# VANGUARD 16x8 / 8x4 / 4x2

## 16CH / 8CH / 4CH Hybrid DVR

*User's Manual*

VANGUARD 16x8

VANGUARD 8x4

VANGUARD 4x2

EverFocus

Copyright © EverFocus Electronics Corp.
Release Date: April, 2018

EVERFOCUS ELECTRONICS CORPORATION

# VANGUARD 16x8 / 8x4 / 4x2
# 16CH / 8CH / 4CH Hybrid DVR

## User's Manual

© 1995-2018 EverFocus Electronics Corp.
www.everfocus.com.tw

**Disclaimer**

All the images including product pictures or screen shots in this document are for example only. The images may vary depending on the product and software version. Information contained in this document is subject to change without notice.

**Copyright**

All rights reserved. No part of the contents of this manual may be reproduced or transmitted in any form or by any means without written permission of the EverFocus Electronics Corporation.

Windows is a registered trademark of the Microsoft Corporation.
D-Link is a registered trademark of the D-Link Corporation.
DynDNS is a registered trademark of the DynDNS.org Corporation.
Other product and company names mentioned herein may be the trademarks of their respective owners.

# 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 DVR at temperatures within -10°C~55°C / 14°F~131°F (Storage). The input power source is 12VDC, 5A.

- **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 DVR.

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.

# TABLE OF CONTENTS


**1. Introduction ..... 1**
1.1 Features ..... 2
1.2 Dimensions ..... 2
1.3 Packing List ..... 2
1.4 Front Panel ..... 3
1.5 Rear Panel ..... 3
1.6 eZ. Controller Function Description ..... 5
**2. Connection and Installation ..... 7**
2.1 Hard Disk Installation ..... 7
2.1.1 Hard Disk Compatibility List ..... 8
2.2 Basic Connection ..... 9
2.2.1 Terminal Block ..... 10
2.3 Accessing the Web Interface ..... 11
**3. Getting Started ..... 14**
3.1 Turning On / Off the Power ..... 14
3.2 Restart the DVR ..... 15
3.3 Startup Wizard ..... 16
3.4 Live View Window ..... 21
3.5 Live Channel Tool Bar ..... 22
3.5.1 Digital Zoom ..... 23
3.5.2 PTZ Control ..... 24
**4. OSD Root Menu ..... 26**
4.1 Main Menu ..... 28
4.1.1 Settings ..... 28
4.1.1.1 Display ..... 28
4.1.1.1.1 IP Channels ..... 28
4.1.1.1.2 Analog Channels ..... 32
4.1.1.1.3 Analog Setting ..... 33
4.1.1.1.4 Output ..... 34
4.1.1.1.5 Privacy Mask ..... 36
4.1.1.2 Record ..... 37
4.1.1.2.1 Record ..... 37
4.1.1.2.2 Record Schedule ..... 38
4.1.1.2.3 Main Stream ..... 39
4.1.1.2.4 Sub Stream ..... 40
4.1.1.3 Snapshot ..... 41
4.1.1.3.1 Snapshot ..... 41
4.1.1.3.2 Snapshot Schedule ..... 42
4.1.1.4 Network ..... 43
4.1.1.4.1 Network ..... 43

4.1.1.4.2 Email ..... 44
4.1.1.4.3 Email Schedule ..... 45
4.1.1.4.4 DDNS ..... 46
4.1.1.4.5 RTSP ..... 50
4.1.1.4.6 FTP ..... 51
4.1.1.5 Alarm ..... 52
4.1.1.5.1 Motion ..... 52
4.1.1.5.2 Alarm ..... 54
4.1.1.5.3 PTZ Linkage ..... 56
4.1.2 Record Search ..... 57
4.1.2.1 General ..... 57
4.1.2.1.1 General Playback ..... 58
4.1.2.1.2 Event / Snapshot Playback ..... 61
4.1.2.1.3 Sub-Periods Playback ..... 62
4.1.2.2 Events ..... 63
4.1.2.2.1 Backup ..... 64
4.1.2.3 Snapshot ..... 66
4.1.3 Device ..... 68
4.1.3.1 HDD ..... 68
4.1.3.1.1 HDD ..... 68
4.1.3.1.2 Disk Group ..... 70
4.1.3.1.3 S.M.A.R.T. ..... 71
4.1.3.2 PTZ ..... 72
4.1.3.3 Cloud ..... 73
4.1.4 System ..... 74
4.1.4.1 General ..... 74
4.1.4.1.1 General ..... 74
4.1.4.1.2 DST ..... 75
4.1.4.1.3 NTP ..... 76
4.1.4.2 Users ..... 77
4.1.4.3 Info ..... 79
4.1.4.3.1 Info ..... 79
4.1.4.3.2 Channel Info ..... 84
4.1.4.3.3 Record Info ..... 84
4.1.4.4 Log ..... 85
4.1.5 Advanced ..... 86
4.1.5.1 Maintain ..... 86
4.1.5.2 Events ..... 87
4.1.6 Shutdown ..... 88
4.2 Lock/Unlock Screen ..... 88
**5. Remote Access to the DVR ..... 89**

5.1 Accessing the DVR on the Network ..... 89
5.2 Remote Live View Window ..... 92
5.2.1 Camera List ..... 93
5.2.2 Live View Function Icons ..... 94
5.2.3 PTZ Setting Panel ..... 96
5.2.4 Color Panel ..... 98
5.3 Playback ..... 99
5.3.1 Download ..... 102
5.4 Settings ..... 103
5.4.1 Display ..... 103
5.4.1.1 IP Channels ..... 103
5.4.1.2 Analog Channels ..... 105
5.4.1.3 Analog Setting ..... 106
5.4.1.4 Privacy Mask ..... 107
5.4.2 Record ..... 108
5.4.2.1 Record Settings ..... 108
5.4.2.2 Record Schedule ..... 109
5.4.2.3 Main Stream ..... 110
5.4.2.4 Sub Stream ..... 112
5.4.3 Snapshot ..... 114
5.4.3.1 Snapshot ..... 114
5.4.3.2 Snapshot Schedule ..... 115
5.4.4 Network ..... 116
5.4.4.1 Network ..... 116
5.4.4.2 Email ..... 117
5.4.4.2.1 Email Schedule ..... 118
5.4.4.3 DDNS ..... 119
5.4.4.4 RTSP ..... 123
5.4.4.5 FTP ..... 124
5.4.5 Alarm ..... 125
5.4.5.1 Motion ..... 125
5.4.5.2 Alarm ..... 127
5.4.6 Storage / PTZ ..... 129
5.4.6.1 HDD ..... 129
5.4.6.2 PTZ ..... 130
5.4.6.3 Cloud Storage ..... 131
5.4.7 System ..... 132
5.4.7.1 General ..... 132
5.4.7.2 User Privilege ..... 134
5.4.7.3 Info ..... 136
5.4.7.4 Channel Info ..... 141

5.4.7.5 Record Info ..... 141
5.4.8 Advanced ..... 142
5.4.8.1 Firmware Upgrade ..... 142
5.4.8.2 Load Default ..... 142
5.4.8.3 Event Settings ..... 143
5.4.8.4 System Maintenance ..... 144
5.5 Local Settings ..... 145
**6. Specification ..... 146**
**7. Troubleshooting ..... 148**
**8. Usage Maintenance ..... 150**
**Appendix A: IR Remote Control ..... 151**
**Appendix B: Recording Backup through EF-Reader ..... 152**

Chapter

1

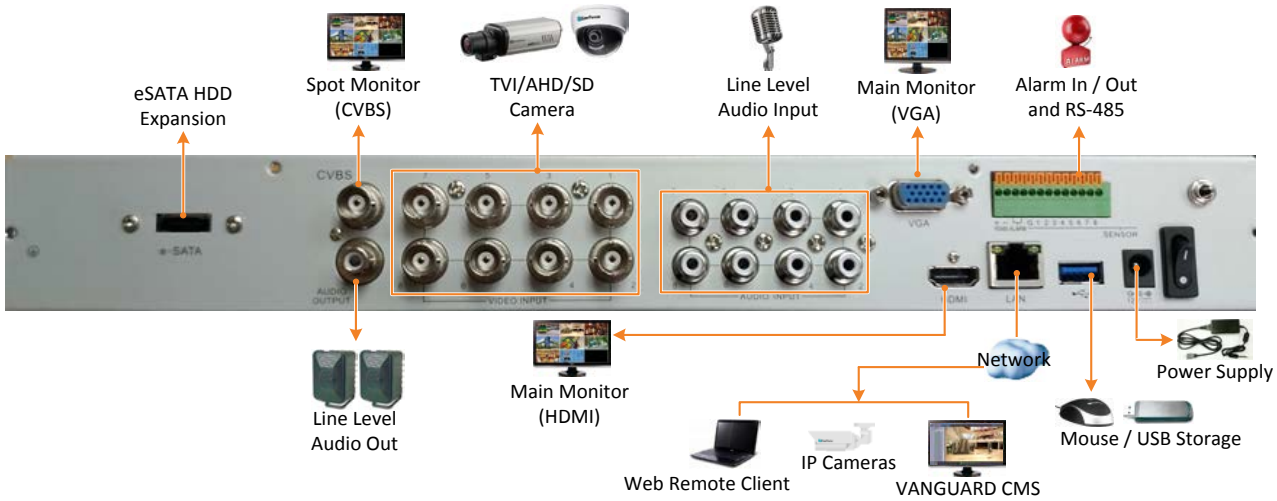
# 1. Introduction

EverFocus' VANGUARD series DVRs are hybrid DVRs supporting AHD/TVI/SD cameras and IP cameras. Operating on a Linux-based system, the DVRs are able to install 2 SATA HDDs with up to 12TB storage capacity. An eSATA port is also provided for connecting to an external eSATA storage device.

VANGUARD series DVRs support multi-channel playback at multiple speed options and easy data search by event, snapshot or sub-periods. Users may enable and perform the specified functions through the local OSD menu or Web interface. Furthermore, you can use Mobile Application to remotely view camera streams from DVR through your handheld devices; or use VANGUARD CMS video management system for remote management.

EverFocus' VANGUARD series DVRs are the best choice for a complete surveillance solution. It is versatile, flexible and well catered to the needs of the industry.

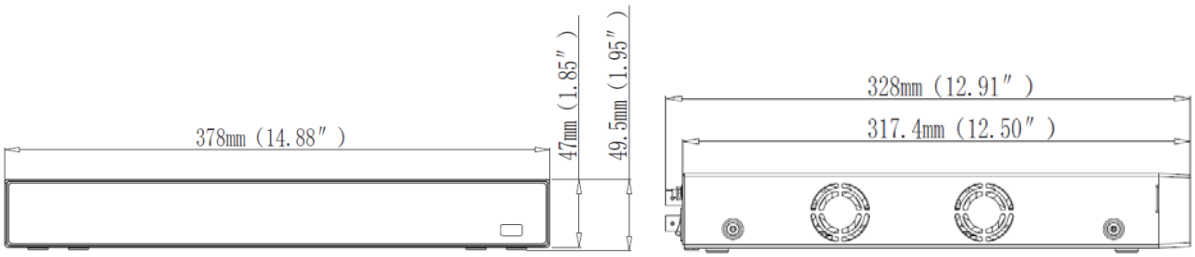
The image below uses VANGUARD 8x4 as example.



## 1.1 Features

- Supports hybrid mode (AHD/TVI/SD cameras and IP cameras)
- Megapixel resolution over standard coaxial / UTP cable
- Supports H.264 compression format
- Supports cloud storage with Dropbox (Snapshot)
- Supports ONVIF 2.0 Conformant IP cameras
- Control methods: Mouse / IR remote controller
- Remote configuration from built-in web interface
- Ethernet interface for remote network viewing and control
- Integrates with VANGUARD CMS
- Supports multi-language
- Supports mobile App: VANGUARD App
- eZ Controller function: Control camera OSD settings directly from DVR end (please refer to *1.6 eZ.Controller Function Description* for more details)

## 1.2 Dimensions




## 1.3 Packing List

| | |
|---|---|
| • DVR x 1<br>• Power Cord + Adaptor x 1<br>• Mouse x 1<br>• HDD Screw x 8 | • Audio Cable (CH5-16) x 1 (only for VANGUARD 16x8)<br>• Quick Installation Guide x 1<br>• CD x 1 (see Note 3)<br>• IR Remote Control (with 2 AAA batteries) x 1 (see Note 4) |

**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.

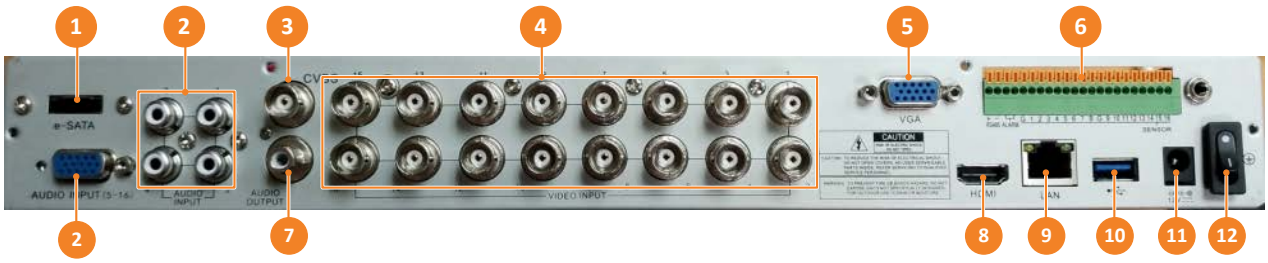
## 1.4 Front Panel

### VANGUARD 16x8 / VANGUARD 8x4 / VANGUARD 4x2

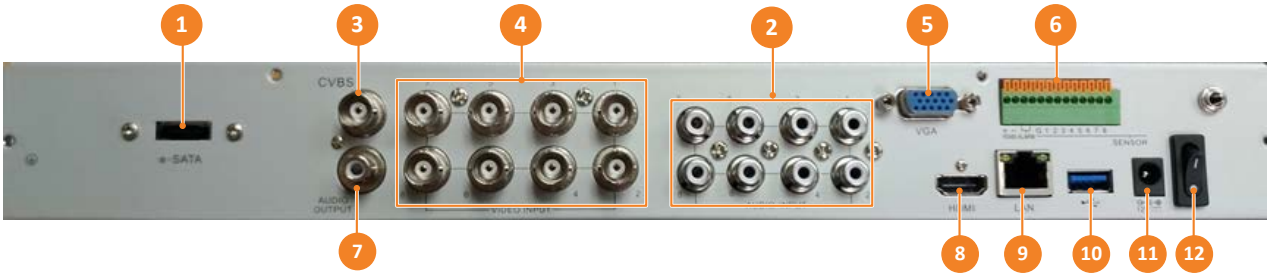
| No. | Name | Description |
|---|---|---|
| 1 | **LED Indicator** | Power: When power is on, the LED will continue lighting in green. HDD: When power is on, the LED will continue lighting in red. When HDD is reading/writing data, the LED will flashes red. |
| 2 | **IR Receiver** | Receiver for signals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

## 1.5 Rear Panel

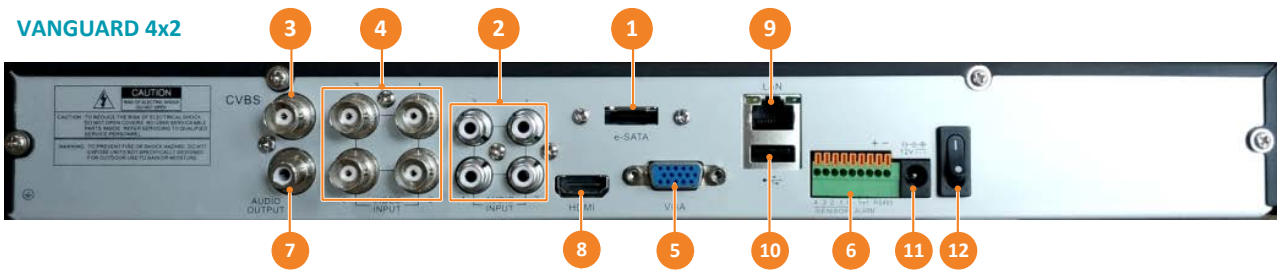
VANGUARD 16x8




VANGUARD 8x4




VANGUARD 4x2



| No. | Name | Description |
|---|---|---|
| 1 | **e-SATA** | Connects to an external e-SATA storage device. |
| 2 | **Audio Input** | Connects to audio input devices, such as microphones. Note that the microphones with a (built-in) amplifier and external power supply are required. |
| 3 | **CVBS Port** | Connects to a spot monitor using a BNC cable. |
| 4 | **Video Input** | Connects the AHD/TVI/SD cameras to the Video Input. |
| 5 | **VGA Port** | Connects to a monitor using a VGA cable. |
| 6 | **Terminal Block** | The Terminal Block provides alarm inputs, alarm output and RS-485 connection (see *2.2.1 Terminal Block)*. |
| 7 | **Audio Output** | Connects to an audio output device, such as speakers. Note that the speakers with a (built-in) amplifier and external power supply are required. |
| 8 | **HDMI Port** | Connects to a monitor using a HDMI cable. |
| 9 | **LAN** | Connects to the Network. |
| 10 | **USB2.0 Port** | The USB2.0 port for connecting to a mouse or external storage device. |
| 11 | **Power Port** | Connects to a 12VDC power source. |
| 12 | **Power Switch** | Press to turn on or off the power. |

## 1.6 eZ. Controller Function Description

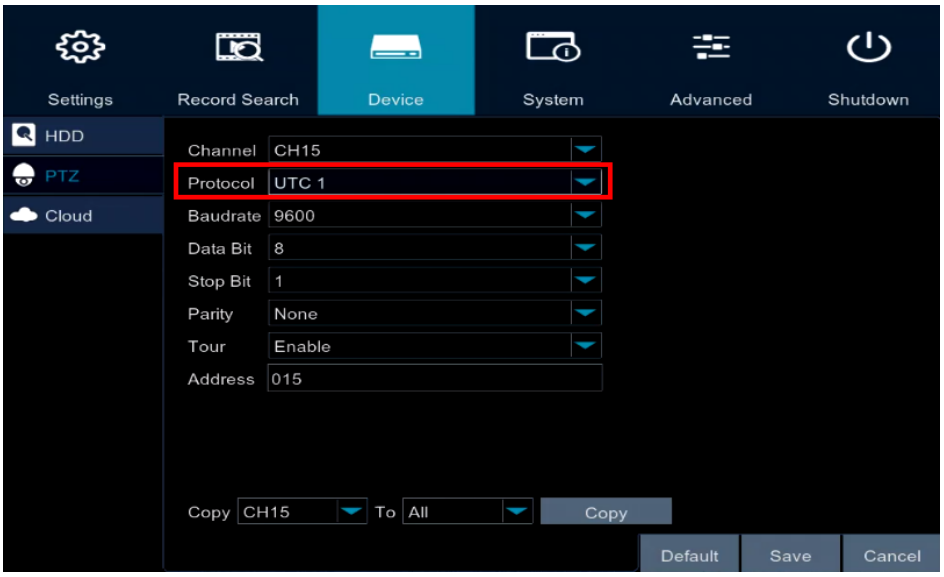
### eZ.Controller: Easily control eZ.HD camera's OSD at the DVR end.

Traditionally, the CCTV installer needs to take a portable monitor to connect to the camera for controlling the camera OSD at the camera installation site as the ***Diagram A*** below. It will take extra effort, time and people to adjust the camera.

Now, EverFocus' **eZ.Controller** allows users to control the camera OSD simply on the monitor at the DVR end as illustrated in ***Diagram B***.

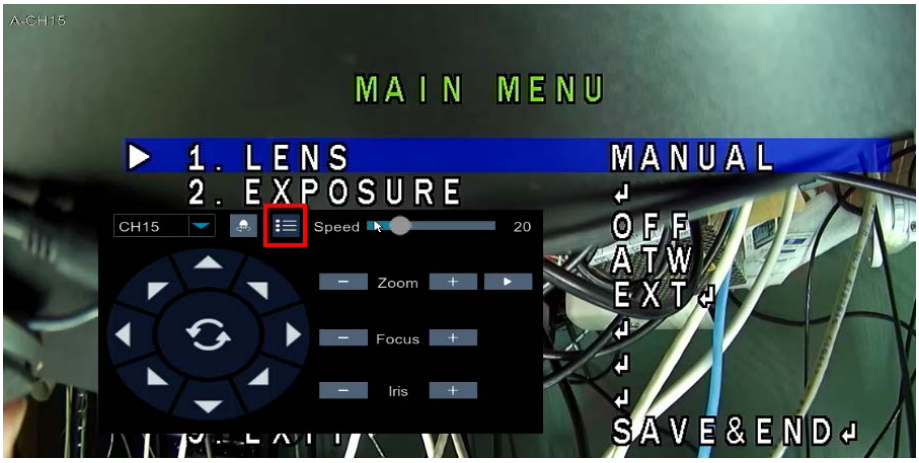
### How to Control eZ.HD Camera's OSD at the DVR End?

1. Select a camera and then select **UTC1** (eZ.HD Camera) or **UTC2** (EverFocus PTZ camera) from the Protocol drop-down list.




2. On the Live View, click the **PTZ** icon of the channel to bring up the PTZ Control window.

3. Click the **Menu** icon on the PTZ Control window, the camera OSD menu will be displayed.




4. You can use the **Up / Down / Left / Right** buttons to select among the OSD menu items and use **Iris +** as the **Enter** button to enter the setup menu.

**Note:** For some sub-menu, such as motion detection setup menu, you can click the **Menu** icon to change between the Position and Size settings of the selected motion area.

Chapter
2

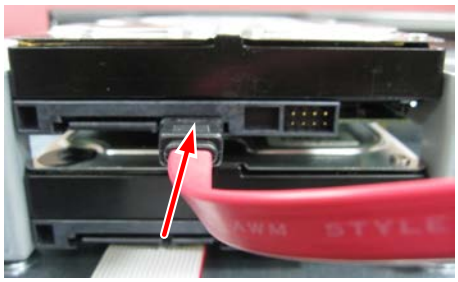
# 2. Connection and Installation

## 2.1 Hard Disk Installation

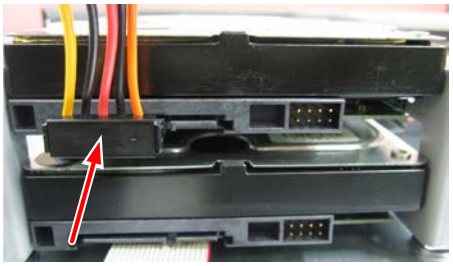
You can install up to two 3.5” HDDs inside the DVR for recording videos. The maximum capacity of each HDD is up to 6TB.

1. Make sure the DVR is power-off.
2. Unscrew the eight housing screws (4 on the rear panel, 2 on the left and right side each). To remove the housing cover from the DVR, push the cover backward and then lift it.

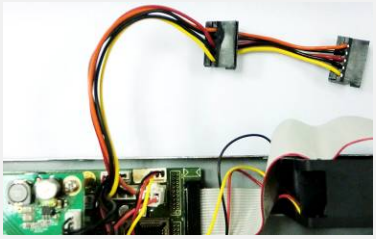
3. Find the SATA cable inside the DVR, and connect the SATA cable to the SATA port on the HDD.



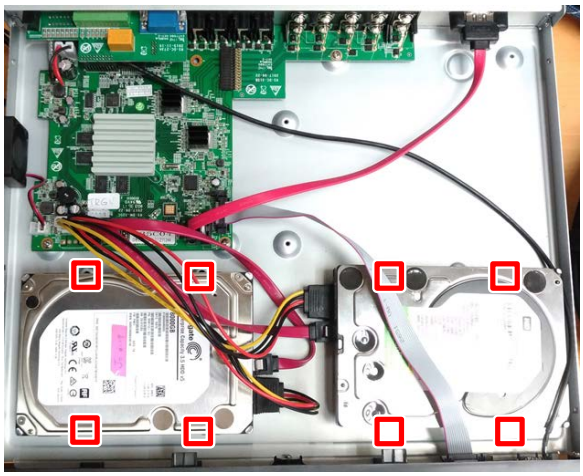
4. Find the internal power cable, and connect the internal power cable to the HDD.



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



5. Place the HDDs inside the DVR, screw the HDDs from the bottom side of the DVR using the supplied Screws.



6. Screw the housing cover back to the DVR.

### 2.1.1 Hard Disk Compatibility List

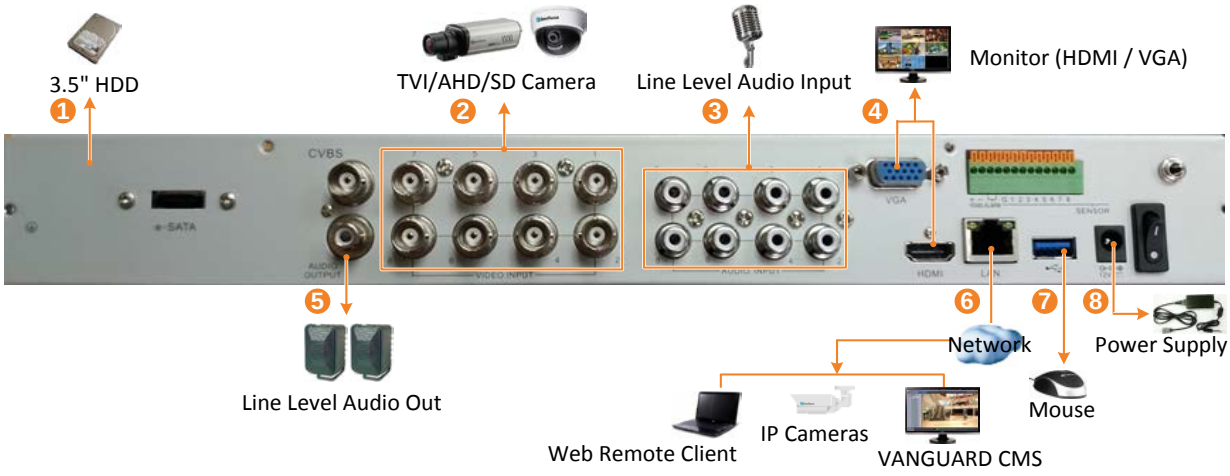
Please go to the product page (Download) on EverFocus' Website www.everfocus.com.tw to see the latest Storage Compatibility List. It's recommended to use the hard disk models listed on the Storage Compatibility List to ensure your hard disks are compatible.

**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 DVR.

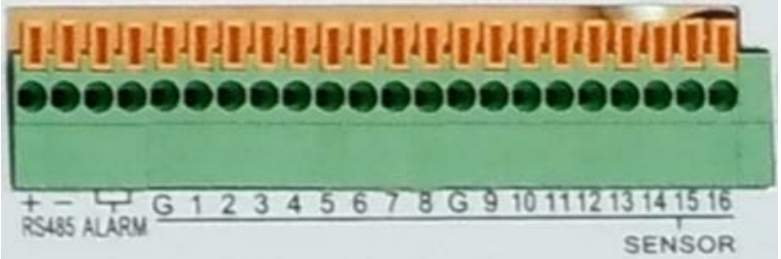
The image below uses VANGUARD 8x4 as example.



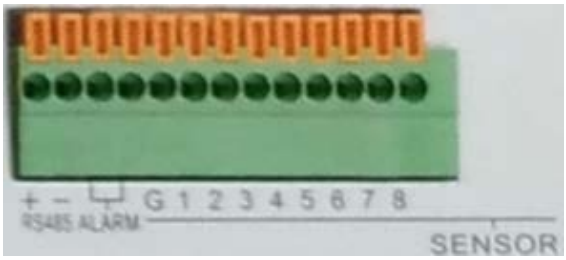

1. To record videos, install 3.5” HDD(s) to the DVR. Please refer to *2.1 Hard Disk Installation*.
2. To connect to the TVI/AHD/SD cameras, connect the cameras to the BNC ports.
3. Connect microphones to the audio input ports to transmit audio from the camera to the DVR. Note that the microphones with a (built-in) amplifier and external power supply are required.
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. To listen to the audio from device side, connect speakers to the audio output. Note that the speakers with a (built-in) amplifier and external power supply are required.
6. Use a standard RJ-45 CAT5 Ethernet cable to connect the DVR to the network and then optionally connect IP cameras to the DVR.
7. Optionally connect a mouse to the DVR to control the system. You can also control the system using the supplied IR Remote Control (*Appendix A. IR Remote Control*).
8. Use the supplied Power Cord and Adaptor to connect the DVR to the power outlet.

### 2.2.1 Terminal Block

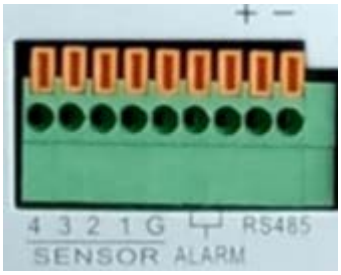
VANGUARD 16x8 provides 16 alarm inputs, 1 alarm output and 1 RS-485.




VANGUARD 8x4 provides 8 alarm inputs, 1 alarm output and 1 RS-485.




VANGUARD 4x2 provides 4 alarm inputs, 1 alarm output and 1 RS-485.

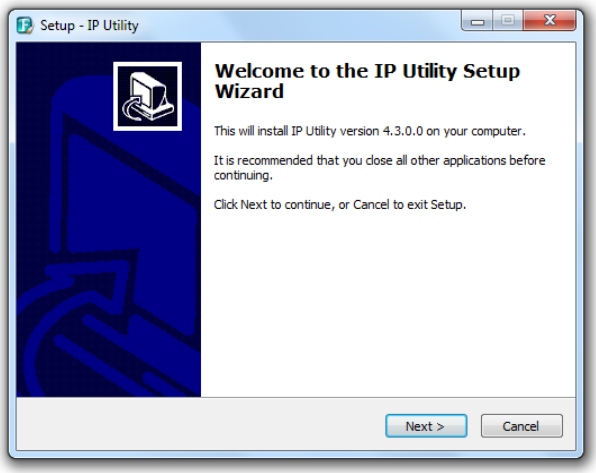


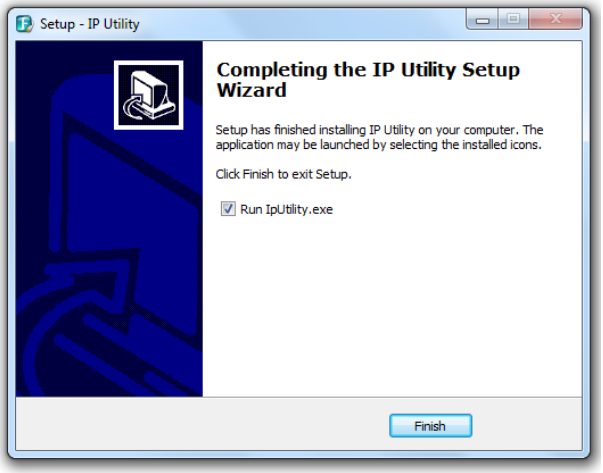
## 2.3 Accessing the Web Interface

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.tw/product/ip-utility/

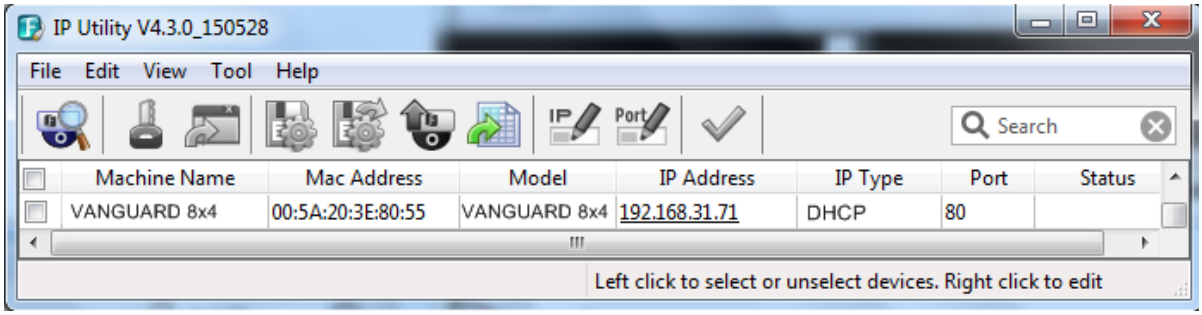
Please connect the DVR on the same LAN of your computer.

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.

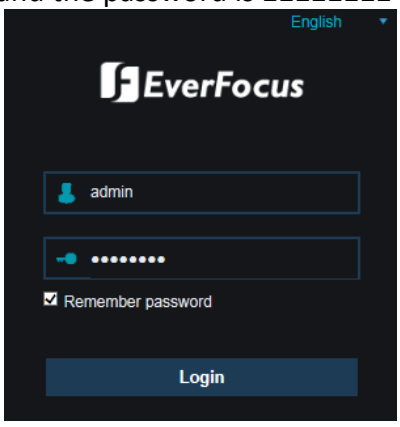



2. Click the **Finish** button, the IP Utility will be automatically launched to search the IP devices connected on the same LAN.

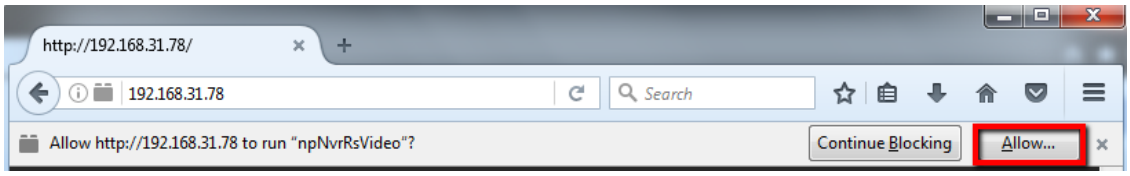


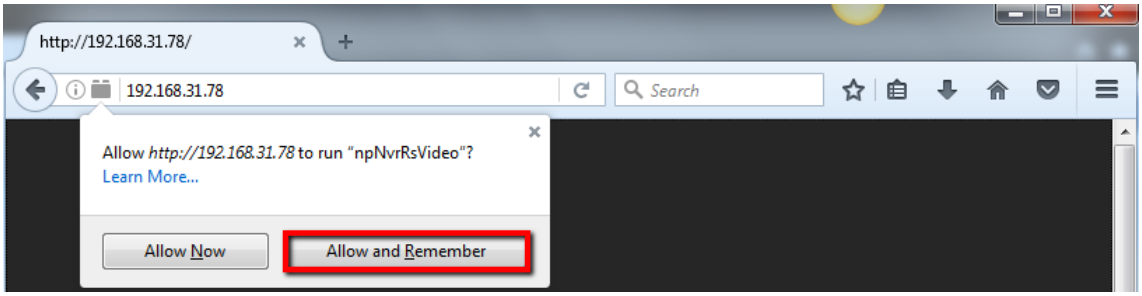

3. To access the Live View window, double click the IP address of the desired device, the login window pops up. Type the user ID and password to log in. By default, the user ID is **admin** and the password is **11111111**



**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.

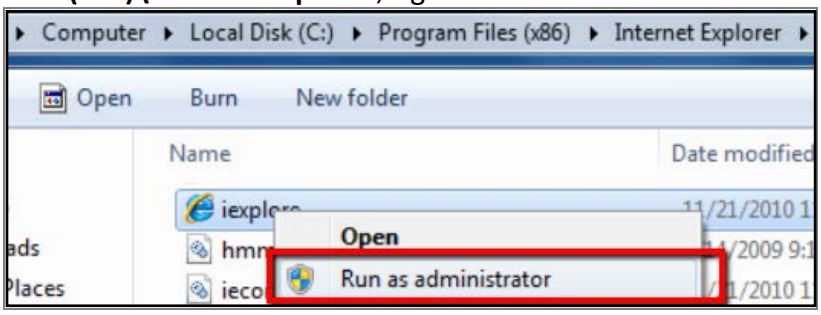


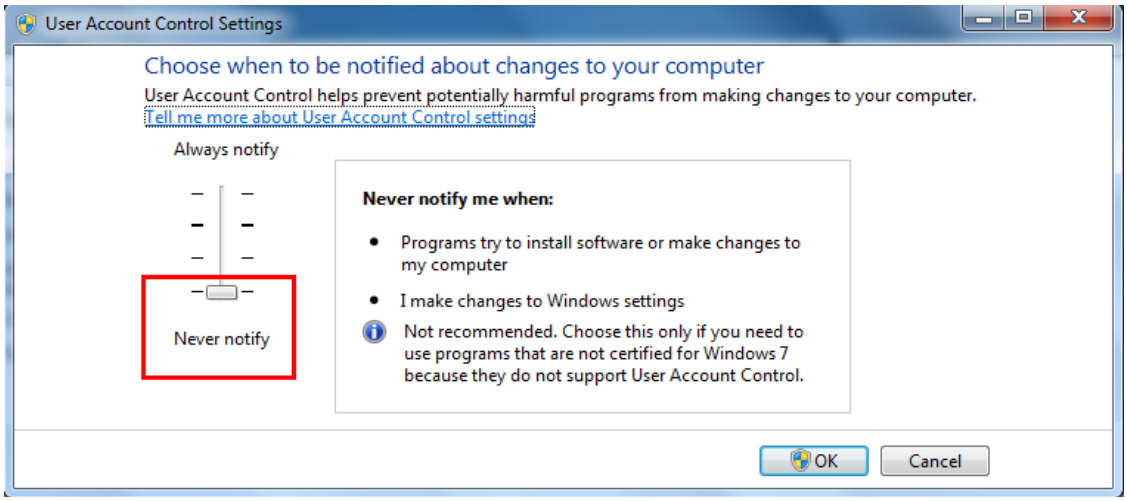

**If you encounter the following problem or still can't access the remote Web interface, please follow the instructions below:**

- 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 DVR, the DVR 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 DVR. 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 DVR, 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 DVR. Simply plug in the power source and then press the **Power Switch** on the rear panel of the DVR to turn on the DVR. The POWER LED will light up if power is normal. Once the system has finished loading, you can start setting up the menu options for the DVR.

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 DVR.

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

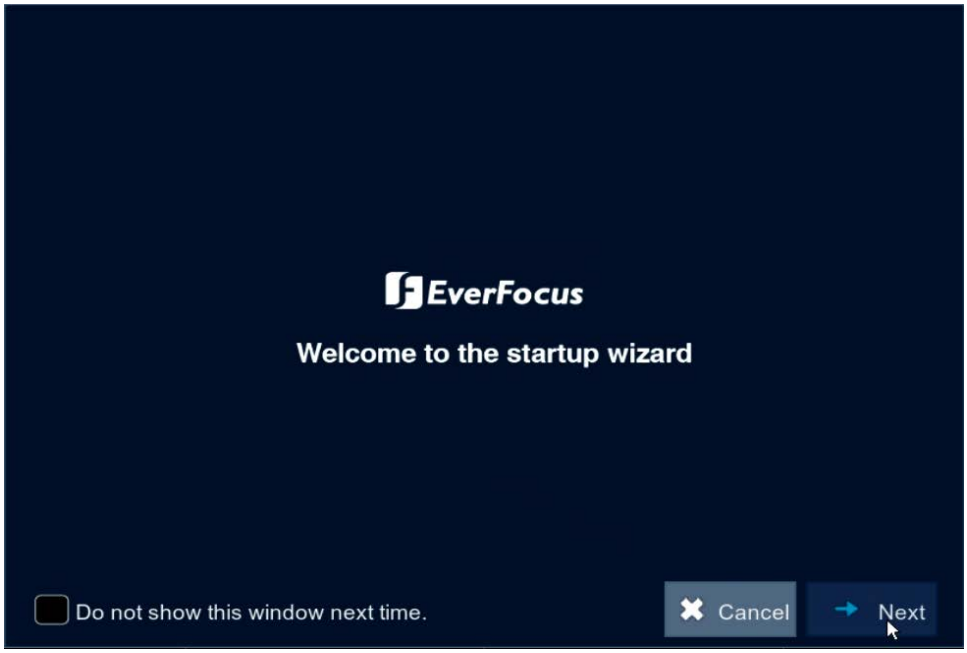
## 3.2 Restart the DVR

To restart the DVR, 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 DVR.

## 3.3 Startup Wizard

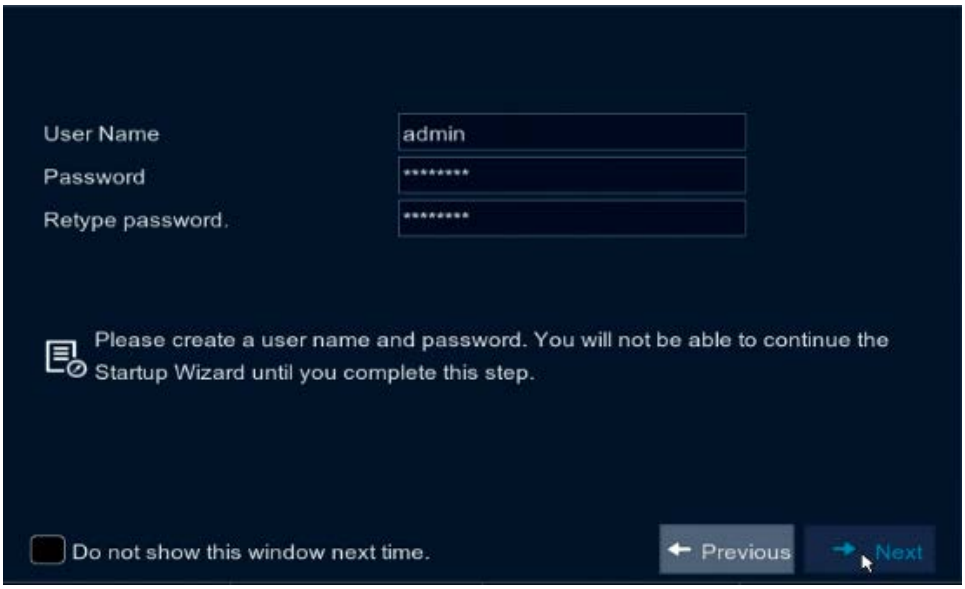
The Startup Wizard will guide you through some basic settings for the DVR. Please follow the on-screen instructions to proceed.

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

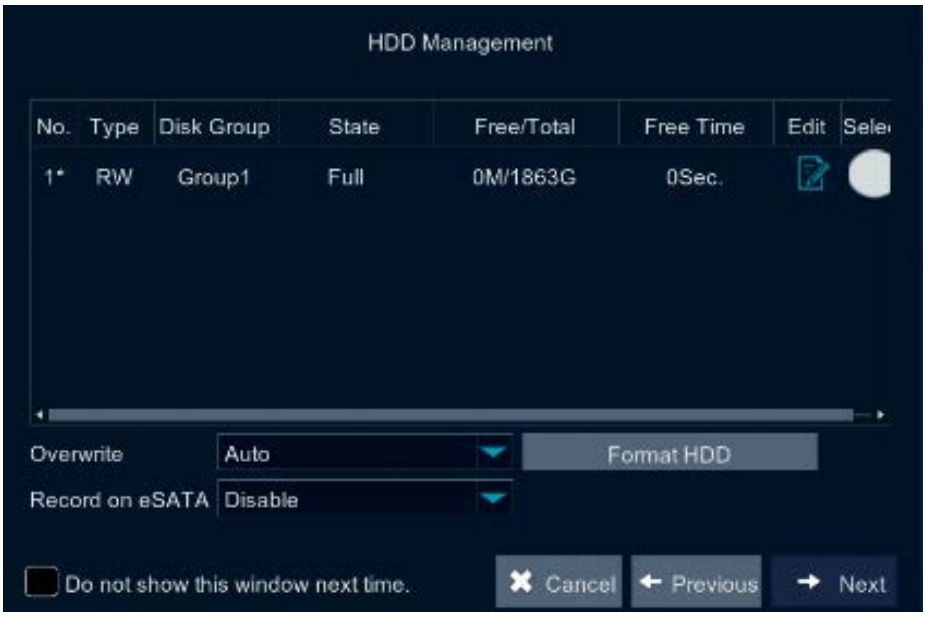



**Note:** You can check "Do not show this window next time" if you do not want to run the Startup Wizard to make any settings when you restart the DVR next time.

2. Change the password for security purpose. Input a new password and then click **Next** to proceed.



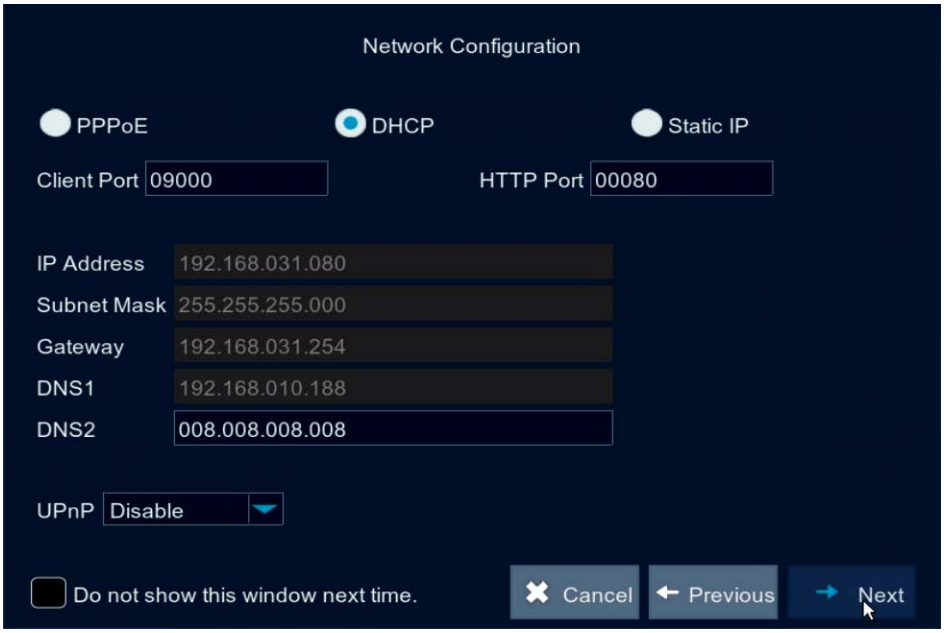
3. For the first time use HDD or a new HDD, users have to format the HDD before use. Click to select the HDD in the Select column and then click **Format HDD** to format the selected HDD. You can also setup to overwrite the HDD. Click **Next** to proceed.



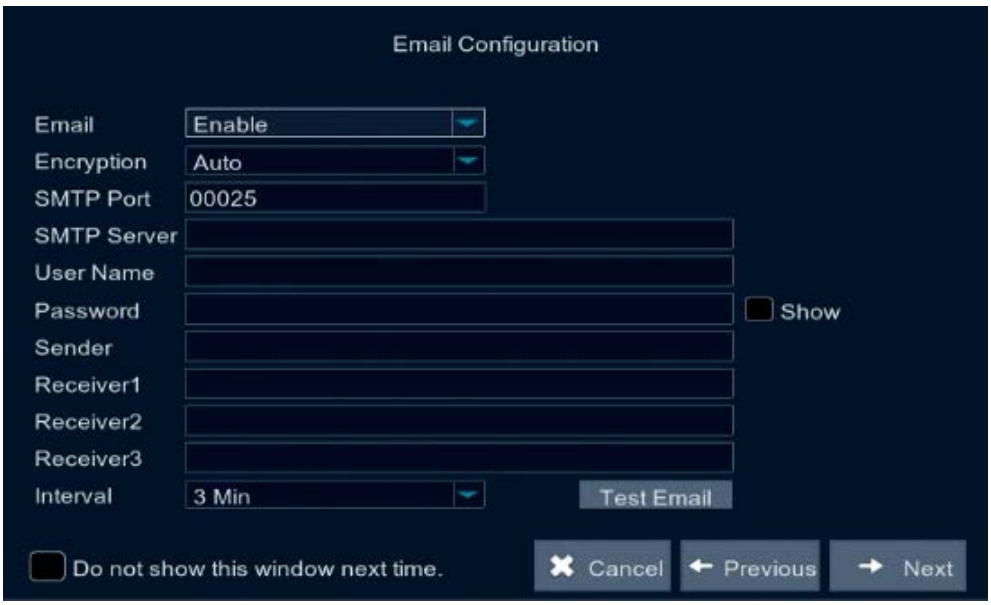

**Note:**

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.

