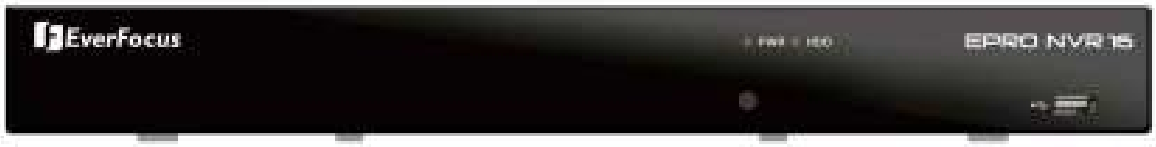
EPRO NVR Series

16/32 Channels Embedded NVR with 2/4 HDDs

User's Manual

EPRO NVR 32

EPRO NVR 16



EverFocus

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EVERFOCUS ELECTRONICS CORPORATION

EPRO NVR Series
16 / 32 Channels Embedded NVR with 2 / 4 HDDs

User's Manual

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Safety Precautions

- Refer all work related to the installation of this product to qualified service personnel or system installers.

- Do not block the ventilation openings or slots on the cover.

- Do not drop metallic parts through slots. This could permanently damage the appliance. Turn the power off immediately and contact qualified service personnel for service.

- Do not attempt to disassemble the appliance. To prevent electric shock, do not remove screws or covers. There are no user-serviceable parts inside. Contact qualified service personnel for maintenance. Handle the appliance with care. Do not strike or shake, as this may damage the appliance.

- Do not expose the appliance to water or moisture, nor try to operate it in wet areas. Do take immediate action if the appliance becomes wet. Turn the power off and refer servicing to qualified service personnel. Moisture may damage the appliance and also may cause electric shock.

- Do not use strong or abrasive detergents when cleaning the appliance body. Use a dry cloth to clean the appliance when it is dirty. When the dirt is hard to remove, use a mild detergent and wipe gently.

- Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.

- Do not operate the appliance beyond its specified temperature, humidity or power source ratings. Do not use the appliance in an extreme environment where high temperature or high humidity exists. Use the NVR at temperatures within 0°C~40°C / 32°F~104°F (Storage). The input power source is 12VDC (EPRO NVR 16); 100-240VAC~ (EPRO NVR 32).

- **Read Instructions**
  All the safety and operating instructions should be read before the unit is operated.

- **Retain Instructions**
  The safety and operating instructions should be retained for future reference.

- **Heed Warnings**
  All warnings on the unit and in the operating instructions should be adhered to.

- **Follow Instructions**
  All operating and use instructions should be followed.

- **Cleaning**
  Unplug the unit from the outlet before cleaning. Do not use liquid cleaners, abrasive or aerosol cleaners. Use a damp cloth for cleaning.

- **Attachments**
  Do not use attachments not recommended by the product manufacturer as they may cause hazards.

- **Water and Moisture**
  Do not use this unit near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, near a swimming pool, in an unprotected outdoor installation, or any area which is classified as a wet location.

- **Servicing**
  Do not attempt to service this unit by yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

- **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, playing particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.

- **Object and Liquid Entry**
  Never push objects of any kind into this unit 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 unit.

- **RTC (Real Time Clock) Battery**
  When encounter failure of time calibration of your DVR, the issue may be caused by running-out of RTC battery. Users will have to change the RTC battery on the main board of the NVR.

CE

ATTENTION! This is a class A product which may cause radio interference in a domestic environment; in this case, the user may be urged to take adequate measures.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the users' authority to operate this equipment.

This Product is RoHS compliant.

WEEE

Your EverFocus product is designed and manufactured with high quality materials and components which can be recycled and reused. This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste. Please, dispose of this equipment at your local community waste collection/recycling centre. In the European Union there are separate collection systems for used electrical and electronic product.
Please, help us to conserve the environment we live in!

The information in this manual was current upon publication. The manufacturer reserves the right to revise and improve his products. Therefore, all specifications are subject to change without prior notice. Manufacturer is not responsible for misprints or typographical errors.
Please read this manual carefully before installing and using this unit. Be sure to keep it handy for later reference.

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Chapter

1

1. Introduction

EverFocus' EPRO NVR Series is a professional embedded network video recorder designed for small and medium-sized businesses (SMB) and enterprises. Operating on a Linux-based system, the NVR offers quick PC-less configuration, network-based surveillance connection, megapixel recording as well as playback, up to 32 channels and 24TB storage capacities are supported.

The NVR supports multi-channel playback at multiple speed options and easy data search by event date and time. Users may enable and perform the specified functions through the local OSD menu or Web interface. Furthermore, you can use EverFocus Mobile Applications, MobileFocus, to remotely view the camera streams from the NVR through your handheld devices; or use EverFocus Genie XMS central management system for remote management. You can also use EverFocus EF-Reader to back up recordings from the NVRs.

EverFocus' EPRO NVR Series is the best choice for a complete network-based surveillance solution. It is versatile, flexible and well catered to the needs of the industry.

Model Name	Max. CH	Enternal HDD (3.5" SATA HDD)	Ethernet	Alarm In/Out
EPRO NVR 32	32Ch	4 x HDD (up to 6TB each)	2 x RJ-45	16 / 4
EPRO NVR 16	16Ch	2 x HDD (up to 6TB each)	1 x RJ-45	16 / 1

1.1 Features

- Records up to 32CH – EPRO NVR 32 (main stream and sub stream)
- Records up to 16CH – EPRO NVR 16 (main stream and sub stream)
- Supports ONVIF IP cameras
- Supports H.265 and H.264 codec
- Supports dual-stream recording
- Supports 4HDD (up to 6TB each)
- Multiple serial interfaces
- Supports mobile applications (MobileFocus)
- Multiple network monitoring: Web viewer, Genie XMS CMS
- Certificates: CE, FCC, UL, RoHS

1.2 Packing List

EPRO NVR 32

- NVR x 1
- Mouse x 1
- Power Cord x 1
- HDD Bracket x 4
- Rack Ear x 2
- IR Remote Control x 1 (with two AAA batteries. See Note 4)
- Screws Pack x 1 (Sliver Screw x 16, Washer Head Screw x 8, M3 (ϕ6.8) Screw x 4)
- CD x 1 (see Note 3)
- Quick Installation Guide x 1

EPRO NVR 16

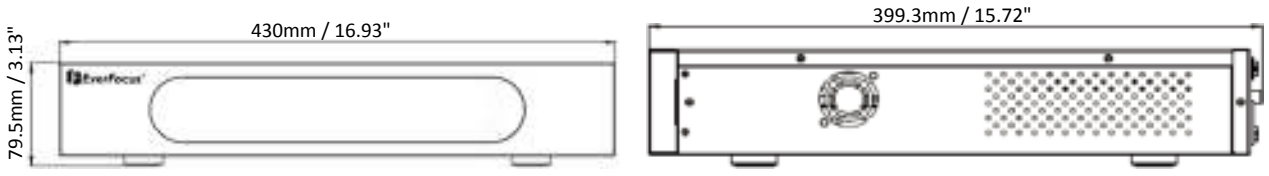
- NVR x 1
- Mouse x 1
- Power Adaptor x 1
- IR Remote Control x 1 (with two AAA batteries. See Note 4)
- HDD Screws Pack x 1
- CD x 1 (see Note 3)
- Quick Installation Guide x 1

Note:

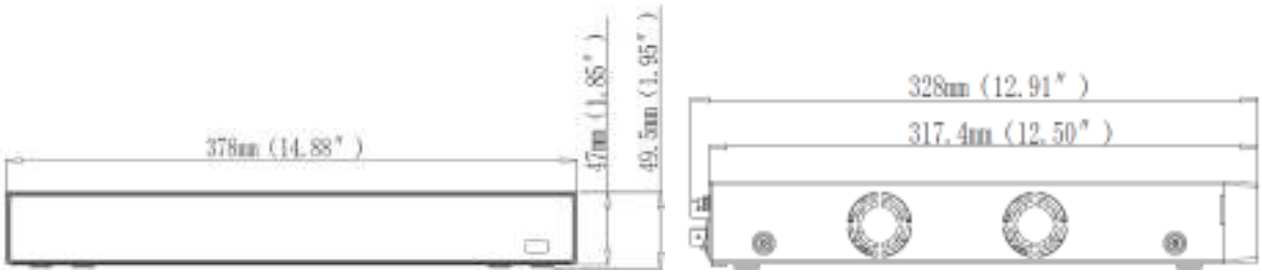
1. Equipment configurations and supplied accessories vary by country. Please consult your local EverFocus office or agents for more information. Please also keep the shipping carton for possible future use.
2. Contact the shipper if any items appear to have been damaged in the shipping process.
3. The CD contains the IP Utility software, User Manual and Quick Installation Guide.
4. Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
   a. Use only two AAA dry cell batteries.
   b. Do not dispose of the batteries in a fire as it may explode.

1.3 Dimensions

EPRO NVR 32



EPRO NVR 16



1.4 Front Panel

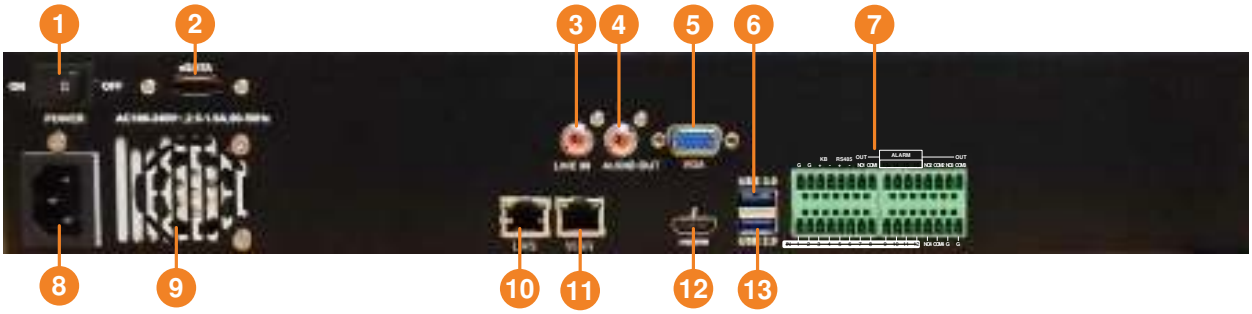
EPRO NVR 32

EPRO NVR 16

No.	Name	Description
1	LED Indicator	Power: When power is on, the LED will continue lighting in green. HDD: When power is on, the LED will continue lighting in red. When HDD is reading/writing data, the LED will flashes red.
2	IR Receiver	Receiver for signals from the IR remote control. Please refer to *Appendix A. IR Remote Control*.
3	USB Port	USB2.0 port for connecting to a mouse or an external storage device.

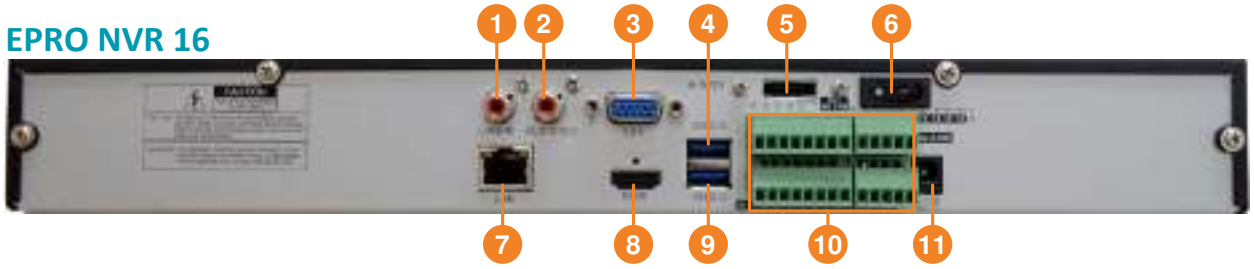
1.5 Rear Panel

EPRO NVR 32



No.	Name	Description
1	Power Switch	Press to turn On / Off the NVR.
2	eSATA Port	Connects to an external eSATA storage device.
3	Audio Input	Connects to a line-in audio input devices, such as microphones. Note that the microphone with a (built-in) amplifier and external power supply are required. The microphone audio source can be output to the speakers on the client PC through NVR Web browser (The function is currently reserved).
4	Audio Output	Connects to the audio output devices, such as speakers. Note that the speaker with a (built-in) amplifier and external power supply are required. The audio source from the cameras can be output here.
5	VGA Port	Connects to a monitor using a VGA cable.
6	USB3.0 Port	USB3.0 port for connecting to a mouse or an external storage device.
7	Alarm I/O	Connects up to 16 alarm input and 4 alarm output, and RS-485 devices. Please refer to *2.2.1 Alarm I/O* for more details.
8	Power Port	Connects to the power using the supplied Power Cord.
9	Fan	Internal fan.
10	LAN	Connects to a router or switch for connecting IP cameras using a standard RJ-45 CAT5 10/100/1000Mb Ethernet cable. Please refer to *2.3 Basic Connection*.
11	WAN	Connects to the network using a standard RJ-45 CAT5 10/100/1000Mb Ethernet cable.
12	HDMI Port	Connects to a monitor using a HDMI cable.
13	USB2.0 Port	USB2.0 port for connecting to a mouse or an external storage device.

EPRO NVR 16



No.	Name	Description
1	Audio Input	Connects to a line-in audio input devices, such as microphones. Note that the microphone with a (built-in) amplifier and external power supply are required. The microphone audio source can be output to the speakers on the client PC through NVR Web browser (The function is currently reserved).
2	Audio Output	Connects to the audio output devices, such as speakers. Note that the speaker with a (built-in) amplifier and external power supply are required. The audio source from the cameras can be output here.
3	VGA Port	Connects to a monitor using a VGA cable.
4	USB3.0 Port	USB3.0 port for connecting to a mouse or an external storage device.
5	eSATA Port	Connects to an external eSATA storage device.
6	Power Switch	Press to turn On / Off the NVR.
7	LAN	Connects to a router or switch for connecting IP cameras using a standard RJ-45 CAT5 10/100/1000Mb Ethernet cable. Please refer to *2.3 Basic Connection*.
8	HDMI Port	Connects to a monitor using a HDMI cable.
9	USB2.0 Port	USB2.0 port for connecting to a mouse or an external storage device.
10	Alarm I/O	Connects up to 16 alarm input and 1 alarm output, and RS-485 devices. Please refer to *2.2.1 Alarm I/O* for more details.
11	Power Port	Connects to the power using the supplied Power Adaptor and Power Cord.

Chapter
2

2. Connection and Installation

2.1 Hard Disk Installation

EPRO NVR 32

You can install up to four 3.5” HDDs inside the NVR for recording videos. The maximum capacity of each HDD is up to 6TB.

1. Make sure the NVR is power-off.
2. Unscrew the ten housing screws on the NVR, and remove the housing from the NVR.

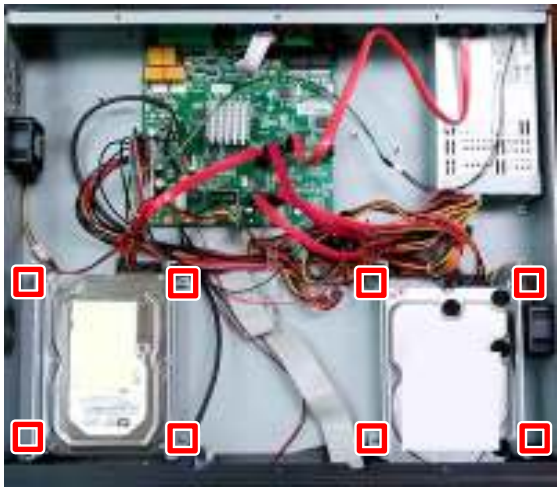
3. Screw two HDD brackets on both sides of the HDDs using the Sliver Screws.

4. Find the SATA cable inside the NVR, and connect the SATA cable to the SATA port on the HDD.

5. Find the internal power cable, and connect the internal power cable to the HDD.

Note: The internal power cable is connected to the Main board inside the NVR. The power cable features multiple connectors, which can be used to connect up to four HDDs.

6. Screw the HDD brackets inside the NVR using the Washer Head Screws.



7. Screw the housing back to the NVR.

EPRO NVR 16

You can install up to two 3.5” HDDs inside the NVR for recording videos. The max. capacity of each HDD is up to 6TB.

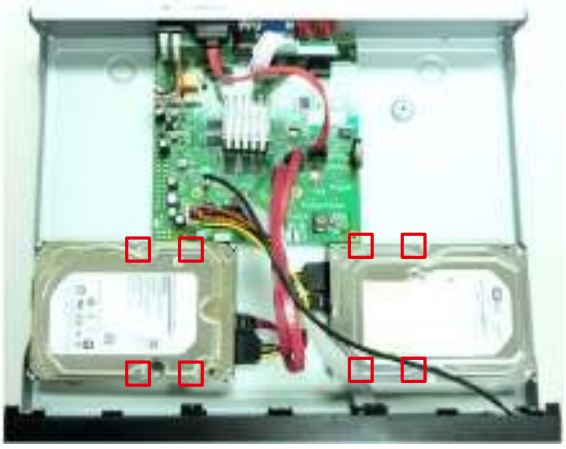
1. Make sure the NVR is power-off.
2. Unscrew the 8 housing screws on the NVR (2 on both sides and 4 on the rear side), and remove the housing from the NVR.

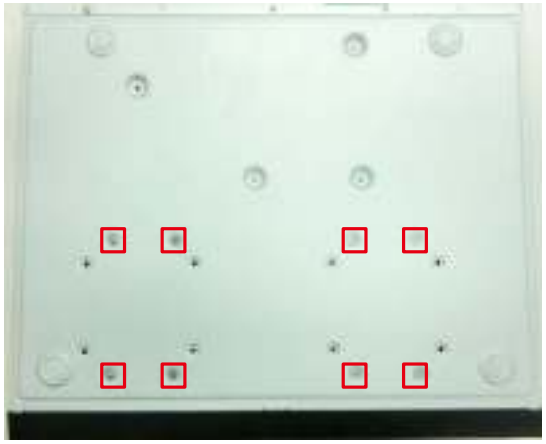
3. Find the SATA cable inside the NVR, and connect the SATA cable to the SATA port on the HDD.

4. Find the internal power cable, and connect the internal power cable to the HDD.

Note: The internal power cable is connected to the Main board inside the NVR. The power cable features multiple connectors, which can be used to connect up to two HDDs.

5. Screw the HDDs to the bottom of the NVR using the supplied screws (inside HDD Screws Pack). Note the screws should be inserted from the outside of the bottom case.





6. Screw the housing back to the NVR.

2.1.1 Hard Disk Compatibility List

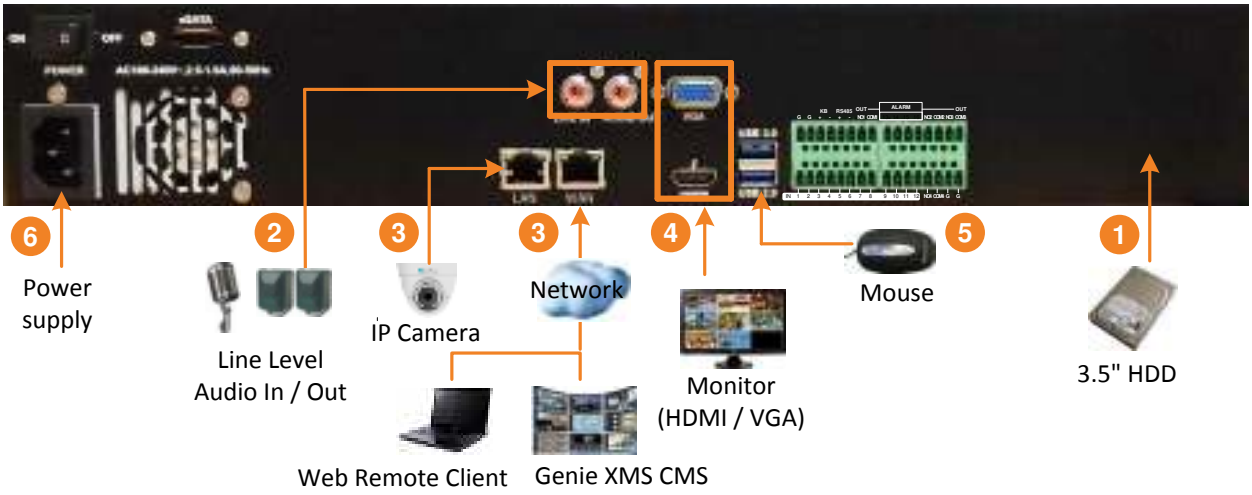
Please go to the product page (Download) on EverFocus' Website www.everfocus.com.tw to see the latest Hard Disk Compatibility List. It's recommended to use the hard disk models listed in the Hard Disk Compatibility List to ensure your hard disks will be compatible.

Note: If using two or more hard disks, please choose the hard disks with the same capacity.

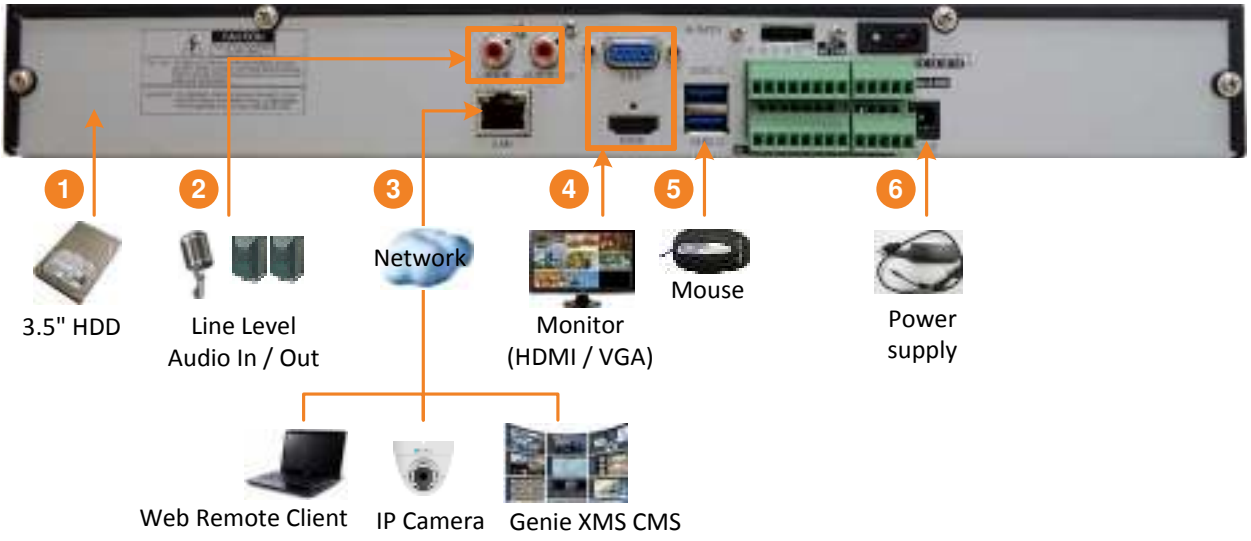
2.2 Basic Connection

The instructions below describe the basic connection to the NVRs.

EPRO NVR 32



EPRO NVR 16



1. To record videos, install the 3.5” HDD(s) to the NVR. Please refer to *2.1 Hard Disk Installation*.
2. To listen to the audio from device side, connect a speaker to the audio output. To transmit audio from the NVR to the Web client side (the function is currently reserved), connect microphones to the audio input. Note that the microphones and speakers with a (built-in) amplifier and external power supply are required.
3. Connect the IP cameras to the NVR and connect the NVR to the network.
   - EPRO NVR 32: Connects to a router or switch to the LAN port for connecting IP cameras using a standard RJ-45 CAT5 10/100/1000Mb Ethernet cable. Connects the NVR to the network through the WAN port using a standard RJ-45 CAT5 10/100/1000Mb Ethernet cable.

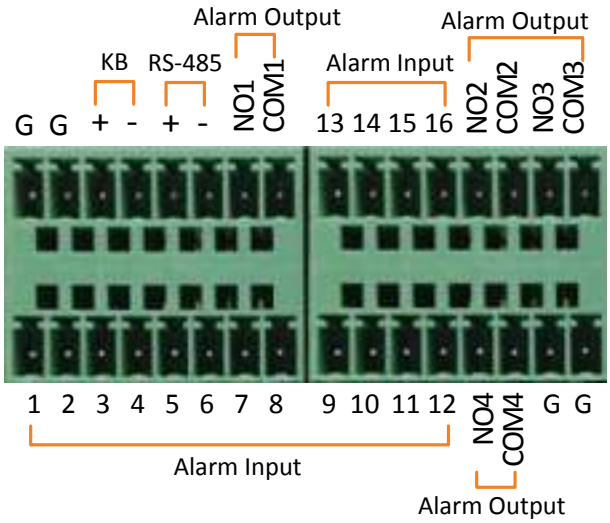
- EPRO NVR 16: Use a standard RJ-45 CAT5 Ethernet cable to connect the LAN port of the NVR to the network.

4. To view videos at local site, connect a monitor to the HDMI or VGA port using the HDMI or VGA cable supplied by the monitor manufacturer.
5. Optionally connect a mouse to the NVR to control the system. You can also control the system using the supplied IR Remote Control (*Appendix A. IR Remote Control*).
6. Use the supplied Power Cord (EPRO NVR 32) / Power Adaptor (EPRO NVR 16) to connect the NVR to the power outlet.

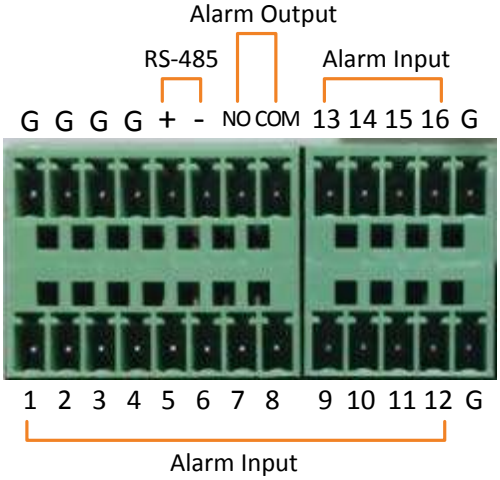
2.2.1 Alarm I/O

The NVR provides alarm I/O and RS-485 connections. Please refer to the image below for PIN assignment.

EPRO NVR 32 provides 16 alarm inputs, 4 alarm outputs and 1 RS-485.



EPRO NVR 16 provides 16 alarm inputs, 1 alarm output and 1 RS-485.

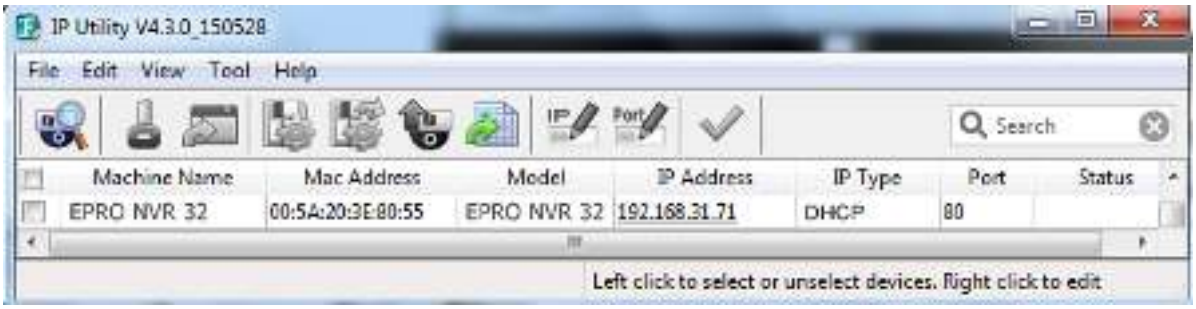


2.3 Accessing the Web Interface of NVR

You can look up the IP address and access the Web interface of the DVR using the **IP Utility (IPU)** program, which is included in the software CD. The IP Utility can also be downloaded from EverFocus' Website: http://www.everfocus.com/HQ/Support/DownloadCenter_p1.aspx. Please connect the DVR on the same LAN of your computer.

