4/8/16CH PoE
Network Video Recorder
User Manual

v.1.0.0

Regulatory Information

FCC compliance: This equipment has been tested and found to comply with the limits for 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.

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

Attention! This is a class A product which may cause radio interference in domestic environment; in this case, the user may be urged to take adequate measures.

Safety Precautions

- To reduce risk of fire or electric shock, do not expose this appliance to rain or moisture.
- Do not place the appliance near to heaters, other heat sources or under direct solar irradiation.
- Make sure the ventilation slot on the appliance is not covered during operating.
- To prevent risk of electric shock, connect only to a proper earth grounded outlet. Do not operate appliance with other none specified power supplies.
- Do not attempt to modify or use the supplied AC power cord if it is not the exact type and rating required.
- Do not attempt to disassemble the appliance. Contact qualified service personnel for maintenance.
- Handle the appliance with care. Do not strike or shake, which may damage the appliance.

Notice

- Information in this document is subject to change without notice.

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1. Introduction

The compact size standalone 4/8/16CH PoE Network Video Recorder can operate independently with local live monitoring, recording, playback and local configuration. It supports up to H.264 High Profile decoding. The high-efficiency 4/8/16CH PoE NVR can perform up to 4/8/16 Full HD recording with multiple recording modes, including continuous, manual, scheduled, alarm and motion recording.

1.1 Features

- Plug-and-Play installation: It provides users with automatic installation to reduce the redundancy in operation and maintenance costs.
- Local operations and configurations: With local operations and configuration technology, the complicated network configurations are able to perform locally.
- High Resolution local display: It supports live and playback directly from HDMI or VGA monitors. It supports HDMI interface which is able to connect to HDMI monitor or TV in full HD (1920x 1080) resolution.
- Linux-embedded, highly reliable standalone NVR.
- Record up to 4/8/16 channel Full HD video input.
- Video search by date and time, event and channel: It supports convenient video search by date and time, event and channel on the local playback interface.
- Digital watermark: It provides the digital watermark utility to verify whether the videos are original or not.
- Digital zoom for live and playback
- Mobile apps: Android, iPhone and iPad.
- CMS: It provides with free bundle CMS to manage 256 channel cameras. Live monitoring with maximum 36 channels simultaneously and one device playback.
- Support 2 internal SATA HDDs, up to 8TB for 4/8/16CH NVR.
- Convenient Control of PT cameras: It supports PTZ (Pan/Tilt/Zoom) cameras to adjust directly from the NVR and they can be viewed on the local display.

1.2 Product Specification

4CH PoE NVR – ANVR2104

System	
Operating System	Embedded Linux
Operations	Live, Recording, Playback, Backup & Remote access
Control Mode	USB mouse, Webpage, CMS
Video	
IP Camera Inputs	4 channel; each one is up to 1080p30
Audio	
Input	1 x RCA
Output	1 x RCA
2-way Audio	Support
Display	
Display Mode	Full screen / Multi-screen / PIP / Sequence
Output	1 x HDMI(1920x1080p60), 1 x VGA(up to 1920x1080, 60Hz)
Sequence	Support
OSD	GUI
Remote View	Via IE Web Viewer, CMS
Mobile Viewing on Smartphone / Tablet PC	Yes; iOS, Android
Recording	
Recording Mode	Continuous, scheduled, alarm, motion
Recording Capability	Up to 120 fps at Full HD(1920x1080)
Pre Recording	5 seconds
Post Recording	0 ~ 255 seconds
Playback & Backup	
Display Mode	Full screen / Multi-screen
Playback Capability	4 channel simultaneous playback
Playback Control	Play / Pause / Step / Fast forward / Rewind / Fast rewind
Search Control	By Date / Time, Events, and Channel
Export	Through USB / Webpage / CMS
Internal Storage	2 x SATA Port and up to 4TB capacity
Network	
Support	TCP / IP, SMTP, DHCP, DDNS, PPPoE, UDP, SSL, RTP, RTSP, NTP
Ethernet	1 x 10 / 100 Mbps(WAN), 1 ~ 4 port 10 / 100 Mbps with PoE(LAN)
I/O	
USB	2; 1 for mouse control and 1 for backup
Alarm	4 Alarm in / 1 Alarm out
RS485	1; Support Pelco D, Pelco P
Security	
Watermark	Yes
User Privilege	3 Levels of User Access Support
Environmental	
Power	DC48V, 60W
Dimension	319(W) x 53(H) x 297(D) mm ± 5 mm
Temperature	0°C ~ 40°C

** Specifications are subject to change without prior notice.

4CH PoE NVR – ANVR2204

System	
Operating System	Embedded Linux
Operations	Live, Recording, Playback, Backup & Remote access
Control Mode	USB mouse, Webpage, CMS
Video	
IP Camera Inputs	4 channel; each one is up to 1080p30 or 3MP or 5MP
Audio	
Input	1 x RCA
Output	1 x RCA
2-way Audio	Support
Display	
Display Mode	Full screen / Multi-screen / PIP / Sequence
Output	1 x HDMI(1920x1080p60), 1 x VGA(up to 1920x1080, 60Hz)
Sequence	Support
OSD	GUI
Remote View	Via IE Web Viewer, CMS
Mobile Viewing on Smartphone / Tablet PC	Yes; iOS, Android
Recording	
Recording Mode	Continuous, scheduled, alarm, motion
Recording Capability	Up to 120 fps at Full HD(1920x1080)
Pre Recording	5 seconds
Post Recording	0 ~ 255 seconds
Playback & Backup	
Display Mode	Full screen / Multi-screen
Playback Capability	4 channel simultaneous playback
Playback Control	Play / Pause / Step / Fast forward / Rewind / Fast rewind
Search Control	By Date / Time, Events, and Channel
Export	Through USB / Webpage / CMS
Internal Storage	2 x SATA Port and each disy up to 4TB capacity
External Storage	1 x eSATA Port
Network	
Support	TCP / IP, SMTP, DHCP, DDNS, PPPoE, UDP, SSL, RTP, RTSP, NTP
Ethernet	1 x 10 / 100 / 1000 Mbps(WAN),1 ~ 4 port 10 / 100 Mbps with PoE(LAN)
I/O	
USB	2; 1 for mouse control and 1 for backup
Alarm	4 Alarm in / 1 Alarm out
RS485	1; Support Pelco D, Pelco P
Security	
Watermark	Yes
User Privilege	3 Levels of User Access Support
Environmental	
Power	DC 48V, 90W
Dimension	319(W) x 53(H) x 297(D) mm ± 5 mm
Temperature	0°C ~ 40°C

** Specifications are subject to change without prior notice.

8CH PoE NVR – ANVR2208

System	
Operating System	Embedded Linux
Operations	Live, Recording, Playback, Backup & Remote access
Control Mode	USB mouse, Webpage, CMS
Video	
IP Camera Inputs	8 channel; each one is up to 1080p30 or 3MP or 5MP
Audio	
Input	1 x RCA
Output	1 x RCA
2-way Audio	Support
Display	
Display Mode	Full screen / Multi-screen / PIP / Sequence
Output	1 x HDMI(1920x1080p60), 1 x VGA(up to 1920x1080, 60Hz)
Sequence	Support
OSD	GUI
Remote View	Via IE Web Viewer, CMS
Mobile Viewing on Smartphone / Tablet PC	Yes; iOS, Android
Recording	
Recording Mode	Continuous, scheduled, alarm, motion
Recording Capability	Up to 240 fps at Full HD(1920x1080)
Pre Recording	5 seconds
Post Recording	0 ~ 255 seconds
Playback & Backup	
Display Mode	Full screen / Multi-screen
Playback Capability	8 channel simultaneous playback
Playback Control	Play / Pause / Step / Fast forward / Rewind / Fast rewind
Search Control	By Date / Time, Events, and Channel
Export	Through USB / Webpage / CMS
Internal Storage	2 x SATA Ports and each disk up to 4TB capacity
External Storage	1 x eSATA Port
Network	
Support	TCP / IP, SMTP, DHCP, DDNS, PPPoE, UDP, SSL, RTP, RTSP, NTP
Ethernet	1 x 10 / 100 / 1000 Mbps(WAN), 1 ~ 8 port 10 / 100 Mbps with PoE(LAN)
I/O	
USB	2; 1 for mouse control and 1 for backup
Alarm	4 Alarm in / 1 Alarm out
RS485	1; Support Pelco D, Pelco P
Security	
Watermark	Yes
User Privilege	3 Levels of User Access Support
Environmental	
Power	DC 48V, 90W
Dimension	319(W) x 53(H) x 297(D) mm ± 5 mm
Temperature	0°C ~ 40°C

** Specifications are subject to change without prior notice.

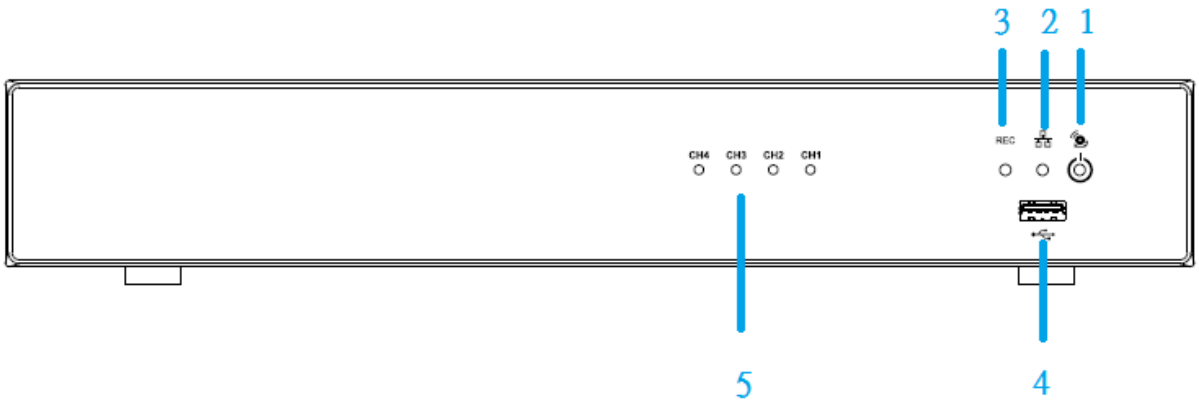
16CH PoE NVR – ANVR2216

System	
Operating System	Embedded Linux
Operations	Live, Recording, Playback, Backup & Remote access
Control Mode	USB mouse, Webpage, CMS
Video	
IP Camera Inputs	16 channel; each one is up to 1080p30 or 3MP or 5MP
Audio	
Input	1 x RCA
Output	1 x RCA
2-way Audio	Support
Display	
Display Mode	Full screen / Multi-screen / PIP / Sequence
Output	1 x HDMI(1920x1080p60), 1 x VGA(up to 1920x1080, 60Hz)
Sequence	Support
OSD	GUI
Remote View	Via IE Web Viewer, CMS
Mobile Viewing on Smartphone / Tablet PC	Yes; iOS, Android
Recording	
Recording Mode	Continuous, scheduled, alarm, motion
Recording Capability	Up to 480 fps at Full HD(1920x1080)
Pre Recording	5 seconds
Post Recording	0 ~ 255 seconds
Playback & Backup	
Display Mode	Full screen / Multi-screen
Playback Capability	16 channel simultaneous playback
Playback Control	Play / Pause / Step / Fast forward / Rewind / Fast rewind
Search Control	By Date / Time, Events, and Channel
Export	Through USB / Webpage / CMS
Internal Storage	2 x SATA Ports and each disk up to 4TB capacity
External Storage	1 x eSATA Port
Network	
Support	TCP / IP, SMTP, DHCP, DDNS, PPPoE, UDP, SSL, RTP, RTSP, NTP
Ethernet	1 x 10 / 100 / 1000 Mbps(WAN), 1 ~ 8 port 10 / 100 Mbps with PoE(LAN)
I/O	
USB	2; 1 for mouse control and 1 for backup
Alarm	4 Alarm in / 1 Alarm out
RS485	1; Support Pelco D, Pelco P
Security	
Watermark	Yes
User Privilege	3 Levels of User Access Support
Environmental	
Power	DC 48V, 90W
Dimension	319(W) x 53(H) x 297(D) mm ± 5 mm
Temperature	0°C ~ 40°C

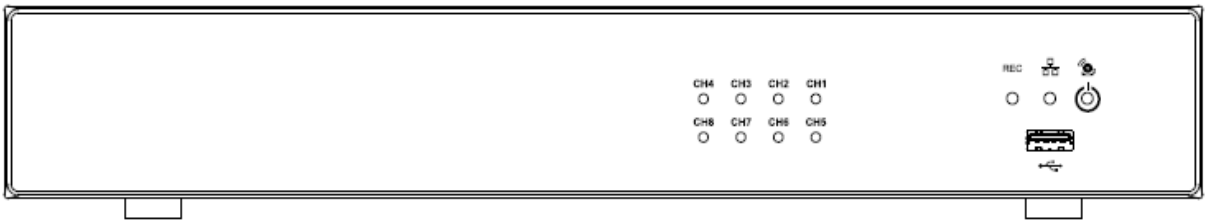
** Specifications are subject to change without prior notice.