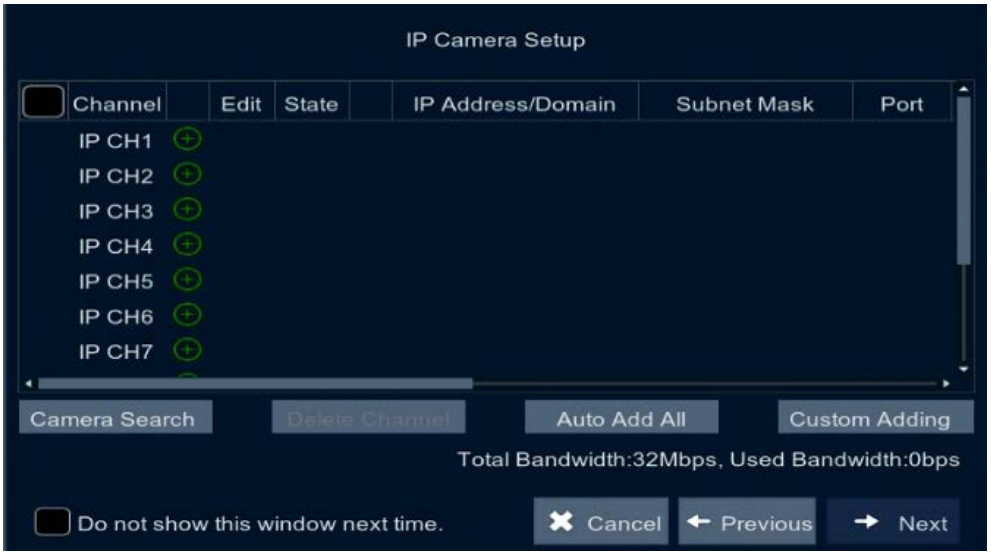
4. Configure the network settings. Select PPPoE, DHCP or Static IP and setup the settings. Click **Next** to proceed.



5. Configure the Email Settings (refer to *4.1.1.3.3 Email* for more details). Click **Next** to proceed.



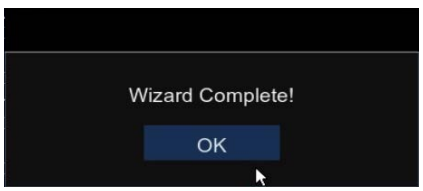

6. This page is only available if the hybrid mode (HVR) is selected (refer to **Step 8** below). You can add IP cameras on this page (please refer to *4.1.1.1.1. IP Channels* for more details). Click **Next** to proceed.



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

8. Configure the general system settings. On the **Mode** drop-down list, select **DVR** if you only want to connect FHD cameras to the DVR, or select **HVR** (hybrid mode) if you want to connect both IP cameras and FHD cameras to the DVR. Click **Save** to save the settings.

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



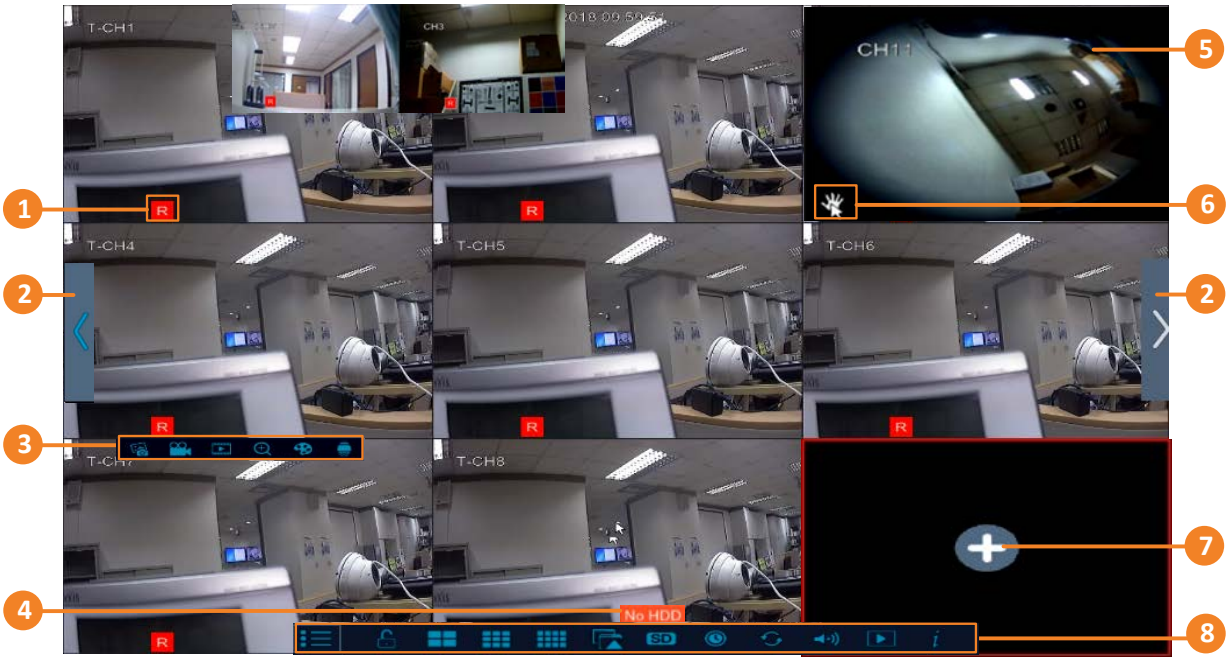
10. After clicking the **OK** button, the system will enter the Live View window (refer to *3.2 Live View Window*). Now you can start using the DVR.

**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 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, for 16CH device, if you select 9-Division, click the next layout page icon (on the right side) will display the next 9-division layout with channel 10-16. |
| 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 | **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. |
| 5 | **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 left-click to bring up the **Live Channel Tool Bar**. Please refer to *3.3 Live Channel Tool Bar* for more details. |

| | | |
|---|---|---|
| **6** | **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. |
| **7** | **Quick Add** | This Icon is only available for IP camera channels. 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** | **Manual Snapshot** | Click to take a snapshot of the channel. Before using this function, you have to enable the **Manual Snapshot** function in advance (OSD Main Menu > Settings > Snapshot). |
| **2** | **Stream Switch** | This icon is only available for IP cameras. 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*. |
| **3** | **Start/Stop Manual Record** | Click the button to start manual recording . Click the button again to stop manual recording . |
| **4** | **Quick Playback** | Click to start the Quick Playback function. Click X to exit the Quick Playback mode. |
| **5** | **Zoom** | Click to start the digital zoom function. Please refer to *3.5.1 Digital Zoom* for more details. |
| **6** | **Image Settings** | Click to bring up the Image Setting window. You can adjust the Hue (for FHD camera only), Sharpness (for IP camera only), Brightness, Contrast and Saturation for each channel individually. |
| **7** | **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

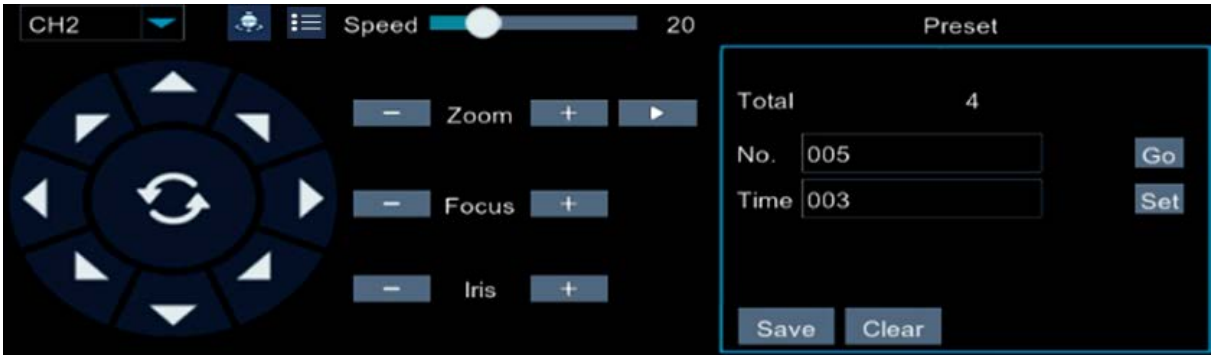
You can use the Digital Zoom function to have a close-up view on the desired locations of a live channel.

To perform the digital zoom function:

1. 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 with a **Preview Window** on the bottom-right corner of the screen.
2. Scroll the mouse upward/downward to zoom in/out, a **Navigation Box** will be displayed on the **Preview Window**.
3. Drag the **Navigation Box** and drop it to the position where you want to have a close-up view.
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. Left click on the channel to display its Live Channel Tool Bar and then click the **PTZ** icon 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.

**OSD Menu** : This button only appears when **UTC1** or **UTC2** is selected from the Protocol drop-down list on the PTZ setup page. This button is designed for UTC function, which allows users to operate analog camera's OSD menu directly through DVR. Please refer to *1.6 eZ.Controller Function Description* for more details.

**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 save this preset point and then 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 will be displayed.

The images in this content are using VANGUARD 8x4 with HVR mode (hybrid) as examples. For DVR mode, some of the OSD may look slightly different, such as the layout options and stream switch function.

| 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 | **Layout Division** | Click to display a layout view. |
| 4 | **More Layouts** | Click to select a desired layout to display. |
| 5 | **Stream Switch** | This function is only available for IP cameras (HVR hybrid mode). Click to select Main Stream or Sub Stream for live view display. |
| 6 | **Preview Policy** | This function is only available for IP cameras (HVR hybrid mode). Click to select a live view quality. The options include Realtime, Balanced and Smooth. |
| 7 | **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 *4.1.1.1.4 Output*. |
| 8 | **Volume** | Click to adjust the volume. |
| 9 | **Playback** | Click to enter the playback page. Please refer to *4.1.2 Record Search* for more details. |
| 10 | **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

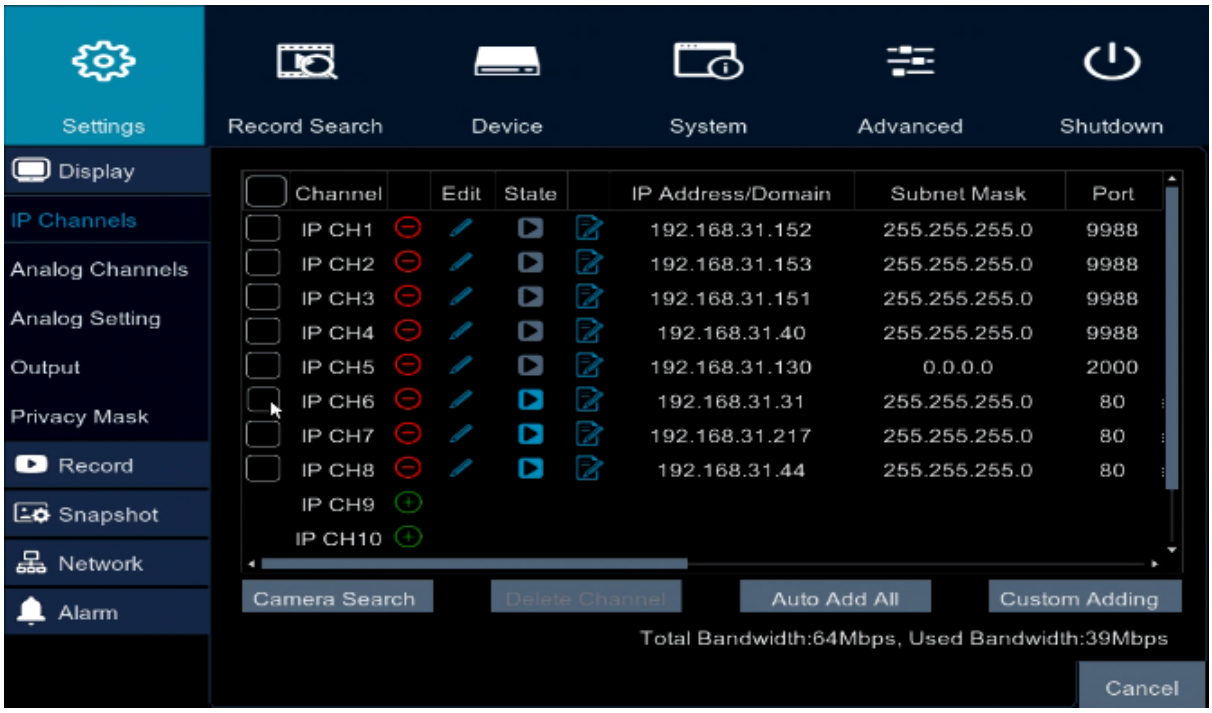
On the Settings page, you can configure the Display, Record, Snapshot, Network and Alarm settings.

#### 4.1.1.1 Display

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

##### 4.1.1.1.1 IP Channels

This page will only appear when HVR hybrid mode is selected (Main Menu < System < General). You can add IP cameras manually or automatically using this page.




**Camera Search:** Click to search for the IP cameras connected on the same LAN.

**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 DVR.

**Custom Adding:** Click to add IP cameras through RTSP protocol to the DVR. 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.

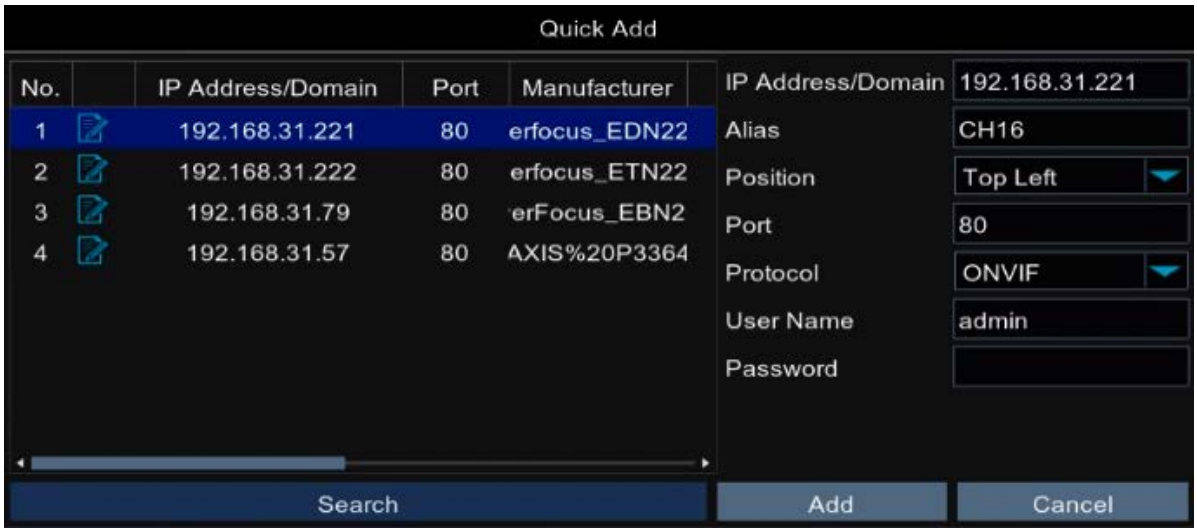
**Edit:** Click to edit IP camera profile.

**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 DVR 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.**

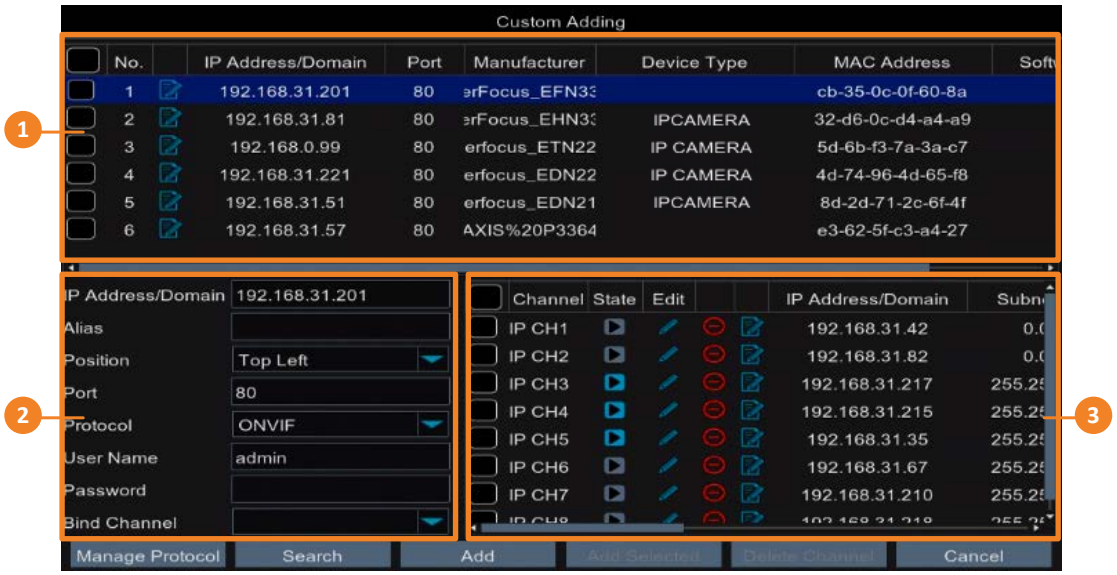
The system will automatically search the IP cameras on the same LAN and lists the IP cameras that have not been added to the system here.

**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]/ip[A]/[B]

  rtsp://192.168.31.33:554/ip01/0

  * IP Address: The IP address of the DVR

  * 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 DVR 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.

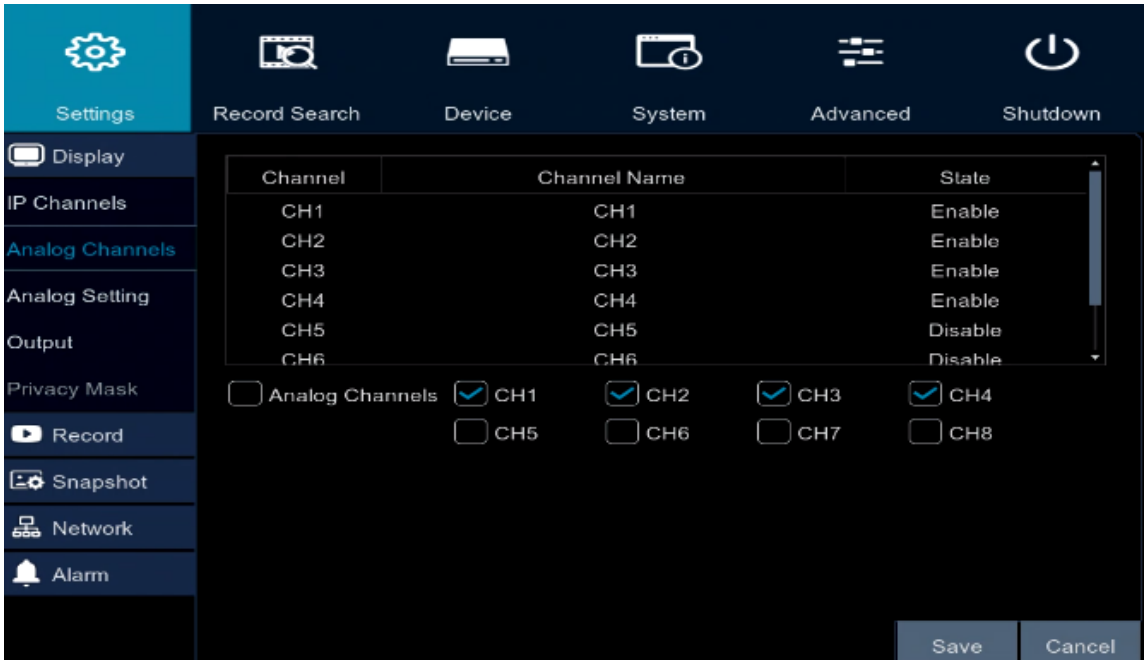
**Delete Channel:** Click to delete the IP cameras from the system. Select the IP cameras by checking the checkboxes from the list in Section 3 and then click the **Delete Channel** button. The selected IP cameras will be deleted from the system.

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

#### 4.1.1.1.2 Analog Channels

You can enable or disable the connected analog cameras on this page. Please ensure the analog cameras have been connected to the real panel of the DVR.

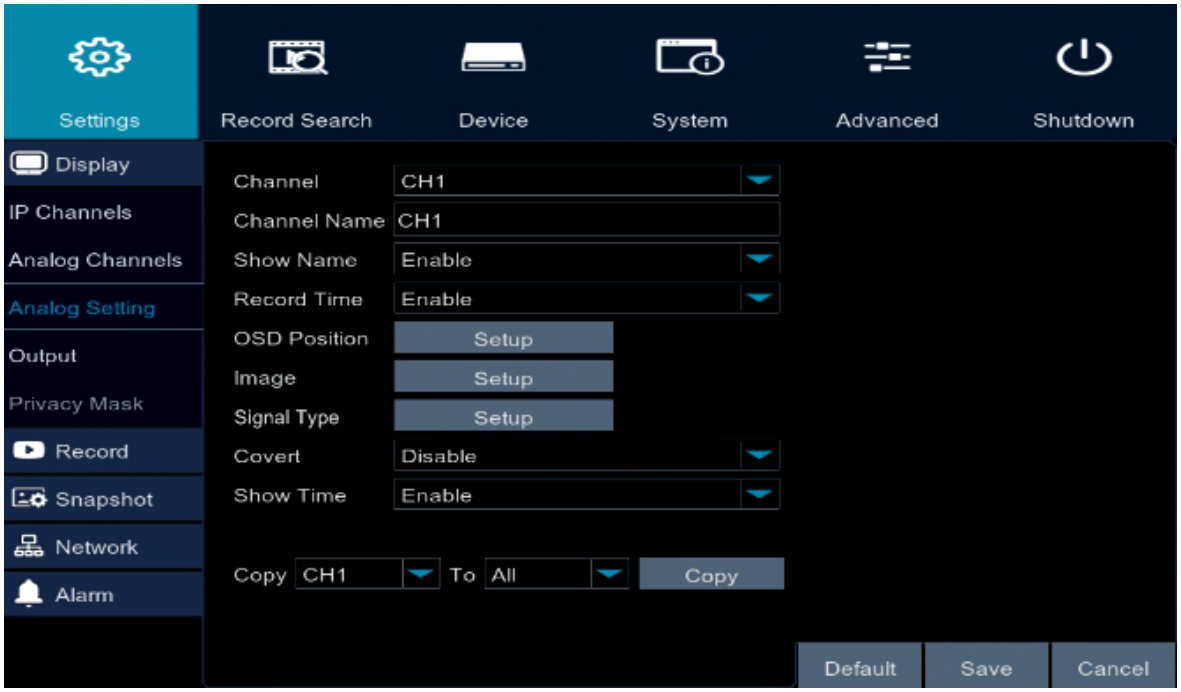
To enable the analog cameras, check the channel checkboxes; to disable the analog cameras (disable streaming), uncheck the checkboxes. Click the **Save** button to save the settings.




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

#### 4.1.1.1.3 Analog Setting

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




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

**Channel Name:** Input a name for the camera.

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

**Record Time:** Select **Enable** if you want to record time on recording video streams.

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

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

**Signal Type:** Configure the signal type (such as TVI or AHD) of the connected camera.

**Covert:** Select to covert the camera stream on the live view. The channel will be black-out on the Live Window, however, the system will still record the streams.

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

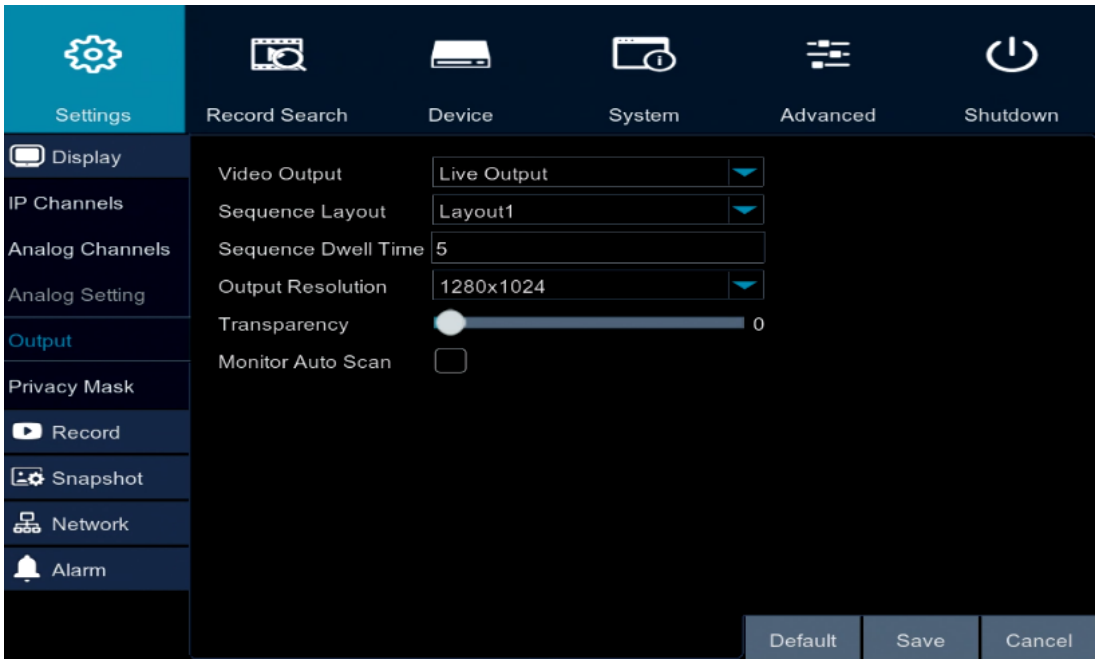
**Copy:** You can apply the same configurations from one channel to the desired channels. Select a channel from the **Copy** drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same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

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

#### 4.1.1.1.4 Output

You can configure the Main monitor and Call monitor settings on this page.

Main Monitor Setting




**Video Output:** Select **Live Output** (Main Monitor) and then configure the below Main Monitor settings.

**Sequence Layout:** Select a layout for the sequence mode. For example, if you select Layout4, the DVR will display a quad view layout for all 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.

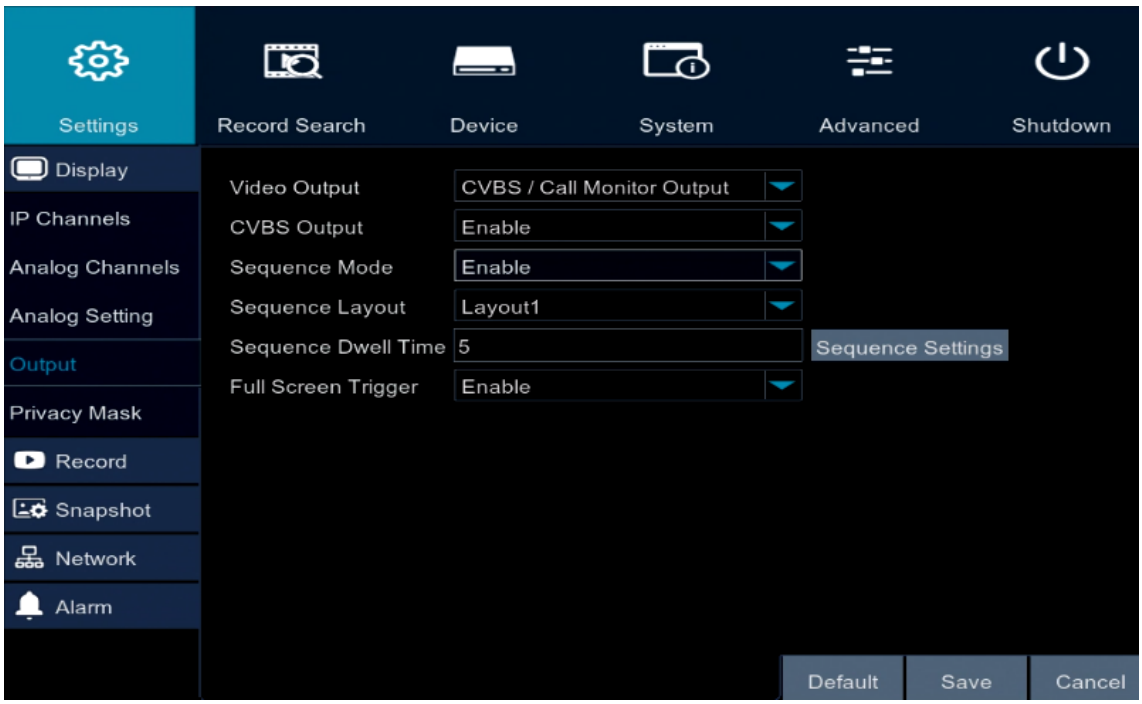
**Output Resolution:** Select a live resolution to be displayed on the output monitor.

**Transparency:** Slide the bar to the left or right to adjust the transparency for the OSD menu.

**Monitor Auto Scan:** Check the box to enable the Monitor Auto Scan function. The system will apply the resolution best suit the connected monitor.

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

Call Monitor Setting




**Video Output:** Select **CVBS/Call Monitor Output** and then configure the below Call Monitor settings.

**CVBS Output:** Select **Enable** to enable the Call Monitor function.

**Sequence Mode:** Select **Enable** to enable the Sequence Mode on Call Monitor. Select **Disable** to disable the Sequence Mode on Call Monitor.

**View Mode:** This function will only be displayed when **Disable** is selected in the **Sequence Mode** field, you can configure the view mode for the Call Monitor. Select a layout from the drop-down list and then click **Layout Settings** to assign channels to the layout.

**Sequence Layout:** If **Sequence Mode** is enabled, you can further setup **Sequence Layout**. Select a layout for the sequence mode. For example, if you select Layout4, the DVR will display a quad view layout for all channels in sequence order. You can also click **Sequence Settings** to assign channels to the layout.

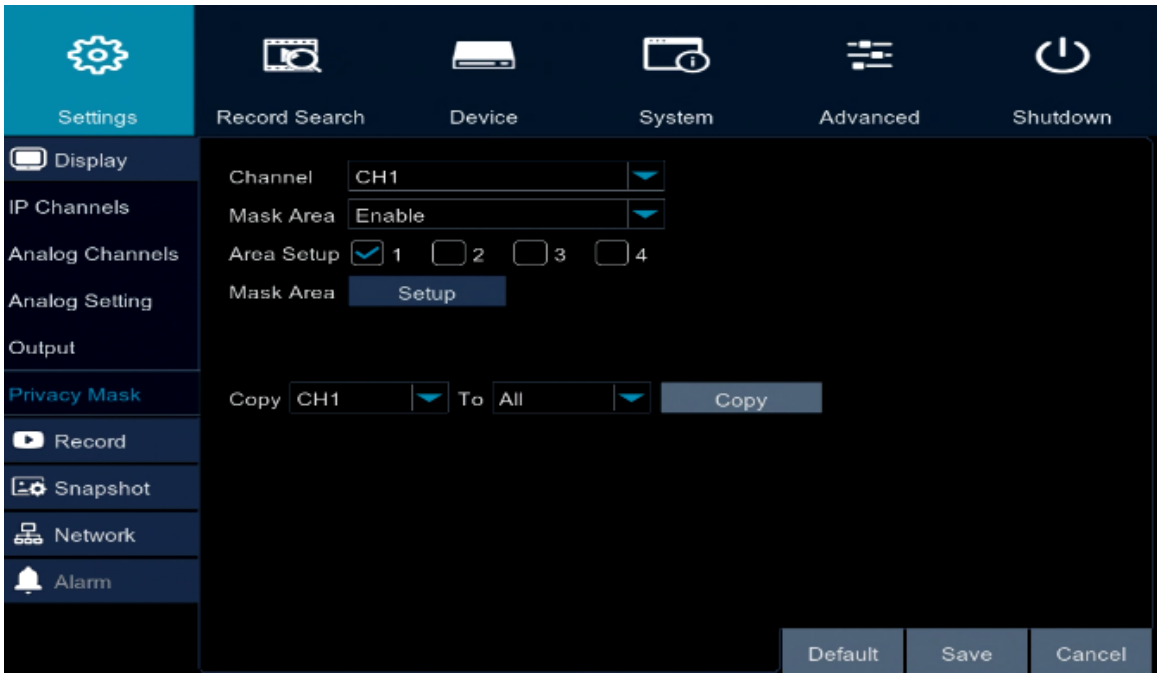
**Sequence Dwell Time:** If **Sequence Mode** is enabled, you can further setup **Sequence Dwell Time**. Select a sequence dwell time in second. By default, 5 seconds is set up.

**Full Screen Trigger:** Select **Enable** to enable Full Screen of the triggered channel.

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

#### 4.1.1.1.5 Privacy Mask

This function is only available for analog cameras. 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 to enable the function.
3. Select the number of masks to be configured. Up to 4 masks are available.
4. Click the **Setup** button to adjust the masks size and position. After setting up the size and position, right click the mouse to return to the Privacy Mask page.
5. Click **Save** to save the settings.

**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.

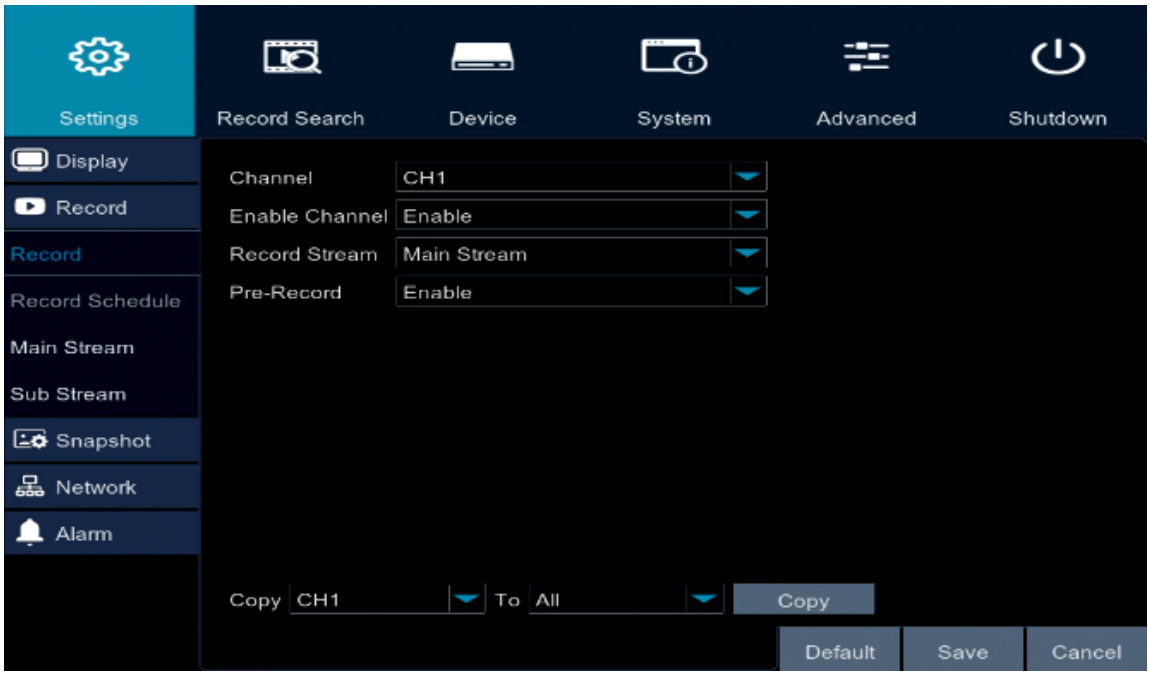
Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

#### 4.1.1.2 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.

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

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

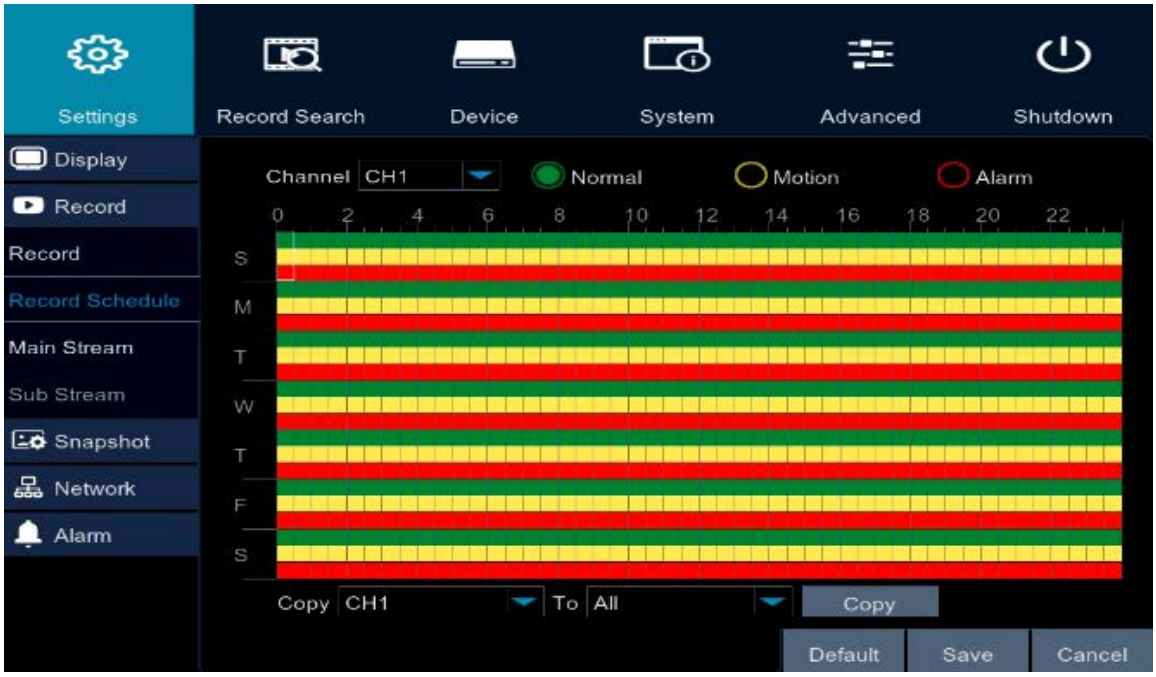
**Pre-Record:** Select **Enable** to enable pre-recording for motion detection or I/O trigger record.

**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.

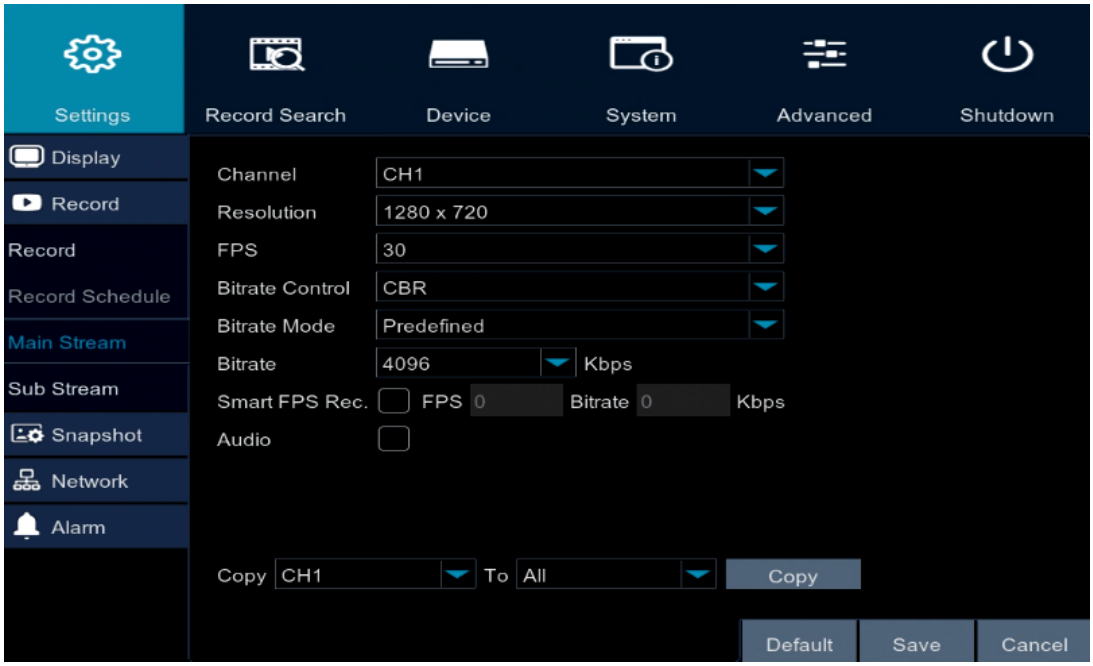
**Alarm:** Click the **Alarm** button and then move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with red color, which will be applied with alarm recording function.

**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

This function is only available for analog cameras. 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 based on your TV or monitor capability.

**FPS:** Select a record FPS (frames per second) for the selected channel. The higher the value, the better the image quality. Note if experiencing system lag or stutter, please lower down the FPS.

**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** to set up bitrate manually; or **Predefined** to auto-select bitrate.

**Bitrate:** Set up a bitrate for the selected channel.

**Smart FPS Rec.:** Check the box to record the **Motion** and **I/O** alarm recordings with the max FPS and Bitrate.

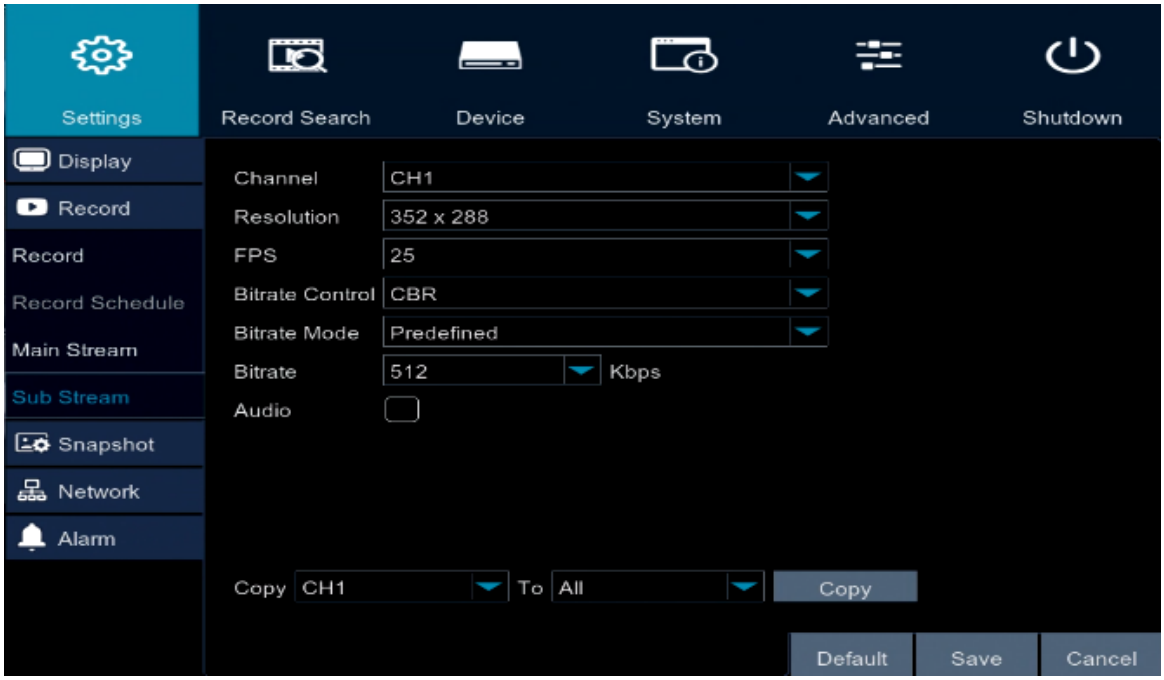
**Audio:** Check the box to enable the audio function.

**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.

#### 4.1.1.2.4 Sub Stream

This function is only available for analog cameras. 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 based on your TV or monitor capability.

**FPS:** Select a record FPS (frames per second) for the selected channel. The higher the value, the better the image quality. Note if experiencing system lag or stutter, please lower down the FPS.

**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** to set up bitrate manually; or **Predefined** to auto-select bitrate.

**Bitrate:** Set up a bitrate for the selected channel.

**Audio:** Check the box to enable the audio function.

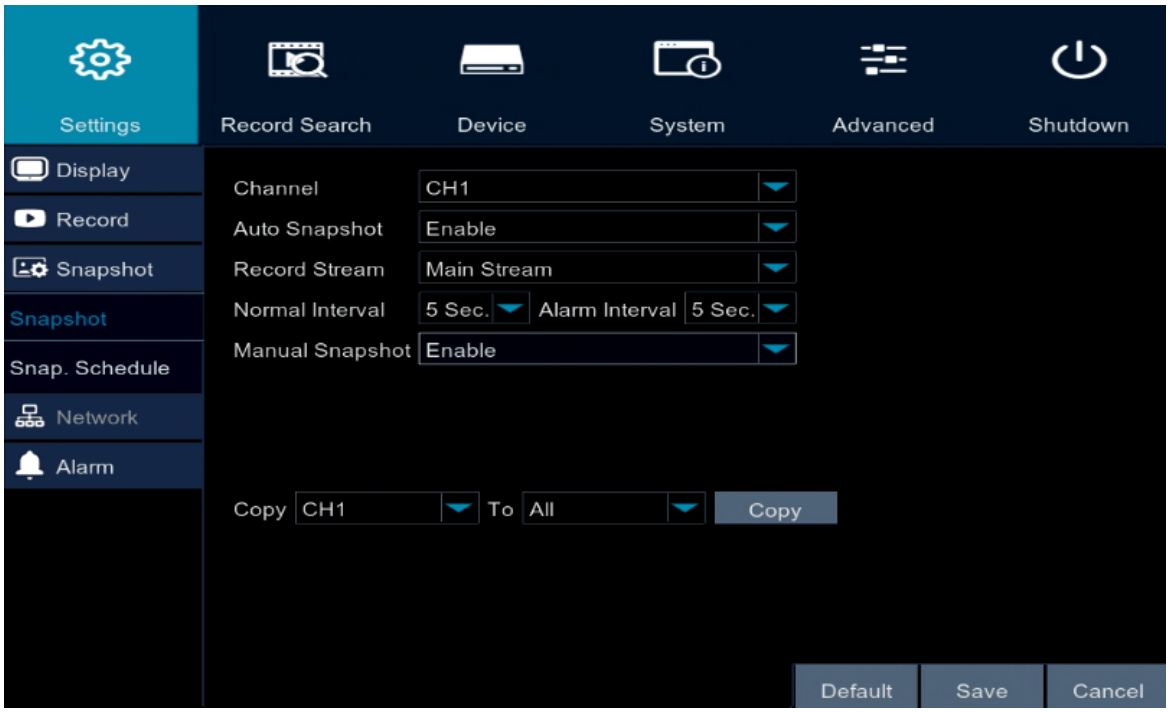
**Copy:** You can apply the same configurations from one channel to the desired channels. Select a channel from the **Copy** drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same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

##### 4.1.1.3.1 Snapshot

You can enable the Auto Snapshot or Manual Snapshot functions on this page.




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

**Auto Snapshot:** Select **Enable** from the drop-down list to enable the function. Note for this function to work, you have to configure Snapshot Schedule in advance (refer to *4.1.1.3.2 Snapshot Schedule*).

**Record Stream:** Select Main Stream or Sub Stream.

**Normal Interval:** Configure an interval to automatically take a snapshot.

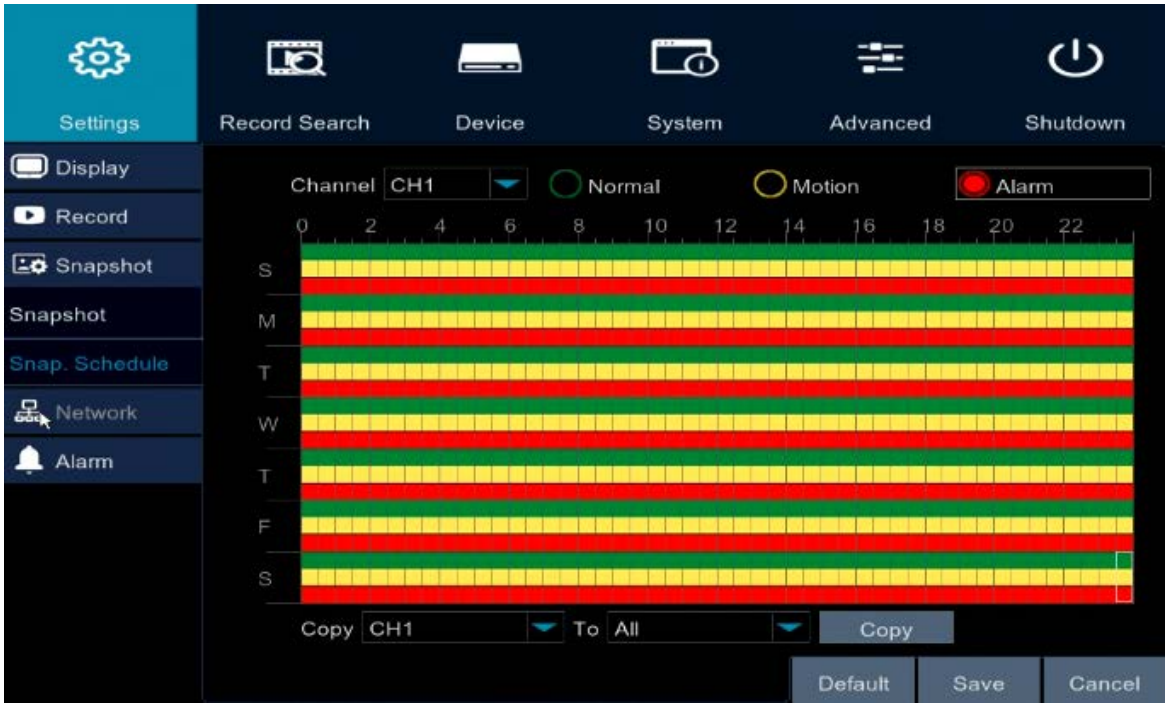
**Alarm Interval:** Configure an interval to automatically take a snapshot when events occur.

