list, you can modify camera parameter and make the IP address static.

Status:  means connection is OK and  means connection failed.

Delete: Select a device on the Added device list, click Delete button, system disconnect device first and then remove its name from the list.

Manual add: Click it to add network device (IP camera) manually. The port number is 37777 for most of the camera. The default user name is admin and password is admin. Otherwise please refer to network device owner's manual.

Click the Manual Add button; you can go to the following interface.



The image shows a 'Manual Add' dialog box with the following fields and values:

Field	Value
Channel	16
Manufacturer	Private
IP Address	192.168.0.0
TCP Port	37777
User Name	admin
Password	•••••
Remote Channel	1
Decoder Buffer	Default


Buttons: OK, Cancel

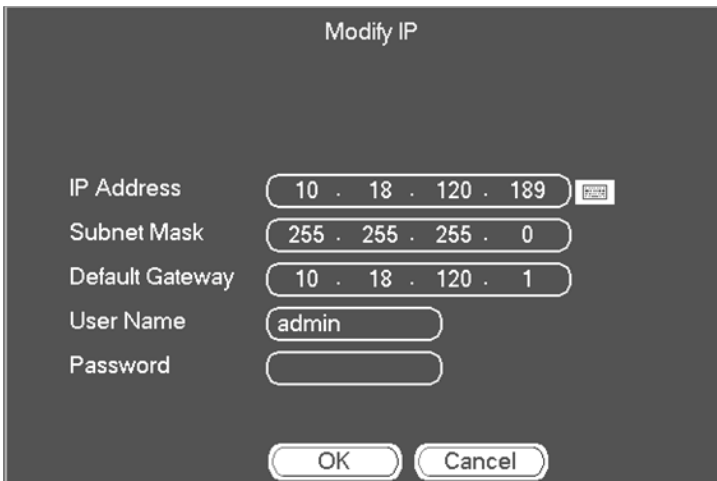
Channel number: The drop down list here displays unconnected channel number.

Note: System default IP address is 192.168.0.0 if you do not input IP address. System will not add current IP address. You can not add two or more devices in the Manual Add interface. Click OK button, system connects to the corresponding front-end device of current channel on the interface.

Show filter: It is to filter the searched device.

- None: it is to display all searched devices.
- IPC: It is to display all cameras.
- NVR: It is to display all storage devices such as NVR, NVR.
-

Change IP: Click , you can modify IP address, subnet mask, and default gateway, user name, password of the selected device. If you modify the IP address of the device, the IP address will be static.



Modify IP


IP Address

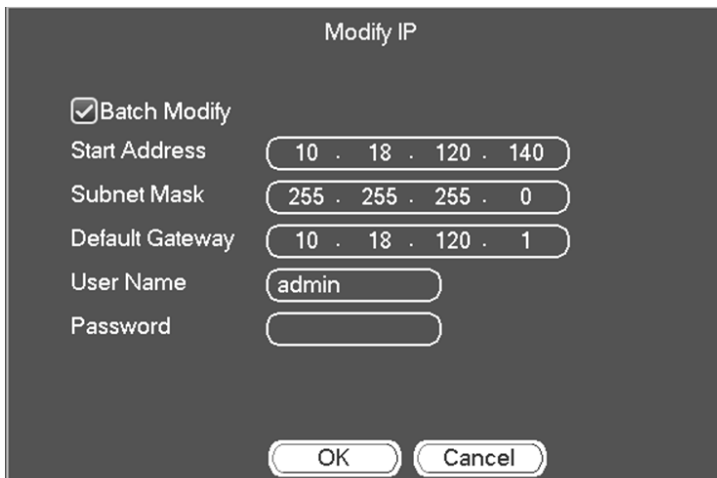
Subnet Mask

Default Gateway

User Name

Password

You can select several devices at the same time and then click . Please check Batch modify button and then input Start Address, Subnet Mask and default gateway.



Modify IP

Batch Modify

Start Address

Subnet Mask

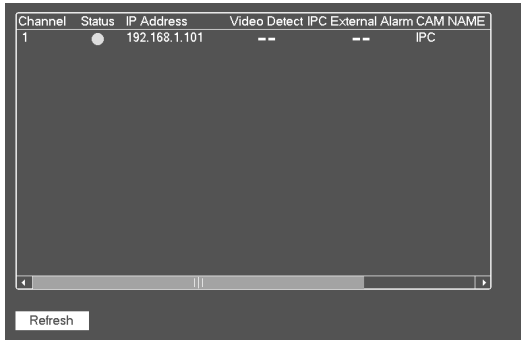
Default Gateway


User Name

Password




Channel Status



Here you can view the IPC status of the corresponding channel such as motion detect, video loss, tampering, alarm and etc.



Channel	Status	IP Address	Video Detect	IPC External Alarm	CAM NAME
1		192.168.1.101	--	--	IPC

Refresh

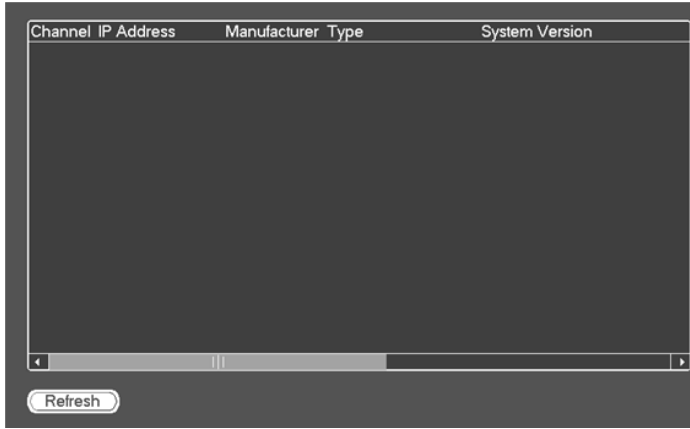
IPC status: : camera does not support. : camera supports. : There is alarm event from current camera.

Connection status: : Connection succeeded. : Connection failed.

Refresh: Click it to get latest channel status.

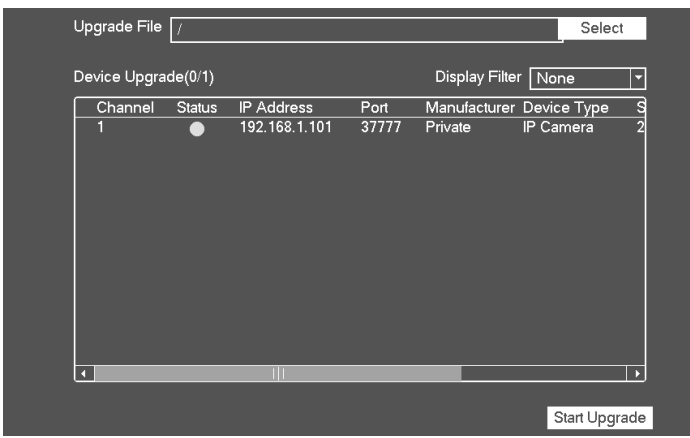
Firmware

It is to view channel, IP address, manufacturer, type, system version, SN, video input, audio input, and etc.



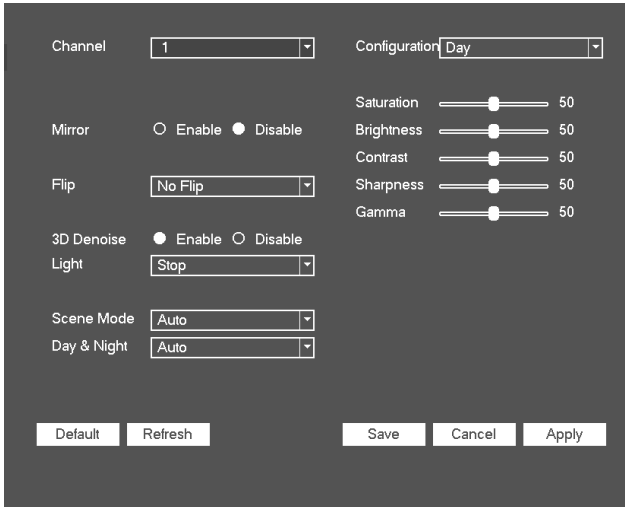
Upgrade

The NVR can upgrade the IPC firmware via USB device. You can upgrade 8 network cameras of the same model at the same time. Select upgrade IPC firmware upgrade file from USB inserted. Click Start Upgrade to upgrade network device firmware.



Image

The interface is shown as following.



Channel: Select a channel from the dropdown list.

Saturation: It is to adjust monitor window saturation. The value ranges from 0 to 100. The default value is 50. The larger the number, the stronger the color is. This value has no effect on the general brightness of the whole video. The video color may become too strong if the value is too high. For the grey part of the video, the distortion may occur if the white balance is not accurate. Please note the video may not be attractive if the value is too low. The recommended value ranges from 40 to 60.

Brightness: It is to adjust monitor window bright. The value ranges from 0 to 100. The default value is 50. The larger the number is, the bright the video is. When you input the value here, the bright section and the dark section of the video will be adjusted accordingly. You can use this function when the whole video is too dark or too bright. Please note the video may become hazy if the value is too high. The recommended value ranges from 40 to 60.

Contrast: It is to adjust monitor window contrast. The value ranges from 0 to 100. The default value is 50. The larger the number is, the higher the contrast is. You can use this function when the whole video bright is OK but the contrast is not proper. Please note the video may become hazy if the value is too low. If this value is too high, the dark section may lack brightness while the bright section may over exposure. The recommended value ranges from 40 to 60.

Sharpness: The value here is to adjust the edge of the video. The value ranges from 0 to 100. The larger the value is, the clearer the edge is and vice versa. Please note there is noise if the value here is too high. The default value is 50 and the recommended value ranges from 40 to 60.

Mirror: It is to switch video up and bottom limit. This function is disabled by default.

Flip: It is to switch video left and right limit. This function is disabled by default.

BLC: It includes several options: BLC/WDR/HLC/OFF.

- BLC: The device auto exposures according to the environments situation so that the darkest area of the video is cleared
- WDR: For the WDR scene, this function can lower the high bright section and enhance the brightness of the low bright section. So that you can view these two sections clearly at the same time. The value ranges from 1 to 100. When you switch the camera from no-WDR mode to the WDR mode, system may lose several seconds record video.
- HLC: After you enabled HLC function, the device can lower the brightness of the brightest section according to the HLC control level. It can reduce the area of the halo and lower the brightness of the whole video.
- OFF: It is to disable the BLC function. Please note this function is disabled by default.

Profile: It is to set the white balance mode. It has effect on the general hue of the video. This function is on by default. You can select the different scene mode such as auto, sunny, cloudy, home, office, night, disable and etc to adjust the video to the best quality.

- Auto: The auto white balance is on. System can auto compensate the color temperature to make sure the video color is proper.
- Sunny: The threshold of the white balance is in the sunny mode.
- Night: The threshold of the white balance is in the night mode.
- Customized: You can set the gain of the red/blue channel. The value ranges from 0 to 100.

Day/night: It is to set device color and the B/W mode switch. The default setup is auto.

- Color: Device outputs the color video.
- Auto: Device auto select to output the color or the B/W video according to the device feature (The general bright of the video or there is IR light or not.)
- B/W: The device outputs the black and white video.
- Sensor: It is to set when there is peripheral connected IR light.

Image enhancement: It is to enhance video quality. The larger the value is, the clearer the video is. But the noise may become large too.

2D NR: It is to process the noise of the single image. The video may become soft after process. The larger the value is, the better the effect is.

3D NR: It is to process the multiple-frame (at least two frames). It is to use the frame information between the following two frames to reduce noise. The larger the value is, the better the effect is.

Encode

It is to set video bit stream, picture bit stream, video overlay parameter and etc.

Video

Video setting includes the following items.

Channel	1	
Code-Stream Type	Regular	Sub Stream 1
Compression	H.264H	H.264H
Smart Codec	Close	
Resolution	1920x1080(1C)	640x480(VGA)
Frame Rate(FPS)	25	25
Bit Rate Type	CBR	CBR
Bit Rate(Kb/S)	2048	512
Reference Bit Rate	1024-10240Kb/S	160-3072Kb/S
Audio/Video	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Copy OK Cancel Apply

Channel: Select the channel you want.

Type: Please select from the dropdown list. There are three options: regular/motion detect/alarm. You can set the various encode code parameters for different record types.

Compression: System supports H.264 and MJPEG.

Smart Codec: Open to enable higher compression ratio.

Resolution: System supports various resolutions, you can select from the dropdown list. Please note the option may vary due to different series.

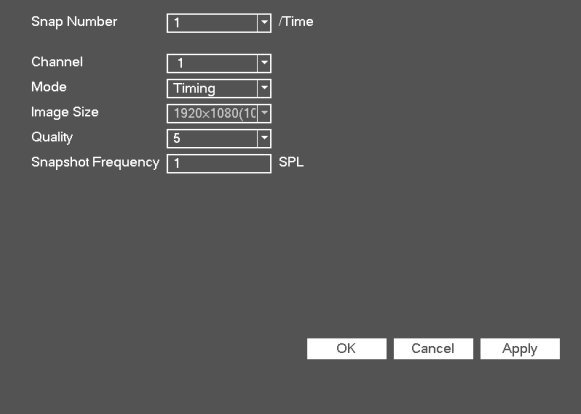
Frame rate: It ranges from 1fps to 25fps in NTSC mode and 1fps to 30fps in PAL mode.

Bit rate type: System supports two types: CBR and VBR. In VBR mode, you can set video quality.

Video/audio: You can enable or disable the video/audio.

Snapshot

Here you can set snapshot mode, picture size, quality and frequency.



The image shows a dark-themed dialog box for configuring snapshot settings. It contains the following fields:

- Snap Number:** A dropdown menu with the value '1' and a label '/Time' to its right.
- Channel:** A dropdown menu with the value '1'.
- Mode:** A dropdown menu with the value 'Timing'.
- Image Size:** A dropdown menu with the value '1920x1080(1C)'.
- Quality:** A dropdown menu with the value '5'.
- Snapshot Frequency:** A text input field with the value '1' and a label 'SPL' to its right.

At the bottom right of the dialog box, there are three buttons: 'OK', 'Cancel', and 'Apply'.

Mode: There are two modes: regular and trigger. If you set timing mode, you need to set snapshot frequency. If you set trigger snapshot, you need to set snapshot activation operation.

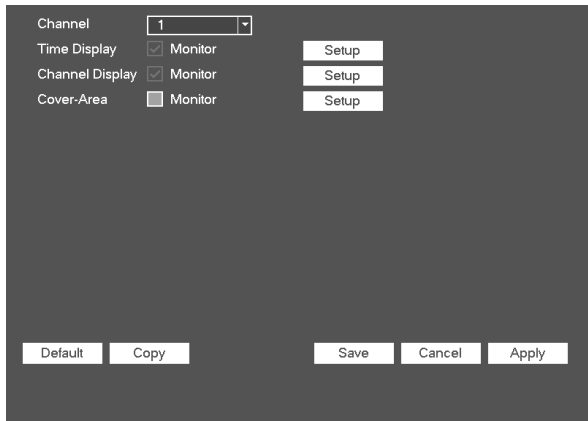
Image size: Here you can set snapshot picture size.

Image quality: Here you can set snapshot quality. The value ranges from 1 to 6.

Interval: It is for you to set timing (schedule) snapshot interval.

Overlay

Overlay interface is shown as following.

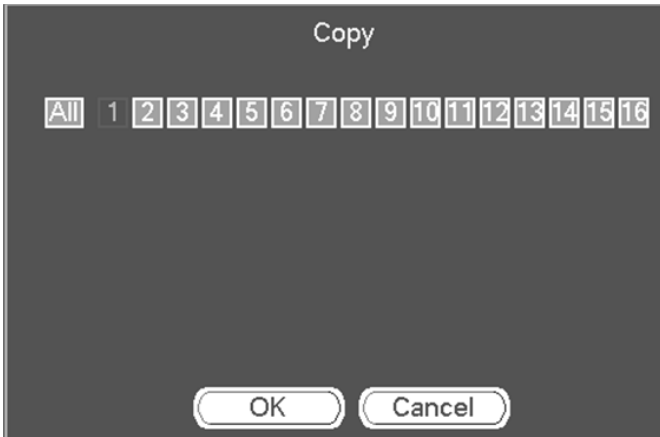


Setup: Here is for you to set cover area. You can drag you mouse to set proper section size. In one channel video, system max supports 4 zones in one channel. Privacy mask has two types. Preview and Monitor. Preview means the privacy mask zone can not be viewed by user when system is in preview status. Monitor means the privacy mask zone can not be view by the user when system is in monitor status.

Time display: You can select system displays time or not when you playback. Please click set button and then drag the title to the corresponding position in the screen.

Channel display: You can select system displays channel number or not when you playback. Please click set button and then drag the title to the corresponding position in the screen.

Copy: After you complete the setup, you can click Copy button to copy current setup to other channel(s).

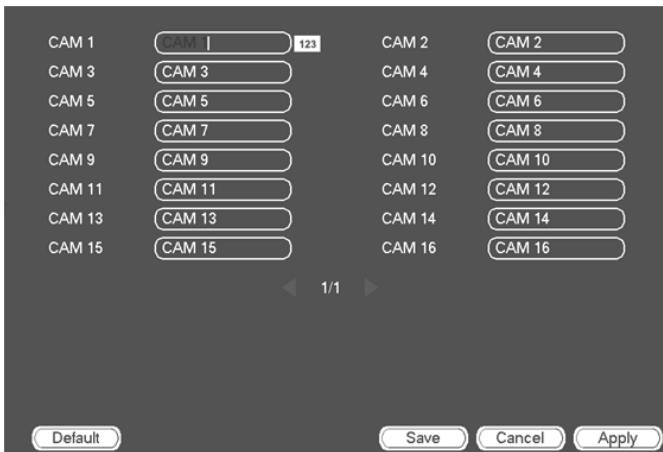


You can see current channel number is grey. Please check the number to select the channel or you can check the box ALL. Please click the OK button to complete the setup.

Please highlight icon  to select the corresponding function.

CAM NAME

It is to modify channel name. It max supports 31-characters. You can only modify the channel name of the connected network camera.



Network

TCP/IP

The interface is shown as following.

The screenshot shows a network configuration window with the following fields and values:

MTU	1500	<input type="checkbox"/>	LAN Download
IP Version	IPv4		
MAC Address	4c:11:bf:48:47:e4		
IP Address	192 . 168 . 1 . 108	<input type="checkbox"/>	DHCP
Subnet Mask	255 . 255 . 255 . 0		
Default Gateway	192 . 168 . 1 . 1		
Preferred DNS	8 . 8 . 8 . 8		
Alternate DNS	8 . 8 . 4 . 4		

MTU: It is to set MTU value of the network adapter. The value ranges from 1280-7200 bytes. The default setup is 1500 bytes. Please note MTU modification may result in network adapter reboot and network becomes off. That is to say, MTU modification can affect current network service. System may pop up dialog box for you to confirm setup when you want to change MTU setup. Click OK button to confirm current reboot, or you can click Cancel button to terminate current modification. Before the modification, you can check the MTU of the gateway; the MTU of the NVR shall be the same as or is lower than the MTU of the gateway. In this way, you can reduce packets and enhance network transmission efficiency.

