SAMSUNG
WISENET

NETWORK VIDEO RECORDER

User Manual

SNR-73200WN

Overview of NVR

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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. Please use the power supply enclosed or specified by the manufacturer.
   Never operate the equipment by using unspecified power supply.
2. Never push objects of any kind through openings of NVR so as to avoid electric shock or other accidents.
3. Do not put the equipment in a dusty location.
4. Do not place the equipment under the rain or humid environment like the basement.
   If the equipment is accidentally in contact with water, please unplug the power cable and immediately contact technical support.
5. Keep the surface of the equipment clean and dry.
   Use a soft damp cloth to clean the outer case of the NVR. (Do not use liquid aerosol cleaners.)
6. Do not operate if any problems are found.
   If there is a strange smell or sound from the NVR, unplug the power cable and contact technical support.
7. Do not try to remove the NVR cover to avoid electrical shock.
8. Handle with care.
   If NVR does not work properly, please contact technical support for repair or replacement.
9. Install and place the equipment in a well ventilated area. The NVR system includes a HDD, which produces large amount of heat during operation. As a result, do not block the ventilation vents (on the top, bottom, sides and the back of the NVR).
10. The power adapter should only be connected to the NVR. Do not connect it to additional equipment or else the NVR may restart repeatedly due to insufficient power.
11. Do not install near any heat sources such as radiator, stove, and other machinery or devices (including speakers) that produce large amount of heat.
12. If the provided plug does not fit your outlet, please technical support for assistance.
13. Protect the power cord from being walked on or pinched particularly at the plug level and each ends of the cord.
14. Only use attachments/accessories specified by the manufacturer.
15. Only use the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the system.
    When a cart is used, use caution when moving the cart and the device to avoid injury from tip-over.

16. Unplug the device during lightning storms or when unused for long periods of time.
17. Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way, such as power-supply cord or plug is broken, liquid has been spilled or objects have fallen onto the device, exposed to rain or moisture, does not operate normally, or has been dropped.

Standards Approvals

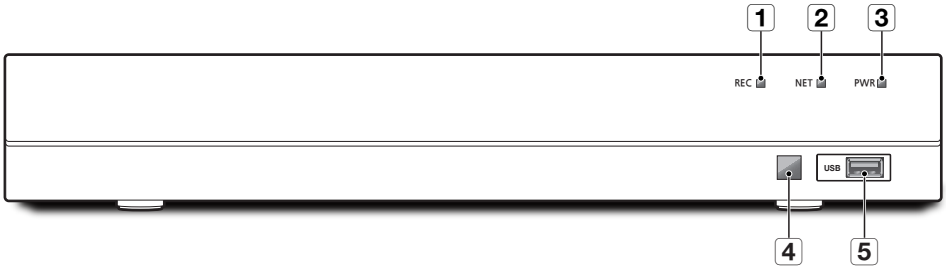
- Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
  This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Overview of NVR

FRONT PANEL

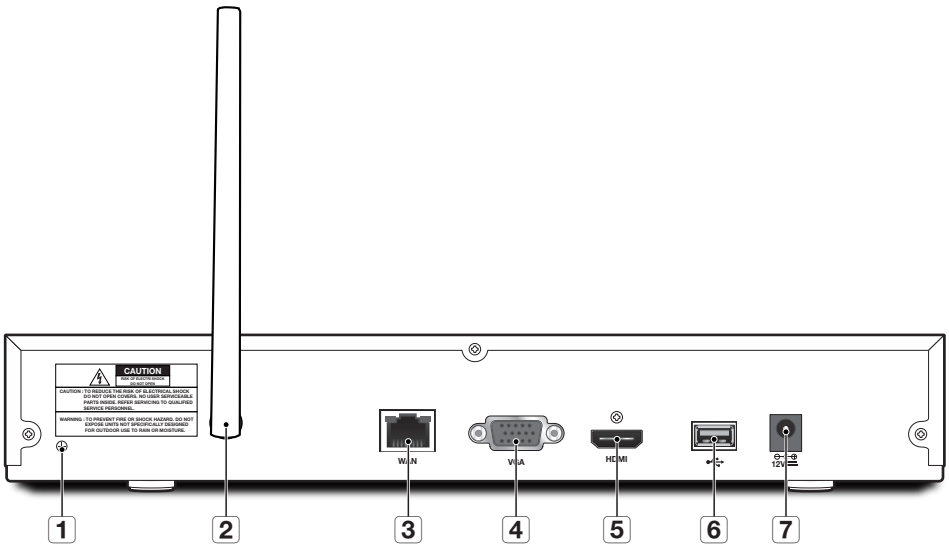
NVR is short for Network Video Recorder.



Type		Key or indicator	Identification	Functions
1	Status lamp	HDD indicator	REC	If the "Red" indicator flashes, the hard drive is being read or written to.
2		Net indicator	NET	Display network connection and data transfer status.
3		Power indicator	PWR	If the "Blue" indicator is on, NVR is getting power normally.
4	IR port		□	Receive IR signal from Remote Controller.
5	USB port	USB	USB	USB port

REAR PANEL

SNR-73200WN

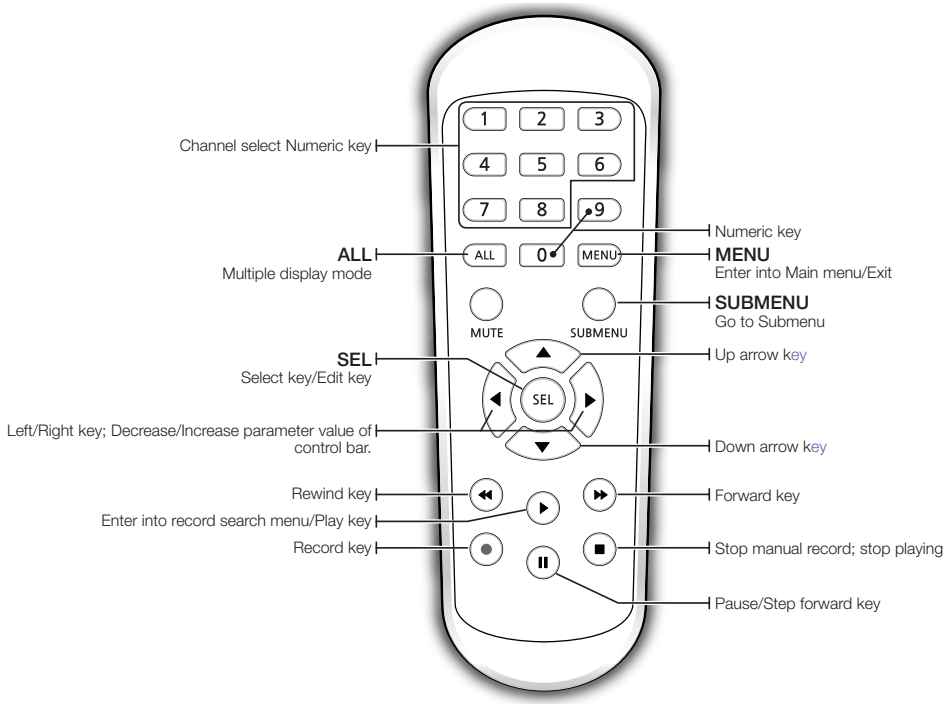


Physical Interface	Connection
1 Ground connection	A terminal to connect a separate ground cable. ■ Make sure to add a ground cable in order to use the equipment safely.
2 Antenna	Receive signal from wireless camera.
3 WAN: (RJ45) Network port	Connect with WAN, Ethernet cable.
4 VGA port	Connect with VGA display devices, such as PC monitor.
5 HDMI	Connect with HDMI display devices, such as PC monitor.
6 USB port	Connect with USB.
7 Power port	Connect with the power supply DC12V 2A, included with the device

Overview of NVR

REMOTE CONTROLLER

Operation of remote controller



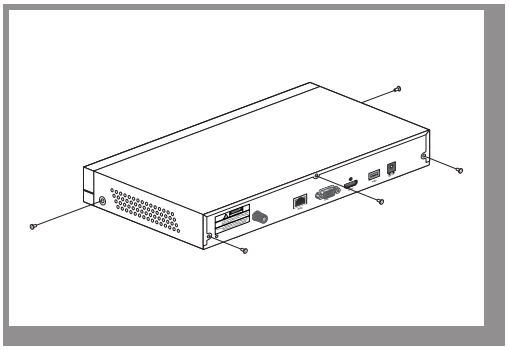
- There is no function of Mute button.
- SNK-B73040BW is a 4 channel NVR. Please press 1 to 4 key to select channel.

INSTALL HARD DRIVE

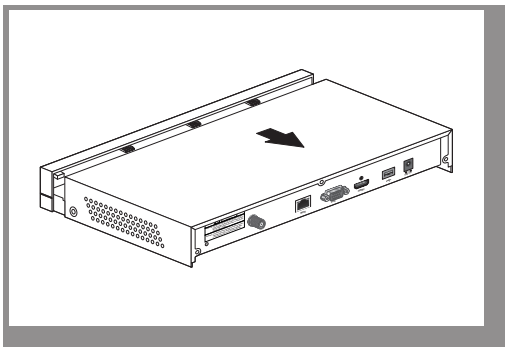
- HDD is pre-installed. If you want to replace hard disk drive, please refer to the following instruction. Please do not remove the hard drive when NVR is operating.

Installation of Hard Drive

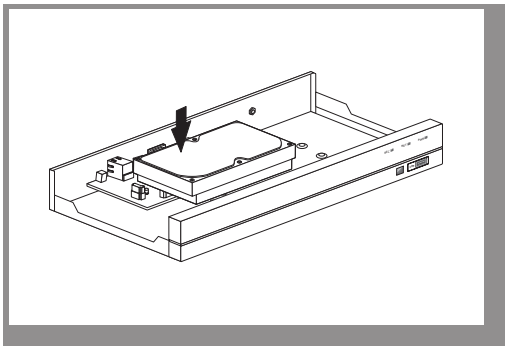
1. Using a screwdriver, remove the screws from the side and back panels.



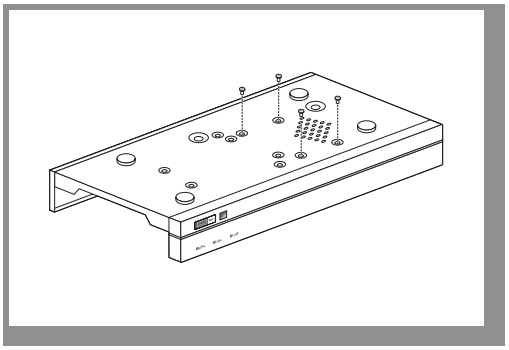
2. Remove the top cover.



3. Connect data and power cables of hard drive to the motherboard. Mount the hard drive by mounting it onto the rack and connecting the power and data cables.



4. Multiple groups of screw mounting holes are provided on the bottom of the NVR. Screw the hard drive in place according to the size of your hard drive.