**Manual Snapshot:** Select **Enable** from the drop-down list to enable the function. To perform the Manual Snapshot function, click the **Manual Snapshot** icon on the Live Channel Tool Bar (refer to *3.5 Live Channel Tool Bar*).

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 Snapshot Schedule

You can configure the snapshot schedule on this page.




**Channel:** Select a channel to configure the snapshot 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 snapshot function. To deselect the blocks, click and drag on the green blocks to select again.

**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 snapshot function. To deselect the blocks, click and drag on the yellow blocks to select again.

**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 snapshot function. To deselect the blocks, click and drag on the red blocks to select again.

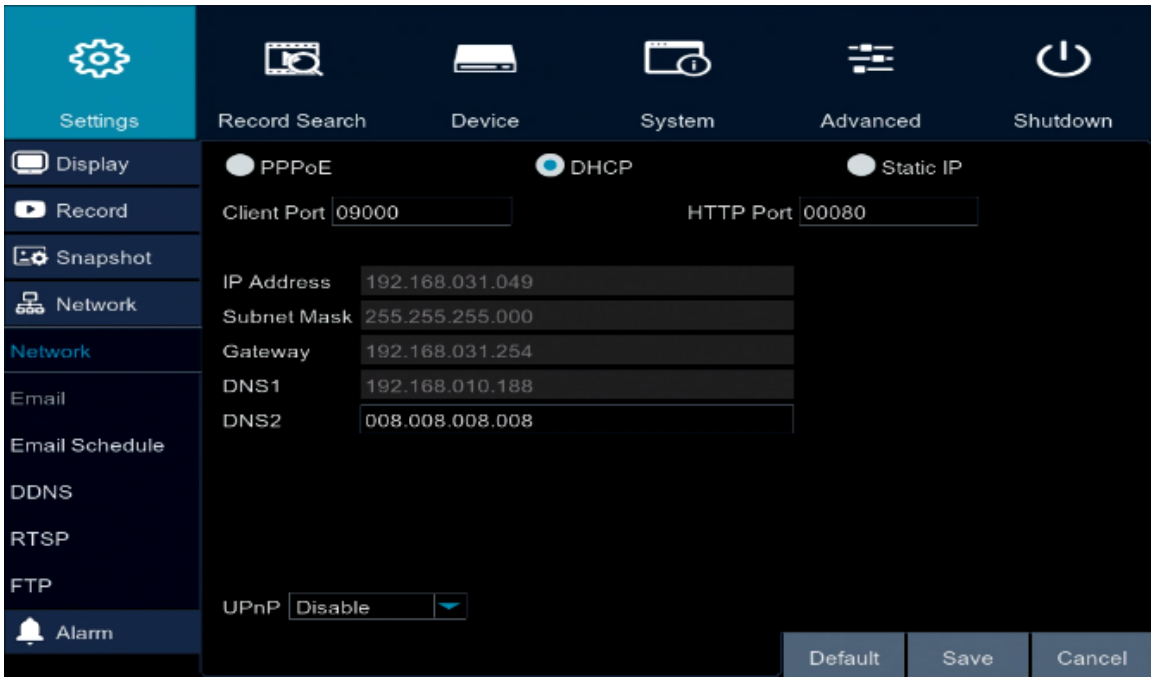
**Copy:** You can apply the same configurations from one channel to the desired channels. Select a channel from the **Copy** drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same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

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

#### 4.1.1.4 Network

##### 4.1.1.4.1 Network

You can configure the network settings on this page.




**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 DVR's network switch/hub has to be rebooted.

**Static IP:** Users can manually set up a Static IP address for the DVR. 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.

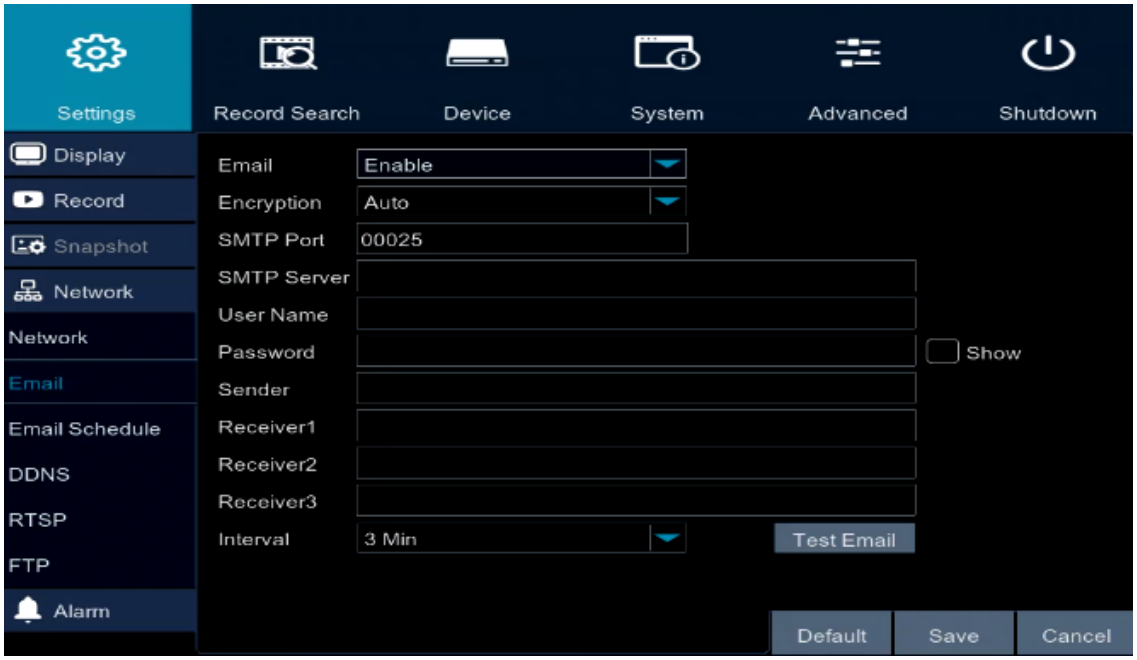
**HTTP Port:** Keep 80 port. Change only when necessary.

**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.

#### 4.1.1.4.2 Email

You can configure the email settings for email alerts 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.

**User Name:** Input the user name of the sender.

**Password:** Input the password of the sender.

**Sender:** Input the Email address of the sender (the DVR).

**Receiver1-3:** Input the Email address of the receiver. You can input 3 receiver email addresses.

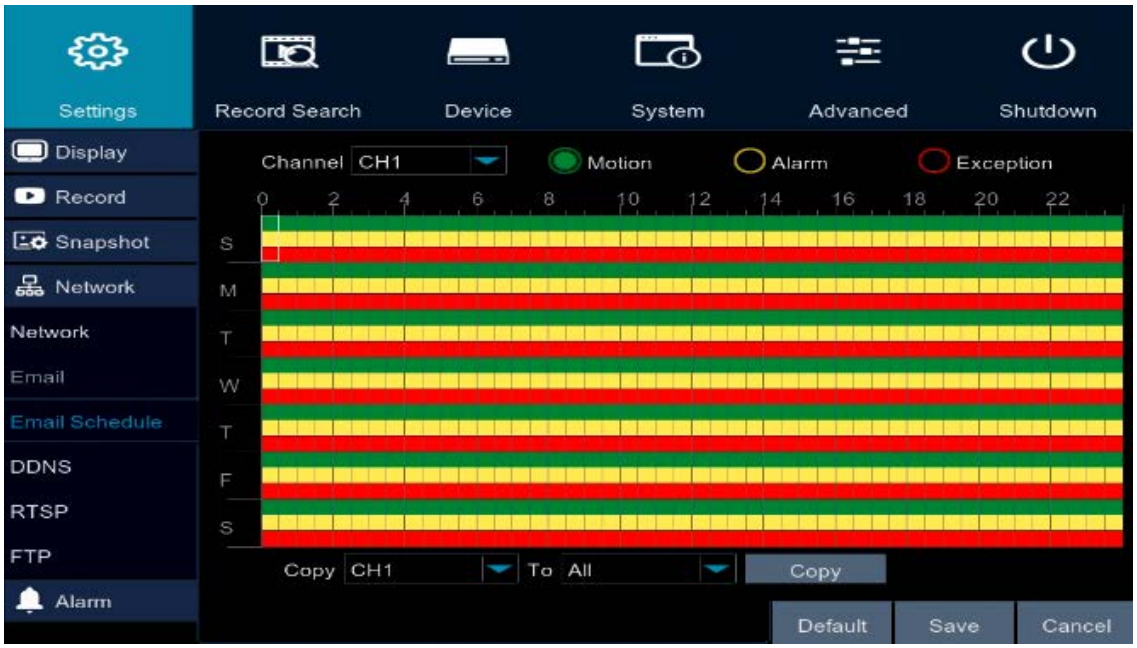
**Interval:** Configure an interval to send Emails when events occur.

**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.

#### 4.1.1.4.3 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 (HDD full, HDD error or Video Loss):** 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.

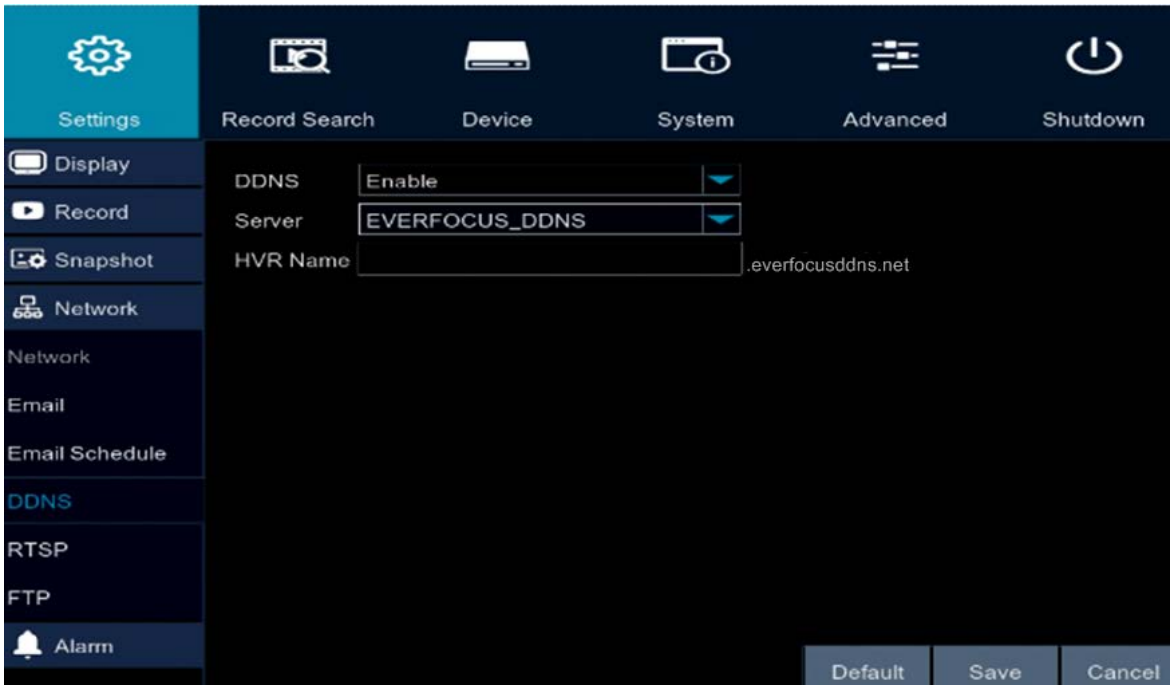
Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

#### 4.1.1.4.4 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 DVR.

DDNS assigns a domain name (URL) to the DVR, 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 DVR 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 DDNS service provider's website. We highly recommend that you use xxxx.everfocusddns.net for the simplicity of setting up your DVR. Please refer to **EverFocus DDNS** on the next page.




**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.

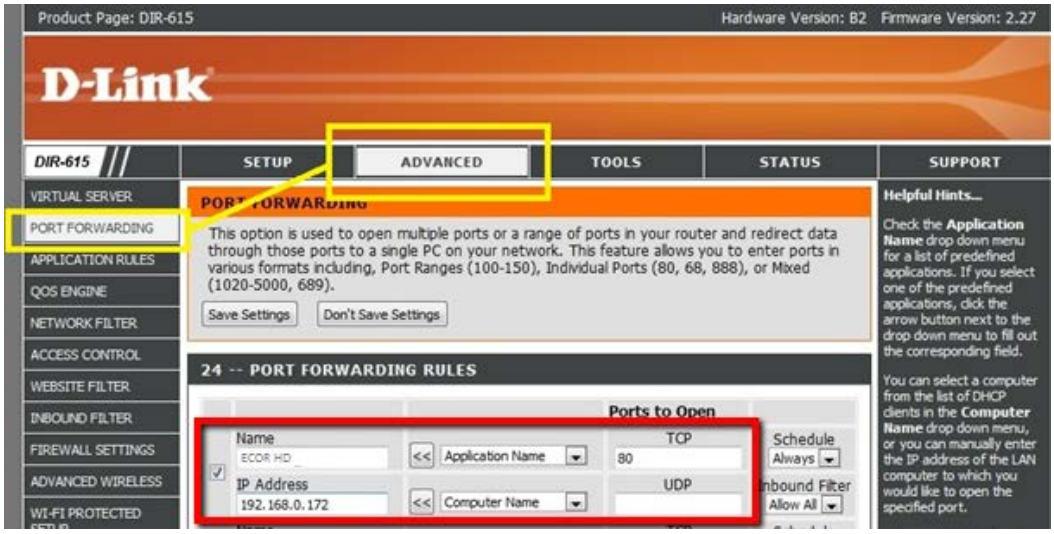
**Test DDNS:** Click the button to test whether the DDNS function is working normally.

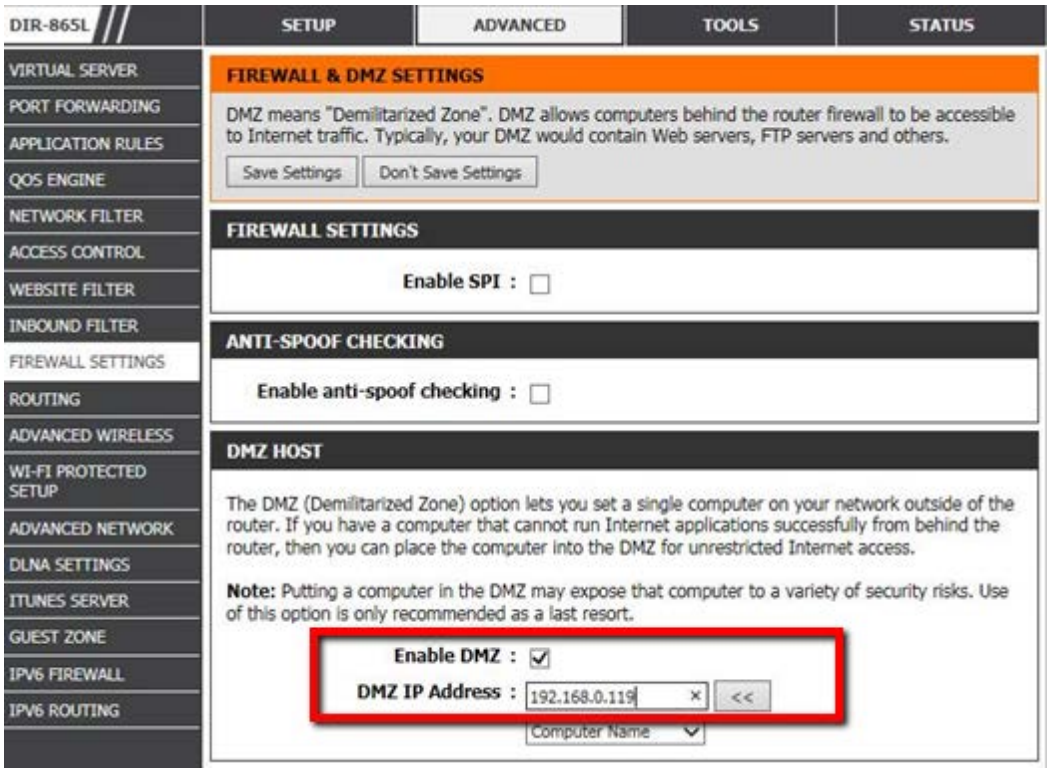
Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

**EverFocus DDNS**

Please follow the steps below to set up EverFocus DDNS.

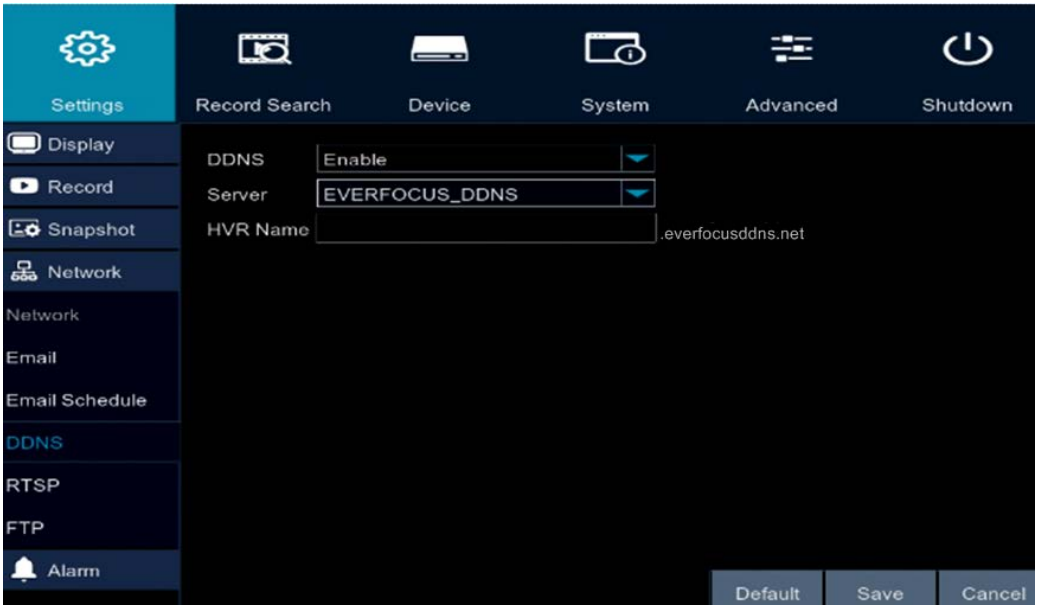
1. In order to allow remote access to the DVR from outside of the local network, enable either the **Port Forwarding** or **DMZ** function of your router. Please refer to the manual of your router for more details.




2. Go to http://www.everfocusddns.net to check an available host name for the DVR. Note that the host name of the DVR cannot include a space, underline or any special characters particularly _~ ! @ # $ % ^ & * ( ) + < > " ; : . ,

3. Register the host name on the DDNS setup page for the DVR.



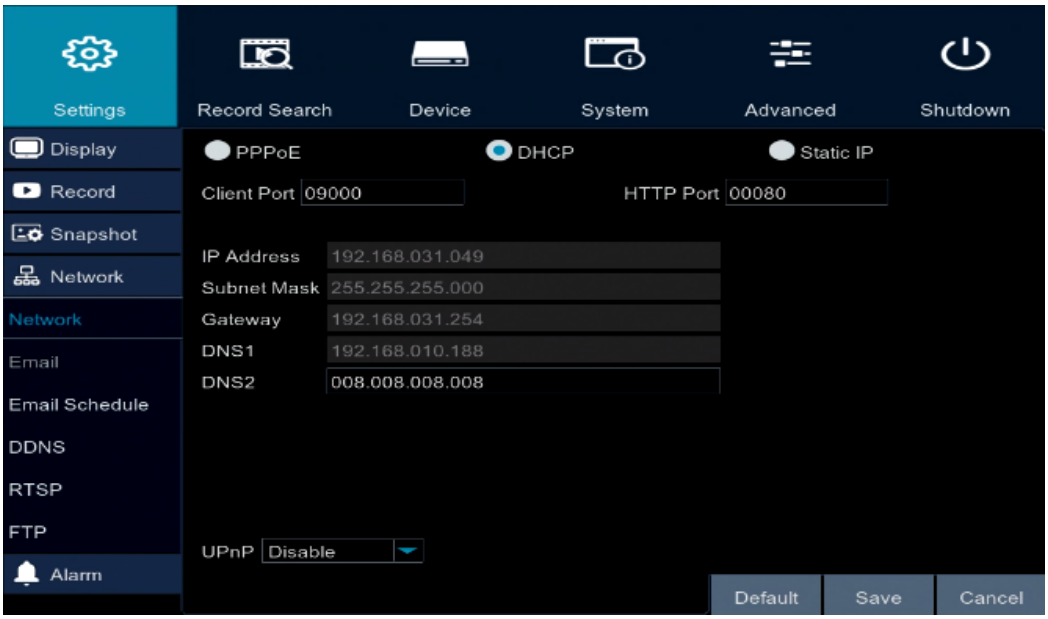

a. Select **Enable** from the DDNS drop-down list to enable the DDNS function.

b. Select **EVERFOCUS DDNS** from the Server drop-down list.

c. Input the host name in the **DVR Name** field.

d. Click the **Save** button.

4. Configure the DVR **Network** settings, keep HTTP port "80" and then click the **Save** button.

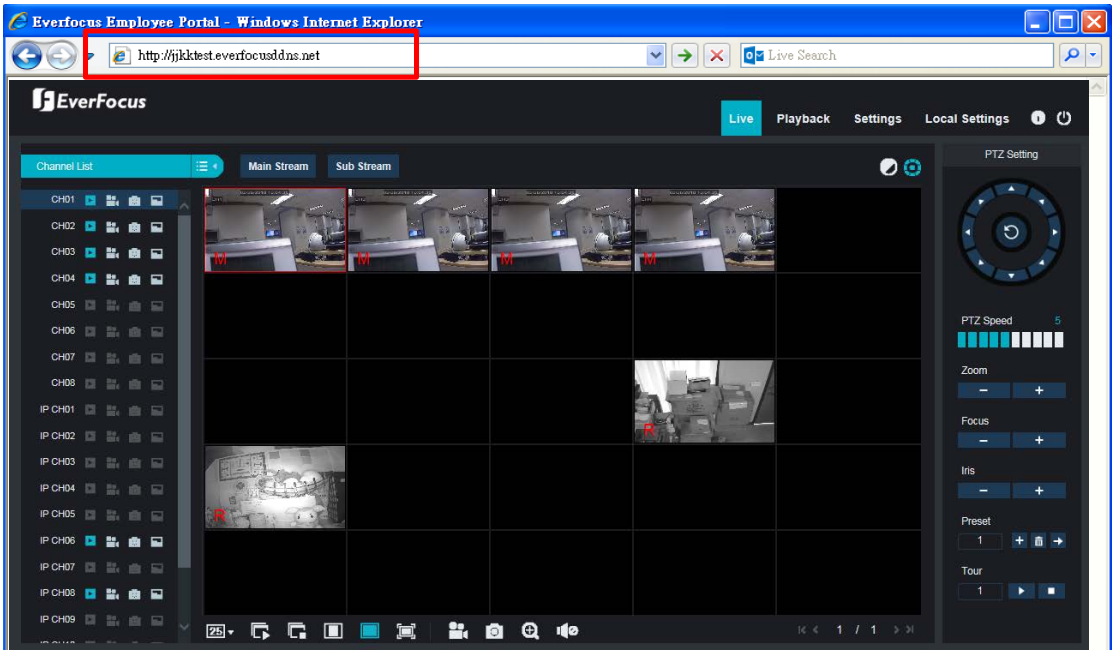



- If **Static IP** is selected: Enter the IP address, subnet mask, default gateway and the DNS Server 1. Please consult with your ISP service provider for the information of subnet mask, default gateway and the DNS Server 1.
- If **DHCP** is selected: The IP address, subnet mask, default gateway and the DNS Server 1 will be assigned automatically by DHCP server.

- If **PPPoE** is selected: Enter the User Name (e.g. xxxx@hinet.net) and Password provided by your ISP service provider.

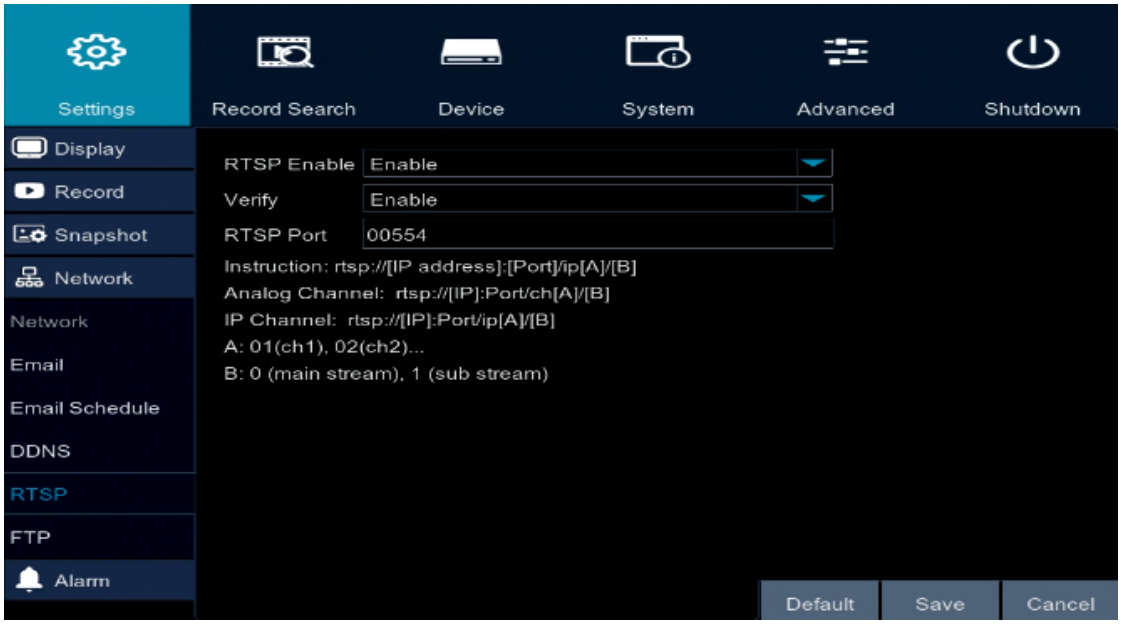
5. The DDNS setup is now complete. Open a browser and enter the domain name (http://[host name].everfocusddns.net) in the address field. The Web interface of the DVR should be displayed.

   For example, if you've obtained the host name "jjkktest" from EverFocus DDNS server, enter http://jjkktest.everfocusddns.net in the address field of the browser.



#### 4.1.1.4.5 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:

| Camera Type | Syntax | Example |
|---|---|---|
| **IP Cameras** | rtsp://[IP Address]:[Port]/ip[A]/[B] | rtsp://192.168.31.33:554/ip05/1 |
| **FHD Cameras** | rtsp://[IP Address]:[Port]/ch[A]/[B] | rtsp://192.168.31.33:554/ch01/0 |

* IP Address: The IP address of the DVR

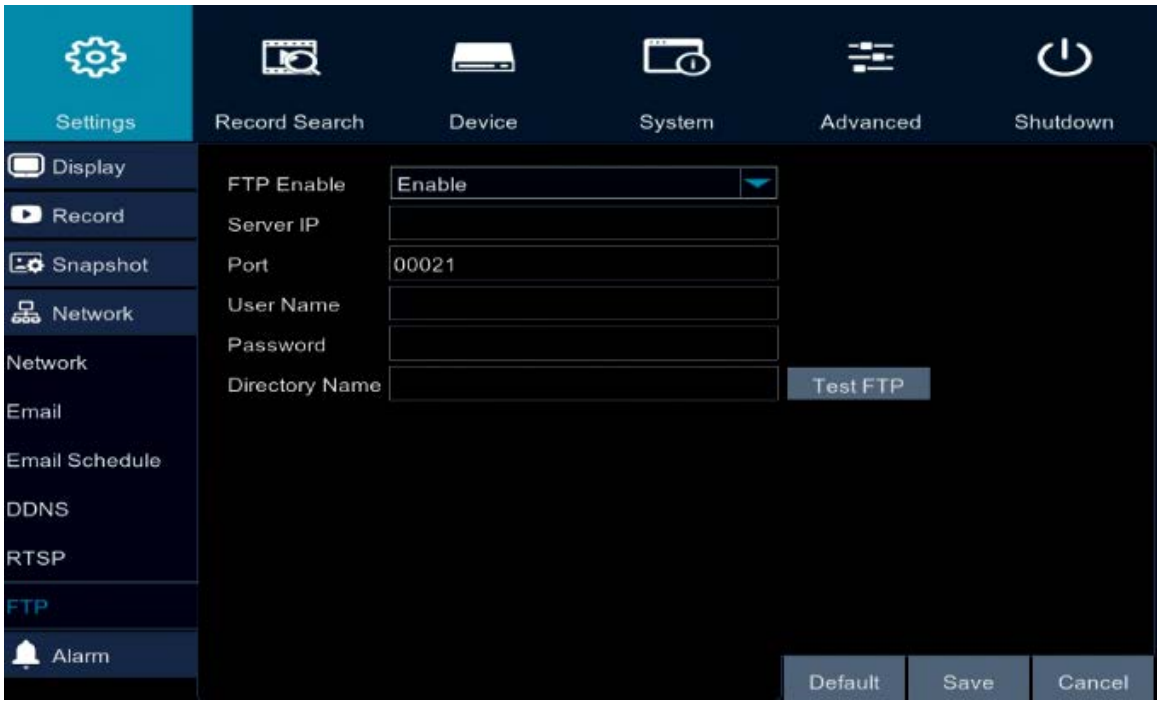
* A: Channel number. 01 (ch1), 02 (ch2), and so on.

* 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.

#### 4.1.1.4.6 FTP

You can configure the FTP server setting on this page. When there is a Motion or I/O event occurs, the system will send an instant snapshot image to the FTP. For system alarm such as HDD lost and Video loss, the system will send alarm log to the FTP as well.




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

**Server IP:** Input the FTP server IP.

**Port:** Keep the port 21.

**User Name:** Input the user name of the FTP server.

**Password:** Input the password of the FTP server.

**Directory Name:** Input the directory of the FTP server.

**Test FTP:** Click to test the FTP server connection.

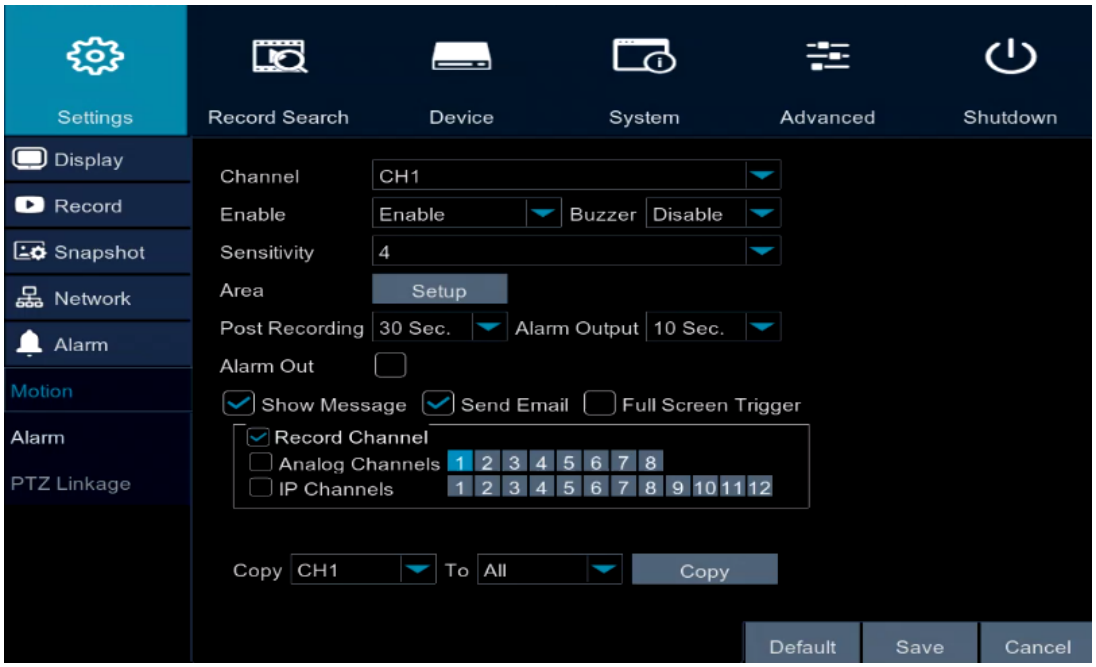
Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

#### 4.1.1.5 Alarm

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

##### 4.1.1.5.1 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 higher 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. To exit the Area Setup page, right-click the mouse.

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

**Alarm Output:** Select an alarm output time (duration) when motion events occur. When a motion object is detected, the alarm will last based on the alarm output 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 DVR 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.

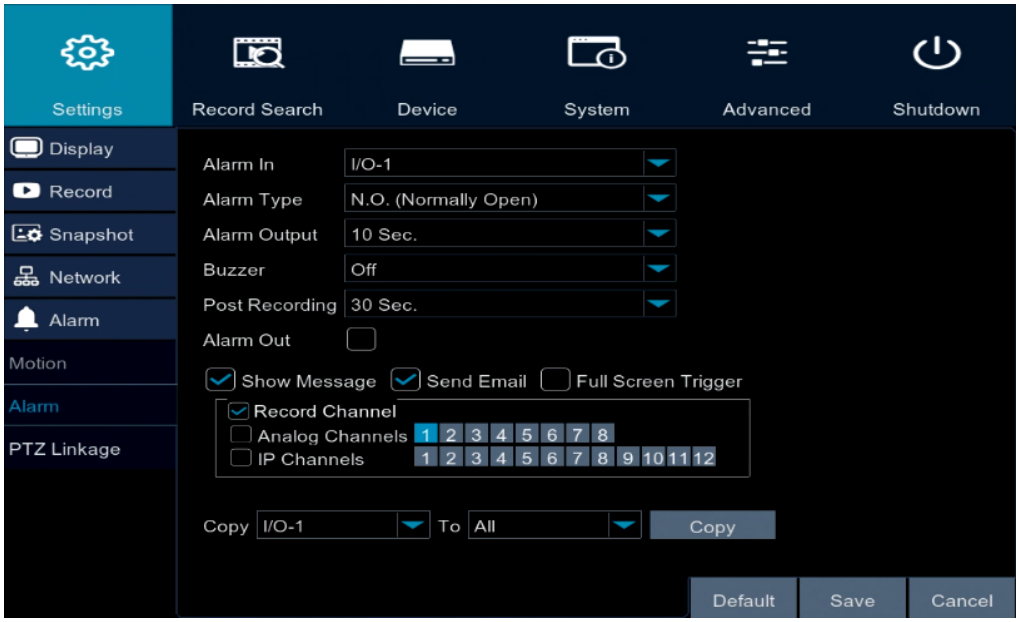
**Record Channel:** Check the box to enable the motion event recording function. When an event occurs, the selected channel(s) will be recorded. Note that the IP Channels will only appear when HVR hybrid mode is selected (Main Menu < System < General).

**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.

#### 4.1.1.5.2 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. **N.O** or **N.C**. If you want to disable the alarm, select **Off**.

**Alarm Output:** Set up an alarm output time (duration) when an alarm is triggered.

**Buzzer:** Set up the time for DVR 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 DVR 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 alarm event recording function. When an alarm event occurs, the selected channel(s) will be recorded. Note that the IP Channels will only appear when HVR hybrid mode is selected (Main Menu < System < General).

**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.

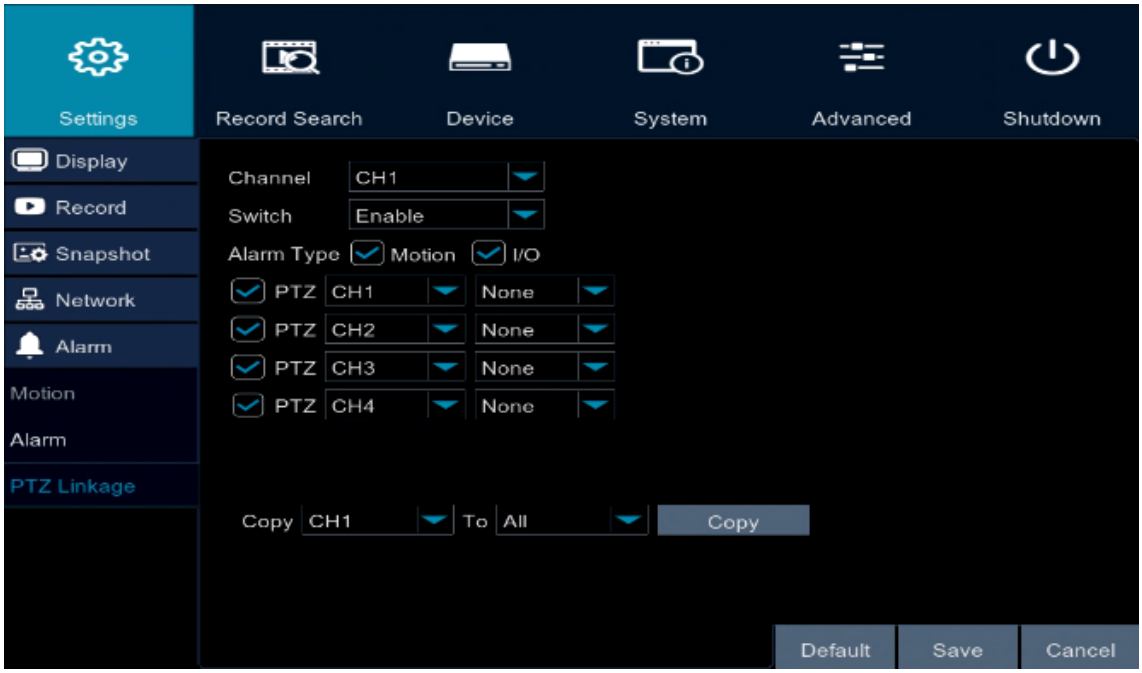
Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

The alarm types and descriptions are listed as below:

| Alarm Type | Functions and Descriptions |
|---|---|
| Video Loss | When DVR fails to receive video signals due to some problems (camera damage, cable dropout or damage, power failure), the alarm will appear. |
| Motion Detection | When 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. |

#### 4.1.1.5.3 PTZ Linkage

You can associate an alarm trigger (motion or I/O) with a specific camera and then activate a PTZ camera to go to a preset position when the alarm is triggered.




**Channel:** Select a channel to be associated with the alarm.

**Switch:** Enable or disable the function.

**Alarm Type:** Select the desired alarm(s).

**PTZ:** Associates the PTZ camera with preset points. Please set up the preset points of your PTZ (analog or IP) cameras in advance. After setting up the preset points, the preset number will be listed on the drop-down list. To activate the function, check the PTZ checkbox first. If the PTZ camera is assigned to CH2, select CH2 from the channel dropdown list and then select a desired preset point. When an even is triggered, the configured PTZ camera will turn to the preset point.

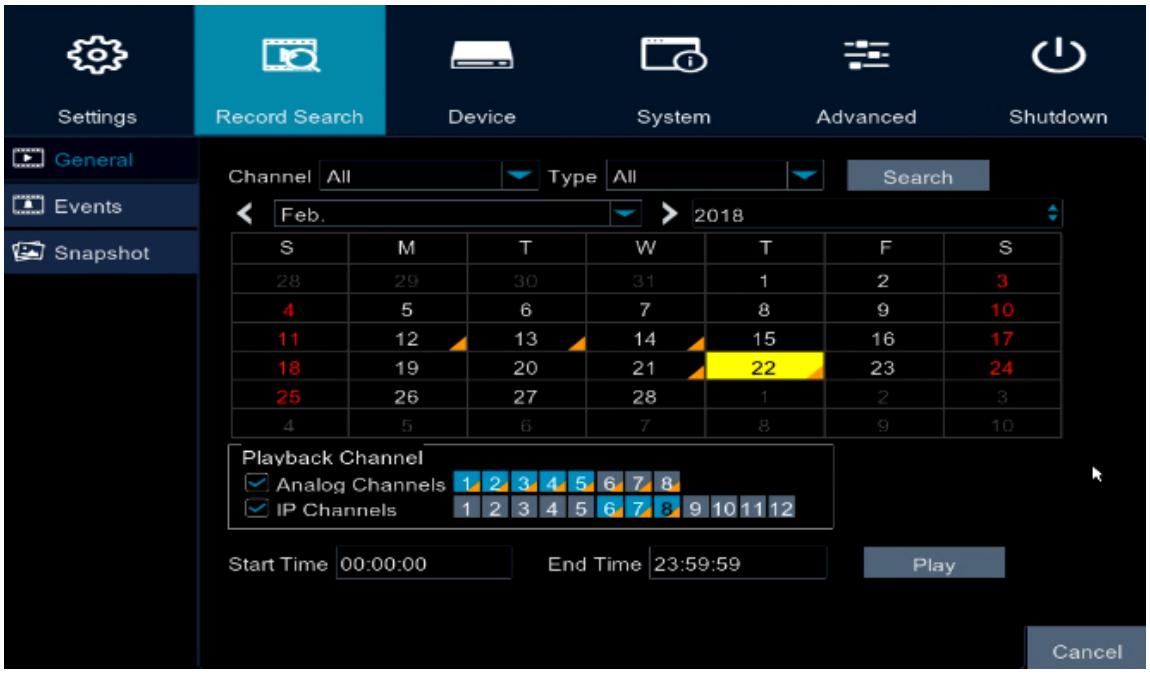
Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

### 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). Note that the IP Channels will only appear when HVR hybrid mode is selected (Main Menu < System < General).

**Start Time:** Select a start time.

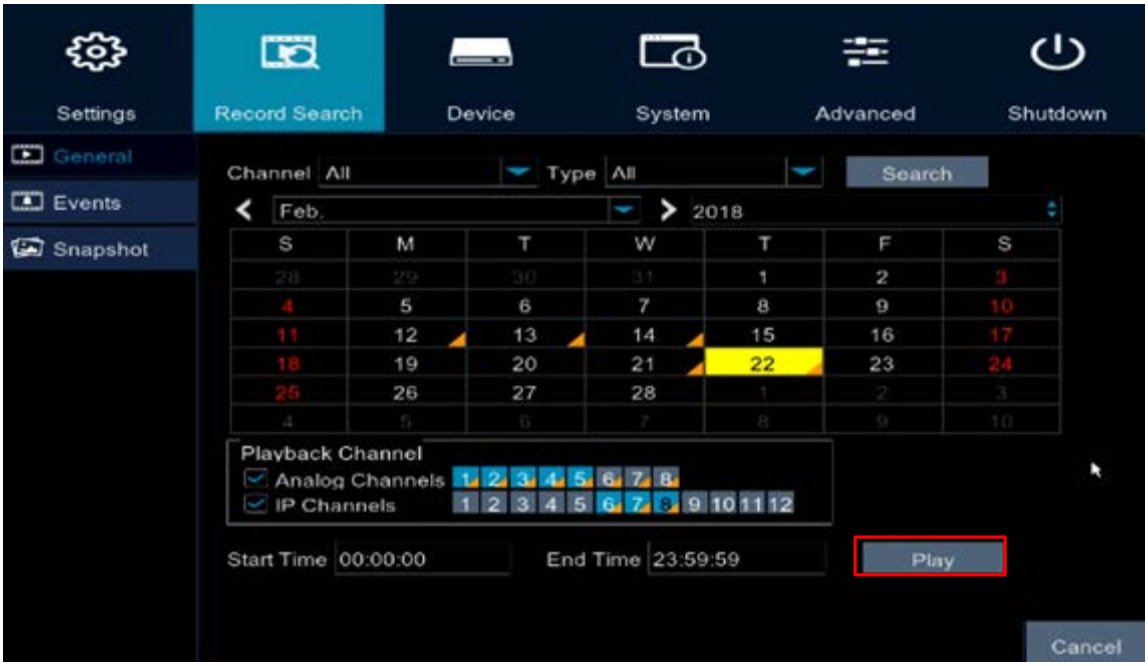
**End Time:** Select an end time.

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

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

#### 4.1.2.1.1 General Playback

On the **Record Search** < **General page**, click the **Play** button to enter the playback mode.



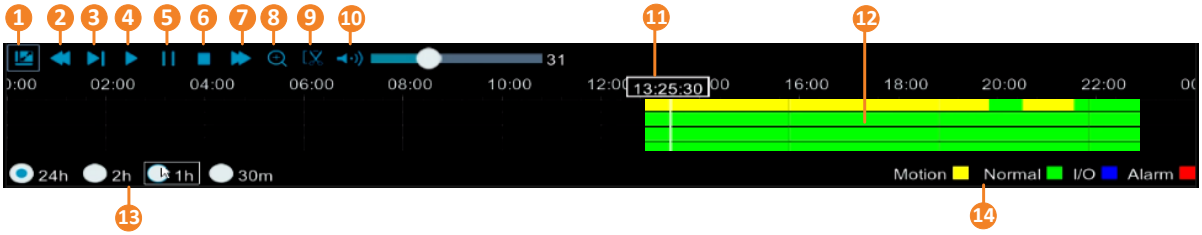

**Playback Mode**

After clicking the **Play** button to enter the **Playback Mode**, the system will start playing back automatically. The playback type includes **General**, **Events**, **Snapshot** and **Sub-periods**. Please refer to the content below for more details. To exit playback mode, click the **X** button on the upper right corner of the screen.

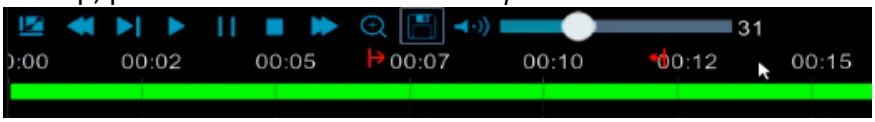
For VANGUARD 16x8, up to 16 multi-channel playback is supported; for VANGIARD 8x4, up to 8 multi-channel playback is supported; for VANGIARD 4x2, up to 4 multi-channel playback is supported.

The layout divisions will be automatically assigned by the system according to the channels you select. For example, if 1 channel is selected, the system will automatically assign single-division; if 2~4 channels are selected, 4-division will be assigned; if 5~9 channels are selected, 9-division will be assigned; if 10~16 channels are selected, 16-division will be assigned.

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



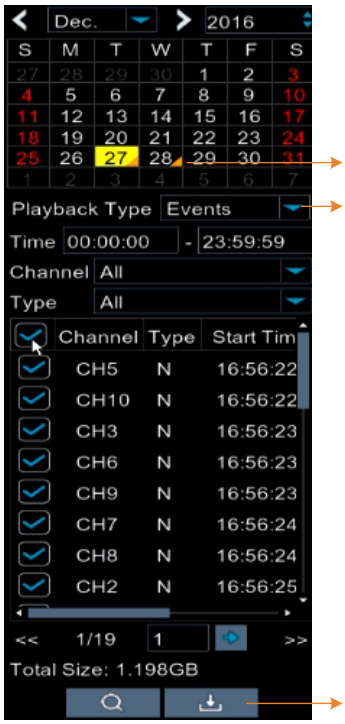

| No. | Name | Description |
|---|---|---|
| 1 | **Pin** | Click to pin or unpin the left-side panel and playback control bar. |
| 2 | **Rewind** | Click to start rewind. You can adjust the speed by continuously clicking on the button. The speed will be displayed on the upper-right corner of the screen. |
| 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. |
| 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.<br>To exit the zoom mode, click the zoom button again. |
| **9** | **Copy** | 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*.<br>  <br>To exit the copy 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** | **Time Bar Color Indicator** | The colors indicate the recording types.<br>Yellow: Motion recordings.<br>Green: Normal recordings.<br>Blue: I/O recordings.<br>Red: Alarm recordings. |

#### 4.1.2.1.2 Event / Snapshot Playback

You can search for events or snapshots for playing back.

Playback Type: Events / Snapshot




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

Select a playback type.

**Events:** Select the desired time, channel and event types and then play back.
**Snapshot:** Select the desired time, channel 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.

The ways for events and snapshot playback are similar. Here we use Events Playback for example:

1. Select **Events** from the Playback Type drop-down list.
2. Set up a time range to search for the events. Select the channels to be searched and select the desired event type (or All).
3. Click the **Search** button , the searched events will be listed.
4. To play back an event, simply click an event on the list. The system will automatically play back the event.
5. If you want to backup event recordings (.avi format), check the checkboxes on the desired events and then click the **Download** button , a **Copy Type** window will display. Click **Save** to backup the selected recordings to the USB storage device (please ensure an USB device has been connected to the DVR). You can then use any AVI-supported player to play back the recordings.

