

USER MANUAL

Wireless Camera

RS-CH222H1XD-TL-28W

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Chapter 1 Safety Instruction

Please carefully read the following safety instruction so as to avoid personal injuries and prevent the equipment and other connection devices from being damaged.

1. Power sources (note: please use the power supply attached or specified by the manufacturer)

Never operate the equipment by using unspecified power supply.

2. Never push objects of any kind through openings of WIRELESS NVR

Never push objects of any kind through openings of WIRELESS NVR so as to avoid electric shock or other accidents.

3. Do not put the equipment in the dusty field

Do not put the equipment in the dusty field.

4. Do not place the equipment under rain or humid environment

Do not place the equipment under humid environment like basement. If the equipment is accidentally in contact with water, please unplug the power cable and immediately contact your local dealer.

5. Keep the surface of the equipment clean and dry

Use soft damp cloth to clean the outer case of WIRELESS NVR (do not use liquid aerosol cleaners)

6. Do not operate if any problems are found

If there are any strange smell or sound from WIRELESS NVR, unplug the power cable and contact the authorized dealer or service center.

7. Do not try to remove the upper cover

Warning: Do not remove the cap of WIRELESS NVR so as to avoid electric shock.

8. Handle with care

If WIRELESS NVR does not work normally because of hitting on the hard object, please contact the authorized dealer for repair or replacement.

9. Use standard lithium battery (Note: Use the batteries attached or specified by the manufacturer)

After cutting off the power supply, if the system clock cannot continue to work, please replace the standard 3V lithium battery on the main board.

Warning: Turn off WIRELESS NVR before replacing the batteries, or you may be suffered from serious electric shock. Please properly dispose of the used batteries.

10. Put the equipment in a place with good ventilation

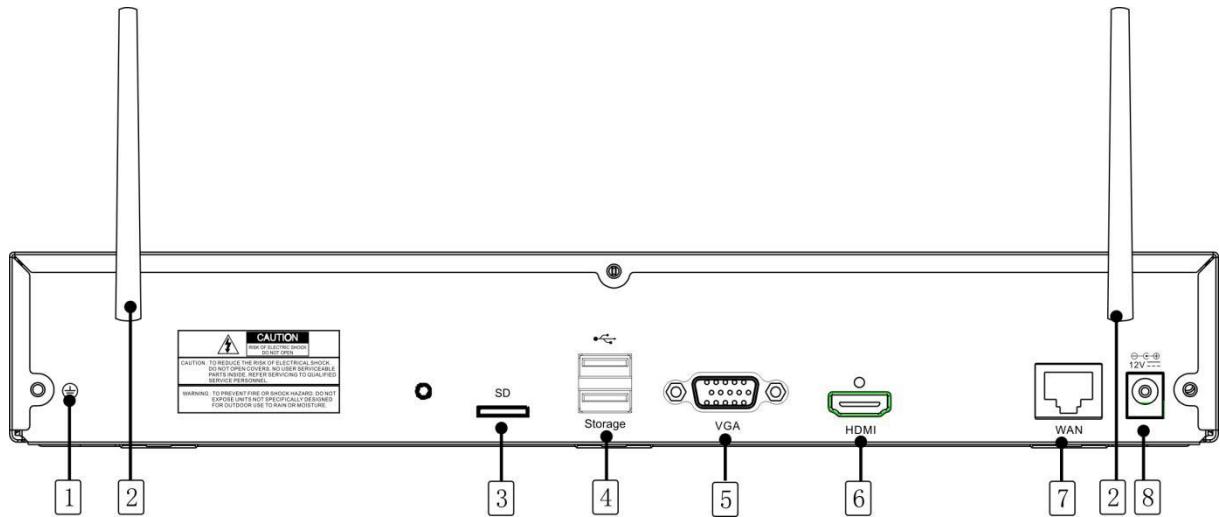
The WIRELESS NVR system includes HDD, which produces large amount of heat during operation. As a result, do not block the ventilation openings (on the top, bottom, both sides and the reverse side) for cooling the system during operation. Install or put the equipment in the place with good ventilation.

11. The attached power adapter can only be used for 1 set of WIRELESS NVR. Do not connect more equipment, or WIRELESS NVR may be restarted repeatedly because of insufficient power.

12. Prevent the equipment from water dropping or splashing. Do not place objects containing water, such as flower vase, on the equipment.

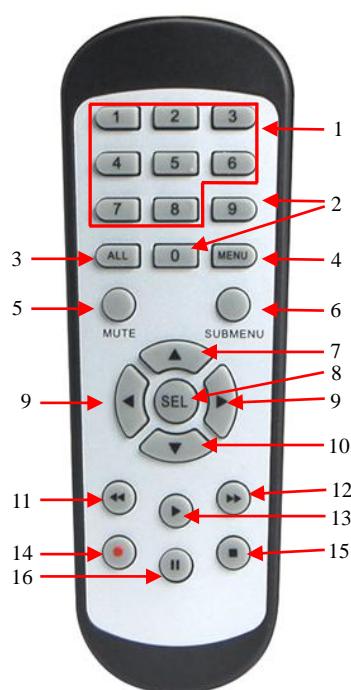
Chapter 2 Product Overview

1.1 Rear Panel



NO	Physical interface	Connection
1	Ground connection	A terminal to connect a separate ground cable. * Make sure to add a ground cable in order to use the equipment safely.
2	Antenna	Receive signal from wireless camera.
3	SD	SD Port
4	USB port	Connect with USB.
5	VGA port	Connect with VGA display devices, such as PC monitor.
6	HDMI	Connect with HDMI display devices, such as PC monitor.
7	WAN:(RJ45) Network port	Connect with WAN, Ethernet cable.
8	Power port	Connect with the power supply DC12V 2A, included with the device.

1.2 Remote Controller (For Reference Only)



No.	Icon	Description
1	1-8	Numeric keys Press to display channel 1~8
2	9、0	Numeric keys
3	ALL	Press to display all channels Multiple display mode
4	Menu	Press to enter or exit the Main Menu
5	Mute	Mute On/off (not support this function)
6	Submenu	Go to submenu
7	▲	Up arrow key; Volume increase
8	SEL	Press to enter the selected menu item and edit the setting
9	◀▶	Left/Right key; Decrease/increase parameter value of control bar.
10	▼	Down arrow key; Volume decrease
11	◀◀	Press to rewind during video playback
12	▶▶	Press to fast forward during video playback
13	▶	Press to play recorded video or enter the recording search menu
14	●	Press to start manual recording
15	■	Press to stop manual recording or stop the video playback
16	⏸	Press to pause the video playback or enter frame-playback mode

Chapter 3 WIRELESS NVR Common Operations

3.1 Using the Supplied Mouse

Left Button of Mouse	Right Button of Mouse
Click once to choose an item in the menus and confirm your selection.	
Click once upon a channel on Live Viewing screen to open Camera Quick Toolbar	
Double-click on the channel on the exit from the menus. Live Viewing screen to view the channel in full screen mode. Double-click again to exit the full screen mode.	
Click and hold to drag an area on motion mode or adjust the values of sliders and scales on menu mode.	Click once to open the pop-up menu on the Live Viewing screen and to exit from the menus.

3.2 Using the Virtual Keyboard

You will see the virtual keyboard automatically on the screen when you need to enter data

Click to toggle the keyboard to
upper case and more punctuation



Move the cursor to left

3.3 Password

For the first time when you run the WIRELESS NVR, you must be required to set your own password immediately in order to protect your privacy. Please be sure to record your username and password and save them in a secure place.

Language	ENGLISH
Device ID	000000 (000000)
New Admin Name	admin
New Admin Password	<input type="password"/>
Confirm Password	<input type="password"/> Show Password
Unlock Pattern Enable	Disable
Apply	

Language: Choose an OSD language

Device ID: Input the device ID in the parentheses. Default ID is 000000. View more about Device ID on [5.6.1 General](#).

New Admin name: To set your own administrator name.

New Admin Password: To set your own password. The password must be a combination of 8 characters.

Confirm Password: Enter your own password again.

Unlock Pattern Enable: Enable or disable unlock pattern. Set the pattern to unlock the alternate password to quickly log in to the WIRELESS NVR.

Click **Apply** to confirm your settings and goes to the login interface. Draw an unlock pattern or Enter your user name & password to **Login** the WIRELESS NVR system.

Language	ENGLISH	
Device ID	000000 (000000)	
User	admin	
Password		
Draw the unlock pattern first.		
○ ○ ○	○ ○ ○	○ ○ ○

NOTE: If you forget your password, you will be unable to login the system, please contact your reseller to reset the password.

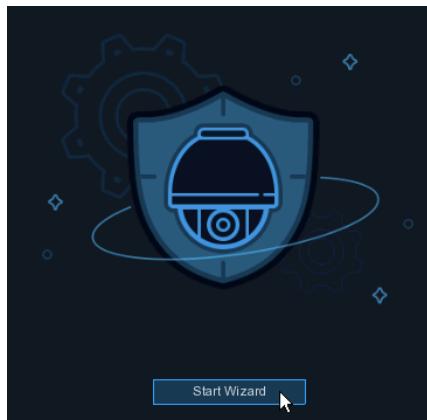
Chapter 4 WIRELESS NVR Starting up

4.1 Startup Wizard

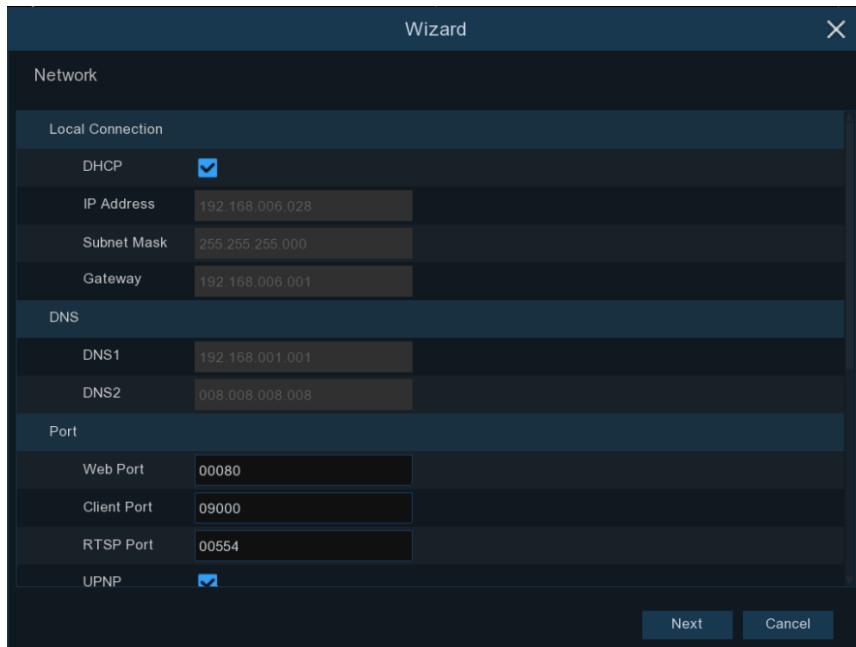
Startup Wizard will help to configure the system and get the WIRELESS NVR works quickly.

4.1.1 Start Wizard

Click the **Start Wizard** to proceed to the next step



4.1.2 Network Configuration



If you connect to a router allows to use DHCP, please check the **DHCP** box. The router will assign automatically all the network parameters for your WIRELESS NVR. Unless the network is manually addressed below parameters:

IP Address: The IP address identifies the WIRELESS NVR in the network. It consists of four groups of numbers between 0 to 255, 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 in a network. If IP address is like a street where you live then subnet mask is like a neighborhood. The subnet address also consists of four groups of numbers, separated by periods. For example, “255.255.000.000”.

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

DNS1/DNS2: DNS1 is the primary DNS server and DNS2 is a backup DNS server. Usually should be enough just to enter the DNS1 server address.

Port

Web Port: This is the port that you will use to log in remotely to the WIRELESS NVR (e.g. using the Web Client). If the default port 80 is already taken by other applications, please change it.

Client Port: This is the port that the WIRELESS NVR will use 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: This is the port that the WIRELESS NVR will be allowed to transmit real-time streaming to other device (e.g. using a streaming Media player.).

UPNP: If you want to log in remotely to the WIRELESS NVR using Web Client, you need to complete the port forwarding in your router. Enable this option if your router supports the UPnP. In this case, you do not need to configure manually port forwarding on your router. If your router does not support UPnP, make sure the port forwarding is completed manually in your router.

4.1.3 Date/Time

This menu allows you to configure the Date, Time, Date Format, Time Format, Time Zone, NTP and DST.

Date and Time

Click on the calendar icon to set the current system date.

	Date	Time	Date Format	Time Format	Time Zone
Date	10/25/2017	15:39:21	MM/DD/YY	24Hour	GMT+08:00

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

Time: Click to set the system time.

Date Format: Choose from the dropdown menu to set preferred date format.

Time Format: Choose time format between 24Hour and 12Hour.

Time Zone: Set the correct time zone.

NTP

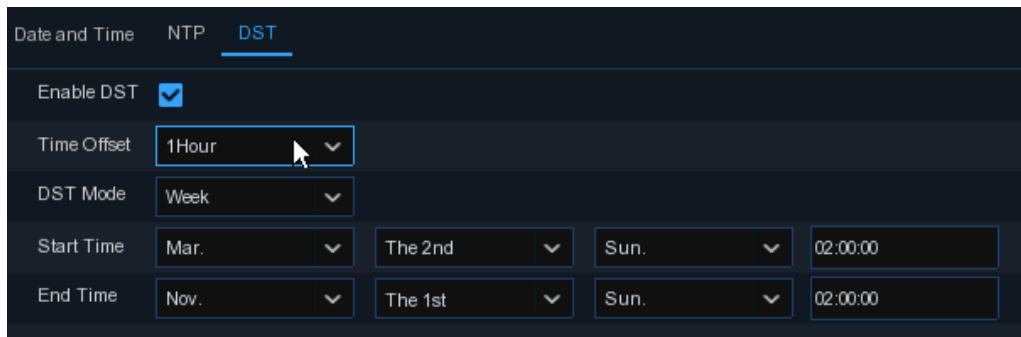
NTP stands for Network Time Protocol. This feature allows you to synchronize the date and time automatically on the WIRELESS NVR over Internet. Therefore, the WIRELESS NVR needs to be connected to the Internet.

Date/Time		
Date and Time	NTP	DST
Enable NTP	<input checked="" type="checkbox"/>	
Server Address	pool.ntp.org	<input type="button" value="Update Now"/>

Check the “**NTP**” box, and select the NTP server.

DST

DST stands for Daylight Savings Time.



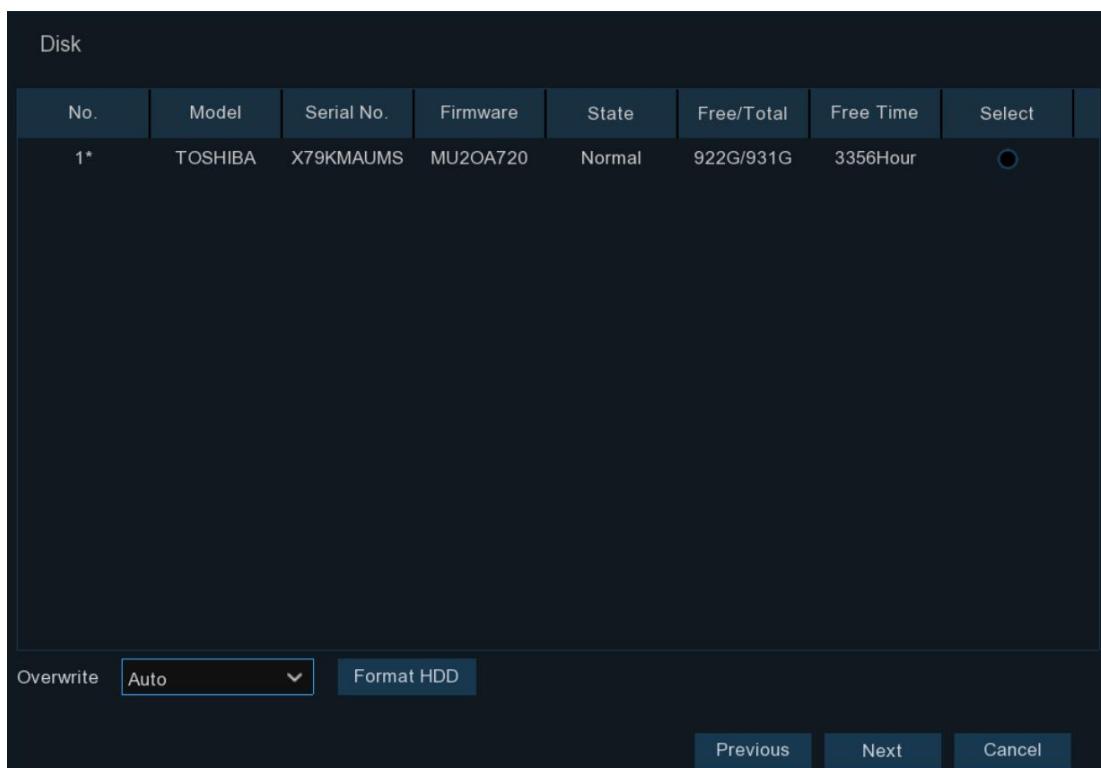
DST: Enable if Daylight Saving Time (DST) is observed in your region

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

Time Mode: Choose to set the daylight saving time in weeks or in days

Start Time/End Time: Set the start time and end time for daylight saving

4.1.4 Disk

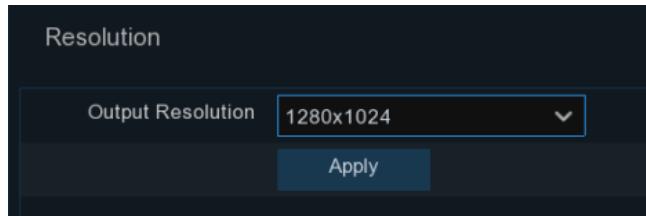


If the HDD is installed in the WIRELESS NVR for the first time, it must be formatted. Select the HDD and then click **Format HDD** button to format the HDD.

Overwrite: Use this option to overwrite the old recordings on the HDD when the HDD is full. For example, if you choose the option 7 days then only the last 7 days recordings are kept on the HDD. To prevent overwriting any old recordings, select Disable. If you have disabled this function, please check the HDD status regularly, to make sure the HDD is not full.

4.1.5 Resolution

Choose an output resolution matches to your monitor. The WIRELESS NVR supports to adjust the output resolution automatically to match the best resolution of your monitor when the system is starting up.



4.1.6 Mobile

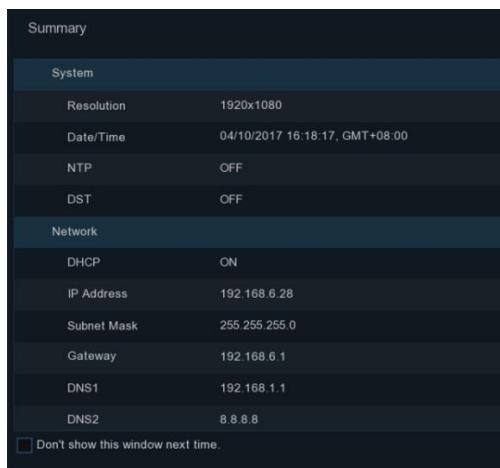
If your WIRELESS NVR come with a P2P ID, you can scan the QR code with your mobile app to view the WIRELESS NVR remotely.



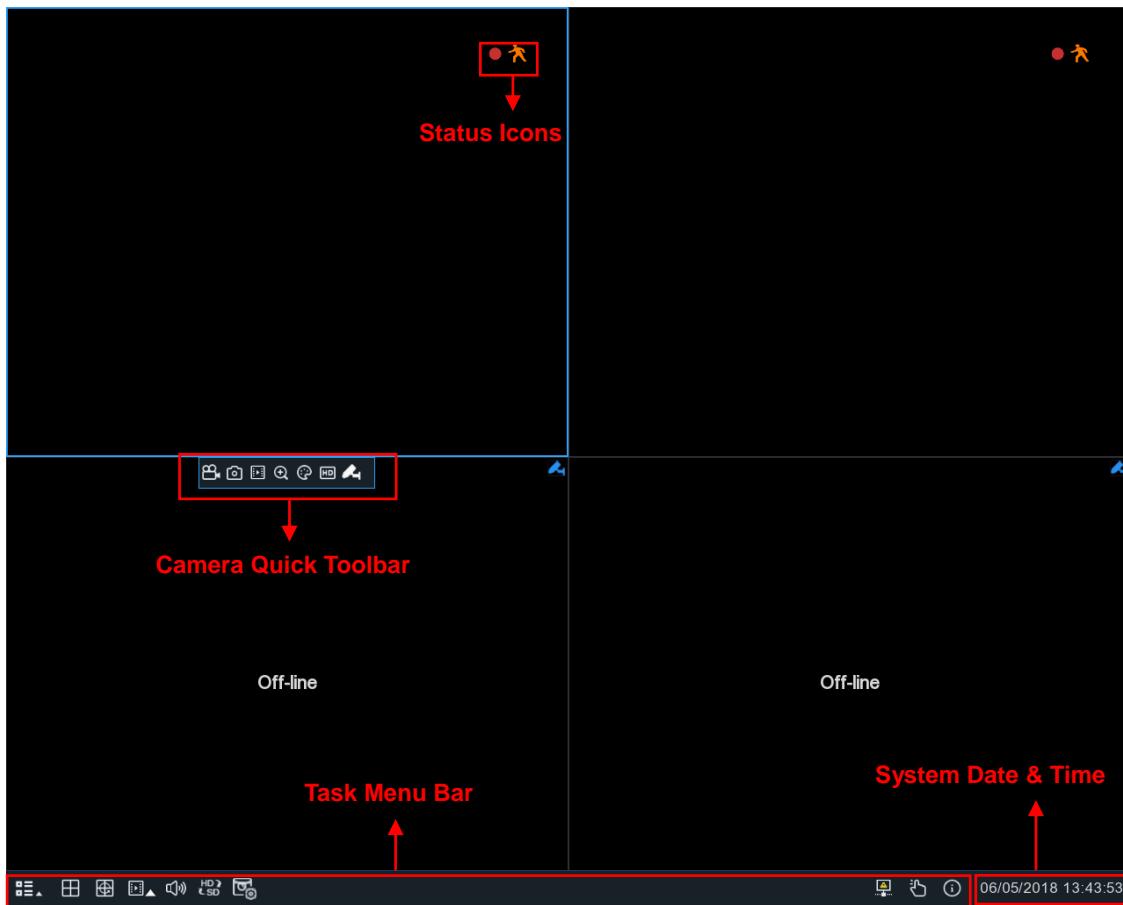
4.1.7 Summary

You can check the system summary information you had set in the start wizard and finish the wizard.

Tick “**Don't show this window next time**” if you don't want to display Start Wizard when system reboot next time. Click **Finish** button to save & exit.



4.2 Live Viewing Screen



Status Icons

 This indicates that the WIRELESS NVR is currently recording.

 This icon appears when the camera has detected motion.

 This icon indicates that the HDD is in error to work

 This icon indicates the HDD is unformatted

 This icon indicates the HDD is full.

 Hard disk not found.

 Click to enter pairing.

4.2.1 Camera Quick Toolbar

In live viewing, click the left button of your mouse on a connected camera to display the Camera Quick Toolbar.



 Click to manually record the channel immediately. If the manually recording is in process, the icon will be in red color. Click one more time to stop manual record.

 Click to save a snapshot of the current camera image. Manual Capture must be enabled to use this feature. For details on enabling Manual Capture, see [5.2.3.1 Capture](#).

 Click to play the latest 5 minutes recording of this channel

 Click to zoom-in the channel. When the  icon appears, press and hold the left button of your mouse to drag the area you want to zoom in.

 Click to adjust the image color of the channel. You can adjust the HUE, BRIGHT, CONTRAST & SATURATION of the image.

 To switch the live view video stream between HD & SD. HD is mainstream live view, SD is substream live view.

