

SAMSUNG
wiSeNET

DIGITAL VIDEO RECORDER

User Manual

SDR-B85300

CE

Overview of DVR

CONTENTS

OVERVIEW OF DVR	2	Contents
	3	Safety Instruction
	4	Front Panel
	5	Rear Panel
	6	Remote Controller
	7	Install Hard Drive
	8	Connect external equipment
	8	Connect DVR
DVR BOOT UP	9	System Initialization
	9	Startup Wizard
	12	Registering with DDNS
	13	Main Interface
DVR MENU	15	Popup Menu
	16	Main Menu Guide
	17	Main Menu
	23	Registering with DDNS
	36	Menu Lock
	36	Split Mode
	36	Record Search
	36	Mute
	36	Start Sequence
WEB APPLICATION MANAGER	37	System Environment Requirements
	41	Web Application Manager Login
	41	Live Interface
MOBILE APP	53	Android Phones/Tablets
	54	iPhone/iPad
APPENDIX	55	Troubleshooting
	57	Specifications
	59	Dimension
	60	Open Source Announcement

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 DVR 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 DVR. (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 DVR, unplug the power cable and contact technical support.
7. Do not try to remove the DVR cover to avoid electrical shock.
8. Handle with care.
If DVR does not work properly, please contact technical support for repair or replacement.
9. Install and place the equipment in a well ventilated area. The DVR 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 DVR).
10. The power adapter should only be connected to the DVR. Do not connect it to additional equipment or else the DVR 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

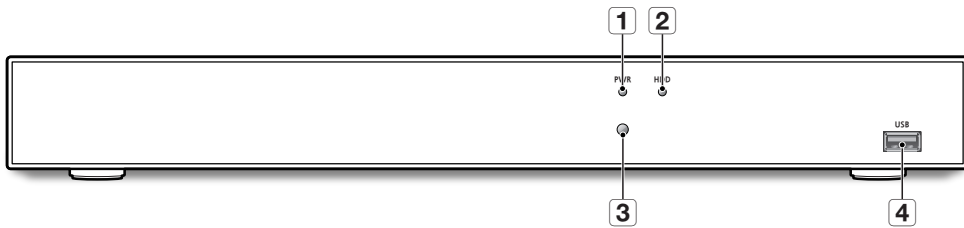


- 
 - Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- 
 - This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (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 DVR

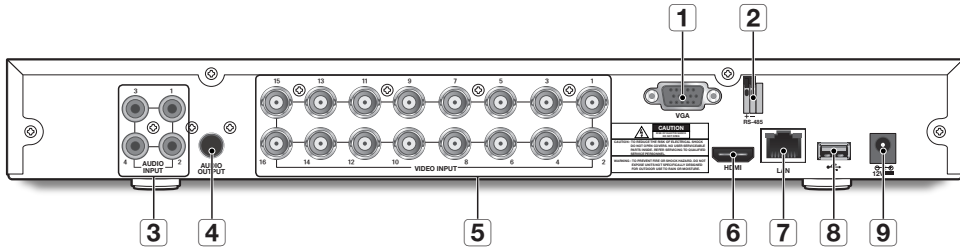
FRONT PANEL

DVR is short for Digital Video Recorder.



Type	Key or indicator	Identification	Functions	
1	Status lamp	Power indicator	PWR	If the "Yellow" indicator is on, DVR is getting power normally.
2		HDD indicator	HDD	If the "Red" indicator flashes, the hard drive is being read or written to.
3	IR port		○	Receive IR signal from Remote Controller.
4	USB port	USB	USB	USB port

REAR PANEL

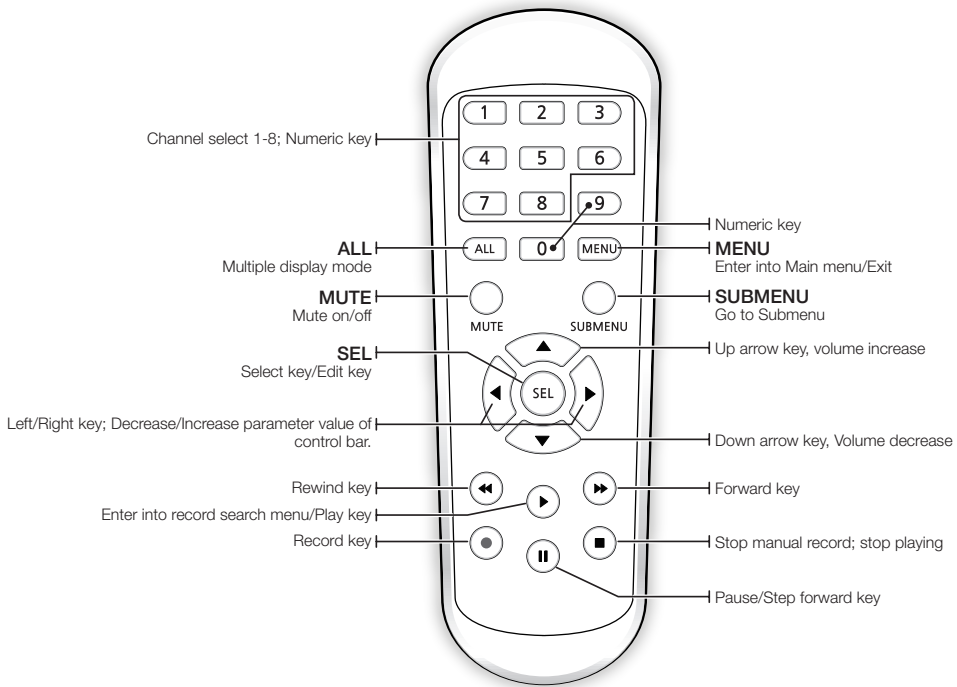


Physical Interface	Connection
1 VGA port	Connect with VGA display devices, such as PC monitor.
2 RS-485	RS485 port. Connect by referring to the interface definition below
3 Audio input	Connect with audio input signals, RCA port
4 Audio output	Audio signal output, RCA port
5 Video input	Connect with (analog) video input device, standard BNC port
6 HDMI	Connect with HDMI display devices, such as PC monitor.
7 LAN: (RJ45) Network port	Connect with LAN, Ethernet cable.
8 USB port	Connect with USB.
9 Power port	Connect with the power supply DC 12V 5A, included with the device


Overview of DVR

REMOTE CONTROLLER

Operation of remote controller

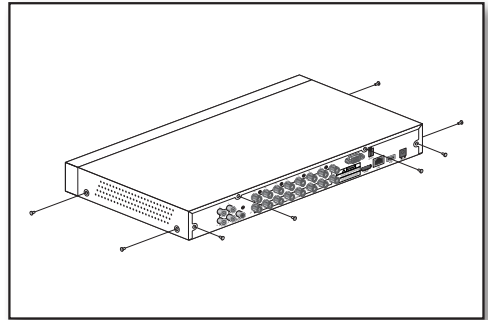


INSTALL HARD DRIVE

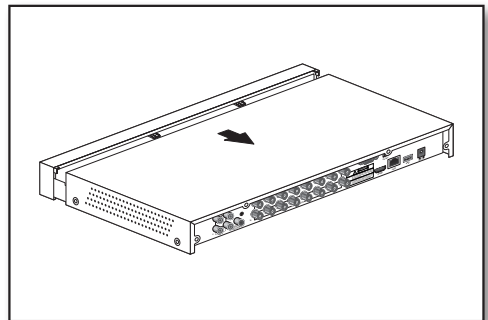
-  ■ HDD is pre-installed. If you want to replace hard disk drive, please refer to the following instruction. Please do not remove the hard drive when DVR is operating.

Installation of Hard Drive

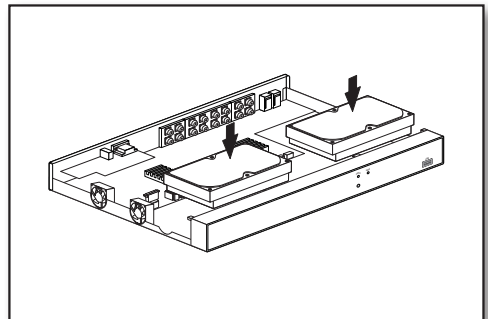
1. Using a screwdriver, remove the screws from the side and back panels.



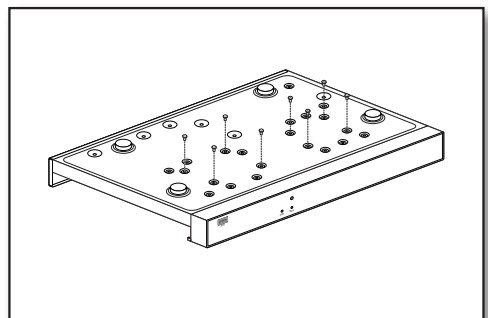
2. Remove the top cover.



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.



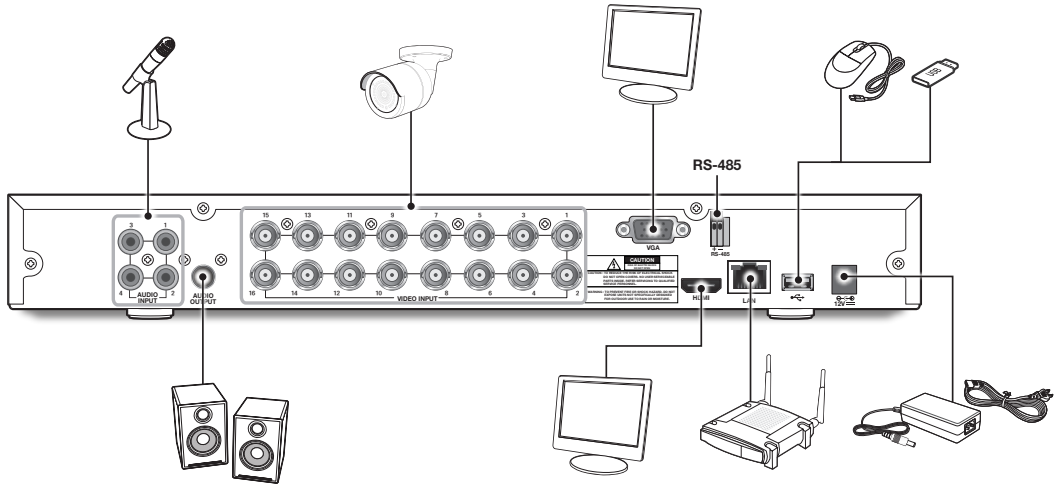
4. Multiple groups of screw mounting holes are provided on the bottom of the DVR. Screw the hard drive in place according to the size of your hard drive.



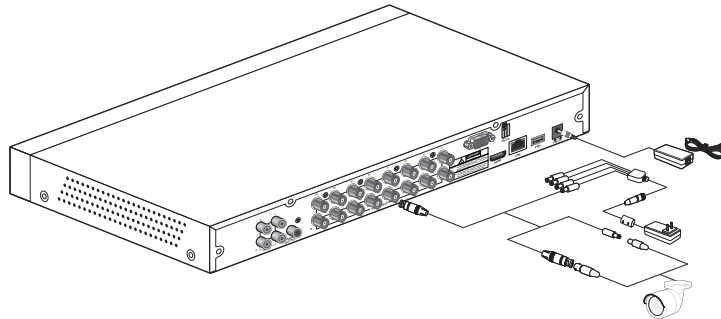
Overview of DVR

CONNECT EXTERNAL EQUIPMENT

Connect camera signal cable to video input port on the DVR via the BNC connectors. Connect your monitor to the DVR using the VGA or HDMI video cable. Connect DVR to the power supply adapter provided. After all connections are completed, plug the DVR in to perform function checks. Be sure that all audio/video I/O ports are connected properly.



CONNECT DVR



- Images may differ depending on the model.
- Camera's shape can be different depending on AIO Kit you purchased.
- Power splitter differs depending on the number of camera connected.

DVR Boot up

SYSTEM INITIALIZATION

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

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

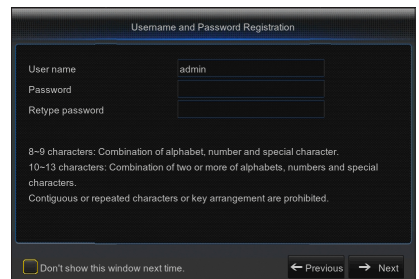


STARTUP WIZARD

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

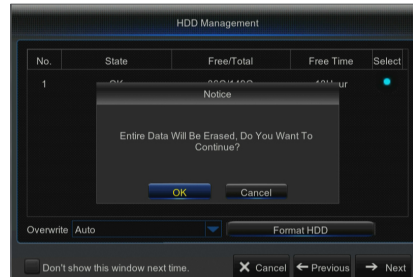
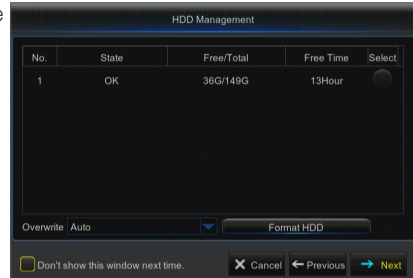
Wizard setting menu includes: Homepage, admin password setting, hard drive management, video recording schedule, basic system configuration, network setup, e-mail and DDNS setting. You can click on "Don't show this window next time" if you do not wish to have the wizard setting to appear next time.