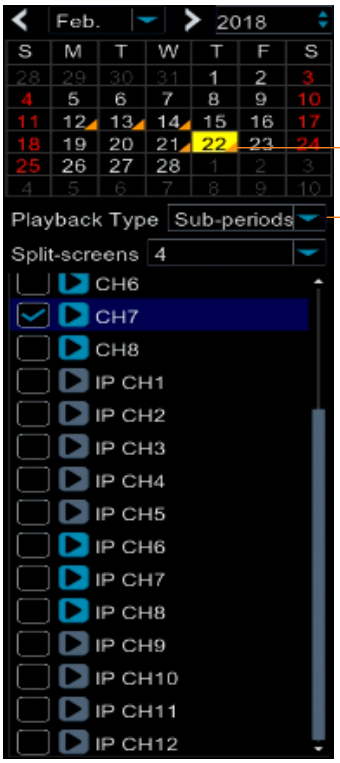
#### 4.1.2.1.3 Sub-Periods Playback

This function allows you to divide a recording into several segments with equal time-length; and then play back the segments simultaneously.

For example, for a 60-minute recording, if you select 4 split-screen, the recording will be divided into 4 segments with 15-minute in length each. If you select 6 split-screen, the recording will be divided into 6 segments with 10-minute in length each.

VANGUARD 16x8 supports up to 16 split-screens; VANGIARD 8x4 supports up to 8 split-screens; VANGIARD 4x2 supports up to 4 split-screens.

Playback Type: Sub-periods




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

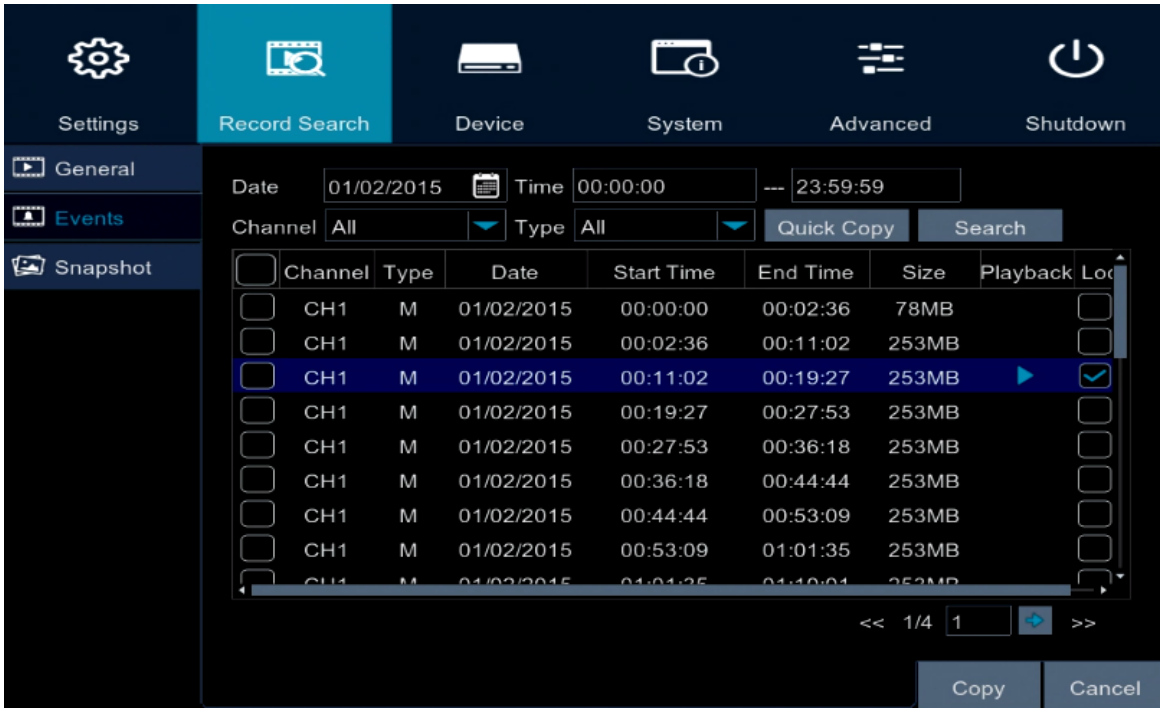
Select a playback type.

**Sub-periods:** Select a desired channel and split-screens and then play back.

1. Select **Sub-periods** from the Playback Type drop-down list.
2. Select a split number from the Split-screens drop-down list.
3. Select a channel for Sub-periods playback by checking the checkbox of the channel. The system will automatically start playing back the divided segments simultaneously.

#### 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 Copy:** After selecting the date/time/channel/event type parameters, click the **Quick Copy** button to back up all the searched recordings. Please refer to *4.1.2.2.1 Backup*.

**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.

**Lock:** If you want to keep the event recordings in the HDD and do not want to overwrite it during storage overwrite, check the Lock checkbox of the events.

**Copy:** If you want to back up a single recording or some of the desired recordings, check the recording boxes and then click the **Copy** button. Please refer to *4.1.2.2.1 Backup*.

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

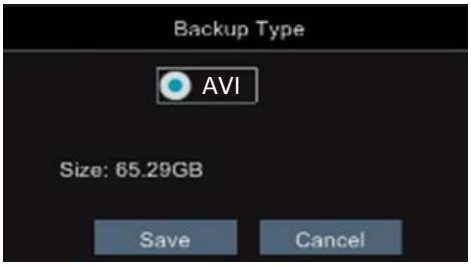
You can use the below buttons to search for the page on the list. To jump to a certain page, input a page number in the input box and then click the **Jump** button.

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.

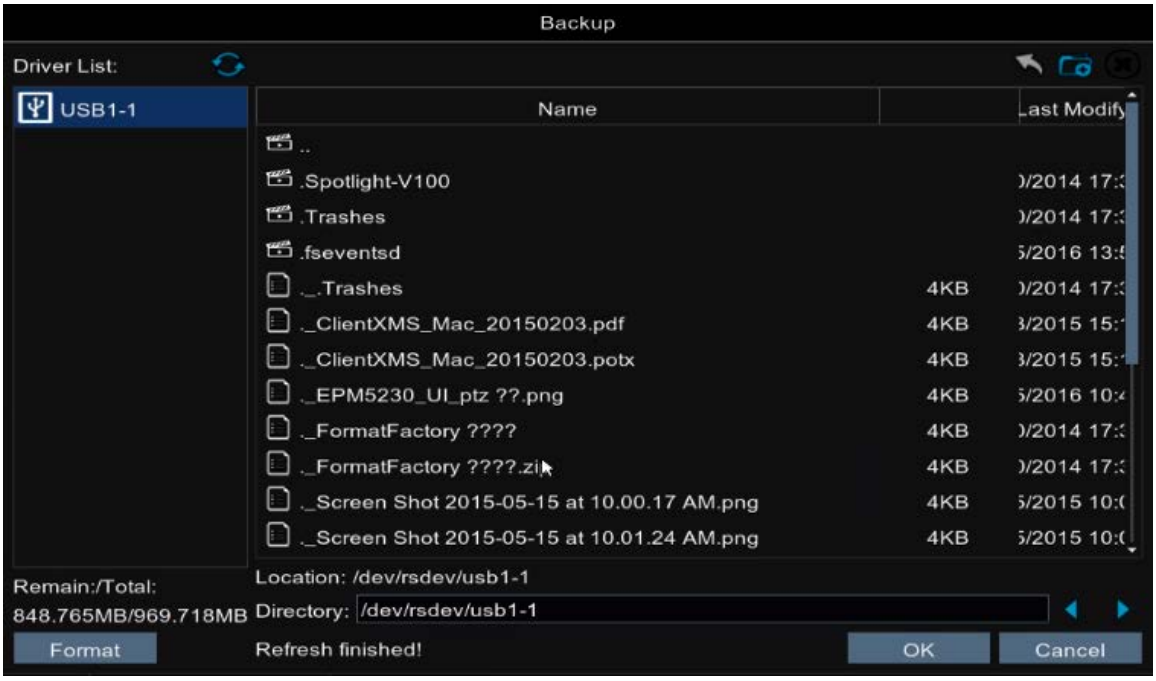
#### 4.1.2.2.1 Backup

You can click the **Quick Copy** button to back up all the searched recordings on the list; or click the **Copy** button to back up the selected recordings on the list. The Copy function is available for Event Recording / Snapshot Images / Log.

1. Ensure a USB storage device has been connected to the DVR.
2. After clicking either the **Quick Copy** or **Copy** button, the **Copy Type** window appears. The Copy Type window is only available when you click the Quick Copy / Copy buttons on the Events page; and when you click the **Copy** icon on the Playback Control Bar.



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

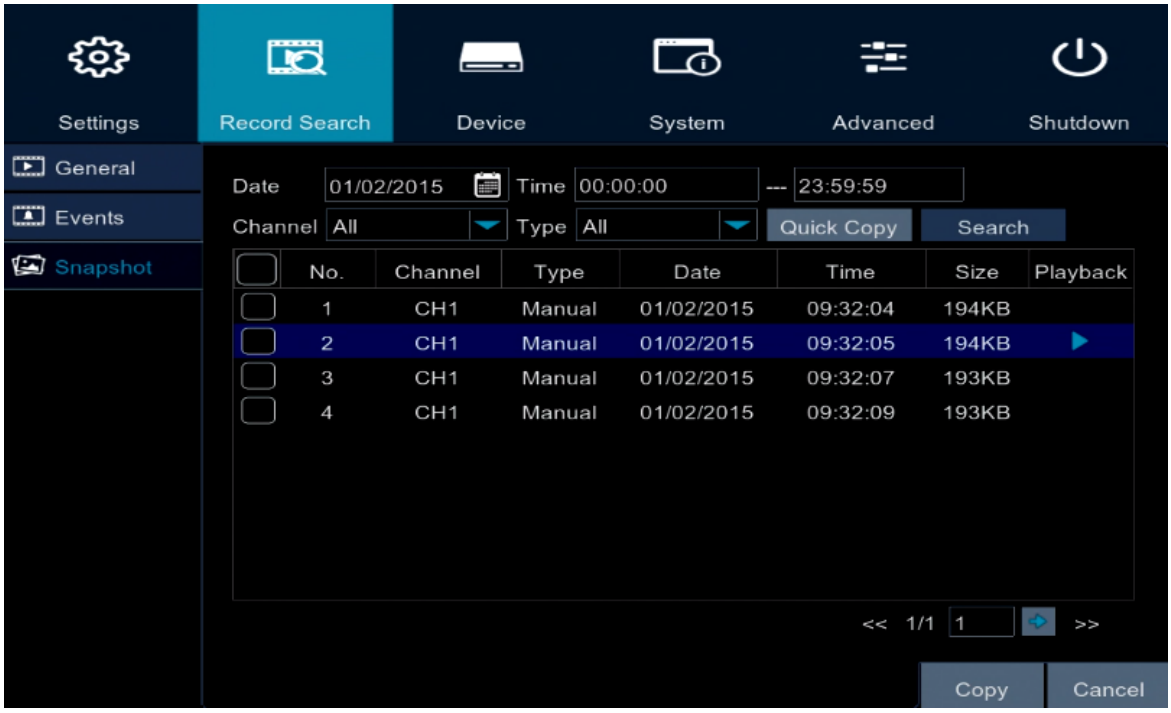



4. Select a storage device from the Driver List and click **OK**, the backup process begins.

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

#### 4.1.2.3 Snapshot

You can search and then play back the snapshot images 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 Copy:** After selecting the date/time/channel/event type parameters, click the **Quick Copy** button to back up all the searched snapshot images. Please refer to *4.1.2.2.1 Backup*.

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

**Copy:** If you want to back up a single snapshot image or multiple snapshot images, check the checkbox of the snapshot images and then click the **Copy** button. Please refer to *4.1.2.2.1 Backup*.

**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 snapshot image on the list, double click on a snapshot image or click the **Playback** icon in the Playback column to enter the playback mode. To exit the playback mode, right click the mouse.

You can use the playback control buttons when playing back the snapshot images. Or click the layout icons to switch to single / quad-view / 9-division for playing back.

### 4.1.3 Device

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

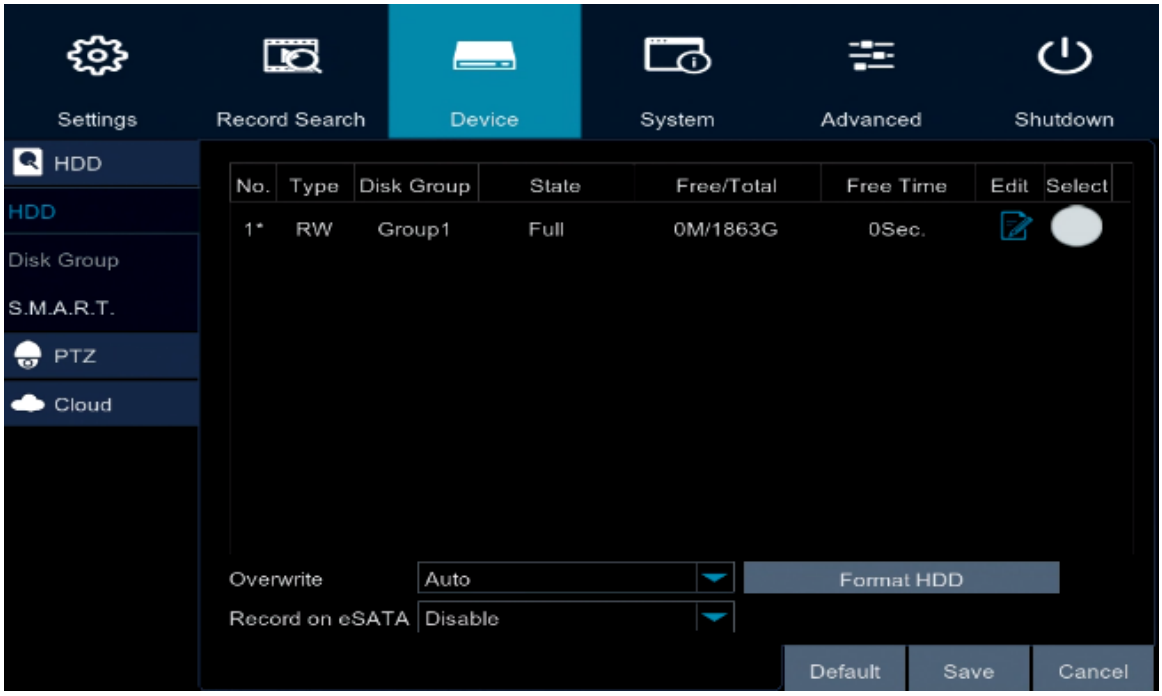
#### 4.1.3.1 HDD

##### 4.1.3.1.1 HDD

You can configure the HDD settings on this page. Please connect the HDD(s) to the DVR in advance and ensure the power and SATA cables are properly connected between the DVR and HDD(s). After connecting the HDD(s) to the DVR, the DVR 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.

The HDD(s) marked with * in the No. column indicates the HDD(s) is/are being used at present.




**Edit:** Click the Edit button and the below window appears. You can assign each HDD to different Disk Type (Read/Write, Read only or Redundant) and Disk Group (Group 1 ~ 16). If you select Disk Redundancy from the Disk Type drop-down list, the redundant disk will start the redundant backup from the recording disk.

**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 DVR will overwrite the oldest files on the HDD when HDD is full. The 1/3/7/14/30/90 Days stands for the overwrite starts day. For example, if 3 Days is selected, the HDD will be overwritten after recording 3 days. 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 DVR in advance.

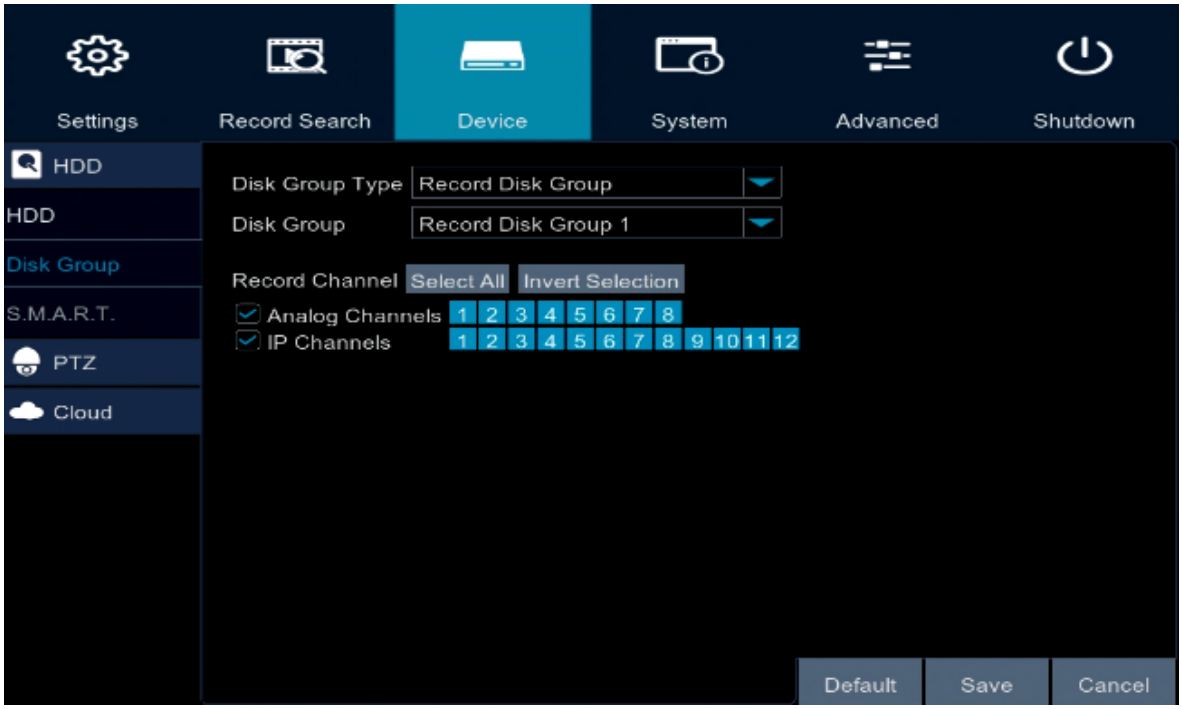
**Note:**

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.

#### 4.1.3.1.2 Disk Group

You can configure each channel to be recorded on the desired Disk Group. The Disk Group can be configured on the HDD page (please refer to *4.1.3.1.1 HDD*).




**Disk Group Type:** Select a Disk Group type. The Disk Group Type has to be pre-configured on the HDD page (please refer to *4.1.3.1.1 HDD*).

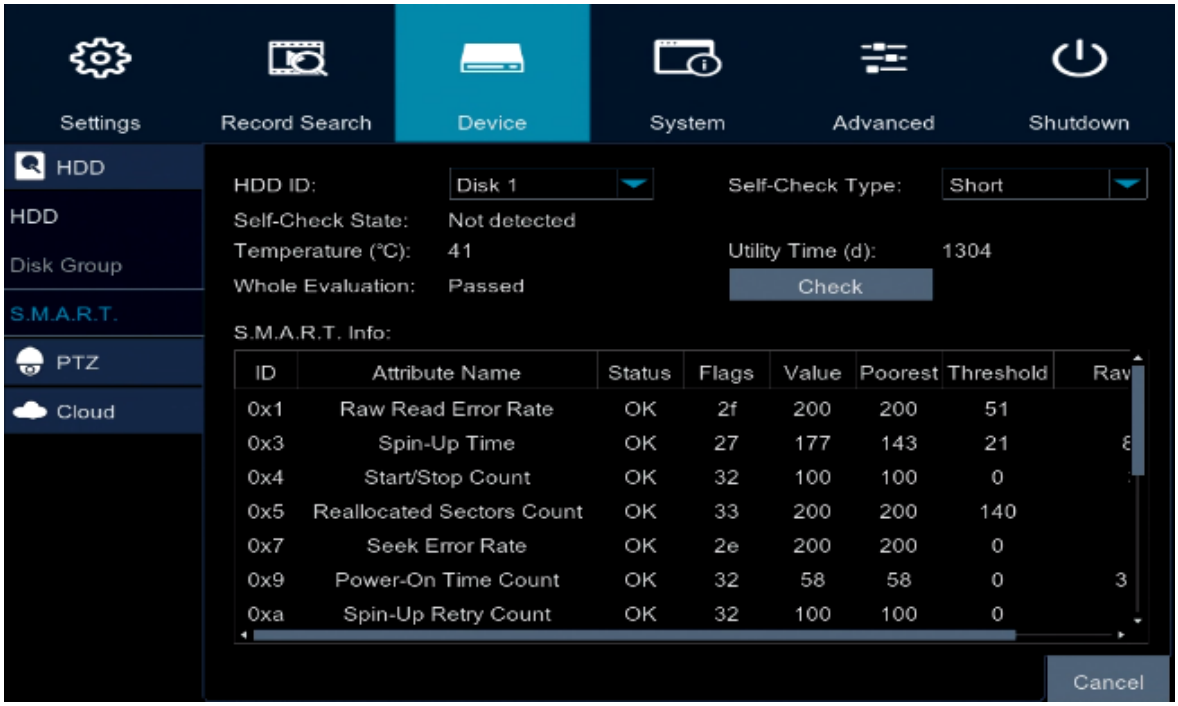
**Disk Group:** Select a Record Disk Group. The Record Disk Group has to be pre-configured on the HDD page (please refer to *4.1.3.1.1 HDD*).

**Channel:** Select the desired channel(s). The recordings of the selected channels will be recorded to the selected Disk Group. Note that the IP Channels will only appear when HVR hybrid mode is selected (Main Menu < System < General).

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

#### 4.1.3.1.3 S.M.A.R.T.

You can check the S.M.A.R.T. info of each HDD on this page.



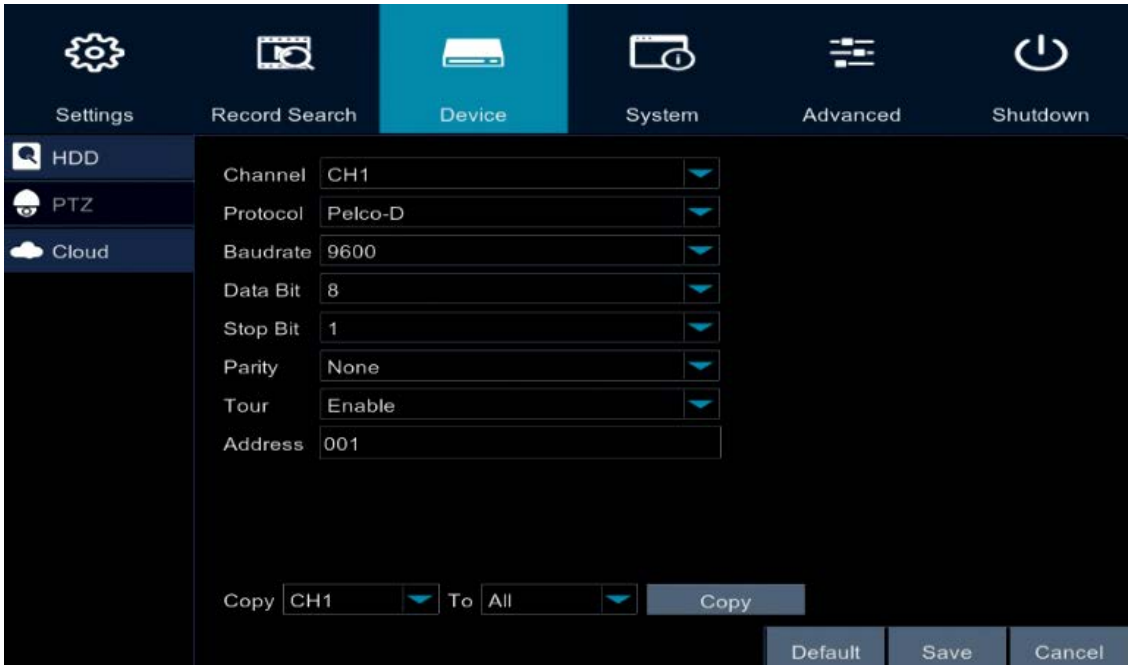

To check the S.M.A.R.T. info of the HDD, select an HDD from the **HDD ID** drop-down list, select a check type from the **Self-Check Type** drop-down list, and then click the **Check** button. The S.M.A.R.T. info will be listed in the S.M.A.R.T. info field.

If the evaluation is not passed but you still want to use the disk for recording, you can check the checkbox of **Whole evaluation not passed. Continue to use the disk**. And then click the **Save** button to save the settings.

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

#### 4.1.3.2 PTZ

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




**Channel:** Select the channel connected with PTZ camera.

**Signal Type:** Select **Analog** for the connected PTZ camera. This feature will only appear when HVR hybrid mode is selected (Main Menu < System < General).

**Protocol:** Select PTZ protocol, choose from the following protocols. (Note: All cameras on the RS-485 bus must use the same protocol). If you want to use the UTC function, select **UTC1** (eZ.HD Camera) or **UTC2** (EverFocus PTZ camera). For more details on UTC function, please refer to *1.6 eZ. Controller Function Description*.

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

**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.

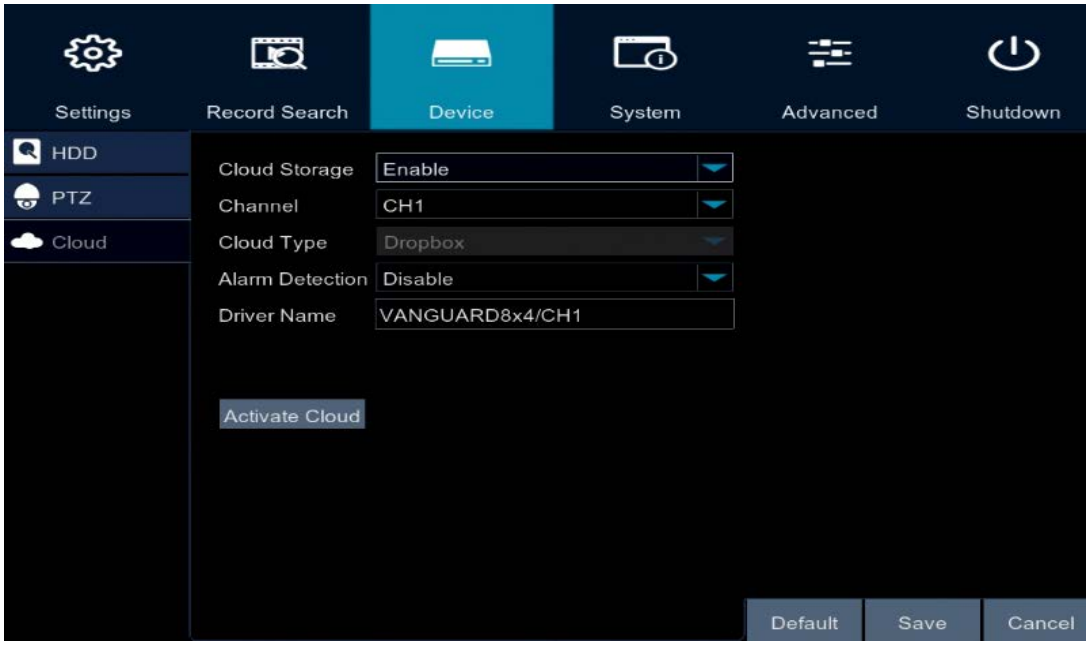
**Address:** Input the ID address of the PTZ camera. Note this address should match the one set up on the PTZ camera.

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

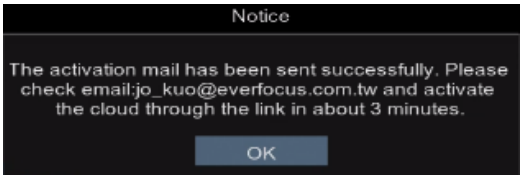
#### 4.1.3.3 Cloud

You can configure the Cloud settings (Dropbox cloud storage) on this page. After configuring the settings, the system will automatically send the Motion and I/O alarm snapshot images to the associated Dropbox when alarm events occur.




To perform the Cloud function:

1. Register an account on Dropbox website.
2. Ensure the DVR network is working properly.
3. Configure the SMTP function (refer to *4.1.1.4.2 Email*).
4. Configure the Cloud settings and then click the **Save** button.
   a. Select **Enable** from the **Cloud Storage** drop-down list to enable the Cloud function.
   b. Select the desired channels to upload the motion or I/O alarm snapshot images of the selected channels to Dropbox.
   c. Select **Enable** to upload the motion and I/O alarm snapshot images to Dropbox.
   d. Input a name in the Driver Name field, which will be created on the Dropbox as a directory for restoring the snapshot images from DVR.
5. Click the **Activate Cloud** button to activate the Cloud function. Once receive the below message, please check your email and complete the cloud activation within 3 minutes.




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

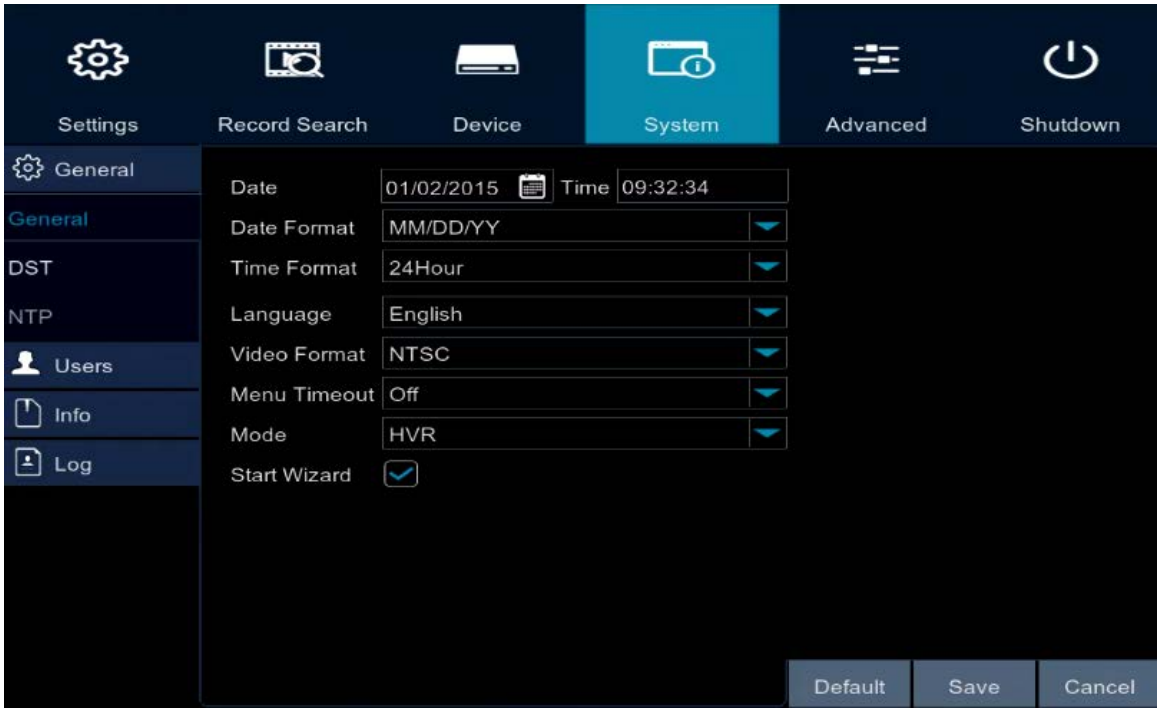
### 4.1.4 System

You can configure system settings on this page.

#### 4.1.4.1 General

##### 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.

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

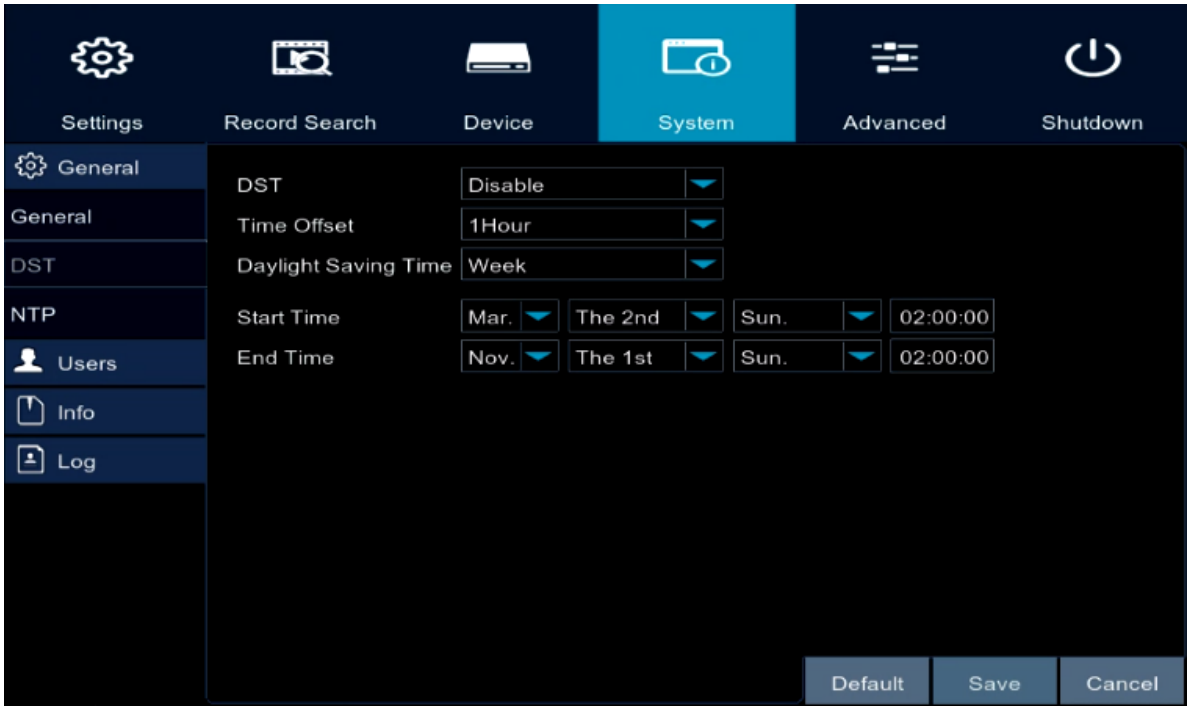
**Mode:** Select **DVR** if you only want to connect FHD cameras to the DVR; or select **HVR** if you want to connect both of the FHD cameras and IP cameras to the DVR.

**Start 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.

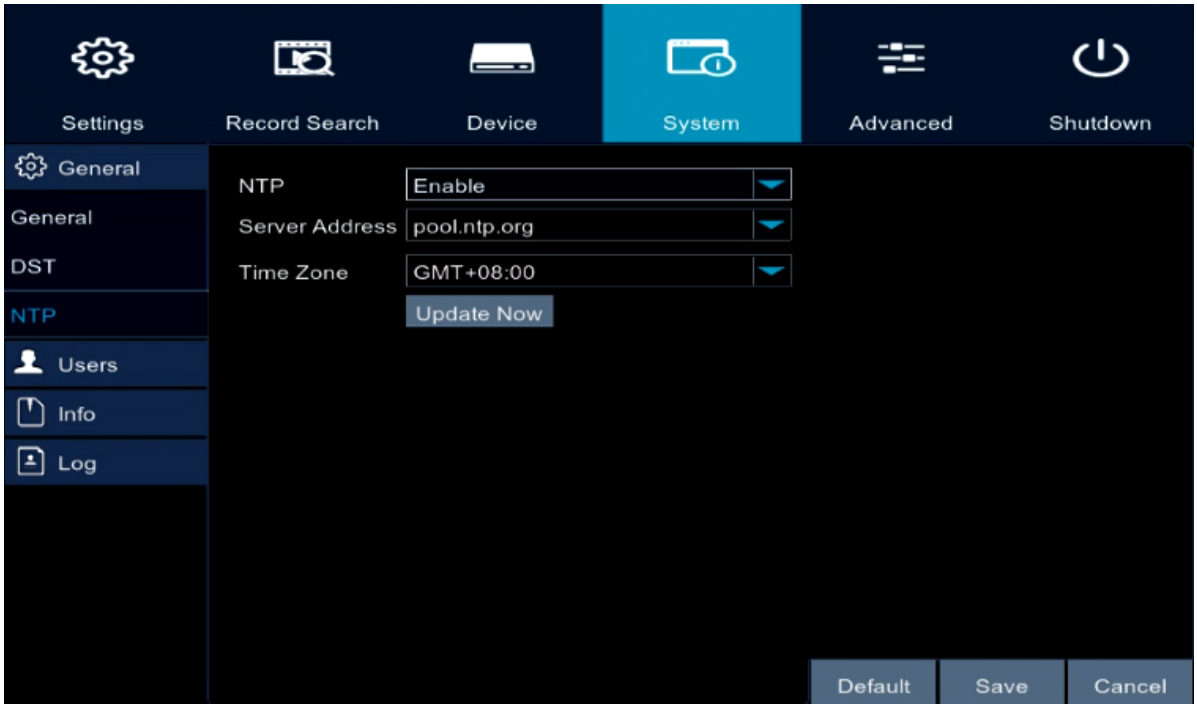
**Start Time:** Select a start time for the DST to start.

**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.

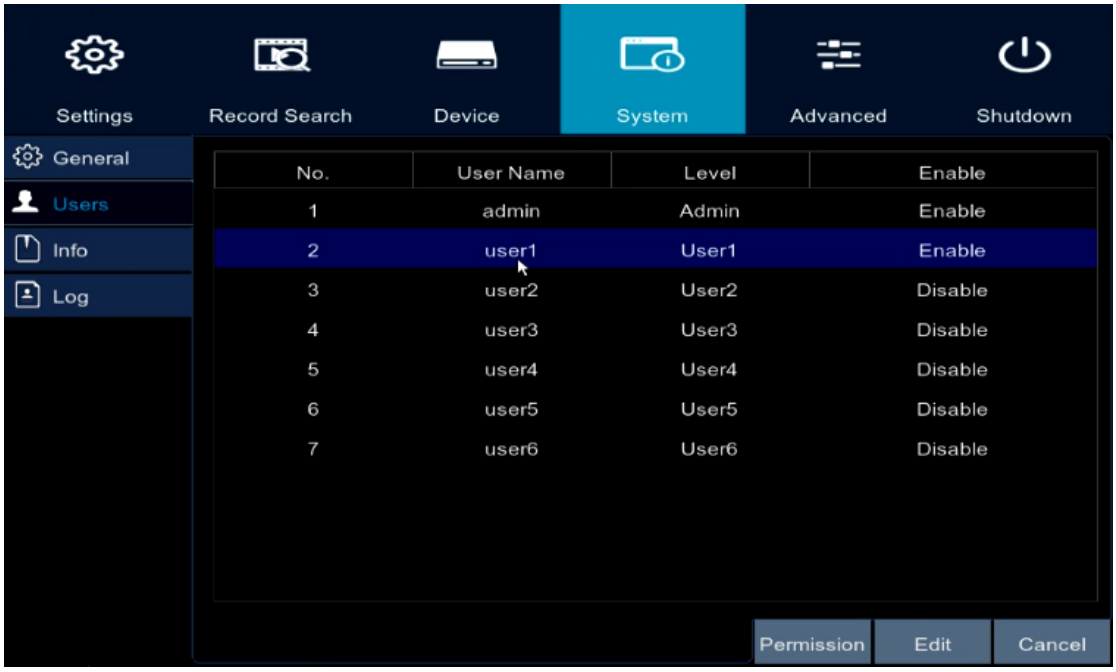
**Time Zone:** Select a time zone.

**Update Now:** Click to calibrate the system time.

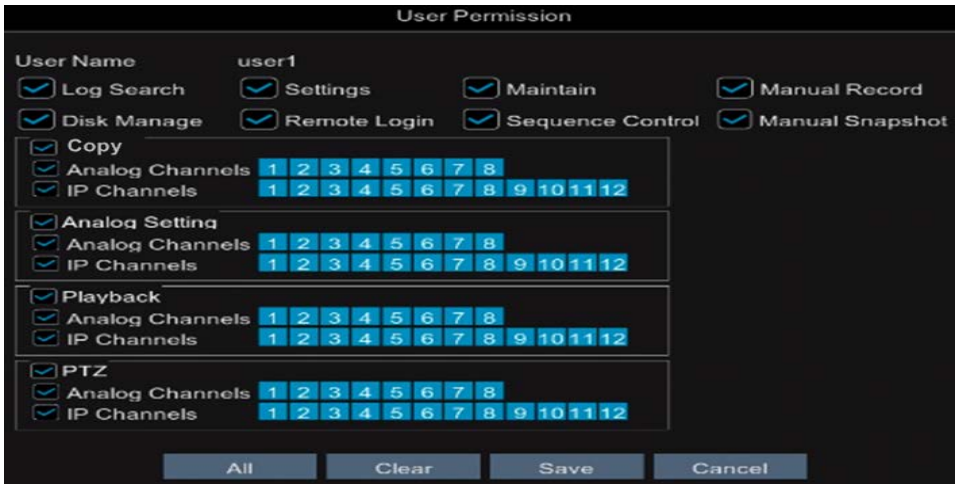
Click **Default** to return to factory default value, **Save** to save the settings, or **Cancel** to cancel and leave the page.

#### 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 Copy/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.
- **Manual Snapshot:** Allow users to use the manual snapshot function.
- **Copy:** Check the **Copy** box to enable the function; and then select the desired channels to backup. This user account will be granted with the Copy function for the selected channels.
- **Analog Setting:** 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.

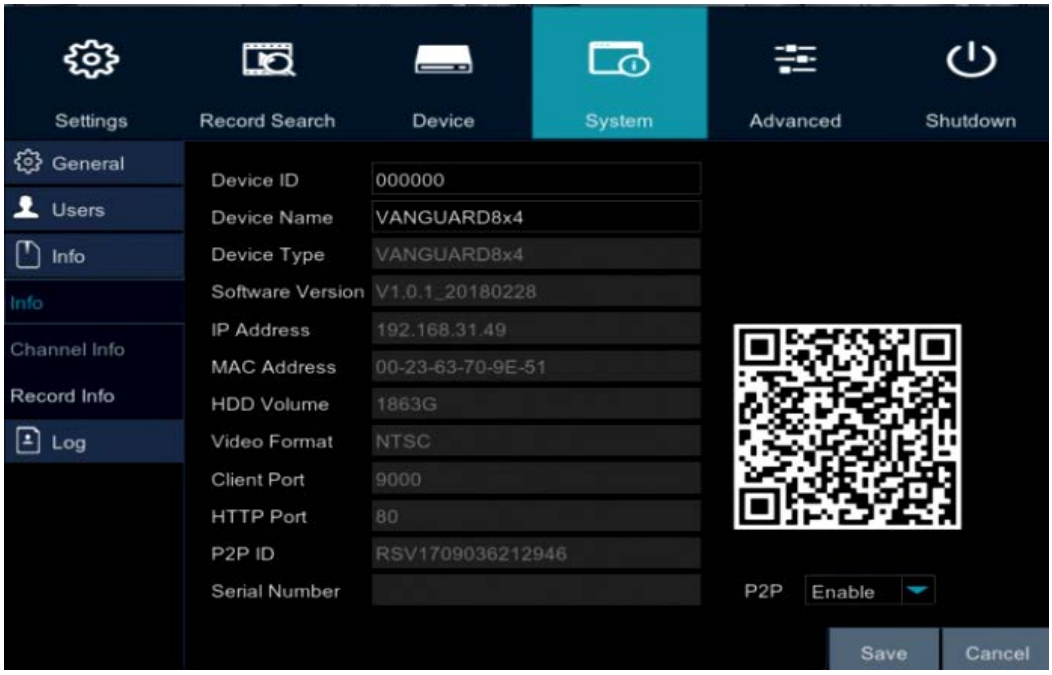
**Cancel:** Click to cancel and leave the page.

#### 4.1.4.3 Info

You can see the DVR info on this page.

##### 4.1.4.3.1 Info

You can see the DVR info or change the Device ID / Device Name. You can also enable the **P2P** function on this page. Click **Save** to save the settings.

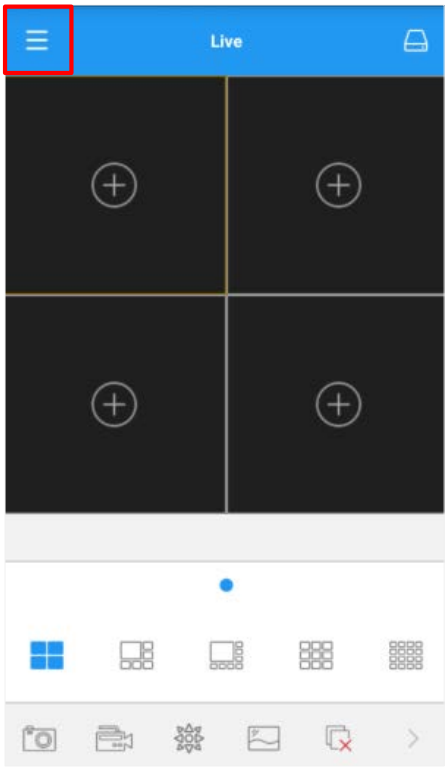


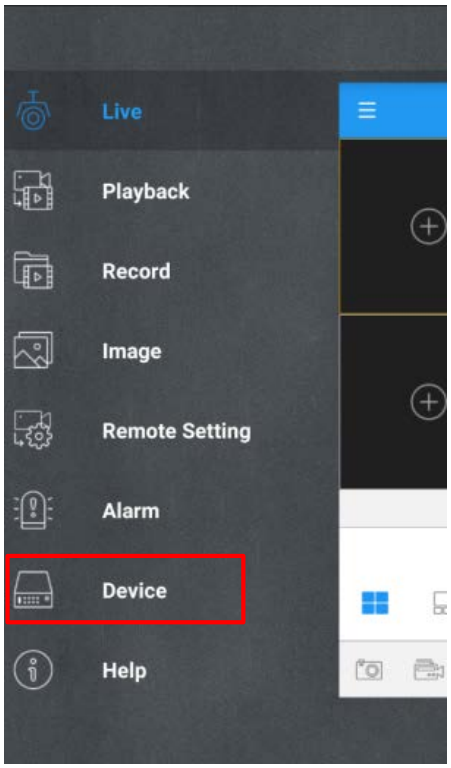

If **P2P** function is enabled, a QR code will be displayed on the Info page. You can scan the QR code with **EverFocus VANGUARD** App installed on your mobile device to add and remote access the DVR.

**For Android users:**

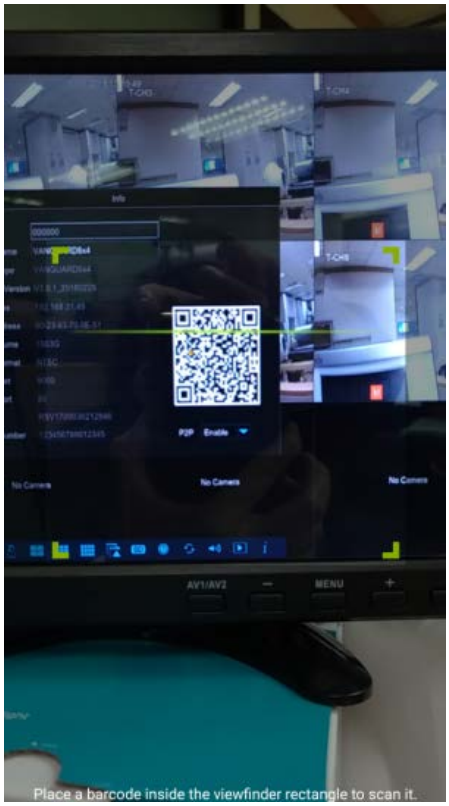
1. Install **EverFocus VANGUARD** App from Google Play Store. After the installation process is complete, tap the **Open** button to start **EverFocus VANGUARD** App.