The following MTU value is for reference only.

- 1500: Ethernet information packet max value and it is also the default value. It is the typical setup when there is no PPPoE or VPN. It is the default setup of some router, switch or the network adapter.
- 1492: Recommend value for PPPoE.
- 1468: Recommend value for DHCP.

LAN download: System can process the downloaded data first if you enable this function. The download speed is 1.5X or 2.0X of the normal speed.

IP Version: There are two options: IPv4 and IPv6. Right now, system supports these two IP address format and you can access via them.

MAC address: The host in the LAN can get a unique MAC address. It is for you to access in the LAN. It is read-only.

IP address: Here you can use up/down button (▲▼) or input the corresponding number to input IP address. Then you can set the corresponding subnet mask the default gateway.

DHCP: It is to auto search IP. When enable DHCP function, you can not modify IP/Subnet mask /Gateway. These values are from DHCP function. If you have not enabled DHCP function, IP/Subnet mask/Gateway display as zero. You need to disable DHCP function to view current IP information. Besides, when PPPoE is operating, you can not modify IP/Subnet mask / Gateway.

Default gateway: Here you can input the default gateway. Please note system needs to check the validity of all IPv6 addresses. The IP address and the default gateway shall be in the same IP section. That is to say, the specified length of the subnet prefix shall have the same string.

Subnet Mask: Enter network subnet mask address. This mask designates a subnet within a network, however, is only used for IPv4 networks.

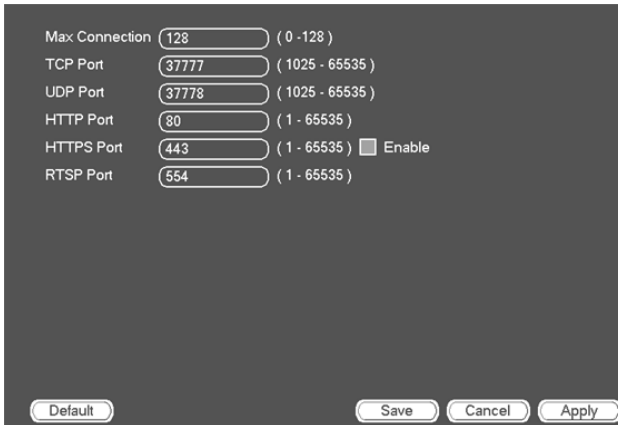
Preferred DNS server: DNS server IP address.

Alternate DNS server: DNS server alternate address.

After completing all the setups please click save button, system goes back to the previous menu.

Connection

The connection setup interface is shown as following.



The screenshot shows a configuration window with the following fields and values:

Field	Value	Range
Max Connection	128	(0 - 128)
TCP Port	37777	(1025 - 65535)
UDP Port	37778	(1025 - 65535)
HTTP Port	80	(1 - 65535)
HTTPS Port	443	(1 - 65535)
RTSP Port	554	(1 - 65535)

There is also an "Enable" checkbox which is currently unchecked. At the bottom of the window are four buttons: "Default", "Save", "Cancel", and "Apply".

Max connection: system support maximal 128 users. 0 means there is no connection limit.

TCP port: Default value is 37777.

UDP port: Default value is 37778.

HTTP port: Default value is 80.

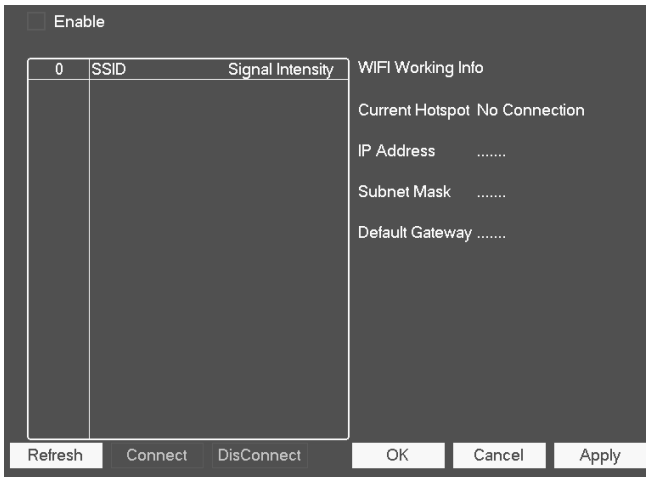
HTTPS port: Default value is 443.

RTSP port: Default value is 554.

Important! System needs to reboot after you changed and saved any setup of the above four ports. Please make sure the port values here do not conflict.

WiFi (Not supported for GNVR series)

WiFi setup interface is shown as below.



Enable: Tick the box here to enable WIFI function.

Refresh: You can click it to search the hotspot list again. It can automatically add the information such as the password if you have set it before.

Disconnect: Here you can click it to turn off the connection.

Connect: Here you can click it to connect to the hotspot. System needs to turn off current connection and then connect to a new hotspot if there is connection of you selected one.

3G (Not supported for GNVR series)

3G setup interface is shown as below.

The screenshot shows a 3G setup interface with three numbered callouts:

- 1:** Points to the 'Enable' checkbox and the 'Signal Intensity' display showing 'No signal'.
- 2:** Points to the configuration fields for '3G Network1', 'Network Type' (set to 'NOSERVICE'), 'APN' (set to 'customType'), 'AUTH' (set to 'NO_AUTH'), 'Dial No.', 'User Name', 'Password', and 'Pulse Interval' (set to '0' sec.).
- 3:** Points to the '3G Wireless Network' status section, which includes 'Module State', 'IP Address', 'SIM State', 'Subnet Mask', and 'PPP State', 'Default Gateway'.

At the bottom of the interface are buttons for 'Default', 'OK', 'Cancel', and 'Apply'.

Please refer to the following contents for the parameter information.

Pane 1: Display 3G signal intensity after you enabled 3G function.

Pane 2: Display 3G module configuration information after you enabled 3G function.

Pane 3: Display 3G module status information after you enabled 3G function.

It is to display current wireless network signal intensity such as WCDMA, EDGE and etc.

3G Enable/Disable: Check the box here to enable 3G module.

3G Network1: It is to display current wireless network adapter name.

Network type: There are various network types for different 3G network modules. You can select according to your requirements.

APN: It is the wireless connection server. It is to set you access the wireless network via which method.

AUTH: It is the authentication mode. It supports PAP/CHAP.

Dial number: Please input 3G network dialup number you got from your ISP.

User name: It is the user name for you to login the 3G network.

Password: It is the password for you to login the 3G network.

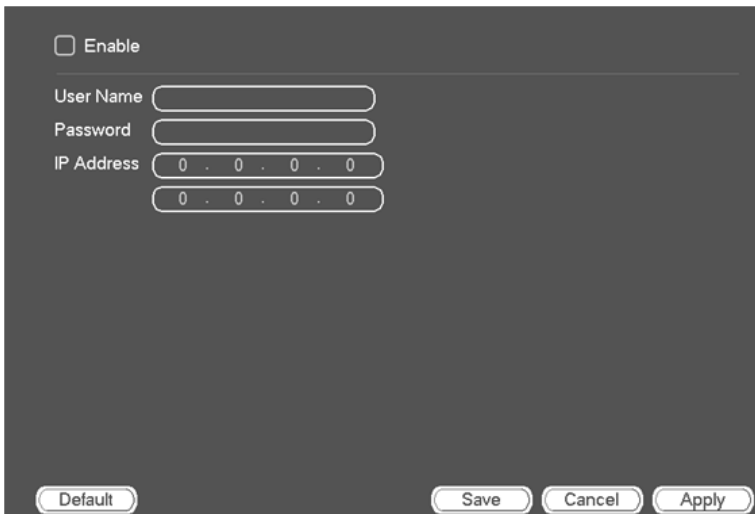
Pulse interval: You can set dialup duration. Once you disable the extra stream, the connection time begins. For example, if you input 5 seconds here, then 3G network connection period is 5 seconds. The device automatically disconnect when time is up. If there is no extra stream, 3G network connection is valid all the time. If the alive time is 0, then the 3G network connection is valid all the time.

Dial: Here you can enable or disable 3G network connection/disconnection manually.

3G wireless network: Here is to display wireless network status, SIM card status, dial status. If the 3G connection is OK, then you can see the device IP address the wireless network automatically allocates.

PPPoE

PPPoE interface is shown as below.



Input “PPPoE name” and “PPPoE password” you get from your ISP (Internet service provider).

Click save button, you need to restart to activate your configuration.

After rebooting, NVR will connect to internet automatically. The IP in the PPPoE is the NVR dynamic value. You can access this IP to visit the unit.

DDNS Setup

DDNS setup interface is shown below.

Enable

DDNS Type: Quick DDNS

Host IP: www.quickddns.com

Domain Mode: Default Domain Custom Domain Name

Domain Name: 9002A9DAA1DC .quickddns.com

Email Address: Please input an email address.

Note: System will reclaim the domain that is idle for more than one year. You can get a notification email one month before the reclaim if your email address setup is right.

Default Test OK Cancel Apply

You need a PC with fixed IP in the internet and there is the DDNS software running in this PC. In other words, this PC is a DNS (domain name server).

In network DDNS, please select DDNS type and highlight enable item. Then please input your PPPoE name you get from you IPS and server IP (PC with DDNS). Click save button and then reboot system.

Click save button, system prompts for rebooting to get all setup activated.

After rebooting, open IE and input as below:

http://(DDNS server IP)/(virtual directory name)/webtest.htm

e.g.: http://10.6.2.85/NVR_DDNS/webtest.htm.)

Now you can open DDNSServer web search page.

Private DDNS function shall work with special DDNS server.

Quick DDNS Introduction

1) Background Introduction

Device IP is not fixed if you use ADSL to login the network. The DDNS function allows you to access the NVR via the registered domain name. Besides the general DDNS ,the Quick DDNS works with the device from the manufacturer so that it can add the extension function.

2) Function Introduction:

The quick DDNS client has the same function as other DDNS client end. It realizes the bonding of the domain name and the IP address. Right now, current DDNS server is for our own devices only. You need to refresh the bonding relationship of the domain and the IP regularly. There is no user name, password or the ID registration on the server. At the same time, each device has a default domain name (Generated by MAC address) for your option. You can also use customized valid domain name (has not registered.).

3) Operation

Before you use Quick DDNS, you need to enable this service and set proper server address, port value and domain name.

Server address: www.quickddns.com

Port number: 80

Domain name: There are two modes: Default domain name and customized domain name.

Except default domain name registration, you can also use customized domain name (You can input your self-defined domain name.) After successful registration, you can use domain name to login installed of the device IP.

User name: It is optional. You can input your commonly used email address.

Important! Do not register frequently. The interval between two registrations shall be more than 60 seconds. Too many registration requests may result in server attack. System may take back the domain name that is idle for one year. You can get a notification email before the cancel operation if your email address setup is OK.

UPnP

The UPNP protocol is to establish a mapping relationship between the LAN and the WAN. Please input the router IP address in LAN connection.

Enable

Status:

LAN IP:

WAN IP:

Port Mapping List

	<input checked="" type="checkbox"/>	Service Name	Protocol	Internal Port	External Port
1	<input checked="" type="checkbox"/>	HTTP	TCP	80	80
2	<input checked="" type="checkbox"/>	TCP	TCP	37777	37777
3	<input checked="" type="checkbox"/>	UDP	UDP	37778	37778
4	<input checked="" type="checkbox"/>	RTSP	UDP	554	554
5	<input checked="" type="checkbox"/>	RTSP	TCP	554	554
6	<input checked="" type="checkbox"/>	SNMP	UDP	161	161
7	<input checked="" type="checkbox"/>	HTTPS	TCP	443	443

UPNP on/off: Tick/Untick to turn on or off the UPNP function of the device.

Status: When the UPNP is offline, it shows as “Unknown”. When the UPNP works it shows “Success”

LAN IP: It is the router IP in the LAN.

WAN IP: It is the router IP in the WAN.

Port Mapping list: The port mapping list here is the one to one relationship with the router’s port mapping setting.

List:

- Service name: Defined by user.
- Protocol: Protocol type
- Internal port: Port that has been mapped in the router.
- External port: Port that has been mapped locally.

Add: Click it to add the mapping relationship.

Delete: Click it to remove one mapping item.

Default: UPNP default port setting is the HTTP, TCP and UDP of the NVR.

Double click one item then you can change the corresponding mapping information.

PORT INFO

Service Name	<input type="text" value="HTTP"/>
Protocol	<input type="text" value="TCP"/>
Int.Port	<input type="text" value="80"/>
Ext.Port	<input type="text" value="80"/>

Important! When you are setting the router external port, please use 1024~5000 port. Do not use well-known port 1~255 and the system port 256~1023 to avoid conflict. For the TCP and UDP, please make sure the internal port and external port are the same to guarantee the proper data transmission.

IP Filter

IP filter interface is shown as below.

Start Address	End Address	Edit	Delete
---------------	-------------	------	--------

Buttons: Add, Default, OK, Cancel, Apply

You can add IP in the following list. The list supports max 64 IP addresses. System supports valid address of IPv4 and IPv6. Please note system needs to check the validity of all IPv6 addresses and implement optimization.

After you enabled trusted sites function, only the IP listed below can access current NVR.

If you enable blocked sites function, the following listed IP addresses can not access current NVR.

Enable: Highlight the box here, you can check the trusted site function and blocked sites function. You can not see these two modes if the Enable button is grey.

Type: You can select trusted site and blacklist from the dropdown list. You can view the IP address on the following column.

Start address/end address: Select one type from the dropdown list, you can input IP address in the start address and end address. Now you can click Add IP address or Add IP section to add.

a) For the newly added IP address, it is in enable status by default. Remove the \surd before the item, and then current item is not in the list.

b) System max supports 64 items.

c) Address column supports IPv4 or IPv6 format. If it is IPv6 address, system can optimize it. For example, system can optimize aa:0000: 00: 00aa: 00aa: 00aa: 00aa: 00aa as aa:: aa: aa: aa: aa: aa: aa.

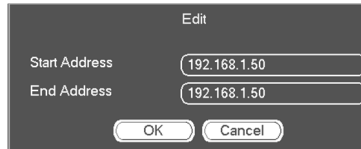
d)System automatically removes space if there is any space before or after the newly added IP address.

e)System only checks start address if you add IP address. System check start address and end address if you add IP section and the end address shall be larger than the start address.

f)System may check newly added IP address exists or not. System does not add if input IP address does not exist.

Delete: Click it to remove specified item.

Edit: Click it to edit start address and end address.

A screenshot of a dark-themed 'Edit' dialog box. It contains two input fields: 'Start Address' with the value '192.168.1.50' and 'End Address' with the value '192.168.1.50'. At the bottom, there are two buttons: 'OK' and 'Cancel'.

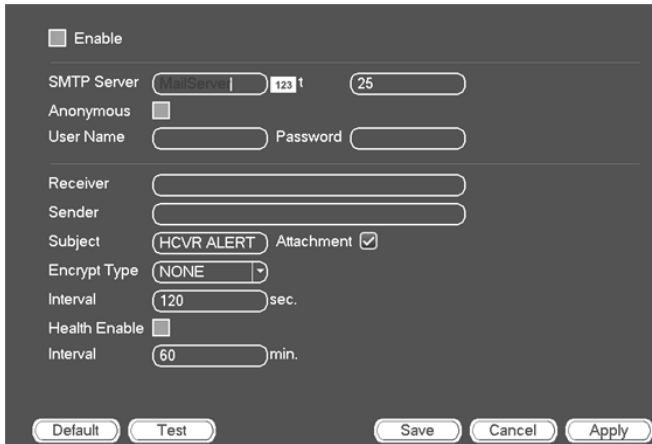
System can check the IP address validity after the edit operation and implement IPv6 optimization.

Default: Click it to restore default setup. In this case, the trusted sites and blocked sites are both null.

Note: If you enabled trusted sites, only the IP in the trusted sites list can access the device. If you enabled blocked sites, the IP in the blocked sites can not access the device. System supports add MAC address.

Email

The email interface is shown as below.



SMTP server: Please input your email SMTP server IP here.

Port: Please input corresponding port value here.

User name: Please input the user name to login the sender email box.

Password: Please input the corresponding password here.

Sender: Please input sender email box here.

Subject: Please input email subject here. System support English character and Arabic number. Max 32-digit.

Receiver: Please input receiver email address here.

Encrypt Type: System supports SSL and TSL method only.

Interval: The send interval ranges from 0 to 3600 seconds. 0 means there is no interval.

Health email enable: Please check the box here to enable this function. This function allows the system to send out the test email to check the connection is OK or not.

Interval: Please check the above box to enable this function and then set the corresponding interval. System can send out the email regularly as you set here. Click the Test button, you can see the corresponding dialogue box to see the email connection is OK or not.

Note: You can click Test button to check the details were entered correctly. System will not send out the email immediately when the alarm occurs. When the alarm, motion detection

or the abnormality event activates the email, system sends out the email according to the interval you specified here. This function is very useful when there are too many emails activated by the abnormality events, which may result in heavy load for the email server.

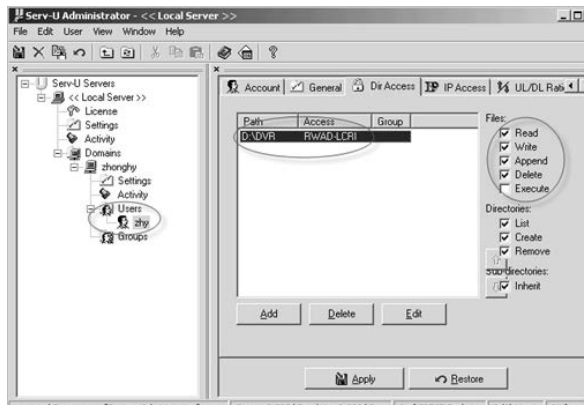
Eg:

Email	Gmail	Outlook	Yahoo
SMTP Server	smtp.gmail.com	smtp-mail.outlook.com	smtp.mail.yahoo.com
Port	465/587	587	587
Encrypt Type	SSL/TLS	TLS	TLS

FTP

You need to download or buy FTP service tool (such as Ser-U FTP SERVER) to establish FTP service.

Please install Ser-U FTP SERVER first. From “start” -> “program” -> Serv-U FTP Server -> Serv-U Administrator. Now you can set user password and FTP folder. Please note you need to grant write right to FTP upload user.