1.3 Front Panel

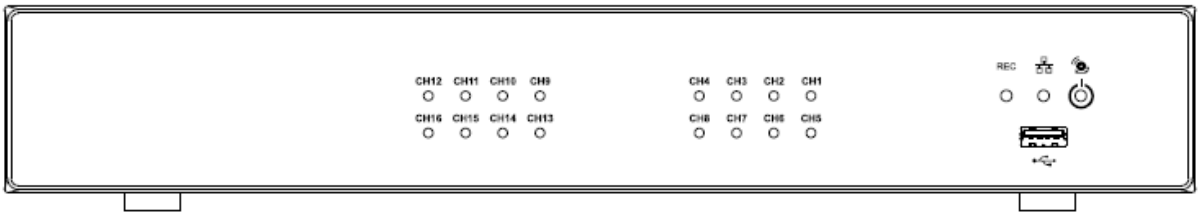
4CH PoE NVR Front Panel (ANVR2104, ANVR2204)



8CH PoE NVR Front Panel (ANVR2208)



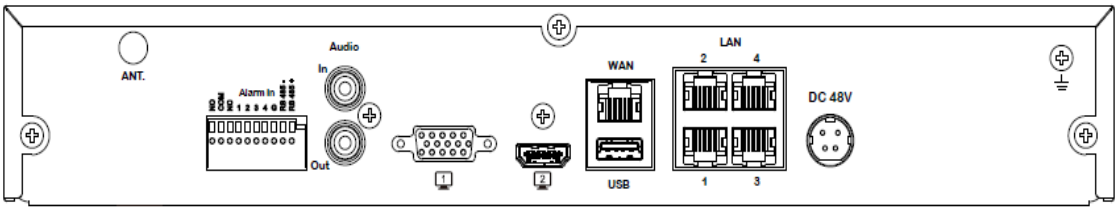
16CH PoE NVR Front Panel (ANVR2216)



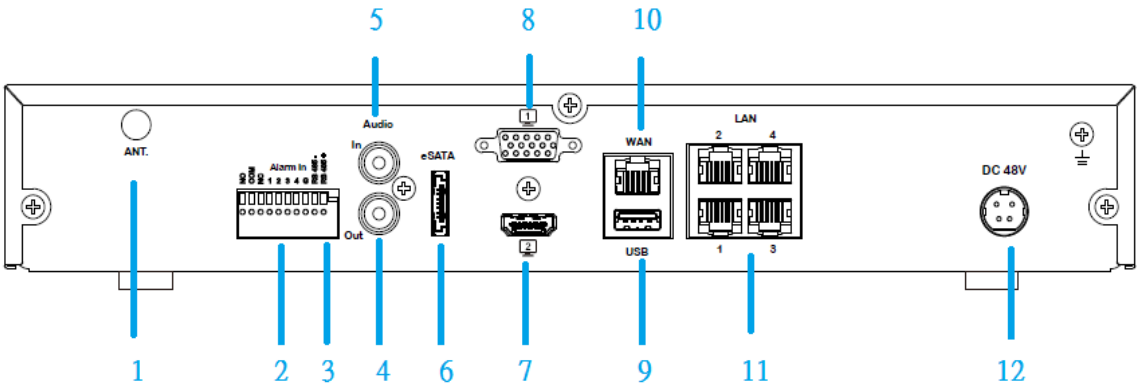
1. Power/ Alarm: Power indicator turns on when NVR turns on. Alarm indicator blinks when the alarm is detected.
2. Network : Network indicator turns on when NVR network access is connected.
3. REC Record : Rec indicator turns on when NVR is recording.
4. USB Port: USB2.0 port for connecting devices, such as USB mouse or USB flash drive.
5. CH1~CH16 : Indicators turn on when the video is connected to the system.

1.4 Rear Panel

The rear panel connectors for 4CH PoE NVR (ANVR2104) are:



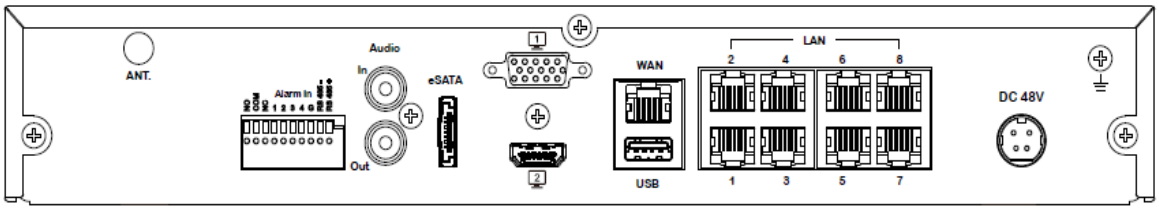
The rear panel connectors for 4CH PoE NVR (ANVR2204) are:



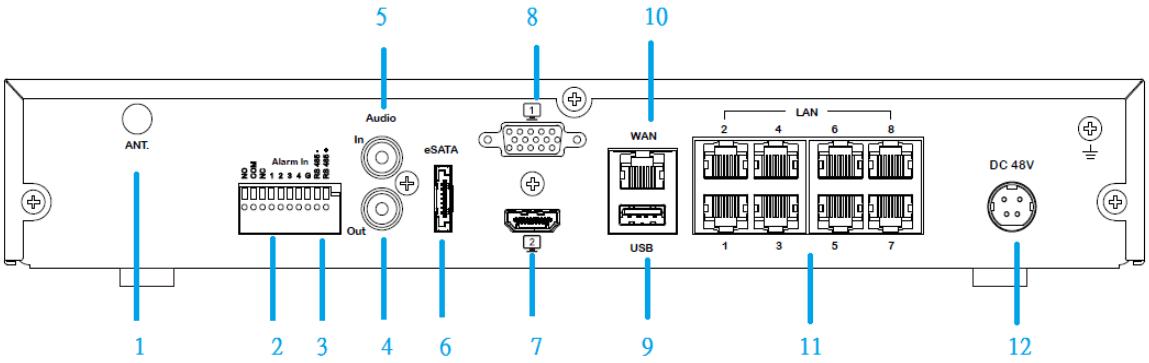
Item	I/O	Description
1	Antenna	Reserved for connecting to Zigbee device
2	Alarm In/ Alarm Out	Connect up to 4 alarm inputs to the alarm input connectors. N.C or N.O type alarm signal out.
3	RS485	Connect a Pan/Tilt/Zoom camera to the RS485 port.
4	Audio Out	Connect a speaker or other audio output device to the audio output connectors.
5	Audio In	Connect the microphone or camera audio output to the audio input connectors.
6	ESATA	For connecting to external SATA HDD or disk array.
7	HDMI	Connect a HDMI monitor to the HDMI output connector.
8	VGA	Connect a VGA Monitor to the VGA output connector.
9	USB Port	USB 2.0 port for connecting devices, such as USB mouse or USB flash drive.

10	WAN	Connect NVR to Internet via a RJ-45 network cable.
11	LAN 1-4	Connect IP camera to the same LAN as the NVR. Connect IP camera to PoE (Power over Ethernet) ports.
12	Power	Plug the DV48V power source into the power socket.

The rear panel connectors for 8CH PoE NVR (ANVR2208) are:



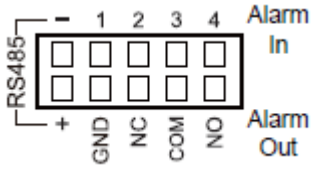
The rear panel connectors for 16CH PoE NVR (ANVR2216) are:



Item	I/O	Description
1	Antenna	Reserved for connecting to Zigbee device
2	Alarm In/ Alarm Out	Connect up to 4 alarm inputs to the alarm input connectors. N.C or N.O type alarm signal out.
3	RS485	Connect a Pan/Tilt/Zoom camera to the RS485 port.
4	Audio Out	Connect a speaker or other audio output device to the audio output connectors.
5	Audio In	Connect the microphone or camera audio output to the audio input connectors.
6	ESATA	For connecting to external SATA HDD or disk array.
7	HDMI	Connect a HDMI monitor to the HDMI output connector.
8	VGA	Connect a VGA Monitor to the VGA output connector.
9	USB Port	USB 2.0 port for connecting devices, such as USB mouse or USB flash drive.
10	WAN	Connect NVR to Internet via a RJ-45 network cable.
11	LAN 1-8	Connect IP camera to the same LAN as the NVR. Connect IP camera to PoE (Power over Ethernet) ports.
12	Power	Plug the DV48V power source into the power socket.

Alarm Input / Output Connection

The alarm input/output interface of the NVR is shown below.



Connect the alarm inputs

Configure the alarm inputs as N/O or N/C in the NVR UI system.

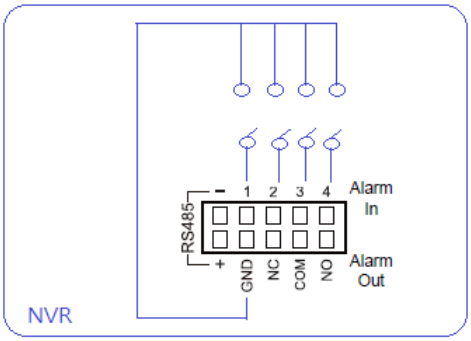
Each (alarm) input line can be switched by a contact from external devices. Wire them as either Normally Open or Normally Closed.

Specifications

Alarm input impedence: Internal pull-up 10 K to +5 V

Input voltage range: 0 VDC minimum to 12 VDC maximum

Input voltage threshold: low voltage 0.5 V maximum, high voltage 2 V minimum



Connect the alarm outputs

Configure the alarm outputs as N/O or N/C in the NVR UI system.

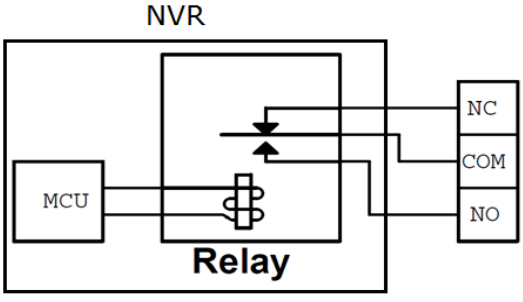
The 2 alarm output relays are responding to input alarms and triggers. Do not exceed 24 Vdc, 500 mA (continuous), or 10 VA on an alarm output relay's contacts.

Specifications

Switching current (resistive): 500 mA maximum

Switching voltage (resistive): 24 VDC maximum

Cable cross section: AWG 26-16 (0.13-1.5 mm2)



1.5. Packing Detail and Installation

1.5.1 Packing

4/8/16CH PoE NVR packing includes the below.

