# **IRONGUARD 16 POE**

## 16CH H.265 8MP NVR

User's Manual





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# IRONGUARD 16 POE 16CH H.265 8MP NVR

User's Manual

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#### Disclaimer

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## **Safety Precautions**

- Refer all work related to the installation of this product to qualified service personnel or system installers.
- > Do not block the ventilation openings or slots on the cover.
- Do not drop metallic parts through slots. This could permanently damage the appliance. Turn the power off immediately and contact qualified service personnel for service.
- Do not attempt to disassemble the appliance. To prevent electric shock, do not remove screws or covers. There are no user-serviceable parts inside. Contact qualified service personnel for maintenance. Handle the appliance with care. Do not strike or shake, as this may damage the appliance.
- Do not expose the appliance to water or moisture, nor try to operate it in wet areas. Do take immediate action if the appliance becomes wet. Turn the power off and refer servicing to qualified service personnel. Moisture may damage the appliance and also may cause electric shock.
- Do not use strong or abrasive detergents when cleaning the appliance body. Use a dry cloth to clean the appliance when it is dirty. When the dirt is hard to remove, use a mild detergent and wipe gently.
- Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.
- Do not operate the appliance beyond its specified temperature, humidity or power source ratings. Do not use the appliance in an extreme environment where high temperature or high humidity exists. Use the NVR at temperatures within 0°C~40°C / 32°F~104°F (Storage). The input power source is 12VDC.

#### 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 NVR, the issue may be caused by running-out of RTC battery. Users will have to change the RTC battery on the main board of the NVR.

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

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.



This Product is RoHS compliant.



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!

#### 

This product complies with the High-Definition Multimedia Interface (HDMI) Specification Adopter Agreement.

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#### Chapter

1

## 1. Introduction

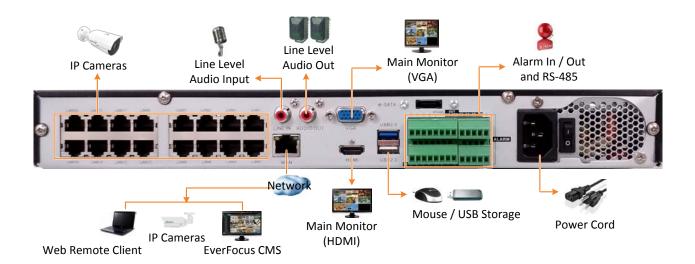
EverFocus' H.265 NVR, IRONGUARD 16 POE, supports 16 channels 8MP (4K) IP cameras. The model comes with 16 PoE ports (802.3at) for connecting to the IP cameras. A 1Gbps Ethernet port is also provided for internet connection.

IRONGUARD 16 POE supports AI Face Recognition and IVS functions. Users can utilize the AI function for access control or use the IVS functions, such as Perimeter Intrusion Detection, Line Crossing Detection, Object Detection, Pedestrian Detection and Cross-Counting Detection for security purpose.

Operating on a Linux-based system, the IRONGUARD 16 POE is able to install up to 2 SATA HDDs with 8TB storage capacity per HDD. Besides, the NVR also supports one e-SATA port for connecting to the external backup storage. The model also features cloud storage for users to backup recordings or snapshot images to the FTP sites or Dropbox.

The IRONGUARD 16 POE supports multi-channel playback at multiple speed options and easy data search by event, snapshot, tags or sub-periods. Users may enable and perform the specified functions through the local OSD menu or Web interface. Furthermore, you can output the video to a 4K monitor through HDMI; or use EverFocus' mobile APP, eFVMS, to remotely view camera streams from NVR through your handheld devices; or use EverFocus CMS video management system for remote management.

EverFocus' IRONGUARD 16 POE NVR is the best choice for a complete IP surveillance solution. It is versatile, flexible and well catered to the needs of the industry.



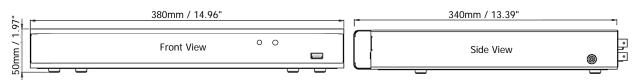
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### **1.1 Features**

- Supports 8MP (4K) IP camera up to 16 channels
- Supports 16 PoE ports
- Supports H.265 / H.264 compression format
- Supports 2 HDDs (8TB / HDD)
- Supports 1 e-SATA port

- Supports ONVIF 2.0 IP cameras
- Supports AI and IVS functions
- Control methods: mouse / IR remote controller
- Integrates with EverFocus CMS
- Supports mobile App: eFVMS App

## **1.2** Dimensions



## 1.3 Packing List

<ul> <li>NVR x 1</li> <li>Power Cord x 1</li> <li>Mouse x 1</li> <li>HDD Screw x 8</li> </ul>	<ul> <li>Quick Installation Guide x 1</li> <li>CD x 1 (see Note 3)</li> <li>IR Remote Control (with 2 AAA batteries) x 1 (see Note 4)</li> </ul>
Note:	
	as and supplied accessories vary by country. Please consult your

- 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





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

## 1.5 Rear Panel



No.	Name	Description
1	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.
2	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.
3	VGA Port	Connects to a monitor using a VGA cable.
4	e-SATA	Connects to an external e-SATA storage device.
5	Video Input	LAN (PoE) ports for connecting to the IP cameras.
6	WAN	Connects to the Network.
7	HDMI Port	Connects to a monitor using a HDMI cable.
8	USB2.0 Port USB3.0 Port	USB ports for connecting to a mouse or an external storage device.
9	Terminal Block	The Terminal Block provides alarm inputs, alarm output and RS-485 connection. Please refer to <i>2.2.1 Terminal Block</i> .
10	Power Port	Connects to a 12VDC power source.
11	Power Switch	Press to turn on or off the power.



## Chapter



## 2. Connection and Installation

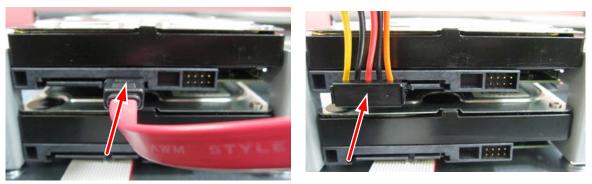
## 2.1 Hard Disk Installation

You can install two 3.5" HDDs inside the NVR for recording videos. The maximum capacity of each HDD is 8TB.

- 1. Make sure the NVR 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 NVR, push the cover backward and then lift it.

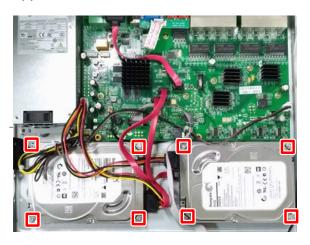


3. Find the SATA cable inside the NVR, and connect the SATA cable to the SATA port on the HDD (left image). Find the internal power cable, and connect the internal power cable to the HDD (right image).





4. Place the HDDs inside the NVR, screw the HDDs from the bottom side of the NVR using the supplied Screws.



5. Screw the housing cover back to the NVR.

#### 2.1.1 Hard Disk Compatibility List

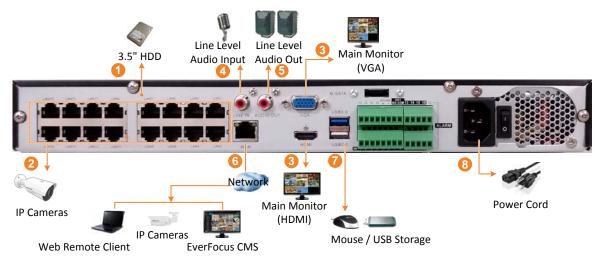
Please go to the product page (Download) on EverFocus' Website <u>www.everfocus.com.tw</u> to see the latest Storage Compatibility List. It's recommended to use the hard disk models listed on the Storage Compatibility List to ensure your hard disks are compatible.

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

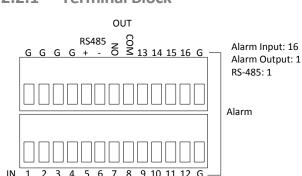


## 2.2 Basic Connection

The instructions below describe the basic connection to the NVR.



- 1. To record videos, install 3.5" HDD(s) to the NVR. Please refer to 2.1 Hard Disk Installation.
- 2. To connect to the IP cameras, connect the cameras to the LAN (PoE) ports.
- 3. 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.
- 4. Connect microphones to the audio input ports to transmit audio from the NVR to the remote sites (Web browser of NVR, eFVMS App or EverFocus CMS). Note that the microphones with a (built-in) amplifier and external power supply are required.
- 5. To listen to the audio from IP cameras or remote sites, 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 NVR to the network.
- 7. Optionally connect a mouse to the NVR to control the system. You can also control the system using the supplied IR Remote Control (*Appendix A. IR Remote Control*).
- 8. Use the supplied Power Cord to connect the NVR to the power outlet.



#### 2.2.1 Terminal Block

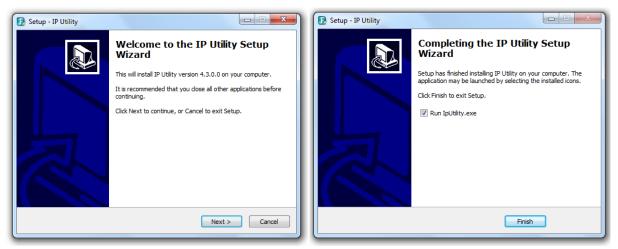


## 2.3 Accessing the Web Interface

You can look up the IP address and access the Web interface of the NVR using the **IP Utility (IPU)** program, which is included in the software CD. The IP Utility can also be downloaded from EverFocus' Website: <u>http://www.everfocus.com.tw/product/ip-utility/</u>

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

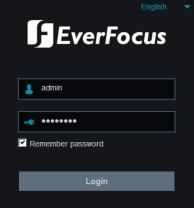
1. Save **IP Utility Setup .exe IP** in your computer. Double click the .exe file and follow the on-screen instructions to install the IP Utility.



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

🕞 IP Utility V4.3.0_150528		_	_	-		
File Edit View Tool	Help					
😪 占 🔊	<b>B</b> 🛿 🐌		Port V		Q Searc	:h 🚫
Machine Name	Mac Address	Model	IP Address	IP Type	Port	Status 🖌
IRONGUARD 16 POE	00:5A:20:3E:80:55	IRONGUARD 16	192.168.31.71	DHCP	80	
٠ [		111				•
		Le	ft click to select or	unselect device	s. Right click	to edit

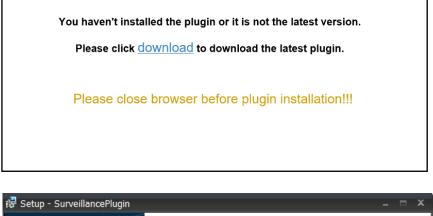
3. To access the Live View window, double click the IP address of the desired device, the login window pops up. Type the user ID and password to log in.

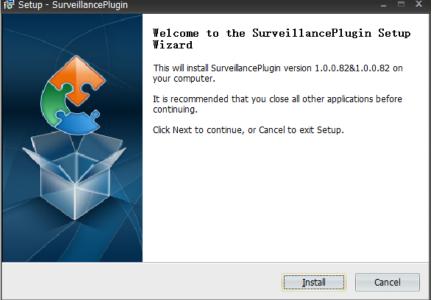


Note for the first time login:



When the Plug-in blocked appears on the browser, click **download** to download the plug-in and install to your computer. 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).</li>
  - ✓ 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.



<ul> <li>Compute</li> </ul>	er 🕨 Local Disl	k (C:) 🕨 Program Files (x86)	Internet Explorer
🖬 Open	Burn	New folder	
	Name		Date modified
ads	🥖 iexple	Open	11/21/2010 1
Places	liecon	🚱 Run as administrator	/ 1/2010 1

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. Getting Started

After pressing the power switch to turn on the NVR, the NVR will enter the System Initialization process. When the process is done, it's required to set up a password for the administrator account immediately in order to protect your privacy.

	Login	
Language	English 🗸	
Device ID	000000	(000000)
New Admin Name	admin	
Password Strength		High
New Admin Password	•••••	Show Password
Confirm Password	•••••	Show Password
Enable Unlock Pattern	Disable 🗸	
	Apply	

Language: Select an OSD language.

**Device ID:** Input the device ID. The default ID is 000000. For more details about the Device ID, please refer to *4.9.1.1 General*.

**New Admin name:** Optionally input a name if you want to set up a name of the administrator account.

Password Strength: Displays the security strength of the setup password.

**New Admin Password:** Set up a password of the administrator account. The password must be a combination of at least 8 characters (alphabetic, numeric, or special characters).

Confirm Password: Enter the password again.

**Enable Unlock Pattern:** If you want to login the system with a pattern lock, select **Enable** from the drop-down list and then click the **Draw** button to draw a pattern. To disable the Unlock Pattern function, please refer to **User Edit** in 4.9.2 User Account.

Apply: Click to save the settings.



After clicking the **Apply** button, the below Unlock page appears. Input the **User Name**, **Password** and then click **Unlock**.

	Unlock	¢	
Language	English	~	
Device ID	000000		(000000)
User	admin	~	
Password			Show Password
	Forgot Password	Unio	ck

## 3.1 Turning On / Off the Power

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

To turn off the power, please refer to *Shutdown* in *4.10 Exit* for more details.



## 3.2 Startup Wizard

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

**Note:** If you don't want to run the startup Wizard to make any settings when you restart the NVR next time, you can go to **OSD Menu > System > General** and then uncheck the **Start wizard** function.

1. Click the **Start Wizard** button to start with the startup wizard.



2. Configure the Network settings. Click **Next** to proceed.

letwork								
letwork								
Local C	Connection							
DI	HCP							
IP Address								
S	ubnet Mask							
	ateway							
DNS								
D	NS1							
D	NS2							
Port								
		Service	Protocol	Internal Port	External Port	UPNP Status	UPnP	
		Web Port	TCP	00080	00080	Inactive		
		Client Port	TCP	09000	09000	Inactive		
		RTSP Por	TCP	00554	00554	Inactive		

[Local Connection]

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**DHCP:** For DHCP users, check DHCP, the router will automatically assign all the below IP parameters to the NVR.

**IP Address:** The IP address of the NVR. The IP address consists of four groups of numbers, separated by periods. For example, "192.168.001.100".

**Subnet Mask:** Subnet mask is a network parameter which defines a range of IP addresses that can be used on a network. The subnet address also consists of four groups of numbers, separated by periods. For example, "255.255.000.000".

**Gateway:** This address allows the NVR to access the Internet. The format of the Gateway address is the same as the IP Address. For example, "192.168.001.001".

## [DNS]

DNS1 is the primary DNS server and DNS2 is a backup DNS server. Usually, it's enough to just enter the DNS1 server address.

## [Port]

**Web Port:** The Web port can be used to remotely login the NVR (e.g. using the Web Client). If the default port 80 is already taken by other applications, please change it.

**Client Port:** The Client port can be used to send information through (e.g. using the mobile app). If the default port 9000 is already taken by other applications, please change it.

**RTSP Port:** The RTSP port allows the NVR to transmit real-time streaming to other devices (e.g. using a streaming media player).

**HTTPS:** The Hypertext Transfer Protocol Secure (HTTPS) is a combination of the Hypertext Transfer Protocol and the SSL/TLS protocol that provides encrypted communication and secure identification of a network web server.

## (PPPoE)

PPPoE is an advanced protocol that allows the NVR to connect to the network via a DSL modem. To enable the PPPoE function, check **Enable PPPoE**, input the **User Name** and **Password** provided by your Internet Service Provider.



3. Configure the Date/Time settings. You can also configure the NTP and DST settings. Click **Next** to proceed.

Date/Time				
Date and Time N	TP DST			
Date	02/26/2019	Ĩ		
Time	16.18.58			
Date Format	MM/DD/YY	*		
Time Format	24Hour	*		
Time Zone	GMT+08:00	~		
			Previous (Mext)	Cancel

#### [Date and Time]

Date: Click on the calendar icon to set the system date.

Time: Click to set the system time.

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

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

Time Zone: Select a time zone of your region.

#### [NTP]

NTP stands for Network Time Protocol. This feature allows you to synchronize the NVR date and time automatically over the Internet with the NTP server. Please ensure the NVR has been connected to the Internet before enabling the NTP function.

To enable NTP, check **Enable NTP**, select an NTP server from the drop-down list or input one of your region. Click **Update Now**.

Date/Time		
Date and Time	DST	
Enable NTP		
Server Address	pool.ntp.org	~



## 【DST】

DST stands for Daylight Saving Time.

le and Time NTP DS1					
Enable DST					
Time Offset	1Hour	~			
Daylight Saving Time	Week	*			

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

Time Offset: Select the amount of time to offset for DST.

**Daylight Saving Time:** Choose to set up the daylight saving time in weeks or in days. **Start Time/End Time:** Set the start time and end time for DST.

4. Add IP cameras to the NVR. By default, the system will automatically detect the IP cameras connected to the PoE ports of the NVR. Please refer to *4.1.1.2 IP Channels* for more details.

				V	Vizar	d				×
IP Ca	mera									
	No.	IP Address/Domain	Port	Manu			Channel	Edit	State	IP Addre
							CH1			10.*
							CH2			
							СНЗ			10.1
							CH4			
							СН5			
							CH6			
					-		CH7			
							СН8			
							СН9			
							CH10			
							CH11			
							CH12			
							CH13			
<						< <u></u>	~~~			, <sup>-</sup>
Sear						Delete				
							Previous	Next	Ca	ancel



 Configure the Disk settings. For the first time use HDD or a new HDD, users have to format the HDD before use. Select the HDDs you want to format by checking the checkbox in the No column and then click the Format HDD button. You can also setup to overwrite the HDD. Click Next to proceed.

			Wizard			×
Disk						
No.	Edit	Model:	No:	Firmware	Туре	Disk Grou
1*		ST2000VX000-1ES164	Z4Z3L8CA	CV26	RW	Group1
2		ST2000VX000-1ES164	Z4Z3L83Y	CV26	RW	Group1
<						
Overwrite		Auto Form	nat HDD			
Record on e	≥SATA	Disable 🗸				
				Previous	Jext C	ancel

**Overwrite:** Select **Auto** to enable the overwrite function; **Off** to disable the overwrite function. If **Auto** is selected, the NVR will overwrite the oldest files on the HDD when HDD is full. If Off is selected, please check the HDD status regularly, to make sure the HDD is not full.

The **1/3/7/14/30/90** Days stands for the last number of days to keep in the HDD. For example, if 3 Days is selected, the last 3 days recordings will be kept in the HDD.

**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.

#### 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.

**Record on eSATA:** If you have connected an external eSATA storage device to the NVR, you can enable the eSATA backup storage function.



6. The NVR will apply the resolution best suit the connected monitor. If you want to change the output resolution, select an output resolution that matches your monitor. Click the **Apply** button. Click **Next** to proceed.

		Wizard			×
Resolution					
Output Resolution	1280x1024	~			
	Apply				
			Previous	Novt	Cancel
			Previous	Next	Cancel

7. Mobile information. You can scan the QR code with **EverFocus eFVMS App** installed on your mobile device to add the NVR to your app and then remotely access the NVR (please refer to *4.9.5.1 System Info* for more details). Click **Next** to proceed.

	١	Wizard	×
Mobile			
P2P ID			
P2P ID	4G1UH4UKT3BRLHR11		
Local Connection			
IP Address	192.168.33.127		
Subnet Mask	255.255.255.0		
Port			
Web Port	80		
Client Port	8000		
		Previous	Next Cancel



8. The setup information through this wizard will be displayed on the Summary page. Click **Finish** to close the wizard.

	Wizard	×
Summary		
System		Î
Resolution	1280x1024	I
Date/Time	07/17/2019 12:00:00, GMT+08:00	I
NTP	off	I
DST	off	
Network		
DHCP	On	
IP Address	192.168.33.126	
Subnet Mask	255.255.255.0	
Gateway	192.168.33.254	
DNS1	192.168.10.188	
DNS2	8.8.8.8	
Do not show this window	r next time.	
		Previous Finish

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

9. After clicking the **Finish** button, the system will enter the Live View window (refer to *3.4 Live View Window*).

+	07/18/2019	11:31:46 +	+
No Camera	No Camera	No Camera	No Camera
+ No Camera	+ No Camera	+ No Camera	+ No Camera
+ No Camera	+ No Camera	+ No Camera	+ No Camera
+ No Camera	+No Camera	+	+ No Camera

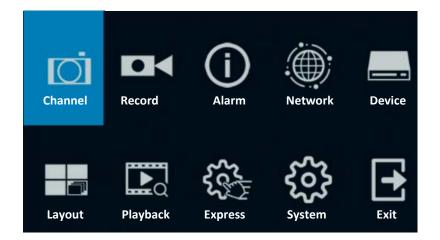


10. To start using the NVR, click any function and the **Unlock** window appears. Input the password of the NVR and then click the **Unlock** button to unlock the screen, the OSD Setup menu appears. You can start using the NVR. Please refer to *4. OSD Menu* for more details.

	Unic	ock		
Language	English	~		
Device ID	000000	(0000	000)	
User	admin	~		
Password			how Password	
	Forgot Password	Unlock		
	Polgot Password	OHIOCK		
$\bigcirc$		U		
Channel	Record	Alarm	Network	Device
		522	522	
- P	a	SEE	222	
Layout	Playback	Express	System	Exit



## **3.3** General Operation on the OSD Menu



## [OSD Menu]

- 1. On the Live View window, right click the mouse, the OSD Menu appears.
- 2. Click on any icons to enter the setup menus.
- 3. To exit the OSD menu, right click the mouse. You can also exit each sub menu by right clicking the mouse.

## 【Text Box】

Click on the box and an on-screen keyboard will appear.

Device Name IRONGUARD 16 POE

### [On-Screen Keyboard]

Click on a button to input that character.

1	2	3	4	5	6	7	8	9	о		ŧ		+	Switch to capital letters
q	w	е	r	t	У	u	i	0	р	ſ	1	٨	-	Confirm the selection
	а	s o	f f	g	h	j	ĸ	I				•		
†  +		z → +	( C	ر ۲	с С	n	m		=		ب	/	<b>+</b> -	Delete the letter backwards
													+ +	Move to the left or right
													l	Enter a space



#### [Drop-Down Box]

Click on the down arrow to see all selections, then directly click on an option to select it.

Language English 🗸

### [Check Box]

Click on the box to enable it (checked) or disable it (unchecked).

🛃 Start Wizard

## [Button]

Click the button to execute the function.



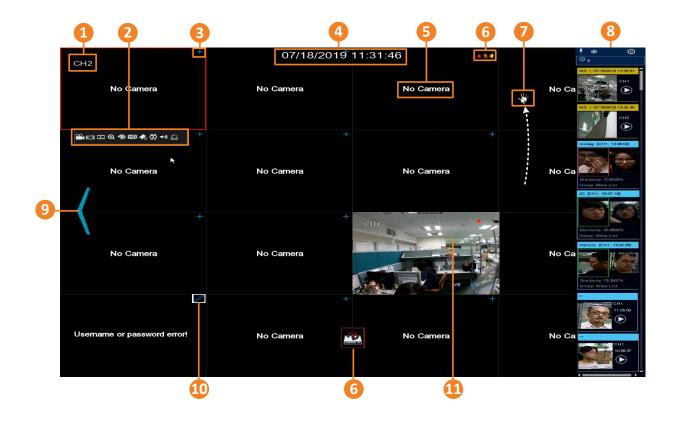
## [Slider]

Slide the bar to the left or right for adjusting the value.

AGC 64



## 3.4 Live View Window



No	Name	Description
1	Channel Number	The system will automatically display the channel number once the channel has been connected to an IP camera. To configure the channel number (name), please refer to <b>Alias</b> in <i>4.1.1.1.3 Manually Add IP Cameras</i> .
2	Live Channel Tool Bar	Left click any channel can display its Live Channel Tool Bar to perform functions including Manual Record, manual Snapshot, Quick Playback and etc Please refer to <i>3.5 Live Channel Tool Bar</i> for more details.
3	Quick Add	Click to open the <b>Quick Add</b> menu to add IP cameras. Please refer to <i>4.1.1.2 IP Channels</i> for more details.
4	System Date and Time	Displays system date and time. To change system date and time, go to OSD Menu > System > General > Date and Time.
5	Channel State	Displays the status of channel connection.



6	Status Icons	<ul> <li>The Status Icons displayed on the upper-right corner of each channel are designed to alert users when any of the following situations occur:</li> <li>Channel recording</li> <li>Motion event is detected</li> <li>External I/O alarm is triggered</li> <li>HDD error I HDD full HDD unformatted</li> <li>HDD is ready only</li> <li>Intelligent event is triggered.</li> </ul>
7	Drag Channel Icon	You can drag and drop a channel to the desired position on the layout. Click on a channel and hold it, a <b>Drag Channel</b> icon will display. Drag and drop the channel to the desired channel position on the layout.
8	Live Alarm Panel	This panel is designed to display the real-time alarm in thumbnails. You can quickly check or play back the alarm using this panel. Please refer to <i>3.6 Live Alarm Panel</i> for more details.
9	Layout Page Icons	Move your mouse cursor to the left or right edge of the screen, the <b>Next</b> icon or <b>Previous</b> icon of will appear. 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.
10	Edit	When IP camera connection failed, the edit icon $\checkmark$ will appear. Click to open the <b>Edit IP Camera Profile</b> menu to edit the IP camera parameters. Please refer to <i>4.1.1.2 IP Channels</i> for more details.
11	Live Channel	<ul> <li>Double-click on a channel can display the channel in full screen. To exit the full screen mode, double-click on the channel again.</li> <li>In full screen mode, you can: <ul> <li>Left-click to bring up the Live Channel Tool Bar. Please refer to 3.5 Live Channel Tool Bar for more details.</li> <li>Scroll the mouse to zoom in or zoom out the images, and then use your mouse to drag the image to the desired positions to spot on a specific area.</li> </ul> </li> </ul>



## 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.

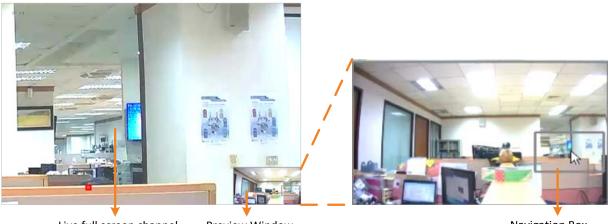


No	Name	Description
1	Manual Record	Click the button to start manual recording. During the process of manual recording, the icon will display in red. Click the button again to stop manual recording.
2	Manual Snapshot	Click to take a snapshot of the channel. You can then using the Playback panel to playback the snapshot images. Please refer to <i>4.7.3.7 Snapshot</i> . To configure the snapshot parameters or set up the snapshot schedule, please refer to <i>4.2.3 Snapshot</i> .
3	Quick Playback	Click to playback the latest 5 minutes recording of this channel. Click <b>X</b> to exit the Quick Playback mode. To configure the quick playback start time, please refer to <i>4.8.1 Quick Playback</i> .
4	PTZ	This icon will only appear when a PTZ camera is connected to the channel. Click to bring up the PTZ Control window. Please refer to <i>3.5.2 PTZ Control Panel</i> for more details.
5	Zoom	Click to start the digital zoom function. Please refer to 3.5.1 Digital Zoom (PIP) for more details.
6	Image Settings	Click to bring up the Color Setting window. You can adjust the Hue, Brightness, Contrast and Saturation for each channel individually.
7	Stream Switch	Click to switch between <b>HD</b> and <b>SD</b> stream displayed on the live view channel. To adjust the HD (main stream), SD (sub stream) settings, please refer to <i>4.2.1.1 Main Stream</i> and <i>4.2.1.2 Sub Stream</i> .
8	Add Customized Tag	You can add a tag of the selected time to this channel. Input a tag name and then click <b>Save</b> . To search for the tags, go to Playback > Tag, please refer to <i>4.7.3.5 Tag</i> .
9	Face Recognition Statistics	This icon will only appear when a face-recognition-supported IP camera is connected to the channel. Move the mouse cursor to the icon can display the number of faces recognized on this channel during the selected time. Please refer to <i>3.6 Live Alarm Panel</i> .
10	Audio	Click to turn on or turn off the audio, or adjust audio volume.
11	Manual Alarm	Click to manually trigger alarm output of the channel.



#### 3.5.1 Digital Zoom (PIP)

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



Live full screen channel Preview Window

Navigation Box

To perform the digital zoom function:

- 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.

**Note:** You can also perform the Digital Zoom function by scrolling the mouse directly on the Live View to zoom in or zoom out the images, and then drag the live view image to the desired positions to spot on a specific area.



#### 3.5.2 PTZ Control Panel

With the PTZ Control Panel, you can control the connected PTZ cameras.

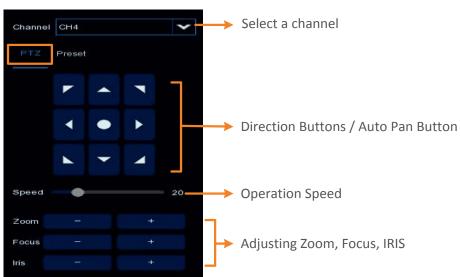
On the Live View window, select a PTZ camera by clicking on the channel, the selected channel will be highlighted with a red frame. Left-click on the channel to display its **Live Channel Tool Bar** and then click the **PTZ** icon to bring up the **PTZ Control panel**.



#### 3.5.2.1 PTZ Control Panel

You can use the PTZ Control panel to control the connected PTZ camera.

Note that before using this function, you have to connect the PTZ cameras to the NVR and configure the related PTZ settings. Please refer to *4.1.4 PTZ*.



#### PTZ Control Panel

Channel: Click to select a PTZ camera you want to control.

PTZ: Click PTZ to enter the PTZ Control panel.

