NVR-0316
User's Manual

Version 1.0.0

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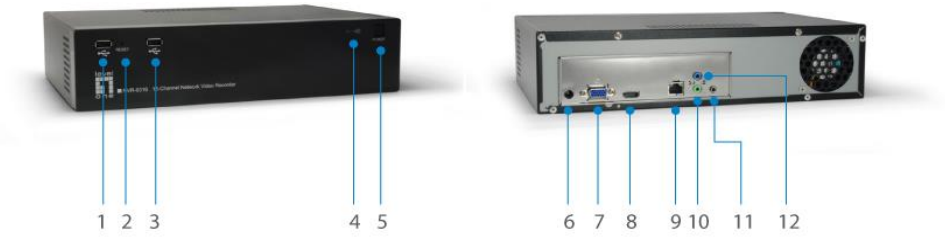
Hardware

Overview



1. USB Port
2. Reset Button
3. USB Port
4. LED
5. Power Button
6. Power Connector
7. VGA Port
8. HDMI Connector
9. Ethernet
10. Audio Out
11. Microphone Port
12. Line In

LED & Buttons Definitions

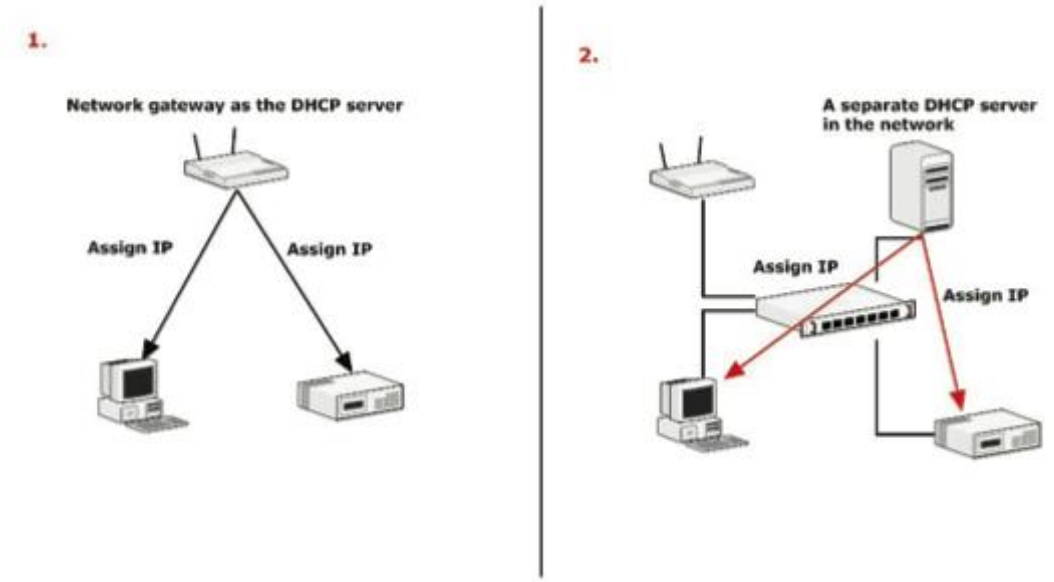
LEDs	Status	Definitions
Power	Green	*Solid green - Normal operation *Slow blinking in green after press and hold the reset button for 5 seconds indicates the device will enter the restore default process. Other LEDs remain unchanged during this state.
	Red	System off (power cord remains plugged in)
	Amber	*Fast blinking in amber during system initializing/starting. Continous blinking when system is unable to start properly (All other LEDs should be off when this LED is blinking in amber) * Slow blinking indicating the system is shutting down. Other LEDs go off according the stage of
Buttons		
Power btn	ON	Press and hold for 2 seconds
	OFF	Press and hold for 2 seconds
Reset	Restore default	Press and hold for 5 seconds
	Restart	Press and hold for 2 seconds
Buzzer		
Beep	Complete start	Beep once (indicating the system is fully started)
	Initiating restart	Beep once (Indicating the restart process has begun)
	Initiating shutdown	Beep once (Indicating users to release the Power button as the shutdown process has begun)

Connect to the NVR

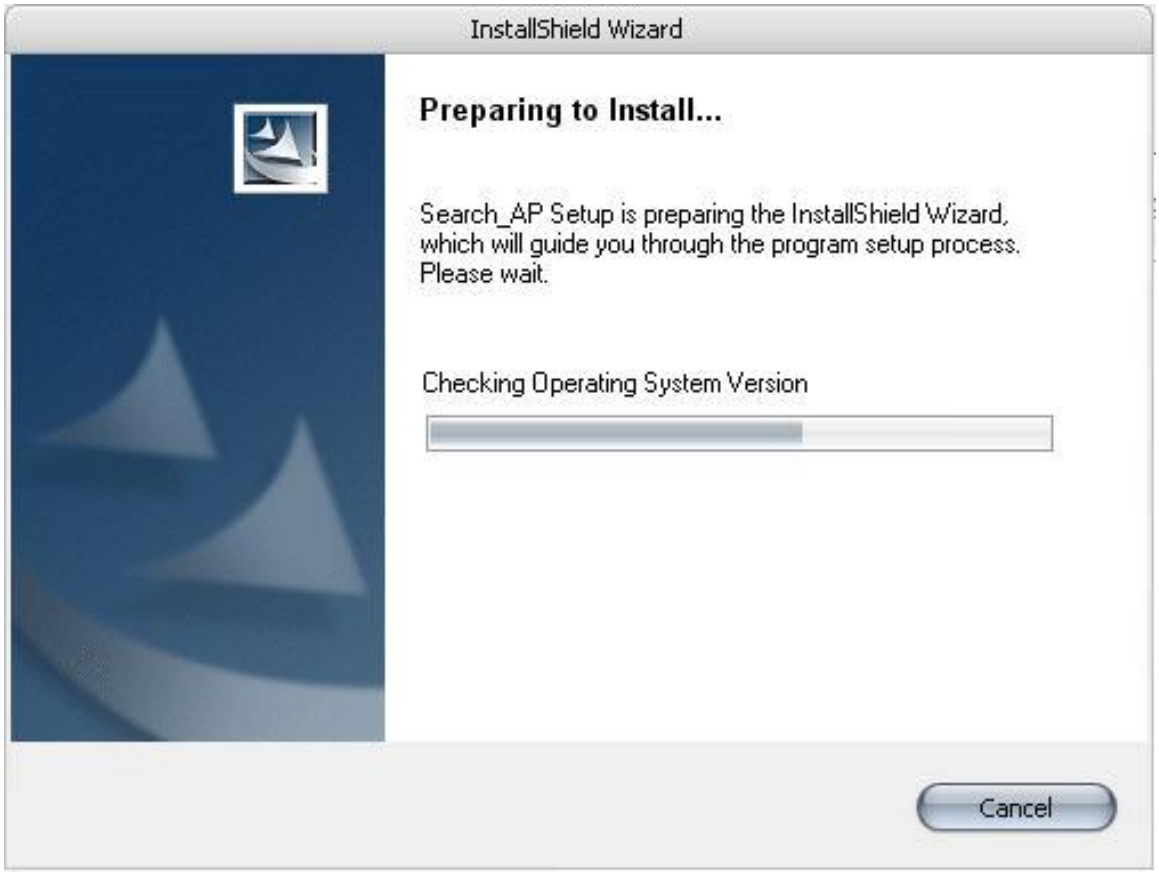
There are various ways you can connect to the NVR and below are the suggested methods for different network setup:

- The NVR is placed in a network with a DHCP server: Connect to the NVR by using **"NVR Search" Utility**
- The NVR is placed in a network without DHCP server (or you are connecting to it directly): **Access the NVR with its default IP**

Use NVR Search Utility



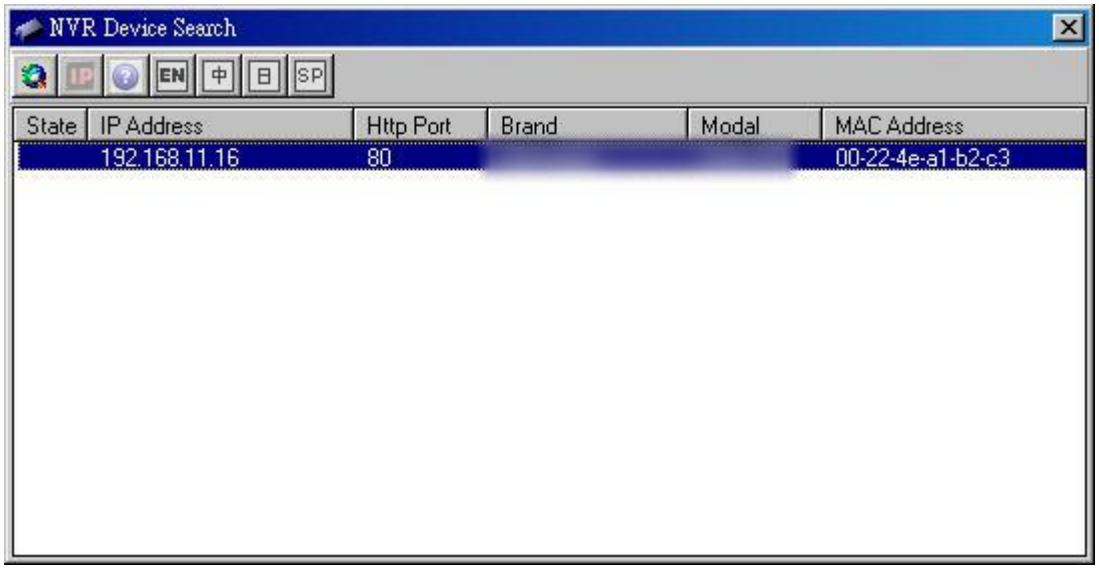
If the NVR is placed in a corporate network or a local area network where a DHCP server is already presented, run the "NVR Search" utility from a computer that is on the same network and locate the NVR with its IP address that is assigned by the top-level DHCP server.



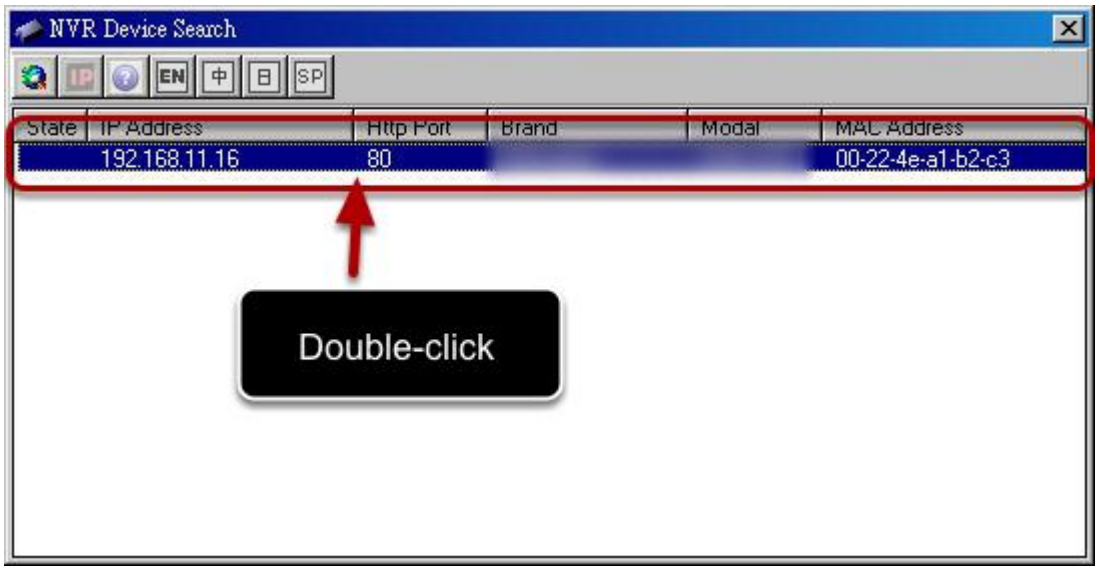
To begin, launch the "NVR Search" utility from the CD and proceed with the installation:

Once the installation is complete, check the "Launch the Search AP" option and click "Finish".

The search should start automatically and its status should be displayed.



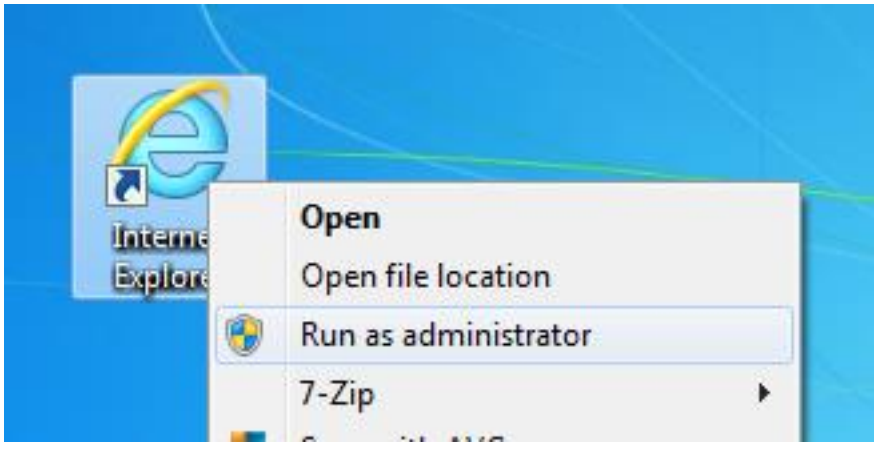
The NVR should be located and its IP address should be displayed.



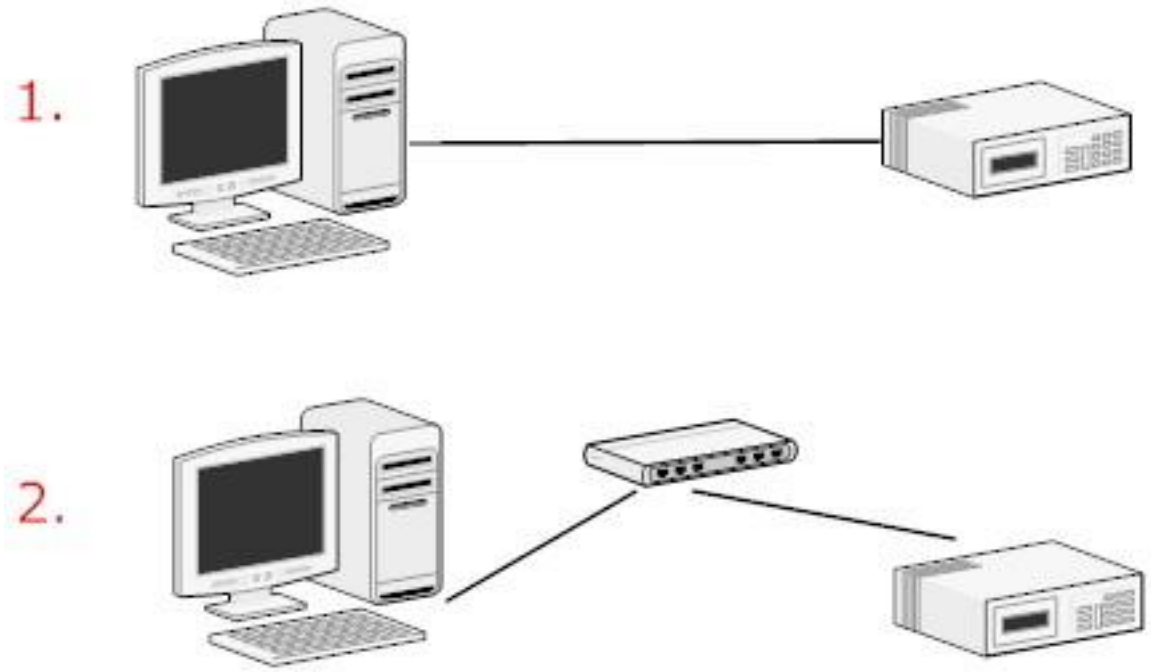
Double-click on an NVR and the search program should automatically access the NVR's web administration page from your default browser.

You should be prompted for the NVR's username and password. Enter **its default username "root" and password "root"** and then click "OK" to enter the system

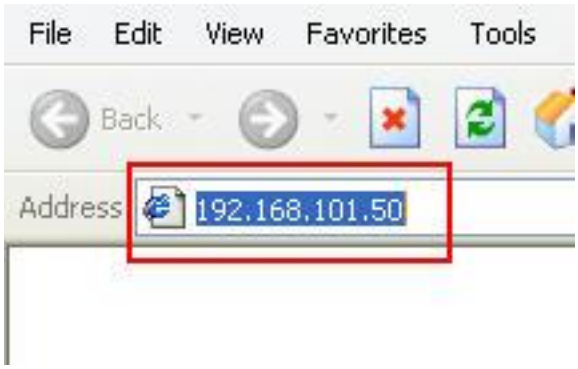
- Please make sure you are using Internet Explorer 7 or above
- If you are running Windows Vista or 7, please make sure you are running Internet Explorer with the "administrator" privilege.



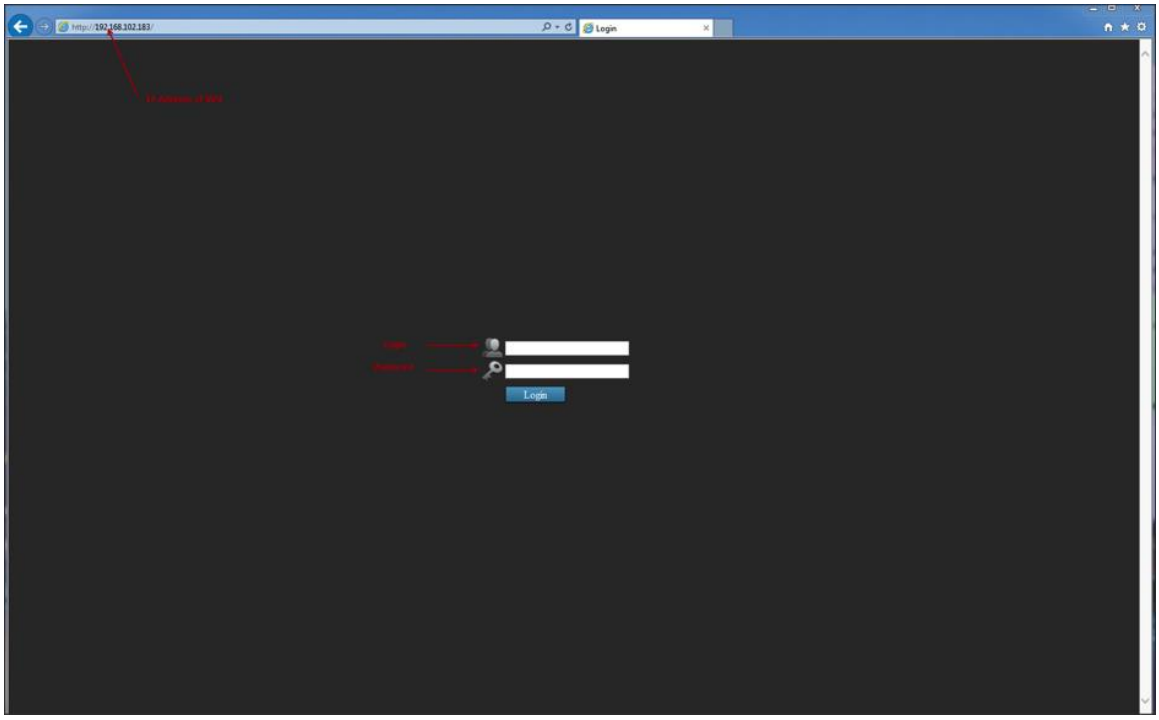
Access the NVR with its default IP address



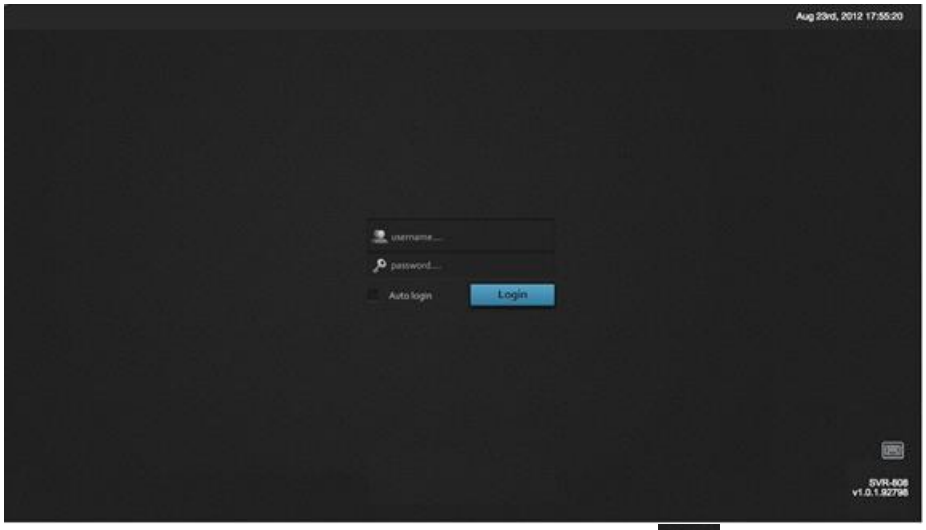
The NVR comes with a pre-configured static IP "**192.168.101.50**". However, it is only used when there is no DHCP server presented in the network. The NVR will turn on its DHCP server function and act as the DHCP server in the network. To connect to the NVR, use a PC that is on the same network over a switch or hub, or connect the PC directly to the NVR using a crossover CAT5 Ethernet cable.