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.
Retype password: Re-enter the password set above.



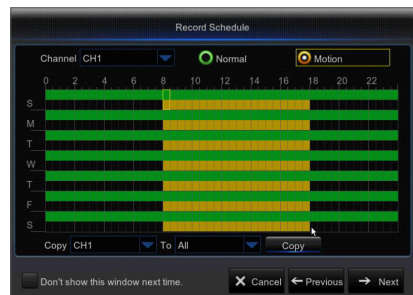
DVR Boot up

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.

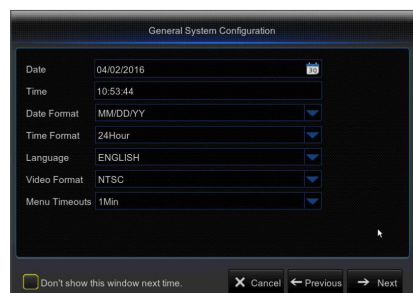


3. **Video Recording Schedule:** Select the channel and the date to be set. One week's schedule can be set. The record schedule of the current channel can be copied to any other channel or all channels.

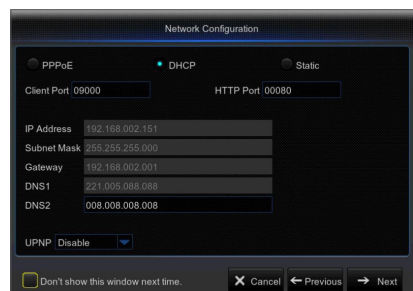
- In the Record menu and Record Search menu, when no colors are presented, it means there are no recordings during that time.
- "Green" stands for normal record and "yellow" stands for motion record.



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

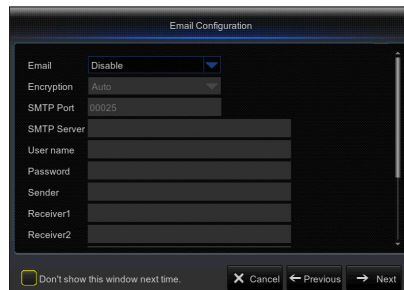


5. **Network Configuration (DHCP):** In DHCP mode the router will automatically assign an IP address to DVR. If the DVR fails to obtain an IP address, refer to the DVR Router Guide. If the problem still cannot be resolved, contact technical support.



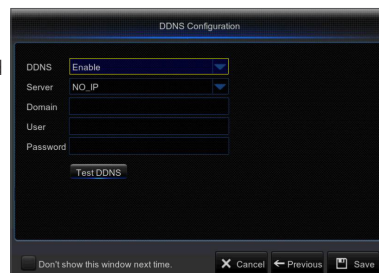
6. Email Configuration: Receive or Send DVR alarm email and set parameters like email address, SSL, email enable, and interval.

- **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:** 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 DVR 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 DVR through domain by using browser in the form of http://applied domain: mapped HTTP port number when using DDNS domain name to access DVR.

- **Server address:** Select dynamic domain name server provider. Available domain name servers (HANWHA-SECURITY, DDNS_3322, DYNDNS, NO_IP, CHANGEIP, DNSEXIT)
- **Host name:** dynamic domain name of the host obtained from dynamic domain name service provider upon registration, for example, dvr2016.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 DVR 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.

DVR Boot up

REGISTERING WITH DDNS

To register your product with the Wisenet DDNS

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

Sign-Up
Complete the following form to use the Wisenet DDNS service.

Required Information * Fill out all required information

User ID *
* Consists of 6 characters, 4 digits, 16~32, alphanumeric characters.
* The characters are restricted to letters (A-Z), numbers and underscore.

Password *
* Consists of 6 characters, 4 digits, 16~32, alphanumeric characters.
* The input not enter your ID or four identical digit/number characters in sequence in your password.

Password Check *
* Consists of 6 characters, 4 digits, 16~32, alphanumeric characters.
* The input not enter your ID or four identical digit/number characters in sequence in your password.

Name *
* Consists of 10 alphanumeric characters.

Email *
* Consists of 10 alphanumeric characters.

Country *
* Select a country.

Personal/ Business Address *

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



3. Click the [Register Product] tab.

4. Enter the product ID.

Register Product
Check real-time video feeds, and use the management services after registering your product.

Web Site URL *
* Consists of 6 characters, 4 digits, 16~32, alphanumeric characters.
* The characters are restricted to letters (A-Z), numbers and underscore.
* Consists of 6 characters, 4 digits, 16~32, alphanumeric characters.
* The input not enter your ID or four identical digit/number characters in sequence in your password.
* Consists of 6 characters, 4 digits, 16~32, alphanumeric characters.
* The input not enter your ID or four identical digit/number characters in sequence in your password.

Type *
* Select product type.

Model *
* Select product type.
* If model name is unavailable, select ITC/L.

Location *
* Enter abbreviation for product management.
* Up to 20 Korean characters and numbers or up to 30 alphanumeric characters.

Description *
* Enter abbreviation for product management.
* Up to 20 Korean characters and numbers or up to 30 alphanumeric characters.

Product Registration

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.

MY DDNS
Below is a list of your currently registered products. You may use video verification, product management, and video tagging services for each DDNS.
If a listed product is not displayed, register the product to you view on the Register Product page.

Product ID

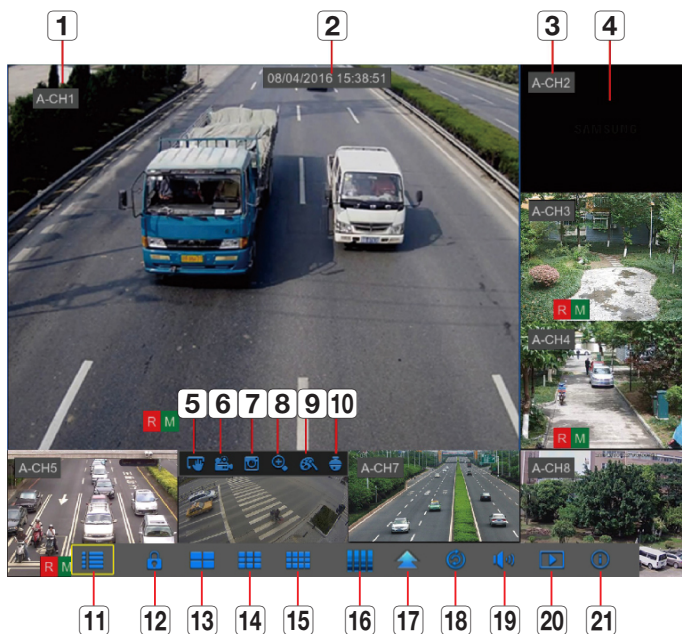
Search for alternative registered products.

No.	Product ID	Model	Connection Status	Product Management	View	Video Tagging
1	HW1234		OFF	Edit Status	View	
2	HW567890		OFF	Edit Status	View	

Refresh Product List

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 Normal recording.

M means Motion detection recording.

M means Motion detection without recording.

Component Name	Function
1 Camera Type	A means AHD camera. Absence of it means 960H camera.
2 Date & Time	Display current date and time
3 Channel Name	Display channel name
4 SAMSUNG Logo	The logo of SAMSUNG will display only when video is loss.
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.
10 PTZ	PTZ control.

DVR Boot up

Component Name	Function
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 9-Channel Layout	Display nine channels of video.
15 12-Channel Layout	Display Twelve channels of video.
16 16-Channel Layout	Display sixteen channels of video.
17 N-Channel Layout	Display 6/8/10/13/14 channels of video.
18 Screen Mode	Press this button to switch the screen mode in sequence.
19 Sound	Adjust volume or mute.
20 Playback	Access video retrieval page.
21 Information	System Information.

 Channel layout is different depending on the model.

DVR Menu

POPUP MENU

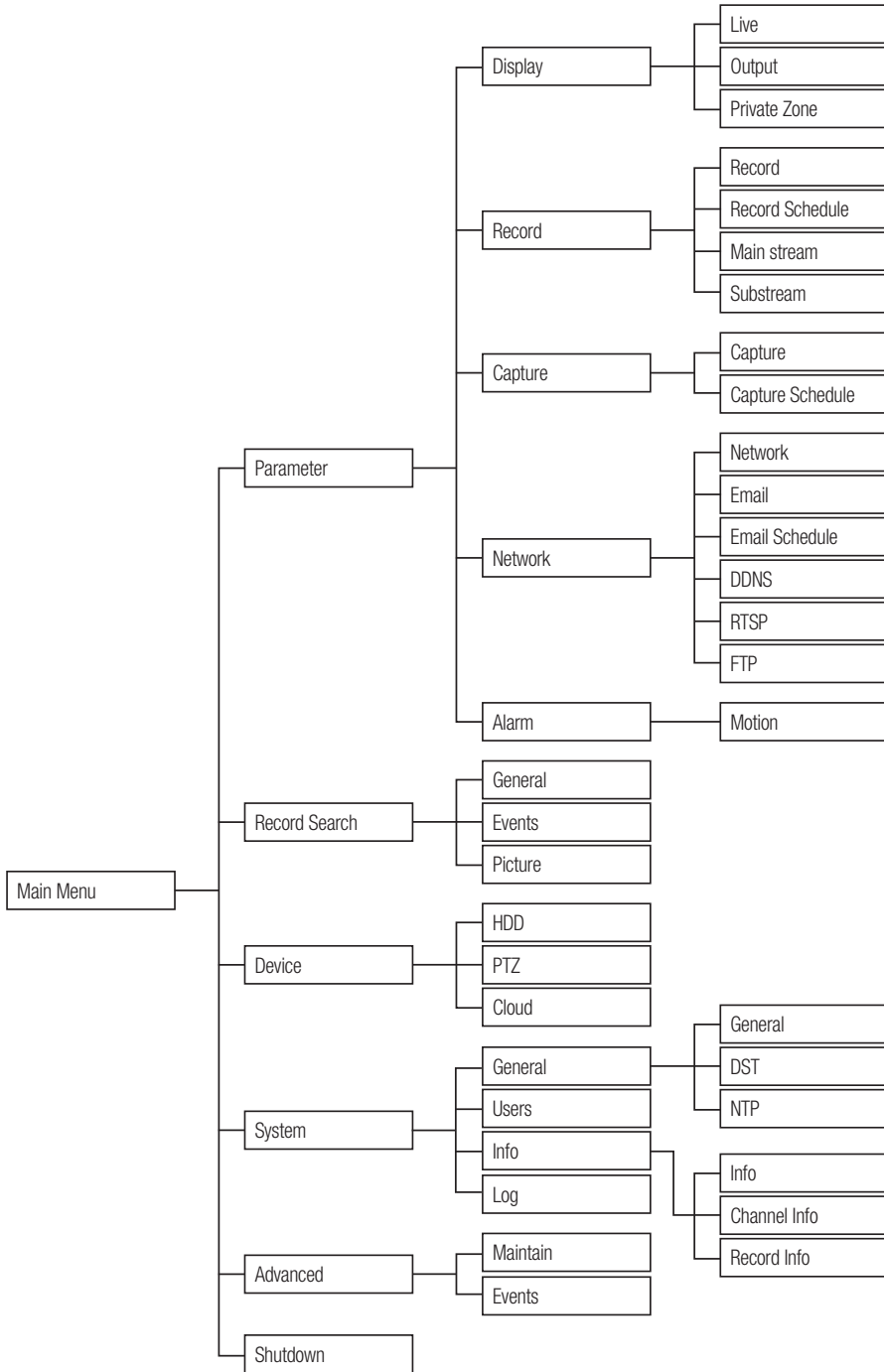
After finishing system initialization, right click the mouse on preview interface or slide the mouse to the bottom of screen to enter into Pop-up Menu. Now you could perform parameter setting and operate on Main Menu, Multi-screen, Record Search, Sequence, Volume and Brightness settings.

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.



DVR 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 36 to unlock by entering your password.

In Main Menu mode, you can make settings for Parameter, Record Search, Device, System, Advanced and Shutdown.