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

**Auto Pan :** Click to start the Auto Pan (360°) function. Click again to stop the Auto Pan function.

**Speed:** Switch the bar to the left or right to adjust the operation speed.

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

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

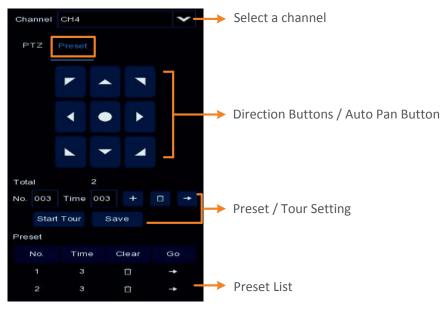
**Iris:** Click + or – to adjust the Iris.



#### 3.5.2.2 Preset Setting

Click **Preset** to enter the Preset Setting panel. On this panel, you can set up Preset positions, perform the Go to Preset function and also perform the Tour function.

#### Preset Setting Panel



#### To set up Preset Points:

- 1. Click on the **No.** input box and input a preset number (1-255).
- 2. Click on the **Time** input box to 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 **•** 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.
- To clear the setup preset points, select a preset number in the No. input box and then click the Clear button 
   Or you can also click the Clear button of a specific preset number on the Preset List.

#### To perform the Go to Preset Point function:

- 1. Set up the preset points in advance.
- 2. Input a preset number (1-255) in the No. input box, and then click the Go button 🔜.
- 3. You can also click the **Go** button ➡ of a specific preset number on the Preset List to go to the selected preset point.



#### To perform the Tour function:

- 1. Set up the preset points in advance.
- 2. Click the **Start Tour** button, the PTZ camera will start cruising based on the pre-configured preset points with the dwell time.
- 3. To stop the Tour function, click the **Stop Tour** button.

Live Alarm Panel

### 3.6 Live Alarm Panel

The **Live Alarm Panel** is designed to display the real-time alarm in thumbnails. You can quickly check or play back the alarm using this panel.

Live Alarm Panel supports the following alarm functions. For the alarm functions to work, you have to pre-configure the required alarm settings:

- Face Recognition
- Motion Detection
- IO Alarm
- IVS Alarm (Perimeter Intrusion, Object Detection, Pedestrian Detection, Line-Crossing, Face Recognition, Cross-Counting Detection, Sound Detection, Tamper Detection)

CH1	07/18/2019	11:31:46 +	<b>₹ ⊚</b> (©) (© ₀
	No Camera	No Camera	
≌सा∷ा ा	+ No Camera	+ No Camera	No Ca Binitary (2)11-12-2023 Binitary: 70 805% Group data Lat 20 5411-10-2019
+ No Camera	+ No Camera	+ No Camera	No Ca Britishing Although Little Britishing Although Lit
+ No Camera	+ No Camera	+ No Camera	No Ca



Here we take **Face Recognition** for example:

- 1. Ensure the face-recognition-supported IP cameras have been connected to the NVR.
- 2. To enable the Face Recognition function, go to OSD > Channel > Intelligent > Face Detection.



- 3. Check the **Switch** checkbox to enable the Face Recognition function of this channel.
- 4. Click the **Setup** icon to configure the Face Recognition settings. After configuring the settings, click **Save**.



Channel: Select a channel to configure the settings.Snapshot Mode: Select a Snapshot Mode.

## **F**EverFocus

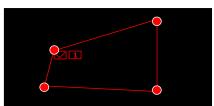
- <u>Realtime</u>: System will take two snapshot images. One is when alarm triggered. The other will be an optimal image that system recognized.
- Optimal: System will take one snapshot images that is recognized as the optimal one.
- Interval: Select this mode to further set up the Snapshot Quantity and Snapshot Interval.
  - Snapshot Quantity: Select the number of snapshot image to take per set up interval.
  - Snapshot Interval: Set up an interval to take the snapshot images.

Snapshot Number: Select a recognition mode.

- <u>Custom Mode</u>: Select this mode to take the frontal face image only. To view the default parameters, select **Customize** and then click the **Custom Mode Default** button.
- <u>Min Pixel:</u> Select this mode to apply the minimum parameters of the orientation angles (Roll, Pitch, Yaw) of the faces toward camera, Picture Quality and Quick Mode. To view the default parameters, select **Customize** and then click the **Min Pixel Default** button.
- <u>Customize:</u> Select this mode and then apply the orientation angles (Roll, Pitch, Yaw) of the faces toward camera, Picture Quality and Quick Mode.
  - Roll Range: Adjust the rotation angle (0-180).
  - Pitch Range: Adjust the horizontal angle (0-180).
  - Yaw Range: Adjust the vertical angle (0-180).
  - Picture Quality: Adjust the quality of the face snapshot images. The more the value, the better the image quality.
  - Quick Mode: Set up the maximum recognition pixel size within a 1080p image.
  - Custom Mode Default: Click to display the default parameters of the Custom Mode.
  - Min Pixel Default: Click to display the default parameters of the Min Pixel.

**Detection Range:** Select a detection area.

- <u>Full Screen</u>: Select Full Screen to detect the area of whole image.
- <u>Customize</u>: Select **Customize** and resize the area by dragging the red dots at the edge.





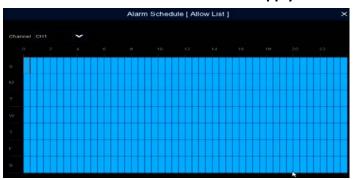
5. To display Face Recognition thumbnails on the Live Alarm Panel, go to OSD > Alarm > Intelligent > Face Recognition.

Ō	•	í	.(			<b>2</b> 2		ŝ	•
Channel	Record	Alarm	Ne	atwork	Device	Express		System	Exit
🗲 Motion								Import Databa	se Copy Database
Ļ I/O		Group Name	+/- E	dit Enable	Policy	Similarity	Alarm	Alarm Schedule	
Intelligent	~ AI	low List			Allow	≥ 70 %			
<ul> <li>Perimeter Intrusion</li> </ul>		ock List			Deny				
	St	ranger		2	Stranger				
Line-Crossing									
<ul> <li>Foreign/Missing OI</li> </ul>									
🕳 Pedestrian Detecti									
<ul> <li>Face Detection</li> </ul>									
<ul> <li>Cross-Counting De-</li> </ul>									
<ul> <li>Sound Detection</li> </ul>									
<ul> <li>Tamper Detection</li> </ul>									
- Face Recognition									
- Statistics									
🗧 PTZ Linkage									
Exception									
Alarm Schedule									
								E	Default Apply

- a. Configure the face group settings. Please refer to 4.3.3.2 Face Recognition for more details.
- b. Click the **Setting** icon in the **Alarm** column of each group. Enable the **Show Thumbnail** function so the Face Recognition thumbnail will be displayed on the Live Alarm Panel.

Channel	Buzzer	*	Alarm Out	Alarm Output	*	Save Face	*	Save Background	*	Show Thumbnail	*
CH1	Disable	~		10 Sec.	*	M				2	
CH2	Disable	~		10 Sec.	~	N					
СНЗ	Disable	*		10 Sec.	*	N				Y	

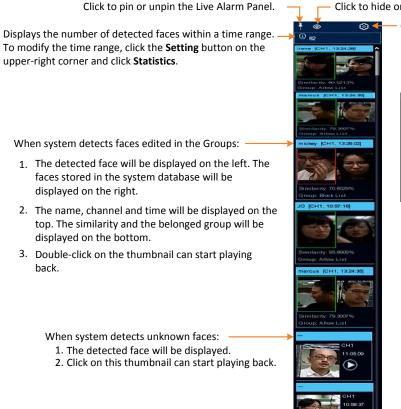
c. Click the **Setting** icon in the **Alarm Schedule** column of each group. Configure the alarm schedule time and then click the **Apply** button.





back.

6. The Face Recognition configuration is complete. Go to the Live View page and when there are faces detected, the Face Recognition thumbnails will be displayed on the Live Alarm Panel.



Click to hide or display the thumbnails.

Click to display the below window to: Select the Alarm functions you want to display on the Live Alarm Panel and select the Channels. Click Apply to save the settings.

	Distan
E Face [A]	Mitton
	Mitco
🔲 🖾 LQ	Permiter Mausion
🖬 🛄 Line-Crossing 👘	C Foreign Missing Object
🖬 🛃 Padaattan Detector	
🖬 🔛 Cross-Courting Detection 🗧	Sound .
E Tangar	

Select a time range to display the number of detected faces from Face Recognition.



When system detects unknown faces:

- 1. The detected face will be displayed.



# Chapter



## 4. OSD Menu

You can use the OSD Menu to configure system settings. To bring up the OSD Menu, right click on the screen.



## **F**EverFocus

## 4.1 Channel

In this section, you can configure the settings including IP cameras, live view display, PTZ setup, motion setup, Intelligent functions and more.

### 4.1.1 Channel

4.1.1.1 IP Channels

Ō			(Ì	)						<b>₹</b> ₹\$	Ś	\$	Ŀ	
Channel	Record		Alarm		Net	work		Device		Express	Syster	n		xit
Channel	~	No.	Edit IF	P Address/Dor	main 🔥	Port		Manufacturer		Device Type	MAC Address	Software	Version	
IP Channels				10.10.25.	153	8000	EverFocu	is/www.everfoo	us.com.tw	IP CAMERA	00-11-14-19-40-0A	V1.0.1_2	0190628	î
				192.168.3	33.5	80		HeroSpeed			00-00-1B-16-69-4F			
<ul> <li>Manage Protocol</li> </ul>				192.168.3	33.6	80	Ev	erFocus_EZN2	268		00-AA-CC-FF-EE-00			
Live				192.168.3	3.20	9988				Fisheye	00-23-63-74-77-02	V2.31.4.8	3_180713	- 1
				192.168.3	3.38	8000	EverFocu	is/www.evenfoo	us.com.tw	EBN1240-A	00-11-14-19-10-06	V1.0.1_2	0190626	
🚉 🖨 Image				192.168.3	3.43	80		EZN368			DE-F3-B0-F6-22-60			
🚑 PTZ	✓			192.168.3	3.57	8000	EverFocu	is/www.everfoo	us.com.tw	EZN1240-A	00-11-14-19-40-08	V1.0.1_2	0190110	
				192.168.3	3.66	80	Eve	erFocus_EZN3	160		00-11-14-0F-36-64			
Privacy Mask				192.168.3	3.69	80	Eve	erFocus_EZN3	260		00-11-14-0D-C3-C2			
📌 Motion				192.168.3	3.84	80	Eve	erFocus_EZN1	260		00-11-14-11-00-79			
Intelligent	Se	arch	Add	Auto Add a	All									
		Channel		Edit State		IP Addre	ss/Domain	Subnet Mask	Port	Man	ufacturer	Device Type	Protocol	MAC Ac
		CH1		/ 🖸		10.10.25		255.255.0.0	8000	EverFocus/www	w.everfocus.com.tw	EZN2540	Private	00-11-14
		CH2				10.10.25		255.255.0.0	8000	EverFocus/www	v.everfocus.com.tw	EZN2540	Private	00-11-14
		СНЗ	0											
		CH4	0											
		CH5	0											
		CH6	•											
		CH7	•											
		CH8	0											
		CH9	•											
	<			13										, ``
	Came	ara Search		nannel Man	ual Mode	Auto M	lode	EPOE /	Auto POE	Default Passw	vord			
											Total Bandwidth:3	20Mbps, Us	ed Bandwi	dth:5.5Mbps

**Search:** Click to search for the IP cameras connected to the local network. The searched IP cameras will be displayed on the upper list.

**Add:** Click to manually add IP camera on the local network one by one to the NVR. The added IP camera will be displayed on the lower list. Please refer to *4.1.1.1.3 Manually Add IP Cameras* for more details.

**Add All:** Click to automatically add the IP cameras on the local network to the NVR based on the supported number of IP camera of your device. Please refer to *4.1.1.1.2 Auto Add IP Cameras* for more details.

**Camera Search:** The added IP camera would not be able to connect to the NVR if its IP address is not on the same network segment with the NVR. Therefore, you can use this function to reassign an IP address to all added IP cameras with the same network segment as NVR's.

**Channel Delete:** On the added IP cameras list, check the IP camera boxes and then click the Channel Delete button to delete the selected IP cameras from the list.

**Manual Mode:** Click to enter the Manual Mode to add the IP cameras from the local network to the NVR. If you are in the Manual Mode and you want to add some IP cameras connected to the NVR via PoE ports, you can click the Edit button to switch the channel mode to Auto



Mode, the system will automatically detect the PoE channels. However, if you are in the Auto Mode, clicking the Manual Mode button will switch all the available channels to Manual Mode, and then you can connect the IP cameras from the local network.

**Auto Mode:** Click to enter the **Auto Mode** for the system to automatically detect the IP cameras connected to the PoE ports of the NVR.

Note that if you have already added some IP cameras from the local network in the Manual Mode, clicking the Auto Mode button will delete all the connected IP cameras from the local network (see message window below). You can click the **Edit** button to switch the channel to Auto Mode to add the IP cameras connected to PoE ports of the NVR.



**EPOE:** Click this button and all the PoE ports will be limited with 10Mbps bandwidth output.



Auto POE: Click this button to disable the EPOE function.

**Default Password:** Click to bring-up the **Set-up Protocol Default Password** page. You can configure the default password for various protocols. When adding IP cameras to the NVR, the NVR will automatically apply the Default Password to the IP cameras based on their protocol. To configure Protocol settings, please refer to *4.1.1.3 Protocol Manage*.

		0-71	
Set-up l	Protocol Defau	It Password	$\times$
Protocol	User Name	Password	4
Private	admin	•••••	î
ONVIF	admin	•••••	
Custom 1	admin	•••••	
Custom 2	admin	•••••	
Custom 3	admin	•••••	
Custom 4	admin	•••••	
Custom 5	admin	•••••	
Custom 6	admin	•••••	
Custom 7	admin	•••••	
Custom 8	admin	•••••	
Custom 9	admin	•••••	÷
	Default	Save Car	ncel



You can also use the buttons on the **Added IP Camera list** to perform the functions:



**PoE:** This represents the IP camera is connected to the PoE port of the NVR.

Delete: Click 🗰 to delete the IP camera.

Add: Click to bring up the Add IP Camera window to add an IP camera from the local network. Please refer to *4.1.1.1.3 Manually Add IP Cameras* for more details.

Edit: Click I to edit IP camera profile.

Modify: Click with to modify IP camera settings.

**State:** Shows the status of the IP camera. Indicates connection failed. Indicates connection succeeded. Click the Campop-up a live window of the IP camera.

#### 4.1.1.1.1 Adding PoE IP Cameras

Ō	•		(i)			xx try	ર્જી	•
Channel	Record		Alarm	Network	Device	Express	System	Exit
💤 Channel	~	No.	Edit IP Addre	ss/Domain Por	Manufacturer Device T	ype MAC Address	Software Version	
- IP Channels								
- Manage Protocol								
Live								
Lo Image								
- PTZ	~							
Privacy Mask								
A Motion								
	<b>~</b>   •			Add All				
		Channel	Edit	State IP Ad	dress/Domain Subnet Mas	ik Port Ma	anufacturer Device Ty	pe Protocol MAC
		PoE CH1		10.10	.25.151 255.255.0.	0 8000 EverFocus/w	ww.everfocus.com.tw EZN254	0 Private 00-11-14
		PoE CH2		10.10	.25.152 255.255.0.	0 8000 EverFocus/w	ww.everfocus.com.tw EBN1240	Private 00-11-14
		РоЕ СНЗ		10.10	.25.153 255.255.0.	0 8000 EverFocus/w	ww.everfocus.com.tw EHN2540	Private 00-11-14
		PoE CH4		10.10	.25.154 255.255.0.	0 8000 EverFocus/w	ww.everfocus.com.tw EZN1540	Private 00-11-14
		PoE CH5						
		PoE CH6						
		PoE CH7						
		PoE CH8						
		PoE CH9						
			./>					

To add IP cameras connected to the PoE ports of the NVR:

- 1. Ensure the PoE IP cameras have been connected to the PoE ports of the NVR.
- 2. Click the **Auto Mode** button, the system will automatically detect the IP cameras connected to the PoE ports and the **Live Display** icon **D** will be displayed in the State column.



- 3. If you still want to add some IP cameras via local network:
  - a. Click the **Edit** button and then select **Manual Mode** from the Switch Mode dropdown list. Click **OK**.

	Edit IP Camera Prof	file		2
Channel				
Switch Mode	Manual Mode	~		
POE Mode	Auto	~		
Alias				
Position	Top Left	~		
IP Address/Domain				
Subnet Mask	000.000.000			
Port				
Protocol	Private	×		
User Name				
Password			Sh	ow Password
Camera Mode	Auto	¥		
			ок	Cancel

b. Now you can click the **Add** button to add an IP camera from the local network. Please refer to *4.1.1.1.3 Manually Add IP Cameras*.



#### Note:

If you want to add non-EF H.265 IP cameras to IRONGUARD NVRs through PoE ports, please refer to Chapter 7 at point 16.

#### 4.1.1.1.2 Auto Add IP Cameras

To automatically add IP cameras connected to the local network to NVR:

- 1. Click the **Search** button to search for the IP cameras connected to the local network.
- 2. Click the **Auto Add All** button. The NVR will automatically add the IP cameras to each channel based on the No. order.



#### 4.1.1.1.3 Manually Add IP Cameras

			Ad	dd IP Camera				×
No.	IP Addres	ss/Domain	Port	Manufacture	er		Device Type	
1		8.33.5	80	HeroSpeed		î		
2	192.16	88.33.6	80	EverFocus_EZN			J.	
< ···				e / esu				<b>,</b> •
IP Add	ress/Domaii	192.16	8.33.6					
Alias		CH2						
Position	1	Top Le	ft		~			
Port		80						
Protoco	əl	ONVIF			×			
User Na	ame	admin						
Passwo	ord	••••					how Password	
Camera								
Camera	a Mode	Auto			×			
s	earch	Default Pas	ssword		A	dd	Cancel	
		a state of the sta						

1. Click Add to bring-up the Add IP Camera page.

- 2. Click **Search** to search for the IP cameras on the network. Note that the IP cameras that have been added to the NVR will not be displayed.
- 3. To select an IP camera, click an IP camera on the list, the clicked IP camera will be highlighted with a blue background.
- 4. Configure the IP camera settings at the lower section.

<u>IP Address/Domain:</u> Input the IP address or domain name of the IP camera.

<u>Alias</u>: Input a channel name for the IP camera. The channel name will be displayed on the upper-left corner of the channel.

Position: Select a position to display the camera name on the live channel.

Port: Port of the IP camera.

Protocol: Select a protocol. For Custom protocol, please refer to 4.1.1.3 Protocol Manage.

<u>User Name:</u> Input the user name of the IP camera.

Password: Input the password of the IP camera.

<u>Camera Mode:</u> Select a camera mode. Options include Auto, Normal and Fisheye.

5. Click **Add** and the IP camera will be added to the channel.



#### 4.1.1.2 Manage Protocol

On this page, you can edit RTSP (Custom 1-16) protocol for IP camera connection.

Channel	Record	Alarm	Network	Device	Express	System	Exit
Channel     P Channels     Manage Protocol	Custom Protocol Protocol Name Stream Type Enable Sub Stream	Custom Protocol1 Custom 1 Main Stream		Sub Stream	~		
Live Live Image	Type Port ✔ RTSP URL	RTSP 554 rtsp://192.168.1.150:5	<b>5</b> 4/ch01/0	RTSP 554 itsp://192.168.1.150:554/	rch01/1		
Privacy Mask	Example : rtsp://IP address A:01(ch1),02(ch2						
	B:0(main stream)	),1(sub stream)					
							Default Apply

**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:** Input the RTSP port of your IP camera. Keep 554 as the RTSP port.
- **Resources 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 NVR
- \* A: Channel number. 01 (ch1), 02 (ch2), and so on
- \* B: Stream Type: 0 (main stream), 1 (sub stream)

Click Apply to save the settings or Default to apply the default setting.



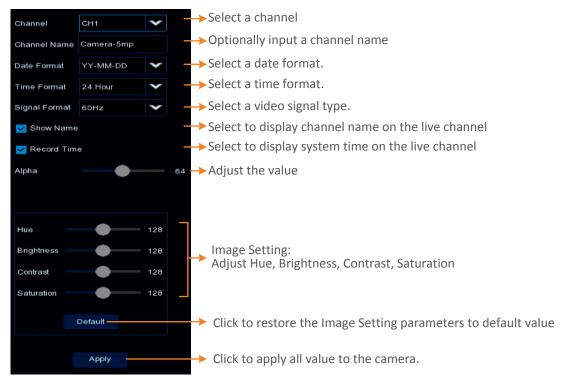
#### 4.1.2 Live

You can configure IP camera Live display settings or image quality.

Ō	•		(	i)				Ś	ζγ ζζ		<b>3</b>	-	
Channel	Reco	ord	А	larm	Network	Dev	rice	E	xpress		System	Ex	
Channel	~	Channel	Setup	Covert 🗸	Channel Name	Show Name 🗸	Date Format	~	Time Form	iat 🗸	Record Time 🗸	Signal For	mat 🗸
Live		CH1			Camera-5mp		YY-MM-DD	~	24 Hour	~		60Hz	~
Es Image		CH2				Y		~		~	3		~
		СНЗ						<		<	Ŋ		~
- PTZ	~	CH5						*		<			~
Privacy Mask													
券 Motion													
	~												
													Apply

#### Channel: Displays the channel number.

## Setup: Click 🙆 to enter the setup page.





**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.

Channel Name: Optionally change the channel name.

**Show Name:** Check the box to display the channel name on the live channel.

Date Format: For supported IP cameras only. Select a date format.

Time Format: For supported IP cameras only. Select a time format.

**Record Time:** Check the box to enable recording the time to the recording files.

Signal Format: For supported IP cameras only. Select a system format (50Hz or 60Hz).

Click **Apply** to save the settings.



#### 4.1.3 Image Control

You can configure the image settings for supported IP cameras.

	Record			Alarm	Network			Device	<b>S</b>	(press	ζς Syste	<b>}</b>	Exit	
Channel	~	Channel	Setup	Day/Night Mode	Delay Switch (s)	Flip	Mirror	Angle Rotate			DWDR		White Balance	Time
Live		CH1		GPIO Auto		Off	off	180	Far	128	128	Middle	R:44 G:27 B:54	
💽 Image		CH2		GPIO Auto		Off	Off		Off	Disable	Off	Off	Auto	
- PTZ	~	сн5 сн6		GPIO Auto Schedule (B/W)		off	off		Off Far	Disable 128	Off 128	Off Far	Auto R:44 G:27 B:54	
Privacy Mask														
券 Motion														
Intelligent	~													

Channel: Displays the channel number.

Setup: Click 😳 to enter the setup page.

Channel	СН6	~
Day/Night Mode	Schedule (B/W)	~
Start Time	00:00	
End Time	00:00	
Delay Switch (s)		14
IR LED	Auto	>
Flip		
Mirror		
Hallway Mode		
Angle Rotate	0	~
Backlight	Enable	~
BLC Level	•	2
BLC Area	Center Area	~
3D Noise Reduction	Manual	~
Level		128
DWDR	Enable	~
Level		128
AGC	•	1
White Balance	Manual	~
Red	-	44
Green	•	27
Blue	-	54
Shutter	Manual	~
Time Exposure	1/30	~
Defog Mode	Manual	~
Defog Level		- 128
D	efault	

**Channel:** Select a channel number.

Day/Night Mode: Select a Day/Night mode.

- **GPIO Auto:** Select GPIO Auto for the camera to automatically switch to day or night mode. You can further set up a **Delay Switch (s)** time (second) in the below field.
- **Color Mode:** Select Color Mode for the camera to display color images.
- Black White Mode: Select Black White Mode for the camera to display B/W images.
- Schedule (B/W): Select Schedule (B/W) for the camera to display B/W images during the setup time range.
   Please select the Start Time and End Time in the below field.

**Delay Switch (s):** This function can only be activated if you select **GPIO Auto** for the **Day/Night Mode**. Set up a delay switch time (seconds) for the camera to auto switch between day and night modes.

**IR-LED:** Select **On** to turn on IR LEDs; select **Off** to turn off IR-LED; select **Auto** for the camera to automatically turn on / off the IR-LED based on the light sensor on the IP camera.

**Flip:** Check the box to enable the Flip function. The image will be rotated vertically around a horizontal axis.

**Mirror:** Check the box to enable the Mirror function. The image will be rotated horizontally around a vertical axis.

**Hallway Mode:** Check the box to enable the Hallway display function (16:9).

Angle Rotate: Select a rotate angle.

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Backlight: Select Enable to enable the BLC (Backlight Compensation) function.

**BLC Level:** Adjust the level for the BLC function.

BLC Area: Select an area to apply the BLC function.

#### **3D Noise Reduction:**

- Auto: Select Auto for the camera to automatically turn on the 3DNR function.
- Manual: Select to turn on the 3DNR function based on the setup Level.
- Disable: Select to disable the 3DNR function.

**WDR:** Select Enable to enable the WDR function and then you will have to adjust a **Level** for the WDR function.

**AGC:** If you select **Manual** in the Shutter field, set up the AGC for the camera. The lower the AGC level, the lower the video signal and the noise.

#### White Balance:

- Auto: Select for the camera to automatically adjust the white balance.
- Manual: Select to adjust the Red, Green, Blue values yourself.
- Indoor: Select Indoor if your camera is installed in an indoor environment.

#### Shutter:

- Auto: Select for the camera to automatically adjust the Shutter.
- Manual: Select to manually adjust the shutter speed. Select a speed in the Time Exposure field. Also set up the AGC in the AGC field above.

**Time Exposure:** If you select **Auto** in the Shutter field, the camera will automatically apply a max. shutter speed. If you select **Manual** in the Shutter field, select a shutter speed from the drop-down list.

#### Defog Mode:

- Auto: Select Auto for the camera to automatically turn on the Defog function.
- Manual: Select to turn on the Defog function based on the setup Level.
- Disable: Select to disable the Defog function.

Click **Default** to restore to default settings.



#### 4.1.4 PTZ

Please connect the PTZ cameras to the NVR and then configure the below PTZ settings. After configuring the PTZ settings, you can start using the PTZ Control panel to control the PTZ camera. Please refer to *3.5.2.1 PTZ Control*.

	Ō	•		<b>(i)</b>		.0							کر کرچ	-	ح ک	ŝ	[	+
	Channel	Record		Alarm		Net	twork			Device		Ex	press		S)	stem		Exit
<b>"</b> •L	Channel	~	Channel	Signal Type	*	Protocol	*	Baudrate	*	Data Bit	*	Stop Bit	*	Parity	*	Address		
	Live		CH2	Analog	~	Pelco-D	~	9600	~		~		~	None	▼ 2			
±¢	Image		СНЗ	Digital	~		~		~		~		~		*			
	PTZ		CH5	Digital	~		~		~		~		~		~			
-	PTZ	^	CH6	Digital	~		*		*		*		*		*			
	- PTZ																	
	Privacy Mask																	
*	Motion																	
$\overline{\sim}$	Intelligent	~																
																Сору	Default	Apply

**Channel:** Displays the channel number.

Signal Type: Analog for analog PTZ cameras; Digital for IP PTZ cameras.

**Protocol:** Select a communication protocol between the PTZ camera and NVR. **Baudrate:** This field is to set the speed at which is used to transmit instruction or information from the NVR to the PTZ camera.

**Data Bit / Stop Bit:** The information between the NVR and PTZ camera is sent in individual packages. The Data Bit indicates the number of bits sent, while the End Bit indicates the end of the package and the beginning of the next (information) package.

Parity: For error check. Refer to the documentation of your PTZ camera to configure this setting

**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 other channels.

To perform the Copy function:

- 1. Click the **Copy** button, the Parameter Copy window appears.
- 2. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels.
- 3. Select the desired channels from the **Target Channel** field.
- 4. Click the **Copy** button, the selected channels will be applied with the same parameters as the source channel.

Click **Apply** to save the settings or **Default** to apply the default setting.



#### **Privacy Mask** 4.1.5

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 per channel.



To configure privacy masks:

- 1. Select a channel from the Channel drop-down list.
- 2. Select Enable Privacy Zone to enable the function.
- 3. Select the areas (masks) to be configured. The selected areas will be displayed on the preview image. Up to 4 areas are available.
- 4. To resize the area, click and drag the bottom-right corner of the rectangle to resize. To drag an area to another location, click and drag the number to relocate the area.



Click and drag to resize



Click and drag to relocate

5. Click the **Apply** button to save the settings.



#### 4.1.6 Motion

You can configure the motion settings and motion event notifications on this page. You can also enable the Push Notification function to send motion event alerts to your mobile devices (with eFVMS App installed). For more details on Push Notification, please refer to *Appendix B: Push Notification*.

Ō		(i)			₹ }	ર્જે	
Channel	Record	Alarm	Network	Device	Express	System	Exit
A Channel	~						
Live		Channel	Setup	Switch	✓ s	šensitivity 🗸	
		CH1				~	
💶 image		CH2		<b>×</b>		~	
🚽 PTZ	~	СНЗ		<b>&gt;</b>		~	
Privacy Mask		CH5		×		~	
		сне		<b>×</b>		~	
🛷 Motion							
Intelligent	~						ļ
							Alarm Apply

To configure the Motion Detection settings:

1. Click 😳 to bring-up the Motion Area Setup page.

Se	ect All Clear All													
Channel	CH1	~												
Switch	Enable	~												
Sensitivity	4	~												

- a. Select a channel from the **Channel** drop-down list.
- b. Select **Enable** from the **Switch** drop-down list to enable motion detection function.
- c. To set up motion detection sensitivity level, select a value from the **Sensitivity** dropdown list. The higher the value the higher the sensitivity.
- d. By default, the whole areas are marked in red. The red blocks represents the areas are applied with the motion detection function. You can click the mouse and drag it to draw multiple areas. To clear a certain area, use the same method to draw on the same area again, the motion area will be erased.
- e. To save the settings, right-click the mouse to return to the Motion Setup page and then click **Apply** to save the settings.
- 2. To further set up the motion event notifications, click the **Alarm** button to enter the Motion alarm setup page (please refer to *4.3.1 Motion*).
- 3. If you want to activate the motion recording function, you need to configure the recording schedule. Please refer to *4.2.2.2 Record Schedule*.