2. To add a DVR through P2P, tap the **Menu** button and then tap **Device**.

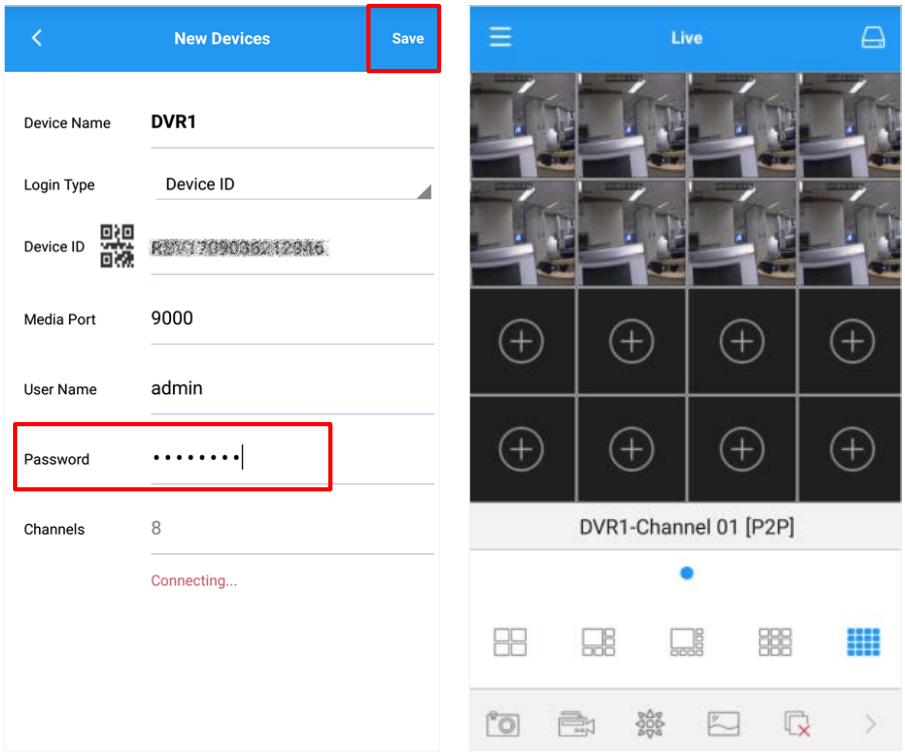



3. Tap **Device ID** and then scan the QR code on the info page of the DVR.

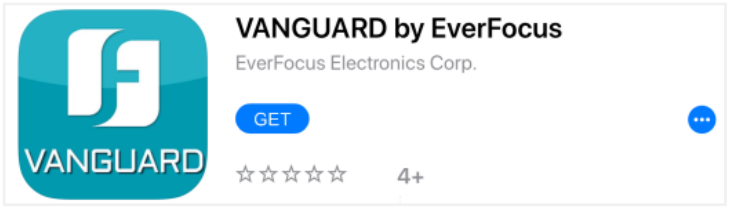


4. The scanned QR code will be displayed in the **Device ID** field. Input the **Password** of the DVR and then click **Save**, the VANGUARD App will add the DVR. Once the DVR has been added, you can start accessing the DVR.

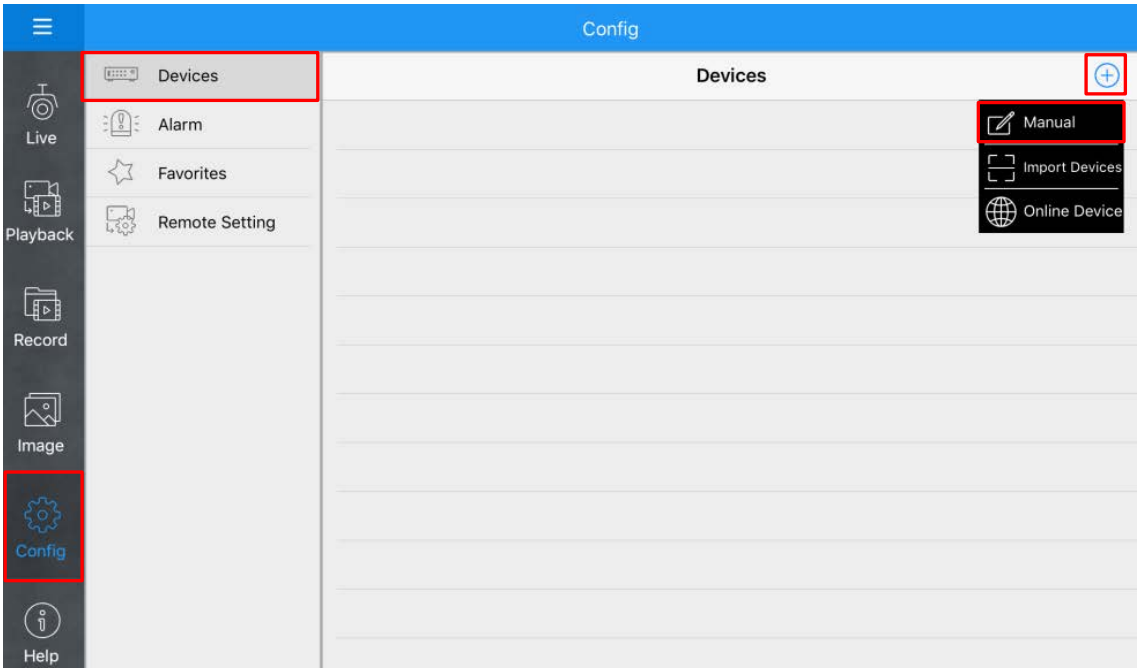



**For iOS users:**

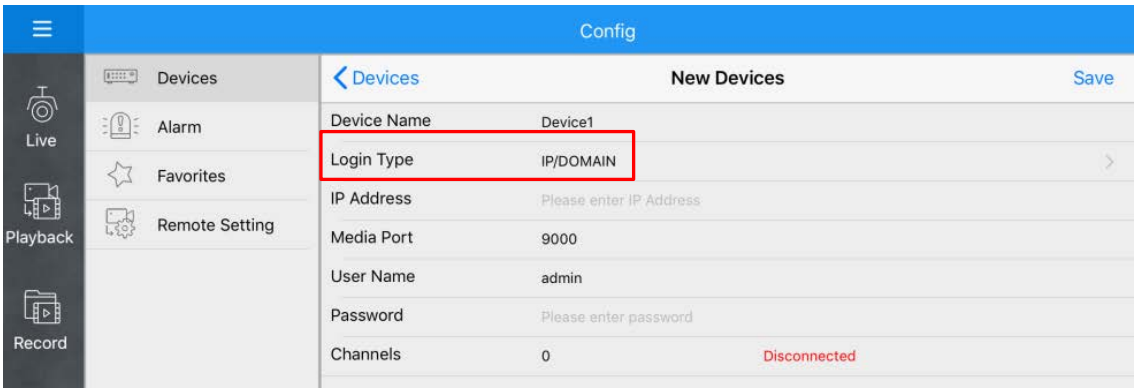
1. Install **EverFocus VANGUARD** App from Apple Store. After the installation process is complete, tap the **Open** button to start **EverFocus VANGUARD** App.



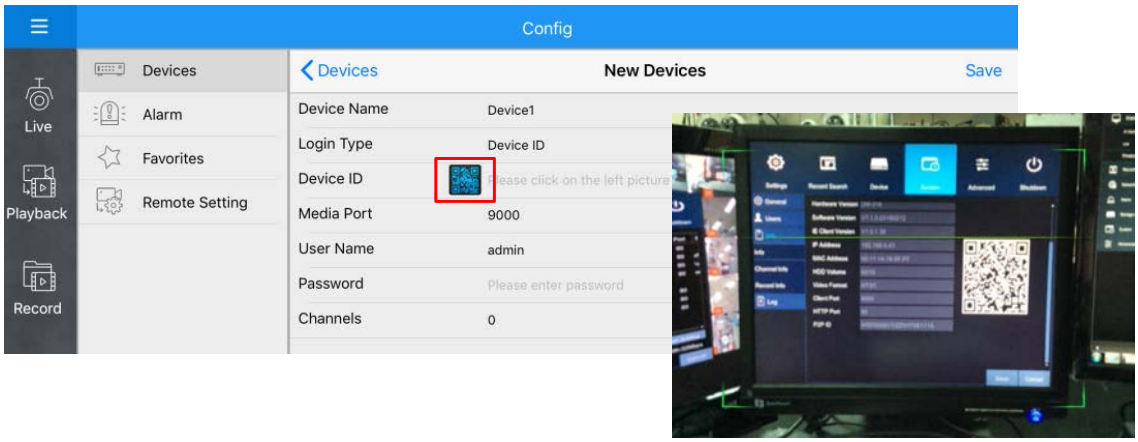
2. To add a DVR through P2P, tap **Config** > **Devices** > **Add** button > **Manual**.



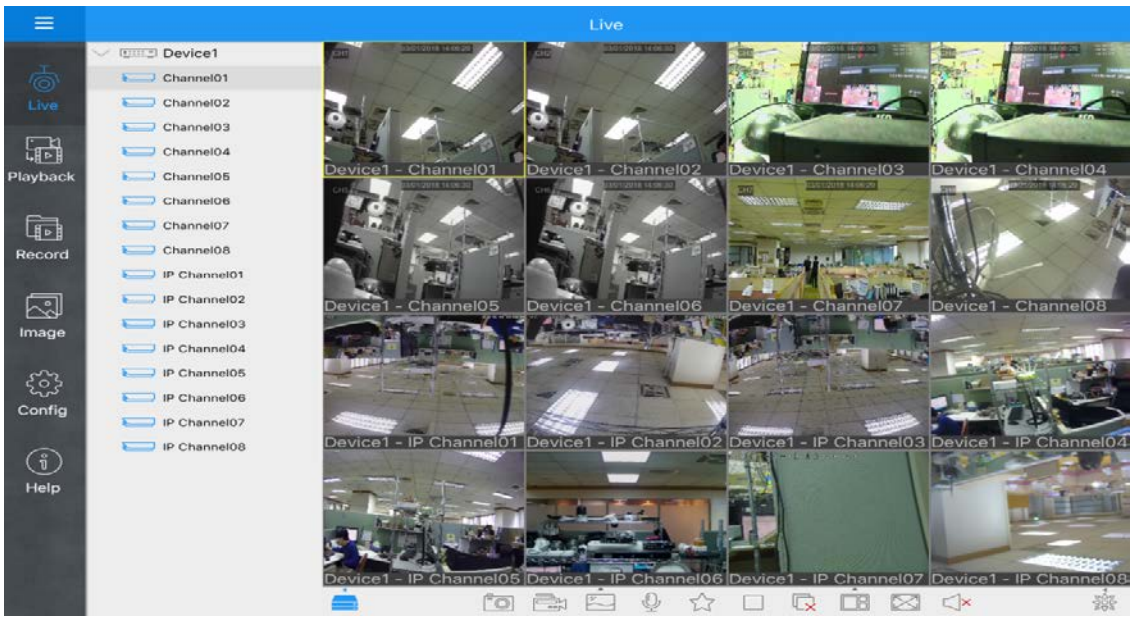

3. In the **Login Type** field, tap **Device ID**.



4. Tap the **QR code icon** to scan the QR code on the info page of the DVR.

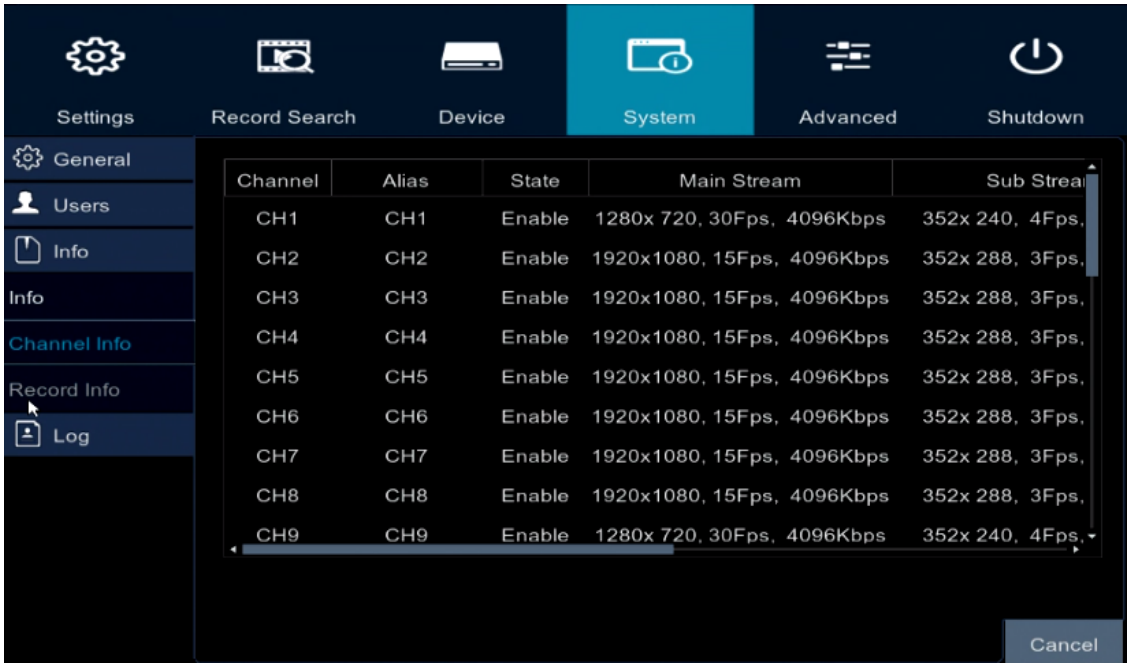



5. The scanned QR code will be displayed in the **Device ID** field. Input the **Password** of the DVR and then click **Save**, the VANGUARD App will add the DVR. Once the DVR has been added, you can start accessing the DVR.



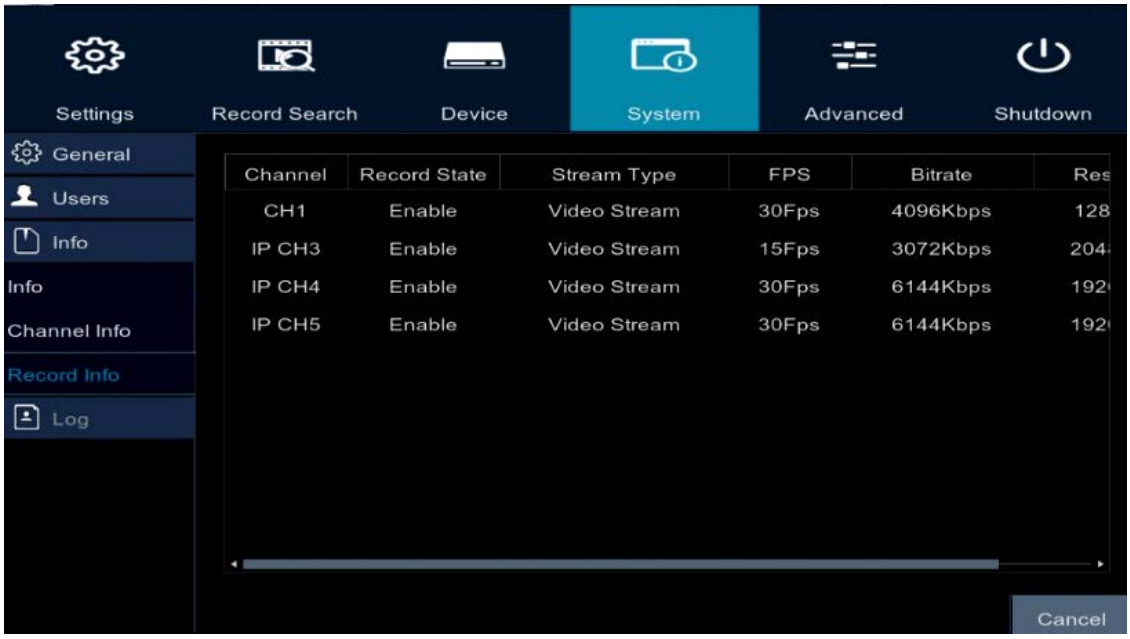
#### 4.1.4.3.2 Channel Info

You can see the channel info on this page.



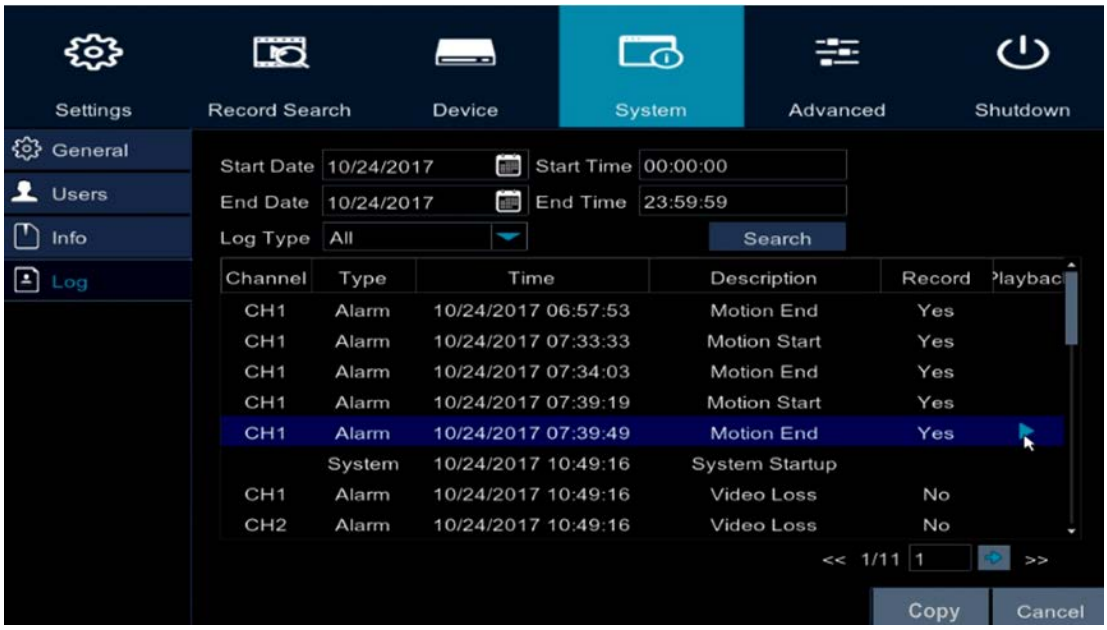

#### 4.1.4.3.3 Record Info

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 **Copy** button to save all the searched logs to the USB storage device (Please refer to *4.1.2.2.1 Backup*).



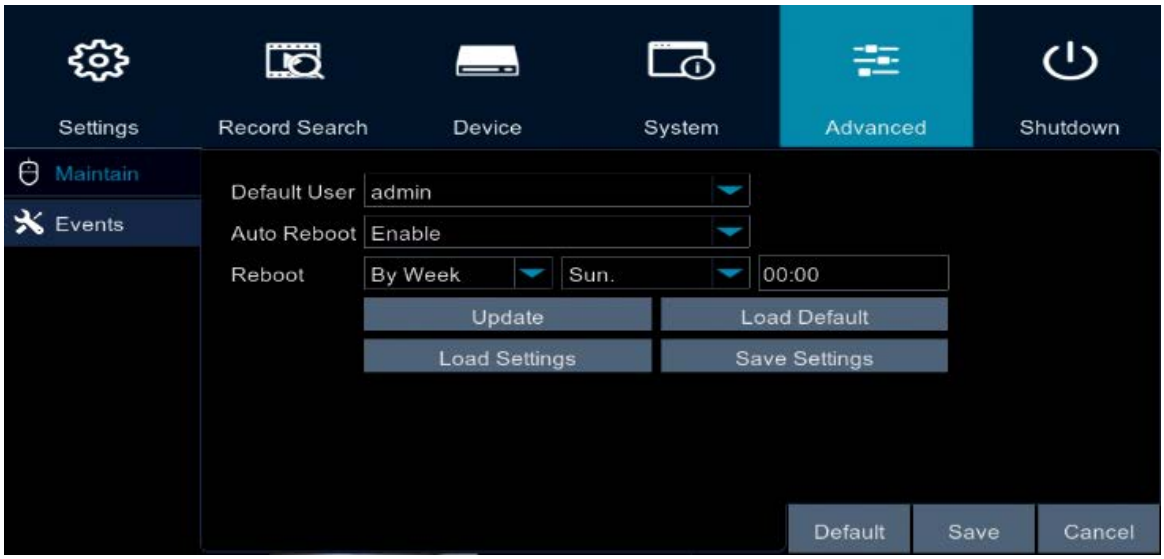

For event/alarm recording logs, you can double click on a recording and then click the **Play** button or click the **Playback** icon in the Playback column to enter the playback mode. About the playback control bar, please refer to *4.1.2.1.1 Playback Mode*. To exit the playback mode, right click the mouse.

### 4.1.5 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.

**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.

**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.

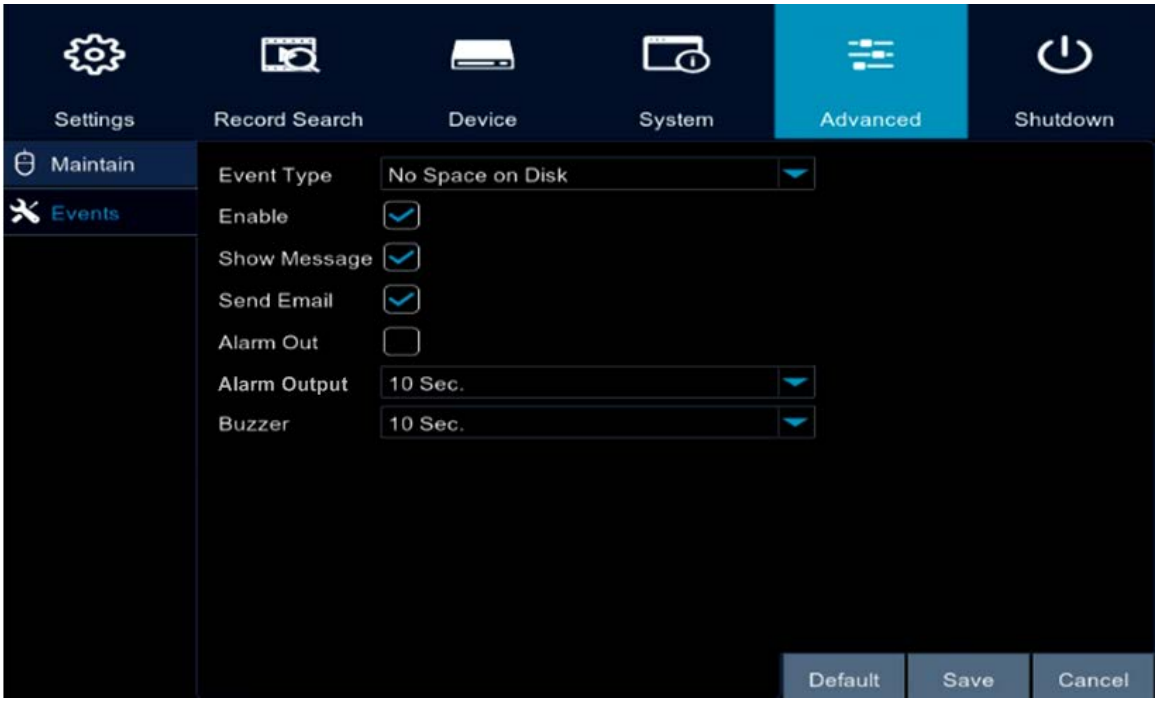
**Load Settings:** Click to import the file of system parameters from a USB storage device. Please restore the file in a USB storage device and insert the USB storage device to the system in advance. Select a file and then click the **OK** button.

**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.

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 DVR 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.

**Alarm Output:** Set up an alarm output time (duration) when an alarm 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 DVR

## 5.1 Accessing the DVR on the Network

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

1. Open a Web browser and in the address bar type the IP address of the DVR.

   **Local connection:**

   http:// (IP address from the DVR's Network Menu): IP port used

   e.g. http://192.168.1.163:2468

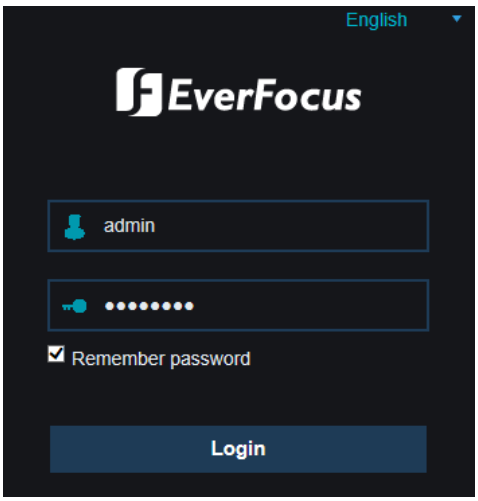
   **Internet connection:**

   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**




**Language:** Select a language from the upper-right drop-down list.

**Username:** Input the user name.

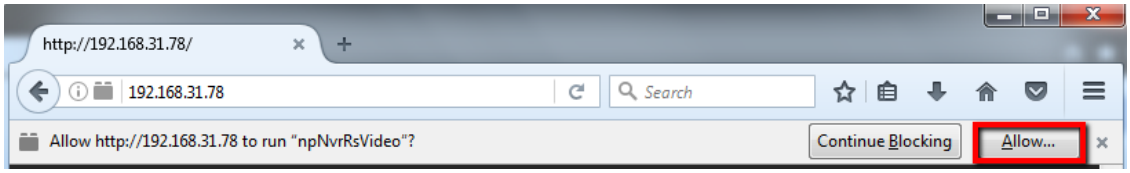
**Password:** Input the password.

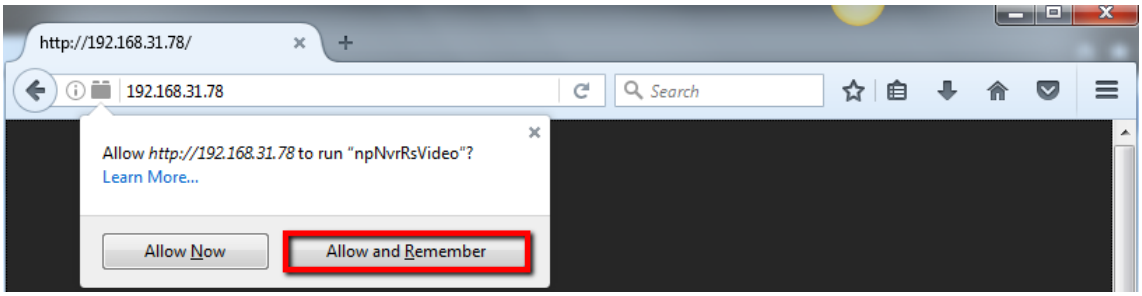
**Client Port:** Input the port number.

**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.

**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.

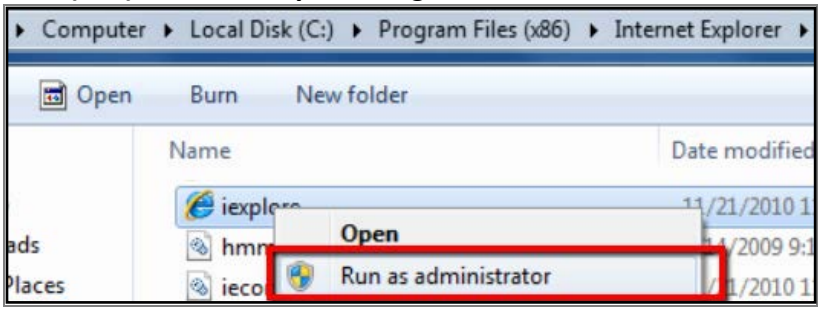



**If you encounter the following problem or still can't access the remote Web interface, please follow the instructions below:**

- 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

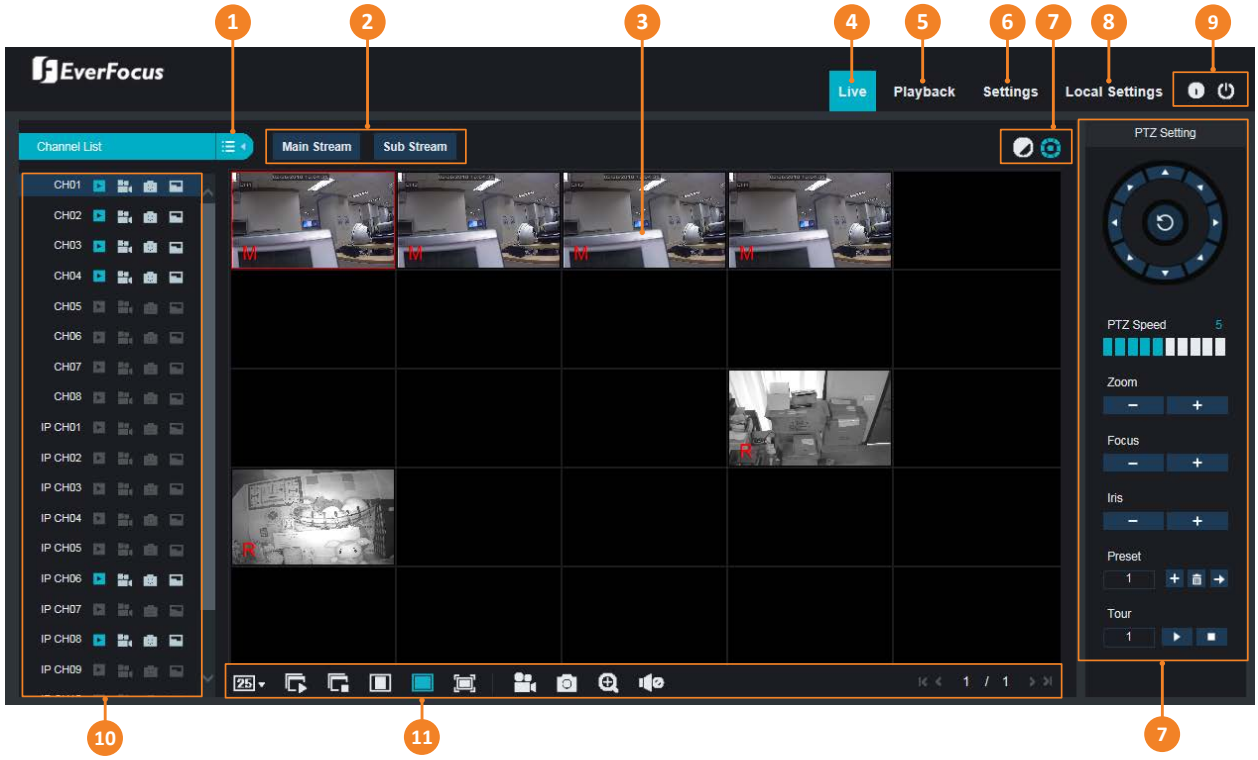
- If your PC or laptop is running with Windows, it's required to run the browser as administrator when first entering the remote web page of the device. Go to **C:\Program Files (x86)\Internet Explorer**, right-click the browser and then click **Run as administrator**.



- 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.

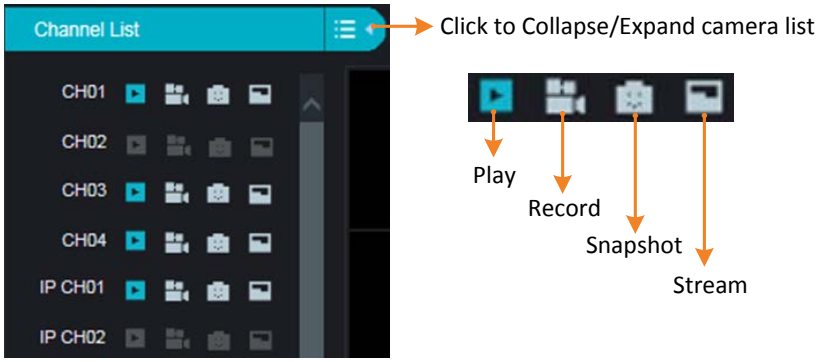



| No. | Name | Description |
|---|---|---|
| 1 | **Camera List Button** | Click to hide or display the Camera List. |
| 2 | **Main Stream/ Sub Stream** | Click to switch all the live streams to Main Stream or Sub Stream. If you want to set up some streams for Main or some streams for Sub, on the Camera List, you can click the **Stream** icon of the specific channels and then select Main Stream or Sub Stream. To configure Main Stream parameters, refer to *5.4.2.3 Main Stream*. To configure Sub Stream parameters, refer to *5.4.2.4 Sub Stream*. |
| 3 | **Live Channel** | You can perform the following functions on each channel:<br>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.<br>b. You can drag and drop a channel to the desired position on the layout. Click and hold on a channel, a Drag Channel icon will display. Drag and drop the channel to the desired position on the layout. |
| 4 | **Live** | Click to display the Live View window. |
| 5 | **Playback** | Click to enter the Playback page. Please refer to *5.3 Playback*. |
| 6 | **Settings** | Click to enter the Settings page. Please refer to *5.4 Settings*. |
| 7 | **Color / PTZ Setting** | Click to display or hide the Color / PTZ Setting Panel on the right-side of the Live View window. Please refer to *5.2.3 PTZ Setting Panel* and *5.2.4 Color Panel* for more details. |

| | | |
|---|---|---|
| **8** | **Local Settings** | Click to enter the Local Settings page to set up the storage path, including recording, download and snapshot. Please refer to *5.5 Local Settings*. |
| **9** | **User / Logout** | Click **User** to view the login user info. Click **Logout** to log out the system. |
| **10** | **Camera List** | Displays the Analog cameras and IP cameras. You can click on the icons on the right to perform some function. Please refer to *5.2.1 Camera List*. |
| **11** | **Live View Function Icons** | You can perform some functions for all the cameras on the Live View window. Please refer to *5.2.2 Live View Function Icons* for more details. |

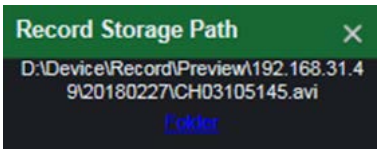
### 5.2.1 Camera List

The Camera list lists the analog and IP camera channels. You can use the camera list icons to perform some functions. If the channel is not connected or the channel has been disabled, the icons will be gray-out.

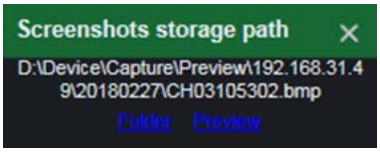



**Play:** Click to display / hide the camera stream on the Live window.

**Record:** Click to start manual record (.avi) of the channel, click again to stop, a message window appears on the bottom-left corner of the screen. Click **Folder** to open the folder to find the recording file. To change the manual record storage path, please refer to *5.5 Local Settings.*



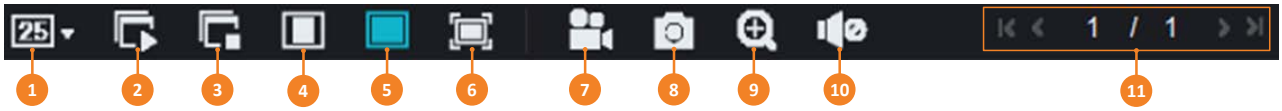

**Snapshot:** To enable the manual snapshot (.bmp) function, the **Manual Snapshot** function must be enabled (Settings > Snapshot > Snapshot > Manual Snapshot). Click to take a manual snapshot of the channel, a message window appears on the bottom-left corner of the screen. Click **Folder** to open the folder to find the snapshot image. Or click **Preview** to preview the snapshot image. To change the manual snapshot storage path, please refer to *5.5 Local Settings.*

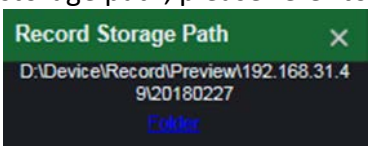
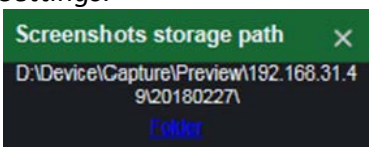



**Stream:** Click and then select Main Stream or Sub Stream for this channel. To configure Main Stream parameters, refer to *5.4.2.3 Main Stream*. To configure Sub Stream parameters, refer to *5.4.2.4 Sub Stream*.

### 5.2.2 Live View Function Icons

You can perform some functions for all the cameras on the Live View window.



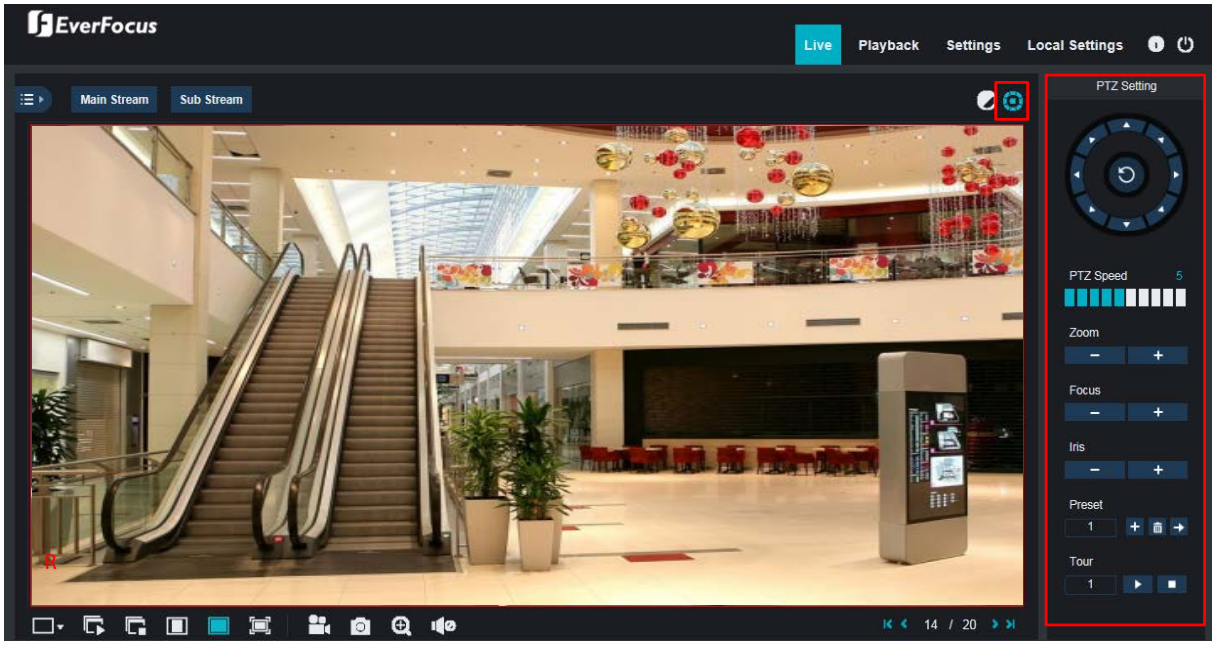

| No. | Name | Description |
|---|---|---|
| 1 | **Divide Screen** | Click to select a layout. |
| 2 | **Play** | Click to display all camera streams on the Live window. |
| 3 | **Stop** | Click to close all camera streams displayed on the Live window. |
| 4 | **Original Aspect Ratio** | Click to display all the live streams with original aspect ratio. |
| 5 | **Stretch** | Click to stretch all the live streams on the Live window. |
| 6 | **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. |
| 7 | **Video Clips** | Click to start manual recording (.avi) of all channels on the Live window. Click the button again to stop, a message window appears on the bottom-left corner of the screen. Click **Folder** to open the folder to find the recording files. To change the manual record storage path, please refer to *5.5 Local Settings.*<br>  |
| 8 | **Snapshot** | Click to take a snapshot (.bmp) of all channels on the Live window, a message window appears on the bottom-left corner of the screen. Click **Folder** to open the folder to find the snapshot images. To change the manual snapshot storage path, please refer to *5.5 Local Settings.*<br>  |
| 9 | **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:<br>a. On the Live View window, select a channel by clicking on the channel.<br>b. Click the **Digital Zoom** button.<br>c. Use your mouse to draw an area where you want to have a close-up view. The area will be zoom-in.<br>d. Right-click to exit the Digital Zoom mode. |

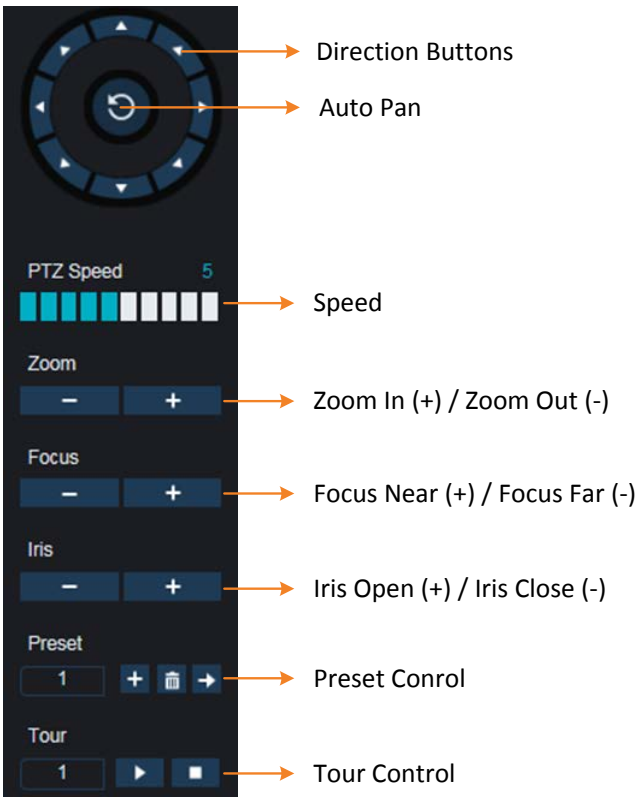
| | | |
|---|---|---|
| **10** | **Audio On** | Click to turn on or off the audio of the selected channel. To perform this function, on the Live window, select a channel by clicking on it, the selected channel will be highlighted with a red frame, click the **Audio** button to enable the audio function. You can adjust the bar to the left or right to adjust volume. |
| **11** | **Layout Page** | Click the left or right buttons to change among the layout pages. For example, for 16-channel model, if you select 4-Division, click the **Next Page** button will display the next 4-division layout with channel 5-8, channel 9-12, and so on.<br> |

### 5.2.3 PTZ Setting Panel

You can control the connected PTZ (analog and IP) camera using the PTZ Control panel. On the Live View window, click the **PTZ Setting** button to display the PTZ Setting Panel. You can click the **PTZ Setting** button again to close the PTZ Control Panel.

Select a PTZ camera by clicking on the PTZ channel, the selected channel will be highlighted with a red frame. You can double-click to display the channel in full screen for operation.




- Direction Buttons
- Auto Pan
- Speed
- Zoom In (+) / Zoom Out (-)
- Focus Near (+) / Focus Far (-)
- Iris Open (+) / Iris Close (-)
- Preset Conrol
- Tour 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:** To perform this function, the **Tour** function must be enabled (Settings > Storage/PTZ > PTZ > Tour). After setting up the preset points, you can perform the Tour function. Click to start the Tour function, click to stop the Tour function.

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.

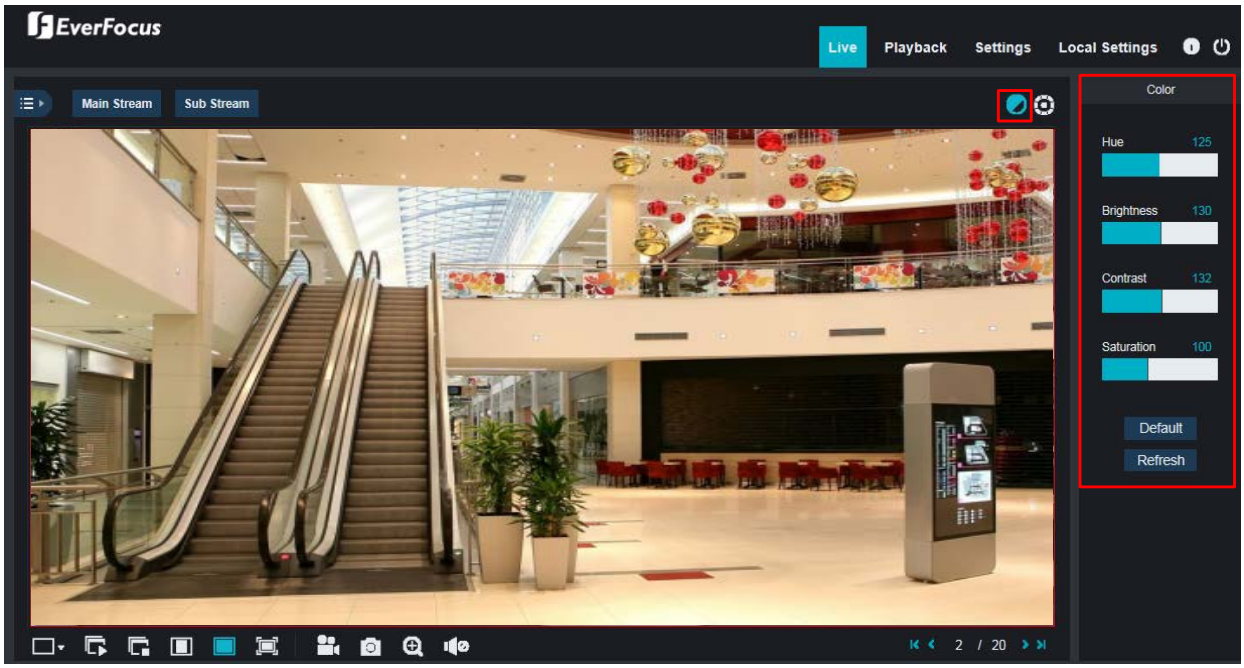
To perform the Go to Preset Point function:

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

### 5.2.4 Color Panel

You can adjust Hue, Brightness, Contrast and Saturation value for each channel on the Live View window using the Color Panel. Click the **Default** button to restore all the value to factory default.

On the Live View window, click the **Color** button to display the Color Panel. You can click the **Color** button again to close the Color Panel.

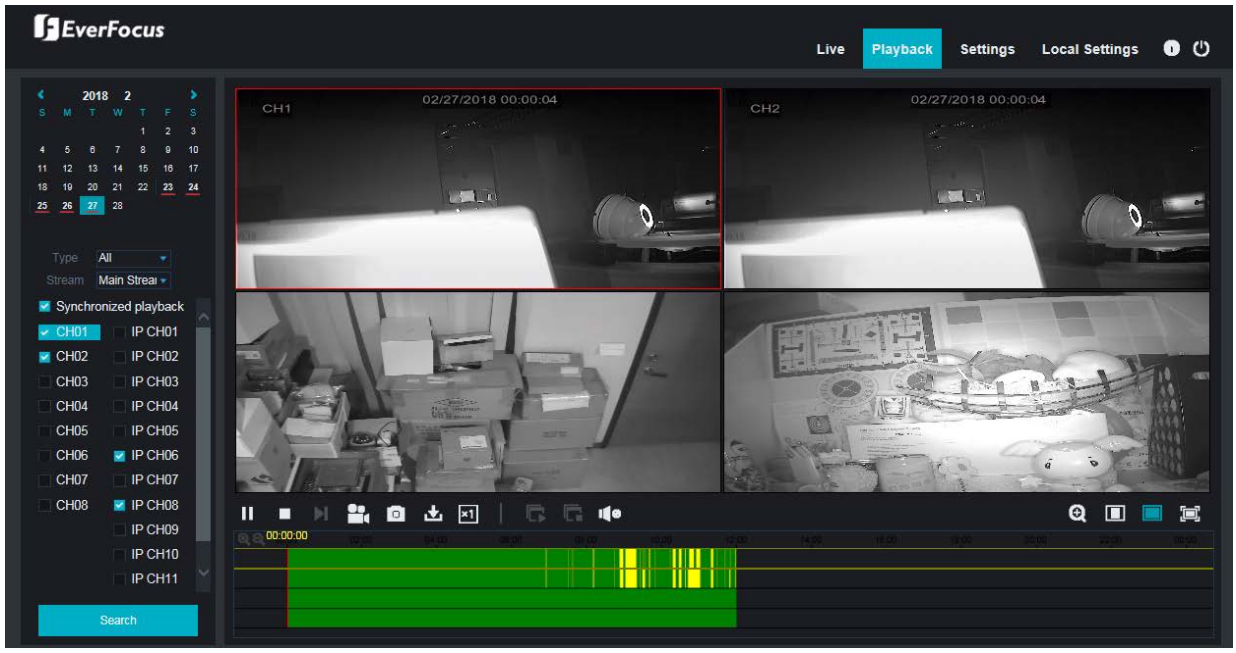


## 5.3 Playback

Click the **Playback** button on the above navigation bar. The Playback window displays.

For VANGUARD 16x8, up to 16 multi-channel playback is supported; for VANGIARD 8x4, up to 8 multi-channel playback is supported; for VANGIARD 4x2, up to 4 multi-channel playback is supported.

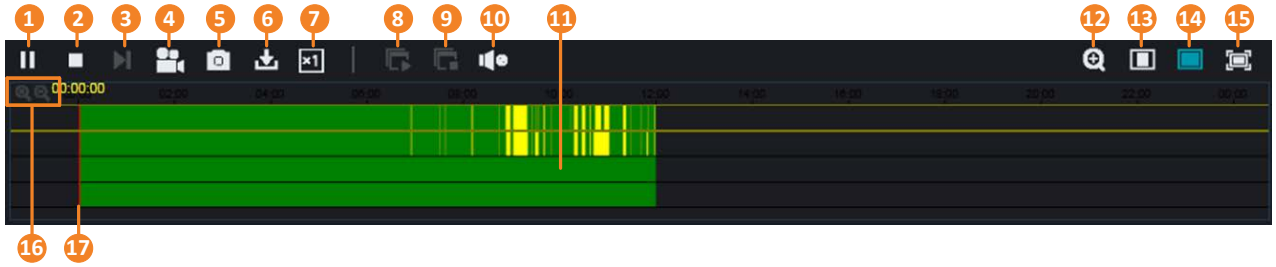
The layout divisions will be automatically assigned by the system according to the channels you select. For example, if 1 channel is selected, the system will automatically assign single-division; if 2~4 channels are selected, 4-division will be assigned; if 5~9 channels are selected, 9-division will be assigned; if 10~16 channels are selected, 16-division will be assigned.

