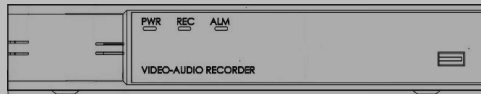


Operating Instructions

8 Channel NVR



Information on hazardous constituents as specified in rule 16(1) in electrical and electronic equipment.

Declaration of Conformity with the requirements of the E-waste (Management) Amendment Rules 2022 with the rule 16(1) limits with respect to lead, mercury, cadmium, hexavalent chromium, polybrominated, biphenyls, polybrominated biphenyls, polybrominated diphenyl ethers.

The content of hazardous substance with the exemption of the applications listed in SCHEDULE II of the E-Waste (management) Amendment Rules 2023.

1. Lead(Pb)- not over 0.1% by weight;
2. Cadmium(Cd)- not over 0.01% by weight;
3. Mercury(Hg)- not over 0.1% by weight;
4. Hexavalent chromium(Cr6+)- not over 0.1% by weight;
5. Polybrominated biphenyls(PBBs) - not over 0.1% by weight;
6. Polybrominated diphenyl ethers(PBDEs)- not over 0.1% by weight;



For the purpose of recycling to facilitate effective utilization of Resources, please return this product to a nearby authorised collection center, registered dismantler or recycler, or Panasonic service center when disposing of this product.

Please see the Panasonic website for further information on collection centers, etc. or call the customer care toll free number.

Website: <https://www.panasonic.com/in/corporate/e-waste-management.html>

Customer Care Number (Toll Free): 18004190373
E-mail: helpline@in.panasonic.com

Thank you for purchasing this Panasonic product.
Please read these instructions carefully before operating this product and retain them for future reference.

The images shown in this manual are for illustrative purposes only.

Important Safeguards and Warnings

Electrical Safety



Installation and operation should confirm to your local electrical safety codes. We assume no liability or responsibility for any fires or electrical shock caused by improper handling or installation.

Transportation Security

Heavy stress, vibration or water splash should be avoided during transportation, storage, and installation.

Installation

Keep upright. Handle with care.

Do not apply power to the NVR before completing installation.

Do not place objects on top of the NVR.

Qualified Engineers

All examination and repair work should be done by qualified service engineers. We are not liable for any problems caused by unauthorized modifications or attempted repair.

Environment

The NVR should be installed in a cool, dry place away from direct sunlight and inflammation or explosive substances, etc.

This product should be transported, stored and operated in a specified environment.

Accessories


Be sure to use all accessories available in the package.

Before installation, please open the package and check all the components are included.

Contact your local retailer if something is broken or missing in your package.

Lithium Battery

Improper battery use may result in fire, explosion, or personal injury.

 When replacing the battery, please make sure to use the same model.

Disclaimer

- The default password is kept blank for the first login. We strongly recommend you set a difficult password immediately after the first log in to ensure account security.
- Password Characters: Password must contain at least 8 to 16 characters comprising all three elements: alphabet, special character and digit.
- The illustrations in this manual are for reference only and may vary depending on the version or model. The screenshots in this manual may have been customized to meet specific requirements and user preferences. As a result, some of the examples and functions featured may differ from those displayed on your screen / monitor.
- We have put in our best efforts to verify the correctness and integrity of the contents in this manual, but no statement, information / recommendation in this manual shall constitute formal guarantee of any kind, expressed or implied. We shall not be held responsible for any technical or typographical errors in this manual.
- Video and audio surveillance can be regulated by laws that vary from country to country. Check the law in your local region before using this product for surveillance purposes. We shall not be held responsible for any consequences resulting from illegal operations of the device.
- Use of this product and the manual and the subsequent result shall be entirely the user's own responsibility. In no event shall Panasonic be liable for any special, consequential, incidental or indirect damages including, among others, damages for loss of business profits, business interruption, loss of data or documentation, product malfunction and information leakage caused by cyber-attack, hacking or virus in connection with the use of his product.

- The contents of this manual are subject to change without prior notice. Regular updates can be added to the new version of this manual.

- Due to uncertainties such as physical environment, discrepancy may exist between the actual values and reference values provided in this manual. The ultimate right to interpretation resides in our company.

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Preface

This manual describes how to use NVR on Local Network or using the Web Browser interface.

In this manual, the terms IP camera and IPC refer to the same thing: network camera, which requires a connection to the network. And the IP device mentioned in this manual refers to an IP camera or network camera.

Part I Product Introduction

Product Overview

This equipment is an advanced network video surveillance product specifically engineered for the security industry. It leverages an embedded LINUX operating system, ensuring enhanced stability and reliability of the system. Additionally, it incorporates the state-of-the-art H.265/H.265+ video compression algorithm, enabling exceptional video quality, efficient utilization of bandwidth, and seamless playback of individual frames.

Product Function

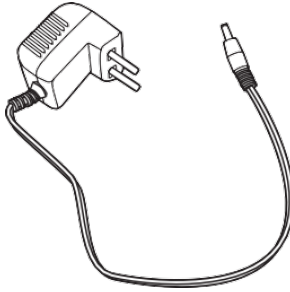
Based on different software and hardware versions, the product's features are different.

- Real time surveillance.
- Normal & scheduled recording.
- Event based recording.
- Recording playback and backup.
- Onvif support.
- Alarm management and control.
- Remote surveillance using mobile and desktop applications.

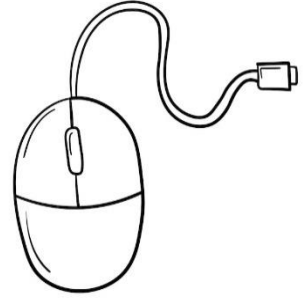
Accessories



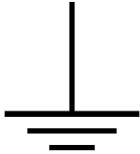
HDD Screw(x4)



Power Adapter



Mouse



Earthing Wire

Panasonic

Panasonic Life Solutions India Pvt. Ltd. **CERTIFICATE OF WARRANTY** Customer Copy

Sub: _____

Dear Customer,
Thank you for buying this Panasonic product. This card entitles you to enjoy 1 Year warranty on the product.

Product : _____

Model No. : _____ SI No. : _____

Customer Name : _____

Address : _____

City No. : _____

Date of Purchase : _____

Invoice No. : _____

Dealer Name and Address : _____

Help Line: Panasonic Customer care: 1800 1007571, Email: help@in.fsp.panasonic.in
Regd. Office: Panasonic Life Solutions India Private Limited, 12th floor, Ambience Tower, Ambience Island, 10th Sector, Gurgaon, 122002, Haryana, India

Warranty Card

Panasonic

Quick Installation Guide

Model Name : _____ Model No. : _____

Accessories : _____

Serial No. : _____ SI No. : _____

Customer Name : _____

Address : _____

City No. : _____

Date of Purchase : _____

Invoice No. : _____

Dealer Name and Address : _____

Model Name : _____ Model No. : _____

Accessories : _____

Serial No. : _____ SI No. : _____

Customer Name : _____

Address : _____

City No. : _____

Date of Purchase : _____

Invoice No. : _____

Dealer Name and Address : _____

Model Name : _____ Model No. : _____

Accessories : _____

Serial No. : _____ SI No. : _____

Customer Name : _____

Address : _____

City No. : _____

Date of Purchase : _____

Invoice No. : _____

Dealer Name and Address : _____

Model Name : _____ Model No. : _____

Accessories : _____

Serial No. : _____ SI No. : _____

Customer Name : _____

Address : _____

City No. : _____

Date of Purchase : _____

Invoice No. : _____

Dealer Name and Address : _____

Model Name : _____ Model No. : _____

Accessories : _____

Serial No. : _____ SI No. : _____

Customer Name : _____

Address : _____

City No. : _____

Date of Purchase : _____

Invoice No. : _____

Dealer Name and Address : _____

Model Name : _____ Model No. : _____

Accessories : _____

Serial No. : _____ SI No. : _____

Customer Name : _____

Address : _____

City No. : _____

Date of Purchase : _____

Invoice No. : _____

Dealer Name and Address : _____

Model Name : _____ Model No. : _____

Accessories : _____

Serial No. : _____ SI No. : _____

Customer Name : _____

Address : _____

City No. : _____

Date of Purchase : _____

Invoice No. : _____

Dealer Name and Address : _____

Life Solutions

Power Protection Router

Read the following instructions carefully before using the product. Do not use the product if it is damaged or if it is not working properly.

Always use the product in a well-ventilated area. Do not use the product in a humid or dusty environment.

Do not use the product near water or other liquids. Do not touch the product when it is hot.

Do not use the product if you are pregnant, nursing, or have a heart condition.

Do not use the product if you are allergic to any of the components.

Do not use the product if you are taking any medication that may interact with the product.

Do not use the product if you are using any other electronic devices that may interfere with the product.

Do not use the product if you are using any other electrical appliances that may overload the circuit.

Do not use the product if you are using any other electrical appliances that may cause a fire hazard.

Do not use the product if you are using any other electrical appliances that may cause an electrical shock.

Do not use the product if you are using any other electrical appliances that may cause a short circuit.

Do not use the product if you are using any other electrical appliances that may cause an explosion.

Do not use the product if you are using any other electrical appliances that may cause a fire.

Do not use the product if you are using any other electrical appliances that may cause a risk to life or property.

Do not use the product if you are using any other electrical appliances that may cause a risk to health.

Safety Warning

Read the following instructions carefully before using the product. Do not use the product if it is damaged or if it is not working properly.

Always use the product in a well-ventilated area. Do not use the product in a humid or dusty environment.

Do not use the product near water or other liquids. Do not touch the product when it is hot.

Do not use the product if you are pregnant, nursing, or have a heart condition.

Do not use the product if you are allergic to any of the components.

Do not use the product if you are taking any medication that may interact with the product.

Do not use the product if you are using any other electronic devices that may interfere with the product.

Do not use the product if you are using any other electrical appliances that may overload the circuit.

Do not use the product if you are using any other electrical appliances that may cause a fire hazard.

Do not use the product if you are using any other electrical appliances that may cause an electrical shock.

Do not use the product if you are using any other electrical appliances that may cause a short circuit.

Do not use the product if you are using any other electrical appliances that may cause an explosion.

Do not use the product if you are using any other electrical appliances that may cause a fire.

Do not use the product if you are using any other electrical appliances that may cause a risk to life or property.

Do not use the product if you are using any other electrical appliances that may cause a risk to health.

Installation Guide

Check

When user receives product, please check all items according to list.