The PC that is connected directly to the NVR (or within the same local area network) should receive an IP from the NVR. Simply access the NVR from your web browser with its IP address

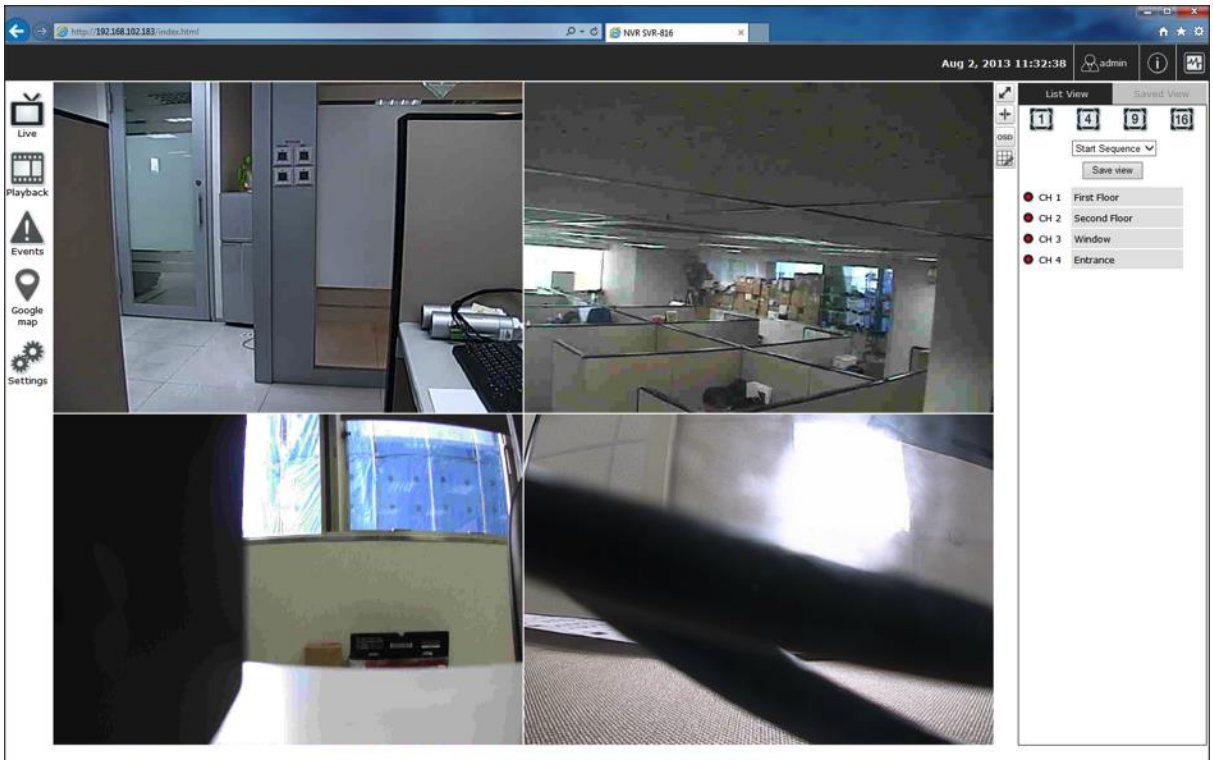


Again, you should be prompted for the username and password. Enter its default username "**root**" and password "**root**" and then click "Login" to enter the system



If you use local UI to operate NVR, click to display virtual keyboard to enter user name and password.

Main/Live View



The main/live view is the first interface displayed once you access to the NVR through the internet browser.
It displays the live video of all the cameras added to the NVR and following the pattern chosen by the user. The interface has many functions explained bellow.

The "Live View" page provides the following functions:

- **Retrieve camera's video stream**
- **Retrieve camera's status**
- **Perform Live Sequence Viewing**
- **PTZ Control (Click directly on the video)**
- **Perform PTZ Preset Sequence viewing**
- **Perform manual recording**
- **Take snapshot** - as soon as a snapshot selection is made, the snapshots are automatically saved to x:\SnapshotFolder ("x" represents the partition where Windows is installed, e.g: C:\)
- **Receive audio of a video stream**
- **Send audio**
- **Control "Buzzer"**
- **Change web UI display language**

a.The UI's 5 main functions:

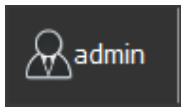
The bar displays the 5 main functions of the Web User Interface (UI).

The Live view is the main view .The other 4 views will be explained in each chapter.

b. Date and Time display

The Date and the Time are defined by the user in the settings section of the NVR.

c. User's configuration



It displays the name of the current user.

If you click on the name of the user, the context menu offers the functions bellow:

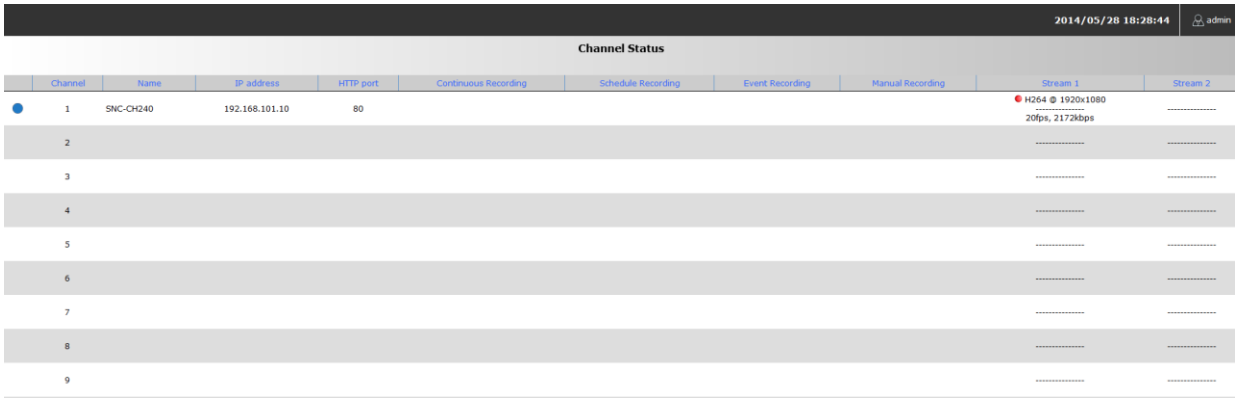
- Language settings
- User setting
- Locking the screen
- Logout function

d. Hardware events notification

In this section, you will receive notifications if a warning sound is triggered or if the hard drive of the NVR failed in recording data.

e. Channels status

If you click on the icon, page tab will display the current status of the channels added to the NVR.



It can also display the current configuration used for the event recording or the configuration settled for the scheduled and manual recording.

The channels status page is updated as long as the NVR's main user interface is open.

f. Video frame

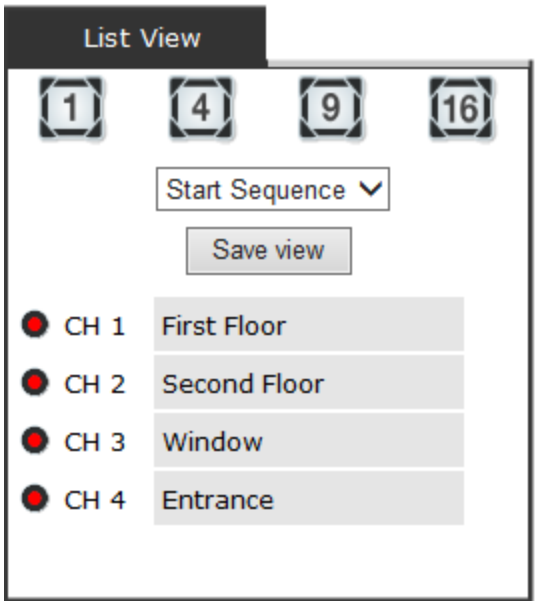
All the camera's videos are displayed in this frame.

- The PTZ function is available by clicking of the left button of the mouse on the camera's view.
- Double click on the left button of the mouse enables the zoom function. To disable it you can click on the right button of the mouse.

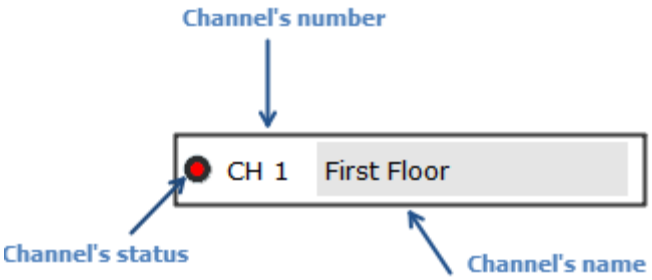
If the cursor is pointing on one of the cameras, it will show a bar in the top.

The bar displays the channel's number and some functions as showed on the snapshot above.

g. List view



It displays the list of channels added to the NVR. Each channel represents a camera with its name, the channel number and its currents status.



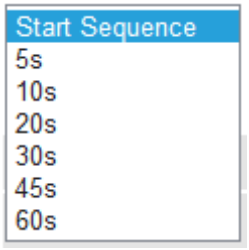
The channel's status is defined by 3 colors:

- Red: The channel is recording and the live view is available
- Blue: The channel is connected and live view is available
- Grey: The camera is disconnected

h.1, 4, 9, 16 Pattern view

Different patterns of live view can be displayed on the video frame.
You can display 1, 4, 9, or 16 cameras at once.
Every time you click on an " n" pattern icon, the live video of the next "n" cameras will be displayed.

i. Sequence view

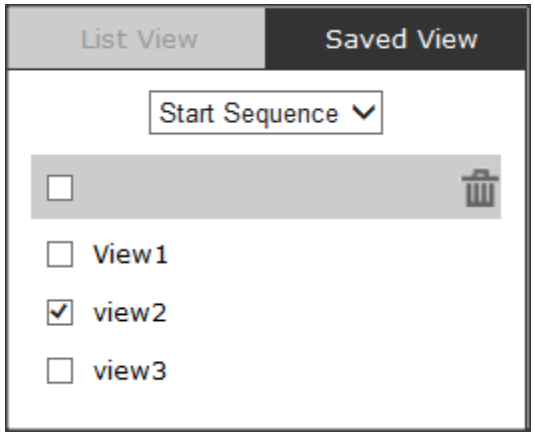


The sequence mode will automatically switch between a single or group of cameras every a certain period of time. You can define this period to 1 second to 60 seconds

j. Save view

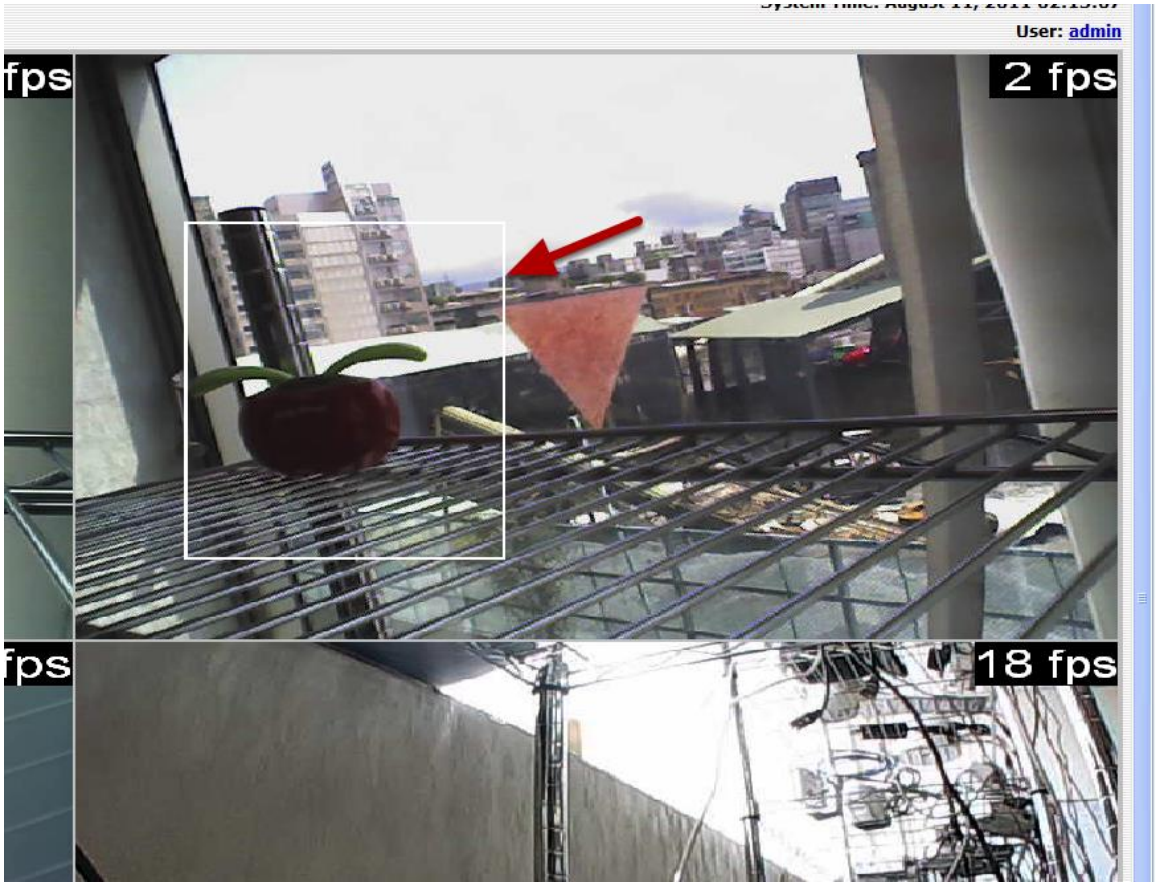
Click on the save view button and you will able to name the current view and save it.
This will help to quickly display your configured views when needed.

k. Saved view



This section can display the views that you have already saved. You can choose the views from the list you have created. You are also able to switch between saved views every certain period of time by clicking on the "start sequence function".
If you check the box beside the name of the view, you can edit or delete the view.

I. Digital zoom



Next, hold the mouse left button and draw a square on the video to specify the zoom in area

Once the image is digitally zoomed in, use the mouse scroll button to further zoom on or zoom out the image. Hold and left-click on the image and move the mouse to move the zoomed in video.

You are able to adjust brightness of the live video from the right-click menu.

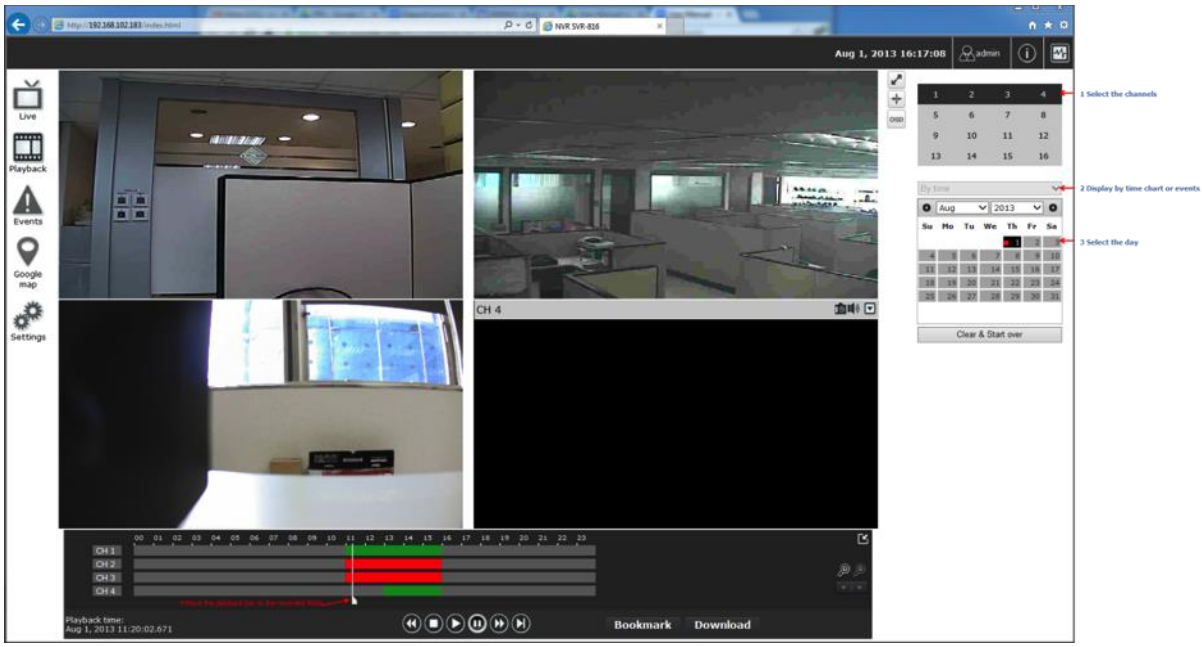
Same thing as the brightness, you can set the contrast for the live video from the right-click menu as well.
You can change the web UI display language from the current login username link located at the upper-right hand corner. Click on the link opens up a new window, which displays detail information about the user as well as a drop-down menu that lets you change the display language.

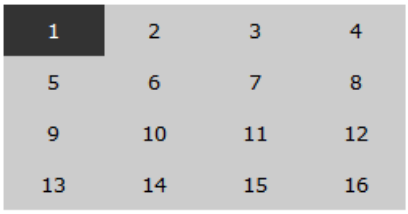
Playback view

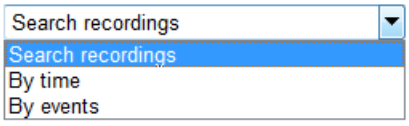
Playback is a function that allows you to play one or more videos that were previously recorded by a chosen recording method or due to an event trigger. The NVR offers synchronized playback from up to 4 channels and various types of search methods are provided to help you find the footage you need quickly.

You can turn on or off the audio of a recorded video at your choice if audio was also recorded during the recording of the video.

Playback video can be viewed in full screen and snapshots can be taken and saved during a video playback.







To play a recorded video:

1. Select channel
2. Choose "search mode", by times or by events

a. Zoom on a range of time

If you click on the icon you can zoom on range of the time and get more details on the playback bar.

b. Minimize the bar of the playback

If you click on the icon you can minimize the playback range to get more space for the videos.

c. Certain functions you can perform to the playback video

You can do the followings by right clicking on the playback video:

1. Play Audio
2. Snapshot
3. Export as AVI file
4. Digital PTZ
5. Adjust brightness
6. Adjust Contrast

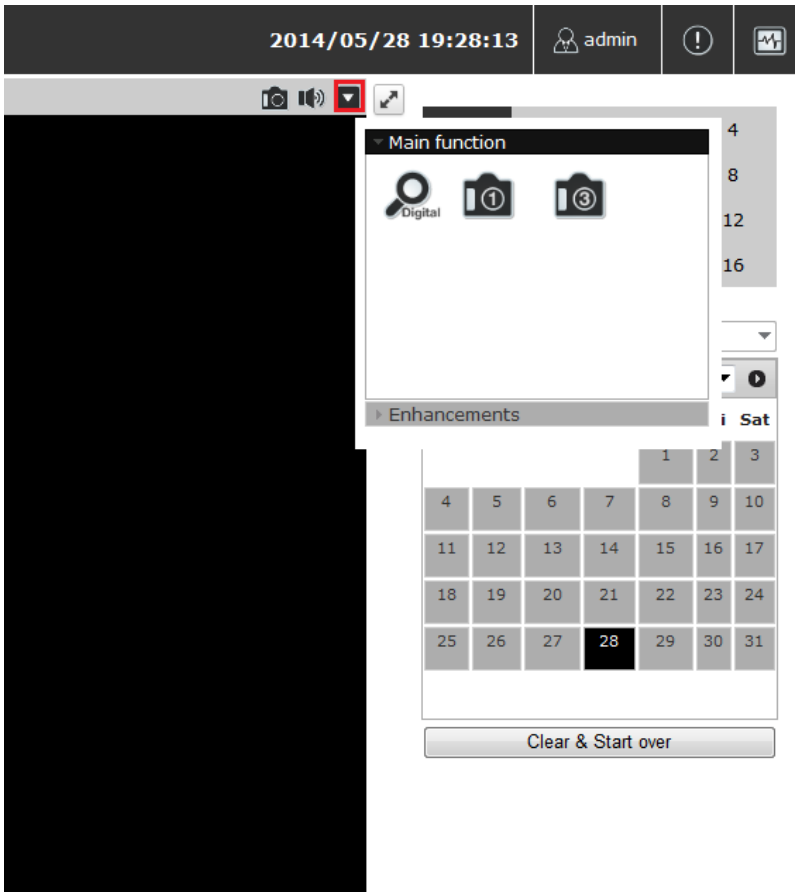
d. Take a snapshot of a playback video

To take a snapshot, click on the button " ", there is a manual showing up. You are given with options to take 1 snapshot or 3 continuous snapshots.

If the "3 continuous snapshots" option is chosen, the new window displays snapshots and lets you view them individually by using the "Prev", "Next" buttons shown above.