The package contains the following items:

- Network video recorder x 1
- User manual/Quick Start Guide/CMS disc x 1
- Quick Install Paper x1
- Power adapter x 1
- Power cord x 1
- SATA connection cable x 2
- Hard drive mounting bracket x 4
- Screws for mounting bracket x 10
- Screws for mounting hard drive x 10

1.5.2 Hard Disk Installation

Hard disk installation steps for 4/8/16CH PoE NVR.

Follow the steps to install or replace the hard disk.

Step 1. Take out the screws on the cover of the unit.

Step 2. Slide opens the top cover.

Step 3. Use the HDD mounting screws attached in the accessory pack to fix the mounting

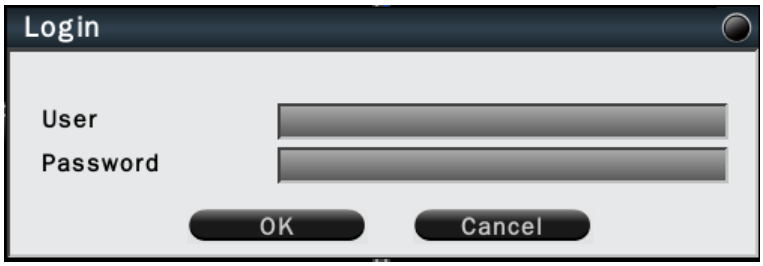
brackets to the hard drive.

Step 4. Connect SATA & Power wire to Hard Disk and put it on right position of the case. Use the HDD mounting screws attached in the accessory pack to fix the hard drive with
bracket firmly on to the chassis.

2. General Operation

2.1 Login

It is requested to login after boot up if the user authentication is enabled.



Click on the User Name and Password column to bring up the virtual keyboard to enter the default user account and password to login to the system.

The default user name/password is:

Note
Administrator user name/password: admin/admin
Operator user name/password: operator/operator
Guest user name/password: guest/guest

If Auto logout is enabled, the system will automatically logout after the preset time. To login to the system, left click on the mouse to bring up the login menu. The functions available can be limited by setting passwords. Access to the unit's functions is determined by the user level of the user logged in.

Authority Instructions based on 3 levels of users

	Administrator	Operator	Guest
View live	Yes	Yes	Yes
OSD	Yes	Yes	Yes
Live Multiple-up	Yes	Yes	Yes
Zoom	Yes	Yes	Yes
Pan/Tilt/Zoom (PTZ)	Yes	Yes	No
Playback	Yes	Yes	No
Export	Yes	Yes	No
Acknowledge Alarm	Yes	Yes	No
Configuration	Yes	No	No

2.2 Add IP Cameras to NVR

There are 6 methods to add IP cameras to NVR. User can use full auto install mode *(Refer to 2.2.1 Wizard-Full Auto Install Mode)*, Wizard-manual install *(Refer to 2.2.2 Wizard-Manual Install Mode)*, Manual Install *(Refer to 2.2.3 Manual Install)*, Discovery (*Refer to 2.2.4 IP Camera Discovery*) or IP Camera Stream Server *(Refer to 2.2.5 Manually Add IP camera by Stream Server)* or by Manually Add Camera by ONVIF(*Refer to 2.2.6 Manually Add Camera by ONVIF*).

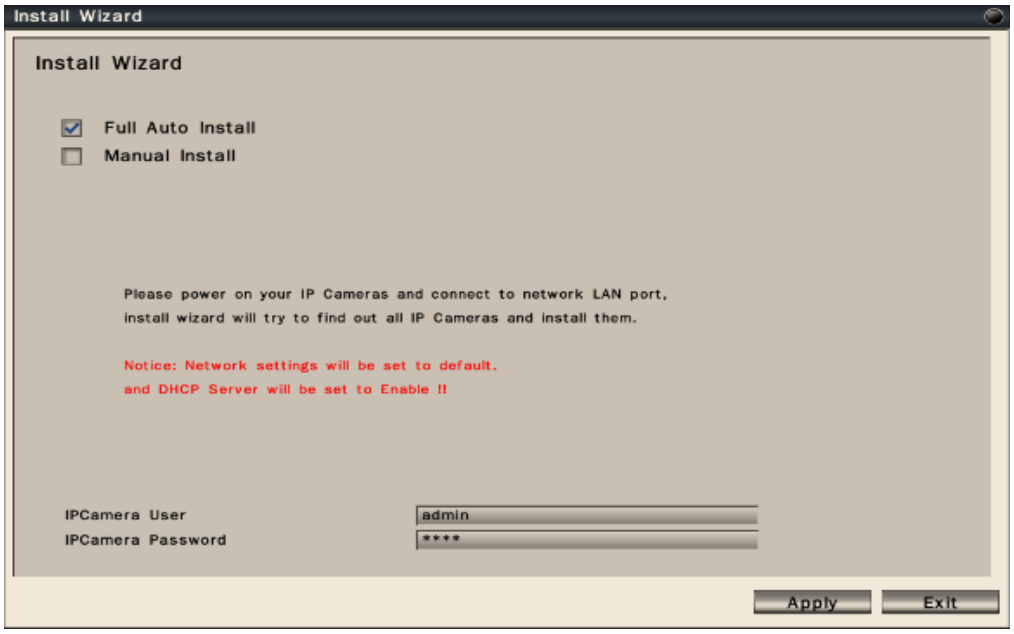
2.2.1 Wizard-Full Auto Install Mode (Plug and Play)

When the first time connect IP cameras to the NVR, the NVR will pop up install wizard window. NVR provides **plug and play** feature if user install specific IP cameras in **Full Auto Install** mode. User just needs to click **Full Auto Install** and then the NVR will automatically configure IP address of a camera connected by LAN. The NVR will then detect the IP camera and display image soon.

The connection of the LAN port is for IP cameras. The connection of the WAN port is for the NVR to Internet.

Please click "Full Auto Install" and the NVR will automatically configure IP cameras connected by LAN. After few seconds, the NVR will detect the IP cameras and display image.

> **Note**
> The connected IP cameras must be integrated IP cameras for NVR to perform plug and play feature.

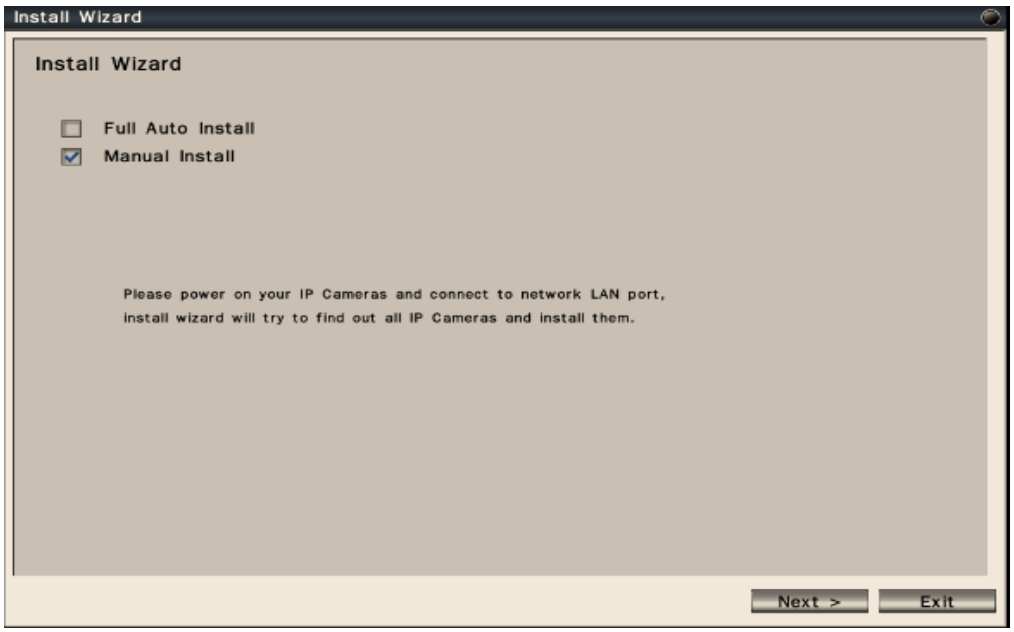


Note
User can also go to Configuration->System->Device->Install Wizard->Go to bring up Install Wizard.

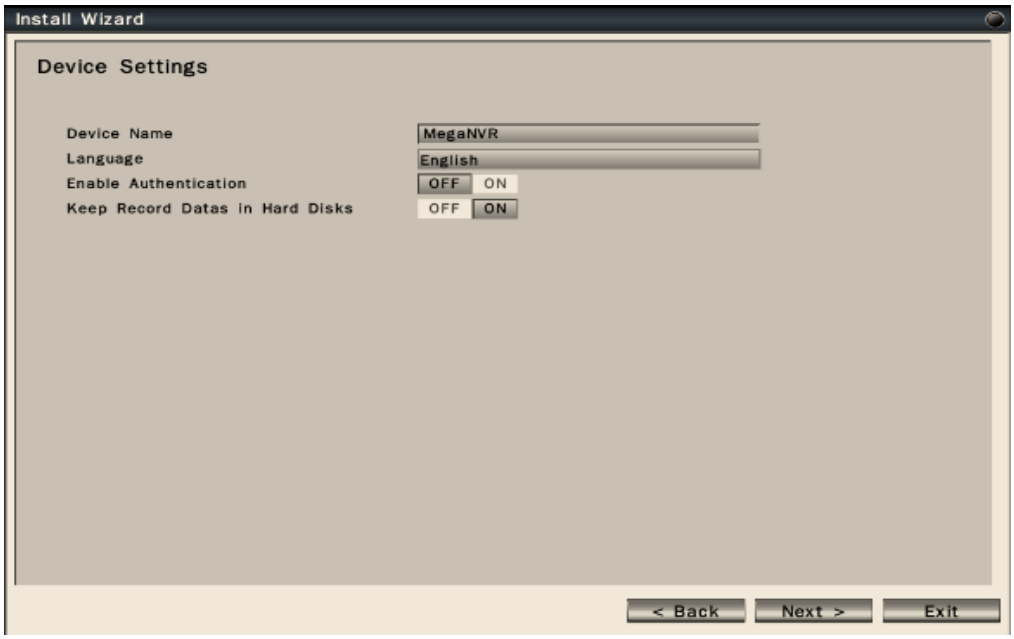
2.2.2 Wizard-Manual Install Mode

If user would like to add IP camera manually in wizard, please follow the below steps.

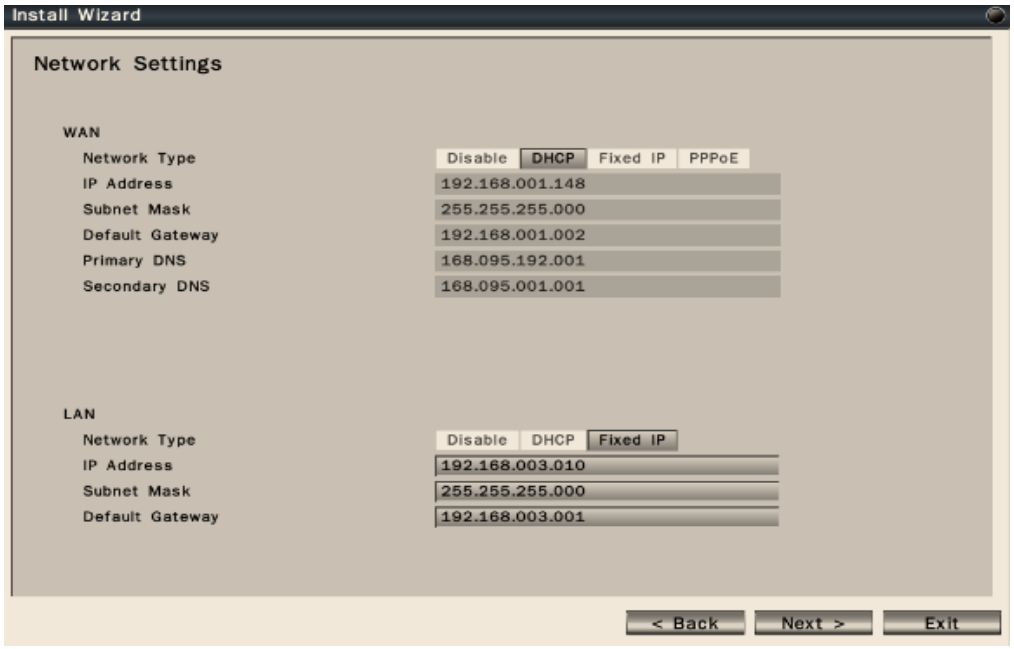
Step 1. Click **Manual Install** and press **Next** to the next page.