Parameter

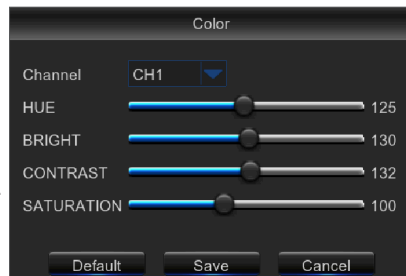
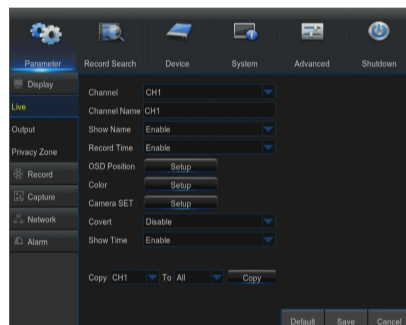
Live

Go to "Main Menu" → "Parameter" → "Display" → "Live"

- **Channel:** Select the channel in the drop-down list.
- **Channel Name:** Channel name, support up to 8 characters.
- **Show Name:** Showing Channel name
- **Record Time:** Enable or disable displaying system time in recording.
- **OSD Position:** Adjustment the position of channel name and time display
- **Color:** Click "Setup" to access the color settings
- **Camera SET:** Click "Setup" to access to the Camera EQ levels setup. It allows you to set the EQ levels according to the distance between camera and DVR.
 - EQ Levels: AUTO, 1(0~50m), 2(50~150m), 3(150~250m), 4(250~350m), 5(350~450m).
- **Covert:** Enable/Disable Video hiding.
- **Show Time:** Enable or disable the time displayed in the live interface.
- **Copy:** Copy the parameters in the channel to any other channel or all channels.

Adjust the brightness, hue, contrast and saturation of the image in selected channel in "Live" interface.

-  To modify the parameter value in sub-menu and make it effective, click "**Save**" after modification and a dialog box with message "Save parameters successful" will pop up. Click "OK" in the interface, then "**Exit**" to exit the menu. If you want to cancel the modification, click "Cancel" to exit.



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 input of special characters. The virtual keyboard is used in the same way as with physical keyboard.

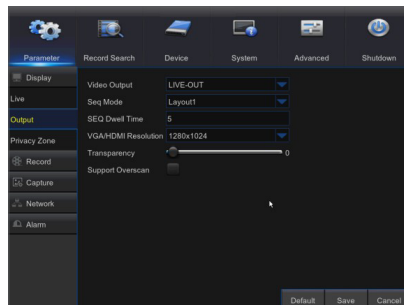
For input of password, use letters and special characters other than <\> and <>.

DVR Menu

Output

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

- **Video Output:** Live Output
- **Sequence Mode:** layout1, 4, 6, 8, 9, 10, 10-1, 12, 13, 13-1, 14
- **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, 2560×1440, 3840×2160
- **Transparency:** Adjust menu transparency in the range of 0-128.
- **Support Overscan:** Support HDMI overscan

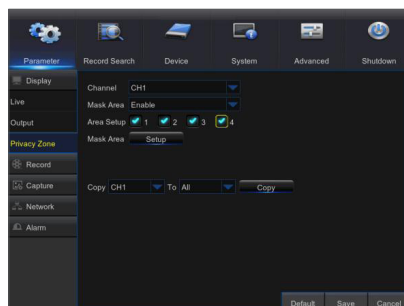


Private Zone

Go to "Main Menu" → "Parameter" → "Display" → "Private Zone" to enter into the interface.

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

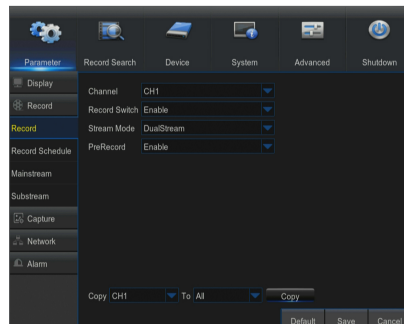
1. Select the number of the zone(s) to be blocked (maximum of 4 zones can be set for single channel)
2. Click "Setup" to adjust the position of the zone.
3. After finish setting, right click the mouse to return to the "Privacy Zone" page.
4. Click "Save" to save the setting.



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
- **Stream Mode:** DualStream
- **PreRecord:** Enable to pre-record motion detection record.



Record Schedule

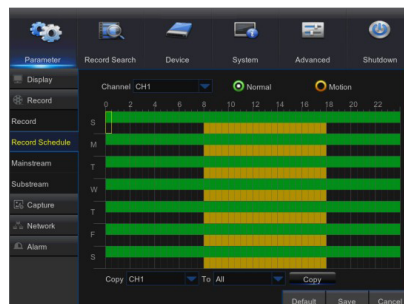
Go to "Main Menu" → "Parameter" → "Record" → "Record Schedule" to enter recording schedule for the DVR.

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.

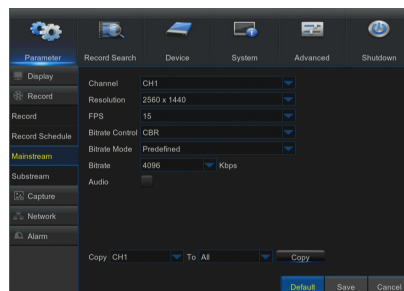
- In the Record menu and Record Search menu, when no colors are presented, it means there are no recordings during that time;
- "Green" stands for normal record and "yellow" stands for motion record.



Mainstream

Go to "Menu" → "Parameter" → "Record" → "Mainstream" to enter into the menu interface.

- **Channel:** Set the desired channel in the drop-down menu.
- **Resolution:** NTSC: 960x480 / 1280x720 / 1920x1080 / 2560x1440
PAL: 960x576 / 1280x720 / 1920x1080 / 2560x1440
 - **Note:** In AHD series, the supported record resolution includes 960H / 720P / 1080P / 2560x1440
- **FPS:** 1-15FPS
- **Bitrate Control:** Select either constant (CBR) / variable (VBR) bit rate.
- **Bitrate Mode:** Select default/custom bit rate.
- **Bitrate:** Bit rate setting
- **Audio:** Enable audio recording.

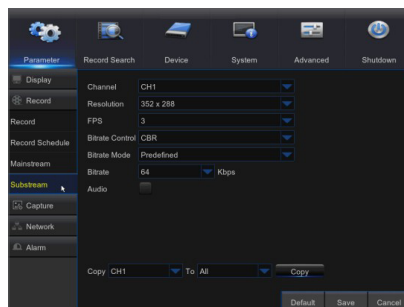


DVR Menu

Substream

Go to "Menu" → "Parameter" → "Record" → "Substream" to enter into the menu interface

- **Channel:** Select recording channel
- **Resolution:** NTSC 352x240 / PAL 352x288
- **FPS:** Select recording frame rate.
- **Bitrate Control:** Select either constant (CBR) / variable (VBR) bit rate.
- **Bitrate Mode:** Select default/custom bit rate.
- **Bitrate:** Bit rate setting
- **Audio:** Enable audio recording.

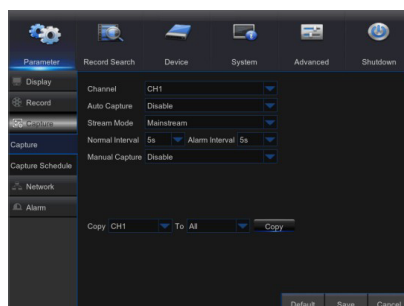


Capture

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

- **Channel:** Select capture channel
- **Auto Capture:** Enable/Disable auto capture.
- **Stream Mode:** Mainstream/Substream
- **Normal Interval:** 5s / 10s / 30s / 1min / 10min / 30min / 1h
- **Alarm Interval:** 5s / 10s / 30s / 1min / 10min / 30min / 1h
- **Manual Capture:** Enable/Disable manual capture

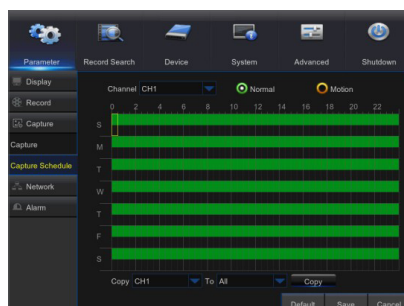
- You can click on the icon [] in the live window to manually capture the image with your mouse.



Capture Schedule

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

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



Network

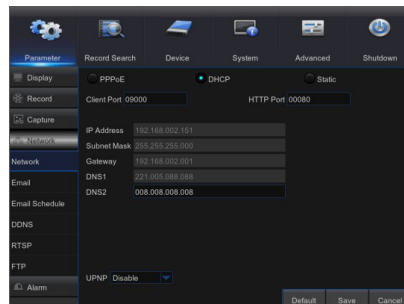
Go to "Main Menu" → "Parameter" → "Network" → "Network" to enter the interface.

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 DVR. After restarting the DVR or DHCP server, the IP address obtained by the DVR may be different. As a result, you need to check the IP address and port numbers before remote access to the DVR every time. The operation procedure is as follows:

1. Select DHCP, click Save and restart the DVR. Input Client Port and HTTP Port (the two ports must be different).
2. Remotely visit the DVR 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 DVR, the extranet port shall be mapped in the router before visiting DVR through public network.

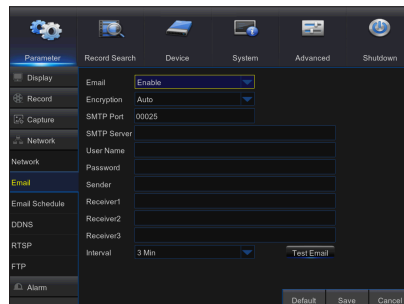


- Save the setting to apply the changes made. If there are multiple DVRs in a LAN, make sure their MAC addresses are different.

E-mail

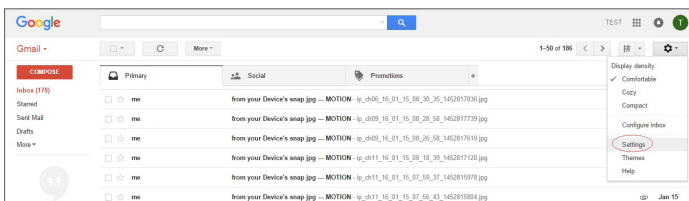
Go to "Main Menu" → "Parameter" → "Network" → "Email" to enter into the menu interface. Receive or Send DVR alarm Email and set parameters like Email address, SSL, Email Enable, and Interval.

- **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 DVR 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.



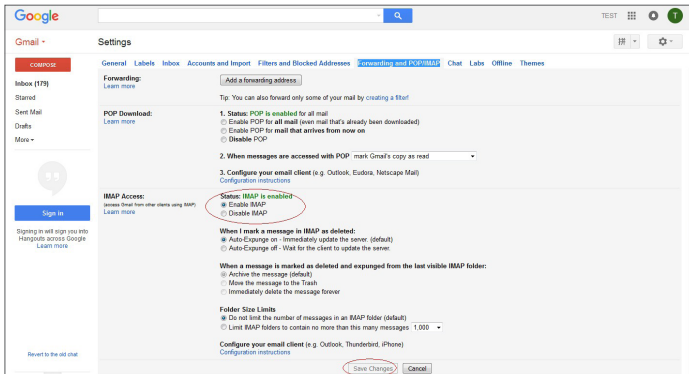
Mailbox Setting:

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



DVR Menu

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





Click on "Enable IMAP--Save Changes"

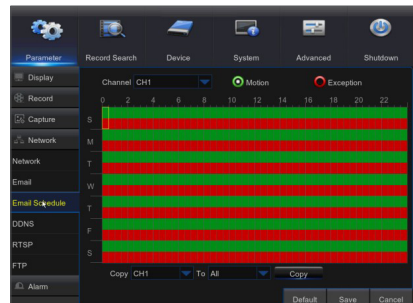
E-mail Schedule

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 Exception: Email will be sent in case of exception, e.g. No Space on Disk, Disk Error, Video loss, etc.



DDNS

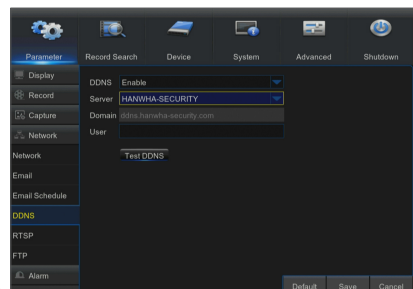
Go to "Main Menu" → "Parameter" → "Network" → "DDNS" to enter into the menu interface.

User may set DDNS in any one of the above 3 network connection types after applying dynamic domain service. User may remotely access the DVR through domain by using browser in the form of `http://applied domain: mapped HTTP port number`. When using DDNS domain name to access the DVR, 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 DVR local setting.