 Click to enter pairing

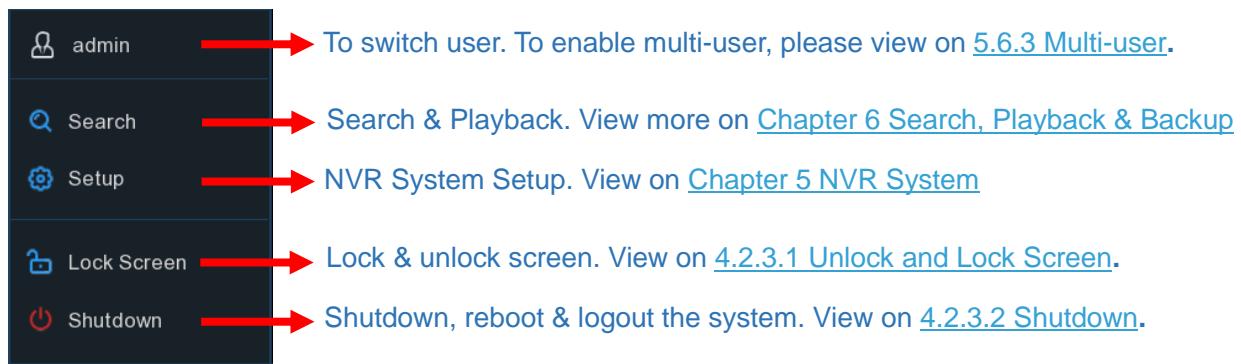
4.2.2 Taskbar



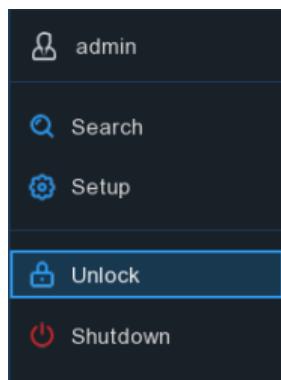
- Click to open the Start Menu
- Click to choose different layout for live view
- Click to start viewing channels in a sequence
- Quick playback. You can choose to play the latest recording for all channels from the beginning of the day, or you can choose the playback from the latest 5s, 10s, 30s, 1Min, 5Min.
- Click to switch all Wireless channels between mainstream and substream (for live view resolution)
- Click to switch among real-time, balanced, or smooth view. The view effect modes affect only the live view video quality by bitrate and frame rate but do not affect the recording quality.
- This icon will appear if the network is disconnected.
- To start or stop Manual Record .
- To view system information, and network state.

4.2.3 Start Menu

With the start menu, you can switch user, search & playback, enter system setup menu, lock & unlock the screen, shut down, reboot & logout the system.



4.2.3.1 Unlock and Lock Screen

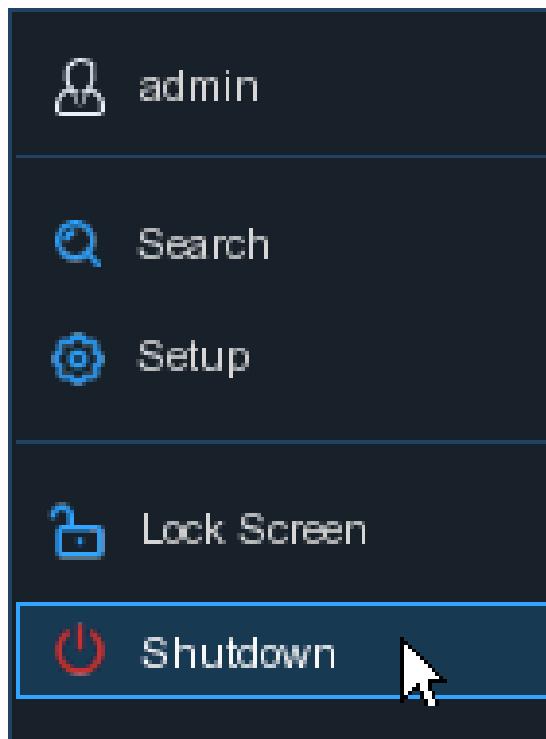


The screen will be locked to protect unauthorized OSD operation while the NVR is not in menu operation 1 minute.

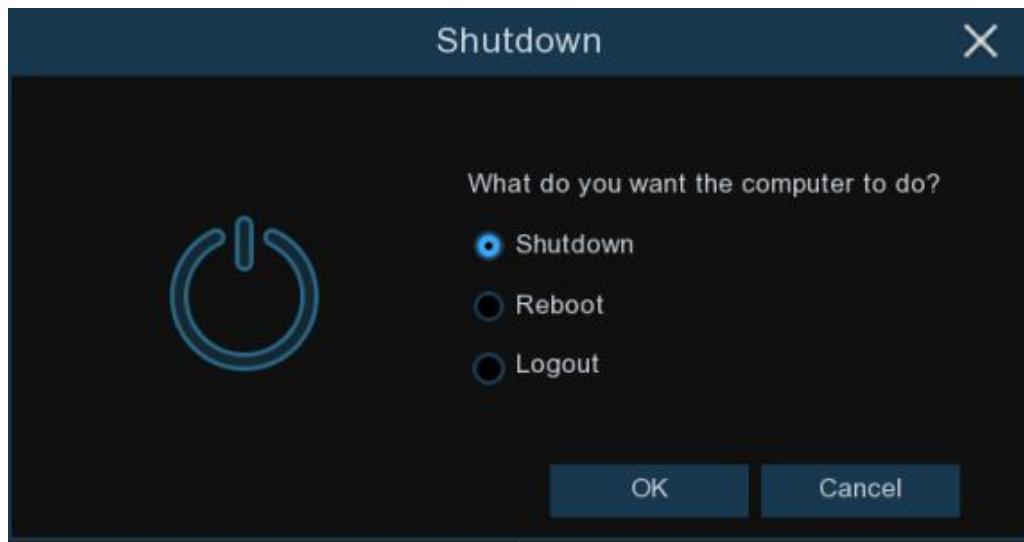
If necessary, you can also lock the screen operation manually. To do so, go to Star Menu, and then click the Lock Screen icon to lock the system immediately.

If the system is locked, you can click the Unlock icon to unlock the system for further operation.

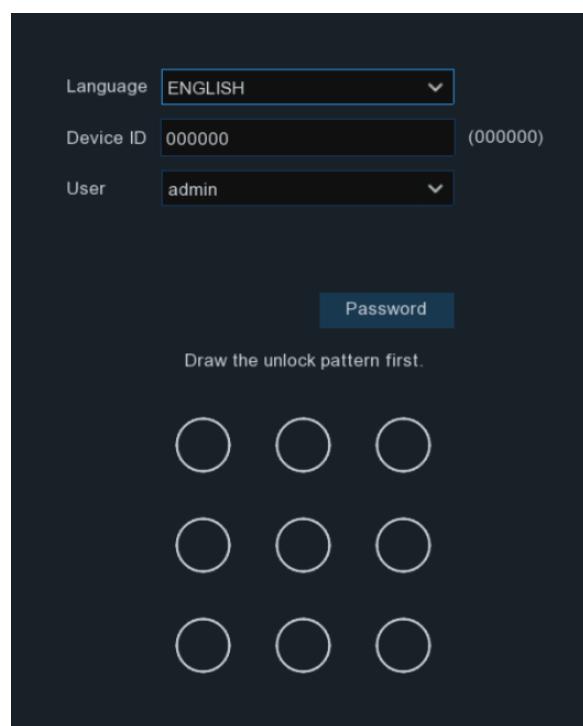
4.2.3.2 Shutdown



Click the **Shutdown** button from Star Menu, and the check the further action you want to move.
Click **OK** button, system will require to input the Admin password to authenticate.

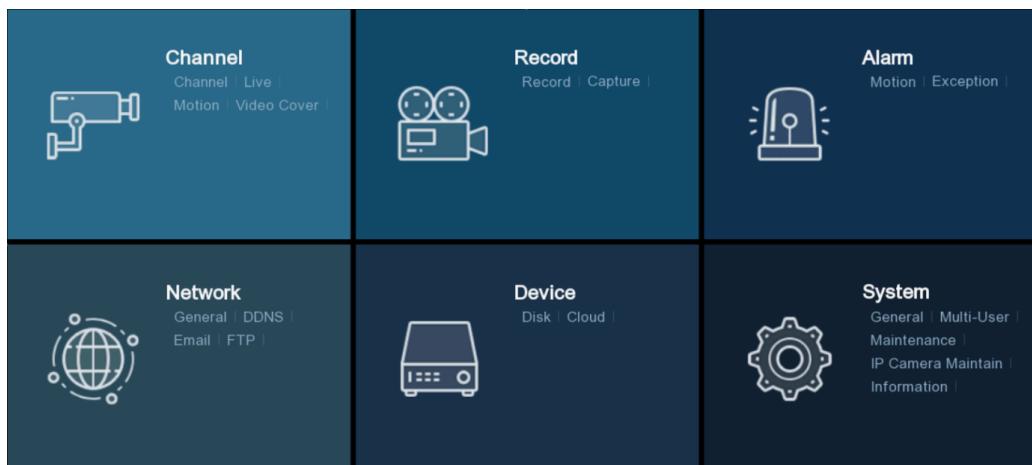


If you choose **Logout** the system, the live viewing screen will be disappeared. You will need to login the system for further operations.



Chapter 5 WIRELESS System Setup

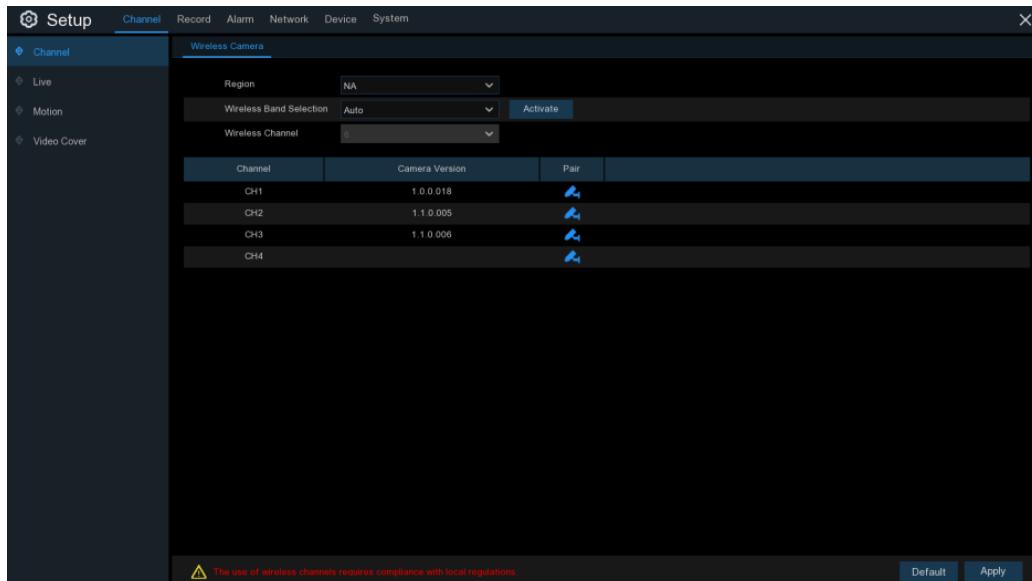
You are able to configure the WIRELESS NVR for Channel, Record, Alarm, Network, Device & System from **Start Menu → Setup**.



5.1 Channel

In this section, you are allowed to configure the Wireless camera, live view display, manage Wireless cameras,motion setup, Video Cover.

5.1.1 Channel



Region: NA/UK/MKK depending on the region.

Wireless Band selection: Auto or Manual optional. Auto is recommended.

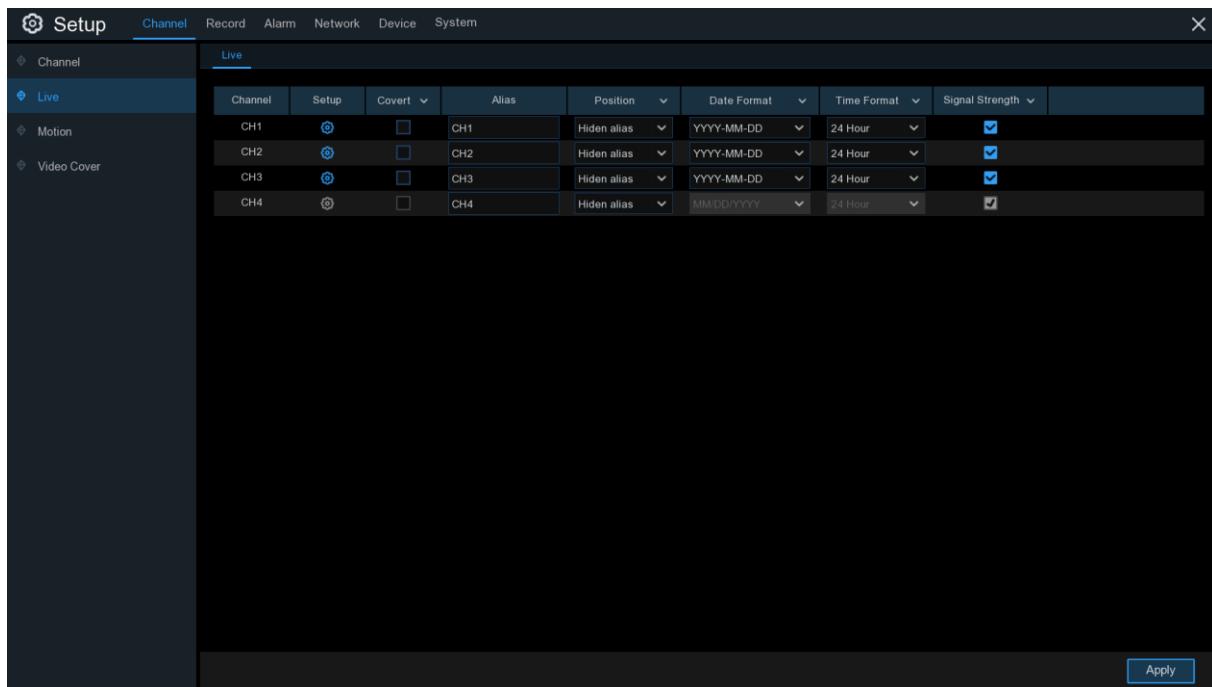
Wireless Channel: Wireless Channel.

Camera version: Camera firmware Version .

Pair: Click the channel button to do pairing.

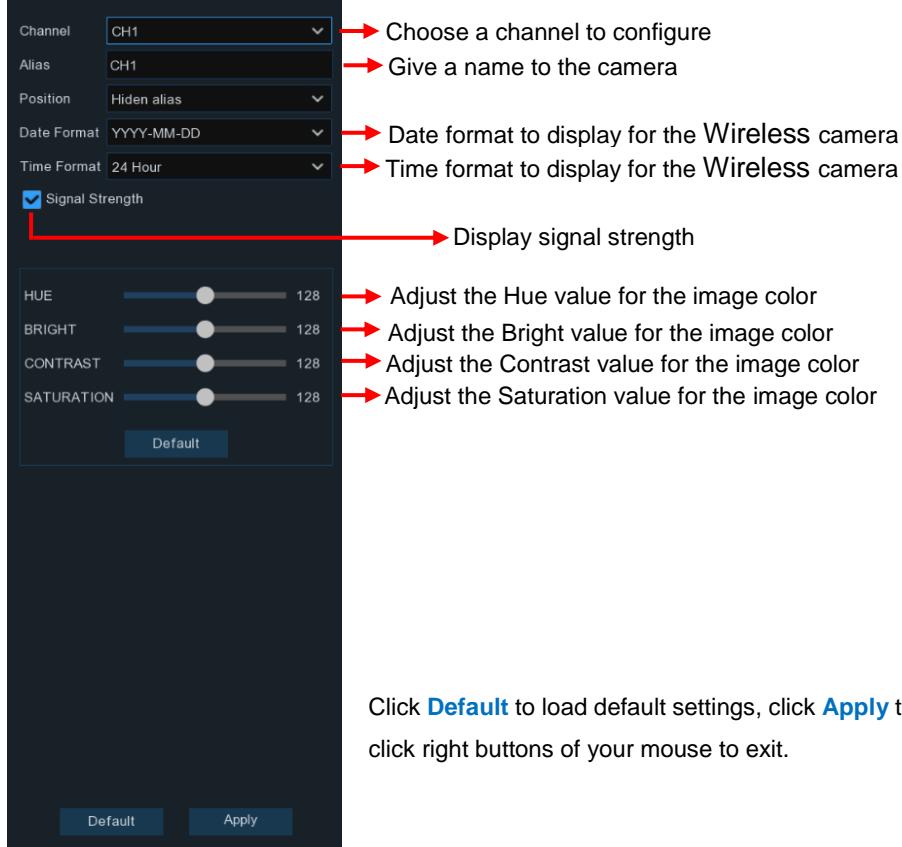
5.1.2. Live

To configure camera parameters.



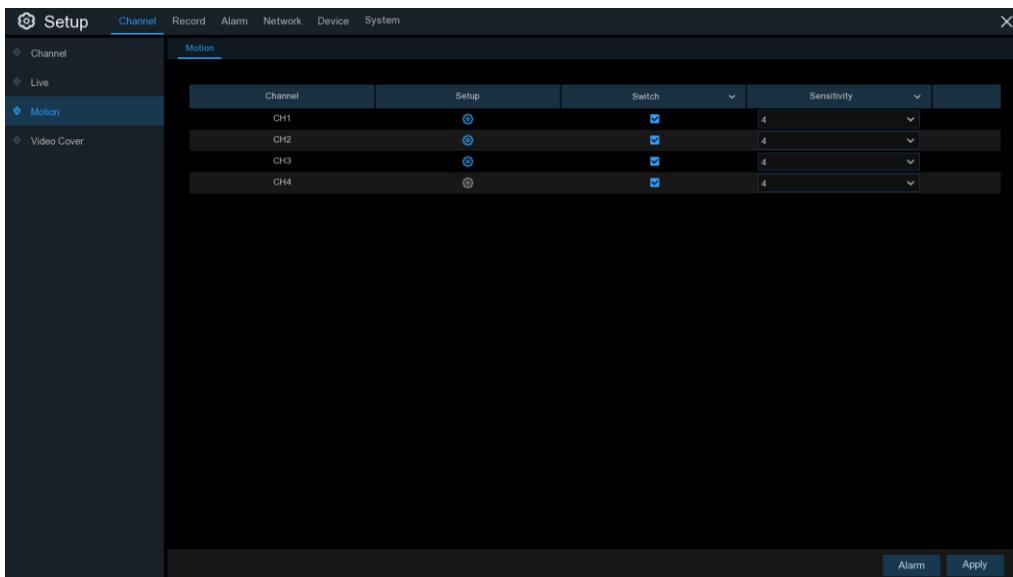
Channel: Display channel number.

Setup: Click icon into the setup page.



5.1.3 Motion

This menu allows you to configure motion parameters. When motion has been detected by one or more cameras, your WIRELESS NVR will alert you to a potential threat at your home. It does this by sending you an email alert with an attached image from the camera to use as a reference (if this option is enabled) and/or sending push notifications via the mobile app.



Setup: Click icon into the setup page.



Motion Detection Area:

The whole screen is marked for motion detection (red blocks) as default. If you want to disable the motion detection on a certain area, click the grid cursor and then drag the mouse to highlight the scope to unmark the area into transparent blocks. After setting is completed, click the right button of your mouse to return and click **Save** to make the area setup effective.

Switch: Enable or disable motion detection.

Sensitivity: Set the sensitivity level. Level 1 the lowest sensitivity level while level 8 is the highest sensitivity level.

5.1.4 Alarm

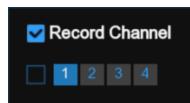
Click **Alarm** button to configure the motion detection alarm function:

Channel	Buzzer	Record	Post Recording	Show Message	Send Email	Full Screen	FTP Upload
CH1	Disable	<input checked="" type="radio"/> ON	30 s	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CH2	Disable	<input checked="" type="radio"/> ON	30 s	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CH3	Disable	<input checked="" type="radio"/> ON	30 s	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CH4	Disable	<input checked="" type="radio"/> ON	30 s	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Channel: Display channel number.

Buzzer: The WIRELESS NVR can use its internal buzzer to emit an alarm tone. You can set the buzzer duration in seconds when the motion is detected.

Record: Click  icon and choose which channel(s) you want to record when the motion detection is triggered.



Post Recording: You can set how long after an event occurs that the WIRELESS NVR will continue to record. The recommended recording length is 30 seconds but it can be set higher up to 5 minutes.

Show Message: Check the box to display  icon on the live view screen when the motion is detected.

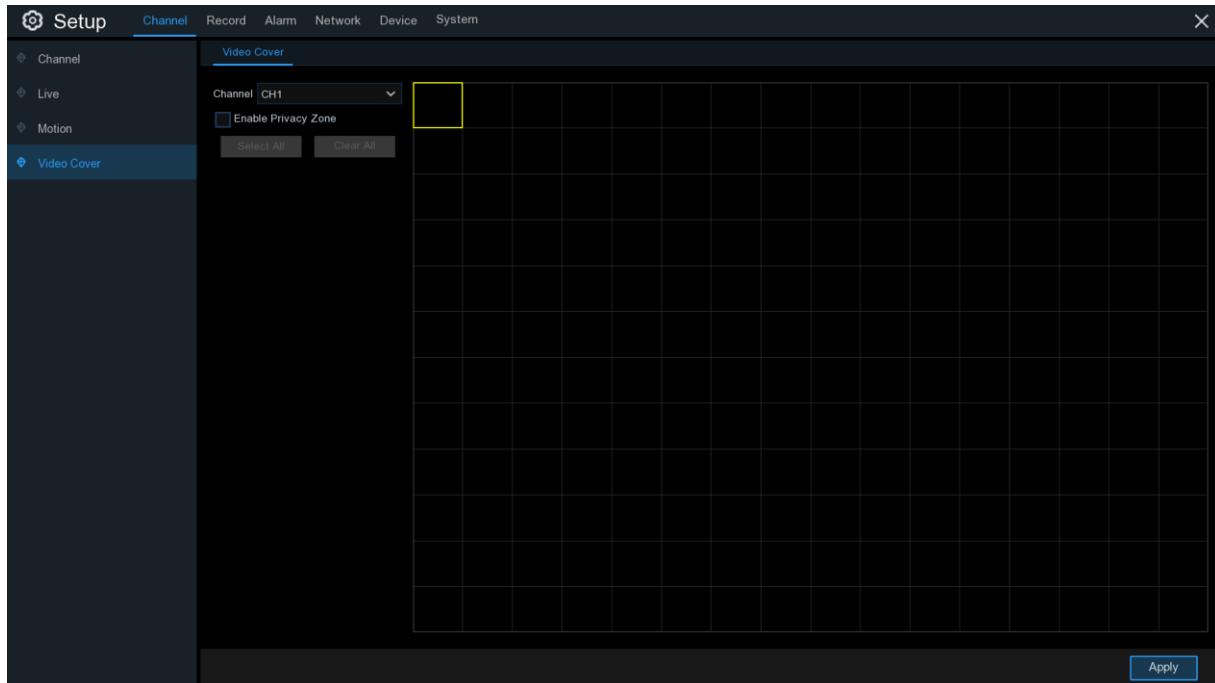
Send Email: You can let the WIRELESS NVR to send you an auto-email when the motion is detected.

Full Screen: If this function is enabled and a motion is detected in a channel, you will see that channel in full screen.

FTP Upload: To upload alarm images to FTP server when motion is detected. To enable FTP, please view [5.4.4 FTP](#).

5.1.5 Video Cover

This menu allows you to create privacy zone(s) if you want to partially cover some certain part of the image. Enable the Privacy Zone, You can create up to 10 privacy zones in any size and location on the camera image. The zone(s) appear as “red box” .

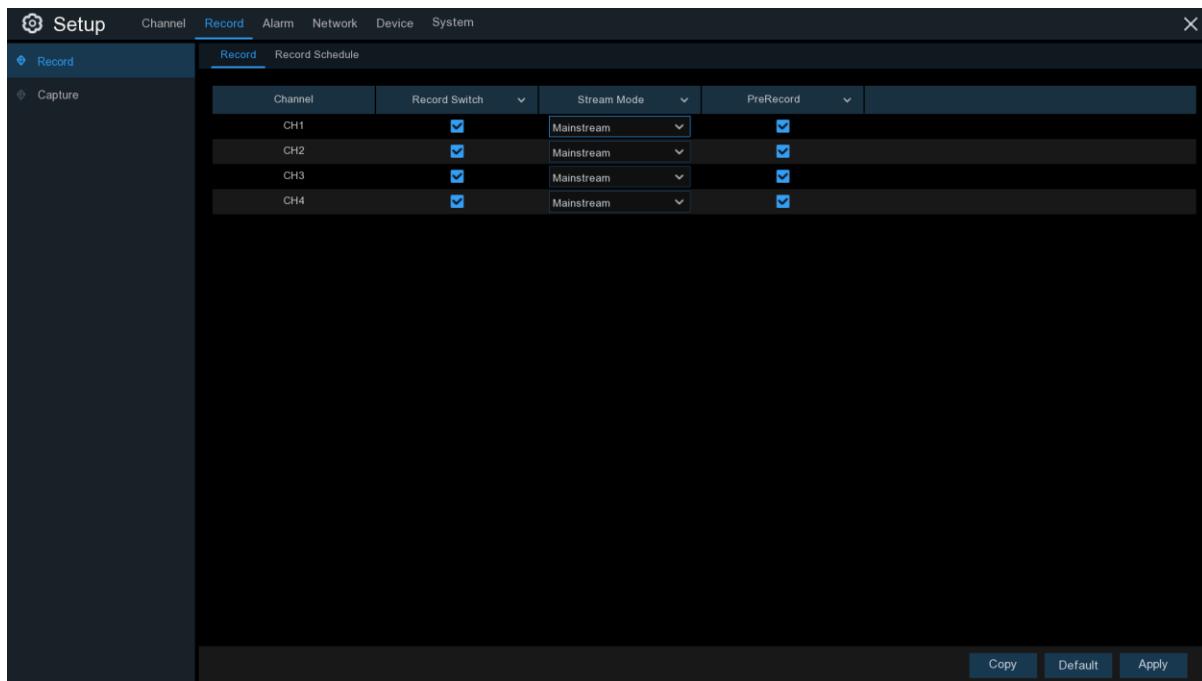


Note: The area of privacy zones you had set will be invisible in both live view & recording video.