Step 2. User can configure NVR device settings. User can change the device name, select the desired display language, enable or disable authentication or keep the recorded data in hard disk or not. After finish the device setting, please click **Next** to the next page.

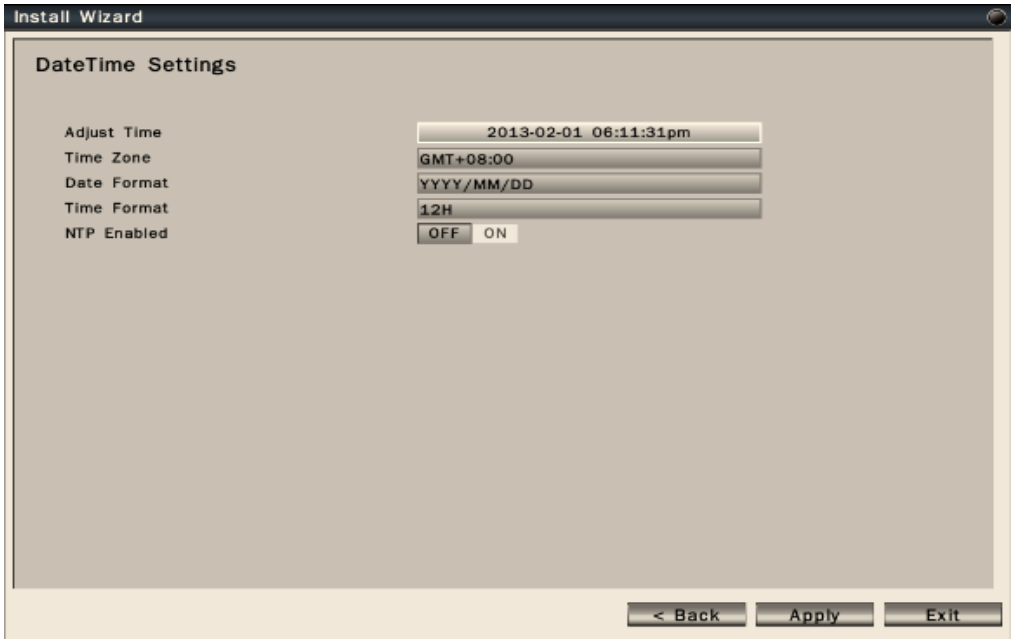


Step 3. User can configure network settings for WAN and LAN.



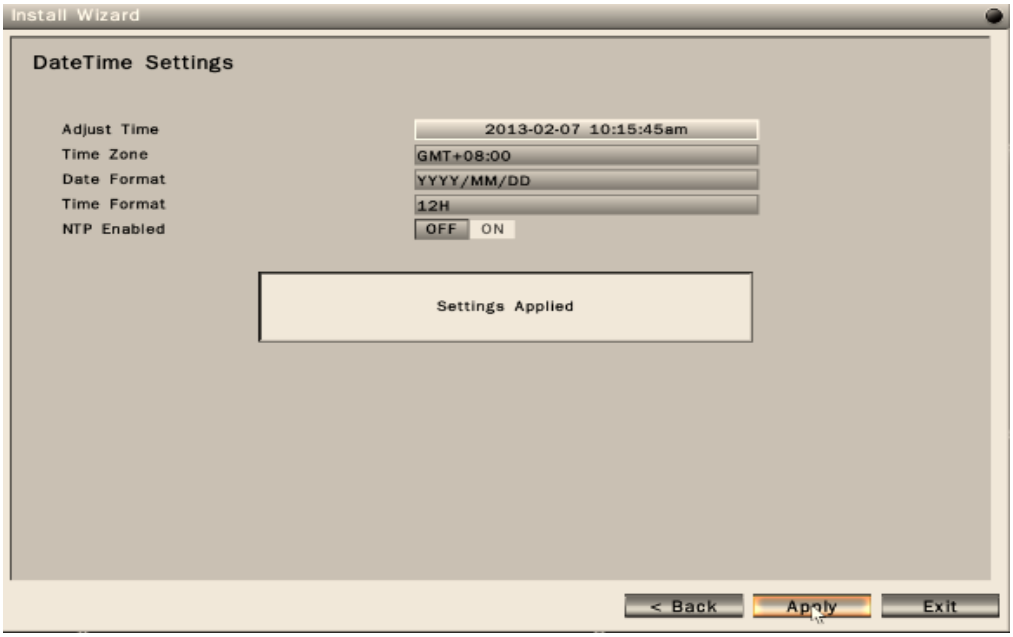
- The connection of the LAN port is for IP cameras. The connection of the WAN port is for the NVR to Internet.
- The NVR provides the options for user to access to the NVR through DHCP, Fixed IP or PPPoE. Select the option user would like to use to enable and configure the settings.
- When the LAN port of the NVR is connected to IP cameras, user can choose DHCP or Fixed IP to enable and configure the settings.
- After finish the network settings, please press **Next** to the next page.

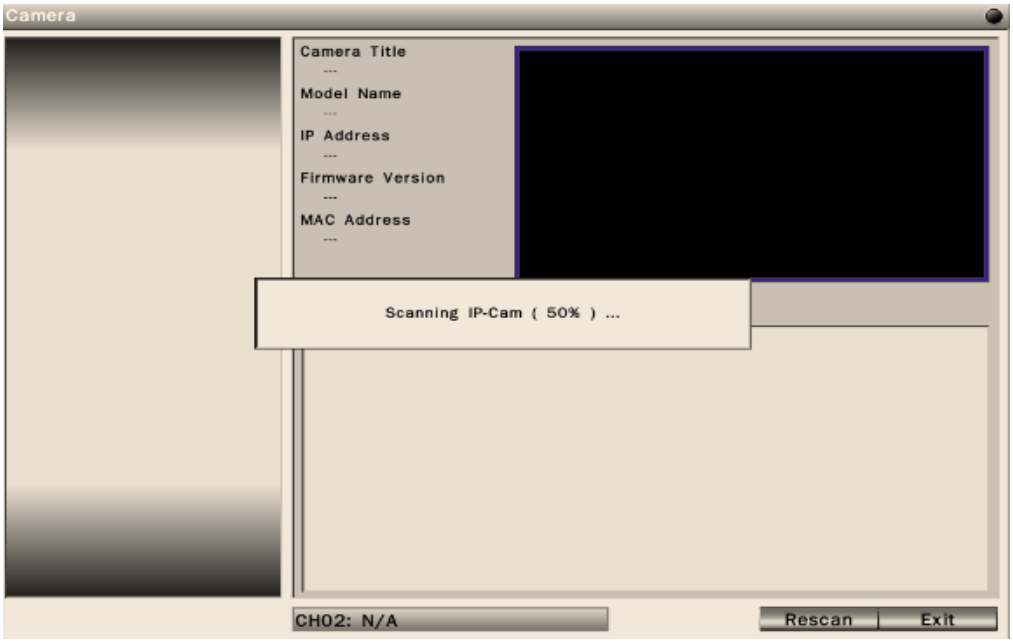
Step 4. User can configure Date/Time settings of the NVR. After finish the Date/Time settings, please press **Apply** to save user's changes and proceed to the next step.



- **Adjust Time** : Click on the column and the Calendar will pop up on screen for user to adjust the system date and time.
- **Time Zone**: Set the time zone that the NVR adjusts to when updating from the time server.
- **Date Format**: Select date format from DD/MM/YYYY, MM/DD/YYYY or YYYY/MM/DD.
- **Time Format**: Select time format between 12 Hours and 24 Hours.
- **NTP On/Off**: To enable or disable system NTP synchronization.

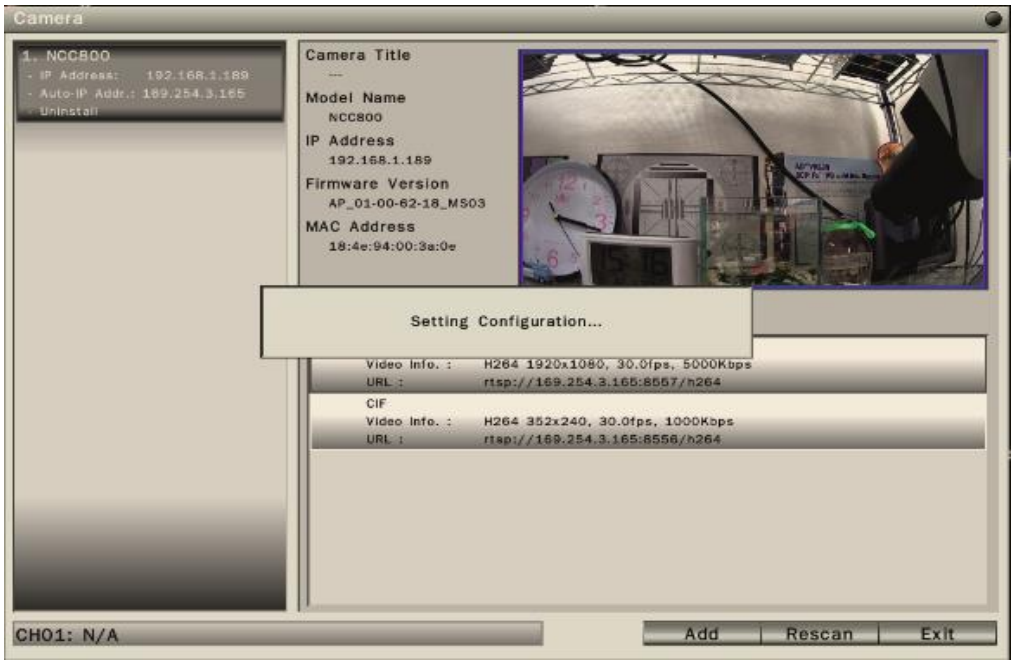
Step 5. After press **Apply** button, the NVR will save those parameters and start to scan the LAN environment to search for the specific IP cameras.



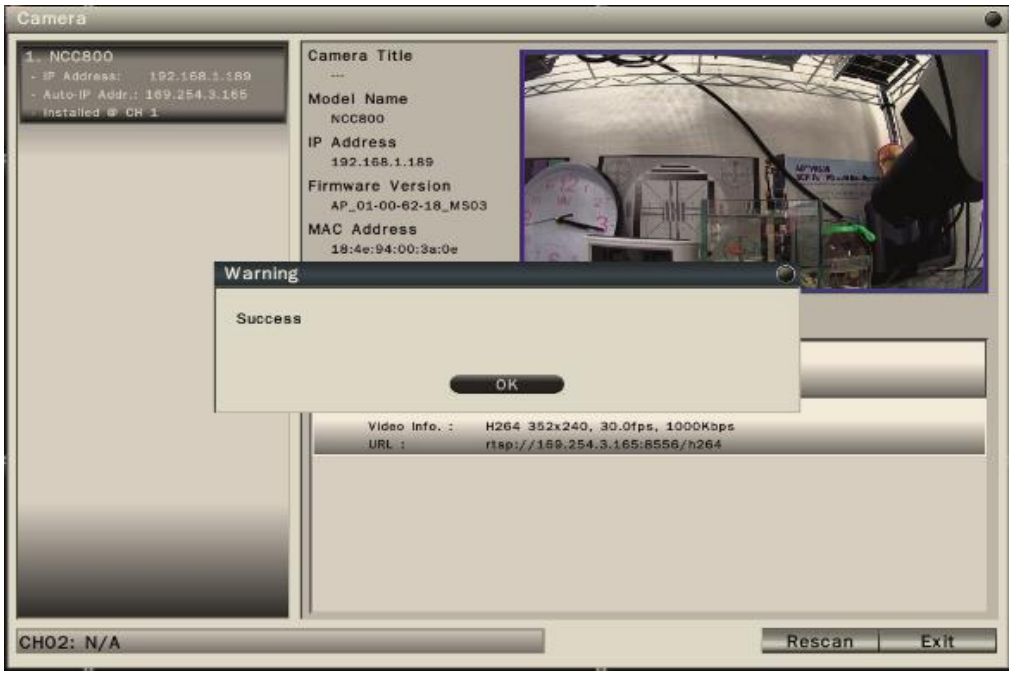


Step 6. After NVR gets the specific IP cameras, it will display the IP camera list. User can click **Add** button to add IP camera into desired channel.