However, as soon as a snapshot selection is made, the snapshots are automatically saved to x:\SnapshotFolder ("x" represents the partition where Windows is installed, e.g: C:\)

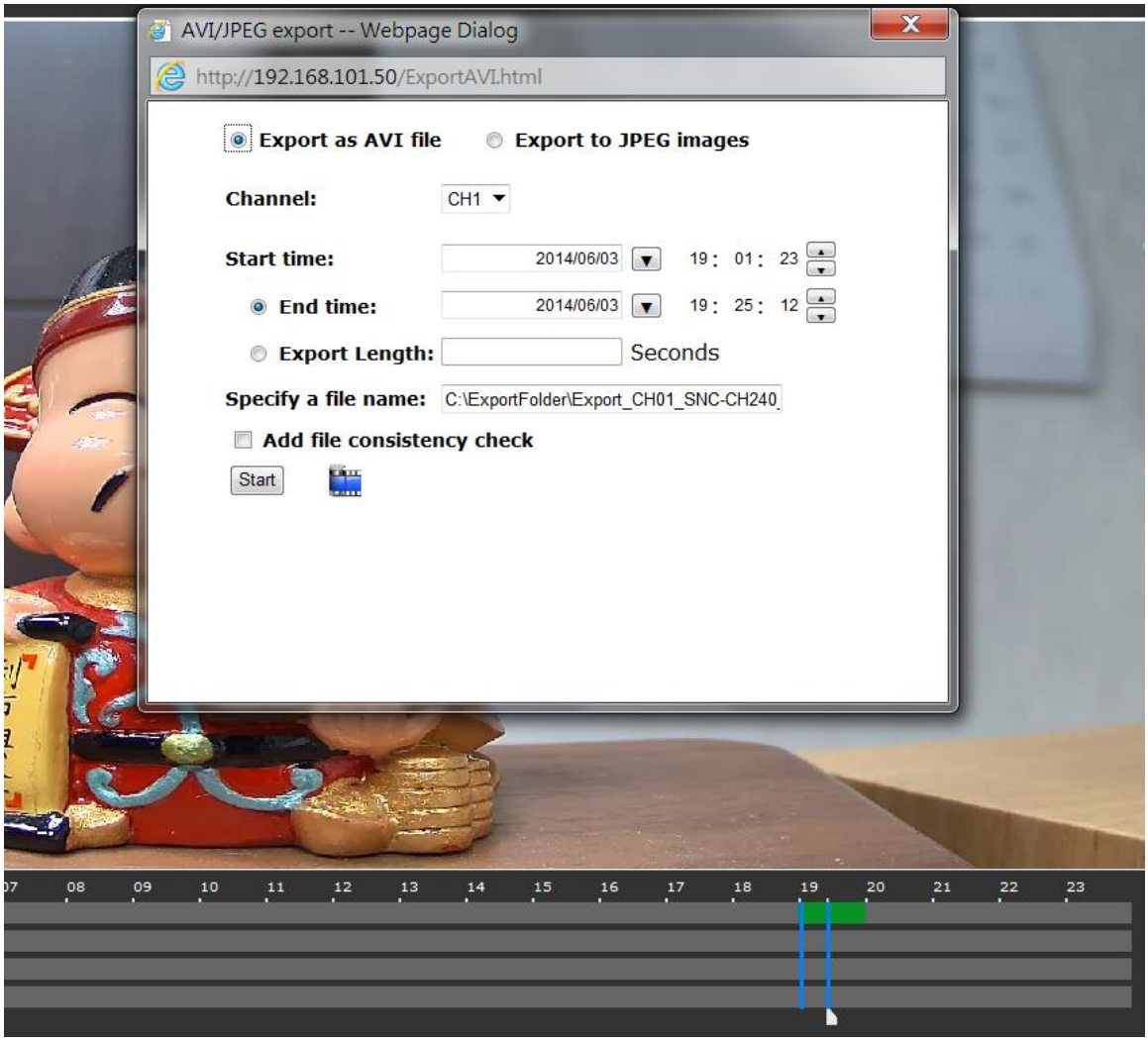
You can right-click anywhere on the image and select "Save Picture As..." to save the images somewhere else if you wish.



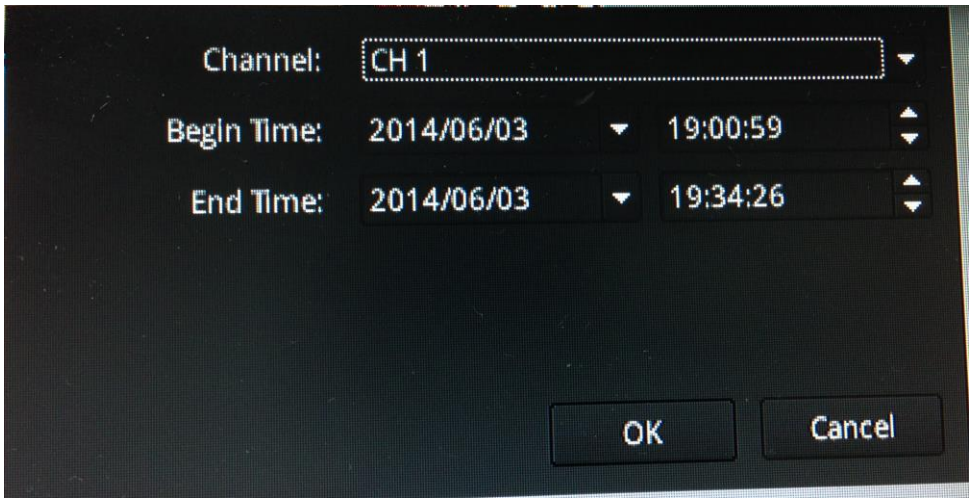
"Bookmark" is used to set a time range for export.

1. Click will set the current playback time as "Start" time. A blue slider should be displayed on the timeline.
2. Click again will set the current playback time as "end" time. A blue slider should be displayed on the timeline.

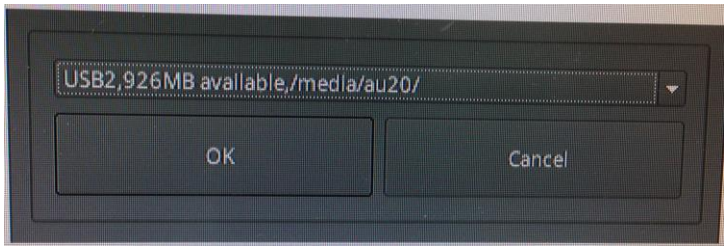
Click "Download" to open a pop-up dialog for export options


AVI/JPEG export -- Webpage Dialog
http://192.168.101.50/ExportAVI.html
Export as AVI file
Export to JPEG images
Channel:
CH1
Start time:
2014/06/03
19 : 01 : 23
End time:
2014/06/03
19 : 25 : 12
Export Length:
Seconds
Specify a file name:
C:\ExportFolder\Export_CH01_SNC-CH240
Add file consistency check
Start
07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

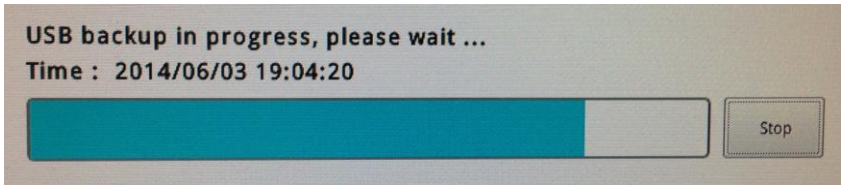
On Web UI

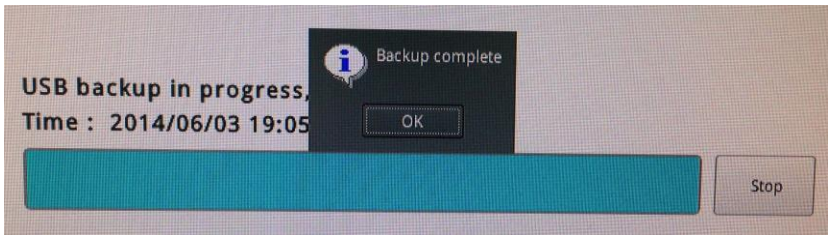

Channel:
CH 1
Begin Time:
2014/06/03
19:00:59
End Time:
2014/06/03
19:34:26
OK
Cancel

On local UI, the recorded video can be backed up to a USB disk with AVI file. It is required to plug in a USB disk formatted in FAT32 prior to using the backup function. Click "OK" to open a pop-up dialog for USB disk options



Click "OK" to start back up

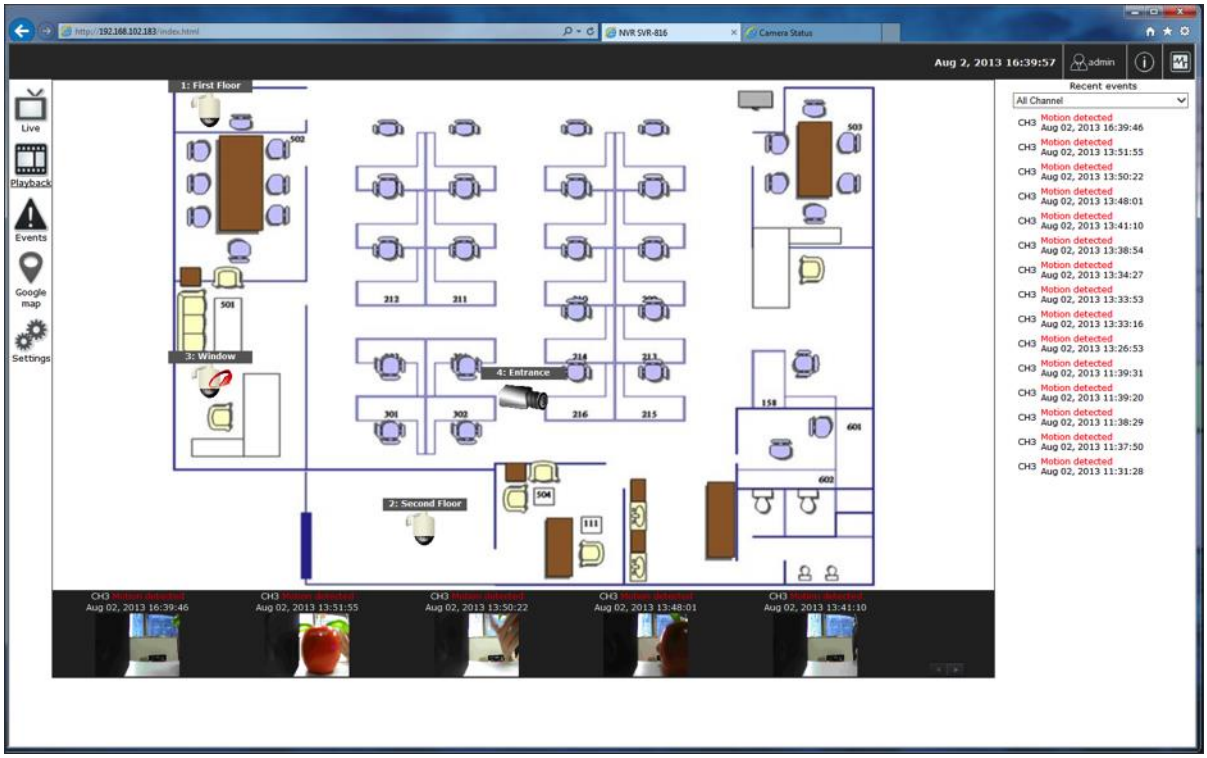




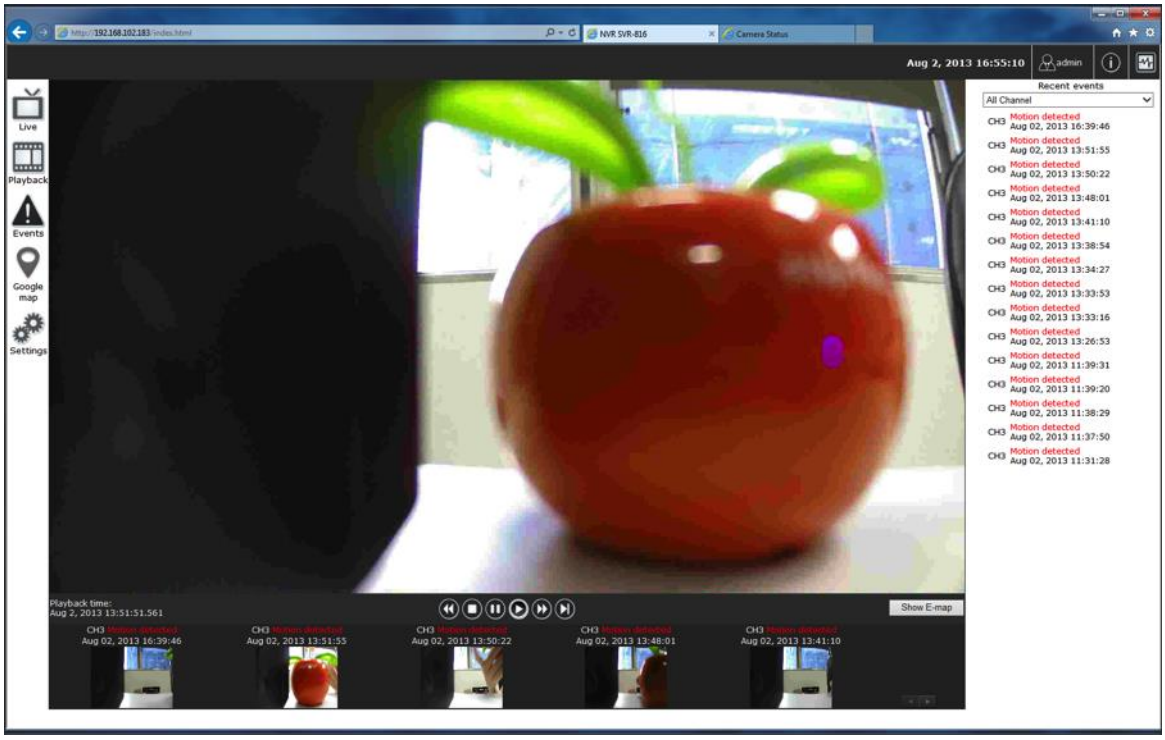
Event view

This section displays the last events recorded by the NVR.

The events can only be detected and displayed if you have configured it on the NVR's settings. You can display the event of all the channels at once or by each channel.



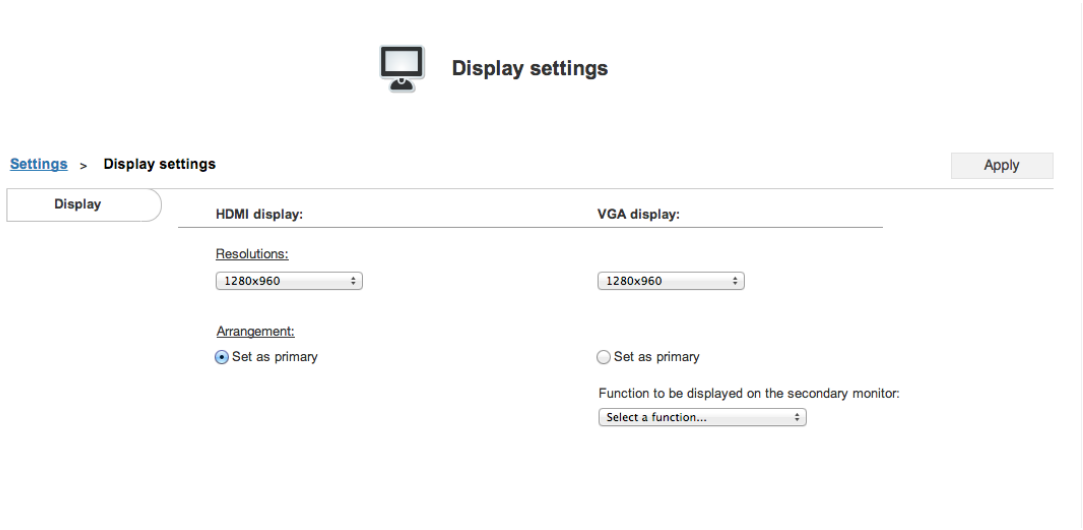
You can click on one of the picture on the bottom of the UI to display the de event related to it. The event can also be displayed if you choose them from the list in the right side of the UI.


Aug 2, 2013 16:55:10
admin
Live
Playback
Events
Google map
Settings
Recent events
All Channel
CH3 Motion detected Aug 02, 2013 16:39:46
CH3 Motion detected Aug 02, 2013 13:51:55
CH3 Motion detected Aug 02, 2013 13:50:22
CH3 Motion detected Aug 02, 2013 13:48:01
CH3 Motion detected Aug 02, 2013 13:41:10
CH3 Motion detected Aug 02, 2013 13:38:54
CH3 Motion detected Aug 02, 2013 13:34:27
CH3 Motion detected Aug 02, 2013 13:33:53
CH3 Motion detected Aug 02, 2013 13:33:16
CH3 Motion detected Aug 02, 2013 13:26:53
CH3 Motion detected Aug 02, 2013 11:39:31
CH3 Motion detected Aug 02, 2013 11:39:20
CH3 Motion detected Aug 02, 2013 11:38:29
CH3 Motion detected Aug 02, 2013 11:37:50
CH3 Motion detected Aug 02, 2013 11:31:28
Playback time:
Aug 2, 2013 13:51:51.561
Show E-map
CH3 Motion detected Aug 02, 2013 16:39:46
CH3 Motion detected Aug 02, 2013 13:51:55
CH3 Motion detected Aug 02, 2013 13:50:22
CH3 Motion detected Aug 02, 2013 13:48:01
CH3 Motion detected Aug 02, 2013 13:41:10

NVR Setup – Settings

The "Settings" page provides users options to setup the device quickly and properly. After properly configuring all settings in all the sub-pages, users should expect a fully working network video recorder that is ready to manage cameras on the network. We will start by configuring its network settings to make sure it works correctly in your network. Next, we will help you adjust the system time so videos will be recorder with correct timestamp. To better secure the system for unwanted disturbance, we will guide you on setting up user's account and privileges to prevent settings gets altered by users other than the system administrator. Lastly, we will tell you what you should expect after installing a hard disk and how to prepare the hard disk for the video recording.

Display



The "Display" configuration page allows you to choose the most optimized display resolution for the monitor that's used with NVR, as there will be circumstances that the incorrect resolution may be used when the system first boots up.

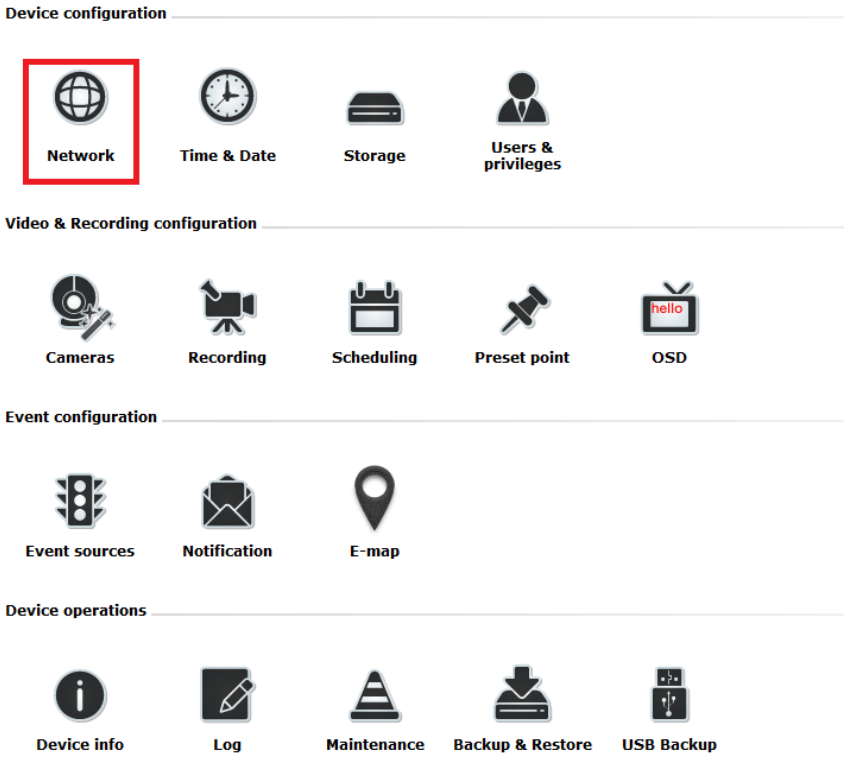
The NVR comes with two video outputs (HDMI: Primary as default, VGA: Secondary as default). You can set which to be used as primary and secondary in this page other than setting the resolution.

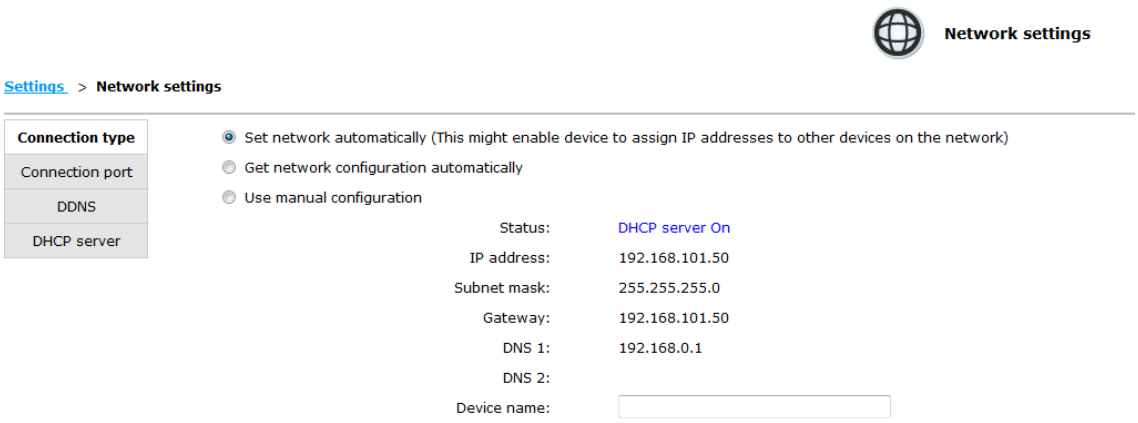
You are also able to set the function to be displayed on the secondary monitor in this page.