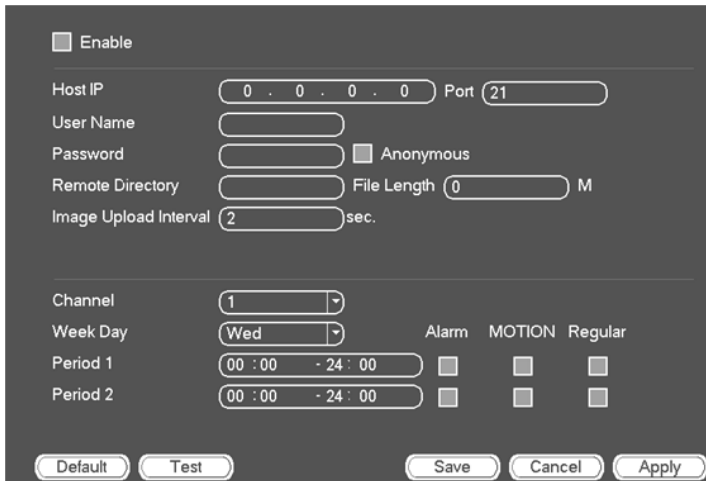



You can use a PC or FTP login tool to test setup is right or not.

For example, you can login user ZHY to H140H140H140HTUFTP://10.10.7.7U TH and then test it can modify or delete folder or not.



System also supports upload multiple NVRs to one FTP server. You can create multiple folders under this FTP. FTP interface is shown as below.



Please highlight the icon  in front of Enable to activate FTP function.

Here you can input FTP server address, port and remote directory. When remote directory is null, system automatically create folders according to the IP, time and channel.

User name and password is the account information for you to login the FTP.

File length is upload file length. When setup is larger than the actual file length, system will upload the whole file. When setup here is smaller than the actual file length, system only uploads the set length and auto ignore the left section. When interval value is 0, system uploads all corresponding files.

After completed channel and weekday setup, you can set two periods for one each channel.

Click the Test button, you can see the corresponding dialogue box to see the FTP connection is OK or not.

SNMP

SNMP is an abbreviation of Simple Network Management Protocol. It provides the basic network management frame of the network management system. The SNMP widely used in many environments. It is used in many network device, software and system.

You can set in the following interface.



The image shows a configuration window for SNMP. At the top, there is a checkbox labeled 'Enable' which is currently unchecked. Below this, there are several configuration options:

- Version:** Two checkboxes, 'V1' and 'V2', both of which are checked.
- SNMP Port:** A text input field containing the value '161'.
- Read Community:** A text input field containing the value 'public'.
- Write Community:** A text input field containing the value 'private'.
- Trap Address:** An empty text input field.
- Trap Port:** A text input field containing the value '162'.

At the bottom of the window, there are three buttons: 'Default', 'Save', and 'Apply'.

Please enable the SNMP function. Use the corresponding software tool (MIB Builder and MG-SOFT MIB Browser. You still need two MIB file: BASE-SNMP-MIB, NVR-SNMP-MIB) to connect to the device. You can get the device corresponding configuration information after successfully connection.

Please follow the steps listed below to configure.

Check the box to enable the SNMP function. Input the IP address of the PC than is running the software in the Trap address. You can use default setup for the rest items.

Compile the above mentioned two MIB file via the software MIB Builder.

Run MG-SOFT MIB Browser to load the file from the previous step to the software.

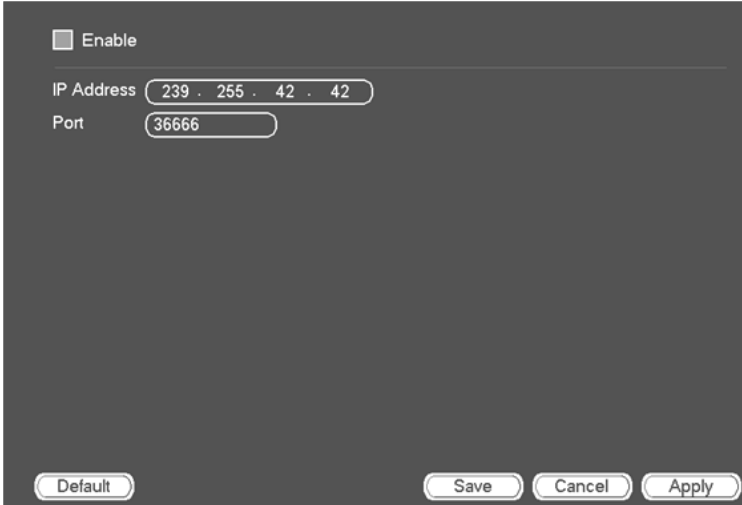
Input the device IP you want to manage in the MG-SOFT MIB Browser. Please set the corresponding version for your future reference.

Open the tree list on the MG-SOFT MIB Browser; you can get the device configuration. Here you can see the device has how many video channels, audio channels, application version and etc.

Note: Port conflict occurs when SNMP port and TCP port are the same.

Multicast

Multicast setup interface is shown as following.



The screenshot shows a configuration window for Multicast. At the top left, there is a checkbox labeled "Enable" which is currently unchecked. Below this, there are two input fields: "IP Address" with the value "239 . 255 . 42 . 42" and "Port" with the value "36666". At the bottom of the window, there are four buttons: "Default", "Save", "Cancel", and "Apply".

Here you can set a multiple cast group. You can use other addresses. For example:

Multiple cast IP: 235.8.8.36

Multiple cast PORT: 3666.


After you logged in the Web, the Web can automatically get multiple cast address and add it to the multiple cast groups. You can enable real-time monitor function to view the view.

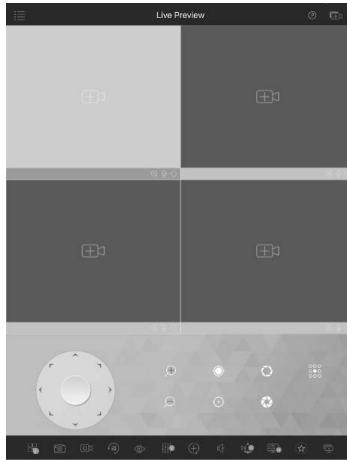
P2P

You can use your cell phone to scan the QR code and add it to the cell phone client. From main menu->Setting->Network->P2P, you can go to the following interface, the P2P interface is shown as below.

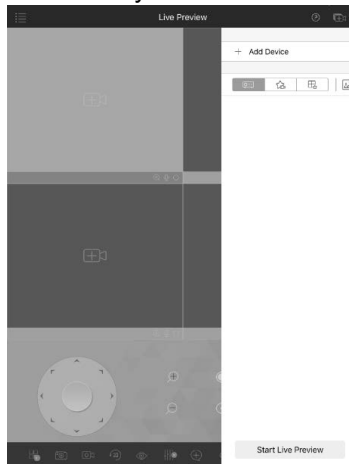


- Android: Open Google Play app in your smart phone. Search Guardian Live Pro or Guardian Live Pro HD, download it and install.
- iOS: Open App Store app in your smart phone. Search Guardian Live Pro or Guardian Live Pro HD, download it and install.

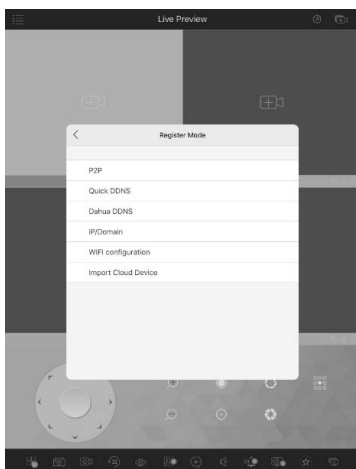
1. Open the app.
2. Tap  at the top right corner.



3. Then tap **+ Add Device** to add your NVR unit into the app.



4. The Register Mode window will appear. Tap **P2P**.



5. The P2P window will appear.



6. Enter the name you want for your device.

7. Scan the Device ID QR code available on the camera label.

8. Enter your GCVR username. The default username is 'admin' and there is no password as default.

9. Keep the Live Preview and Playback setting as Extra. This allows you to save internet bandwidth. This correspond to the quality of the sub-stream.

10. For P2P, tap Start Live Preview to view video feed live.

Using the App

You can perform the following operation* when using the app for remote viewing.

Icon:

		preview split
		open close all video
		favourite
		snapshot selected window
		start stop record
		start stop real time playback
		open close ptz wheel
		open close encoding parameter
		open close alarm
		audio mute/on
		start stop two-way talk
		open close display parameter
		fisheye

* Please note that app screenshots on page 91, 92 and 93 are for reference only. Most screenshots are for iPad and Android Tablets. User Interface for iPhone and Android Phones might differ in terms of icons layout and functionality and may change without notice.

Some features may not work with the cameras included and may work with other optional cameras.


Auto Register

This function allows the device to auto register to the proxy you specified. In this way, you can use the client-end to access the NVR and etc via the proxy. Here the proxy has a switch function. In the network service, device supports the server address of IPv4 or domain.

Please follow the steps listed below to use this function.

Please set proxy server address, port, and sub-device name at the device-end. Please enable the auto register function, the device can auto register to the proxy server.

1) The setup interface is shown as below.



Important! Do not input network default port such as TCP port number.

2) The proxy server software developed from the SDK. Please open the software and input the global setup. Please make sure the auto connection port here is the same as the port you set in the previous step.

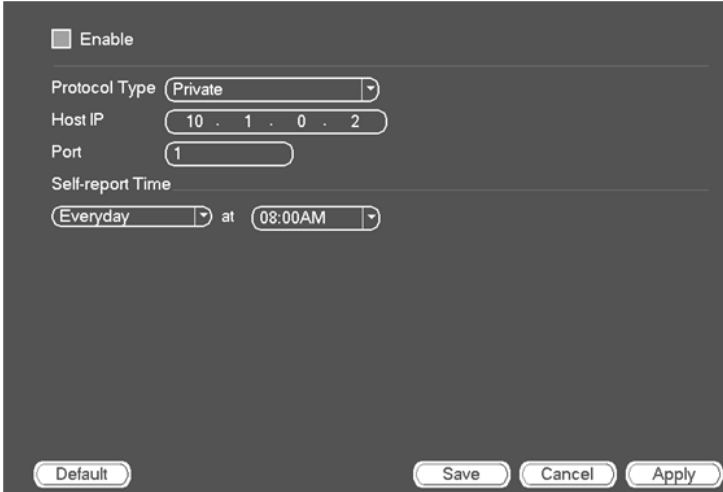
3) Now you can add device. Please do not input default port number such as the TCP port in the mapping port number. The device ID here shall be the same with the ID you input earlier. Click Apply button to complete the setup.

4) Now you can boot up the proxy server. When you see the network status is Y, it means your registration is OK. You can view the proxy server when the device is online.

Important! The server IP address can also be domain. But you need to register a domain name before you run proxy device server.

Alarm Centre

This interface is reserved for you to develop



The screenshot shows a configuration window for the Alarm Centre. At the top left, there is an unchecked checkbox labeled "Enable". Below this, there are several input fields: "Protocol Type" is a dropdown menu set to "Private"; "Host IP" is a text box containing "10 . 1 . 0 . 2"; "Port" is a text box containing "1"; and "Self-report Time" is a dropdown menu set to "Everyday" followed by the word "at" and another dropdown menu set to "08:00AM". At the bottom of the window, there are four buttons: "Default", "Save", "Cancel", and "Apply".

Switch

It is for you to set IP address, subnet mask, gateway and etc of the Switch.

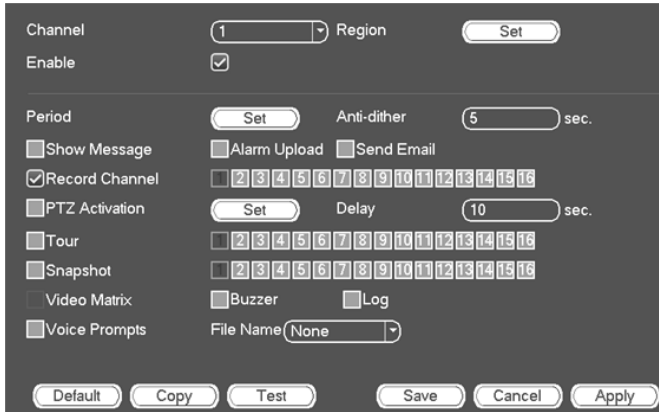


The screenshot shows a configuration window for a Switch. It contains three rows of input fields: "IP Address" with the value "10 . 1 . 1 . 1" and a small "IP" icon to its right; "Subnet Mask" with the value "255 . 255 . 255 . 0"; and "Default Gateway" with the value "10 . 1 . 1 . 1". At the bottom of the window, there are four buttons: "Default", "OK", "Cancel", and "Apply".

Event

Detect

In the main menu, from Setting->Event->Detect, you can see motion detect interface.



There is three detection types: motion detection, video loss, tampering.

The video loss has no detection region and sensitivity setup and tampering has no detection region setup.

You can see motion detect icon if current channel has enabled motion detect alarm.

You can drag you mouse to set motion detect region. Please click OK button to save current region setup. Right click mouse to exit current interface.

For digital channel, the detect function refers to support detection function of the front-end and support local activation function. The front-end can get enable/disable status, sensitivity and region setup. You can get corresponding prompt if front-end can not get the above information. You can change front-end setup if it can get.

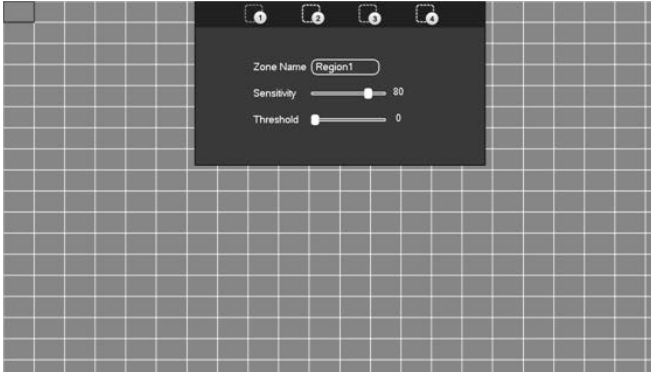
Motion Detect: After analysis video, system can generate a video loss alarm when the detected moving signal reached the sensitivity you set here.

Event type: From the dropdown list you can select motion detection type.

Channel: Select a channel from the dropdown list to set motion detect function.

Enable: Check the box here to enable motion detect function.

Region: Click select button, the interface is shown as following.

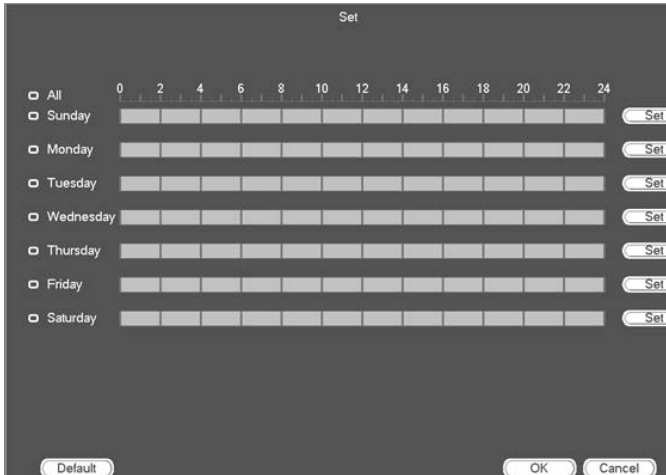


Here you can set motion detection zone. There are four zones for you to set. Please select a zone first and then left drag the mouse to select a zone. The corresponding color zone displays different detection zone. After you completed the setup, please click ENTER button to exit current setup. Do remember click save button to save current setup. If you click mouse right button to exit the region setup interface system will not save your zone setup.





Sensitivity: System supports 6 levels. The sixth level has the highest sensitivity.

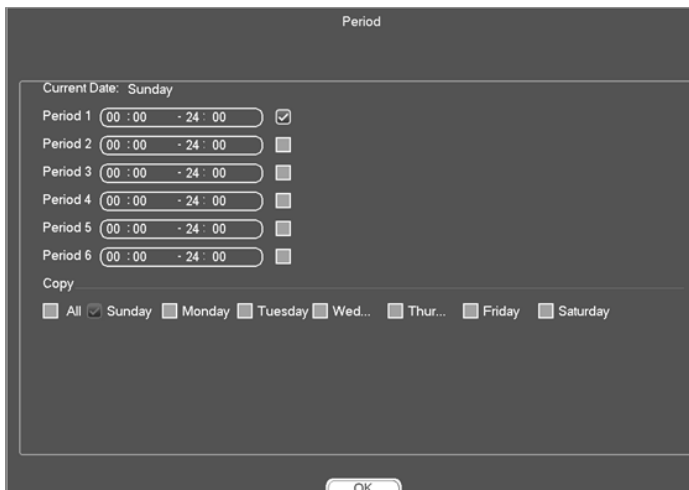
Anti-dither: Here you can set anti-dither time. The value ranges from 5 to 600s. The anti-dither time refers to the alarm signal lasts time. It can be seen as the alarm signal activation stays such as the buzzer, tour, PTZ activation, snapshot, channel record. The stay time here does not include the latch time. During the alarm process, the alarm signal can begin an anti-dither time if system detects the local alarm again. The screen prompt, alarm upload, email and etc will not be activated. For example, if you set the anti-dither time as 10 second, you can see the each activation may last 10s if the local alarm is activated. During the process, if system detects another local alarm signal at the fifth second, the buzzer, tour, PTZ activation, snapshot, record channel will begin another 10s while the screen prompt, alarm upload, email will not be activated again. After 10s, if system detects another alarm signal, it can generate an alarm since the anti-dither time is out.

Period: Click set button, you can see an interface is shown below.



Here you can set motion detect period. System only enables motion detect operation in the specified periods. It is not for video loss or the tampering. There are two ways for you to set periods. Please note system only supports 6 periods in one day.

- Select icon  of several dates, all checked items can be edited together. Now the icon is shown as . Click  to delete a record type from one period.
- Click button  after one date or a holiday, you can see an interface shown as following.



There are four record types: regular, motion detection (MD), Alarm, MD & alarm.

Alarm output: when an alarm occurs, system enables peripheral alarm devices.

Latch: when motion detection complete, system auto delays detecting for a specified time. The value ranges from 1-300(Unit: second)

Show message: System can pop up a message to alarm you in the local host screen if you enabled this function.

Alarm upload: System can upload the alarm signal to the network (including alarm centre) if you enabled current function.

Send email: System can send out email to alert you when an alarm occurs.

Record channel: System auto activates motion detection channel(s) to record once an alarm occurs. Please make sure you have set MD record in Schedule interface(Main Menu->Setting->Schedule) and schedule record in manual record interface(Main Menu->Advanced->Manual Record)

PTZ activation: Here you can set PTZ movement when an alarm occurs. Such as go to preset, tour & pattern when there is an alarm. Click "select" button, you can see an interface is shown as in Figure 4-97X.