Step 7. After adding IP cameras into NVR, NVR will start to configure the parameters of the IP cameras.



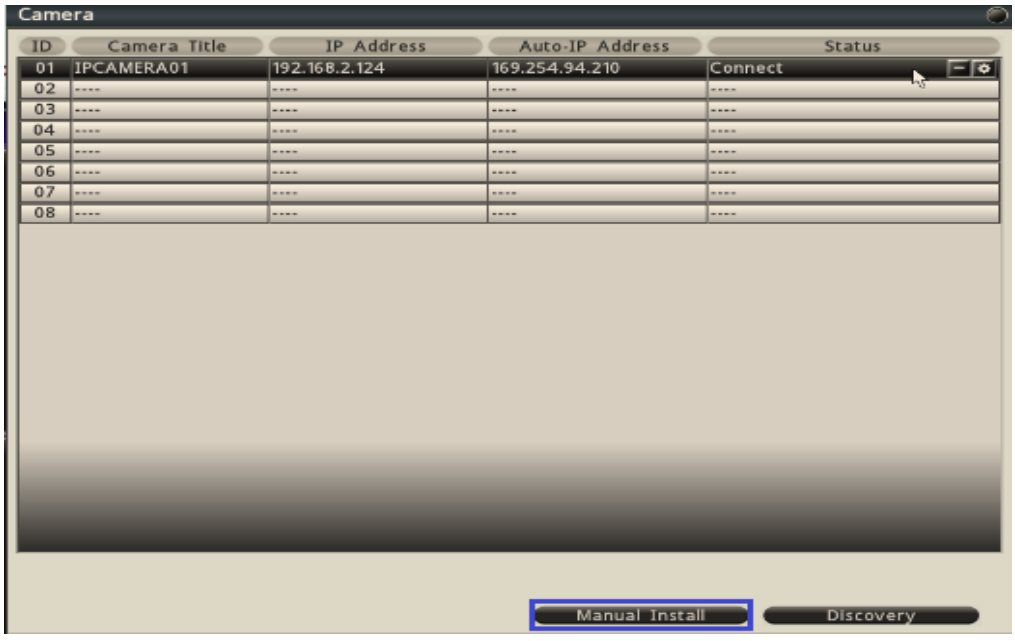
Step 8. When NVR finish the configuration of the IP cameras, it will pop up the success message and IP camera also successfully add into NVR.



2.2.3 Manual Install

User can add IP cameras manually in Camera-Settings menu by following the below steps.

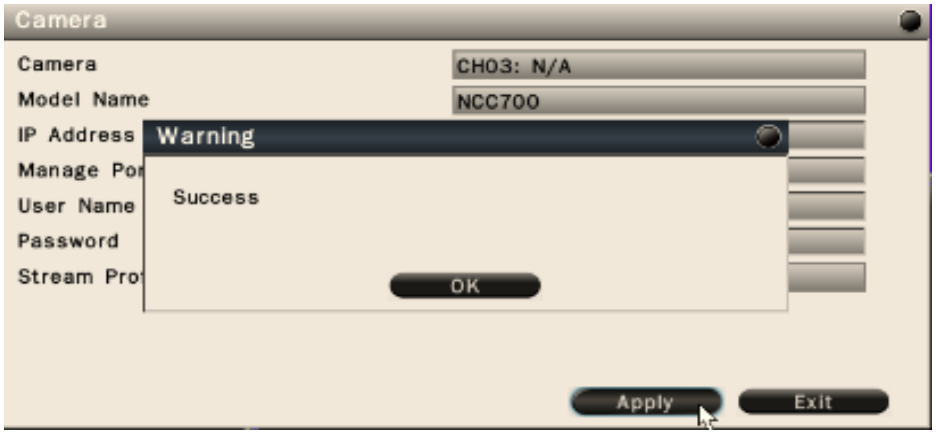
Step 1. Please click **Manual Install** button to add IP camera.



Step 2. After click **Manual Install** button, NVR will pop up the below screen. Please select IP camera brand name, model name, IP address, manage port, user name, password, and stream profile. After finish the settings, please select this IP camera to the desired channel and click **Apply** to save the parameters and proceed to the next step.

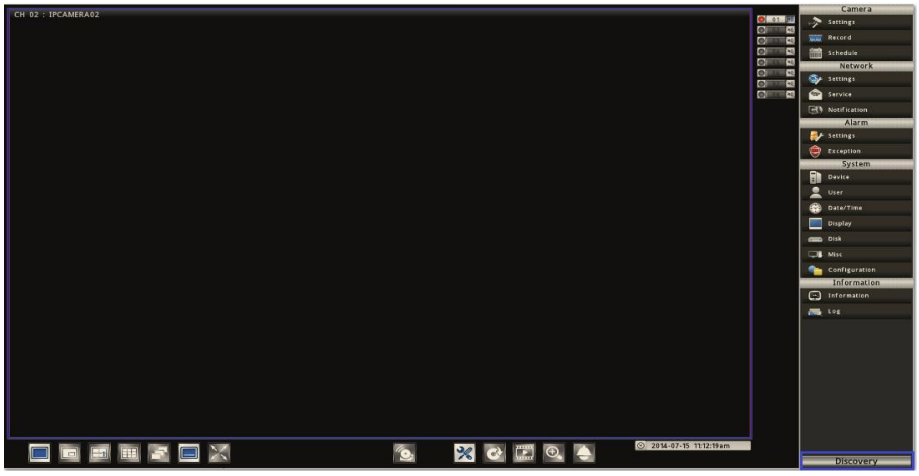
Note
In order to add IP camera successfully to NVR, NVR manage port number must be the same as IP camera http port number.

Step 3. When the IP camera is installed successfully, NVR will pop up the success message.

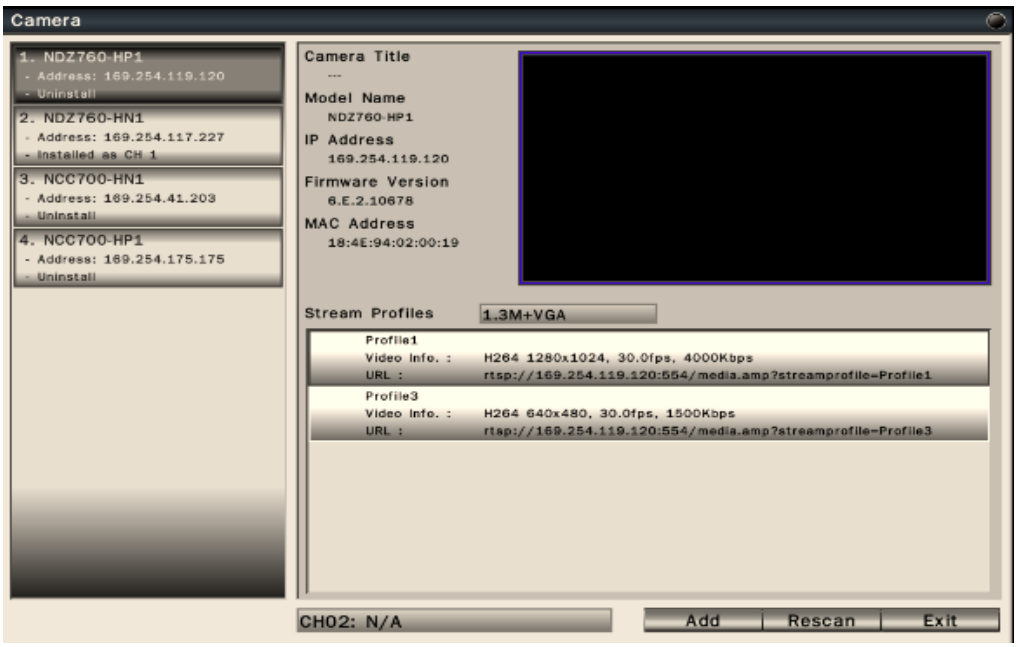


2.2.4 IP Camera Discovery

Click “Discovery” button Discovery to start search IP cameras(s) connected in the same network segment of NVR.



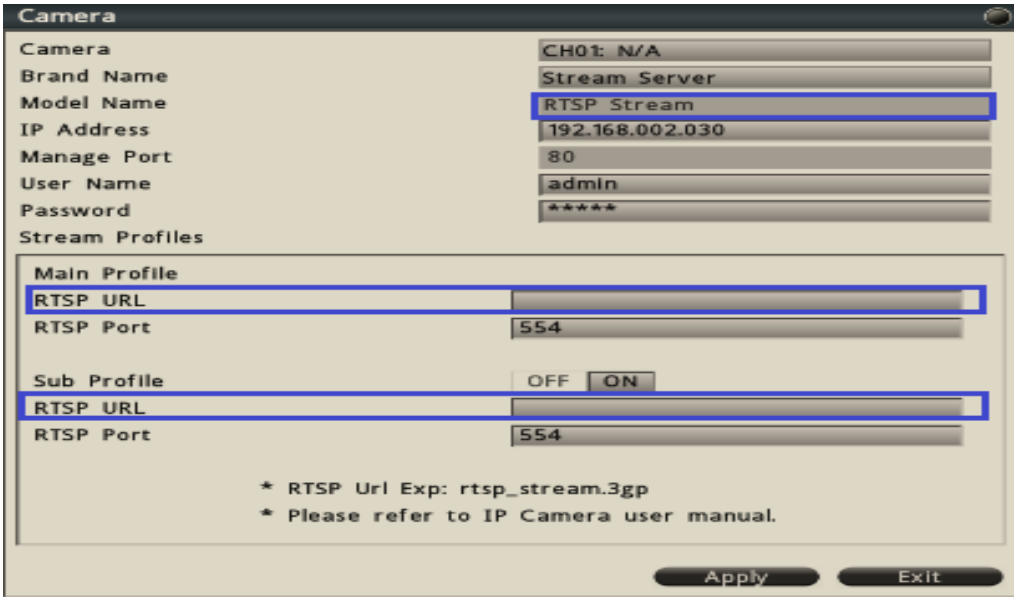
After NVR finish scanning, user will see the list of every connected IP cameras with its detailed information, MAC address and connection status to the NVR.



User can add the IP camera into the desired channel.

2.2.5 Manually Add Camera by Stream Server

User can add IP camera to NVR by input IP camera's RTSP URL in main profile and sub profile, user name and password.