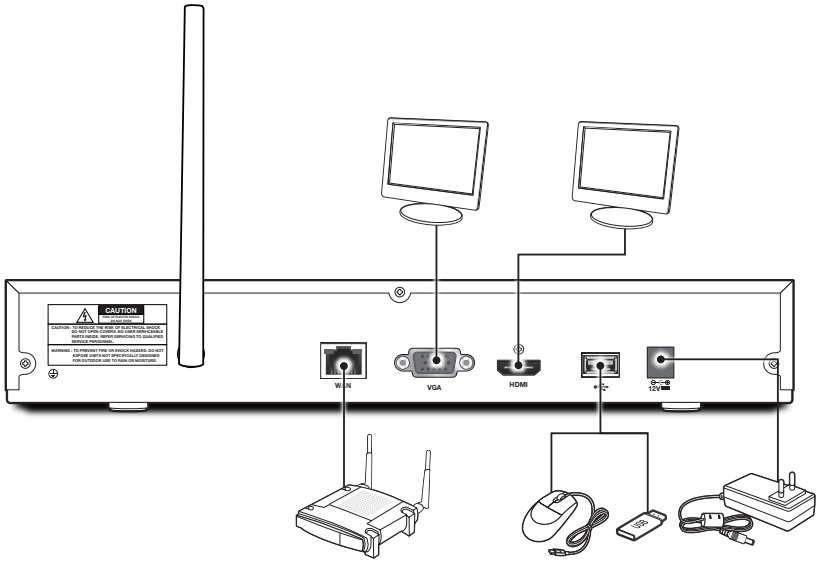


Overview of NVR

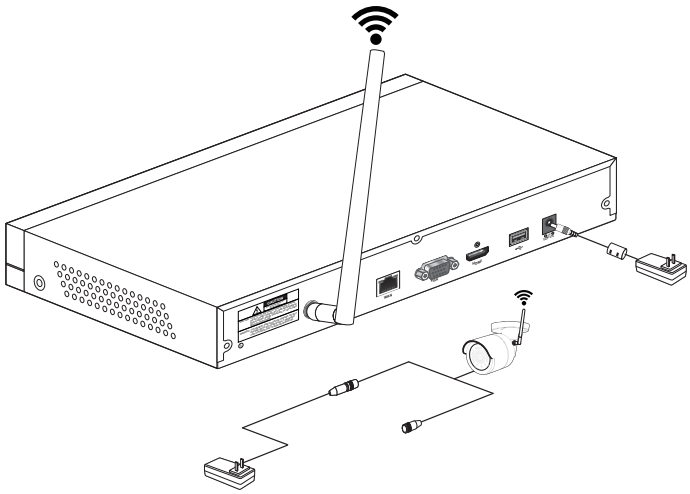
CONNECT EXTERNAL EQUIPMENT

Connect your monitor to the NVR using the VGA or HDMI video cable. Connect NVR to the power supply adapter provided. After all connections are completed, plug the NVR in to perform function checks.

- The appearance of power adaptor differs depending on sales region.



CONNECT NVR



- Images may differ depending on the model.
- Camera's shape can be different depending on AIO Kit you purchased.

NVR Boot up

SYSTEM INITIALIZATION

After connecting the NVR power cable to wall outlet, the NVR system initializing screen will appear.

- It may take 40 seconds to start up, and the screen may beep 5~6 times.

STARTUP WIZARD

After the NVR startup is complete, the startup wizard will display.

Wizard setting menu includes: Homepage, admin password setting, hard drive management, video recording schedule, basic system configuration, network setup, e-mail and DDNS setting. You can click on "Don't show this window next time" if you do not wish to have the wizard setting to appear next time.

1. Set Admin Password: Please create a user name and password for your device. Password MUST be 8~13 characters long. When password is 8~9 characters long, it should be with at least a combination of letters, digits and special symbols. If it is 10~13 characters long, it should be with at least a combination of two types of characters. 4 or more contiguous or repeated characters or key arrangement are prohibited, for example 1111, 1234, abcd, qwerty.

Use Virtual Keyboard

Virtual keyboard window will be displayed for input. Click on the desired characters to apply them. Press <Shift> to switch to input of upper-case letters.
Press <Shift> again to switch to input of special characters. The virtual keyboard is used in the same way as with physical keyboard.
For input of password, use letters and special characters other than <\> and <">.

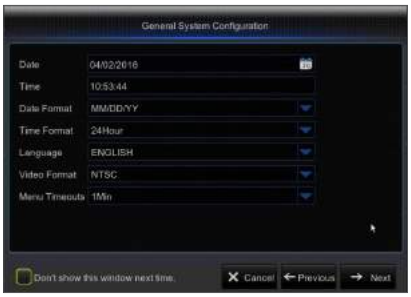
NVR Boot up

2. Hard Drive Management: Any new disk connected must be formatted before use. Click on "Select" to highlight the hard drive to be formatted. Click on "Format HDD" and the user login box will appear. Enter the password to log in. Click on "OK" to format the disk when the "Entire Data Will Be Erased. Do You Want To Continue?" dialog box appears. Formatting process is complete when the progress bar is full.

3. Video Recording Schedule: Select the channel and the date to be set. One week's schedule can be set.
The record schedule of the current channel can be copied to any other channel or all channels.

- In the Record menu and Record Search menu, when no colors are presented, it means there are no recordings during that time.
- "Green" stands for normal record and "yellow" stands for motion record.

4. General System Configuration: Set the date, time, date format, time format, language, video format and menu timeouts.



5. Network Configuration (DHCP): In DHCP mode the router will automatically assign an IP address to NVR. If the NVR fails to obtain an IP address, refer to the NVR Router Guide. If the problem still cannot be resolved, contact technical support.

6. Email Configuration: Receive or Send NVR alarm email and set parameters like email address, Encryption, email enable, and interval.

- **Encryption**: Disable, SSL, TLS and Auto optional. Auto means it can detect the encryption type automatically. It is recommended to set the encryption type as Auto.
- **SMTP Port**: Mail sending port used by SMTP (Simple Mail Transfer Protocol). Server is generally Port 25, or Port 465 when SSL is used by Gmail.
- **SMTP Server**: Enter the address of the server for the mailbox in use.
- **User Name**: Enter a server to connect to. For example, email "aaa@gmail.com" should correspond to server "smtp.gmail.com"
- **Password**: Enter the password of the SMTP server user.
- **Sender address**: Enter sender's mail address, which must correspond to the server used. For example, mailbox "aaa@gmail.com" should correspond to server "smtp.gmail.com".
- **Receiver 1/2/3**: Recipient's mail address, used to receive alarm image and message from NVR side. If system alarms continually and sends Email images frequently, save the images to another location or remove them, so as to avoid excessive space occupation and thereby affect your normal use of mailbox.
- **Interval**: A mail will be sent every three minutes by default. If the time interval for mail notification is set too short, email server may deem mails as junk mails, so they cannot be transferred normally.

7. DDNS SETTING. User may set DDNS under network type of PPPoE/Static/DHCP after applying dynamic domain service. User may remotely access NVR through domain by using browser in the form of http://applied domain: mapped HTTP port number when using DDNS domain name to access NVR.

- **Server address**: Select dynamic domain name server provider. Available domain name servers (HANWHA-SECURITY, DDNS_3322, DYNDNS, NO_IP, CHANGEIP, DNSEXIT)
- **Domain**: dynamic domain name of the host obtained from dynamic domain name service provider upon registration, for example, NVR2016.no-ip.org
- **User Name**: The user name registered upon application for dynamic domain name.
- **Password**: The password set upon registration.
- Click on "Test DDNS". If connection succeeds, it will be indicated that "DDNS Test is Successful!"
  Perform remote access to NVR by using dynamic domain name, for example, http://ddns.hanwha-security.com/snb5000: HTTP port number (e.g. 19010)

8. Click on "Save" to finish setting of startup wizard.

REGISTERING WITH DDNS

To register your product with the Wisenet DDNS

1. Visit the Wisenet DDNS web site (http://ddns.hanwha-security.com) and sign in with a registered account.

2. From the top menu bar, select <**MY DDNS**>.

3. Click the [**Register Product**] tab.
4. Enter the product ID.

5. Select a <**Type**> and specify the <**Model**>.
6. Specify the product location with a description if necessary.
7. Click [**Product Registration**].
   The product will be added to the product list that you can check.

MAIN INTERFACE

In real-time preview mode: right click on any area to access the desired menu. Right click on it to open a context menu, whose menu items may vary depending on the specific condition, such as sign-in, sign-out, split screen mode and various operation conditions.

Left click on any channel to access shortcut menu, where operations such as image capture, recording and image zoom-in are available.

The video recording marks are as shown below:

R means common Recording.

M means Motion detection recording.

M means Motion detection without recording.

Component Name	Function
1 Channel Name	Display channel name
2 Date & Time	Display current date and time
3 The signal icon	The level of the signal, strong or weak.
4 Video Loss	Wireless Camera is off-line.
5 Image Capture	Make a snapshot of current video
6 Manual Recording	Enable or disable manual recording
7 Quick Playback	Make playback of the last 5 minutes of the video
8 Electronic Zoom-In	Hold and drag mouse cursor to select a frame of current video to zoom in.
9 Channel Color Setting	Set hue, brightness, contrast and saturation of current channel.

NVR Boot up

Component Name	Function
10 Pair	Do the pairing of camera and NVR.
11 Main Menu	Access the main menu
12 Lock	Sign out or access sign-in page.
13 4-Channel Layout	Display four channels of video.
14 Preview Policy	Realtime: There is no delay of video, but it is not that smooth.
	Smooth:There may be some delay of video, but it is smooth.
	Balanced: Take both realtime and smooth into consideration at the same time.
15 Start SEQ	Press this button to switch the screen mode in sequence.
16 Playback	Access video retrieval page.
17 Information	System Information.