- Server address:** Select dynamic domain name server provider. Available domain name servers (HANWHA-SECURITY, DDNS_3322, DYNDNS, NO_IP, CHANGEIP, DNSEXIT)
- Host name:** 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 DVR by using dynamic domain name, for example, `http://ddns.hanwha-security.com/snb5000:HTTP port number (e.g. 19010)`



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.

Sign-Up
Complete the following form to use the Wisenet DDNS service.

Required Information * Fill out all required information

User ID *
Must be 6 to 20 characters, alphanumeric, no spaces, no special characters.
* The values for an account ID are provided by DDNS management software.

Password *
Must be 6 to 20 characters, alphanumeric.
* You may not enter your ID or four identical alphanumeric characters in sequence in your password.

Confirm Password *
Must be 6 to 20 characters, alphanumeric.
* You may not enter your ID or four identical alphanumeric characters in sequence in your password.

Name *

E-mail *

Country *

Company *

Personal/ Business Address *



Register Product
Check real-time video feeds and use the management service after registering your product.

URL (URL) * * URL: http://ddns-01
URL: http://ddns.hanwha-security.com/

Type *
Select product type.

Model *
Select product type.
* If model name is unavailable, select (P/C).

Location
Enter a description for product management.
* Up to 255 Korean characters and numbers or up to 20 alphanumeric characters.

Description
Enter a description for product management.
* Up to 255 Korean characters and numbers or up to 20 alphanumeric characters.

Product Registration

MY DDNS
Below is a list of your currently registered products. You may view real-time status, product management, and other tagging services for each DDNS. If a list of products is not displayed, register the products you want to register through the Register Product page.

Product ID **Search**

Search for information on registered products.

No.	Product ID	Model	Connection Status	Product Management	View	When Tagging
1	MS11021		OFF	CFG	Details	View >
2	camera102111		OFF	CFG	Details	View >

Download CSV File

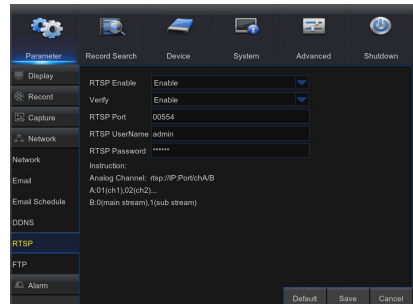
DVR Menu

RTSP

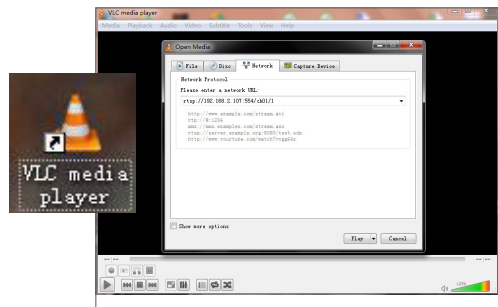
Go to "Main Menu" → "Parameter" → "Network" → "RTSP"

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

- **RTSP Enable:** Enable/Disable
- **Verify:** Enable/Disable
- **RTSP Port:** 00554
- **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

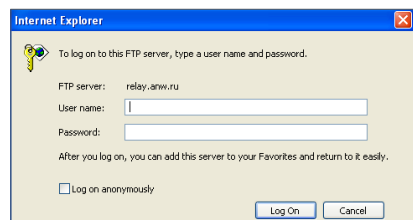
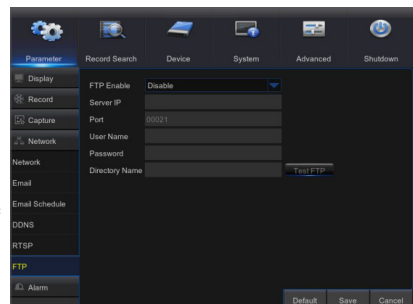
Go to "Main Menu" → "Parameter" → "Network" → "FTP"

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

Enter into ftp://relay.anw.ru/ and input User Name and Password to view the captured images.

- **FTP Enable:** Enable/Disable
- **Server IP:** Server IP address
- **Port:** 00021
- **User Name:** User Name
- **Password:** User password
- **Directory Name:** Directory name

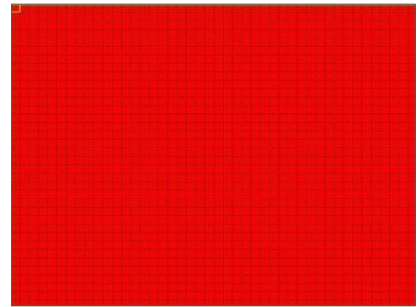
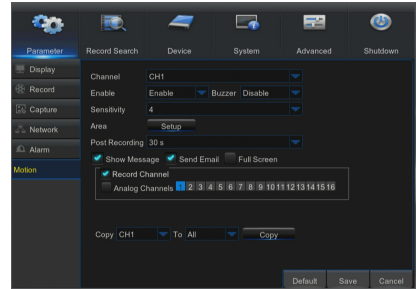
■ It is recommended to use FTP software Filezilla with open source free of charge. Use of other FTP software may cause image distortion.



Motion

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

- **Channel:** Enable or disable Motion function.
- **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 15×12 (PAL) or 15×10 (NTSC) 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.
- **Copy:** Allow you copy current channel parameters to any other channel (setting of record channel cannot be copied).



Alarm Type	Functions & Descriptions
Video Loss	When the DVR 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.

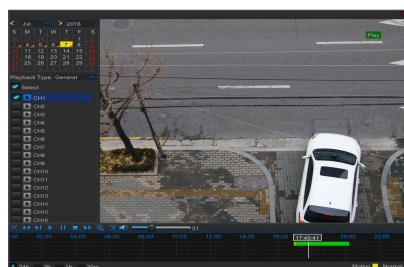
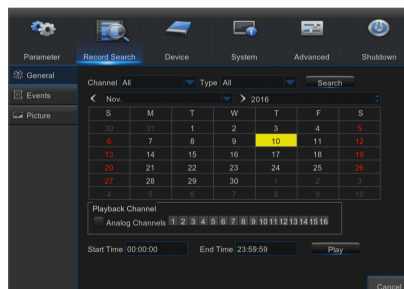
DVR Menu

Record Search

General

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

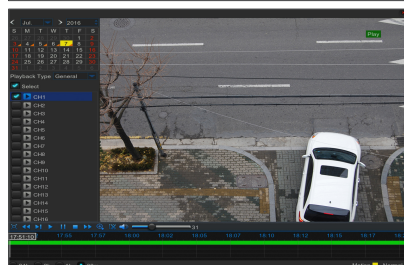
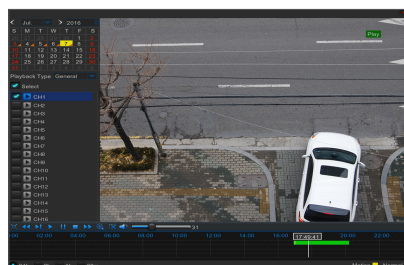
- **Channel:** Select the channel you want to search.
- **Type:** Select the type the playback record. There are three options: All, Normal and Motion.
- **Start Time/End Time:** Select the specific period of time. The default setting is from 0:00 to 24:00.
- **Playback Channel:** Click a date and select 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, DVR will remain in the playback interface.



Time Axis setup, file clip and zoom in/out

The DVR 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.

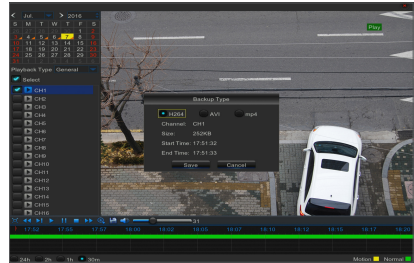


Detailed Operation

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.

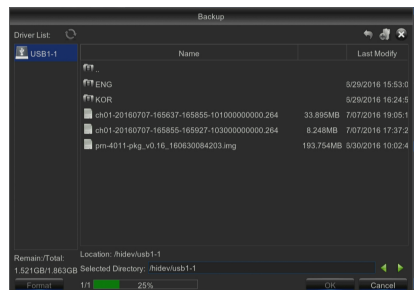
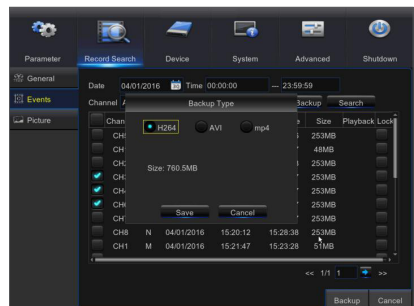
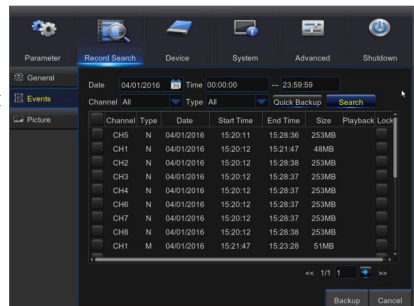
Two types of backup: Quick Backup and Backup

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.

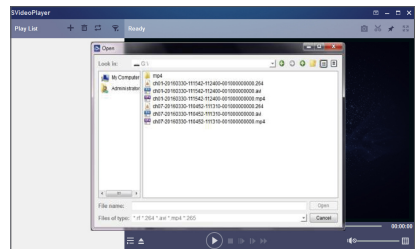
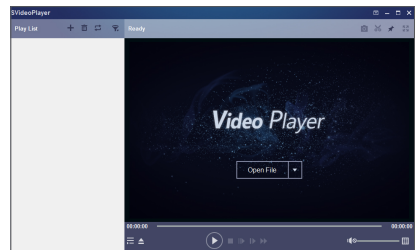
 Before backup, connect devices for backup (USB flash drive or other mobile storage devices with USB interface)



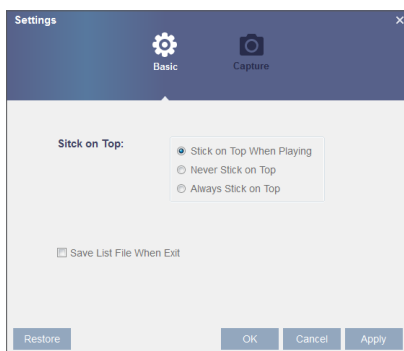
DVR Menu

Play Backup Files

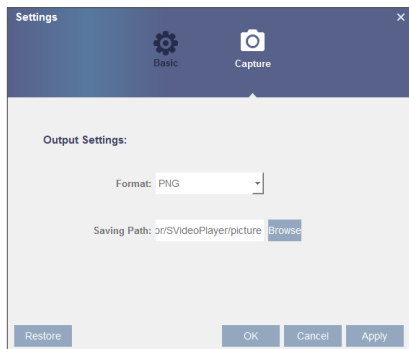
1. Copy backup files to the computer.
 2. Open SVideo player and click [+] or [Open File].
For example, if you want to choose *.264, *.avi, *.mp4, add backup file and select a file to play.
- Play: Click to play file
 - Pause: Click to pause.
 - Stop: Click to stop playback.
 - Frame Forward: step forward by frame
 - Slow Play
 - Slow forward: Click to play at 8x, 4x, 2x, 1x, 1/2, 1/4, 1/8, 1/16 speed.
 - Fast forward: Click to play at 16x, 8x, 4x, 2x, 1x, 1/2x, 1/4x, 1/8x 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
 - Adjust volume
 - 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

Step Forward

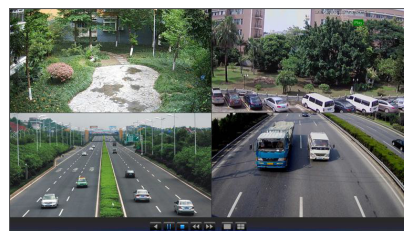
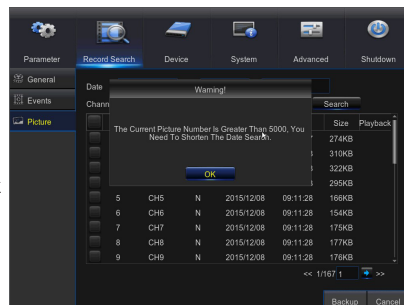
Play

Stop

Rewind

Fast Forward

Single/Quad View



DVR Menu

Device

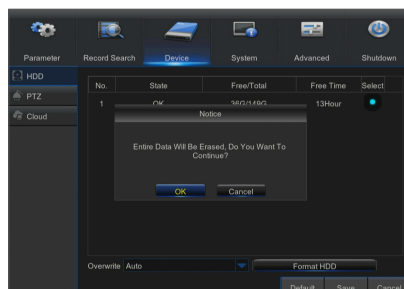
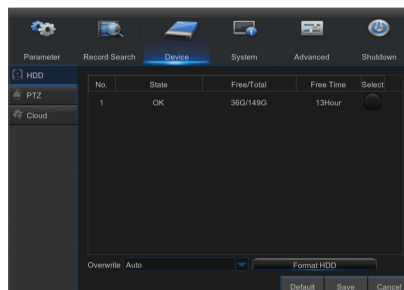
HDD

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

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

- **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 "Normal".
- **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 Auto and the hard drive is full, the DVR will overwrite the oldest files on the hard drive. When set to OFF and the hard drive is full, the DVR will stop recording.
- **Format HDD:** Format HDD for the first use.