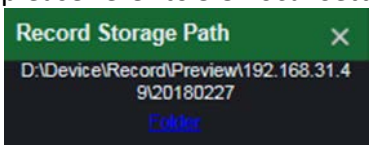
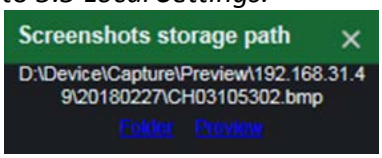



To start playing back:

1. Select the date on the calendar (the date with a red bar on the bottom 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 a stream type from the Stream drop-down list for playing back.
4. You can optionally enable the **Synchronized 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).
5. Select the desired channels you would like to play back.
6. 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.
7. Click the **Play** button to start playing back.

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



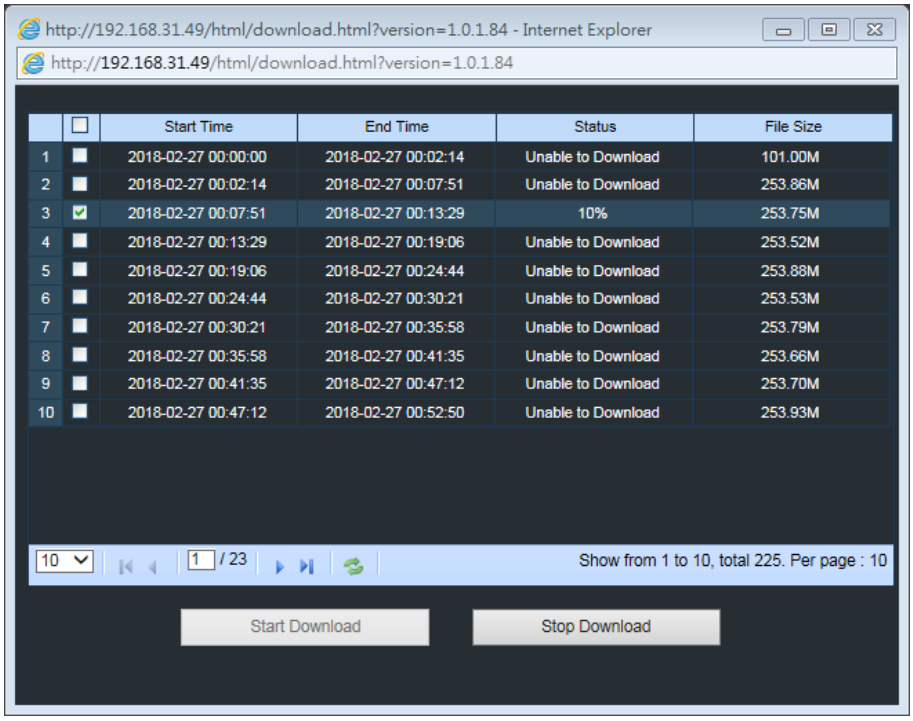

| No. | Name | Description |
|---|---|---|
| 1 | **Play/Pause** | Click to Play or Pause playing back. |
| 2 | **Stop** | Click to Stop playing back. |
| 3 | **Step Forward** | Click the button to play the recording frame by frame. Note this button is only functional under single channel playback. |
| 4 | **Video Clips** | Click to start manual recording (.avi) of a channel. Click the button again to stop. On the playback window, click on a channel and then click the **Video Clips** button, a message window appears on the bottom-left corner of the screen. Click **Folder** to open the folder to find the recording file. To change the manual record storage path, please refer to *5.5 Local Settings.*<br>  |
| 5 | **Snapshot** | Click to start manual snapshot (.bmp) of a channel. Click the button again to stop. On the playback window, click on a channel and then click the **Snapshot** button, a message window appears on the bottom-left corner of the screen. Click **Folder** to open the folder to find the snapshot image. Or click **Preview** to preview the snapshot image. To change the manual snapshot storage path, please refer to *5.5 Local Settings.*<br>  |
| 6 | **Download** | Click to download recordings for a single channel. To perform the Download function, please refer to *5.3.1 Download*. |
| 7 | **Playback Speed** | Click to select a playback speed. |
| 8 | **Play All Windows** | Click to start playing back all the windows. This function is useful under the Multi-Channel Playback Separately mode (disable **Synchronized playback**). |

| | | |
|---|---|---|
| **9** | **Stop Playback** | Click to stop playing back all the windows. This function is useful under the Multi-Channel Playback Separately mode (disable **Synchronized playback**). |
| **10** | **Audio On** | Click to switch on/off the speaker. You can also adjust the volume. |
| **11** | **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. |
| **12** | **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:<br>a. Select a window you want to perform the digital zoom by clicking on the window.<br>b. Click the Digital Zoom button to enable the function.<br>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.<br>d. Right-click to exit the Digital Zoom mode. |
| **13** | **Original Aspect Ratio** | Click to play back all the streams with original aspect ratio. |
| **14** | **Stretch** | Click to stretch all the streams on the Playback window. |
| **15** | **Full Screen** | Click to display the Playback window in full screen mode. To exit full screen mode, press the **ESC** button on the keyboard. |
| **16** | **Time Span Buttons** | You can adjust the time span on the Time Bar by clicking the buttons. |
| **17** | **Time Indicator** | Indicates the playback time. |

### 5.3.1 Download

You can download the searched recordings for a single channel on the Playback window.

1. Select a window you want to download the recordings by clicking on the window. The selected channel will be highlighted with a red 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, please refer to *5.5 Local Settings.*

## 5.4 Settings

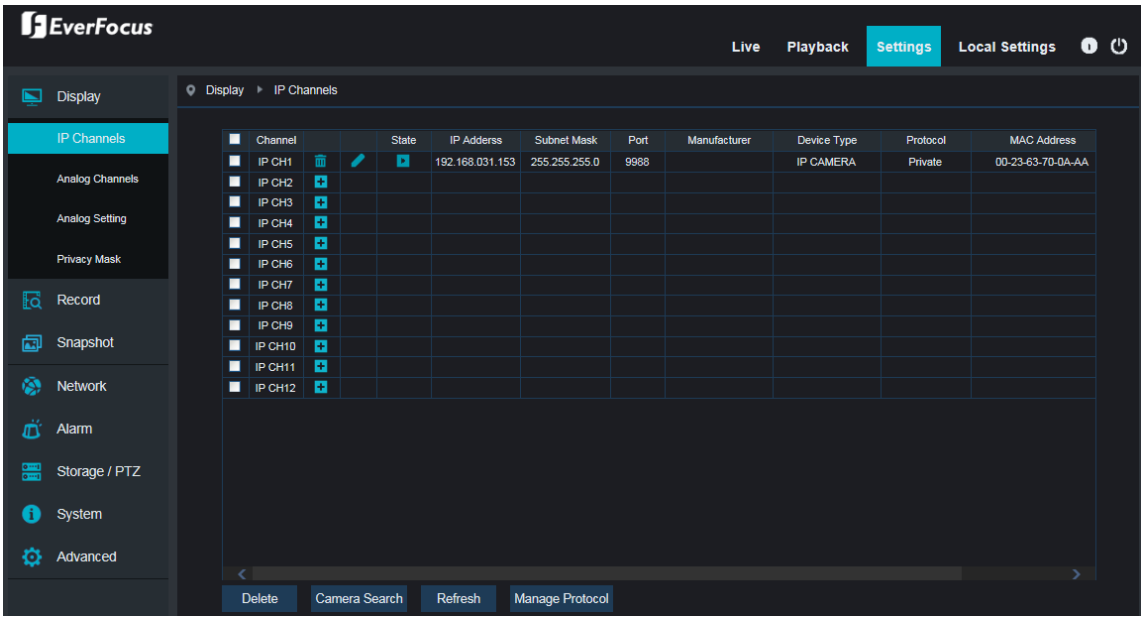
You can configure the DVR settings here.

### 5.4.1 Display

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

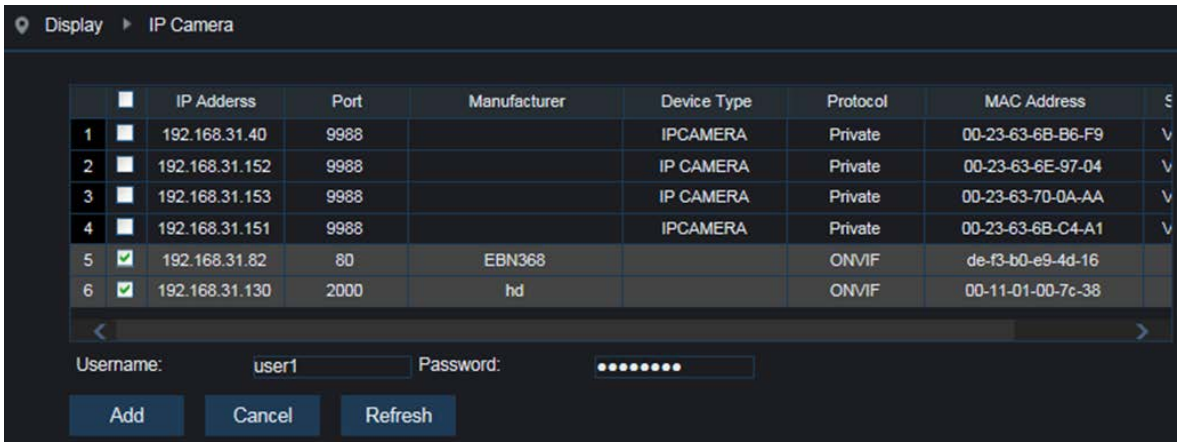
#### 5.4.1.1 IP Channels

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



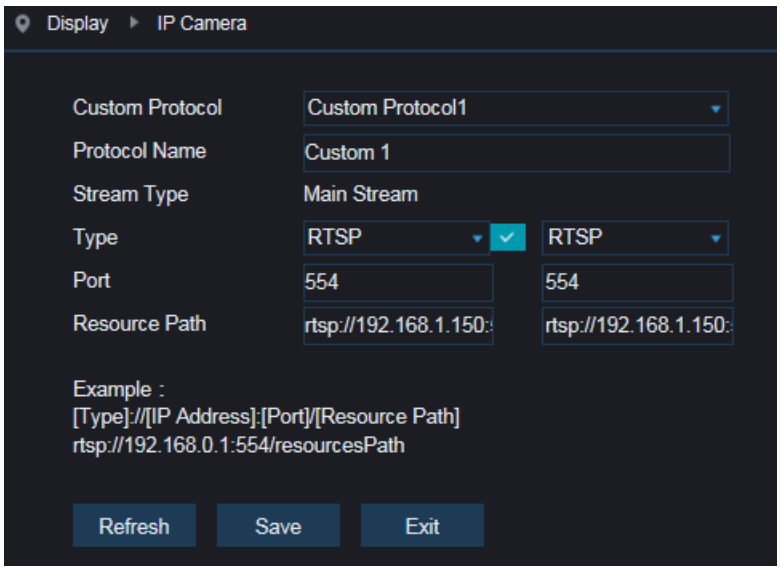

**Delete:** Select the desired IP cameras from the list below by checking the checkboxes and then click the **Delete** button to delete the selected IP cameras.

**Camera Search:** Click to automatically search for the IP cameras on the same LAN. Select the IP cameras you want to add to the DVR, input the Username and Password and then click the **Add** button. The selected IP cameras should be added to the DVR. 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 Path: Input the RTSP URL syntax in the box. For example:

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

  rtsp://192.168.31.33:554/ip01/0

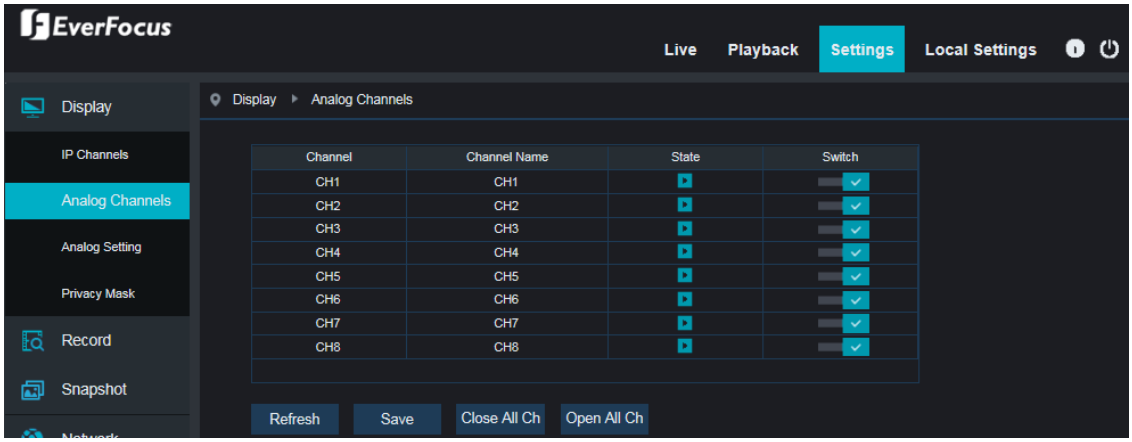
  * IP Address: The IP address of the DVR

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

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

### 5.4.1.2 Analog Channels

You can enable / disable the connected analog cameras using this page.




**Switch:** Switch to the right to enable the channel or switch to the left to disable the channel.

**Refresh:** Click to refresh the page.

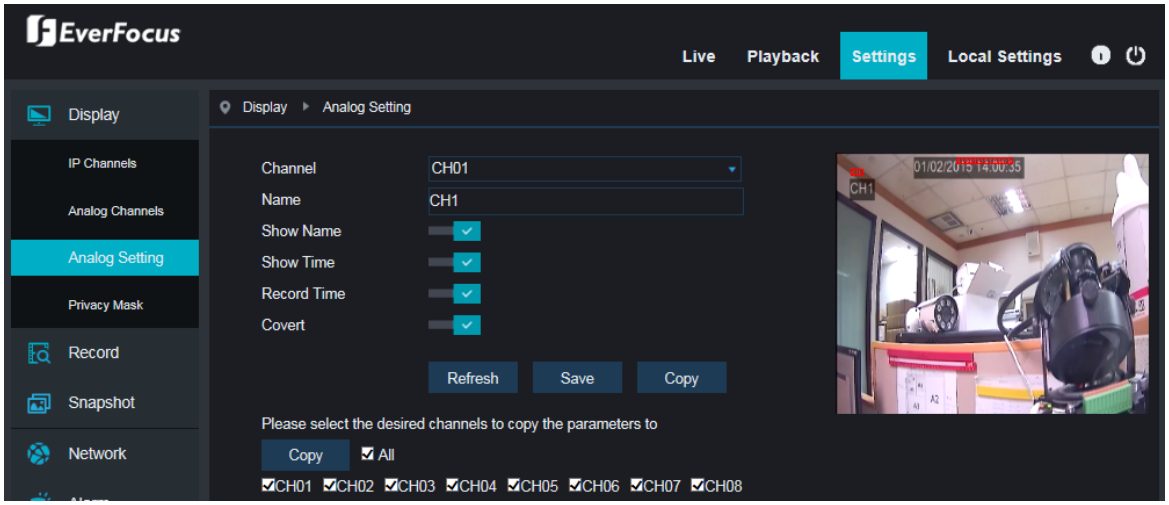
**Save:** After switching the buttons on the table, click **Save** to save the settings.

**Close All Ch:** Click to switch-off all cameras.

**Open All Ch:** Click to switch-on all cameras.

### 5.4.1.3 Analog Setting

This feature is only available for Analog cameras. You can configure camera OSD or image settings on this page.




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

**Name:** Input a name for the camera. Note that you can also configure the name in Chinese.

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

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

**Record Time:** Switch right to **Enable** if you want to record time on recording video streams.

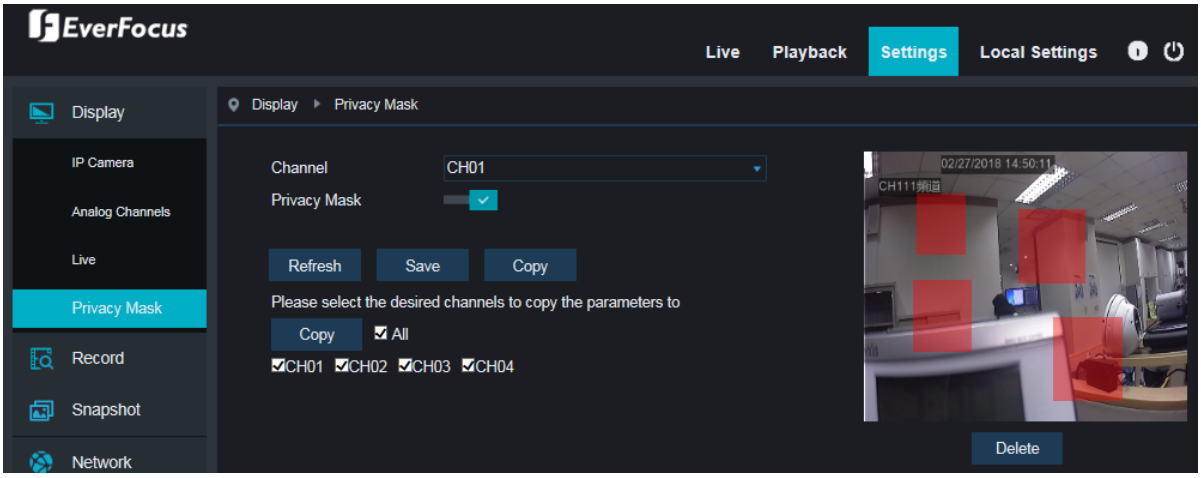
**Covert:** Switch right to covert the camera stream on the live view.

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

Click **Copy** to apply the same configurations from the current channel to the desired channels. Select the desired channel(s) and then click the **Copy** button, the selected channel(s) will be applied with the same configurations.

#### 5.4.1.4 Privacy Mask

This feature is only available for Analog Cameras. 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 Mask areas can be configured.




To configure privacy masks:

1. Select a channel from the Channel drop-down list.
2. Switch the Privacy Mast to the right to enable the function.
3. Draw a rectangle area on the image. Up to 4 masks are available.
4. Click **Save** to save the settings.

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

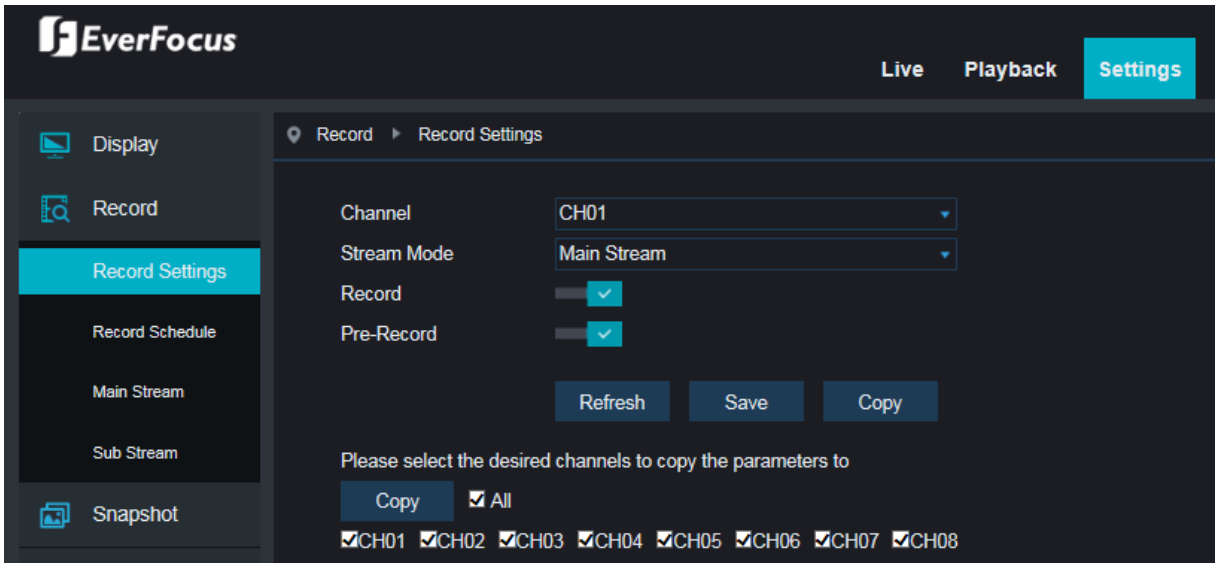
Click **Copy** to apply the same configurations from the current channel to the desired channels. Select the desired channel(s) and then click the **Copy** button, the selected channel(s) will be applied with the same configurations.

## 5.4.2 Record

You can configure the record settings on this page.

### 5.4.2.1 Record Settings

You can configure the basic record settings on this page.




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

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

**Record:** Switch to the right to **Enable** the record function.

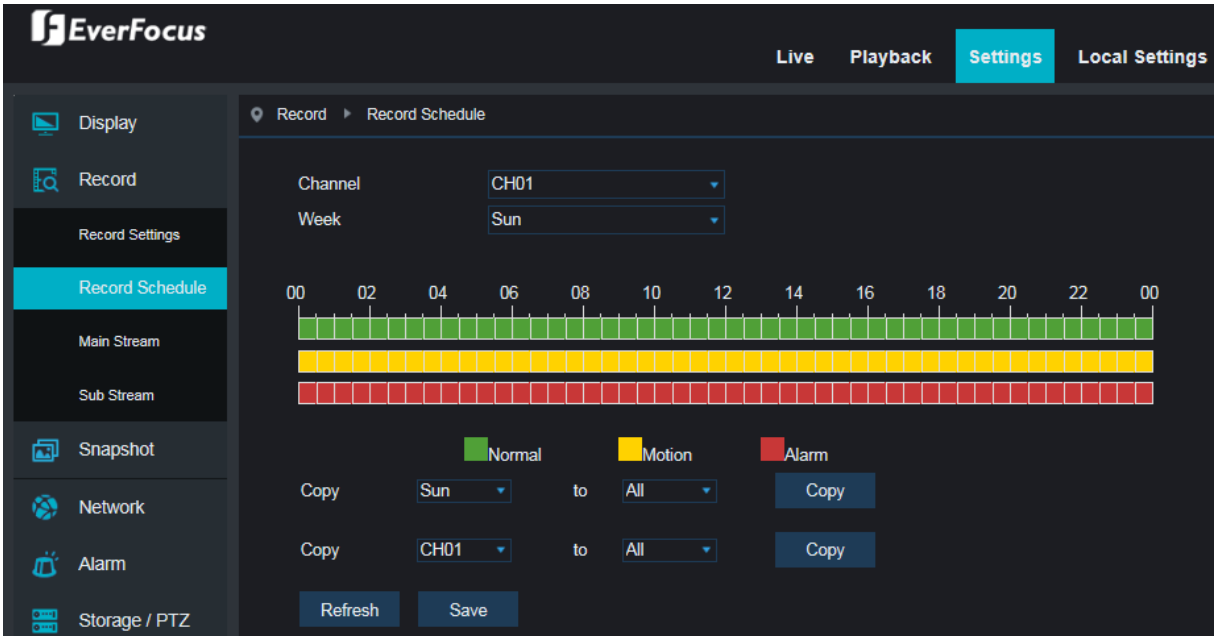
**Pre-Record:** Switch to the right to **Enable** pre-recording for motion detection or I/O trigger record.

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

Click **Copy** to apply the same configurations from the current channel to the desired channels. Select the desired channel(s) and then click the **Copy** button, the selected channel(s) will be applied with the same configurations.

### 5.4.2.2 Record 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.

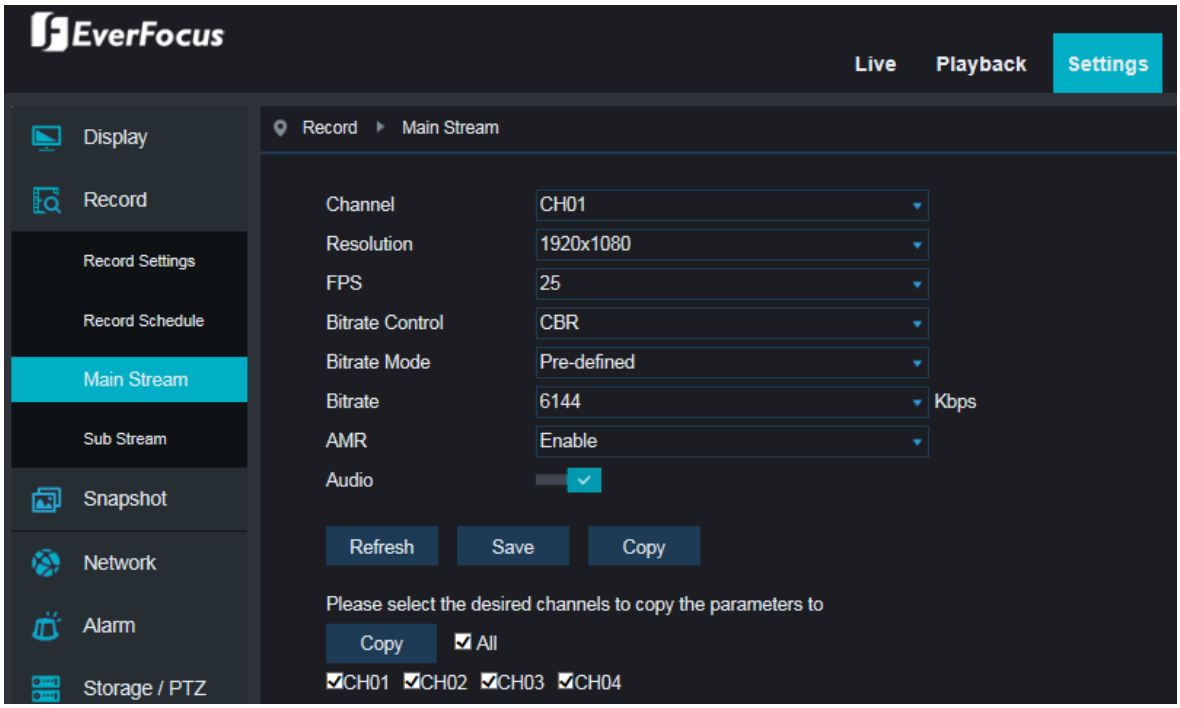
**Copy (channel):** You can apply the same configurations from one channel to the desired channels. Select a channel from the drop-down list first and then select a desired channel (or All) from the **To** drop-down list, click the **Copy** button, the selected channel(s) will be applied with the same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

**For Analog Cameras:**




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

**Resolution:** Select a recording resolution based on your TV or monitor capability.

**FPS:** Select a record FPS (frames per second) for the selected channel. The higher the value, the better the image quality. Note if experiencing system lag or stutter, please lower down the FPS.

**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** to set up bitrate manually; or **Predefined** to auto-select bitrate.

**Bitrate:** Set up a bitrate for the selected channel.

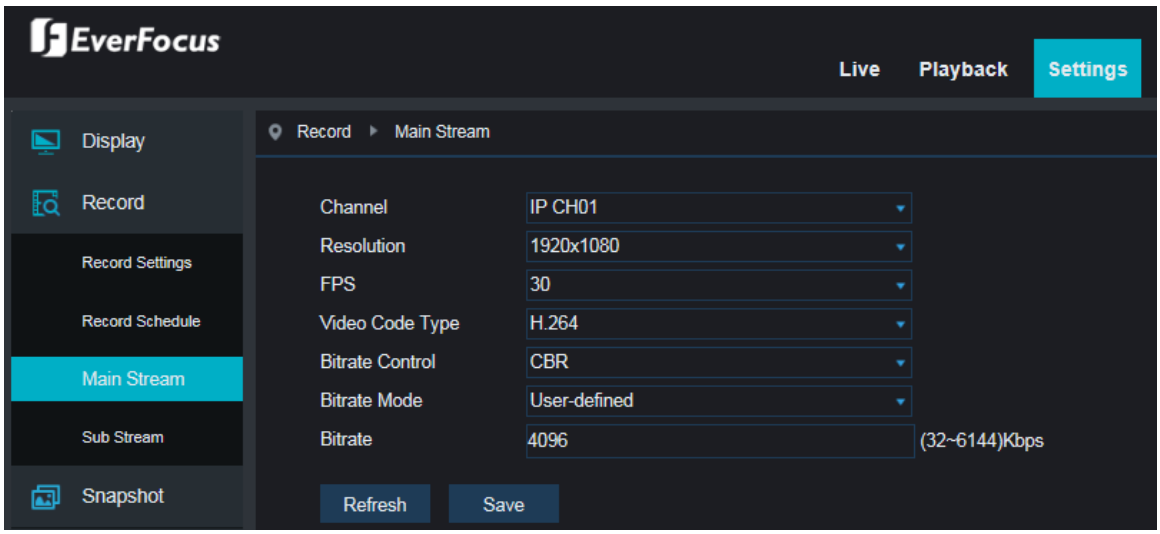
**AMR:** Check the box to record the **Motion** and **I/O** alarm recordings with the max FPS and Bitrate.

**Audio:** Check the box to enable the audio function.

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

Click **Copy** to apply the same configurations from the current channel to the desired channels. Select the desired channel(s) and then click the **Copy** button, the selected channel(s) will be applied with the same configurations.

**For IP Cameras:**




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

**Resolution:** Select a recording resolution based on your TV or monitor capability.

**FPS:** Select a record FPS (frames per second) for the selected channel. The higher the value, the better the image quality. Note if experiencing system lag or stutter, please lower down the FPS.

**Video Code Type:** Select a video codec from H.264 or H.265.

**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** to set up bitrate manually; or **Predefined** to auto-select bitrate.

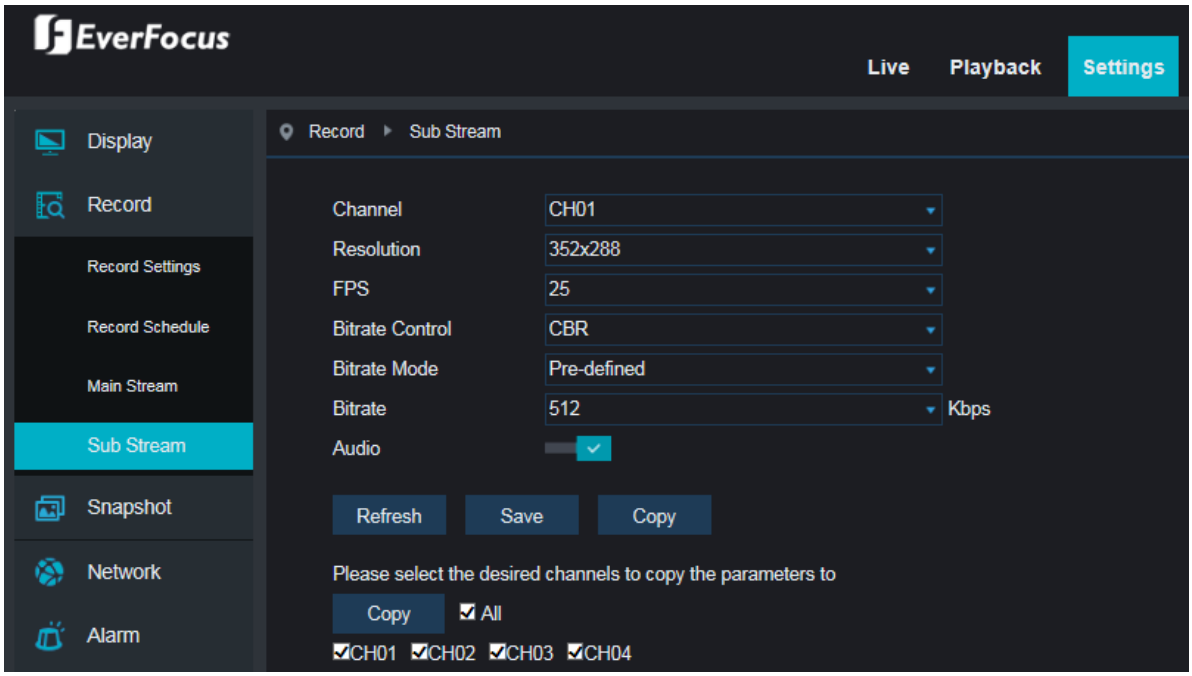
**Bitrate:** Set up a bitrate for the selected channel.

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.

**For Analog Cameras:**




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

**Resolution:** Select a recording resolution based on your TV or monitor capability.

**FPS:** Select a record FPS (frames per second) for the selected channel. The higher the value, the better the image quality. Note if experiencing system lag or stutter, please lower down the FPS.

**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** to set up bitrate manually; or **Predefined** to auto-select bitrate.

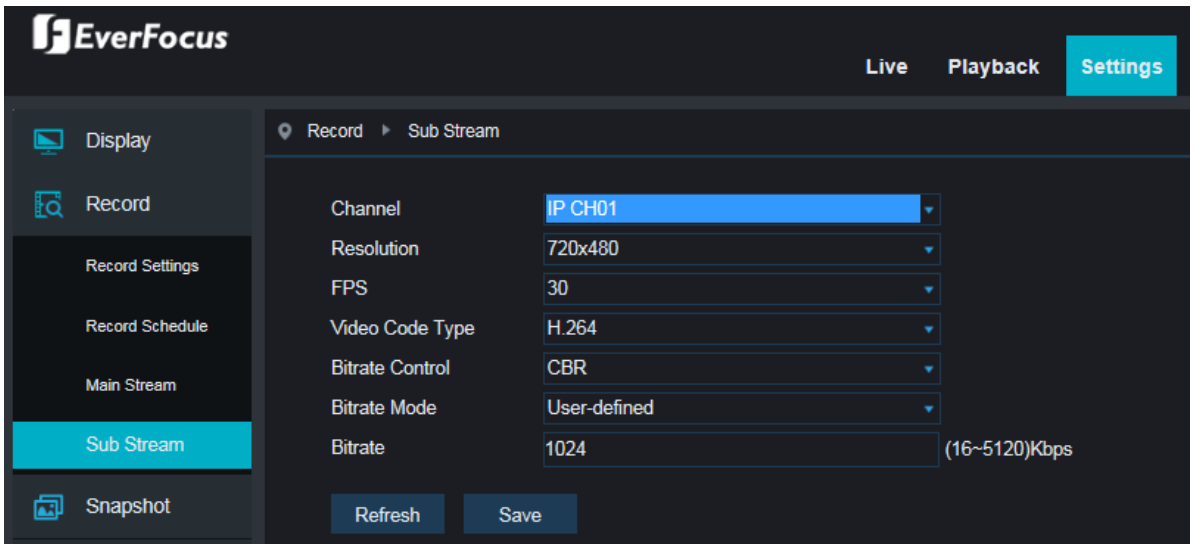
**Bitrate:** Set up a bitrate for the selected channel.

**Audio:** Check the box to enable the audio function.

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

Click **Copy** to apply the same configurations from the current channel to the desired channels. Select the desired channel(s) and then click the **Copy** button, the selected channel(s) will be applied with the same configurations.

**For IP Cameras:**




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

**Resolution:** Select a recording resolution based on your TV or monitor capability.

**FPS:** Select a record FPS (frames per second) for the selected channel. The higher the value, the better the image quality. Note if experiencing system lag or stutter, please lower down the FPS.

**Video Code Type:** Select a video codec from H.264 or H.265.

**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** to set up bitrate manually; or **Predefined** to auto-select bitrate.

**Bitrate:** Set up a bitrate for the selected channel.

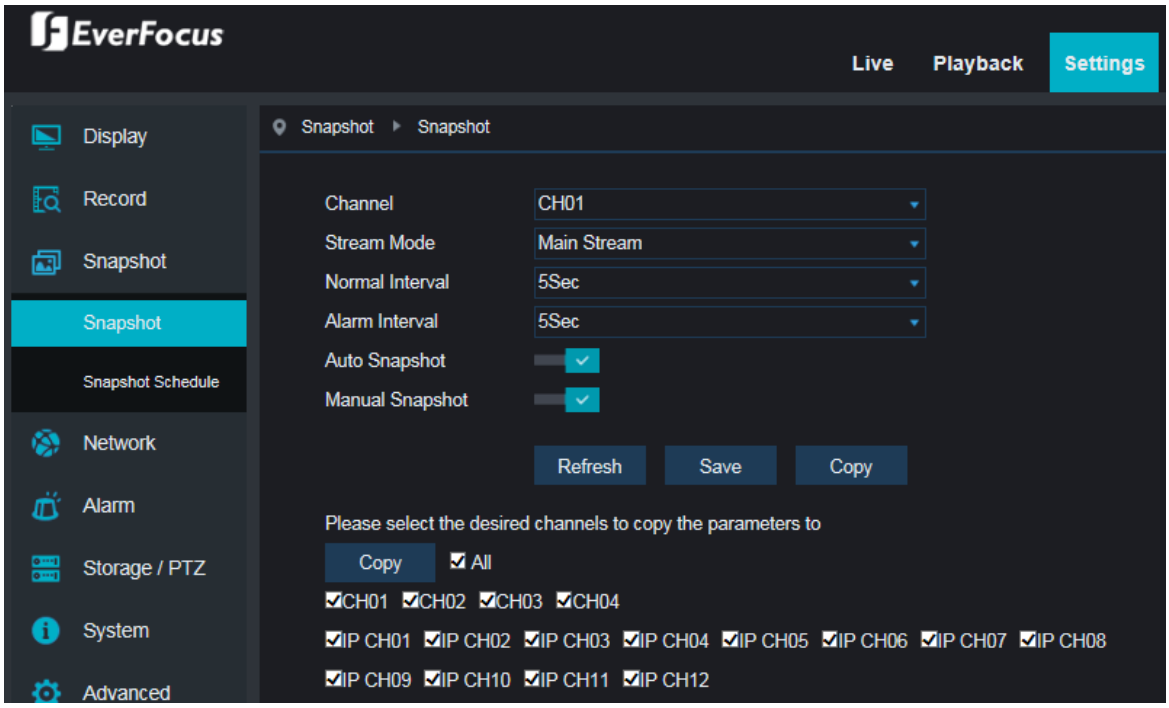
Click **Save** to save the settings or **Refresh** to refresh the page.

### 5.4.3 Snapshot

You can configure the network settings on this page.

#### 5.4.3.1 Snapshot

You can enable the Auto Snapshot or Manual Snapshot functions on this page.




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

**Stream Mode:** Select Main Stream or Sub Stream.

**Normal Interval:** Configure an interval to automatically take a snapshot.

**Alarm Interval:** Configure an interval to automatically take a snapshot when events occur.

**Auto Snapshot:** Switch to the right to **Enable** the Auto Snapshot function on the local side. Note for this function to work, you have to configure Snapshot Schedule in advance (refer to *5.4.3.2 Snapshot Schedule*).

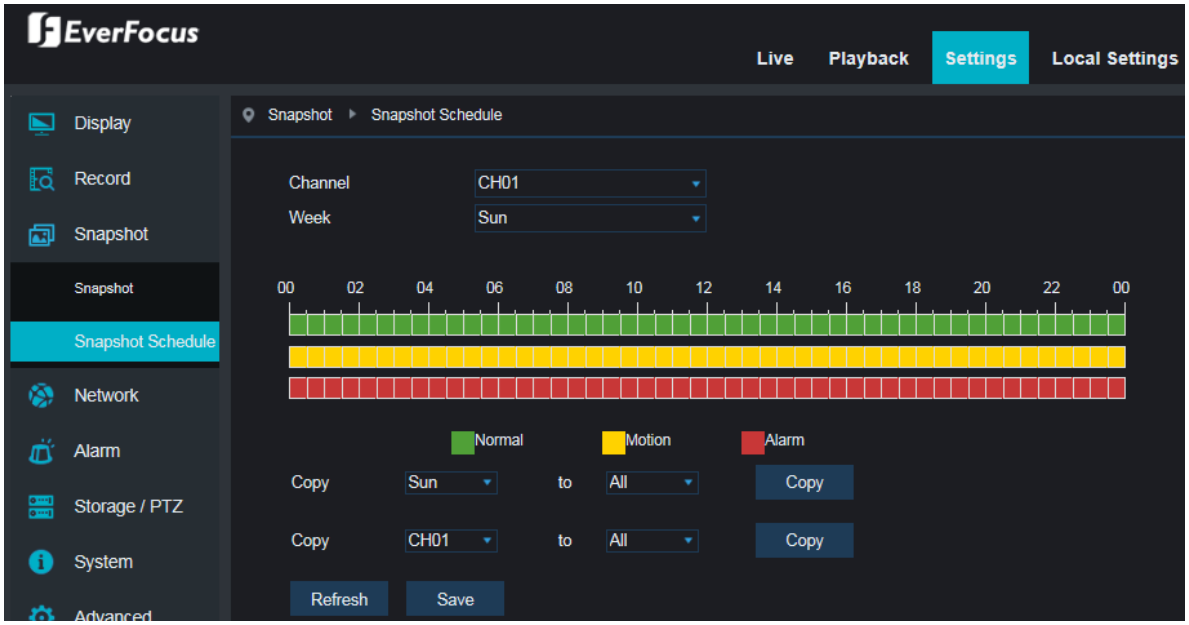
**Manual Snapshot:** Switch to the right to **Enable** the function. To perform the Manual Snapshot function on the local side, click the **Manual Snapshot** icon on the Live Channel Tool Bar (refer to *3.5 Live Channel Tool Bar*).

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

Click **Copy** to apply the same configurations from the current channel to the desired channels. Select the desired channel(s) and then click the **Copy** button, the selected channel(s) will be applied with the same configurations.

### 5.4.3.2 Snapshot Schedule

You can configure the snapshot schedule on this page.




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

**Week:** Select a day from the drop-down list.

**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 snapshot function. To deselect the blocks, click and drag on the green blocks to select again.

**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 snapshot function. To deselect the blocks, click and drag on the yellow blocks to select again.

**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 snapshot function. To deselect the blocks, click and drag on the red blocks to select again.

**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.

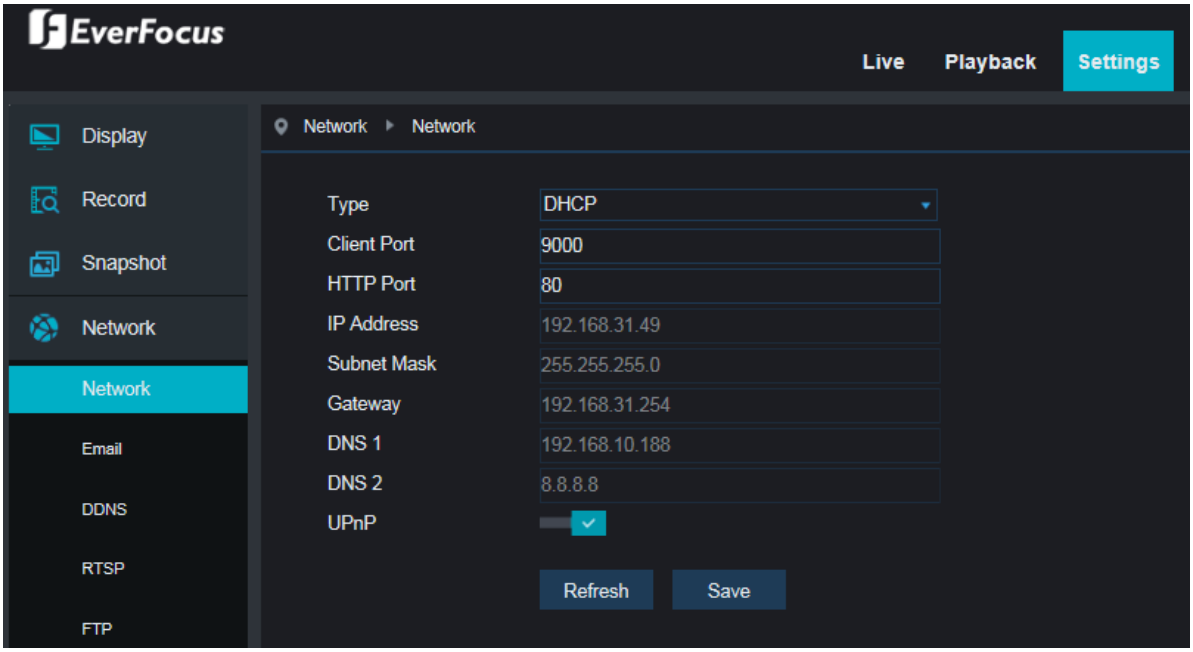
Click **Save** to save the settings or **Refresh** to refresh the page.

### 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 DVR 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 DVR'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 DVR. 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.

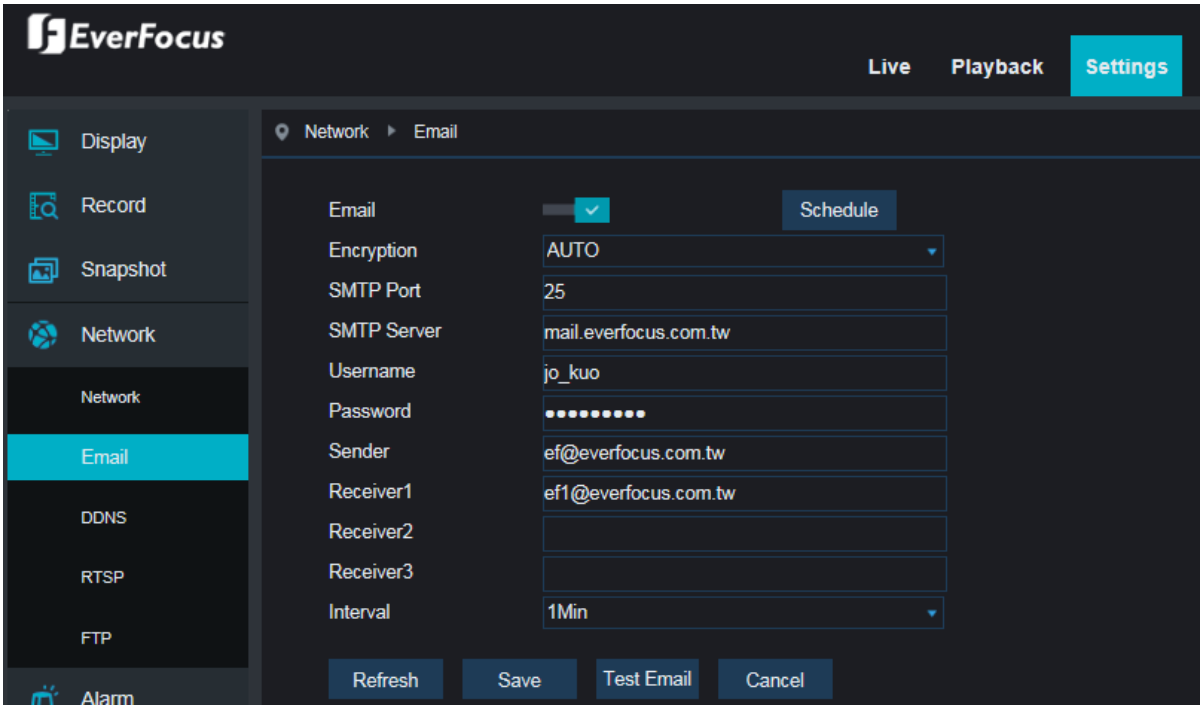
**HTTP Port:** Keep 80 port. Change only when necessary.

**UPnP:** Switch to the right if you want to enable the UPnP function.

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:** Switch to the right if you want to enable the Email function.

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

**Encryption:** Select an encryption item or select **Disable** to disable the 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.

**Username:** Input the user name of the sender.

**Password:** Input the password of the sender.

**Sender:** Input the Email address of the sender (the DVR).

**Receiver1-3:** Input the Email address of the receiver. You can input 3 receiver email addresses.

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

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

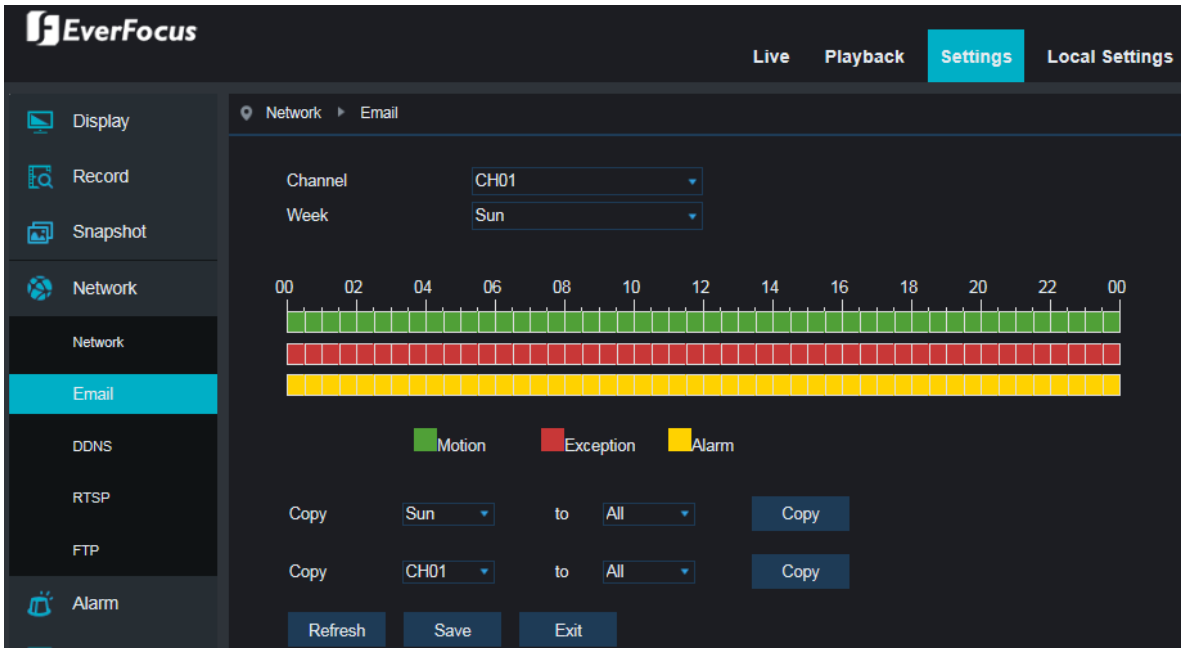
Click **Test Email** to test whether the Email function is working normally.