1. Save **IP Utility Setup .exe** in your computer. Double click the .exe file and follow the on-screen instructions to install the IP Utility.

2. Click the **Finish** button, the IP Utility will be automatically launched to search the IP devices connected on the same LAN.



3. To optionally configure the Machine Name, IP Address, IP Type or Port Number using the IPU:

   a. Log in the DVR by checking the desired model and then click the **Log in** icon. The Log in dialog box appears.

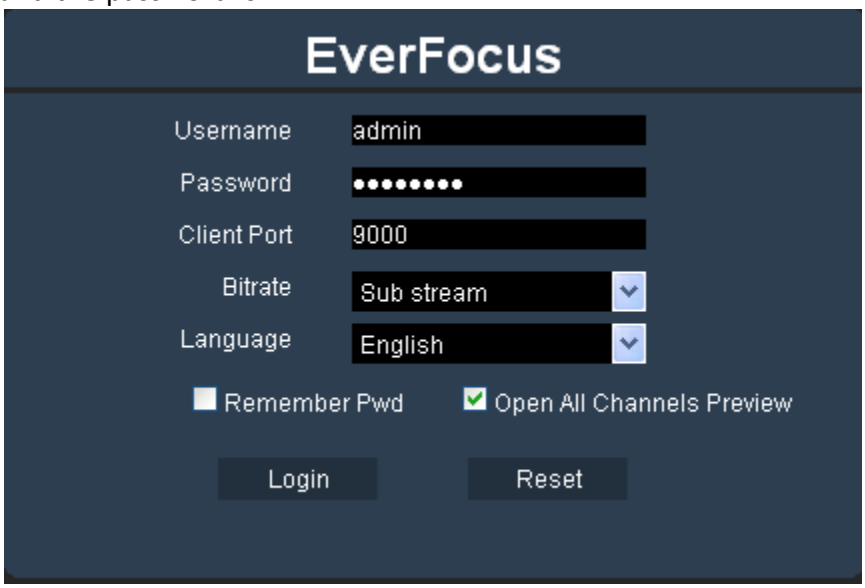
b. Type the Username and Password. Click the **OK** button, the status of the selected camera will display **Login**.

Note:
1. The default user ID is **admin** and the default password is **11111111**.
2. If you select more than one DVRs that have the same user ID / password, you will be able to log in several DVRs at once.

c. Right click the column to configure the setting. Click **Apply Changes** button to apply and save the settings.

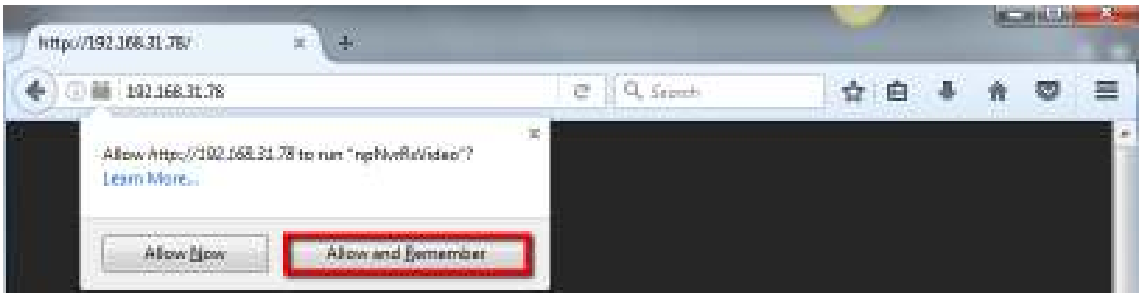
Note: Most networks uses DHCP to assign IP address, if you are unsure of your network settings, please consult your network administrators for configuration details.

4. To access the Live View window, double click the IP address of the desired device, the login window pops up. Type the user ID and password to log in. By default, the user ID is **admin** and the password is **11111111**.



Note for the first time login:

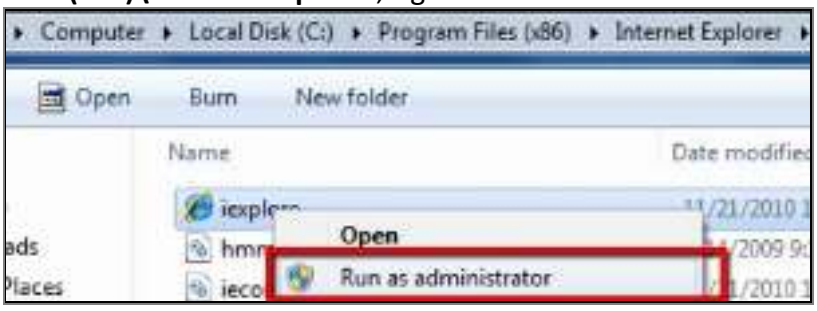
- When the Plug-in blocked appears on the browser, click **Allow…** and then click **Allow and Remember**. Reload the webpage and you should see the remote live view page now.



If you encounter the following problem or still can't access the remote Web interface, please follow the instructions below:

- If the ActiveX is not downloaded successfully, please check if your browser's safety level or firewall setting is set too high. Enable the following options on the Security Settings window (IE Browser < Tools < Internet Options < Security < Internet < Custom Level).
  - ✓ Automatic prompting for ActiveX controls
  - ✓ Script ActiveX controls marked safe for scripting

- If your PC or laptop is running with Windows, it's required to run the browser as administrator when first entering the remote web page of the device. Go to **C:\Program Files (x86)\Internet Explorer**, right-click the browser and then click **Run as administrator**.



- If you are unable to backup or record during remote operation, you may need to turn off the firewall and turn **User Account Control** off.
  To turn **User Account Control** off, on the computer, **click Start > Control Panel > System and Security > Action Center** (click Change User Account Control Settings), the **User Account Control Settings** window appears. Adjust the slide bar to **Never Notify** and then click **OK**. Restart your computer if requested.

Chapter
3

3. Getting Started

After pressing the power switch to turn on the NVR, the NVR will enter the System Initialization process. When the process is done, the Login window will display. Input the Device ID / User Name and Password. Click the **Login** button to login.

By default, the User Name is **admin** and Password is **11111111**

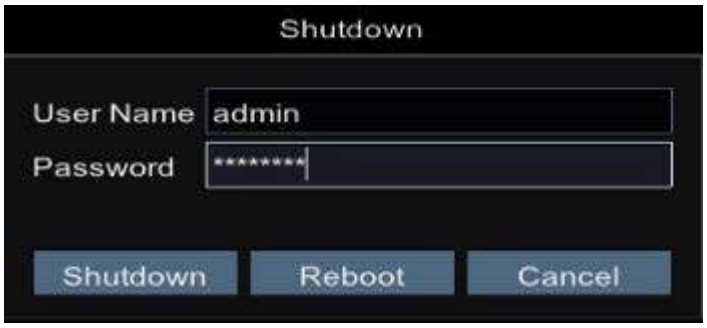
After clicking the **Login** button, the Startup Wizard will be displayed to guide you through the basic settings for the NVR. Click the **Next** button to proceed or **Cancel** to cancel the startup wizard.

Please refer to *3.1 Startup Wizard* for more details.

3.1 Turning On / Off the Power

Before powering on the NVR, please make sure the internal HDD have been installed properly. Once you have completed the basic cable connections, you are ready to turn on the NVR. Simply plug in the power source and then press the **Power Switch** on the rear panel of the NVR to turn on the NVR. The POWER LED will light up if power is normal. Once the system has finished loading, you can begin to set up the menu options for the NVR.

To turn off the power, right-click on the Live View window to bring up the OSD Root Menu and then click **Shutdown**, the below Shutdown widow appears. Input the User Name, Password and then click the **Shutdown** button to shutdown the NVR.



After clicking the **Shutdown** button, the below Warning window appears. Users can now press the **Power Switch** on the rear panel of the NVR to turn off the power.

3.2 Restart the NVR

To restart the NVR, right-click on the Live View window to bring up the OSD Root Menu and then click **Shutdown**, the below Shutdown widow appears. Input the User Name, Password and then click the **Reboot** button to restart the NVR.

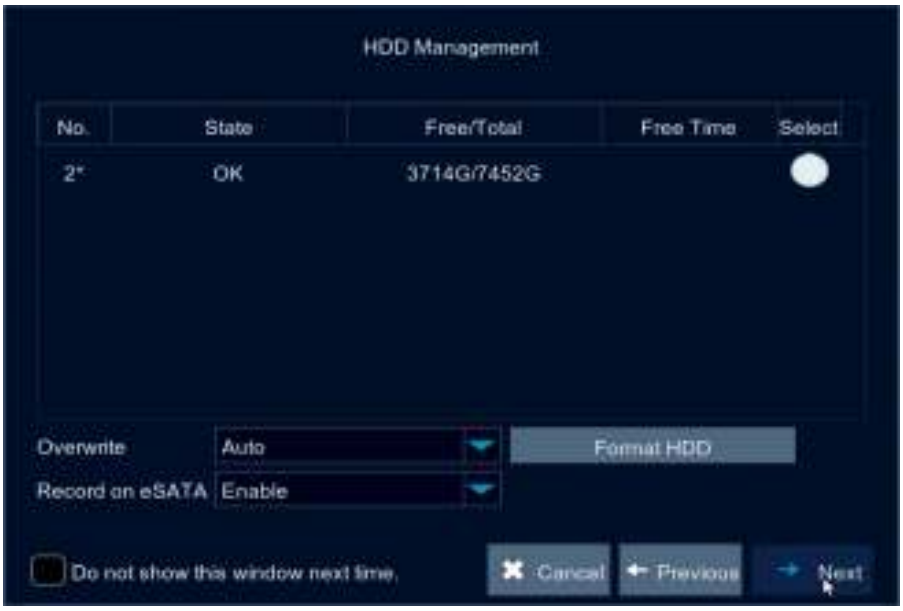
3.3 Startup Wizard

The Startup Wizard will guide you through some basic settings for the NVR. Please follow the on-screen instructions to proceed.

1. Click the **Next** button to start with the Startup Wizard.

Note: You can check “Do not show this window next time” if you do not want to run the Startup Wizard to make any settings when you restart the NVR next time.

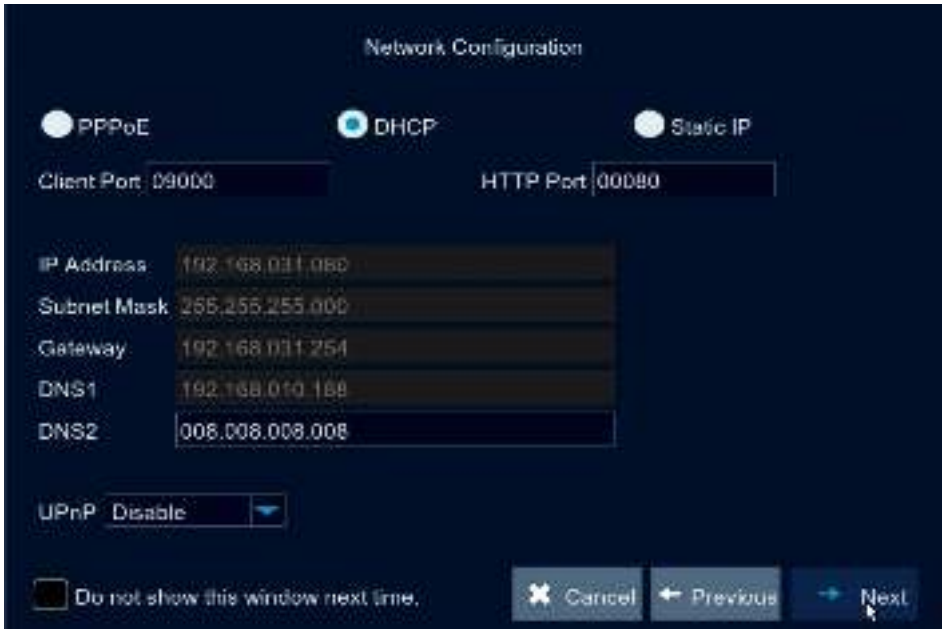
2. For the first time use HDD or a new HDD, users have to format the HDD before use. Click to select the HDD in the Select column and then click **Format HDD** to format the selected HDD. You can also setup to overwrite the HDD or Record on eSATA. Click **Next** to proceed.



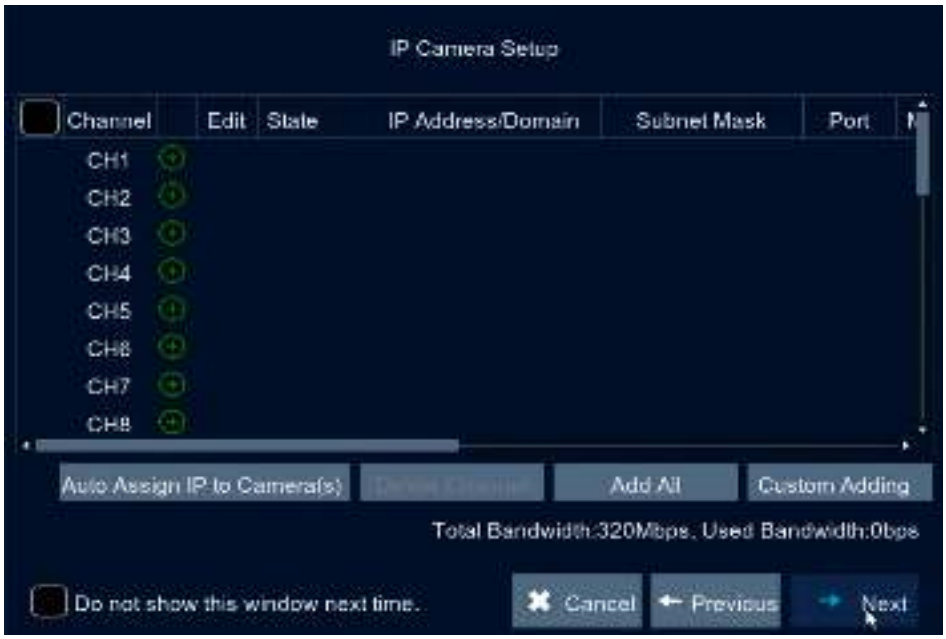
Note:

1. Please connect the HDDs to the system in advance.
2. Clicking the **Format HDD** button will effectively erase the entire data in the HDD! If you do not want to format the HDD, click the **Next** button to proceed.

3. Configure the network settings. Select PPPoE, DHCP or Static IP and setup the settings. Click **Next** to proceed.

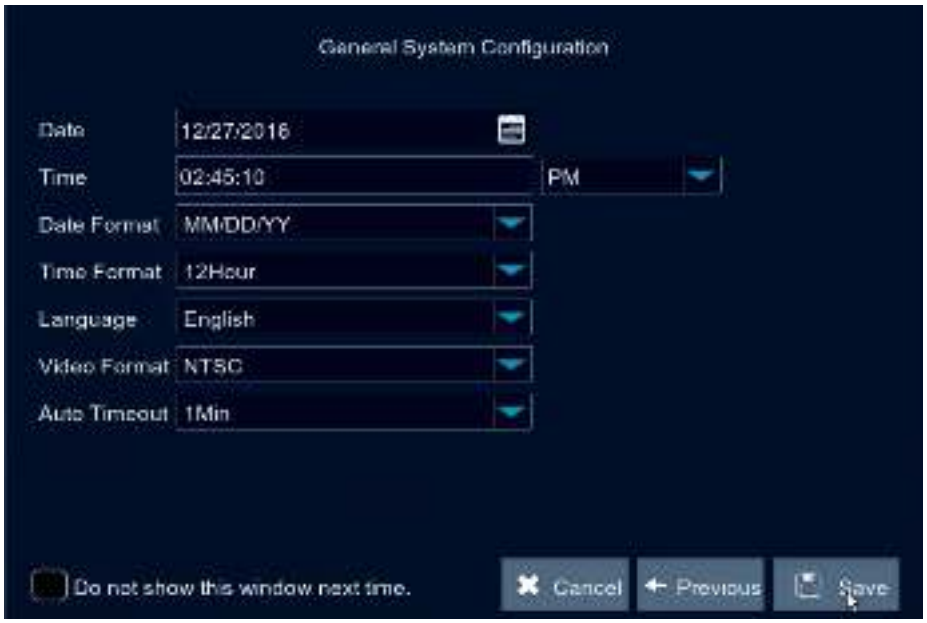


4. You can add IP cameras on this page (please refer to *4.1.1.1.1. IP Channels* for more details). Click **Next** to proceed.

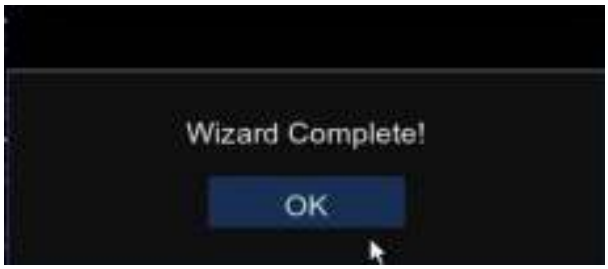


5. Configure the recording schedule. Click **Next** to proceed.

6. Configure the general system settings. Click **Save** to save the settings.



7. Click **OK** to complete the Startup Wizard.



8. After clicking the **OK** button, the system will enter the Live View window (refer to *3.2 Live View Window*). Now you can start using the NVR.

Note:

1. If no HDD has been connected to the system, a warning message will pop-up. Click X to close the warning message. If you want to perform the recording function, you will have to connect the HDDs to the system.

2. If multiple HDDs have been connected to the system, the system will automatically detect the connected HDDs when system starts up. The status of the connected HDDs will be display in the Disk Warning window. Take the below image for example, HDD1 has not been formatted; HDD2 is running normally (in recording state).

3.4 Live View Window

No	Name	Description
1	Record Icon	If the HDDs have been connected to the system, the system will automatically start recording all the connected IP camera channels, and the **Record Icon** will be displayed. If you want to configure the record settings, please refer to *4.1.1.2 Record* for more details.
2	Layout Page Icon	Click the Previous / Next icon to turn to the previous / next layout pages. For example, if you select 9-Division, click the next layout page icon (on the right side) will display the next 9-division layout with channel 10-18.
3	Live Channel Tool Bar	Left click any channel can display its Live Channel Tool Bar to perform functions including manual record, quick playback, digital zoom, PTZ and etc. Please refer to *3.3 Live Channel Tool Bar* for more details.
4	Drag Channel	You can drag and drop a channel to the desired position on the layout. Click on a channel, a Drag Channel icon will display. Drag and drop the channel to the desired position on the layout.
5	No HDD Icon	If there is no HDD connected to the system, there will be a **No HDD** icon displayed on the bottom of the window. Note that if you want to perform the recording function, HDD(s) are required to be connected to the system.

6	Live Channel	Double click on a channel can display the channel in full screen. To exit the full screen mode, double click on the channel again. In full screen mode, you can right-click to bring up the **Channel Tool Bar**. Please refer to *3.3 Channel Tool Bar* for more details.
7	Quick Add	For channels without adding IP camera, a "No Camera" message will be displayed on the channel. Right-click on the channel, a **Quick Add** icon will be displayed. Click on the **Quick Add** icon will bring up the Quick Add window. You can add an IP camera to this channel. Please refer to **Quick Add Window** in *4.1.1.1.1 IP Channels* for more details.
8	OSD Root Menu	You can right click your mouse or move your mouse over the bottom of the screen to bring up the OSD Root Menu. Please refer to *4. OSD Root Menu* for more details.

3.5 Live Channel Tool Bar

You can left click any channel on the Live View Window to bring up its Live Channel Tool Bar.

No	Name	Description
1	Stream Switch	Click to switch between **HD** and **SD** stream to be displayed on the live view channel. To adjust the HD (main stream), SD (sub stream) configurations, please refer to *4.1.1.2.3 Main Stream* and *4.1.1.2.4 Sub Stream*.
2	Start/Stop Manual Record	Click the button to start manual recording. Click the button again to stop manual recording.
3	Quick Playback	Click to start the Quick Playback function. Click X to exit the Quick Playback mode.
4	Zoom	Click to start the digital zoom function. Please refer to *3.5.1 Digital Zoom* for more details.
5	Image Settings	Click to bring up the Image Setting window. You can adjust the Sharpness, Brightness, Contrast and Saturation for each channel individually.
6	PTZ	Click to bring up the PTZ Control window. Please refer to *3.5.2 PTZ Control* for more details.

3.5.1 Digital Zoom

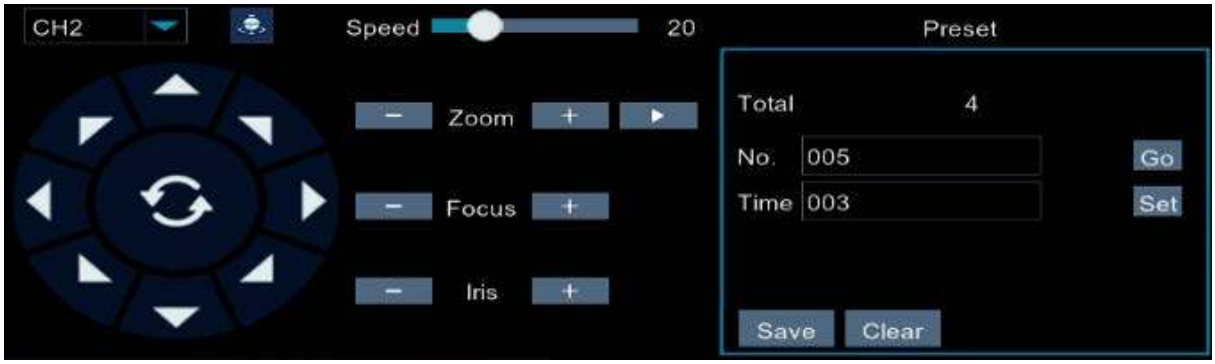
On the Live View window, left click on a channel to display its Live Channel Tool Bar and then click the **Zoom** icon, the channel will be displayed in full screen.

To perform the digital zoom function:

1. Click on the image and then draw an area where you want to have a close-up view. A preview window will display on the bottom right corner of the screen.
2. Drag the Navigation Box and drop it to the position where you want to have a close-up view.
3. To re-draw an area, double click on the Live full screen channel.
4. To exit the Digital Zoom mode, right click the mouse.
5. To return to the Live View window, double click on the Live full screen channel.

3.5.2 PTZ Control

You can control the connected PTZ camera using the PTZ Control window. On the Live View window, select a PTZ camera by clicking on the channel, the selected channel will be highlighted with a red frame and its Live Channel Tool Bar will be displayed. Click the **PTZ** button to bring up the PTZ Control window. You can use your mouse to drag the PTZ Control window and drop it to the desired position on the screen.



Channel Drop-Down List: Click to select a channel of PTZ camera you want to control.

Start Tour : Click to start the Tour function. Click again to stop the Tour function. Note that for this function to work, users have to set up preset points in advance.

Speed: Slide the bar to the left or right to adjust the control speed.

Direction Buttons: Click the direction buttons to force the PTZ camera to turn to the direction.

Auto Pan : Click to start the Auto Pan function. Click again to stop the Auto Pan function.

Zoom: Click + or – to zoom in or zoom out.

Focus: Click + or – to focus near or focus far.

Iris: Click + or – to adjust the Iris.

Show Preset Window : Click to display or hide the Preset window. You can set up Preset Points or perform the go to preset function on this window.

To set up Preset Points:

1. Select a preset number (1-255) by clicking on the No. input box.
2. Set up a dwell time for this preset number.
3. Use the direction buttons or Zoom/Focus/Iris buttons to search for the location for this preset number.
4. Click the **Set** button to jump to the next preset number for configuration. Follow **Step 2-3** to set up multiple preset points.
5. After setting up the preset points, click the **Save** button to save the settings.
6. To clear the setup preset points, select a preset number and then click **Clear**.

To perform the Tour function:

1. Set up the preset points in advance. Please refer to the steps of “To set up Preset Points” above.
2. Click the **Start Tour** button .
3. To stop the Tour function, click the **Stop Tour** button.

To perform the Go to Preset Point function:

1. Set up the preset points in advance. Please refer to the steps of “To set up Preset Points” above.
2. Select a preset number (1-255) by clicking on the No. input box.
3. Click the **Go** button.

Chapter

4

4. OSD Root Menu

To bring up the OSD Root Menu, right click your mouse or move your mouse over the bottom of the screen, the OSD Root Menu displayed.

The images in this content are using the OSD of EPRO NVR 32 as examples. For EPRO NVR 16, some of the OSD may look slightly different, such as the number of channels and layout options.

No	Name	Description
1	Main Menu	Click to enter the Main setup page. Please refer to *4.1 Main Menu* for more details.
2	Manually Lock Screen	Click to lock or unlock the system interface. Please refer to *4.2 Lock/Unlock Screen* for more details.
3	Quad	Click to display quad view.
4	9 Divisions	Click to display the layout with 9 divisions.
5	12 Divisions	Click to display the layout with 12 divisions.
6	16 Divisions	Click to display the layout with 16 divisions.
7	25 Divisions	Click to display the layout with 25 divisions.
8	36 Divisions	Click to display the layout with 36 divisions.
9	More Layouts	Click to select a desired layout to display.
10	Stream Switch	Click to select Main Stream or Sub Stream for live view display.
11	Preview Policy	Click to select a live view quality. The options include Realtime, Balanced and Smooth.
12	Start/Stop Sequence	Click the button to start displaying the sequence mode. Click again to stop the sequence mode. To configure the sequence settings, please refer to *4.1.1.1.3 Output*.
13	Volume	Click to adjust the volume.
14	Playback	Click to enter the playback page. Please refer to *4.1.2 Record Search* for more details.
15	Info	Click to display the system info.

4.1 Main Menu

You can configure most of the system settings on the Main Menu.

4.1.1 Settings

On the Settings page, you can configure the Display, Record, Network and Alarm settings.

4.1.1.1 Display

On this page, you can configure IP Channels, Live, Output and Privacy Mask.

4.1.1.1.1 IP Channels

You can add IP cameras manually or automatically using this page.

Auto Assign IP to Camera(s): Click to automatically search the IP cameras on the same LAN and then automatically assign IP addresses to the IP cameras. The IP cameras will be automatically added to the NVR as well.

Delete Channel: Select the desired IP cameras and then click this button to delete the selected IP cameras.

Auto Add All: Click to automatically search the IP cameras on the same LAN. The IP cameras will be automatically added to the NVR.

Custom Adding: Click to add IP cameras through RTSP protocol to the NVR. Please refer to **Custom Adding** in the following content for more details.

You can also click the following icons to perform the functions:

Delete: Click to delete the IP camera.

Add: Click to bring up the Quick Add window to add an IP camera. Please refer to Quick Add window below for more details.

Edit: Click to edit IP camera profile.

Modify: Click to modify IP camera settings.

Click **Cancel** to cancel and leave the page.

- **Quick Add Window**

After clicking the **Add** button, the Quick Add window appears.

To quickly add an IP camera to this channel:

1. Click the **Search** button to search for the IP cameras on the same LAN. Note that the IP cameras that have been added to the NVR will not be displayed.
2. Select an IP camera from the list by clicking on it, the selected IP camera will be highlighted with a blue background and its IP address will be automatically displayed in the right-side field.
3. Input the User Name and Password of the IP camera. Configure the Alias, Position and Protocol if necessary.
4. Click the **Add** button, the IP camera will be added to the channel.