5.2 Record

5.2.1 Record

This menu allows you to configure the channel recording parameters.



Channel: Display channel number.

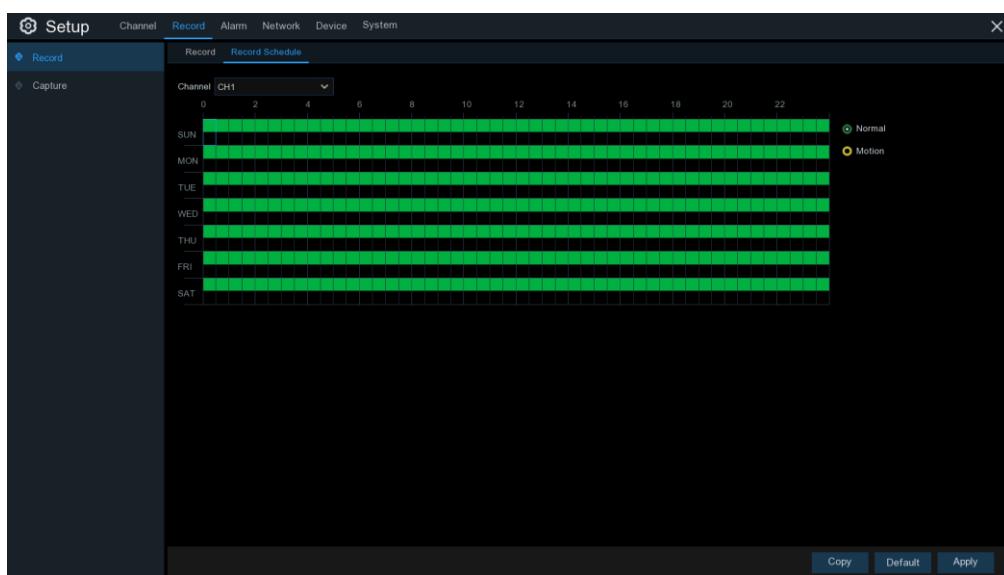
Record Switch: Enable in order to allow the video to be recorded to the HDD.

Stream Mode: Choose the recording resolution. The available options are Mainstream and DualStream.

PreRecord: If this option is enabled, the WIRELESS NVR starts recording a few seconds before an event occurs. Use this option if your primary recording type is motion based.

5.2.2 Record Schedule

This menu allows you to specify when the WIRELESS NVR records video and define the recording mode for each channel. The recording schedule lets you set up a schedule like, daily and hourly by normal (continuous) recording, motion recording. To set the recording mode, click first on the mode radio button (Normal, Motion), then drag the cursor to mark the slots. The recording schedule is valid only for one channel. If you want to use the same recording schedule for other channels, use **Copy To** function.



Channel: Select the channel to set its recording parameters.

Normal: When the time slot is marked green, this indicates the channel performs normal recording for that time slot.

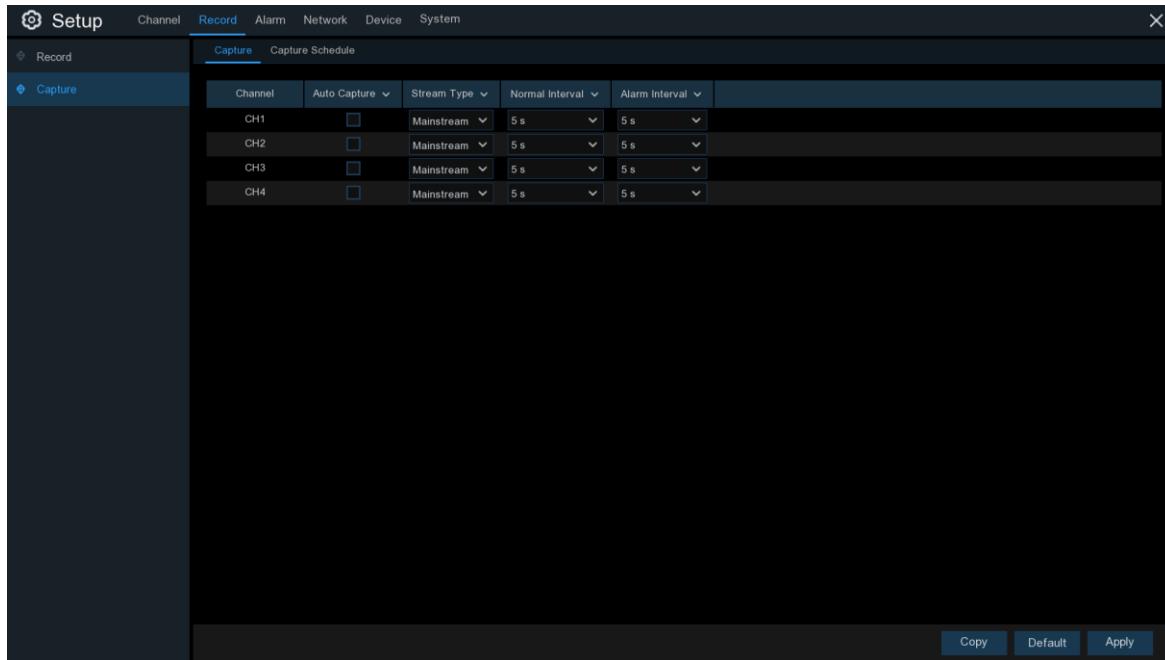
Motion: When the time slot is marked yellow, this indicates the channel records only when a motion is detected during that time slot.

NOTE: To use the motion detection, you must enable and configure the motion settings for the channel in Alarm menu. Please see [5.6.1 Motion](#)

No Record: A time slot marked black means that there is no recording scheduled for the time slot.

5.2.3 Capture

This menu allows to configure the image capture function.



Auto Capture: Enable or disable automatic capturing on the channel. When this feature is enabled, you can select the snapshot capturing interval.

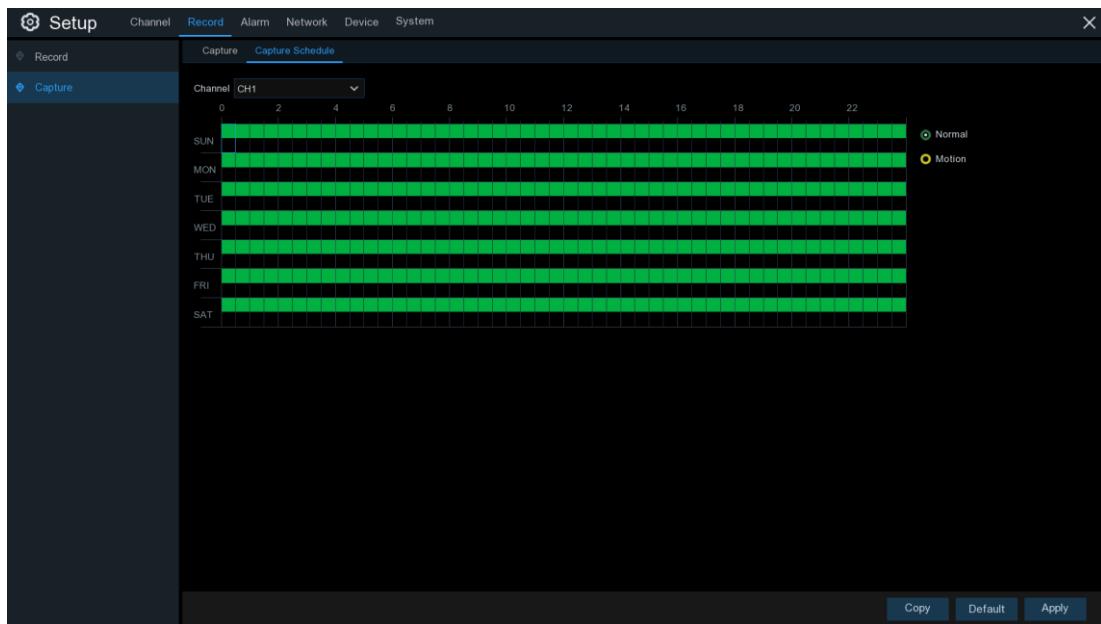
NOTE: When the Auto Capture is enabled, you can select the image capturing interval.

Stream Mode: Select the image resolution by mainstream or substream..

Normal Interval: Snapshots are captured based on normal interval.

Alarm Interval: Snapshots are captured based on alarm interval only when a motion is detected.

Capture Schedule



Channel: Select the channel to set its snapshot capturing schedule.

Normal: When the time slot is marked green, this indicates the channel is capturing snapshots based on the Normal Interval.

Motion: When the time slot is marked yellow, this indicates the channel is capturing snapshots based on Alarm Interval only when a motion is detected.

No Capturing: A time slot marked black means that there is no snapshot capturing scheduled for the time slot.

5.3 Alarm

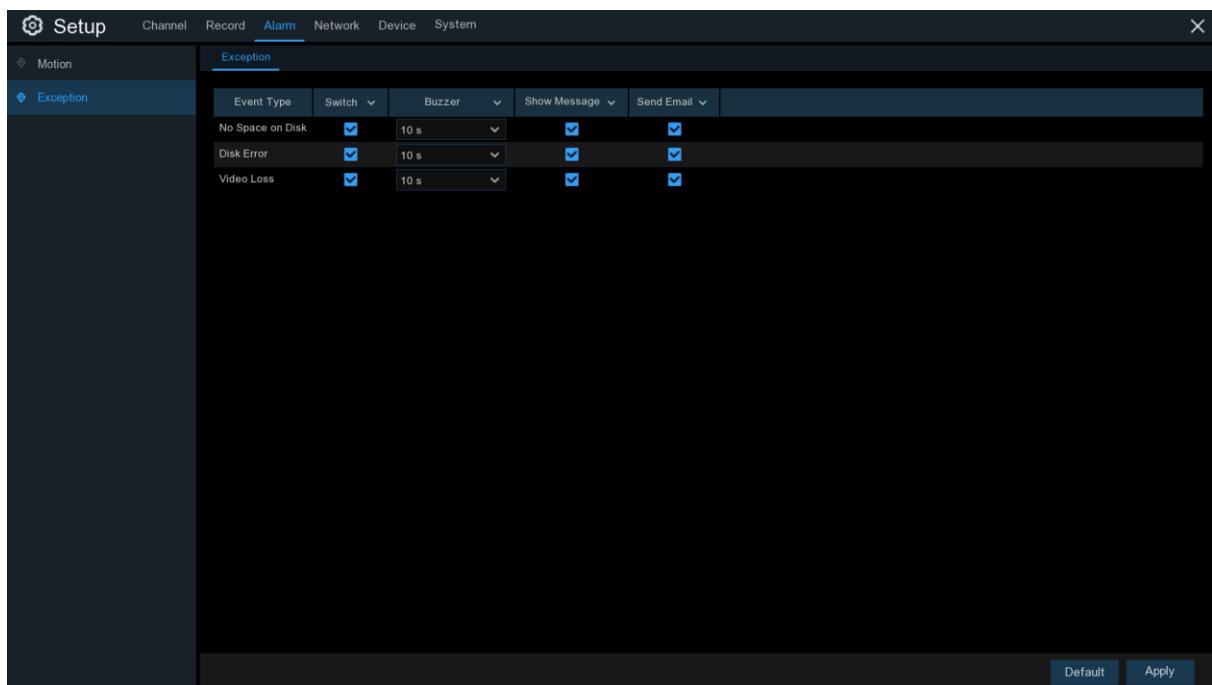
In these section, you can configure the alarm parameters.

5.3.1 Motion

Operation is same as [5.1.3 Motion](#)

5.3.2 Exception

This menu allows you to set the type of events that you want the WIRELESS NVR to inform you.



Event Type: Select the event type from below options:

- **No Space on Disk:** When an HDD is full.
- **Disk Error:** If the HDD is not detected properly.
- **Video Loss:** If a camera is not connected properly.

Switch: Check the box to enable the monitoring of the event.

Buzzer: Set the buzzer duration when the event occurs (Off/10s/20s/40s/60s). To disable buzzer, select **OFF**.

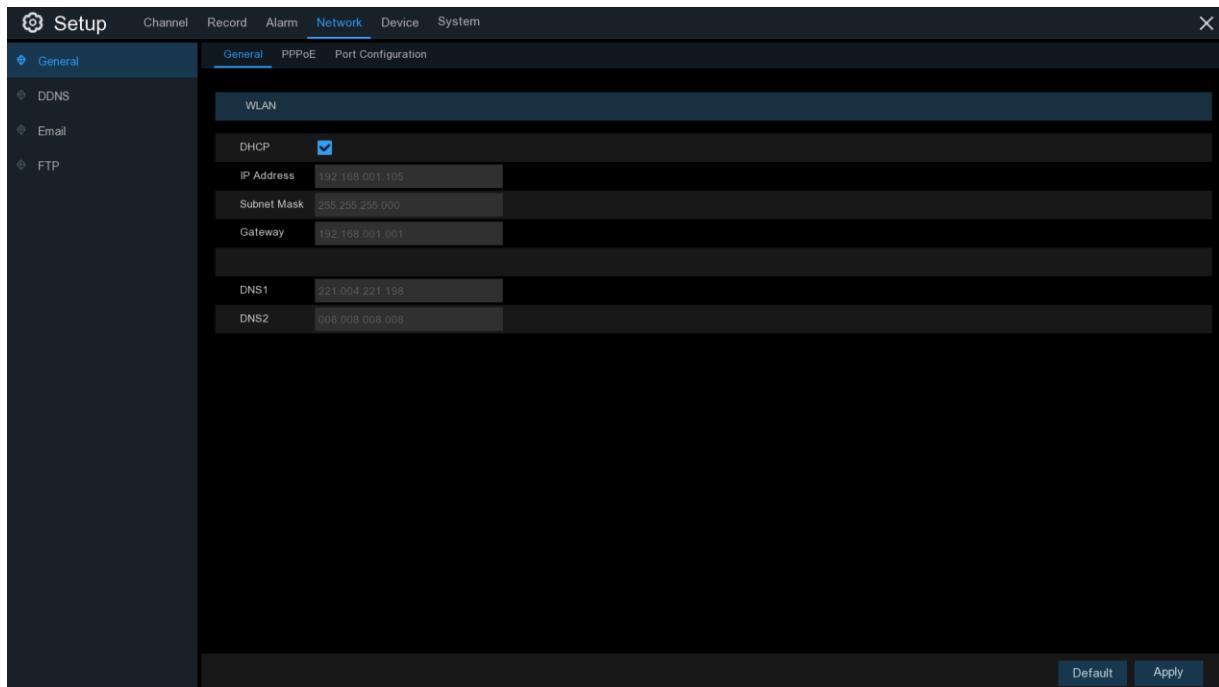
Show Message: Check the box to display a message on the screen when No Space on Disk, Disk Error, or Video Loss event happens.

Send Email: Let the WIRELESS NVR to send you an auto-email when an event occurs.

5.4 Network

This menu allows you to configure network parameters, such as PPPoE, DHCP. The most common types are DHCP. Most probably your network type is DHCP, unless the network is manually addressed. If you need an authentication user name and password to the Internet, then choose PPPoE.

5.4.1 General



If you connect to a router allows to use DHCP, please check the **DHCP** box. The router will assign automatically all the network parameters for your WIRELESS NVR. Unless the network is manually addressed below parameters:

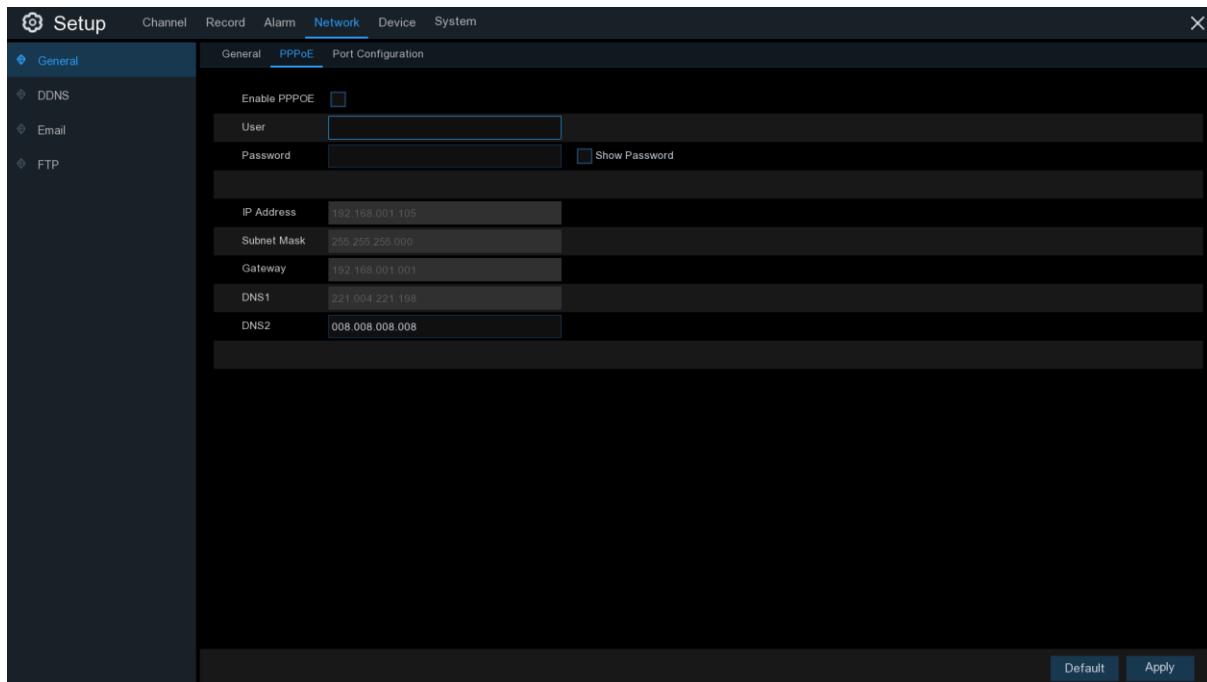
IP Address: The IP address identifies the WIRELESS NVR in the network. It consists of four groups of numbers between 0 to 255, separated by periods. For example, “192.168.001.100”.

Subnet Mask: Subnet mask is a network parameter which defines a range of IP addresses that can be used in a network. If IP address is like a street where you live then subnet mask is like a neighborhood. The subnet address also consists of four groups of numbers, separated by periods. For example, “255.255.000.000”.

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

DNS1/DNS2: DNS1 is the primary DNS server and DNS2 is a backup DNS server. Usually should be enough just to enter the DNS1 server address.

5.4.1.1 PPPoE

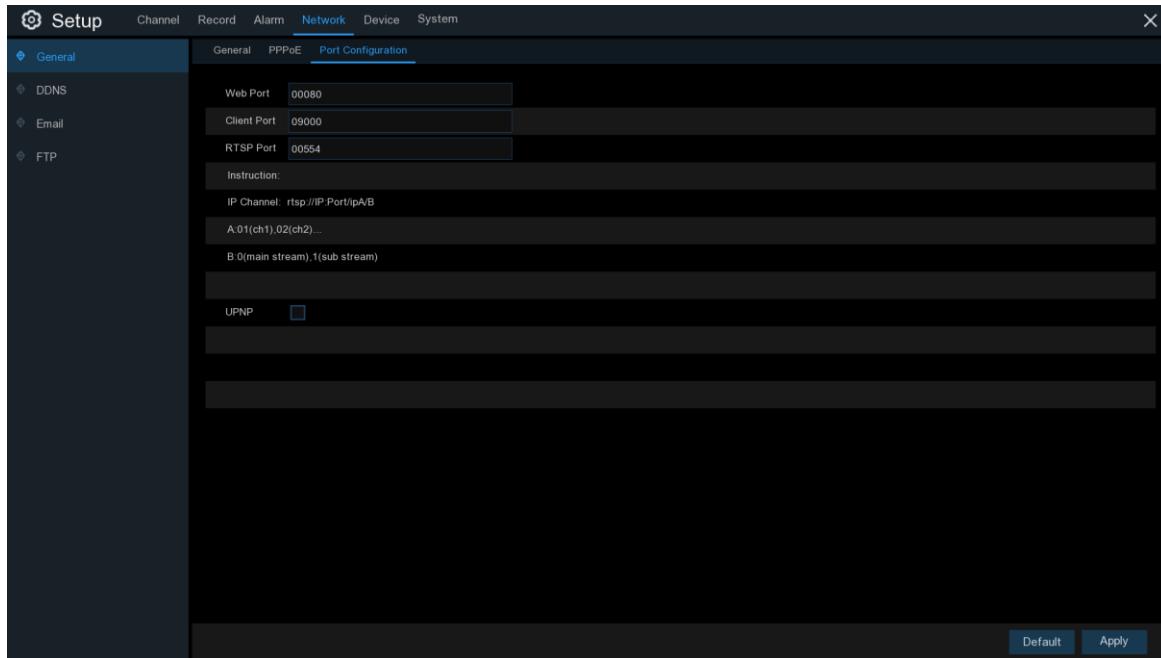


This is an advanced protocol that allows the WIRELESS NVR to connect to the network more directly via DSL modem.

Check the “Enable PPPOE” box, and then enter the User name & Password of the PPPOE.

Click **Apply** to save, system will reboot to active the PPPOE setting.

5.4.1.2 Port Configuration



Web Port: This is the port that you will use to log in remotely to the WIRELESS NVR (e.g. using the Web Client). If the default port 80 is already taken by other applications, please change it.

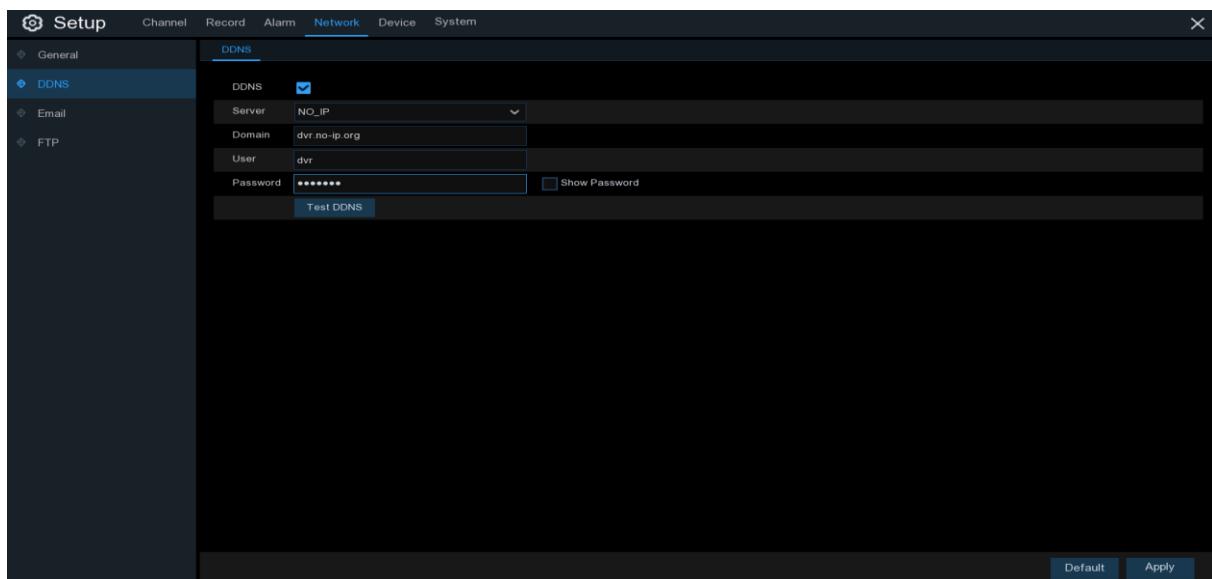
Client Port: This is the port that the WIRELESS NVR will use to send information through. If the default port 9000 is already taken by other applications, please change it.

RTSP Port: Default is 554, if the default port 554 is already taken by other applications, please change it.

UPNP: If you want to log in remotely to the WIRELESS NVR using Web Client, you need to complete the port forwarding. Enable this option if your router supports the UPnP. You need to enable UPnP both, on WIRELESS NVR and router. In this case, you do not need to configure manually port forwarding on your router. If your router does not support UPnP, make sure the port forwarding is completed manually

5.4.2 DDNS

This menu allows you to configure DDNS settings. The DDNS provides a static address to simplify remote connection to your WIRELESS NVR. To use the DDNS, you first need to open an account on the DDNS service provider's web page.



DDNS: Check to enable DDNS.

Server: Select the preferred DDNS server (DDNS_3322, DYNDNS, NO_IP, CHANGEIP, DNSEXIT).