NVR Menu

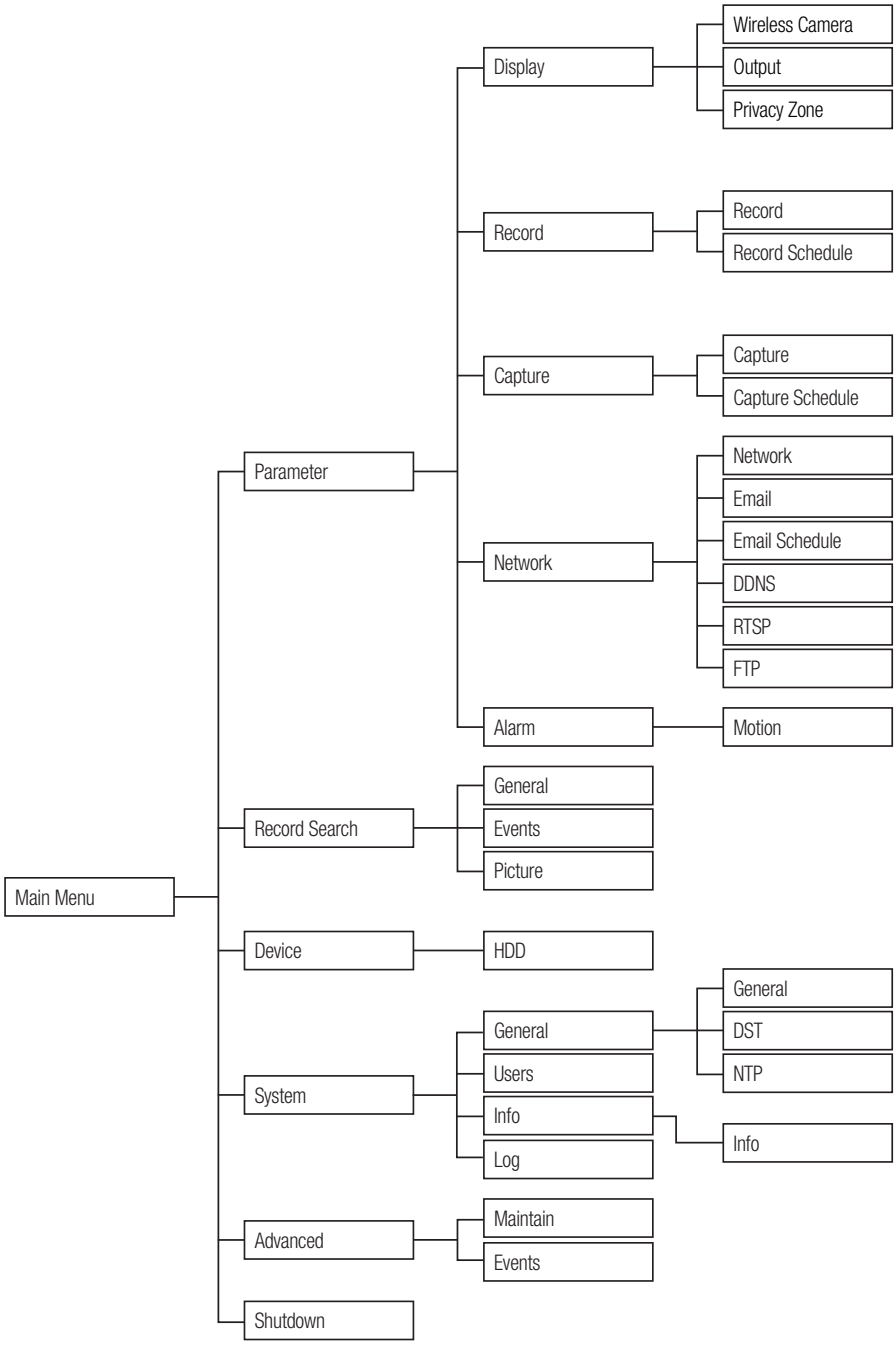
POPUP MENU

After finishing system initialization, right click the mouse on preview interface or slide the mouse to the bottom of screen to enter into Pop-up Menu. Now you could perform parameter setting and operate on Main Menu, Multi-screen, Record Search, Sequence and Brightness settings.

The options in the pop-up menu may vary slightly according to different parameter settings and application environment. The options in the menu will be explained in detail in the following chapters.

NVR Menu

MAIN MENU GUIDE



MAIN MENU

On LIVE mode, click the mouse button, or [Menu] button on the remote controller, or click [ ] icon on the toolbar to enter the main menu screen.

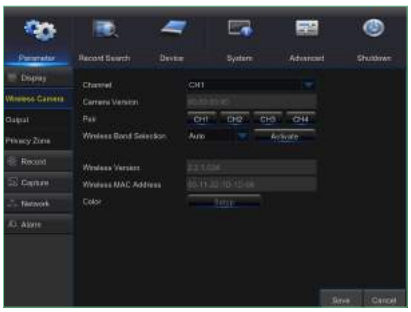
If system interface is locked, refer to page 34 to unlock by entering your password.
In Main Menu mode, you can make settings for Parameter, Record Search, Device, System, Advanced and Shutdown.

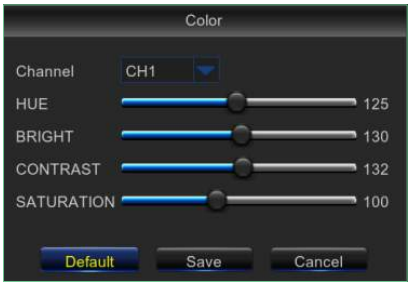
Parameter

Wireless Camera

Go to "Main Menu" ➞ "Parameter" ➞ "Display" ➞ "Wireless Camera" to enter into the following menu.

- **Channel**: Channel of wireless camera.
- **Camera Version**: Camera firmware Version
- **Pair**: Click the channel button to do pairing.
- **Wireless Band Selection**: Auto or Manual optional. Auto is recommended.
- **Wireless Version**: Wireless firmware version.
- **Wireless MAC Address**: Wireless MAC Address.
- **Color**: Click "Setup" to access the color settings.

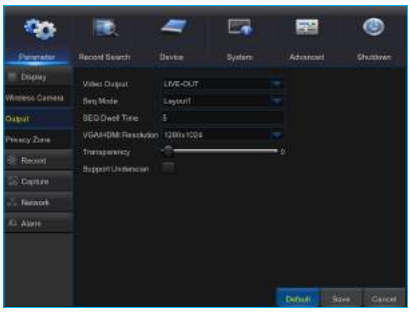




Output

Go to "Main Menu" ➞ "Parameter" ➞ "Display" ➞ "Output" to enter into the interface.

- **Video Output**: Live Output
- **Sequence Mode**: Layout1
- **SEQ Time**: Sequence time is set 5 seconds by default. User may set it as required up to 300 seconds
- **VGA/HDMI Resolution**: For VGA output or HDMI output, the optional resolution includes 1024×768, 1280×1024, 1440×900, 1280×720, 1920×1080
- **Transparency**: Adjust menu transparency in the range of 0-128.
- **Support Underscan**: Support HDMI underscan.

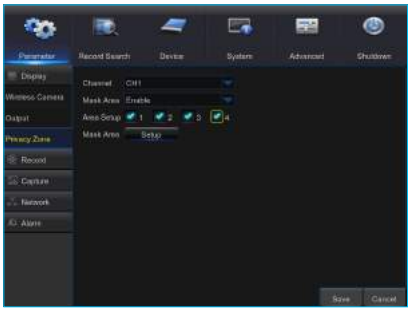


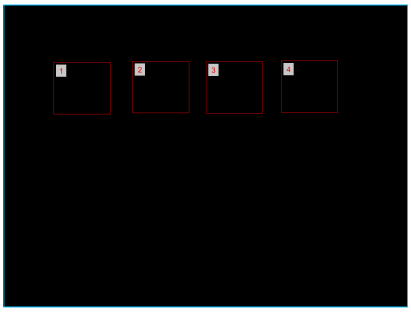
Privacy Zone on Live Video

Go to "Main Menu" ➞ "Parameter" ➞ "Display" ➞ "Privacy Zone".

Privacy Zone is to block certain area(s) in the camera's field of view on live video of selected channel.

1. Select the number of the zone(s) to be blocked (maximum of 4 zones can be set for single channel)
2. Click "Setup" to adjust the position of the zone.
3. After finish setting, right click the mouse to return to the "Privacy Zone" page.
4. Click "Save" to save the setting.

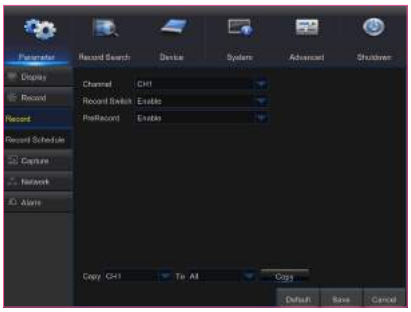




Record

Go to "Main Menu" ➞ "Parameter" ➞ "Record" ➞ "Record" to enter into the interface.

- **Channel**: Set the desired channel in the drop-down menu
- **Record Switch**: Enable/disable record
- **PreRecord**: Enable to pre-record motion detection record.



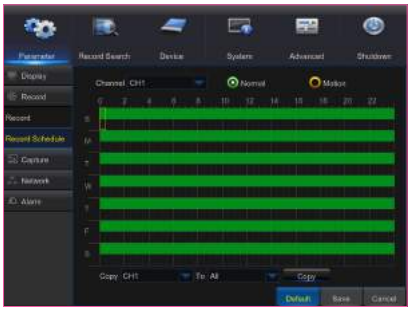
Record Schedule

Go to "Main Menu" ➞ "Parameter" ➞ "Record" ➞ "Record Schedule" to enter recording schedule for the NVR.

Schedule interface

Select the channel and the date to be set.
One week's schedule can be set.

The record schedule of the current channel can be copied to any other channel or all channels.

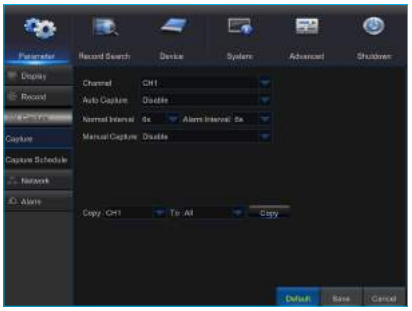


- In the Record menu and Record Search menu, when no colors are presented, it means there are no recordings during that time;
- “Green” stands for normal record and “yellow” stands for motion record.

Capture

Go to "Main Menu" ➞ "Parameter" ➞ "Capture".

- **Channel**: Select capture channel
- **Auto Capture**: Enable/Disable auto capture.
- **Normal Interval**: 6s / 10s / 30s / 1min / 10min / 30min / 1h
- **Alarm Interval**: 6s / 10s / 30s / 1min / 10min / 30min / 1h
- **Manual Capture**: Enable/Disable manual capture



- You can click on the icon [ ] in the live window to manually capture the image with your mouse.

Capture Schedule

Go to "Main Menu" ➞ "Parameter" ➞ "Capture Schedule".

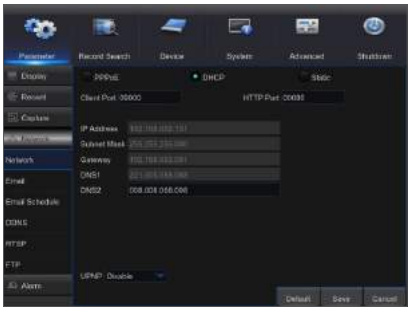
- **Normal**: Conventional capture setting
- **Motion**: Motion detect capture setting

Network

Go to "Main Menu" ➞ "Parameter" ➞ "Network" ➞ "Network" to enter the interface.

Select the network connection option (PPPoE, DHCP, Static) to set the port. User can view and do the recording, playback or backup of the video remotely.

Take DHCP as an example. In this mode, the router automatically assigns IP address for the NVR. After restarting the NVR or DHCP server, the IP address obtained by the NVR may be different. As a result, you need to check the IP address and port numbers before remote access to the NVR every time. The operation procedure is as follows:



1. Select DHCP, click Save and restart the NVR. Input Client Port and HTTP Port (the two ports must be different).
2. Remotely visit the NVR by using IP address plus HTTP port through web browsers.
   http://Public network IP: HTTP port number (such as 00080)
   http:// Intranet IP: HTTP port number (such as 00080) (Only available in the same LAN)

For PPPoE, Static and DHCP, after setting the IP address for the NVR, the extranet port shall be mapped in the router before visiting NVR through public network.

■ Save the setting to apply the changes made. If there are multiple NVRs in a LAN, make sure their MAC addresses are different.