➢ **Custom Adding**

After clicking the **Custom Adding** button, the Custom Adding window appears. The Custom Adding window can be divided into three sections:

Section 1: Displays the searched IP cameras on the same LAN.

The system will automatically search the IP cameras on the same LAN and lists the IP cameras that have not been added to the system here.

Section 2: Configure the info of the IP camera selected in Section 1.

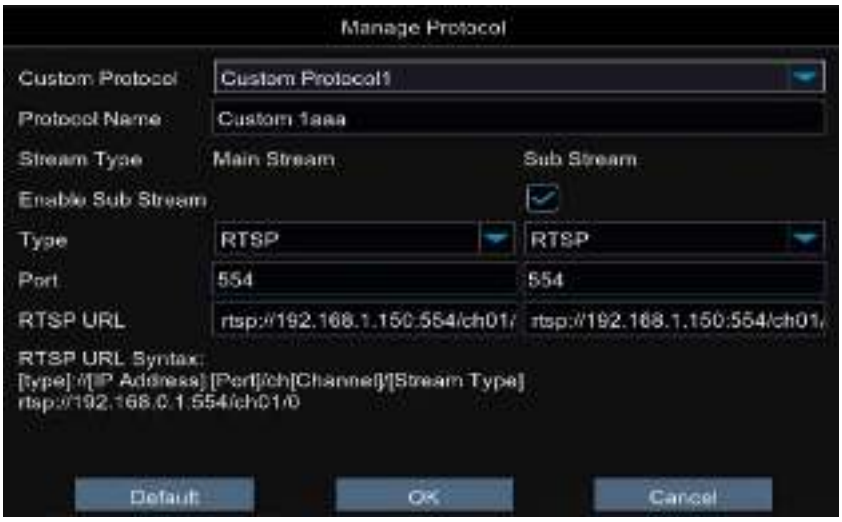
Click an IP camera on the Section 1 list, the clicked IP camera will be highlighted with a blue background and its IP address will be displayed in the IP Address/Domain input box automatically. You can further input the information of the IP camera in this section.

Section 3: Displays the IP cameras already added to the system.

The IP cameras that have been added to the system will be listed here. You can check the box to select the IP cameras and then click the **Delete Channel** button to delete the selected IP cameras.

Note: The **Protocol** drop-down list in Section 2 includes three protocols: **Private**, **ONVIF** and **Custom**. Depends on the IP cameras, users can add the IP cameras through Private, ONVIF or RTSP (Custom 1-16) protocol. To configure multiple RTSP protocol to Custom 1-16, click the **Manage Protocol** button to bring up the Manage Protocol window. Please refer to **Manage Protocol** in the following content for more details.

Manage Protocol: Click to bring up the Manage Protocol window. You can configure Custom 1-16 RTSP streaming protocol on this page.



- Custom Protocol: Select a custom RTSP protocol profile from the drop-down list to be configured. Up to 16 profiles can be configured.
- Protocol Name: Input a name for this RTSP protocol profile.
- Stream Type: Indicates Main Stream and Sub Stream are supported. You can separately configure the Main Stream and Sub Stream settings below.
- Enable Sub Stream: Check the Sub Stream checkbox if you want to enable sub stream for this RTSP protocol.
- Type: Select RTSP.
- Port: Keep 554 as the RTSP port.
- RTSP URL: Input the RTSP URL syntax in the box. For example:

  rtsp://[IP Address]:[Port]/ch[A]/[B]

  rtsp://192.168.31.33:554/ch01/0

  * IP Address: The IP address of the NVR

  * A: Channel number. 01 (ch1), 02 (ch2), and so on

  * B: Stream Type: 0 (main stream), 1 (sub stream)

Search: Click to search the IP cameras on the same LAN. The searched IP cameras will be displayed on the Section 1 list. Note that the IP cameras that have been added to the NVR will not be displayed on this list.

Add: Click to add the single selected IP camera to the system. Select an IP camera from the Section 1 list by clicking on it, the selected IP camera will be highlighted with a blue background and its info will be displayed on Section 2. You can edit the IP camera info in Section 2. Click the **Add** button, the IP camera will be added to the system. You can see this IP camera listed on Section 3 list.

Add Selected: Click to add the multiple selected IP cameras to the system. Select the desired IP cameras from the Section 1 list by checking the checkboxes and then click the

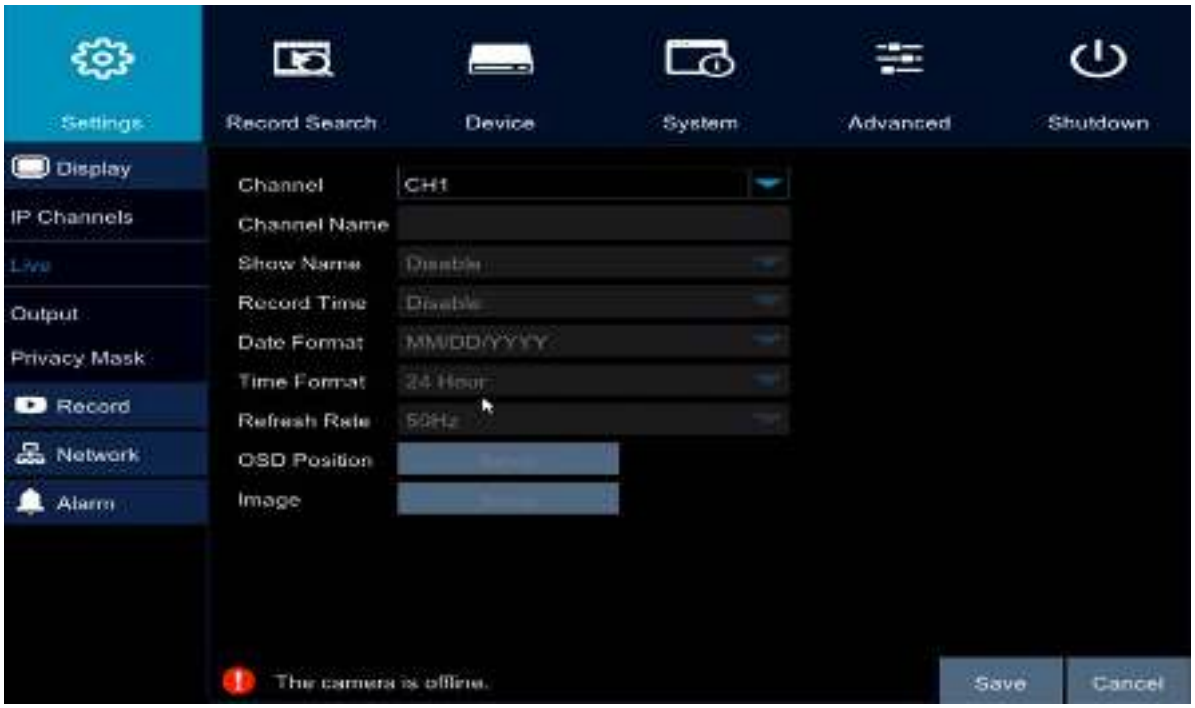
Add Selected button, the IP cameras will be added to the system. You can see the IP cameras listed on Section 3 list.

Delete Channel: Click to delete the IP cameras from the system. Select the IP cameras by checking the checkboxes from the list in Section 3 and then click the **Delete Channel** button. The selected IP cameras will be deleted from the system.

Cancel: Click to cancel and leave the page.

4.1.1.1.2 Live

You can configure camera OSD or image settings on this page.



Channel: Select a channel from the drop-down list.

Channel Name: Input a name for the IP camera.

Show Name: Select **Enable** if you want to display camera name on the live stream.

Record Time: Select **Enable** if you want to display time on the live stream.

Date Format: Select a date format from the drop-down list.

Time Format: Select a time format from the drop-down list.

Refresh Rate: Select 50Hz or 60Hz from the drop-down list.

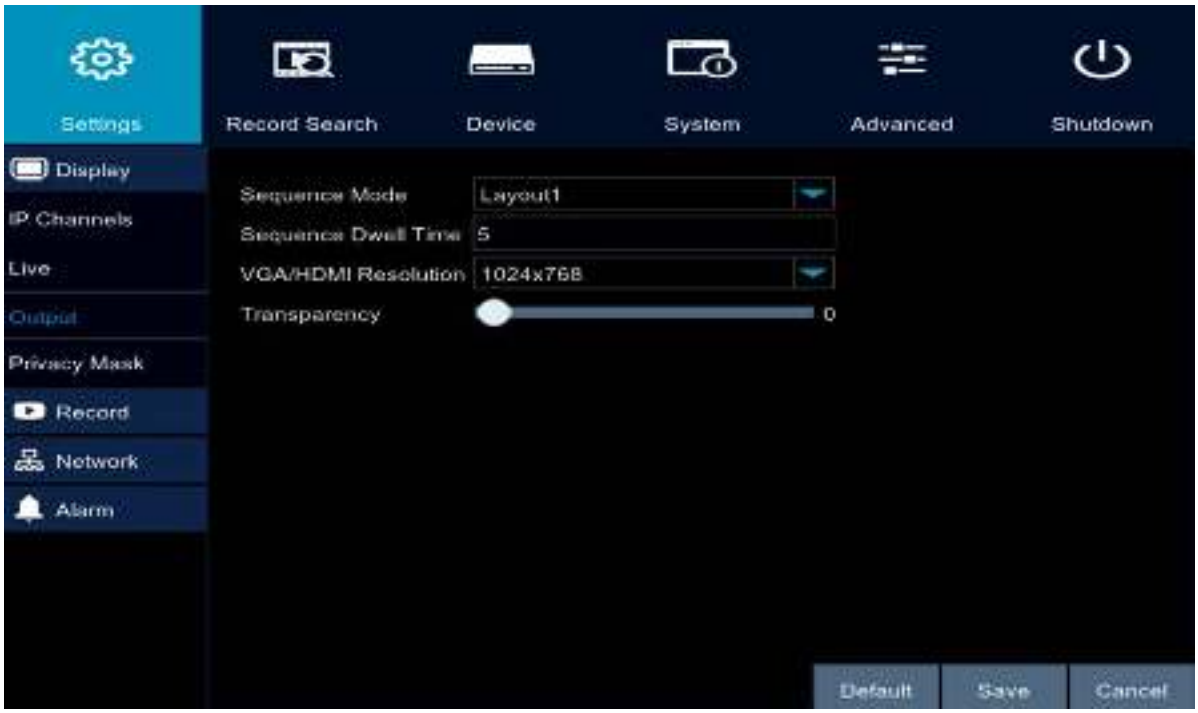
OSD Position: Click to set up the OSD position freely.

Image: Click to adjust image configurations including Sharpness, Brightness, Contrast and Saturation.

Click **Save** to save the settings or **Cancel** to cancel and leave the page.

4.1.1.1.3 Output

You can configure the output monitor settings and OSD menu transparency on this page.



Video output: Select Live Output from the drop-down list.

Sequence Mode: Select a layout for the sequence mode. For example, if you select Layout4, the NVR will display a quad view layout for the 32 channels in sequence order. To start the sequence mode, on the Live View screen, click the **Start Sequence** icon on the OSD Root menu. Click the button again to stop sequence mode.

Sequence Dwell Time: Select a sequence dwell time in second. By default, 5 seconds is set up.

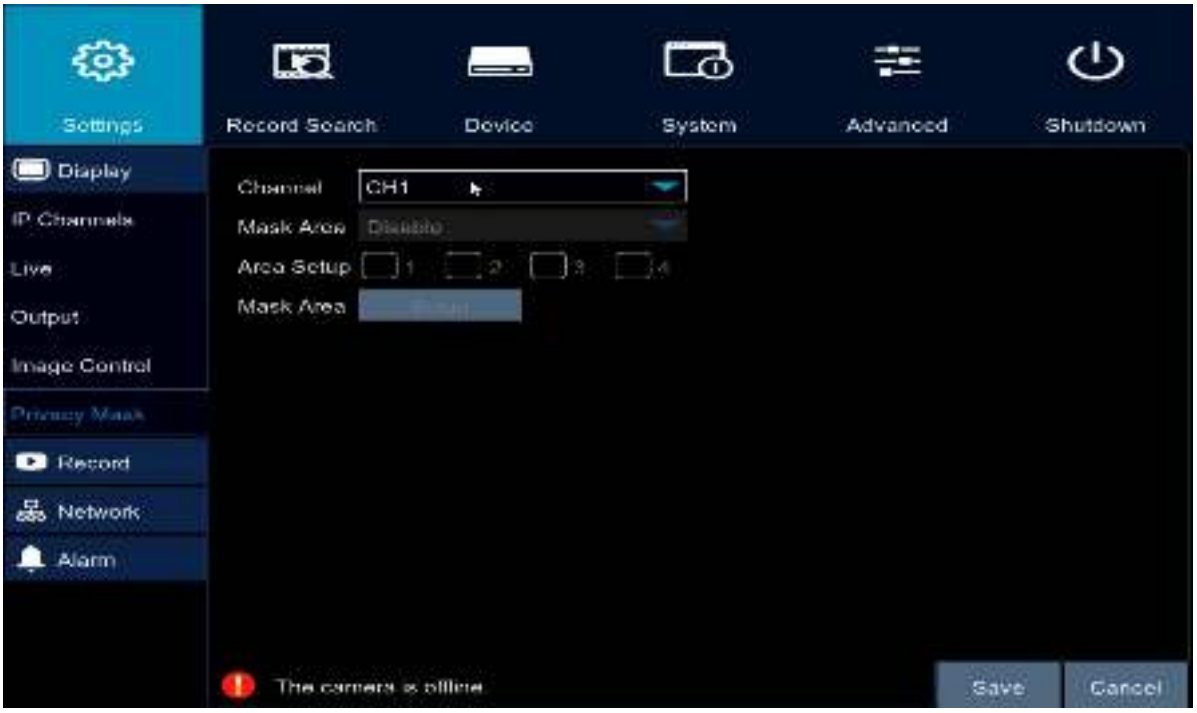
VGA/HDMI Resolution: Select a live resolution to be displayed on the output monitor.

Transparency: Set up the transparency for the OSD menu.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.1.4 Privacy Mask

The Privacy Mask can block out sensitive areas from view. This feature is useful when users' don't want the sensitive information visible. Up to four Privacy Masks can be configured.



To configure privacy masks:

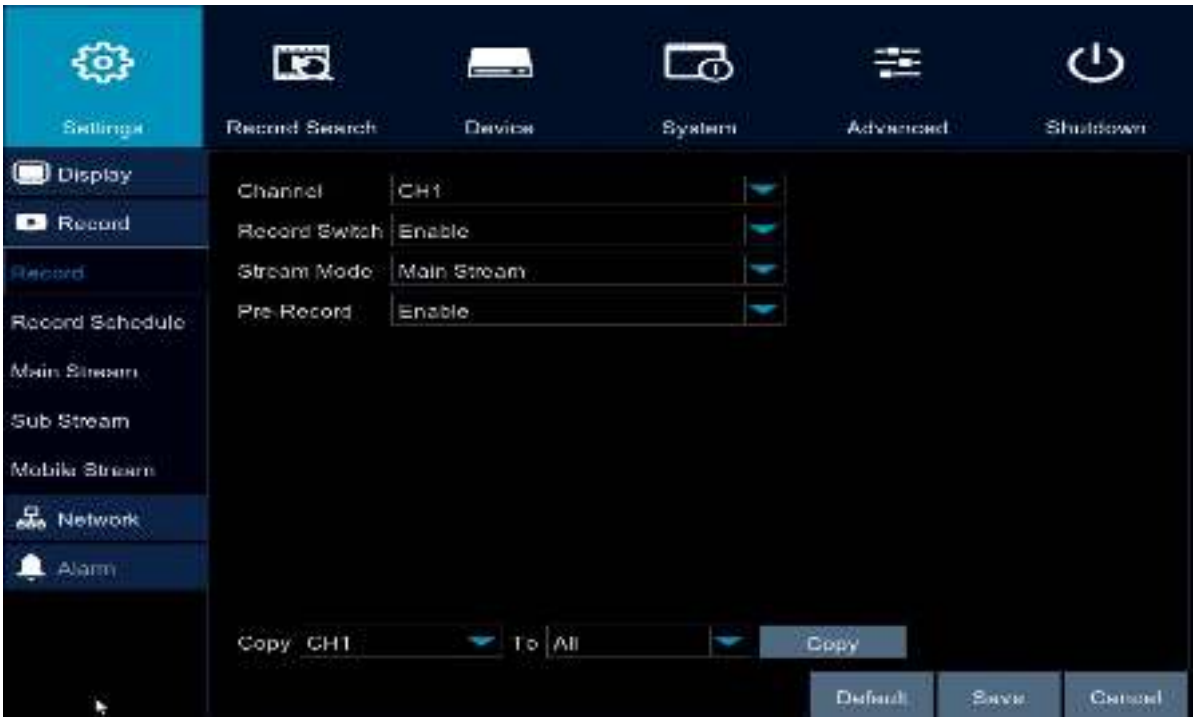
1. Select a channel from the Channel drop-down list.
2. Select **Enable** from the Mask Area drop-down list.
3. Select the number of masks to be configured. Up to 4 masks are available.
4. Click the **Setup** button to adjust the masks position. After setting up the position, right click the mouse to return to the Privacy Mask page.
5. Click **Save** to save the settings.

4.1.1.2 Record

You can configure the record settings on this page.

4.1.1.2.1 Record

You can configure the basic record settings on this page.



Channel: Select a channel to configure the record setting individually.

Record Switch: Select **Enable** to enable the record function.

Stream Mode: Select **Main Stream** or **Sub Stream** to record on this channel.

Pre-Record: Select **Enable** to enable pre-recording for motion detection or I/O trigger record.

Copy: You can apply the same configurations from one channel to the desired channels. Select a channel from the **Copy** drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.2.2 Record Schedule

You can configure the record schedule on this page.

Channel: Select a channel to configure the record schedule setting individually.

Normal: Click the **Normal** button and then move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with green color, which will be applied with normal recording function.

Motion: Click the **Motion** button and then move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with yellow color, which will be applied with motion recording function.

Alarm: Click the **Alarm** button and then move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with red color, which will be applied with alarm recording function.

Copy: You can apply the same configurations from one channel to the desired channels. Select a channel from the **Copy** drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.2.3 Main Stream

You can configure the main stream record, resolution and etc. for individual channel.

Channel: Select a channel to apply with the following configurations.

Resolution: Select a recording resolution for the selected channel.

FPS: Select a record FPS (frames per second) for the selected channel.

Bitrate Control: Select **CBR** (constant bitrate) or **VBR** (variable bitrate) for the selected channel. If VBR is selected, select a quality type from the drop-down list next to Bitrate Control.

Bitrate Mode: Select **User-defined** or **Predefined** for the selected channel.

Bitrate: Set up a bitrate for the selected channel.

Click **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.2.4 Sub Stream

You can configure the sub stream record, resolution and etc. for individual channel.

Channel: Select a channel to apply with the following configurations.

Resolution: Select a recording resolution for the selected channel.

FPS: Select a record FPS (frames per second) for the selected channel.

Bitrate Control: Select **CBR** (constant bitrate) or **VBR** (variable bitrate) for the selected channel. If VBR is selected, select a quality type from the drop-down list next to Bitrate Control.

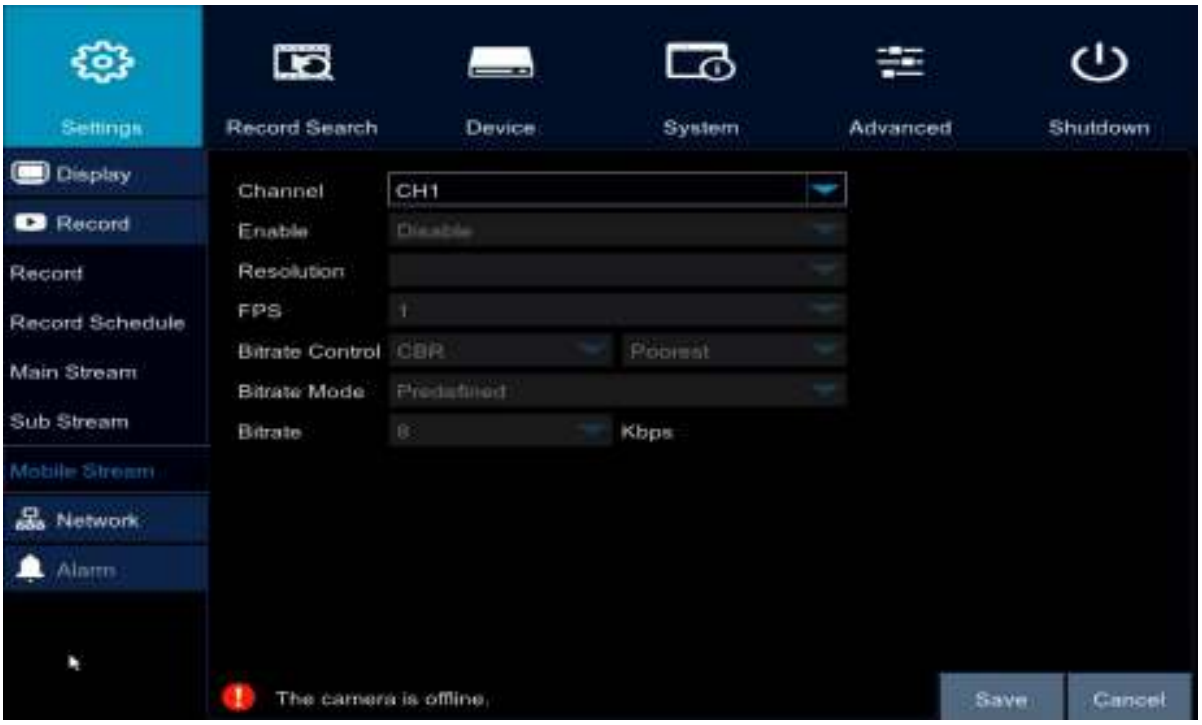
Bitrate Mode: Select **User-defined** or **Predefined** for the selected channel.

Bitrate: Set up a bitrate for the selected channel.

Click **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.2.5 Mobile Stream

You can configure the mobile stream record, resolution and etc. for individual channel.



Channel: Select a channel to apply with the following configurations.

Enable: Select **Enable** from the drop-down list to enable the function.

Resolution: Select a recording resolution for the selected channel.

FPS: Select a record FPS (frames per second) for the selected channel.

Bitrate Control: Select **CBR** (constant bitrate) or **VBR** (variable bitrate) for the selected channel. If VBR is selected, select a quality type from the drop-down list next to Bitrate Control.

Bitrate Mode: Select **User-defined** or **Predefined** for the selected channel.

Bitrate: Set up a bitrate for the selected channel.

Click **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.3 Network

You can configure the network settings on this page.

4.1.1.3.1 Network

You can configure the basic network settings on this page. After configuring the settings, users are able to control and monitor the NVR remotely.

PPPoE: This is a DSL-connection application. The ISP will ask the user to input a username and password. Contact your ISP for these details.

Note: If PPPoE is selected as the IP type, the supplied IP Utility program will not be able to detect the device.

DHCP: DHCP server in LAN will automatically assign an IP configuration for the network connection. This setting lets the system use an automatically assigned (dynamic) IP address. This address can change under certain circumstances, for instance, when the NVR's network switch/hub has to be rebooted.

Static IP: Users can manually set up a Static IP address for the NVR. This type of address is stable and cannot change, but users have to make sure there are no IP address conflicts with other network-connected devices.

Client Port: Keep 9000 port. Change only when necessary.

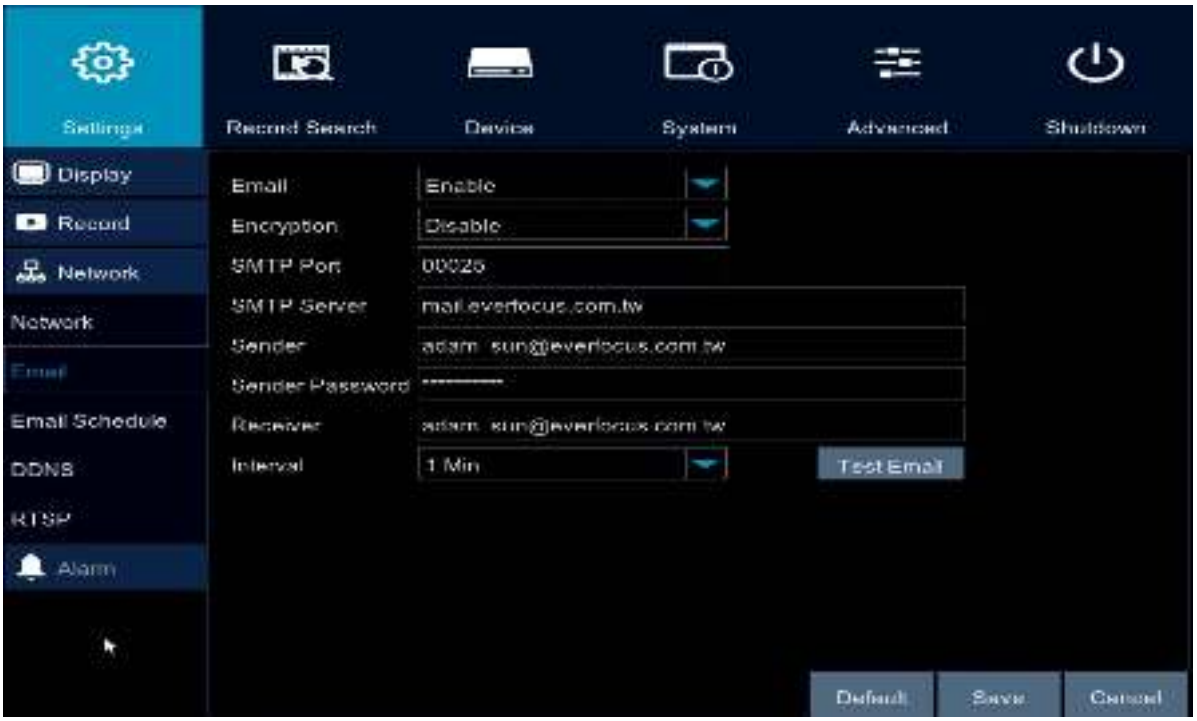
HTTP Port: Keep 80 port. Change only when necessary.

UPnP: If you want to enable the UPnP function, click **Enable** from the drop-down list.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.3.2 Email

You can configure the email settings on this page.



Email: Select **Enable** to enable the Email function.

Encryption: Select **Enable** if you want to enable the Encryption function.

SMTP Port: Assign the port number used by the SMTP server.

SMTP Server: Assign the SMTP (Email) server's name. Note that for more reliable email service, use the server's IP address.

Sender: Input the Email address of the sender (the NVR). Sender's Email address has to match the password below.

Sender Password: Input the password of the sender.

Receiver: Input the Email address of the receiver.