Hard Disk Installation

Installation Preparation

Need to prepare a cross screwdriver. This series of NVR can be installed in the case and the largest capacity of hard disk could be up-to 10TB.

Installation Steps

Disconnect the power from the NVR before installing a hard disk drive (HDD).
Factory recommended HDD should be used for this installation.

Step 1: Remove the cover from the NVR by unfastening the screws on the back and side.

Step 2: Install 4 screws on HDD.

Step 3: Install HDD in the HDD rack using the provided screws.

Step 4: Turn over the machine and fasten the screws on the button to fix the HDD.

Step 5: Connect the power cable and SATA cable.

Host Operation

Shutdown & Login Operation

Shutdown

【Enter Menu】 → 【logout】 → 【Shutdown】 → 【OK】 .

(Note: It is advisable to use this method for shutdown to avoid any damage to the device.)

Note: Turn off the power before changing the hard disk.

Power Off Recovery

If power supply of device is cut off or forced off when network video recorder is in

working mode, the video recorder will automatically save recording before powering off and automatically restore to the working state before powering on to continue working.

Note: It is recommended to use UPS backup to ensure a stable power source for the equipment.

Login System

After the device boots up, the user must login and the system provides the corresponding functions according to the permissions of the logged in user.

By default, there are two predefined users: admin and guest. There is no password allocated by default. The factory predefined user i.e., admin has superuser privileges. The factory predefined user i.e., Guest has permissions for preview and video playback.

Password Protection: If the wrong password is entered 5 times consecutively, the system will alarm to lock the account. User needs to wait for half an hour or reboot the system to get login screen. For security reasons, **please change the username and password in the “User Management” during the first login.**

Part II Local Network Access

For configuration an NVR can be accessed using two different methods: local Network access and web-based access. For local access, the user connects a monitor and a mouse to the NVR and uses the mouse to operate.

The NVR has an embedded web server and allows web-based access for operation using PC. To do this, the user needs a PC that has a network connection to the NVR and is installed with a web browser. User just needs to navigate to the NVR's IP address and log in to the Web interface like user log in to the system locally.

This section describes local connectivity.

1 Before User Login

The parameters and values displayed may vary with device model, and the figures in this manual are for illustration purposes only.

User Login

Use the default username admin. There is no password to be used for the first login. After logging in, the user needs to define the password.

CAUTION!

The password should be configured to a strong one containing at least 8-16 characters including letters, digits, and special characters after your first login to ensure security.

2 How to use Mouse with the NVR

1. Right-click anywhere in the window and then choose **Menu**. The login dialog box is displayed.
2. Select the username from the drop-down list, enter your password (If already configured) and then click **OK**.

Table 1–1 Mouse Operations

| Name | Action | Description |
|--------------|-------------------|---|
| Left Button | Click | <ul style="list-style-type: none"> ● Select or confirm an item. ● Select to edit digits, symbols, upper-case or lower-case letters in a field. |
| | Double-click | Enter or exit full screen mode in live view |
| | Drag | Draw or move a rectangle on the screen, for example, a motion detection area/digital zoom. |
| Right Button | Click | <ul style="list-style-type: none"> ● Show the shortcut menu. ● Exit zoom. ● Exit the current window when Cancel or Exit is displayed. |
| Wheel | Scroll up or down | Scroll up or down a list or a window. |

3 Initial Configuration

Preparation

- Make sure that at least one Display / monitor is correctly connected to the VGA or HDMI interface on the rear panel of the NVR.
- Verify that the hard disk(s) are correctly installed. For detailed steps to install a hard disk, please refer to the hard disk installation section.

NVR Login (Display)

After switching on the NVR, a login page will be displayed.

Quick Set-up

Welcome
Congratulations on your purchase of this product.

This setup wizard will help as the initial configurations of this equipment and will put your device online in the internet.

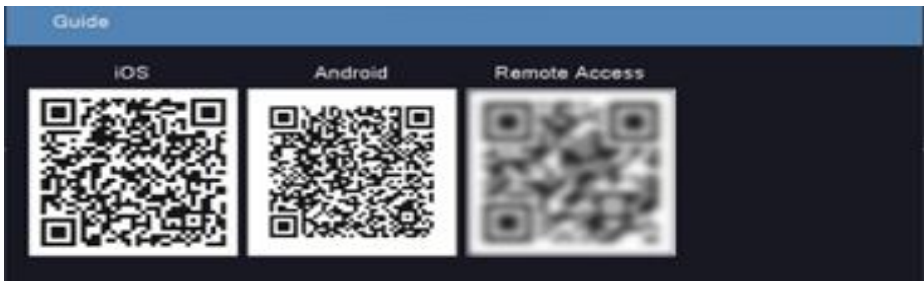
| | |
|----------------------------|--------------------------|
| Language | ENGLISH |
| Guide | |
| Will no longer be prompted | <input type="checkbox"/> |

Next Page Cancel

1. User will get Quick Set-up wizard. This setup wizard will help in initial basic configuration.

| | |
|----------------------------|--------------------------|
| Language | ENGLISH |
| Guide | |
| Will no longer be prompted | <input type="checkbox"/> |

2. Click next, QR codes will be available to download mobile applications for iOS & Android. QR code for remote access configuration on the app will also be available.



Remote Access QR is shown as blurred due to privacy reasons.

3. Click Next, Option for system configuration will be available, you can configure date, time, language, machine name etc. (Ref. pic below)

| System Config | |
|-----------------|--|
| Time Zone | [UTC+08:00]Beijing,Urumqi,Taipei,Singapore |
| NTP | Setting |
| System Time | 2023 - 06 - 05 03 : 31 : 24 |
| DST | Setting |
| Date Format | YYYY MM DD |
| Date Separator | - |
| Time Format | 24-HOUR |
| Language | ENGLISH |
| HDD Full | Overwrite |
| Machine No. | 0 |
| Video Standard | PAL |
| Auto Logout/min | 0 |
| Machine Name | LocalHost |
| Quick Set-up | <input checked="" type="checkbox"/> |

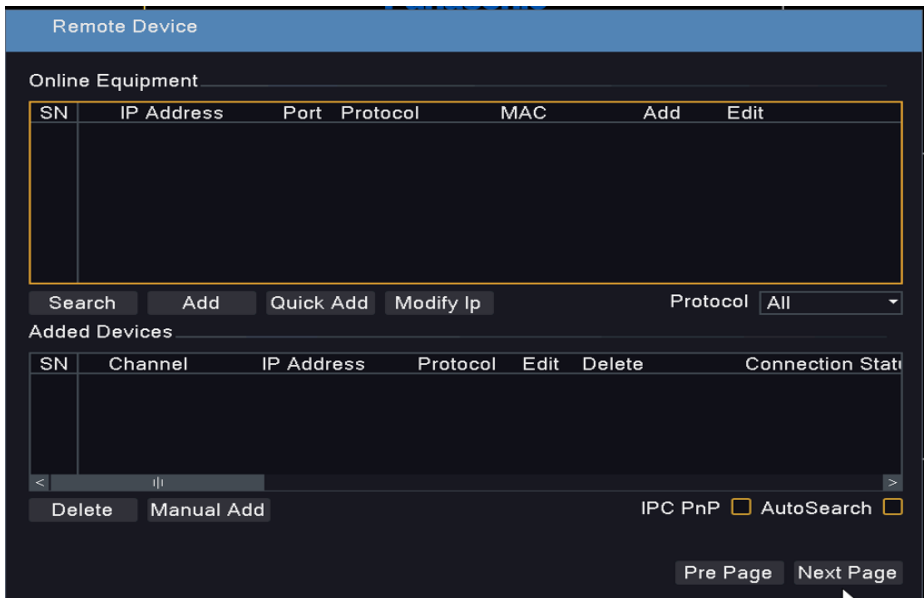
4. Click Next, Network configuration option will be displayed.

| Network Config | |
|-----------------|--------------------------|
| Net Card | Wire Netcard |
| DHCP Enable | <input type="checkbox"/> |
| IP Address | 192 . 168 . 1 . 18 |
| Subnet Mask | 255 . 255 . 255 . 0 |
| Gateway | 192 . 168 . 1 . 1 |
| Primary DNS | 8 . 8 . 8 . 8 |
| Secondary DNS | 8 . 8 . 4 . 4 |
| Network Testing | |
| TCP Port | 34567 |
| HTTP Port | 80 |
| Mobile Port | 5800 |
| MTU | 1400 |
| HS Download | <input type="checkbox"/> |
| Transfer Policy | Quality Preferred |

5. Click Next, Option to configure default password for IP cameras will be displayed.
Configure the default passwords for auto registration of IP cameras to the NVR.

| DefaultPassword | |
|----------------------------------|---|
| IPC PnP <input type="checkbox"/> | |
| NPTS | User Name <input type="text" value="admin"/> Password <input type="password" value="•••••"/> |
| NETIP | User Name <input type="text" value="admin"/> Password <input type="password" value=""/> |
| ONVIF | User Name <input type="text" value="admin"/> Password <input type="password" value="•••••"/> Port <input type="text" value="80"/> |
| | User Name <input type="text" value="admin"/> Password <input type="password" value="•••••"/> Port <input type="text" value="8091"/> |
| | User Name <input type="text" value="admin"/> Password <input type="password" value=""/> Port <input type="text" value="6060"/> |

- Click Next, Option to discover IP cameras automatically will appear. Select the devices from the discovered IP cam list and add them to complete configuration.



Note: In case IPC PnP & Auto Search options are enabled then cameras will be added automatically by the NVR.











- Click Next and press Okay to complete the configuration & go to Live view.

4 Live View

Live View Status

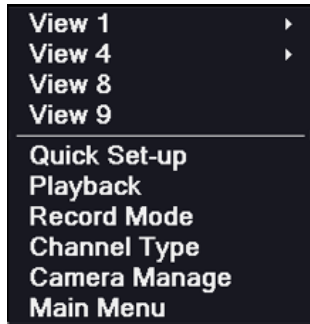
The following icons are used to indicate alarms, recording status and audio status in a live view window.