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### 4.1.7 Intelligent

The optional intelligent functions, including Perimeter Intrusion Detection, Line Crossing Detection, Foreign/Missing Object Detection, Pedestrian Detection, Face Detection, Cross Counting, Sound Detection and Tamper Detection.

#### 4.1.7.1 Perimeter Intrusion

When objects (people, vehicle or other objects) enter in or out of a pre-defined region, the Perimeter Intrusion Detection event will be triggered. You can configure some event actions like event recording, Email alert or pop-up full screen when an event is triggered.

Ō	•		i) 🔅			ζζ ζζ		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	[	+
Channel	Record	A	larm Network	Device		Express		System		Exit
Channel	•									
Live		Channel	Setup	Switch	*	Sensitivity	~	Scene	~	
image		CH1					~	Indoor	~	
TZ PTZ	~	CH6		<b>V</b>			~	Indoor	~	
Privacy Mask										
券 Motion										
Intelligent	^									
🕳 Perimeter Intrusio	on									
Line-Crossing										
- Foreign/Missing C	Object									
🗕 Pedestrian Detec	ation									
- Face Detection										
<ul> <li>Cross-Counting D</li> </ul>	etection									
<ul> <li>Sound Detection</li> </ul>										
<ul> <li>Tamper Detection</li> </ul>										
<ul> <li>Record Schedule</li> </ul>										
- Cross-Counting A	nalysis								Alarm	Apply

To configure the Perimeter Intrusion settings:

- 1. Check the **Switch** checkbox to enable the function of the channel.
- 2. Select a **Sensitivity** value from the drop-down list. The larger the value, the higher the sensitivity.
- 3. In the **Scene** field, select **Indoor** or **Outdoor** based on the location where your camera is installed.
- 4. In the **Setup** field, click (2) to set up the detection areas. Please refer to 4.1.8.1.1 Configuring Perimeter Intrusion Areas for more details.
- 5. Click the **Apply** button to save the settings.
- 6. To further set up the alarm notifications, click the **Alarm** button to enter the Alarm setup page. Please refer to *4.3.4 Intelligent Alarm*.
- 7. If you want to activate the intelligent recording function, you need to configure the recording schedule. Please refer to *4.1.8.9 Record Schedule*.



4.1.8.1.1 Configuring Perimeter Intrusion Areas

Channel	CH6	~		B	
Rule Number	1	~	<u> </u>	A	
Rule Switch			$\langle \rangle$		→ <sup>B</sup>
Rule Type	A->B	~		Α	A
	Remove		B	$\backslash$	A
	Remove All				
					78
	Save				

#### Click the **Setup** button 😳 to enter the Area setup page.

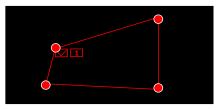
- 1. Select **1** from the **Rule Number** drop-down list to configure the first area.
- 2. Click the **Rule Switch** button to enable this rule.
- 3. Define a type for this rule:

 $A \rightarrow B$ : Detects movement from A to B.

 $B \rightarrow A$ : Detects movement from B to A.

 $A \leftarrow \rightarrow B$ : Detects both movements from A to B and from B to A.

- 4. To draw an area:
  - a. Use your mouse to click 4 points to draw a rectangle shape. The shape should be convex. Concave shape is not allowed.
  - b. If you want to move the area to other position or re-size the area, select the area by checking the red box on the upper-left corner of the area, the borders of the area will change to red color. Drag and drop the area to a desired position. Drag the red dots at the edge of the area can re-size the area.



- c. Click the **Save** button to save the settings.
- d. Follow the steps above to configure more areas. Up to 4 areas can be configured.
- e. You can click the **Remove All** button to remove all the areas. To remove a certain area, select the area by checking the red box on the upper-left corner of the area, and then click the **Remove** button.

**Note:** The detection areas should not be too narrow or small in order to enhance the detection rate.

5. To return to the Perimeter Intrusion setup page, right-click the mouse.



#### 4.1.7.2 Line Crossing

When objects (people, vehicle or other objects) cross a pre-defined line, the Line Crossing Detection event will be triggered. You can configure some event actions like event recording, Email alert or pop-up full screen when an event is triggered.

Ō		í			<b>₹</b> ₹		•
Channel	Record	Alarm	Network	Device	Express	System	Exit
Channel	•						
Live		Channel	Setup	Switch	<b>√</b> s	ensitivity 🗸	Scene 🖍
Los Image		CH1				~	Indoor 🗸
😞 PTZ	~	CH6		M		~	Indoor 🗸
Privacy Mask							
券 Motion							
Intelligent	^						
🕳 Perimeter Intrusi	on						
- Line-Crossing							
- Foreign/Missing	Object						
🗕 Pedestrian Dete	ction						
<ul> <li>Face Detection</li> </ul>							
- Cross-Counting E	Detection						
<ul> <li>Sound Detection</li> </ul>							
- Tamper Detectio	on <b>(</b>						
<ul> <li>Record Schedul</li> </ul>							
<ul> <li>Cross-Counting A</li> </ul>	Analysis						Alarm Apply

To configure the Line Crossing settings:

- 1. Check the **Switch** checkbox to enable the function of the channel.
- 2. Select a **Sensitivity** value from the drop-down list. The larger the value, the higher the sensitivity.
- 3. In the **Scene** field, select **Indoor** or **Outdoor** based on the location where your camera is installed.
- 4. In the **Setup** field, click 😳 to set up the detection lines. Please refer to 4.1.8.2.1 Configuring Line Crossing Detection Lines for more details.
- 5. Click the **Apply** button to save the settings.
- 6. To further set up the alarm notifications, click the **Alarm** button to enter the Alarm setup page. Please refer to *4.3.4 Intelligent Alarm*.
- 7. If you want to activate the intelligent recording function, you need to configure the recording schedule. Please refer to *4.1.8.9 Record Schedule*.



4.1.8.2.1 Configuring Line Crossing Detection Lines

Channel	СНб	~	
Rule Number	1	~	
Rule Switch			
Rule Type	A->B	~	
	Remove		B
	Remove All		A
	Save		$\langle \rangle$

#### Click the **Setup** button to enter the Line setup page.

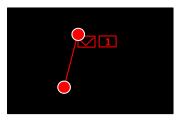
- 1. Select **1** from the Rule Number drop-down list to configure the first line.
- 2. Click the Rule Switch button to enable this rule.
- 3. Define a type for this rule:

 $A \rightarrow B$ : Detects movement from A to B.

 $B \rightarrow A$ : Detects movement from B to A.

 $A \leftarrow \rightarrow B$ : Detects both movements from A to B and from B to A.

- 4. To draw a line:
  - a. Use your mouse to click 2 points to draw a line.
  - b. If you want to move the line to other position or re-draw the line, select the line by checking the red box on the upper-side of the line, the line will change to red color. Drag and drop the line to a desired position. Drag the red dots of the line can re-size the line.



- c. Click the **Save** button to save the settings.
- d. Follow the steps above to configure more lines. Up to 4 lines can be configured.
- e. You can click the **Remove All** button to remove all the lines. To remove a certain line, select the line by checking the red box on the upper-side of the line, and then click the **Remove** button.

**Note:** The detection lines should not be too short in order to enhance the detection rate.

5. To return to the Line Crossing setup page, right-click the mouse.



#### 4.1.7.3 Foreign/Missing Object

When camera detects foreign (unattended) or missing objects in a pre-defined area, the Foreign/Missing Object event will be triggered. You can configure some event actions like event recording, Email alert or pop-up full screen when an event is triggered.

	•	· (i			£c¢}		
Channel	Record	Alarm	Network	Device	Express	System	Exit
Channel	•						
Live		Channel	Setup	Switch	✓ Sensitivity	✓ Scene	~
Image		CH1				► Indoor	~
- PTZ	~	CH6		<b>V</b>		► Indoor	~
Privacy Mask							
券 Motion							
Intelligent	^						
<ul> <li>Perimeter Intrusion</li> </ul>							
Line-Crossing							
- Foreign/Missing Ob	oject						
🗕 Pedestrian Detectio	n						
<ul> <li>Face Detection</li> </ul>							
<ul> <li>Cross-Counting Determine</li> </ul>	ection						
<ul> <li>Sound Detection</li> </ul>							
<ul> <li>Tamper Detection</li> </ul>							
<ul> <li>Record Schedule</li> </ul>							
<ul> <li>Cross-Counting Ana</li> </ul>	lysis						Alarm Apply

To configure the Foreign/Missing Object settings:

- 1. Check the **Switch** checkbox to enable the function of the channel.
- 2. Select a **Sensitivity** value from the drop-down list. The larger the value, the higher the sensitivity.
- 3. In the **Scene** field, select **Indoor** or **Outdoor** based on the location where your camera is installed.
- 4. In the **Setup** field, click <sup>(2)</sup> to set up the detection areas. Please refer to *4.1.8.3.1 Configuring Foreign/Missing Areas* for more details.
- 5. Click the **Apply** button to save the settings.
- 6. To further set up the alarm notifications, click the **Alarm** button to enter the Alarm setup page. Please refer to *4.3.4 Intelligent Alarm*.
- 7. If you want to activate the intelligent recording function, you need to configure the recording schedule. Please refer to *4.1.8.9 Record Schedule*.



4.1.8.3.1 Configuring Foreign/Missing Areas

	•			
Channel	СН6	~		
Rule Number	1	~		1
Rule Switch			1 Missing & Foreign	
Rule Type	Missing & Foreign	~		
	Remove			
	Remove All			
	Save			

Click the **Setup** button 😳 to enter the Area setup page.

- 1. Select **1** from the **Rule Number** drop-down list to configure the first area.
- 2. Click the **Rule Switch** button to enable this rule.
- 3. Define a type for this rule.

Foreign: NVR will only detect the unattended objects.

Missing: NVR will only detect the missing objects.

Missing & Foreign: NVR will detect both missing objects and unattended objects.

- 4. To draw an area:
  - a. Use your mouse to click 4 points to draw a rectangle shape. The shape should be convex. Concave shape is not allowed.
  - b. If you want to move the area to other position or re-size the area, select the area by checking the red box on the upper-left corner of the area, the borders of the area will change to red color. Drag and drop the area to a desired position. Drag the red dots at the edge of the area can re-size the area.



- c. Click the **Save** button to save the settings.
- d. Follow the steps above to configure more areas. Up to 4 areas can be configured.
- e. You can click the **Remove All** button to remove all the areas. To remove a certain area, select the area by checking the red box on the upper-left corner of the area, and then click the **Remove** button.

**Note:** For foreign/missing object, please draw an area slightly larger than or equal to the detected object, and the detected object cannot be covered.



5. To return to the Foreign/Missing Object setup page, right-click the mouse.



#### 4.1.7.4 Pedestrian Detection

When camera detects moving people in a pre-defined area, the Pedestrian Detection event will be triggered. You can configure some event actions like event recording, Email alert or pop-up full screen when an event is triggered.

	Ō		(i)			<b>3</b> 33	<sub>⊭</sub> {	3	ŀ	
	Channel	Record	Alarm	Network	Device	Expres	s Sy	stem	E	≣xit
-7 <b>%</b> -4	Unannei	•								
$\Box$	Live		Channel	Setup	Switch	*	Level	*	Scene	
<b>_</b> •	Image		CH1			MIC	ddle	✓ Inde	or	~
	PTZ	~	CH6			Ne	ar	✓ Inde	oor	~
	Privacy Mask									
*	Motion									
$\overline{\mathbf{x}}$	Intelligent	^								
	<ul> <li>Perimeter Intrusion</li> </ul>									
	<ul> <li>Line-Crossing</li> </ul>									
	🗕 Foreign/Missing Obje	ct								
	<ul> <li>Pedestrian Detection</li> </ul>									
	<ul> <li>Face Detection</li> </ul>									
	<ul> <li>Cross-Counting Detect</li> </ul>	tion								
	<ul> <li>Sound Detection</li> </ul>									
	<ul> <li>Tamper Detection</li> </ul>		<							>
	<ul> <li>Record Schedule</li> </ul>									
	<ul> <li>Cross-Counting Analysis</li> </ul>	sis							Alarm	Apply

To configure the Pedestrian Detection settings:

- 1. Check the **Switch** checkbox to enable the function of the channel.
- 2. In the **Level** field, select among Far, Middle and Near. **Far** level is recommended to detect objects in long distance. **Near** level is recommended to detect objects in short distance.
- 3. In the **Scene** field, select **Indoor** or **Outdoor** based on the location where your camera is installed.
- 4. In the **Setup** field, click (2) to set up the detection areas. Please refer to *4.1.8.4.1 Configuring Pedestrian Detection Area* for more details.
- 5. Click the **Apply** button to save the settings.
- 6. To further set up the alarm notifications, click the **Alarm** button to enter the Alarm setup page. Please refer to *4.3.4 Intelligent Alarm*.
- 7. If you want to activate the intelligent recording function, you need to configure the recording schedule. Please refer to *4.1.8.9 Record Schedule*.



#### 4.1.8.4.1 Configuring Pedestrian Detection Area

Channel	СНб	~	
Rule Number	1	~	<b>.</b> Дл
Rule Switch			
Rule Type	Normal	~	
	Remove		
	Remove All		
	Save		

Click the **Setup** button 😳 to enter the Area setup page.

- 1. Select **1** from the **Rule Number** drop-down list to configure the area.
- 2. Click the **Rule Switch** button to enable this rule.
- 3. Define a type for this rule. Only **Normal** type is available.
- 4. To draw an area:
  - a. Use your mouse to click 4 points to draw a rectangle shape. The shape should be convex. Concave shape is not allowed.
  - b. If you want to move the area to other position or re-size the area, select the area by checking the red box on the upper-left corner of the area, the borders of the area will change to red color. Drag and drop the area to a desired position. Drag the red dots at the edge of the area can re-size the area.



- c. Click the Save button to save the settings.
- d. You can click the **Remove All** button to remove all the areas. To remove a certain area, select the area by checking the red box on the upper-left corner of the area, and then click the **Remove** button.

**Note:** The detection areas should not be too narrow or small in order to enhance the detection rate. The whole target object (people) should be inside the area.



5. To return to the Pedestrian Detection setup page, right-click the mouse.



#### 4.1.7.5 Face Detection

This page can be used to setup Face Recognition functions. Note that for Face Recognition function to work, a face-recognition-supported IP camera should be connected to the NVR. When camera detects faces of moving people, the Face Recognition event will be triggered. You can configure some event actions like event recording, Email alert or pop-up full screen when an event is triggered.

Ō	• <	í			55	ŝ	1
Channel		Alarm	Network	Device	Express	System	Exit
Jac Gnannei	•						
Live		Channel	Setup		Switch 🗸		
image					2		
🕁 РТZ	~	СНБ					
Privacy Mask							
* Motion							
intelligent	~						
- Perimeter Intrusion							
- Line-Crossing							
- Foreign/Missing Of	bject						
- Pedestrian Detects	ion :						
- Face Detection							
- Cross-Counting De	tection						
- Sound Detection							
- Tamper Detection							
- Record Schedule							
- Cross-Counting An	atysis						Alarm Apply

To configure the Face Recognition settings (face-recognition-supported IP camera required):

- 1. Check the **Switch** checkbox to enable the function of the channel.
- 2. In the **Setup** field, click (2) to set up the face recognition settings. Please refer to *4.1.8.5.2 Configuring Face Recognition Settings* for more details.
- 3. Click the **Apply** button to save the settings.
- 4. To further set up the alarm notifications, click the **Alarm** button to enter the Alarm setup page. Please refer to *4.3.3.2 Face Recognition Alarm Settings*.
- 5. If you want to activate the intelligent recording function, you need to configure the recording schedule. Please refer to *4.1.8.9 Record Schedule*.



4.1.7.5.1 Configuring Face Detection Area

Click the **Setup** button 🙆 to enter the Area setup page.

Channel	СНБ	~	
Snapshot Mode	Realtime Mode	~	<b>2</b> 1
Snapshot Number	Custom Mode	~	
Detection Range	Full Screen	~	•
	Save		

- 1. Select **1** from the **Rule Number** drop-down list to configure the area.
- 2. Select Enable from the Rule Switch drop-down list to enable this rule.
- 3. Define a type for this rule. Only **Normal** type is available.
- 4. To draw an area:
  - a. Use your mouse to click 4 points to draw a rectangle shape. The shape should be convex. Concave shape is not allowed.
  - b. If you want to move the area to other position or re-size the area, select the area by checking the red box on the upper-left corner of the area, the borders of the area will change to red color. Drag and drop the area to a desired position. Drag the red dots at the edge of the area can re-size the area.



- c. Click the **Save** button to save the settings.
- d. You can click the **Remove All** button to remove all the areas. To remove a certain area, select the area by checking the red box on the upper-left corner of the area, and then click the **Remove** button.

Note: The configured areas should include the whole front face.



5. To return to the Face Detection setup page, right-click the mouse.



4.1.7.5.2 Configuring Face Recognition Settings

			Camera-5mp 2019-07-19 10:11:37
Channel	CH1	~	
Snapshot Mode	Interval Mode	· ·	
Snapshot Quantity	3	~	
Snapshot Interval	2	s/pic	KA CHARLES HAR E
Snapshot Number	Customize	~	
Roll Range	180	(0-180)	
Pitch Range	180	(0-180)	
Yaw Range	180	(0-180)	
Picture Quality	100	(0-100)	
Quick Mode	32	(32-1080)	
Custom Mode De	efault Min Pix	el Default	
Detection Range	Full Screen	~	
	Save		

### Click the **Setup** button 🙆 to enter the setup page.

1. Configure the below settings.

**Channel:** Select a channel to configure the settings.

Snapshot Mode: Select a Snapshot Mode.

- <u>Realtime</u>: System will take two snapshot images. One is when alarm triggered. The other will be an optimal image that system recognized.
- Optimal: System will take one snapshot images that is recognized as the optimal one.
- Interval: Select this mode to further set up the Snapshot Quantity and Snapshot Interval.
  - Snapshot Quantity: Select the number of snapshot image to take per set up interval.
  - Snapshot Interval: Set up an interval to take the snapshot images.

Snapshot Number: Select a recognition mode.

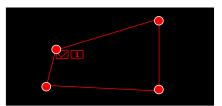
- <u>Custom Mode</u>: Select this mode to take the frontal face image only. To view the default parameters, select **Customize** and then click the **Custom Mode Default** button.
- <u>Min Pixel:</u> Select this mode to apply the minimum parameters of the orientation angles (Roll, Pitch, Yaw) of the faces toward camera, Picture Quality and Quick Mode. To view the default parameters, select **Customize** and then click the **Min Pixel Default** button.
- <u>Customize</u>: Select this mode and then apply the orientation angles (Roll, Pitch, Yaw) of the faces toward camera, Picture Quality and Quick Mode.
  - Roll Range: Adjust the rotation angle (0-180).
  - Pitch Range: Adjust the horizontal angle (0-180).
  - Yaw Range: Adjust the vertical angle (0-180).
  - Picture Quality: Adjust the quality of the face snapshot images. The more the value, the better the image quality.



- Quick Mode: Set up the maximum recognition pixel size within a 1080p image.
- Custom Mode Default: Click to display the default parameters of the Custom Mode.
- Min Pixel Default: Click to display the default parameters of the Min Pixel.

Detection Range: Select a detection area.

- <u>Full Screen</u>: Select **Full Screen** to detect the area of whole image.
- <u>Customize</u>: Select **Customize** and resize the area by dragging the red dots at the edge.



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



#### 4.1.7.6 Cross-Counting Detection

The NVR will count the times when objects (people, vehicle or other objects) cross a predefined line, and the Cross-Counting event will be triggered. You can configure some event actions like event recording, Email alert or pop-up full screen when an event is triggered.

You can search and view the statistical result of cross counting on the Intelligent Analysis page. Please refer to *4.1.8.10 Cross-Counting Analysis*.

Ō		(i				\$?}	ŝ	•
Channel	Record	Alar	m Network	Device		Express	System	Exit
Channel	•							Ì
Live		Channel	Setup	Switch	*	Sensitivity 🗸	Scene	~
Image		CH1				~	Indoor	~
😞 PTZ	~	CH6				~	Indoor	~
Privacy Mask								
券 Motion								
Intelligent	^							
🗕 Perimeter Intrusi								
<ul> <li>Line-Crossing</li> </ul>								
<ul> <li>Foreign/Missing</li> </ul>	Object							
🗕 Pedestrian Dete	ction							
<ul> <li>Face Detection</li> </ul>								
- Cross-Counting E	Detection							
- Sound Detection	1							
<ul> <li>Tamper Detection</li> </ul>								
<ul> <li>Record Schedul</li> </ul>	le							
Cross-Counting A	Analysis							Alarm Apply

To configure the Cross-Counting settings:

- 1. Check the **Switch** checkbox to enable the function of the channel.
- 2. Select a **Sensitivity** value from the drop-down list. The larger the value, the higher the sensitivity.
- 3. In the **Scene** field, select **Indoor** or **Outdoor** based on the location where your camera is installed.
- 4. In the **Setup** field, click 😳 to set up the detection line. Please refer to *4.1.8.6.1 Configuring Cross-Counting Detection Line* for more details.
- 5. Click the **Apply** button to save the settings.
- 6. To further set up the alarm notifications, click the **Alarm** button to enter the Alarm setup page. Please refer to *4.3.4 Intelligent Alarm*.
- 7. If you want to activate the intelligent recording function, you need to configure the recording schedule. Please refer to *4.1.8.9 Record Schedule*.



4.1.8.6.1 Configuring Cross-Counting Detection Line

Channel	CH1	~	
Rule Number	1	~	
Rule Switch			
Rule Type	А->В	~	
	Remove		B
	Remove All		A
	Save		

Click the **Setup** button to enter the Line setup page.

- 1. Select **1** from the Rule Number drop-down list to configure the line.
- 2. Click the **Rule Switch** button to enable this rule.
- 3. Define a type for this rule.

 $A \rightarrow B$ : Detects movement from A to B.

 $B \rightarrow A$ : Detects movement from B to A.

- 4. To draw a line:
  - a. Use your mouse to click 2 points to draw a line.
  - b. If you want to move the line to other position or re-draw the line, select the line by checking the red box on the upper-side of the line, the line will change to red color. Drag and drop the line to a desired position. Drag the red dots of the line can re-size the line.



- c. Click the **Save** button to save the settings.
- d. You can click the **Remove All** button to remove all the lines. To remove a certain line, select the line by checking the red box on the upper-side of the line, and then click the **Remove** button.

**Note:** The detection line should not be too short in order to enhance the detection rate.

5. To return to the Line Crossing setup page, right-click the mouse.



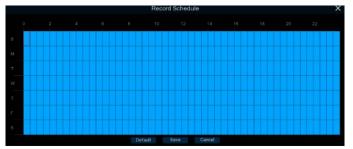
#### 4.1.7.7 Sound Detection

To perform the Sound Detection function, the audio devices have to be pre-installed to the IP cameras.

Ō			(Ì)		(			~~~ ~~		£63		+
Channel	Record	3	Alarm		Netw	• /ork	Device	Express		System		Exit
Channel	•											
Live		Channel	Switch 🗸	Rise	*	Rise Sensitivity	Sound Intensity	Decline	*	Decline Sensitivity	Record	d Schedule
Image		CH1		Disable	~	50	50	Disable	~	50		
- PTZ	~	сне		Disable	~	50	50	Disable	~	50		
Privacy Mask												
券 Motion												
	^											
- Perimeter Intrusion												
🕳 Line-Crossing												
- Foreign/Missing Ob	ject											
🕳 Pedestrian Detectio												
<ul> <li>Face Detection</li> </ul>												
- Cross-Counting Dete	ection											
- Sound Detection												
<ul> <li>Tamper Detection</li> </ul>												
<ul> <li>Record Schedule</li> </ul>												
<ul> <li>Cross-Counting Ana</li> </ul>	lysis									Ţ	Alarm	Apply

To configure the Sound Detection settings:

- 1. Check the **Switch** checkbox to enable the function of the channel.
- 2. In the **Rise** field, select **Enable** to enable the Sound Rise detection. And then further set up the **Rise Sensitivity** and **Sound Intensity**.
- 3. In the **Decline** field, select **Enable** to enable the Sound Decline detection. And then further set up the **Decline Sensitivity**.
- 4. If you want to enable recording when sound detection alarm is triggered, in the **Record Schedule** field, click <sup>(2)</sup> to set up the recording schedule. Click and drag on the schedule time blocks to draw the blocks with blue color, which will be applied with Sound Detection. To deselect the blocks, click and drag on the blue blocks to select again. Click **Save** to save the settings.



- 5. Click the **Apply** button to save the settings.
- 6. To further set up the alarm notifications, click the **Alarm** button to enter the Alarm setup page. Please refer to *4.3.4 Intelligent Alarm*.



#### 4.1.7.8 Tamper Detection

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Channel	Record	Alarm	Network	Device	Express	System	Exit
	•						
Live		Channel	Switch	✓ s	Sensitivity 🗸		
Image		CH1			~		
- PTZ	~	CH6			~		
Privacy Mask							
券 Motion							
Intelligent	~						
- Perimeter Intrusion							
- Line-Crossing							
- Foreign/Missing C	Þbject						
🗕 Pedestrian Detect	tion						
- Face Detection							
<ul> <li>Cross-Counting De</li> </ul>	etection						
Sound Detection							
- Tamper Detection							
<ul> <li>Record Schedule</li> </ul>							
- Cross-Counting An	nalysis					1	Alarm Apply

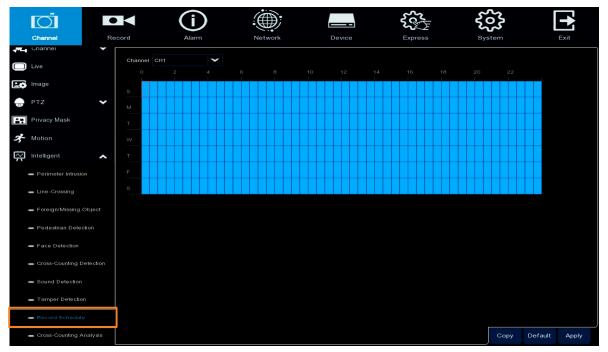
To configure the Tamper Detection settings:

- 1. Check the **Switch** checkbox to enable the function of the channel.
- 2. Select a **Sensitivity** value from the drop-down list. The larger the value, the higher the sensitivity.
- 3. Click the **Apply** button to save the settings.
- 4. To further set up the alarm notifications, click the **Alarm** button to enter the Alarm setup page. Please refer to *4.3.4 Intelligent Alarm*.
- 5. If you want to activate the intelligent recording function, you need to configure the recording schedule. Please refer to *4.1.8.9 Record Schedule*.



#### 4.1.7.9 Record Schedule

In order to active the intelligent recording function, you need to configure the schedule recording for Intelligent events. The schedule will be activated 24 hours a day, 7 days a week.



- 1. Select a channel and then move your mouse cursor over the schedule time blocks.
- 2. Click and drag on the schedule time blocks to draw the blocks with blue color, which will be applied with intelligent event recording function. To deselect the blocks, click and drag on the blue blocks to select again.
- 3. If you want to apply the same configurations from one channel to other channels, click the **Copy** button. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.
- 4. Click **Apply** to save the settings.



#### 4.1.7.10 Cross-Counting Analysis

On this page, you can search and view the statistical result of Cross-Counting Detection. For more details on Cross-Counting Detection, please refer to *4.1.8.6 Cross-Counting*.

Select the criteria and then click the **Search** button, the results will be listed at the lower section.

		• <	(j				₹¢¢		
	Channel	Record	Alarm	Net	twork	Device	Express	System	Exit
<b>7</b> 4	Unannei 🗸 🗸								
	Live	Channel	СН1	<ul> <li>Report Type</li> </ul>	Daily Report	<b>`</b>			
	, Image	Cross Type	Cross In	Start Date	07/23/2019		Search		
	PTZ 🗸		Hour			Count(Cross	in)		
	Privacy Mask		00:00 - 00:	59		202			î
			01:00 - 01:5	59		197			
ネ	Motion		02:00 - 02:	59		218			
$\overline{\sim}$	Intelligent 🔨		05:00 - 05:	59		201			
	Destauration Interview		06:00 - 06:	59					
	<ul> <li>Perimeter Intrusion</li> </ul>		07:00 - 07:			198			
	<ul> <li>Line-Crossing</li> </ul>		08:00 - 00:80			224			
	<ul> <li>Foreign/Missing Object</li> </ul>		09:00 - 09:						
			10:00 - 10:			195			
	<ul> <li>Pedestrian Detection</li> </ul>		11:00 - 11:5			245			
	<ul> <li>Face Detection</li> </ul>		12:00 - 12:						
			13:00 - 13:5 14:00 - 14:5			571			
	<ul> <li>Cross-Counting Detection</li> </ul>		15:00 - 15:			161			
	<ul> <li>Sound Detection</li> </ul>		16:00 - 16:			199			
			17:00 - 17:			64			
	<ul> <li>Tamper Detection</li> </ul>		18:00 - 18:						
	<ul> <li>Record Schedule</li> </ul>		19:00 - 19:						
	<ul> <li>Cross-Counting Analysis</li> </ul>		20:00 - 20:						

### 4.2 Record

You can configure the recording settings on this page.

#### 4.2.1 Stream

On this page, you can configure the recording video or network transmission picture quality. Generally, main stream defines the recording video quality which will be saved in the HDD; sub stream defines the video quality which is being viewed via remote access, for example web client and CMS; mobile stream defines the video quality which is being viewed via remote access through mobile devices.