Currently you can configure the secondary monitor to display live videos with selected channels in desired layout, or live video in automatic sequence view.

NOTE: The NVR will reboot automatically upon change of resolution/or monitor for the new setting to take effect or be detected.

Network Settings





The NVR supports three connection types that can be configured depends on how the network is setup:

1. Set network automatically
   Set the NVR to configure network settings automatically

1) When no other DHCP server is in the network, the NVR should use the default IP: 192.168.101.50 and turn on built-in DHCP servers
2) Users should not be able to change IP settings when this mode is selected
3) Users can not turn on/off built-in DHCP server

2. Get network configuration automatically
   This sets the NVR as a DHCP client

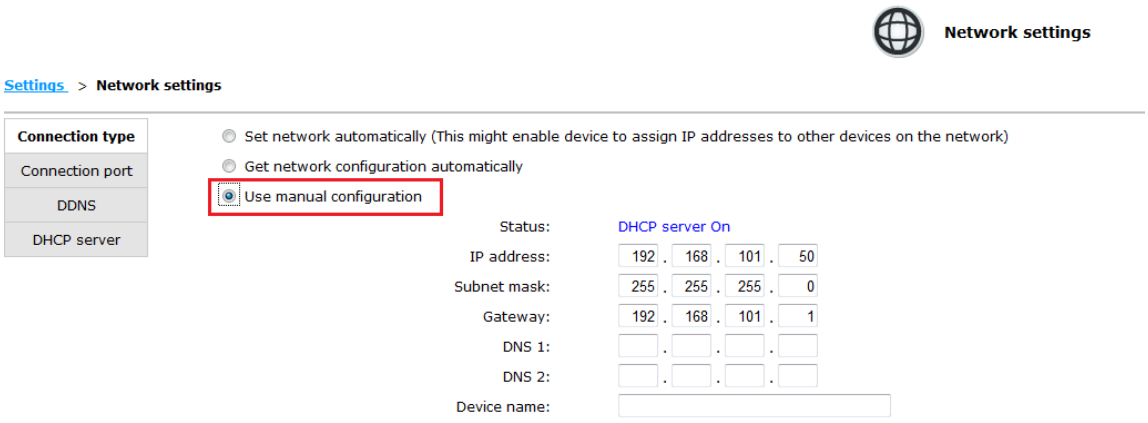
1) If no other DHCP server is in the network. The NVR should change to use the auto mode automatically
2) Users should not be able to change IP settings when this mode is selected
3) Users can not turn on/off built-in DHCP server

3. Use manual configuration
   Set the NVR to use static IP

1) Built-in DHCP server should be turned on when this mode is selected.
2) Use the NVR's default static IP when this mode is selected.
3) Users can change the IP settings

Users can turn on/off built-in DHCP server.
You need to adjust settings in this page for the device to work properly in your network. It is critical that settings here are configured correctly based on your network configurations so that the recorder can be administered through the local area network and cameras can be connected from it.

By default, the recorder is set to "Set network automatically" which if there's a DHCP server in the same local network, the NVR can obtain IP address from DHCP server, and you can locate the NVR by using the NVR search utility.
If there's no DHCP server in the network, and the NVR is set to enable DHCP server, it will use its own default static IP 192.168.101.50.



If you wish to set the recorder to use a static IP address in your local area network,

1. Choose "Use manual configuration"
2. Enter the IP address, subnet mask, default gateway address and DNS server address for the recorder

* *The recorder can detect the presence of a DHCP server upon startup. It sets itself to use static IP address if there is no DHCP server currently presented in the network. Its DHCP server function is also turned on at the same time to assign IP addresses to cameras that are later connected to the network* or you can manually turn off the DHCP server function if you wish to use a separate DHCP server.

DHCP Server

The built-in DHCP Server function is NOT always configurable and is greatly dependent to the connection type that is set to use in " Network Settings".

DDNS Service

DDNS, which stands for "Dynamic DNS", is a method, protocol, or network service that provides the capability for a networked device, such as a router or computer system (in this case, the NVR) using the Internet Protocol Suite, to notify a domain name server to change, in real time, the active DNS configuration of its configured hostnames, addresses or other information stored in DNS.

A popular application of dynamic DNS is to provide a residential user's Internet gateway that has a variable, often changing, IP address with a well-known hostname resolvable through standard DNS queries.

This is useful if the NVR is placed on the Internet with a dynamic public IP, which once the DDNS is properly setup, users can access the NVR remotely with the DDNS domain name without worrying if the IP has changed or not.

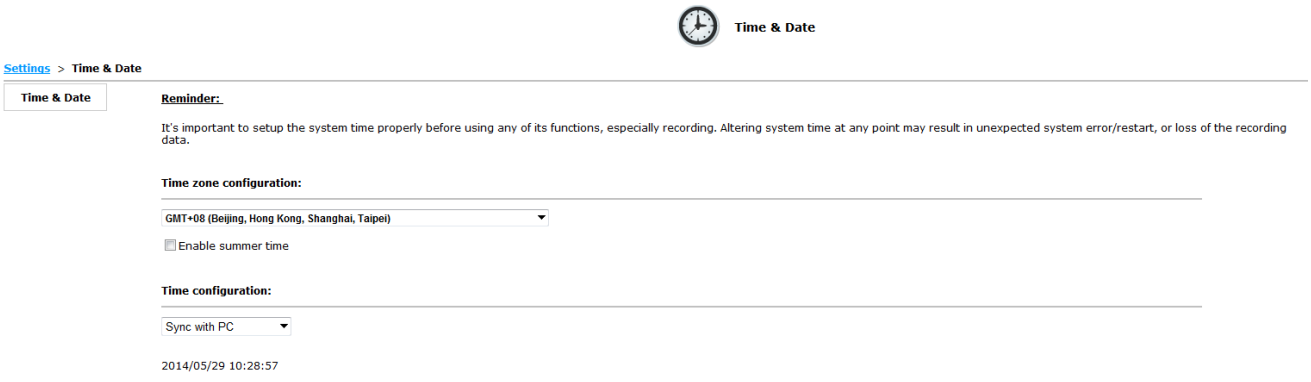
**Please make sure a valid DNS server has been configured under the "Network Setting" page in order for this function to work properly.*

**The NVR currently works with free DDNS service provided by "DynDNS & No-IP". For more information, please go to* www.dyndns.com *&* http://www.noip.com/

If the NVR is placed behind a router or Internet gateway, please make sure port forwarding for port 80 is configured on the router or the gat- way in order for the DDNS function to properly register with the service.* ***It's often suggested to use the DDNS function in the router/ gateway for such case instead.*

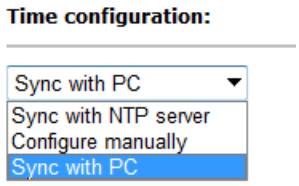
**Once you have the DDNS function successfully up and running, please DO NOT forget to configure port forwarding for the NVR web port (default 80) and the streaming port (default 9877) in the router/gateway for remote viewing. You can then type in http://yourddnsdomain in the browser to access the NVR remotely for live view.*

Time and Date

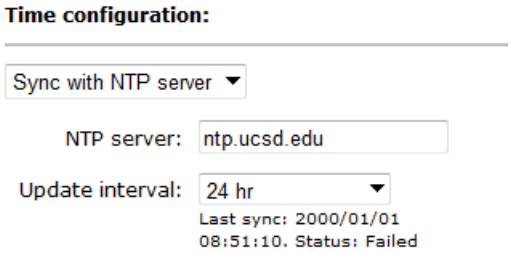


Set the time and date by selecting the time zone according to your location. It is imperative that you set the recorder's time correctly to avoid the following errors:

• Incorrect display time for playback videos
• Inconsistent display time of event logs and when they actually occur
After selecting the time zone, choose an option below to set the recorder time



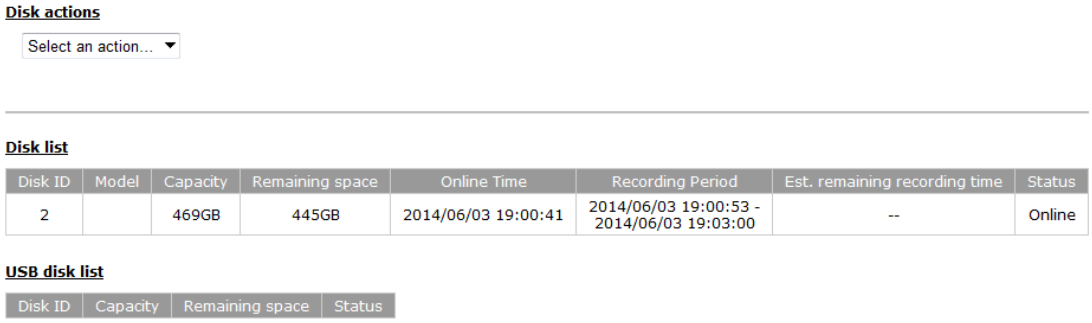
•**Sync with NTP server** – enter the hostname or IP address of a valid NTP server and set how often the recorder should synchronize the time with it by using the "Update interval" drop-down menu



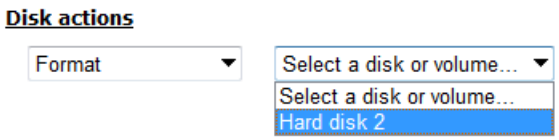
•**Configure manual** – Use the drop-down list and configure the time manually

• **Sync with PC** – Check this option to synchronize the recorder time with the PC that you are currently using to access the recorder

Storage



Once you install a hard disk to the recorder, you would need to initialize it so that it can be ready for recording. You can obtain basic information about the disk you installed in this page.

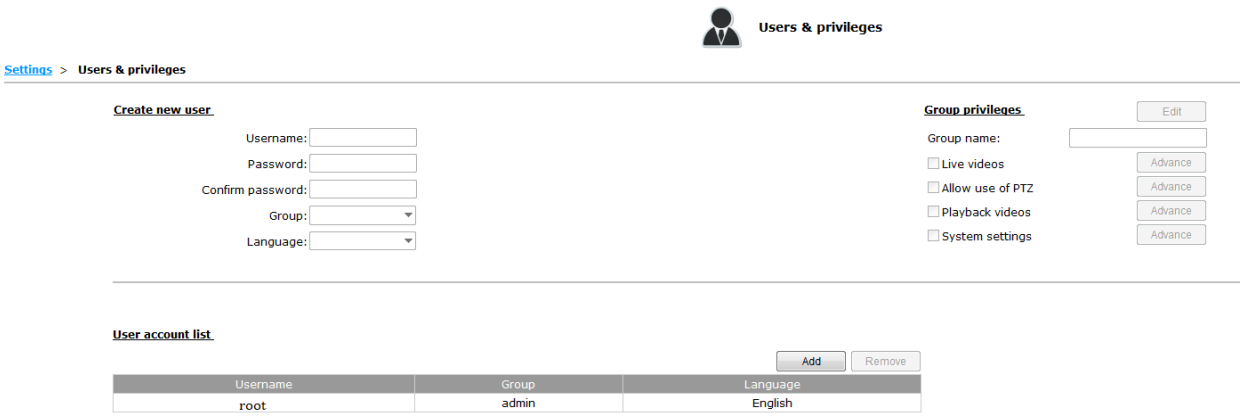


To initialize it, simply choose the "Format" and disk ID in Disk actions, then click "Apply"

**This page will list the Internal disks, and the USB disk only. The HDD will be formatted in EXT4 file system.*

- Disk ID: Display disk ID
- Model: Display HDD model name
- Capacity: Display HDD capacity in "GB"
- Remaining space: Display remaining space in "GB"
- Online Time: Display when it was formatted
- Recording Period: Display period of time recording was taken place
- Est. remaining recording time: Calculate remaining recording time based on remaining disk space and current cameras' settings
- Status: Display HDD status

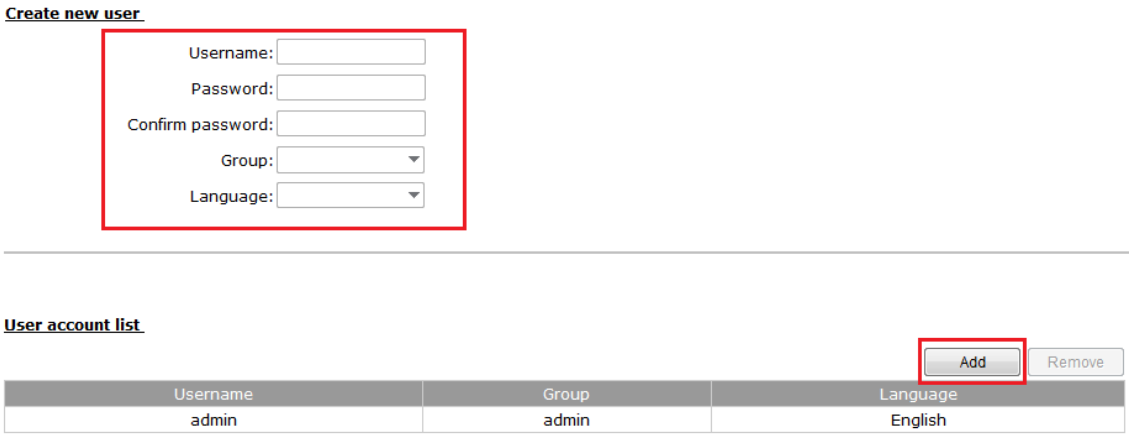
Users & privileges



Multiple users can access the recorder simultaneously. You can add, remove, and edit users by using options provided in this page to keep user information organized. Each recorder comes with a built-in

"admin" account with password "admin". It's highly recommended to change the password upon your initial login.

Add a new user



• Click "Add" to add new user

• Enter a username and password

• Select a group from the "Group" drop-down menu to assign the new user to a particular group

• Click "Apply" to finish configuration

Change the password of the "root" account

1. Click and highlight the "admin" account in the account list and click

2. Its information should be displayed

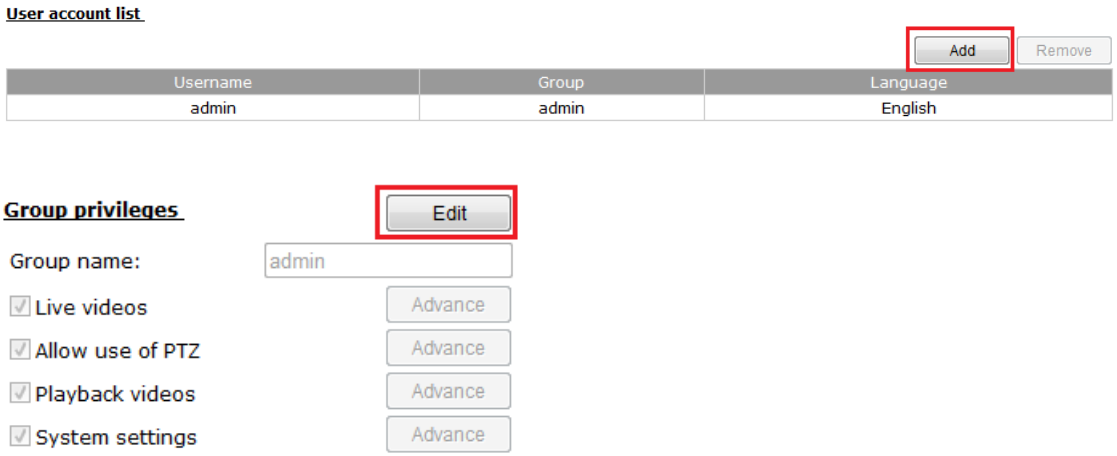
3. Enter a new password in the "Password" field and enter it again in "Confirm Password"

Group Privilege

Group Privilege is where you can create multiple customized access policies for situations if you need the recorder to be accessed by users other than the administrator. There are 7 pre-defined user groups for privilege configurations. You can do so by creating a group, and then remove access privileges for certain configuration pages or cameras. Users that are created and assigned to this group will have limited access instead of full administration rights.

The recorder comes with seven built-in groups and five built-in privilege profiles, except the "admin" and the "guest" accounts; the other five groups are fully customizable or you can simply assign a group with one of the default privilege profiles. You can, however, assign more than one users to the "admin" account if you wish to do so. The guest account comes with a "view-only" privilege in the "Live View" page, and users in this group do not have the power to make any changes in the "Live View" page or have access to pages other than the "Live View" page.

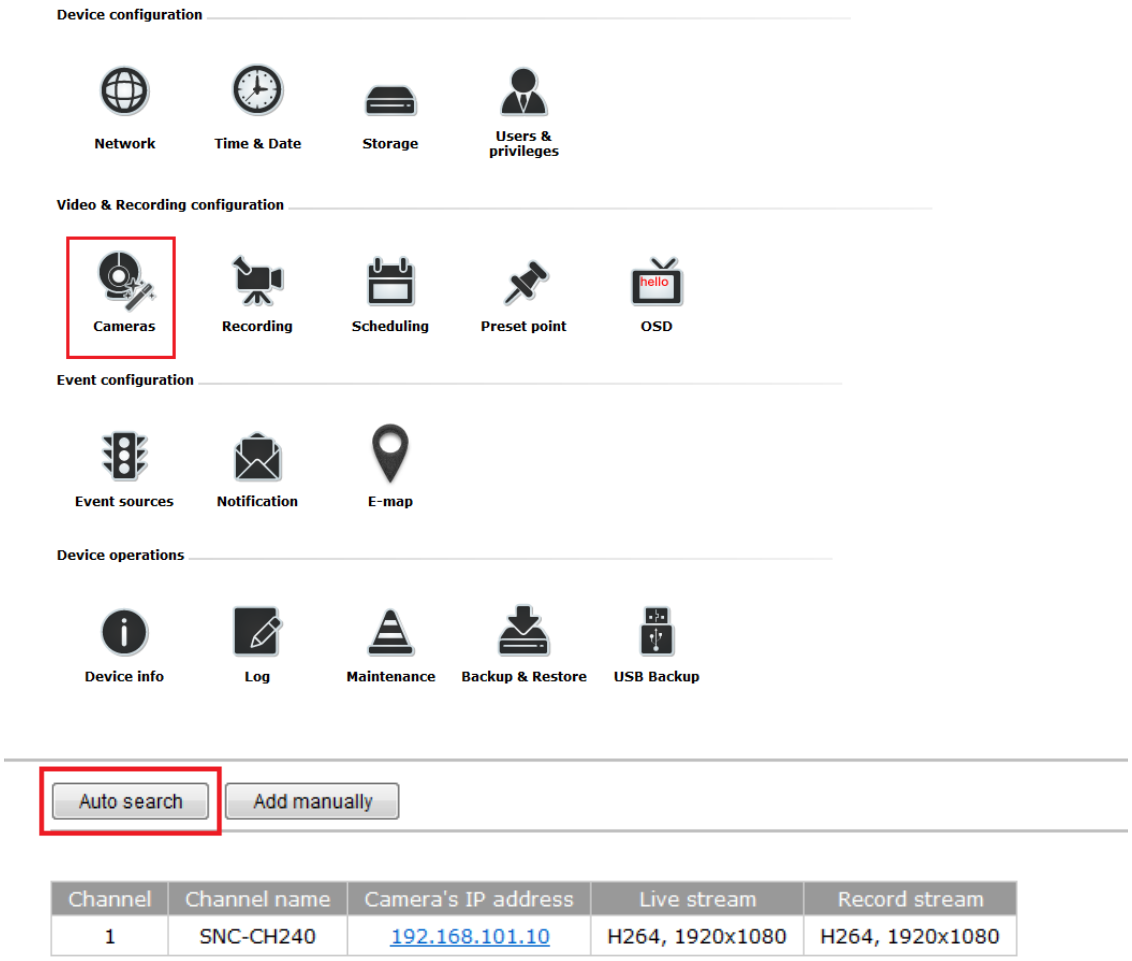
To change a group configuration, after clicking "Add" to add new user account, press "Edit" to change Group privileges.



You can change the group name and privilege.