Table 3–1 Live View Window Icons

| Icon | Description |
|---|--|
|  | Click to record video manually. |
|  | Click to play recorded video. |
|  | Available for PTZ cameras. Click to control the PTZ settings. |
|  | Click to control camera color, brightness, contrast, saturation etc. |
|  | Click to hide the displayed icons. |
|  | Click to unmute & mute. |
|  | Motion detection icon. |
|  | Video blind icon. |
|  | Human detection icon. |
|  | Recording icon. |

Shortcut Menu

When you right-click in a window, a shortcut menu appears as shown below.



| Menu | Description |
|---------------|---|
| View 1 | Click to view single selected camera. |
| View 4 | Click to view camera no 1-4 or 4-8. |
| View 8 | Click to view camera no 1-8. |
| View 9 | Click to view camera no 1-8 & CH wise bandwidth details. (When NVR in 8CH mode) |
| Quick Set-up | Quick configuration for camera, network, etc. |
| Playback | Click to view camera recordings. |
| Record Mode | Click to configure camera recording options. |
| Channel Type | Click to configure 8CH(4K) and 16CH(5M) NVR options. |
| Camera Manage | Click to view available cameras on network & select for live view. |
| Main Menu | Click to access detailed NVR settings. |

5 Record Settings

HDD Manage

Display information related to hard disk. Provides option to format & recover hard disk.

The screenshot shows a software interface with a dark theme. At the top, there is a blue header bar labeled "Record". Below it, a sidebar on the left contains the text "HDD Manage" in orange and "Record" in white. The main area features a table with five columns: "Disk No.", "DiskSpace", "Status", "Property", and "Remaining". The table is currently empty, with a mouse cursor hovering over it. Below the table, a white text message reads: "After installation of a new Hard Drive formatting will be required !!". At the bottom right of the interface, there are three buttons: "Format Disk", "Recover", and "Apply".

Record

Provides option to select manual or schedule recording for each camera/channel. Recording criteria can be selected as standard or motion based.

The screenshot shows a 'Record' configuration window. On the left is a sidebar with 'HDD Manage' and 'Record' (highlighted in orange). The main area contains the following settings:

- Channel: 1
- Length/min: 60
- Main Stream: Schedule Manual Stop
- Extra Stream: Schedule Manual Stop
- Day: Mon
- Period: Standard Motion
- 00 :00 - 24 :00:
- 00 :00 - 24 :00:
- 00 :00 - 24 :00:
- 00 :00 - 24 :00:

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

6 Network

Provides options to configure network parameters like IP Address & necessary IP ports. We can configure NVR in DHCP or Static IP mode depending on network requirements.

The screenshot shows a network configuration window with a sidebar on the left and a main configuration area on the right. The sidebar has categories: Network, DDNS, UPNP, EMAIL, Cloud, Wi-Fi, 3G/4G, and Net Service. The main area is divided into sections: Net Card (Wire Netcard), DHCP Enable (checkbox), IP Address (192 . 168 . 1 . 18), Subnet Mask (255 . 255 . 255 . 0), Gateway (192 . 168 . 1 . 1), Primary DNS (8 . 8 . 8 . 8), Secondary DNS (8 . 8 . 4 . 4), Network Testing (checkbox), TCP Port (34567), HTTP Port (80), Mobile Port (5800), MTU (1400), HS Download (checkbox), and Transfer Policy (Quality Preferred). At the bottom right are buttons for OK, Cancel, and Apply.

| | |
|--|--------------------------|
| Net Card | Wire Netcard |
| DHCP Enable | <input type="checkbox"/> |
| IP Address | 192 . 168 . 1 . 18 |
| Subnet Mask | 255 . 255 . 255 . 0 |
| Gateway | 192 . 168 . 1 . 1 |
| Primary DNS | 8 . 8 . 8 . 8 |
| Secondary DNS | 8 . 8 . 4 . 4 |
| Network Testing <input type="checkbox"/> | |
| TCP Port | 34567 |
| HTTP Port | 80 |
| Mobile Port | 5800 |
| MTU | 1400 |
| HS Download | <input type="checkbox"/> |
| Transfer Policy | Quality Preferred |

Note: Network ports not to be changed unless until required for specific application.

DDNS

You can register with an DDNS server to obtain a domain name for your NVR and then access your NVR by visiting the domain name instead of an IP address (<http://DDNS server address/NVR's domain name>) using a web browser.

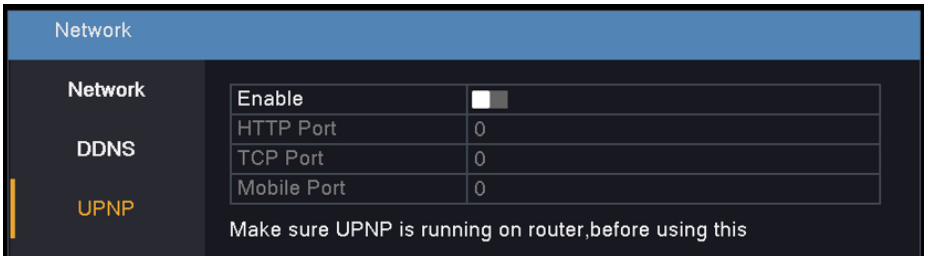
The screenshot shows a network configuration interface with a sidebar on the left and a main configuration area on the right. The sidebar contains the following menu items: Network, DDNS (highlighted with an orange bar), UPNP, EMAIL, Cloud, Wi-Fi, 3G/4G, and Net Service. The main configuration area is titled 'Network' and contains a table for DDNS settings.

| | |
|-------------|--------------------------|
| DDNS Type | Oray |
| Enable | <input type="checkbox"/> |
| Domain Name | your.gicp.net |
| User Name | |
| Password | |

At the bottom right of the configuration area, there are three buttons: OK, Cancel, and Apply. A mouse cursor is pointing at the OK button.

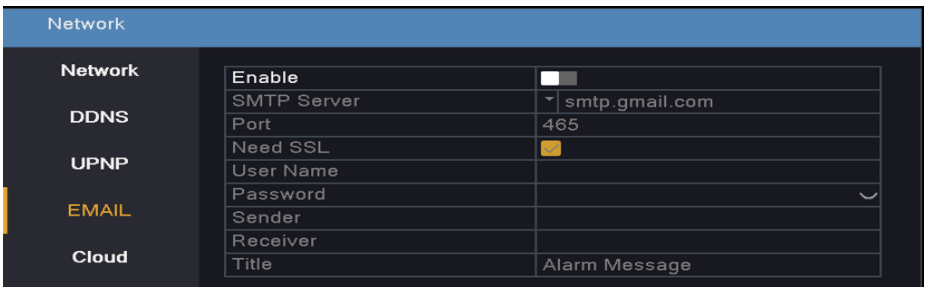
UPnP

To use UPnP in your NVR, UPnP must be enabled in the connected router. With UPnP enabled for Network Address Translation (NAT), the ports on the NVR can be mapped automatically to the router, and computers can access NVR from WAN.



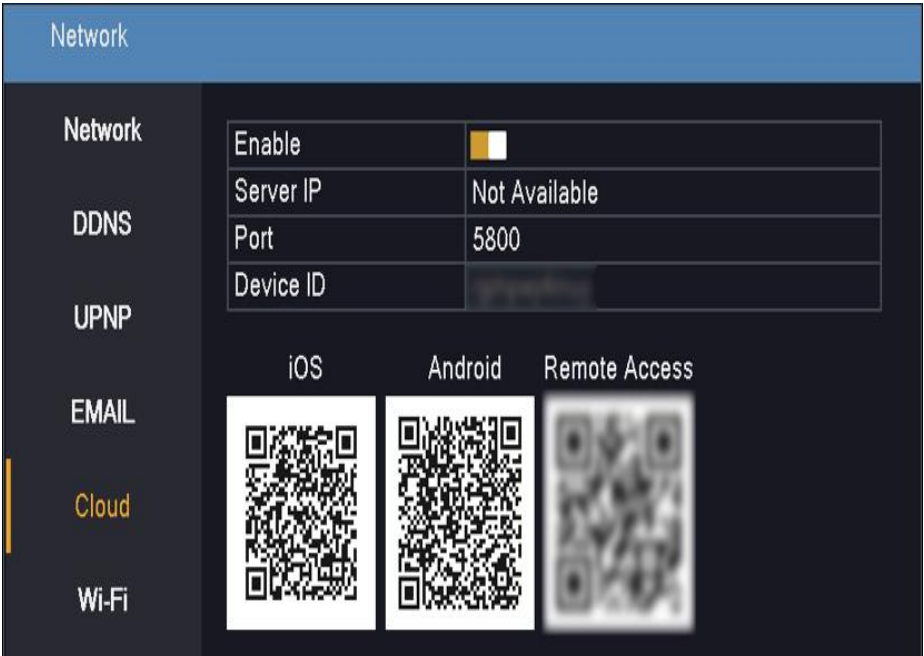
Email

Once email is configured and NVR checked for connection to SMTP server for the valid email account user has configured (Gmail, Yahoo etc.), user will be able to receive emails for all the triggered alarms enabled in the alarm section. i.e., NVR sends an email notification to specify email address depending on the alarm configuration.



Cloud

Provide option to enable/disable cloud connectivity for remote access using mobile applications or desktop.



Wi-Fi

To connect NVR on Wi-Fi router/network, user can connect external Wi-Fi dongle to the NVR and enable/configure settings related to Wi-Fi network.

| SSID | Authentication | Signal |
|-------------|--------------------------|--------|
| Search | | |
| Enable | <input type="checkbox"/> | |
| DHCP Enable | <input type="checkbox"/> | |
| SSID | 11n-AP | |
| Password | | |
| IP Address | 192 . 168 . 38 . 12 | |
| Subnet Mask | 255 . 255 . 255 . 0 | |
| Gateway | 192 . 168 . 38 . 1 | |

3G/4G

To connect NVR on 3G/4G network, user can connect external 3G/4G dongle to the NVR and enable/configure settings related to 3G/4G network.

The screenshot shows a configuration window titled "Network" with a sidebar on the left containing menu items: Network, DDNS, UPNP, EMAIL, Cloud, Wi-Fi, 3G/4G (highlighted in orange), and Net Service. The main area displays the 3G/4G configuration table.

| | |
|-------------|--------------------------|
| Enable | <input type="checkbox"/> |
| Location | NONE |
| MobileISP | |
| Type | EVDO |
| Wireless AP | ChinaNet |
| Dial Number | #777 |
| User Name | ctnet@mycdma.cn |
| Password | ●●●●●●●● |
| IP Address | 0 . 0 . 0 . 0 |

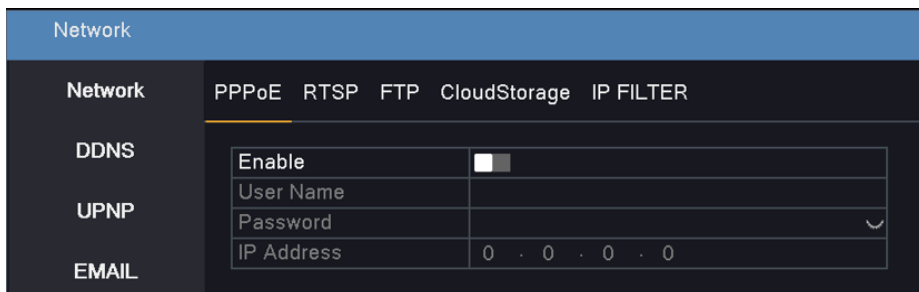
At the bottom right of the window are three buttons: OK, Cancel, and Apply.