Record Delay: System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.

Tour: Here you can enable tour function when alarm occurs. System one-window tour.

Snapshot: You can enable this function to snapshot image when a motion detect alarm occurs.

Buzzer: Highlight the icon to enable this function. The buzzer beeps when alarm occurs.

Test: Click it to test current motion detect setup (do not need to save). Click Select button after Region, you can set motion detect area.

Please highlight icon  to select the corresponding function. After all the setups please click save button, system goes back to the previous menu.

Note: In motion detection mode, you can not use copy/paste to set channel setup since the video in each channel may not be the same. Motion detect only has relationship with the sensitivity and region setup. It has no relationship with other setups.

Video Loss

This function allows you to be informed when video loss phenomenon occurred. You can enable alarm output channel and then enable show message function.

The screenshot shows a configuration window for Video Loss. At the top, 'Channel' is set to 1 and 'Enable' is checked. Below this, there are several sections: 'Period' with a 'Set' button and 'CAM AntiDither' set to 0 sec.; 'Show Message' (unchecked), 'Alarm Upload' (checked), and 'Send Email' (unchecked); 'Record Channel' with a grid of 16 checkboxes (2-16); 'PTZ Activation' with a 'Set' button and 'Delay' set to 10 sec.; 'Tour' with a grid of 16 checkboxes (2-16); 'Snapshot' with a grid of 16 checkboxes (2-16); 'Buzzer' (unchecked) and 'Log' (checked); and 'Voice Prompts' (unchecked) with a 'File Name' dropdown set to 'None'. At the bottom are buttons for 'Default', 'Copy', 'Save', 'Cancel', and 'Apply'.

Tampering

When someone viciously masks the lens, or the output video is in one-color due to the environments light change, the system can alert you to guarantee video continuity.

The screenshot shows a configuration window for Tampering. At the top, 'Channel' is set to 1, 'Enable' is checked, and 'Sensitivity' is set to 3. Below this, there are several sections: 'Period' with a 'Set' button and 'CAM AntiDither' set to 0 sec.; 'Show Message' (unchecked), 'Alarm Upload' (checked), and 'Send Email' (unchecked); 'Record Channel' with a grid of 16 checkboxes (2-16); 'PTZ Activation' with a 'Set' button and 'Delay' set to 10 sec.; 'Tour' with a grid of 16 checkboxes (2-16); 'Snapshot' with a grid of 16 checkboxes (2-16); 'Buzzer' (unchecked) and 'Log' (checked); and 'Voice Prompts' (unchecked) with a 'File Name' dropdown set to 'None'. At the bottom are buttons for 'Default', 'Copy', 'Save', 'Cancel', and 'Apply'.

You can enable “Alarm output “or “Show message” function when tampering alarm occurs.

Sensitivity: The value ranges from 1 to 6. It mainly concerns the brightness. The level 6 has the higher sensitivity than level 1. The default setup is 3.

Note: In Motion Detection interface, copy/paste function is only valid for the same type, which means you can not copy a channel setup in video loss mode to tampering mode. About Default function. Since detection channel and detection type may not be the same, system can only restore default setup of current detect type. For example, if you click Default button at the tampering interface, you can only restore default tampering setup. It is null for other detect types. System only enables tampering function during the period you set here. It is null for motion detect or video loss type.

Alarm

Before operation, please make sure you have properly connected alarm devices such as buzzer.

In the main menu, from Setting->Event->Alarm, you can see alarm setup interface.

Alarm In Alarm Name

Enable

Period Anti-dither sec.

Show Message Alarm Upload Send Email

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

PTZ Activation Delay sec.

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

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

Video Matrix Buzzer Log

Voice Prompts File Name

Important! If it is your first time to boot up the device, the disconnection status of the front-end network camera will not be regarded as offline. After one successfully connection, all the disconnection events will be regarded as IPC offline event. When IPC offline alarm occurs, the record and snapshot function of digital channel is null.

Alarm in: Here is for you to select channel number.

Type: normal open or normal close.

Anti-dither: Here you can set anti-dither time. Here you can set anti-dither time. The value ranges from 5 to 600s. The anti-dither time refers to the alarm signal lasts time. It can be seem as the alarm signal activation stays such as the buzzer, tour, PTZ activation, snapshot, channel record. The stay time here does not include the latch time. During the alarm process, the alarm signal can begin an anti-dither time if system detects the local alarm again. The screen

prompt, alarm upload, email and etc will not be activated. For example, if you set the anti-dither time as 10 second, you can see the each activation may last 10s if the local alarm is activated. During the process, if system detects another local alarm signal at the fifth second, the buzzer, tour, PTZ activation, snapshot, record channel will begin another 10s while the screen prompt, alarm upload, email will not be activated again. After 10s, if system detects another alarm signal, it can generate an alarm since the anti-dither time is out.

Show message: System can pop up a message to alarm you in the local host screen if you enabled this function.

Alarm upload: System can upload the alarm signal to the network (including alarm centre) if you enabled current function.

Send email: System can send out email to alert you when alarm occurs.

Record channel: you can select proper channel to record alarm video (Multiple choices). At the same time you need to set alarm record in schedule interface (Main Menu->Setting->Schedule) and select schedule record in manual record interface (Main Menu->Advance->Manual Record).

Latch: Here is for you to set proper delay duration. Value ranges from 10 to 300 seconds. System automatically delays specified seconds in turning off alarm and activated output after external alarm cancelled.

Tour: Here you can enable tour function when alarm occurs. System supports 1/8-window tour. Please note the tour setup here has higher priority than the tour setup you set in the Display interface. Once there two tours are both enabled, system can enable the alarm tour as you set here when an alarm occurred. If there is no alarm, system implements the tour setup in the Display interface.


Snapshot: System can snapshot corresponding channel when an alarm occurs. Please note the activation snapshot has the higher priority than schedule snapshot. If you have enabled these two types at the same time, system can activate the activation snapshot when alarm occurs, and otherwise system just operates the schedule snapshot.

Log: Check the box here, system can record local alarm log.

Buzzer: Highlight the icon to enable this function. The buzzer beeps when alarm occurs.

Voice prompts: Check the box here to trigger audio broadcast function. You can select specified audio file here. System can play the audio file once the corresponding event occurs.

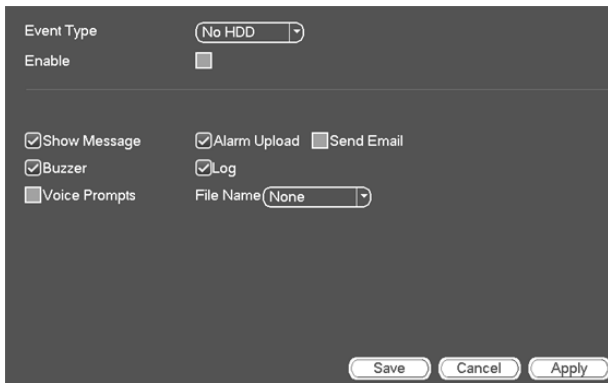
Note: Network alarm means the alarm signal from the TCP/IP. You can use NET SDK to activate network alarm. Comparing with the local alarm, there is no type, anti-dither, alarm upload function.

Please highlight icon  to select the corresponding function. After setting all the setups please click save button, system goes back to the previous menu.

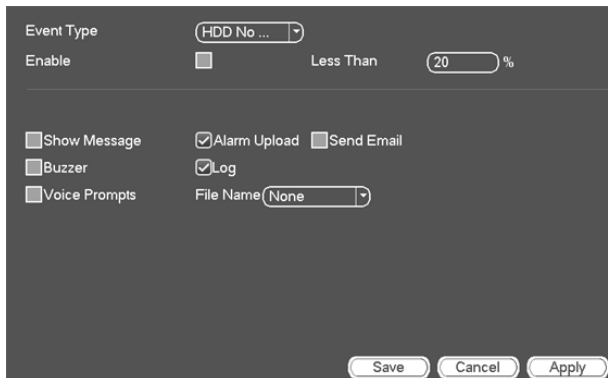
Abnormality

There are three types: HDD/Network/user.

HDD: HDD error, no disk, no space.



This screenshot shows a configuration window for the 'No HDD' event type. The 'Event Type' dropdown is set to 'No HDD'. The 'Enable' checkbox is unchecked. The 'Show Message' checkbox is checked, and the 'Voice Prompts' checkbox is unchecked. The 'Alarm Upload' checkbox is checked, and the 'Send Email' checkbox is unchecked. The 'Log' checkbox is checked. The 'File Name' dropdown is set to 'None'. At the bottom, there are 'Save', 'Cancel', and 'Apply' buttons.



This screenshot shows a configuration window for the 'HDD No ...' event type. The 'Event Type' dropdown is set to 'HDD No ...'. The 'Enable' checkbox is unchecked. To the right of the 'Enable' checkbox, the text 'Less Than' is displayed, followed by a numeric input field containing '20' and a '%' symbol. The 'Show Message' checkbox is unchecked, and the 'Voice Prompts' checkbox is unchecked. The 'Alarm Upload' checkbox is checked, and the 'Send Email' checkbox is unchecked. The 'Log' checkbox is checked. The 'File Name' dropdown is set to 'None'. At the bottom, there are 'Save', 'Cancel', and 'Apply' buttons.

Network: Disconnection, IP conflict, MAC conflict.

The screenshot shows a configuration window for a network event. At the top, 'Event Type' is set to 'Net Disco...' and 'Enable' is checked. Below this, there are several options: 'Show Message', 'Record Channel', 'Buzzer', and 'Voice Prompts', all of which are unchecked. 'Send Email' is also unchecked. A numeric keypad is visible, with the number '10' selected. To the right of the keypad, 'Log' is checked and 'Delay' is set to '10 sec.'. 'File Name' is set to 'None'. At the bottom right, there are three buttons: 'Save', 'Cancel', and 'Apply'.

User: Illegal login.

The screenshot shows a configuration window for a user event. 'Event Type' is set to 'Illegal Login' and 'Attempt(s)' is set to '10'. 'Enable' is checked and 'Lock Time' is set to '30 min.'. Below this, there are several options: 'Buzzer' and 'Voice Prompts' are unchecked. 'Alarm Upload' and 'Log' are checked, while 'Send Email' is unchecked. 'File Name' is set to 'None'. At the bottom right, there are three buttons: 'Save', 'Cancel', and 'Apply'.

Storage

It is to set HDD management, storage parameters, set record plan and record control.

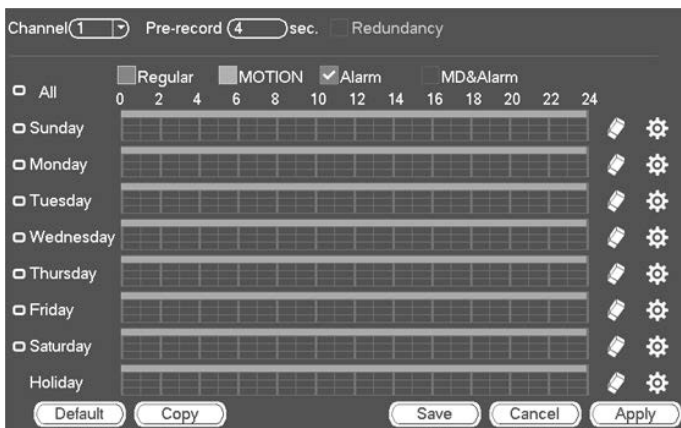
Schedule

It is for you to set record plan and snapshot plan.

Record




Note: You need to have proper rights to implement the following operations. Please make sure the HDDs have been properly installed. After the system booted up, it is in default 24-hour regular mode. You can set record type and time in schedule interface.


In the main menu, from Setting->Storage->Schedule, you can go to schedule menu.



Please note you need to go to main menu->Setting->System->General->Holiday to set holiday date first, otherwise, there is no holiday setup item.

Channel: Please select the channel number first. You can select “all” if you want to set for the whole channels.

 : Sync connection icon. Select icon  of several dates, all checked items can be edited together. Now the icon is shown as .

 : Click it to delete a record type from one period.


Record Type: Please check the box to select corresponding record type. There are four types: Regular/MD (motion detect)/Alarm/MD&Alarm.

Week day: There are eight options: ranges from Saturday to Sunday and all.

Holiday: It is to set holiday setup. Please note you need to go to the General interface (Main Menu->System->General) to add holiday first. Otherwise you can not see this item.

Pre-record: System can pre-record the video before the event occurs into the file. The value ranges from 1 to 30 seconds depending on the bit stream.

Redundancy: System supports redundancy backup function. You can highlight Redundancy button to activate this function. Please note, before enable this function, please set at least one HDD as redundant. (Main menu->Setting->Storage->HDD Manager). Please note this function is null if there is only one HDD.

Period setup: Click button  after one date or a holiday, you can see an interface shown as below.



There are four record types: regular, motion detection (MD), Alarm, MD & alarm.

Please follow the steps listed below to draw the period manually.

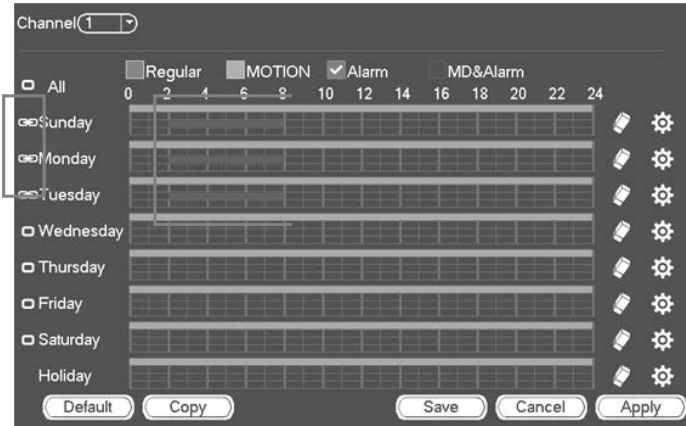
1. Select a channel you want to set.




2. Set record type.



3. Please draw manually to set record period. There are six periods in one day.

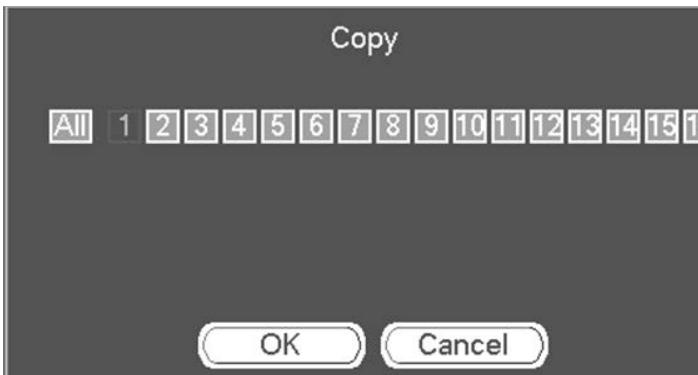


Please highlight icon  to select the corresponding function. After completing all the setups please click save button, system goes back to the previous menu.

There are color bars for your reference. Green color stands for regular recording, yellow color stands for motion detection and red color stands for alarm recording. The white means the Motion Detection and alarm record is valid. Once you have set to record when the Motion Detection and alarm occurs, system will not record neither motion detect occurs nor the alarm occurs.

Quick Setup

Copy function allows you to copy one channel setup to another. After setting in channel 1, click Copy button.



You can see current channel name is grey such as channel 1. Now you can select the channel you want to paste such as channel 5/6/7. If you want to save current setup of channel 1 to all channels, you can click the first box "ALL". Click the OK button to save current copy setup. Click the OK button in the Encode interface, the copy function succeeded.

Redundancy (Available for GNVR167 series only)

Redundancy function allows you to memorize record file in several disks. When there is file damage occurred in one disk, there is a spare one in the other disk. You can use this function to maintain data reliability and safety.

In the main menu, from Setting->Storage-> Schedule, you can highlight redundancy button to enable this function.

In the main menu, from Main menu->Setting->Storage->HDD Manager, you can set one or more disk(s) as redundant. You can select from the dropdown list. System auto overwrites old files once hard disk is full.

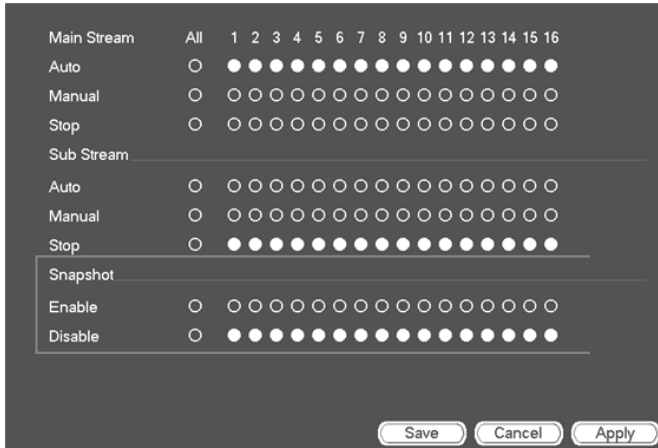
Please note only read/write disk or read-only disk can backup file and support file search function, so you need to set at least one read-write disk otherwise you can not record video.

Note: If current channel is not recording, current setup gets activated when the channel begin recording the next time. If current channel is recording now, current setup will get activated right away, the current file will be packet and form a file, then system begins recording as you have just set. After all the setups please click save button, system goes back to the previous menu. There are two ways for you to playback or search in the redundant disk. Set redundant disk(s) as read-only disk or read-write disk (Main menu->Setting->Storage->HDD Manager)). System needs to reboot to get setup activated. Now you can search or playback file in redundant disk.

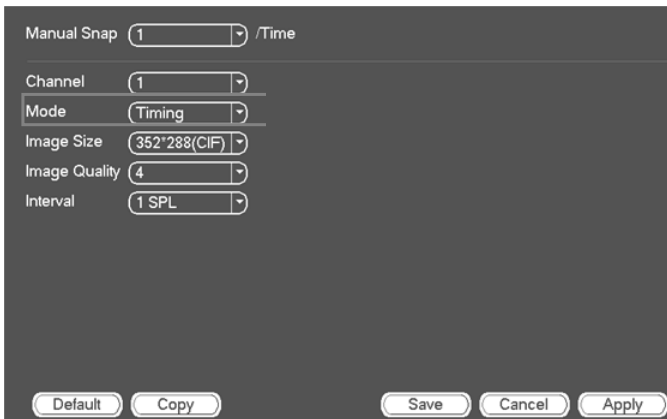
Snapshot

Schedule Snapshot

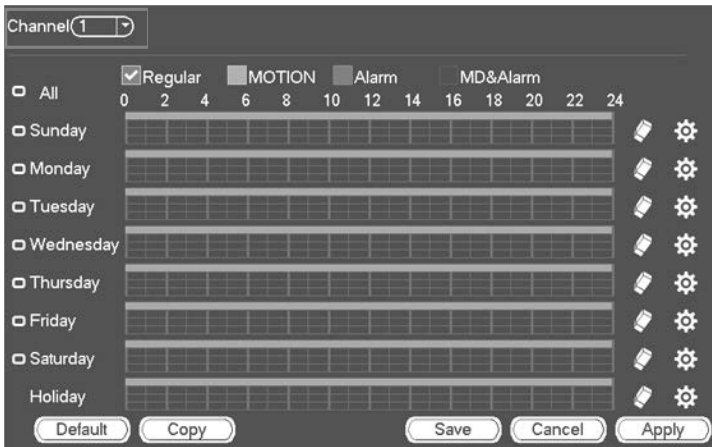
On the preview interface, right click mouse and then select Manual->Record, or in the main menu, from Setting->Storage->Record, check the box to enable snapshot function of corresponding channels.