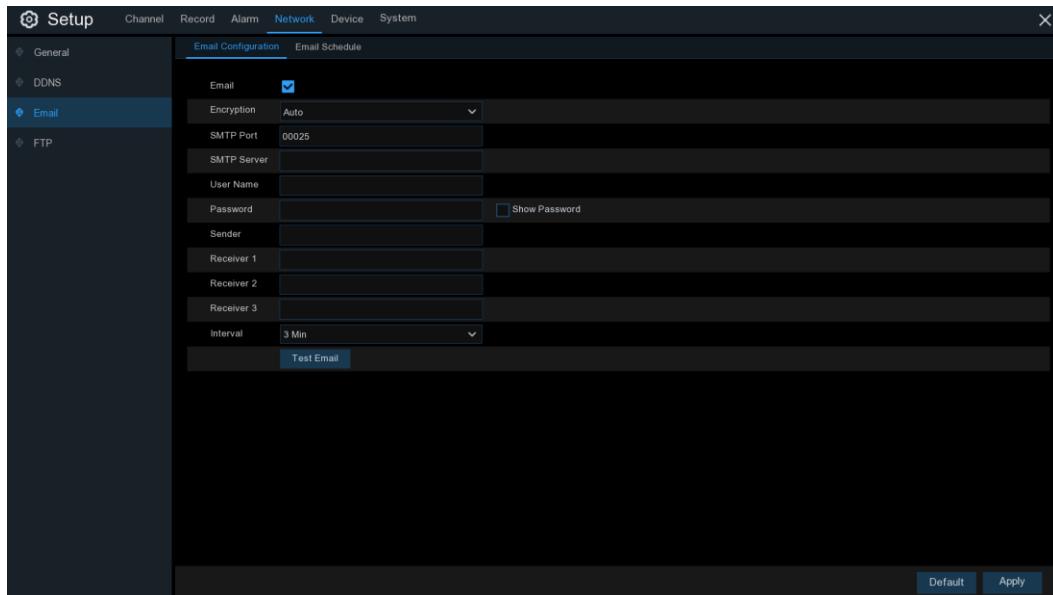
Domain: Enter the domain name you created on the DDNS service provider's web page. This will be the address you type in the URL box when you want to connect remotely to the WIRELESS NVR via PC. For example: NVR.no-ip.org.

User/Password: Enter the user name and password you obtained when creating an account on the DDNS service provider's web page.

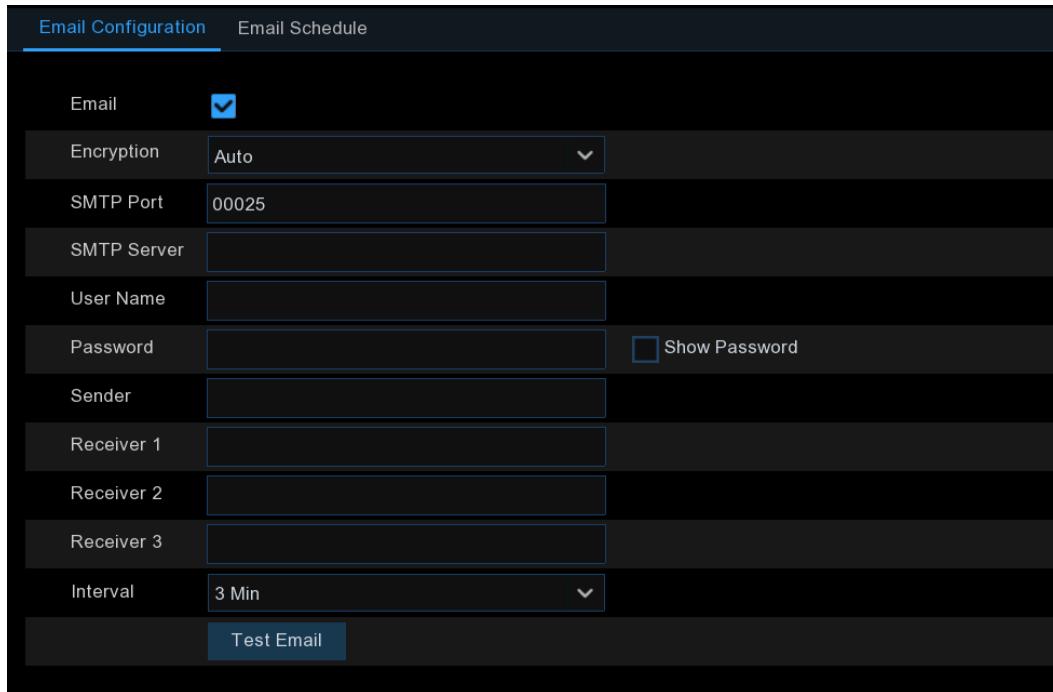
After all parameters are entered, click **Test DDNS** to test the DDNS settings. If the test result is "Network is unreachable or DNS is incorrect", please check whether the network works fine, or the DDNS information is correct or not.

5.4.3 Email

This menu allows you to configure email settings. Please complete these settings if you want to receive the system notifications on your email when an alarm is triggered, HDD becomes full, HDD is in error state, or Video Loss occurs.



5.4.3.1 Email Configuration



Email: Check to enable.

Encryption: Enable if your email server requires the SSL or TLS verification. If you are not sure, set to be **Auto**.

SMTP Port: Enter the SMTP port of your email server.

SMTP Server: Enter the SMTP server address of your email.

User Name: Enter your email address.

Password: Enter the password of your email.

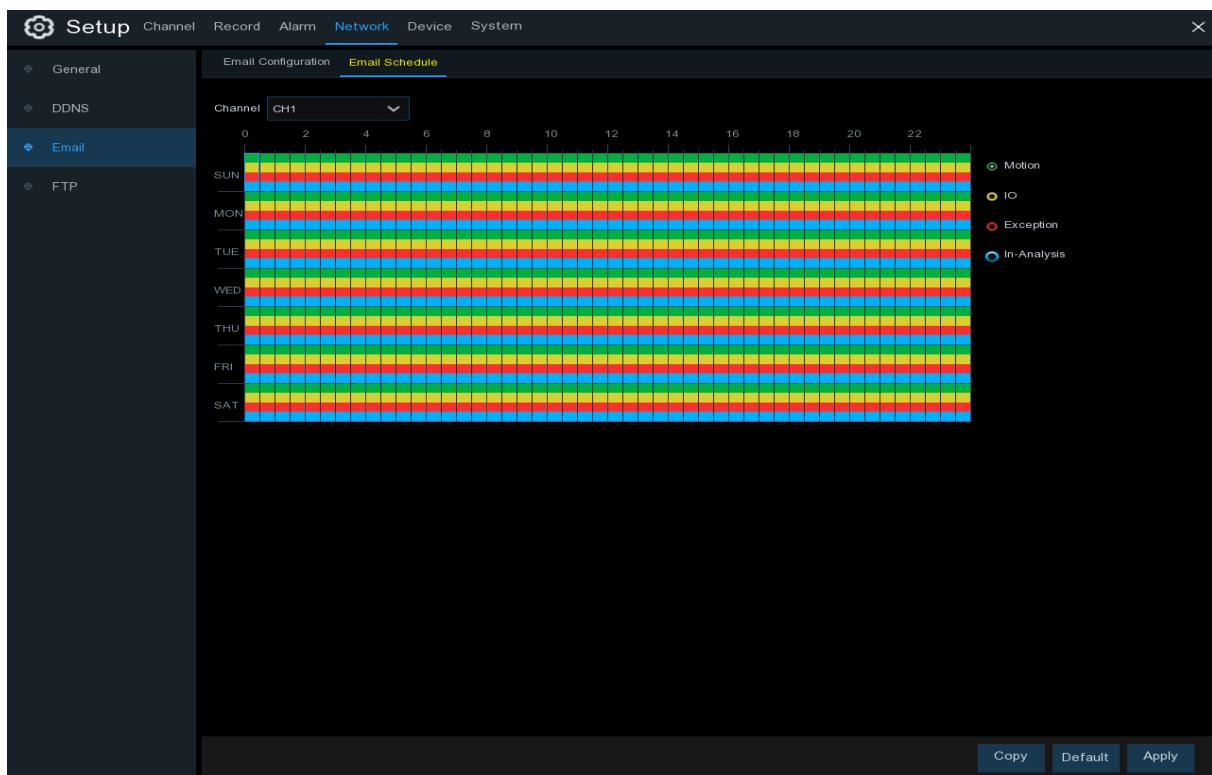
Receiver 1~3: Enter the email address where you want to receive the event notifications from the WIRELESS NVR.

Interval: Configure the length of the time interval between the notification emails from the WIRELESS NVR.

To make sure all settings are correct, click **Test Email**. The system sends an automated email message to your inbox. If you received the test email, it means the configuration parameters are correct.

5.4.3.2 Email Schedule

You need to configure the schedule to fully implement the Email notification.



The color codes on email schedule have the following meanings:

Green: Slot for Motion detection.

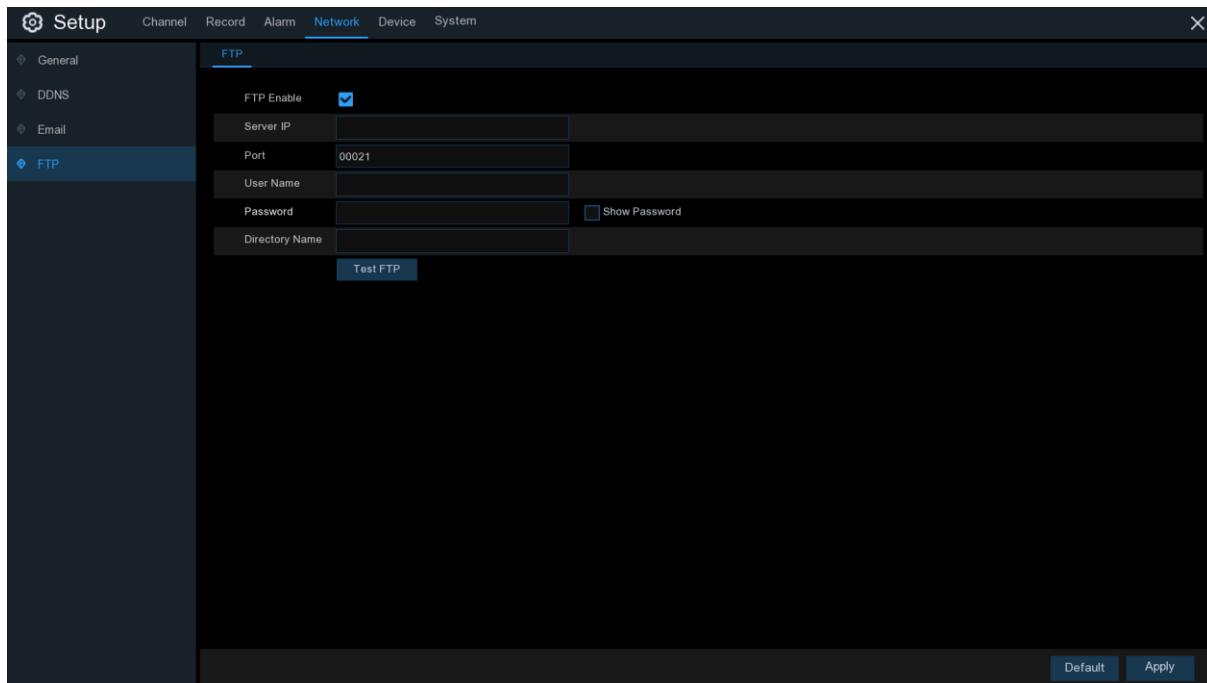
Yellow: Slot for I/O Alarm (optional).

Red: Slot for Exception (HDD full, HDD error, or Video Loss).

Blue: Slot for Intelligent Analysis detection.

5.4.4 FTP

This menu allows you to enable FTP function to view and load captured snapshots from WIRELESS NVR to your storage device over FTP.



FTP Enable: Click to enable FTP function.

Server IP: Enter your FTP server IP address or domain name.

Port: Enter the FTP port for file exchanges.

Name/ Password: Enter your FTP server user name and password.

Directory Name: Enter the default directory name for the FTP file exchanges.

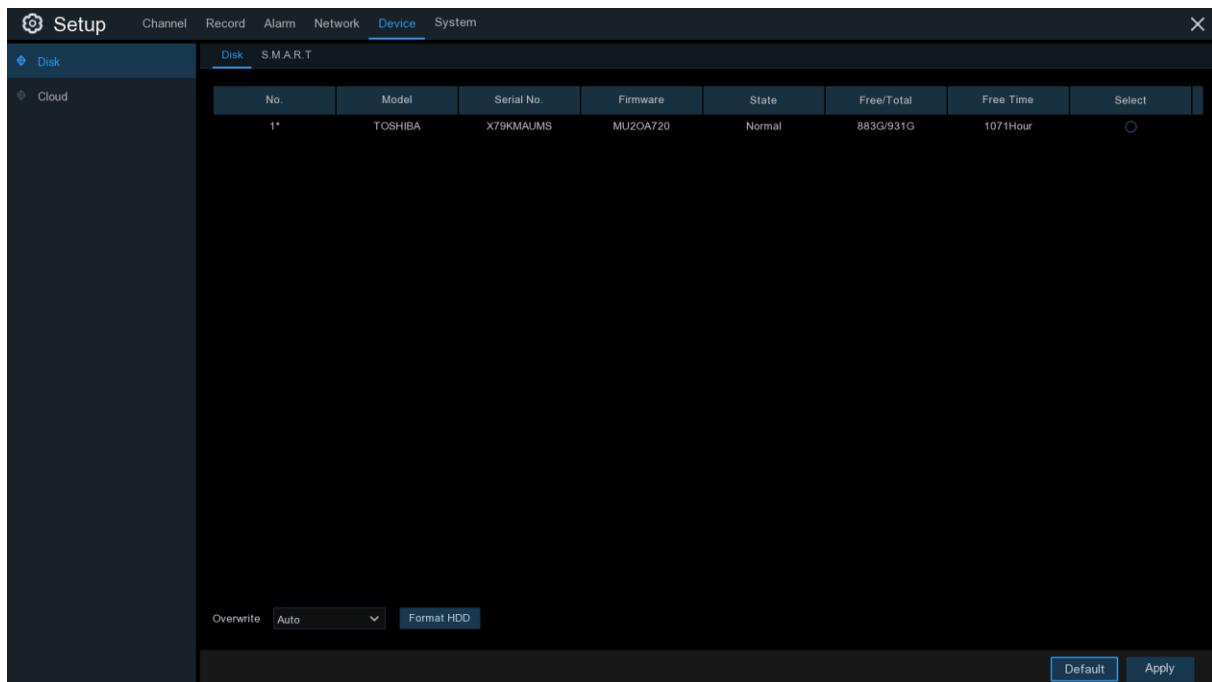
Test FTP: Click to test the FTP settings.

5. 5 Device

In this section, you can configure the internal HDD function.

5. 5.1 Disk

This menu allows you to check & configure the internal HDD(s). You need to format the HDD only at the first startup and if you replace a new HDD.



Format HDD: Select the HDD you want to format and then click **Format HDD**. To start formatting, you need to enter your user name and password and then click **OK** to confirm to continue formatting.

Overwrite: Use this option to overwrite the old recordings on the HDD when the HDD is full. For example, if you choose the option 7 days then only the last 7 days recordings are kept on the HDD. To prevent overwriting any old recordings, select **OFF**. If you have disabled this function, please check the HDD status regularly, to make sure the HDD is not full. Recording will be stopped if HDD is full.

5.5.2 S.M.A.R.T

This function can be used to display technical information on the hard drive installed inside your WIRELESS NVR. You can also perform a test (there are three types available) to evaluate and detect potential drive errors.

ID	Attribute Name	Status	Flags	Value	Worst	Threshold	Raw Value
0x1	Raw Read Error Rate	OK	b	100	100	16	0
0x2	Throughput Performance	OK	5	100	100	54	0
0x3	Spin Up Time	OK	7	183	183	24	118 (Average 116)
0x4	Start Stop Count	OK	12	100	100	0	722
0x5	Reallocated Sector Ct	OK	33	100	100	5	0
0x7	Seek Error Rate	OK	b	100	100	67	0
0x8	Seek Time Performance	OK	5	100	100	20	0
0x9	Power On Hours	OK	12	100	100	0	1137
0xa	Spin Retry Count	OK	13	100	100	60	0
0xc	Power Cycle Count	OK	32	100	100	0	191
0xc0	Power-Off Retract Count	OK	32	100	100	0	723
0xc1	Load Cycle Count	OK	12	100	100	0	723
0xc2	Temperature Celsius	OK	2	150	150	0	40 (Min/Max 25/58)
0xc4	Reallocated Event Count	OK	32	100	100	0	0
0xc5	Current Pending Sector	OK	22	100	100	0	0
0xc6	Offline Uncorrectable	OK	8	100	100	0	0
0xc7	UDMA CRC Error Count	OK	a	200	200	0	9

Whole Evaluation not passed, continue to use the disk: If for some reason the hard drive has developed a fault (such as one or more bad sectors), you can instruct your WIRELESS NVR to continue saving to the drive.

Self-check Type: There are three types available:

Short: This test verifies major components of the hard drive such as read/write heads, electronics and internal memory.

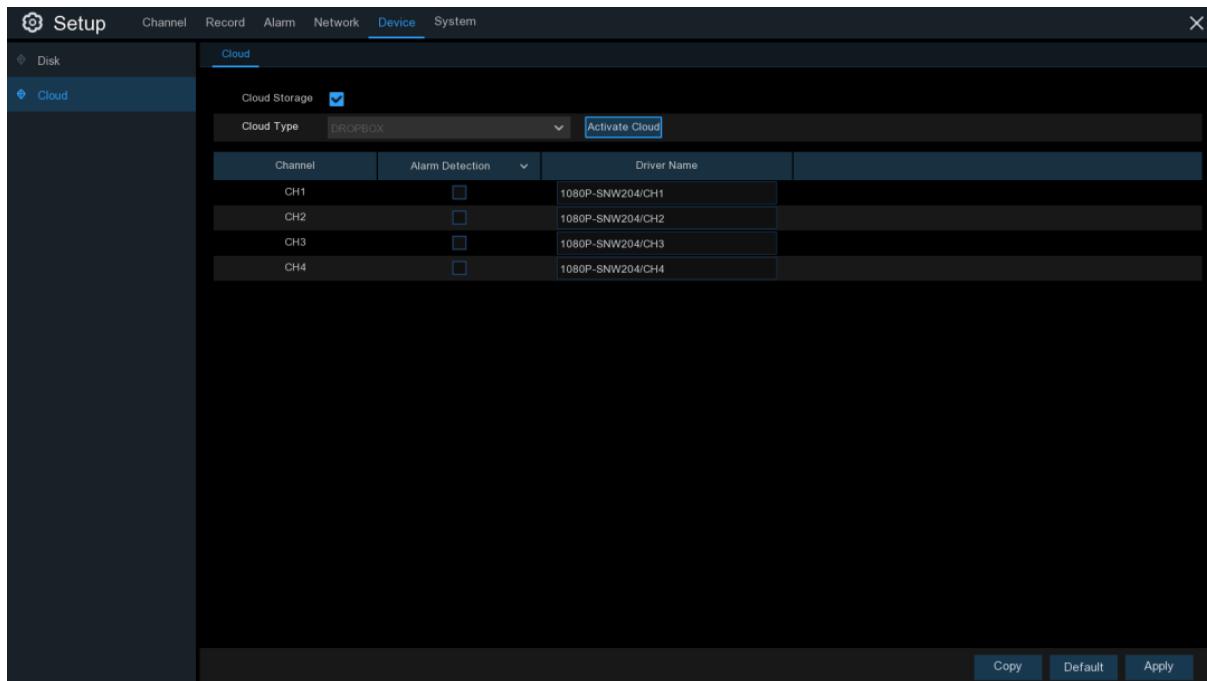
Long: This is a longer test that verifies the above as well as performing a surface scan to reveal problematic areas (if any) and forces bad sector relocation

Conveyance: This is a very quick test that verifies the mechanical parts of the hard drive are working.

Note: When performing a test, your WIRELESS NVR will continue to work as normal. If an HDD S.M.A.R.T error found, the HDD can be continued to use, but there will be a risk to lose recording data. It is recommended to replace a new HDD.

5.5.3 Cloud

This menu allows you to see what is happening on your camera site anytime. It can upload the captured pictures to Dropbox at normal time, or when motion detection happens.



Cloud Storage: Enable to allow cloud settings

Cloud Type: Only Dropbox cloud storage is supported currently

Channel: Select the channels where you want to upload the snapshots to Dropbox

Alarm Detection: Enable if you want to upload snapshots to Dropbox when the camera detects a motion

Drive Name: Enter the cloud storage name for your WIRELESS NVR

Activate Cloud: Click to activate the function. An activation email will be sent to the Receiver email account

Process to start uploading the snapshots

- 1) To use the cloud backup, you need to register your email first. For the detail, please refer to the page 35.
- 2) Register an account on <https://www.dropbox.com/>.
- 3) Configure network to ensure DVR is under network.
- 4) **Configure Cloud:** Enable Cloud and set the channel. Enable Motion Detection to have it capture pictures when motion detection happens.
- 5) Driver Name refers to the name created in the folder of Dropbox and the name can be defined by the user, e.g. 1080P-SNW204. The folder is to store captured pictures from the DVR.
- 6) Click [**Active Cloud**] to activate Cloud and Email for the user verification will be sent. Click the link in the email and then log in to your dropbox account, and

click permit. DVR cloud storage function will be activated. If you have logged in your dropbox account before Cloud storage activation, then no need to relogin.

Just click Permit to complete the activation. Please finish the activation within 3 minutes. After activation is completed, you can use the Cloud storage function.

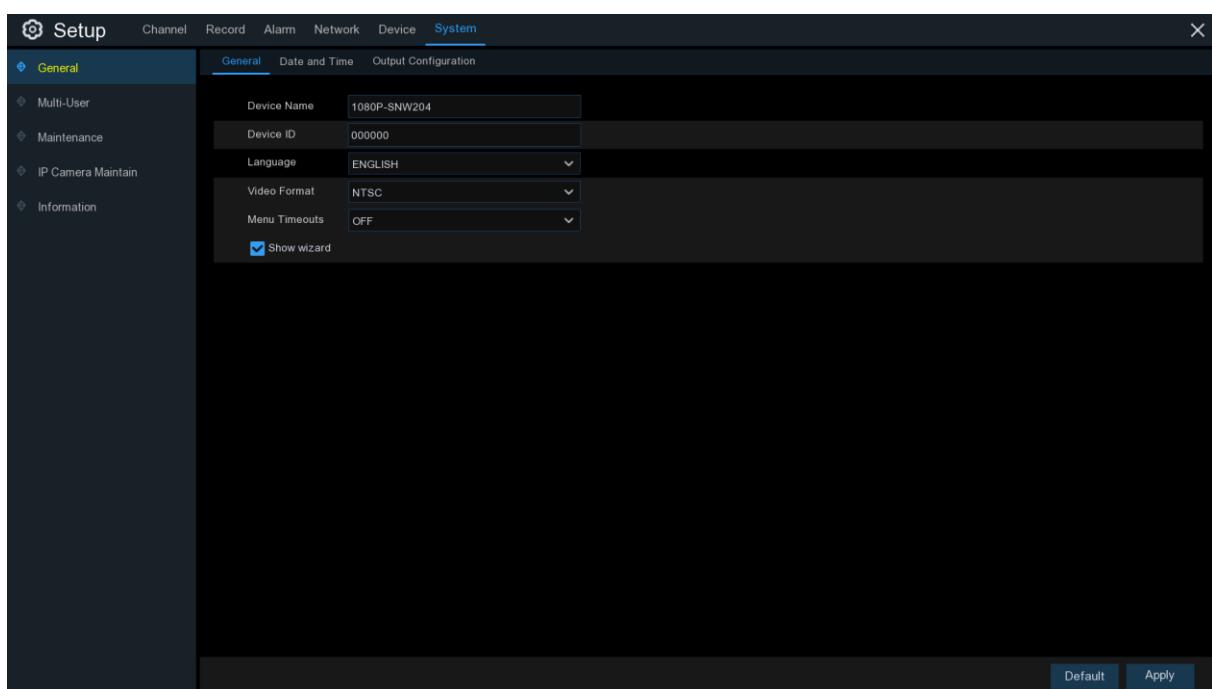
7) Click the icon at the upper-left of dropbox account interface to view the folder made in the 5th step.

8) Open the Dropbox folder to view the DVR captured pictures.

5.6 System

Change general system information such as date, time and region, edit passwords and permissions, and more.

5.6.1 General



Device Name: Enter the desired name for your WIRELESS NVR. The name can include both letters and numbers.