- Recording can only be performed when the HDD is in "Normal" state.



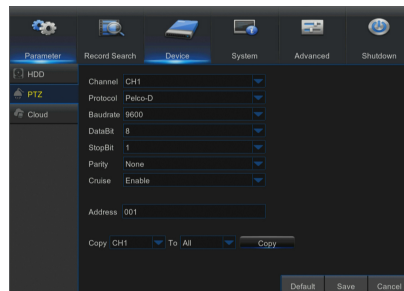
PTZ

Go to "Main Menu" → "Device" → "PTZ" to enter into the interface.

Select a PTZ channel and set PTZ protocol(Pelco-D, Pelco-P), Baudrate (1200, 2400, 4800, 9600), DataBit (8, 7, 6, 5), StopBit (1, 2), Parity (None, Odd, Even Mark Space), Address and Cruise.

Parameter setting for above channels must be the same as that of PTZ so that PTZ can be controlled. The protocol, baudrate and PTZ address must be set.

- ✎ ■ Doesn't support preset point setup and cruise of PTZ speed dome cameras through coax communication.



Cloud

Cloud Storage

- Cloud: It can upload the captured pictures to Dropbox at normal time, or when motion detection happens.

1) To use the cloud backup, you need to register your email first. For the detail, please refer to the page 21.

2) Register an account on <https://www.dropbox.com/>.

3) Configure network to ensure DVR is under network.

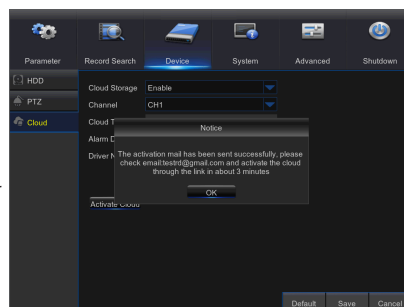
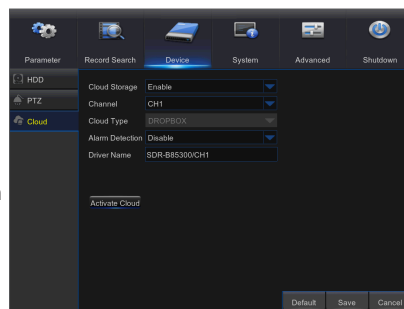
4) Configure Cloud: Enable Cloud and set the channel. Enable Motion Detection to have it capture pictures when motion detection happens.

5) Driver Name refers to the name created in the folder of Dropbox and the name can be defined by the user, e.g. CloudDVR000. 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 re-login. 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.



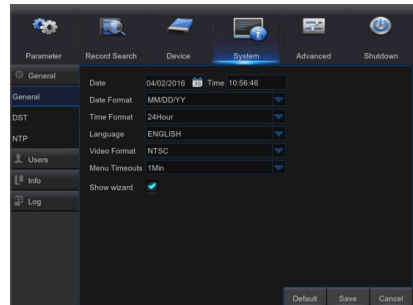
DVR Menu

System

General

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

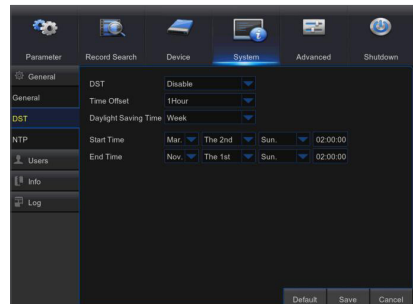
User may set Date, Time, Date Format, Time Format, Language, Video Format, Menu Timeouts and Show Wizard on this page.



DST

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

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

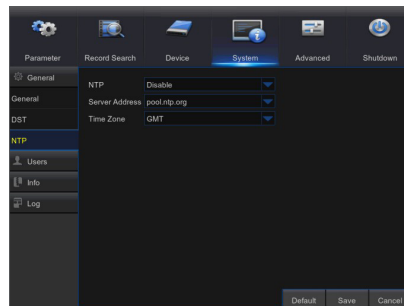


NTP

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

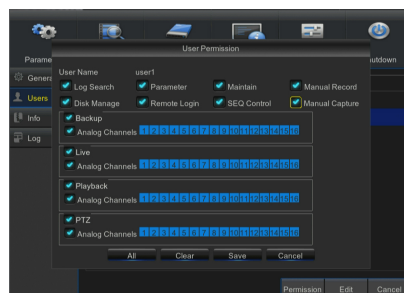
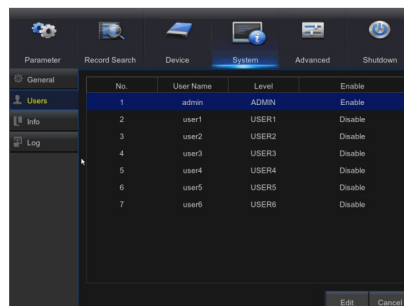
Go to "Main Menu" → "System" → "Users" to enter into the User interface.

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 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.

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

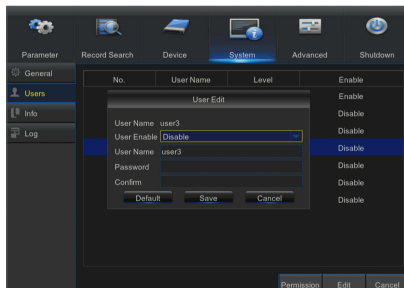
- **Log Search:** allow you check all the system logs.
- **Parameter:** allow you set all the parameters.
- **Maintain:** allow you update version, recover ex-factory value, device reboot and shut down.
- **Disk Management:** allow you manage and control the HDD and USB drive.
- **Remote Login:** allow you remotely login DVR.
- **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.
- **PTZ:** Tick-select the ENABLE "√" option and select a channel and the user is allowed to PTZ control in the selected channel.



DVR Menu

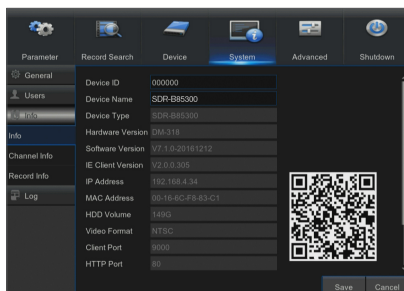
User Edit

User may enable or disable the function or set password.



Info

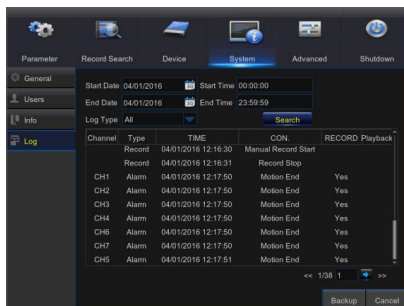
Go to "Main Menu" → "System" → "Info" to enter into the interface.



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.

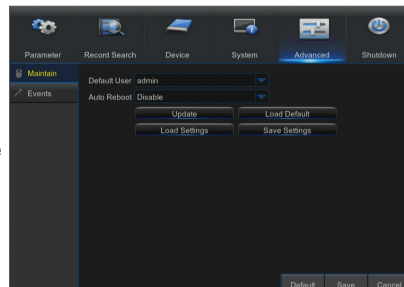



Advanced

Maintain

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

- **Auto Reboot:** Enable the auto maintenance function to reboot system regularly at every day/week/month. When Auto Reboot is enabled, DVR 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
- **Load Settings:** Load parameters in the removable storage device to DVR.
- **Save Settings:** Save the set parameters of user's DVR to the removable storage device.

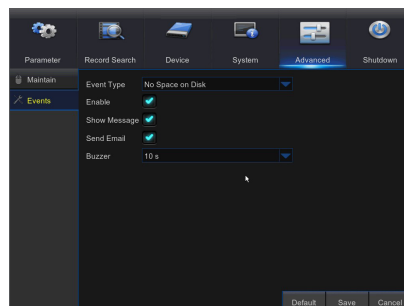


-  Do not take out the USB memory or cut off the power during upgrading. When the update is done, system will be automatically restarted. After about 5 minutes, the upgrading will be finished. It is recommended to load ex-factory default after upgrading. The auto maintain function can be effective only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

Events

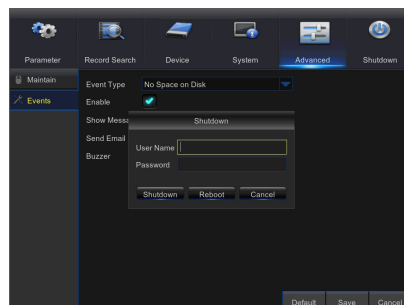
Go to "Main Menu" → "Advance" → "Events" to enter into the interface.

- **Event Type:** Support three abnormal types: No Space on Disk, Disk Error and Video Loss.
- **Enable:** Active alarms for abnormal situations.
- **Show Message:** You can set show message on the screen when sensor 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.

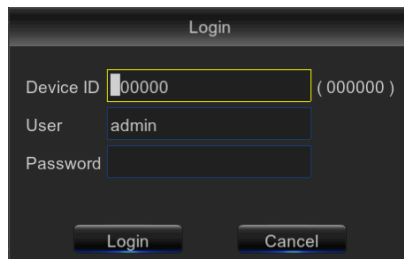


DVR Menu

MENU LOCK

In consideration of system safety, user may click the icon [] on the toolbar when he leaves away from DVR 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.



The image shows a 'Login' dialog box with a dark background. It contains three input fields: 'Device ID' with the value '00000' and a '(000000)' label to its right; 'User' with the value 'admin'; and 'Password' which is empty. At the bottom, there are two buttons: 'Login' and 'Cancel'.

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.

MUTE

Click [] icon on the toolbar or remote controller to control the mute of DVR.

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.

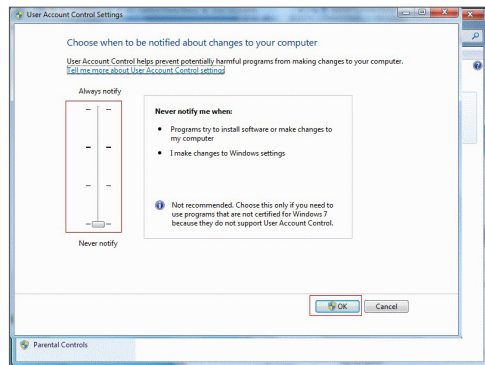
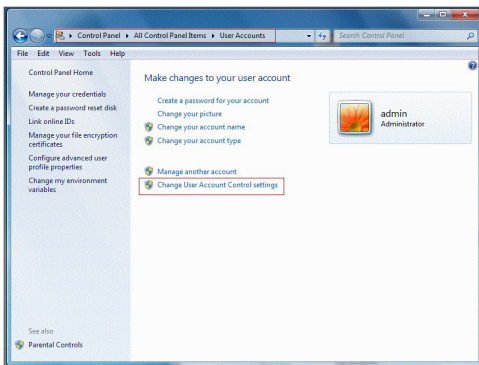
	Minimum	Recommended
CPU	Intel i3	Intel i7 or higher
RAM	4GB or more	8GB or more
Hard Drive	500GB or more	1000GB or more
Display RAM	2GB or more	4GB or more
Display Resolution	1280*1024	1920*1080
OS	Windows® Vista, Windows® 7, Windows® 8, Windows® 10 Mac OS X® 10.9 and above Microsoft Internet Explorer (Ver. 11, 10, 9, 8), Mozilla Firefox v19.x or higher, Google Chrome™ V 44.x or lower Safari®5.1 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

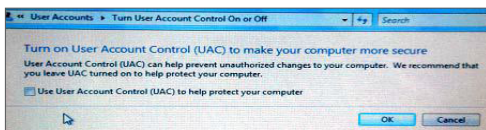
If your computer system is Windows 7, you may need to setup the user authority for remote control, or you may be unable to backup or record.

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

WIN7



Vista



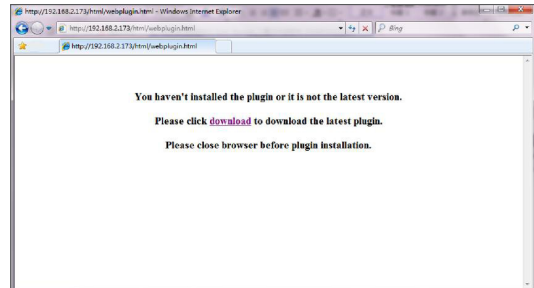
Web Application Manager

- ✎ 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.