Net Service

Provides option to use following services.

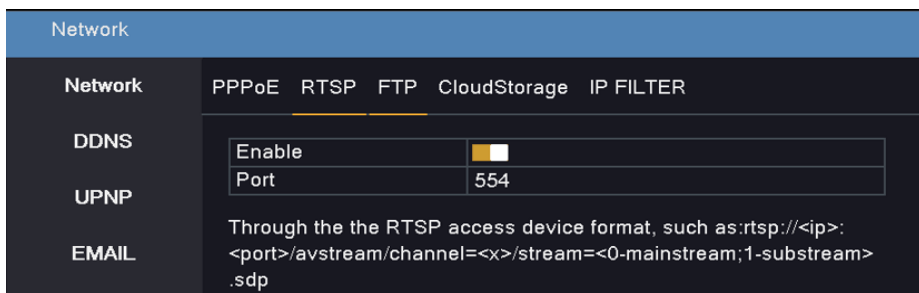
1. PPPoE

PPPoE can be used on an NVR (Network Video Recorder) to establish an Internet connection and enable remote access to the NVR's features and functionalities depending upon connectivity from ISP.



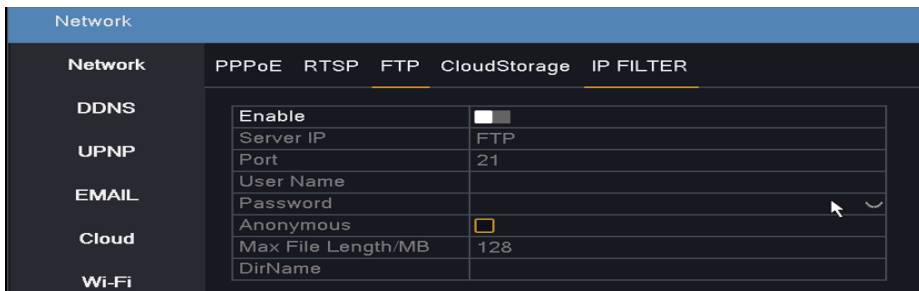
2. RTSP

RTSP is Real Time Streaming Protocol which can be used to access NVR video stream over any 3rd party device/media player.



3. FTP

FTP is File Transfer Protocol which can be used to push event image/video file to the FTP server from the NVR.



4. Cloud Storage

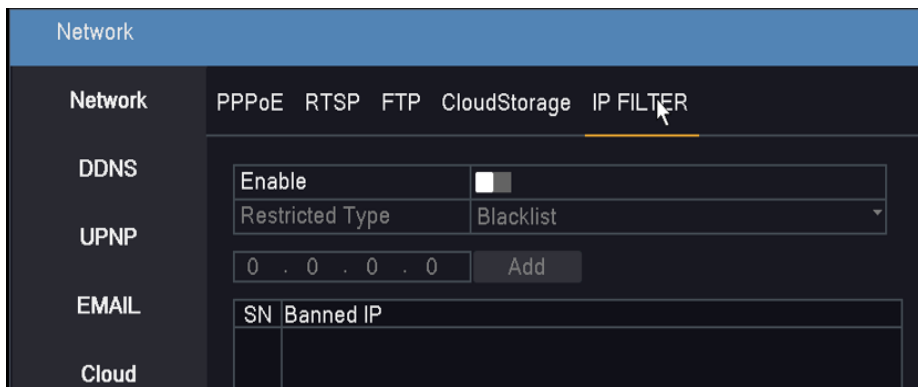
Cloud Storage provides an option to push any event image / video on Dropbox/Google drive account.



Note: Cloud storage services can be enabled for any one channel at a time.

5. IP Filter

Provide option to secure connectivity and provide access to authorized users using blacklist and whitelist IP address table.



7 Camera

Camera Manage

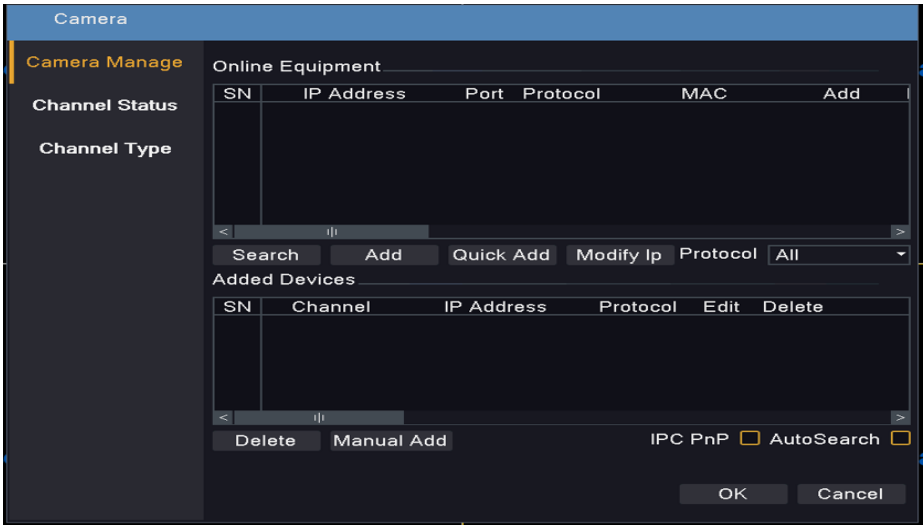
This provides an option to add and manage IP camera in the NVR, make sure IP cameras are connected to the NVR using network switch.

Adding an IP Camera:

Step 1. Click on the Search button.

Step 2. If the user is using a new camera with default IP address, then select all displayed cameras and click on quick Add button. NVR will automatically assign different IP addresses to each camera and will add camera automatically for live display.

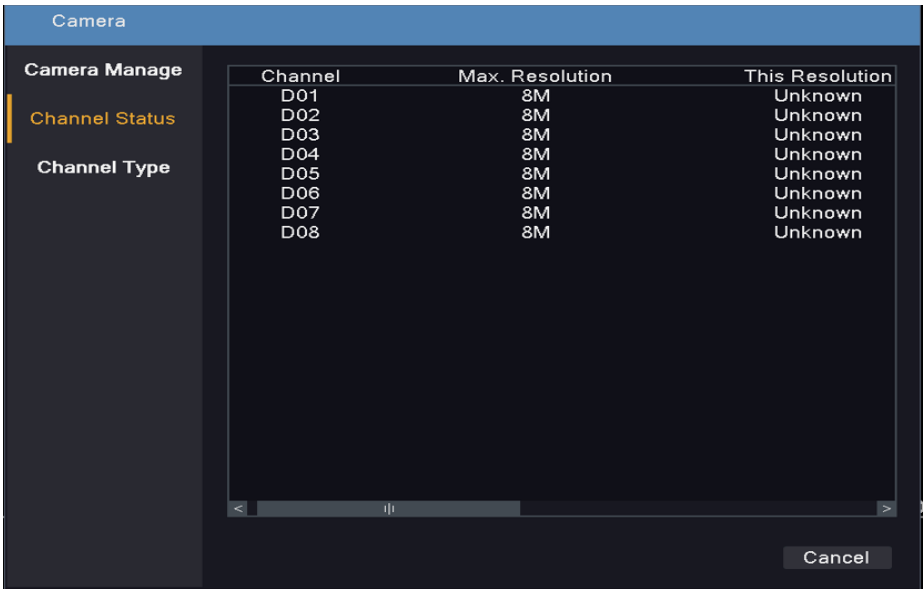
Step 3. If user is having 3rd party cameras, then please select Onvif protocol and click on search button, select the displayed camera, and click on add button.



Note: If NVR display username or password error please change the username & password as per the camera settings.

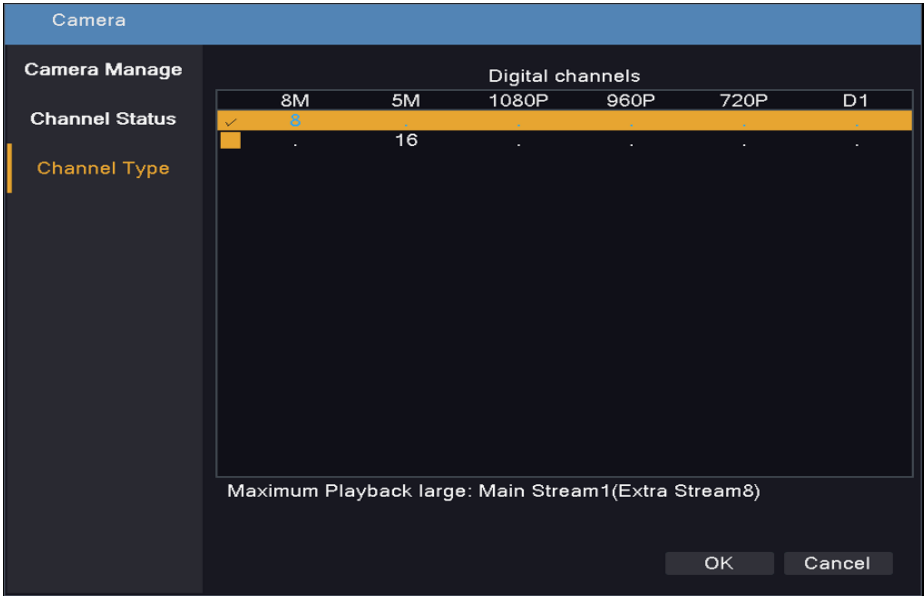
Channel Status

Displays maximum resolution, current resolution & camera connectivity status.



Channel Type

Provide options to configure 8CH(4K) and 16CH(5M) NVR options.



8 Alarm

Provide option to trigger notification/recording based on motion, human, video loss, video blind, abnormality & intelligent analytics.