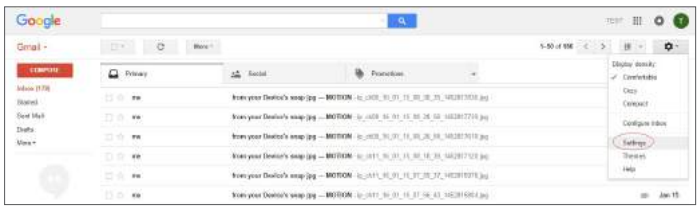
E-mail

Go to "Main Menu" ➞ "Parameter" ➞ "Network" ➞ "Email" to enter into the menu interface. Receive or Send NVR alarm Email and set parameters like Email address, SSL, Email Enable, and Interval.

- **Encryption**: Disable, SSL, TLS and Auto optional. Auto means it can detect the encryption type automatically. It is recommended to set the encryption type as Auto.
- **SMTP Port**: Mail sending port used by SMTP (Simple Mail Transfer Protocol). Server is generally Port 25 or Port 465 when SSL is used by Gmail.
- **SMTP Server**: Enter the address of the server for the mailbox in use.
- **User Name**: Enter a server to connect to. For example, email "aaa@gmail.com" should correspond to server "smtp.gmail.com"
- **Password**: Enter the password of the SMTP server user.
- **Sender address**: Sender's mail address, which must correspond to the server used. For example, mailbox "aaa@gmail.com" should correspond to server "smtp.gmail.com".
- **Receiver 1/2/3**: Recipient's mail address, used to receive alarm image and message from NVR side. If system alarms continually and sends email images frequently, save the images to another location or remove them, so as to avoid excessive space occupation and thereby affect your normal use of mailbox.
- **Time interval**: A mail will be sent every three minutes by default. If the time interval for mail notification is set too short, email server may deem mails as junk mails, so they cannot be transferred normally.

Mailbox Setting:

For example, if you are using Gmail, sign in to the GMAIL mailbox. https://mail.google.com



Click on "settings--Forwarding and POP/IMAP"

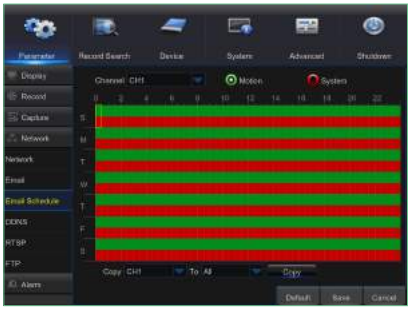
Click on "Enable IMAP--Save Changes"

E-mail Schedule

Go to "Main Menu" ➞ "Parameter" ➞ "Network" ➞ "E-mail Schedule" to make Email schedule.

Select the channel and the date to be set.
One week's schedule can be set.

The record schedule of the current channel can be copied to any other channel or all channels.

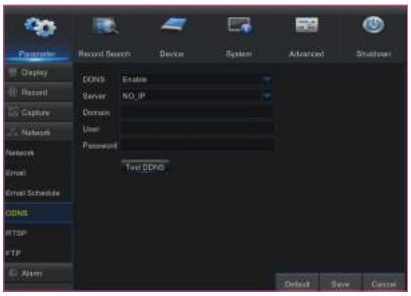


- Green stands for Motion: Email will be sent in case of object motion;
- Red stands for System: Email will be sent in case of System, e.g. No Space on Disk, Disk Error, Video loss, etc.

DDNS

Go to "Main Menu" ➞ "Parameter" ➞ "Network" ➞ "DDNS" to enter into the menu interface.

User may set DDNS in any one of the above 3 network connection types after applying dynamic domain service. User may remotely access the NVR through domain by using browser in the form of http://applied domain: mapped HTTP port number. When using DDNS domain name to access the NVR, user must confirm that the port can be normally connected to current IP on the public network and the settings for server address/host name/user/password/setting should be consistent with the NVR local setting.



- **Server address**: Select dynamic domain name server provider. Available domain name servers (HANWHA-SECURITY, DDNS_3322, DYNDNS, NO_IP, CHANGEIP, DNSEXIT)
- **Domain**: dynamic domain name of the host obtained from dynamic domain name service provider upon registration, for example, http://ddns.hanwha-security.com/snb5000
- **User Name**: The user name registered upon application for dynamic domain name.
- **Password**: The password set upon registration.
  Click on "Test DDNS". If connection succeeds, it will be indicated that "DDNS Test is Successful!"
  Perform remote access to the NVR by using dynamic domain name, for example, http://ddns.hanwha-security.com/snb5000:HTTP port number (e.g. 19010)

- For details on registering with DDNS, please refer to P12.

RTSP

Go to "Main Menu" ➞ "Parameter" ➞ "Network" ➞ "RTSP"

Set User Name and Password to view video by PC software VLC.

- **RTSP Enable**: Enable/Disable
- **Verify**: Enable/Disable
- **RTSP Port**: 00054
- **RTSP User Name**: admin
- **RTSP Password**: 111111
- **Analog Channel**: rtsp://IP:Port/chA/B
- **A**: 01(ch1), 02(ch2)
- **B**: 0(main stream), 1(sub stream)

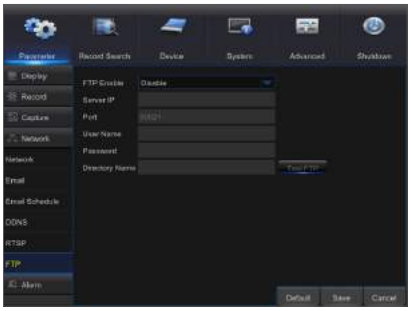
Follow the instruction to input IP and port to preview video.

FTP

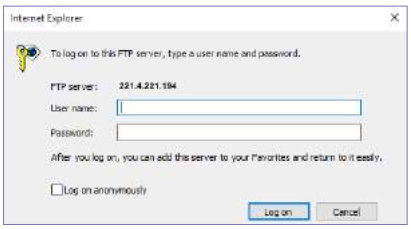
Go to "Main Menu" ➞ "Parameter" ➞ "Network" ➞ "FTP"

Set IP, User Name and Password to view the captured image in the server.

- **FTP Enable**: Enable/Disable
- **Server IP**: Server IP address
- **Port**: Port
- **User Name**: User Name
- **Password**: User password
- **Directory Name**: Directory name

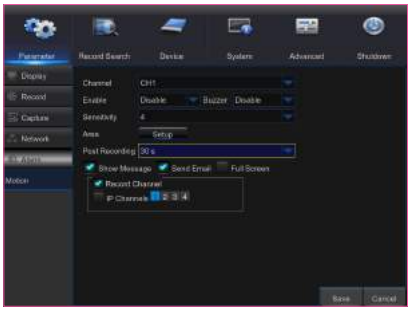


■ It is recommended to use FTP Win8, Win10 not support with open source free of charge. Use of other FTP software may cause image distortion.

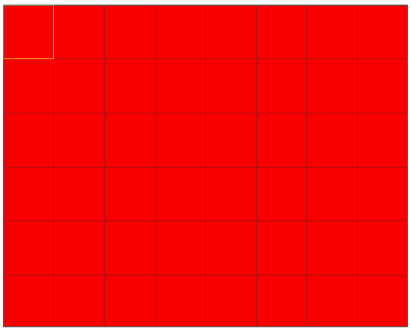


Motion

Go to "Main Menu" ➞ "Parameter" ➞ "Alarm" ➞ "Motion" to enter into the interface.



- **Channel**: Select Channel.
- **Sensitivity**: Support 1-8 level, 8 is the highest level.
- **Buzzer**: When detecting object moving, buzzer makes alarms (disable, 10 seconds, 20 seconds, 40 seconds and 60 seconds).
- **Show Message**: Messages will be displayed on the screen when moving object is detected and alarms are made.
- **Send Email**: When moving object is detected, send Email to the specified Email address.
- **Full Screen**: When moving object is detected, messages will be displayed in full screen.
- **Post Recording**: After the alarm finishes, the duration time of the alarm recording can be set as 30 seconds, 1 minute, 2 minutes and 5 minutes.
- **Area**: Click it to enter into the interface to set the motion detection area to be monitored intensively.
  A single channel is divided into 6x8 configurable grids. The red grids indicate that the motion detection in the area is enabled, white semitransparent ones indicate that the motion detection in the area is disabled. After setting is completed, right click the mouse button to return and click Save to make the parameter setting effective.
- **Record Channel**: When object motion is detected, the record channel setting will be activated.

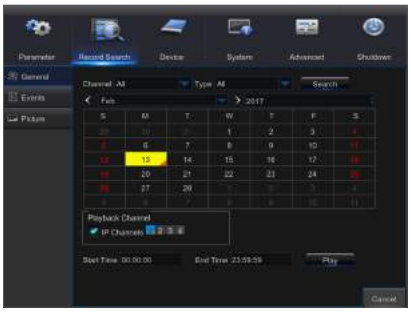


Alarm Type	Functions & Descriptions
Video Loss	When the NVR fails to receive video signals due to some problems (camera damage, line dropout or damage, power failure), the alarm will appear.
Motion Detection	When camera detects object moving, alarm will be activated. Sensitivity is subject to the actual application environment test. **Sensitivity** is adjusted according to the sensitivity of moving object detection and parameters are modified by combining the area setting.
HDD Status	Alarm will appear when the HDD does not work due to damage, power failure, HDD auto-overwrite off and insufficient space.

Record Search

General

Go to "Main Menu" ➞ "Record Search" ➞ "Record Search" to enter into the interface.



- **Channel**: Select the channel you want to search.
- **Type**: Select the type the playback record. There are three options: All, Normal and Motion.
- **Start Time/End Time**: Select the specific period of time. The default setting is from 0:00 to 24:00.
- **Playback Channel**: Click a date and select corresponding channel in Playback Channel.
  The selected channels must not be more than 16.
- **Playback**: Select the desired year and month and click "Search". If there are any records, a yellow corner mark which shows the recording at specific date will appear at the down-right corner of the date sheet. Select the date checkbox and select playback channel and click Playback to enter into the interface.
- **Playback interface**: You can use the Playback Control bar to operate the Fast Forward (X2, X4, X8 and X16), Rewind (X2, X4, X8 and X16), Slow play (1/2, 1/4, 1/8 and 1/16 speed), Play, Pause/Frame. You can click or drag the volume control bar to adjust volume. When playback ends, NVR will remain in the playback interface.

Time Axis setup, file clip and zoom in/out

The NVR supports the processing control bar function when playing back record files.

- **Time Axis zoom**: Default value is 24hours. Allow user to select 2 hours, 1 hour, 30 minutes or user-defined.

- **Detailed Operation**

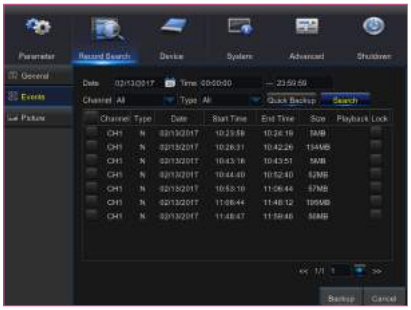
Fixed time axis: If you select [2h] option, that means the processing control bar covers two hour of video content. The time range refers to 1 hour before and after the middle point. Record clip and backup function and playback zoom in/out function.