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

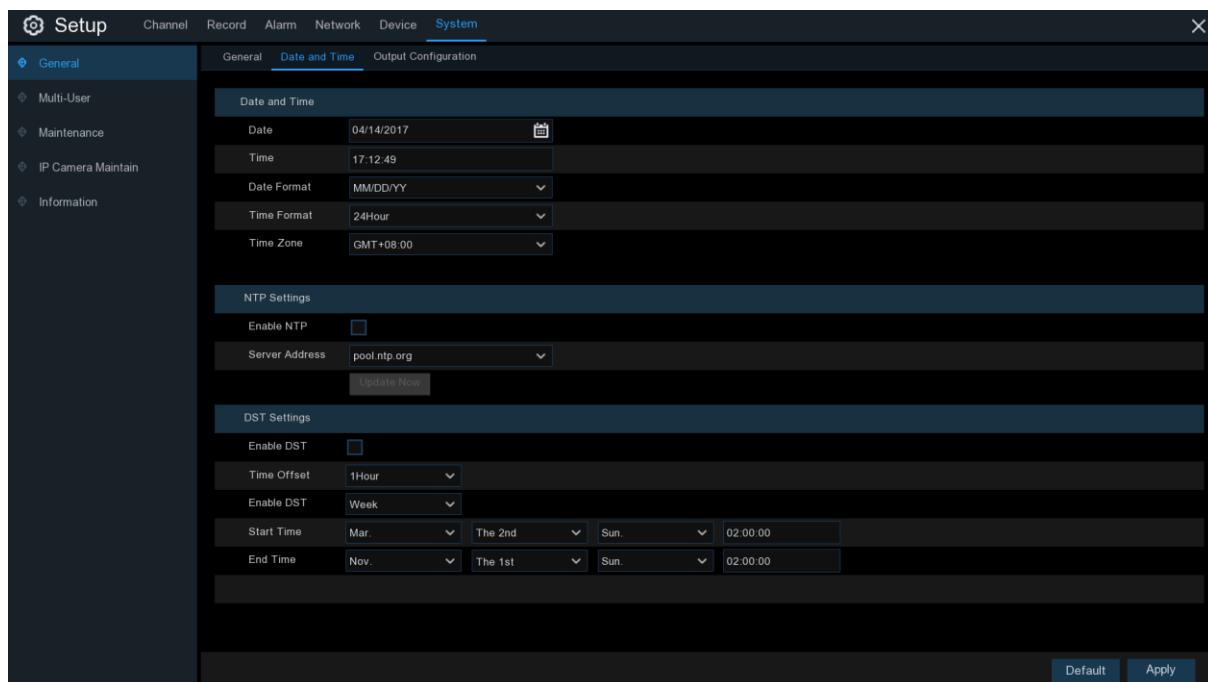
Language: Select a language you would like the system menus to be displayed in. Multiple languages are available.

Video Format: Select the correct video standard for your region.

Menu Timeouts: Click the drop-down menu to select the time your WIRELESS NVR will exit the Main Menu when idle. You can also disable this by selecting “OFF” (password protection will be temporarily disabled).

Show Wizard: Click the checkbox if you would like to display the Startup Wizard each time you turn on or reboot your WIRELESS NVR.

5.6.1.1 Date and Time



Date & Time

Date: Click the calendar icon to change the date.

Time: Click the dialogue box to change the time.

Date Format: Select the preferred date format.

Time Format: Select the preferred time format.

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

5.6.1.2 NTP Settings

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

This screenshot shows the 'Date and Time' configuration page. It includes sections for 'Date and Time' and 'NTP Settings'. In the 'NTP Settings' section, the 'Enable NTP' checkbox is checked, and the 'Server Address' is set to 'pool.ntp.org'. A blue button labeled 'Update Now' is visible at the bottom.

Check to enable the **NTP**, and select a **Server Address**, click Update Now to manually sync the date & time.

Click **Apply** to save your settings.

When NTP function is enabled, system will update the system time at 00:07:50 per day, or every time when the system is starting up.

5.6.1.3 DST Settings

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.

This screenshot shows the 'Date and Time' configuration page with the 'DST Settings' tab selected. It includes sections for 'Date and Time', 'NTP Settings', and 'DST Settings'. In the 'DST Settings' section, the 'Enable DST' checkbox is checked, and the 'Time Offset' is set to '1Hour'. The 'Start Time' is set for March 2nd at 02:00:00, and the 'End Time' is set for November 1st at 02:00:00. A cursor is hovering over the 'Time Offset' dropdown menu.

Enable DST: If Daylight Saving applies to your time zone or region, check this option to enable.

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.

Enable DST: You can select how Daylight Saving starts and ends:

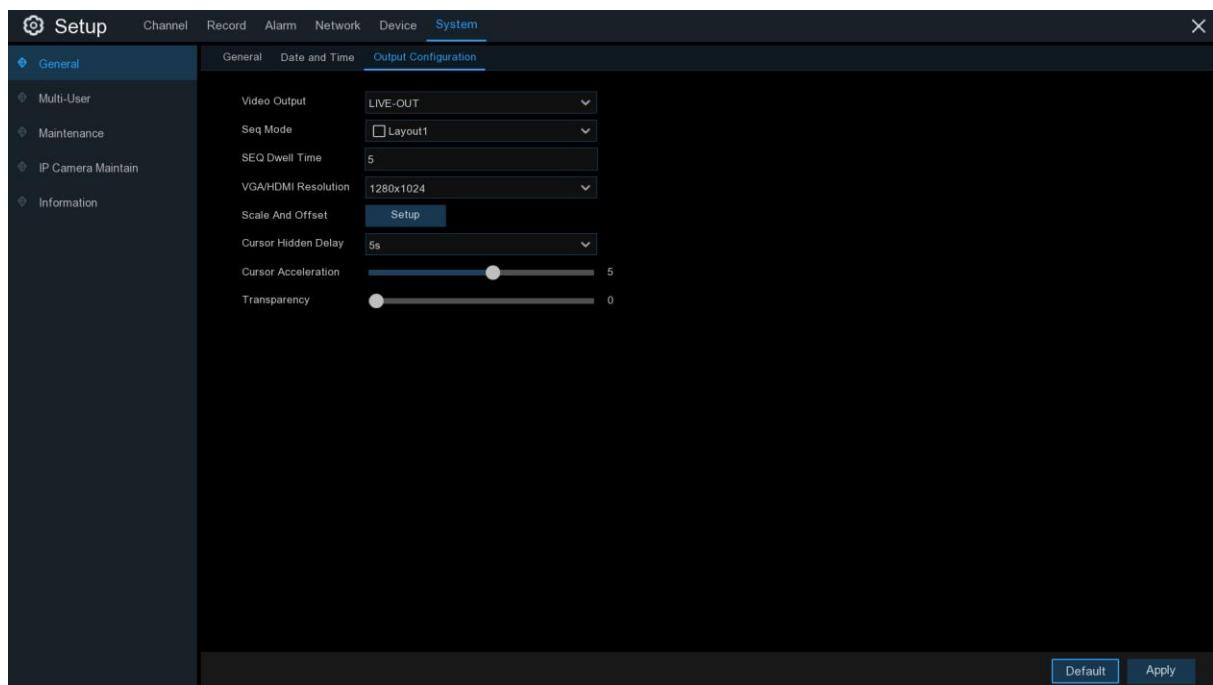
Week: Select the month, a particular day and time when Daylight Saving starts and ends. For example, 2 a.m. on the first Sunday of a particular month.

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

Start Time / End Time: Set the start time and end time for Daylight Saving.

5.6.2 Output Configuration

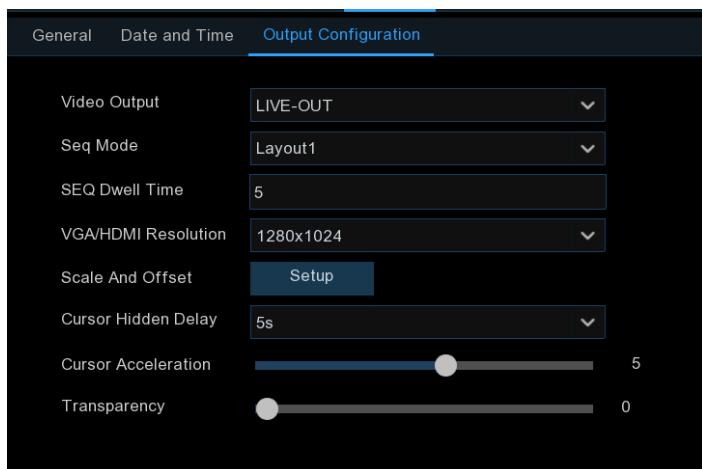
This menu allows you to configure video output parameters.



Video Output: To choose the output options:

LIVE-OUT is used to configure the main output parameters.

5.6.2.1 LIVE-OUT



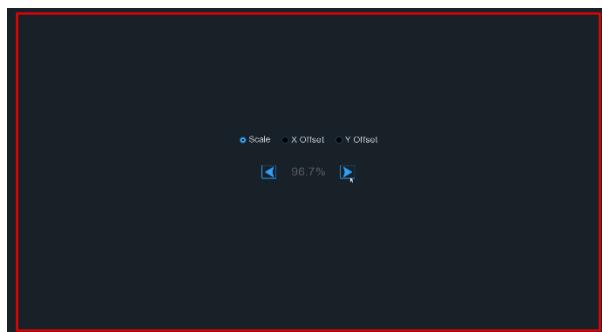
Choose **LIVE-OUT** from the Video Output drop-down menu.

SEQ Mode: Select how many video channels you would like to display when your WIRELESS NVR is in sequence mode.

SEQ Dwell Time: Enter in seconds the maximum length of time you would like to display a video channel in sequence mode before displaying the next video channel (300 seconds is the maximum).

Output Resolution: Select a display resolution that is suitable for your TV. 1920 x 1080 will suit most TVs. If your WIRELESS 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 WIRELESS NVR supports to adjust the size & position of the display screen to match your monitor or TV. Click **Setup** button to adjust.



Scale: To adjust the size of the displayed screen by scale.

X Offset: To move the displayed screen to left or right.

Y Offset: To move the displayed screen to up or down.

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 WIRELESS NVR will hide the mouse cursor when idle. You can also disable this by selecting “OFF” (password protection will be temporarily disabled).

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

Transparency: Click and hold the slider left or right to change how transparent the Menu Bar and Main Menu will appear on-screen. Adjust accordingly.

5.6.3 Multi-user

This menu allows you to configure the user name, password and user permission.

No.	User Name	Level	User Enable	Password Enable	User Edit	Permission
1	admin	ADMIN	Enable	Enable		
2	user1	USER1	Enable	Enable		
3	user2	USER2	Disable	Disable		
4	user3	USER3	Disable	Disable		
5	user4	USER4	Disable	Disable		
6	user5	USER5	Disable	Disable		
7	user6	USER6	Disable	Disable		

Default User: admin

The system supports the following account types:

- **ADMIN — System Administrator:** The administrator has full control of the system, and can change both administrator and user passwords and enable/disable password protection.
- **USER — Normal User:** Users only have access to live viewing, search, playback, and other functions. You may set up multiple user accounts with varying levels of access to the system.

5.6.3.1 Changing Password

To change the password for the administrator or user accounts, click the User Edit icon . The password has to be a minimum of 8 characters and can contain a mixture of numbers and letters. Enter your new password again to confirm, and then click **Save** to save your new password. You will be required to input your old password to authenticate.

User Edit

Level	USER1
User Enable	Enable
User Name	user1
Password Enable	Enable
Password	*****
Confirm	*****

Default Save Cancel

Authentication

User	admin
Password	<input type="password"/>

Show Password Authenticate Cancel

Password Enable: It's strongly recommended to enable the password to protect your privacy. If you want to disable the password protection, please ensure your WIRELESS NVR is placed in a secure place.

5.6.3.2 Add New Users

No.	User Name	Level	User Enable	Password Enable	User Edit	Permission
1	admin	ADMIN	Enable	Enable		
2	user1	USER1	Enable	Enable		
3	user2	USER2	Disable	Disable		
4	user3	USER3	Disable	Disable		
5	user4	USER4	Disable	Disable		
6	user5	USER5	Disable	Disable		
7	user6	USER6	Disable	Disable		

Default User admin

1. Select one of the user accounts that is currently disabled, click the User Edit icon .

User Edit

Level	USER1
User Enable	<input type="button" value="Enable"/>
User Name	user1
Password Enable	<input type="button" value="Enable"/>
Password	*****
Confirm	*****
<input type="checkbox"/> Show Password	
<input type="checkbox"/> Show Password	
<input type="button" value="Default"/> <input type="button" value="Save"/> <input type="button" value="Cancel"/>	

2. Select **Enable** from the drop-down next to **User Enable**.
3. Click the field next to **User Name** to change the user name for the account.
4. Select **Enable** from the drop-down next to **Password Enable**.
5. Click the field next to **Password** to enter the desired password.
6. Click the field next to **Confirm** to reenter the password.
7. Click **Save**. You will be required to input your Admin password to authenticate.

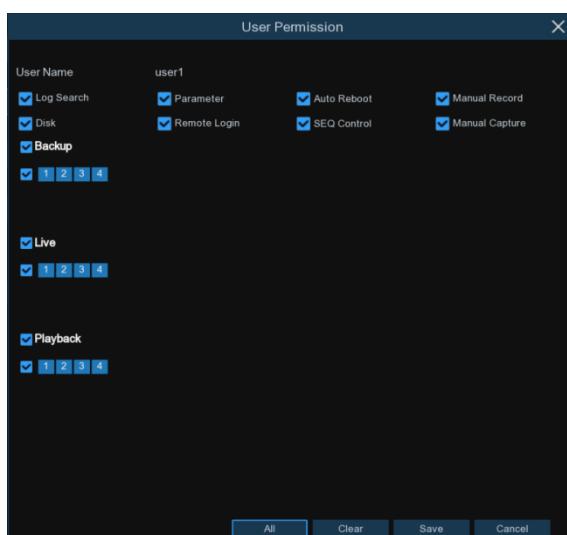
5.6.3.3 Setting User Permissions

The administrator account is the only account that has full control of all system functions. You can enable or disable access to certain menus and functions of each user account.

No.	User Name	Level	User Enable	Password Enable	User Edit	Permission
1	admin	ADMIN	Enable	Enable		
2	user1	USER1	Enable	Enable		
3	user2	USER2	Disable	Disable		
4	user3	USER3	Disable	Disable		
5	user4	USER4	Disable	Disable		
6	user5	USER5	Disable	Disable		
7	user6	USER6	Disable	Disable		

Default User **admin**

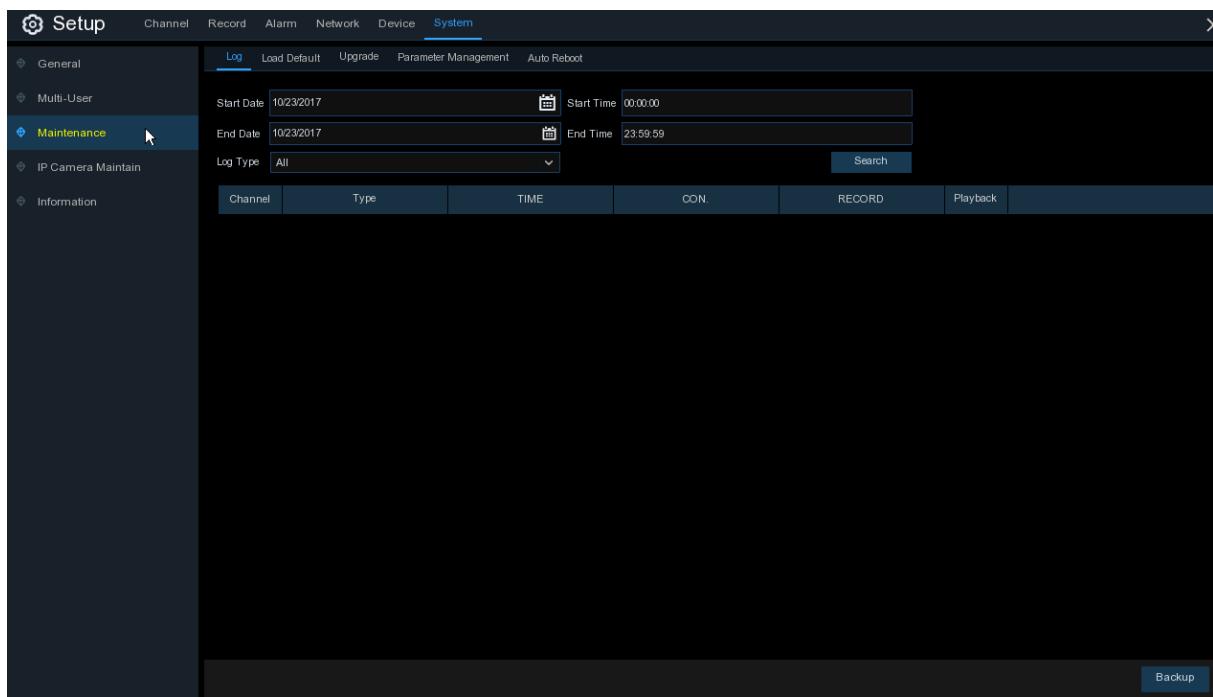
1. Click the edit icon under Permission tab.



2. Check the boxes next to any system menus or capabilities you would like the user to access. Click **All** to check all boxes. Click **Clear** to check none of the boxes.
3. Click **Save** to save your modifications.

5.6.4 Maintenance

In this section, you will be able to search & view the system log, load default settings, upgrade the system, export & import system parameters and manager system auto reboot.



5.6.4.1 Log

The system log shows you important system events, such as motion alarms and system warnings. You can easily create a backup file of the system log for a set time period to a USB flash drive.

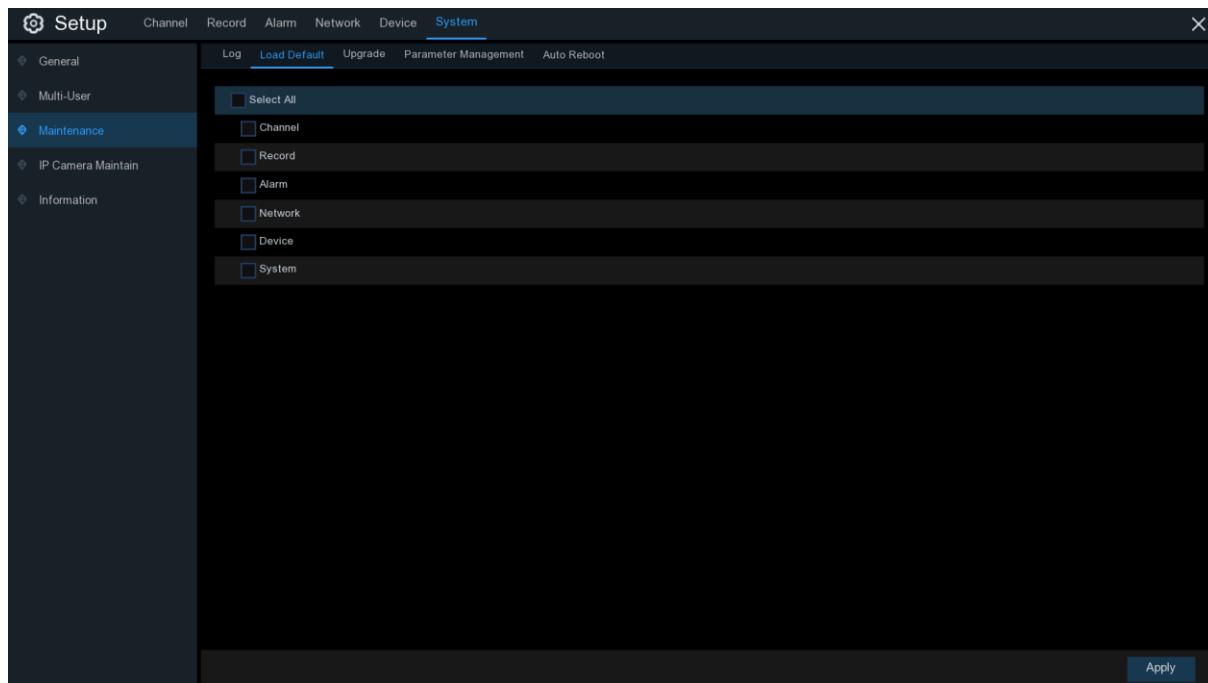
Channel	Type	TIME	CON.	RECORD	Playback
CH3	Alarm	08/11/2018 00:15:04	Motion Start	Yes	<input type="checkbox"/>
CH1	Alarm	08/11/2018 00:15:05	Motion Start	Yes	<input type="checkbox"/>
CH2	Alarm	08/11/2018 00:15:06	Motion Start	Yes	<input type="checkbox"/>
CH3	Alarm	08/11/2018 00:15:35	Motion End	Yes	<input type="checkbox"/>
CH1	Alarm	08/11/2018 00:15:36	Motion End	Yes	<input type="checkbox"/>
CH2	Alarm	08/11/2018 00:15:37	Motion End	Yes	<input type="checkbox"/>
CH3	Alarm	08/11/2018 00:16:26	Motion Start	Yes	<input type="checkbox"/>
CH2	Alarm	08/11/2018 00:16:27	Motion Start	Yes	<input type="checkbox"/>
CH3	Alarm	08/11/2018 00:16:57	Motion End	Yes	<input type="checkbox"/>
CH2	Alarm	08/11/2018 00:16:58	Motion End	Yes	<input type="checkbox"/>
CH3	Alarm	08/11/2018 00:30:18	Motion Start	Yes	<input type="checkbox"/>
CH2	Alarm	08/11/2018 00:30:19	Motion Start	Yes	<input type="checkbox"/>
CH3	Alarm	08/11/2018 00:30:49	Motion End	Yes	<input type="checkbox"/>
CH2	Alarm	08/11/2018 00:30:50	Motion End	Yes	<input type="checkbox"/>
PVU9	Message	08/11/2018 00:51:51 AL	Motion Start	No	<input type="checkbox"/>

Log Searching and Backing Up:

1. Click the field next to **Start Date & Start Time** to choose the starting date & time for your search from the on-screen calendar.
2. Click the field next to **End Date & End Time** to choose the end date & time for your search from the on-screen calendar.
3. Select the type of events you would like to search for from the dropdown next to **Log Type**, or select **All** to see the entire system log for the selected time period.
4. Click **Search**.
5. Browse system log events from your search period:
 - o Video events can be played back instantly by clicking in the **Playback** column. Right-click to return to your search results.
 - o Use the **<< / > >** buttons in the bottom-right corner of the menu to move between pages of system log events.
6. Click **Backup** to create a backup of the system log for your search period. Please make sure your flash derive has been connected to the WIRELESS NVR's USB port.
7. The backup drive menu appears. Navigate to the folder you want the backup file to be saved in, then click **OK** to begin.

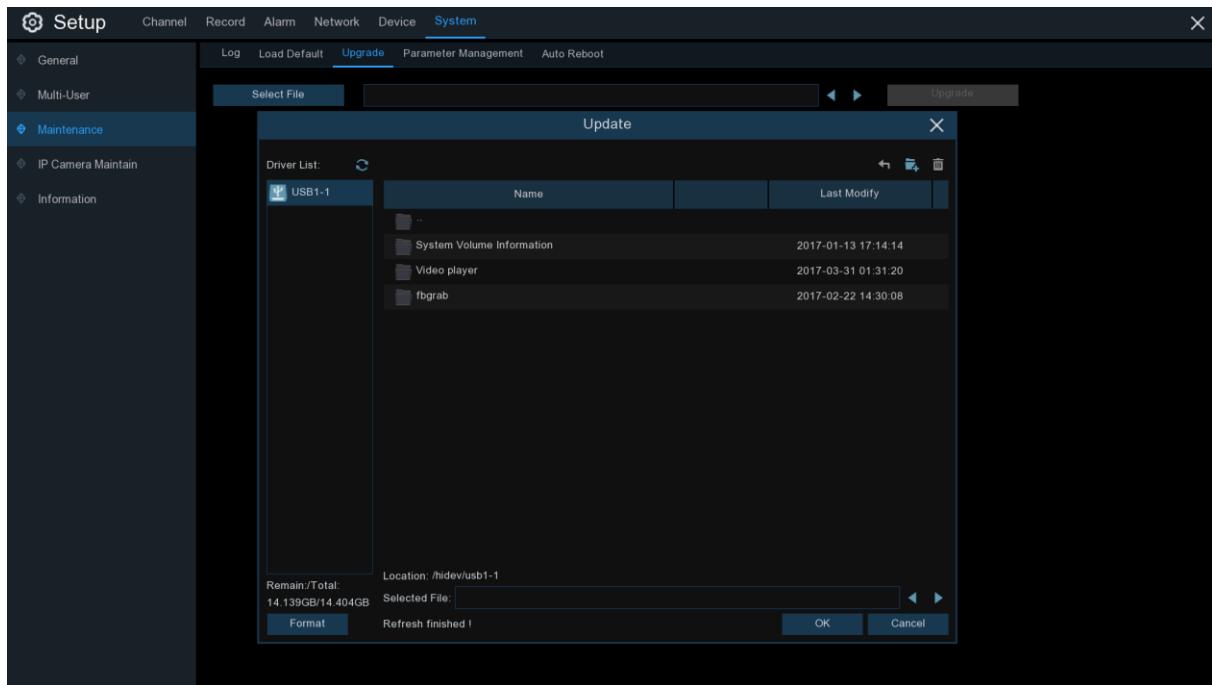
5.6.4.2 Load Default

Reset the WIRELESS NVR settings to its out-of-box state. You can choose to reset all settings at once, or just settings on specific menus. Restoring default settings will not delete recordings and snapshots saved to the hard drive.



Check the items you want restore, or check **Select All** to choose all items. Click **Apply** to load default settings of your chosen items.