#### 4.2.1.1 Main Stream

		D 4					~~~ ~~		ž	22		
Channel Re	A	arm N	Network		Device		Express		Syst	em		Exit
🕞 Stream 🔥	Channel Stream Ty	pe Resolution 🥆	✓ FPS	*	Video Encode Type	~	Bitrate Control 🗸	Video Quali	y 🗸	Bitrate Mode	*	Bitrate
🕳 Main Stream	CH1 Normal	2592 x 1944 🗸	30	~	H.265	~	CBR 🗸			Predefined	~	4096
- Sub Stream	CH3 Normal	1920 x 1080 🗸	30	~			vbr 🗸	Poor	~	User-defined	~	3072
🕳 Mobile Stream	CH6 Normal	1920 x 1080 🗸		~	H.265	~	CBR 🗸			Predefined	~	6144
🐑 Snapshot 🗸 🗸												
			_									,
	Total Bandwidth:320M	1bps, Used Bandwidth:1.	7.5Mbps									Apply

Main stream defines the recording video quality which will be saved in the HDD.

Channel: Displays channel number.

**Stream Type:** Displays the stream type.

**Resolution:** Select a recording resolution.

FPS: Select a FPS (frames per second) for the recording.

Video Encode Type: Select H.264 or H.265 based on your IP cameras.

**Bitrate Control:** Select **CBR** (constant bitrate) if the scene is simple and less changing, such as a gray wall. Select **VBR** (variable bitrate) if the scene is complex, such as a department store. If VBR is selected, select a video quality next to Bitrate Control.

Video Quality: If VBR is selected in the Bitrate Control field, select a video quality for VBR.



**Bitrate Mode:** Select **User-defined** to set up bitrate manually; or **Predefined** to auto-select bitrate.

**Bitrate:** The Bitrate corresponds to the speed of data transfer that the NVR will use to record video. Recordings that are encoded at higher bitrates, will be of better quality.

**Audio:** Select this option if you want to record audio along with video. Please ensure the camera supports audio function.

**i-Frame Interval:** This function is only available for certain IP cameras. Please consult EverFocus. Input an i-Frame interval.

**I/O:** Select this option if you want to enable external IO alarm for Main Stream recording.



#### 4.2.1.2 Sub Stream

Sub stream defines the video quality which is being viewed via remote access, for example web client and CMS.

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Channel	Record	Alarm	Ne	twork		Devi	ce E	xpress	;	Sys	tem		Exit
► Stream	Channel	Stream Type	Resolution	*	FPS	*	Video Encode Typ	• 🗸	Bitrate Contro	<b>~</b>	Video Quality	*	Bitrate Mod
🕳 Main Stream	CH1	Normal	640 x 480	~		~	H.264	~	CBR	~			Predefined
🗕 Sub Stream	СНЗ	Normal	640 x 480	~	30	~				~	Poor	~	User-define:
	СН6	Normal	1280 x 720	~	30	~	H.264	~	CBR	~			Predefined
- Mobile Stream													
Record	~												
Snapshot	✓												
	<												
	Total Bandy	idth:320Mbps, Used	Bandwidth: 17.5	Mbps									Apply
		namozowops, osec		mops									, debily

Channel: Displays channel number.

Stream Type: Displays the stream type.

Resolution: Select a recording resolution.

FPS: Select a FPS (frames per second) for the recording.

Video Encode Type: Select H.264 or H.265 based on your IP cameras.

**Bitrate Control:** Select **CBR** (constant bitrate) if the scene is simple and less changing, such as a gray wall. Select **VBR** (variable bitrate) if the scene is complex, such as a department store. If VBR is selected, select a video quality next to Bitrate Control.

Video Quality: If VBR is selected in the Bitrate Control field, select a video quality for VBR.

**Bitrate Mode:** Select **User-defined** to set up bitrate manually; or **Predefined** to auto-select bitrate.

**Bitrate:** The Bitrate corresponds to the speed of data transfer that the NVR will use to record video. Recordings that are encoded at higher bitrates, will be of better quality.

**Audio:** Select this option if you want to record audio along with video. Please ensure the camera supports audio function.

**i-Frame Interval:** This function is only available for certain IP cameras. Please consult EverFocus. Input an i-Frame interval.



#### 4.2.1.3 Mobile Stream

Mobile stream defines the video quality which is being viewed via remote access through mobile devices.

Channel	Record	(i) Alarm	Net	twork		Device		Express	System		Exit	
▶ Stream	Channel	Switch 🗸	Stream Type	Resolution	*	FPS	*	Video Encode Type	✓ Bitrate Co	ntrol 🗸	Bitrate Mode	
🗕 Main Stream	CH1		Normal	640 x 480	~		~	H.264	CBR	~	Predefined	~
- Sub Stream	СНЗ		Normal		~		~	H.264	CBR	~		~
	СН6	M	Normal	640 x 480	~	30	~	H.264	CBR	~	Predefined	~
- Mobile Stream												
Record	~											
🔄 Snapshot	<b>~</b>											
	<											
	Total Bandwi	dth:320Mbps, Used	Bandwidth:17.5	Mbps							Appl	У

Channel: Displays channel number.

Switch: Check the box to enable the Mobile Stream function.

Stream Type: Displays the stream type.

**Resolution:** Select a recording resolution.

FPS: Select a FPS (frames per second) for the recording.

Video Encode Type: Select H.264 or H.265 based on your IP cameras.

**Bitrate Control:** Select **CBR** (constant bitrate) if the scene is simple and less changing, such as a gray wall. Select **VBR** (variable bitrate) if the scene is complex, such as a department store. If VBR is selected, select a video quality next to Bitrate Control.

**Bitrate Mode:** Select **User-defined** to set up bitrate manually; or **Predefined** to auto-select bitrate.

**Bitrate:** The Bitrate corresponds to the speed of data transfer that the NVR will use to record video. Recordings that are encoded at higher bitrates, will be of better quality.

**Audio:** Select this option if you want to record audio along with video. Please ensure the camera supports audio function and a microphone has been connected to the NVR.

**i-Frame Interval:** Input an i-Frame interval.



#### 4.2.2 Record

On this page, you can configure the recording parameters and recording schedule for each channel.

#### 4.2.2.1 Record

Channel	Record	(i) Alarm	Network	Device	Express	System	Exit
		Admin	Hotwork	Device	Explose	Cybrom	Exit
Stream	*	Channel	Enable Channel 🗸 🗸	Record Stream 🗸	Pre-Record 🗸		
Record	^	CH1	<b>~</b>	Dual Streams 🗸 🗸	<b>~</b>		Î
- Record			<b>~</b>	Dual Streams 🗸 🗸	×		
<ul> <li>Record Schedule</li> </ul>			×	Dual Streams 🗸 🗸	×		l III
		CH4	<b>×</b>	Dual Streams 🗸 🗸	>		
😭 Snapshot	~	CH5	<b>×</b>	Dual Streams 🗸 🗸	>		
		CH6	<b>×</b>	Dual Streams 🗸 🗸	<b>×</b>		
		CH7	✓	Dual Streams 🗸 🗸	<b>×</b>		
		CH8	<b>×</b>	Dual Streams 🗸	×		
		CH9	✓	Dual Streams 🗸	×		
		CH10	✓	Dual Streams 🗸	×		
		CH11	✓	Dual Streams 🗸	×		
		CH12	✓	Dual Streams 🗸	×		
		CH13	✓	Dual Streams 🗸	×		
			✓	Dual Streams 🗸	×		
		CH15	<u>~</u>	Dual Streams 🗸	×		
			<b>V</b>	Dual Streams 🗸	×		· • • • • • • • • • • • • • • • • • • •
		IP CH1	<b>×</b>	Dual Streams 🗸	×		
		IP CH2	✓	Dual Streams 🗸	×		
		IP CH3	✓	Dual Streams 🗸 🗸	×		
		IP CH4	✓	Dual Streams 🗸 🗸	×		Ļ
						Сору	Default Apply

Channel: Displays channel number.

Enable Channel: Check the box to enable the function of the channel.

**Record Stream:** Select a recording stream for the channel. If you select **Dual Streams**, the system will record both Main Stream and Sub Stream. If you select **Main Stream**, the system will only record Main Stream.

**Pre-Record:** Check the box to enable the pre-record function. The NVR will start recording a few seconds before an alarm/event is triggered.

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

**Default**: Click to apply the default setting.



#### 4.2.2.2 Record Schedule

On this page, you can configure the recording schedule for Normal, Motion or I/O recordings.



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

**Normal:** Click the **Normal** button on the right-side 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 on the right-side 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. Note that for this function to work, you will have to configure the motion settings in advance (please refer to *4.1.6 Motion*).

**IO:** Click the **IO** button on the right-side 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 IO recording function. Note that for this function to work, you will have to configure the IO settings in advance (please refer to *4.3.3 IO*).

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

**Default**: Click to apply the default setting.



#### 4.2.3 Snapshot

On this page, you can configure the snapshot parameters or set up the snapshot schedule.

#### 4.2.3.1 Snapshot

On this page, you can configure the snapshot parameters.

$\overline{O}$	•		(i)					ę	523  }_	Ś	•
Channel	Reco	rd	Alarm	Network		De	vice		Express	System	Exit
▶ Stream	~	Channel	Auto Snapshot 🥆	<ul> <li>Stream Type</li> </ul>	*	Normal Inte	rval 🗸	Alarm Inte	rval 🗸		
Record	~	CH1		Main Stream	~	5 Sec.	~	5 Sec.	~		
🔄 Snapshot	~	CH2		Main Stream	~	5 Sec.	~	5 Sec.	~		
		СНЗ	<b>V</b>	Main Stream	~	5 Sec.	~	5 Sec.	~		
- Snapshot		CH4	<b>V</b>	Main Stream	~	5 Sec.	~	5 Sec.	~		
🕳 Snap. Schedule		CH5	<b>V</b>	Main Stream	~	5 Sec.	~	5 Sec.	×		
		CH6	<b>V</b>	Main Stream	~	5 Sec.	~	5 Sec.	$\mathbf{v}$		
		CH7	<u>×</u>	Main Stream	~	5 Sec.	~	5 Sec.	$\mathbf{v}$		
		CH8	<u>×</u>	Main Stream	~	5 Sec.	~	5 Sec.	~		
		CH9	<b>×</b>	Main Stream	~	5 Sec.	~	5 Sec.	~		
		CH10	<u>×</u>	Main Stream	~	5 Sec.	~	5 Sec.	$\mathbf{v}$		
		CH11	<b>V</b>	Main Stream	~	5 Sec.	~	5 Sec.	~		
		CH12	<b>V</b>	Main Stream	~	5 Sec.	~	5 Sec.	~		
		CH13	V	Main Stream	~	5 Sec.	~	5 Sec.	~		
		CH14	V	Main Stream	~	5 Sec.	~	5 Sec.	~		
		CH15	M	Main Stream	*	5 Sec.	~	5 Sec.	~		
		CH16	M	Main Stream	*	5 Sec.	~	5 Sec.	~		
		For IP of								Сору	Default Apply

**Channel:** Displays the channel number.

**Auto Snapshot:** Check the box to enable the Auto Snapshot function. For this function to work, you will have to configure the Snapshot Schedule (refer to *4.2.3.2 Snap. Schedule*).

**Stream Type:** Select main stream or sub stream for the snapshot image.

**Normal Interval:** Configure an interval to automatically take a normal snapshot. For this function to work, you will have to configure the Snapshot Schedule. Please refer to *4.2.3.2 Snap. Schedule*.

**Alarm Interval:** Configure an interval to automatically take a snapshot when motion, IO alarm is triggered. For this function to work, you will have to configure the Snapshot Schedule. Please refer to *4.2.3.2 Snap. Schedule*.

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

Default: Click to apply the default setting.



#### 4.2.3.2 Snap. Schedule

On this page, you can configure the snapshot schedule.

Channel			Ç	<b>j</b>	Netwo	);	Device	Express	222		[	Exit
Stream	~	Channel		~			- 00100	2,01000	- Oya			
► Record	*	Channel 0	2	4 6								
Snapshot	^	s								<ul> <li>Norma</li> </ul>		
🕳 Snapshot		м								O Motion		
🕳 Snap. Schedule												
		T										
		ig										
										Сору	Default	Apply

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

**Normal:** Click the **Normal** button on the right-side 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.

**Motion:** Click the **Motion** button on the right-side 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. Note that for this function to work, you will have to configure the motion settings in advance (please refer to *4.1.6 Motion*).

**IO:** Click the **IO** button on the right-side 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 IO snapshot function. Note that for this function to work, you will have to configure the IO settings in advance (please refer to *4.3.3 IO*).

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

Default: Click to apply the default setting.

## 4.3 Alarm

You can configure the alarm settings on this page.

### 4.3.1 Motion

After configuring the Motion Detection settings, you can further configure the Motion Alarm settings. To configure the Motion Detection setting, click the **Motion** button to enter the Motion Detection setup page (please refer to *4.1.6 Motion*).

LUO CH1 Disable V (2) 10 Sec. V (2) On 30 Sec. V	Show Message 🗸	Send Email 🗸 FTP Pic
L/O CH1 Disable 🗸 🔕 10 Sec. 🗸 🍈 On 30 Sec. 🗸		
		<b>V</b>
Intelligent V CH3 Disable V (3) 10 Sec. V (3) On 30 Sec. V	<u> </u>	
CH6 Disable 💙 🚳 10 Sec. 🔽 🚯 On 30 Sec. 🔽	<b>V</b>	
Exception		
Alarm Schedule		
	Motion Copy	y Default Apply

Channel: Displays the channel number.

**Buzzer:** Select a time for NVR buzzer to sound when a motion event is triggered. Select **Disable** to disable the function.

Alarm Out: Select an external alarm output device connected to the NVR (Local), IPCam (CH) or both (All).

**Alarm Output:** Select an alarm output time (duration) when events occur. When an event is triggered, the alarm will last based on the setup time.

**Record:** Click <sup>(2)</sup> and select the desired channel(s) you want to record when a motion event is triggered. Note that for recording function to work, the Record Schedule function has to be configured (please refer to *4.2.2.2 Record Schedule*).

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

**Post Recording:** Select a post recording time when a motion event is triggered.

**Show Message:** Check the box to display the motion icon  $\stackrel{\frown}{\land}$  on the live channel when a motion event is triggered.

**Send Email:** Check the box to enable the Email alert function. When a motion event is triggered, the NVR will send an email alert with a snapshot to the pre-configured Email receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *4.4.3 Email*).

**FTP Picture Upload:** When an event is triggered, the NVR will upload alarm images to FTP server. Note that for this function to work, you have to set up FTP configurations in advance. You can also configure the snapshot image resolution and quality, please refer to *4.4.4.1 FTP*.

**FTP Video Upload:** When a motion event is triggered, the NVR will upload alarm videos to FTP server. Note that for this function to work, you have to set up FTP Schedule in advance, please refer to *4.4.4.2 FTP Schedule*.

**Picture to Cloud:** When a motion event is triggered, the NVR will upload alarm images to Cloud (Dropbox). Note that for this function to work, you have to set up Cloud in advance, please refer to *4.5.2 Cloud*.

**Video to Cloud:** When a motion event is triggered, the NVR will upload alarm videos to Cloud (Dropbox). Note that for this function to work, you have to set up Cloud in advance, please refer to *4.5.2 Cloud*.

**Full Screen Trigger:** If this function is enabled and a motion event is triggered, the triggered channel will be displayed in full screen.

**Motion:** Click the **Motion** button to enter the Motion Detection setup page (please refer to *4.1.6 Motion*).

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

**Default**: Click to apply the default setting.



### 4.3.2 IO

After connecting the external IO devices to the NVR or IPCam, you can further configure the IO Alarm settings.

0		( <b>i</b> )	(f)	€;					<b>∼</b>	ર્ક	502	[	
Channel	Record	Alarm	Netw	vork		Device		Expre	ess	s	ystem		Exit
Motion	Alarm In	Alarm Type 🗸 🗸	Buzzer	<b>~</b> /	Alarm Out	Alarm Output	*	Channel	Post Recording	, •	Show Message	*	Send Ema
1/0	Local<-1	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	✓		<u>×</u>
Intelligent	✓ Local<-2	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×		<b>y</b>
	- Local<-3	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×		8
PTZ Linkage	Local<-4	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	<b>X</b>		8
Exception	Local<-5	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×		<b>V</b>
Alarm Schedule	Local<-6	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	<b>X</b>		<b>y</b>
	Local<-7	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	<b>X</b>		y.
	Local<-8	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	<b>X</b>		Y
	Local<-9	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	<b>X</b>		y.
	Local<-10	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	<b>X</b>		Y
	Local<-11	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×.		Y
	Local<-12	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	<b>X</b>		Y
	Local<-13	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×		3
	Local<-14	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×		\$
	Local<-15	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×		<b>X</b>
	Local<-16	N.O. (Normally C 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×		<u>×</u>
	CH1<-1	off 🗸 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×		<u>×</u>
	CH6<-1	off 🗸 🗸	Disable	~		10 Sec.	~		30 Sec.	~	×		<b>×</b>
											Copy D	efault	Apply

**Alarm In:** Displays the alarm input number. Local: the IO devices connected to the NVR. CH: the IO devices connected to the IP cameras.

**Alarm Type:** Select an alarm type for the alarm input. Options include Normally-Open, Normally-Close and Off.

**Buzzer:** Select a time for NVR buzzer to sound when an IO event is triggered. Select **Disable** to disable the function.

Alarm Out: Select an external alarm output device connected to the NVR (Local), IPCam (CH) or both (All).

**Alarm Output:** Select an alarm output time (duration) when events occur. When an event is triggered, the alarm will last based on the setup time.

**Channel:** Click <sup>(2)</sup> and select the desired channel(s) you want to record when an IO event is triggered. Note that for IO recording function to work, the Record Schedule function has to be configured (please refer to *4.2.2.2 Record Schedule*).



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

**Show Message:** Check the box to display the IO event icon on the live channel when an IO event is triggered.

**Send Email:** Check the box to enable the Email alert function. When an IO event is triggered, the NVR will send an email alert with a snapshot to the pre-configured Email receiver. Note

that for this function to work, you have to set up the Email function in advance (refer to 4.4.3 *Email*).

**FTP Picture Upload:** When an event is triggered, the NVR will upload alarm images to FTP server. Note that for this function to work, you have to set up FTP configurations in advance. You can also configure the snapshot image resolution and quality, please refer to *4.4.4.1 FTP*.

**FTP Video Upload:** When a motion event is triggered, the NVR will upload alarm videos to FTP server. Note that for this function to work, you have to set up FTP Schedule in advance, please refer to *4.4.4.2 FTP Schedule*.

**Picture to Cloud:** When an event is triggered, the NVR will upload alarm images to Cloud (Dropbox). Note that for this function to work, you have to set up Cloud in advance, please refer to *4.5.2 Cloud*.

**Video to Cloud:** When an event is triggered, the NVR will upload alarm videos to Cloud (Dropbox). Note that for this function to work, you have to set up Cloud in advance, please refer to *4.5.2 Cloud*.

**Full Screen Trigger:** If this function is enabled and an IO event is triggered, the triggered channel will be displayed in full screen.

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

**Default**: Click to apply the default setting.



### 4.3.3 Intelligent Alarm

After configuring the Intelligent function settings, you can further configure the Alarm settings for each intelligent function. To configure the Intelligent functions, click the **Intelligent** button to enter each intelligent function setup page (please refer to *4.1.8 Intelligent*).

#### 4.3.3.1 IVS Alarm Settings

The Intelligent Alarm setup configurations for the following intelligent functions are similar. Perimeter Intrusion, Line Crossing, Foreign/Missing Object, Pedestrian Detection, Face Detection, Cross-Counting Detection, Sound Detection and Tamper Detection.

	Ō		G	D	.e		l		ζζ.	<b>م</b> الع		3	[		
	Channel	Record	Ala	m	Ne	twork		Device	Expre	ess	Sys	tem		Exit	
オ	Motion	Char	nel Buzze	r 🗸	Alarm Out	Alarm Output	*	Record 🗸	Post Recordin	g 🗸	Show Message	• <b>→</b> s	end Email	<ul> <li>FTP P</li> </ul>	i¢,
Ļ	VO		1 Disable	~		10 Sec.	~	🔅 On	30 Sec.	~	×		Y		
$\approx$	Intelligent	~ □	6 Disable	~		10 Sec.	~		30 Sec.	~			M		
	<ul> <li>Perimeter Intrusion</li> </ul>														
	Line-Crossing														
	<ul> <li>Foreign/Missing Object</li> </ul>														
	<ul> <li>Pedestrian Detection</li> </ul>														
	- Face Detection														
	- Cross-Counting Detection														
	<ul> <li>Sound Detection</li> </ul>														
	<ul> <li>Tamper Detection</li> </ul>														
	<ul> <li>Face Recognition</li> </ul>														
	<ul> <li>Statistics</li> </ul>														
0	PTZ Linkage														
▲	Exception														
Q	Alarm Schedule	<												;	
											Intelligent	Сору	Default	Apply	J
		L									Intelligent	Сору	Derault	Арріу	

Here we use **Perimeter Intrusion** alarm setup page for example.

**Channel:** Displays the channel number.

**Buzzer:** Select a time for NVR buzzer to sound when an event is triggered. Select **Disable** to disable the function.

Alarm Out: Select an external alarm output device connected to the NVR (Local), IPCam (CH) or both (All).

**Alarm Output:** Select an alarm output time (duration) when events occur. When an event is triggered, the alarm will last based on the setup time.

**Record:** Click <sup>(2)</sup> and select the desired channel(s) you want to record when an event is triggered on this channel. Note that for recording function to work, the Record Schedule function has to be configured (please refer to *4.1.8.9 Record Schedule*).



Record Channel

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

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

**Show Message:** Check the box to display an Intelligent event icon "S" or intelligent messages on the live channel when an event is triggered.

**Send Email:** Check the box to enable the Email alert function. When an event is triggered, the NVR will send an email alert with a snapshot to the pre-configured Email receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *4.4.3 Email*).

**FTP Picture Upload:** When an event is triggered, the NVR will upload alarm images to FTP server. Note that for this function to work, you have to set up FTP configurations in advance. You can also configure the snapshot image resolution and quality, please refer to *4.4.4.1 FTP*.

**FTP Video Upload:** When a motion event is triggered, the NVR will upload alarm videos to FTP server. Note that for this function to work, you have to set up FTP Schedule in advance, please refer to *4.4.4.2 FTP Schedule*.

**Picture to Cloud:** When an event is triggered, the NVR will upload alarm images to Cloud (Dropbox). Note that for this function to work, you have to set up Cloud in advance, please refer to *4.5.2 Cloud*.

**Video to Cloud:** When an event is triggered, the NVR will upload alarm videos to Cloud (Dropbox). Note that for this function to work, you have to set up Cloud in advance, please refer to *4.5.2 Cloud*.

**Full Screen Trigger:** If this function is enabled and an event is triggered, the triggered channel will be displayed in full screen.

**Intelligent:** Click the button to enter each Intelligent setup page (please refer to *4.1.8 Intelligent*).

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

Default: Click to apply the default setting.



#### 4.3.3.2 Face Recognition Alarm Settings

Facial recognition can help verify personal identity to accurately authenticate the users. For this function to work, you will have to edit the database and group the users in advance.

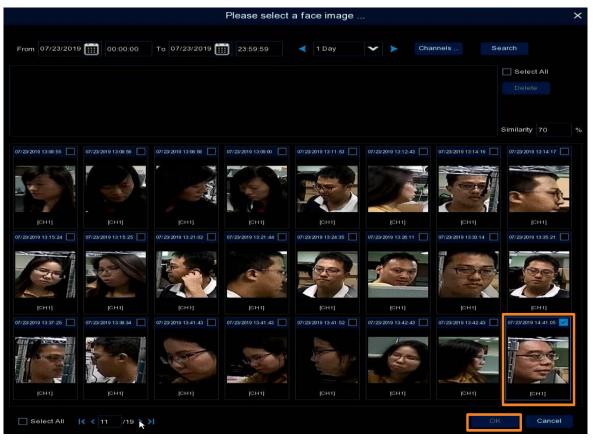
Channel	Record		Alarm	Netwo	ГК rk	Device		Express		System	Exit
Motion										Import Database	Copy Databas
1/0		Gro	up Name	Edit	Enable	Policy	s	imilarity	Alarm	Alarm Schedule	
	~	Allow List		Ø		Allow					
<ul> <li>Perimeter Intrusion</li> </ul>		Block List			2	Deny					
<ul> <li>Permeter intrusion</li> </ul>		Stranger				Stranger					
Line-Crossing											
🕳 Foreign/Missing Ob	ject										
🗕 Pedestrian Detectio											
<ul> <li>Face Detection</li> </ul>											
<ul> <li>Cross-Counting Determine</li> </ul>											
<ul> <li>Sound Detection</li> </ul>											
- Tamper Detection											
- Face Recognition											
- Statistics											
PTZ Linkage											
Exception											
Alarm Schedule											

- 1. Create a group. By default, Allow List, Block List and Stranger groups have been created. You can click the **Add** button **Solution** to add more groups. Select a **Policy** and input a **Similarity** for the added groups.
- 2. To add account users to the group:
  - a. Enable the Face Recognition function for the system to detect faces and take snapshot images in database. Please refer to *4.1.7.5 Face Detection*.
  - b. To add users to a group, click the **Edit** button and then click **Local Storage Device** to display the snapshot images from the local storage.

	Allow List			×
Search Input a name here				
	Import from	×	Datail lafa	
			Detail Info	
	Local Storage Device			
	External Storage Device			
	Cancel			
Delete Import Ex	port I< <	1 /1 >>		

c. Select a person you want to edit to the face recognition database and then click **OK**.

#### **IRONGUARD 16 POE**



#### d. Input the info of the person and then click Import.

		Imp	ort			×
Name	jason	Gender	Male	~		10101
Age	0	Country				
Nationality		Place of Residence				
ID Code						
Occupation						Modify
Phone Number		Email				
Domicile						
Remark						
Additional Face	e Image					
					Import	Exit



e. To add more face images of this person in order to raise the face recognition accuracy, click the **Additional Face Image** field and then click **Local Storage Device** to add more images.

		Imp	ort			×
Name	jason	Gender	Male	$\checkmark$		
Age	40	Country	tw			
Nationality		Place of Residence				1
ID Code						X
Occupation		Import 1	from	×	Modify	
Phone Number						
Domicile		Local Stora	ge Device			
Remark		External Stor	age Device			
Additional Face	e Image					
		Can	cel			
×						

f. Click Modify to confirm setting.

		Imp	ort			×
Name	jason	Gender	Male	~		
Age	40	Country	tw			
Nationality		Place of Residence			÷.	A REAL
ID Code					1.0	
Occupation						Modify
Phone Number		Email				
Domicile						
Remark						
Additional Face	Image					
<b>m</b>	- and					
			2			
		17				
					Modify	Exit

g. The user has been added to the system.

#### **IRONGUARD 16 POE**

## **F**EverFocus

Allow List		×
Search Input a name here		
1 jason	Detail Info	
	Name	jason
	Gender	Male
	Age	40
	Country	tw
	Nationality	
	Place of Residence	
	ID Code	
	Occupation	
	Phone Number	
	Email Domicile	
	Remark	
	Remark	
Delete Import Export IX < 1 /1 > >		

- h. Follow Step 1 to add more users.
- 3. To set up the Alarm Output function, click the **Alarm** button of the group and then configure the Alarm function.

Group Name	+/-	Edit	Enable	Poli	су		Simila	ity	Alarm	Alarm Schedule
Allow List		C		Allo	w		70	%	\$	0
Block List		Ø	2	Der	iy	N	70	%	<b>(</b> )	\$
Stranger			3	Stran	ger		70	%	0	6
Visitor	t	Z	3	Allow	~		70	%	6	6

Channel: Displays the channel number.

**Buzzer:** Select a time for NVR buzzer to sound when an event is triggered. Select **Disable** to disable the function.

**Alarm Out:** Select an external alarm output device connected to the NVR (Local), IPCam (CH) or both (All).

**Alarm Output:** Select an alarm output time (duration) when events occur. When an event is triggered, the alarm will last based on the setup time.

Save Face: Check the checkbox to save face images when the system detects faces.

Save Background: Check the box to save background.

**Show Thumbnail:** Check the box to display the face thumbnails on the Live Alarm Panel.

**Send Email:** Check the box to enable the Email alert function. When an event is triggered, the NVR will send an email alert with a snapshot to the pre-configured Email receiver. Note that for this function to work, you have to set up the Email function in advance (refer to *4.4.3 Email*).

**FTP Picture Upload:** When an event is triggered, the NVR will upload alarm images to FTP server. Note that for this function to work, you have to set up FTP configurations in advance. You can also configure the snapshot image resolution and quality, please refer to *4.4.4.1 FTP*.

**Picture to Cloud:** When an event is triggered, the NVR will upload alarm images to Cloud (Dropbox). Note that for this function to work, you have to set up Cloud in advance, please refer to *4.5.2 Cloud*.

4. To configure the Alarm Schedule of the Face Recognition function, click the **Alarm Schedule** button to configure the alarm schedule.



- 5. Click the **Apply** button to save the settings.
- 6. The Face Recognition configuration is complete. Go to the Live View page and when there are faces detected, the Face Recognition thumbnails will be displayed on the Live Alarm Panel.



#### 4.3.3.3 Statistics

You can search for the Facial Recognition statistics on this page.