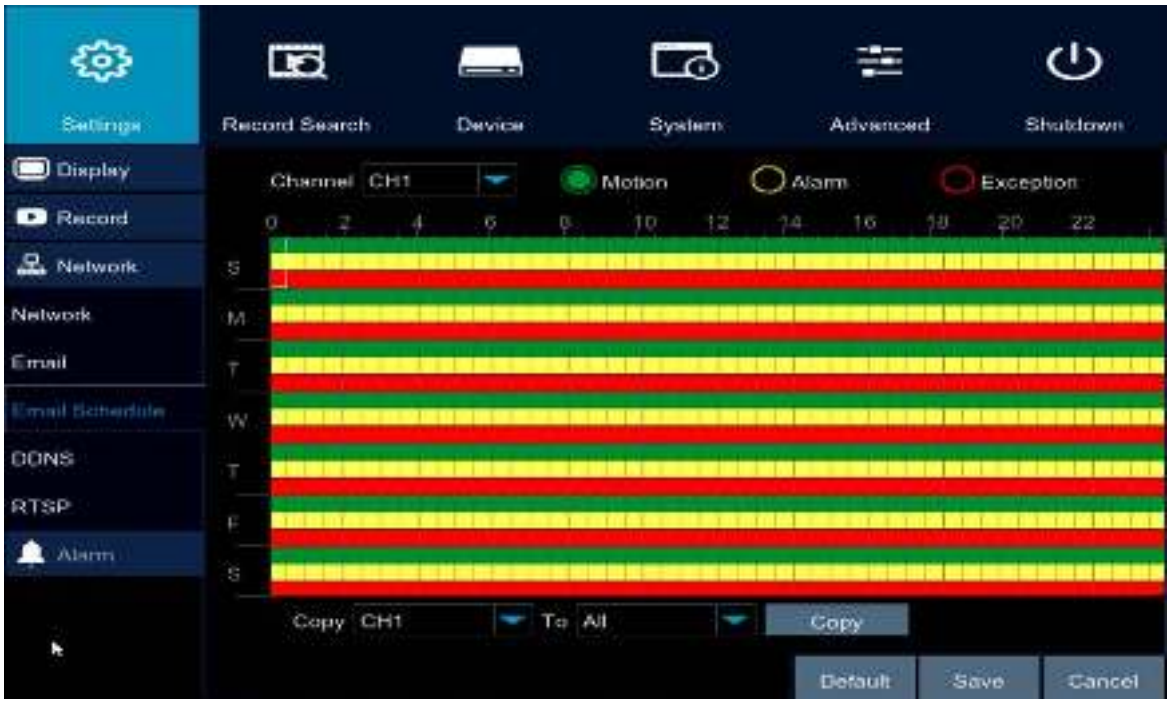
Interval: Configure an interval to send Emails when events occur.

Test Email: Click to test whether the Email function is working normally.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.3.3 Email Schedule

You can configure the email schedule on this page. The selected event Email alerts will be sent out by the scheduled time. For example, if you set up Motion on Sunday between 6-8am, the Motion Email alerts will only be sent out between 6-8am on Sunday.



Channel: Select a channel to configure the email schedule individually.

Motion: Click the **Motion** button and then move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with green color, which will be applied with motion email alert function.

Alarm: Click the **Alarm** button and then move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with yellow color, which will be applied with alarm email alert function.

Exception: Click the **Exception** button and then move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with red color, which will be applied with exception email alert function.

Copy: You can apply the same configurations from one channel to the desired channels. Select a channel from the **Copy** drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same configurations.

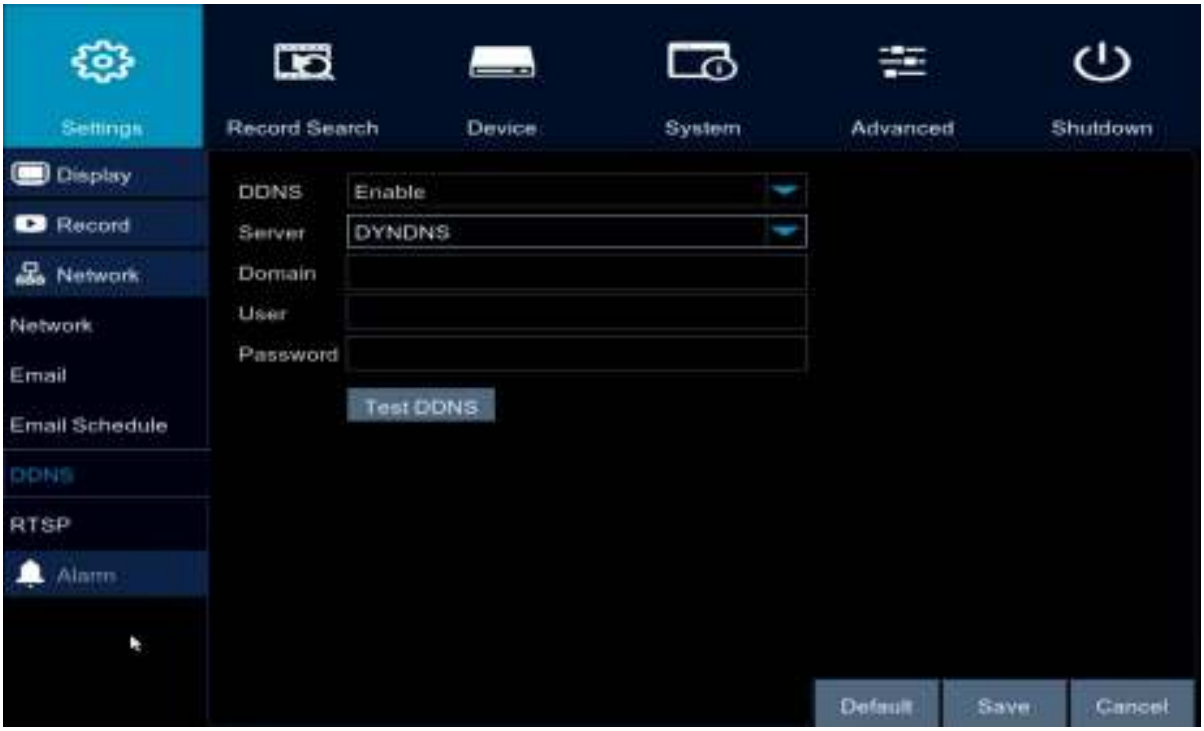
Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.3.4 DDNS

You can configure the DDNS setting on this page. DDNS (Dynamic Domain Name System) is a service used to map a domain name to the dynamic IP address of a network device. You can set up the DDNS service for remote access to the NVR.

DDNS assigns a domain name (URL) to the NVR, so that the user does not need to go through the trouble of checking if the IP address assigned by DHCP Server has changed. Once the IP is changed, the NVR will automatically update the information to the DDNS to ensure it is always available for remote access.

Note that before enabling the following DDNS function, user should have applied for a host name from the DDS service provider's website.



DDNS: Select **Enable** from the DDNS drop-down list to enable DDNS function.

Server: Select a DDNS service provider from the drop-down list.

Doman: Input the domain name obtained from the DDNS service provider. Note that before enabling the following DDNS function, user should have applied for a host name from the DDS service provider's website.

User: Input the user name of the DDNS account.

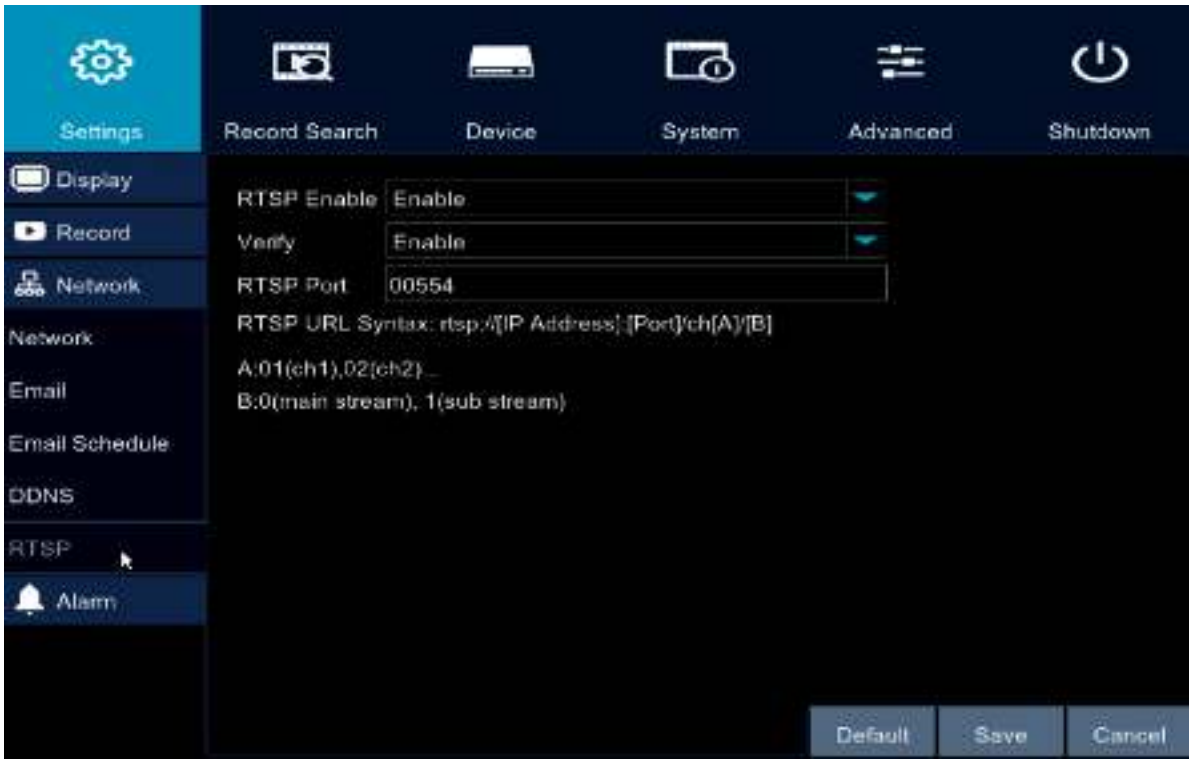
Password: Input the password of the DDNS account.

Test DDNS: Click the button to test whether the DDNS function is working normally.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.3.5 RTSP

You can configure the RTSP setting on this page.



RTSP Enable: Select **Enable** from the drop-down list to enable the RTSP function.

Verify: Select **Enable** from the drop-down list to enable the verify function.

RTSP Port: Keep 554 as RTSP port.

RTSP URL Syntax:

rtsp://[IP Address]:[Port]/ch[A]/[B]

rtsp://192.168.31.33:554/ch01/0

* IP Address: The IP address of the NVR
* A: Channel number. 01 (ch1), 02 (ch2), and so on.
* B: Stream Type: 0 (main stream), 1 (sub stream)

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.4 Alarm

You can configure the motion and alarm settings on this page.

4.1.1.4.1 Motion

You can configure the Motion setting on this page.

Channel: Select a channel to apply with the motion detection function.

Enable: Select **Enable** from the drop-down list to enable the function.

Buzzer: Select a buzzer sound duration from the drop-down list. If you want to disable the buzzer, select **Disable** from the drop-down list.

Sensitivity: Select a sensitivity value from the drop-down list. The larger the value, the higher the sensitivity.

Area: Click to set up the motion detection area. Drag a rectangle with your mouse. The selected areas will be highlighted in red and are applied with the motion detection function.

Post Recording: Select a post recording time when motion events occur.

Latch Time: Select a latch time (duration) when motion events occur. When a motion object is detected, the alarm will last based on the latch time.

Alarm Out: Check the box to enable the alarm output.

Show Message: Check the box to enable the function. When an event occurs, an event message will be displayed on the live screen.

Send Email: Check the box to enable the function. When an event occurs, the NVR will send an email alert to the receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *4.1.1.3.2 Email*).

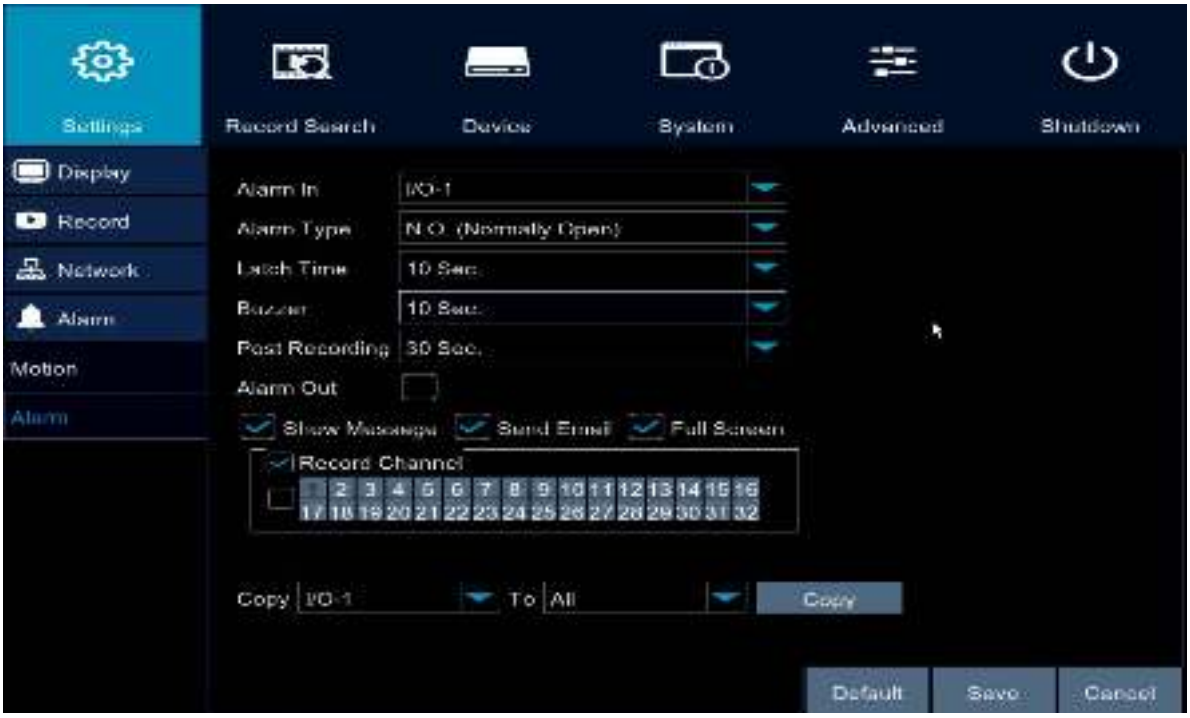
Full Screen: Check the box to enable the function. When an event occurs, the corresponding channel with the event will be switched to full screen on the live screen.

Record Channel: Check the box to enable the function. When an event occurs, the selected channel(s) will be recorded.

Click **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.1.4.2 Alarm

You can configure the Alarm setting on this page.



Alarm In: Select an alarm input from the drop-down list.

Alarm Type: Select an alarm type. **N.O** or **N.C**. If you want to disable the alarm, select **Off**.

Latch Time: Set up the time for buzzer to sound when an alarm is triggered by external sensor.

Buzzer: Set up the time for buzzer to sound when an alarm is triggered.

Post Recording: Select a post recording time when an alarm is triggered.

Alarm Out: Check the box to enable the alarm output.

Show Message: Check the box to enable the function. When an alarm is triggered, an alarm message will be displayed on the live screen.

Send Email: Check the box to enable the function. When alarm is triggered, the NVR will send an email alert to the receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *4.1.1.3.2 Email*).

Full Screen: Check the box to enable the function. When alarm is triggered, the corresponding channel with the alarm will be switched to full screen on the live screen.

Record Channel: Check the box to enable the function. When alarm is triggered, the selected channel(s) will be recorded.

Copy: You can apply the same configurations from one channel to the desired channels. Select a channel from the **Copy** drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

The alarm types and descriptions are listed as below:

Alarm Type	Functions and Descriptions
Video Loss	When NVR fails to receive video signals due to some problems (camera damage, cable dropout or damage, power failure), the alarm will appear.
Motion Detection	When IP camera detects moving objects, alarm will be triggered. Sensitivity is subject to the actual application environment test. Sensitivity is adjusted according to the sensitivity of moving object detection and parameters are modified by combining the area setting.
I/O Status	Communicate with alarm device through I/O port. Alarm signals sent by IR sensor or other devices will be transformed to the system recognized signal and activate relevant channel to record or control the device output.
HDD Status	Alarm will appear when HDD does not work due to damage, power failure, HDD auto-overwrite off and insufficient space.

4.1.2 Record Search

You can search and then play back the recordings or search the event logs on this page.

4.1.2.1 General

You can search and then play back the recordings on this page.

Channel: Select the desired channel(s) you want to search for playback.

Type: Select the desired event types from the drop-down list.

Search: After selecting the channel/event type and date, click the **Search** button to search for the recordings.

Calendar: Select the month and year and click a date on the calendar. The date marked with an orange triangle indicates there are recordings on the date.

Playback Channels: Select the desired channels for playback. The channel(s) marked with an orange triangle indicates there are recordings on the channel(s). Up to 16 channels can be selected.

Start Time: Select a start time.

End Time: Select an end time.

Play: Click the Play button to enter the playback mode and start playing back. Please refer to *4.1.2.1.1 Playback Mode* for more details.

Click **Cancel** to cancel and leave the page.

4.1.2.1.1 Playback Mode

On the **Record Search** < **General page**, click the **Play** button to enter the playback mode. To exit playback mode, click the **X** button on the upper right corner of the screen.

You can use the playback control bar to operate the below functions:

No.	Name	Description
1	Pin	Click to pin or unpin the left-side panel and playback control bar.
2	Rewind	Click to start rewind. You can adjust the speed by continuously clicking on the button. The speed will be displayed on the upper-right corner of the screen.
3	Slow Play	Click to start slow playback. You can adjust the speed by continuously clicking on the button. The speed will be displayed on the upper-right corner of the screen.
4	Play	Click to start playing back.
5	Pause	Click to pause playing back.

No.	Name	Description
6	Stop	Click to stop playing back.
7	Fast Forward	Click to start playing fast forward. You can adjust the speed by continuously clicking on the button. The speed will be displayed on the upper-right corner of the screen.
8	Zoom	Select a channel by clicking on the channel on the screen. The selected channel will be highlighted with a red frame. Click the Zoom button, the selected channel will be switch to single view. Click to draw a rectangle area on the channel where you want to zoom in using your mouse, a preview PIP window appears on the lower-right screen. You can drag the navigation window in the PIP window to navigate the stream view. To exit the zoom mode, click the zoom button again.
9	Backup	Select a channel by clicking on the channel on the screen. The selected channel will be highlighted with a red frame. Click the scissor button , the button will change to a save button , and the red time period icons appear on the time bar. Drag the time period icons to the left or right to adjust the time period and then click the save button to start backing up. For more details on Backup, please refer to *4.1.2.2.1 Backup*. To exit the backup mode, click the scissor button again.
10	Volume	Click to enable/disable volume sound. You can also adjust the volume bar.
11	Time Indicator	Indicates the current playback time.
12	Time Bar	You can use your mouse to drag the time bar to the left or right to search the desired time for playing back. Double click on the time bar at a certain time will start playing back from the clicked time. The colors on the time bar represent different recording types.
13	Time Span	You can click to select a time span.
14	Color	The colors indicate the recording types. Yellow: Motion recordings. Green: Normal recordings. Blue: I/O recordings. Red: Alarm recordings.

Playback Type: General

Playback Type: Events

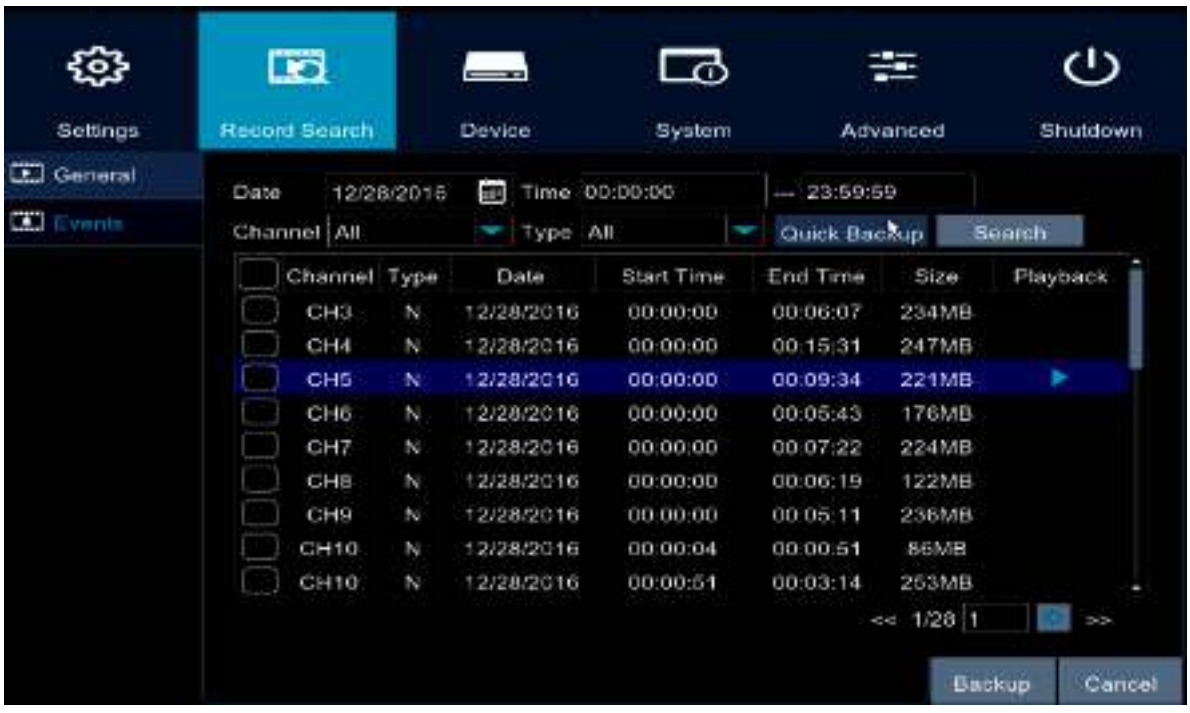
The orange triangle mark indicates there are recordings on the date.

Select a playback type.
General: Select the desired channels and then play back.
Events: Select the desired time, channels and event types and then play back.

If Events is selected from the Playback Type drop-down list, after searching for the desired event recordings, click this button to back up the recordings.

4.1.2.2 Events

You can search the event recordings and then play back the event recordings on this page.



Date: Select the desired date.

Time: Select the desired time period.

Channel: Select the desired channel(s).

Type: Select the desired event types from the drop-down list.

Quick Backup: After selecting the date/time/channel/event type parameters, click the **Quick Backup** button to back up all the searched recordings.

Search: After selecting the date/time/channel/event type parameters, click the **Search** button and the searched event recordings will be displayed on the below list.

Backup: If you want to back up a single recording or some of the desired recordings, check the recording boxes and then click the **Backup** button.

Cancel: Click to cancel and leave the page.

You can use the below buttons to search for the page on the list. To jump to a certain page, input a page number in the input box and then click the **Jump** button.

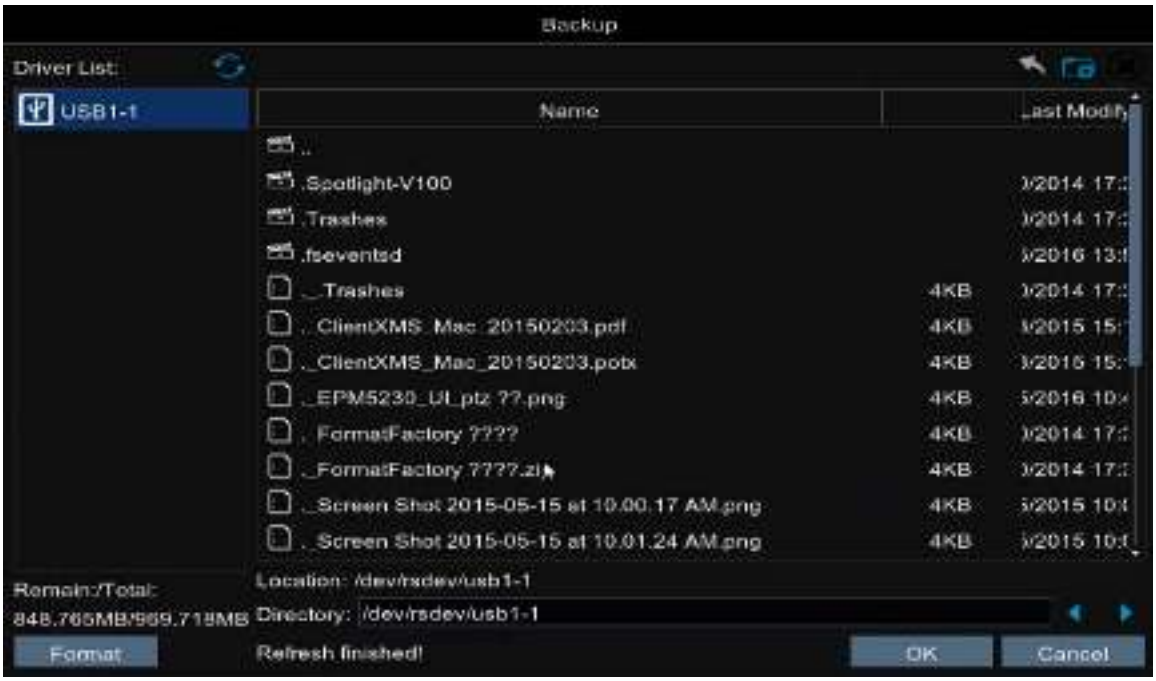
To play back a certain event recording on the list, double click on a recording or click the **Playback** icon in the Playback column to enter the playback mode. About the playback control bar, please refer to *4.1.2.1.1 Playback Mode*. To exit the playback mode, right click the mouse.

4.1.2.2.1 Backup

You can click the **Quick Backup** button to back up all the searched recordings on the list; or click the **Backup** button to back up the selected recordings on the list.

1. Ensure a USB storage device has been inserted to the NVR.
2. After clicking either the **Quick Backup** or **Backup** button, the **Backup Type** window appears.

3. Select a backup format and then click the **Save** button, the **Backup** window appears. Note that you have to insert a storage device before starting backup files. You can also create a directory for the backup recording by clicking the Directory button on the upper-right corner .



4. Select a storage device from the Driver List and click **OK**, the backup process begins.

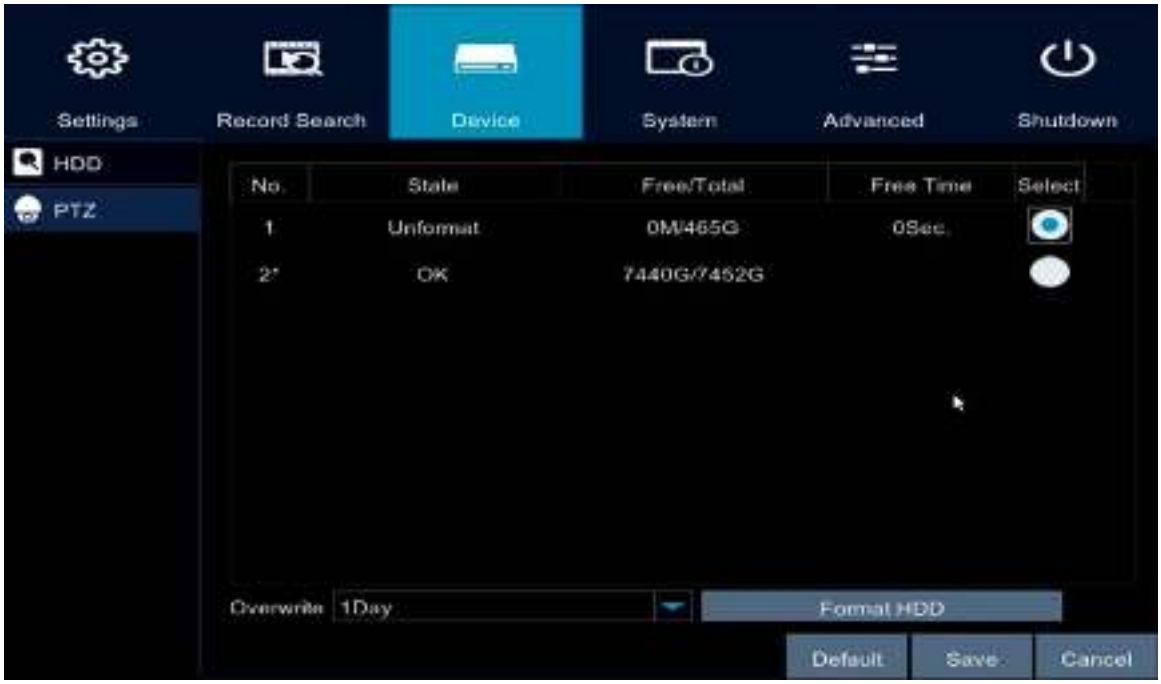
5. After the backup process is complete, click the **Cancel** button to return to the **Events** page.