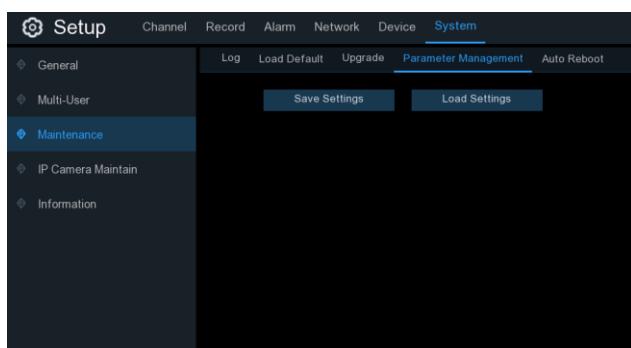
5.6.4.3 Upgrade



1. Copy the firmware file (.sw file) to your USB drive, and insert the USB flash drive into the WIRELESS NVR's USB port.
2. Click Select File button to choose the firmware file in your USB flash drive, then Click **OK**.
3. Click **Upgrade** button to start system upgrade. The system upgrade will last around 5-10 minutes, please do **NOT** power off the WIRELESS NVR or remove the USB from WIRELESS NVR during firmware upgrade.

5.6.4.4 Parameter Management

You can export the main menu settings you have configured to a USB flash drive, or import an exported setting file from USB flash drive to the WIRELESS NVR.

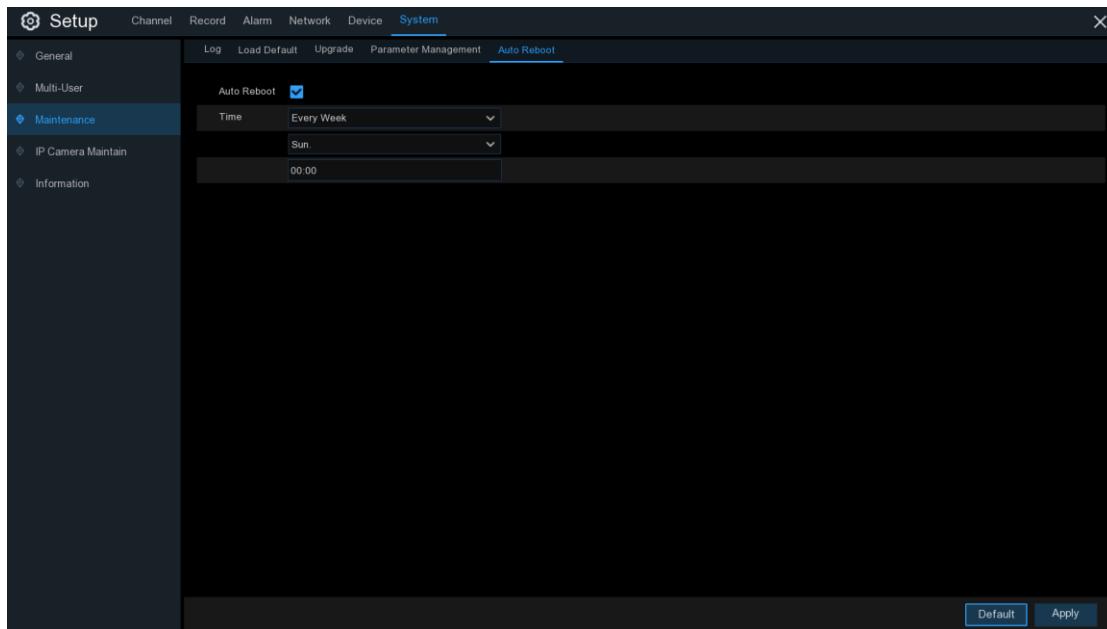


Save Settings: Click to save the WIRELESS NVR current system settings to the USB device. You will be required to input the Admin password to authenticate.

Load Settings: Once you have created a system settings export, you can import the settings on another NVR. Click **Load Settings** button to navigate to the system settings file you want to import from your USB flash driver. You will be required to input the Admin password to authenticate.

5.6.4.5 Auto Reboot

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

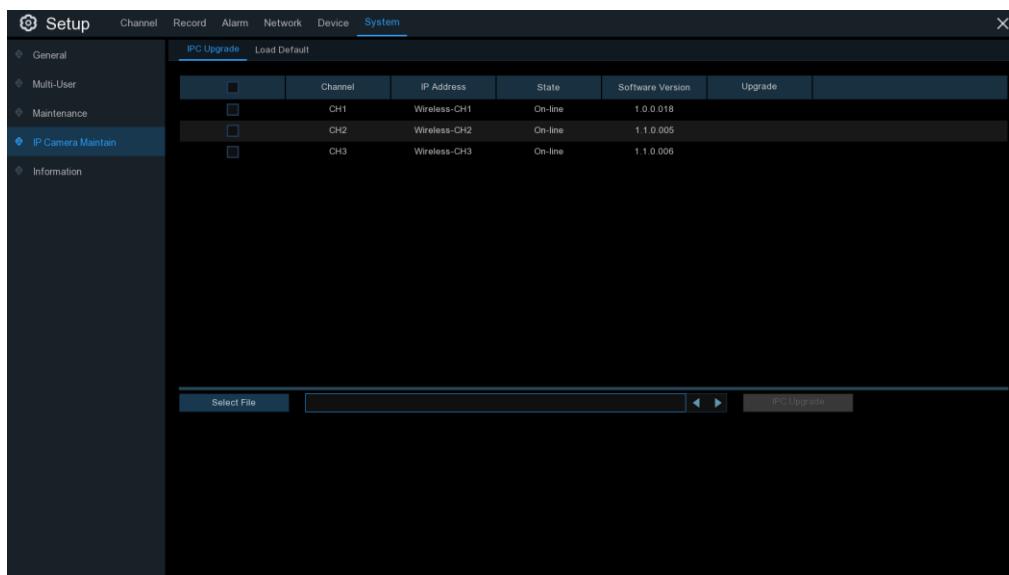


Auto Reboot: Check to enable.

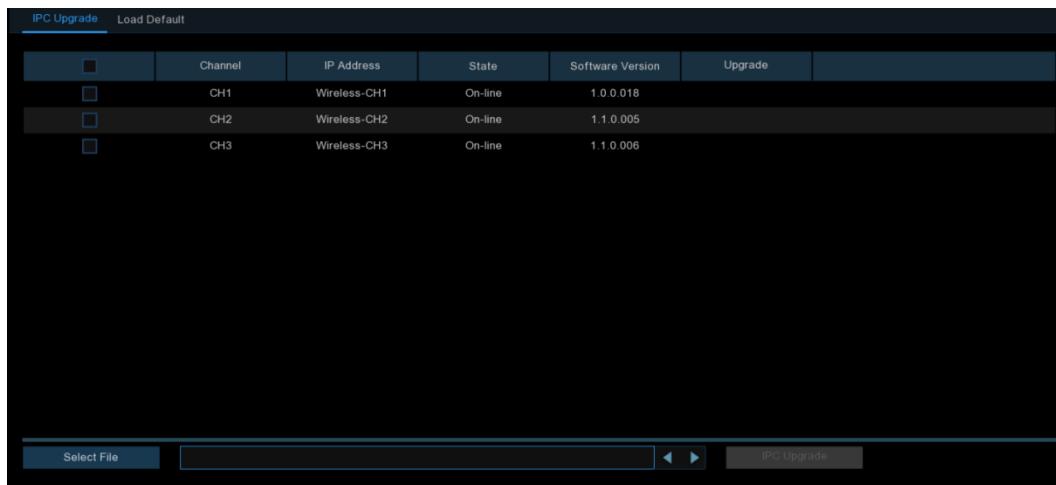
Time: You can set the WIRELESS NVR to reboot by day, week or month.

5.6.5 IP Camera Maintain

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

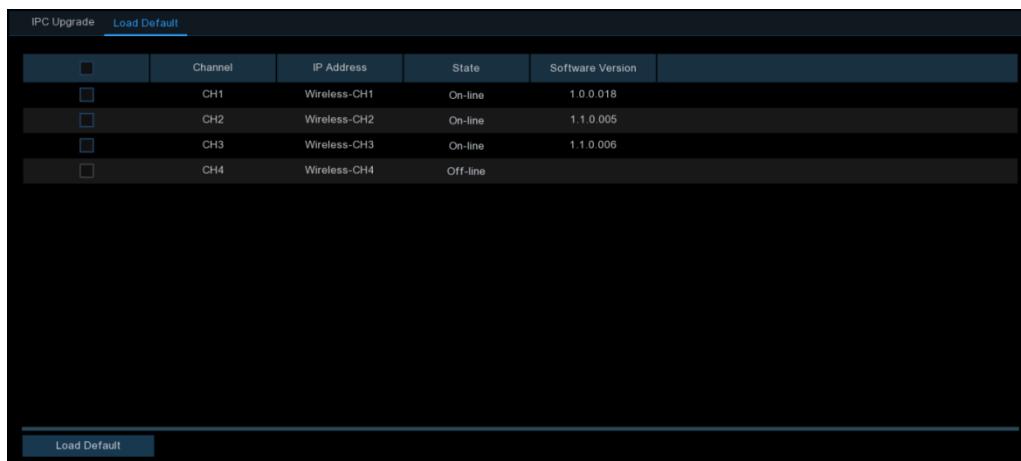


5.6.5.1 Upgrade IP Camera



1. Choose one of the IP cameras you want to upgrade firmware.
2. Click **Select File** select the update file from your USB flash drive, then click **OK**.
3. Click IPC Upgrade button to start upgrading. You will be required to input the Admin password to authenticate. Please do **NOT** power off the WIRELESS NVR and IP camera or remove the USB during the upgrading.

5.6.5.2 Load Default Settings for IP Camera



1. Choose the IP cameras you want to restore.
2. Click **Load Default** to restore settings. You will be required to input the Admin password to authenticate.

5.6.6 System Information

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

5.6.6.1 Information

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

Setup		Channel	Record	Alarm	Network	Device	System	X
		Information Network State						
General		Device ID	000000					
Multi-User		Device Name	1080P-SNW204					
Maintenance		Device Type	SNW-204					
IP Camera Maintain		Hardware Version	DM-354					
Information		Software Version	V8.1.0-20180619					
		Wireless Version	V1.0.0.051					
		IE Client Version	V2.0.0.103					
		Video Format	NTSC					
		HDD Volume	931G					
		IP Address	192.168.1.105					
		Web Port	80					
		Client Port	9000					
		MAC Address	88-1B-12-83-20-E2					
		Network State	connect success					
		P2P ID	RSV1917051030327					

If your WIRELESS NVR supports P2P function, you will find the P2P ID & P2P QR code in the information page. You can scan this QR cord with mobile app to remote view the WIRELESS NVR.

5.6.6.2 Network State

Information		Network State
	Attribute	Value
WLAN		
	IP Address	192.168.1.105
	Subnet Mask	255.255.255.0
	Gateway	192.168.1.1
	MAC Address	88-1B-12-83-20-E2
	DHCP	Enable
DNS1		221.4.221.198
DNS2		8.8.8.8
PPPoE		Disable
Port		
	Web Port	80
	Client Port	9000
	RTSP Port	554
	UPNP	Disable

View network information.

Chapter 6 Search, Playback & Backup

The Search function gives you the ability to search for and play previously recorded videos as well as snapshots that are stored on your WIRELESS NVR's hard drive. You have the choice of playing video that matches your recording schedule, manual recordings or motion events only. The Backup function gives you the ability to save important events (both video and snapshots) to a USB flash drive.

6.1 Using Search Function

Click  **Search** button in the Start Menu to enter search section.



- 1. Search Options:** the system provides various search & playback methods: General, Events, Sub-periods & Pictures
- 2. Search Date:** search by a date to play back.
- 3. Search Type:** the system provides different search types to narrow your search.
- 4. Channel Selection:** to choose the channels you want to search & play.
- 5. Video Playback Controls:** to control the video playback.



 Enlarge the video playback to full screen

 Rewind, x2, x4, x8 and x16

-  Slow Play, 1/2, 1/4 and 1/8, 1/16 speed
-  Play
-  Pause
-  Play frame by frame. Click once to play a frame of the video
-  Stop
-  Fast Forward, x2, x4, x8 and x16
-  Digital Zoom: Click to zoom in then click-and-drag on a camera image during playback to zoom in on the selected area. Right-click to return to regular playback.
-  Video Clip. Quickly save a section of video to a USB flash drive. View more on [6.1.1.1 Video Clip Backup](#)
-  Save Video Clip.
-  Volume Control: scroll the slider bar to increase or decrease volume.
-  Snapshots: to capture a snapshot image to your USB flash drive. If the video playback is in split-screen view, move the mouse cursor to the channel you want to capture, and then click the  icon to save the snapshot.

6. **Timeline:** Continuous recordings are shown with colored bars to represent different types of recording (legend shown in the bottom-right corner of the display). Use the timeframe options ( 24h  2h  1h  30m) to view a smaller or larger time period.

Different types of recording shown in different colors:



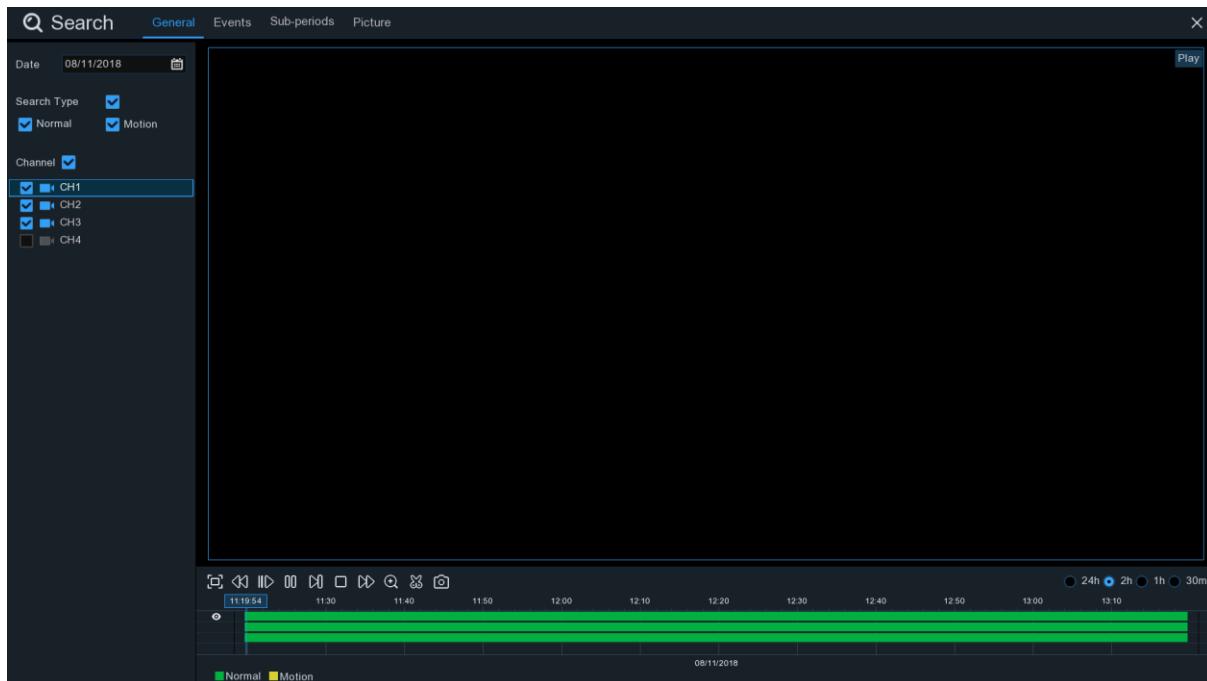
Continuous Recording in **Green** color;

Motion Recording in **Yellow** color;

7. **Playback Status:** display the video play status.

6.1.1 Search & Play Video in General

This menu gives an option to search & play recording for a selected date.



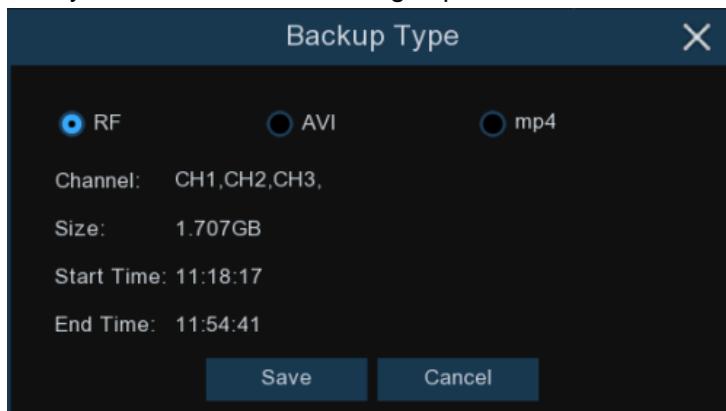
1. Select a date to search for video recording from the calendar.
2. Choose a search type.
3. Check channels you would like to search, or check **Channel** to search all connected channels.
4. The search result will display on the timeline from 00:00 to 24:00.
5. Click button to start playback.
6. Control the playback with buttons on [Video Playback Controls](#).
7. Use the timeframe options (24h 2h 1h 30m) to view a smaller or larger time period.
8. If you want to quickly save a section of video during playing back to a USB flash drive, use the [Video Clip](#) backup function.

6.1.1.1 Video Clip Backup

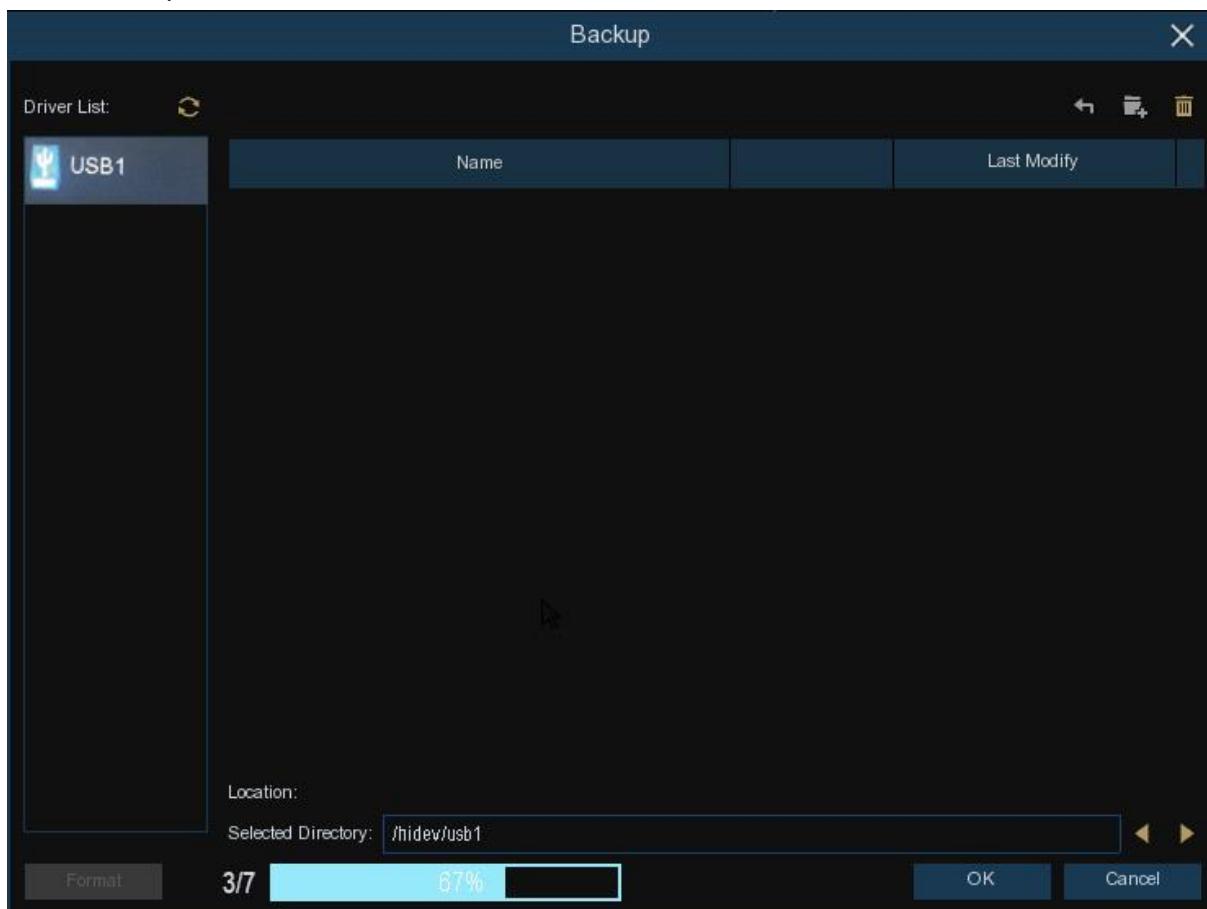


1. Insert your USB flash drive to the WIRELESS NVR.
2. Start a video recording playback.
3. Click .
4. Check the channel(s) you want to make a video clip backup.
5. Move the mouse cursor to the timeline where you want to start the video clip.

6. Press and hold the left button of your mouse, and drag the cursor to the timeline where you want to end the video clip.
7. The  icon has been changed to  icon, click  to save the video clip.
8. Select a file type for your backup files, click **Save** button to save the video clips. Please make sure your USB driver has enough space to save the video clips.

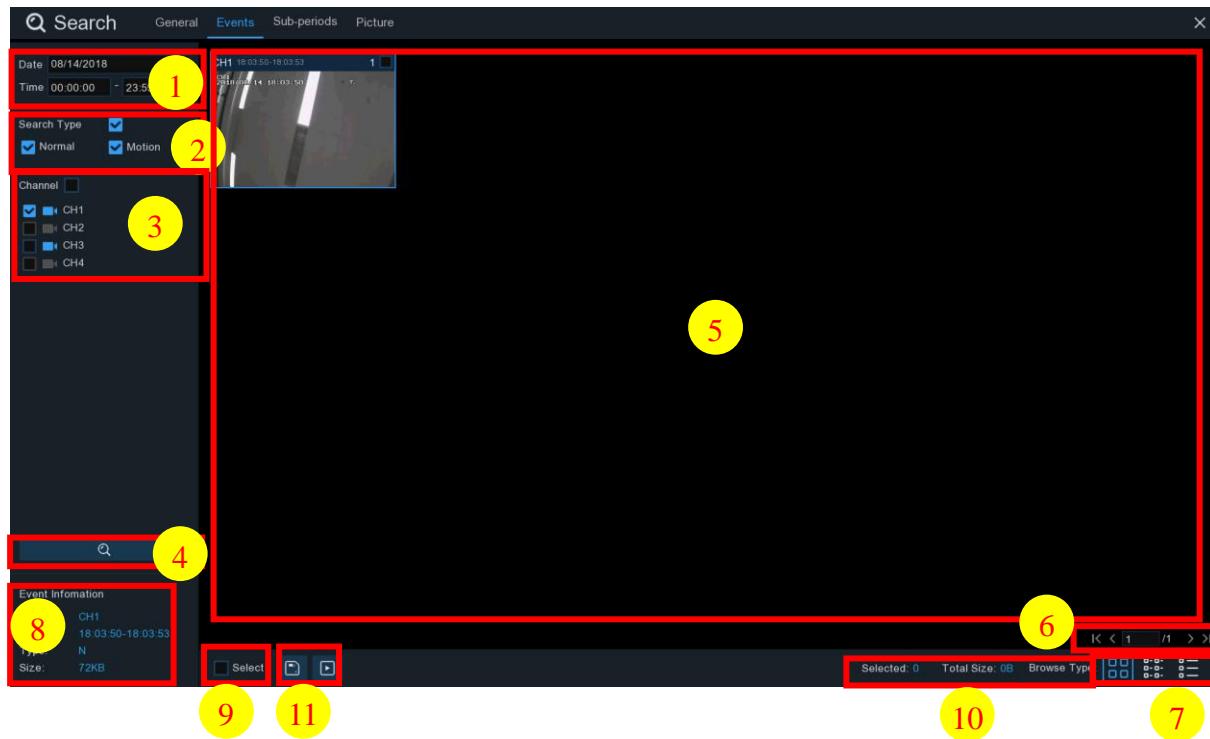


9. The backup drive menu appears. Navigate to the folder you want the backup files to save in.
10. Click **OK** to begin. The progress bar at the bottom of the window shows you the progress of the backup.



6.1.2 Event Search, Playback & Backup

Event search lets you view a list of video recordings with the channel, start and end time, and recording type conveniently summarized. You can also quickly back up events to a USB flash drive.



To search, play & back up for events:

1. Choose the date & time you want to search.
2. Check the recording types you want to search, or check **Search Type** to choose all.
3. Choose the channels you want to search, or check **Channel** to choose all channels.
4. Click icon to start search.
5. Events fitting your search criteria are displayed in list form. You can double click the left button of your mouse upon one of the events to play the video immediately.
6. Click in the bottom-right corner of the menu to browse between pages of events, or input the page you want to browse.
7. You can switch the view of list form in by clicking below icons which is show at the right bottom corner of the screen:
 - Thumbnails view.** You can view the snapshots of the events.
 - List view.** The events will be displayed in list.