### 4.3.4 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	Record	(i) Alarm	Network	Device		xpress	System	Exit
		Alailii	Network	Device		Apress	System	
A Motion	Channel	Switch 🗸	Motion 🗸	1/O 🗸	PTZ1 🗸	PTZ2 🗸	ртzз 🗸	PTZ4 🗸
Ļ vo	CH1	<u>}</u>	V		🔅 ୍ମ	🔅 off	🔅 off	🍪 off
Intelligent		N.			🔅 off	🎲 Off	Off	Off
🚑 PTZ Linkage	СН6	<b>V</b>			🄅 ा	୍ତି ୍ମ	🔅 ୍ମ	🍪 off
Exception								
Alarm Schedule								
							Сору	Default Apply

Channel: Displays the channel number.

**Switch:** Check the box to enable the PTZ Linkage function.

Motion: Check the box to trigger the PTZ Linkage function when a motion event occurs.

**IO:** Check the box to trigger the PTZ Linkage function when an IO event occurs. Select an external alarm output device connected to the NVR (Local), IPCam (CH) or both (All).

**PTZ1-4:** Associates the PTZ camera with preset points. Please set up the preset points of your PTZ cameras in advance (please refer to *3.5.2.2 Preset Setting*). After setting up the preset points, click <sup>(i)</sup> to configure a PTZ camera and the preset number. 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.

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

**Default**: Click to apply the default setting.



### 4.3.5 Exception

You can configure the system alarm settings on this page.

	_	Record		(i) Alarm						Express	System	[	Exit
券 Moti			vent Type										
<b>1</b> /0			pace on Disk	Switch 🗸	Buzzer	<b>*</b>	Alarm Out	Alarm Outpu	~	Show Message 🗸	Send Email 🗸		
	lligent 🗸 🗸	Diek		<u> </u>	10 Sec.	~		10 Sec.	~		<b>S</b>		
	Z Linkage		o Loss		10 Sec.	~		10 Sec.	~		N		
<b>A</b> Exce	eption												
Aları	m Schedule												
												Defeult	dural i
												Default	Apply

Event Type: Displays the event types.

- <u>No Space on Disk:</u> When an HDD is full.
- <u>Disk Error</u>: When the HDD is not detected properly.
- <u>Video Loss</u>: When a camera is not connected properly.

**Switch:** Check the box to enable the function.

**Buzzer:** Set up the time for buzzer to sound when an event is triggered. To disable the Buzzer function, select **Disable**.

**Alarm Out:** Select an external alarm output device connected to the NVR (Local), IPCam (CH) or both (All).

**Alarm Output:** Select an alarm output time (duration) when events occur. When an event is triggered, the alarm will last based on the setup time.

**Show Message:** Check the box to display an alarm message on the upper-right corner of the live channel when an event is triggered.

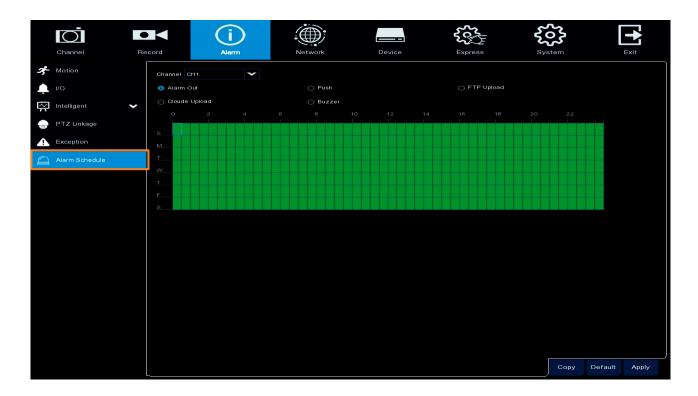
**Send Email:** Check the box to enable the Email alert function. When an event is triggered, the NVR will send an email alert with a snapshot to the pre-configured Email receiver. Note that for this function to work, you have to set up the Email function in advance (refer to 4.4.3 *Email*).

Default: Click to apply the default setting.



### 4.3.6 Alarm Schedule

You can configure the schedule to activate the alarm functions including IO Alarm Output, Push Notification, FTP Upload, Cloud Upload and Buzzer.



### 4.4 Network

You can configure the network settings on this page.

#### 4.4.1 General

This page allows you to configure network parameters, such as DHCP and PPPoE.

#### 4.4.1.1 General

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

	Channel	Record		(j) Alarm	 Device	Express	۲ System		Exit
A	General	^	WLAN						
	- General		THE ACT						
	- PPPoE		DHCP	2					
	- Port Configuration		IP Address	192 168 033 076					
			Subnet Mask						
	DDNS		Gateway						
×	Email	<b>*</b>							
5		~	DNS1						
T	IP Filter	~	DNS2						
								Default	Apply

**DHCP:** Check the box to enable the DHCP function. The router will automatically assign all the below IP parameters to the NVR.

**IP Address:** The IP address of the NVR. The IP address consists of four groups of numbers, separated by periods. For example, "192.168.001.100".

**Subnet Mask:** Subnet mask is a network parameter which defines a range of IP addresses that can be used on a network. The subnet address also consists of four groups of numbers, separated by periods. For example, "255.255.000.000".

**Gateway:** This address allows the NVR to access the Internet. The format of the Gateway address is the same as the IP Address. For example, "192.168.001.001".

**DNS:** DNS1 is the primary DNS server and DNS2 is a backup DNS server. Usually, it's enough to just enter the DNS1 server address.

**Default**: Click to apply the default setting.



#### 4.4.1.2 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.

Channel	Record		(j) Alarm	Network	Device	Express	System	Exit
🛃 General	^	Enable PPPoE						
General		User						
- PPPoE		Password			Show Password			
<ul> <li>Port Configuration</li> </ul>								
🖦 DDNS		IP Address	192.168.033.076					
🖂 Email	•	Subnet Mask	255.255.255.000					
FTP	~	Gateway DNS1	192.168.033.254 192.168.010.188					
T IP Filter	• •	DNS2	008.008.008.008					
								Default Apply

Check the **Enable PPPoE** box, and then enter the User name and Password provided by the ISP. Click the **Apply** button, the system will reboot to activate the PPPoE setting.



#### 4.4.1.3 Port Configuration

On this page, you can configure the port settings or enable/disable the UPnP or P2P function.

Channel	Record		<b>J</b> arm	Network	Device	Express	System		Exit
General	^		Service	Protocol	Internal Port	External Port	UPNP Status	UPnP	
🗕 General			Web Port		00080	00080	Inactive		î
- PPPoE			Client Port		08000	08000	Inactive		
- Port Configuration			RTSP Port		00554	00554	Inactive		
DDNS			HTTPS		00443	00443	Inactive		
Email Email FTP Filter	* * *	RTSP Instruction: IP Channel: rtsp:// A: 01(ch1), 02(ch2 B: 0 (main stream							
		External IP							
		P2P Switch	<u>×</u>						
		TOE	<b>&gt;</b>						
									÷
								Defau	t Apply

**Web Port:** The Web port can be used to remotely login the NVR (e.g. using the Web Client). If the default port 80 is already taken by other applications, please change it.

**Client Port:** The Client port can be used to send information through (e.g. using the mobile app). If the default port 9000 is already taken by other applications, please change it.

**RTSP Port:** The RTSP port allows the NVR to transmit real-time streaming to other devices (e.g. using a streaming media player).

**HTTPS:** The Hypertext Transfer Protocol Secure (HTTPS) is a combination of the Hypertext Transfer Protocol and the SSL/TLS protocol that provides encrypted communication and secure identification of a network web server.

**UPnP:** Check the box to enable the UPnP function. If you want to remotely login the NVR using Web Client, you need to enable the UPnP function and also enable the Port Forwarding function on your router.

#### Note:

- 1. For the UPnP function to work, an UPnP-enabled router is required.
- 2. If your router does not support UPnP, ensure the **Port Forwarding** function is manually enabled on your router.

External IP: After enabling the UPnP function, the external IP address will be displayed.

**P2P Switch:** Check the box to enable the P2P function. If **P2P** function is enabled, a QR code will be displayed on the System Info page. You can scan the QR code with **EverFocus eFVMS App** installed on your mobile device to add and remote access the NVR. Please refer to 4.9.5.1.1 Performing the P2P Function.

**TOE:** Check the box to enable the TOE function.

Default: Click to apply the default setting.

### 4.4.2 DDNS

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

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

Note that before enabling the following DDNS function, user should have applied for a host name from the DDNS service provider's website. We highly recommend that you use xxxx.everfocusddns.net for the simplicity of setting up your NVR. Please refer to **EverFocus DDNS** on the next page.

Channel	Reco		Alarm	Network	Device	Express	<b>System</b>		Exit
🚑 General	~	DDNS	×						
🗊 DDNS		Server	EVERFOCUS_DDNS	~					
🔀 Email	~	Domain			.everfocusddns.net				
FTP	~								
IP Filter	*								
								Default	Apply

**DDNS:** Check the box to enable the 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.

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

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

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

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

Default: Click to apply the default setting.



#### **EverFocus DDNS**

Please follow the steps below to set up EverFocus DDNS.

1. In order to allow remote access to the NVR 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.

	5			Hardware Version: B	2 Firmware Version: 2.2
D I Seal					
D-Linl					
DIR-615	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	PORT FORWARDING				Helpful Hints
PORT FORWARDING APPLICATION RULES QOS ENGINE NETWORK FILTER	through those ports to various formats including (1020-5000, 689).	open multiple ports or a ran a single PC on your netwo g, Port Ranges (100-150), save Settings	rk. This feature allow	s you to enter ports in	Check the Application Name drop down menu for a list of predefined applications. If you selec one of the predefined applications, dick the arrow button next to this drop down menu to fill or
ACCESS CONTROL	24 PORT FORWA	RDING RULES			the corresponding field.
WEBSITE FILTER					You can select a compute from the list of DHCP
INBOUND FILTER FIREWALL SETTINGS ADVANCED WIRELESS WL-FI PROTECTED	Name ECOR HD IP Address 192.168.0.172	< Application Name	Ports to 0 TCI 80 UDI	P Schedule Always 👻	dents in the Computer Name drop down menu, or you can manually ente the IP address of the LAI computer to which you would like to open the specified port.
IR-865L	SETUP	ADVANC	ED	TOOLS	STATUS
IRTUAL SERVER	FIREWALL & DI	MZ SETTINGS			
ORT FORWARDING					
PPLICATION RULES		nilitarized Zone". DMZ a . Typically, your DMZ w			
	Save Settings	Don't Save Settings			
OS ENGINE	motion seasoning of				
	_				
etwork filter	- FIREWALL SET				
etwork filter	FIREWALL SET	TINGS			
	- FIREWALL SET		]		
CCESS CONTROL		TINGS Enable SPI:	]		
CCESS CONTROL	ANTI-SPOOF C	TINGS Enable SPI:	]		
CCESS CONTROL IEBSITE FILTER IBOUND FILTER	ANTI-SPOOF C	TINGS Enable SPI:			
CCESS CONTROL EBSITE FILTER IBOUND FILTER REWALL SETTINGS	ANTI-SPOOF C	TINGS Enable SPI : HECKING			
CCESS CONTROL FEBSITE FILTER HEOUND FILTER REWALL SETTINGS OUTING	ANTI-SPOOF CH Enable anti- DMZ HOST	TINGS Enable SPI : HECKING spoof checking :	]		
CCESS CONTROL IEBSITE FILTER IEBOUND FILTER IEEWALL SETTINGS OUTING DVANCED WIRELESS TI-FI PROTECTED ETUP	ANTI-SPOOF CE Enable anti- DMZ HOST The DMZ (Demilit	TINGS Enable SPI : HECKING	] s you set a single		
CCESS CONTROL IEBSITE FILTER IBOUND FILTER REWALL SETTINGS OUTING DVANCED WIRELESS ILFI PROTECTED ETUP DVANCED NETWORK	ANTI-SPOOF CE Enable anti- DMZ HOST The DMZ (Demilit router. If you hav	TINGS Enable SPI : HECKING spoof checking : tarized Zone) option let	] s you set a single not run Internet a	pplications successfully	y from behind the
CCESS CONTROL IEBSITE FILTER IEBOUND FILTER IEEWALL SETTINGS OUTING DVANCED WIRELESS TI-FI PROTECTED ETUP	ANTI-SPOOF CE Enable anti- DMZ HOST The DMZ (Demilit router. If you hav router, then you of Note: Putting a c	FINGS Enable SPI : HECKING spoof checking : tarized Zone) option let re a computer that can	] s you set a single not run Internet a r into the DMZ for ay expose that co	pplications successfully unrestricted Internet	y from behind the access.
CCESS CONTROL IEBSITE FILTER IEBOUND FILTER IREWALL SETTINGS OVTING DVANCED WIRELESS ILFI PROTECTED ETUP DVANCED NETWORK LNA SETTINGS	ANTI-SPOOF CE Enable anti- DMZ HOST The DMZ (Demilit router. If you hav router, then you of Note: Putting a c	Enable SPI : Enable SPI : HECKING spoof checking : tarized Zone) option let re a computer that can can place the computer computer in the DMZ m nly recommended as a	] s you set a single not run Internet a r into the DMZ for ay expose that co last resort.	pplications successfully unrestricted Internet	y from behind the access.
CCESS CONTROL IEBSITE FILTER IEBOUND FILTER IEWALL SETTINGS OUTING DVANCED WIRELESS TI-FI PROTECTED ETUP DVANCED NETWORK LNA SETTINGS UNES SERVER	ANTI-SPOOF CE Enable anti- DMZ HOST The DMZ (Demilit router. If you hav router, then you of Note: Putting a co of this option is o	Enable SPI : Enable SPI : HECKING spoof checking : tarized Zone) option let te a computer that can can place the computer tomputer in the DMZ m nily recommended as a Enable DMZ :	] s you set a single not run Internet a r into the DMZ for ay expose that co last resort.	pplications successfully unrestricted Internet : mputer to a variety of	y from behind the access.
CCESS CONTROL IEBSITE FILTER IEBOUND	ANTI-SPOOF CE Enable anti- DMZ HOST The DMZ (Demilit router. If you hav router, then you of Note: Putting a co of this option is o	Enable SPI : Enable SPI : HECKING spoof checking : tarized Zone) option let re a computer that can can place the computer computer in the DMZ m nly recommended as a	] s you set a single not run Internet a r into the DMZ for ay expose that co last resort.	pplications successfully unrestricted Internet	y from behind the access.

- Go to <a href="http://www.everfocusddns.net">http://www.everfocusddns.net</a> to check an available host name for the NVR. Note that the host name of the NVR cannot include a space, underline or any special characters particularly \_~ ! @ # \$ % ^ & \* () + < > " ; : . ,
- 3. Register the host name on the DDNS setup page for the NVR.

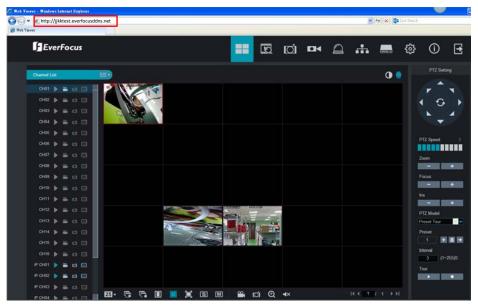
Channel	Record		Alarm Network		Device	Express	<b>System</b>	Exit		
🛃 General	~	DDNS	*							
DDNS		Server	EVERFOCUS_DDNS	~						
🔀 Email	~	Domain			.everfocusddns.net					
FTP	~									
IP Filter	~									
								Default Apply	,	

- a. Check DDNS to enable the DDNS function.
- b. Select EVERFOCUS DDNS from the Server drop-down list.
- c. Input the host name in the NVR Name field.
- d. Click the **Apply** button.
- 4. Configure the NVR **Network** settings, keep Web port "80" and enable the UPnP function. Click the **Apply** button.

Channel		Cord	(i) Alarm	Network	Device	Express	System	
🛃 General	^		Service	Protocol	Internal Port	External Port	UPNP Status	UPnP
<ul> <li>General</li> </ul>		1	Web Port	TCP	00080	00080	Inactive	>
- PPPoE		2	Client Port	TCP	09000	09000	Inactive	×
<b>—</b> 3G			RTSP Port	TCP	00554	00554	Inactive	8
- Port Configuration			Https		00443	00443	Inactive	<b>×</b>

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 NVR should be displayed.

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





#### 4.4.3 Email

You can configure the email settings for email alerts, or configure the Email schedule on this page.

#### 4.4.3.1 Email Configuration

You can configure the email settings for email alerts. When events occur, the NVR will send Email alert with a snapshot image (.jpg) to the receiver(s).

Channel	Record		(j) Alarm	Network	Device	Express	System		Exit
📇 General	•	Email	×						
DDNS		Encryption	Auto	~					
🖂 Email	^	SMTP Port	00025						
- Email Configuration		SMTP Server							
Email Schedule		User Name							
FTP	*	Password			Show Password				
T IP Filter	~	Sender							
		Receiver 1 Receiver 2							
		Receiver 2							
		Interval	3 Min	~					
								Default	Apply

Email: Check the box to enable the Email function.

**Encryption:** Select an encryption if your Email server requires the **SSL** or **TLS** verification. Select **Auto** if you are not sure. Select **Disable** to disable this function.

**SMTP Port:** Enter the port number used by the SMTP server.

**SMTP Server:** Enter the SMTP server address of your Email.

User Name: Input your Email address.

Password: Input the password of the sender.

Sender: Input the Email address of the sender (the NVR).

**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.

**Default**: Click to apply the default setting.



#### 4.4.3.2 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 on the right-side 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. To enable Motion alarm, please refer to *4.1.6 Motion*.

**IO:** Click the **IO** button on the right-side 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 IO email alert function. To enable IO alarm, refer to *4.3.3 IO*.

**Exception (HDD full, HDD error or Video Loss):** Click the **Exception** button on the right-side 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. To enable Exception alarm, please refer to *4.3.6 Exception*.

**Intelligent Analysis:** Click the **Intelligent Analysis** button on the right-side and then move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with blue color, which will be applied with Intelligent Analysis email alert function. To enable Intelligent Analysis alarm, please refer to *4.3.4 Intelligent Alarm*.

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

**Default**: Click to apply the default setting.



4.4.4 FTP

4.4.4.1 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.

	Channel	Record	Alarm		Network		Device	Express	System		Exit
ł	General	~	FTP Enable	×							
	DDNS		Server IP								
Х	Email	~	Port	00021							
141	I FTP	~	User Name								
	- FTP		Password				Show Password				
٦	- FTP Schedule		Picture Resolution	1280 x 720		~					
			Picture Quality	Very Good		×					
T	IP Filter	~	Video Stream ⊤ype	Sub Stream		~					
			Max. Package Interval	30 Min		~					
			Directory Name								
			Upload Normal Video	Off							
			Upload Alarm Video								
					Intelligent						
										Default	Apply

FTP Enable: Check the box to enable the function.

Server IP: Input the FTP server IP.

Test FTP: Click to test the FTP server connection.

**Port:** Keep the port 21.

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

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

Picture Resolution: Select a resolution of the snapshot images for FTP uploading.

Picture Quality: Select a quality of the snapshot images for FTP uploading.

Video Stream Type: Select a stream type of the recordings for FTP uploading.

Max. Package Interval: Select a max. package interval for FTP uploading.

Directory Name: Input a directory of the FTP server.

**Upload Normal Video:** Select the desired channel(s) for uploading the normal recordings. For this function to work, please setup the FTP Schedule (refer to *4.4.4.2 FTP Schedule*) in advance.

**Upload Alarm Video:** To enable uploading alarm videos to the FTP Server, click the Motion, PIR, IO or Intelligent buttons to enter each alarm setup page, and then check the **FTP Video Upload** box to enable the function. For this function to work, please setup the FTP Schedule (refer to *4.4.4.2 FTP Schedule*) in advance.

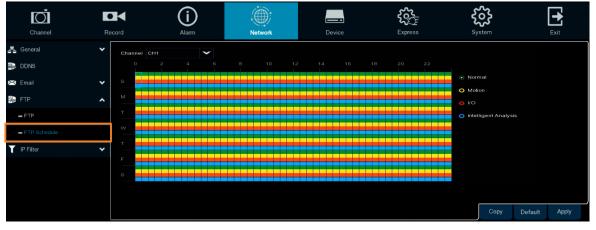
Default: Click to apply the default setting.



#### 4.4.4.2 FTP Schedule

You can configure the FTP schedule on this page. The selected event recordings will be uploaded to the FTP by the scheduled time. For example, if you set up Motion on Sunday between 6-8am, the Motion recordings will be uploaded to FTP between 6-8am on Sunday.

Note that for the FTP Schedule function to work, you have to enable **FTP Video Upload** function on the related alarm setup page (Motion, PIR, IO, Intelligent).



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

**Normal:** Click the **Normal** button on the right-side 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 FTP upload function. Note that for this function to work, you have to select the desired channel(s) for uploading the normal recordings (please refer to **Upload Normal Video** in *4.4.4.1 FTP*.

**Motion:** Click the **Motion** button on the right-side 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 FTP upload function. To enable Motion alarm, please refer to *4.1.6 Motion*.

**IO:** Click the **IO** button on the right-side 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 IO FTP upload function. To enable IO alarm, refer to *4.3.3 IO*.

**Intelligent Analysis:** Click the **Intelligent Analysis** button on the right-side and then move your mouse cursor over the schedule time blocks. Click and drag on the schedule time blocks to draw the blocks with blue color, which will be applied with Intelligent Analysis FTP upload function. To enable Intelligent Analysis alarm, please refer to *4.3.4 Intelligent Alarm*.

**Copy:** You can apply the same configurations from one channel to other channels. Select a channel from the **Source Channel** drop-down list and then select the parameters you would like to apply to other channels. Select the desired channels from the **Target Channel** field and then click the **Copy** button.

Default: Click to apply the default setting.



### 4.4.5 IP Filter

You can configure the IP Filter settings on this page. This function allows you to allow or deny some specific IP address to access the Web interface of the NVR. By default, all IP addresses are allowed.

Channel	Record		(i) Alarm	Network	Device		Ś	xpress	System		Exit
🛃 General		Enable		elist 💿 Enable Blacklist							
🔀 Email 🏭 FTP	st	estricted Type art IP Address id IP Address	Blacklist  192.168.33.1 192.168.33.100			Single Add				•	
Y IP Filter	~	No.	Start IP A		End IP Addr			De	lete		
- IP Filter		1 2	192.16 192.16		192.168.33 192.168.33						
										Default	Apply

To set up IP Filter:

1. Check the **Enable** box and then select either one from the two options below. You can only activate one option for the NVR.

Enable Whitelist: Enable the whitelist configured below.

Enable Blacklist: Enable the blacklist configured below.

- 2. Edit the Whitelist or Blacklist.
  - a. If you want to edit whitelist, select **Whitelist** from the **Restricted Type** drop-down box; if you want to edit blacklist, select **Blacklist** from the **Restricted Type** drop-down box.
  - b. To add a single IP address to the list, input an IP address in the **Start IP Address** input box and then click the **Single Add** button, the IP address will be added.
  - c. To add a range of IP addresses to the list, input the start IP address in the **Start IP Address** input box and the end IP address in the **End IP Address** input box, and then click the **Network Segment Add** button, the range of IP addresses will be added.
  - d. You can click the **Edit** icon to edit the IP address, or click the **Delete** icon to delete the IP address from the list.
- 3. Click the **Apply** button to save the settings.

## **F**EverFocus

### 4.5 Device

You can configure the internal HDD and Cloud storage function on this page.

4.5.1 Disk

### 4.5.1.1 Disk

You can configure the HDD settings on this page. Please connect the HDD(s) to the NVR in advance and ensure the power and SATA cables are properly connected between the NVR and HDD(s). After connecting the HDD(s) to the NVR, the NVR will automatically detect the connected HDD(s) and listed all the connected HDD(s) in the below field.

For the first time connected HDDs, the status will show "Unformat" in the state column, users will have to format the HDDs before you can use it.

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

Ō	•		(	j)				<u>کې</u>	<b>2</b>	ŝ		•
Channel	Reco	ord	,	Alarm	Network		Device	Expre	ISS	System		Exit
R Disk	^		Edit	Model:		Firmware	Туре	Disk Group	State	Free/Total	Free/Total Time	
- Disk				ST4000VX000-1F4168	Z301LWWJ		RW	Group1	Full	0M/3739G	0Sec./1309Hour	
<ul> <li>Disk Group</li> </ul>												
S.M.A.R.T												
Cloud												
		Overwrite		✓ Forma								
		Record on eSATA	Enable	~								
											Default	Apply

**Edit:** Click the **Edit** button and the below window appears. You can assign each HDD to different Disk Type (Read/Write, Read only or Redundancy) and Disk Group (Group  $1 \sim 16$ ).

A Redundant HDD can be used to automatically backup video footage on the recording (read-write) hard drive. When a redundant HDD is set, the system can be set to record cameras in parallel to both the recording hard drive and the redundant hard drive in case of hard drive failure.



**Checkbox:** You can select the HDDs in the **No** column to select the HDD(s), and then you can set up the Overwrite or eSATA function, or Format the HDD.



**Overwrite:** Select **Auto** to enable the overwrite function; **Off** to disable the overwrite function. If **Auto** is selected, the NVR will overwrite the oldest files on the HDD when HDD is full. If Off is selected, please check the HDD status regularly, to make sure the HDD is not full.

The **1/3/7/14/30/90** Days stands for the last number of days to keep in the HDD. For example, if 3 Days is selected, the last 3 days recordings will be kept in the HDD.

**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.

### 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.

**Record on eSATA:** If you have connected an external eSATA storage device to the NVR, you can enable the eSATA backup storage function.

**Default**: Click to apply the default setting. **Apply:** Click to save the settings.



### 4.5.1.2 Disk Group

You can assign the HDDs to different groups. HDD groups allow you to balance recordings across multiple hard drives. For example, you can record channels 1~4 to one hard drive and 5~8 to a second hard drive. This can reduce the amount of wear on the hard drives and may extend the life of the hard drives.

Channel		ecord	(i) Alarm	Network	Device	Express	System	Exit	
C Disk	^	Disk Group Type Disk Group	Record Disk Group Record Disk Group 1		*				
<ul> <li>Disk Group</li> <li>S.M.A.R.T</li> </ul>		Record Channel	Select All Invert S	telection 5 7 8 9 10 11 12 13 14	15 16				
- Cloud		One channel can							
								Default Apply	У

**Disk Group Type:** Select a Disk Group type. The Disk Group Type has to be pre-configured on the Disk page (please refer to *4.5.1.1 Disk*).

**Disk Group:** Select a Record Disk Group. The Record Disk Group has to be pre-configured on the Disk page (please refer to *4.5.1.1 Disk*).

**Record Channel:** Select the desired channel(s). The recordings of the selected channels will be recorded to the selected Disk Group.

**Default**: Click to apply the default setting.

Apply: Click to save the settings.



#### 4.5.1.3 S.M.A.R.T

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

Channel	Record	(i) <sub>Alarm</sub>	Network		evice	ζςς Expr	Œ	<b>ک</b> ک System	Exit
C Disk	HDD ID: Self-Check St Temperature (	Disk 2 late: Not detected (*C): 36	*	Self-Check T				×	
Disk Group	Whole Evaluat								
- Cloud		Attribute Name	Status	Flags	Value	Poorest	Threshold	Raw Value	
	0x1	Raw Read Error Rate	ок		108	96		20950768	î
	0x3	Spin Up Time	OK		96				
	0x4	Start Stop Count						2345	
	0x5	Reallocated Sector Ct							
		Seek Error Rate						8736042230	
	0x9	Power On Hours	ок					16937	
	Oxa	Spin Retry Count			100	100			
	0xc	Power Cycle Count	OK:					1949	
	0xb8	End-to-End Error							
	Oxbb	Reported Uncorrect							
	Oxbc	Command Timeout	ок		100			141736345644	
	Oxbd	High Fly Writes	ок						
	Oxbe	Airflow Temperature Cel	OK:					36 (255 255 36 36 0)	
	Oxbf	G-Sense Error Rate							
	0xe0	Power-Off Retract Count						1808	
		Load Cycle Count							

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.



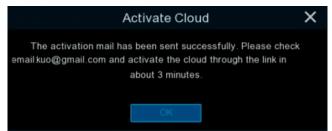
### 4.5.2 Cloud

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 or recordings to the associated Dropbox when alarm events occur.

Channel	Record		D	Network		Device	Express	System	[	Exit
R Disk	~	Cloud Storage	<b>Y</b>							
Cloud		Cloud Type	Dropbox		~					
		Cloud Status								
		Capacity		1905.		2.00 / 2.00GB				
		Cloud Overwrite	Auto		~					
		Video Type	AVI		~					
		Channel		Driver Name						
		CH1	CH1							î
		CH2	CH2							
		СНЗ	СНЗ							
		CH4	CH4							
		CH5	CH5							
		CH6	CH6							
		CH7	CH7							
		СН8	СН8							
		снэ	СНЭ							
		CH10	CH10							
		CH11	CH11							
		CH12	CH12							
		CH13	CH13							~
									Default	Apply

To perform the Cloud function:

- 1. Register an account on Dropbox website. It's recommended to create the account with the same Email address and password used for your NVR.
- 2. Ensure the NVR network is working properly.
- 3. Configure the SMTP function (refer to 4.4.3 Email).
- 4. Configure the Cloud settings and then click the **Apply** button.
  - a. Check the **Cloud Storage** checkbox to enable the Cloud function.
  - b. Select a **Cloud Overwrite** option.
  - c. Select a Video Type.
- 5. Click the **Activate Cloud** button to activate the Cloud function. The below message will pup-up on the screen. Check your email and complete the cloud activation within 3 minutes.





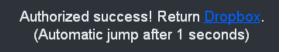
6. Go to your email box and click on the provided link, the below message appears. Input the IP address of the NVR and keep the 80 port. Click **Authorize**.