Motion Detect

Once enabled a motion detection alarm occurs when an object inside the detection area moves. An alarm icon appears on the display. Various notifications like show message, email, buzzer, ftp upload, tour and recording can be configured for each CH/Camera.

| Alarm | | | |
|----------------------|-------------------|---------------------------------------|-------------------------------------|
| Motion Detect | Channel | 1 | |
| | Enable | <input checked="" type="checkbox"/> | |
| Video Blind | Sensitivity | Middle | |
| | | | |
| Video Loss | Region | Set | |
| Abnormality | Period | Set | |
| | Interval/Sec. | 1 | |
| Intelligent Analysis | Record delay/Sec. | 10 | |
| | Record Channel | 1 2 3 4 5 6 7 8 | |
| SMD | Tour | 1 2 3 4 5 6 7 8 | |
| | PTZ Activation | Set | |
| | Other Setting | <input type="checkbox"/> Show Message | <input type="checkbox"/> Send Email |
| | | <input type="checkbox"/> Buzzer | <input type="checkbox"/> FTP upload |

Video Blind

Once enabled a video blind alarm occurs when the camera view is blocked more than 60% by an object. An alarm icon appears on the display. Various notifications like show message, email, buzzer, ftp upload, tour and recording can be configured for each CH/Camera.

| Alarm | | | |
|----------------------|-------------------|---------------------------------------|-------------------------------------|
| Motion Detect | Channel | 1 | |
| Video Blind | Enable | <input checked="" type="checkbox"/> | |
| | Sensitivity | Middle | |
| | | | |
| Video Loss | Period | Set | |
| Abnormality | | | |
| | Record delay/Sec. | 10 | |
| Intelligent Analysis | Record Channel | 1 2 3 4 5 6 7 8 | |
| | Tour | 1 2 3 4 5 6 7 8 | |
| SMD | PTZ Activation | Set | |
| | Other Setting | <input type="checkbox"/> Show Message | <input type="checkbox"/> Send Email |
| | | <input type="checkbox"/> Buzzer | <input type="checkbox"/> FTP upload |

Video Loss

Once enabled a video loss alarm occurs when the camera is disconnected from the network due to power failure or network error. An alarm icon appears on the display. Various notifications like show message, email, buzzer, ftp upload, tour and recording can be configured for each CH/Camera.

The screenshot shows a configuration window titled "Alarm" with a dark theme. On the left is a sidebar menu with categories: Motion Detect, Video Blind, Video Loss (highlighted in orange), Abnormality, Intelligent Analysis, and SMD. The main area is a form for "Video Loss" settings. It includes a "Channel" dropdown set to "1", an "Enable" toggle switch that is turned on, and a "Period" dropdown set to "Set". Below these are fields for "Record delay/Sec." (10), "Record Channel" (a row of buttons 1-8), and "Tour" (a row of buttons 1-8). The "PTZ Activation" dropdown is set to "Set". The "Other Setting" section contains four checkboxes: "Show Message", "Send Email", "Buzzer", and "FTP upload", all of which are currently unchecked. At the bottom of the window are buttons for "Default", "Copy", "OK", "Cancel", and "Apply".

| | |
|-------------------|--|
| Channel | 1 |
| Enable | <input checked="" type="checkbox"/> |
| Period | Set |
| Record delay/Sec. | 10 |
| Record Channel | 1 2 3 4 5 6 7 8 |
| Tour | 1 2 3 4 5 6 7 8 |
| PTZ Activation | Set |
| Other Setting | <input type="checkbox"/> Show Message <input type="checkbox"/> Send Email <input type="checkbox"/> Buzzer <input type="checkbox"/> FTP upload |

Default Copy OK Cancel Apply

Abnormality

Once enabled an abnormality alarm occurs in the event of No Disk, Disk Error, Disk Full, Network Loss, IP Conflict detection. An alarm icon appears on the display. Various notifications like show message & buzzer can be configured.

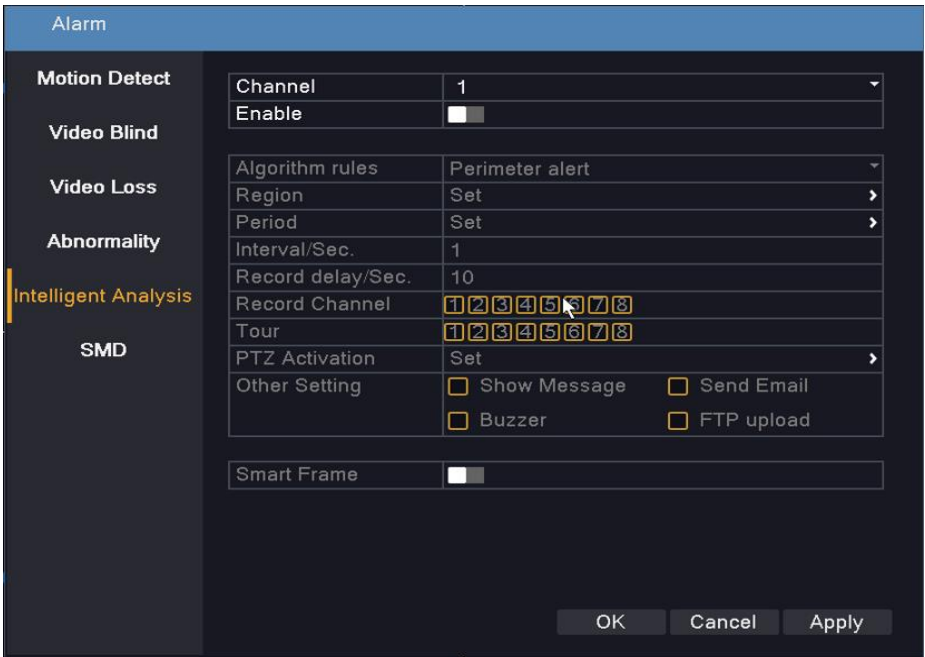
The screenshot shows a configuration window titled "Alarm" with a dark background. On the left is a sidebar menu with the following items: "Motion Detect", "Video Blind", "Video Loss", "Abnormality" (highlighted in orange), "Intelligent Analysis", and "SMD". The main area contains a table for configuring the Abnormality alarm:

| | |
|--------------|---|
| Event Type | No Disk |
| Enable | No Disk Disk Error Disk Full Network Loss IP Conflict |
| Show Message | <input type="checkbox"/> |
| Buzzer | <input type="checkbox"/> |

At the bottom right of the window are three buttons: "OK", "Cancel", and "Apply".

Intelligent Analysis.

Once enabled an alarm occurs when the camera detects Area Intrusion, Line Crossing event in the defined region. An alarm icon appears on the display. Various notifications like show message, email, buzzer, ftp upload, tour and recording can be configured for each CH/Camera.



SMD

Once enabled an alarm occurs when the camera detects any human movement in the defined region. An alarm icon appears on the display. Various notifications like show message, email, buzzer, ftp upload, tour and recording can be configured for each CH/Camera.

| Alarm | |
|-----------------------------|---|
| Motion Detect | Channel 1 |
| | Enable <input checked="" type="checkbox"/> |
| Video Blind | Sensitivity Middle |
| Video Loss | |
| Abnormality | Period Set |
| | Interval/Sec. 1 |
| | Record delay/Sec. 10 |
| Intelligent Analysis | Record Channel 1 2 3 4 5 6 7 8 |
| | Tour 1 2 3 4 5 6 7 8 |
| | PTZ Activation Set |
| | Other Setting <input type="checkbox"/> Show Message <input type="checkbox"/> Send Email |
| | <input type="checkbox"/> Buzzer <input type="checkbox"/> FTP upload |
| | Smart Frame <input checked="" type="checkbox"/> |
| Default OK Cancel Apply | |

9 Video

This option is related to the quality of video, compression type, resolution, GUI Display & Output Adjust etc.

Encode

Encode settings are video image quality settings that are set for each camera. This includes compression, resolution, FPS, bitrate, I-Frame interval etc. Setting these correctly based on the network can save network bandwidth, HDD space, fix network lags etc.

| Setting | Value | Value |
|--------------------------|--------------------------|--------------------------|
| Channel | 1 | |
| Stream | Main Stream | Extra Stream |
| Compression | H.265 | H.265 |
| Resolution | 5M(2880x1620) | D1(704x576) |
| Frame Rate(FPS) | 20 | 15 |
| Bit Rate Type | VBR | VBR |
| Quality | high | high |
| Bit Rate(Kb/S) | 3267 | 635 |
| I Frame Interval(1-20/S) | 4 | 4 |
| Audio | <input type="checkbox"/> | <input type="checkbox"/> |

Default Copy OK Cancel Apply

GUI Display

Graphical User Interface are information displayed with video images, for example Channel title/Camera name, Alarm status, Date & Time etc. It also gives you an option to configure privacy masking for each camera/channel.



Output Adjust

Provide options to adjust video display on the screen by configuring display settings, brightness, contrast, saturation, hue & screen display size.

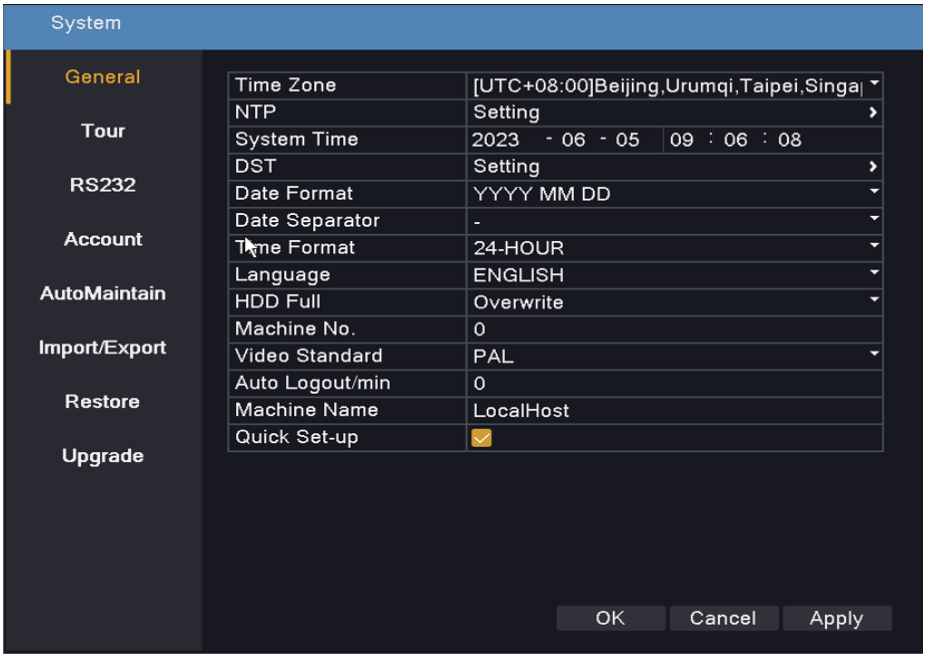
| Setting | Value |
|------------------|----------|
| Top Deflate | 0 |
| Bottom Deflate | 0 |
| Left Deflate | 0 |
| Right Deflate | 0 |
| Display Settings | VGA/HDMI |
| Brightness | 50 |
| Contrast | 50 |
| Saturation | 50 |
| Hue | 50 |

10 System

Provide options and basic settings related to the NVR/Camera.