- **Clip and backup**: When it is under single channel playback, the [ ] icon will appear in the Play Control bar. Click the icon to start video clip function, click the icon again to end the function and pop up the dialog. Now, you may save the clipped video file.
- **Zoom out**: When it is under single channel playback, the [ ] icon will appear in the Play Control bar. Click the icon to zoom in certain area of the playback screen and right click mouse to return the Playback page.

Events

Go to "Main Menu" ➞ "Record Search" ➞ "Events" to enter into the interface.

In this page, user may search details by date, time, channel and record type. The relevant operations are as follows:



<< Previous page : Click the button to go to previous page when viewing events (except the first page). When viewing the first page, click this button to display the event list in the first page.

>> Next page : Click the button to go to next page when viewing events (except the last page). When viewing the last page, click this button to display the event list in the last page.

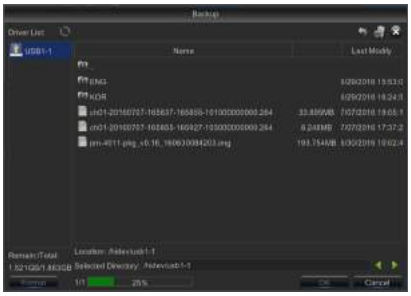
Jump : Input the desired record event page in the input box and click arrow button to jump to the input page.

Two types of backup: Quick Backup and Backup

If you want to back up a record in the detailed file list, you may check the checkbox at the left of the record ("√" means it has been selected) and click "Backup" to enter into "Select backup type" (Make sure USB flash drive or other portable storage device are connected).

If you want to back up with USB, select USB and click OK to start processing and you will see the backup progress.

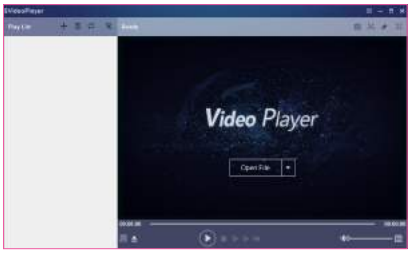
After backup finishes, message Backup Finishes will appear at down-right corner.



- Before backup, connect devices for backup (USB flash drive or other mobile storage devices with USB interface)

Play Backup Files

1. Copy backup files to the computer.
2. Open SVideo player and click [+] or [Open File].
   For example, if you want to choose *.264, *.avi, *.mp4, add backup file and select a file to play.



Play: Click to play file

Pause: Click to pause.

Stop: Click to stop playback.

Frame Forward: step forward by frame

Slow Play: Click to play at 1/2, 1/4, 1/8, 1/16 speed.

Fast forward: Click to play at 16x, 8x, 4x, 2x speed.

Open file/Open Directory

Expand/pack up the list.

Screenshot: Save path: C:\Users\Administrator\SVideoPlayer\picture

Cut: Save path: C:\Users\Administrator\SVideoPlayer\video

Full screen display

Never on top

Always on top

On top during playing

Window Division

1/4/9/16 channels optional.

Add folder or file.

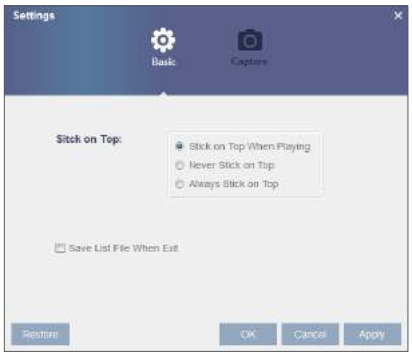
Playback mode, Single, Order, Repeat one, Repeat ALL are optional

Delete all files in the list.

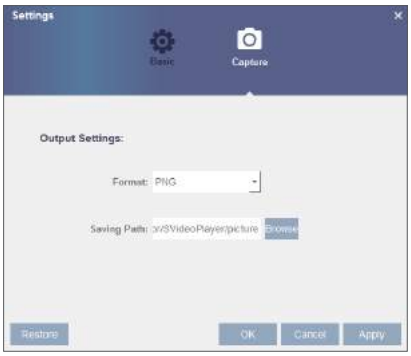
Search File

Language/Settings

Basic Settings: Set on-top mode



Capture Settings: Set the path to save image



- It is recommended to use SVideo Player contained in compact disk for playback. Use of any other player may cause compatibility problem.

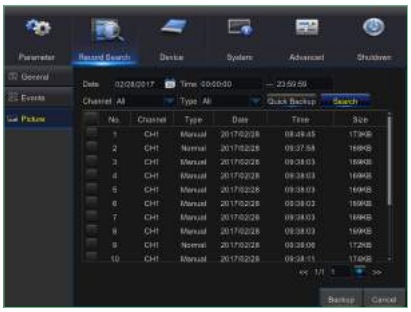
Picture

Go to "Main Menu" ➞ "Parameter"

Support search picture for 5000pcs each time. If the picture number greater than this value, please adjust the date (time) of the current search and search again.

Go to "Main Menu" ➞ "Record Search" ➞ "Picture" to enter into the interface.

In this page, user may search details by date, time, channel and record type. The relevant operations are as follows:



< < Previous page: Click the button to go to previous page when viewing events (except the first page). When viewing the first page, click this button to display the event list in the first page.

> > Next page: Click the button to go to next page when viewing events (except the last page). When viewing the last page, click this button to display the event list in the last page.

Jump: Input the desired record event page in the input box and click arrow button to jump to the input page.

Two types of backup: Quick Backup and Backup

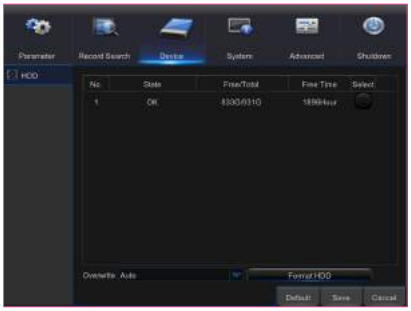
Device

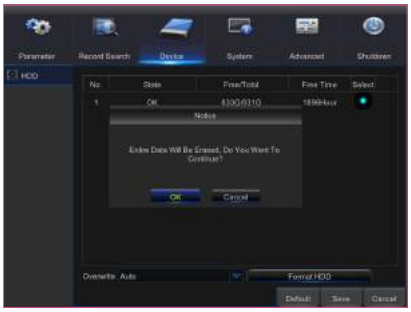
HDD

Go to "Main Menu" ➞ "Device" ➞ "HDD" to enter into the interface.

When HDD is connected, the system will automatically detect if the HDD is OK or not; if the HDD needs to be formatted, select the HDD and format it. If the system detects the HDD is OK, the HDD status will be shown as "OK".

- **No.**: Number of HDD connected to system.
- **State**: It shows the current status of the HDD. It will be available only when the HDD is "OK".
- **Free/Total Space**: Remaining or total space of the HDD
- **Free Time**: Remaining time for the HDD recording according to current setting for "Resolution", "Encoding Rate" and "Frame Rate" of image.
- **Auto-overwrite**: When set to ENABLE and the hard drive is full, the NVR will overwrite the oldest files on the hard drive. When set to DISABLE and the hard drive is full, the NVR will stop recording.
- **Format HDD**: Format HDD for the first use.





■ Recording can only be performed when the HDD is in "OK" state.

System

General

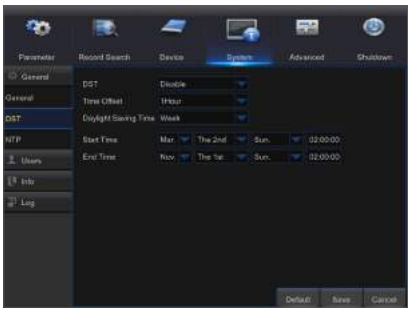
Go to "Main Menu" ➞ "System" ➞ "General" ➞ "General" to enter into the interface.

User may set Date, Time, Date Format, Time Format, Language, Video Format, Menu Timeouts and Show Wizard on this page.

DST

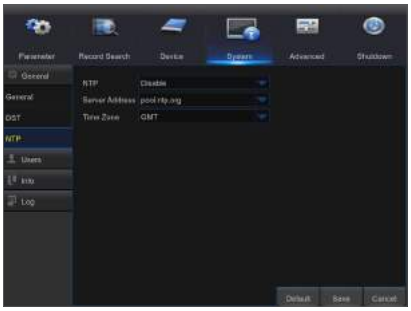
Go to "Main Menu" ➞ "System" ➞ "General" ➞ "DST".

Enter into the interface to set DST, Time Offset, Start Time and End Time.



NTP

Go to "Main Menu" ➞ "System" ➞ "General" ➞ "NTP".

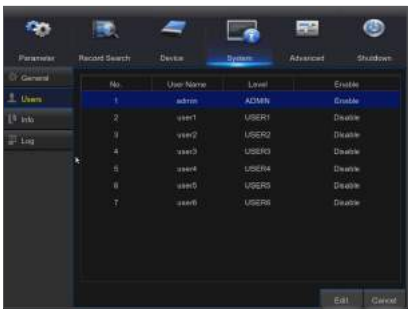


- **NTP service**: Enable/Disable NTP function.
- **Server Address**: Select NTP server (time.windows.com, time.nist.gov, pool.ntp.org).
- **Time Zone**: Corresponding time zones for various nations or regions.
- **Update Time**: Enable NTP function and save parameters and click Update Time to calibrate the system time.

- When NTP function is set to "Enable", system will calibrate the system time at every 00:07:50 and every start-up.

Users

Go to "Main Menu" ➞ "System" ➞ "Users" to enter into the User interface.



It supports up to seven users, including one administrator and six users. Click [Edit] button to enter into the [User Edit] interface to input user name and password.

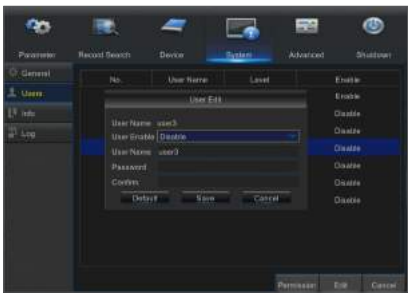
User Name consists of 8 characters. Password MUST be 8~13 characters long. When password is 8~9 characters long, it should be withat least a combination of letters, digits and special symbols. If it is 10~13 characters long, it should be with at least a combination of two types of characters. 4 or more contiguous or repeated characters or key arrangement are prohibited, for example 1111, 1234, abcd, qwerty.

Set user password. Administer is authorized to set user common user"s authority.

- **Log Search**: Allow you check all the system logs.
- **Parameter**: Allow you set all the parameters.
- **Maintain**: Allow you to update firmware, reboot and shutdown the NVR.
- **Disk Management**: Allow you manage and control the HDD.
- **Remote Login**: Allow you remotely login NVR.
- **SEQ Control**: Allow you sequence live screens for all the channels.
- **Manual Record**: Allow you manually start/stop record.
- **Manual Capture**: Allow you to manually take a snapshot
- **Backup**: Tick-select the ENABLE "√" option and select channel for backup, the user is allowed to back up the record in the selected channel.
- **Live**: Tick-select the ENABLE "√" option and select a channel and the user is allowed to view all the live images in the selected channel.
- **Playback**: Tick-select the ENABLE "√" option of Playback and the common user is allowed to playback the selected record in the channel.