Dropbox needs to be activated for this device. Please make sure the PC is on the same network as the device and enter the local IP address of the device below. The IP address can be found in the Network section of the device settings.						
	IP Address Port	<u>192.168.33.76</u> 80				
		Authorize				

7. Input the user name and password of the NVR and then click Log In.

Authentication Required			
-	6 requires a username and password. this site is not private.		
User Name:	admin		
Password:	***		
	Log In Cancel	]	
		_	

8. The Cloud activation is complete.





### 4.6 Layout

You can select the desired Layout or activate the Auto Sequence function on this page.

To select a layout, directly click on the layout icon.

To start displaying the sequence mode, click the **Auto Sequence** button. To stop the sequence mode, click the button again. To configure the sequence settings, please refer to *4.9.1.3 Video Output*.

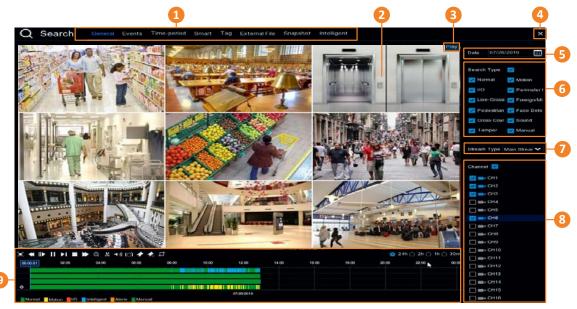
	Layout	& Seq.	×
Auto Sequen			



### 4.7 Playback

## 4.7.1 General Operation

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



No.	Name	Description
1	Search Mode	Click to enter each Search mode (General, Events, Time-period, Smart, Tag, External File and Snapshot) to search and play back the recordings. Please refer to <i>4.7.3 Search Mode</i> for more details.
2	Playback Layout	The layout divisions will be automatically assigned by the system based on the number of selected channels. 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.
3	Status Icon	Displays the playback status, such as speed, play, stop or step.
4	Close Button	You can click the <b>Close</b> button to close the Playback window and return to the Live View window. You can also close the Playback window by right-clicking the mouse.
5	Date	Click the <b>Calendar</b> button 🔳 to display the calendar and select a date.
6	Search Type	Select the desired search types for playback.
7	Stream Type	Select a stream type of the source recordings. For this function to work, you will have to configure the record stream setting to Dual Streams (please refer to <i>4.2.2.1 Record</i> ).
8	Channel Selection	Select the desired channel(s) to search and play back.
9	Playback Control Panel	You can use the playback control panel for playback operation. Please refer to <i>4.7.2 Playback Control Panel</i> for more details.



### 4.7.2 Playback Control Panel

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



1	Full Screen	Click to display the Playback Layout in full screen. Right-click the mouse to exit the Full Screen. Please refer to <i>4.7.2.1 Full Screen on Playback Window</i> .
2	Fast Backward	Click to rewind (x2, x4, x8, x16). The rewind speed will be displayed on the <b>Status Icon</b> located on the upper-right corner of the Playback Layout.
3	Slow Play	Click to start slow playback (1/2, 1/4, 1/8, 1/16). The slow play speed will be displayed on the <b>Status Icon</b> located on the upper-right corner of the Playback Layout.
4	Play / Pause	Click to start or pause playing back.
5	Step Forward	Click to playback frame by frame.
6	Stop	Click to stop playing back.
7	Fast Forward	Click to Fast Forward (x2, x4, x8, x16). The fast forward speed will be displayed on the <b>Status Icon</b> located on the upper-right corner of the Playback Layout.
8	Zoom	Click to use the Digital Zoom function. To perform this function, select a channel by clicking on the channel and then click the <b>Zoom</b> button, the selected channel will be displayed in single-channel. And you can start using the Digital Zoom function. For Digital Zoom operation, please refer to 3.4.1 Digital Zoom (PIP) for more details. To exit Digital Zoom mode, click the <b>Zoom</b> button again.
9	Video Clip	Click to quickly save a video clip (AVI) to a USB storage device. Please refer to <i>4.7.2.2 Backup Video Clips</i> .
10	Audio	Scroll the slider bar to increase or decrease volume.
11	Manual Snapshot	<ul> <li>Click to capture a snapshot image (.jpeg) of a channel and store it to the USB storage device. To perform this function:</li> <li>1. Insert a USB storage device to the NVR.</li> <li>2. Select a channel by clicking on the channel and then click the Manual Capture button.</li> <li>Note: For the first-time-use USB device, select a directory and then click OK.</li> </ul>



12	Add Default Tag	Click to add a default tag to the current playback time, which will be applied with a default Tag Name "Tag". You can then search for the tag on the Tag window. Please refer to <i>4.7.3.5 Tag</i> .
13	Add Customized Tag	Click to add a customized tag to the current playback time, which can input a tag name to the tag. You can then search for the tag on the Tag window. Please refer to <i>4.7.3.5 Tag</i> .
14	Screenshot	Click to cut a screenshot and save it to the USB storage device. You can also take a screenshot of a face and import the face image to the group of Face Recognition.
15	Time Indicator	Indicates the current playback time.
16	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. Single-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 (refer to <b>No.18</b> ). Note that for the Motion, PIR, Intelligent and Alarm recording to work, you have to configure the related settings in advance. For Motion recording, please refer to <i>4.1.6 Motion</i> . For PIR recording, please refer to <i>4.1.7 PIR</i> . For Intelligent recording, please refer to <i>4.3.6 Exception</i> .
17	Time Span	You can click to select a time span.
18	Selected Channel	The selected channel will be applied with an <b>Eye</b> icon <b>2</b> . You can perform the Zoom, Audio or Manual Snapshot functions for the selected channel.
19	Time Bar Color Indicator	The colors indicate the recording types. Green: Normal recordings or manual recordings. Yellow: Motion recordings. Red: I/O recordings. Purple: PIR recordings. Blue: Intelligent recordings. Orange: Alarm recordings.
20	Playback Date	Displays the selected playback date.



### 4.7.2.1 Full Screen on Playback Window

On the Playback Control Panel, click the **Full Screen** button **I** to display the Playback Layout in full screen. To exit the Full Screen, click the **Full Screen** button again on the Playback Control Panel. You can also exit the Full Screen by right-clicking the mouse.



Under Full Screen mode, you can move your mouse to the right to display the right-side **Search Panel**; or move your mouse to the bottom side to display the **Playback Control Panel**.



Search Panel





♦ Playback Control Panel

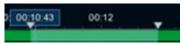


4.7.2.2 Backup Video Clips



To backup video clips:

- 1. Ensure the USB storage device has been inserted to the NVR.
- 2. On the Playback Control Panel, click the **Video Clip** button **M**. The button will then change to a **Copy** button **M**, and a copy range will be displayed on the time bar.



3. Check the left-side channel box if you want to back-up with the same start time and end time of the selected channel(s).



4. To set up the start time and end time, drag the **Triangle** icons to the left or right.



5. Click the **Copy** button **I**, the below Copy Type window appears.



6. Click the **Save** button, the Copy window appears. You can also create a directory for the video clip(s) by clicking the **Directory** button on the upper-right corner.

	Сору	×
Driver List: 🔿		
👱 USB1-1	Name	Last Modify
	Copy	03/08/2019 05:54:18
Remain:/Total:	Location: /hidev/usb1-1 Directory: //hidev/usb1-1/copy	
186.718MB/1.905GB Format	1/1 7%	OK Cancel

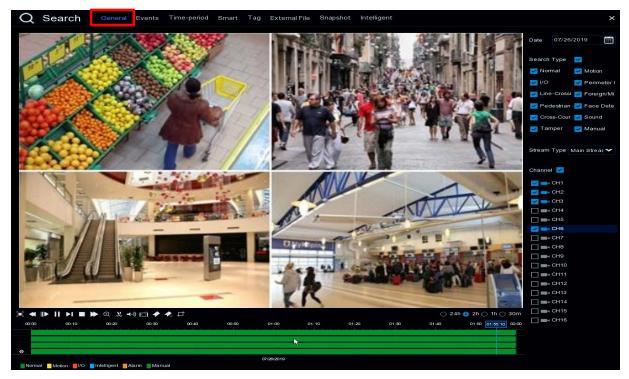
7. Click the **OK** button, the backup process begins. After the backup process is complete, click the **Cancel** button to return to the **Playback** window.



### 4.7.3 Search Mode

### 4.7.3.1 General

You can use this page to search, play back and backup all types of recordings. Click the **General** tab to enter the General Playback mode.



- 1. Click the **Calendar** button to select a date.
- 2. Select the desired Search Type(s).
- 3. Select a **Stream Type**. For this function to work, you will have to configure the record stream setting to Dual Streams (please refer to *4.2.2.1 Record*).
- 4. Select the desired channel(s).
- 5. Click the **Play** button to start playing back.
- 6. Use the Playback Control Panel to operate the Playback function. Please refer to *4.7.2 Playback Control Panel* for more details.

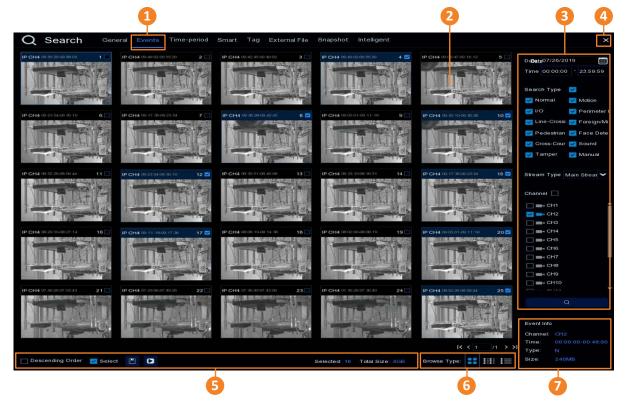
**Note:** The layout divisions will be automatically assigned by the system based on the number of selected channels. For example, if 1 channel is selected, the system will automatically assign single-division; if 2~4 channels are selected, 4-division will be assigned; if 5~9 channels are selected, 9-division will be assigned; if 10~16 channels are selected, 16-division will be assigned.



### 4.7.3.2 Events

You can use this page to search, play back and backup the event recordings to the USB storage device. The Event Playback page gives you a summary of all events on the list. You can display the events with Thumbnail, List or Details list type.

### Event Search and Backup



No.	Name	Description
1	Event Tab	Click to enter the Event Playback page.
2	Event List	The searched events will be listed on the Event List. You can display the Event List in Thumbnail, List or Details mode. Please refer to <b>No.6</b> .
3	Search Panel	You can use this panel to search for the event recordings based on the selected attributes including date and time, record mode and channels.
4	Close Button	You can click the <b>Close</b> button to close the Playback window and return to the Live View window. You can also close the Playback window by right-clicking the mouse.



5	Function Bar	<ul> <li><u>Descending order:</u> Click to display the events in descending order.</li> <li><u>Select:</u> Check the box to select all the events on the list. Uncheck the box to deselect all the events on the list.</li> <li><u>Copy:</u> Select the event(s) on the Event List and then click the <b>Copy</b> button to backup the selected event recordings to the USB storage device.</li> <li><u>Play:</u> Click an event on the Event List and then click the <b>Play</b> button to play back the clicked event recording.</li> <li><u>Selected:</u> The number of selected event(s) on the Event List will be displayed here.</li> <li><u>Total Size:</u> The total size of selected event(s) on the Event List will be displayed here.</li> </ul>
6	Browse Type	Click to display the Event List with Thumbnail, List or Details mode.
7	Event Info	Click an event on the Event List, the information of the clicked event will be displayed here.

- 1. <u>To search for events:</u>
  - a. Click the Calendar button to select a date.
  - b. Click the **Time** column to select a time range.
  - c. Select the desired Search Type(s).
  - d. Select a **Stream Type**. For this function to work, you will have to configure the record stream setting to Dual Streams (please refer to *4.2.2.1 Record*).
  - e. Select the desired channel(s).
  - f. Click the **Search** button , the search results will be displayed on the Event List.
  - g. You can click the left or right buttons to browse between pages, or input the page number you want to browse.

#### I< < 1 /6 > >I

h. You can switch the Event List display mode by clicking the Thumbnail, List or Details icons.

Thumbnail: Click to display the events with thumbnail images.



**List:** Click to display the events in list.



1 IP CH3 00:00:00	2 IP CH4 00:00:00	3 IP CH4 00:03:24	4 IP CH3 00:09:33	5 IP CH4 00:09:47
6 IP CH4 00:16:12	7 IP CH3 00:20:13	E 8 IP CH4 00:22:36	9 IP CH4 00:29:00	10 IP CH3 00:30:53
11 IP CH4 00:35:25	12 IP CH3 00:41:33	13 IP CH4 00:41:49	14 IP CH4 00:48:14	15 IP CH3 00:52:13
16 IP CH4 00:54:38	17 IP CH4 01:01:03	18 IP CH3 01:02:53	19 IP CH4 01:07:27	20 IP CH3 01:13:34
21 IP CH4 01:13:51	22 IP CH4 01:20:16	23 IP CH3 01:24:14	24 IP CH4 01:26:40	25 IP CH4 01:33:05

**Details:** Click to display the events in detailed list.

	Channel	Туре	Date	Start Time	End Time	Size	Playback	Lock
1	CH1	м	08/28/2018	09:57:07	09:57:19	9MB		25
2	CH1	м	08/28/2018	09:55:54	09:57:07	55MB		25
3	CH1	м	08/28/2018	09:55:04	09:55:54	37MB		
4	CH1	м	08/28/2018	09:53:41	09:54:11	22MB		
5	CH1	м	08/28/2018	09:50:00	09:51:26	65MB	•	

<u>Playback:</u> Click the Playback icon can play back the event.

Lock: Click the icon to lock 🚨 or unlock 🚔 the event. The locked events will be stored in the hard disk and will not be overwritten.

- i. On the Event List, click on an event and its information will be displayed at the lowerright corner.
- To back up event recordings to the USB storage device: 2.
  - a. Ensure the USB storage device has been inserted to the NVR.
  - b. On the Event List, select the desired event(s) and then click the **Copy** button.
- To play back an event recording, you can try either way: 3.
  - On the Event List, double-click on an event, the Event Playback page appears
  - On the Event List, click on an event and then click the **Play** button on the Function bar, the Event Playback page appears
  - On the Event List (Detail list), click the **Playback** button of an event, the Event Playback ٠ page appears





### **Event Playback page**



Playback Control Panel

Event Info

**(Event List)** You can perform the below functions using the Event List.

Playback: There are two ways:

- Double-click on an event can start playing back the event recording.
- Click on an event and then click the **Playback** button **I** to start playing back.

Copy: Check the event boxes to select the events and then click the **Copy** button back-up the event recordings to the USB storage device.

**Playback View** You can perform the below functions using the Playback View.

Digital Zoom: Scroll the Playback View to zoom in or zoom out the images. You can also use your mouse to drag the image to the desired positions to spot on a specific area.

Digital Zoom (PIP): Click the **Zoom** button on the Playback Control Panel and then scroll mouse upward/downward to zoom in/out, a Navigation Box will be displayed on the **Preview Window**. For more details about the operation, please refer to 3.4.1 Digital Zoom (PIP).

Return to the Event Search Page: Right-click on the Playback View can return to the Event Playback page. You can also click the **Return** button on the Playback Control Panel to return to the Event Playback page.

**[Event Info]** On the Event List, click on an event, the information of the clicked event will be displayed here.

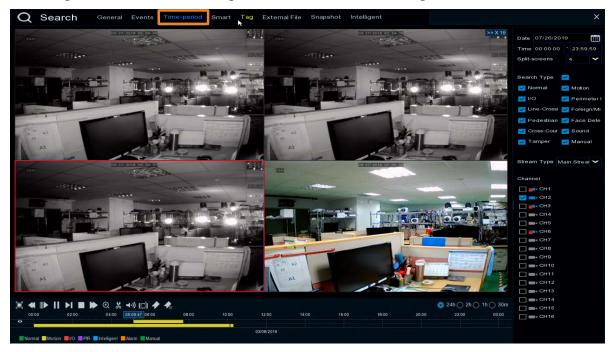
**Playback Control Panel** You can use this panel to operate the playback function. Please refer to 4.7.2 Playback Control Panel for more details.

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### 4.7.3.3 Time-Period

Click the Time-Period tab to enter this page. Time-Period function allows you to divide a recording into several segments with equal time-length; and then play back the segments simultaneously.

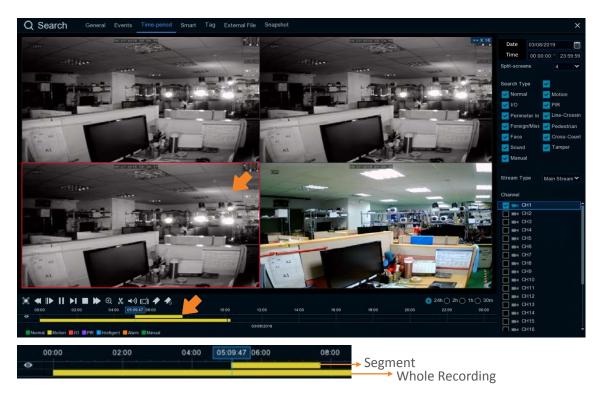
For example, for a 60-minute recording, if you select 4 split-screen, the recording will be divided into 4 segments with 15-minute in length each. If you select 6 split-screen, the recording will be divided into 6 segments with 10-minute in length each.



- 1. Click the **Sub-period** tab on the top to enter the Sub-Period Playback page.
- 2. Click the Calendar button to select a date.
- 3. Click the **Time** column to select a time range.
- 4. Select a split number from the Split-screens drop-down list.
- 5. Select a Search Type.
- 6. Select a **Stream Type**. For this function to work, you will have to configure the record stream setting to Dual Streams (please refer to *4.2.2.1 Record*).
- 7. Select a channel for Sub-period playback by checking the checkbox of the channel.
- 8. Click the **Play** button on the Playback Control Panel to start playing back. Please refer to *4.7.2 Playback Control Panel* for more details about Playback Control Panel.
- 9. You can also single-click on each segment on the playback layout to view the time range of the clicked (selected) segment. Please refer to the image below.

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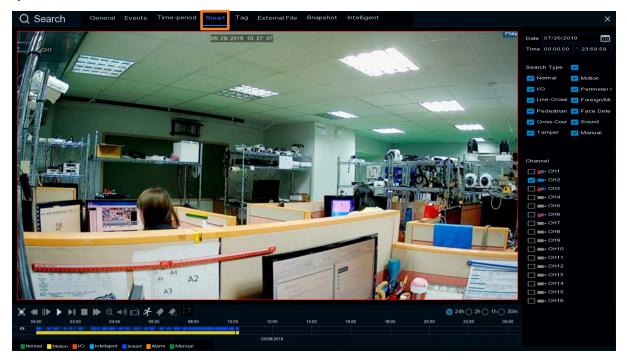






#### 4.7.3.4 Smart

Smart Playback allows you to easily search and play back the motion events in one or more specific areas of a channel.



To perform the Smart Playback function:

- 1. Click the **Calendar** button to select a date.
- 2. Click the **Time** column to select a time range.
- 3. Select the Search Type.
- 4. Select a channel for smart playback by checking the checkbox of the channel.
- 5. Click the **Play** button on the Playback Control Panel to start playing back.
- 6. By default, the whole area of the live image is defined as the smart area. To re-define the smart area(s), click the **Motion** button  $\checkmark$  on the Playback Control Panel to enter the Smart Area Define page. Please refer to **Defining Smart Areas** below.
- 7. Click the **Search** button on the Smart Area Define page to return to the Smart Playback page and then click the **Play** button to start playing back. You can see the searched Smart Motion Detection recordings displayed on the time bar in blue color (upper one).

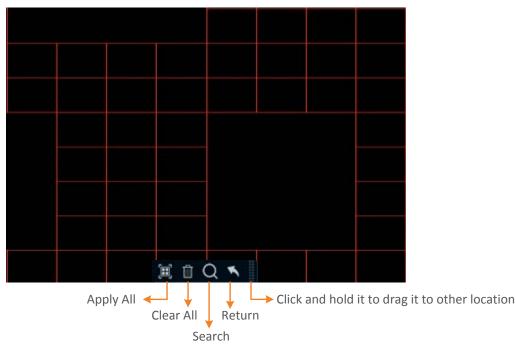


8. You can operate the smart playback function using the Playback Control Panel. Please refer to *4.7.2 Playback Control Panel* for more details.



**Defining Smart Areas:** 

1. Follow **Step 1 ~ Step 6** above to enter the Smart Area Define page.



- 2. To define the smart area(s), click the mouse and drag it to draw an area. The area applied with the smart function will be shown with red grids. You can follow this method to draw several areas. To clear a certain area, use the same method to draw on the same area again, the smart area will be erased.
- 3. Click the **Search** button to start searching the motion events on the smart areas for playing back.



### 4.7.3.5 Tag

You can search for the tagged recordings and then play back the recordings.

Qs	Search	General Events	Time-period	Smart Tag	External File	Snapshot Intelligent				,
		Tag Name	Channel	Date	Time	Playback		Delete		
		Tag	CH1	03/08/2019	00 00 07	۵				Start Time
	2	Tag	CH1	03/08/2019	00.00.12	0	1	6		07/26/2019 🗰 00:00:00
		Door1	CH1	03/08/2019	10.22.28	0				End Time
		Door5		03/08/2019	10:23:07	0				07/26/2019 📺 23:59:59
		Tag	CH1	03/11/2019	09:47:29	O				Keyword
										Channel
										CH1
										🔽 🔜 CH2
										СН3
										CH10
										CH11
										CH12
										CH13
										CH14
										CH15
										CH16
								I< <	1 /1 >>	
										4

After adding tags to the recordings, you can use the Tag playback window to search for the tagged recordings.

There are two ways to add a tag:

1. On the Live View window, click the **Add customized Tag** icon on the Live Channel Toolbar. Please refer to *3.5 Live Channel Toolbar* for more details.



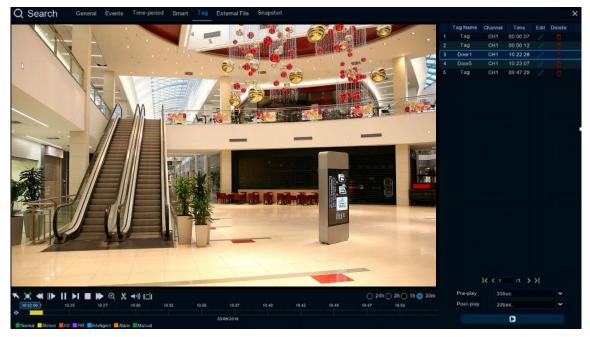
2. On the Playback windows (General, Events, Time-period, Smart), click the **Add Default Tag** or the **Add customized Tag** icon on the Playback Control Panel. Please refer to 4.7.2 Playback Control Panel for more details.

<b>≪ IÞ II</b>	ÞI 🔳 🕪	🕀 💾 ┥	) 🖸 🔶 🐗	3		C	24h 🔵 2h 🔵	1h 💽 30m
00:00	00:02	00:05	00:07	00.09.00 00.10	00:12	00:15	00:17	00:20
 					03/06/2019			

To play back the tagged recordings:

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- 1. On the Tag playback window, select a **Start Time** and **End Time**.
- 2. Optionally input a keyword of the tag if you want to find the tags with customized names.
- 3. Select the desired channel(s).
- 4. Click the **Search** button , the searched tags will be displayed on the list.
- 5. To play back the tagged recordings, you can either double-click on the tag recording or select a tag recording and then click the **Play** button on the lower-left corner. The below playback window appears.

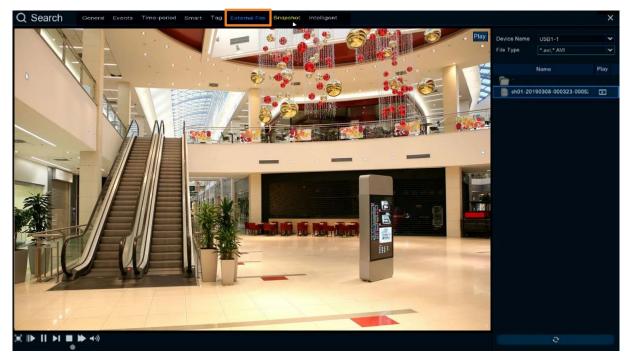


- By default, the NVR will play back the tagged recordings for 1 minute starts from 30 seconds ago of the tagged time. You can optionally adjust the playback time by selecting the Pre-play or Post-play options and then click the Playback button.
- b. You can edit the tag names by clicking the **Edit** icon, or delete the tags by clicking the **Delete** icon.
- c. You can now operate the tag playback function using the Playback Control Panel. Please refer to *4.7.2 Playback Control Panel* for more details.
- d. To return to the Tag playback window, click the **Close** button or right-clicking the mouse.



### 4.7.3.6 External File

You can play back the recordings (.avi) stored in the USB storage device using the External File Playback window.



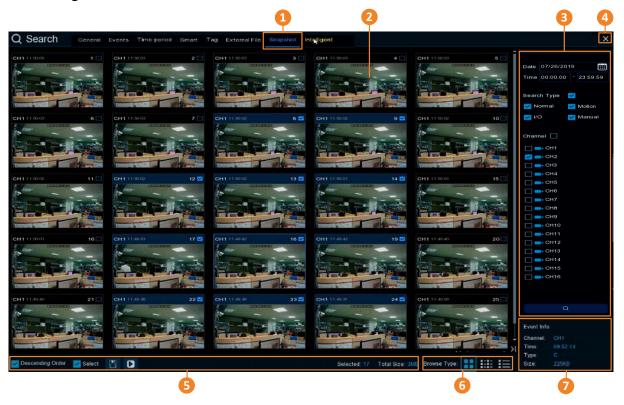
To play back the recordings (.avi) stored in the USB storage device:

- 1. Ensure the USB storage device has been inserted to the NVR.
- 2. Select the USB device from the **Device Name** drop-down box.
- 3. Double-clicking the recordings on the right-side panel, the recording will be played back.



#### 4.7.3.7 Snapshot

You can use this page to search and play back the snapshot images and backup the images to a USB storage device.



No.	Name	Description			
1	Snapshot Click to enter the Snapshot Playback window.				
2 Snapshot List The searched snapshot images will be listed on the Snapshot List. Yo can display the Snapshot List in Thumbnail, List or Details mode. Pleat refer to No.6.					
3	Search Panel	You can use this panel to search for the snapshot images based on the selected attributes including date and time, record mode, and channels.			
4	Close Button	You can click the <b>Close</b> button to close the Snapshot Playback window and return to the Live View window. You can also close the Snapshot Playback window by right-clicking the mouse.			



5	Function Bar	<ul> <li><u>Descending order:</u> Click to display the snapshots in descending order.</li> <li><u>Select:</u> Check the box to select all the snapshots on the list. Uncheck the box to deselect all the snapshots on the list.</li> <li><u>Copy:</u> Select the snapshot(s) on the list and then click the <b>Copy</b> button to backup the selected snapshot images to the USB storage device.</li> <li><u>Play:</u> Click a snapshot on the list and then click the <b>Play</b> button to play back the snapshot images starting from the clicked one.</li> <li><u>Selected:</u> The number of selected snapshot(s) on the list will be displayed here.</li> <li><u>Total Size:</u> The total size of selected snapshot(s) on the list will be displayed here.</li> </ul>
6	Browse Type	Click to display the snapshot list with Thumbnail, List or Details mode.
7	Event Info	Click an image on the Snapshot List, the information of the clicked snapshot image will be displayed here.

- 1. <u>To search for snapshot images:</u>
  - a. Click the **Calendar** button to select a date.
  - b. Click the **Time** column to select a time range.
  - c. Select the desired **Search Type**(s) and channel(s).
  - d. Click the **Search** button , the search results will be displayed on the Snapshot List.
  - e. You can click the left or right buttons to browse between pages, or input the page number you want to browse.

I< < 1 /6 > >I

f. You can switch the Snapshot List display mode by clicking the Thumbnail, List or Details button.

**Thumbnail:** Click to display the events with thumbnail images.

CH111:5005 1	CH1115003 2	CH1112003 3	CH1115002 4
CH1115003 6	CH1115003 7	CH111:2002 B 💟	CH1115002 9 🛛

## List: Click to display the snapshots in list.

1 CH1 11:50:05	2 CH1 11:50:03	3 CH1 11:50:03	4 CH1 11:50:03
6 CH1 11:50:03	<b>7 CH1</b> 11:50:03	✓ 8 CH1 11:50:02	S OH1 11:50:02
<b>11 CH1</b> 11:50:02	✓ 12 CH1 11:50:02	✓ 13 CH1 11:50:02	✓ 14 CH1 11:50:01
<b>16 CH1</b> 11:50:01	🗹 17 CH1 11:49:53	✓ 18 CH1 11:49:42	🗹 19 CH1 11:49:42
21 CH1 11:49:40	✓ 22 CH1 11:49:38	≥ 23 CH1 11:49:38	≥ 24 CH1 11:49:37
CH1 11:49:09	27 CH1 11:49:09	28 CH1 11:49:08	29 CH1 11:49:08
31 CH1 11:49:06	32 CH1 11:49:06	33 CH1 11:49:05	34 IP CH2 11:48:52
36 IP CH2 11:48:48	37 IP CH2 11:48:48	38 IP CH2 11:48:46	39 IP CH2 11:48:45



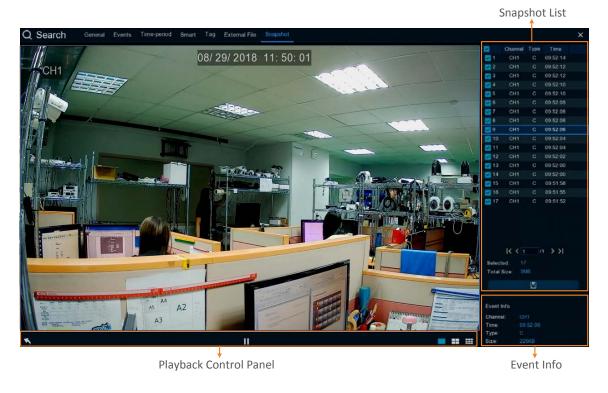
**Details:** Click to display the snapshots in detailed list.