General

An Option to configure date, time, language, machine name etc. (Ref. pic below)



The screenshot displays the 'System' configuration window with the 'General' tab selected. The interface features a dark sidebar with menu items: General, Tour, RS232, Account, AutoMaintain, Import/Export, Restore, and Upgrade. The main area contains a table of settings:

| | | |
|-----------------|--|---|
| Time Zone | [UTC+08:00]Beijing,Urumqi,Taipei,Singa | ▼ |
| NTP | Setting | ▶ |
| System Time | 2023 - 06 - 05 09 : 06 : 08 | |
| DST | Setting | ▶ |
| Date Format | YYYY MM DD | ▼ |
| Date Separator | - | ▼ |
| Time Format | 24-HOUR | ▼ |
| Language | ENGLISH | ▼ |
| HDD Full | Overwrite | ▼ |
| Machine No. | 0 | |
| Video Standard | PAL | ▼ |
| Auto Logout/min | 0 | |
| Machine Name | LocalHost | |
| Quick Set-up | <input checked="" type="checkbox"/> | |

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

Tour

The tour operation user to configure the view type, link cameras and the tour interval. Then the tour can be linked with alarm notifications also.

The screenshot shows a configuration window titled "System" with a sidebar on the left containing menu items: General, Tour (highlighted), RS232, Account, AutoMaintain, Import/Export, Restore, and Upgrade. The main area is divided into two sections: "Tour" and "Alarm Tour Type".

| Tour | |
|---------------|--------------------------|
| Enable Tour | <input type="checkbox"/> |
| Interval/Sec. | 5 |
| View 1 | 1 2 3 4 5 6 7 8 |
| View 4 | 1 2 |
| View 8 | 1 2 3 4 5 6 7 8 |
| View 9 | 1 |

| Alarm Tour Type | |
|-----------------------|-------------------------------------|
| Interval/Sec. | 5 |
| Return after finished | <input checked="" type="checkbox"/> |

At the bottom right, there are three buttons: OK, Cancel, and Apply.

RS232

Note: Reserved for future application.

Account

This option is used to create additional login accounts for additional users and define accessible functions and features.

This option is also used to change the default password for the admin account.

System

General

Tour

RS232

Account

AutoMaintain

Import/Export

Restore

Upgrade

| SN | User Name | Group | Status |
|----|-----------|-------|--------------|
| 1 | admin | admin | Web |
| 2 | guest | user | Normal |
| 3 | default | user | Default User |
| 4 | rohit | admin | Normal |

Add User Add Group Delete User Delete Group

Set security

Modify User >

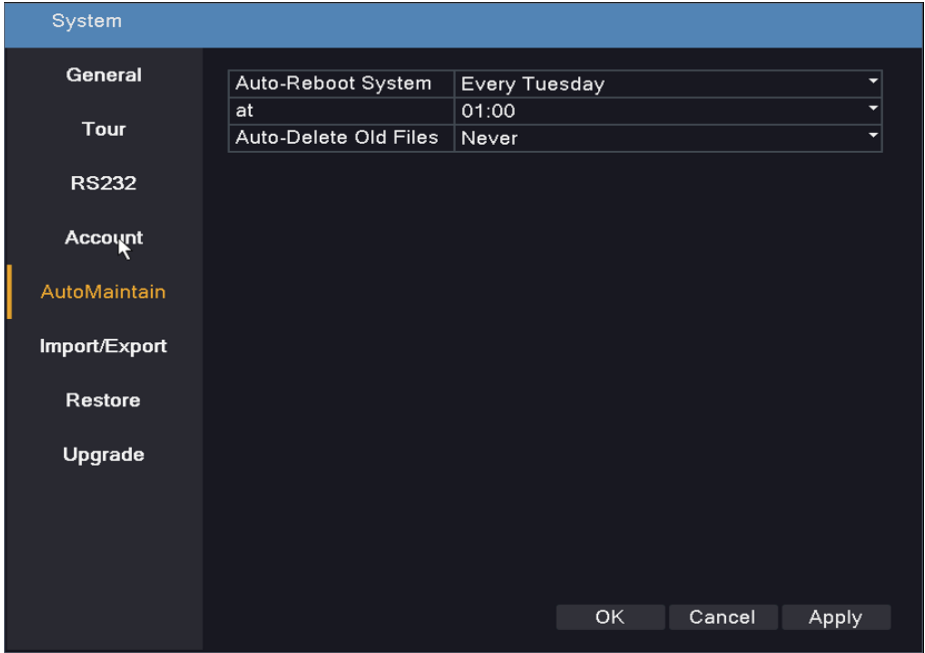
Modify Group >

Modify Pwd >

Update Cancel

Auto Maintenance

Option to reboot the system automatically at desired interval & time.
We can also select to auto delete old files (Logs).



Import/Export

Provides option to export logs files, configuration, abnormal operation (device malfunction) to the connected USB drive with NVR.

This utility also provides an option to import configuration files (backup).

The screenshot shows a web-based interface for system management. On the left is a dark sidebar with a menu containing: System, General, Tour, RS232, Account, AutoMaintain, Import/Export (highlighted with an orange bar), Restore, and Upgrade. The main content area has a blue header labeled 'System'. Below the header, the 'Import/Export' section is active, showing two options: 'Export' and 'Import'. The 'Export' option is selected, and its configuration is visible: a 'Device Name' dropdown menu, a 'File Name' input field containing 'Log_06050927.zip', and an 'Export' button. The 'Import' option is also visible, with a 'File Name' input field. Below the 'Import' section, there is an 'Abnormal' section with a 'File Name' input field containing 'Excpt_1.03.06400640.02j26179.T000.2_06...' and an 'Export' button. A 'Cancel' button is located at the bottom right of the main content area.

Restore

This function provides an option to restore or factory default settings. NVR will restart automatically to complete this operation depending upon the restore option selected.

| System | |
|---------------|--|
| General | Select all <input type="checkbox"/> |
| | General <input type="checkbox"/> |
| Tour | |
| RS232 | Record <input type="checkbox"/> |
| | Alarm Set <input type="checkbox"/> |
| Account | Network <input type="checkbox"/> |
| | Net Service <input type="checkbox"/> |
| AutoMaintain | Output Settings <input type="checkbox"/> |
| | Account <input type="checkbox"/> |
| Import/Export | RS232 <input type="checkbox"/> |
| | |
| Restore | |
| Upgrade | |

OK Cancel Apply

Note: Operation logs & recordings will not be deleted.

Upgrade

This option provides utility to upgrade the device locally using a USB storage device or OTA.

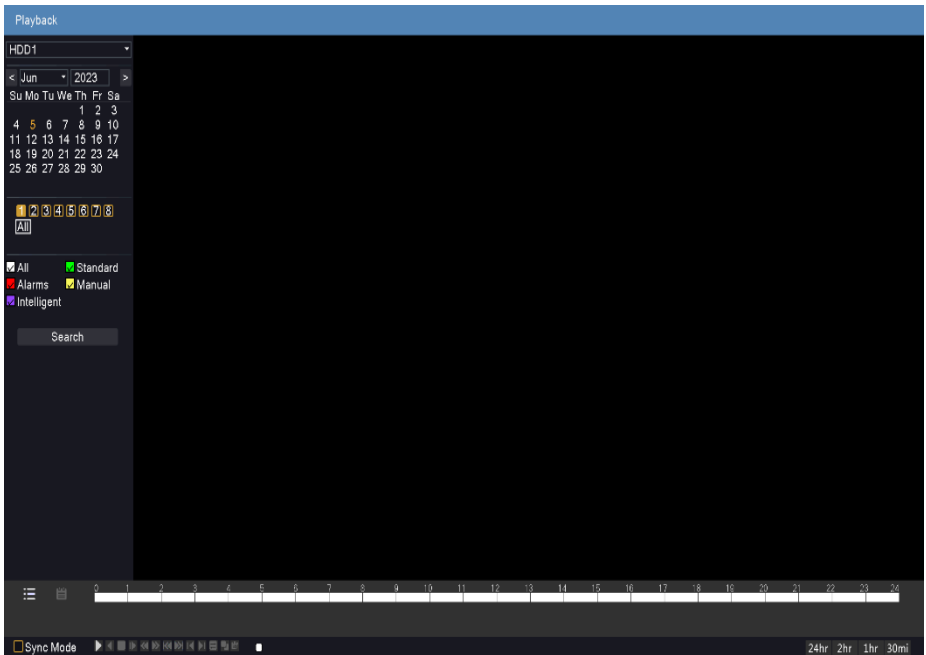
The screenshot shows a software interface for system management. On the left is a dark sidebar with a list of menu items: General, Tour, RS232, Account, AutoMaintain, Import/Export, Restore, and Upgrade. The 'Upgrade' item is highlighted with a yellow bar. The main content area has a blue header labeled 'System'. Below the header, there are two dropdown menus: 'Upgrade Position' with the value 'Remote' and 'Upgrade file'. At the bottom right of the main area, there are two buttons: 'Detect' and 'Upgrade'.

| | |
|------------------|--------|
| Upgrade Position | Remote |
| Upgrade file | |

11 Playback

This option provides utility to playback recorded videos using video query and advance search option, we can also playback by selecting standard, alarm, manual, intelligent or all recording options.

Note: Green color for standard recording, Red for alarm recordings, Yellow for manual recording, purple for intelligent recording.



12 Backup

This option provides utility to backup recorded files by selecting start time and time, backup format (H.26X & AVI) in the USB storage device.