4.1.3 Device

You can configure the HDD and PTZ settings on this page.

4.1.3.1 HDD

You can configure the HDD settings on this page. Please connect the HDD(s) to the NVR in advance and ensure the power and SATA cables are properly connected between the NVR and HDD(s). After connecting the HDD(s) to the NVR, the NVR will automatically detect the connected HDD(s) and listed all the connected HDD(s) in the below field. For the first time connected HDDs, the status will show “Unformat” in the state column, users will have to format the HDDs before you can use it.



Select: Select the HDDs in the Select column to select the HDD(s).

Overwrite: Select **Auto** to enable the overwrite function; **Off** to disable the overwrite function. If **Auto** is selected, the NVR will overwrite the oldest files on the HDD when HDD is full. The 1/3/7/14/30/90 Days stands for the longest storage days of the HDD. For example, if 3 Days is selected, the HDD can record a maximum of 3 days data. If more data has to be recorded, the oldest recorded data will be overwritten (FIFO, first-in first-out).

Format HDD: The first time use HDDs have to be formatted before you can use it. Select the desired HDDs and then click the **Format HDD** button to format the selected HDDs. Note that only the HDDs with “Unformat” status displayed in the State column are required to format or the recording function will not work. WARNING: This will effectively ERASE the ENTIRE hard disk!! Please backup the data from HDDs before formatting the HDDs.

Record on eSATA: Select **Enable** to start recording on eSATA for redundant recording. Note that to perform this function, an external eSATA storage device must be connected to the NVR in advance.

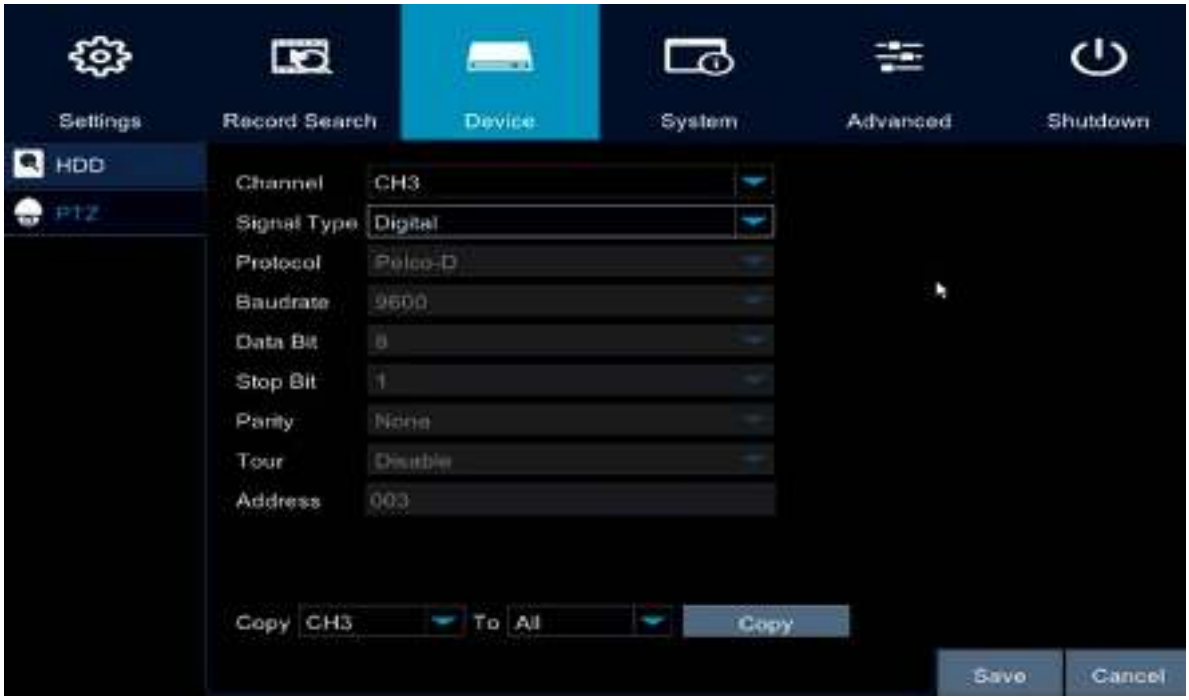
Note:

1. Only the HDDs with “OK” in the State column can perform the recording function. If not, format the HDDs before start using the recording function.
2. The “Free Time” on the HDD list indicates the remaining time for the HDD to record based on the pre-setup resolution, streaming and fps.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.3.2 PTZ

You can configure the PTZ settings on this page.



Channel: Select the channel connected with PTZ camera.

Signal Type: Select **Digital** for the connected PTZ camera.

Protocol: Select PTZ protocol, choose from the following protocols. (Note: All cameras on the RS-485 bus must use the same protocol).

Baudrate: This field is to set the speed at which is used to transmit instruction or information through the RS-485 port on the NVR.

Data Bit: This field is the data bit at which you will be transferring.

Stop Bit: This field is to set the stop bit for the RS-232 connection.

Parity: This field is to select the parity level at which you will be connected.

Tour: Select **Enable** to enable the tour function.

Address: Input the ID address of the PTZ camera. Note this address should match the one set up on the PTZ camera.

Copy: You can apply the same configurations from one channel to the desired channels. Select a channel from the **Copy** drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.4 System

You can configure system settings on this page.

4.1.4.1 General

You can configure the following settings on this page.

4.1.4.1.1 General

You can configure the general system settings on this page.

Date: Set up the date for the system.

Time: Set up the time for the system.

Date Format: Select a format for the date.

Time Format: Select a format for the time.

Language: Select a language.

Video Format: Select **NTSC** or **PAL** for the system.

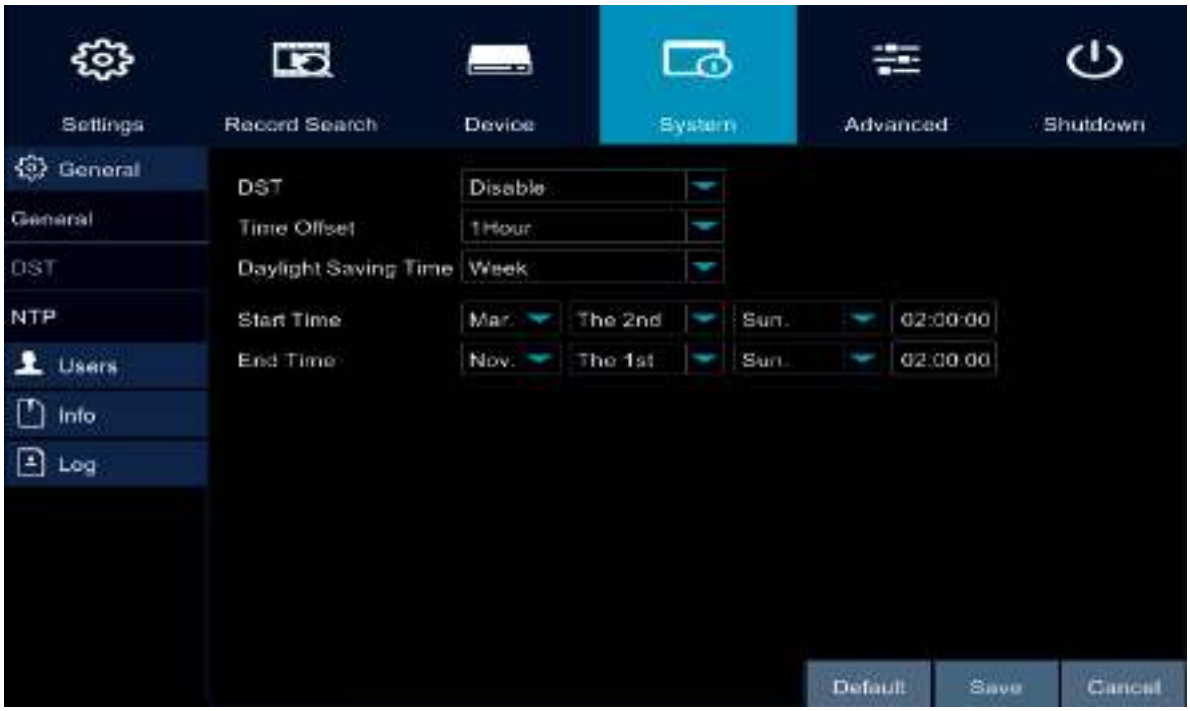
Auto Timeout: Select a timeout time for the OSD menu to automatically close. Select **Off** for the OSD menu to display continuously.

Show Wizard: Check the box to enable starting the Startup Wizard every time when system starts.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.4.1.2 DST

You can configure DST settings on this page.



DST: Select **Enable** to enable the DST function.

Time Offset: Select an offset time.

Daylight Saving Time: Select **Week** or **Date** to configure the start/end time below.

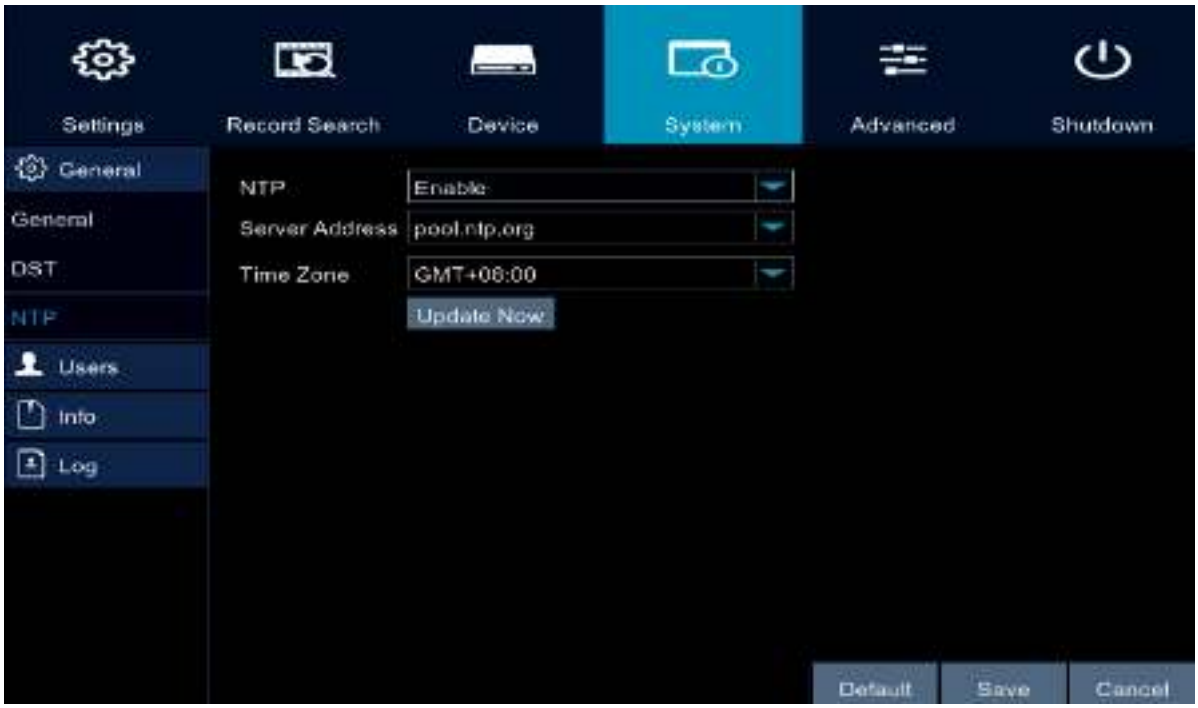
Start Time: Select a start time for the DST to start.

End Time: Select an end time for the DST to stop.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.4.1.3 NTP

You can configure NTP settings on this page.



NTP: Select **Enable** to enable the NTP function. When NTP function is enabled, the system will calibrate the system time at 00:07:50 daily and every time when the system is started up.

Server Address: Select a NTP server.

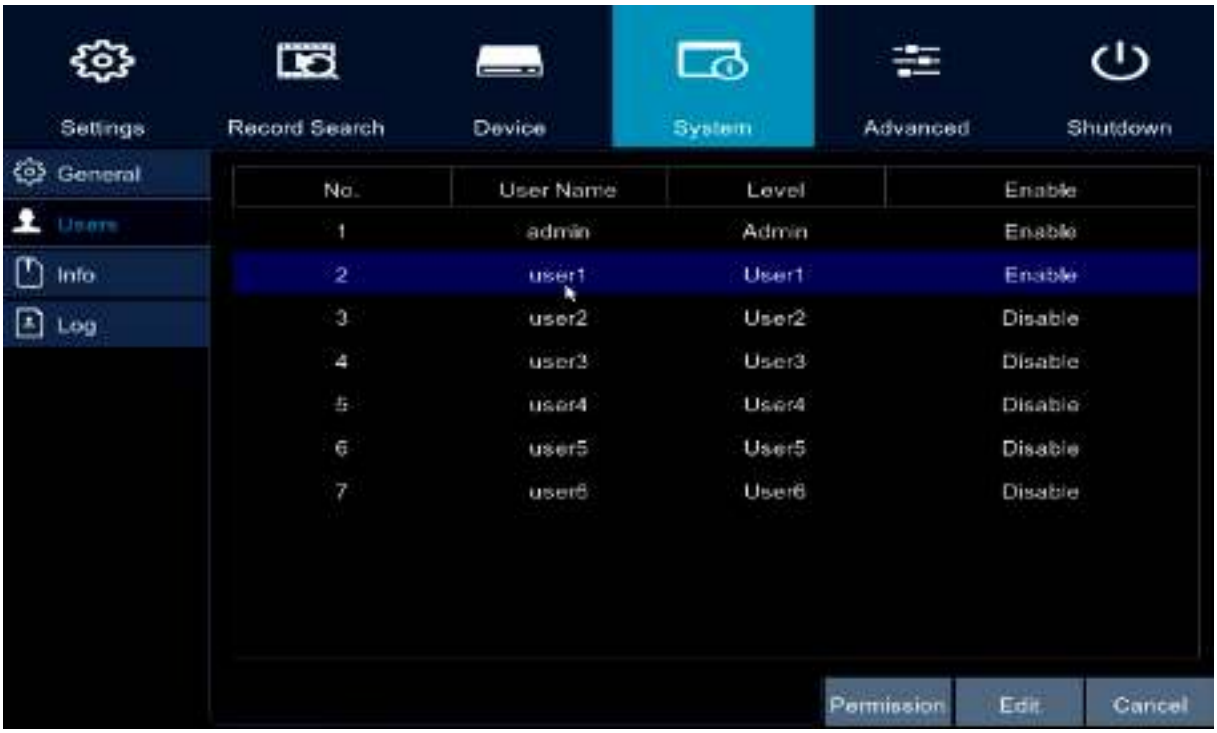
Time Zone: Select a time zone.

Update Now: Click to calibrate the system time.

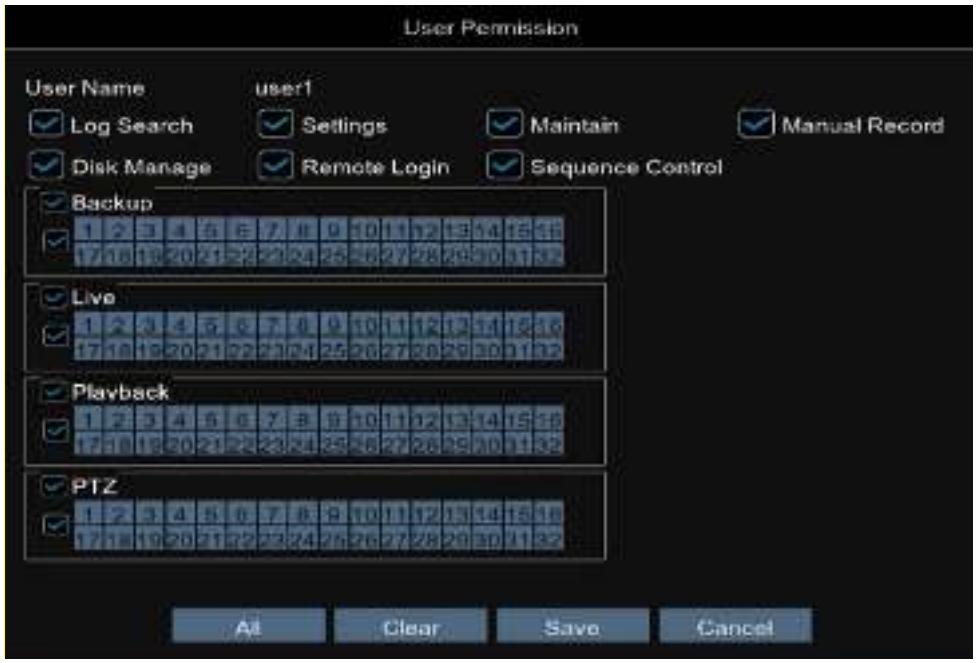
Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.4.2 Users

You can configure the user settings on this page. Up to 7 user accounts (1 administrator and 6 users) can be configured.



Permission: Click to select an account from the list and then click **Permission** to display the User Permission window. The Administrator account has full privileges so the functions cannot be configured. In the User Permission window, check the boxes to grant functions for the selected user account. You can also set up the Backup/Live/Playback/PTZ functions to specific channels. After the configuration, click **Save** to save the settings.



- Log Search: Allow users to check all the system logs.
- Settings: Allow users to set all the parameter settings.
- Maintain: Allow users to update version, restore to factory default settings, device reboot and shut down.
- Manual Record: Allows users to manually start/stop recording.
- Disk Manage: Allow users to manage and control the HDD and USB storage device.
- Remote Login: Allow users to login the system remotely.
- Sequence Control: Allow users to use the sequence function.
- Backup: Check the **Backup** box to enable the function; and then select the desired channels to backup. This user account will be granted with the Backup function for the selected channels.
- Live: Check the **Live** box to enable the function; and then select the desired channels for live view display. This user account will be granted with the live view display function for the selected channels.
- Playback: Check the **Playback** box to enable the function; and then select the desired channels for playback. This user account will be granted with the playback function for the selected channels.
- PTZ: Check the **PTZ** box to enable the function; and then select the desired channels for PTZ function. This user account will be granted with the PTZ control function for the selected channels.

Edit: Click to select an account from the list and then click **Edit** to display the User Edit window. You can edit the user name/password in this window. The max. length of user name is 8 characters (alphabetic or numeric); and the passwords have to be numeric (0-9) with exactly 8 characters. Select **Enable** from the **User Enable** drop-down list to enable the user account. Select **Enable** from the **Password Enable** drop-down list to enable the password (if Disable is selected, the user can login without password). Click **Save** to save the settings.

Cancel: Click to cancel and leave the page.

4.1.4.3 Info

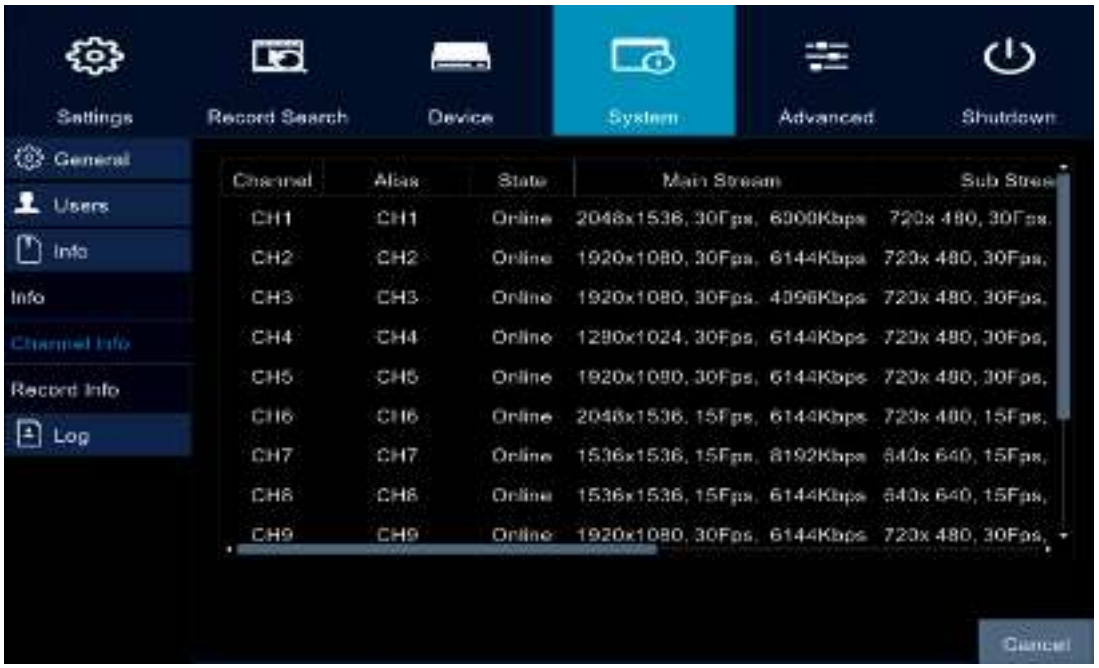
You can see the NVR info on this page.

4.1.4.3.1 Info

You can see the NVR info or change the Device ID / Device Name on this page. Click **Save** to save the settings.

4.1.4.3.2 Channel Info

You can see the channel info on this page.

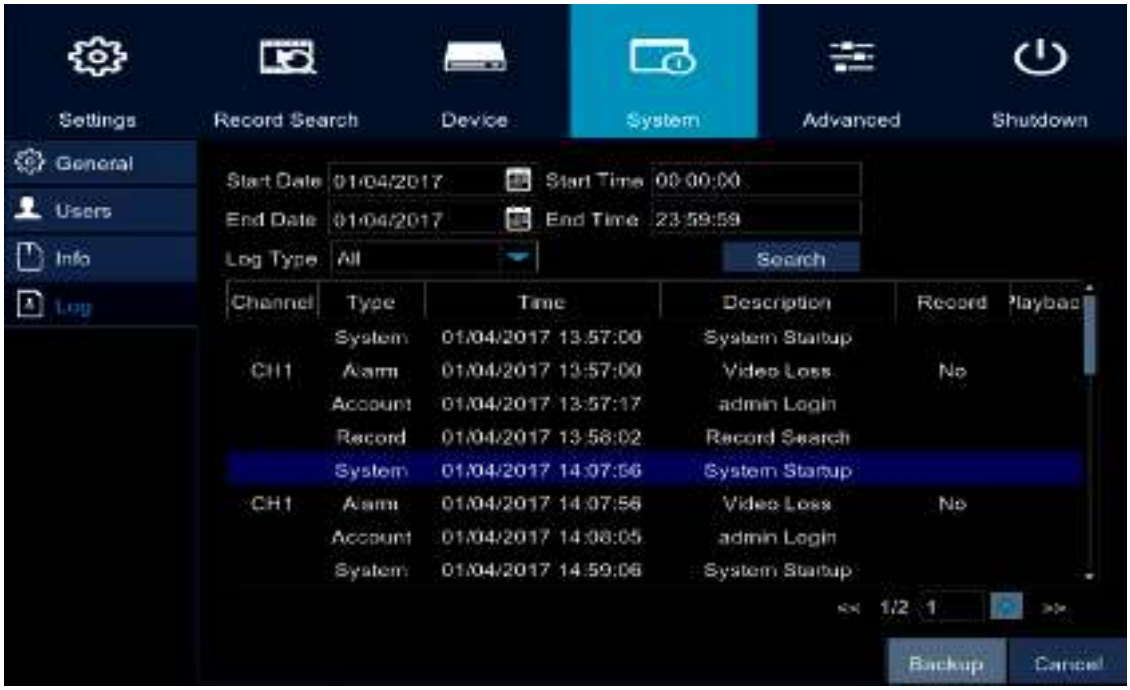


4.1.4.3.3 Record Info

You can see the record info on this page.

4.1.4.4 Log

You can search for logs on this page. Select the start time, end time, log type and then click the **Search** button, the searched logs will be displayed on the list below. Double click on a log from the list can bring up the Log Details window. You can also click the **Backup** button to save all the searched logs.

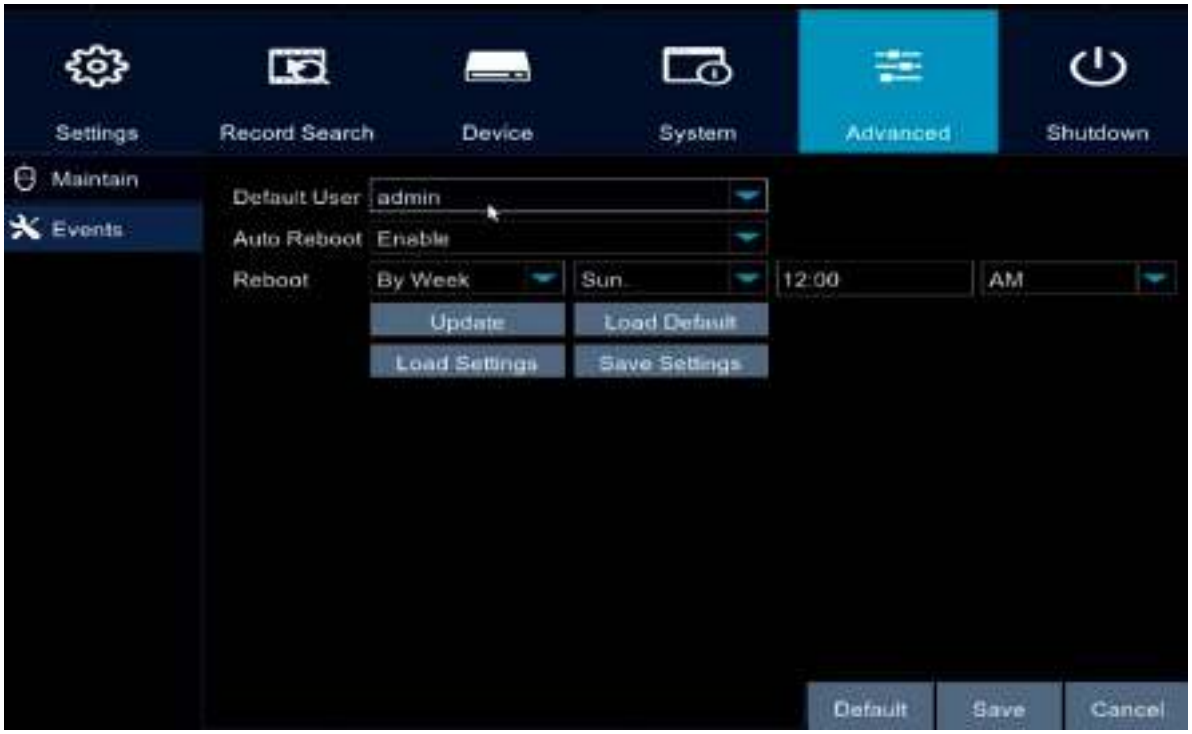


4.1.5 Advanced

You can configure the system maintenance and system event settings on this page.

4.1.5.1 Maintain

You can configure system maintenance on this page.



Default User: Select a default user from the drop-down list.

Auto Reboot: Select **Enable** to enable the Auto Root function. You can further set up the reboot time below.

Reboot: If Auto Reboot is selected on the above section, set up the reboot time here for the system to regularly reboot at the setup time.