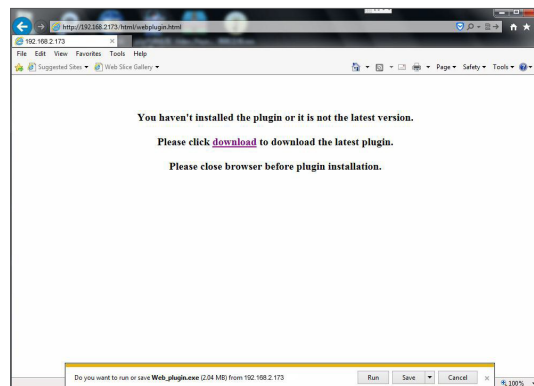


Download and installation of plugin for IE

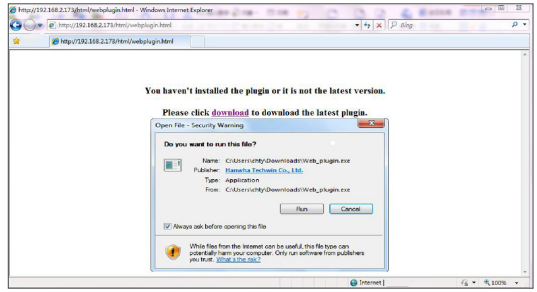
Enter IP address of DVR in address bar of IE, for example, <http://192.168.2.173:80>



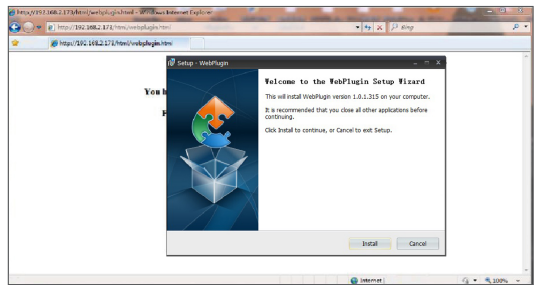
Click on "Download", and then click on "Run" in being Downloaded File - Security Warning box"



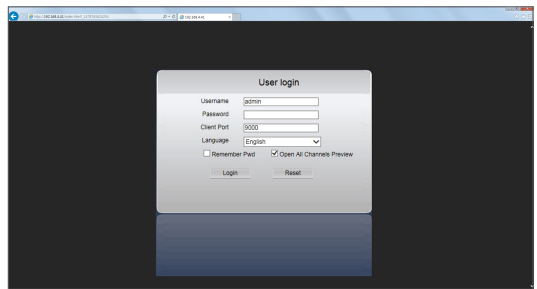
Click on "Run" in warning box reading "Do you want to run this software?"



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

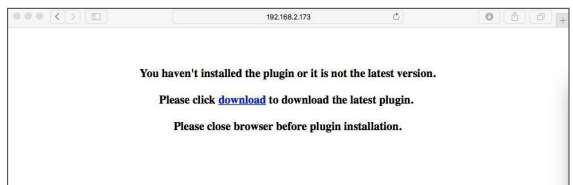


Shut down IE browser and restart it, and then enter IP address of DVR in address bar to access login page.

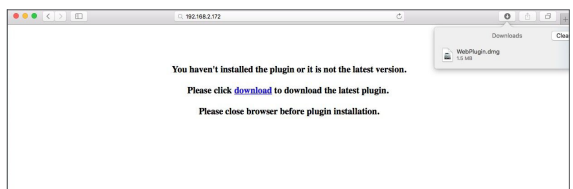


Download and installation of plugin for Mac SAFARI

Enter IP address of DVR 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 "WebPlugin.dmg" and double click on it

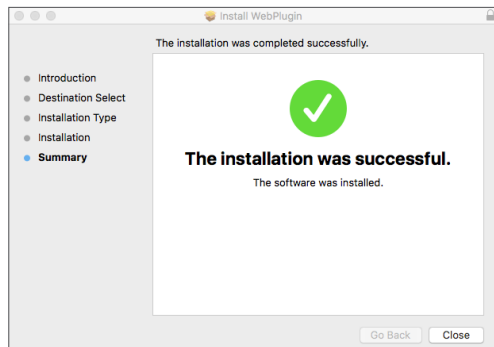
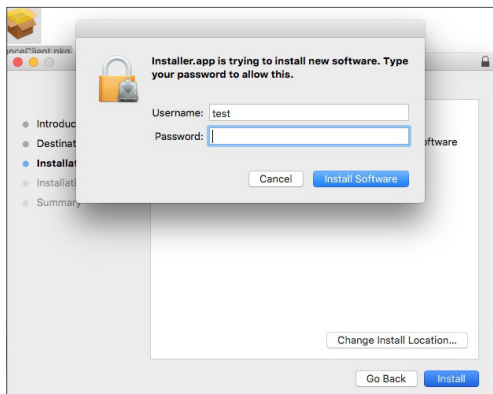
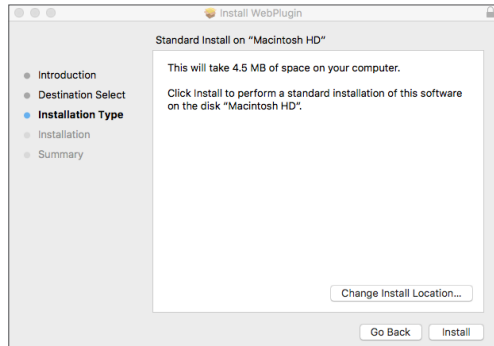
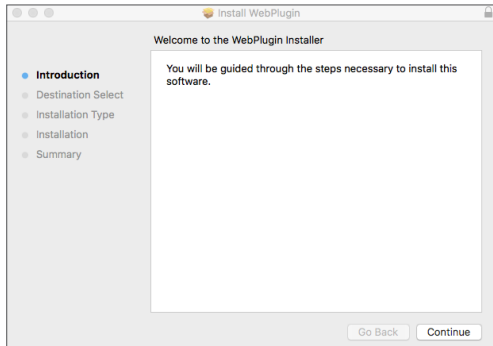


Web Application Manager


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



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



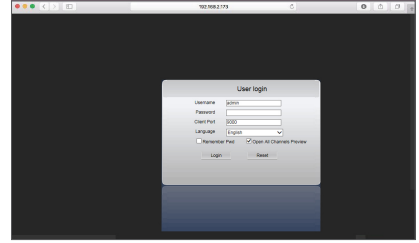
Shut down Mac SAFARI browser and restart it, and then enter IP address of DVR in address bar to access login page.

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

If you use Google Chrome to log in, please use Version 41 or lower. If you use V42 to V44 to log in, you need to enable NPAPI plugins. You can enter chrome://flags/#enable-npapi on URL bar of Google Chrome to find and enable NPAPI. Please note that it doesn't support V45 or above.

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 DVR.

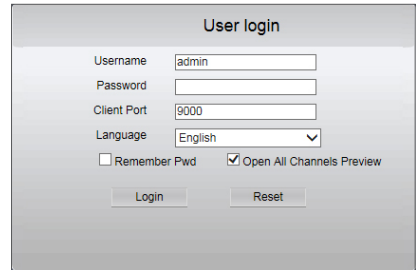
When you do a firmware upgrade, please close the browsers in order to have the new plug in replace the old one. Depending on your situation, the plugin may not be work on your browser. In this case, please install the plugin available on the CD provided. (Web_plugin_Windows_YYYY_MM_DD.exe for Windows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



WEB APPLICATION MANAGER LOGIN

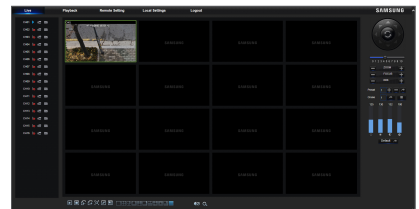
After web plugins installation, please input user name and password, and input HTTP port number and select language in the interface. There is an option for opening all channel preview, select it to open all live pictures. Press Login to log in client and remotely visit DVR. The default password is blank and administrator 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.



Web Application Manager

Menu Bar

Menu Bar: Live, Replay, Configuration, Local Setting and Logout.

Live Display

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



: Volume switch



: 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.



: Open or close the images on Live window.



: Switch display mode in channel window



: Open all the Live channels.



: Close all the Live channels



: Display previous group of channels



: Display next group of channels

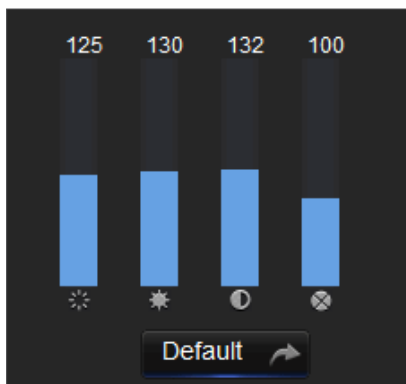


: Click to maximize the current window to full screen. Right click to popup menu option and select Exit Full Screen.



: Display preview of all channels in original proportions. Press this icon again, it would stretch the images.

Video Control



: Adjust the chromaticity of video



: Adjust the brightness of video



: Adjust the contrast of video

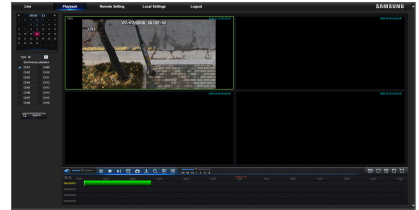


: Adjust the saturation of video

Playback

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

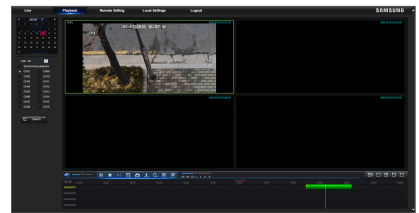
It supports 1 to 4 channel record playback.



Record Search

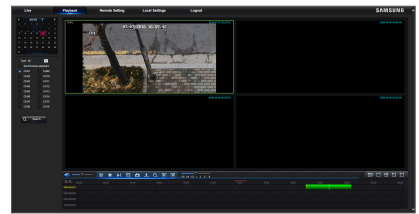
Record playback procedure

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 [**Play**] to start record playback. When mouse cursor 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 [**Zoom In**] or [**Zoom Out**] to zoom in/out the time bar display ratio.

Web Application Manager

Playback Control

Playback control bar



Detailed brief description is shown as below list

Key	Description	Key	Description
	Play		Enable the volume switch
	Pause		Volume adjustment bar
	Stop		Slow playing 1/2,1/4, 1/8, Fast playing 1/2/4/8
	Byframe		Stop playing all the files
	Record Clip		Single channel mode
	Snap		Quad mode
	Download		Full Screen
	Open all the playback channels		Stop playing all the playback

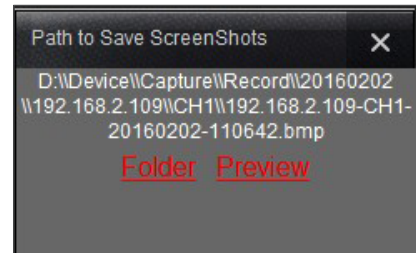
Record file clip

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 cursor 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.

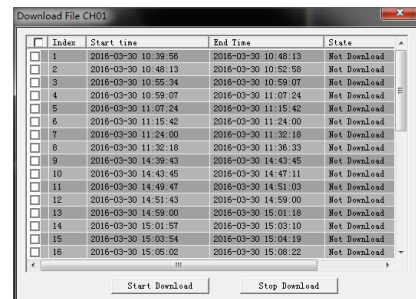
The captured file will be saved as .bmp format.



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.



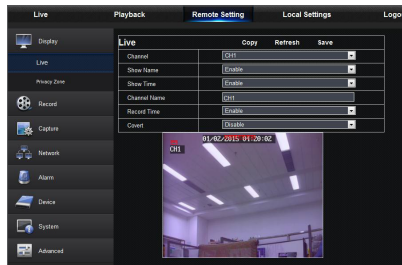
Remote Setting

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

Display

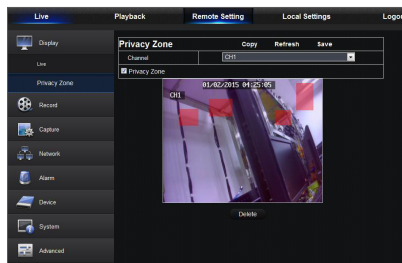
Live

- **Channel:** Select analog channel or digital channel.
- **Show Name:** Enable or Disable display camera name.
- **Show Time:** Enable or Disable time display.
- **Channel Name:** Define a camera name for the camera.
- **Record Time:** When enable, the time will be recorded on your video.
- **Covert:** Enable or Disable video covert.