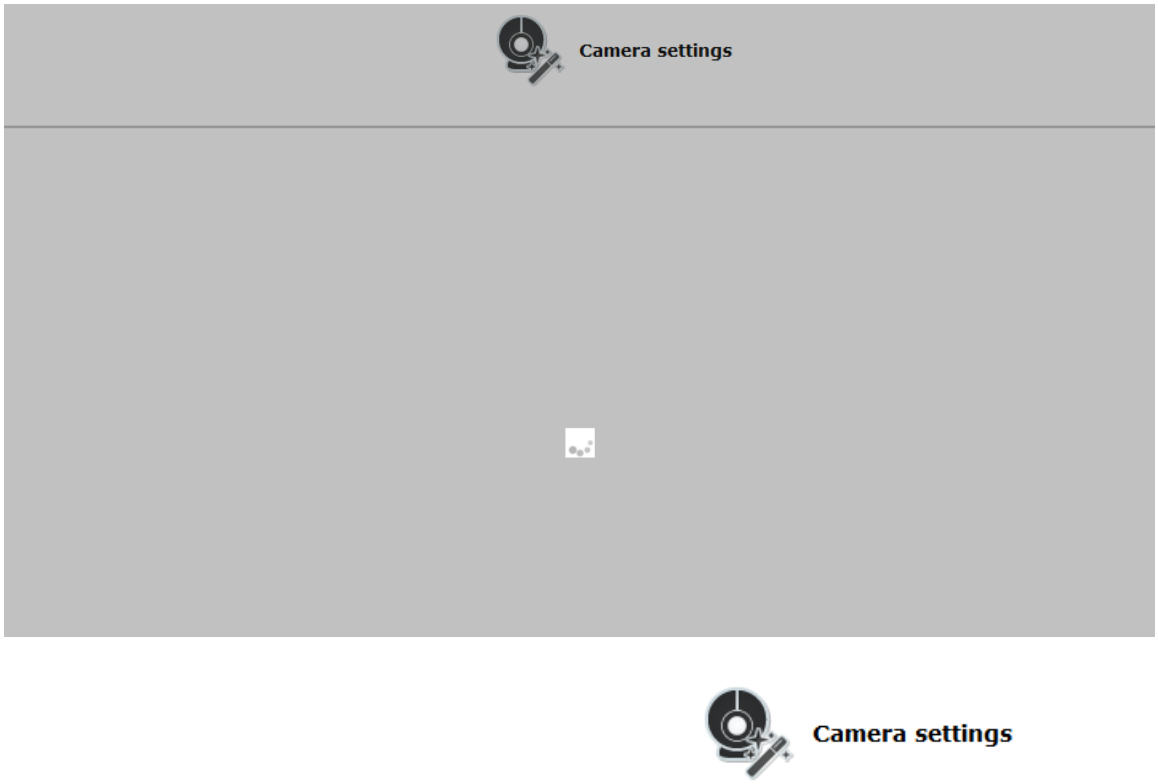
Camera

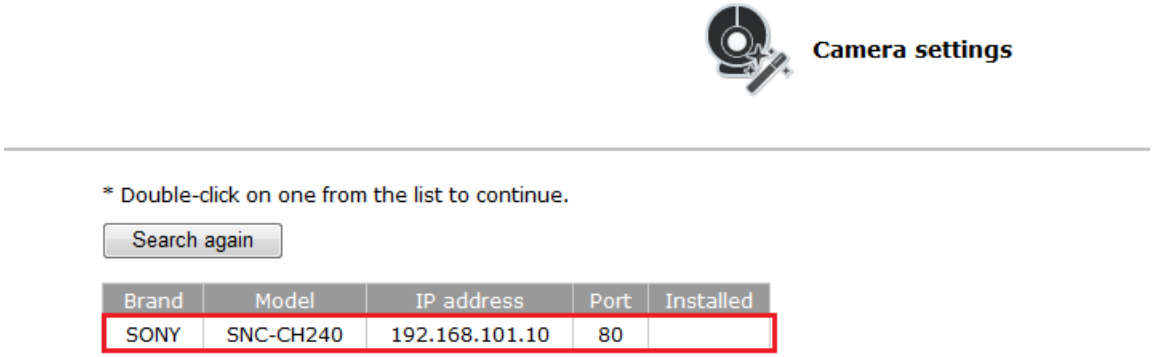
Automatic Search



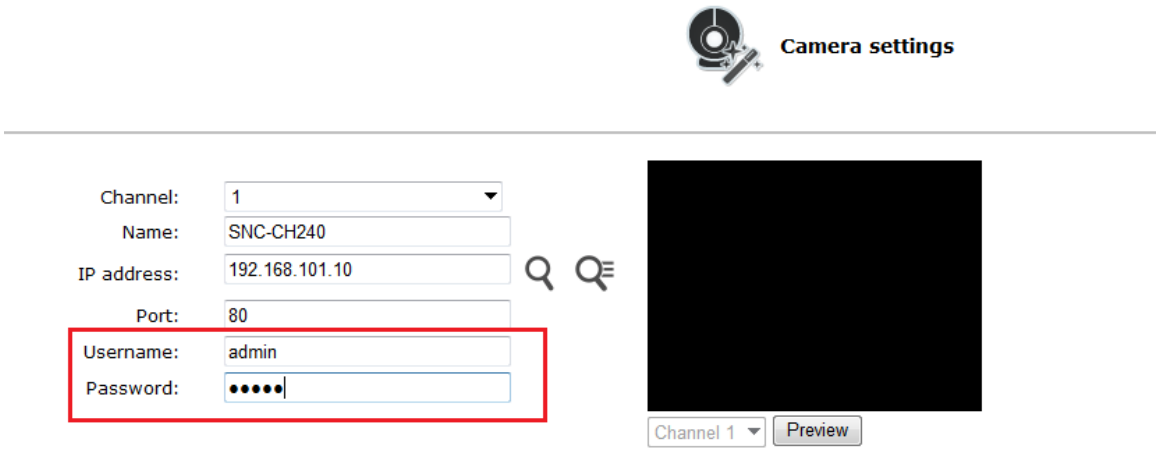
In "Settings" >> "Cameras", click the "Auto search" button to perform the camera search.

After that, the search should begin and its status should be displayed:

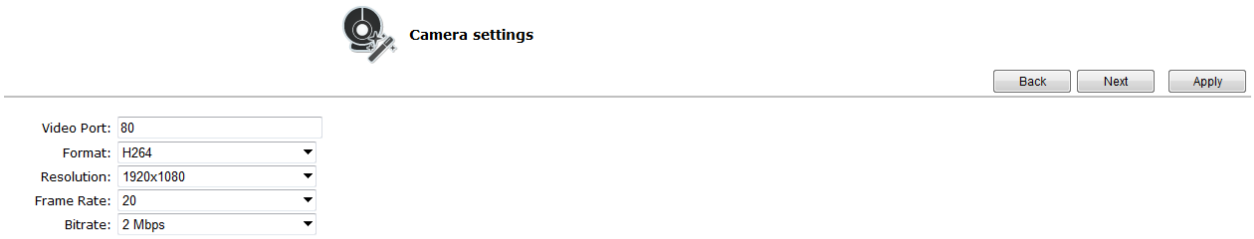




Found cameras should be listed and simply select a camera from the list



Its corresponding information should be displayed in the "Camera Information" section. Enter its username and password and press "Next" to detect this camera.



If connection establishes successfully, camera's detailed information should be polled and displayed as below.
Adjust its video format, frame rate, resolution or bitrate...etc if you wish and then click "Apply" to finish adding the camera.

You can click "Next" to set up recording stream if dual stream is supported on this camera.

Some cameras are capable of dual streaming profiles, in which different video codecs are used for different purposes.

You will be able to use different video format for continuous recording if it's a dual-stream capable camera.

Camera settings

Same as Live

Resolution:

Bitrate:

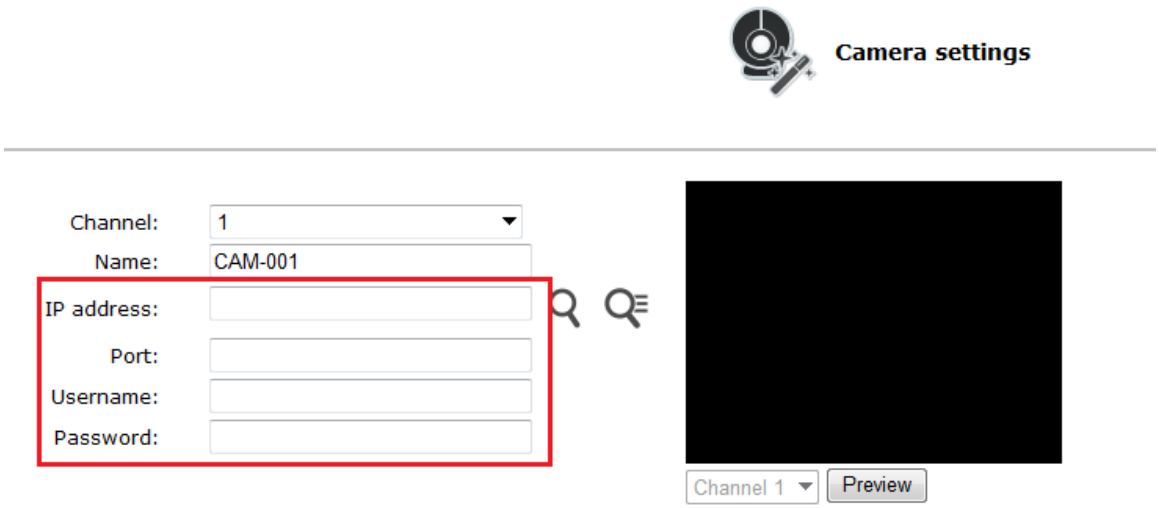
Quality:

Add a camera manually

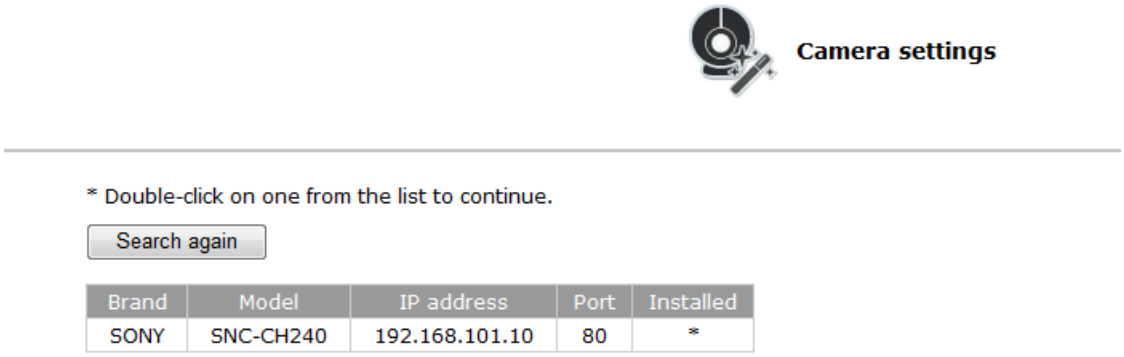
Camera settings

Auto search | Add manually

Channel	Channel name	Camera's IP address	Live stream	Record stream



Simply follow the instruction described above but click "Add manually" function, enter the camera's IP address and credential in the "Camera Information" manually.

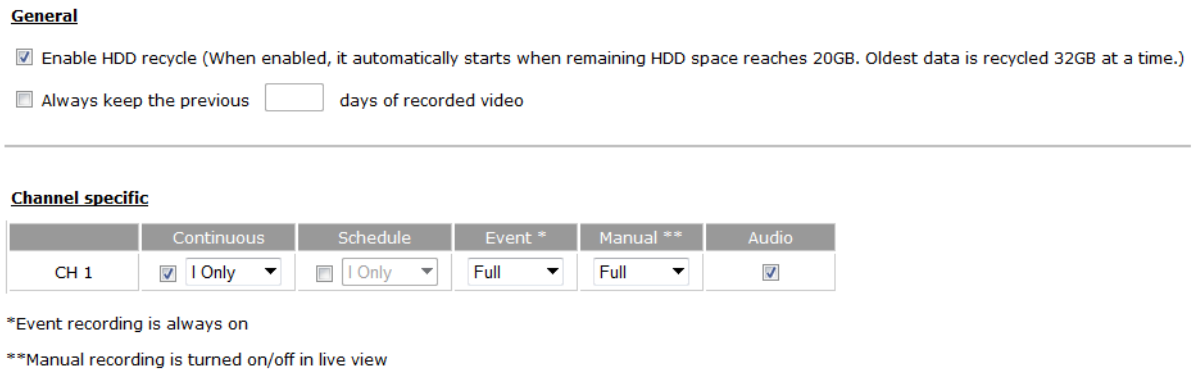


**If cameras are marked with "*" in the search result, it means those cameras are already configured and connected to the NVR.*

Recording

The "recording" gives users the overall control of how and when a recording is performed and the quality of different types of recordings performed on each channels. It can help the recorder to operate with

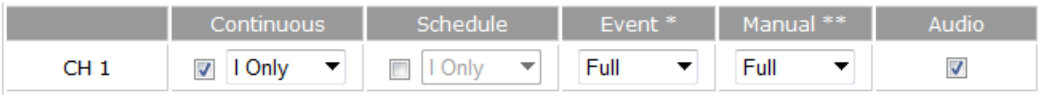
sufficient system resource by performing recording only when it's necessary with adjustable recording frame rate.



You can define the following in "General Settings":

- Enable cycle recording or not
- Recording frame rate
- Define to always keep a number of days of previously recorded data
- Enable/disable different recording types on different cameras
- Enable/disable audio recording

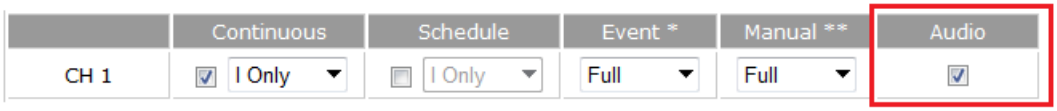
Users can also set to keep a previous number of days of recording data by enabling the option below. This is quite often used in application such as banking which certain countries requires to always keeping a minimum previous number of days of recording data.



Recording frame rate allows you to set different frame rate for different types of recording instead of recording at one frame rate only. Use the drop-down menu and select one of the pre-defined frame rates for a particular recording type

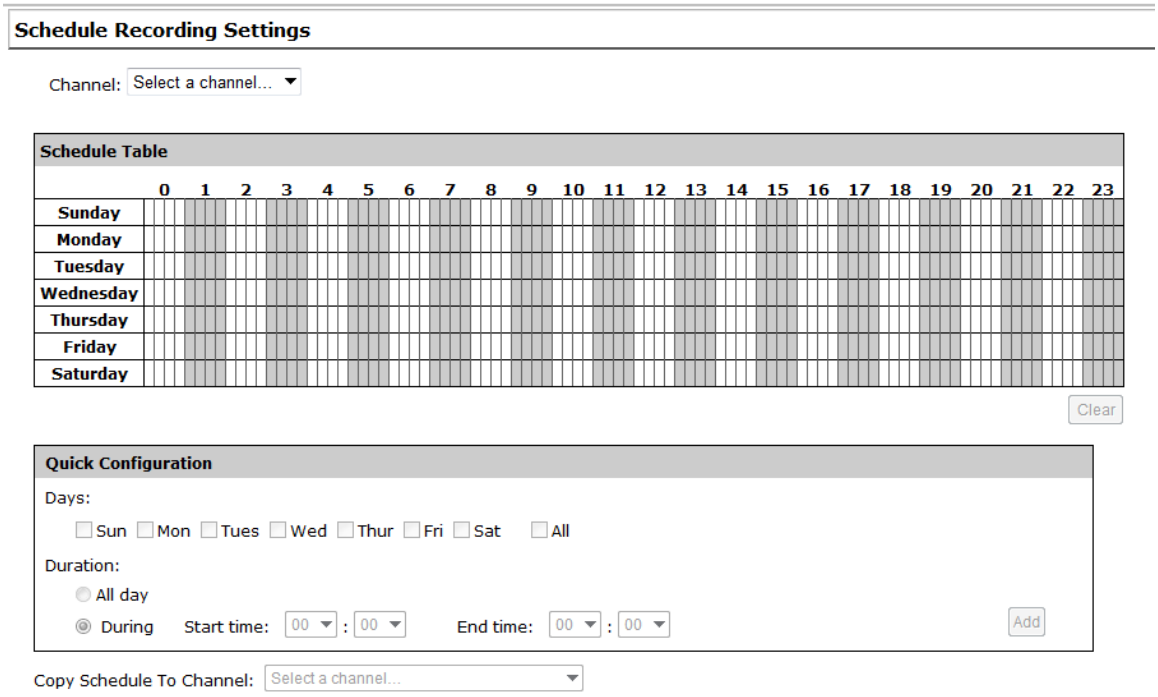
There are two types of fps settings here, one is the fps that NVR sets back to the camera, and this is the fps NVR will be receiving from the camera. The other is recording fps, which will be limited by the live fps. (ex. if the live fps is set to 10, choosing "Full" in the recording fps meaning it will only record at 10fps maximum.

For MPEG/H.264, only i frame or full (i+p frame) can be selected for recording fps.



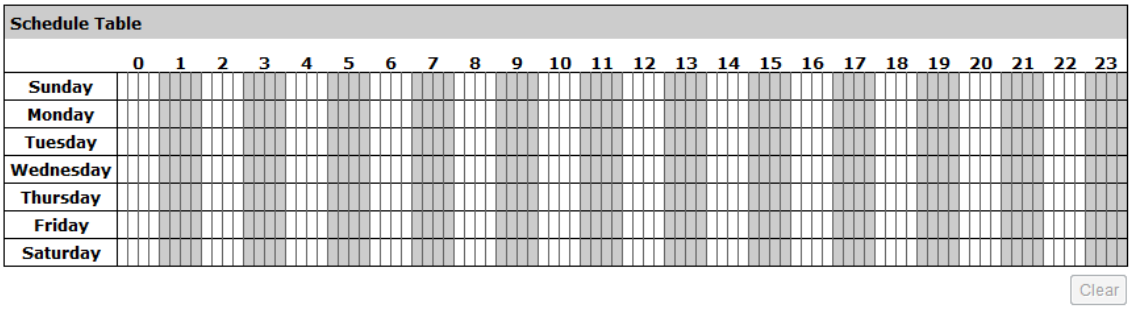
You also can disable audio recording (record video only) of particular channels.

Scheduling



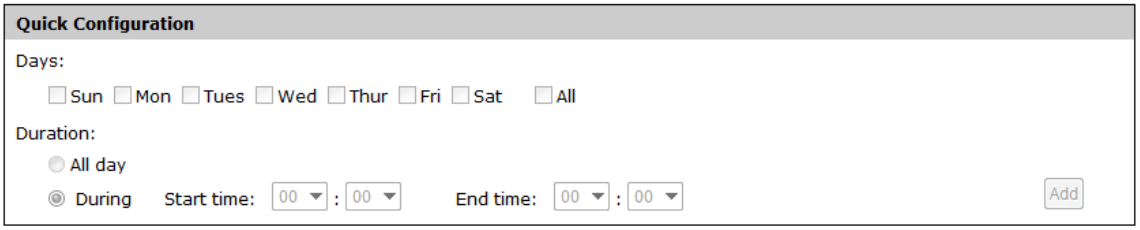
You can define the time range of the schedule recording for all channels in this page.

Use the "Channel" drop-down menu and select a camera first.



You can use the schedule table to set the time range. Click the cell boxes then move horizontally lets you set what hours to perform recording during a day. Click and move vertically lets you set what days to perform recording at a specific time.

** Each cell box represents 15 minutes of time. Click one or more boxes to omit consecutive recording.*



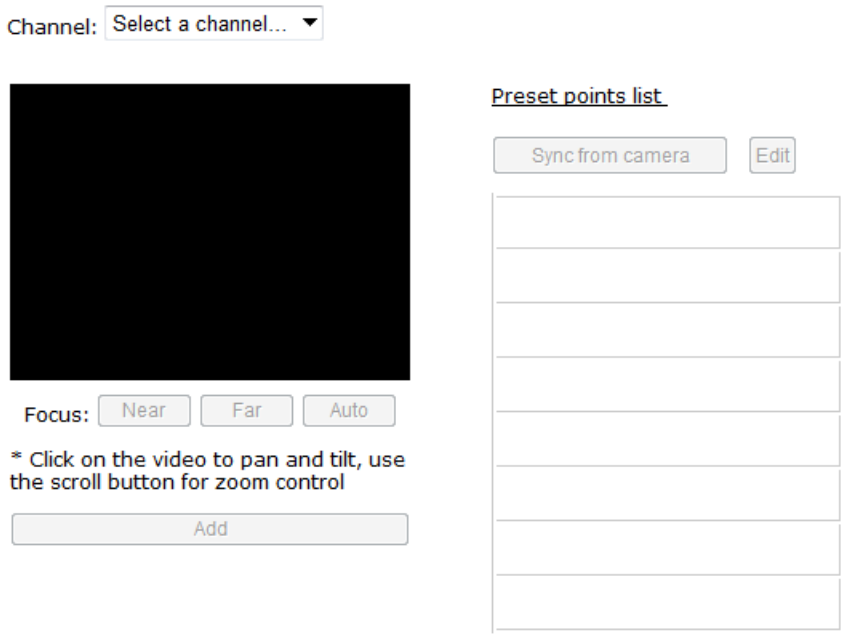
You can also use the "Quick Configuration" to define recording time range instead of clicking cell boxes one by one on the timetable. Simply check what days you would like to perform recording and specify the recording duration by either choosing "All Day" or enter a start and end time for specific recording duration.

Select the "Copy Schedule to Channel:" option if you would like to set the same recording schedule to another camera.

Preset Point Setting

PTZ Preset Settings

The recorder supports PTZ cameras and can set multiple preset points or retrieve and manage preset points that are set in the camera. This is helpful if you need to monitor multiple spots in one area from a particular camera.