In main menu, from Setting->Camera->Encode->Snapshot interface, here you can input snapshot mode as regular, size, quality and frequency.



In main menu, from Setting->Camera->Encode->Schedule interface, please enable snapshot function.



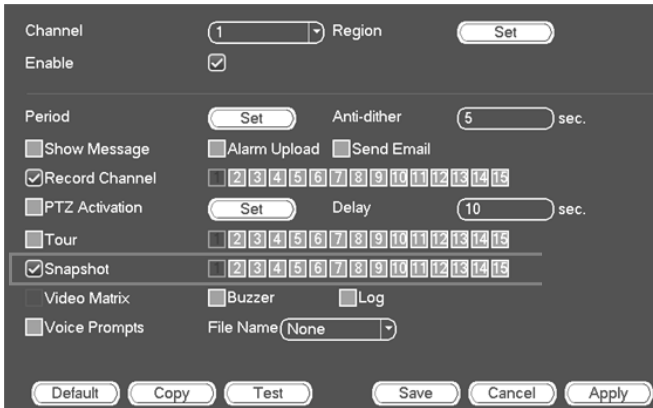
Trigger Snapshot

Please follow the steps listed below to enable the activation snapshot function. After you enabled this function, system can snapshot when the corresponding alarm occurred.

In main menu, from Setting->Camera->Encode->Snapshot interface, here you can input snapshot mode as trigger, size, quality and frequency.



In main menu, from Setting->Event->Detect, please enable snapshot function for specified channels.

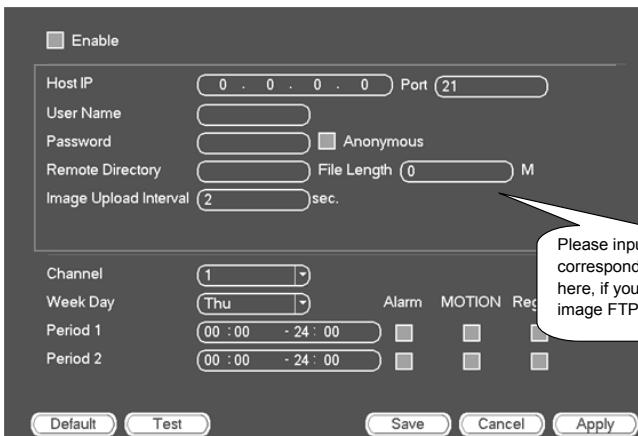


Priority

Please note the activation snapshot has the higher priority than schedule snapshot. If you have enabled these two types at the same time, system can activate the activation snapshot when alarm occurs, and otherwise system just operates the schedule snapshot.

Image FTP

In the main menu, from Setting->Network->FTP, you can set FTP server information. Please enable FTP function and then click save button.

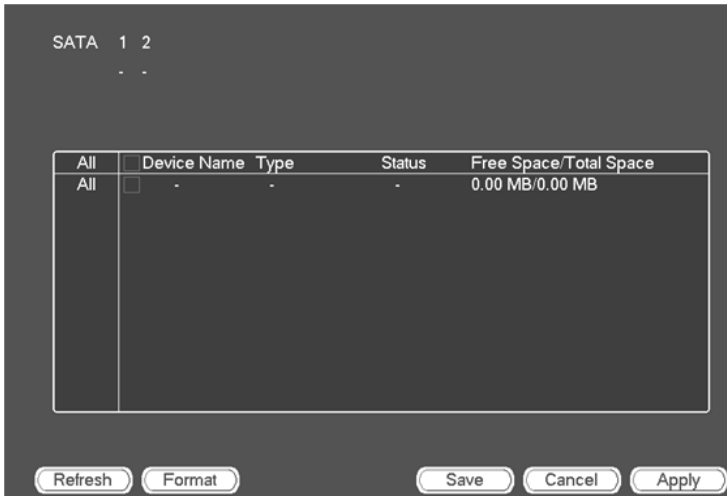


Please boot up corresponding FTP server.

Please enable schedule snapshot or activate snapshot first, now system can upload the image file to the FTP server.

HDD Manager

Here is for you to view and implement hard disk management.



You can see current HDD type, status, capacity and etc. The operation includes format HDD, and change HDD property (read and write/read-only/redundancy).

Record

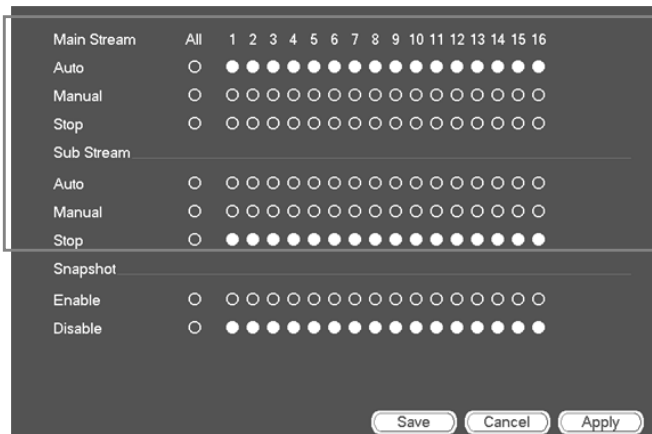
Record Control

You need to have proper rights to implement the following operations. Please make sure the HDD has been properly installed.

There are three ways for you to go to manual record menu.

- Right click mouse and then select Manual->Record.
- In the main menu, from Setting->Storage->Record.
- In live viewing mode, click record button in the front panel or record button in the remote control.

System supports main stream and sub stream. There are three statuses: schedule/manual/stop.



Please highlight icon “○” to select corresponding channel.

Manual: The highest priority. After manual setup, all selected channels will begin ordinary recording.

Schedule: Channel records as you have set in recording setup (Main Menu->Setting->System->>Schedule)

Stop: Current channel stops recording.

All: Check All button after the corresponding status to enable/disable all-channel schedule/manual record or enable/disable all channels to stop record.

Snapshot Operation

Check the corresponding box to enable/disable schedule snapshot function.

Main Stream	All	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Auto	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Manual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sub Stream																	
Auto	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stop	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Snapshot																	
Enable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disable	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>

HDD Detect

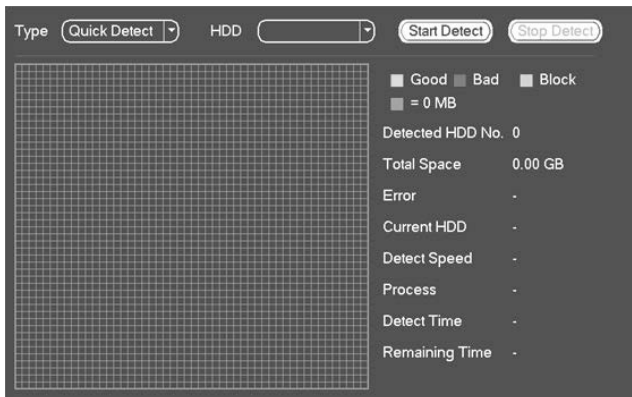
The HDD detect function is to detect HDD current status so that you can clearly understand the HDD performance and replace the malfunction HDD.

There are two detect types:

- Quick detect is to detect via the universal system files. System can quickly complete the HDD scan. If you want to use this function, please make sure the HDD is in use now. If the HDD is removed from other device, please make sure the write-data once was full after it installed on current device.
- Global detect adopts Windows mode to scan. It may take a long time and may affect the HDD that is recording.

Manual Detect

The manual detect interface is shown as below.

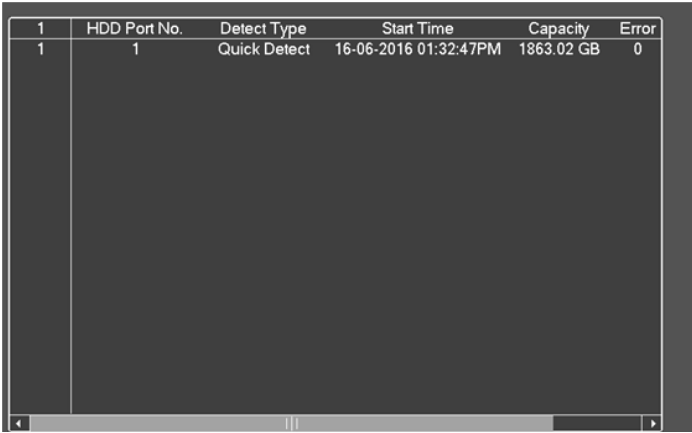


Please select detect type and HDD. Click start detect to begin. You can view the corresponding detect information.



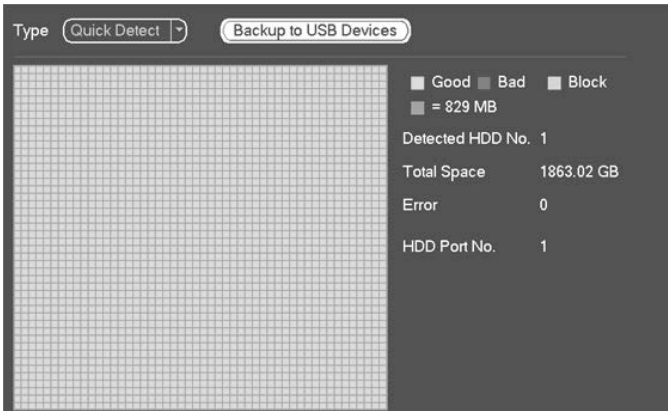
Detect Report

After the detect operation, you can go to the detect report to view corresponding information. The detect report interface is shown as below.



1	HDD Port No.	Detect Type	Start Time	Capacity	Error
1	1	Quick Detect	16-06-2016 01:32:47PM	1863.02 GB	0

Click the item you can see the detailed information such as detect result.



Type: Quick Detect (dropdown) Backup to USB Devices (button)

Legend:
■ Good ■ Bad ■ Block
■ = 829 MB

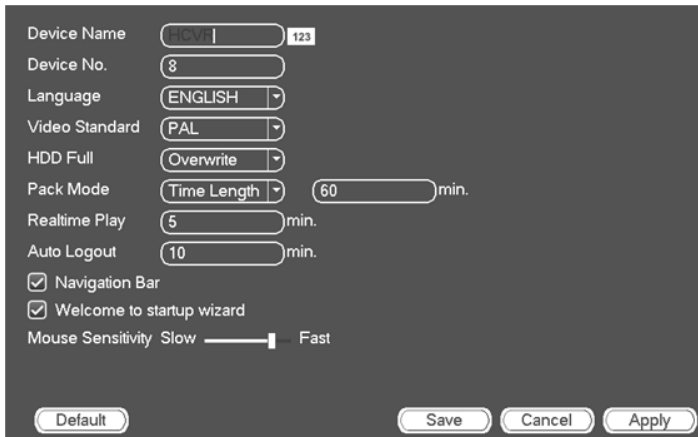
Detected HDD No. 1
Total Space 1863.02 GB
Error 0
HDD Port No. 1

System

General

Device

General setting includes the following items.



The screenshot shows a settings window with the following fields and options:

- Device Name: Text input field containing "123".
- Device No.: Text input field containing "8".
- Language: Dropdown menu set to "ENGLISH".
- Video Standard: Dropdown menu set to "PAL".
- HDD Full: Dropdown menu set to "Overwrite".
- Pack Mode: Dropdown menu set to "Time Length", with a sub-field for "60 min".
- Realtime Play: Text input field containing "5 min".
- Auto Logout: Text input field containing "10 min".
- Navigation Bar: Checked checkbox.
- Welcome to startup wizard: Checked checkbox.
- Mouse Sensitivity: Slider between "Slow" and "Fast", currently positioned towards "Fast".

Buttons at the bottom: Default, Save, Cancel, Apply.

Device Name: Please input a corresponding device name here.

Device No: Here you can set device number.

Language: System supports various languages: Chinese (simplified), Chinese (Traditional), English, Italian, Japanese, French, Spanish (All languages listed here are optional. Slight difference maybe found in various series.)

Video standard: There are two formats: NTSC and PAL. (Australia Standard: PAL)

HDD full: Here is for you to select working mode when hard disk is full. There are two options: stop recording or rewrite. If current working HDD is overwritten or the current HDD is full while the next HDD is no empty, then system stops recording, If the current HDD is full and then next HDD is not empty, then system overwrites the previous files.

Pack duration: Here is for you to specify record duration. The value ranges from 1 to 120 minutes. Default value is 60 minutes.

Real-time playback: It is to set playback time you can view in the preview interface. The value ranges from 5 to 60 minutes.

Auto logout: Here is for you to set auto logout interval once login user remains inactive for a specified time. Value ranges from 0 to 60 minutes.

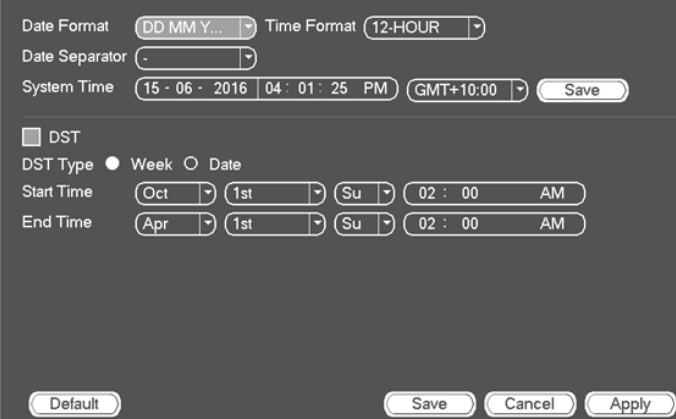
Navigation bar: Check the box here, system displays the navigation bar on the interface.

Startup wizard: Once you check the box here, system will go to the startup wizard directly when the system restarts the next time. Otherwise, it will go to the login interface.

Mouse sensitivity: You can set double click speed via dragging the slide bard. You can Click Default button to restore default setup.

Date and Time

The interface is shown as below.



The screenshot shows a configuration window for Date and Time settings. At the top, there are dropdown menus for 'Date Format' (set to 'DD MM Y...') and 'Time Format' (set to '12-HOUR'). Below these is a 'Date Separator' dropdown (set to '.'). The 'System Time' section displays '15 - 06 - 2016 04 : 01 : 25 PM' and 'GMT+10:00', with a 'Save' button to the right. A 'DST' checkbox is present and unchecked. Under 'DST Type', the 'Week' radio button is selected. The 'Start Time' is set to 'Oct 1st Su 02 : 00 AM' and the 'End Time' is set to 'Apr 1st Su 02 : 00 AM'. At the bottom, there are four buttons: 'Default', 'Save', 'Cancel', and 'Apply'.

Date format: There are three types: YYYYMM-DD: MM-DD-YYYYY or DD-MM-YYYY.

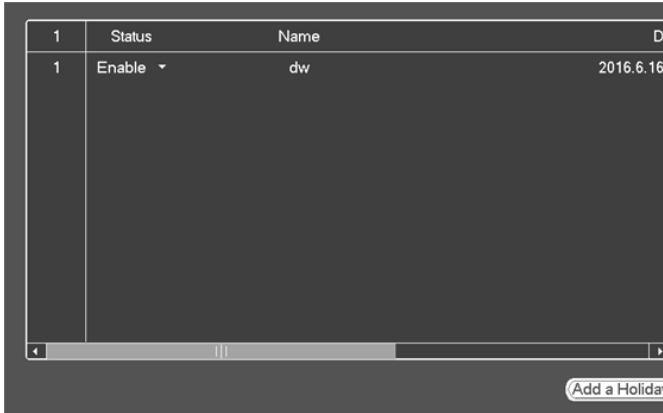
Date separator: There are three denotations to separate date: dot, beeline and solidus.

DST: Here you can set DST time and date. Here you can set start time and end time by setting corresponding week setup or by setting corresponding

NTP: It is to set NTP server information.

Holiday

Holiday setup interface is shown below.



1	Status	Name	Date
1	Enable	dw	2016.6.16

[Add a Holiday](#)

Click Add new holiday button, you can input new holiday information.



Add Holidays

Holiday Name

Repeat Mode Once Always

Holiday Range Date Week

Start Time

End Time

Add More

[Add](#) [Cancel](#)

You can set holiday name, repeat mode and start/end time.

Note: When you enable Holiday settings and schedule setup at the same time, holiday setting has the priority. If the selected day is a holiday, then system records as you set in holiday setting. If it is not a holiday, system records as you set in Schedule interface. There is no year setup on the holiday setup. For example, if you set 30th Oct, 2016 as a holiday, then the date of 30th Oct in each year will be set as a holiday.

Display

It is to set display, TV adjust, tour, zero-channel encode, and preview favorites information.

Display

Display setup interface is shown as below.



Time display: You can select to display time or not when system is playback.

Channel display: You can select to channel name or not when system is playback.

Image original rate: Check the box here, the video can be displayed at its actual size.

Transparency: Here is for you to adjust menu transparency. The higher the value is, the more transparent the menu is.

Resolution: There are four options: 1920×1080, 1280×1024, 1280×720, 1024×768(default). Please note the system needs to reboot to activate current setup.

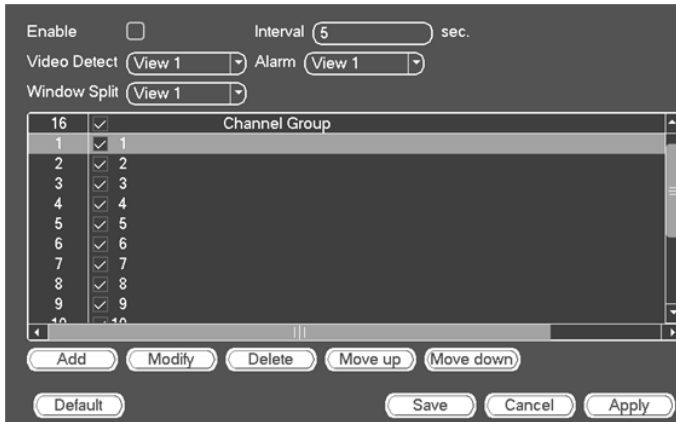
Preview enhance: Check the box; it can optimize the video quality of the preview video.