Backup

| | | | | | | |
|---------------|------------|---|----|---|----|--------------|
| Channel | 1 | | | | | |
| File Type | All | | | | | |
| Type | Read/Write | | | | | |
| Start Time | 2023 | - | 06 | - | 05 | 00 : 00 : 00 |
| End Time | 2023 | - | 06 | - | 05 | 09 : 55 : 09 |
| Backup Format | H26X | | | | | |

Remove Search

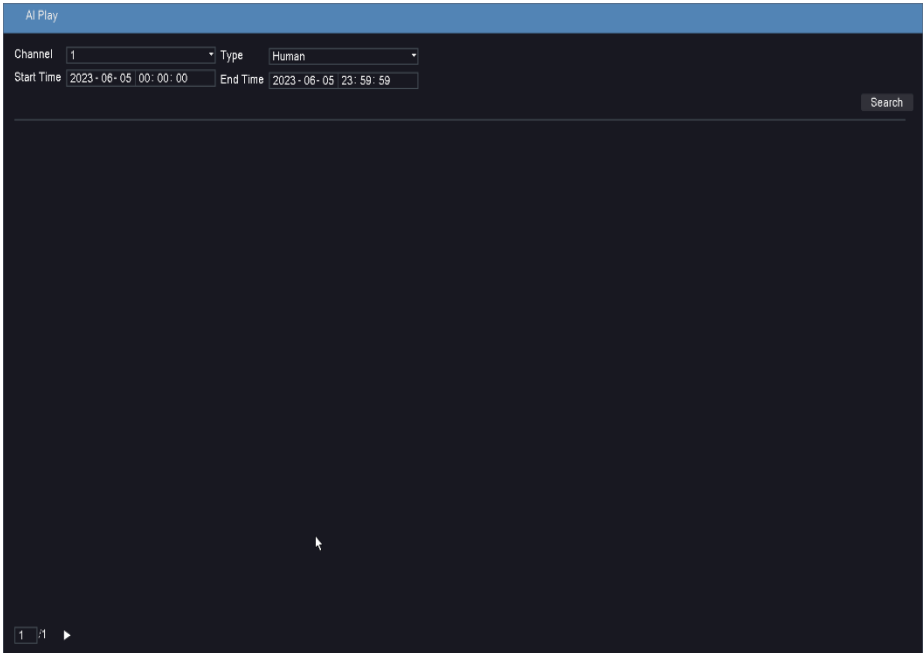
| SN | Channel | File Name | Length |
|----|---------|-----------|--------|
|----|---------|-----------|--------|

Remaining 0.00 KB/0.00 KB

Detect Backup Burning

13 AI Play

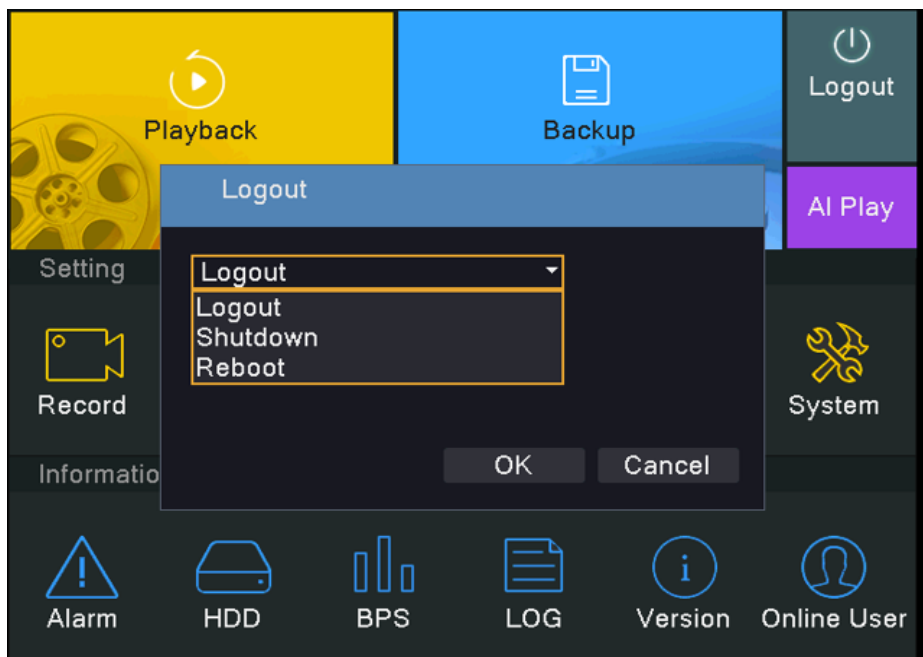
Option to search recorded video based on human detection using start time and end time.



14 Logout

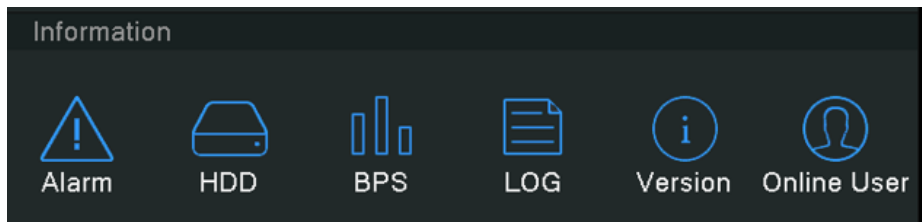
Once logout option is selected, three options can be viewed:

1. Reboot – To reboot the device.
2. Shutdown – To shut down the device.
3. Logout – To log out from the current user account.



15 Information

This provides details related to NVR like alarm, HDD, BPS, Logs, Version & Online user (Web access) details etc.



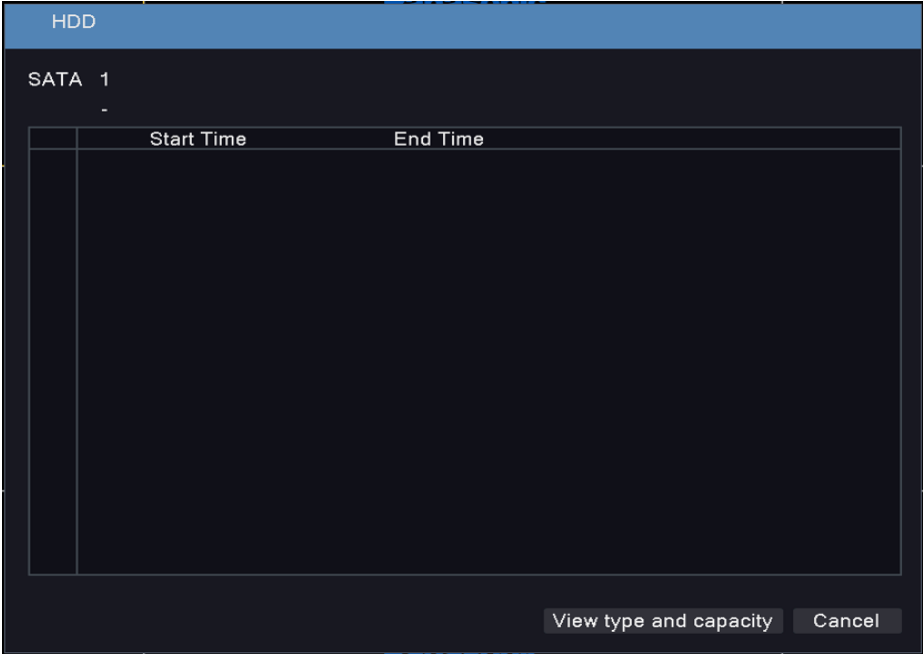
Alarm

This option displays real time alarm notification based on parameters like motion detection, video blind, video loss, intelligent analysis, human detection.



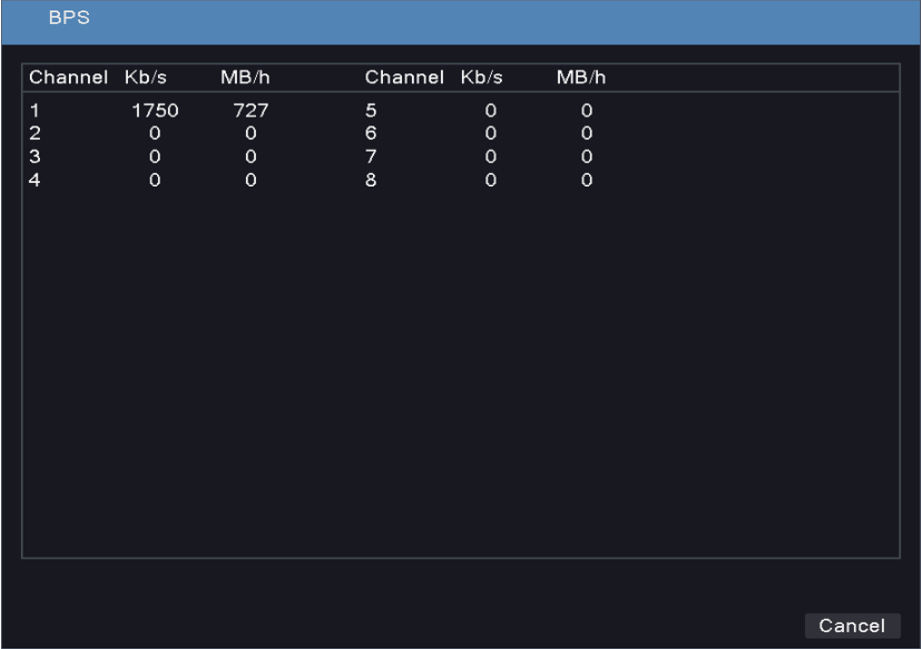
HDD

This option displays information related to video recordings on the hard disk. It also displays hard disk status & capacity/utilization.



BPS

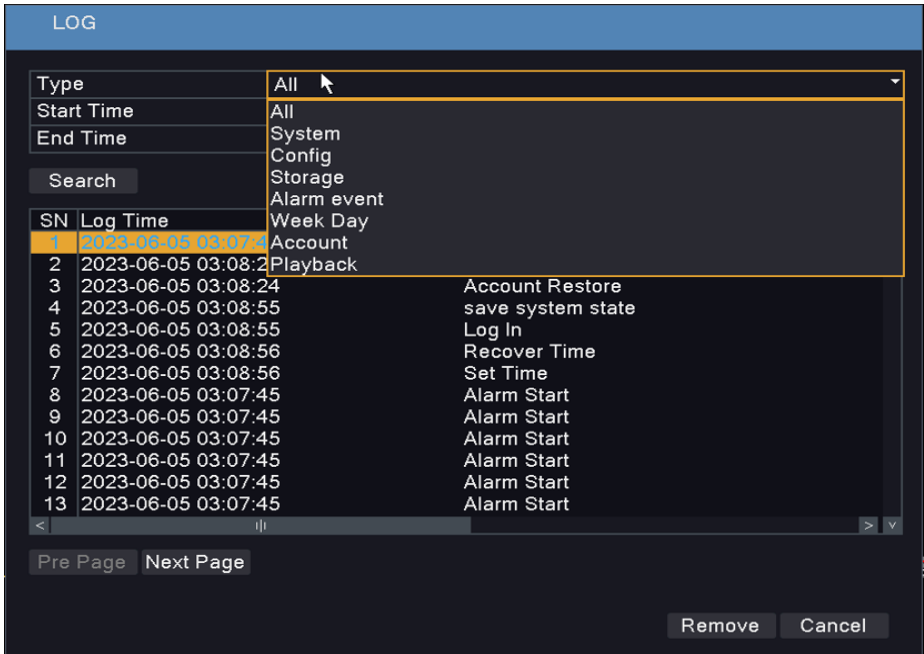
This option displays the network bandwidth consumption for each channel/camera.



| Channel | Kb/s | MB/h | Channel | Kb/s | MB/h |
|---------|------|------|---------|------|------|
| 1 | 1750 | 727 | 5 | 0 | 0 |
| 2 | 0 | 0 | 6 | 0 | 0 |
| 3 | 0 | 0 | 7 | 0 | 0 |
| 4 | 0 | 0 | 8 | 0 | 0 |

LOG

This option displays the logs related to system, configuration, storage, alarm event, account & playback.