Click **Cancel** to cancel the changes.

#### 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.

To enter the Email Schedule page, on the Email setup page, click the **Schedule** button.




**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.

**Exception (HDD full, HDD error or Video Loss):** 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.

**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.

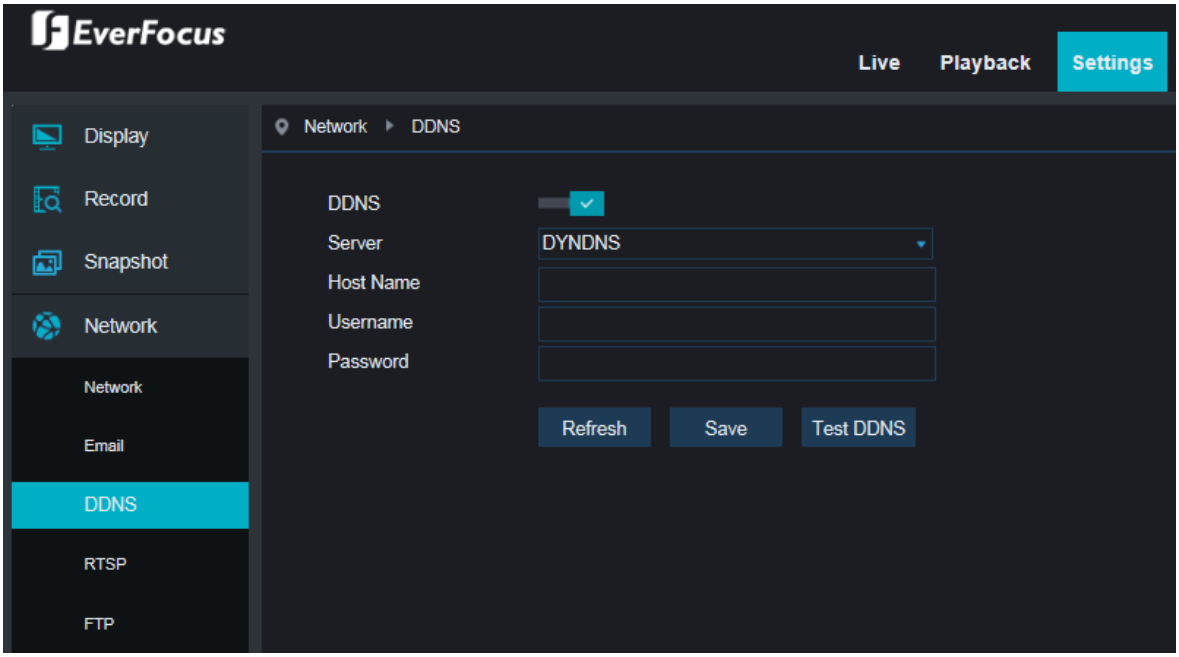
Click **Save** to save the settings or **Refresh** to refresh the page. Click **Exit** to return to the Email setup page.

### 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 DVR.

DDNS assigns a domain name (URL) to the DVR, 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 DVR 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. We highly recommend that you use xxxx.everfocusddns.net for the simplicity of setting up your DVR. Please refer to **EverFocus DDNS** on the next page.




**DDNS:** Switch to the right 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.

**Host Name:** Input the domain name obtained from the DDNS service provider.

**Username:** Input the user name of the DDNS account.

**Password:** Input the password of the DDNS account.

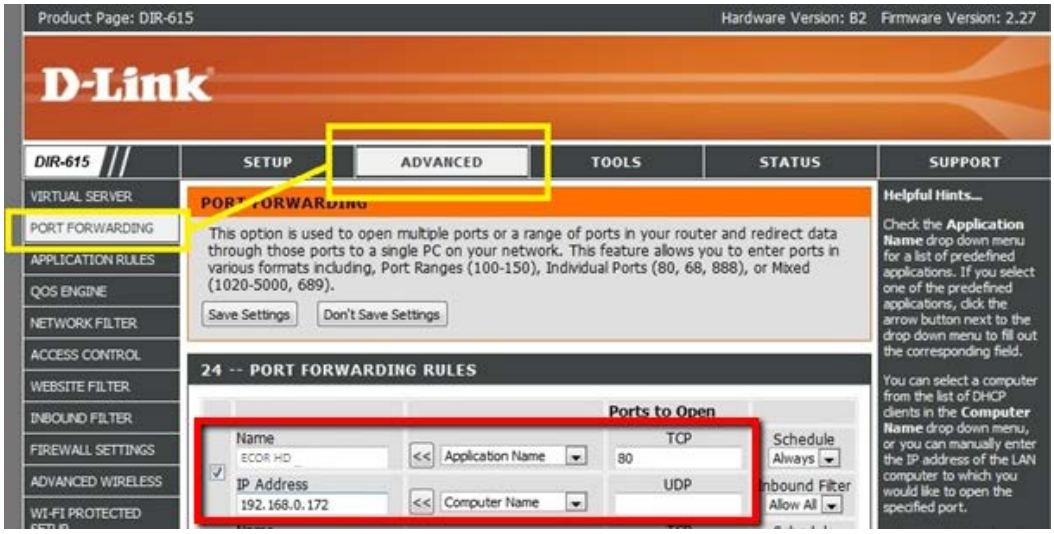
**Test DDNS:** Click the button to test whether the DDNS function is working normally.

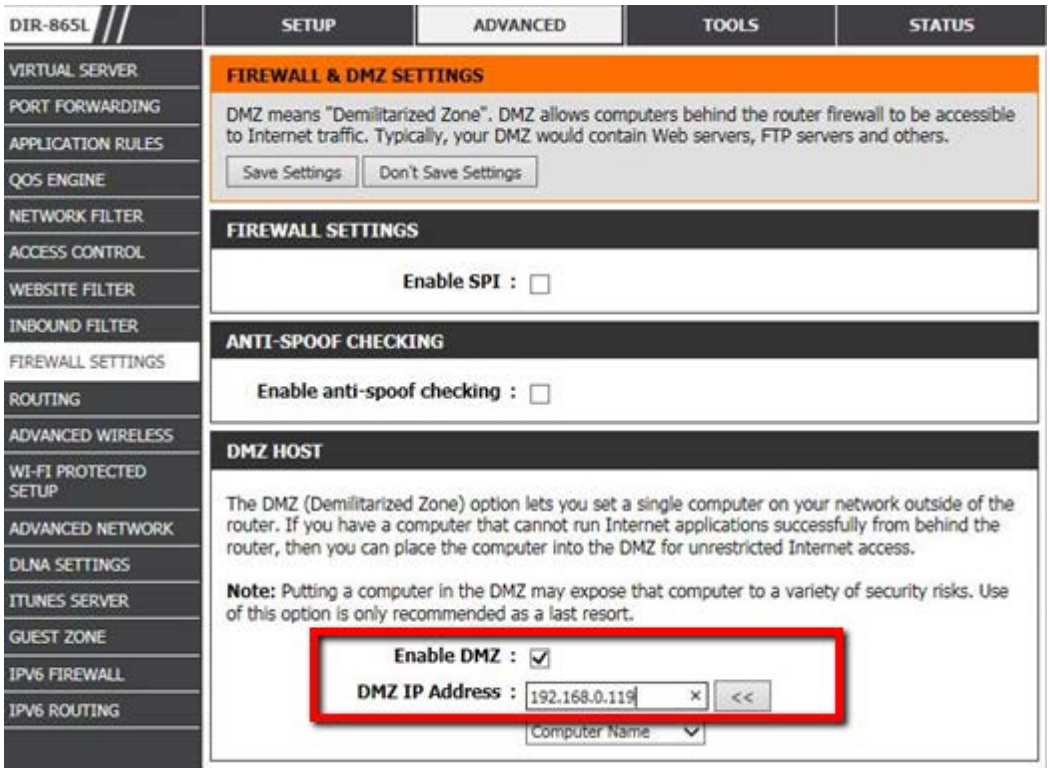
Click **Save** to save the settings or **Refresh** to refresh the page.

**EverFocus DDNS**

Please follow the steps below to set up EverFocus DDNS.

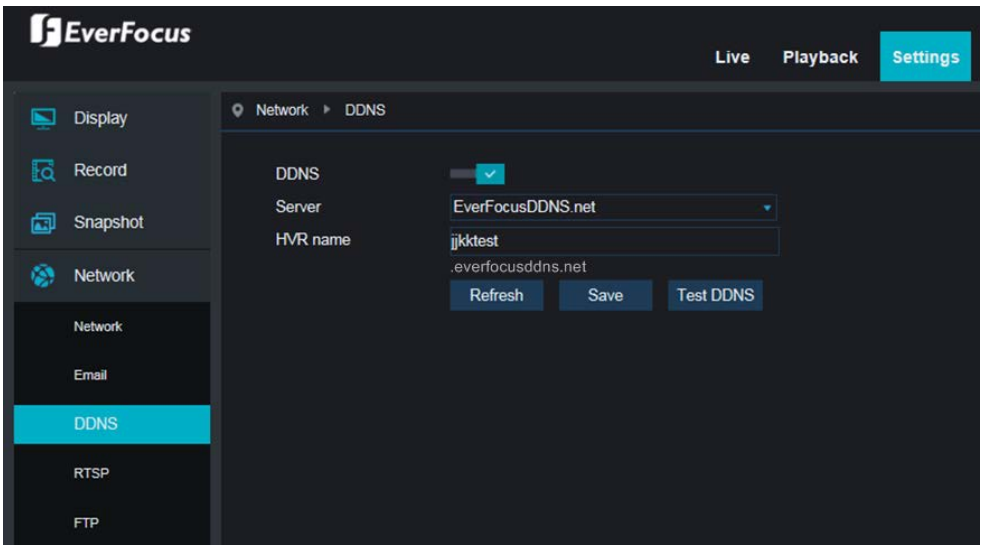
1. In order to allow remote access to the DVR from outside of the local network, enable either the **Port Forwarding** or **DMZ** function of your router. Please refer to the manual of your router for more details.



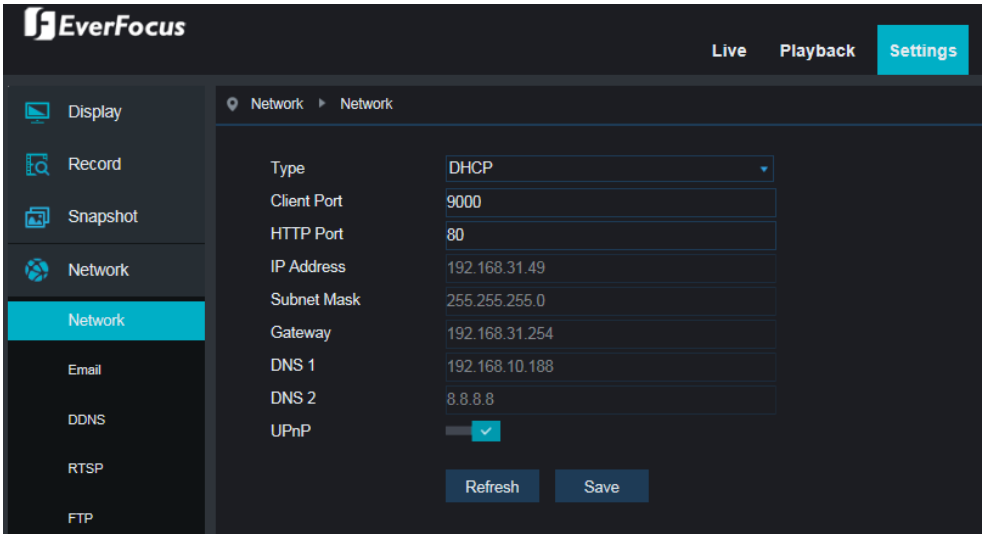

2. Go to http://www.everfocusddns.net to check an available host name for the DVR. Note that the host name of the DVR cannot include a space, underline or any special characters particularly _~ ! @ # $ % ^ & * ( ) + < > " ; : . ,

3. Register the host name on the DDNS setup page for the DVR.




a. Select **Enable** from the DDNS drop-down list to enable the DDNS function.
b. Select **EVERFOCUS_DDNS** from the Server drop-down list.
c. Input the host name in the **Host Name** field.
d. Click the **Save** button.

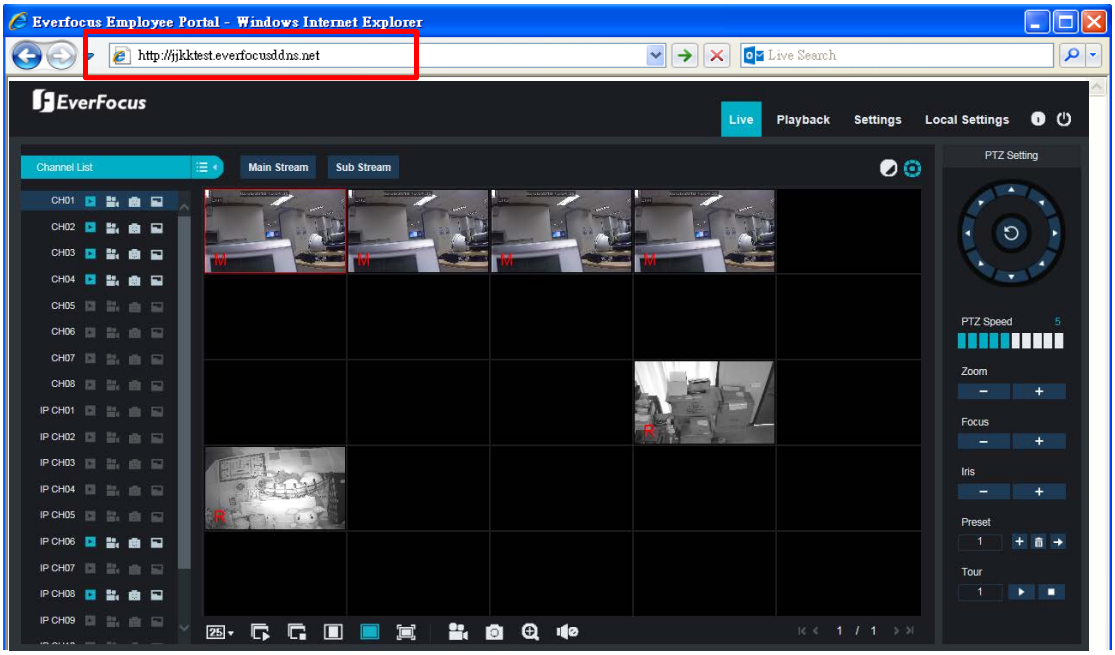
4. Configure the DVR **Network** settings, keep HTTP port “80” and then click the **Save** button.




- If **Static IP** is selected: Enter the IP address, subnet mask, default gateway and the DNS Server 1. Please consult with your ISP service provider for the information of subnet mask, default gateway and the DNS Server 1.
- If **DHCP** is selected: The IP address, subnet mask, default gateway and the DNS Server 1 will be assigned automatically by DHCP server.
- If **PPPoE** is selected: Enter the User Name (e.g. xxxx@hinet.net) and Password provided by your ISP service provider.

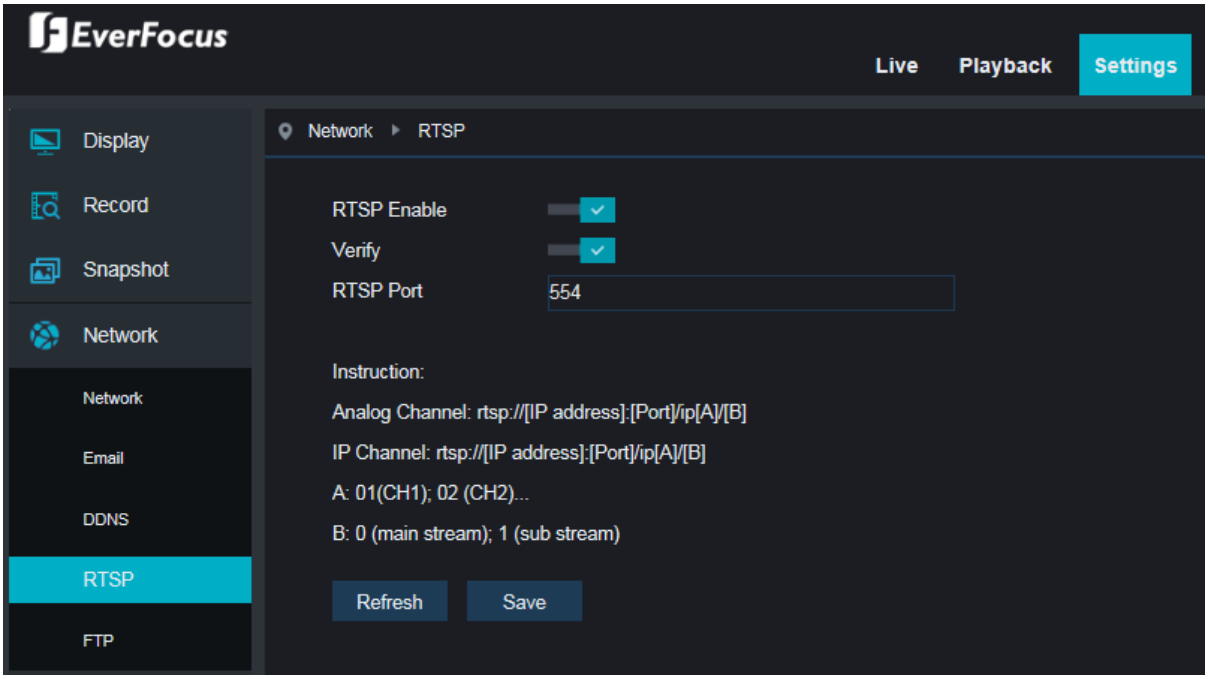
5. The DDNS setup is now complete. Open a browser and enter the domain name (http://[host name].everfocusddns.net) in the address field. The Web interface of the DVR should be displayed.

   For example, if you've obtained the host name "jjkktest" from EverFocus DDNS server, enter http://jjkktest.everfocusddns.net in the address field of the browser.



#### 5.4.4.4 RTSP

You can configure the RTSP setting on this page.




**RTSP Enable:** Switch to the right to **Enable** the RTSP function.

**Verify:** Switch to the right to **Enable** the verify function.

**RTSP Port:** Keep 554 as RTSP port.

RTSP URL Syntax:

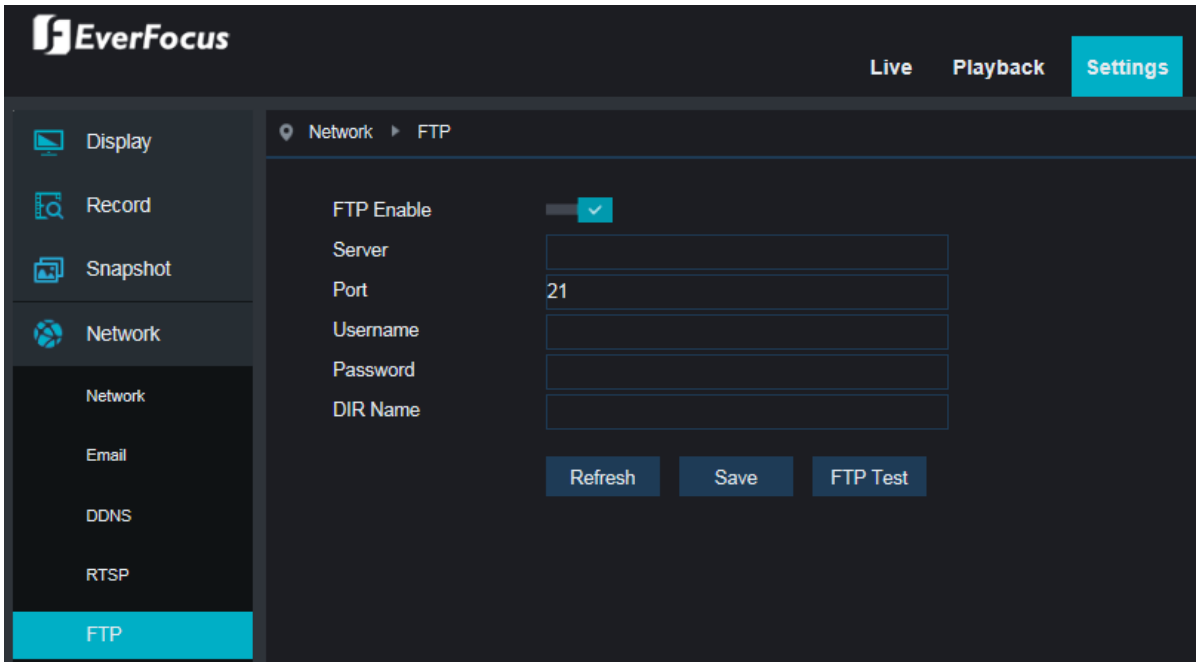
| Camera Type | Syntax | Example |
|---|---|---|
| **IP Cameras** | rtsp://[IP Address]:[Port]/ip[A]/[B] | rtsp://192.168.31.33:554/ip05/1 |
| **FHD Cameras** | rtsp://[IP Address]:[Port]/ch[A]/[B] | rtsp://192.168.31.33:554/ch01/0 |

* IP Address: The IP address of the DVR
* 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.

### 5.4.4.5 FTP

You can configure the FTP server setting on this page. When there is a Motion or I/O event occurs, the system will send an instant snapshot image to the FTP. For system alarm such as HDD lost and Video loss, the system will send alarm log to the FTP as well.




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

**Server:** Input the FTP server IP.

**Port:** Keep the port 21.

**Username:** Input the user name of the FTP server.

**Password:** Input the password of the FTP server.

**DIR Name:** Input the directory of the FTP server.

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

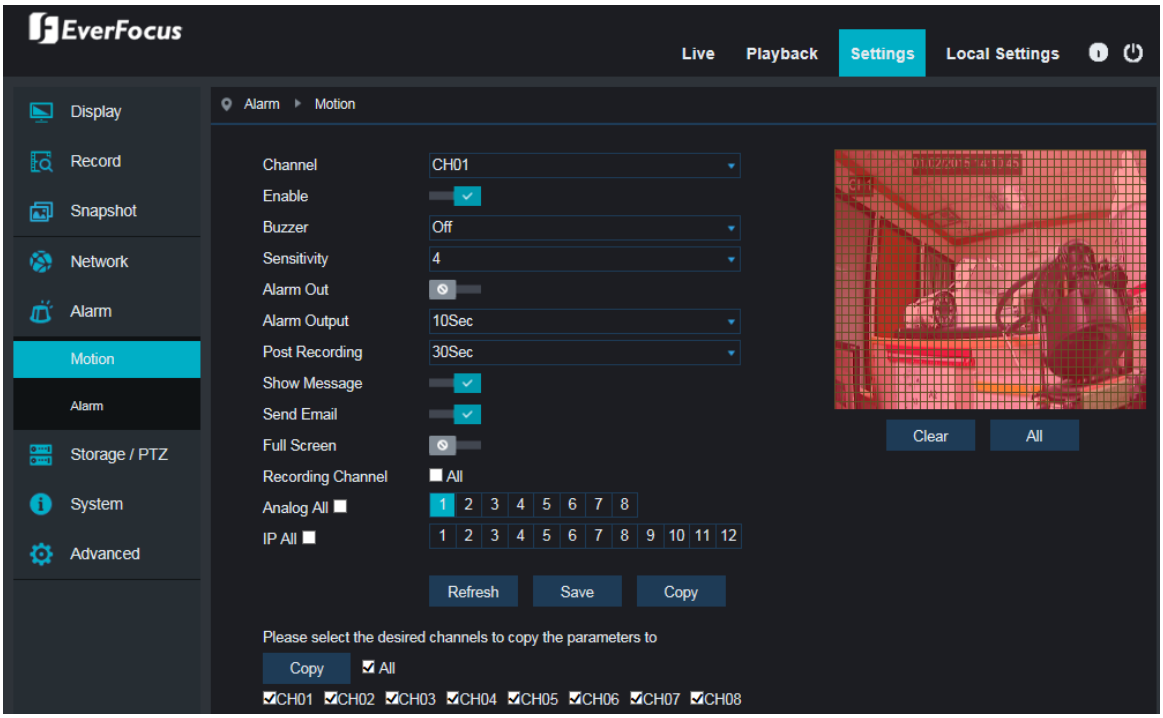
Click **FTP Test** to test the FTP server connection.

## 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:** Switch to the right to **Enable** the function.

**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.

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

**Alarm Out:** Switch to the right to enable the alarm output.

**Alarm Output:** Set up an alarm output time (duration) when an alarm is triggered.

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

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

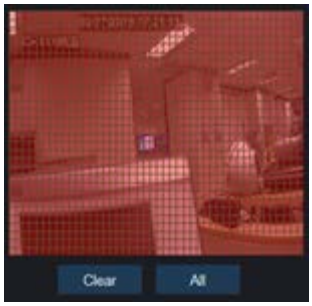
**Send Email:** Switch to the right to enable the function. When a motion event occurs, the DVR will send an email alert to the receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *5.4.4.2 Email*).

**Full Screen:** Switch to the right 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.

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

**Analog/IP Channels:** Check the 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.

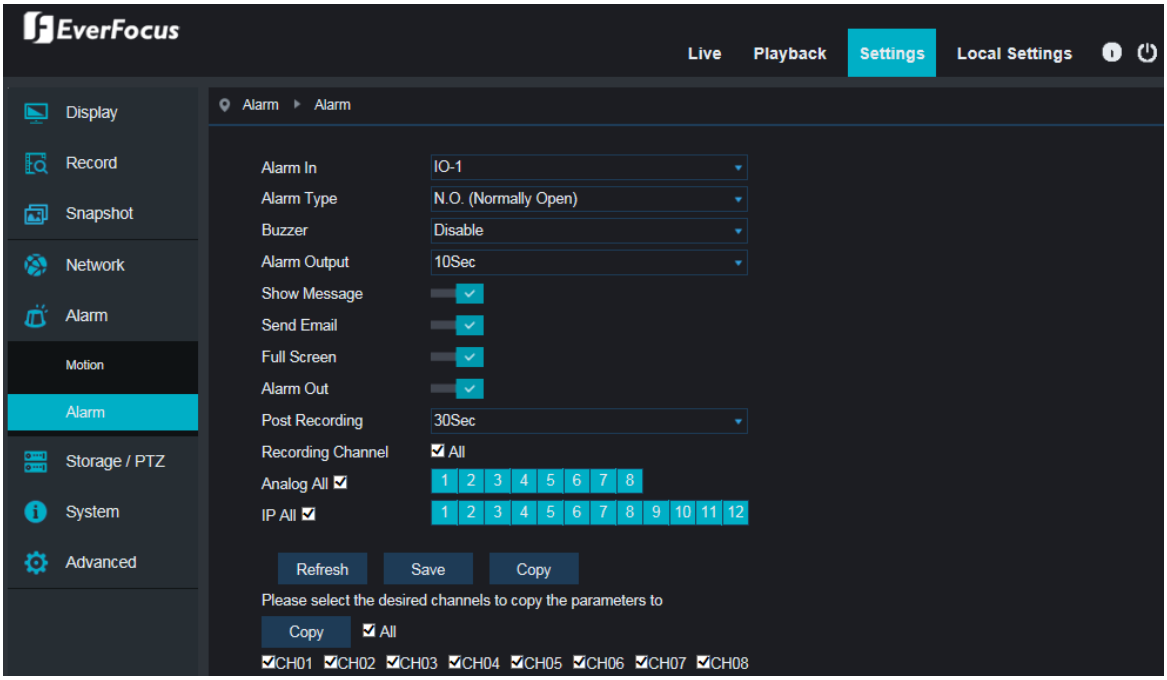



Click **Save** to save the settings or **Refresh** to refresh the page.

Click **Copy** to apply the same configurations from the current channel to the desired channels. Select the desired channel(s) and then click the **Copy** button, the selected channel(s) will be applied with the same configurations.

### 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.

**Alarm Output:** Set up an alarm output time (duration) when an alarm is triggered.

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

**Send Email:** Switch to the right to enable the function. When alarm is triggered, the DVR 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:** Switch to the right 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:** Switch to the right to enable the alarm output.

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

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

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

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

Click **Copy** to apply the same configurations from the current channel to the desired channels. Select the desired channel(s) and then click the **Copy** button, the selected channel(s) will be applied with the same configurations.

The alarm types and descriptions are listed as below:

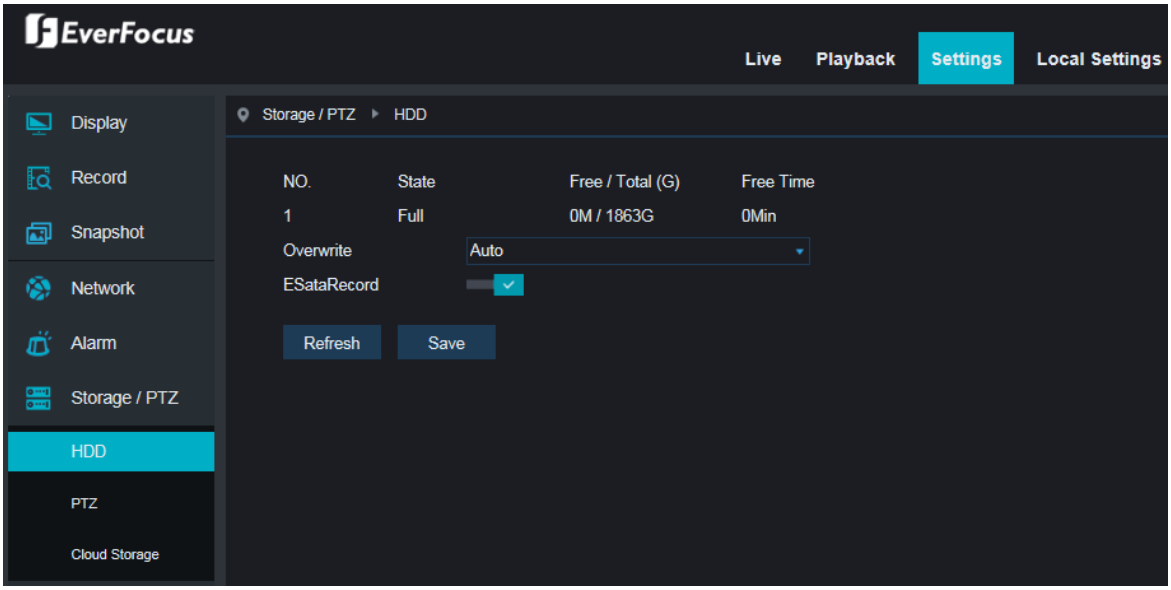
| Alarm Type | Functions and Descriptions |
|---|---|
| Video Loss | When DVR fails to receive video signals due to some problems (camera damage, cable dropout or damage, power failure), the alarm will appear. |
| Motion Detection | When camera detects moving objects, alarm will be triggered. Sensitivity 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 Storage / PTZ

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

### 5.4.6.1 HDD

You can configure the HDD settings on this page. Please connect the HDD(s) to the DVR in advance and ensure the power and SATA cables are properly connected between the DVR and HDD(s). After connecting the HDD(s) to the DVR, the DVR 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 DVR local side.




**Overwrite:** Select **Auto** to enable the overwrite function; **Close** to disable the overwrite function. If **Auto** is selected, the DVR 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).

**ESataRecord:** Switch to the right to **Enable** eSATA for redundant recording. Note that to perform this function, an external eSATA storage device must be connected to the DVR in advance.

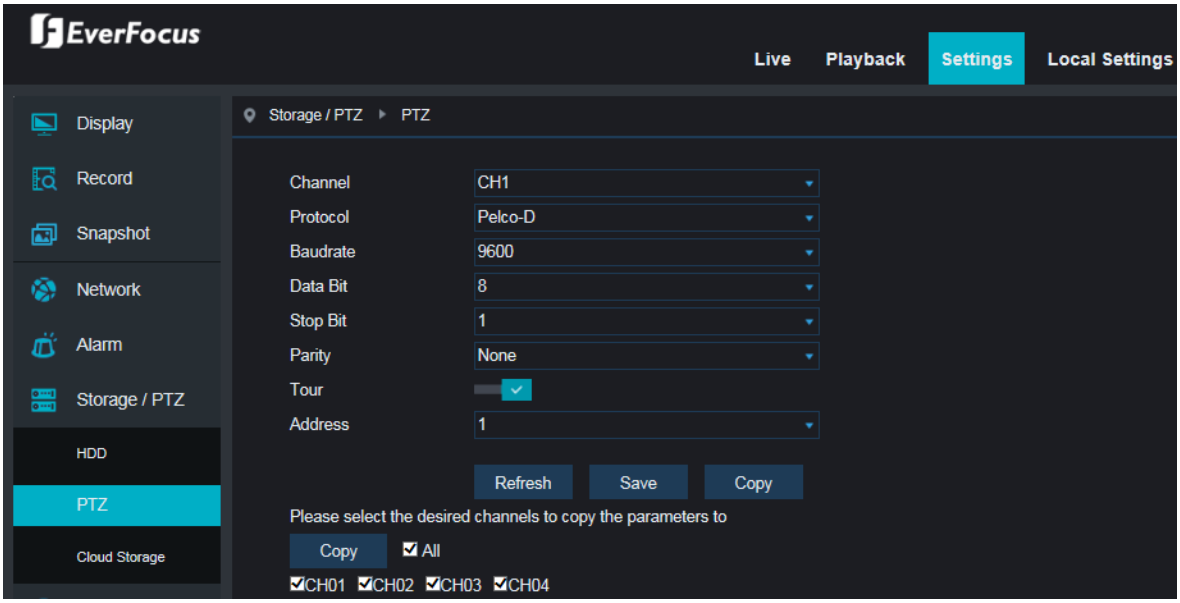
Click **Save** to save the settings or **Refresh** to refresh the page.

**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.

### 5.4.6.2 PTZ

You can configure the PTZ settings on this page.




**Channel:** Select the channel connected with PTZ camera.

**Protocol:** Select PTZ protocol, choose from the following protocols. (Note: All cameras on the RS-485 bus must use the same protocol). If you want to use the UTC function, select **UTC1** (eZ.HD Camera) or **UTC2** (EverFocus PTZ camera). For more details on UTC function, please refer to *1.6 eZ. Controller Function Description*.

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

**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:** Switch to the right to enable the **Tour** function.

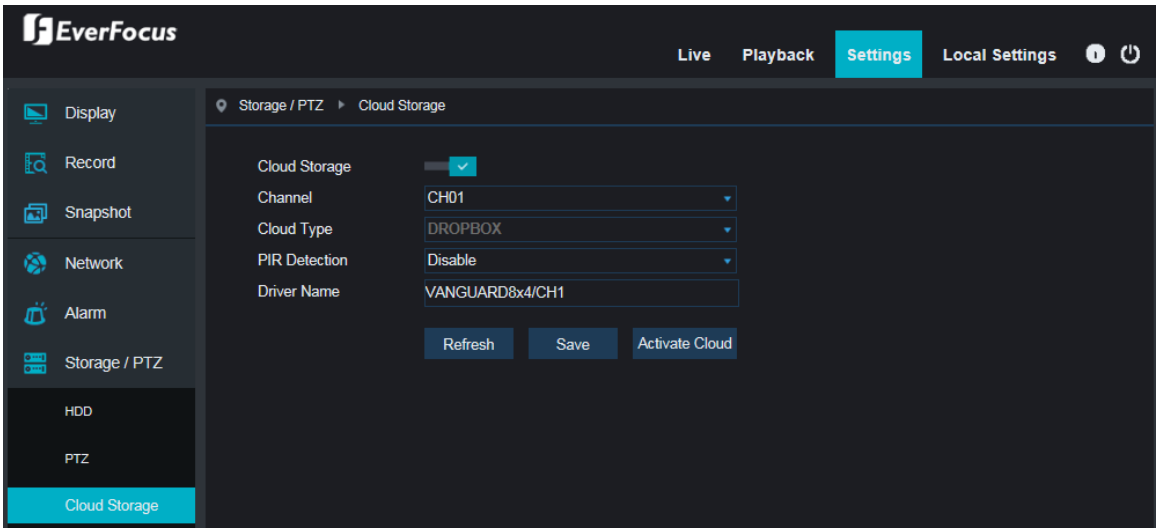
**Address:** Input the ID address of the PTZ camera. Note this address should match the one set up on the PTZ camera.

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

Click **Copy** to apply the same configurations from the current channel to the desired channels. Select the desired channel(s) and then click the **Copy** button, the selected channel(s) will be applied with the same configurations.

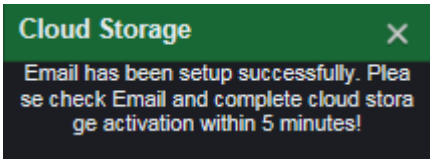
### 5.4.6.3 Cloud Storage

You can configure the Cloud settings (Dropbox cloud storage) on this page. After configuring the settings, the system will automatically send the Motion and I/O alarm snapshot images to the associated Dropbox when alarm events occur.




To perform the Cloud function:

1. Register an account on Dropbox website.
2. Ensure the DVR network is working properly.
3. Configure the SMTP function (refer to *5.4.4.2 Email*).
4. Configure the Cloud settings and then click the **Save** button.
   a. In the Cloud Storage field, switch to the right to **Enable** the Cloud function.
   b. Select the desired channels to upload the motion or I/O alarm snapshot images of the selected channels to Dropbox.
   c. In the PIR Detection field, select **Enable** to upload the motion and I/O alarm snapshot images to Dropbox.
   d. Input a name in the Driver Name field, which will be created on the Dropbox as a directory for restoring the snapshot images from DVR.
5. Click the **Activate Cloud** button to activate the Cloud function. Once receive the below message, please check your email and complete the cloud activation within 3 minutes.

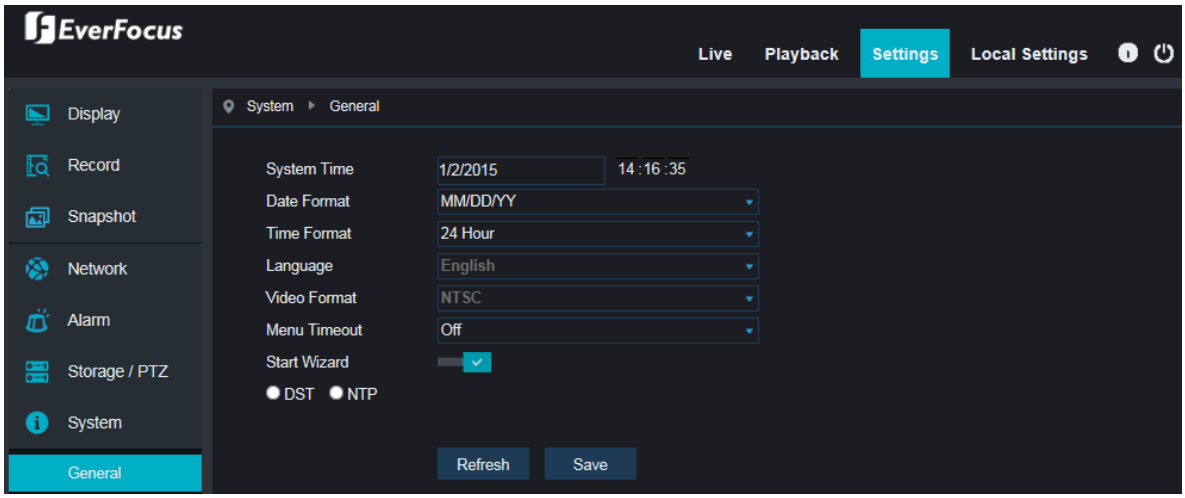


## 5.4.7 System

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.

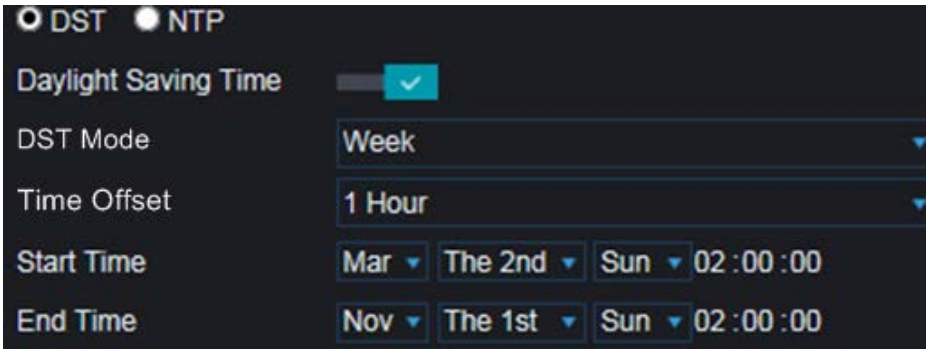
**Language:** If you want to change the language, you can select a language on the Login window.

**Video Format:** Select **NTSC** or **PAL** for the system. This function can only be performed on the local OSD.

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

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

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




Daylight Saving Time: Switch to the right to enable the DST function.

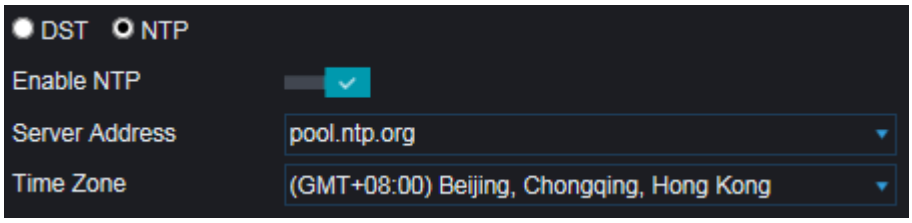
DST Mode: Select **Week** or **Date** to configure the start/end time below.

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: Switch to the right 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.

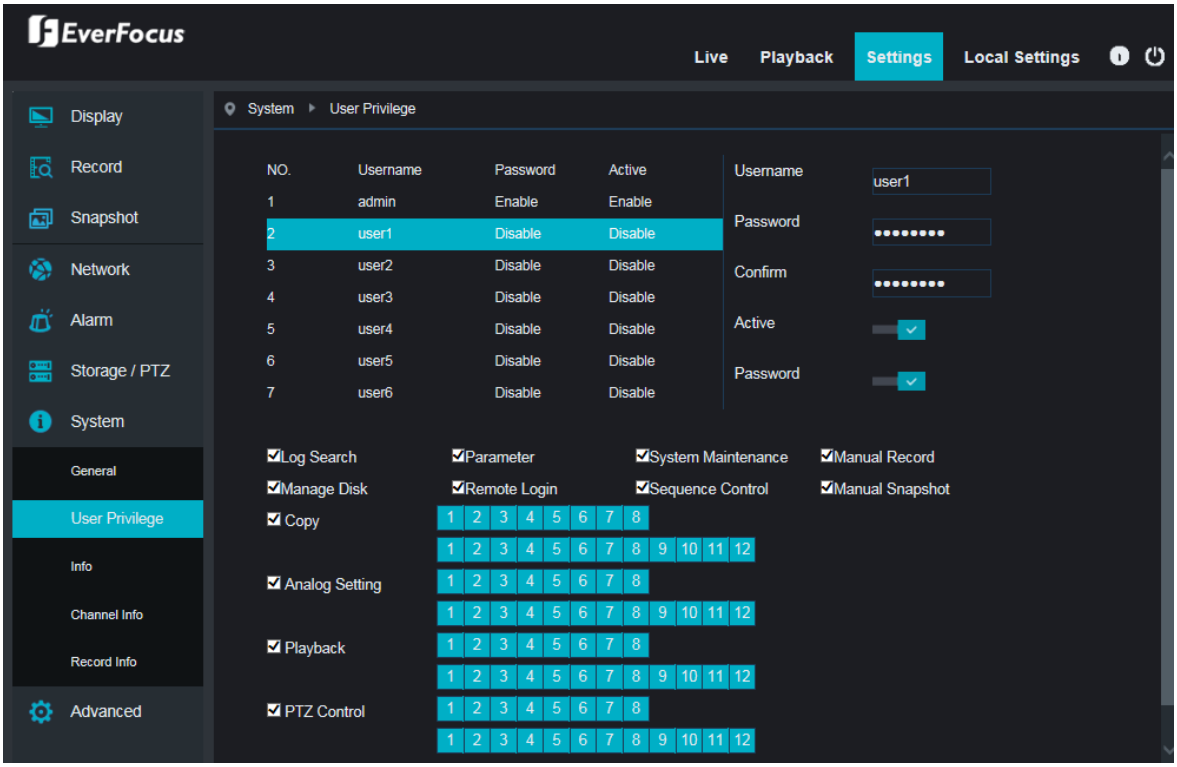
Server Address: Select a NTP server.

Time Zone: Select a time zone.

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

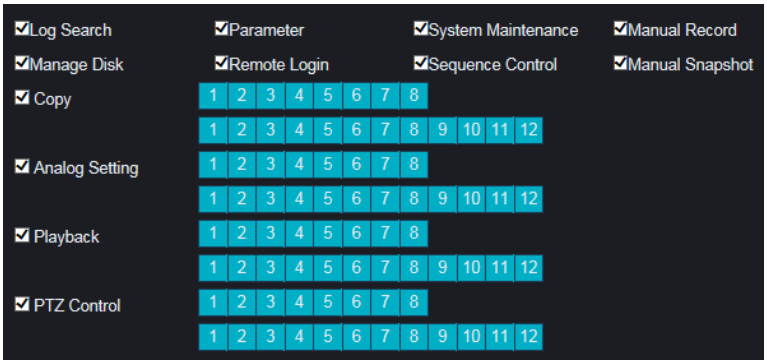
### 5.4.7.2 User Privilege

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 Copy/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.

   System Maintenance: 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.

Sequence Control: Allow users to use the sequence function.

Manual Snapshot: Allow users to use the manual snapshot function.

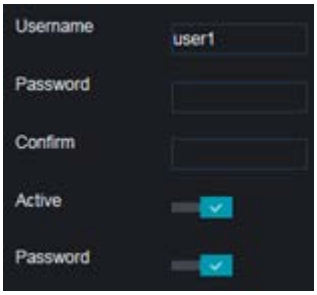
Copy: Check the **Copy** box to enable the function; and then select the desired channels to backup. This user account will be granted with the Backup function for the selected channels.

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. In the **Active** field, switch to the right to enable the user account. At the bottom **Password** field, switch to enable the password (if Disable is selected, the user can login without password).