Update: Click to upgrade the system firmware. Please restore the firmware file in a USB storage device and insert the USB storage device to the system in advance. When this button is clicked, an Update window appears. Select the firmware file and then click the **OK** button.

Load Default: Click to initialize the system to the factory default. Click the button and select the desired items to be restored to factory default.

Load Settings: Click to import the file of system parameters from a USB storage device. Please restore the file in a USB storage device and insert the USB storage device to the system in advance. Select a file and then click the **OK** button.

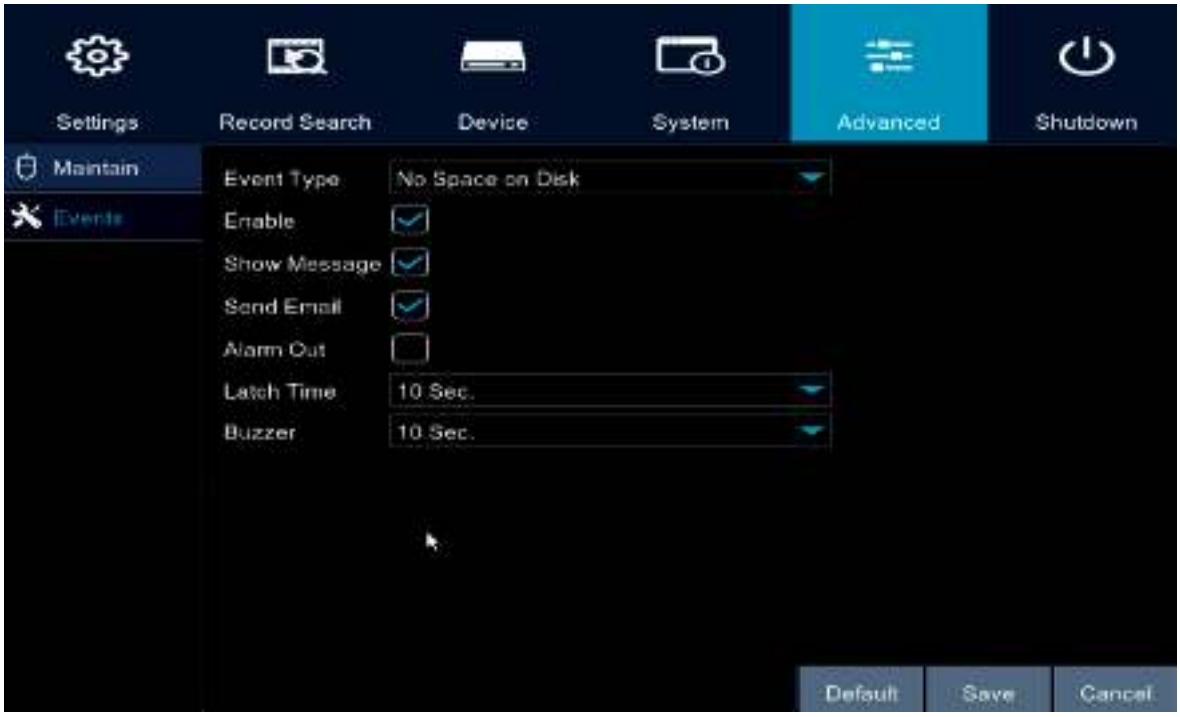
Save Settings: Click to export the file of system parameters to a USB storage device. Please insert a USB storage device to the system in advance. Select a directory and then click the **OK** button.

Note: Do not take out the USB storage device or turn off the power during system upgrading. When the upgrade is done, the system will restart automatically.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.5.2 Events

You can configure the system event settings on this page.



Event Type: Select an event type from the drop-down list.

Enable: Check the box to enable the function.

Show Message: Check the box to enable the function. When the selected events have been triggered, an event message will be displayed on the live screen.

Send Email: Check the box to enable the function. When the selected events have been triggered, the NVR will send an email alert to the receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *4.1.1.3.2 Email*).

Alarm Out: Check the box to enable the alarm output.

Latch Time: Set up the time for buzzer to sound when an event is triggered.

Buzzer: Set up the time for buzzer to sound when an event is triggered.

Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

4.1.6 Shutdown

Click the **Shutdown** icon and the Shutdown window appears. Enter the user name and password. You can click the **Shutdown** button to shutdown the system; or the **Reboot** button to reboot the system.

4.2 Lock/Unlock Screen

You can click the **Manually Lock Screen** button on the OSD menu to lock or unlock the system interface for safety purpose.

When the system interface is locked, Users have to input Device ID, User Name and Password to login the system.

Note: Administrator account has full privileges. User accounts have limitations for authorization and have to get authorization from administrator.

Chapter
5

5. Remote Access to the NVR

5.1 Accessing the NVR on the Network

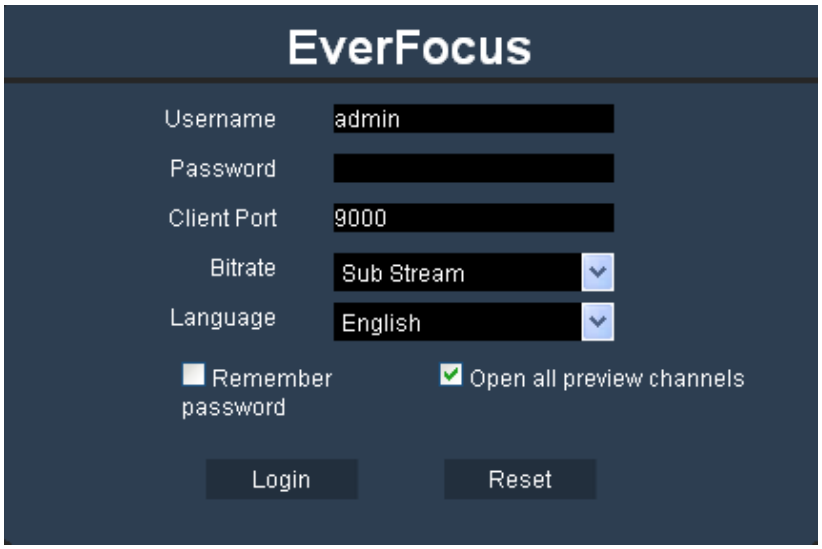
Follow the steps below to access the NVR through a Web browser.

1. Open a Web browser and in the address bar type the IP address of the NVR.
   Local connection:
   http:// (IP address from the NVR's Network Menu): IP port used
   e.g. http://192.168.1.163:2468

   Internet connection:
   http:// (IP address given by your Internet Service Provider): IP port used
   e.g. http://57.182.67.204:2468

2. If your computer is connected to the internet, it will download and install "ActiveX" plug-in automatically.

3. The Login window pops up. Type the User Name and Password. Click **Login**. The default User Name is **admin**, while the password is **11111111**



Username: Input the user name.

Password: Input the password.

Client Port: Input the port number.

Bitrate: Select Main Stream or Sub Stream to be displayed on the Live View window.

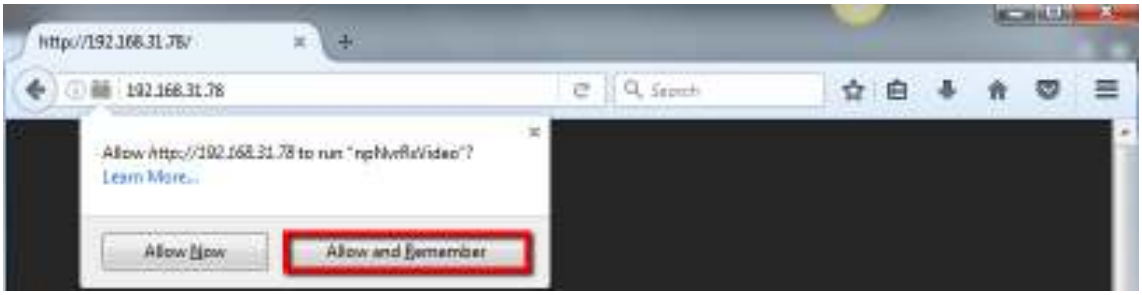
Language: Select a language.

Remember password: If you want the web browser to keep the password so you will not be able to input the password when you restart the Web page, check this checkbox.

Open all preview channels: If you want to display all the connected IP camera streams when you login the Web interface, check this checkbox.

Note for the first time login:

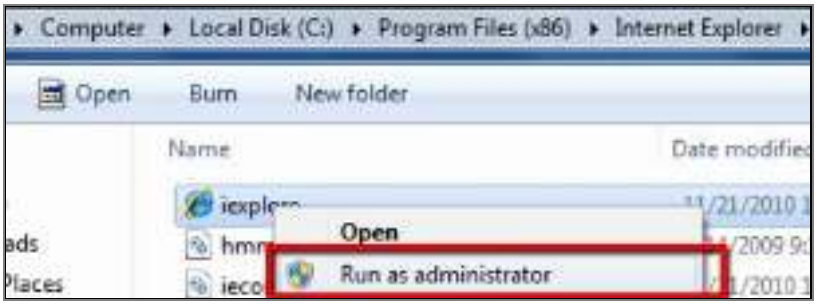
- When the Plug-in blocked appears on the browser, click **Allow…** and then click **Allow and Remember**. Reload the webpage and you should see the remote live view page now.



If you encounter the following problem or still can't access the remote Web interface, please follow the instructions below:

- If the ActiveX is not downloaded successfully, please check if your browser's safety level or firewall setting is set too high. Enable the following options on the Security Settings window (IE Browser < Tools < Internet Options < Security < Internet < Custom Level).
  - ✓ Automatic prompting for ActiveX controls
  - ✓ Script ActiveX controls marked safe for scripting

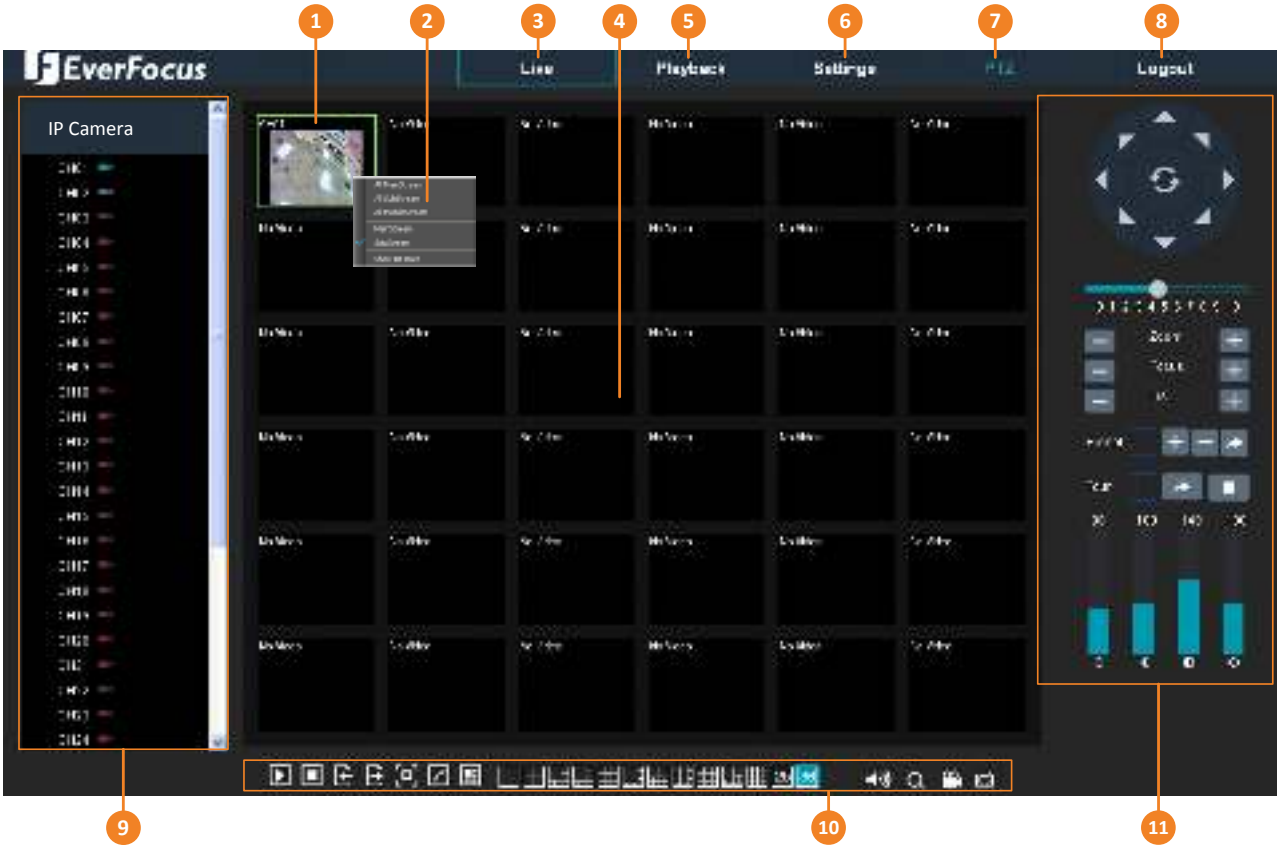
- If your PC or laptop is running with Windows, it's required to run the browser as administrator when first entering the remote web page of the device. Go to **C:\Program Files (x86)\Internet Explorer**, right-click the browser and then click **Run as administrator**.



- If you are unable to backup or record during remote operation, you may need to turn off the firewall and turn **User Account Control** off.
  To turn **User Account Control** off, on the computer, **click Start > Control Panel > System and Security > Action Center** (click Change User Account Control Settings), the **User Account Control Settings** window appears. Adjust the slide bar to **Never Notify** and then click **OK**. Restart your computer if requested.

5.2 Remote Live View Window

After logging in the system, the below Live View Window appears.



No.	Name	Description
1	Live Channel	You can perform the following functions on each channel: a. Double click on a channel can display the channel in full screen. To exit the full screen mode, double click on the channel again. b. You can right-click to bring up the **Live Channel Tool Window** (No.2). c. You can drag and drop a channel to the desired position on the layout. Click on a channel, a Drag Channel icon will display. Drag and drop the channel to the desired position on the layout.
2	Live Channel Tool Window	Right-click on any channel can bring up the **Live Channel Tool Window**. All Main Stream: Click to display Main Stream for all channels on the layout. To configure Main Stream, refer to *5.4.2.3 Main Stream*. All Sub Stream: Click to display Sub Stream for all channels on the layout. To configure Sub Stream, refer to *5.4.2.4 Sub Stream*. All Mobile Stream: Click to display Mobile Stream for all channels on the layout. To configure Mobile Stream, refer to *5.4.2.5 Mobile Stream*. Main Stream: Click to display Main Stream for this channel. Sub Stream: Click to display Sub Stream for this channel. Show Bit rate: Click to display the bit rate of this channel on the upper right corner of this channel.

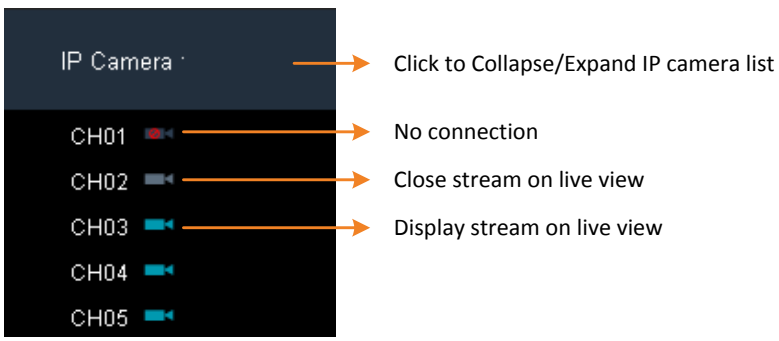
3	Live	Click to display the Live View window.
4	Live View Layout	Displays the connected IP camera stream. You can change the layout type by clicking on the Layout icons below the window.
5	Playback	Click to enter the Playback page. Please refer to *5.3 Playback* for more details.
6	Settings	Click to enter the Settings page. Please refer to *5.4 Settings* for more details.
7	PTZ	Click to display or hide the PTZ Control Panel on the Live View window. Please refer to *5.2.3 PTZ Control Panel* for more details.
8	Logout	Click to logout the Web interface of NVR.
9	Camera List	Displays the IP cameras. You can click on the camera icon to close or enable stream displaying on the Live View window. Please refer to *5.2.1 Camera List* for more details.
10	Live View Function Icons	You can perform some functions for the IP cameras on the Live View window. Please refer to *5.2.2 Live View Function Icons* for more details.
11	PTZ Control Panel	You can control PTZ camera or adjust image settings for each channel using the PTZ Control Panel. Please refer to *5.2.3 PTZ Control Panel* for more details.

5.2.1 Camera List

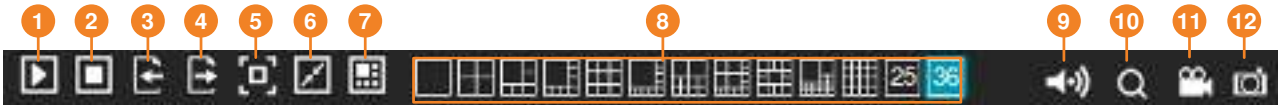
The Camera list lists the IP camera channels. You can see the camera status icon displayed on the right side of each channel.

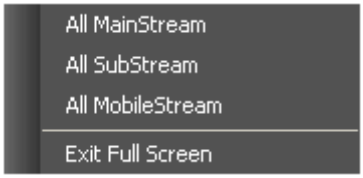
If the camera is connected to the NVR, you can click the camera icon to switch between green or gray. Green camera icon indicates the camera stream is displaying on the Live View window; while gray camera icon indicates the camera stream has been closed.

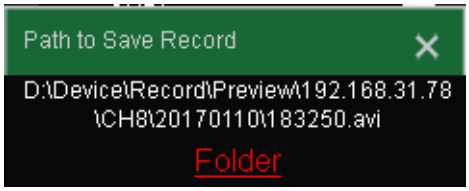
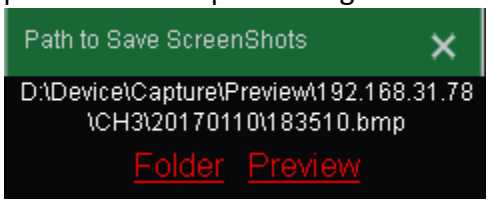
indicates there is no connection of this camera (or connection failed). Please check the connection between the camera and the NVR.



5.2.2 Live View Function Icons

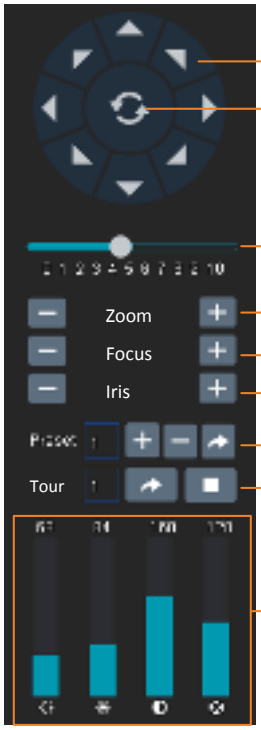


No.	Name	Description
1	Open All Channels	Click to display all camera streams on the Live View window.
2	Close All Channels	Click to close all camera streams displayed on the Live View window.
3	Previous Page	Click to turn to the previous layout pages. For example, for 36-channel model, if you select 9-Division, click the **Previous Page** button will display the previous 9-division layout with channel 28-36, channel 19-27, and so on.
4	Next Page	Click to turn to the next layout pages. For example, for 36-channel model, if you select 9-Division, click the **Next Page** button will display the next 9-division layout with channel 10-18, channel 19-27, and so on.
5	Full Screen	Click to display the Live View window in full screen mode. To exit full screen mode, press the **ESC** button on the keyboard, or right-click to bring up the Tool Window and click **Exit Full Screen**. 
6	Original Aspect Ratio	Click to switch between the original ratio and the stretched ratio of all the camera streams on the Live View window.
7	Layout Options	Click to hide or display the Layout Buttons.
8	Layout Buttons	Select a layout by clicking on it. You can click the **Layout Options** button (No.7) to hide or display the Layout Buttons.
9	Speaker	Click to turn on or off the speaker.
10	Digital Zoom	Click to enable the Digital Zoom mode. To exit the Digital Zoom mode, click the button again. To perform the Digital Zoom function: a. On the Live View window, select a channel by clicking on the channel. b. Click the Digital Zoom button. c. Use your mouse to draw an area where you want to have a close-up view. The area will be zoom-in. d. Right-click to exit the Digital Zoom mode.

11	Record	Click to start manual recording of a single channel. Click the button again to stop. To perform the manual Record function: a. On the Live View window, select a channel by clicking on the channel. b. Click the **Record** button to start manual recording. c. Click the **Record** button again to stop recording, a message window appears on the bottom-left corner of the screen. Click **Folder** to enter the folder to find the recording file.  Note: To change the storage path, go to Remote Setting < Device < Local Settings.
12	Snapshot	Click to take a snapshot of the selected channel in bmp format. To perform the Snapshot function: a. On the Live View window, select a channel by clicking on the channel. b. Click the **Snapshot** button to take a snapshot, a message window appears on the bottom-left corner of the screen. Click **Folder** to enter the folder to find the snapshot image. Or click **Preview** to preview the snapshot image.  Note: To change the storage path, go to Remote Setting < Device < Local Settings.

5.2.3 PTZ Control Panel

You can control the connected PTZ camera using the PTZ Control panel. On the Live View window, select a PTZ camera by clicking on the channel, the selected channel will be highlighted with a green frame. You can double-click to display the channel in full screen. Click the **PTZ** button on the above navigation bar, the PTZ Control Panel appears on the right-side of the screen. You can click the **PTZ** button again to close the PTZ Control Panel.



Direction Buttons

Auto Pan

Speed

Zoom In (+) / Zoom Out (-)

Focus Near (+) / Focus Far (-)

Iris Open (+) / Iris Close (-)

Preset Conrol

Tour Control

Image Control

Direction Buttons: Click the direction buttons to force the PTZ camera to turn to the direction.

Auto Pan: Click to start the Auto Pan function. Click again to stop the Auto Pan function.

Speed: Slide the bar to the left or right to adjust the control speed.

Zoom: Click + or – to zoom in or zoom out.

Focus: Click + or – to focus near or focus far.

Iris: Click + or – to adjust the Iris.

Preset Control: You can set up preset points here and then operate the Preset function. Please see the below steps for more details.

Tour Control: After setting up the preset points, you can perform the Tour function. Click to start the Tour function, click to stop the Tour function.

Image control: You can adjust Acutance, Brightness, Contrast and Saturation value for each channel on the Live View window. Please refer to *5.2.4 Image Control* for more details.

To set up Preset Points:

1. Select a preset number (1-255) by clicking on the Preset input box.
2. Use the direction buttons or Zoom/Focus/Iris buttons to search for the location for this preset number.
3. Click the **+** button to add this preset point, and the number will jump to the next preset number for configuration. Follow **Step 2-3** to set up multiple preset points.
4. To clear the setup preset points, select a preset number and then click the **-** button.

To perform the Go to Preset Point function:

1. Select a preset number (1-255) by clicking on the Preset input box.
2. Click the **Go to** button .

5.2.4 Image Control

You can adjust Acutance, Brightness, Contrast and Saturation value for each channel on the Live View window using the Image Control on the PTZ Control Panel.

On the Live View window, select a camera by clicking on the channel, the selected channel will be highlighted with a green frame. You can double-click to display the channel in full screen. Click the **PTZ** button on the above navigation bar, the PTZ Control Panel appears on the right-side of the screen. You can adjust the Chromaticity, Brightness, Contrast and Saturation value in the Image Control field.

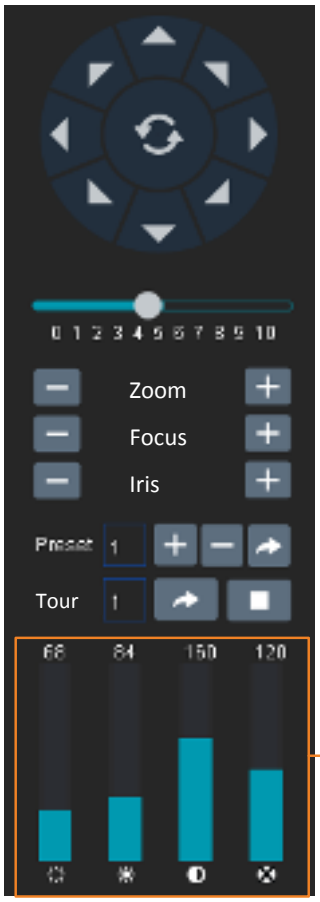


Image Control

5.3 Playback

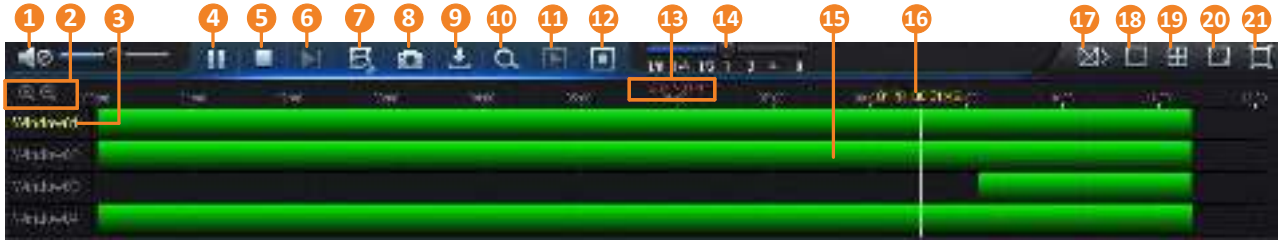
Click the **Playback** button on the above navigation bar. The Playback window displays. Up to 4 channels can be played back simultaneously at a time.

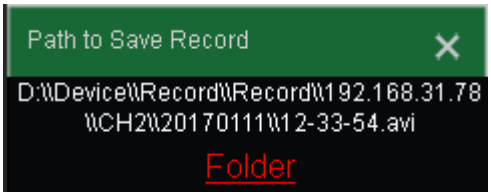
To start playing back:

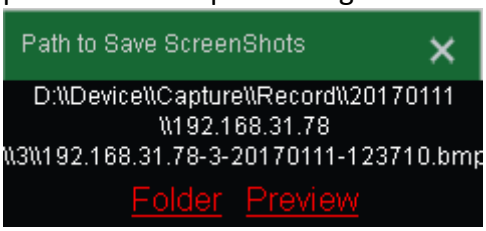
1. Select the date on the calendar (the date with an orange triangle mark on the upper-right corner indicates there are recordings on the date).
2. Select a record type from the Type drop-down list. The options include Normal, Alarm, Motion, I/O, All.
3. Select up to four channels you would like to play back.
4. Click the **Search** button, the recordings will be displayed on the time bar of the Playback Panel in different colors. Green: Normal recordings; Yellow: Motion recordings; Red: Alarm recordings; Blue: I/O recordings.
5. Click the **Play** button to start playing back.
6. To stop the playback mode, click the **Stop** button. You can also **Stop Menu** button and click **Stop Playback**.

7. You can optionally enable the **Synchronous playback** function to enable multiple channel simultaneously playback at the same time. If this function is unselected, you can separately control each channel for playing back (each channel can be played back with individual time).