User Edit

User may enable or disable the function or set password.



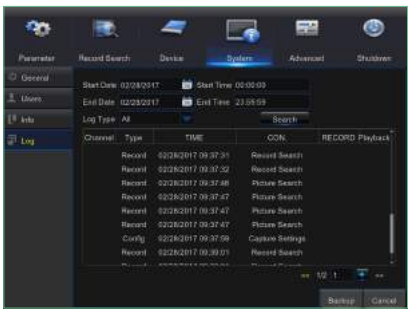
Info

Go to "Main Menu" ➞ "System" ➞ "Info" to enter into the interface.

Log

Go to "Main Menu" ➞ "System" ➞ "Log".

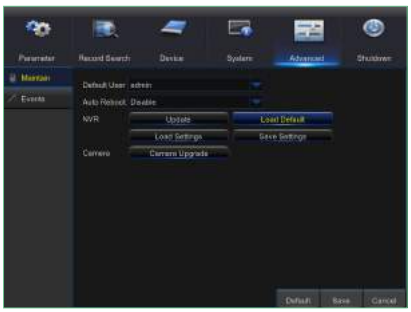
User may search log information in different period of time. Click "Backup" to save all the log information.



Advanced

Maintain

Go to "Main Menu" ➞ "Advanced" ➞ "Maintain" to enter into the interface.

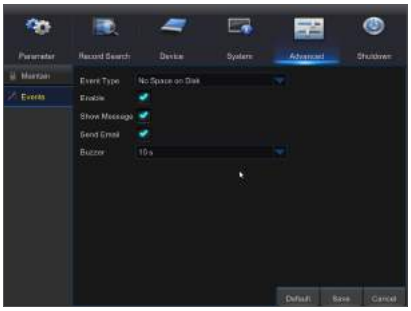


- **Default User**: Set a user as default user or turn default user off.
- **Auto Reboot**: Enable the auto maintenance function to reboot system regularly at every day/week/month. When Auto Reboot is enabled, NVR should be in the main interface and no user operation.
- **Update**: Click Update to enter the Device interface and select the updating file in USB to execute.
- **Load Default**: If [Load Default] is selected, you can initialize the system to the ex-factory default. Click "Load Default" and select items to be restored. You can restore the color settings, motion detection on/off, motion detection sensitivity and motion detection area of wireless camera to ex-factory default.
- **Load Settings**: Load parameters in the removable storage device to NVR.
- **Save Settings**: Save the set parameters of user's NVR to the removable storage device.
- **Camera Upgrade**: Click to do firmware upgrade of Wireless Camera.

■ Do not take out the USB memory or cut off the power during upgrading. When the update is done, system will be automatically restarted. After about 5 minutes, the upgrading will be finished. It is recommended to load ex-factory default after upgrading. The auto maintain function can be effective only when NVR returns back to Preview mode with no any operation within the set auto maintain time.

Events

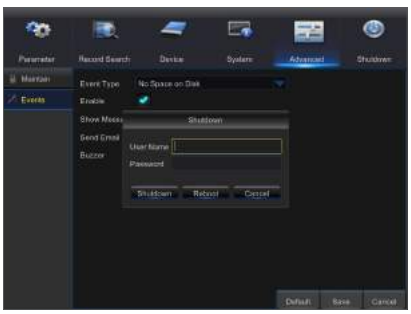
Go to "Main Menu" ➞ "Advance" ➞ "Events" to enter into the interface.



- **Event Type**: Support three abnormal types: Disk Full, Disk Error and Video Loss.
- **Enable**: Active alarms for abnormal situations.
- **Show Message**: You can set show message on the screen when alarm is detected.
- **Buzzer**: How long the buzzer will sound (10s, 20s, 40s, 60s).
- **Send Email**: Select to send Email to specified Email address when abnormal events appear.

Shutdown

Go to "Main Menu" ➞ "Shutdown" to enter into the interface.



NVR Menu

MENU LOCK

In consideration of system safety, user may click the icon [ ] on the toolbar when he leaves away from NVR and the system interface will be locked. User has to input Device ID, User Name and Password on the login interface to unlock. In case that the password is forgotten, contact the technical personnel.

- Administrator has all authorization of menu operation and users have limitations for authorization and have to get authorization from administrator.

SPLIT MODE

There are many display modes in video channel, including single channel display, SEQ display and split mode.

RECORD SEARCH

Click [ ] icon on the toolbar to enter into the Record Search interface to search and playback. Refer to former section for specific operating method.

START SEQUENCE

After set channel sequence time, click Start Sequence icon [ ] on the toolbar to start sequence.

Web Application Manager

SYSTEM ENVIRONMENT REQUIREMENTS

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

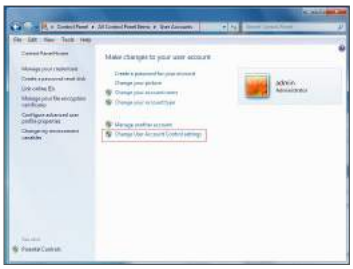
	Minimum	Recommended
CPU	Intel i3	Intel i7 or higher
RAM	4GB or more	8GB or more
Hard Drive	500GB or more	1000GB or more
Display RAM	2GB or more	4GB or more
Display Resolution	1280*1024	1920*1080
OS	Windows® Vista, Windows® 7, Windows® 10 Mac OS X® 10.12.2 and above Microsoft Internet Explorer (Ver. 11, 10, 9, 8), Mozilla Firefox43.0.4 or above Safari®10.0 and above	
DirectX	DirectX 11	
Direct3D	Acceleration Function	
Ethernet Adapter	10/100M Ethernet Adapter	
IE	Microsoft Internet Explorer (Ver. 11, 10, 9, 8)	

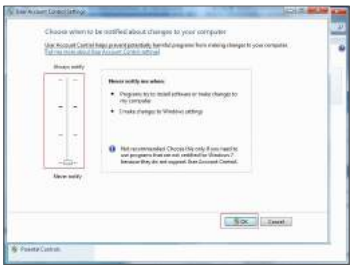
Web Plugin Download and Installation

If your computer system is Windows 7, you may need to setup the user authority for remote control, or you may be unable to backup or record.

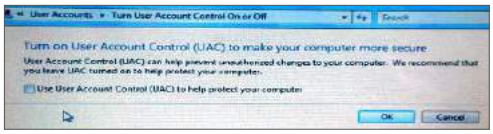
Vista System: Start ➞ Setup ➞ Control Panel. Set user authority in control panel as the following picutre. Remove the Tick "√" in front of the option "Use UAC to help protect your computer" and confirm OK.

WIN7





Vista

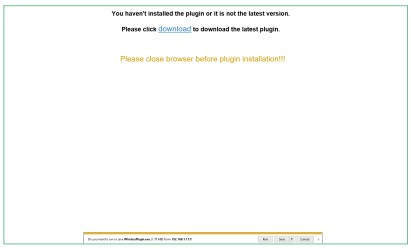


- If the Web plugins is not downloaded successfully, please check if your browser's safety level or firewall setting is set too high. Please open IE browser ➞ [Menu Bar] Tools ➞ Internet options ➞ Security ➞ Internet ➞ Custom level ➞ Enable the options.

Download and installation of plugin for IE

Enter IP address of NVR in address bar of IE, for example, http://192.168.2.173:80

Click on "Download", and then click on "Run" in being Downloaded File - Security Warning box"



Click on "Install" in the dialog box "Setup-Web Plugin".

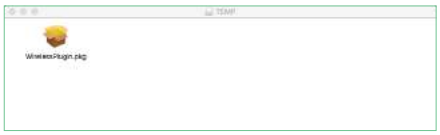
Shut down IE browser and restart it, and then enter IP address of NVR in address bar to access login page.

Download and installation of plugin for Mac SAFARI

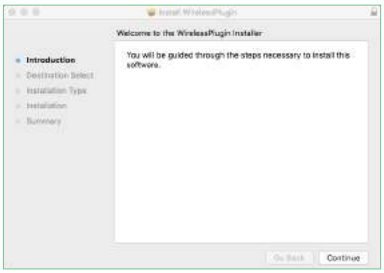
Enter IP address of NVR in address bar of Mac SAFARI, for example, http://192.168.2.173:80, and click on "download" to download the plugin.

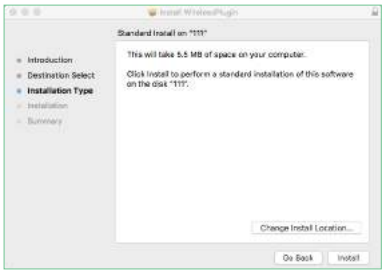
Locate the downloaded plugin "WirelessPlugin.dmg" and double click on it

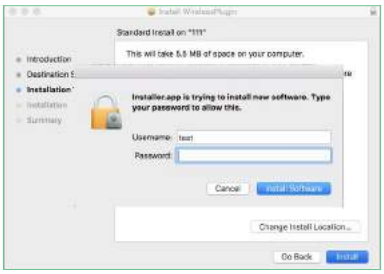
Install the plugin by double clicking on "WirelessPlugin.pkg".

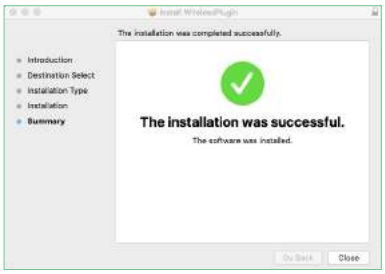


Click on "Continue" > "Install". Enter user name and password for login to Apple computer. Click on "Install" > "Shut down" to finish installation.









Web Application Manager

Shut down Mac SAFARI browser and restart it, and then enter IP address of NVR in address bar to access login page.

- The above instruction is to install the initial plug in. You can use the same plugin for IE and Firefox. If plugin for windows OS was installed on IE, Firefox once, you can use IE which needs to be run as administrator, Firefox to log in to NVR.

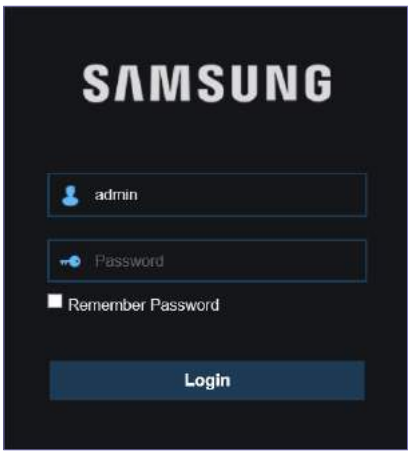
When you download and install plugin on Firefox, please close Firefox when it is prompted to. After installation is finished, you can restart Firefox to log in to the NVR.

When you do a firmware upgrade, please close the browsers in order to have the new plug in replace the old one. Depending on your situation, the plugin may not be work on your browser. In this case, please install the plugin unavailable on the CD provided. (Web_plugin_Windows_YYYY_MM_DD.exe for Windows system, and SurveillanceClient_Mac_YYYY_MM_DD.dmg for Mac).