Please highlight icon  to select the corresponding function.

After completing all the setups please click save button, system goes back to the previous menu.

Tour

Here you can activate tour function. Click Setup button, you can following interface.



Enable tour: Highlight box here to enable this function.

Interval: System supports 1/8-window tour. Input proper interval value here. The value ranges from 5-120 seconds. It is for schedule tour/alarm/motion detect tour.

Split: You can select window split mode from the dropdown list.

Channel group: It is to display all channel groups on current split mode. You can edit and delete a channel group here. Double click an item in the list; you can edit its channel group setup. System only maximum supports 24 channels.





Add: Under specified window split mode, click it to add channel group.

Delete: Click it to remove selected channel group.

Move up: Click it to move current selected channel up.

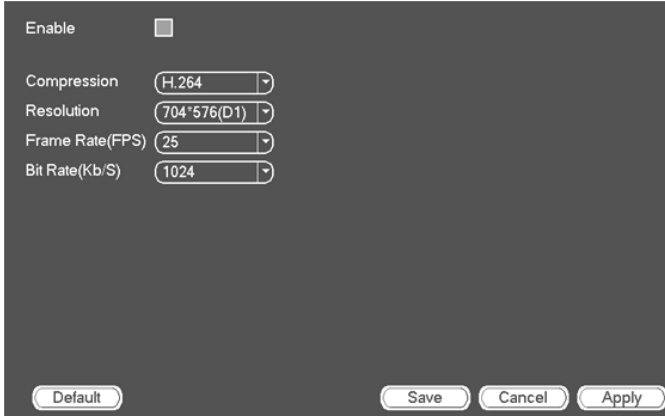
Move down: Click it to move current selected channel down.

Default: Click it to restore default setup.

Use mouse to enable /disable tour.  means the tour function is enabled and  means tour function is disabled. On the navigation bar, click  or  to enable/disable tour function.

Zero-channel Encoding

Click zero-channel encoding button, you can go to the following interface.



The screenshot shows a configuration window for zero-channel encoding. At the top left, there is an 'Enable' checkbox which is currently unchecked. Below it are four dropdown menus: 'Compression' set to 'H.264', 'Resolution' set to '704*576(D1)', 'Frame Rate(FPS)' set to '25', and 'Bit Rate(Kb/S)' set to '1024'. At the bottom of the window, there are four buttons: 'Default', 'Save', 'Cancel', and 'Apply'.

Here you can enable and set zero-channel encoding function so that you can view several video sources at one channel.

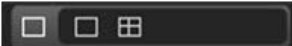
Enable: This function is disabled by default. Check the box here to enable this function so that you can control the zero-channel encoding function at the WEB.

Compression: System default setup is H.264. You can set according to device capability.

Resolution: The resolution value may vary due to different device capabilities. Please select from the dropdown list.

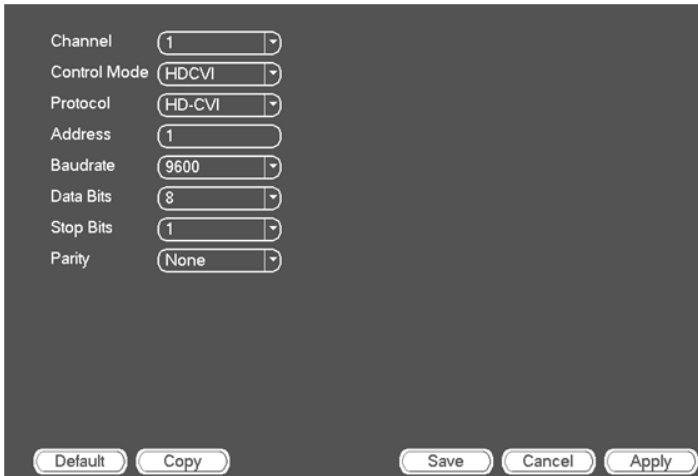
Frame rate: The frame rate value may vary due to different device capabilities. Please select from the dropdown list.

Bit Rate: The bit rate value may vary due to different device capabilities and frame rate setups. Please select from the dropdown list.

Save: Click the Save button to save current setup. If this function is disabled, you can not operate zero-channel encoding function at the WEB, the video is black or null even you operate when the function is disabled. After you enabled this function, login the Web and you can select zero-channel encoding mode at the right corner of the interface . Select a mode; you can view the local preview video.

PTZ

The pan/tilt/zoom setup includes the following items. Please select channel first.




A screenshot of a PTZ configuration dialog box. It features a dark grey background with white text and controls. The settings are as follows:

Channel	1
Control Mode	HDCVI
Protocol	HD-CVI
Address	1
Baudrate	9600
Data Bits	8
Stop Bits	1
Parity	None

At the bottom of the dialog, there are five buttons: Default, Copy, Save, Cancel, and Apply.

PTZ type: There are two options: local/remote. Please select remote if you are connecting to the network PTZ.



A screenshot of a PTZ Type configuration dialog box. It features a dark grey background with white text and controls. The settings are as follows:

Channel	16
PTZ Type	Remote

At the bottom of the dialog, there are five buttons: Default, Copy, Save, Cancel, and Apply.

Control mode: You can select control mode from the dropdown list. There are two options: Serial/HDCVI. For HDCVI series product, please select HDCVI. The control signal is sent to the PTZ via the coaxial cable. For the serial mode, the control signal is sent to the PTZ via the RS485 port.

Protocol: Please select corresponding protocols such as PELCOD.

Address: input corresponding PTZ address.

Baudrate: Select baud rate.

Data bits: Select data bit.

Stop bits: Select stop bit.

Parity: There are three choices: none/odd/even.

After completed all the setups please click save button, system goes back to the previous menu.

Voice

The audio function is to manage audio files and set schedule play function. It is to realize audio broadcast activation function.

File List

Here you can add audio file, listen to the audio file, or rename/delete audio file. Here you can also set audio volume.



When in HDD mode, the newly added audio file can be saved on the HDD automatically. You do not need to connect to the USB device if you want to use it the next time. When in USB mode, after you imported, you need to connect the USB device all the time; otherwise, the audio link function may fail. So, if you want to use the audio trigger function, please make sure the audio file is on the UBS device and the USB device has connected to the NVR before the NVR boots up. You need to make sure the USB device connection is always there if you want to manage and use the audio file function.

Click Add button, you can add audio file and import the audio file via the USB device.

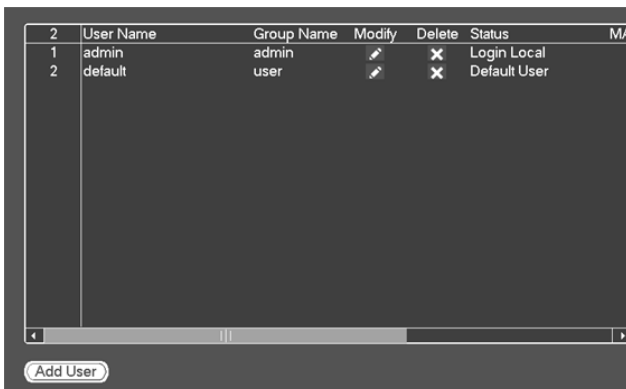


The audio file can be saved on the HDD or on the USB device.

If there is a USB device (containing the audio file) and the HDD (containing the audio file) at the same time, the HDD mode has higher priority. That is to say, NVR uses the audio file from the HDD.

Account

Here is for you to implement account management.



You can:

- Add new user
- Modify user
- Add group
- Modify group
- Modify password

For account management please note:

For the user account name and the user group, the string max length is 6 characters. The backspace in front of or at the back of the string is invalid. There can be backspace in the middle. The string includes the valid character, letter, number, underline, subtraction sign, and dot.

The default user amount is 64 and the default group amount is 20. System account adopts two-level management: group and user. No limit to group or user amount.

For group or user management, there are two levels: admin and user.

The user name and group name can consist of eight bytes. One name can only be used once. There are one default users: admin.

One user should belong to one group. User right can not exceed group right.

About reusable function: this function allows multiple users use the same account to login.

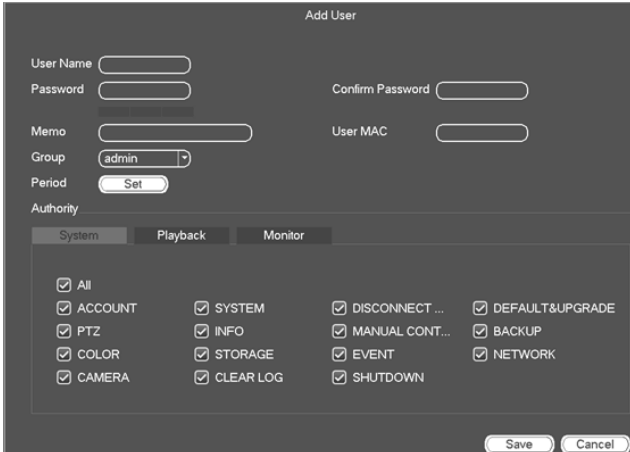
About user account and MAC. When you add a new user, you can input the MAC address of current user. Only the user of the same MAC address can access the device remotely.(MAC address is for the device of the same LAN.) If you leave MAC address item in blank when you add a new user, the user of any MAC address can access the device remotely. You can set or change MAC address when you add or modify a user.

Note: Current function does not support IPV6.

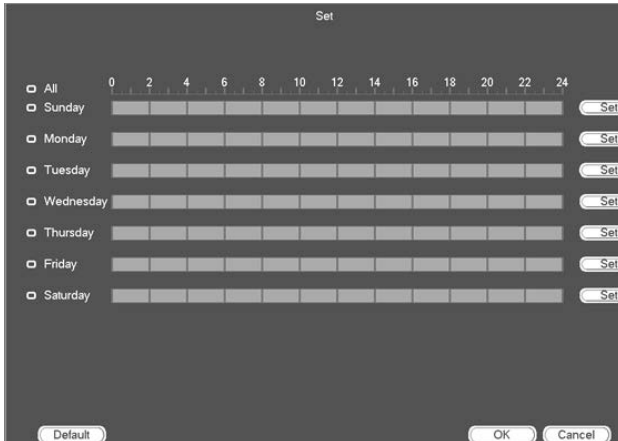
After all the setups please click save button, system goes back to the previous menu.

Add User

Click modify user button  in following interface.



The following interface will be shown.



Please input the user name, password, select the group it belongs to from the dropdown list.

Then you can check the corresponding rights for current user.

For convenient user management, usually we recommend the general user right is lower than the admin account.

- **Username:** admin. **Password:** (null).

When you create a new user, you can input the corresponding MAC address of current user. If you leave this item in blank, any MAC address user can share this user account to login. Please note system needs to check the validity of MAC. Only the 12-digit format address can pass the validity verification. System only saves small character even you input capitalized one. You can see the corresponding prompt if there is any illegal input.

Click the Set button after the period, you can set valid period to use current account.


The 'Set' dialog box features a horizontal timeline at the top with markers from 0 to 24 in increments of 2. Below this, there are seven rows, one for each day of the week (All, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday). Each row contains a series of 24 small rectangular slots representing hourly periods. To the right of each row is a 'Set' button. At the bottom of the dialog, there are three buttons: 'Default', 'OK', and 'Cancel'.

Click Set button, you can set six periods in one day.

The 'Period' dialog box shows the 'Current Date' as 'Sunday'. It lists six periods, each with a time range (00:00 - 24:00) and a checkbox. The first period's checkbox is checked. Below the periods is a 'Copy' section with checkboxes for each day of the week: All, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday. An 'OK' button is located at the bottom center of the dialog.

Check the box after the period, you can enable current setup.

Modify user

Click  , you can go to the following interface to change user information.



Modify User

User Name

Modify Password

Old Password

New Password

Confirm Password

User MAC

User Name

Group

Memo

Authority

System Playback Monitor

All

ACCOUNT SYSTEM DISCONNECT ... DEFAULT&UPGRADE

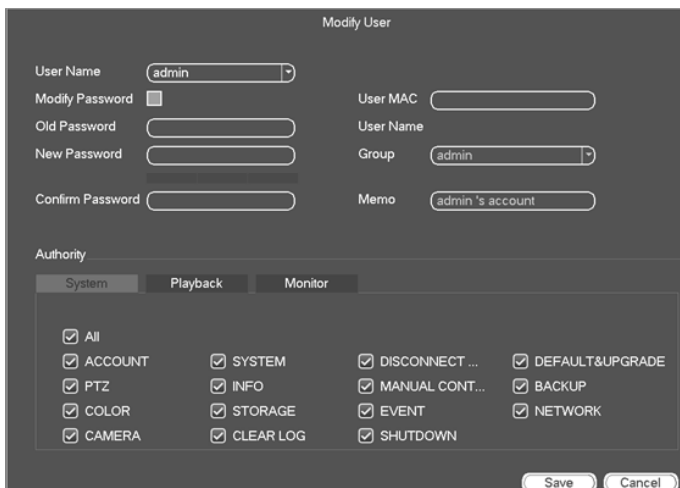
PTZ INFO MANUAL CONT... BACKUP

COLOR STORAGE EVENT NETWORK

CAMERA CLEAR LOG SHUTDOWN

Change Password

Check the Modify password box, you can change password. Please input old password, and then input new password twice to confirm.



Modify User

User Name

Modify Password

Old Password

New Password

Confirm Password

User MAC

User Name

Group

Memo

Authority

System Playback Monitor

All

ACCOUNT SYSTEM DISCONNECT ... DEFAULT&UPGRADE

PTZ INFO MANUAL CONT... BACKUP

COLOR STORAGE EVENT NETWORK

CAMERA CLEAR LOG SHUTDOWN

The password can contain 24 characters and the space at the begin or at the end of the password are invalid. It can contain in the middle of the password.

Add/Modify Group

Click Group button at Add User interface, you can see the following interface.

Modify User

User Name

Modify Password

Old Password

New Password

Confirm Password

User MAC

User Name

Group

Memo

Authority

System Playback Monitor

All

ACCOUNT SYSTEM DISCONNECT ... DEFAULT&UPGRADE

PTZ INFO MANUAL CONT... BACKUP

COLOR STORAGE EVENT NETWORK

CAMERA CLEAR LOG SHUTDOWN

Save Cancel

Click add group button.

Add Group

Group Name

Memo

Authority

System Playback Monitor

All

ACCOUNT SYSTEM DISCONNECT ... DEFAULT&UPGRADE

PTZ INFO MANUAL CONT... BACKUP

COLOR STORAGE EVENT NETWORK

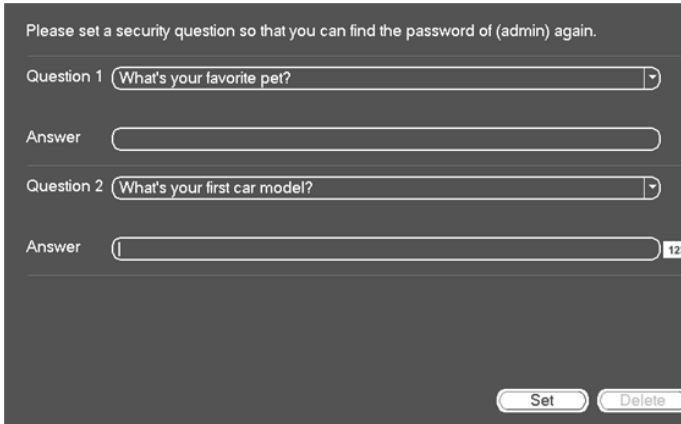
CAMERA CLEAR LOG SHUTDOWN

Save Cancel

You can input group name and then input some memo information if necessary. There are total 56 rights such as control panel, shut down, real-time monitor, playback, record, record file backup, PTZ, user account, system information view, alarm input/output setup, system setup, log view, clear log, upgrade system, control device and etc.

Security Question

The security question is shown as below.



Please set a security question so that you can find the password of (admin) again.

Question 1

Answer

Question 2

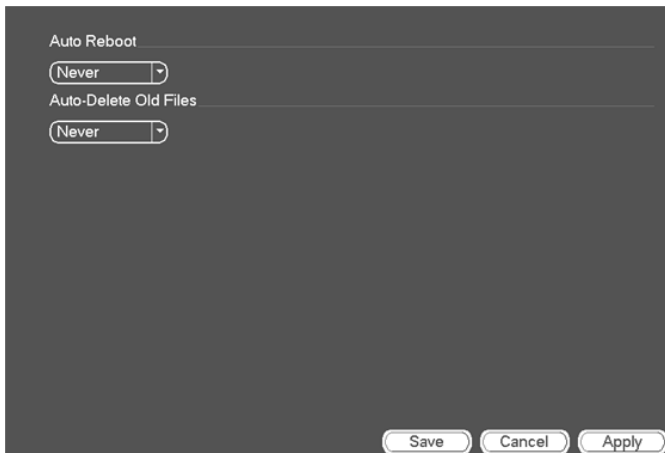
Answer

123

You can change security questions and input your answer. Click set to save the question asked and answer.

Auto Maintain

Here you can set auto-reboot time and auto-delete old files setup. You can set to delete the files for the specified days.

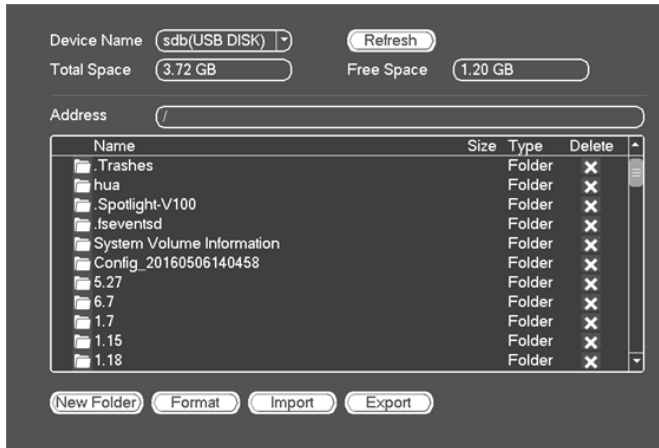


Auto Reboot

Auto-Delete Old Files

Config Backup

The configuration file backup interface is shown as below.



This function allows you to import/export system configuration. You can use this function when there are several devices need the same setup.


Export: Please connect the peripheral device first and then go to the following interface. Click Export button, you can see there is a corresponding “Config_ Time” folder. Double click the folder, you can view some backup files.