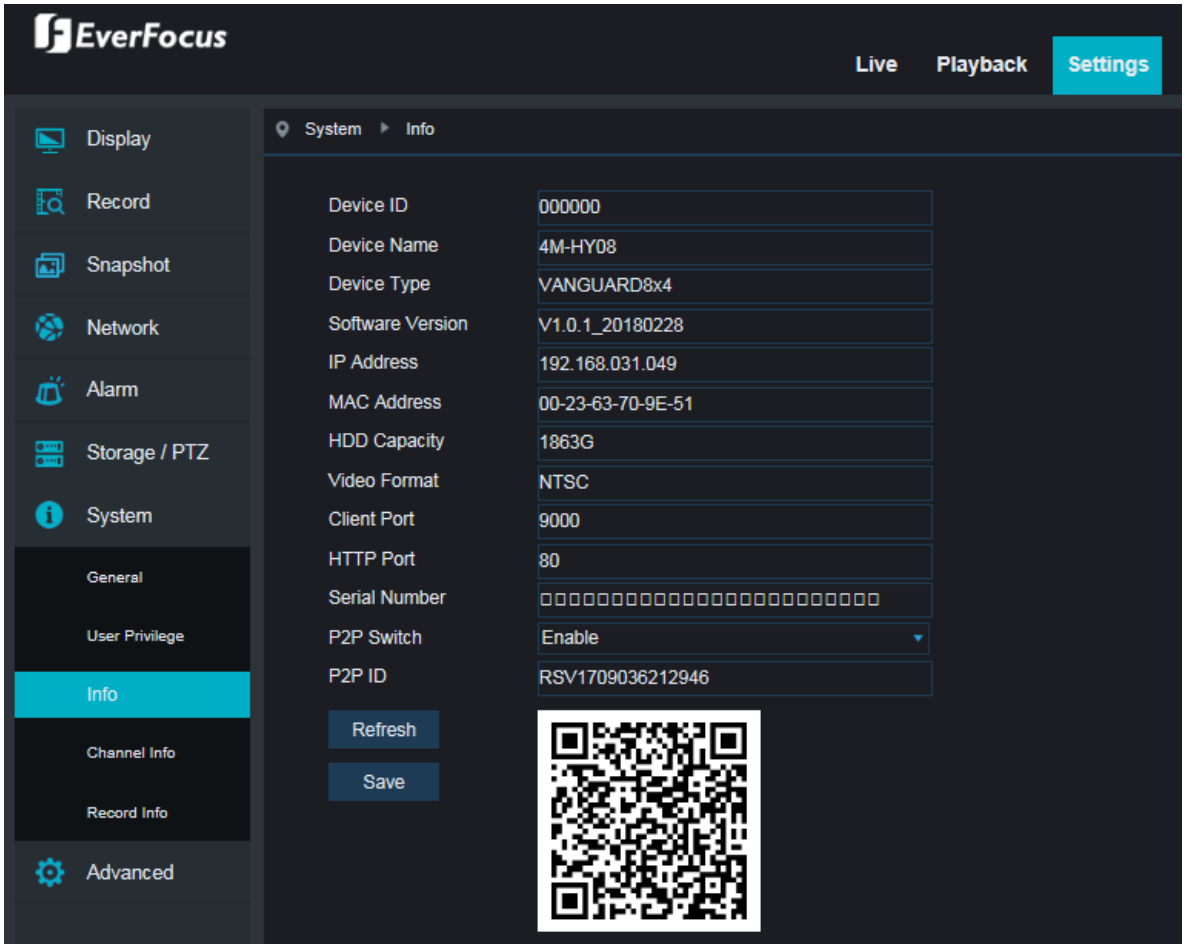



4. Click **Save** to save the settings.

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

### 5.4.7.3 Info

You can see the DVR info or change the Device ID / Device Name. You can also enable the **P2P** function on this page. Click **Save** to save the settings.

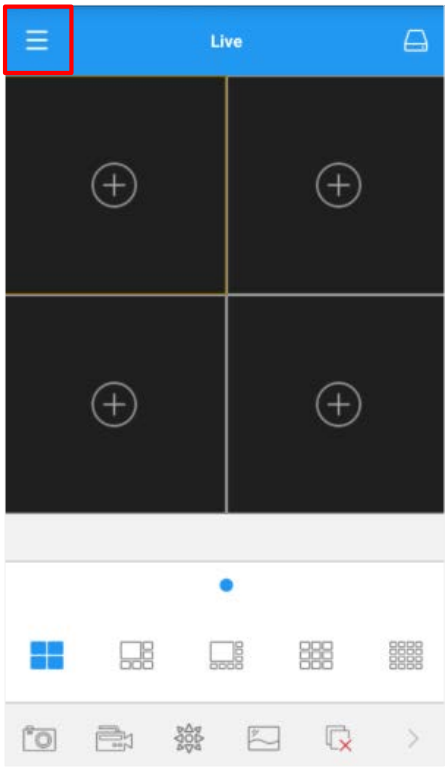


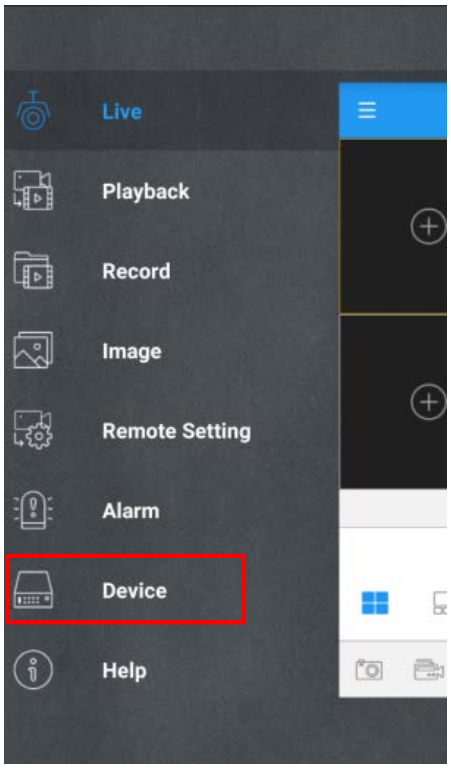

If **P2P** function is enabled, a QR code will be displayed on the Info page. You can scan the QR code with **EverFocus VANGUARD** App installed on your mobile device to add and remote access the DVR.

**For Android users:**

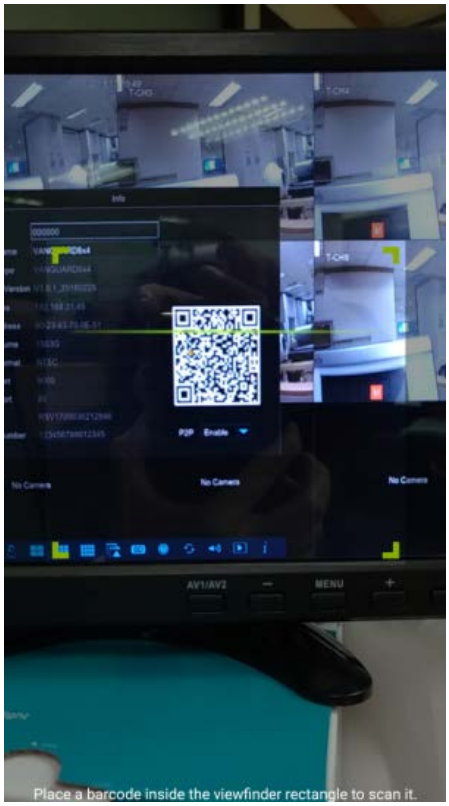
1. Install **EverFocus VANGUARD** App from Google Play Store. After the installation process is complete, tap the **Open** button to start **EverFocus VANGUARD** App.

2. To add a DVR through P2P, tap the **Menu** button and then tap **Device**.

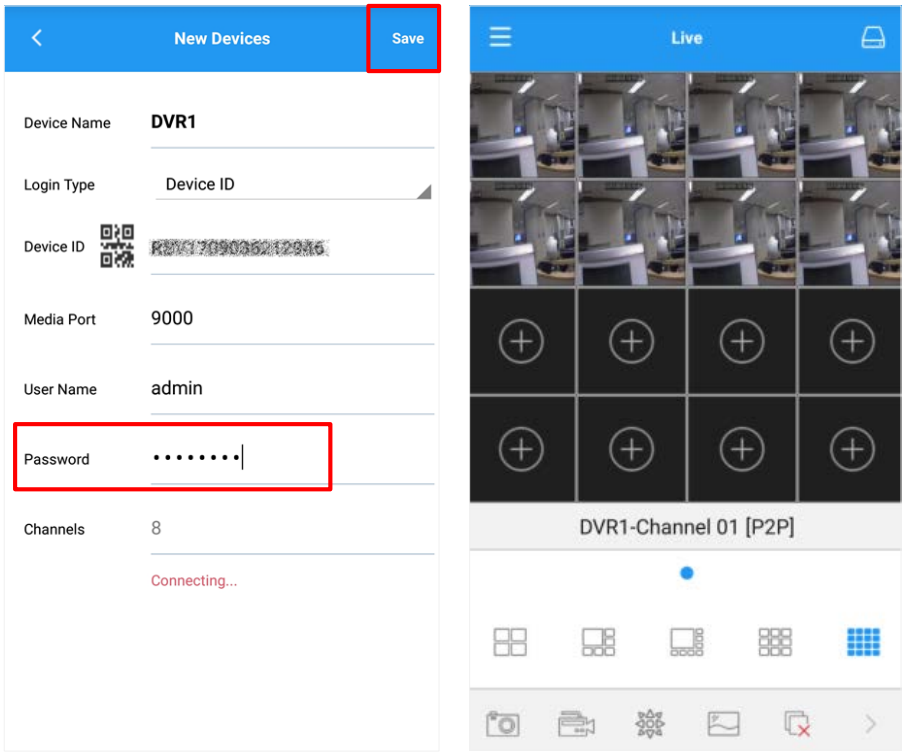



3. Tap **Device ID** and then scan the QR code on the info page of the DVR.

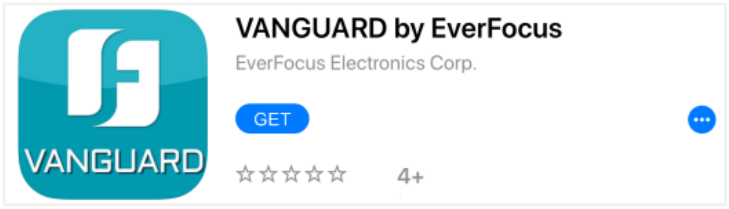


4. The scanned QR code will be displayed in the **Device ID** field. Input the **Password** of the DVR and then click **Save**, the VANGUARD App will add the DVR. Once the DVR has been added, you can start accessing the DVR.

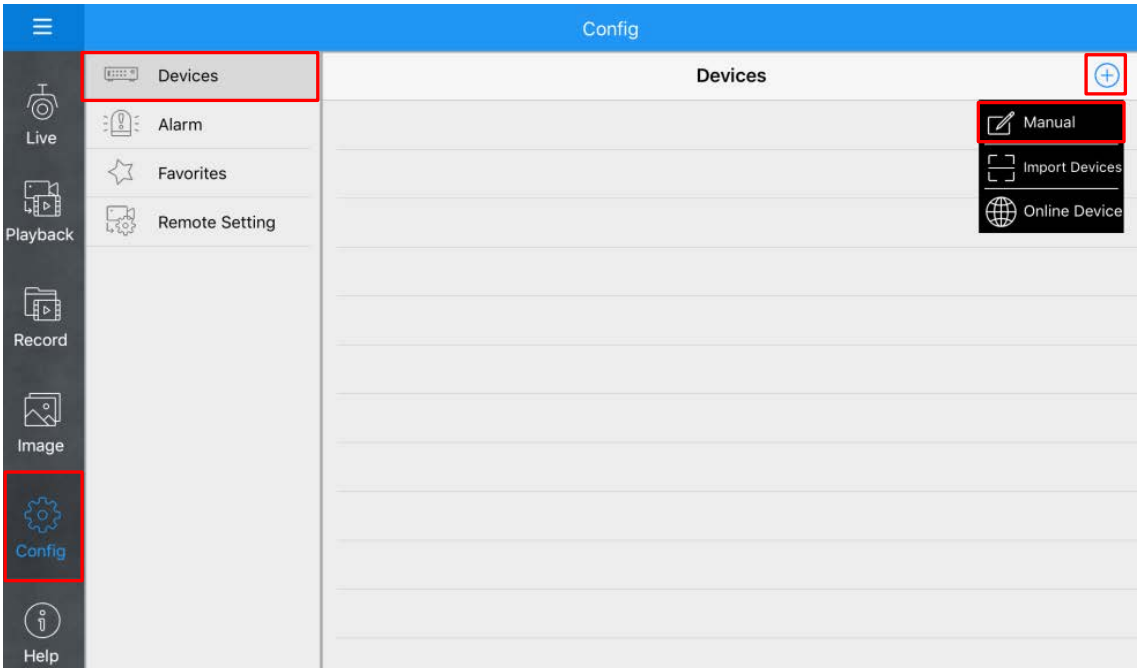



**For iOS users:**

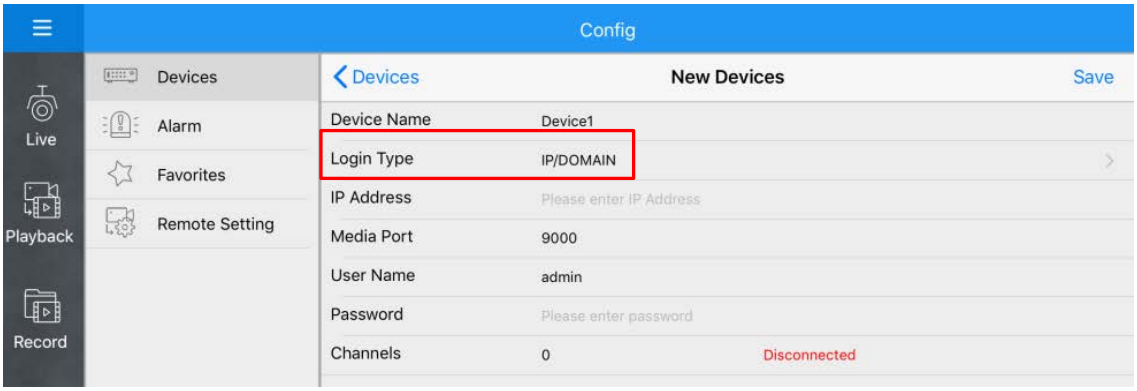
1. Install **EverFocus VANGUARD** App from Apple Store. After the installation process is complete, tap the **Open** button to start **EverFocus VANGUARD** App.



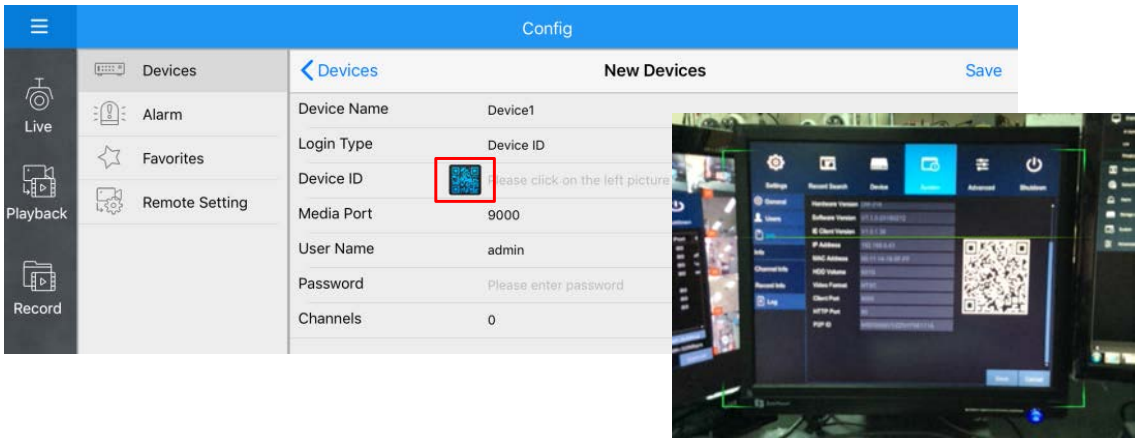
2. To add a DVR through P2P, tap **Config** > **Devices** > **Add** button > **Manual**.



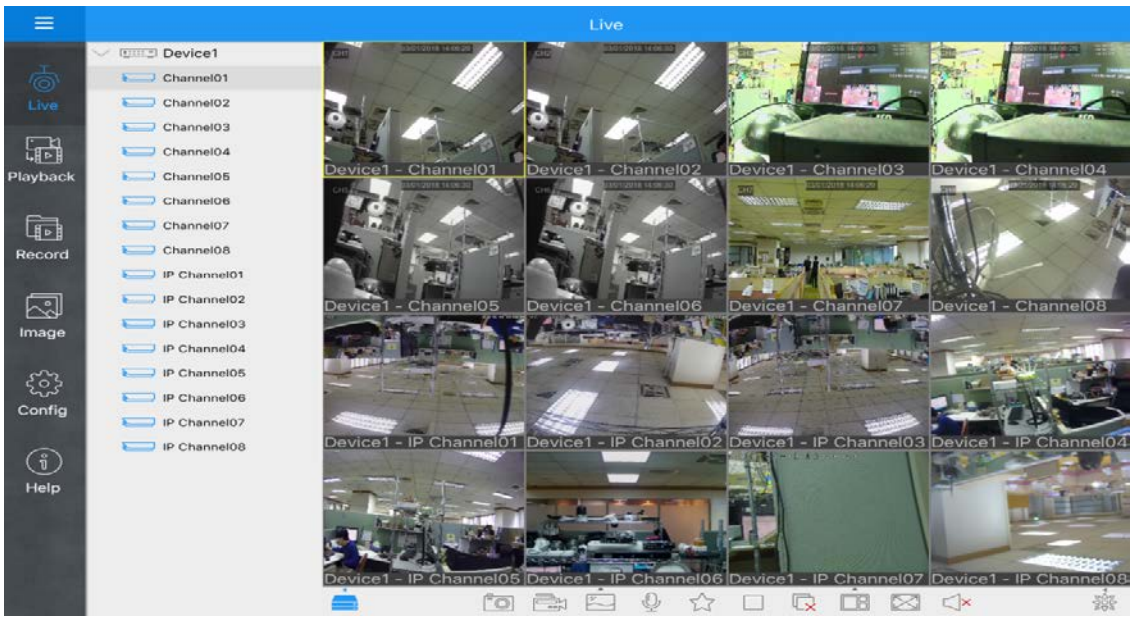

3. In the **Login Type** field, tap **Device ID**.



4. Tap the **QR code icon** to scan the QR code on the info page of the DVR.

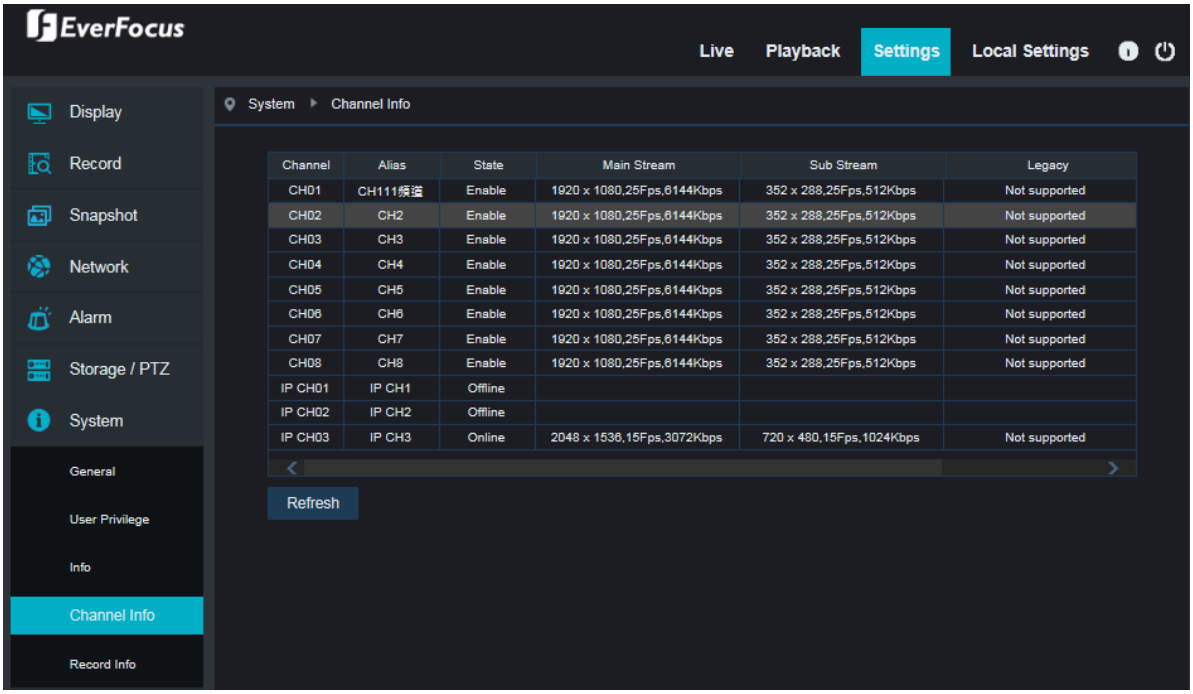



5. The scanned QR code will be displayed in the **Device ID** field. Input the **Password** of the DVR and then click **Save**, the VANGUARD App will add the DVR. Once the DVR has been added, you can start accessing the DVR.



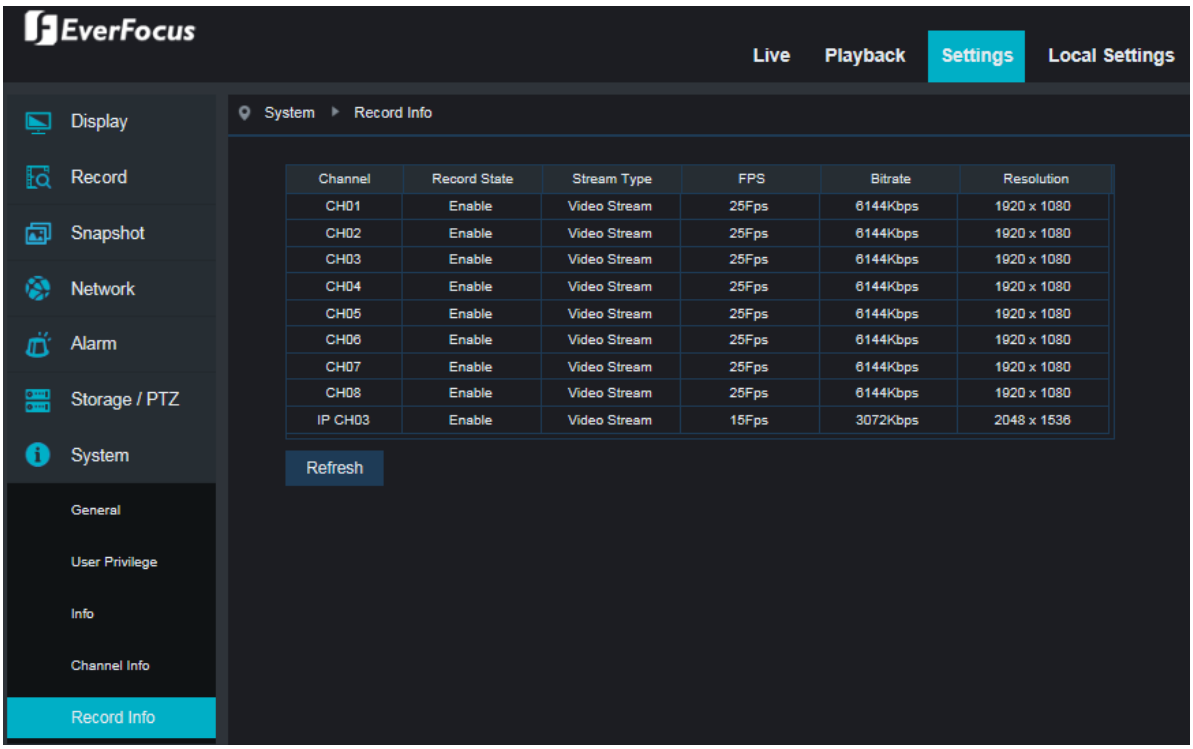
### 5.4.7.4 Channel Info

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.

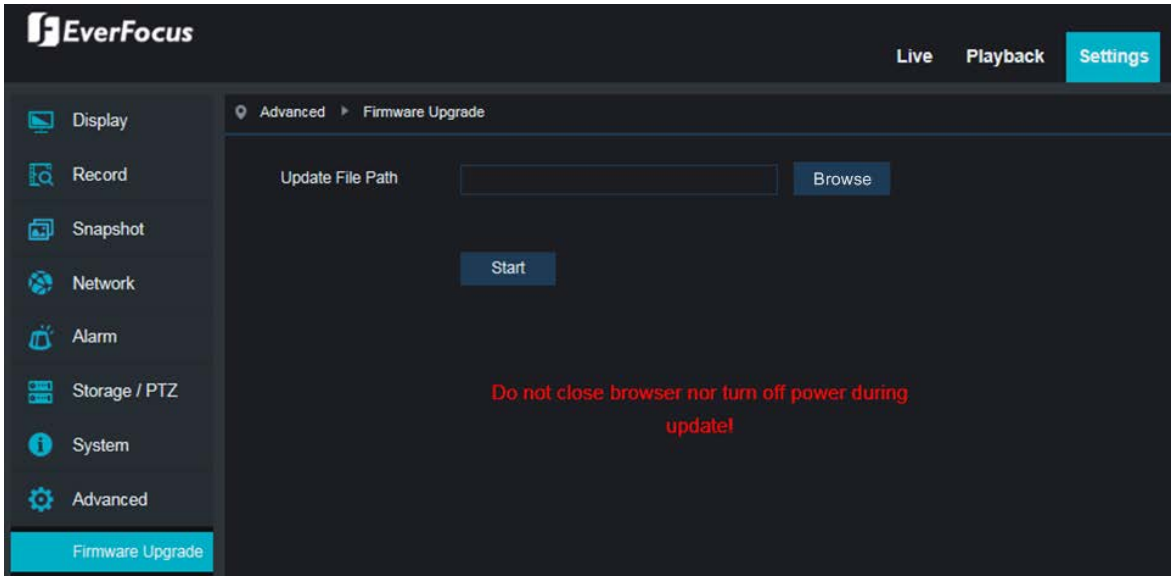


## 5.4.8 Advanced

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

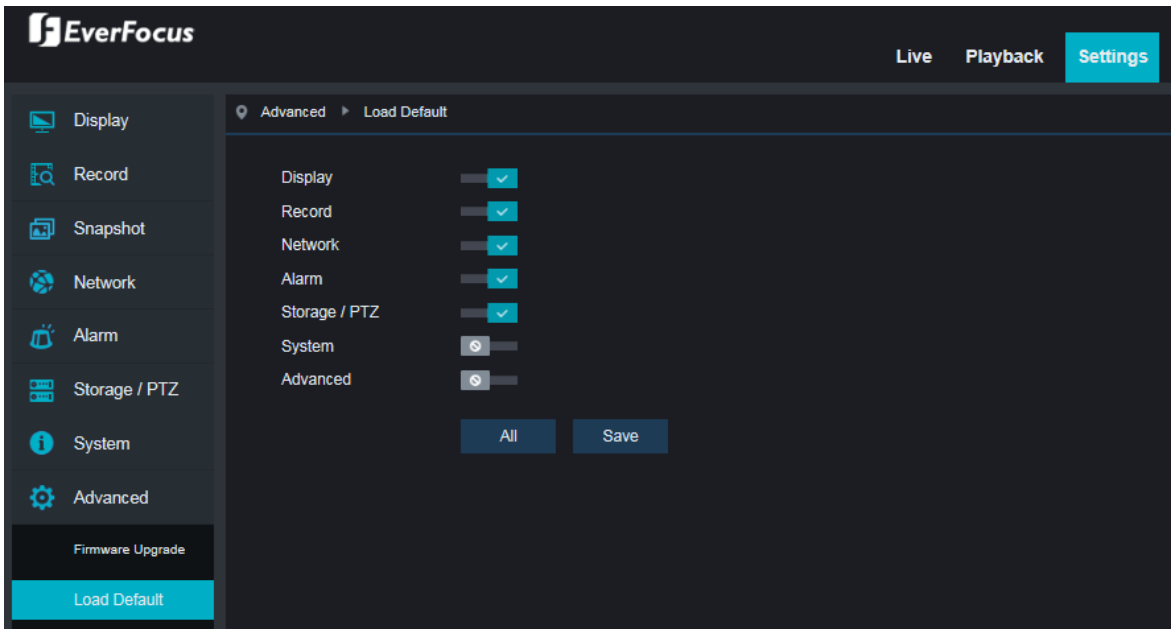
### 5.4.8.1 Firmware Upgrade

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



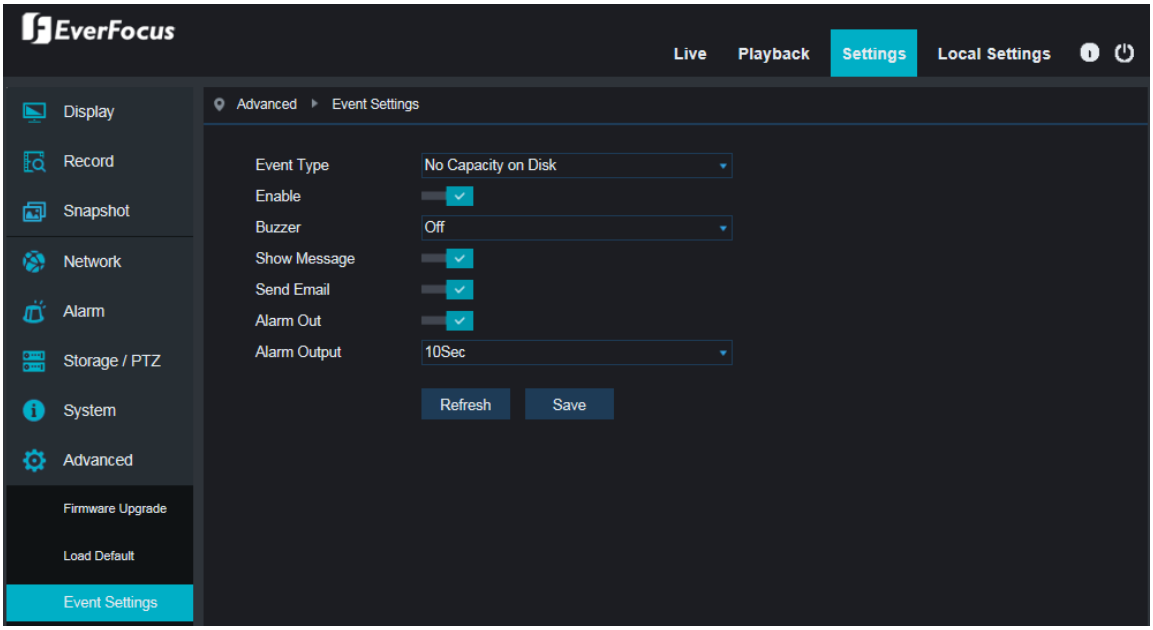

### 5.4.8.2 Load Default

Select the functions by switching the button to the right 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:** Switch to the right to enable the function.

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

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

**Send Email:** Switch to the right to enable the function. When the selected events have been triggered, the DVR 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*).

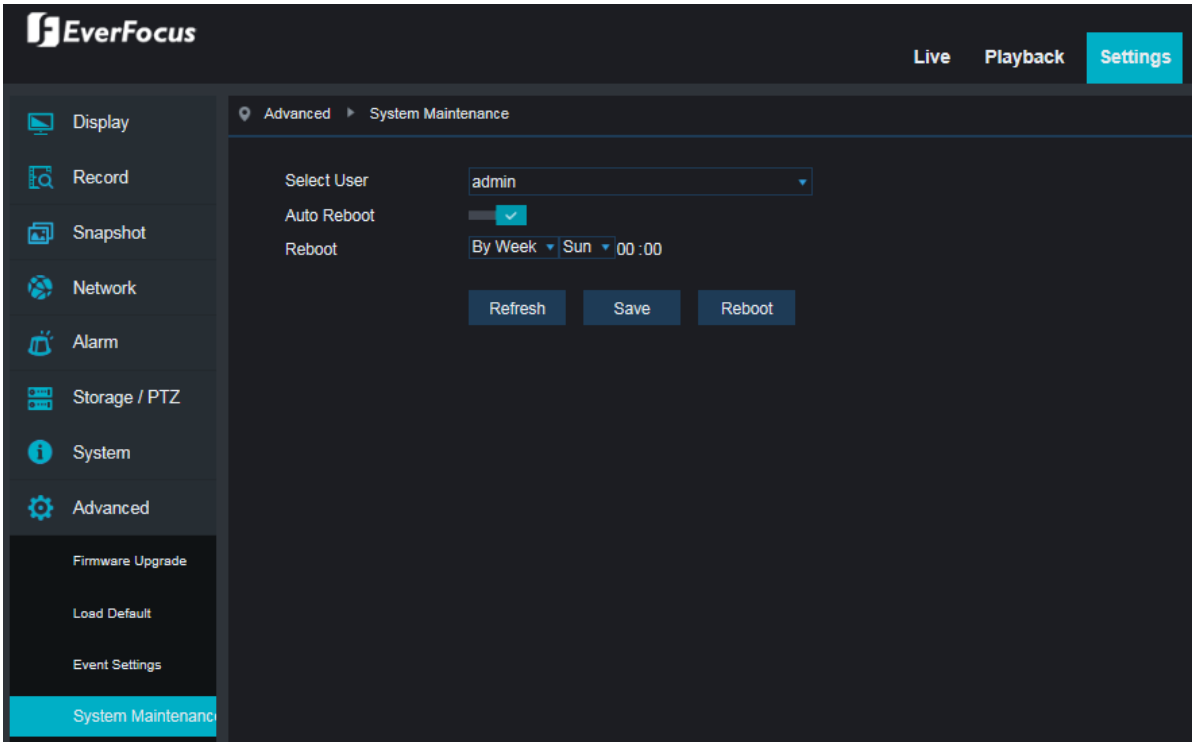
**Alarm Out:** Switch to the right to enable the alarm output.

**Alarm Output:** Set up an alarm output time (duration) when an alarm 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.




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

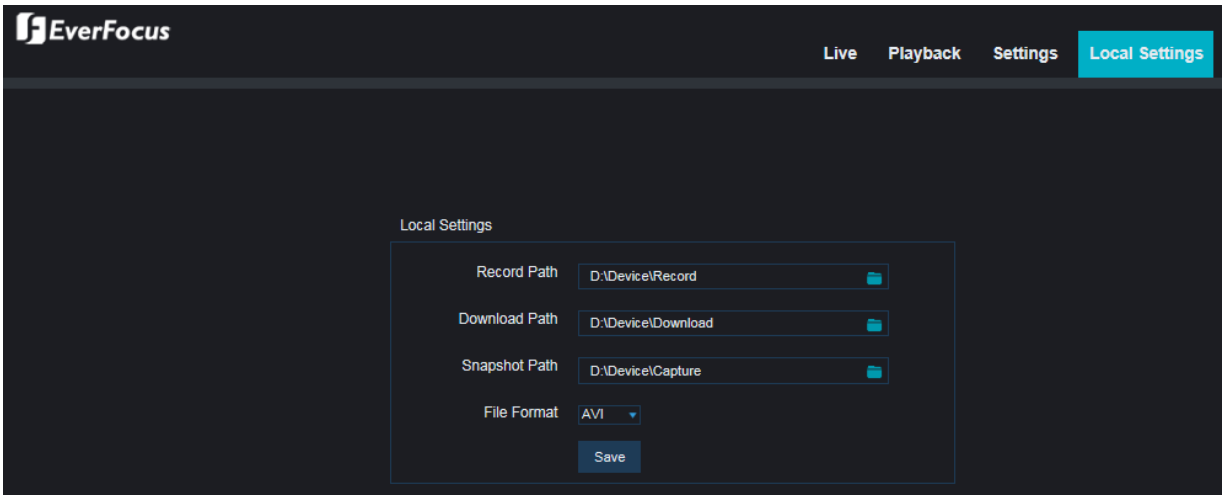
**Auto Reboot:** Switch to the right to enable the Auto Reboot function. You can further set up the auto reboot time in the Reboot field.

**Reboot:** After switching to 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. Click **Reboot** to reboot.

## 5.5 Local Settings

You can configure the Record, Download and Snapshot storage path on this page. On the top menu bar, click **Local Settings** to enter this page.




**Record Path:** Select a storage path for recordings.

**Download Path:** Select a storage path for download recordings.

**Snapshot Path:** Select a storage path for snapshot images.

**File Format:** Select AVI, and the recordings will be stored in avi format.

Click **Save** to save the settings.

Chapter
6

# 6. Specification

| Model Name | | VANGUARD 16x8 | VANGUARD 8x4 | VANGUARD 4x2 |
|---|---|---|---|---|
| **System** | | | | |
| Operating System | | Embedded Linux | | |
| Number of Channels | | 16CH 4MP cameras and 8CH 5MP IP cameras | 8CH 4MP cameras and 4CH 5MP IP cameras | 4CH 4MP cameras and 2CH 5MP IP cameras |
| RAM | | 2GB | | |
| Watchdog | | Yes | | |
| Dual Stream | | Yes | | |
| OSD Menu | | Yes | | |
| System Control | | Mouse, IR Remote Control | | |
| Pentaplex Operation | | Simultaneous Live, Recording, Playback, Archive and Remote Viewing | | |
| PTZ Protocol Supported | | Pelco D, Transparent | | |
| **Video** | | | | |
| Compression Format | | H.264 | | |
| Video Format | | NTSC / PAL | | |
| Video Inputs | | 16 BNC | 8 BNC | 4 BNC |
| Video Looping Outputs | | Not supported | | |
| Video Outputs | Main | HDMI, VGA | | |
| | Call | CVBS | | |
| IP Bandwidth | Incoming | Max 48Mbps | Max 32Mbps | Max 16Mbps |
| | Outgoing | Max 128Mbps | Max 96Mbps | Max 48Mbps |
| **Recording** | | | | |
| Recording Rate / Resolution | NTSC | 4MP@15fps (per ch) ; other resolution@ 30fps (per ch) | | |
| | PAL | 4MP@12fps (per ch) ; other resolution@ 25fps (per ch) | | |
| Recording Modes | | Continuous, Manual, Motion | | |
| **Playback** | | | | |
| Playback Rate / Resolution | NTSC | 4MP@15fps (per ch) ; other resolution@ 30fps (per ch) | | |
| | PAL | 4MP@12fps (per ch) ; other resolution@ 25fps (per ch) | | |
| Search Modes | | Time, Event, Motion in Recorded Video | | |
| **Audio** | | | | |
| Audio Input | | 16 inputs | 8 inputs | 4 inputs |
| Audio Output | | 1 output (RCA) | | |

| | | | |
|---|---|---|---|
| **Alarm** | | | |
| Alarm Input | 16 inputs | 8 inputs | 4 inputs |
| Alarm Output | 1 output | | |
| **Storage Device** | | | |
| Internal 3.5" HDD | 2 SATA HDD | | |
| External HDD | 1 e-SATA storage | | |
| Storage Capacity | 12TB | | |
| DVD Burner | Not supported | | |
| **Network** | | | |
| Ethernet | 10/100/1000 Ethernet | | |
| Protocol | TCP-IP / DHCP / PPPoE / DDNS / NTP | | |
| **Interface** | | | |
| USB2.0 | 2 (1 on Front Panel,1 on Rear Panel) | | |
| RS-485 | 1 (2-pin terminal) | | |
| Ethernet | 1 RJ-45 | | |
| **General** | | | |
| Power Input | 12VDC / 5A | | |
| Power Consumption | 60W max. | | |
| Operating Temperature | -10°C ~ 55°C / 14°F ~ 131°F (10 ~ 90% humidity) | | |
| Dimensions (W x D x H) | 378 x 328 x 49.5mm / 14.88” x 12.91” x 1.95” | | |
| Weight (without HDDs) | 3.0kg / 6.6lb | | |
| Language | English, Japanese, Traditional Chinese, German, Russian, Dutch, Italian | | |
| Regulatory | CE, FCC | | |
| **Functions** | | | |
| Video Pause | Yes | | |
| Video Loss Detection | Yes | | |
| Motion Detection | Yes | | |
| Event Log | Yes | | |
| User Interface | GUI (Graphical User Interface) | | |
| Control PTZ via OSD | Yes (via both local and remote interfaces) | | |
| Schedule Setting | Yes | | |
| User Access | 2 Levels of User Access Defined | | |
| **Remote Client System Minimum Requirement** | | | |
| Operating System | Win7 (32 and 64-bit) / Win10 (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 | | |
| Other Remote Application | 1. EverFocus VANGUARD CMS<br>2. EverFocus VANGUARD (mobile app) | | |

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 DVR and camera together. Power supply for both devices is OK. What is wrong?
A: Check network cable at DVR 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 DVR from being influenced by heat?
A: The DVR needs to dissipate heat while it is running. Please place the DVR in a place with good air circulation and away from heat sources to ensure stability and life of the DVR.

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 DVR. Can it work?
A: All HDDs supported by the system can be used. But remember, once DVR 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 DVR?

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 DVR 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

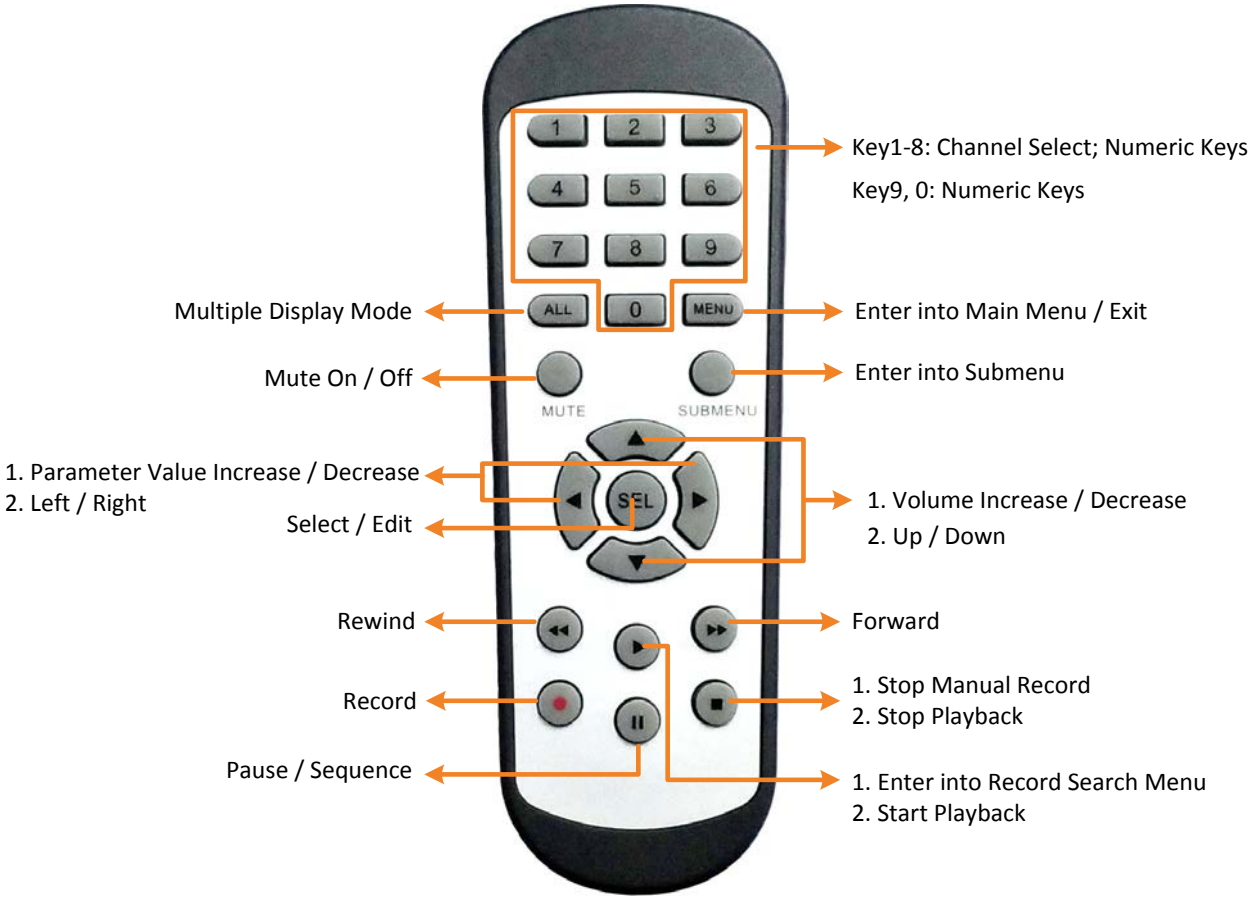
1. To shut down DVR, please firstly shut down the system and then turn off the power. Do not turn off the power directly or HDD data will be lost or damaged.
2. Please keep DVR away from heat sources or places.
3. Clean the internal dust regularly. Make sure the good ventilation of DVR so as to ensure 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 DVR 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 DVR. You can perform all the settings and operations from the remote control.



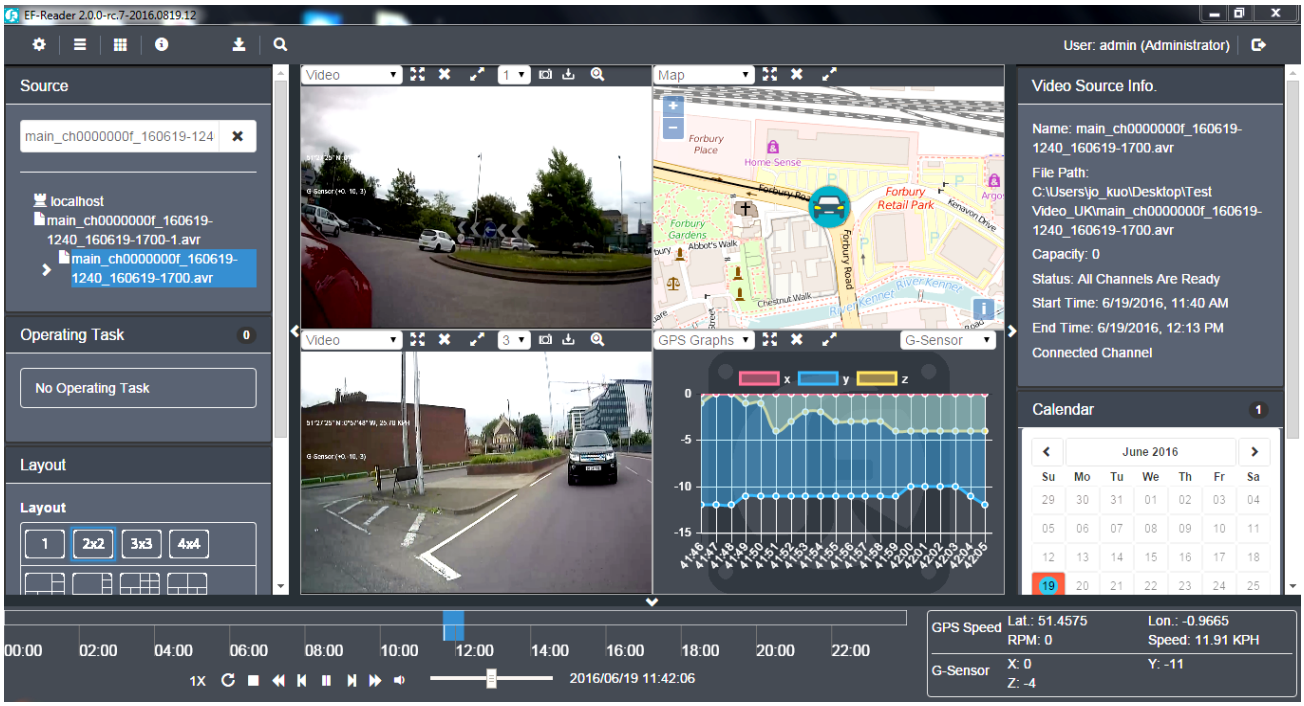
Appendix

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*.



# *EverFocus Electronics Corp.*


**EverFocus Taiwan:**
12F-1, No.79, Sec. 1, Shin-Tai Wu Road,
Hsi-Chih, New Taipei City, Taiwan
TEL: +886 2 2698 2334
FAX: +886 2 2698 3943
www.everfocus.com.tw
marketing@everfocus.com.tw

**EverFocus Europe - Germany:**
Albert-Einstein-Strasse 1, D-46446
Emmerich, Germany
TEL: +49 2822 93940
FAX: +49 2822 939495
www.everfocus.de
sales@everfocus.de

**EverFocus China - Beijing:**
Room 609, Technology Trade Building,
Shangdi Information Industry Base,
Haidian District, Beijing 100085, China
TEL: +86 10 6297 3336~39
FAX: +86 10 6297 1423
www.everfocus.com.cn
marketing@everfocus.com.cn

**EverFocus China - Shenzhen:**
3F, Building 7, Longcheng Industrial Park, No.39,
Longguan No.7 Road, Dalang Street, Longhua,
Shenzhen, Guangdong, China
TEL: +86 755 2765 1313
FAX: +86 755 2765 0337
www.everfocus.com.cn
marketing@everfocus.com.cn

**EverFocus USA - California:**
1801 Highland Avenue, Unit A, Duarte, CA 91010, USA
TEL: +1 626 844 8888
FAX: +1 626 844 8838
www.everfocus.com
sales@everfocus.com

**EverFocus Japan:**
3F, Kuramochi, Building II, 2-2-3 Koto-Bashi,Sumida-Ku, Tokyo, 130-0022, Japan
TEL: +81 3 5625 8188
FAX: +81 3 5625 8189
www.everfocus.co.jp
info@everfocus.co.jp

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!

Ihr EverFocus Produkt wurde entwickelt und hergestellt mit qualitativ hochwertigen Materialien und Komponenten, die recycelt und wieder verwendet werden können.
Dieses Symbol bedeutet, dass elektrische und elektronische Geräte am Ende ihrer Nutzungsdauer vom Hausmüll getrennt entsorgt werden sollen.
Bitte entsorgen Sie dieses Gerät bei Ihrer örtlichen kommunalen Sammelstelle oder im Recycling Centre.
Helfen Sie uns bitte, die Umwelt zu erhalten, in der wir leben!

EverFocus