WEB APPLICATION MANAGER LOGIN

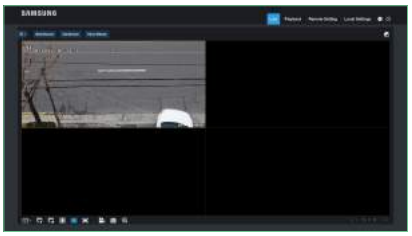
After web plugins installation, please input user name and password, select Main Stream or Sub Stream (In general, select main stream for intranet and sub stream for extranet), and input HTTP port number. There is an option for opening all channel preview, select it to open all live pictures. Press Login to log in client and remotely visit NVR. The default password is blank and administer is authorized to modify the password. Set password as per introductions of user management in system setting.

After successfully log in, it will enter the real-time monitoring interface and connect video automatically.



LIVE INTERFACE

Log in and enter into the live interface.



Menu Bar

Menu Bar: Live, Playback, Remote Setting, Local Setting and Logout.

Live Display Video Control

Log in the Web Application Manager, system will be defaulted to enter into <Live> interface. You can click [Play] button to Open/close live images, on-spot record, capture, and many live display modes.

Buttons on a single live interface

: Open or close the images on Live window.

: Bitrate: Mainstream or Substream optional.

: Display mode: Single channel or quad view optional.

: Open the video on Live window.

: Close all the Live channels

: Original proportions.

: Stretch.

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

: 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.

Video Control

Hue: Adjust the chromaticity of video

Bright: Adjust the brightness of video

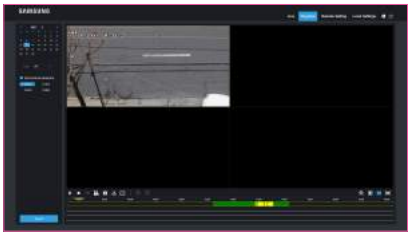
Contrast: Adjust the contrast of video

Saturation: Adjust the saturation of video

Playback

Click [Playback] to enter into Playback interface to remotely view the records in NVR HDD.

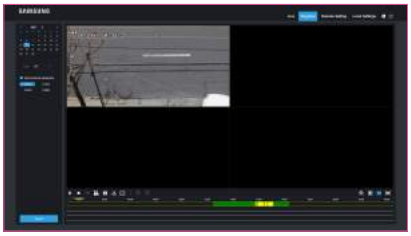
It supports 1 to 4 channel record playback.



Record Search

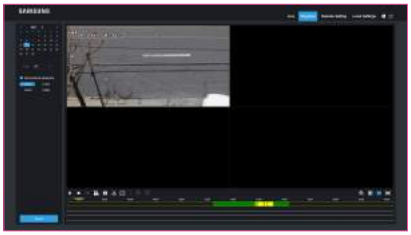
Record playback procedure

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 and All) and channels, and then click [Search], and time axis panel will display specific time quantum. On the time axis, red part stands for Motion, yellow 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 icon [⊕] or [⊖] to zoom in/out the time bar display ratio.

Playback Control

Playback control bar

Detailed brief description is shown as below:

Key	Description	Key	Description
▶	Play	×1/8 ×1/4 ×1/2 ×1 ×2 ×4 ×8	Slow playing x1/2,1/4, 1/8, Fast Forward x1/2/4/8
⏸	Pause		Open all the playback channels
■	Stop		Stop playing all the playback
⏭	Frame by frame		Digital ZOOM
	Record Clip		Original proportions
	Image Snapshot		Stretch
	Download		Full Screen

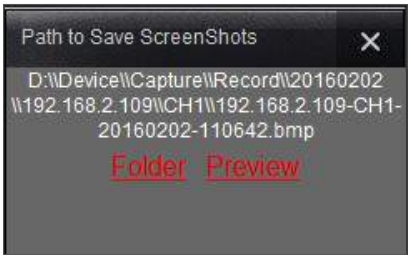
Record file clip

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 can be saved as H.264, AVI or MP4. H.264 is set as default.

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.

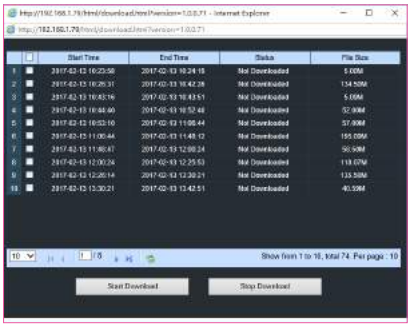
The captured file will be saved as .bmp format.



Record file download

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

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.



Remote Setting

Click Remote Setting to enter into the interface shown, including Record,Capture, Network, Alarm, Device, System and Advance.

Record

Click <Record> option to unfold its sub-options: Record parameter and Schedule.

Record Parameters

The parameters should be consistent with NVR local setting.

Record Schedule

The parameters should be consistent with NVR local setting.
Green stands for Normal record; Yellow stands for Motion detection.

Capture

Capture

- **Channel**: Select channel.
- **Auto Capture**: Enable/Disable auto capture.
- **Normal Interval**: Select interval time of normal capture.
- **Alarm Interval**: Select interval time of alarm capture.
- **Manual Capture**: Enable/Disable manual capture.

Capture Schedule

- **Channel**: Select channel.
- **Normal**: Conventional capture setting.
- **Motion**: Motion detect capture setting.

Network

Unfold <Network> to show its sub-options: Network, Email, DDNS and RTSP configuration.

LAN setting

NVR supports Static/DHCP/PPPoE modes. System default network type is <DHCP>. User can set parameters as required. If you change Network type to PPPoE, NVR will automatically restart to make the setting effective.

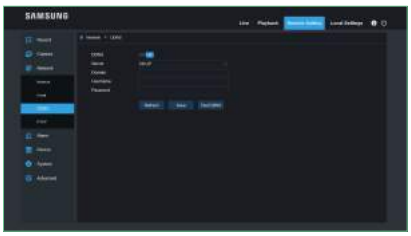
Email

Email: Set NVR alarm Email configuration parameters, including Email address, Encryption, Email Enable, and Interval etc. Detailed parameters should be consistent with NVR local setting.

DDNS

DDNS: After user applies for DDNS service, you could enable <DDNS> function under any one network type mode (Static, DHCP and PPPoE). And you may remotely visit the NVR through domain name (http://domain name: HTTP port No.). When visiting NVR by using DDNS, user should make sure port and current IP can be normally connected in public network. Details settings, including server address, host, user, and password, should be consistent with NVR local setting.

Click on "Test DDNS". If connection succeeds, it will be indicated that "DDNS Test is Successful!



RTSP

The relevant parameters should be consistent with NVR local setting.

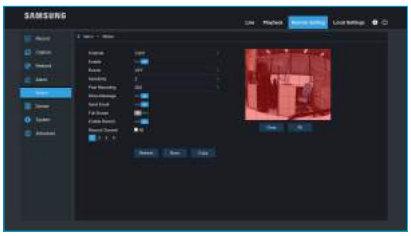
Web Application Manager

Alarm

Alarm setting includes Motion Detection Parameters.

Motion Detection

Configure Sensitivity, Alarm out, Alarm Record and Alarm Capture, etc. Detailed setting should be consistent with NVR local setting.



Device

Click <Device> to unfold its sub-options: HDD

HDD

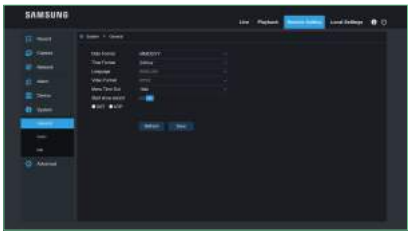
User may check HDD status of NVR and overwritten time. Detail setting should be consistent with NVR local setting.

System

Click <System> option to unfold its sub-options: General, Users and Info.

General

User may check NVR language and video system and date format, menu display time, DST and NTP parameters. Detailed setting should be consistent with NVR local setting.



Users

User may configure user name and password and detailed setting should be consistent with NVR local setting.

Info

User may search device name, device number, device type, MAC address, software version, IE version and hardware version of NVR.

Web Application Manager

Advanced

Click Advance to unfold its sub-options: Firmware Update, Load default, Events and Maintain.

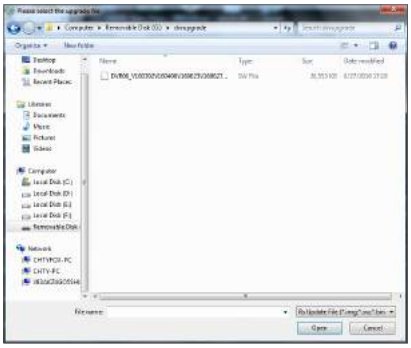
Firmware Update

User may remotely update NVR system.

Updating procedure

Firstly, select the update file path. The file format is *.sw.

Secondly, click "Start" to start updating. The updating progress can be seen on the screen.



Load Default

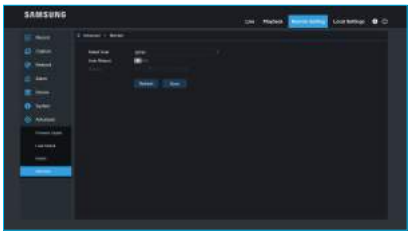
User may remotely restore default parameters of NVR, with same setting method as that of NVR.

Events

User may configure Event Type, Buzzer, Send Email, Show Message and other parameters. Detailed setting should be consistent with NVR local setting.

Maintain

Allow you remotely set auto maintain time for NVR. Detailed setting should be consistent with NVR local setting.



Local Setting

User may set Record Path (save Live record and Playback clip file), Download Path for remote file, Snapshot Path for captured pictures, Interval for switching record files (Packaging time), and File type (h.264, AVI and MP4).

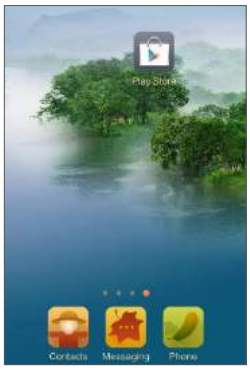
Logout

Click [⏻] to log out and return to the login interface.

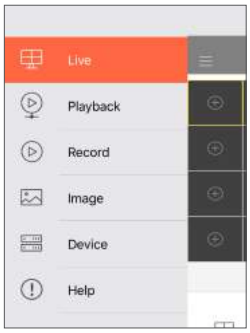
Mobile App

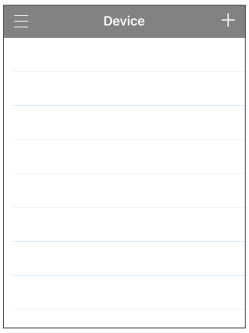
ANDROID PHONES/TABLETS

1. Open Play Store to search WiseView and click "INSTALL" to install.



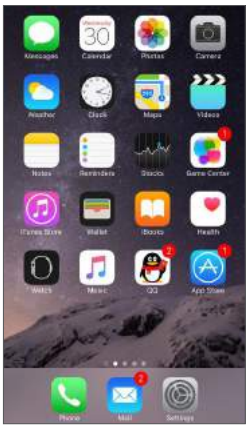
2. After installation, open WiseView and select "Device". Then click [+] to add new device.
   Scan QR code under Information page of system on local NVR. Then input client port, user name and password, and then click Save to log in to the device.