To set up PTZ preset points:

1. Select a camera from the "Channel" drop-down menu

2. Use the PTZ control provided in the configuration page to set the preset point

3. Press "Add" to add preset point

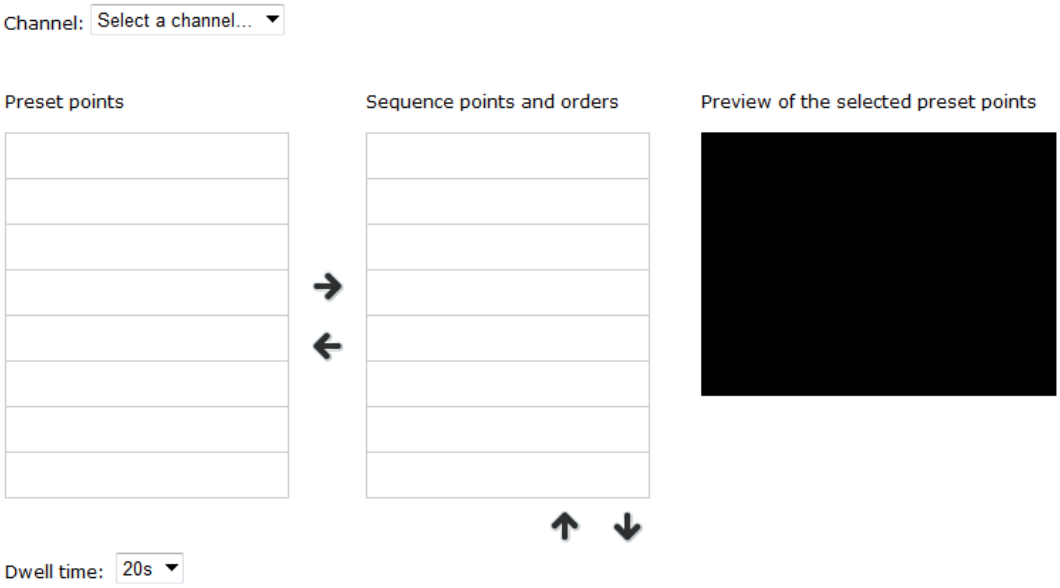
Press "Edit" to enter edit mode to change preset point names or delete preset points

The function of "Sync from camera" is to retrieve preset points from camera

You can choose to make this preset point a "Home" point among all other preset points, as well as making the camera to move to this particular point when an event is triggered.

** "Move Here when Event Trigger": In order for this function to work properly, please also complete configuration in "Event Configuration" >> "Event Trigger"*

PTZ Preset Sequence



Once you have multiple preset points defined for a camera, it is convenient for monitoring to set up the sequencing viewing among those preset point and let the recorder automatically switch between them for you.

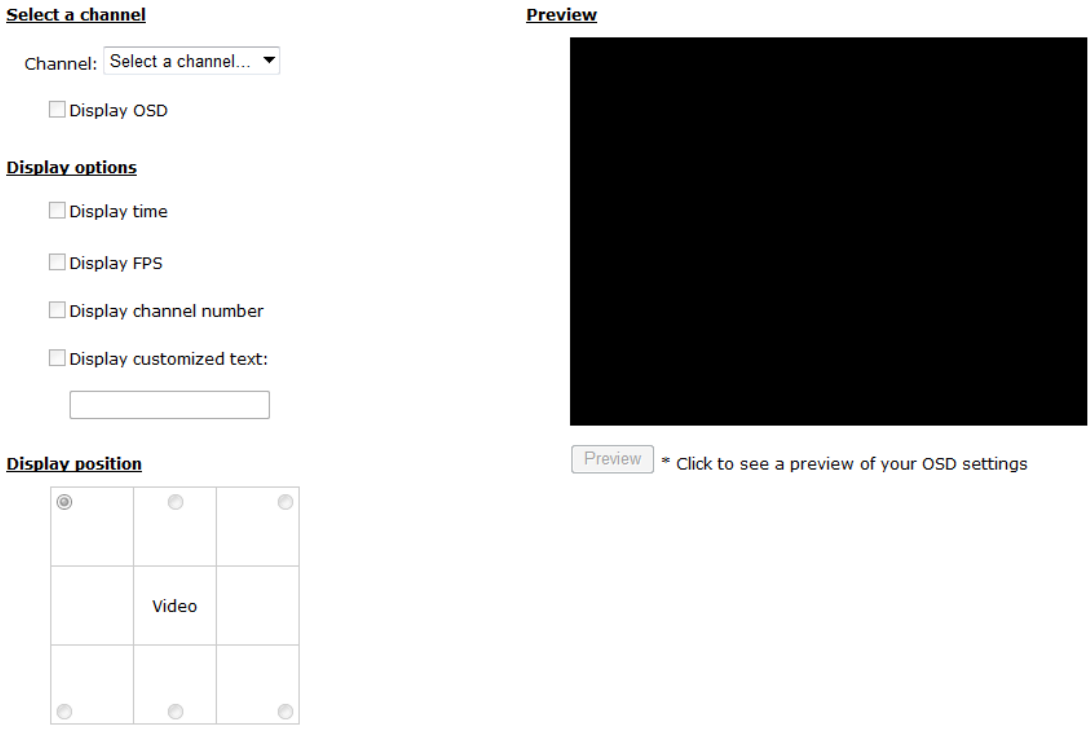
To configure preset sequence for a camera,
1. Select a channel from the "Channel" drop-down menu. The available preset points should be listed in "Camera Presets" section.

2. Pick the ones you like for sequence viewing and press the "->" button to move them to the "Preset Sequence" section, then

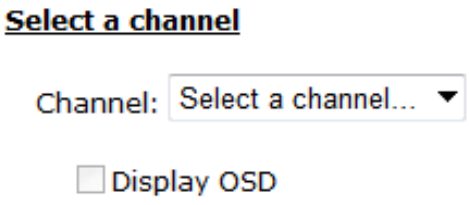
3. Use the up and down buttons to adjust their sequencing positions.

4. Finally, select a dwell time from the drop-down menu and click "Apply" to save the configuration

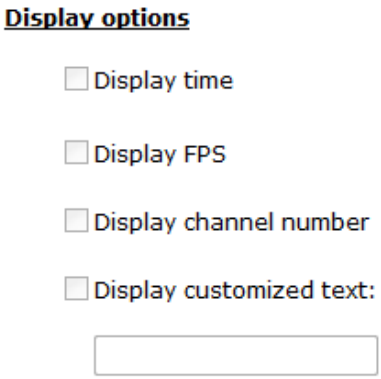
OSD Settings



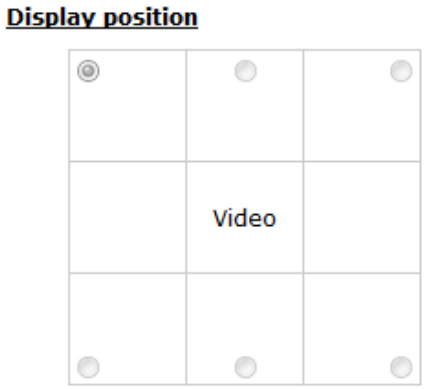
The OSD (On Screen Display) allows users to add informational text message and embed it onto the video. By default, this function is turned off. To add texts to one or more videos:



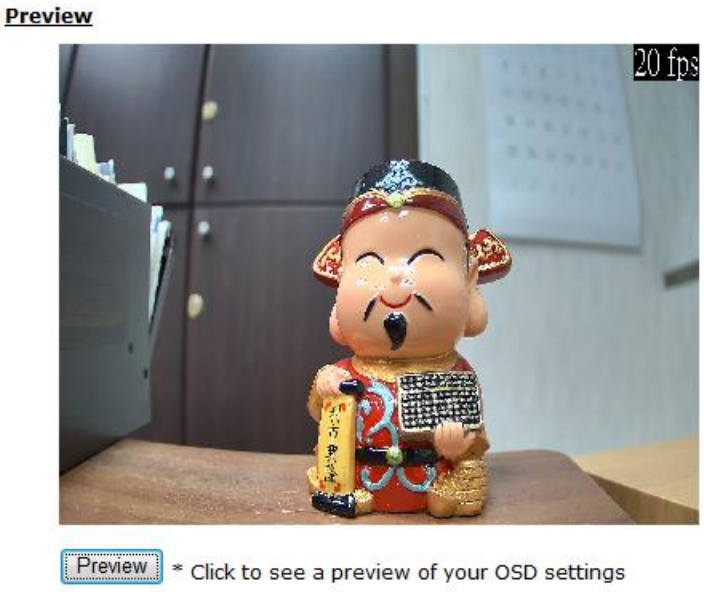
Select a camera you would like to add text to and choose "Display OSD"



Choose one or more display options if you would also like the recorder to automatically embed the system time or the frame rate for you. Or simply choose to display a custom message of your own.



Next, define where the text will be displayed by either entering an X/Y value based on percentage or use the system pre-defined position from the drop-down menu.

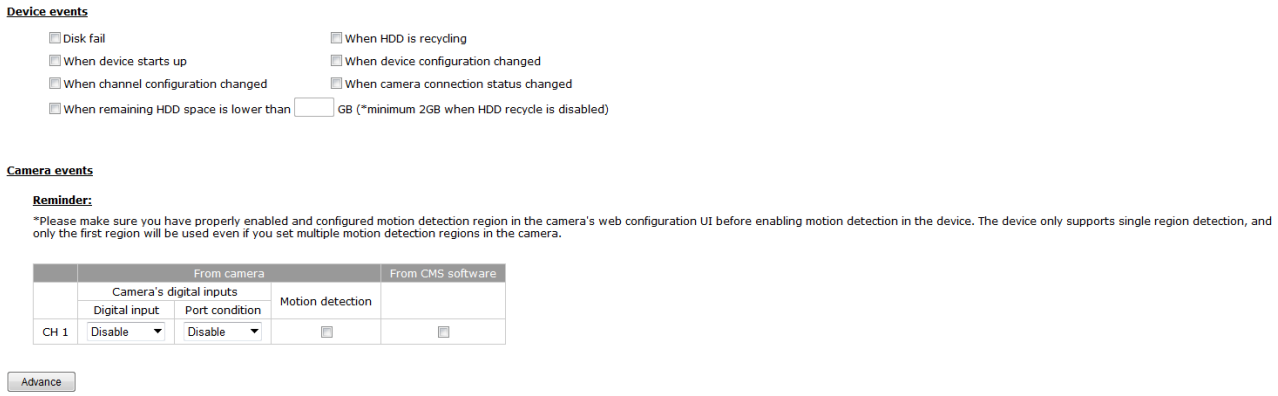


Click on the "Preview" button to see the preview of your setting and click "Apply" to save the configuration.

Event sources

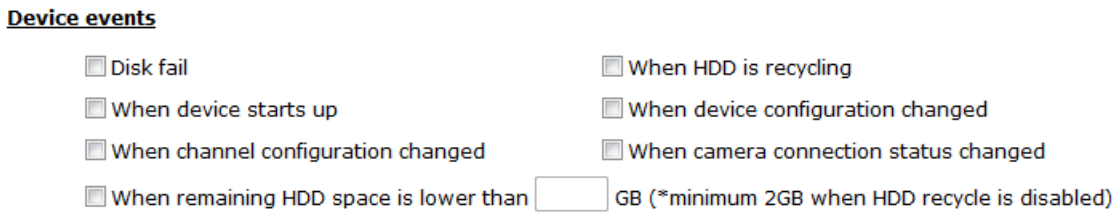
The "Event sources" section allows users to define conditions that constitute an event, its corresponding trigger action and when it will be triggered. Such setting can reduce the management overhead and notify the administrator only when it's necessary.

Event sources

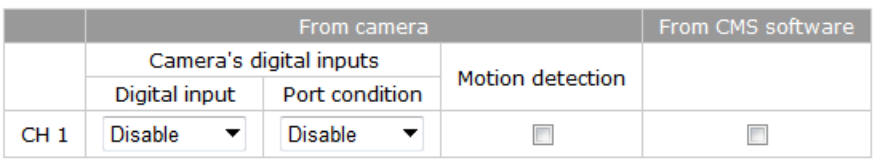


The 1st step is to define the condition to trigger event, we can finish up the event triggers by setting:

•Which channels will have event trigger function enabled
•What is considered to be an event



Define which system events should trigger the recorder to send out notifications.



Use the checkbox to enable event trigger on the desired channels.

**Once motion detection is enabled in this page, please configure the motion area and enable motion detection in the corresponding channels (cameras) from* camera's *own web UI*. The NVR only detects the first motion area set in the camera. The NVR recognizes the first motion area by its ID number set in the camera.

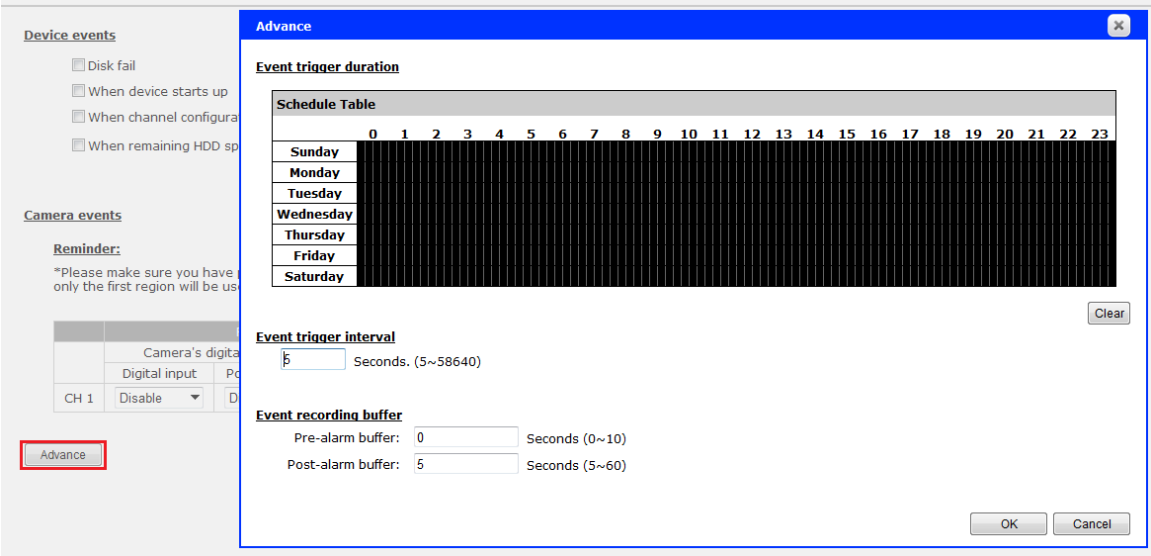
** Enabling the "From CMS software" option allows the NVR to receive events from the CMS software and start recording; events such as the intelligent video detection in the CMS.*

You can setup the recorder to receive triggers from a particular camera's digital input.
1. For cameras that come with physical digital input ports, their ports will be listed in the far left drop-down menu.
2. Pick the desired channel, and then select the camera's input port from the drop-down menu.
3. Select the trigger condition from the "Port condition" drop-down menu.

**The recorder only acts as a medium for pairing up input/output ports between cameras and the recorder.*

**Only connected cameras will be displayed in the list.*

**Some cameras only allow one trigger source be configured at a time, e.g.:*
if the camera has the motion detection function turned on, its digital input will be disabled and vice versa. Under such circumstance, if you set to use camera's digital input port as the event trigger source, you will not be able to select motion detection as the trigger source for this camera



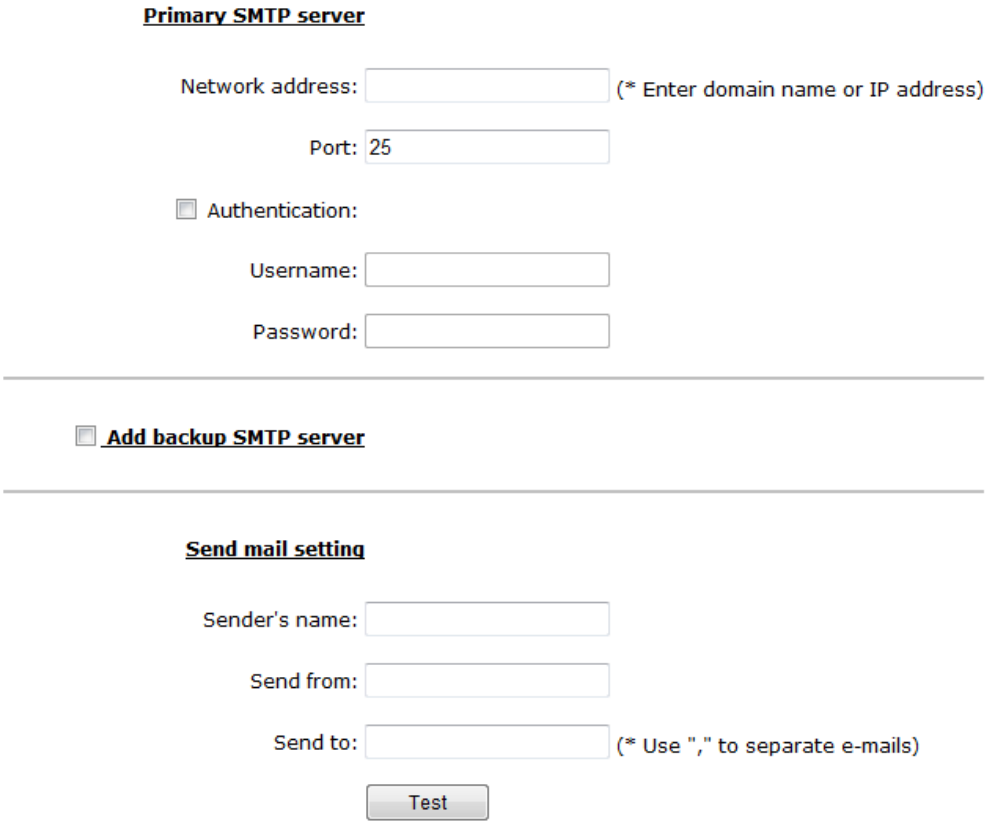
Click "Advance" button to set up event schedule.

The "recording buffer" allows user to define "pre-alarm" and "post-alarm" time for event recordings. The "pre-alarm" time sets the NVR to record in advance when an event is triggered. The "post-alarm" time sets the NVR to continue recording for a period of time after an event trigger is finished.

Notifications

Event servers are to be used with event trigger actions. In case of unusual motion detected by the camera or a disk failure, the recorder can send notification with the acceptable format (image/txt) to a destined event server according to the configuration.

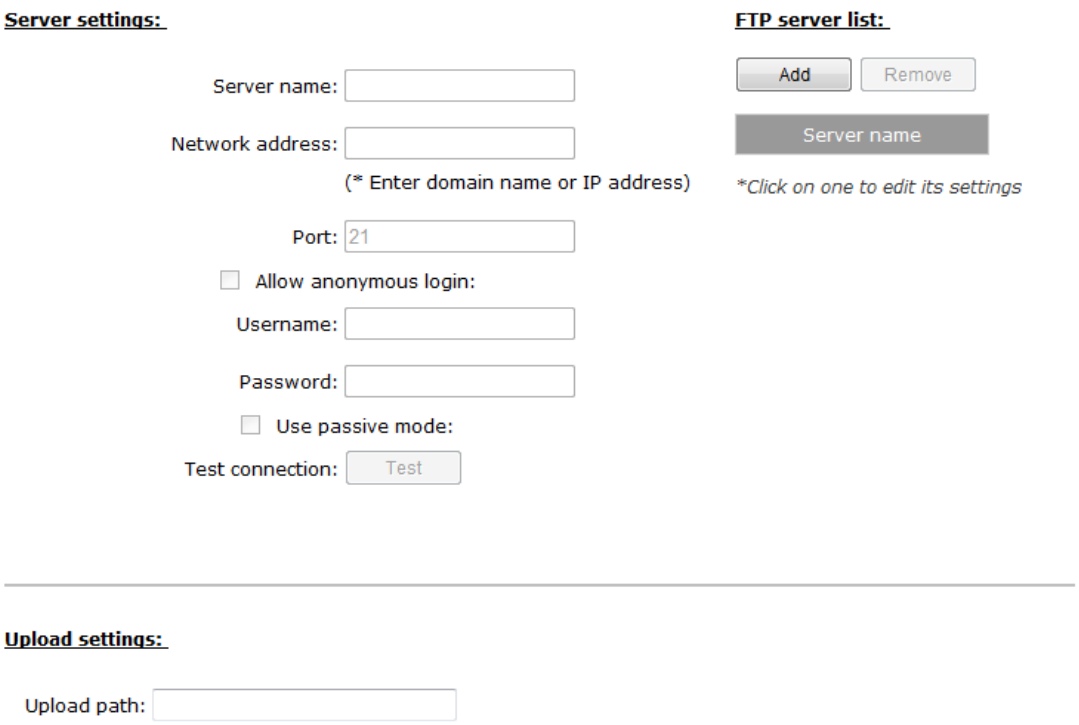
E-Mail notification



1. Enter the hostname or the IP address of the SMTP server
2. Enter the port of the SMTP server
3. Specify the sender's name in the "Sender's name" field
4. Enter the sender's e-mail address
5. Check "Enable Authentication" and enter the username and password of the SMTP server if it requires authentication
6. Click "Apply" to save the configuration

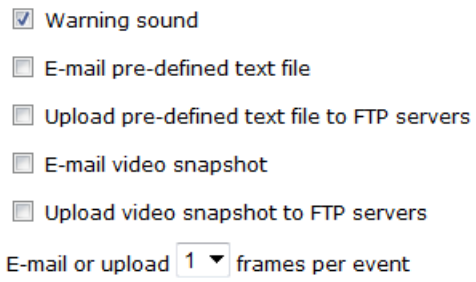
- The NVR supports SMTP servers that use base64 or MD5 authentication methods.
- 3rd party free E-mail services such as Gmail (openssl) is supported.