You can use the **Playback Panel** to operate the below functions:



No.	Name	Description
1	Mute Speakers / Audio On	Click to switch on/off the speaker. You can also adjust the volume.
2	Zoom In / Zoom Out	You can adjust the time span on the Time Bar by clicking the Zoom In or Zoom Out buttons.
3	Window Number	You can select a window on the layout by clicking on it or directly click on the channel on the playback layout window. The selected window will be highlighted with a green frame. After selecting a window, you can perform the following functions: ➢ Full Screen: Double click on a channel on the playback layout window can display the channel in full screen. ➢ Multi-Channel Playback Separately: Disable the **Synchronous playback** function, select a window by clicking on it, and then click the **Play** button. ➢ Video Clips: In the playback mode, click the button to start producing the video clip, click the button again to stop.
4	Play/Pause	Click to Play or Pause playing back.
5	Stop	Click to Stop playing back.
6	Step Forward	Click the button to play the recording frame by frame. Note this button is only functional under single channel playback.
7	Video Clips	Select a window you want to produce the video clip by clicking on the window, click the button to start producing the video clip, click the button again to stop. A message window appears on the bottom-left corner of the screen. Click **Folder** to enter the folder to find the video clip. The video clip will be stored in avi format.  Note: To change the storage path, go to Remote Setting < Device < Local Settings.

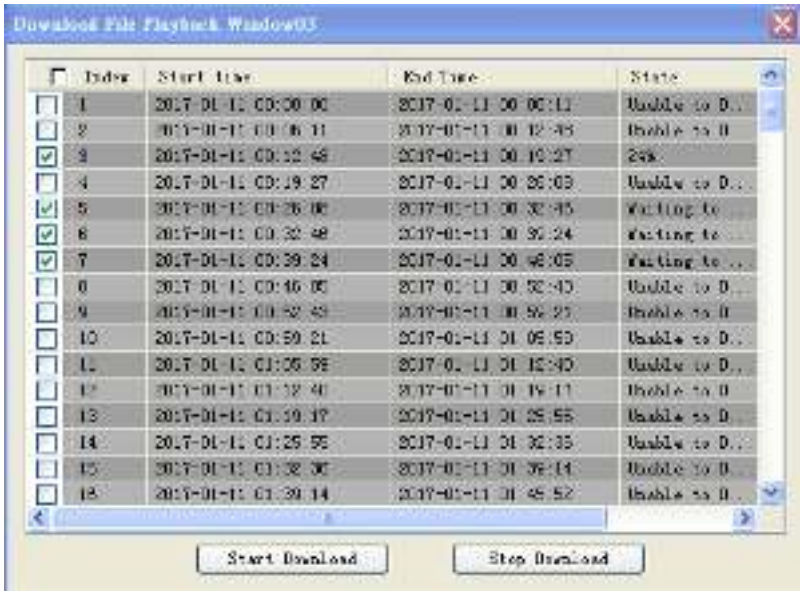
No.	Name	Description
8	Snapshot	Select a window you want to take a snapshot by clicking on the window, click the button to take a snapshot. A message window appears on the bottom-left corner of the screen. Click **Folder** to enter the folder to find the snapshot image. Or click **Preview** to preview the snapshot image.  Note: To change the storage path, go to Remote Setting < Device < Local Settings.
9	Download	Click to download recordings for a single channel. To perform the Download function, please refer to 5.3.1 Download for more details.
10	Digital Zoom	Click to enable the Digital Zoom mode. To exit the Digital Zoom mode, click the button again. To perform the Digital Zoom function: a. Select a window you want to perform the digital zoom by clicking on the window. b. Click the Digital Zoom button to enable the function. c. Use your mouse to draw an area where you want to have a close-up view on the stream. The area will be zoom-in. d. Right-click to exit the Digital Zoom mode.
11	Start All Windows	Click to start playing back all the windows. This function is useful under the Multi-Channel Playback Separately mode (disable **Synchronous playback**).
12	Stop Playback	Click to stop playing back all the windows. This function is useful under the Multi-Channel Playback Separately mode (disable **Synchronous playback**).
13	Selected Date	The selected date on the calendar will be displayed here.
14	Playback Speed	You can select a playback speed here.
15	Time Bar	Double click on the time bar at a certain time will start playing back from the clicked time. The colors on the time bar represent different recording types. Green: Normal recordings; Yellow: Motion recordings; Red: Alarm recordings; Blue: I/O recordings.
16	Time Indicator	Move your mouse cursor over the Time Bar can display the time.

No.	Name	Description
17	Stop Menu	Click to display the stop menu. You can click **Stop Playback** to stop the playback function; **Stop All Downloads** to stop all the download process; **Stop All Windows** to clear the searched recordings.
18	Single Channels	Click to display single channel layout.
19	Four Channels	Click to display four-channel layout.
20	Stretch/ Video Aspect Ratio	Click to switch between the original video aspect ratio and the stretched ratio of all the camera streams on the layout windows.
21	Maximize Window	Click to hide / display the Time Bar.

5.3.1 Download

You can download the searched recordings for a single channel.

1. Select a window you want to download the recordings by clicking on the window. The selected channel will be highlighted with a green frame.
2. Click the **Download** button, the corresponding recordings to this channel will be displayed.



3. Select the desired recordings you want to download, and then click **Start Download**. The recordings will be downloaded in avi format. To change the storage path, go to Remote Setting < Device < Local Settings.

5.4 Remote Setting

You can configure the NVR settings here.

5.4.1 Display

On this page, you can configure IP Channels, Live and Output.

5.4.1.1 IP Camera

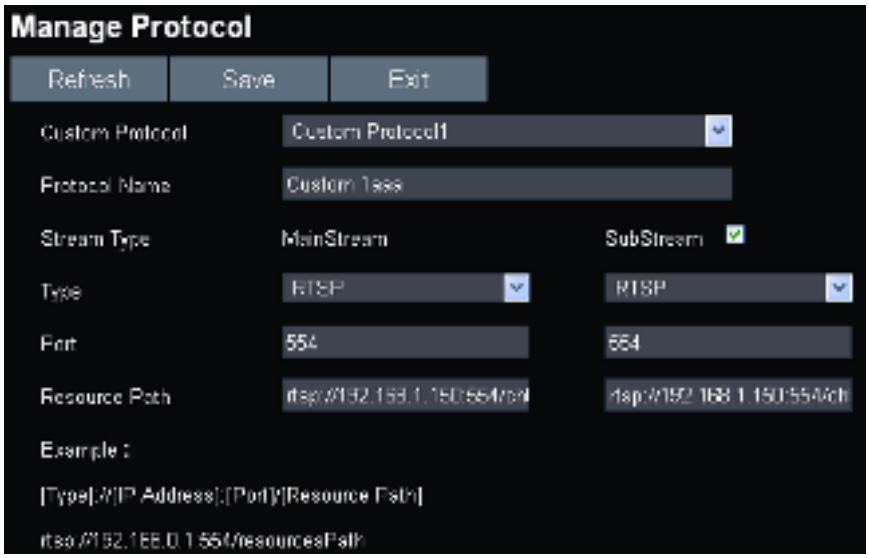
You can add IP cameras manually or automatically using this page.

Delete: Select the desired IP cameras from the list below by checking the checkboxes and then click the **Delete** button to delete the selected IP cameras.

Quick Add: Click to automatically search the IP cameras on the same LAN. Select the IP cameras you want to add to the NVR, input the Username and Password and then click the **Add** button. The selected IP cameras should be added to the NVR. You can see the live streams on the Live View window.

Refresh: Click to refresh the page.

Manage Protocol: Click to enter the Manage Protocol page. You can configure Custom 1-16 RTSP streaming protocol on this page.



- Custom Protocol: Select a custom RTSP protocol profile from the drop-down list to be configured. Up to 16 profiles can be configured.
- Protocol Name: Input a name for this RTSP protocol profile.
- Stream Type: Indicates Main Stream and Sub Stream are supported. You can separately configure the Main Stream and Sub Stream settings below. Check the Sub Stream checkbox if you want to enable sub stream for this RTSP protocol.
- Type: Select RTSP.
- Port: Keep 554 as the RTSP port.
- RTSP URL: Input the RTSP URL syntax in the box. For example:

  rtsp://[IP Address]:[Port]/ch[A]/[B]

  rtsp://192.168.31.33:554/ch01/0

  * IP Address: The IP address of the NVR

  * A: Channel number. 01 (ch1), 02 (ch2), and so on

  * B: Stream Type: 0 (main stream), 1 (sub stream)

5.4.1.2 Live

You can configure camera OSD or image settings on this page.

Channel: Select a channel from the drop-down list.

Show Name: Select **Enable** if you want to display camera name on the live stream.

Show Time: Select **Enable** if you want to display time on the live stream.

Channel Name: Input a name for the IP camera.

Record Time: Select **Enable** if you want to display time on the live stream.

Covert: Select **Enable** if you want to enable the covert function.

Date Format: Select a date format from the drop-down list.

Time Format: Select a time format from the drop-down list.

Refresh Rate: Select 50Hz or 60Hz from the drop-down list.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.1.3 Privacy Zone

The Privacy Zone can block out sensitive areas from view. This feature is useful when users' don't want the sensitive information visible. Up to four Privacy Zones can be configured. Note that the relevant parameters should be consistent with NVR local setting. You can select the zones to be deleted (select zones < click **Delete** < click **Save**).

Copy: You can apply the same configurations from one channel to the desired channels. Click the **Copy** button, the below channel selection field appears. Select a desired channel (or All), click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.2 Record

You can configure the record settings on this page.

5.4.2.1 Rec Parameters

You can configure the basic record settings on this page.

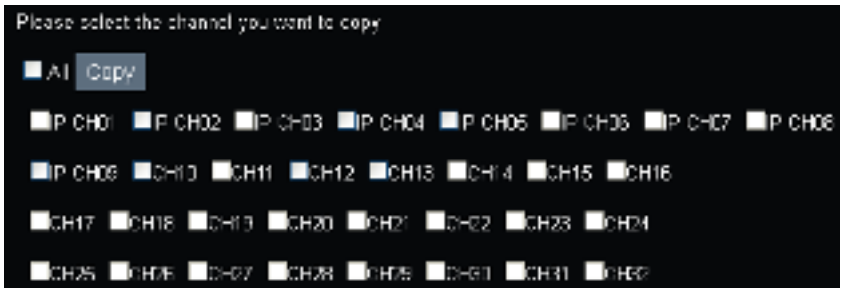
Channel: Select a channel to configure the record setting individually.

Record: Select **Enable** to enable the record function.

Stream Mode: Select **Main Stream** or **Sub Stream** to record on this channel.

Pre-Record: Select **Enable** to enable pre-recording for motion detection or I/O trigger record.

Copy: You can apply the same configurations from one channel to the desired channels. Click the **Copy** button, the below channel selection field appears. Select a desired channel (or All), click the **Copy** button, the selected channel(s) will be applied with the same configurations.



Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.2.2 Schedule

You can configure the record schedule on this page.

Channel: Select a channel to configure the record schedule setting individually.

Week: Select a day from the Week drop-down list to be configured.

Normal: Move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with green color, which will be applied with normal recording function.

Motion: Move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with yellow color, which will be applied with motion recording function.

Alarm: Move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with red color, which will be applied with alarm recording function.

Copy (day): You can apply the same configurations from one day to another. Select a day from the drop-down list first and then select a desired day (or All) from the **To** drop-down list, click the **Copy** button, the selected day(s) will be applied with the same configurations.

Copy (channel): You can apply the same configurations from one channel to the desired channels. Select a channel from the drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.2.3 Main Stream

You can configure the main stream record, resolution and etc. for individual channel.

Channel: Select a channel to apply with the following configurations.

Resolution: Select a recording resolution for the selected channel.

FPS: Select a record FPS (frames per second) for the selected channel.

Bitrate Mode: Select **User-defined** or **Predefined** for the selected channel.

Bitrate: Set up a bitrate for the selected channel.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.2.4 Sub Stream

You can configure the sub stream record, resolution and etc. for individual channel.

Channel: Select a channel to apply with the following configurations.

Resolution: Select a recording resolution for the selected channel.

FPS: Select a record FPS (frames per second) for the selected channel.

Bitrate Mode: Select **User-defined** or **Predefined** for the selected channel.

Bitrate: Set up a bitrate for the selected channel.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.2.5 Mobile Stream

You can configure the mobile stream record, resolution and etc. for individual channel.

Channel: Select a channel to apply with the following configurations.

Resolution: Select a recording resolution for the selected channel.

FPS: Select a record FPS (frames per second) for the selected channel.

Bitrate Mode: Select **User-defined** or **Predefined** for the selected channel.

Bitrate: Set up a bitrate for the selected channel.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.3 Capture

This menu is used to configure global express settings for all cameras.

5.4.3.1 Capture

You can configure the capture function on this page.

Channel: Select a channel to apply with the following configurations.

Auto Capture: Select **Enable** to enable the Auto Capture function.

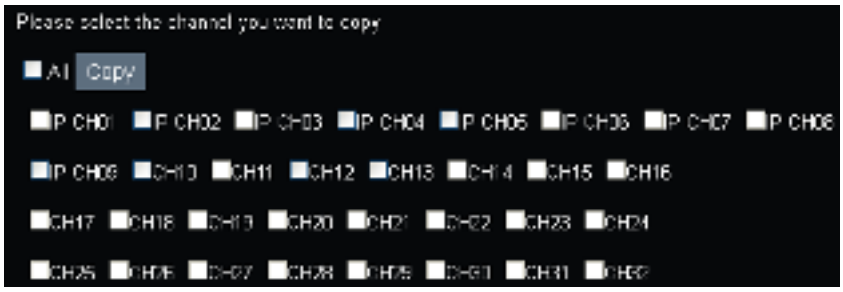
Stream Mode: Select Main stream or Sub stream for the captured images.

Normal Inteval: Select an interval time of the auto capture.

Alarm Interval: Select an interval time of the alarm capture.

Manual Capture: Select **Enable** to enable the Manual Capture function.

Copy: You can apply the same configurations from one channel to the desired channels. Click the **Copy** button, the below channel selection field appears. Select a desired channel (or All), click the **Copy** button, the selected channel(s) will be applied with the same configurations.



Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.3.2 Capture Schedule

You can configure the Capture Schedule on this page. The selected event will be captured by the scheduled time. For example, if you set up Motion on Sunday between 6-8am, the Motion recording will only be captured between 6-8am on Sunday.

Channel: Select a channel to configure the capture schedule setting individually.

Week: Select a day from the Week drop-down list to be configured.

Normal: Move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with green color, which will be applied with normal recording capture function.

Motion: Move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with yellow color, which will be applied with motion recording capture function.

Alarm: Move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with red color, which will be applied with alarm recording capture function.

Copy (day): You can apply the same configurations from one day to another. Select a day from the drop-down list first and then select a desired day (or All) from the **To** drop-down list, click the **Copy** button, the selected day(s) will be applied with the same configurations.

Copy (channel): You can apply the same configurations from one channel to the desired channels. Select a channel from the drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.4 Network

You can configure the network settings on this page.

5.4.4.1 Network

You can configure the basic network settings on this page. After configuring the settings, users are able to control and monitor the NVR remotely.

Type: Select DHCP, PPPoE or Static from the drop-down list.

- **DHCP:** DHCP server in LAN will automatically assign an IP configuration for the network connection. This setting lets the system use an automatically assigned (dynamic) IP address. This address can change under certain circumstances, for instance, when the NVR's network switch/hub has to be rebooted.
- **PPPoE:** This is a DSL-connection application. The ISP will ask the user to input a username and password. Contact your ISP for these details.

> **Note:** If PPPoE is selected as the IP type, the supplied IP Utility program will not be able to detect the device.

- **Static:** Users can manually set up a Static IP address for the NVR. This type of address is stable and cannot change, but users have to make sure there are no IP address conflicts with other network-connected devices.

Client Port: Keep 9000 port. Change only when necessary.

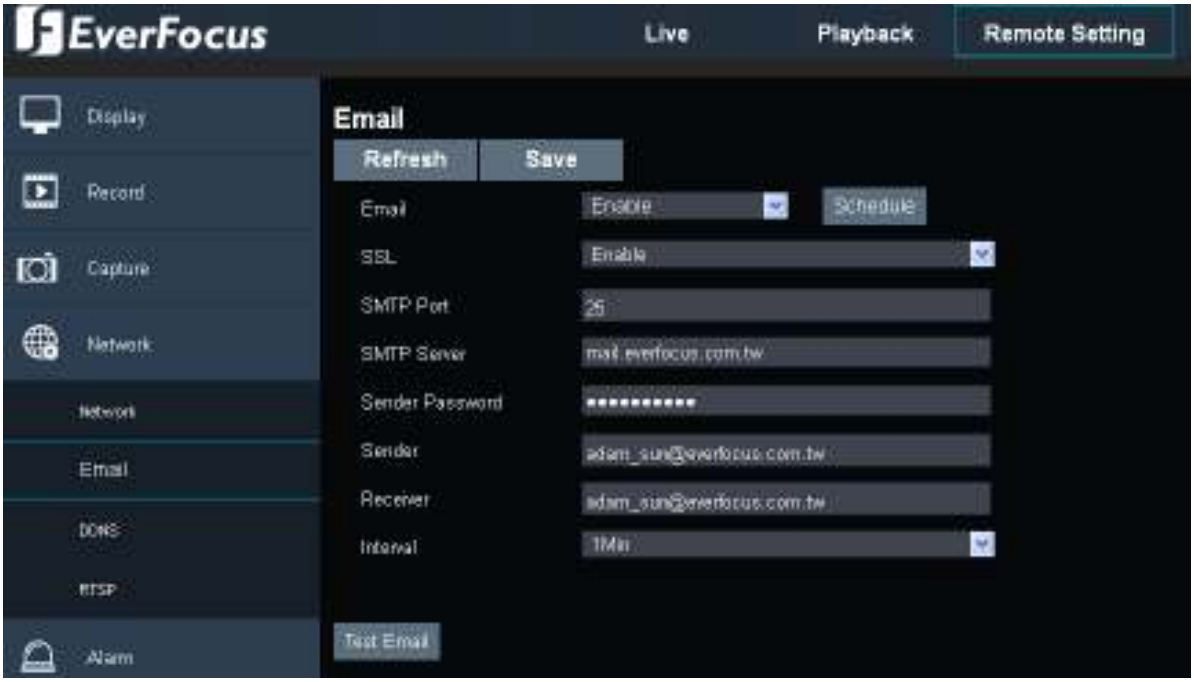
HTTP Port: Keep 80 port. Change only when necessary.

UPnP: If you want to enable the UPnP function, click **Enable** from the drop-down list.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.4.2 Email

You can configure the email settings on this page.



Email: Select **Enable** to enable the Email function.

Schedule: Click to set up Email Schedule. Please refer to *5.4.4.2.1 Email Schedule*.

SSL: Select **Enable** if you want to enable the SSL function.

SMTP Port: Assign the port number used by the SMTP server.

SMTP Server: Assign the SMTP (Email) server's name. Note that for more reliable email service, use the server's IP address.

Sender Password: Input the password of the sender.

Sender: Input the Email address of the sender (the NVR). Sender's Email address has to match the password below.

Receiver: Input the Email address of the receiver.

Interval: Configure an interval to send Emails when events occur.

Test Email: Click to test whether the Email function is working normally.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.4.2.1 Email Schedule

You can configure the email schedule on this page. The selected event Email alerts will be sent out by the scheduled time. For example, if you set up Motion on Sunday between 6-8am, the Motion Email alerts will only be sent out between 6-8am on Sunday.

Channel: Select a channel to configure the email schedule setting individually.

Week: Select a day from the Week drop-down list to be configured.

Motion: Move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with green color, which will be applied with motion email alert function.

Events: Move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with red color, which will be applied with event email alert function.

Alarm: Move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with yellow color, which will be applied with alarm email alert function.

Copy (day): You can apply the same configurations from one day to another. Select a day from the drop-down list first and then select a desired day (or All) from the **To** drop-down list, click the **Copy** button, the selected day(s) will be applied with the same configurations.

Copy (channel): You can apply the same configurations from one channel to the desired channels. Select a channel from the drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.4.3 DDNS

You can configure the DDNS setting on this page. DDNS (Dynamic Domain Name System) is a service used to map a domain name to the dynamic IP address of a network device. You can set up the DDNS service for remote access to the NVR.

DDNS assigns a domain name (URL) to the NVR, so that the user does not need to go through the trouble of checking if the IP address assigned by DHCP Server has changed. Once the IP is changed, the NVR will automatically update the information to the DDNS to ensure it is always available for remote access.

Note that before enabling the following DDNS function, user should have applied for a host name from the DDS service provider's website.

DDNS: Select **Enable** from the DDNS drop-down list to enable DDNS function.

Server: Select a DDNS service provider from the drop-down list. Note that before enabling the following DDNS function, user should have applied for a host name from the DDS service provider's website.

Doman: Input the domain name obtained from the DDNS service provider.

User: Input the user name of the DDNS account.

Password: Input the password of the DDNS account.

Test DDNS: Click the button to test whether the DDNS function is working normally.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.4.4 RTSP

You can configure the RTSP setting on this page.

RTSP Enable: Select **Enable** from the drop-down list to enable the RTSP function.

RTSP Port: Keep 554 as RTSP port.

Verify: Select **Enable** from the drop-down list to enable the verify function.

Username: Input the username.

Password: Input the password.

RTSP URL Syntax:

rtsp://[IP Address]:[Port]/ch[A]/[B]

rtsp://192.168.31.33:554/ch01/0

* IP Address: The IP address of the NVR
* A: Channel number. 01 (ch1), 02 (ch2), and so on.
* B: Stream Type: 0 (main stream), 1 (sub stream)

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.5 Alarm

You can configure the motion and alarm settings on this page.

5.4.5.1 Motion

You can configure the Motion setting on this page.

Channel: Select a channel to apply with the motion detection function.

Enable: Check **Enable** to enable the function.

Sensitivity: Select a sensitivity value from the drop-down list. The larger the value, the higher the sensitivity.

Buzzer: Select a buzzer sound duration from the drop-down list. If you want to disable the buzzer, select **Off** from the drop-down list.

Full Screen: Check the box to enable the function. When a motion event occurs, the corresponding channel with the motion event will be switched to full screen on the live screen.

Alarm Out: Check the box to enable the alarm output.

Latch Time: Select a latch time (duration) when motion events occur. When a motion object is detected, the alarm will last based on the latch time.

Enable Record: Check the box to enable the post recording function. You can further set up the post recording time when motion events occur.

Post Recording: Select a post recording time when motion events occur.

Show Message: Check the box to enable the function. When a motion event occurs, a motion event message will be displayed on the live screen.

Send Email: Check the box to enable the function. When a motion event occurs, the NVR will send an email alert to the receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *5.4.4.2 Email*).

Record Channel: Check the All checkbox to select all channels. When a motion event occurs, the selected channel(s) will be recorded.

IP Channels: Check the IP Channels checkbox to select all channels or check the desired channel checkboxes. When a motion event occurs, the selected channel(s) will be recorded.

Preview Window: Click **All** to select all area to applied with the motion detection function. Or use your mouse to draw an area on the preview window. Click **Clear** to clear the setting.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.5.2 Alarm

You can configure the Alarm setting on this page.

Alarm In: Select an alarm input from the drop-down list.

Alarm Type: Select an alarm type. **Normally-Open** or **Normally-Close**. If you want to disable the alarm, select **Off**.

Buzzer: Set up the time for buzzer to sound when an alarm is triggered.

Latch Time: Set up the time for buzzer to sound when an alarm is triggered by external sensor.

Show Message: Check the box to enable the function. When an alarm is triggered, an alarm message will be displayed on the live screen.

Send Email: Check the box to enable the function. When alarm is triggered, the NVR will send an email alert to the receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *5.4.4.2 Email*).

Full Screen: Check the box to enable the function. When alarm is triggered, the corresponding channel with the alarm will be switched to full screen on the live screen.

Alarm Out: Check the box to enable the alarm output.

Enable Record: Check the box to enable the post recording function. You can further set up the post recording time when alarm events occur.

Post Recording: Select a post recording time when alarm events occur.

Record Channel: Check the All checkbox to select all channels. When an alarm event occurs, the selected channel(s) will be recorded.

IP Channels: Check the IP Channels checkbox to select all channels or check the desired channel checkboxes. When an alarm event occurs, the selected channel(s) will be recorded.

Copy: You can apply the same configurations from one channel to the desired channels. Click the **Copy** button, the below channel selection field appears. Select a desired channel (or All), click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Save** to save the settings or **Refresh** to refresh the page.

The alarm types and descriptions are listed as below:

Alarm Type	Functions and Descriptions
Video Loss	When NVR fails to receive video signals due to some problems (camera damage, cable dropout or damage, power failure), the alarm will appear.
Motion Detection	When IP camera detects moving objects, alarm will be triggered. Sensitivity is subject to the actual application environment test. Sensitivity is adjusted according to the sensitivity of moving object detection and parameters are modified by combining the area setting.
I/O Status	Communicate with alarm device through I/O port. Alarm signals sent by IR sensor or other devices will be transformed to the system recognized signal and activate relevant channel to record or control the device output.
HDD Status	Alarm will appear when HDD does not work due to damage, power failure, HDD auto-overwrite off and insufficient space.

5.4.6 Device

You can configure the storage path, HDD and PTZ settings on this page.

5.4.6.1 Local Settings

You can configure the Record, Download and Snapshot storage path on this page.

Record Path: Select a storage path for recordings.

Download Path: Select a storage path for download recordings.

Snapshot: Select a storage path for snapshot images.

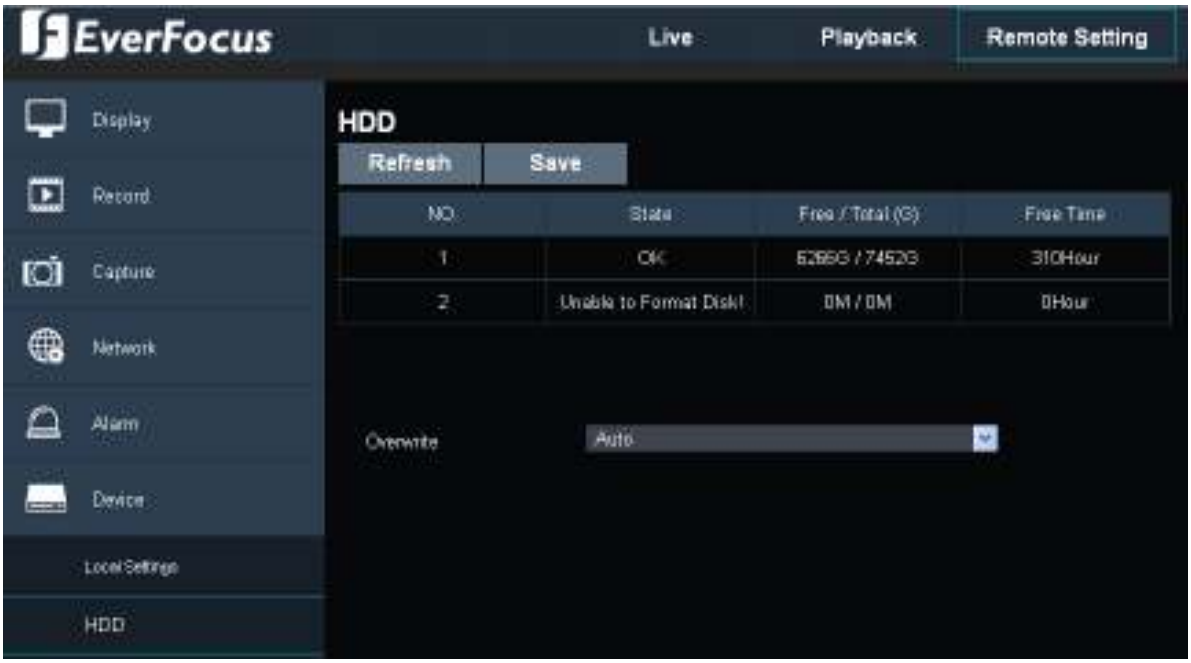
File Type: Select avi, and the recordings will be stored in avi format.

Interval: Set up an interval time.

Click **Save** to save the settings.