The screenshot shows a 'LOG' window with a table of log entries. A dropdown menu is open over the 'Type' column, listing various log categories. The table contains 13 rows of log data, with the first row highlighted in orange. The interface includes search and navigation controls.

| Type | Start Time | End Time | Search | SN | Log Time | Week Day | Account |
|-------------|------------|-------------|--------|----|---------------------|----------|-------------------|
| All | All | System | | 1 | 2023-06-05 03:07:45 | | Playback |
| Config | | Storage | | 2 | 2023-06-05 03:08:24 | | Account Restore |
| Storage | | Alarm event | | 3 | 2023-06-05 03:08:24 | | save system state |
| Alarm event | | Week Day | | 4 | 2023-06-05 03:08:55 | | Log In |
| Account | | Account | | 5 | 2023-06-05 03:08:55 | | Recover Time |
| Playback | | Playback | | 6 | 2023-06-05 03:08:56 | | Set Time |
| | | | | 7 | 2023-06-05 03:08:56 | | Alarm Start |
| | | | | 8 | 2023-06-05 03:07:45 | | Alarm Start |
| | | | | 9 | 2023-06-05 03:07:45 | | Alarm Start |
| | | | | 10 | 2023-06-05 03:07:45 | | Alarm Start |
| | | | | 11 | 2023-06-05 03:07:45 | | Alarm Start |
| | | | | 12 | 2023-06-05 03:07:45 | | Alarm Start |
| | | | | 13 | 2023-06-05 03:07:45 | | Alarm Start |

Navigation: Pre Page, Next Page, Remove, Cancel

Version

This option displays details like serial number, software build date, P2P status, model number & MAC address.

Version

Record Channel 8

| | |
|------------|-------------------------------|
| System | 1.03.06400640.02j26179.T000.2 |
| Extra Info | 1.15.230517 |
| Build Date | 2023-05-19 15:16:37 |
| MAC | 90:f4:21:40:07:8e |
| SerialNo | XXXXXXXXXX |
| P2P status | 1:Connecting |

| | |
|--------------|-----------------|
| Model | PI-HRA081A |
| SN | 06/23 |
| Manufacturer | Panasonic India |



OK

Online User

This displays details related to online users logged in to the NVR on the local network.

The screenshot shows a window titled "Online User" with a dark background. At the top, there is a blue header bar with the text "Online User". Below the header is a table with three columns: "User Name", "IP", and "Login Type". The table contains one row of data: "admin", "192.168.1.29", and "Web". The table is highlighted with a yellow background. At the bottom right of the window, there are two buttons: "Disconnect" and "Cancel".

| User Name | IP | Login Type |
|-----------|--------------|------------|
| admin | 192.168.1.29 | Web |

Do's & Don'ts

| No. | Do's | Don'ts |
|-----|---|---|
| 1 | All electrical & electronic products are required to be handed over only to the Authorized recycler. | The product should not be opened by the user himself/herself but only be authorised service personnel. |
| 2 | The product should be handed over only to authorised recycler for disposal. | The product is not meant for resale to any unauthorised agencies/ scrap dealers/ kabariwalas. |
| 3 | Keep the product in an isolated area after it become non-functional/ unrepairable so as to prevent its accidental breakage. | The product is not meant for mixing into household waste stream. |
| 4 | Refer to operating instructions for handling of end-of-life products. | Do not keep any replaced spare part(s) from the product in an exposed area. |
| 5 | Always dispose of products that have reached end of life at Panasonic Life Solutions India Authorized Service Centre. | Do not donate old electronic items to anybody. Do not dispose of your product in garbage bins along with municipal waste that ultimately reaches landfill. |
| 6 | Wherever possible or instructed, separate the packaging material according to responsible waste disposal options and sorting for recycling. | Do not give e-waste to informal and unorganized sectors like Local Scrap Dealers/ Rag Pickers. |

16 Troubleshooting Points

When troubleshooting network video recorders (NVRs), there are several points you can consider identifying and resolve issues. Here are some troubleshooting steps you can follow:

1. Check power and connections:

- Ensure that the NVR is receiving power and turned on.
- Verify that the power adapter or power supply is working correctly.
- Make sure all cables connecting the NVR, cameras and network are securely connected.

2. Network connectivity:

- Check the network cables and connections between the NVR and the network switch/router.
- Confirm that the NVR is assigned a valid IP address and is on the same network subnet.
- Test the network connectivity by pinging the NVR's IP address from another device on the network.
- Check firewall or security settings that might be blocking network communication.

3. Camera connections:

- Verify that the cameras are connected to the NVR and powered on.
- Ensure that the cameras are compatible with the NVR and configured correctly.
- Check camera settings, such as IP address, subnet mask, gateway, and port numbers.

4. NVR settings:

- Access the NVR's web interface or management software and review the settings.
- Check the recording schedule to ensure it is configured correctly.
- Verify that the storage devices (hard drives) are properly installed and recognized.

- Confirm that the NVR firmware is up to date. Consider updating if a newer version is available.

5. Network configuration:

- Check the network settings on the NVR, including IP address, subnet mask, gateway, and DNS.
- Ensure that the NVR's network settings match the network settings of other devices on the network.
- Troubleshoot any network issues, such as DHCP conflicts or IP address conflicts.

6. Software and firmware updates:

- Check for firmware updates for both the NVR and cameras. Apply updates if available.
- Update the NVR's management software or mobile app to the latest version.

7. System logs and error messages:

- Check the NVR's system logs or error messages for any indications of problems or specific error codes.
- Look for any error messages related to camera connectivity, network issues or storage problems.

8. Resetting or restoring:

- If all else fails, consider resetting the NVR to factory defaults and reconfiguring it from scratch.
- Restore the NVR to a previously known working configuration if a backup is available.

If you've gone through these troubleshooting steps and are still experiencing issues, it may be helpful to consult Panasonic technical support.

TECHNICAL SPECIFICATIONS

| | |
|--------------------------|---|
| Network Video Input | 8-CH (Expandable upto 16-CH*) |
| Operating System | Embedded Linux |
| Network Access Bandwidth | 80Mbps |
| Video Compression | H.265+/H.265/H.264 |
| Video Output | 1 CH VGA output (1920×1080, 1280×1024@50/60Hz) 1 CH HDMI output (3840×2160, 1920×1080, 1280×1024, 1440×990, 1024×768 @50/60Hz) |
| Video Preview Mode | 8-CH & 16-CH* |
| Video Bit Rate | 16Kbps-8Mbps |
| Video Resolution | 8MP/5MP/3MP/1080P/720P/D1/VGA/CIF/QCIF |
| Preview Capability | 8×8MP, 16x5MP@25/30fps (Mainstream), 8xD1, 16xD1@25/30fps (Sub Stream) |
| Motion Detection | Support 396(22*18) surveyed area can be set in every screen and multi-level sensitivity adjustable |
| Human Detection | Support Human detection on all channels (IPC Support Required) |
| Area Intrusion Detection | Support Intrusion detection on all channels (IPC Support Required) |
| Line Crossing Detection | Support Line Crossing detection on all channels (IPC Support Required) |
| Privacy Mask | Support 4 zones (IPC Support Required) |

AUDIO

| | |
|-------------------|-----------------|
| Audio compression | G.711a |
| Audio output | 1Ch, 3.5mm Jack |

VIDEO RECORDING AND PLAYBACK

| | |
|------------------|--|
| Playback Ability | Support 16/8CH |
| Playback Mode | Instant playback, Local video, local image, External file playback |

STORAGE AND BACKUP

| | |
|-------------------|----------------------------|
| Storage Interface | 1 SATA |
| HDD Capacity | Single max.10TB |
| Backup Method | USB Device, network backup |

NETWORK

| | |
|--------------------|---|
| Network Protocol | TCP/IP, IPv4, HTTP, PPPoE, DHCP, DNS, 3G/4G, Wi-Fi, Google drive/Dropbox Storage(1CH), DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, FTP, P2P |
| Interface Protocol | ONVIF, RTSP |

| | |
|---------------------|--------------------------------|
| Mobile Surveillance | Panasonic PHS for iOS, Android |
|---------------------|--------------------------------|

| | |
|----------------------|--------------------------------------|
| Web Browser Support* | IE, Chrome, MS Edge, Firefox, Safari |
|----------------------|--------------------------------------|

EXT INTERFACE

| | |
|-------------------|--|
| Network Interface | 1 X RJ45 10M/100M adaptive Ethernet port |
|-------------------|--|

| | |
|---------------|-----------|
| USB Interface | 3 USB2.0* |
|---------------|-----------|

GENERAL

| | |
|--------------|------------|
| Power Supply | DC12V 2Amp |
|--------------|------------|

| | |
|-------------------|--------------------|
| Power Consumption | ≤10W (Without HDD) |
|-------------------|--------------------|

| | |
|------------------------------------|-------------------------|
| Operation Temperature/ Humidity | -10°C ~ 60°C/10 % -90 % |
|------------------------------------|-------------------------|

| | |
|-----------------------------|--------------------|
| Dimension(mm)/ Weight(g) | 229x250x45mm/ 770g |
|-----------------------------|--------------------|

Notes:

1. Design and specification are subjected to change without notice.
2. Weight and dimensions shown herein are approximate.
3. The Graphics in this manual are only for reference.
4. Your NVR may be slightly different from that shown in this manual.

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