FTP notification



To add an FTP server,
1. Start by giving a name to the server that you are adding to the recorder
2. Enter the hostname or the IP address of the FTP server
3. Enter the communication port of the FTP server (usually port 21)
4. Enter the username and password of the FTP server if it's required
5. Check "Use Passive Mode" if it's required or leaves it unchecked to use active mode
6. Click "Test" to verify if all information is entered correctly and the connection to the FTP server can be established successfully
7. Click "Add" for the settings to take effect

Event actions

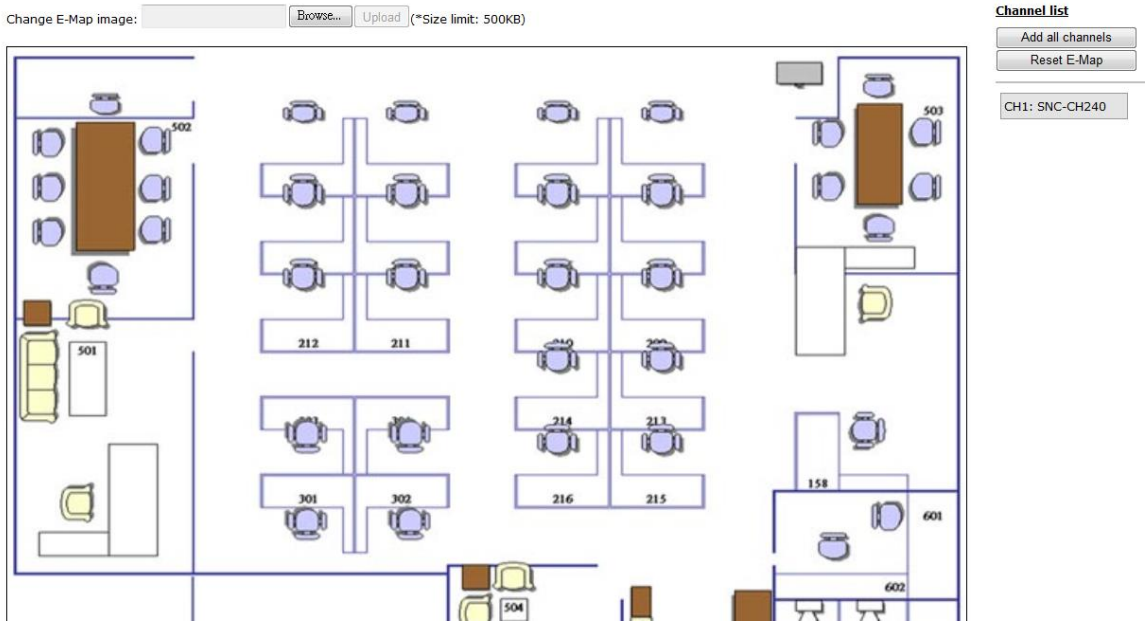


Define how the notifications will be sent and where they will be sent.

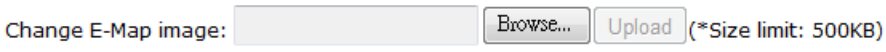
- *Event trigger may not work for cameras that are placed outside of your local network or on the Internet until the "UPnP Port Forwarding" is enabled in both the NVR and the router.*

E-Map

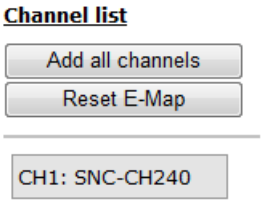
Local E-Map Setting



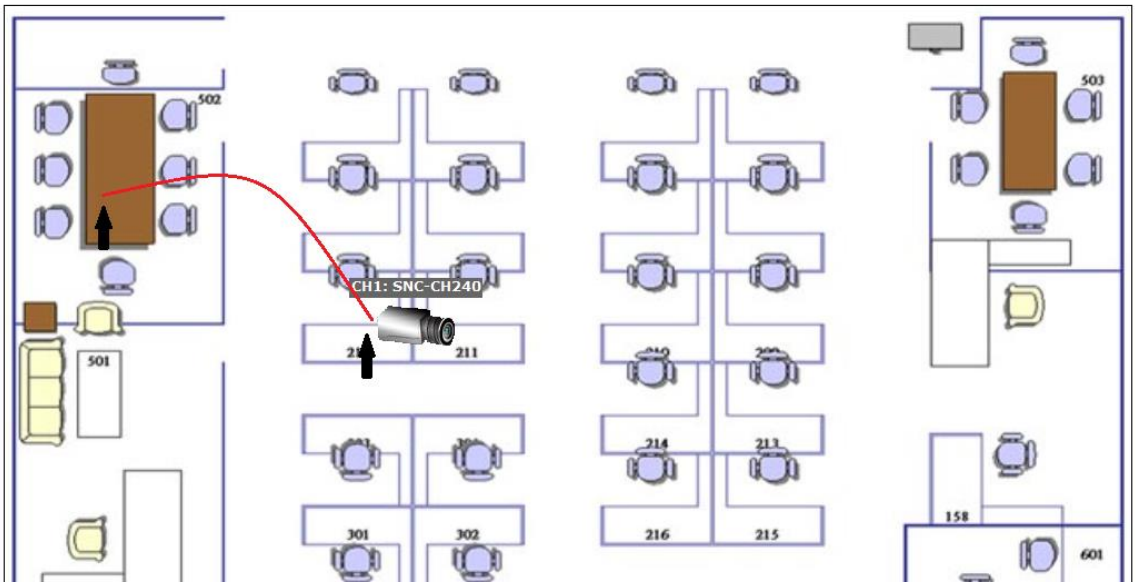
E-Map monitor is a function that alerts users whenever there is an event triggered (e.g. motion detected) from a camera with a geographical perspective. With this function, users can quickly identify which camera has detected an unusual event and where this event is happening. This function works by incorporating the event detection function as well as the recording function, which, as a result, helps users take all the necessary actions when an unusual event occurs.



To replace the map, click "Browse" button to locate the new map image file from the local PC and then click "Upload".
** Only JPG, PNG, and GIF file formats are supported with file size under 500KB.*

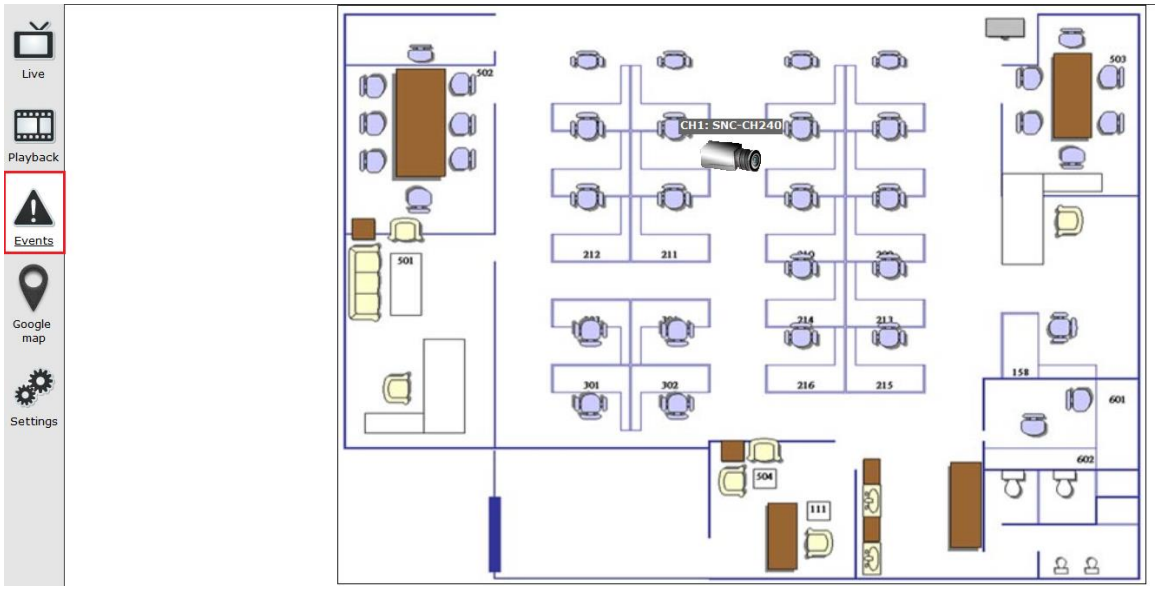


Add all channels: display all camera icons on E-map
Reset E-Map: remove all camera icons on E-map
Click CH ID to display camera icon of this camera on E-map

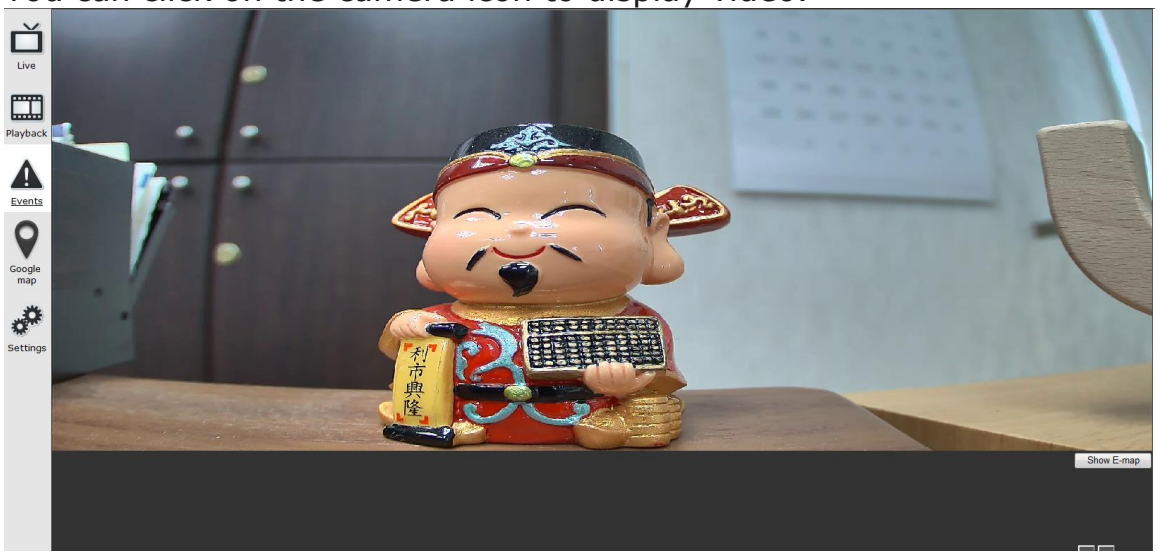


Then click and drag the camera icon to move the camera to define its location.

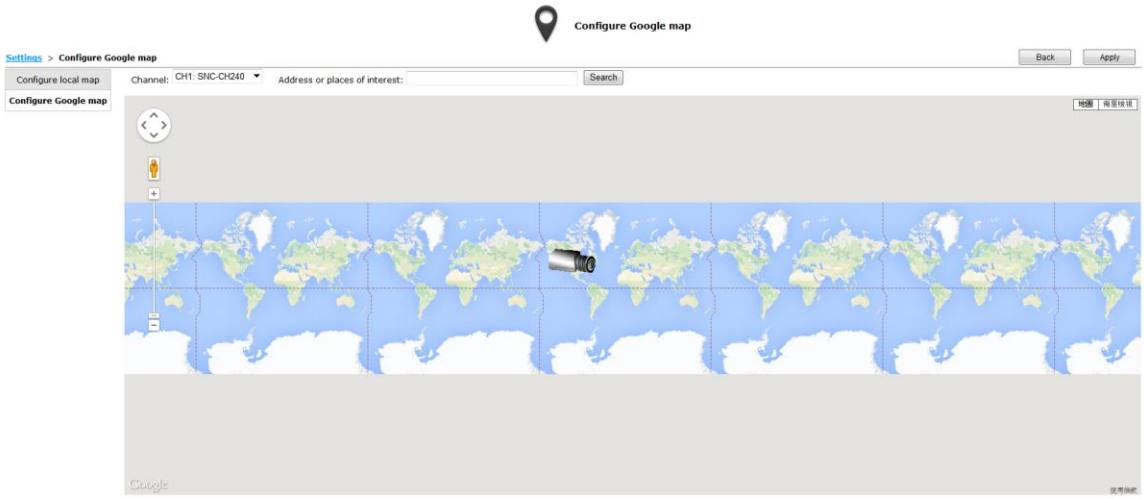
Access the E-Map by enabling "Event view".



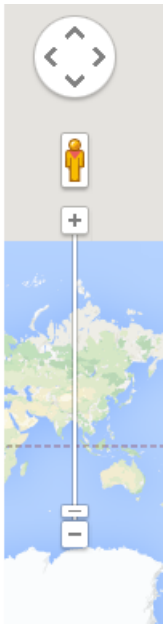
You can click on the camera icon to display video.



Google Map Setting



The Google Map monitor is a similar function to the aforementioned E-Map monitor. It is useful if you are managing multiple cameras from different locations.



To configure locations of each camera, first determine the location you'd like to place the camera to on the map. You can do so by:

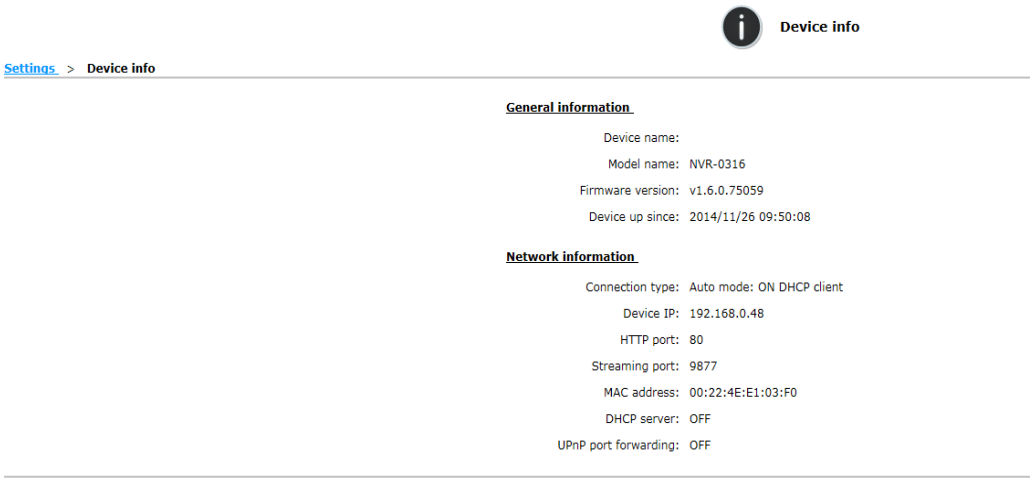
1. Zoom in to a smaller area by using the zoom control bar on the map
2. Zoom in to a smaller area by using the mouse scroll button

You can also go to a specific place on the map by entering its address or the name of the place in the "Address or places of interest" field

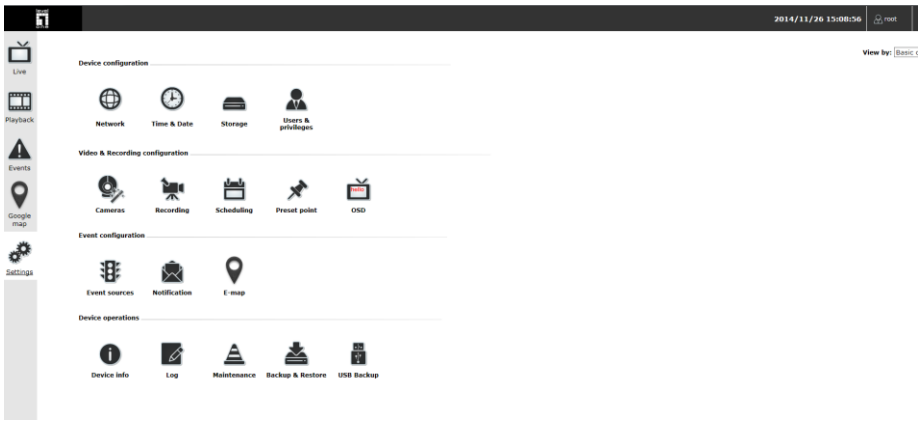
Once the location has been determined, click and drag the camera icon to move it to the desired location

** The Google Map Monitor requires active Internet connection and can not be used in conjunction with the regular E-Map monitor function.*

Device Info



Device info gives users a glance of the overall system status and allows users to perform maintenance tasks such as upgrading firm- ware, restore/backup device settings or reboot device ....etc.



The "Device Information" provides the general information of the device such as firmware version and system time. It also provides information of the current network settings and status.

Log

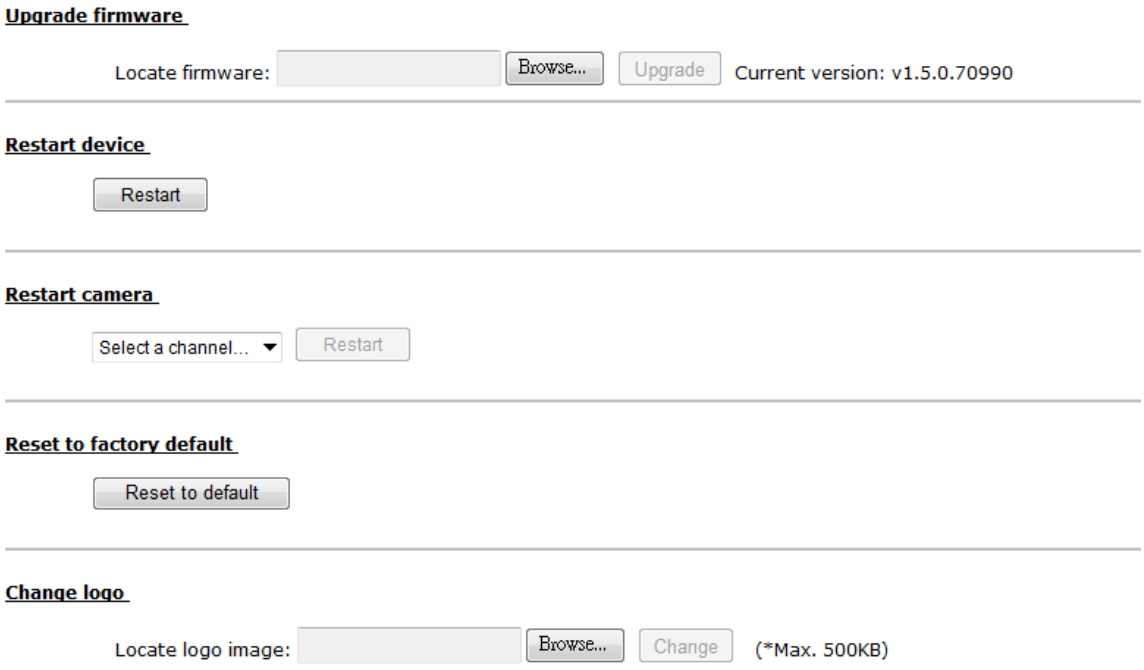
ID	Time	Type	Sub-type	CH	AP	IP	User
1	2014/06/03 15:51:58	User	User login		Web Event Receiver	192.168.101.60	admin
2	2014/06/03 15:51:56	User	User logout		Web Event Receiver	192.168.101.60	admin
3	2014/06/03 15:50:08	User	User login		Web Event Receiver	192.168.101.60	admin
4	2014/06/03 15:50:07	User	User logout		Web Event Receiver	192.168.101.60	admin
5	2014/06/03 15:45:02	User	User login		Web Event Receiver	192.168.101.60	admin
6	2014/06/03 15:45:00	User	User logout		Web Event Receiver	192.168.101.60	admin
7	2014/06/03 15:22:33	User	User login		Web Event Receiver	192.168.101.60	admin
8	2014/06/03 15:22:31	User	User logout		Web Event Receiver	192.168.101.60	admin
9	2014/06/03 15:21:20	User	User login		Web Event Receiver	192.168.101.60	admin
10	2014/06/03 15:21:18	User	User logout		Web Event Receiver	192.168.101.60	admin
11	2014/06/03 15:21:16	User	User login		Web Event Receiver	192.168.101.60	admin
12	2014/06/03 15:21:13	User	User login		Web	192.168.101.60	admin
13	2014/06/03 15:03:21	User	User logout		Web Event Receiver	192.168.101.60	admin
14	2014/06/03 13:57:30	User	User login		Web Event Receiver	192.168.101.60	admin
15	2014/06/03 13:57:28	User	User logout		Web Event Receiver	192.168.101.60	admin
16	2014/06/03 13:57:16	User	User login		Web Event Receiver	192.168.101.60	admin
17	2014/06/03 13:57:13	User	User login		Web	192.168.101.60	admin
18	2014/06/03 10:17:25	User	User logout		Web Event Receiver	192.168.101.60	admin
19	2014/06/03 10:12:08	User	User login		Web Event Receiver	192.168.101.60	admin
20	2014/06/03 10:12:06	User	User logout		Web Event Receiver	192.168.101.60	admin
21	2014/06/03 10:03:19	User	User login		Web Event Receiver	192.168.101.60	admin
22	2014/06/03 10:03:17	User	User logout		Web Event Receiver	192.168.101.60	admin
23	2014/06/03 10:03:08	User	User login		Web Event Receiver	192.168.101.60	admin
24	2014/06/03 10:03:06	User	User logout		Web Event Receiver	192.168.101.60	admin
25	2014/06/03 10:02:58	User	User login		Web Event Receiver	192.168.101.60	admin
26	2014/06/03 10:02:56	User	User logout		Web Event Receiver	192.168.101.60	admin
27	2014/06/03 09:50:30	User	User login		Web Event Receiver	192.168.101.60	admin
28	2014/06/03 09:50:29	User	User logout		Web Event Receiver	192.168.101.60	admin
29	2014/06/03 09:38:33	User	User login		Web Event Receiver	192.168.101.60	admin
30	2014/06/03 09:38:31	User	User logout		Web Event Receiver	192.168.101.60	admin

|< Prev Next >|

Clear log Export log

"Log" keeps a record of what's been happening to the device and provides basic information for troubleshooting.