5.4.6.2 HDD

You can configure the HDD settings on this page. Please connect the HDD(s) to the NVR in advance and ensure the power and SATA cables are properly connected between the NVR and HDD(s). After connecting the HDD(s) to the NVR, the NVR will automatically detect the connected HDD(s) and listed all the connected HDD(s) in the below field. For the first time connected HDDs, the status will show “Unable to Format Disk” in the state column, users will have to format the HDDs on the NVR local side.



Overwrite: Select **Auto** to enable the overwrite function; **Close** to disable the overwrite function. If **Auto** is selected, the NVR will overwrite the oldest files on the HDD when HDD is full. The 1/3/7/14/30/90 Days stands for the longest storage days of the HDD. For example, if 3 Days is selected, the HDD can record a maximum of 3 days data. If more data has to be recorded, the oldest recorded data will be overwritten (FIFO, first-in first-out).

Click **Save** to save the settings or **Refresh** to refresh the page.

Note:

1. Only the HDDs with “OK” in the State column can perform the recording function. If not, format the HDDs before start using the recording function. To format the HDD, please refer to *4.1.3.1 HDD*.
2. The “Free Time” on the HDD list indicates the remaining time for the HDD to record based on the pre-setup resolution, streaming and fps.

5.4.6.3 PTZ

You can configure the PTZ settings on this page.

Channel: Select the channel connected with PTZ camera.

Signal Type: Select **Digital** for the connected PTZ camera.

Protocol: Select PTZ protocol, choose from the following protocols. (Note: All cameras on the RS-485 bus must use the same protocol).

Baudrate: This field is to set the speed at which is used to transmit instruction or information through the RS-485 port on the NVR.

Data Bit: This field is the data bit at which you will be transferring.

Stop Bit: This field is to set the stop bit for the RS-232 connection.

Parity: This field is to select the parity level at which you will be connected.

Address: Input the ID address of the PTZ camera. Note this address should match the one set up on the PTZ camera.

Copy: You can apply the same configurations from one channel to the desired channels. Click the **Copy** button, the below channel selection field appears. Select a desired channel (or All), click the **Copy** button, the selected channel(s) will be applied with the same configurations.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.7 System

You can configure system settings on this page.

5.4.7.1 General

You can configure the general system settings on this page.

System Time: Set up the system date and time.

Date Format: Select a format for the date.

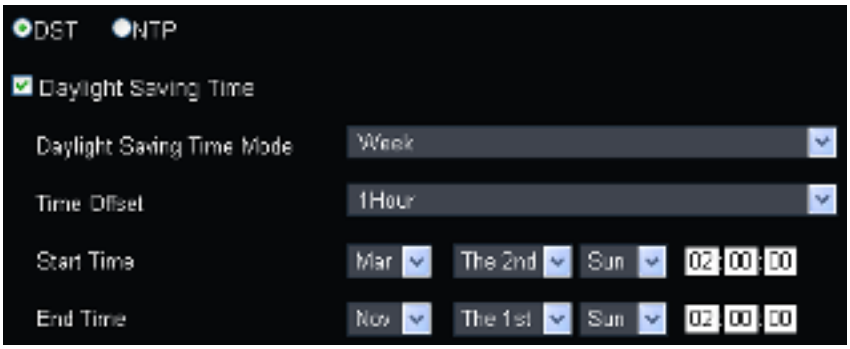
Time Format: Select a format for the time.

Language: Select a language.

Video Format: Select **NTSC** or **PAL** for the system.

Start show wizard: Select **Enable** to enable starting the Startup Wizard on the local NVR side every time when system starts.

DST: Select to configure the DST (Daylight Saving Time) settings.



Daylight Saving Time: Check the box to enable the DST function.

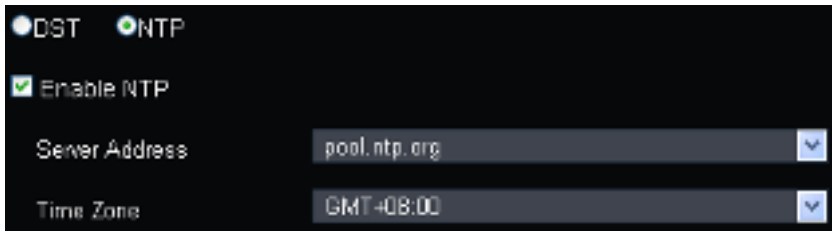
Daylight Saving Time Mode: Select **Week** or **Date** to configure the start/end time below.

Time Offset: Select an offset time.

Start Time: Select a start time for the DST to start.

End Time: Select an end time for the DST to stop.

NTP: Select to configure the NTP function.



Enable NTP: Check the box to enable the NTP function.. When NTP function is enabled, the system will calibrate the system time at 00:07:50 daily and every time when the system is started up.

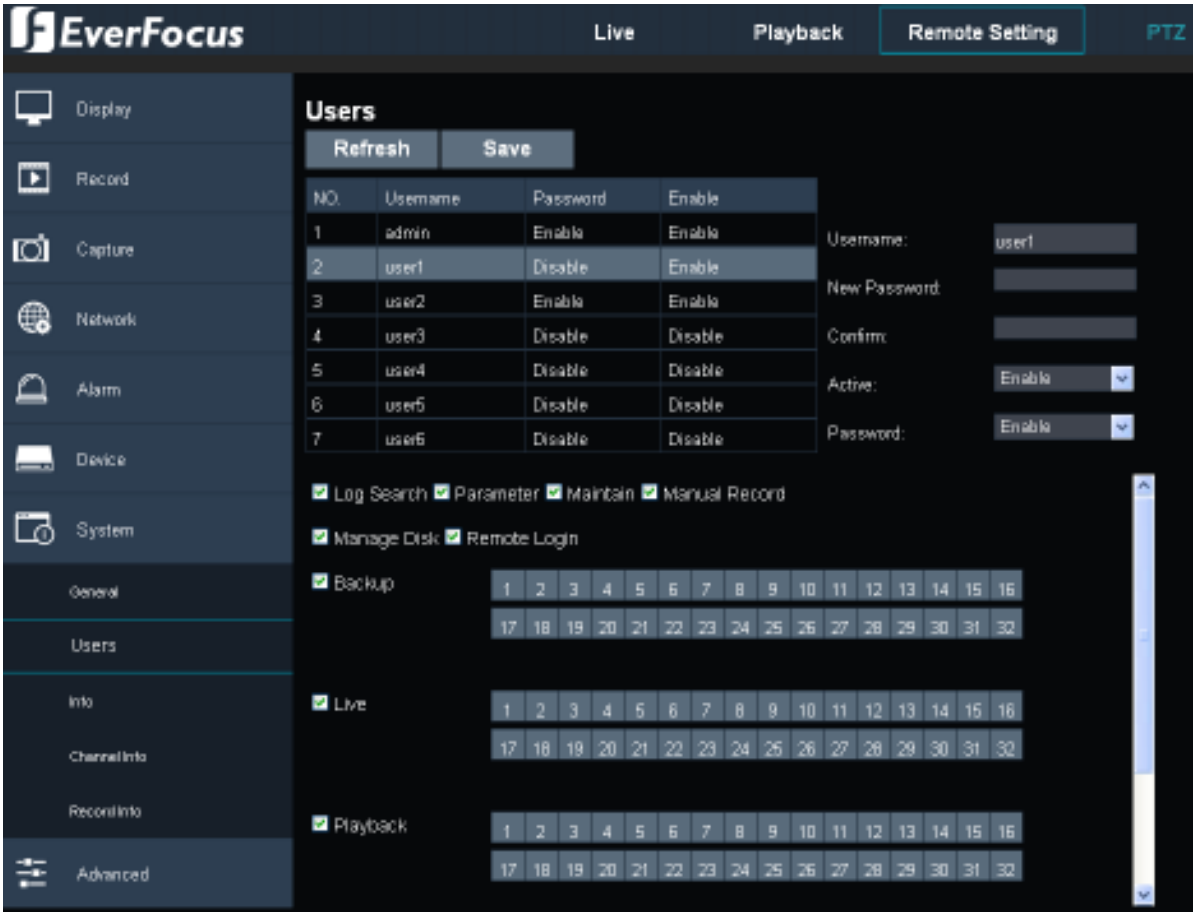
Server Address: Select a NTP server.

Time Zone: Select a time zone.

Click **Save** to save the settings or **Refresh** to refresh the page.

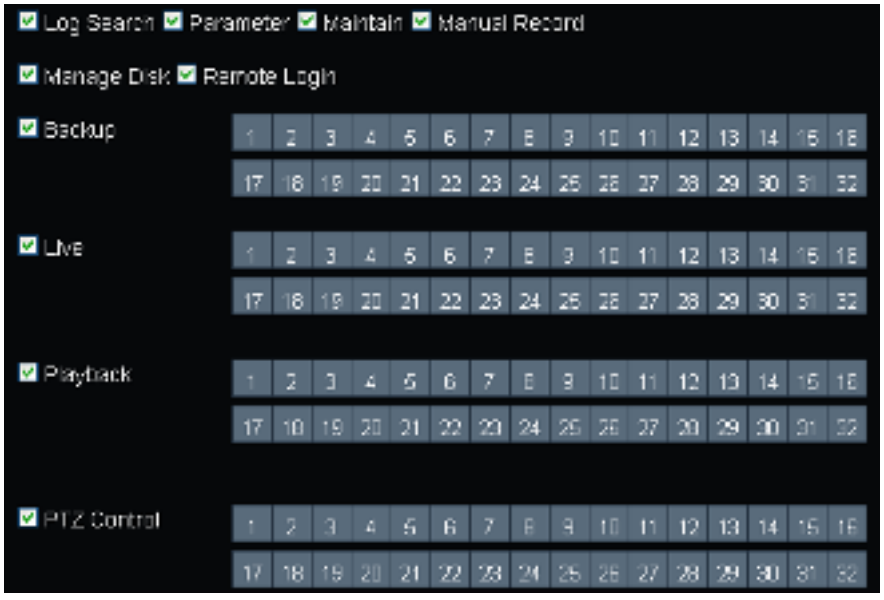
5.4.7.2 Users

You can configure the user settings on this page. Up to 7 user accounts (1 administrator and 6 users) can be configured.



To edit the user privileges:

1. Select a user from the list by clicking on it, the below privilege options appears.



2. Check the boxes to grant functions for the selected user account. You can also set up the Backup/Live/Playback/PTZ Control functions to specific channels. After the configuration, click **Save** to save the settings.

   Log Search: Allow users to check all the system logs.

   Parameter: Allow users to set all the parameter settings.

   Maintain: Allow users to update version, restore to factory default settings, device reboot and shut down.

   Manual Record: Allows users to manually start/stop recording.

   Manage Disk: Allow users to manage and control the HDD and USB storage device.

   Remote Login: Allow users to login the system remotely.

   Backup: Check the **Backup** box to enable the function; and then select the desired channels to backup. This user account will be granted with the Backup function for the selected channels.

   Live: Check the **Live** box to enable the function; and then select the desired channels for live view display. This user account will be granted with the live view display function for the selected channels.

   Playback: Check the **Playback** box to enable the function; and then select the desired channels for playback. This user account will be granted with the playback function for the selected channels.

   PTZ Control: Check the **PTZ** box to enable the function; and then select the desired channels for PTZ function. This user account will be granted with the PTZ control function for the selected channels.

3. You can configure the user name/password in the right-side field. The max. length of user name is 8 characters (alphabetic or numeric); and the passwords have to be numeric (0-9) with exactly 8 characters. Select **Enable** from the **Active** drop-down list to enable the user account. Select **Enable** from the **Password** drop-down list to enable the password (if Disable is selected, the user can login without password).

4. Click **Save** to save the settings.

Note: The Administrator account has full privileges so the functions cannot be configured.

5.4.7.3 Info

You can see the NVR info on this page. Click **Refresh** to refresh the page.

5.4.7.4 Channel Info

You can see the info of all the channels on this page.

5.4.7.5 Record Info

You can see the record info of all the channels on this page.

5.4.8 Advanced

You can configure the system maintenance and system event settings on this page.

5.4.8.1 Firmware Upgrade

You can upgrade the system firmware on this page. Click the **Browse** button to locate the firmware file and then click the **Start** button.

5.4.8.2 Load Default

Select the functions you want the system to restore to the factory default value and then click the **Save** button.

5.4.8.3 Event Settings

You can configure the system event settings on this page.

Event Type: Select an event type from the drop-down list.

Enable: Check the box to enable the function.

Buzzer: Set up the time for buzzer to sound when an event is triggered.

Show Message: Check the box to enable the function. When the selected events have been triggered, an event message will be displayed on the live screen.

Send Email: Check the box to enable the function. When the selected events have been triggered, the NVR will send an email alert to the receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *4.1.1.3.2 Email*).

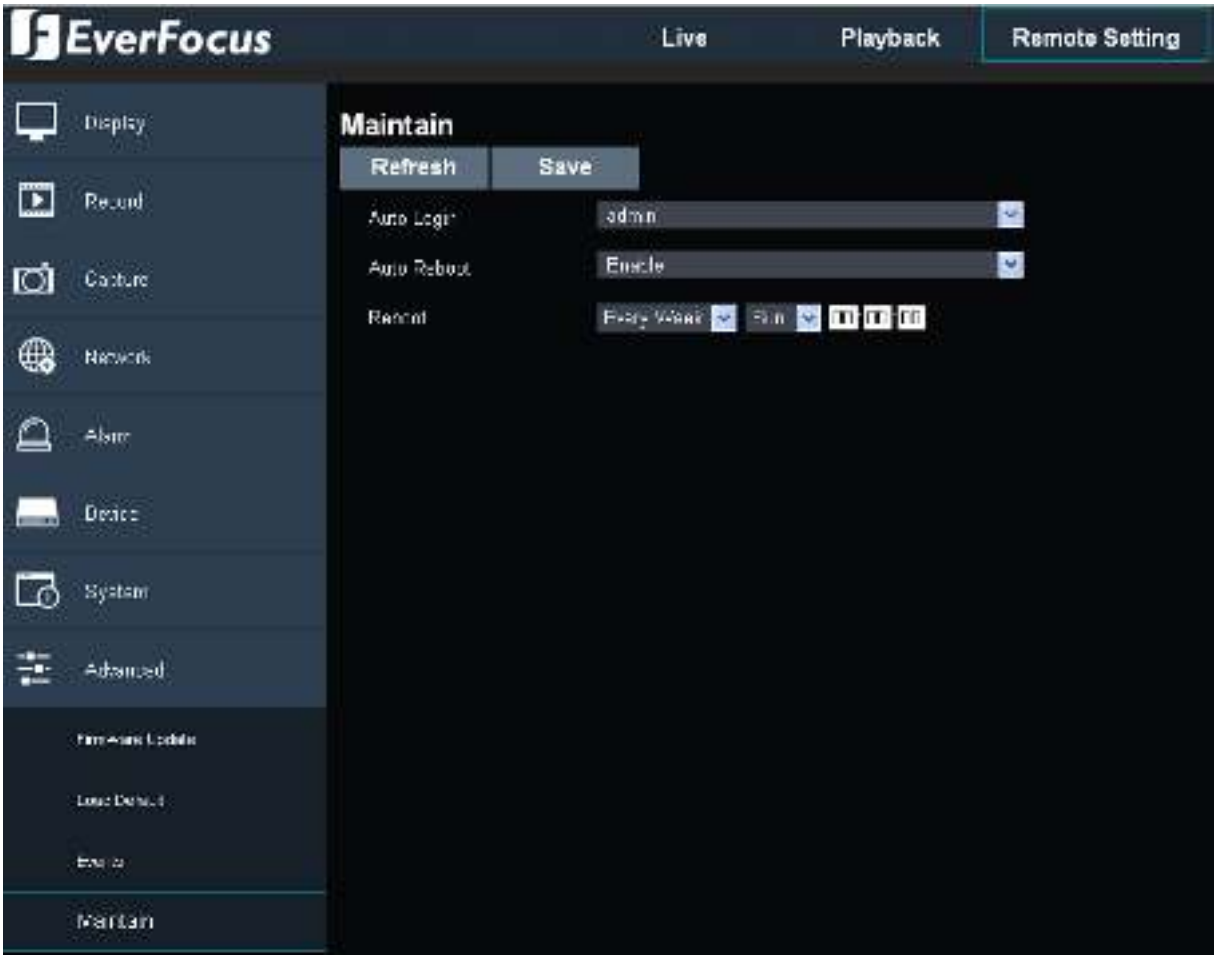
Alarm Out: Check the box to enable the alarm output.

Latch Time: Set up the time for buzzer to sound when an event is triggered.

Click **Save** to save the settings or **Refresh** to refresh the page.

5.4.8.4 System Maintenance

You can set up the Auto Login and Auto Reboot function on this page.



Auto Login: Select a user for the auto login function. The options in the drop-down list can be configured on the Users page (enable the user). Please refer to *5.4.7.2 Users*.

Auto Reboot: Select **Enable** to enable the Auto Reboot function. You can further set up the auto reboot time in the Reboot field.

Reboot: After selecting Enable in the Auto Reboot field, set up the reboot time here for the system to regularly reboot at the setup time.

Click **Save** to save the settings or **Refresh** to refresh the page.

Chapter
6

6. Specification

Model Name		EPRO NVR 32 – 4HDD	EPRO NVR 16 – 2HDD
System			
Operating System		Embedded Linux	
Number of Channels		Up to 32CH	Up to 16CH
Dual Streams		Yes	
Control PTZ via OSD		Yes	
User Interface		GUI (Graphical User Interface)	
User Access		2 Levels of user access	
Video			
Compression Format		H.265 or H.264	
Video outputs	HDMI	1024x768, 1920x1080, 3840x2160	
	VGA	1024x768, 1920x1080	
Bandwidth	Incoming	Max 320Mbps	
	Outgoing	Max 256Mbps	
Recording			
Recording Resolution		4K, 5MP, 3MP, 2MP, 1.3MP, 1MP	
Audio			
Audio Input		1 input	
Audio Output		1 output	
Alarm			
Alarm Input		16 inputs	
Alarm Output		4 outputs	1 output
Storage Device			
Internal HDD		4 x SATA HDD (up to 6TB each)	2 x SATA HDD (up to 6TB each)
External HDD		1 x eSATA	
Network			
Ethernet		10/100/1000Mbps	
Protocol		TCP-IP / DHCP/ PPPoE / Everfocus DDNS / RTSP	

Interface		
USB	2 x USB2.0 port; 1 x USB3.0 port	
RS-485	1 x RS-485	
Ethernet	2 x RJ-45	1 x RJ-45
eSATA	1 x eSATA	
General		
Power Input	100-240VAC~ / 150W max	12VDC / 5A / 60W max
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F (20 ~ 80% humidity)	
Weight	6.0kg / 13.23lb (without HDDs)	3.0kg / 6.613lb (without HDDs)
Dimensions (W x D x H)	430 x 399.3 x 79.5mm / 16.93” x 15.72” x 3.13” (EPRO NVR 32) 378 x 328 x 49.5mm / 14.88” x 12.91” x 1.95” (EPRO NVR 16)	
Language	English, Japanese, Traditional Chinese, Spanish, Deutsch, French, Russian, Portuguese (Brazil), Dutch, Simplified Chinese	
Regulatory	UL, CE, FCC, RoHS	
Remote Client System Minimum Requirements		
Operating System	Windows XP (32-bit) / Win7 (32 and 64-bit)	
CPU	Intel Core I3-2100	
RAM	2GB	
VGA	Intel HD 2000	
LAN Speed	10 / 100 / 1000 Mbps (RJ45)	
Web Browser	IE11 and later, Firefox 50 and earlier, Chrome 44 and earlier, EF browser	
Other Remote Application	1. EverFocus’ Xfleet fleet management server system. 2. EverFocus’ mobile app: MobileFocus (iOS and Android); MobileFocusHD (iPad).	

Chapter

7

7. Troubleshooting

If you have problems with the system, run through the following checklist to see if you can solve the problem.

1. Q: What can I do if the system does not detect the HDD?
A: Check if the power supply system is properly connected and power cord and power cables are securely connected, and if something wrong with the HDD interface. Or you may check if your HDD is supported by referring to the specifications or descriptions.

2. Q: I have changed the password but forget the new password, how can I access the system?
A: If you forget system password, please consult with our technical personnel. We strongly suggest user to set password easy to be remembered and relatively safe. If you have safety requirement, please do not set too simple password, such as 000000.

3. Q: We see abnormal video signal or even no video signal by connecting the NVR and camera together. Power supply for both devices is OK. What is wrong?
A: Check network cable at NVR side to see if the cable is firmly connected and if it is worn out and needs to be replaced.

4. Q: How to prevent NVR from being influenced by heat?
A: The NVR needs to dissipate heat while it is running. Please place the NVR in a place with good air circulation and away from heat sources to ensure stability and life of the NVR.

5. Q: The remote control doesn't work while the monitor screen is OK and panel keys are functional. Why?
A: Operate again by aiming the remote control at the IR receiver on front panel. If it still doesn't work, please check if the batteries in the remote control are running out of power. If not, check if the remote control is broken.

6. Q: I want to take out HDD from my PC and install it in NVR. Can it work?
A: All HDDs supported by the system can be used. But remember, once NVR runs, the data on your HDD will be formatted.

7. Q: Can I playback while recording?

A: Yes. The system supports the function of playing while recording.

8. Q: Can I clear some records on HDD of NVR?

A: In consideration of the file security, you may not clear part of records. If you want to remove all the records, you can format HDD.

9. Q: Why can't I log in NVR client?

A: Please check if the network connection settings are correct and RJ-45 port is with good contact. And check if your account and password are correctly input.

10. Q: Why can't I find any records during playback?

A: Please check if the data line connection for HDD is OK and system time is properly adjusted. Try a few times and restart. If it still doesn't work, check if the HDD is broken.

11. Q: Why doesn't dynamic detection work?

A: Please check if the motion detection alarm setting at IP camera side is correct and if the sensitivity is set too low.

12. Q: Why doesn't alarm work?

A: Please check if the alarm setting, alarm connection and alarm input signals are correct.

13. Q: Why does buzzer keep alarming?

A: Please check the alarm setting, check if motion detection function is enabled and object motion is detected all the time and if I/O alarm is set as Always Off. Besides, refer to corresponding HDD alarm setting.

14. Q: Why can't I stop recording by pressing "STOP" button or click "Stop Recording" in context menu?

A: Pressing Stop button can only stop manual record. If you want to stop Scheduled recording in certain time quantum, please change the setting to No Record. To stop Startup recording, please change record mode to scheduled recording or manual recording. Then you may stop recording by the prescribed methods

Chapter

8

8. Usage Maintenance

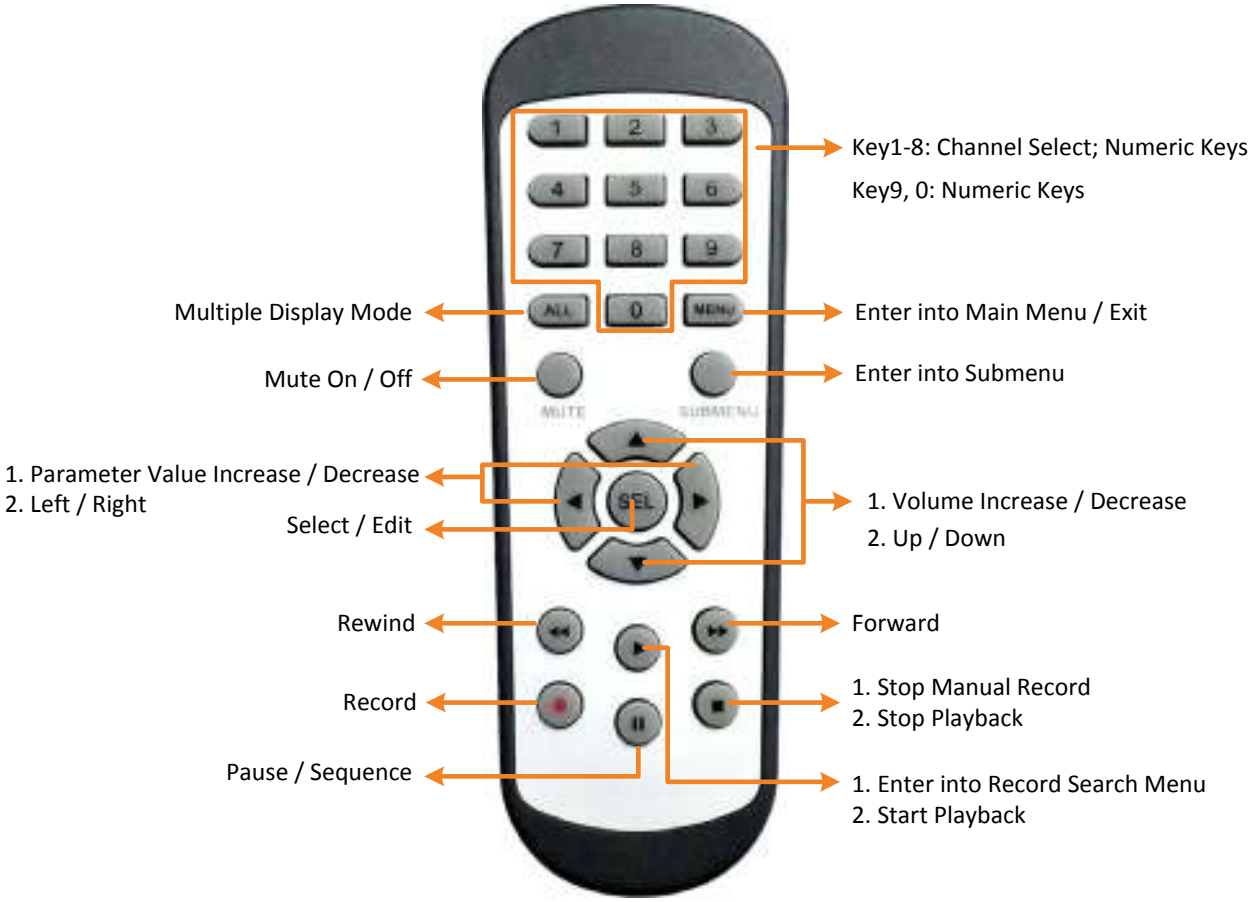
1. To shut down NVR, please firstly shut down the system and then turn off the power. Do not turn off the power directly or HDD data will be lost or damaged.
2. Please keep NVR away from heat sources or places.
3. Clean the internal dust regularly. Make sure the good ventilation of NVR so as to ensure the good heat dissipation.
4. Please do not hot plugging cables at ports, or the ports may be damaged.
5. Please check the HDD cable and data cable regularly to see if they are ageing.
6. Please prevent the audio and video signals of NVR from being intervened by other electronic devices, and prevent the HDD from being damaged by static electricity and induced voltage.
7. If the network cable is frequently plugged, it is suggested to replace connecting line regularly, or the input signal may be unstable.
8. This is A class product. It may bring wireless interference in life. Under this situation, it need users to make measurements.

Appendix

A

Appendix A: IR Remote Control

The IR remote control is an accessory to enhance the convenient operation of the NVR. You can perform all the settings and operations from the remote control.



Appendix

B

Appendix B: Recording Backup through EF-Reader

EverFocus EF-Reader is an enhanced HDD reader enabling users to access HDDs / SD cards locally or remotely and further play back the recordings (depends on EverFocus models). Users granted with privileges are allowed to log in the EF-reader and operate the specific functions. The EF-Reader supports AVI, MP4 and AVR file formats. Moreover, the meta data or the GPS data from the source recordings can also be played back on the Playback Window graphically; or be exported in .kml (GPS data) files.

The EF-Reader supports various functions including Event Search, Archive, AB Repeat Playback, Format Convert, Mask, Watermark and etc.. To know more about EF-Reader, please refer to *EF-Reader User's Manual*.

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