	Channel	Туре	Date			Playback
1	CH1	Manual	08/29/2018	11:50:05	245KB	•
2	CH1	Manual	08/29/2018	11:50:03	245KB	·
3	CH1	Manual	08/29/2018	11:50:03	245KB	Þ
4	CH1	Manual	08/29/2018	11:50:03	245KB	·
5	CH1	Manual	08/29/2018	11:50:03	245KB	

<u>Playback:</u> Click the **Playback** icon in the Playback column can display the snapshot image. You can then click the buttons to display the next or previous snapshot image.

- g. On the Snapshot List, click on a snapshot image and its information will be displayed at the lower-left corner.
- 2. <u>To back up snapshot images to the USB storage device:</u>
  - a. Ensure the USB storage device has been inserted to the NVR.
  - b. On the Snapshot List, select the desired snapshot(s) and then click the **Backup** button.
- 3. To play back a snapshot images continuously:
  - a. On the Snapshot List, click on a snapshot and then click the **Play** button on the Function bar, the Image Playback page appears.
  - b. The system will automatically play back the snapshot images starting from the clicked one to the last one.





**(Snapshot List)** You can perform the below functions using the Event List.



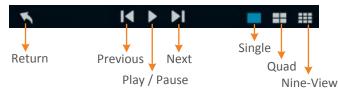
<u>Image Display:</u> Click a snapshot image on the list can display the image on the viewing window.

<u>Continuous Playback</u>: Click a snapshot image on the list and then click the **Play** button on the Playback Control Panel, the snapshot images will be automatically playing back continuously starting from the clicked one to the last one.

<u>Copy:</u> On the Snapshot List, check the snapshot boxes to select the snapshots and then click the **Copy** button and back-up the snapshot images to the USB storage device.

**[Event Info]** On the Snapshot List, click on a snapshot, the information of the clicked snapshot image will be displayed here.

**(Playback Control Panel)** You can use this panel to operate the playback function.



<u>Return:</u> Click to return to the Picture search page.

Previous: Click to display the previous image.

<u>Play / Pause</u>: Click to start playing back or pause playing back the continuous snapshot playback.

Next: Click to display the next image.

Single: Click to display the snapshot images in single view.

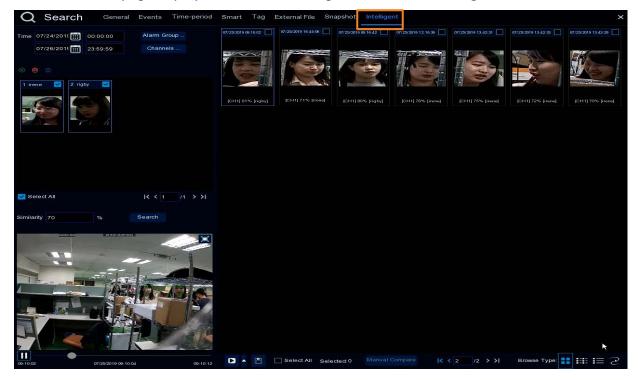
Quad: Click to display the snapshot images in quad view (displaying 4 images at a time).

Nine-View: Click to display the snapshot images in nine-view (displaying 9 images at a time).

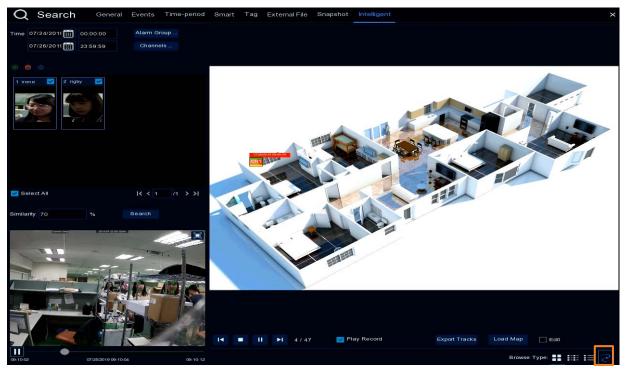


### 4.7.3.8 Intelligent

You can use this page to playback the Face Recognition alarm recordings.



You can also add an E-map to display the location of the alarm channel.





### 4.8 Express

### 4.8.1 Quick Playback

You can configure the start playback time for the Quick Playback function. Select a time from the drop-down box to set up playing back from how many time ago.

After the configuration, you can activate the function by clicking the **Quick Playback** icon on the **Live Channel Tool Bar** on each channel (please refer to *3.4 Live Channel Tool Bar*).

Channel	Record	Alar	D	Network	Device	Express
Playback		Quick Playback 5 s	Sec. 🗸	second(s)ago.		
HD Stream Switch		Playback	Play			
E Preview Policy						

### 4.8.2 Stream Switch

This function is only available for IP cameras. You can set up a stream mode for all IP channels on the live view window. Select **Main Stream** or **Sub Stream** and then click the **Apply** button.

To adjust the Main Stream or Sub Stream configurations, please refer to 4.2.1 Stream.

		ecord (	(i) Alarm	Network	Device	Express
	Playback	Stream Switch	Sub Stream 💙	Apply		
	Stream Switch					
E	Preview Policy					

### 4.8.3 Preview Policy

You can set up a displaying quality for all channels on the live view window. Select among realtime, balanced or smooth view. The view modes affect only the live view video quality by bit rate and frame rate but do not affect the recording quality.

Ō		í			22
Channel	Record	Alarm	Network	Device	Express
Playback	Р	review Policy Smooth	✓ Apply		
HD Stream Switch					
Preview Policy					

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### 4.9 System

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

### 4.9.1 General

### 4.9.1.1 General

You can configure the general system settings on this page.

	Ō		C	D				<b>₹</b> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ર્ટ્ટેટ	[	
	Channel	Record	Ala	rm	Network		Device	Express	System		Exit
ŝ	General	^	Device Name	IRONGUARD 16	5 POE						
	General		Device ID	000000							
	<ul> <li>Date and Time</li> </ul>		Language	English		~					
	🗕 Video Output		Video Format	NTSC		~					
	User Account		Menu Timeout	off		~					
*	Maintenance	~	✓ Start Wizard								
© ×	IPCam Maintain	~									
	System Info	~									
		_								Default	Apply

**Device Name:** Input a desired name for your NVR. The name can include both letters and numbers.

**Device ID:** Enter the desired ID for your NVR. The device ID is used to identify the NVR, and can only be composed of numbers. For example, 2pcs NVRs are installed in the same place, the Device ID is 000000 for one of the NVRs, and 111111 for another NVR. When you want to operate the NVR with a remote controller, both of the NVR may receive the signal from controller & act at the same time. If you want to control only the NVR with ID 111111, you can input the Device ID 111111 in login page with remote controller for further operations.

Language: Select a language.

Video Format: Select NTSC or PAL for the system.

**Record Mode:** Select a record mode, **Normal (4k)** or **5MP Mode**. The recording FPS options will be different when **Normal Mode (4k)** or **5MP Mode** is selected. For more details about recording FPS, please refer to *4.2.1 Stream*.

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

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

Default: Click to apply the default setting.

Apply: Click to save the settings.



### 4.9.1.2 Date and Time

Channel	Record		j)	· · ·	etwork		Device		Express	දිදු System		<b>→</b> Exit
🛟 General	^	Date and Time					39999555					
- General			03/07/2019									
- Date and Time		Time	09:52:32		)							
- Video Output		Date Format	MM/DD/YY		~							
L User Account			24Hour		~							
X Maintenance	•	Time Zone	GMT+08:00		~							
o∎< IPCam Maintain	•	NTP Settings										
System Info	*	Enable NTP	×									Î
		Server Address	pool.ntp.org		*							
			Update Now									•
		DST Settings										
		Enable DST	<b>X</b>									
		Time Offset	1Hour	Y								
		Daylight Saving Tin	ne Week	×								
		Start Time	Mar.	×	The 2nd	~	Sun.	~				
		End Time		*	The 1st	*	Sun.	*	02:00:00			
											Default	Apply

### [ Date and Time ]

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.
Time Zone: Select a time zone relevant to your region.

### [NTP Settings]

The NTP (Network Time Protocol) function allows your NVR to automatically sync its clock with a time server. This gives it the ability to constantly have an accurate time setting (your NVR will periodically sync automatically).

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

Server Address: Select a NTP server.

Update Now: Click to calibrate the system time.



### [DST Setting]

The DST (Daylight Saving Time) function allows you to select the amount of time that Daylight Saving has increased by in your particular time zone or region.

Enable DST: Check the box to enable the DST function.

**Time Offset:** Select the amount of time that Daylight Saving has increased by in your time zone. This refers to the difference in minutes, between Coordinated Universal Time (UTC) and the local time.

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

<u>Week:</u> Select a month, a particular day and time when Daylight Saving starts and ends. For example, 2am on the first Sunday of a particular month.

<u>Date:</u> Select the start date (click the calendar icon), end date and time when Daylight Saving starts and ends.

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

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

Default: Click to apply the default setting.

Apply: Click to save the settings.



### 4.9.1.3 Video Output

You can configure the monitor output settings on this page.

Channel	Record	(i) Alarm	Network		Device	Express	<del>کرکر</del> System		Exit
General	∧ Record	Video Output	Live Output	~	Device	Express	System		Exit
<ul> <li>General</li> <li>Date and Time</li> </ul>		Sequence Layout Sequence Interval Time	Layout1	~					
- Video Output		Output Resolution Scale and Offset	1920x1080	~					
Luser Account	*	Cursor Hidden Delay Cursor Acceleration	5Sec.	~					
रु≖< IPCam Maintain	*	Transparency	•						
							J	Default	Apply

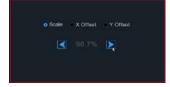
Video Output: Select Live Output (Main Monitor) and then configure the below settings.

**Sequence Layout:** Select a layout for the sequence mode. For example, if you select Layout4, the NVR will display a quad view layout for all channels in sequence order. To start the sequence mode, go to OSD menu > Layout and then click the **Auto Sequence** button. Click the button again to stop sequence mode.

**Sequence Interval Time:** Input a sequence interval time in second. By default, 5 seconds is set up.

**VGA/HDMI Resolution:** Select a live resolution to be displayed on the output monitor. 1920 x 1080 will suit most TVs. If your NVR supports 4K output resolution, you can select either 2K (2560 x 1440) or 4K (3840 x 2160) to take advantage of the higher resolution that your 4K TV provides.

**Scale and Offset:** The NVR supports to adjust the size and position of the display screen to match your monitor or TV. Click the **Setup** button to adjust.



<u>Scale:</u> To adjust the size of the displayed screen by scale.

<u>X Offset:</u> To move the displayed screen to the left or right.

<u>Y Offset:</u> To move the displayed screen to the top or bottom.

Click once or long press the left button of your mouse on the arrow to adjust the size and position, or you can scroll the wheel of the mouse to adjust. Click the right button of your mouse to exit, and click **Apply** to save your modifications.

**Cursor Hidden Delay:** Click the drop-down menu to select the time your NVR will hide the mouse cursor when idle. You can also disable this function by selecting **Off** (password protection will be temporarily disabled).

Cursor Acceleration: To adjust the speed to move the mouse cursor.

**Transparency:** Slide the bar to the left or right to adjust the transparency for the OSD menu. **Default**: Click to apply the default setting.

Apply: Click to save the settings.

### 4.9.2 User Account

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

Channel			Alarm		letwork	Device		Express	<b>کرک</b> System		<b>E</b> xit
දිරී General	•	No.	User Name	Level	User Enable	Password Enable	User Edit	Permission			
👤 User Account			admin	Admin	Enable	Disable					
🗙 Maintenance	~		user1	User1	Disable	Disable					
o∎< IPCam Maintain	*		user2	User2	Disable	Disable					
System Info	*		user3	User3	Disable	Disable					
			user4	User4	Disable	Disable					
			user5	User5	Disable	Disable					
			user6	User6	Disable	Disable					
		Default User ad	imin 🔪	•							
										Default	Apply

Default User: Select an user account as the default account.

**User Edit:** Click to bring-up the User Edit window. You can edit the user name/password in this window. Input the user name with alphabetic or numeric characters; and the passwords have to be numeric (0-9) and at least 5 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.

A	dmin Acco	unt		User Account						
	User Ed	it	×		User E	dit				
Level	Admin			Level	User1					
User Name	admin			User Enable	Enable	~				
Password Enable	Enable	~		User Name	user1					
Password Strength			High	Password Enable	Enable	~				
Password	•••••		Show Password	Password Strength						
Confirm			Show Password	Password	•••••		Show Password			
Enable Unlock Pattern	Disable	~		Confirm			Show Password			

• Enable Unlock Pattern: Enable or disable the Unlock Pattern function.

**Permission:** Click <sup>(2)</sup> 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.

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								Us	er	Pe	rmi	issi	on						×
User Name			110	er1															
			uə									1							
Cog Search			~		ettin								to R					ual Recor	
Disk			~	R	emo	te Lo	ogin					Se	quer	ice	Con	trol	Man Man	ual Snaps	hot
Сору																			
Z Analog Channels	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
IP Channels	1	2	3	4	5	6	7	8											
<b>Z</b> Live																			
🛃 Analog Channels	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
V Channels	1	2	3	4	5	6	7	8											
Playback																			
Analog Channels										10	11	12				16			
IP Channels																			
<b>PTZ</b>																			
🛃 Analog Channels	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
P Channels	1	2	3	4	5	6	7	8											
									Al				C	lear			Save	Cano	

- Log Search: Allow users to check all the system logs.
- Settings: Allow users to set all the parameter settings.
- Auto Reboot: Allow users to auto reboot the device.
- Manual Record: Allows users to manually start/stop recording.
- **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: 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.



### 4.9.3 Maintenance

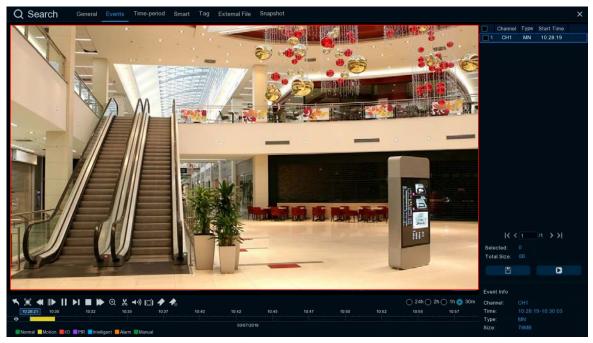
On this page, you can search and view the system log, load default settings, upgrade the system, export and import system parameters and manager system auto reboot.

### 4.9.3.1 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.

Ō		í			<b>€</b> €	ર્જુ	Ð
Channel	Record	Alarm	Network	Device	Express	System	Exit
😚 General	Start Date	03/07/2019	🟢 Start Time	00:00:00			
Q User Account	End Date	03/07/2019	End Time	23:59:59			
🗙 Maintenance	Log Type	All	~				
- Log	Channe	і Туре		Description	Record	Playback	
- Load Default		Account	03/07/2019 09:13:40	Manual Lock Screen			Î
		System	03/07/2019 10:28:18	System Startup			
<ul> <li>Upgrade</li> </ul>	CH1	Alarm	03/07/2019 10:28:22	Motion Start	Yes	<b>₽</b> k	
<ul> <li>System Parameter</li> </ul>		Account	03/07/2019 10:30:00	admin Login			
- Auto Reboot		Storage	03/07/2019 10:30:06	No.1 No Space on Disk			
o∎< IPCam Maintain	*	Record	03/07/2019 09:26:44	Record Search			Ī
System Info	•	Configurations	03/07/2019 09:57:34	Video Settings			
		Configurations	03/07/2019 09:57:58	Video Settinas			
							Сору

You can click the **Playback** icon **I** in the Playback column to play back the event recording. About the playback control bar, please refer to *4.7.2 Playback Control Panel*. To exit the playback mode, right click the mouse.



**Copy**: Click to save all the searched logs to the USB storage device.



Click the **Copy** button, the Copy window appears. You can also create a directory for the video clip(s) by clicking the **Directory** button and the upper-right corner. Click the **OK** button, the copy process begins. After the copy process is complete, click the **Cancel** button to return to the **Log** page.

	Сору			×
Driver List: C			:≡ ~	- 14 ii
💾 USB1-1	Name		Last M	lodify
	ch01-20180827-105158-105210-1010(	9.759MB	08/27/2018	3 03:28:33
	Location: /hidev/usb1-1			
Remain:/Total: 115.625MB/1.905GB	Selected Directory: //hidev/usb1-1			< >
	1/1 100%			Cancel



### 4.9.3.2 Load Default

Select the desired items to be restored to factory default and then click **Apply**. Restoring default settings will not delete recordings and snapshots saved to the hard drive.

	Channel	• Reco		(j) Alarm	Network	Device	Express	۲۵۶ System	Exit	
ŝ	General	*	Select All							I
<b>.</b>	User Account		Channel							
∗	Maintenance	^	Record							
	- Log		💙 Alarm							
	- Load Default		Vetwork							
	- Upgrade		<mark> v</mark> Device							
	<ul> <li>System Parameter</li> </ul>									
	- Auto Reboot									
<b>014</b>	IPCam Maintain	~								
$\square$	System Info	~								
									Apply	

### 4.9.3.3 Upgrade

You can upgrade system firmware using this page.

Channel	Record	Alarm	Network	Device	Express	کرک System	Exit
<ul> <li>General</li> <li>User Account</li> </ul>	Sel	ect File			4 ►	Upgrade	
<ul> <li>Maintenance</li> <li>Log</li> <li>Load Default</li> </ul>	^						
- Upgrade - System Parameter							
- Auto Reboot ס∎< IPCam Maintain	*						
System Info	*						

- 1. Restore the firmware file (.sw) in a USB storage device and insert the USB storage device to the NVR.
- 2. Click the **Select File** button to select the firmware file from the USB storage device.
- 3. Click the Upgrade button to start system upgrade.

**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.



### 4.9.3.4 System Parameter

You can export the system parameters you have configured to a USB storage device, or import a system parameters file from USB storage device to the NVR.

Channel	Record	Alarm	Network	Device	Express	System	Exit
🚯 General	*	Save Settings	Load Settings				
L User Account							
🗙 Maintenance	^						
- Log							
- Load Default							
- Upgrade							
- System Parameter							
- Auto Reboot							
IPCam Maintain	*						
System Info	*						

**Save Settings:** Click to save the NVR current system settings to the USB device. You will be required to input the Admin password to authenticate.

**Load Settings:** Once you have exported system parameters file, you can import the file on another NVR. Stored the file to your USB storage device and then insert the USB storage device to the NVR, click **Load Settings** to navigate the file. You will be required to input the Admin password to authenticate.

### 4.9.3.5 Auto Reboot

This menu allows the system to auto reboot the NVR regularly. It is recommended to leave this function enabled, as it maintains the operational integrity of your NVR.

Ō		1	( <b>i</b> )			₹¢¢¢	£33		+
Channel	Record		Alarm	Network	Device	Express	System		Exit
දිරු General	~	Auto Reboot	<b>×</b>						
Luser Account		Time	By Week	~					
🗙 Maintenance	^		Sun.	~					
- Log			00:00						
- Load Default									
<ul> <li>Upgrade</li> </ul>									
- System Parameter									
- Auto Reboot									
o∎< IPCam Maintain	~								
System Info	~								
								Default	Apply

Check the **Auto Reboot** box to enable the function and then set up the reboot time for the system to regularly reboot at the setup time. Click the **Apply** button to save the settings.



### 4.9.4 IPCam Maintain

This menu allows you to upgrade the IP camera's firmware and restore default settings of IP camera.

### 4.9.4.1 Upgrade

This menu allows you to upgrade the IP camera's firmware.

		(j					E
Channel	Record	Alam	Netv	vork Dev	ice Expres:	s System	Exit
General	*		Channel I	P Address Stal	te Software Version	Upgrade	
Luser Account			IP CH1 17	2.16.0.13 On-li	ne 1.0.19_150330		
🗙 Maintenance	*						
IPCam Maintain	~						
🕳 Upgrade							
- Load Default							
- Reboot IPC							
System Info	*						
		Select File				IPCam Upgrad	le

- 1. Select one of the IP cameras you want to upgrade firmware by checking the checkbox.
- 2. Click the **Select File** button to select the update file from your USB storage device.
- 3. Click the **IPCam Upgrade** button to start upgrading the selected IP camera. You will be required to input the Admin password to authenticate.

Channel	Record	8	(i) <sub>Alarm</sub>	Network	Device	Express	ک System	Exit
🛟 General	~		Channel	IP Address	State	Software Version		
Luser Account		<b>V</b>	IP CH1	172.16.0.13	On-line	1.0.19_150330		
🗙 Maintenance	*							
o∎< IPCam Maintain	^							
<ul> <li>Upgrade</li> </ul>								
- Load Default								
- Reboot IPC								
System Info	*							
		Load Default						

### 4.9.4.2 Load Default

- 1. Select one of the IP cameras you want to load factory default by checking the checkbox.
- 2. Click the **Load Default** button to start loading default. You will be required to input the Admin password to authenticate.



4.9.4.3 Reboot IPC

On this page, you can reboot the IP cameras.

Ō		í			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u></u>	<b>-</b>
Channel	Record	Alarm	Network	Device	Express	System	Exit
<b>දිදු</b> } General	•	Channel	IP Address	State	Software Version		
Luser Account		P CH1	172.16.0.13	On-line	1.0.19_150330		
🗙 Maintenance	~						
o∎< IPCam Maintain	~						
🕳 Upgrade							
- Load Default							
- Reboot IPC							
System Info	*						
	R	eboot IPC					

- 1. Select one of the IP cameras you want to reboot by checking the checkbox.
- 2. Click the **Reboot IPC** button to start rebooting. You will be required to input the Admin password to authenticate.

### 4.9.4.4 System Parameter

You can export the IP camera parameters to a USB storage device, or import a IP camera parameters file from USB storage device to the NVR.

Ō		(	D			₹₹¢	ર્ટ્સ્ટ્રે	•
Channel	Record	A	larm	Network	Device	Express	System	Exit
General	~		Channel	IP Address	State	Software Version		
L User Account		<b>×</b>	CH1	10.10.25.151	Online	V1.0.1_20190628		
🗙 Maintenance	~	×	CH2	192.168.33.108	Online	V1.0.1_170309		
		<b>&gt;</b>	CH3	192.168.33.188	Online	V1.04.10-181105		
S⊒◀ IPCam Maintain	^	<b>X</b>	CH6	192.168.33.153	Online	V4.43.5.0_181212		
🕳 Upgrade								
🗕 Load Default								
- Reboot IPC								
🕳 System Paramete	r							
System Info	~							
		Save Settings	Load Settings					

**Save Settings:** Click to save the IP camera settings to the USB device. You will be required to input the Admin password to authenticate.

**Load Settings:** Once you have exported IP camera parameters file, you can import the file on another NVR. Stored the file to your USB storage device and then insert the USB storage device to the NVR, click **Load Settings** to navigate the file. You will be required to input the Admin password to authenticate.



### 4.9.5 System Info

This menu allows you to view the system information, channel information, record information and network status.

### 4.9.5.1 System Info

View system information such as device ID, device model name, IP address, MAC address, firmware version and more.

Channel	Record	Alarm	Network			ર્જુ	Exit
		Alarm	Network	Device	Express	System	Exit
General	~	Device ID	000000				
Luser Account		Device Name	IRONGUARD 16 POE				
🗙 Maintenance	~	Device Type	IRONGUARD 16 POE		光回		
-	~	Hardware Version	DM-279	建成	55		
System Info		Software Version	V1.0.1-20190624		額		
	<u>^</u>	IE Client Version	V2.0.0.210				
<ul> <li>System Info</li> </ul>		Video Format	NTSC				
- Channel Info		HDD Volume	3739G				
<ul> <li>Record Info</li> </ul>		IP Address	192.168.33.127				
<ul> <li>Network Info</li> </ul>		Web Port	80,80				
		Client Port	8000,8000				
		MAC Address	58-E8-76-03-49-FA				
		Network Info	Connection successful				
		P2P ID	4G1UH4UKT3BRLHR1111A				

If **P2P** function is enabled, a QR code will be displayed on the Info page. You can scan the QR code with **EverFocus eFVMS App** installed on your mobile device to add and remote access the NVR. To enable the P2P function, please refer to *4.4.1.4 Port Configuration*.

### 4.9.5.1.1 Performing the P2P Function

The **P2P** function allows users to add NVRs to EverFocus' **eFVMS App** through QR code.

1. Install **EverFocus eFVMS App**. For Android users, go to Google Play Store. For iOS users, go to Apple Store. After the installation process is complete, start the eFVMS App.





2. To add a NVR through P2P, tap **Menu** > **Device List**, and then tap the "+" button on the upper-right corner.

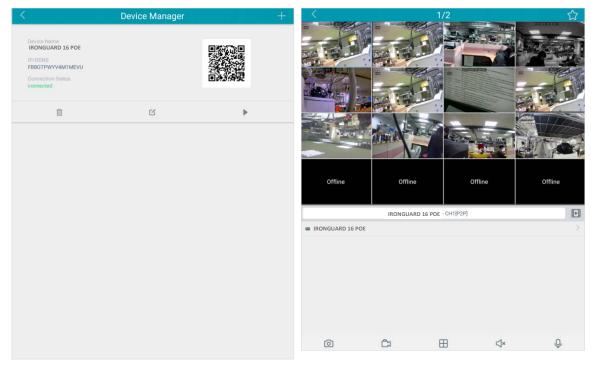
	1/2	奈\$99% ➡ 16:56 🔒 🖸 🗑		奈 <b>:</b> 99% 📑
<b>EverFocus</b>	1/2	☆ <	Device Manager	
.0				
Remote Setting				
Cocal Config				
File List				
E Device List				
Dotifications				
💡 Help				
(i) About				
	/ANGUARD16x8 - Channel01[P2P]			

3. Scan the NVR's **QR code** on the System Info page of the NVR OSD menu. Input the NVR ID, password and Media Port 9000. Tap the **Save** button.

<	Add New Device	< Edit Information
		IP Address/ID
nfo	Network Info 🗙	51TYH8YTLCFZB3
	the state of the s	Media Port
and south		9000
		User Name
		admin
		Password
		••••• >>
8		
	and the state of t	Save
	A REAL PROPERTY AND ADDRESS OF TAXABLE PARTY.	
	NAMES OF A DESCRIPTION OF A DESCRIPTION OF A DESCRIPTIONO	
	-	
	the second s	
	Online Search	
101		
	Manual Add	



4. The NVR is now added and connected to the App. You can start accessing the NVR.



### 4.9.5.2 Channel Info

You can see the channel info on this page.

Ō		M	<b>()</b>				ζζζ ζζ	ŝ	•
Channel	Re	cord	Alarm		Network	Device	Express	System	Exit
<b>දිදු</b> } General	~	Channel	Alias	State	Main Stream	Sub Stream	Motion Detection	Privacy Mask	
Luser Account		CH1	CH1	Enable	2560x1944, 10Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
🗙 Maintenance	~	CH2	CH2	Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
o∎< IPCam Maintain	*			Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
System Info	~	CH4	CH4	Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
—		CH5	CH5	Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
- System Info		CH6	CH6	Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
- Channel Info		CH7	CH7	Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
<ul> <li>Record Info</li> </ul>		CH8	CH8	Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
- Network Info		CH9	CH9	Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
				Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
				Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
				Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
				Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
				Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
				Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	
		CH16		Enable	2560x1440, 15Fps, 6Mbps	704x 480, 10Fps, 512Kbps	Support	Support	

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### 4.9.5.3 Record Info

You can see the record info on this page.

Ō		(	(j)		D.		5000 A	Ś	<b>+</b>
Channel	Record		Alarm		work	Device	Express	System	Exit
General	*								
User Account		Channel	Record State	Enable Channel	Stream Type	Resolution	FPS	Bitrate	
X Maintenance	~	CH1	On	Enable	Dual Streams	2592x1944   640x480	30Fps   10Fps	4Mbps   1024Kbps	
		CH2	On	Enable	Dual Streams	1280x960   640x480	25Fps   25Fps	601Kbps   1024Kbps	
o∎< IPCam Maintain	~	СНЗ	On	Enable	Dual Streams	1920x1080   640x480	30Fps   30Fps	3Mbps   512Kbps	
System Info	^	CH6	On	Enable	Dual Streams	1920x1080   1280x720	30Fps   30Fps	6Mbps   2Mbps	
- System Info									
- Channel Info									
- Record Info									
- Network Info									

### 4.9.5.4 Network Info

You can see the network state on this page.

Ō		(i)				င့်နို	<b>I</b>
Channel	Record	Alarm	Network	Device	Express	System	Exit
र्ट्रे General	~	Attribute	Value				
User Account	WLAN	J					
		IP Address	192.168.33.12				
🗙 Maintenance	~	Subnet Mask	255.255.255	0			
💭 🗖 IPCam Maintain	~	Gateway	192.168.33.25				
5		MAC Address	58-E8-76-03				
System Info	^	DHCP	Enable				
- System Info	Interna	al Interface	Connected				
		IP Address	10.10.25.100				
<ul> <li>Channel Info</li> </ul>		Subnet Mask	255.255.0.0				
- Record Info	DNS1		192.168.10.18	18			
	DNS2		8.8.8.8				
<ul> <li>Network Info</li> </ul>	PPPo	E	Disable				
	Port						
		Web Port	80,80,Inactive,Di	sable			
		Client Port	8000,8000,Inactive	Disable			
		RTSP Port	554,554,Inactive,E	isable			
		HTTPS	443,443,Inactive,D	isable			
		Bandwidth:	320Mbps				
		Bandwidth:	19.086Mbps				
	TOE		Enable				

Total Bandwidth: It shows the NVR's total input bandwidth for IP cameras.