2.2.6 Manually Add ONVIF IP Camera

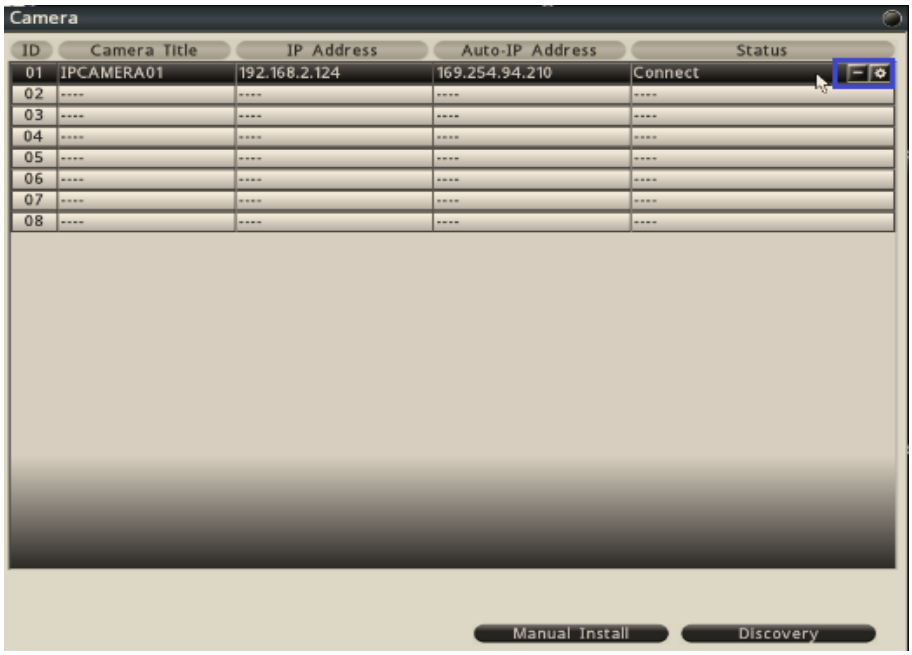
User can add ONVIF IP camera to NVR by ONVIF protocol. Select brand name as **ONVIF**, input ONVIF IP camera's IP address, manage port number, user name and password. Click **Probe** to search this specific IP camera to add IP camera into NVR.

2.3 Edit cameras

Click to edit cameras. Configure the connection and video profile information as needed.

2.4 Delete Cameras

Click to delete the camera.

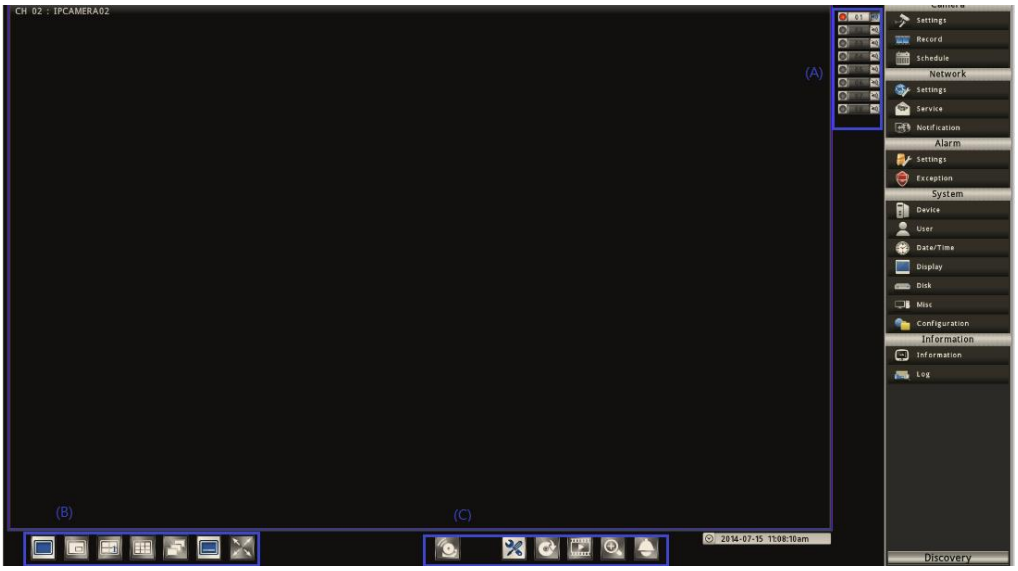


2.5 Live Viewing

2.5.1 Basic Operation

The NVR will enter into the Live View mode after user login to the system.

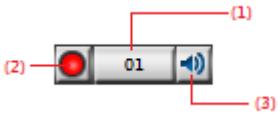
Use mouse to double click on any video channel to bring it up to full screen display.



The basic operation icons are showing on the main screen, the functions are:

(A) System indicators, Channel selection and Audio output selection

The system indicator is showing general system status for each input channel.



(1) The color of the button stands for the status for each channel as listed:
White – Normal, the camera input is installed and enabled.
Grey – The video input is disabled.
Red – Video Lost or Motion or Alarm triggered.

(2) Recording status indicator
Red – Recording
Grey – Not Recording

(3) Audio output selection
Click on the Audio icon on the channel user would like to display, the audio output will switch to the selected channel.

(4) To switch channel in the display window, move the focus channel to the selected window, click on the channel button user wish to display, the channel will be switched.

(B) Display mode control :

Single view display mode

PIP display mode

First/ Second Quad display mode

3x3 display mode

Sequence display mode

Show/Hide OSD

Switch display to full screen display mode

(C) Function Control

Alarm acknowledge, click to disable buzzer when alarm is triggered

Click to enable/disable Setup menu

Click to bring up Export menu

Click to switch to search and playback mode

Under full screen mode, click the button to enable Digital Zoom function.
Right click on the mouse to drag on the screen to zoom in the selected area.

Click to bring up the PTZ control panel

Click to Logout from the current user's privilege.

(D) Current date time: It indicates the current system time.

3. Search (Playback) Operation

3.1 Playback Basic operation

To search and playback the video, click **Playback** button on the main page to switch to playback mode as show below.

The display mode controls are the same as under Live View mode.

The function controls are as below:

Click to bring up the Export menu

Under full screen mode, click to enable Digital Zoom function.
Right click on the mouse to drag on the screen to zoom in the selected area.

Click to switch to live view mode

Show/Hide OSD

Note

Click the display icons to playback multiple channels simultaneously.

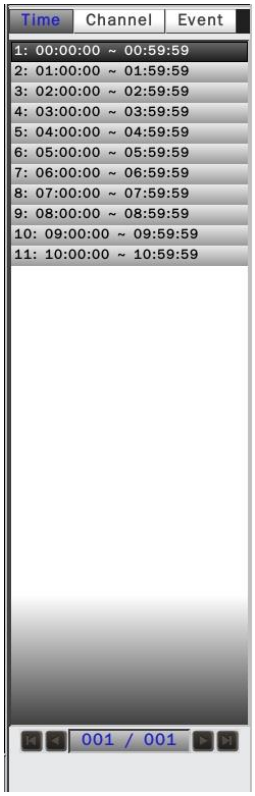
3.2 Calendar

The calendar on the screen shows the recorded data contains in the hard drives. The date highlighted in orange means there's recorded data of the date in the hard drives. The red highlighted date indicates the current search date. Click on the calendar to select the date user would like to search.

3.3 Playback operation

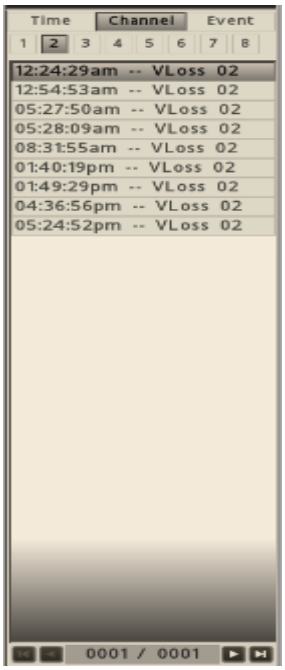
The recorded file list is showing in the column below, the files can be searched by **Time**, **Channel** and **Event**. Select the search type and the results will show in the list below. Double click on the selected file then the video will start to play on the display window.

3.3.1 Search by Time



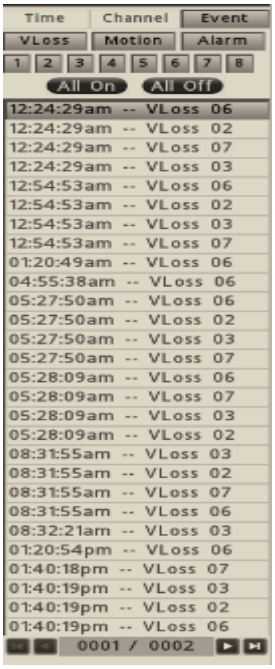
Select Time Search, all the video files of the selected date will be shown in the list. Each file contains maximum 60 minutes of the video. Select the time range user would like to view and double click the item to start to play on the display window.

3.3.2 Search by Channel



Select the channel that user would like search. All the event video files of the selected date and channel will be shown in the list. Select the event video user would like to view and double click the item to start to play on the display window.

3.3.3 Search by Event



The system provides the option to search the video by each event type and channel. All the event video files of the selected event type and channel will be shown in the list. Select the event video user would like to view and double click the item to start to play on the display window.

3.4 Playback operation

Please refer to the below for the playback control function:

The progress bar shows the current playback status and timeline. Drag the time indicator on the progress bar to move to the selected timeline to playback.

On the time bar, it also indicates the initial and end time of the current playback section.

Click to playback video

Click to pause video

Click to reverse playback

Click to switch to fast forward playback, use and to adjust playback Speed, in x0.25, x0.5, x1, x2, x4 and x8.

Pause the video and click the button to step forward playback.

Click to fast forward to the next section

Click to switch to fast reverse playback, use and to adjust playback speed, in x1, x2, and x4 and x8.

Pause the video and click the button to step reverse playback.

Click to fast backward to the previous section

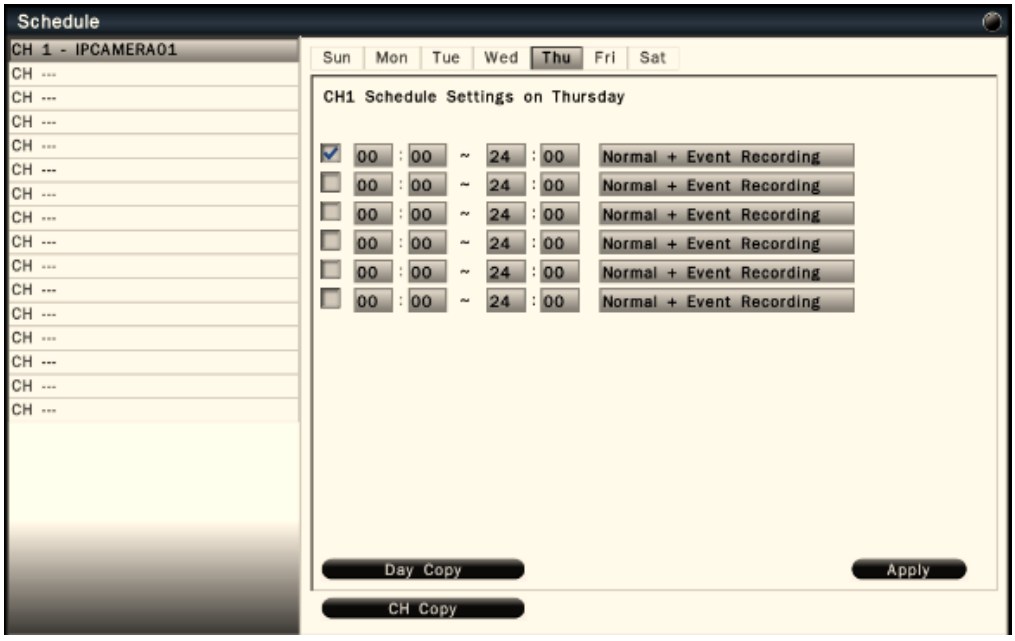
4. Recording

NVR is set to continually record once the system startup. NVR supports the following recording mode.

- Continuous recording: By default, all channels are enabled with continuous recording.
- Event recording: NVR can be configured to record event only when motion or video loss or alarm is detected. When motion of IP camera is detected, the motion icon (M) appears in the channel and NVR will start to record. When video loss of IP camera occurs, the Video loss icon (V) appears in the channel and NVR will start to record. When external alarm device is triggered, the alarm icon (A) appears in the channel and NVR will start to record.

4.1 Schedule Recording Settings

In the Camera-Schedule sub menu, user can define the recording schedule and recording behavior for each individual channel in the below page.