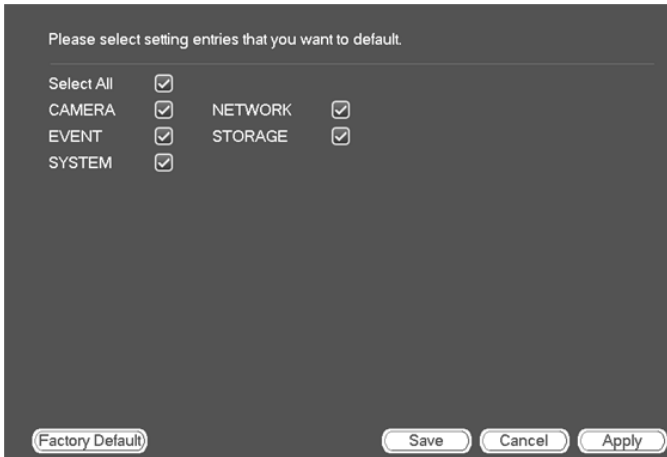
Import: Here you can import the configuration files from the peripheral device to current device. You need to select a folder first. You can see a dialogue box asking you to select a folder if you are selecting a file. System pops up a dialogue box if there is no configuration file under current folder. After successfully import, system needs to reboot to activate new setup.

Format: Click Format button, system pops up a dialogue box for you to confirm current operation. System begins format process after you click the OK button.

Note: System can not open config backup interface if there is backup operation in the process. System refreshes device when you go to the config backup every time and set current directory as the root directory of the peripheral device. If you go to the configuration backup interface first and then insert the peripheral device, please click Refresh button to view the newly added device.

Default

Click default icon, system pops up a dialogue box. You can check  to restore default factory setup.



- Camera
- Network
- Event
- Storage
- System

Please highlight icon  to select the corresponding function.

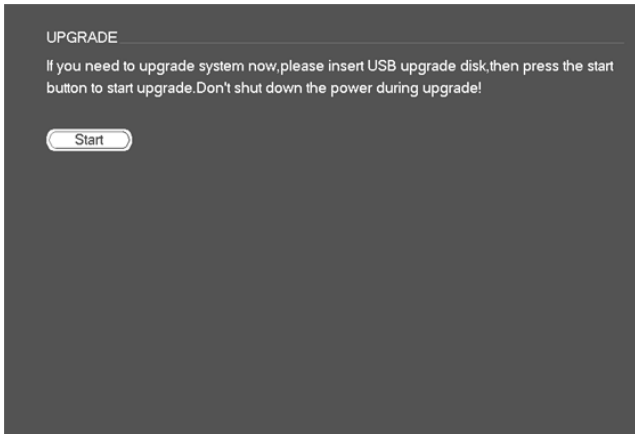
Click factory default button, you can restore factory default setup.

After all the setups please click save button, system goes back to the previous menu.

Note: System menu color, language, time display mode, video format, IP address, user account will not maintain previous setup after default operation!

Update

Here is for you to view hardware features, software version, built date, release SN information and etc. You can also update system here.



Click Start then please insert the USB device that have the update file to the device and then click the Start button to begin the update. Please make sure the upgrade file name is update.bin.

GUARDIAN LIVE PRO APP
























- Android: Open Google Play app in your smart phone. Search Guardian Live Pro or Guardian Live Pro HD, download it and install.
- iOS: Open App Store app in your smart phone. Search Guardian Live Pro or Guardian Live Pro HD, download it and install.

Compatibility: Android: Requires Android 3.0 and up
 iOS: Requires iOS 7.0 or later

Using the App

You can perform the following operation* when using the app for remote viewing.

Icon:

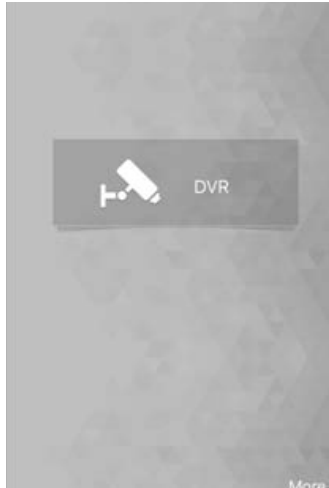
		preview split
		open close all video
		favourite
		menu
		gesture/demo/help
		select multiple camera
		open 1 camera video
		call preset
		iris control (open)
		iris control (close)
		focus control (wider)
		focus control (narrower)
		zoom in
		zoom out

* Please note that app screenshots are for reference only. Most screenshots are for iPad and Android Tablets. User Interface for iPhone and Android Phones might differ in terms of icons layout and functionality and may change without notice.

Some features may not work with the cameras included and may work with other optional cameras.

Remote Monitoring

Select the icon to enter NVR.

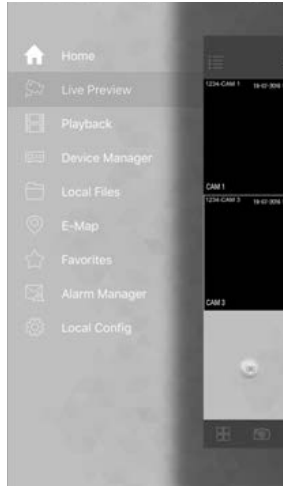


Main Menu

Enter camera, you will see Live Preview interface by default.



Click on , system displays main menu interface.



User can click on function in main menu to enter corresponding function interface.

Main functions includes: Live Preview, Playback, Device Manager, Local Files, Favorites, Alarm Manager and etc.

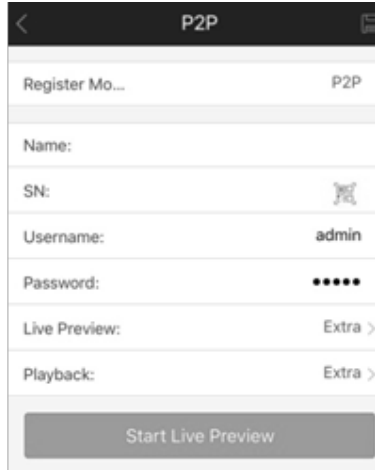
Device Manager

In Device Manager, you can add device, modify device info, remotely configure device, view HDD and delete device. Click on added device in the list, you can see its functional buttons.


Add Device

To add device:


Step 1. In device manager interface, click  to enter add device interface.



The screenshot shows a mobile interface titled 'P2P'. It contains the following fields and options:

- Register Mo...: P2P
- Name:
- SN: 
- Username: admin
- Password: •••••
- Live Preview: Extra >
- Playback: Extra >
- Start Live Preview button

Parameter	Note
Register Mode	<ul style="list-style-type: none">• P2P: for network environment, add device by scanning two-dimension code, inputting SN.• QuickDDNS: for network environment, add device by inputting complete domain name address, and analysis is done by QuickDDNS.• IP/Domain name: for normal environment, add device by inputting its IP address or third-party domain name.
Name	Device name.
SN	<ul style="list-style-type: none">• P2P type: input SN.• QuickDDNS: input complete domain name.• IP/Domain name type: input IP address or complete third party domain name.
Username/Password	Device username and password are both admin. If changed, please input new username and password.
Live Preview/Playback	Select main stream or extra stream for live preview and playback.

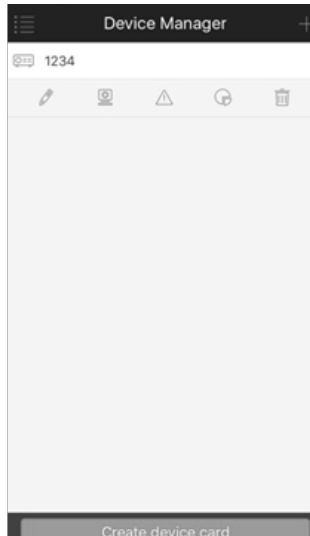
Step 2. Fill in parameter, and click on  to save.

You can click on Start Live Preview to view all channels of the device. System will go to monitoring page and save device info. For device supporting P2P, you can scan QR code, input SN to add device.


Modify Device Info

To modify device information:

Step 1. In device manager interface, click on device. System shows dropdown menu.



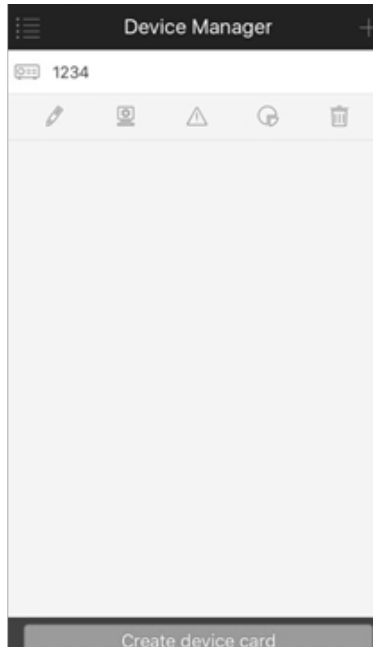
Step 2. Click on  in dropdown menu.


Step 3. Change device info, and click on  to save.

Delete Device

To delete device:

Step 1. In device manager interface, click on device. System shows dropdown menu.



Step 2. Click on  in dropdown menu. System asks if to delete the device.

Step 3. Click on OK.

Remote Configuration

Via remote configuration, you can perform function of motion detect, alarm setting, camera setting, storage manager and user manager.

To configure:

Step 1. In device manager interface, click on device. System shows dropdown menu.


Step 2. Click on  in dropdown list.

Step 3. Select corresponding item to remotely configure.

View HDD Information

You can view HDD name, status, free capacity and total capacity.

Step 1. In device manager interface, click on device. System shows dropdown menu.


Step 2. In dropdown menu, click on  to view HDD information..


Alarm Out Control

You can enable and disable alarm output of channel.

To enable or disable alarm output:

Step 1. In device manager interface, click on device. System shows dropdown menu.

Step 2. In dropdown menu, click on .

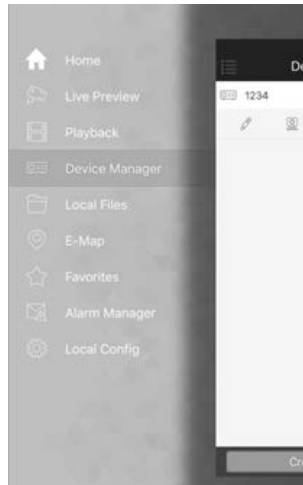
Step 3. Select alarm out channel, click on  to enable or disable alarm out.


WIFI Config Device

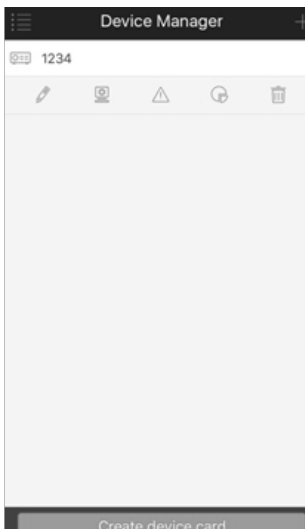
In live preview, it provides shortcut to add device, and supports to add product via the same WIFI and two-dimension code scanning which can get device SN filled in chart in App.

Smart config add device:

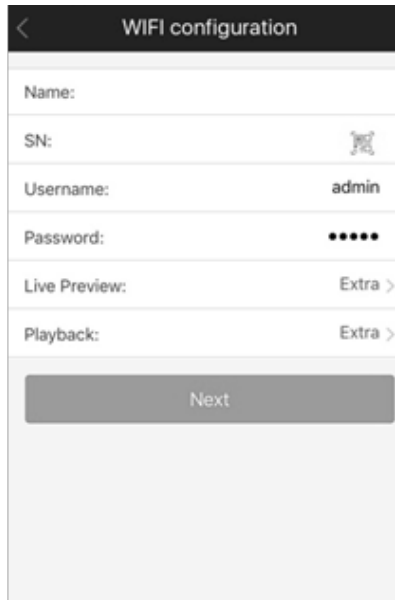
Step 1. User click device list button .




Step 2. Click add device button , system shows device adding interface, select WIFI config device.



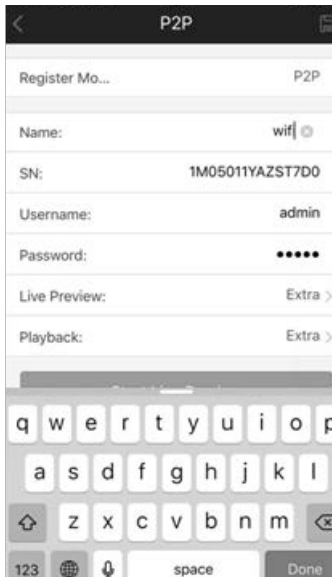
Step 3. Interface displays: name, SN (QR code), username, password, live preview, and playback.



Step 4. Tap , and it shows two-dimension code box.

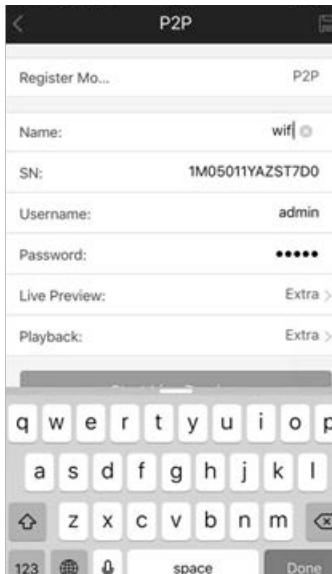


Step 5. Scan QR code of device, when complete, return to device adding interface. SN will be automatically filled in.

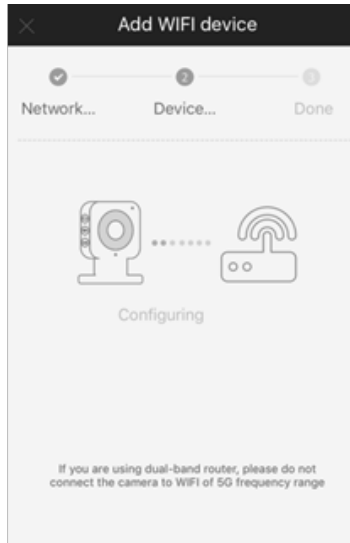


Step 6. When you scan QR code, click back to return to device adding interface.

Step 7. Input SN, click input field to input device SN.



Step 8. After you complete input, click next.

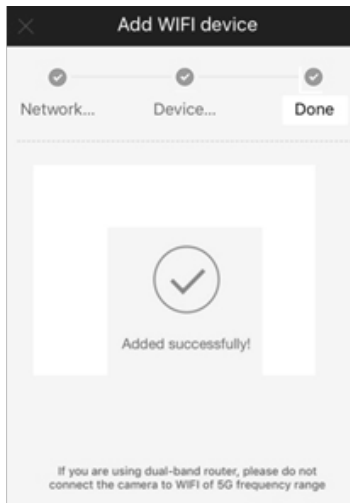


Step 9. Input WIFI password and click next.

Step 10. System will auto configure (wait).

Step 11. If failed, then click try again or repeat the above steps.

Step 12. Save data if all config are correct and go to live preview interface.



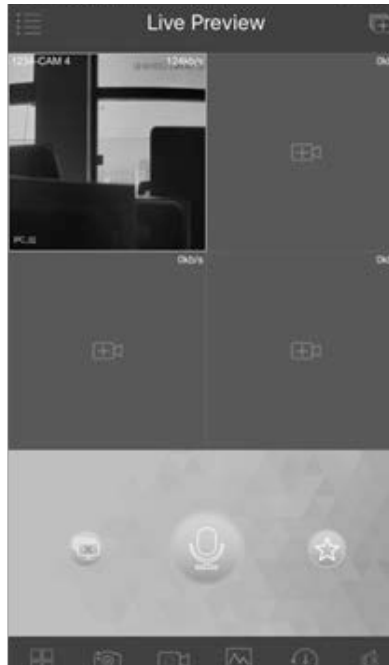
Step 13. Save data if information is correct.

Import Cloud Device

GCVR series do not support cloud devices.


Live Preview


Click on ☰ and click on Live Preview in main interface to enter live preview. When you click camera, you will enter see live preview interface by default.

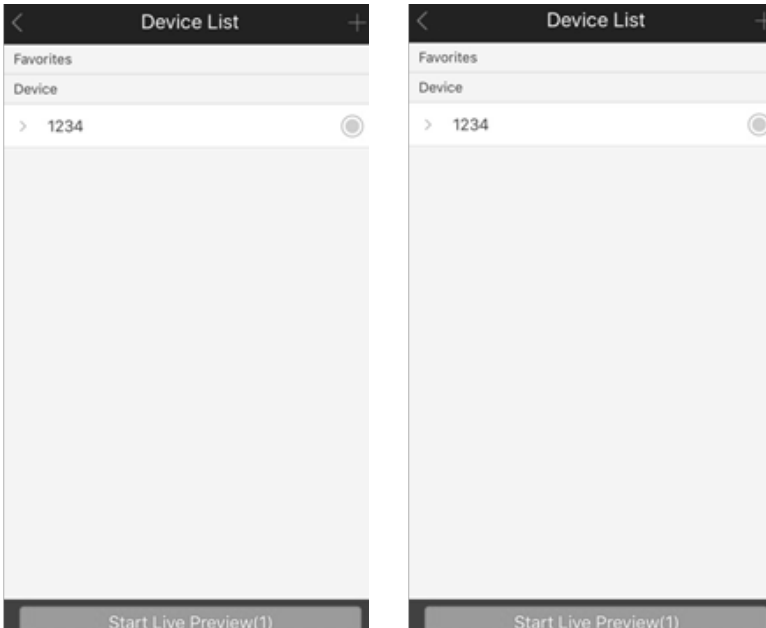


Video Monitoring

The app supports 2 methods to monitoring video.

1. In corresponding window open monitoring video of a certain window. Click on  in window, select channel of device displayed as to monitor the selected channel.

2. Open monitoring video of multiple windows. Click on  at the upper-right corner, and select one or more channels in displayed device list. Click on Start Live Preview at the lower bottom. System will display monitoring video from first window in sequence.



Close Video Monitoring


System supports two methods to close Video monitoring.

1. Close a single channel.


Long press monitoring window you want to close and drag it to the trashcan, it will be deleted.




2. Close all monitoring channels

Click on  to close all monitoring channels.

Record

Select designated record channel and click on  to start record. Record status on bar at the bottom will show a red dot. Click this button again to stop recording of the channel.

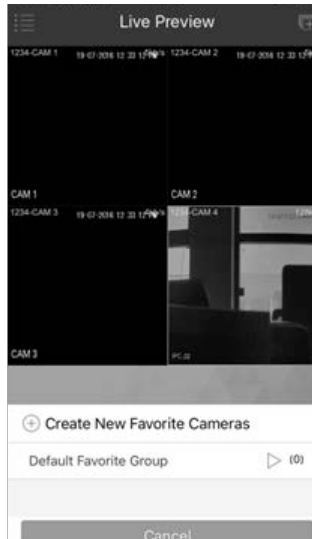
Snapshot

Select channel to snapshot, click on  to snapshot current channel. You can view snapshots under local file path. Android device can view snapshots directly under app installation path.

Favorites

App supports favorites features.