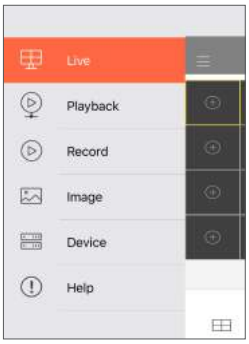


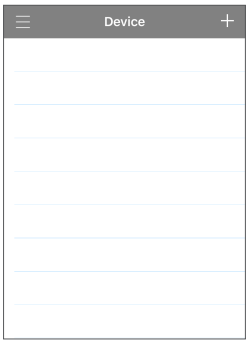
IPHONE/IPAD

1. Open App Store to search WiseView, and click icon [ ] to install.



2. Open WiseView, and go to Device. Click [+] to add new device. Scan QR code under Information page of system on local NVR. Then input client port, user name and password, and then click Save to log in to the device.





Appendix

TROUBLESHOOTING

Symptom	Countermeasures
What can I do if the system does not detect the HDD?	• 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.
I have changed the password but forget the new password, how can I access the system?	• If you forget system password, please consult with our technical personnel. We strongly suggest user to set password easily to be remembered and relatively safe.
We see abnormal video signal or even no video signal by connecting the NVR and camera together. Power supply for both devices is OK. What is wrong?	• Check network cable on 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.
How to prevent NVR from being influenced by heat?	• The NVR needs to dissipate heat while it is running. Please place the NVR in a place with good air circulation and away from heat sources to ensure stability and life of the NVR.
The remote controller of NVR doesn't work while the monitor screen is OK and panel keys are functional. Why?	• 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.
I want to take out HDD from my PC and install it in NVR. Can it work?	• All HDDs supported by the system can be used. But remember, once NVR runs, the data on your HDD will be lost.
Can I playback while recording?	• Yes. The system supports the function of playing while recording.
Can I clear some records on HDD of NVR?	• 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.
Why can't I log in NVR client?	• Please check if the network connection settings are correct and check if your account and password are correctly input.
Why can't I find any records during playback?	• 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.
Why doesn't dynamic detection work?	• Please check if the motion detection sensitivity level set is too low and motion detection area setting is correct.
Why does buzzer keep alarming?	• Please check the alarm setting, check if motion detection function is enabled and object motion is detected all the time. Besides, refer to corresponding HDD alarm setting.

Usage Maintenance

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

Appendix

SPECIFICATIONS

SNR-73200WN

Item		Details
Description		
Video	Inputs	4CH Wireless
	Resolution	1,920x1,080 (Full HD)
Live	Frame rate	Max 60fps@1080p - Main stream : 15fps@1080p per channel
	Resolution	1080p
	Multi Screen display	1 / 4 / SEQ
Performance		
Operating System	Embedded	Linux
	Installation wizard	Support
Recording	Compression	H.264
	Recording bandwidth	Up to 12Mbps (4ch simultaneously, Max 3Mbps per channel)
	Record Rate	Up to 60fps@1080p Main stream : 15fps@1080p per channel
	Mode	Manual, Schedule (Continuous/Event), Event(Pre/Post)
	Event	Video Loss, Motion(Sensitivity Level 1~8)
	Overwrite modes	Off/On(Auto/1/3/7/14/30/90days)
	Pre-alarm	Min. 1sec
	Post-Alarm	Up to 5min (30 sec, 1/2/5min)
Search & Playback	Playback bandwidth	Up to 12Mbps (4ch simultaneosly, Max 3Mbps per channel))
	Search mode	Date/time, Event, Motion
	Playback function	Fast forward / backward (2x, 4x, 8x, 16x) Slow forward (1/2x, 1/4x, 1/8x,1/16x) Step Forward
Network (IPv4)	Transmission speed	60fps@1080p
	Bandwidth	32Mbps
	Live stream	60fps@1080p, 60fps@960x540
	Max. Remote Users	10 (Max. bandwidth 32M)
	Protocol support	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, DHCP(Server, Client), SMTP, DNS, DDNS, uPnP
	Monitoring	Webviewer, Wiseview(TUTK P2P), HANWHA Client for PC(TUTK P2P)

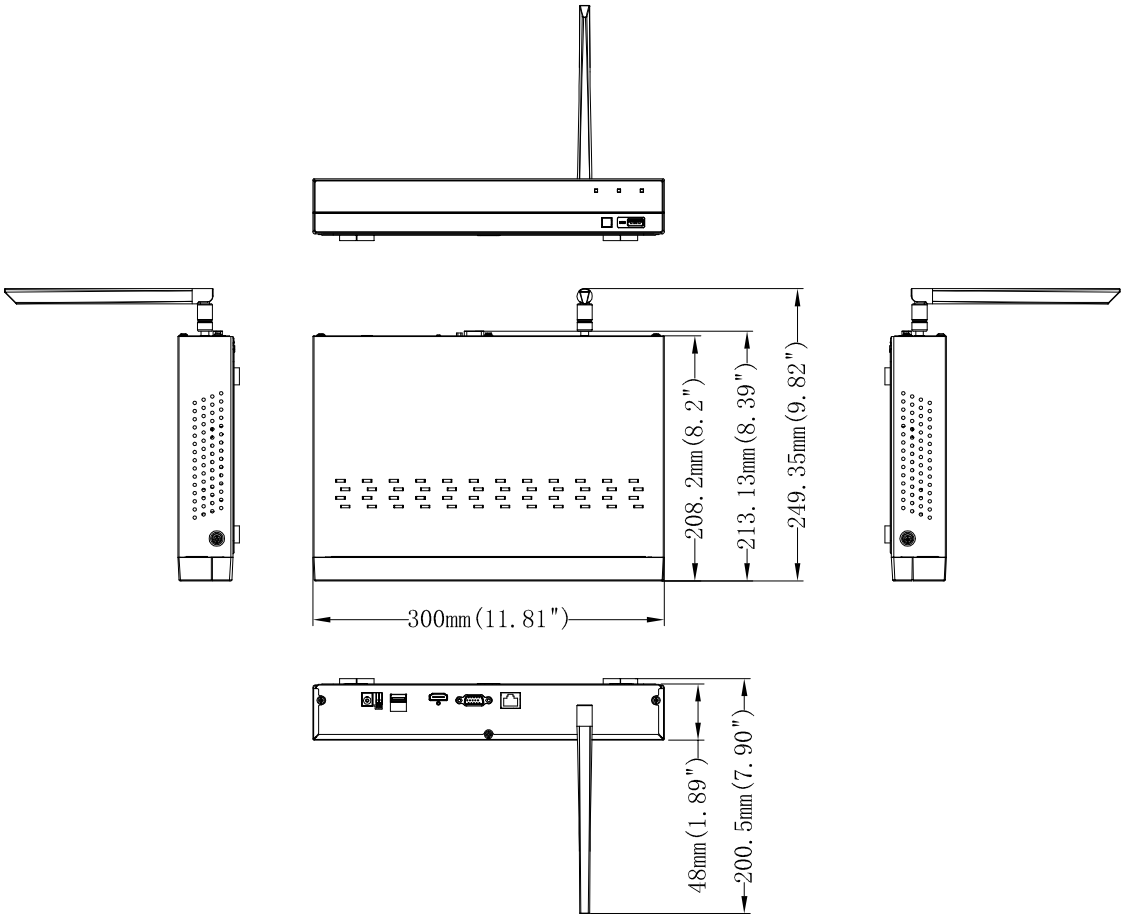
Item		Details
Remote Monitoring	Web / App viewer	Supported OS - PC : Windows® Vista, Windows® 7, Windows® 10 Mac OS X® 10.12.2 or above - Mobile : Android Ver4.4 or above iOS® 7.0 or above Supported Browser - Microsoft Internet Explorer (Ver. 11, 10, 9, 8), Mozilla Firefox Ver 43.0.4 or higher, Safari®10.0 and above
	Protocol support	TCP/IP, UDP/IP, UDP, P2P
	Transmission speed	60fps@1080p
	Max. remote users	10 (Up to bandwidth 32M)
Storage	Internal HDD	1 SATA HDD (1TB) - 1 Bay
	USB (Back-up)	2 USB Ports
	File Format (Back-up)	H.264, AVI, MP4
Security	Password Protection	1 Admin, 6 Users
Interface		
Monitors	VGA	1 VGA (1,024x768, 1,280x1,024, 1,280x720, 1,440x900, 1,920x1,080)
	HDMI	1 HDMI (1,024x768, 1,280x1,024, 1,280x720, 1,440x900, 1,920x1,080)
	Simulatneous Output	VGA and HDMI
Alarm	Remote notification	Notification via e-mail
Connections	Ethernet	1 RJ45 10/100 Base-T
	USB	USB 2.0, 2 ports (Front/Rear)
	Application Support	Mouse, Remote control
General		
Electrical	Input Voltage/Current	12V/2A DC Adaptor
	Power consumption	10W
Environmental	Operating Temperature/ Humidity	0°C~+40°C (32°F ~ 104°F) / 20% ~ 85%RH
Mechanical	Dimension (WxHxD)	300x208.2x48mm(11.81"x8.2"x1.89")
	Weight (With hard disks)	1.43Kg prox.- 1TB hard drive pre-installed
OSD Lauguage		English, French, Spanish, Portuguse, German

Appendix

Item		Details
Mechanical / Package information		
Color / Material		Black / Metal
Dimension (W x D x H)		300X219.7X52.5mm (11.8” x 8.65” x 2.07”)
Weight		1.43Kg prox.- 1TB hard drive pre-installed
Accessory	Printed material	Quick start guide - Eng / Fre / Spa / Por / Ger (5 in total) Samsungsv.com insert Package contents insert Return notice insert
	LAN cable	1 EA (1.5m)
	HDMI cable	1 EA (1.8m)
	Mouse	1 EA
	Remote control	1 EA
	Battery	2 EA (AAA size)
	Power adatpter	1 EA for NVR
	CD	Quick start guide - Eng / Fre / Spa / Por / Ger (5 in total)
		User manual - Eng / Fre / Spa / Por / Ger (5 in total)
		Router guide - Eng / Fre / Spa / Por / Ger (5 in total)
		HANWHA Client for windows (P2P support)

DIMENSION

Unit: mm (inch)



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signature of Ty Coon, 1 April 1990 Ty Coon, President of Vice.

FCC Compliance Statement

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.

FCC Interference Statement

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

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IEEE 802.11b or 802.11g operation of this product in the USA is firmware-limited to channels 1 through 11.

Industry Canada Statement

This device complies with RSS-247 of the Industry Canada 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. Ce dispositif est conforme à la norme CNR-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Industry Canada Radiation Exposure Statement

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

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non con trôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Antennas Statement

This radio transmitter (identify the device by certification number or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le present emetteur radio (identifier le dispositif par son numero de certification ou son numero de modele s'il fait partie du materiel de categorie II) a ete approuve par Industrie Canada pour fonctionner avec les types d'antenne enumeres ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est superieur au gain maximal indique, sont strictement interdits pour l'exploitation de l'emetteur.

Antenna List

No.	Model	Type	Gain[dBi]	Impedance
1	2.4G SMA Antenna	Dipole antenna	3.40	50

Hanwha Techwin cares for the environment at all product manufacturing stages, and is taking measures to provide customers with more environmentally friendly products.
The Eco mark represents Hanwha Techwin's devotion to creating environmentally friendly products, and indicates that the product satisfies the EU RoHS Directive.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

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