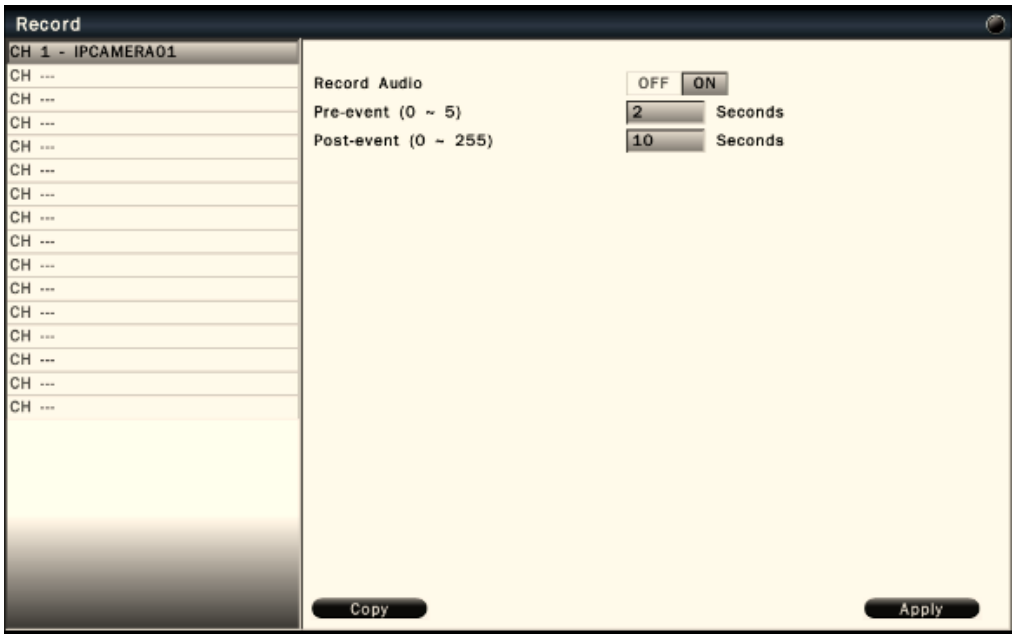
- To setup schedule, select the **channel** from the left column, the recording option for the channel will be shown in the right column.
- Click on the day(Sun ~ Sat) user would like to set schedule, check in the column to enable the timelines and select the recording behaviors. User can configure multiple timelines for each day.
- Click **Day Copy** to select the day user would like to copy to.

- Click **CH Copy** to allow user to copy the settings of the whole week from one channel to other channels.

Click **Apply** to save the changes.

4.2 Record Settings

In the Camera-Record sub menu, user can define the recording behavior in the record setup menu. Each channel can be configured independently.



Click on the selected channel to bring up the setup page.

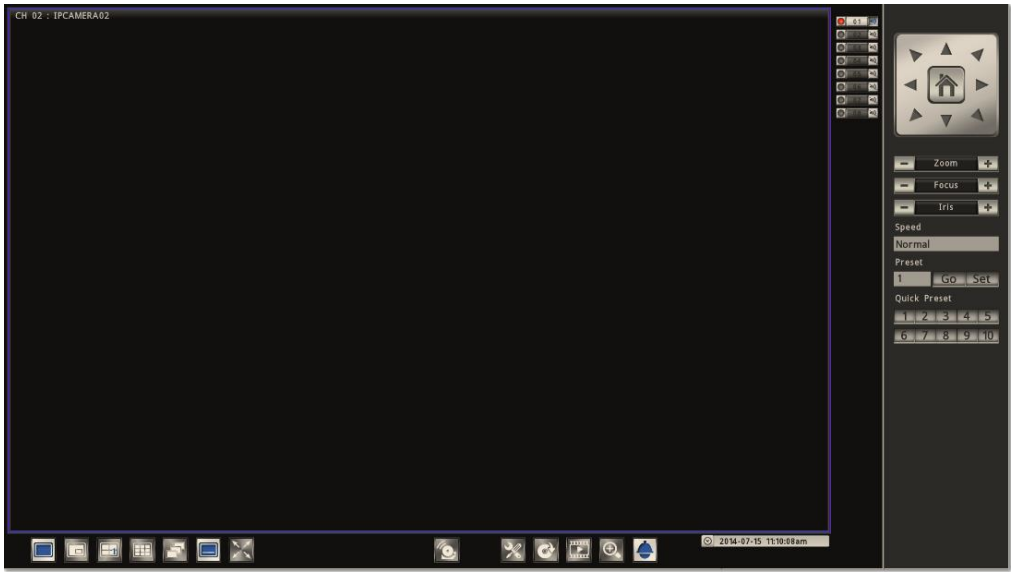
- **Record Audio** – Enable or Disable the audio recording.
- **Pre-event** – Set the pre-event recoding duration. The maximum pre-recording duration is 5 seconds.
- **Post-event** – Set the post-event recording duration.

Click **Apply** to save the settings.

Click **Copy** to copy the settings to other channels.

5. PTZ Control

Click on the **PTZ** button to enable the PTZ control panel as shown below.



The PTZ control will apply the PTZ command to the current focus camera channel if it's connected to a PTZ device which includes RS485 PTZ device or Network PTZ device.

The functions are:

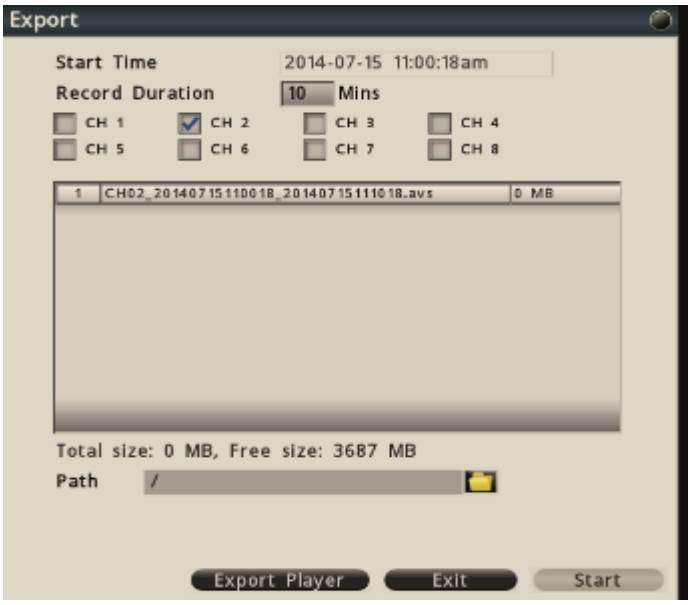
- 8 way pan/tilt control: To pan/tilt the PTZ device to up/down/left/right/up right /up left /down right / down left.
- Speed : There are five levels of speed (Lowest/Low/Normal/High/Highest) can be applied when press the pan/tilt control.
- Set: To save the current PTZ position as it's internal preset position.
- Go : Go to the preset position
- Quick Preset 1 – 10 : The quick button to go to the preset positions.

6. Export(Backup) Video

To export the video from NVR hard disk to external USB drive device or self-powered USB external hard drive.

6.1 Export Video

1. Insert a USB drive or USB external hard drive into NVR USB port.
2. Click **Export** button to bring up the Export menu shown as below. Export video files to external USB drive.



3. Select the video file by input the below data.

- **Start Time**: Click on the date/time, the calendar will pop up on the screen for user to select the date and input the start time.
- **Record Duration**: Input the data duration to be exported.
- **Channel**: Select the channels to be exported.

The video files will be shown in the list. The total data size and available external storage size will be shown under the list.

User can assign the recording path by clicking the "**Open Folder**" icon.

4. Click **Start** to execute the exporting process and wait for it complete.

User can view the exported video by the Export Player. Click Export Player to download to the USB drive if the user does not have the Player installed.To playback the exported file by using the steps in *Chapter 7 export player.*

7. Export Player

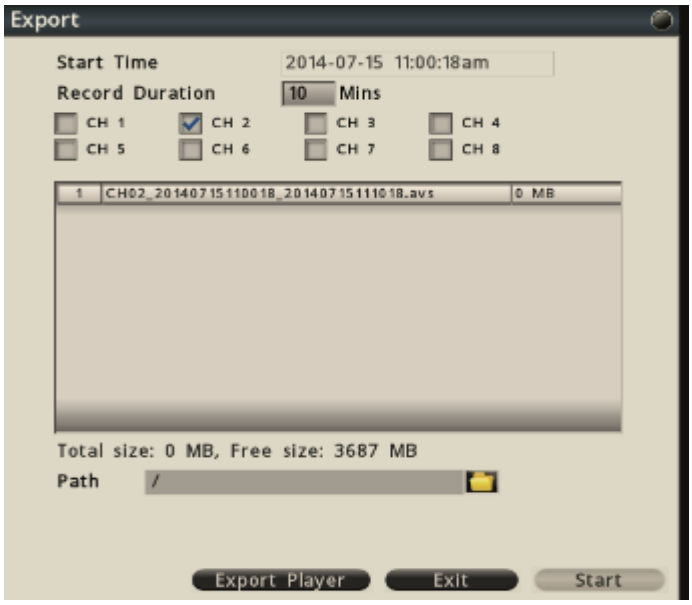
The Export Player allows user to view video exported from the NVR or Web viewer on a PC (System operating platform: Windows XP, Windows Vista, Windows 7 or Windows 8).

7.1 Player Installation

The Export Player can be downloaded from NVR or Web Viewer.

On the NVR, insert the USB pen drive then start the Export page as shown below.

Click **Export Player** button and the system will automatically store the Player in the pen drive.



7.2 Starting the Player Program and Viewing exported video file

Double click on the **Player.exe**

file to start the program.

The Player will be displayed as shown below:

Click **Open** button to select the exported video file. Drag the files to the window that would like to playback. The Player will automatically start to play the video.

Note

The Player is only PC compatible. User can playback exported .avs video files in 4-up screen. If user would like to view .avi file, please convert .avs file to avi file by click AVI icon on the Player.

Video Player Operations

Single view display mode

Quad display mode

Keep video aspect ratio of exported video as 16:9 or 4:3

Under full screen mode, click to enable Digital Zoom function.
Right click on the mouse to drag on the screen to zoom in the selected area.

Click to take a snapshot of the selected video.

Click watermark icon to verify the video is authentic or not.

The progress bar shows the current playback status and timeline. Drag the time indicator on the progress bar to move to the selected timeline to playback.

Click to playback video

Click to pause video

Click to switch to fast forward playback, use and to adjust playback speed, in x0.25, x0.5, x1, x2, x4 and x8.

Click to stop playback video

Click to enable or disable audio playback. Drag the slide bar to adjust the volume. When audio is on, the user can move the focus window to the select the channel that would like to play.

Click to convert the video file of the selected channel to AVI format.

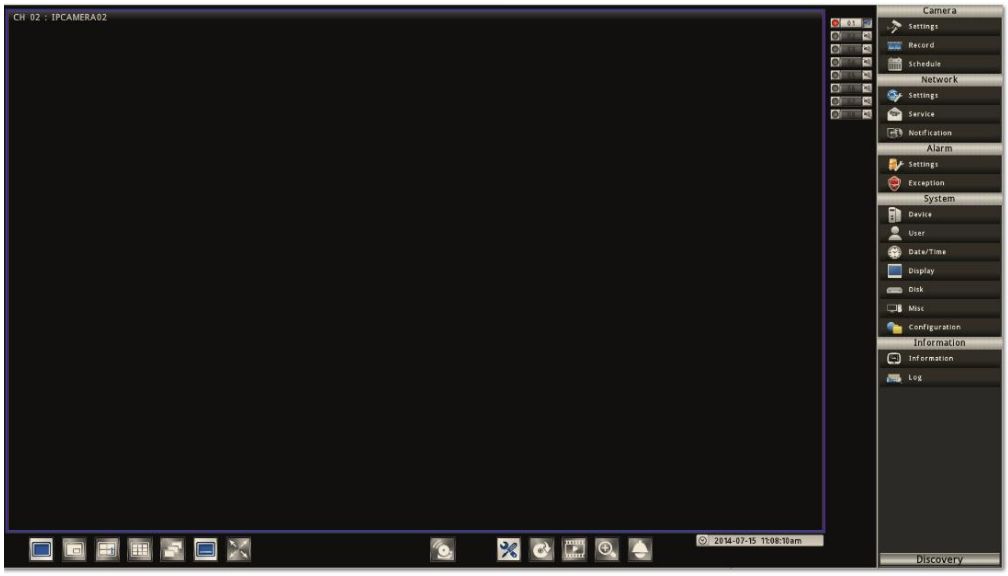
8. Main Menu Operations

Click the **Configuration** button , the setup menu will be enable and shown as below. Please refer to below for the setup menu functions

> **Note**
> By default the user name is **admin** and the password is **admin**.