Privacy Zone

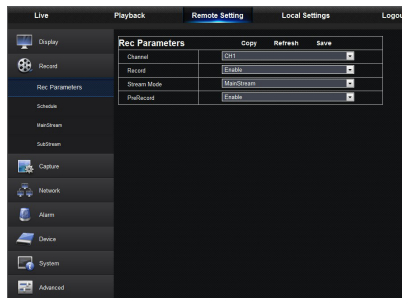
Each channel can set 4 privacy zones. The relevant parameters should be consistent with DVR local setting. Select zones to be deleted and click "Delete" and click "Save" at up-right corner.



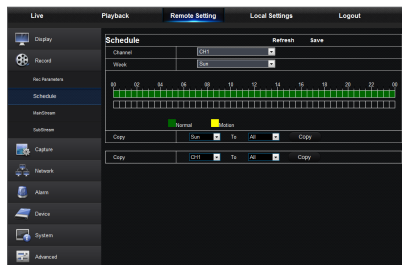
Record

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

1. Record Parameters. The parameters should be consistent with DVR local setting.



2. Record Schedule. The parameters should be consistent with DVR local setting. Green stands for Normal record; Yellow stands for Motion detection.

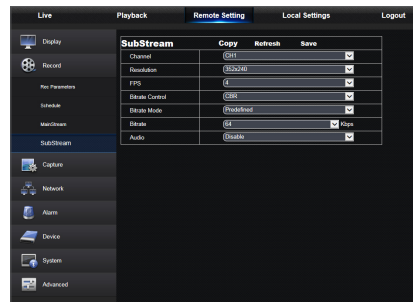


Web Application Manager

3. Mainstream: User may set Mainstream.
The relevant parameters should be consistent with DVR local setting.



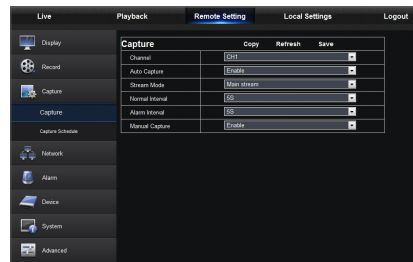
4. Substream:
- **Channel:** Select analog channel or digital channel.
 - **Resolution:** Select recording resolution.
 - **FPS:** Select recording frame rate.
 - **Bitrate Mode:** Select default or custom bit rate.
 - **Bitrate:** Select recording bit rate.



Capture

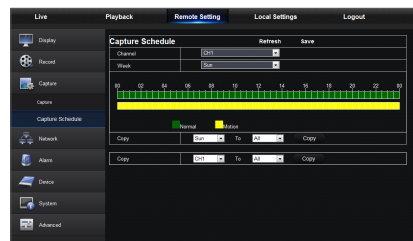
Capture

- **Channel:** Select analog channel or digital channel.
- **Auto Capture:** Enable/Disable auto capture
- **Stream Mode:** Select main stream or sub stream of 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 analog channel or digital channel
- **Normal:** Conventional capture setting
- **Motion:** Motion detect capture setting

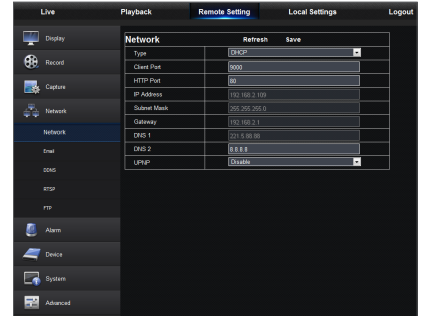


Network

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

LAN setting

DVR supports Static/DHCP/PPPoE modes. System default network type is <DHCP>. User can set parameters as required. After the network parameters are modified successfully, DVR will automatically restart to make the setting effective.



Email

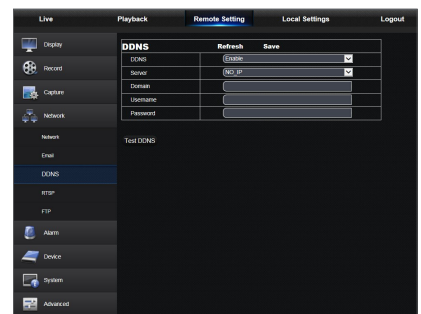
Email: Set DVR alarm Email configuration parameters, including Email address, Encryption, Email Enable, and Interval etc. Detailed parameters should be consistent with DVR local setting.



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 DVR through domain name (http://domain name: HTTP port No.). When visiting DVR 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 DVR local setting.

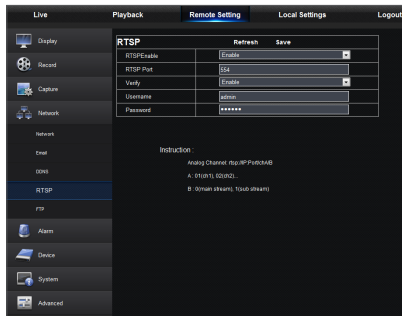
Click on "Test DDNS". If connection succeeds, it will be indicated that "DDNS Test is Successful!"



Web Application Manager

RTSP

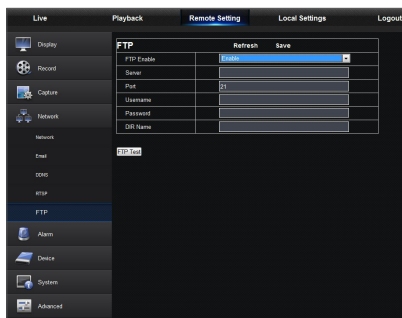
The relevant parameters should be consistent with DVR local setting.



FTP

The relevant parameters should be consistent with DVR local setting.

- It is recommended to use FTP software Filezilla with open source free of charge. Use of other FTP software may cause the image abnormal.

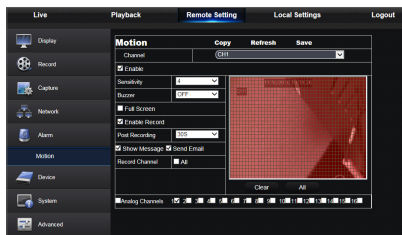


Alarm

Alarm setting includes Motion Detection Parameters.

Motion Detection

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



Device

Click <Device> to unfold its sub-options: HDD, PTZ and Cloud Storage.

HDD

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



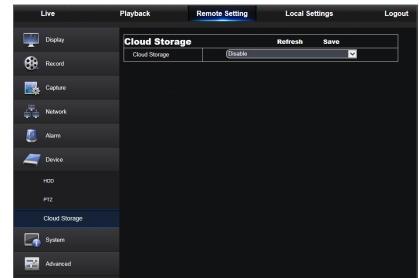
PTZ

User may set the relevant parameters of PTZ. Detail setting should be consistent with DVR local setting.



Cloud Storage

User may set the relevant parameters of Cloud Storage. Detail setting should be consistent with DVR local setting.

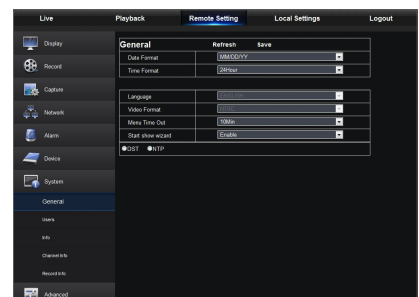


System

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

General

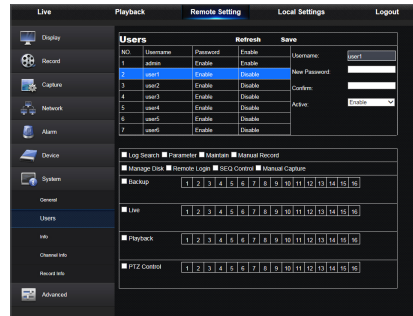
User may check DVR language and video system and date format, menu display time, DST and NTP parameters. Detailed setting should be consistent with DVR local setting.



Web Application Manager

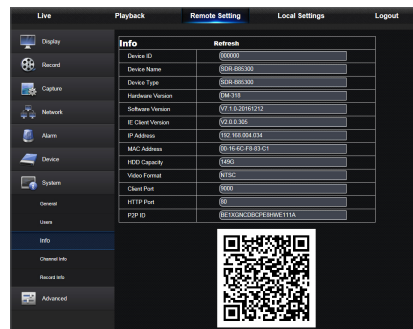
Users

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



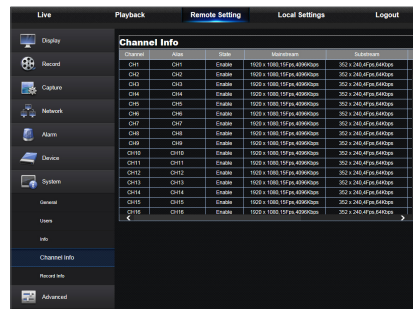
Info

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



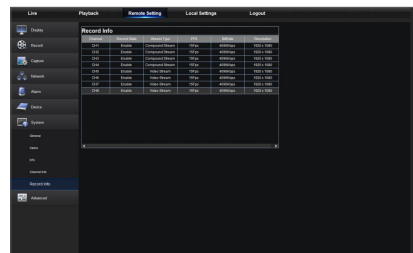
Channel Info

Displays all channels camera relevant information.



Record Info

Display relevant information on video from all cameras.



Advanced

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

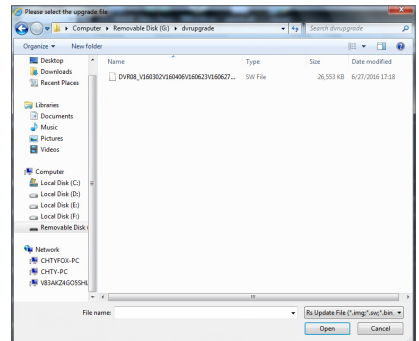
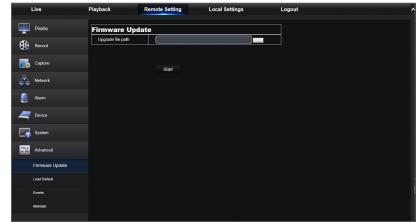
Firmware Update

User may remotely update DVR system.

Updating procedure

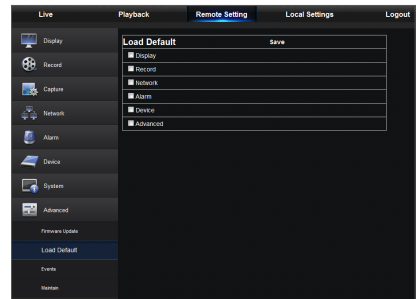
Firstly, select the update file path. The file format is *.sw.

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



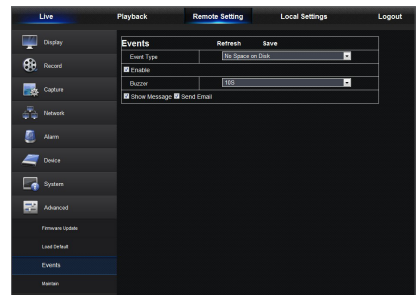
Load Default

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



Events

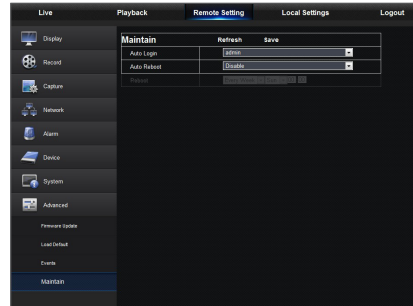
User may configure Event Type, Buzzer, Send Email, Show Message and other parameters. Detailed setting should be consistent with DVR local setting.



Web Application Manager

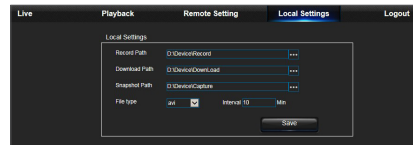
Maintain

Allow you remotely set auto maintain time for DVR. Detailed setting should be consistent with DVR 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 (H264 and AVI).