Maintenance



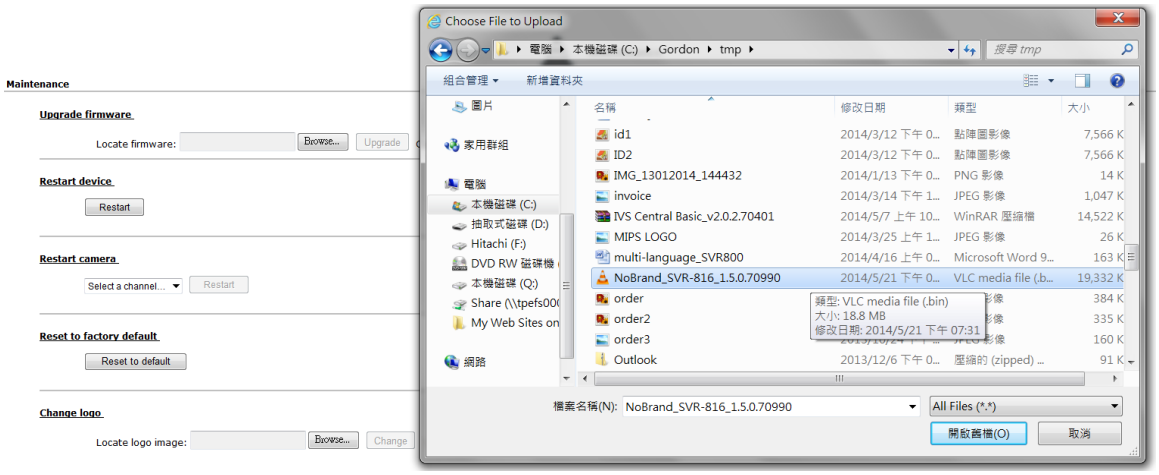
"Maintenance" provides functions for users to:

- Perform Firmware Upgrade(Only on Web UI)
- Restart the NVR when necessary
- Restart cameras directly from the NVR
- Reset the NVR's settings to their factory default values

Firmware Upgrade

The firmware can be upgraded through web UI. Before upgrading firmware, please backup configuration in advance.

***** the firmware file comes with a ".bin" file extension.***

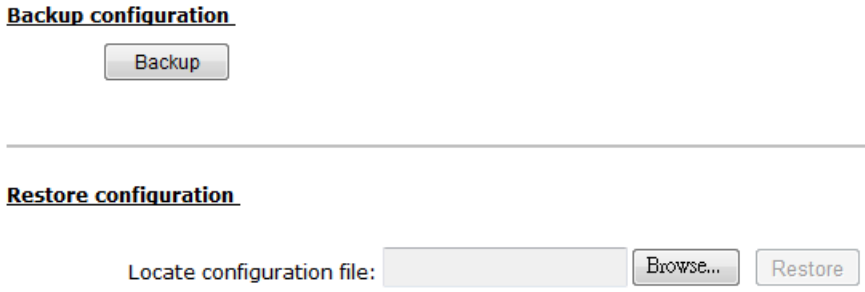


Click "Browse…", A new dialog should display and let you choose the location of the firmware file.

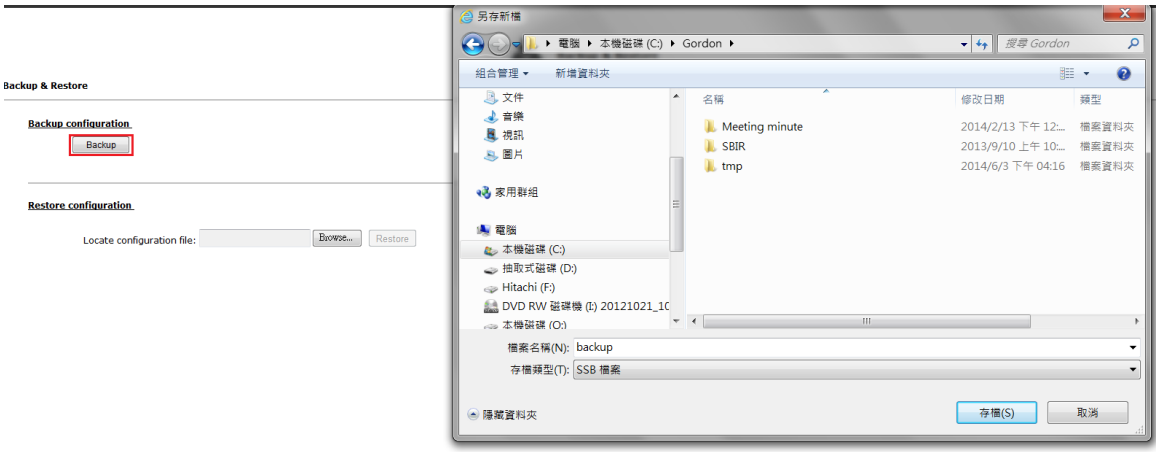
When done, click "Upgrade".

Follow the on screen instruction and wait for the process to finish (After upgrade, the system will reboot automatically, it's part of the process)

Backup & Restore

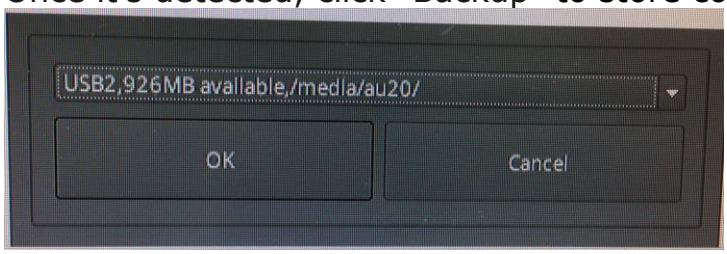


It is a function that allows users to backup the NVR's settings to a local hard drive.
Users also can restore the NVR's settings from a previously saved configuration file

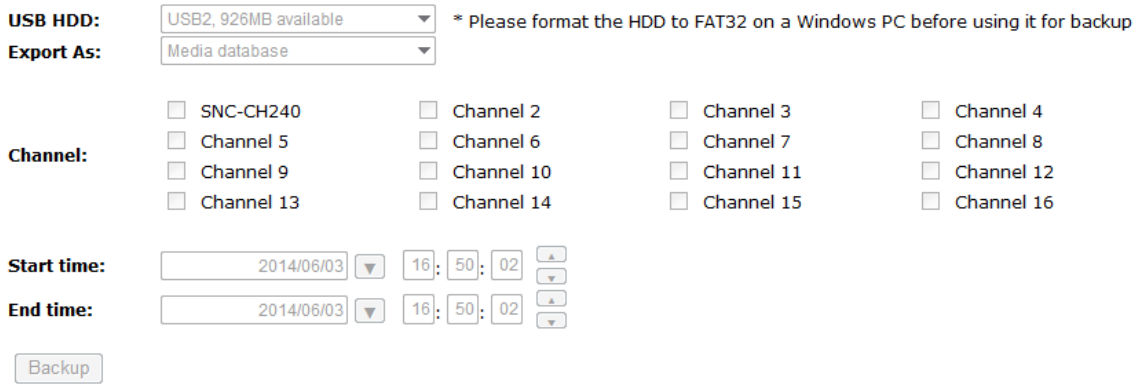


On Web UI, he configuration can be backed up to or restore from a local computer.
Click "Backup" to store configuration file in local computer.

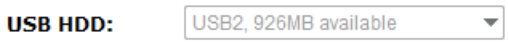
On local UI, the configuration can be backed up to or restore from a USB disk. It is required to plug in a USB disk formatted in FAT32 prior to using the backup and restore functions.
Once it's detected, click "Backup" to store configuration file in USB disk.



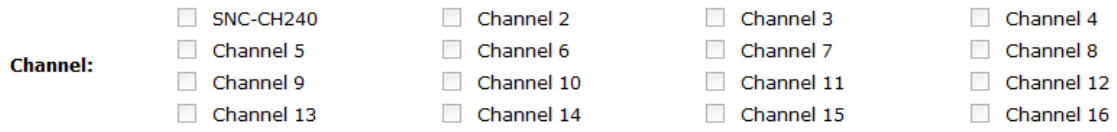
USB backup



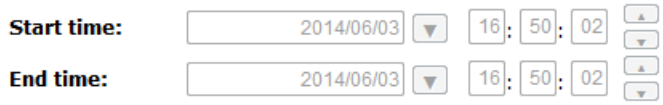
It's a function that allows users to backup the recording data in its database file format as well as in AVI to the externally connected USB hard disk.



The USB hard disk(s) will be listed in the drop-down menu displaying the remaining disk space. Make your selection from the drop-down menu if you have more than one disks connected to the NVR.



Next, select channels which you would like to backup the recording data from. Maximum 4 channels can be selected at once.



Configure the start and end time of the recording data you would like to backup and click the "Backup" button to begin.

Things to pay attention to the USB Backup function

Limitation:

- It does not support USB Hub extend the number of HDD connected to the NVR
- Only one backup process can be performed at a time
- Maximum 4 channels can be selected for backup

• Only FAT32 USB hard disk is supported for backup
• The USB hard disk needs to have more than 100MB remaining space
• If multiple partitions are presented in one disk, only the first partition will be detected and used for backup

Process:
• Progress will be displayed on the UI
• If the backup process gets interrupted, which the process stops at a point of time that is before the "END Time" user defined, such time will be displayed on the UI
• A folder will be automatically created in the USB hard disk with a name format like 0028687831_20100610151515_2010060511 0010_20100606110010 (MAC_backupbuttonclicktime_starttime_ endtime)

Note:
• Please plug in the USB HDD only after the NVR is fully started, or the HDDs will be incorrectly mounted.
• Play the backed up files using the NVR media player.

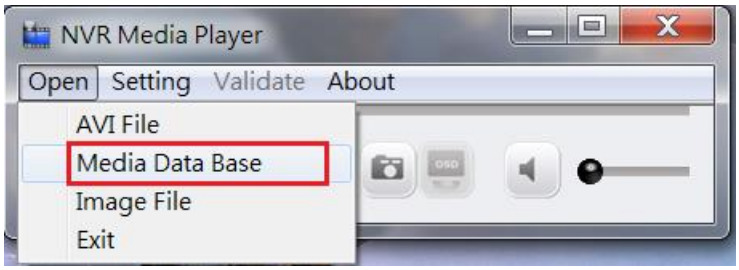
NVR Media Player

You can use the NVR Media Player to play the exported AVI files or media database file. This can save you the trouble of installing third-party media player or codecs when playing the exported AVI videos.

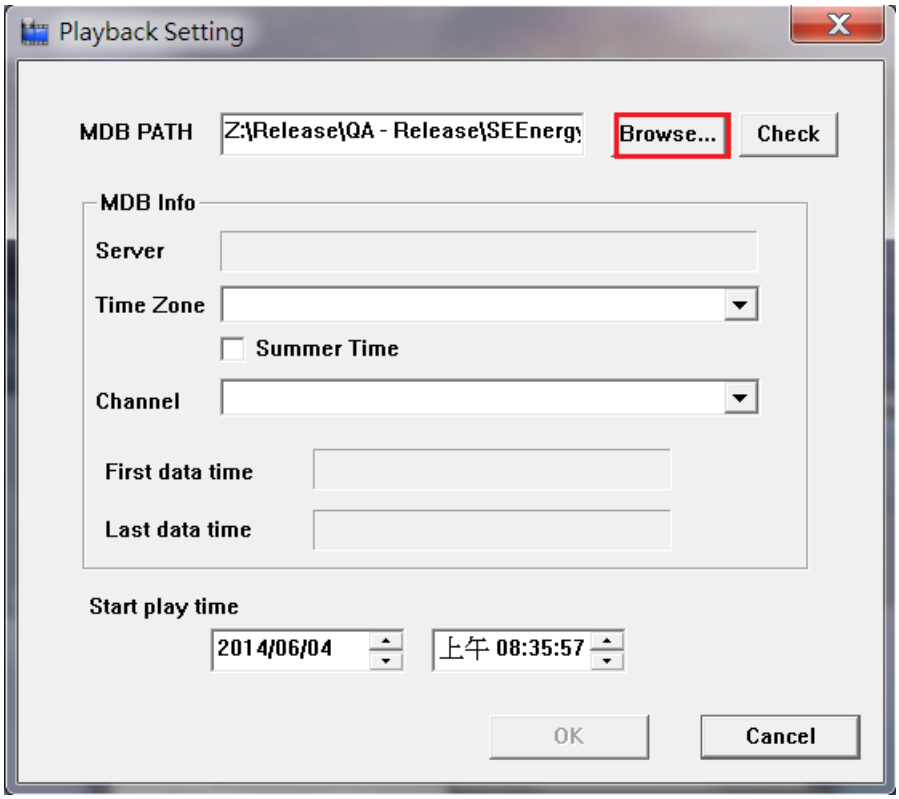
The NVR Media Player will be automatically installed after the CMS software is installed. You can find it in the Windows Start menu.

Play the backup file with the NVR Media Player

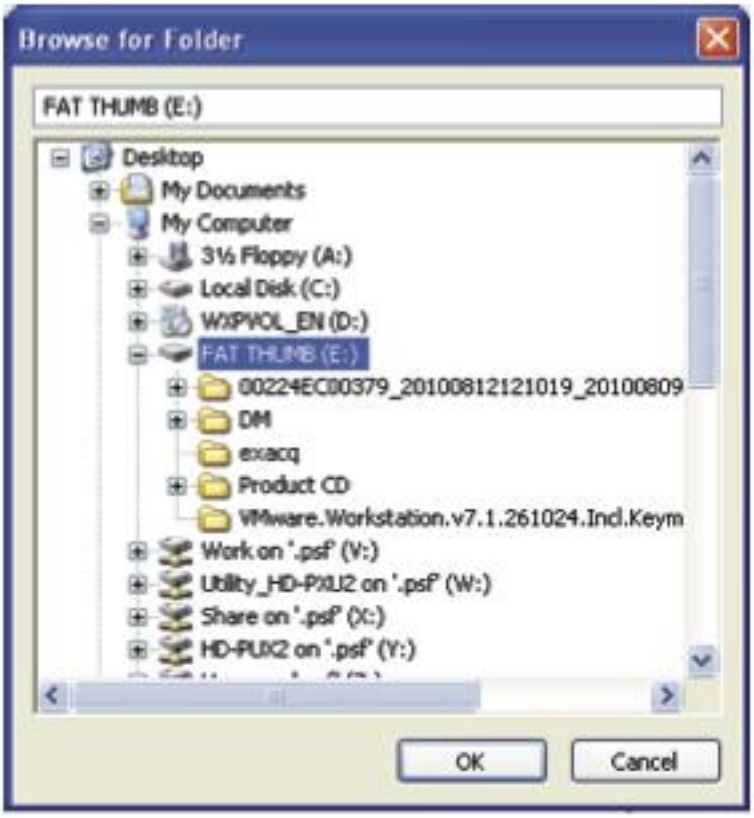
Play Media database



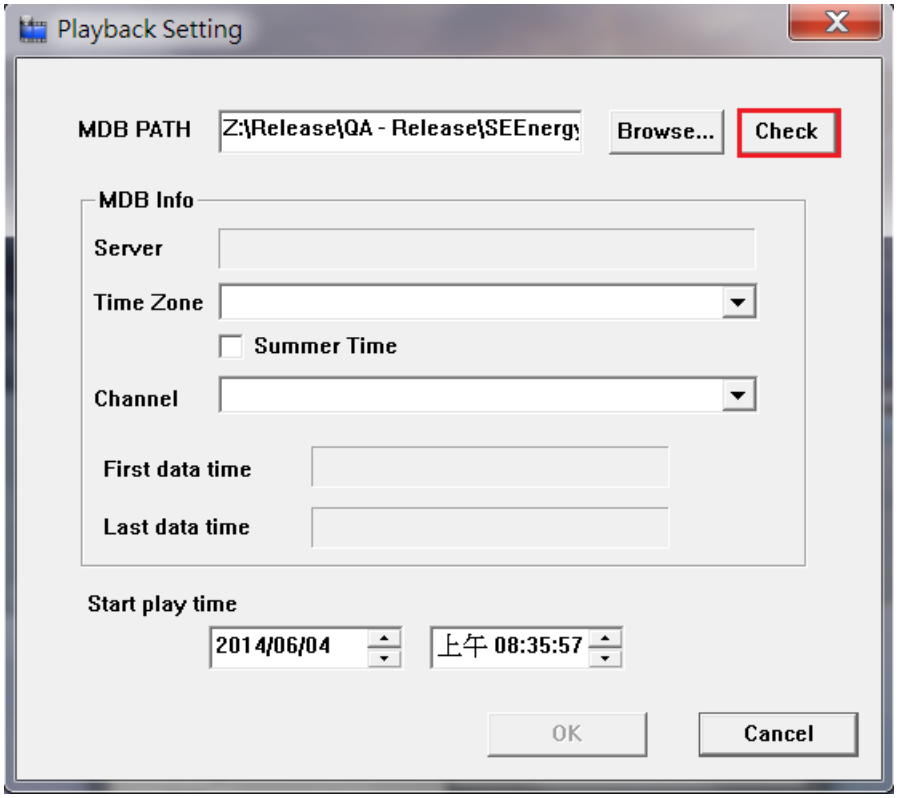
The backup files can be played with the NVR media player. To do, open the player and select "Open" >> "Media Database"



Click "Browse..." to select the file from the USB disk.



A new dialog should be prompted for you to select the file location.



When done, click "Check" to validate the file.

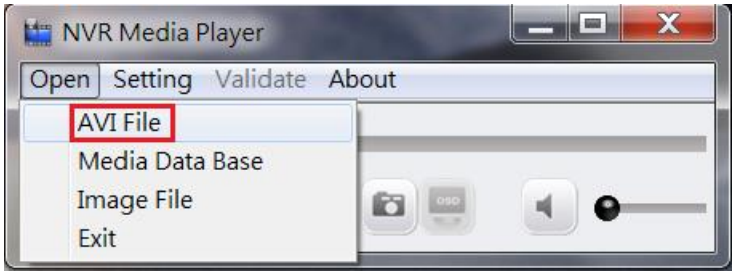
Once the file has been successfully verified, you should be prompted with the message shown below.

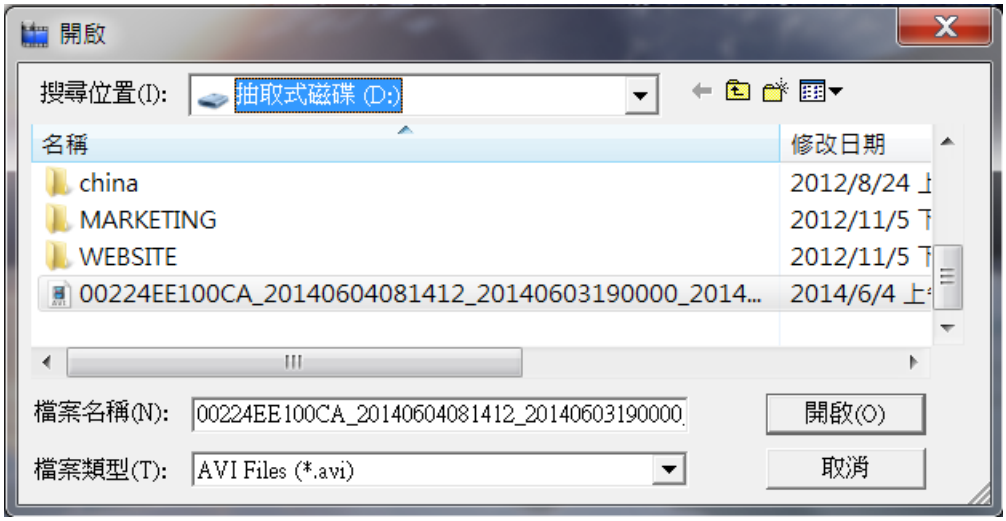
Select the time zone according to your current location.

Finally, click "OK" to begin playing. The player should now play the backed up file.

Play Media database

Open the player and select "Open" >> "AVI File"

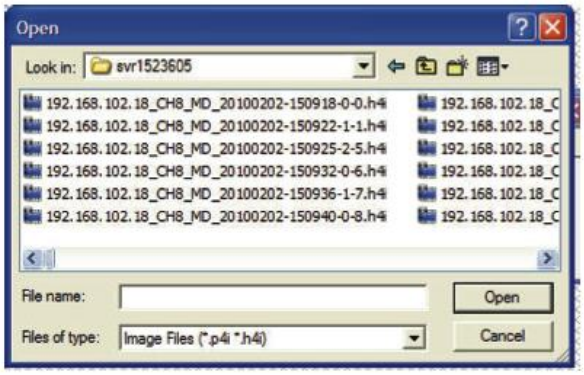




Select the AVI file

Click "Open" to play file

Open Event Snapshot images with NVR Media Player



The NVR sends snapshots that are taken when an event occurs to a destined FTP server or mail recipient. These types of snapshot images are saved in a proprietary image file format, h4i or p4i, and can only be opened by the NVR media player.

Notification of Compliance

Europe -EU Declaration of Conformity

For complete DoC please visit
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