Used Bandwidth: It shows the used bandwidth of IP cameras.



### 4.10 Exit

You can Shutdown, Reboot ore Logout the system using this page.

Channel	Record	Alarm	Network	Device	Express	<b>System</b>	Exit
🛃 Exit		Shutdown	Reboot	Logout			



### Chapter

5

# 5. Remote Access to the NVR

### 5.1 Accessing the NVR on the Network

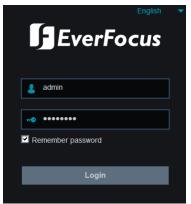
Follow the steps below to access the NVR through a Web browser.

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

### Internet connection:

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

- 2. If your computer is connected to the internet, it will download and install "ActiveX" plug-in automatically.
- 3. The Login window pops up. Type the User Name and Password. Click Login.



**Username:** Input the user name.

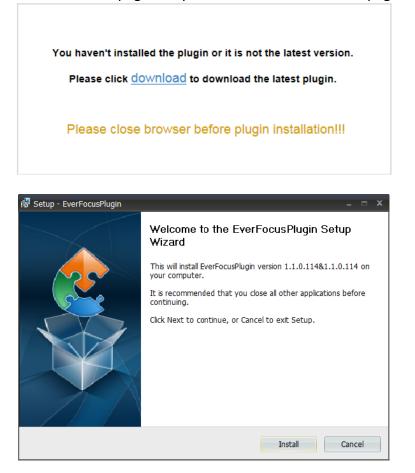
Password: Input the password.

**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 block appears on the browser, click **download** to install the plug-in. Reload the webpage and you should see the 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).</li>
  - ✓ 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.

<ul> <li>Computer</li> </ul>	<ul> <li>Local Dis</li> </ul>	k (C:) 🕨 Program Files (	x86) 🕨 Internet Explorer 🕨
🖬 Open	Burn	New folder	
	Name		Date modified
ads	🏉 iexplo	Open	11/21/2010 1 14/2009 9:1
Places	ieco	😗 Run as administrat	



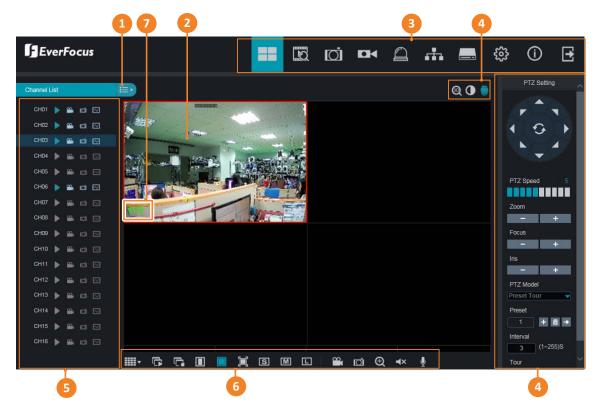
 If you are unable to backup or record during remote operation, you may need to turn off the firewall and turn User Account Control off.

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.

🛞 User Account Control Settings		
User Account Control he	notified about changes to your computer lps prevent potentially harmful programs from making changes Account Control settings	to your computer.
Always notify   Never notify	<ul> <li>Never notify me when:</li> <li>Programs try to install software or make changes to my computer</li> <li>I make changes to Windows settings</li> <li>Not recommended. Choose this only if you need to use programs that are not certified for Windows 7 because they do not support User Account Control.</li> </ul>	
	<b>()</b>	Cancel



## 5.2 Remote Live View Window



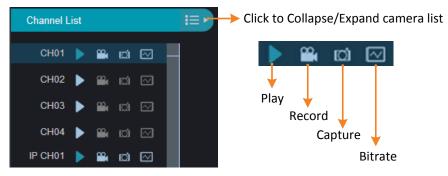
No.	Name	Description			
1	Camera List Button	Click to hide or display the Camera List. Please refer to 5.2.1 Camera List.			
2	Live Channel	<ul> <li>You can perform the following functions on each channel:</li> <li>a. Double-click on a channel can display the channel in full screen. To exit the full screen mode, double-click on the channel again.</li> <li>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.</li> </ul>			
3	Menu Bar	Click to enter each menu bar. Please refer to 5.3 Menu Bar.			
4	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 <i>5.2.3 PTZ Setting Panel</i> and <i>5.2.4 Color Panel</i> for more details.			
5	Camera List	Displays the IP cameras. You can click on the icons to perform some functions. Please refer to <i>5.2.1 Camera List</i> .			
6	Live View	You can perform some functions for all the cameras on the Live View			
	Function Icons	window. Please refer to 5.2.2 Live View Function Icons for more details.			



		atus Icons displayed on the bottom-left of each channel are ed to alert users when any of the following situations occur:	
		R	The channel is on normal <b>recording</b> .
		н	No HDD / HDD error / HDD not formatted
		М	Motion event is triggered.
7	Status Icon	М	Motion event is triggered. Motion event is recording.
		I	Alarm event is triggered.
		- I	Alarm event is triggered. Alarm event is recording.
	S	Intelligent event is triggered.	
		S	Intelligent event is triggered. Intelligent event is recording.
	С	Tamper alarm is detected.	

### 5.2.1 Camera List

The Camera list lists the 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 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.



**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.





Bitrate: Click and then select Main Stream or Sub Stream for this channel.

### **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	<b>Original Aspect Ratio</b>	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 <b>ESC</b> button on the keyboard.
7	Sub Stream	Click to switch all live streams to Sub Stream. If you want to set up some streams for Main and some for Sub streams, on the Camera List, you can click the <b>Stream</b> icon of the specific channels and then select Main Stream or Sub Stream.
8	Main Stream	Click to switch all live streams to Main Stream. If you want to set up some streams for Main and some for Sub streams, on the Camera List, you can click the <b>Stream</b> icon of the specific channels and then select Main Stream or Sub Stream.
9	Mobile Stream	Click to switch all live streams to Mobile Stream.



1

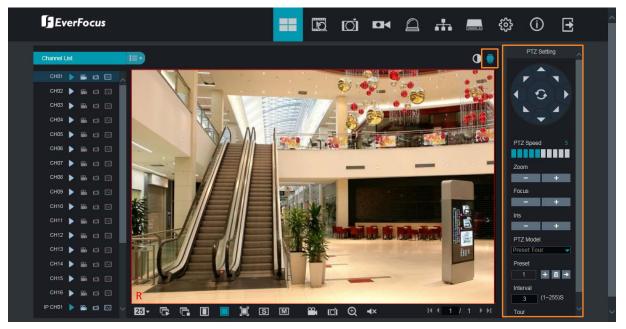
10	Video Clips	Click to start manual recording of all channels on the Live window. Click the button again to stop, a message window appears on the bottom-left corner of the screen. Click <b>Folder</b> to open the folder to find the recording files. <b>Record Storage Path</b> C:\Device\Record\Preview\192.168.33.3 2\20190312 Folder
11	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 <b>Folder</b> to open the folder to find the snapshot images. Screenshots storage path C:\Device\Snapshot\Preview\192.168.33. 32\20190312\ Folder
12	Digital Zoom	<ul> <li>Click to enable the Digital Zoom mode. To exit the Digital Zoom mode, click the button again. To perform the Digital Zoom function:</li> <li>a. On the Live View window, select a channel by clicking on the channel.</li> <li>b. Click the Digital Zoom button.</li> <li>c. Use your mouse to draw an area where you want to have a close-up view. The area will be zoom-in.</li> <li>d. Right-click to exit the Digital Zoom mode.</li> </ul>
13	Audio	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 <b>Audio</b> button to enable the audio function. You can adjust the bar to the left or right to adjust volume.
14	Intercom	Click to turn on or off the intercom function. This is a voice communication system. You can simply communicate with the client edge at EF CMS or EF VMS app. If you already connect to the HDMI cable, the sound will be sent directly, if you don't connect to the HDMI cable, you have to connect to the headphones or loudspeaker on NVR.
15	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 <b>Next Page</b> button will display the next 4-division layout with channel 5-8, channel 9-12, and so on. First Page Last Page Previous Page Next Page



### 5.2.3 PTZ Setting Panel

For PTZ cameras, you can use this panel to control the PTZ (analog and IP) camera; for motorized cameras, you can use this panel to adjust camera zoom or focus.

On the Live View window, click the **PTZ Setting** button to display the PTZ Setting Panel. Click the **PTZ Setting** button again can hide the PTZ Control Panel.

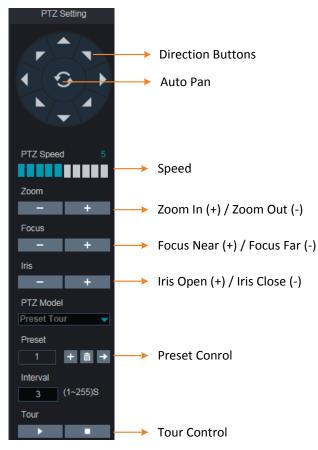


For motorized cameras, select a motorized camera by clicking on the live channel, the selected channel will be highlighted with a red frame. You can double-click on the channel to display the channel in full screen. Click the **PTZ Setting** button, the below PTZ Setting panel appears. You can adjust camera zoom or focus using this panel.





For PTZ cameras, 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. Click the **PTZ Setting** button, the below PTZ Setting panel appears. You can use this panel to control PTZ cameras.



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

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

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

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

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

Iris: Click + or – to adjust the Iris.

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

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

### To perform the Tour function:

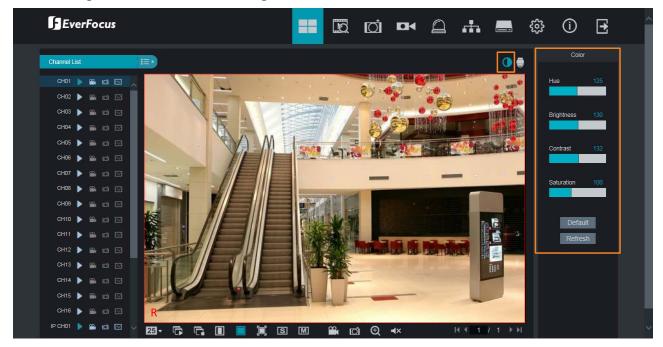
- 1. Set up the preset points in advance. Please refer to the steps of "To set up Preset Points" above.
- 2. Input an interval time in the **Interval** box.
- 3. Click the **Start Tour** button **I**, the PTZ camera will start cruising based on the preconfigured preset points with the dwell time.
- 4. To stop the Tour function, click the **Stop Tour** button

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### 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.

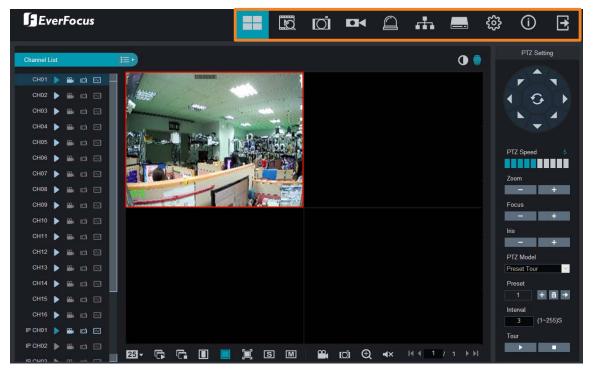
On the Live View window, select a camera by clicking the channel, the channel will be highlighted with a red frame. Click the **Color** button to display the Color Panel and then you can start adjust color settings. Click the **Color** button again can hide the Color Panel.





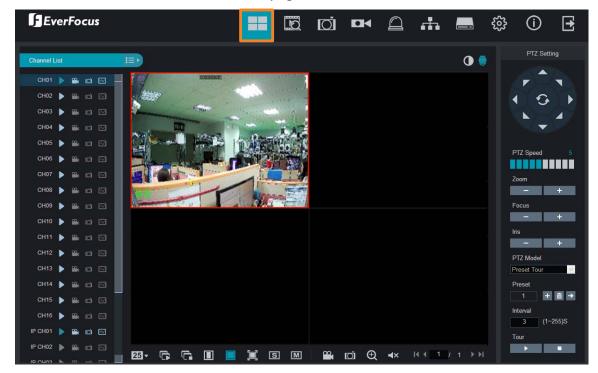
### 5.3 Menu Bar

Click any icon on the top navigation bar to enter each menu page.



### 5.3.1 Live

Click the Live icon to enter the Live View page. Please refer to 5.2 Remote Live View window.

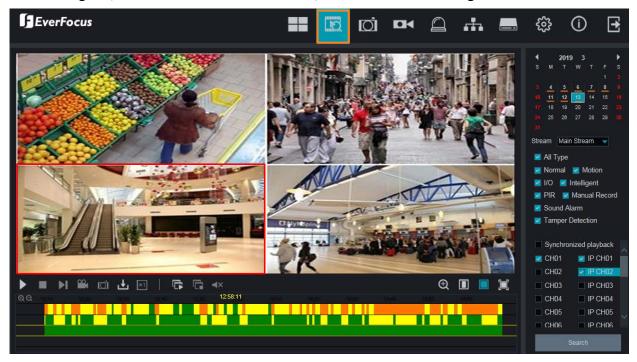




### 5.3.2 Playback

Click the **Playback** icon on the top navigation bar. The Playback window displays. Up to 16 multichannel 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 a date on the calendar (the date with an orange bar on the bottom indicates there are recordings on the date).
- 2. Select a stream type from the Stream drop-down list for playing back. Note that if you want to search for **Sub Stream** recordings, you have to select **Dual-Stream** mode in *5.3.4.2.1 Record*.
- 3. Select the desired recording type(s). The options include Normal, Motion, IO, Smart, PIR, Manual, Sound Alarm, Tamper Detection and All.
- 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.
- Click the Search button, the recordings will be displayed on the time bar of the Playback Panel in different colors. <u>Green:</u> Normal and Manual recordings; <u>Yellow</u>: Motion recordings; <u>Red</u>: I/O recordings; <u>Purple:</u> PIR recordings; <u>Blue:</u> Intelligent, Sound, Tamper.
- 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 of a channel (.avi). Click the button again to stop. On the playback window, click on a channel and then click the <b>Record</b> button, a message window appears on the bottom-left corner of the screen. Click <b>Folder</b> to open the folder to find the recording file. <b>Record Storage Path</b> C:Device\Record\Record\192.168.33.32 L20190313 Folder		
5	Snapshot	Click to start manual snapshot (.jpg) of a channel. Click the button again to stop. On the playback window, click on a channel and then click the <b>Snapshot</b> button, a message window appears on the bottom-left corner of the screen. Click <b>Folder</b> to open the folder to find the snapshot image. Or click <b>Preview</b> to preview the snapshot image. Screenshots storage path C:\Device\Snapshot\Record\192.168.33. 32\20190313\CH01152240.jpg Folder Preview		
6	Download	Click to download recordings for a single channel. To perform the Download function, please refer to <i>5.3.2.1 Download</i> .		
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 All	Click to stop playing back all the windows. This function is useful under the Multi-Channel Playback Separately mode (disable <b>Synchronized playback</b> ).		
10	Audio	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. <u>Green:</u> Normal and Manual recordings; <u>Yellow</u> : Motion recordings; <u>Red</u> : I/O recordings; <u>Purple:</u> PIR recordings; <u>Blue:</u> Intelligent, Sound, Tamper.		
12	Digital Zoom	<ul> <li>Click to enable the Digital Zoom mode. To exit the Digital Zoom mode, click the button again. To perform the Digital Zoom function:</li> <li>a. Select a window you want to perform the digital zoom by clicking on the window.</li> <li>b. Click the Digital Zoom button to enable the function.</li> <li>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.</li> <li>d. Right-click to exit the Digital Zoom mode.</li> </ul>		
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 <b>ESC</b> 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.		





### 5.3.2.1 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.

	_		.html?version=2.0.0.109 - 1	Internet Explorer	<u> </u>		
🨂 ht	ttp:// <b>1</b>	72.16.0.16/html/download	l.html?version=2.0.0.109		_		
		Start Time	End Time	Status	File Size		
1		2018-09-04 00:00:00	2018-09-04 00:00:51	Not Downloaded	38.41M		
2		2018-09-04 00:00:51	2018-09-04 00:03:30	Not Downloaded	120.07M		
		2018-09-04 00:03:30	2018-09-04 00:03:54	Not Downloaded	18.12M		
4		2018-09-04 00:04:26	2018-09-04 00:04:56	Not Downloaded	23.07M		
		2018-09-04 00:05:53	2018-09-04 00:08:25	Not Downloaded	114.70M		
		2018-09-04 00:08:25	2018-09-04 00:09:03	Not Downloaded	29.49M		
		2018-09-04 00:09:03	2018-09-04 00:09:33	Not Downloaded	23.25M		
		2018-09-04 00:09:33	2018-09-04 00:11:12	Not Downloaded	74.47M		
		2018-09-04 00:11:12	2018-09-04 00:12:17	Not Downloaded	49.25M		
10		2018-09-04 00:12:17	2018-09-04 00:13:48	Not Downloaded	68.32M		
10 V   1 / 47   1 / 47   3 Show from 1 to 10, total 461. Per page :							
Start Download			Download	Stop Download			

3. Select the desired recordings you want to download, and then click **Start Download**. To change the storage path or the file format, please refer to *5.3.8.5 Local Setting*.



# Chapter



# 6. Specification

Model Name	IRONGUARD 16 PoE				
Video					
Compression Format	H.265 / H.264				
Video Format	NTSC / PAL				
Video Inputs	16				
Live Resolution	1024x768, 1280x720, 1280x1024, 1440x900, 1920x1080, 2560x1440, 3840x2160				
Live Performance	4K: 4ch realtime / 4MP:8ch realtime / 3MP: 10ch realtime / 2MP: 16ch realtime				
Video Outputs	1 x HDMI (up to 4K) 1 x VGA				
Display Division	1/4/6/8/9/10/13/14/16/17/19/22/25/32/36				
Recording					
Recording Resolution	8MP (4K), 5MP, 3MP, 2MP (1080P), 1.3MP (960P),1MP (720P)				
Recording Bandwidth	Max 320Mbps				
Playback					
Synchronized Playback	16CH				
Playback Performance	4K: 4ch realtime / 4MP:8ch realtime / 3MP: 10ch realtime / 2MP: 16ch realtime				
Audio					
Audio Input	1 x Line-In				
Audio Output	1 x Audio-Out				
Alarm					
Alarm Input	16				
Alarm Output	1				
Storage Device					
Internal 3.5" HDD	2 x SATA HDD				
External HDD	1 x e-SATA				
Storage Capacity	8TB/disk				
DVD Burner	Not supported				
Network					
Ethernet	10/100/1000 Ethernet				
Protocol	-				
Interface					
USB	2 x USB2.0 (for mouse) 1 x USB3.0 (for backup/upgrade)				
RS-485	1 x RS-485				
Ethernet	1 x RJ-45				
РоЕ	16 x PoE port; single port up to 802.3at (30w) * Every 16 PoE ports shares 200W of power budget				



Functions					
User Interface	GUI (Graphical User Interface)				
User Access 2 Levels of User Access Defined					
Control PTZ via OSD	Supported (via both local and remote interfaces)				
AI Function	Face Recognition (only work with supported IP cameras)				
Video Analytics	Perimeter Intrusion Detection, Line Crossing Detection, Foreign/Missing Object Detection, Pedestrian				
	Detection, Cross-Counting Detection, Sound Detection, Tamper Detection				
Other Functions	Video Loss Detection, Motion Detection, Event Log, Schedule Setting				
General					
Power Input	110~240VAC ,PoE Switch: 48V				
Power Consumption	12W max. (excluding HDD)				
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F (20 ~ 80% humidity)				
Dimensions (W x D x H)	380 x 340 x 50mm / 14.96" x 13.39" x 1.97"				
Weight (without HDDs) 2.3kg / 5.07lb					
Language English, Japanese, Traditional Chinese, German, Russian, Dutch, Italian					
Regulatory	CE, FCC, BSMI( by Project), UI ( by Project)				
Remote Client System Minim	um 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 CMS 2. EverFocus eFVMS (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 have configured the email settings, you can click "Forget Password" on the login window and the system will send the password or a super password to the setup email address. If you have never configured the email settings, please mail the MAC Address, Serial Number and the Model Name to <u>ts@everfocus.com.tw</u> to get a temporary password.

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

4. Q: How to prevent NVR from being influenced by heat?

A: The NVR needs to dissipate heat while it is running. Please place the NVR in a place with good air circulation and away from heat sources to ensure stability and life of the NVR.

5. Q: The remote control doesn't work while the monitor screen is OK and panel keys are functional. Why?

A: Operate again by aiming the remote control at the IR receiver on front panel. If it still doesn't work, please check if the batteries in the remote control are running out of power. If not, check if the remote control is broken.

6. Q: I want to take out HDD from my PC and install it in NVR. Can it work?

A: All HDDs supported by the system can be used. But remember, once NVR runs, the data on your HDD will be formatted.

7. Q: Can I playback while recording?

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

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



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

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

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

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

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

11. Q: Why NVR cannot control PTZ?

A: Please check if:

- a) PTZ in the front side is malfunctioned.
- b) Setting, connection and installation of PTZ decoder are not correct.
- c) PTZ setting of NVR is not correct.
- d) Protocol of PTZ decoder does not match the NVR's.
- e) Address of PTZ decoder does not match the NVR's.
- f) If many decoders are connected, the farthest side of AB line of PTZ decoder should be added  $120\Omega$  resistance to realize reflection suppression and impedance matching. Otherwise, PTZ control will be unstable.
- 12. 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.

### 13. Q: Why doesn't alarm work?

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

14. 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.

15. 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

# **F**EverFocus

16. Q: How to add non-EF H.265 IP cameras to IRONGUARD NVRs through PoE ports?

A: IRONGUARD series NVRs supports auto connect and detect PoE IP cameras. The supported IP cameras include all EverFocus Value series H.265 IP cameras.

If you want to add EverFocus H.264 IP cameras or 3rd-party IP cameras through PoE ports, please follow the steps below:

- (1.) Configure a static IP address for your IP cameras. You can either use the EverFocus IP Utility or the Web interface of the IP camera to configure the IP address.
   Due to the default local area network (through PoE) of the NVR is set to 10.10.25.100, please configure the static IP address of your IP cameras between 10.10.25.151 and 10.10.25.166.
- (2.) Connect the IP cameras to the PoE ports of the NVR.
- (3.) To configure the PoE settings, 1) enter the IP Channels page (OSD > Channel >IP Channel), 2) click the Auto Mode button 3) click the Edit button to edit the IP camera information (refer to Step 4).





(4.) To edit IP camera information, input the IP address, Subnet Mask, Port number (default: 80), Protocol (select ONVIF), User Name and Password. Click OK.

	Edit IP Car	nera Profile	×
Channel	СН4		
Chainer	CH4		
Switch Mode	Auto Mode	~	
POE Mode	Auto	~	
Alias			
Position	Top Left	~	
IP Address/Domain	10.10.25.152		
Subnet Mask	255.255.0.0		
Port	80		
Protocol	ONVIF	~	
User Name	admin		
Password			Show Password
Camera Mode	Auto	~	
			OK Cancel
			Cancel

(5.) The IP camera streams will display on the channel.



# Chapter



# 8. Usage Maintenance

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

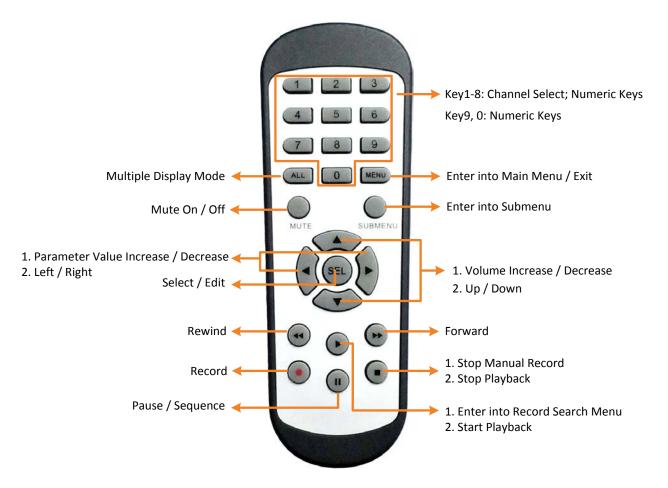


# Appendix



# **Appendix A: IR Remote Control**

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



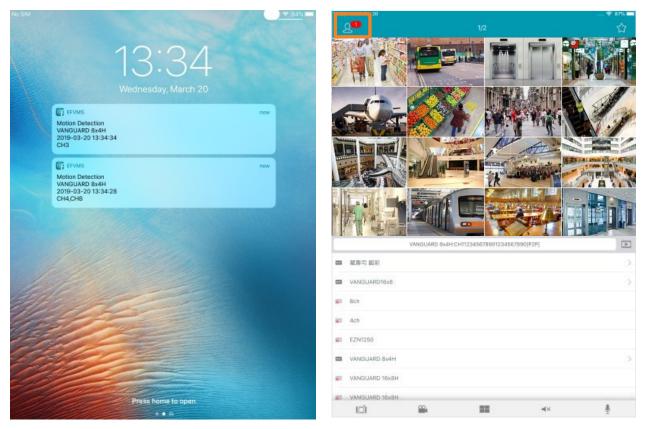


# Appendix



# **Appendix B: Push Notification**

You can enable the Push Notification function to send motion or I/O event alerts to your mobile devices (with eFVMS App installed).



To use the Push Notification function, you have to set up the motion detection settings or I/O alarm settings and enable the Push Notification function on the EverFocus **eFVMS App**. Please refer to the below instructions.



To enable the Push Notification function:

- 1. On the NVR end, configure the motion alarm settings (refer to 4.3.1 Motion) or I/O alarm settings (refer to 4.3.3 I/O).
- 2. On your mobile device, install **eFVMS App**. For Android users, go to Google Play Store. For iOS users, go to Apple Store. After the installation process is complete, start the eFVMS App.



a. Go to **Menu** > **Notifications**, and then switch the button to the right to enable the Push Notification function.

		🛜 🗘 99% 🔜 16:56	13-32 Wed Mar 20		🕈 88% 🛄 .
-	1/2		<	Push Setting	
<b>EverFocus</b>					
			IRONGUARD 16 POE		
			IRONGUARD 16 POE		$\bigcirc$
Remote Setting					
Cocal Config					
File List					
E Device List					
Notifications					
💡 Help					
(i) About					
	/ANGUARD16x8 - Channel01[P2P]				

b. The Push Notification setting is complete. You can start receiving motion or I/O alarms from the NVR.

8	D				17	13:33 Wed Mar 20	Push Notifications	🕈 🕇 85% 🗖
						Motion Detection VANGUARD 8x4H - CH112345 2019-03-20 13:33:22	678901234567890,CH2,CH6	
	A					Motion Detection VANGUARD 8x4H - CH8 2019-03-20 13:32:59		
				THE REAL		Motion Detection VANGUARD 16x8H - CH1 2019-03-14 14:32:28		
						Video Loss Alarm VANGUARD 16x8H - IP Chann 2019-03-14 14:31:40	el05	
						Motion Detection VANGUARD 16x8H - CH1 2019-03-14 14:31:17		
		VANGUARD BX4H:CH	1123456789012345678	SEO[P2P]		Motion Detection VANGUARD 16x8H - CH1 2019-03-14 14:30:13		
	語句 観前 WOLIARD16x8				>	Motion Detection VANGUARD 16x8H - CH1,Char 2019-03-13 11:12:39	nnel02,Channel03,Channel04,Channel09,	Channel11
R Bc	zh					Motion Detection VANGUARD 16x8H - Channel1 2019-03-13 11:09:54	3,Channel14,Channel15	
📰 4c						Motion Detection VANGUARD 16x8H - Channel1 2019-03-13 11:09:21	3,Channel14,Channel15	
VANGUARD 844H >					>	Motion Detection VANGUARD 16x8H - CH1Channel02,Channel03,Channel04,Channel05,Channel06,Channel08,Channel10,Channel11		
vi vi	VNGUARD 18k8H					2019-03-13 10:55:15	annero4,channero5,channero6,channero8	s,onannen o,onannei T
	(C)			- MX	8	<i>=</i> <sub>x</sub>		1



c. You can tap on the alarms on the Alarm List to enter the Live page or Playback page.

:33 Wed Mar 20	Push Notifications	🗢 🕇 85% 💻 ©			
Motion Detection VANGUARD 8x4H - CH11234 2019-03-20 13:33:22	15678901234567890,CH2,CH6		► For alarms occur within one minute from		
Motion Detection VANGUARD 8x4H - CH8 2019-03-20 13:32:59			the current time, tap to enter the Live page		
Motion Detection VANGUARD 16x8H - CH1 2019-03-14 14:32:28					
Video Loss Alarm VANGUARD 16x8H - IP Char 2019-03-14 14:31:40	inel05		For alarms occur more than one minute from the current time, tap to enter the Playback page		
Motion Detection VANGUARD 16x8H - CH1 2019-03-14 14:31:17					
Motion Detection VANGUARD 16x8H - CH1 2019-03-14 14:30:13					
Motion Detection VANGUARD 16x8H - CH1,Ch 2019-03-13 11:12:39	annel02,Channel03,Channel04,Channe	el09,Channel11			
Motion Detection VANGUARD 16x8H - Channe 2019-03-13 11:09:54	i13,Channel14,Channel15				
Motion Detection VANGUARD 16x8H - Channe 2019-03-13 11:09:21	l13,Channel14,Channel15				
Motion Detection VANGUARD 16x8H - CH1,Channel02,Channel03,C 2019-03-13 10:55:15	hannel04,Channel05,Channel06,Chann	nel08,Channel10,Channel11			
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