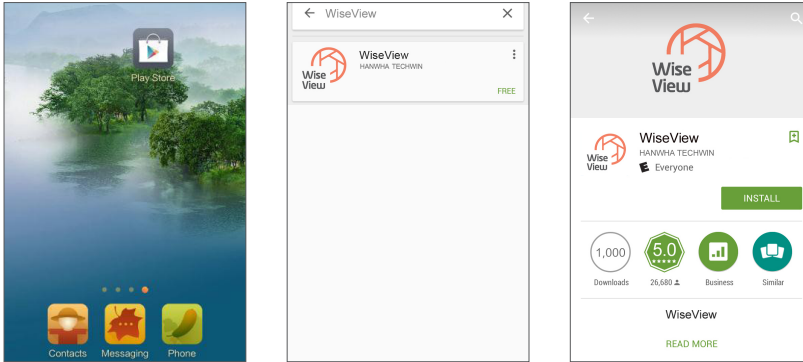
Logout

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

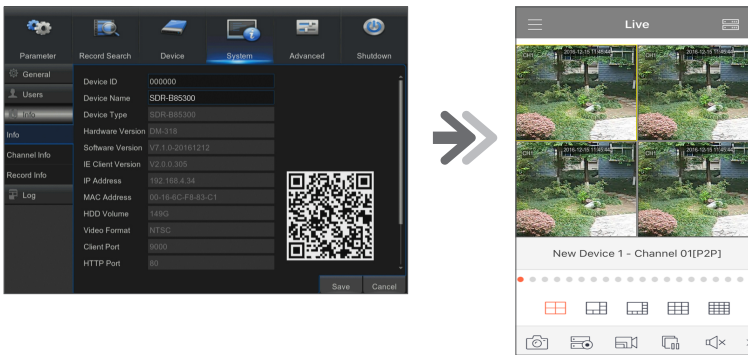
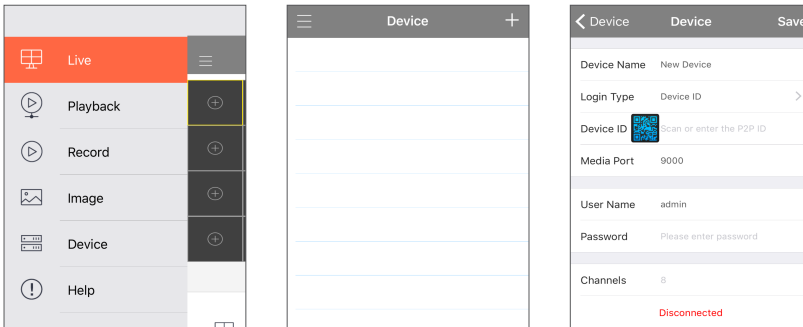
Mobile App

ANDROID PHONES/TABLETS

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



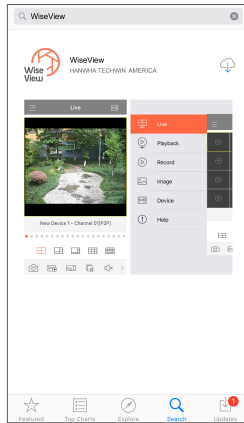
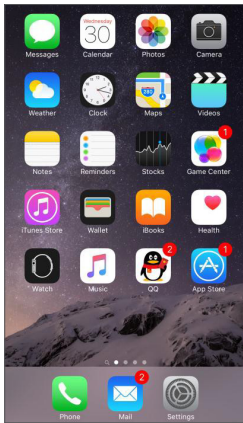
2. After installation, open WiseView and select "Device". Then click [+] to add new device. Scan QR code under Information page of system on local DVR. Then input client port, user name and password, and then click Save to log in to the device.



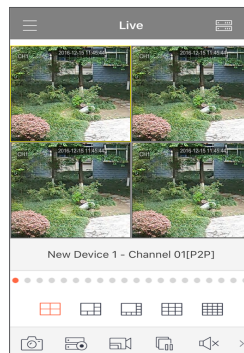
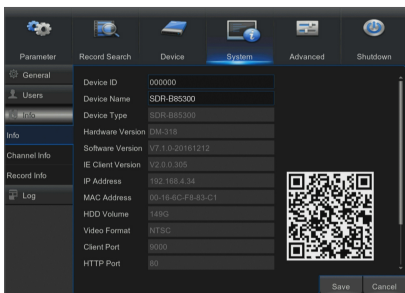
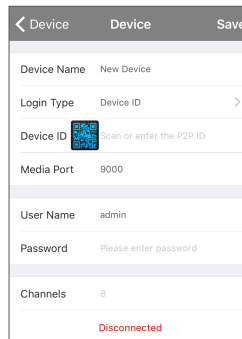
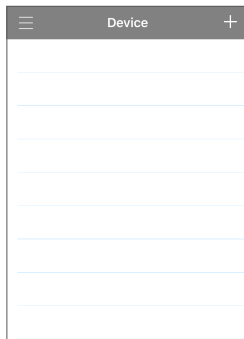
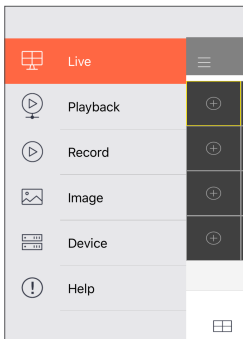
Mobile App

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 DVR. 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?	<ul style="list-style-type: none">• 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?	<ul style="list-style-type: none">• 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 DVR and camera together. Power supply for both devices is OK. What is wrong?	<ul style="list-style-type: none">• Check network cable on DVR 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 DVR from being influenced by heat?	<ul style="list-style-type: none">• The DVR needs to dissipate heat while it is running. Please place the DVR in a place with good air circulation and away from heat sources to ensure stability and life of the DVR.
The remote controller of DVR doesn't work while the monitor screen is OK and panel keys are functional. Why?	<ul style="list-style-type: none">• 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 DVR. Can it work?	<ul style="list-style-type: none">• All HDDs supported by the system can be used. But remember, once DVR runs, the data on your HDD will be lost.
Can I playback while recording?	<ul style="list-style-type: none">• Yes. The system supports the function of playing while recording.
Can I clear some records on HDD of DVR?	<ul style="list-style-type: none">• 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 DVR client?	<ul style="list-style-type: none">• 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?	<ul style="list-style-type: none">• 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?	<ul style="list-style-type: none">• Please check if the motion detection sensitivity level set is too low and motion detection area setting is correct.
Why does buzzer keep alarming?	<ul style="list-style-type: none">• 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.

Appendix

Usage Maintenance

1. To shut down DVR, please firstly shut down the system and then turn off the power. Do not turn off the power directly or HDD data will be lost or damaged.
2. Please keep DVR away from heat sources or places.
3. Clean the internal dust regularly. Make sure the good ventilation of DVR so as to ensure the good heat dissipation.
4. Please do not hot plugging 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 DVR 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.

SPECIFICATIONS

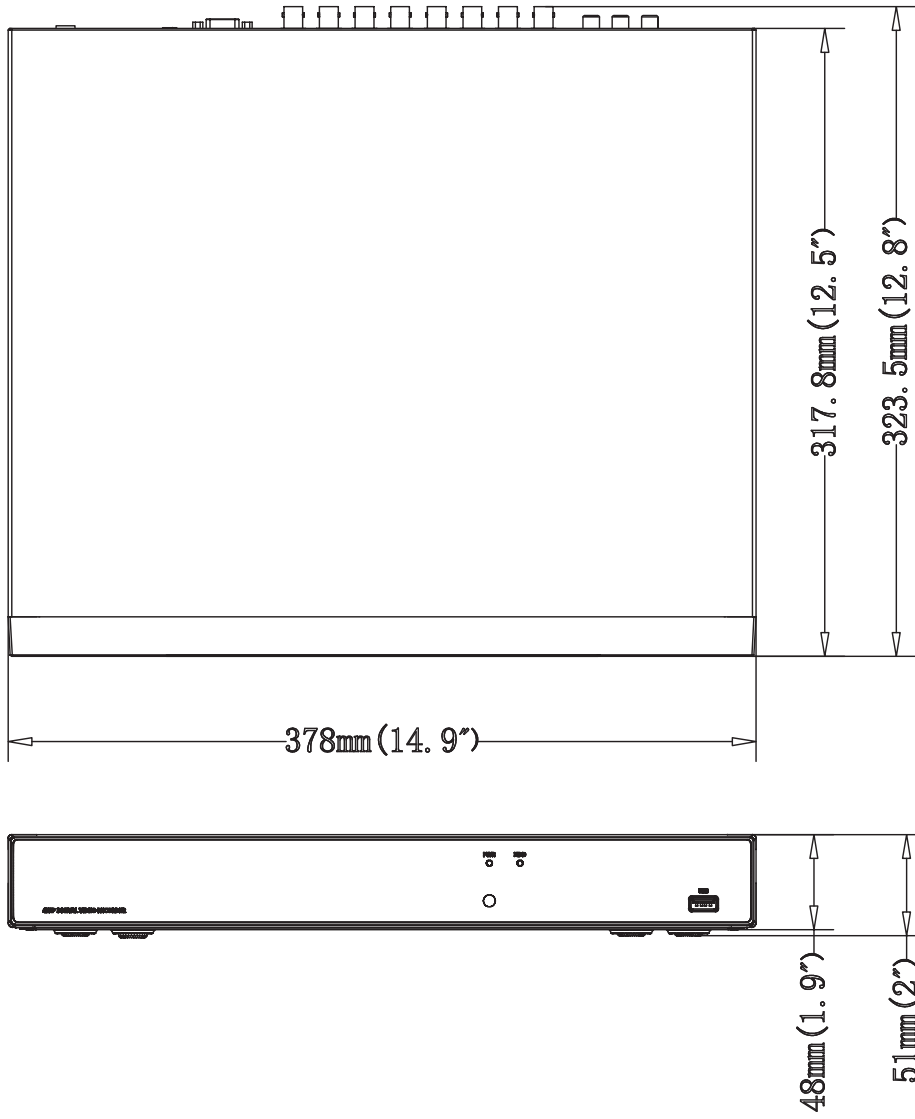
Item		Details
Description		
Video	Inputs	16CH BNC
	Resolution	2,560x1,440(4MP) (4MP) / 1,920x1,080 (Full HD) / 1,280x720 (HD) / 960x480 (960H)
Live	Frame rate	NTSC : 30fps@4M per channel / PAL : 25fps@4M per channel
	Resolution	1440p / 1080p / 720p / 960H / etc
	Multi Screen display	1 / 4 / 6 / 8 / 9 / 16 / SEQ
Performance		
Operating System	Embedded	Linux
	Installation wizard	Support
Recording	Compression	H.264
	Record Rate	Up to 240fps@2,560x1,440 Up to 480fps@1,920x1,080 Up to 480fps@1,280x720 Max. reso.1440P
	Mode	Manual, Schedule (Continuous/Event), Event(Pre/Post)
	Event	Video Loss, Motion(Sensitivity Level 1~8)
	Overwrite modes	Auto/Off
	Pre-alarm	Min. 1sec
	Post-Alarm	Up to 5min (30 sec, 1/2/5min)
Search & Playback	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
	Playback (decoding)	Up to 240fps@2,560x1,440 Up to 480fps@1,920x1,080 Up to 480fps@1,280x720
Network (IPv4)	Protocol support	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, DHCP(Server, Client), PPPoE, SMTP, DNS, DDNS, uPnP
	Monitoring	Webviewer, Mobile Viewer(TUTK P2P), CMS for PC(TUTK P2P)
Remote Monitoring	Web / App viewer	Supported OS - PC : Windows® Vista, Windows® 7 Windows® 8, Windows® 10 Mac OS X® 10.9 or above - Mobile : Android Ver.4.4 or above iOS®8.0 or above
		Supported Browser - Microsoft Internet Explorer (Ver. 11, 10, 9, 8), Mozilla Firefox Ver 19.x or higher, Google Chrome Ver 44.x or lower Safari®5.1or above
	Protocol support	TCP/IP, UDP/IP, UDP, P2P
	Transmission speed	Max.240fps@1440p
	Remote users Maximum	20 (Max. bandwidth 128M)

Appendix

Item		Details
Storage	Internal HDD	2 SATA HDD - 2 bays support up to 6TB per 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, 2,560x1,440, 3,840x2,160)
	Simultaneous Output	VGA and HDMI
Audio	Inputs/Output	4CH RCA in / 1CH RCA out
	Compression	G.711, 8KHz
Alarm	Remote notification	Notification via e-mail
PTZ control	RS-485	1 EA (Pelco-D/P)
Connections	Ethernet	1 RJ45 10/100/1000 Base-T
	USB	USB 2.0, 2 ports (Front/Rear)
	Serial	RS-485
	Application Support	Mouse, Remote control
General		
Electrical	Input Voltage/Current	12V
	Power consumption	13.56W
Environmental	Operating Temperature/ Humidity	0°C~+40°C (32°F ~ 104°F) / 20% ~ 85%RH
Mechanical	Dimension (WxHxD)	378X323.5X51 mm (14.88"X12.74"X2.01")
	Weight (With hard disks)	3Kg
OSD Language		English, French, German, Spanish, Italian, Russian, Turkish, Portuguese
Mechanical / Package information		
Color / Material		Black / Metal
Accessory	Printed material	Quick start guide
	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 adapter	DVR : 12V 5A UL; 1EA for 6 cameras: 12V 3A UL, 1EA for 4 cameras: 12V 2A UL
	Power splitter	1EA 1 to 4 way power splitter, 1EA 1 to 8 way power splitter
	CD	Quick start guide (PDF), User manual (PDF), Router guide (PDF), CMS for PC

DIMENSION

Unit: mm (inch)



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If such an object file uses only numerical parameters, data structure

layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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