1 CH1 00:00:00	2 CH1 00:00:45	3 CH1 00:18:30	4 CH1 00:44:03	5 CH1 01:10:48	6 CH1 01:19:22	7 CH1 01:35:37	8 CH1 01:43:32
9 CH1 02:01:12	10 CH1 02:25:38	11 CH1 02:43:17	12 CH1 03:02:08	13 CH1 03:08:37	14 CH1 03:10:01	15 CH1 03:14:54	16 CH1 03:42:12
17 CH1 04:07:23	18 CH1 04:19:35	19 CH1 04:36:40	20 CH1 05:00:20	21 CH1 05:24:12	22 CH1 05:45:55	23 CH1 06:04:07	24 CH1 06:14:27
25 CH1 06:41:12	26 CH1 06:44:25	27 CH1 07:01:42	28 CH1 07:20:43	29 CH1 07:31:23	30 CH1 07:48:04	31 CH1 08:17:33	32 CH1 08:40:16
33 CH1 08:50:34	34 CH1 09:07:05	35 CH1 09:25:12	36 CH1 09:44:07	37 CH1 09:46:08	38 CH1 10:00:52	39 CH1 10:14:18	40 CH1 10:34:42
41 CH1 10:45:57	42 CH1 11:12:48	43 CH1 11:20:27	44 CH1 11:48:18	45 CH1 12:07:25	46 CH1 12:30:12	47 CH1 12:44:43	48 CH1 12:55:49
49 CH1 13:05:48	50 CH1 13:30:45	51 CH1 13:37:51	52 CH1 13:57:01	53 CH1 14:10:24	54 CH1 14:11:16	55 CH1 14:18:12	56 CH1 14:35:25
57 CH1 14:40:31	58 CH1 14:44:42	59 CH1 14:48:38	60 CH1 15:15:44	61 CH1 15:39:06	62 CH1 16:01:07	63 CH1 16:16:00	64 CH1 16:24:41
65 CH1 16:27:29	66 CH1 16:43:47	67 CH1 16:45:43	68 CH1 17:01:14	69 CH1 17:05:03	70 CH1 17:28:30	71 CH1 17:54:23	72 CH1 18:08:49
73 CH1 18:36:07	74 CH1 18:44:14	75 CH1 18:57:14	76 CH1 19:07:37	77 CH1 19:12:12	78 CH1 19:38:50	79 CH1 19:50:34	80 CH1 20:01:42
81 CH1 20:25:40	82 CH1 20:34:32	83 CH1 20:49:48	84 CH1 21:04:51	85 CH1 21:21:09	86 CH1 21:42:12	87 CH1 21:47:36	88 CH1 22:02:49
89 CH1 22:20:59	90 CH1 22:39:14	91 CH1 22:54:42	92 CH1 22:57:45	93 CH1 23:08:03	94 CH1 23:22:59	95 CH1 23:35:50	

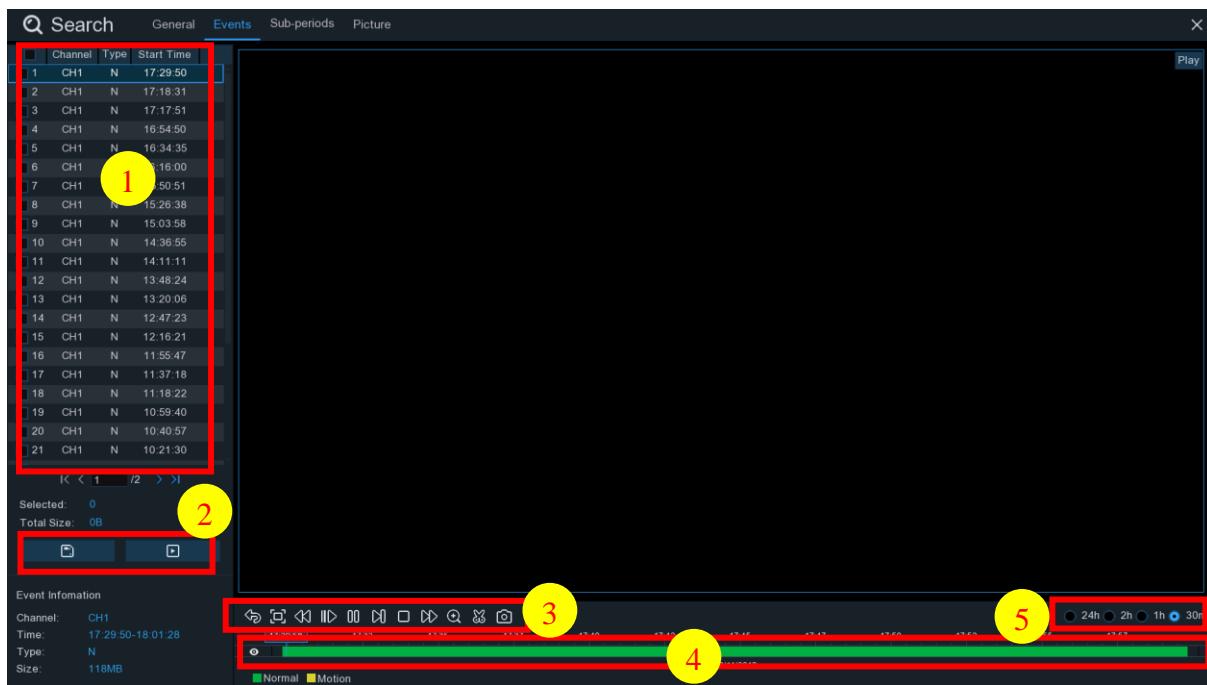
 **Detailed view.** You can view the details of the events.

	Channel	Type	Date	Start Time	End Time	Size	Playback	Lock
1	CH1	MINS	10/23/2017	00:00:00	00:00:45	6MB		
2	CH1	MINS	10/23/2017	00:00:45	00:18:30	150MB		
3	CH1	MINS	10/23/2017	00:18:30	00:44:03	217MB		
4	CH1	MINS	10/23/2017	00:44:03	01:10:48	227MB		
5	CH1	MINS	10/23/2017	01:10:48	01:19:22	72MB		
6	CH1	MINS	10/23/2017	01:19:22	01:35:37	138MB		
7	CH1	MINS	10/23/2017	01:35:37	01:43:32	67MB		
8	CH1	MINS	10/23/2017	01:43:32	02:01:12	150MB		
9	CH1	MINS	10/23/2017	02:01:12	02:25:38	207MB		
10	CH1	MINS	10/23/2017	02:25:38	02:43:17	150MB		
11	CH1	MINS	10/23/2017	02:43:17	03:02:08	160MB		
12	CH1	MINS	10/23/2017	03:02:08	03:08:37	55MB		

In the detailed view mode, you can lock the video events to keep events from being overwritten in the hard drive. Click the  icon to lock or click  to unlock the events.

8. When you click the left button of your mouse upon one of the event, system will show the event information on the left bottom corner of the screen.
9. Check the box next the number of the event to select files, or check the box next **Select** to select all events in the page.
10. The number of selected files, total size information will be displayed at the right bottom of the screen.
11. After selecting file, you can click  icon to save the video to USB flash drive. Or click  icon into event playback control window to play the video.

6.1.2.1 Event Playback Control



1. Event List, you can select the events here.
2. Click icon to save your selected event videos to USB flash drive. Click icon to play video.
3. Control the playback with buttons on **Video Playback Controls**. You can click icon or click right button of your mouse to exit the playback and return to event search window.
4. The event you are playing now will be displayed on the timeline.
5. Use the timeframe options (24h, 2h, 1h, 30m) to view a smaller or larger time period.

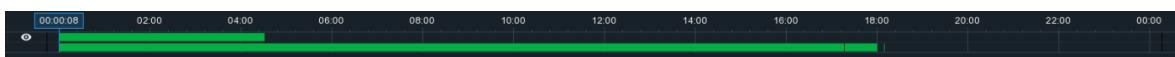
6.1.3 Sub-periods Playback

Sub-periods playback allows you to play multiple normal recordings and motion events simultaneously from a single channel. With normal and event recordings, the video is divided evenly depending on the split-screen mode that has been selected. For example, if the video is an hour long and you have selected Split-screens x 4, each split-screen will play for 15 minutes.



To search & play video in sub-periods:

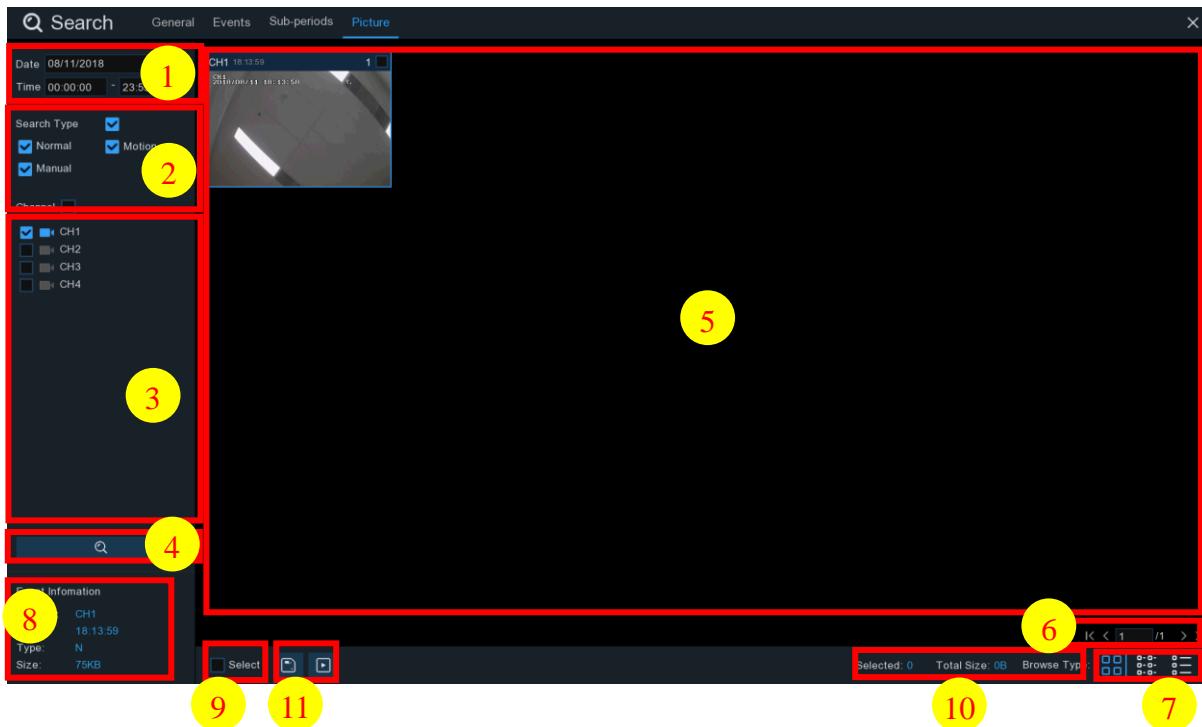
1. Choose the date & time you want to search.
2. Choose the split-screens you want the videos to be played in.
3. Check the recording types you want to search, or check **Search Type** to choose all.
4. Choose the channels you want to search. Please note that this function only supports to search & play one channel at a time.
5. Click the play button to start playing. Control the playback with buttons on [Video Playback Controls](#).
6. Videos are being played in split-screens.
7. Click the left button of your mouse upon a particular split-screen, the time period of the video split-screen will be displayed on the timeline. The color bar on the top of the timeline indicates the time span of the video split-screen you have clicked. The color bar on the bottom of the timeline indicates the time span for the whole videos you have searched.



8. Use the timeframe options (24h 2h 1h 30m) to view a smaller or larger time period.

6.1.4 Picture Search & View

This function can be used to search, play and copy snapshots to a USB flash drive.



To search, play & back up pictures:

1. Choose the date & time you want to search.
2. Check the picture capture types you want to search, or check **Search Type** to choose all.
3. Choose the channels you want to search, or check **Channel** to choose all channels.
4. Click **Q** button to start search.
5. Pictures fitting your search criteria are displayed in list form. You can double click one of the pictures to get a larger view.
6. Click **◀ 4 ▶ /15** icons in the bottom-right corner of the menu to browse between pages of pictures, or input the page you want to browse.
7. You can switch the view of list form in by clicking below icons which is show at the right bottom corner of the screen:



Thumbnails view. You can view the snapshots of the events.



List view. The events will be displayed in list.

1	CH1	00:00:00
2	CH1	00:00:45
3	CH1	00:18:30
4	CH1	00:44:03
5	CH1	01:10:48
6	CH1	01:19:22
7	CH1	01:35:37
9	CH1	02:01:12
10	CH1	02:25:38
11	CH1	02:43:17
12	CH1	03:02:08
13	CH1	03:08:37
14	CH1	03:10:01
15	CH1	03:14:54
17	CH1	04:07:23
18	CH1	04:19:35
19	CH1	04:36:40
20	CH1	05:00:20
21	CH1	05:24:12
22	CH1	05:45:55
23	CH1	06:04:07
25	CH1	06:41:12
26	CH1	06:44:25
27	CH1	07:01:42
28	CH1	07:20:43
29	CH1	07:31:23
30	CH1	07:48:04
31	CH1	08:17:33
33	CH1	08:50:34
34	CH1	09:07:05
35	CH1	09:25:12
36	CH1	09:44:07
37	CH1	09:46:08
38	CH1	10:00:52
39	CH1	10:14:18
41	CH1	10:45:57
42	CH1	11:12:48
43	CH1	11:20:27
44	CH1	11:48:18
45	CH1	12:07:25
46	CH1	12:30:12
47	CH1	12:44:43
49	CH1	13:06:48
50	CH1	13:30:46
51	CH1	13:37:51
52	CH1	13:57:01
53	CH1	14:10:24
54	CH1	14:11:16
55	CH1	14:18:12
57	CH1	14:40:31
58	CH1	14:44:42
59	CH1	14:48:38
60	CH1	15:15:44
61	CH1	15:39:06

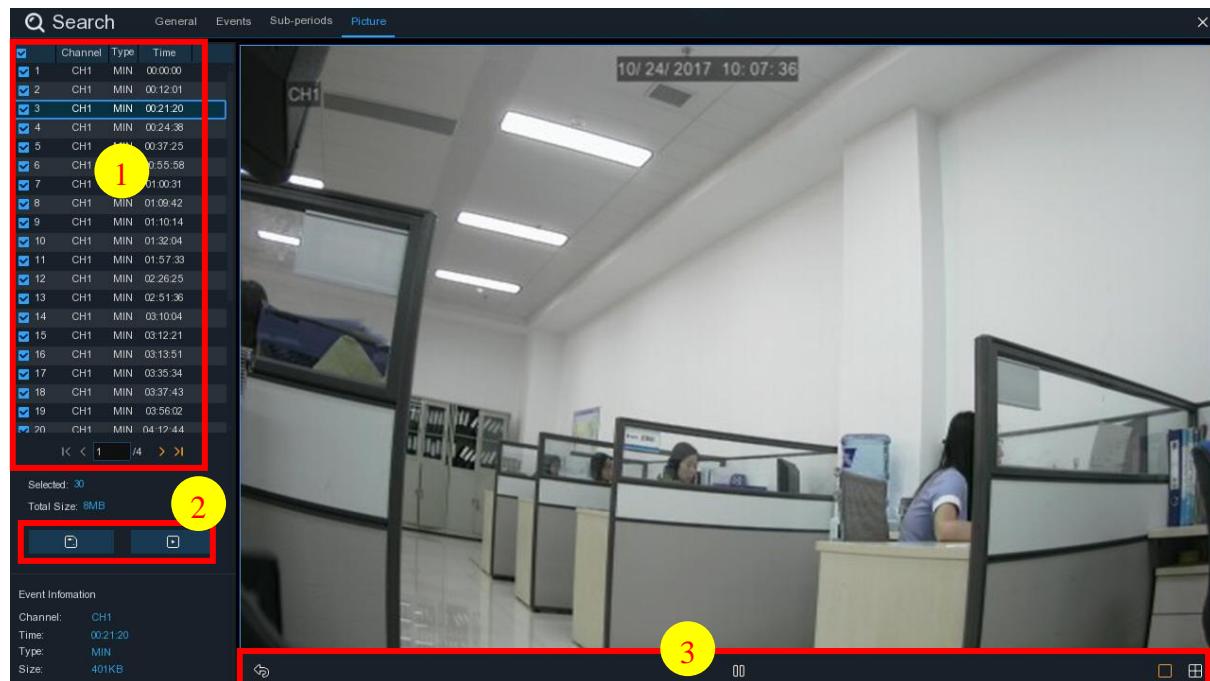


Detailed view. You can view the details of the events.

	Channel	Type	Date	Time	Size	Playback
<input type="checkbox"/> 1	CH1	MIN	10/24/2017	00:00:00	160KB	<input type="checkbox"/>
<input type="checkbox"/> 2	CH1	MIN	10/24/2017	00:12:01	201KB	<input type="checkbox"/>
<input type="checkbox"/> 3	CH1	MIN	10/24/2017	00:21:20	401KB	<input type="checkbox"/>
<input type="checkbox"/> 4	CH1	MIN	10/24/2017	00:24:38	111KB	<input type="checkbox"/>
<input type="checkbox"/> 5	CH1	MIN	10/24/2017	00:37:25	167KB	<input type="checkbox"/>
<input type="checkbox"/> 6	CH1	MIN	10/24/2017	00:55:58	210KB	<input type="checkbox"/>

8. When you click the left button of your mouse upon one of the pictures, system will show the picture information on the left bottom corner of the screen.
9. Check the box next the number of the event to select files, or check the box next **Select** to select all pictures in the page.
10. The number of selected files, total size information will be displayed at the right bottom of the screen.
11. After selecting file, you can click  button to save the pictures to USB flash drive. Or click  button to go into picture preview control window.

6.1.5.1 Picture Preview Control



1. Picture List, you can select the pictures here.
2. Click  button to save your selected pictures to a USB flash drive. Click  button to view the pictures in slideshow.
3. Press  button to exit preview control window and go back to picture search window.
Press  button to pause, press  to resume slideshow.
Press  button to display previous snapshot or group of snapshots, press  to display the next snapshot or group of snapshots.
- Click  button to view a single snapshot at a time, click  button to view four snapshots at a time, press  buttons to view nine snapshots at a time.

Chapter 7 Remote Access via Web Client

Use the Web Client to remotely access your WIRELESS NVR at any time via a PC. Before you access the Web Client, you need to ensure that the network settings of the WIRELESS NVR are configured properly. The most convenient and easiest way is if you have set the WIRELESS NVR a static IP address (please see “[5.5.1 Network](#)”). It means you only need to open the web browser on your PC and type in the static IP address you have set on the WIRELESS NVR. However, if the IP address of the WIRELESS NVR is assigned by a DHCP server (see“[5.5.1 Network](#)”), then it means that each time you reboot the WIRELESS NVR, the IP address changes. In this case, ask if your ISP can provide you a static IP address. If not, then configure the DDNS service. See the network settings in “[5.5.4 DDNS](#)”.

System Environment Requirements

The minimum requirements for hardware and OS required to run Web Client are given as below.

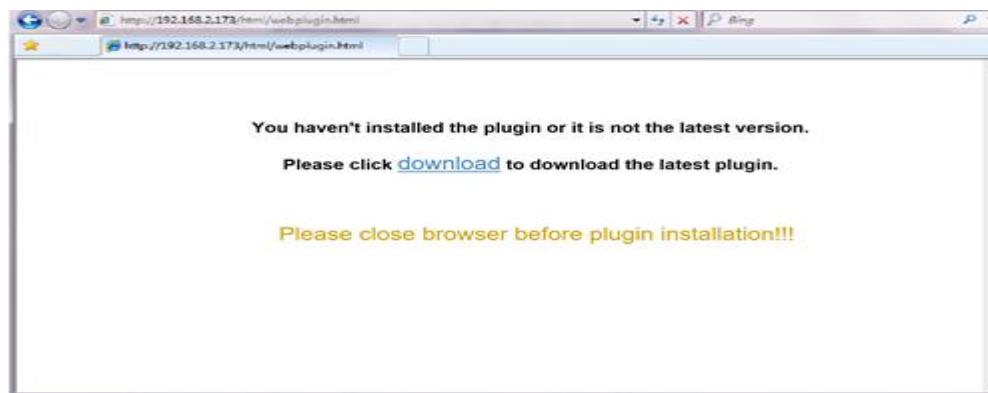
Item	Minimum	Recommended
CPU	Intel i3	Intel i7 or higher
RAM	4G or more	8G or more
Hard Drive	500G or more	1000G or more
Display RAM	2G or more	4G or more
Display Resolution	1280*1024	1920*1080
OS	Windows® Vista, Windows® 7 ,Windows® 8 Mac OS X® 10.9 and above	
DirectX	DirectX 11	
Direct3D	Acceleration Function	
Ethernet Adapter	10/100M Ethernet Adapter	
IE	Microsoft Internet Explorer (Ver. 11,10,9,8)	
Mozilla Firefox	43.0.4 or above	
Google Chrome	V44 or below	
Mac Safari	5.1 or above	

7.1 Web Plugin Download and Installation

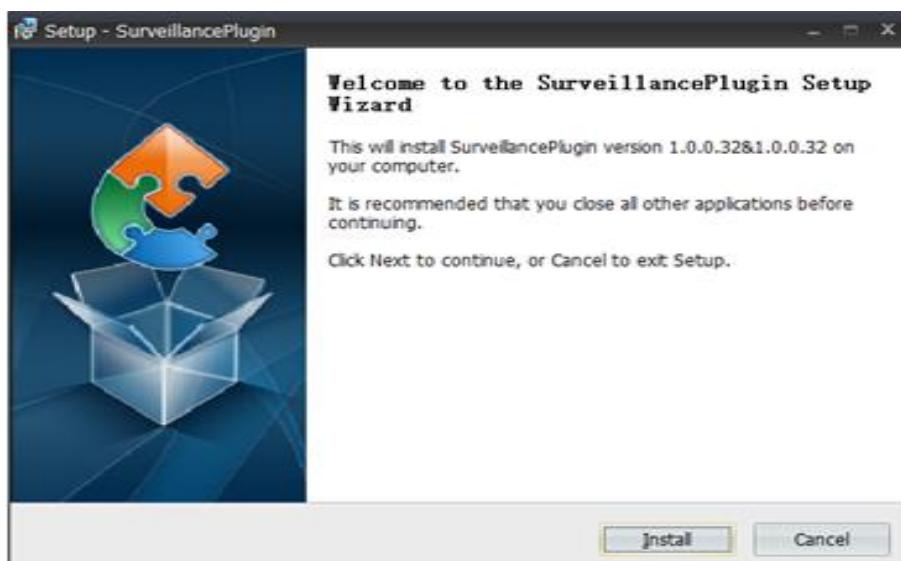
To access the Web Client, do the following:

For IE/Chrome/Firefox:

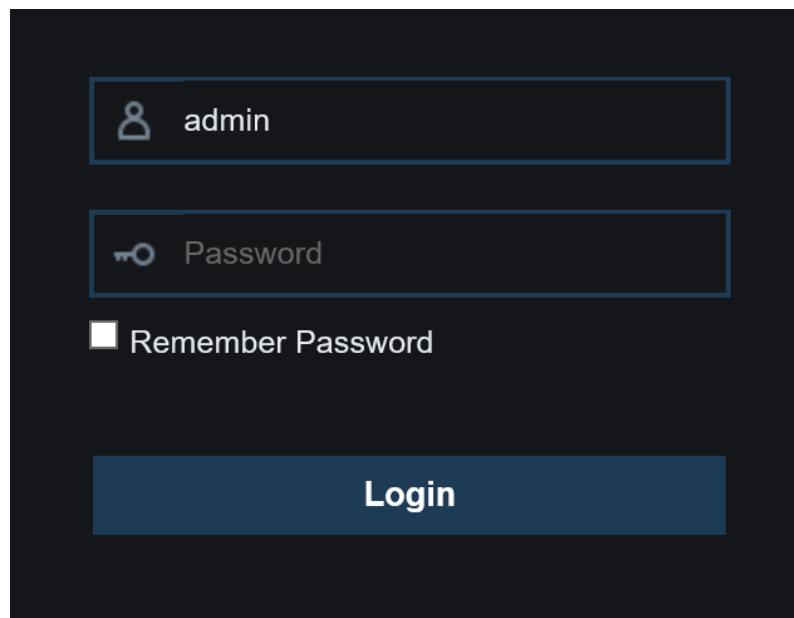
- 1) Launch the explorer on your PC and enter the WIRELESS NVR static IP address or DDNS domain name (Host Name) you have set on WIRELESS NVR in the URL box.



- 2) For the first time you run the web client, system will require to install the web client plugin. Click [download](#) to download the plugin and install to your computer.



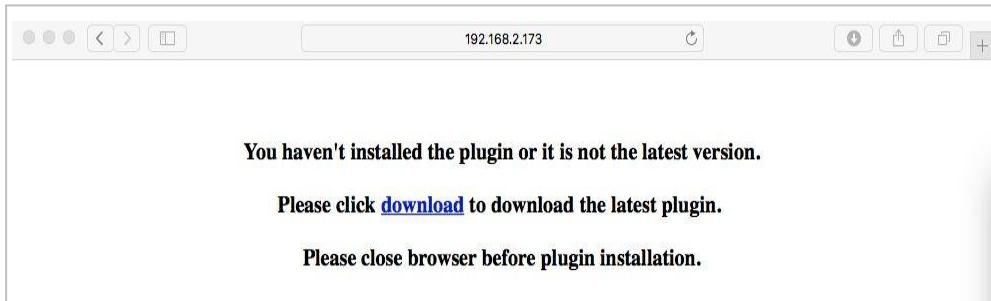
3) After installing the plug-in, close & launch again your browser and repeat step 1 to open the login page. Input your user name and password to login the web client.