In live preview interface, select a video window in preview, click on ☆ to add it to favorites.



Select Favorites, and the process is complete.

Playback

In live preview, click on ⏮, the selected channel will play video of the previous 30 seconds.

Note:

System default playback is 30 seconds. You can set playback time in local config.

Click on ⏮ to end playback and return to monitoring mode.

PTZ

Direction and Zooming

Click on  to activate PTZ panel. The selected window will be maximized.


When PTZ control is activated, use hand to control PTZ direction by sliding touch screen:

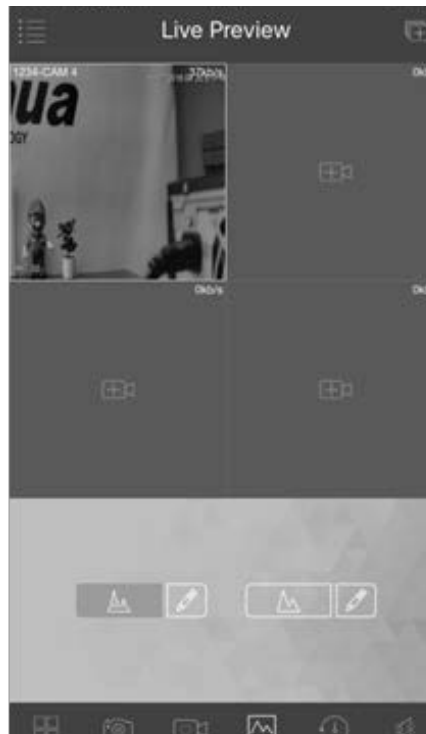
PTZ rotation: slide the touch screen toward designated direction to rotate PTZ.

Focus control: Slide with two fingers to control focus.


Bit Stream Switch


System switches live preview and bit stream switch.


Step 1. Under live preview, select a preview window, click on . System displays bit stream switch panel.



Step 2. You can switch between main and extra stream.

Click on , to switch to main stream encoding.

Click on , to switch to encoding extra stream.


Click on , customize main/extra stream.






Alarm Out Control

GCVR does not support alarm output.

Image Adjustment

System supports image adjustment including brightness, contrast, saturation and etc.

Step 1. In live preview, select a monitoring window, click on  button, open image adjustment control panel.

Icon	Note
	Adjust brightness
	Adjust contrast
	Adjust color
	Adjust saturation
	Reset

Step 2. Click on functional icon to adjust corresponding effect. You can increase/decrease parameter by clicking on +/- buttons in monitoring window.

Zoom In

Via touch signal to zoom in current video, and can drag zoomed video in order to view details in video.

Window Position Switch

Select a window, drag the window to the target window, and the two windows will switch position.


Fish-eye

For future use only.

Playback


System supports record playback and picture playback.

Record playback is to play record saved on GCVR; picture playback is to play picture saved on smartphone/tablet.

Click on  button to view main menu. Click on playback on main menu to enter playback interface. The default is to play record, but you can switch it to picture by clicking on tab above.

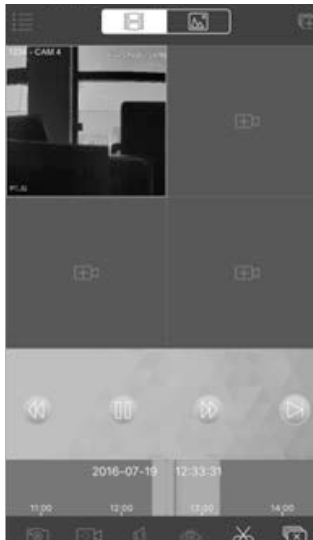
Record Playback

To record:

Step 1. Click on  in window to open device list.

Step 2. Select playback period.











Step 3. Select record channel to view. System can play video of selected channel in selected window.



You can close playback by either of:


Close a single channel playback: long press video to close playback and drag it to the trashcan above.

Close all channels playback: click on  to close all playback.

Parameter	Note
	<p>Quick: quick play with 2x, 4x or 8x speed. Select playing video, click on  to 2x play; click on  to 4x play. During 4x play, click on  to 8x play and click on it again back to normal speed.</p> <p>Slow: slow play with 1/2x, 1/4x and 1/8x speed. Select playing video, click on  to 1/2 play; click on  to 1/4 play. During 1/4 play, click on  to 1/8 play and click on it again back to normal speed.</p>
	Play/Pause
	Play by frame. Click on  to play next frame.


Picture Playback

To playback picture:

Step 1. Click on  button to open device list.

Step 2. Select playback period.

Step 3. Select picture channel to view. System will play picture of selected channel in selected window.

Click on  to close playback.

File Manager

System supports viewing, editing, exporting of live preview and snapshot, record during playback.

View File

Click on record file to view. In the interface, you can play, pause, snapshot, play audio, quickly play, slowly play and etc.

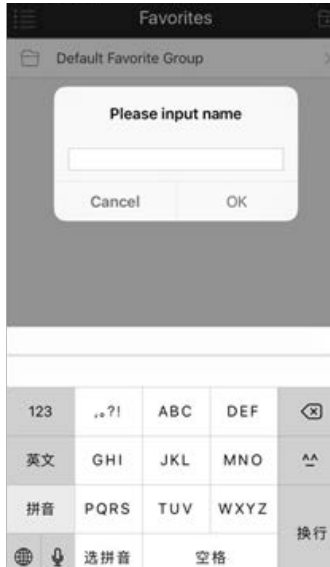
E-Map



For future use only.

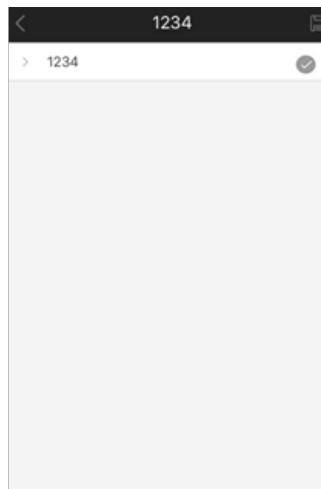
Favorites

System supports to create new favorites, or add monitoring spot to existing favorites.

Step 1. Click on  and input name.



Step 2. Enter a certain favorite group, click on  at upper-right corner to enter device list. Check designated channel and click on  to add it into favorites.



Alarm Manager

Alarm push function is the function to enable push notification generated on GCVR or App Cam devices to smartphone/tablet. User can preview and playback according to push info.

Push Config (Motion Detection Only)

Step 1. Select device to push.

Step 2. Select push type.



Step 3. Select Motion Detect.

Step 4. Select camera that you want to send you push notification when it detects motion.

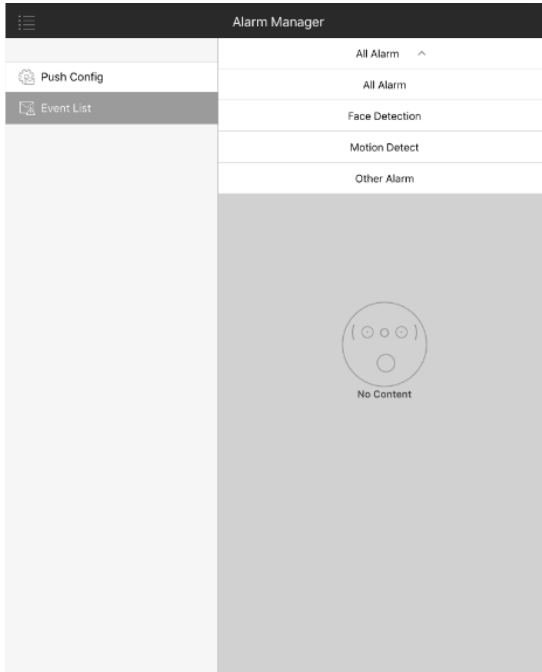
Step 5: Tap back and save the setting.

Other functions is not supported currently and is for future use only.

Note: Android user need to login Google account. Videos and pictures push notification requires storage on smartphone or tablet and you must set alarm record. System supports to store up to 50 historical records in event list.

Alarm Push Event List

You can view historical record in event list. Click all alarms dropdown list, you can view: face detection/moving detection/other alarm.



Local Config

System supports local configuration including PTZ step, capture mode, push duration, video mode and etc.

Parameter	Note
PTZ Step	Used to set PTZ step during live preview. The larger the step length, the higher the speed will be. Range: 1~8.
Capture Mode	Configure continuous snapshot quantity in live preview interface and etc. There are three modes: 1, 3 and 5.
Push Duration	Set corresponding playback duration of push info, including: 15s, 30s, 1min, 2min, 5min.
Video Mode	Default is higher-performance mode. If you encounter window split error or system crash, please witch to compatible mode.
Real-time Playback	Set playback period, as 5s~60s adjustable.
Protection	Set password protection of mobile monitoring app. After you have set password, every time you login, you must verify password for security purpose.



TROUBLESHOOTING

When a malfunction occurs, it may not be serious and can be corrected easily. The following describes the most common problems and solutions. Please refer to the following before calling Uniden Customer Service for support:

1. NVR can not boot up properly.

There are following possibilities:

- Input power is not correct.
- Power connection is not correct.
- Power switch button is damaged.
- Program upgrade is wrong.
- HDD malfunction or HDD ribbon is damaged.
- Motherboard is damaged.

2. NVR often automatically shuts down or stops running.

There are following possibilities:

- Input voltage is not stable or it is too low.
- HDD malfunction or HDD ribbon is damaged.
- Video signal is not stable.
- Working environment is too harsh or too much dust.
- Hardware malfunction.

3. System can not detect hard disk.

There are following possibilities:

- HDD is broken.
- HDD ribbon is damaged.
- HDD cable connection is loose.
- Motherboard SATA port is broken.

4. There is no video output whether it is one-channel, multiple-channel or all-channel output.

There are following possibilities:

- Firmware is not compatible. Please upgrade to the latest version.
- Brightness is 0. Please restore factory default setup.
- There is no video input signal or it is too weak.
- Check privacy mask setup or your screen saver.
- NVR hardware malfunctions.

5. Real-time video color is distorted.

There are following possibilities:

- When using BNC output, NTSC and PAL setup is not correct. The real-time video becomes black and white.
- NVR and monitor is not compatible.
- Video transmission is too long or degrading is too huge.
- NVR color or brightness setup is not correct.

6. Can not search local records.

There are following possibilities:

- HDD ribbon is damaged.
- HDD is broken.
- Upgraded program is not compatible.
- The recorded file has been overwritten.
- Record function has been disabled.

7. Video is distorted when searching local records.

There are following possibilities:

- Video quality setup is too low.
- Program read error, bit data is too small. There is mosaic in the full screen. Please restart the NVR to solve this problem.
- HDD data ribbon error.
- HDD malfunction.
- NVR hardware malfunctions.

8. There is audio when monitor but there is no audio when system playback.

There are following possibilities:

- Setup is not correct. Please enable audio function
- Corresponding channel has no video input. Playback is not continuous when the screen is blue.

9. Time display is not correct.

There are following possibilities:

- Setup is not correct
- Battery contact is not correct or voltage is too low.
- Crystal is broken.

10. NVR can not control PTZ.

There are following possibilities:

- PTZ setup, connection or installation is not correct.
- Cable connection is not correct.
- PTZ setup is not correct.
- PTZ decoder and NVR protocol is not compatible.
- When there are several decoders, please add 120 Ohm between the PTZ decoder A/B cables furthest end to delete the reverberation or impedance matching. Otherwise the PTZ control is not stable.
- The distance is too far.

11. Motion detection function does not work.

- There are following possibilities:
- Period setup is not correct.
- Motion detection zone setup is not correct.
- Sensitivity is too low.
- Camera limitation.

12. There is no video when preview or playback video file remotely.

There are following possibilities:

- Network fluency is not good.
- Client-end resources are limit.
- There is multiple-cast group setup in NVR. This mode can result in mosaic. Usually we do not recommend this mode.
- There is privacy mask or channel protection setup.
- Current user has no right to monitor.
- NVR local video output quality is not good.

13. Network connection is not stable.

There are following possibilities:

- Network is not stable.
- IP address conflict.
- MAC address conflict.
- NVR network port is malfunction.

14. USB backup error.

There are following possibilities:

- System uses too much CPU resources. Please stop record first and then begin backup.
- Data amount exceeds backup device capacity. It may result in backup error.
- Backup device is not compatible.
- Backup device is damaged.

15. Record storage period is not enough.

There are following possibilities:

- HDD capacity is not enough.
- HDD is damaged.

16. Can not playback the backup file.

Media player do no support .asf and .dav video file format.

17. Forgot local menu operation password after 5 tries.

Please contact our customer service number at 1300 366 895 or email us at custservice@uniden.com.au.

APPENDIX A: HARD DISK CAPACITY CALCULATION

Calculate total capacity needed by each NVR according to video recording (video recording type and video file storage time).

Step 1: According to Formula (1) to calculate storage capacity q_i that is the capacity of each channel needed for each hour, unit Mbyte.

$$q_i = d_i \times 8 \times 3600 \times 1024 \quad (1)$$

In the formula: d_i means the bit rate, unit Kbit/s

Step 2: After video time requirement is confirmed, according to Formula (2) to calculate the storage capacity, which is storage of each channel needed unit Mbyte.

$$m_i = q_i \times h_i \times D_i \quad (2)$$

In the formula:

h_i means the recording time for each day (hour)

D_i means number of days for which the video shall be kept

Step 3: According to Formula (3) to calculate total capacity (accumulation) q_T that is needed for all channels in the NVR during scheduled video recording.

$$q_T = \sum_{i=1}^c m_i \quad (3)$$

In the formula: c means total number of channels in one NVR

Step 4: According to Formula (4) to calculate total capacity (accumulation) q_T that is needed for all channels in NVR during alarm video recording (including motion detection).

$$q_T = \sum_{i=1}^c m_i \times a\% \quad (4)$$

In the formula: $a\%$ means alarm occurrence rate

SPECIFICATION

NVR Unit

Model	GNVR86
System	
Main Processor	Dual-core Embedded processor
Operating System	Embedded LINUX
Video	
IP Camera Input	8 channel, PoE
Resolution	Support up to 5MP IP Camera
Audio	
Two-way Talk	Reuse audio input/output channel 1
Display	
Interface	1 HDMI, 1 VGA
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768
Display Split	1/4/8/9
On Screen Display	Camera title, Time, Video loss, Camera lock, Motion detection, Recording
Recording	
Video/Audio Compression	H.264+/H.264
Record Rate	80Mbps
Bit Rate	64Kbps~20Mbps
Record Mode	Manual, Schedule, Motion Detection
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec

Model	GNRV 86
Video Detection & Alarm	
Video Detection	Motion Detection, Video Loss & Camera Blank
Alarm Input	16 Channel
Relay Output	4 Channel
Playback & Backup	
Sync Playback	1/4/9
Search Mode	Time/Date, Motion Detection & Exact search (accurate to second)
Playback Functions	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom
Backup Mode	USB Device
Network	
Ethernet	RJ-45 port (10/100Mbps)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, SNMP, P2P, IP Search
Smart Phone App	Support iPhone, iPad, Android
Storage	
Internal HDD	1 SATA ports, supported up to 4TB each (2TB included)
Auxiliary Interface	
USB Interface	2 USB2.0 ports
RS232	1 port, For Keyboard communication
RS485	1 port, For PTZ Control
General	
Power Supply	DC48V/2A
Working Environment	-10°C ~+55°C

Model	GNC610
Camera	
Image Sensor	1/2.7" CMOS
Effective Pixels	1920×1080 2 Megapixel
Electronic Shutter	1/3s~1/100,000s
Scanning System	Progressive
Video Frame Rate	up to 25fps@1080P
Mini. Illumination	0.1Lux@F2.0, 0 Lux with IR on
Camera Features	
Max. IR LEDs Length	30m
Day/Night	Color / B/W
Backlight Compensation	BLC/HLC/DWDR
White Balance	Auto/Manual
Noise Reduction	3D
Lens	
Focal Length	3.6mm fixed lens
Angle of View	H: 83°
Lens Type	Fixed lens
Audio	
Microphone	N/A
Speaker	N/A
General	
Power Supply	DC12V
Power Consumption	Max 5.5W
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)
Ingress Protection	IP66
Material	Metal

ONE-YEAR LIMITED WARRANTY

GNVR 86xx Series

Important:

Satisfactory evidence of the original purchase is required for warranty service. Please refer to our Uniden website for any details or warranty durations offered in addition to those contained below.

Warrantor:

The warrantor is Uniden Australia Pty Limited ABN 58 001 865 498 (“Uniden Aust”).

Terms of Warranty: Uniden Aust warrants to the original retail purchaser only that the GNVR 86xx (“the Product”), will be free from defects in materials and craftsmanship for the duration of the warranty period, subject to the limitations and exclusions set out below.

Warranty Period: This warranty to the original retail purchaser is only valid in the original country of purchase for a Product first purchased either in Australia or New Zealand and will expire, as indicated below, from the date of original retail sale.

Product	1 Year
Accessories	90 Days

If a warranty claim is made, this warranty will not apply if the Product is found by Uniden to be:

- A. Damaged or not maintained in a reasonable manner or as recommended in the relevant Uniden Owner’s Manual;
- B. Modified, altered or used as part of any conversion kits, subassemblies or any configurations not sold by Uniden Aust;
- C. Improperly installed contrary to instructions contained in the relevant Owner’s Manual
- D. Repaired by someone other than an authorized Uniden Repair Agent in relation to a defect or malfunction covered by this warranty; or
- E. Used in conjunction with any equipment, parts or a system not manufactured by Uniden.

Parts Covered: This warranty covers the Product and included accessories.

User-generated Data: This warranty does not cover any claimed loss of or damage to user-generated data (including but without limitation phone numbers, addresses and images) that may be stored on your Product.

Statement of Remedy: If the Product is found not to conform to this warranty as stated above, the Warrantor, at its discretion, will either repair the defect or replace the Product without any charge for parts or service. This warranty does not include any reimbursement or payment of any consequential damages claimed to arise from a Product's failure to comply with the warranty.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is in addition to and sits alongside your rights under either the COMPETITION AND CONSUMER ACT 2010 (Australia) or the CONSUMER GUARANTEES ACT (New Zealand) as the case may be, none of which can be excluded.

Procedure for Obtaining Warranty Service: Depending on the country in which the Product was first purchased, if you believe that your Product does not conform with this warranty, you should deliver the Product, together with satisfactory evidence of your original purchase (such as a legible copy of the sales docket) to Uniden. Please refer to the Uniden website for address details. You should contact Uniden regarding any compensation that may be payable for your expenses incurred in making a warranty claim. Prior to delivery, we recommend that you make a backup copy of any phone numbers, images or other data stored on your Product, in case it is lost or damaged during warranty service.

UNIDEN AUSTRALIA PTY LTD
Phone number: 1300 366 895
Email address: custservice@uniden.com.au

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