Note: If you use Google Chrome, please use Version V41 or below. If you use V42 to V44, you need to enable NPAPI plugins. Please enter <chrome://flags/#enable-npapi> on URL bar to find and enable NPAPI. It doesn't support V45 or above so far.

For Mac SAFARI:

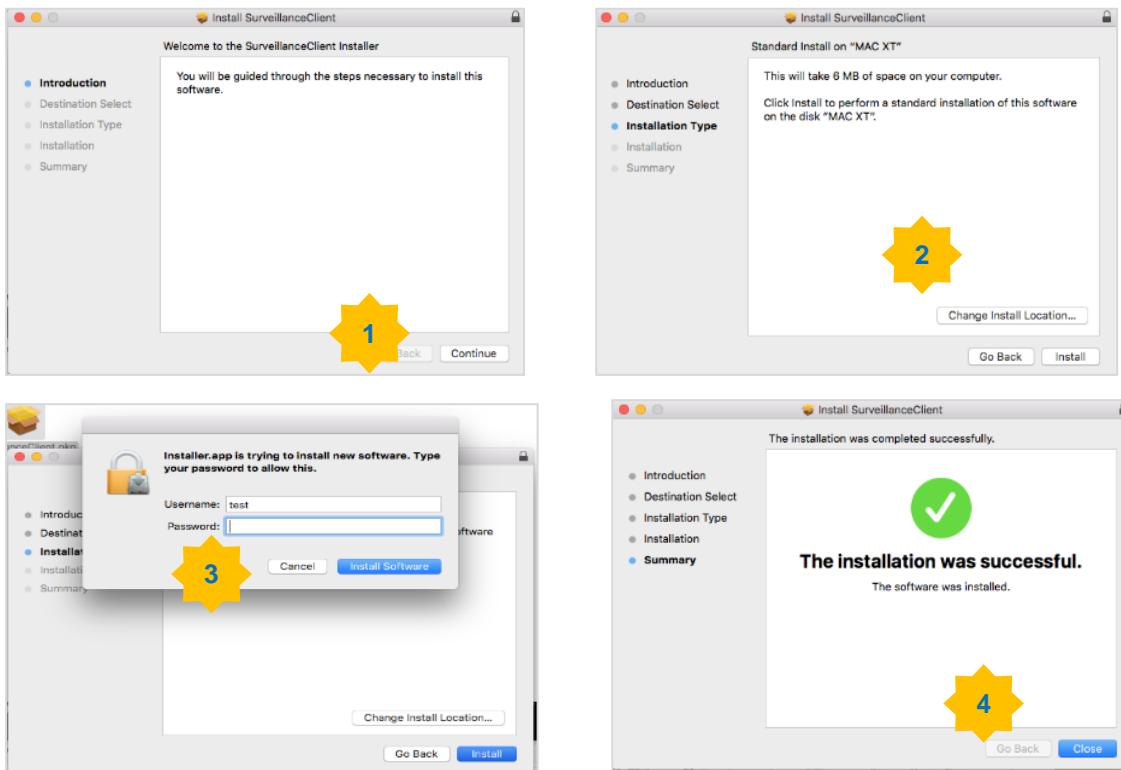
- 1) Launch the Safari on your Mac, and enter the WIRELESS NVR static IP address or DDNS domain name (Host Name) you have set on WIRELESS NVR in the URL box.



- 2) Download the plug-in "SurveillanceClient.dmg", locate the downloaded file and double click it.



- 3) Click on "Continue" --> "Install". Enter user name and password for Mac computer, Click on "Install Software" --> "Close" to finish installation.



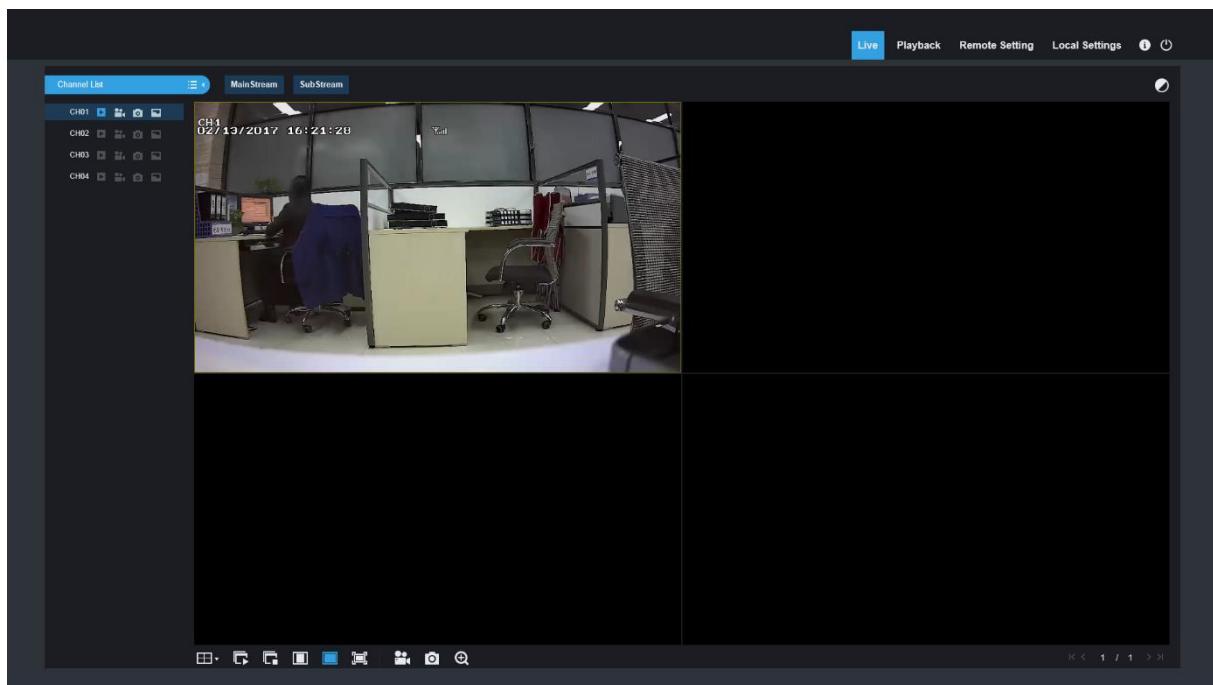
- 1) Close SAFARI repeat step 1 to open the Web Client login page.

7.2 Web Client Manager

The web client supports to full control the WIRELESS NVR with administrator account. Please make sure to protect your user name & password for preventing illegal login.

7.2.1 Live Interface

This is the first screen that opens after you have logged in to the Web Client. Here you can open or close live preview, record video to local computer manually, take snapshots of the screens, color adjustment, etc.



1. Buttons on a single live interface:



: Record switch: the remote record switch of client. Record will be automatically saved to a specified position on PC after the function is enabled.



: Snapshot: Capture the selected live image and save it to a specified position on PC. The image is saved as *.bmp format.



: Digital ZOOM.



: Open the images on Live window.



: Close all the Live channels



: Switch display mode in channel window



: Open the images on Live window.



: Stretch.

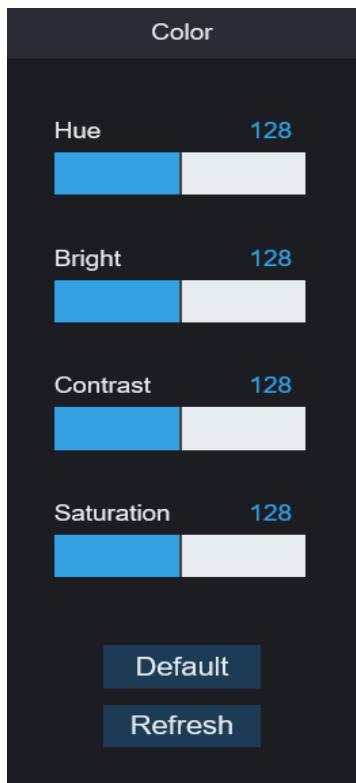


: Original proportions.



: Click to maximize the current window to full screen. Right click to popup menu option and select Exit Full Screen.

2. Video Control



Hue: Adjust the chromaticity of video

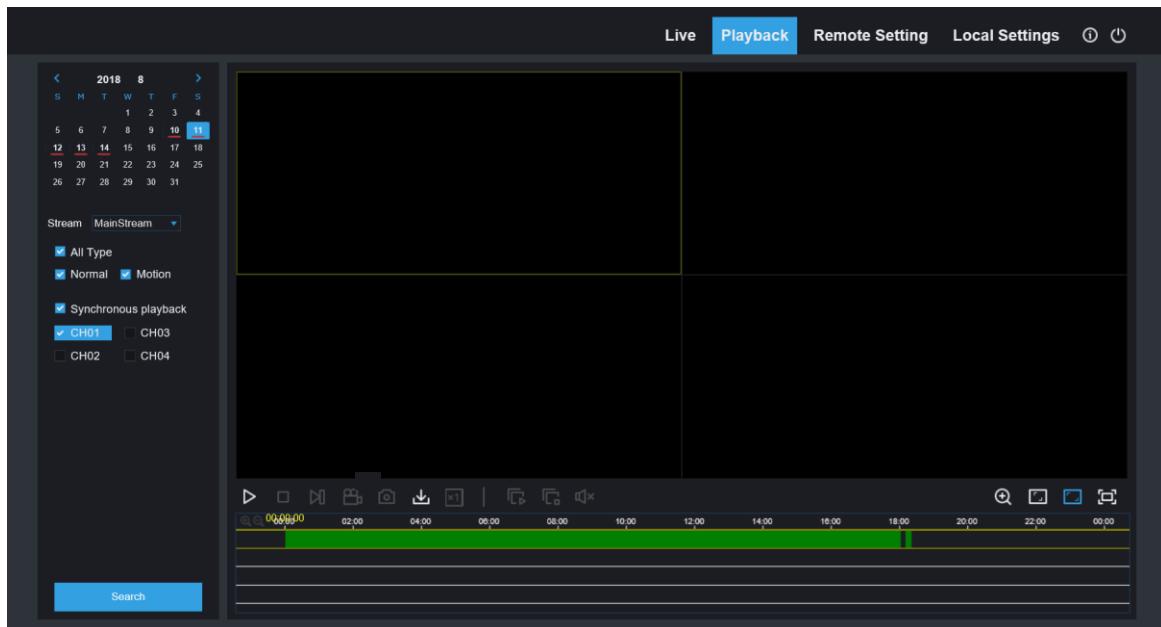
Bright: Adjust the brightness of video

Contrast: Adjust the contrast of video

Saturation: Adjust the saturation of video

7.3.2 Playback

You can search & play recorded files stored on the HDD inside the WIRELESS NVR, and save the result to the local directory on your PC.



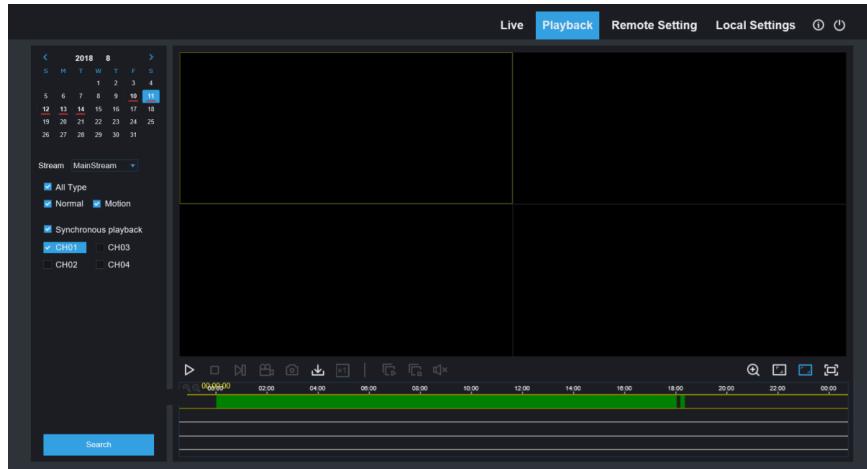
Click **Playback** to enter into Playback interface to remotely view the records in WIRELESS NVR HDD.

It supports 1 to 4 channel record playback.

1. Record Search

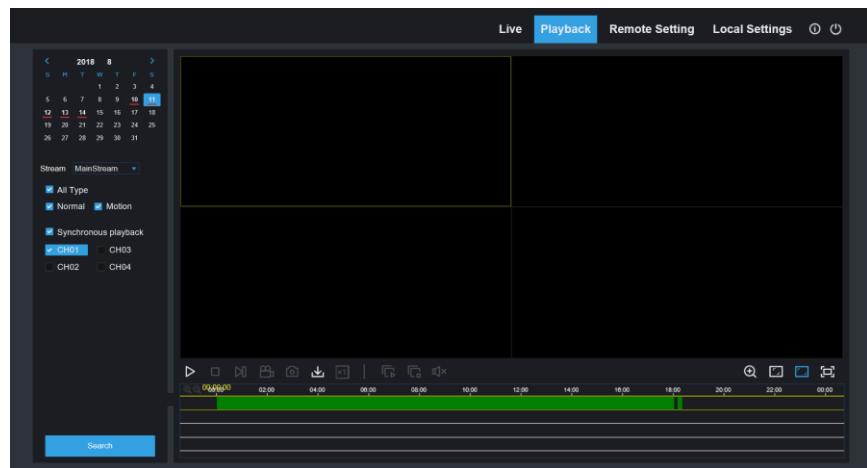
Record playback procedure

Firstly, select the date you want to check and tick 1 to 4 channels. Any record files in current channel at current date will be displayed in the status bar of the interface.



Secondly, select record type (Normal record, Motion record) and channels, and then click

“Search”, and time axis panel will display specific time quantum. On the time axis, red part stands for motion record, green stands for normal record and original part stands for no record during this period.



Before playback, choose to enable playback 4 channels synchronously. If you tick-select “**Synchronous playback**”, that means the selected channel will playback synchronously; otherwise, you could separately control the channels playback.

Thirdly, start playback

Click to start record playback. When mouse curse is moving on the time axis, the time point of current position will be displayed on the time axis screen. Click to locate the record. Click the or to zoom in/out the time bar display ratio.

2. Playback Control

Playback control bar.



Detailed brief description is shown as below list

Key	Description	Key	Description
	Play		Stop playing all the playback
	Pause		Open/Close is Speaker
	Stop		Slow/Fast playing
	By frame		Slow playing 1/2,1/4, 1/8, Fast playing 1/2/4/8
	Record Clip		Digital ZOOM
	Snap		Original proportions
	Download		Stretch
	Open all the playback channels		Full Screen

Record file clip



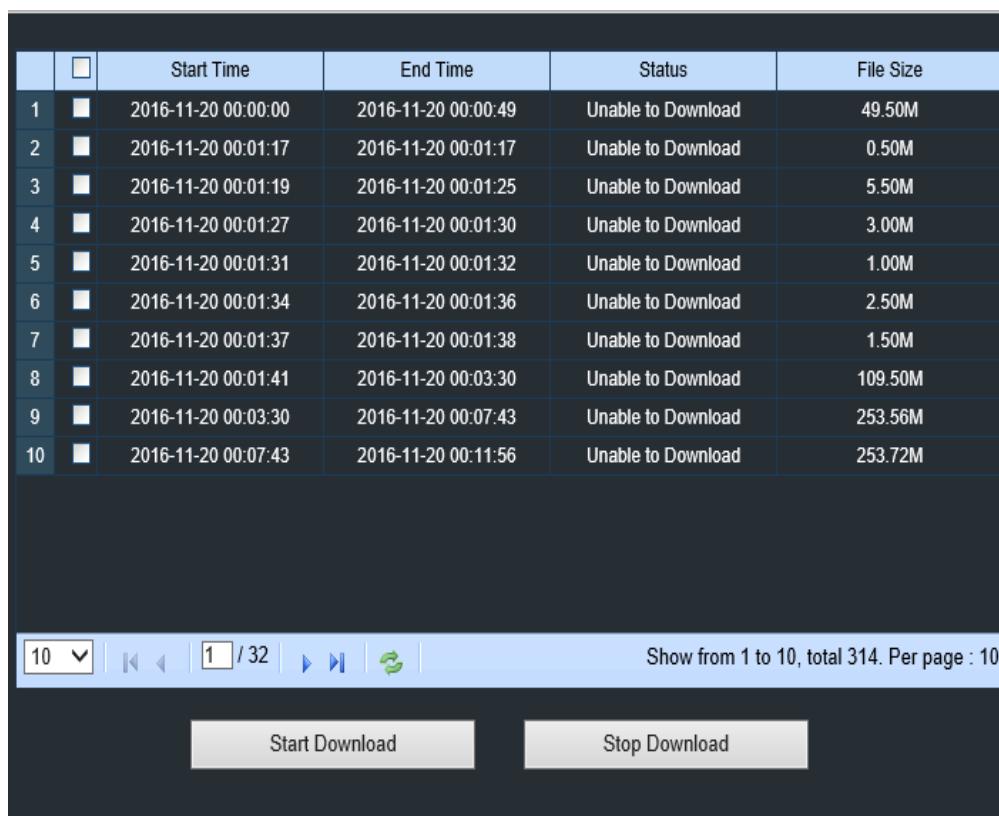
After opening playback, click icon to clip the selected file; and click again to stop the clip function. Then playback clip is successfully done. Record clip file will be saved as *.264 format.

Snapshot function

Move the mouse curse to the channel you want to capture, and click [] icon to capture the live images remotely. After capturing the images successfully, a path prompt box will be popped up. The captured file will be saved as .bmp format.

Record file download

Click download icon “” on the control bar to display all the matched record file according to the search conditions of channels.



The screenshot shows a table with 10 rows of recorded files. The columns are labeled: Start Time, End Time, Status, and File Size. The data is as follows:

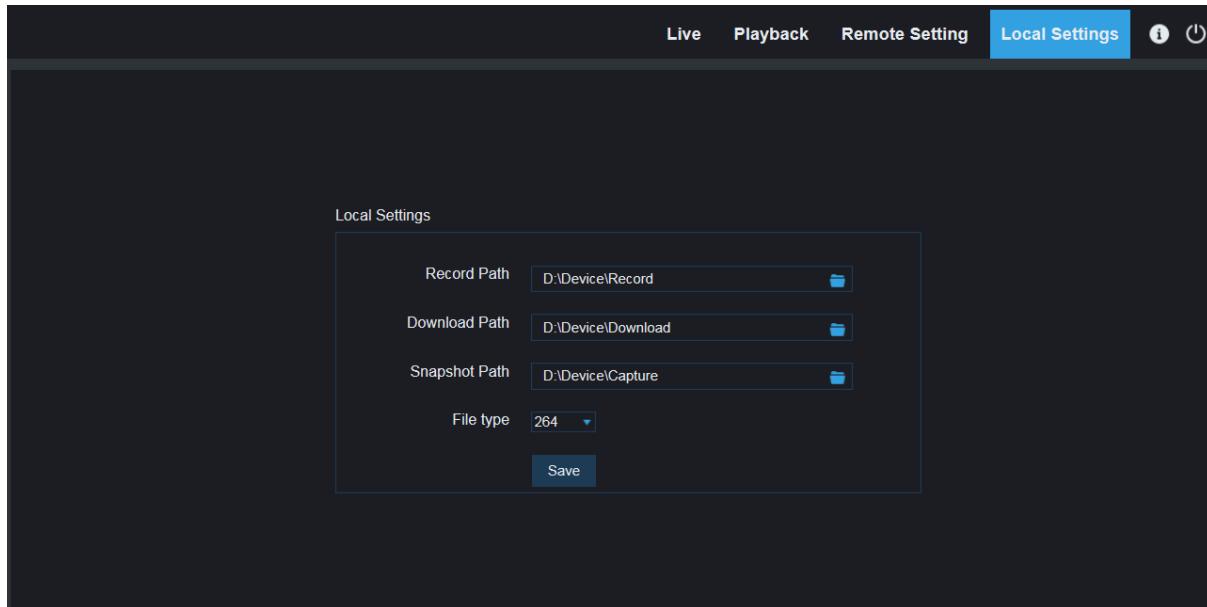
		Start Time	End Time	Status	File Size
1	<input type="checkbox"/>	2016-11-20 00:00:00	2016-11-20 00:00:49	Unable to Download	49.50M
2	<input type="checkbox"/>	2016-11-20 00:01:17	2016-11-20 00:01:17	Unable to Download	0.50M
3	<input type="checkbox"/>	2016-11-20 00:01:19	2016-11-20 00:01:25	Unable to Download	5.50M
4	<input type="checkbox"/>	2016-11-20 00:01:27	2016-11-20 00:01:30	Unable to Download	3.00M
5	<input type="checkbox"/>	2016-11-20 00:01:31	2016-11-20 00:01:32	Unable to Download	1.00M
6	<input type="checkbox"/>	2016-11-20 00:01:34	2016-11-20 00:01:36	Unable to Download	2.50M
7	<input type="checkbox"/>	2016-11-20 00:01:37	2016-11-20 00:01:38	Unable to Download	1.50M
8	<input type="checkbox"/>	2016-11-20 00:01:41	2016-11-20 00:03:30	Unable to Download	109.50M
9	<input type="checkbox"/>	2016-11-20 00:03:30	2016-11-20 00:07:43	Unable to Download	253.56M
10	<input type="checkbox"/>	2016-11-20 00:07:43	2016-11-20 00:11:56	Unable to Download	253.72M

Below the table is a navigation bar with the following elements: a dropdown menu set to "10", left and right arrows, a page number "1 / 32", a refresh icon, and a text "Show from 1 to 10, total 314. Per page : 10". At the bottom are two large buttons: "Start Download" and "Stop Download".

Tick-select the record file you want to download and click [Start download]. System will download the record file in sequence and save to local PC. The downloading file will be displayed in percentage form. After downloading finishes, “Complete” will be displayed on the status bar.

Tip: The recorder supports HTTP, if there is network disconnection during the download, continue to download from the file point before disconnecting when the network recovers.

7.3.3 Local Setting



Record Path: Set the path to save manual recordings on your PC's local drive.

Download Path: Set the path on your PC's local drive where you want to download recordings from the WIRELESS NVR.

Snapshot Path: Set the path to save manual snapshots on your PC's local drive.

Save: Click Save to save the modifications.

File Type: Choose your preferred file type for manual recordings.

Interval: Determine the maximum length of manual recordings.

Chapter 8 Appendix

8.1 Troubleshooting

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 data cord and power cables are securely connected, and if something wrong with the HDD interface. Or you may check if your HDD is supported by referring to the specifications or descriptions.
2. Q: I have changed the password but forget the new password, how can I access the system?
A: If you forget system password, please consult with our technical personnel. We strongly suggest user to set password easy to be remembered and relatively safe. If you have safety requirement, please do not set very simply password, such as 000000.
3. Q: We see abnormal video signal or even no video signal by connecting the WIRELESS NVR and camera together. Power supply for both devices is OK. What is wrong?
A: Check network cable at WIRELESS NVR side to see if the cable is firmly connected and if it is worn out and needs to be replaced, or to check if NTSC or PAL is selected consistently.
4. Q: How to prevent WIRELESS NVR from being influenced by heat?
A: The WIRELESS NVR needs to dissipate heat while it is running. Please place the WIRELESS NVR in a place with good air circulation and away from heat sources to ensure stability and life of the WIRELESS NVR.
5. Q: The remote controller of WIRELESS NVR doesn't work while the monitor screen is OK and panel keys are functional. Why?
A: Operate again by aiming the remote controller at the IR receiver on front panel. If it still doesn't work, please check if the batteries in the remote controller are dying. If not, check if the remote controller is broken.
6. Q: I want to take out HDD from my PC and install it in WIRELESS NVR. Can it work?
A: All HDDs supported by the system can be used. But remember, once WIRELESS NVR runs, the data on your HDD will be lost.
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 WIRELESS 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 WIRELESS 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.

12. Q: Why doesn't dynamic detection work?
A: Please check if the motion detection time and motion detection regional setting are 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 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 or Stop Recording 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. And another way of stopping recording is to set channel as off status in record setting.

8.2 Usage Maintenance

1. To shut down WIRELESS 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 WIRELESS NVR away from heat sources or places.
3. Clean the internal dust regularly. Make sure the good ventilation of WIRELESS NVR so as to ensure the good heat dissipation.
4. Please check the HDD cable and data cable regularly to see if they are ageing.
5. Please prevent the audio and video signals of WIRELESS NVR from being intervened by other electronic devices, and prevent the HDD from being damaged by static electricity and induced voltage. If the network cable is frequently plugged, it is suggested to replace connecting line regularly, or the input signal may be unstable.
6. This is a class A product. It maybe bring wireless interference in life. Under this situation, it need user to make measures.

8.3 Accessories (For reference only)



Remote Controller



Power Adapter



Warranty Card



USB mouse



CD

FCC Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 or more 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

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 equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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