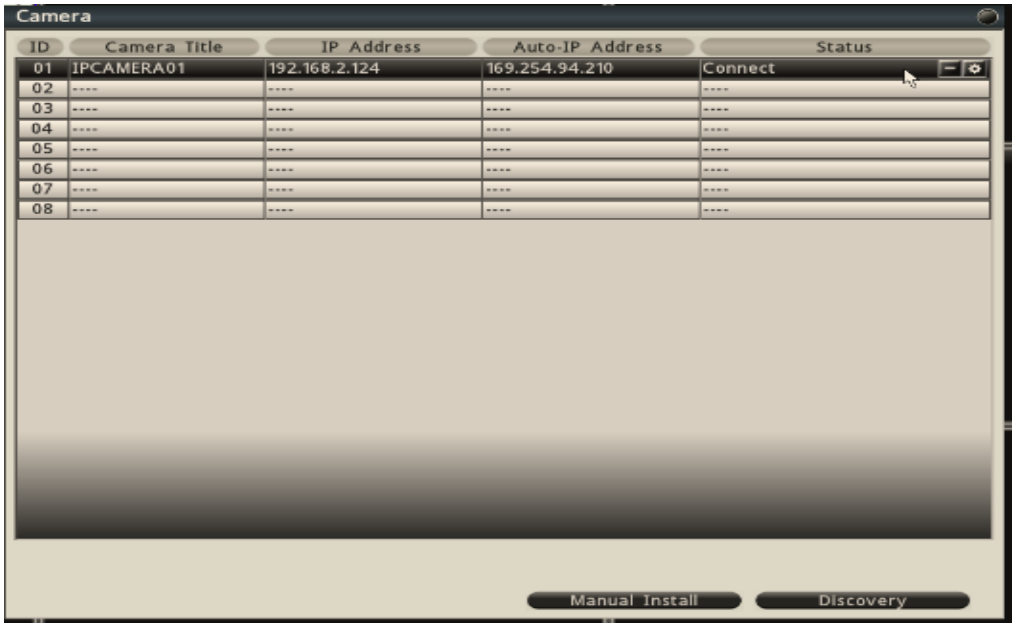
8.1 Camera

The camera setup menu allows user to configure the behaviors related to the input video of IP cameras.



8.1.1 Camera Settings

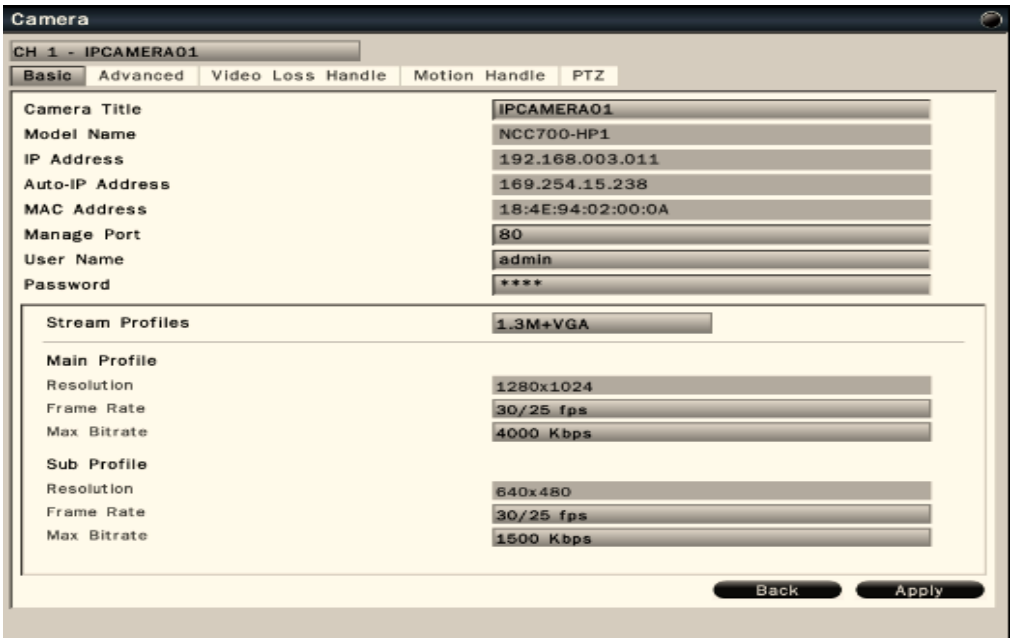
In the Camera-Settings sub menu, it displays the current IP camera information, including camera title, IP address, Auto-IP address and IP camera connecting status.



Click on the for detailed setup of each IP camera.
Click on the to delete IP camera.

8.1.1.1 Camera Basic Setting

In the Camera-Settings-Basic sub menu, user will see the IP camera basic information and user can configure stream profiles of the IP cameras from the NVR.



To configure recording video quality setting

- **Camera title** – Click on the column, the virtual keyboard will pop-up for user to input the camera title shown on the NVR.
- **Model Name** – It indicates the model name of IP camera.
- **IP address** – It indicates the IP address of the IP camera.
- **Auto-IP address** – It indicates the Auto-IP address of the IP camera.
- **MAC address** – It indicates the MAC address of the IP camera.
- **Manage Port** – User can configure the port of the IP camera.

> **Note**
> User must configure NVR manage port number same as IP camera http port number.

- **User Name** – User need to input the user name of the IP camera. The NVR will display the default IP camera user name. Once user make the change of the user name of the IP camera, please input the new user name.
- **Password** – User need to input the password of the IP camera. The NVR will display the default IP camera password. Once user make the change of the password of the IP camera, please input the new password.
- **Stream Profiles** – There are different stream profiles of the IP camera. User can select the desired stream profile as the recorded main profile and sub profile. Click **Apply** to save the changes.
- **Main Profile** – The resolution of the main profile reflects the stream profiles

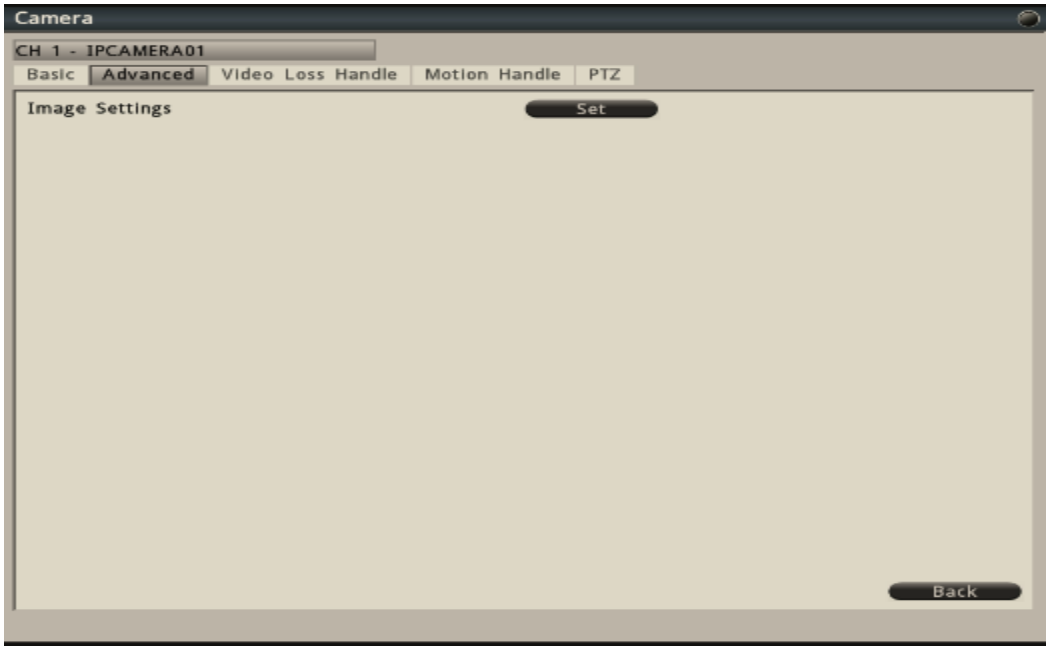
selection. User can configure **Frame rate** and **Max Bitrate** of the IP camera from NVR.

- **Sub Profile** – The resolution of the sub profile reflects the stream profiles selection. User can configure **Frame rate** and **Max Bitrate** of the IP camera from NVR.

> **Note**
> Only for integrated IP cameras, user can make the changes of stream profiles, frame rate and max bit rate of IP cameras from this sub menu.

8.1.1.2 Camera Advanced Setting

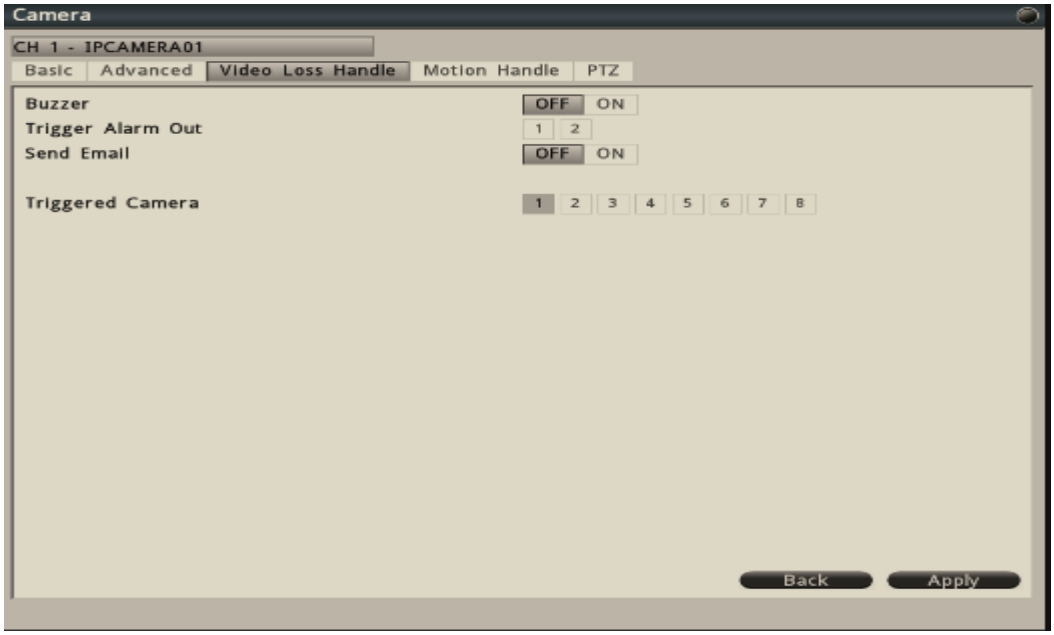
In the Camera-Settings-Advanced sub menu, user can configure image settings of integrated IP cameras from the NVR.



User can adjust video brightness, contrast, saturation, sharpness, mirror and flip of the IP cameras. Press **Restore** to back to the last parameter settings. Press **Exit** to back the previous page.

8.1.1.3 Video Loss Handle Settings

In the Camera-Settings-Video Loss Handle sub menu, it allows user to define the system actions while there's video loss triggered.

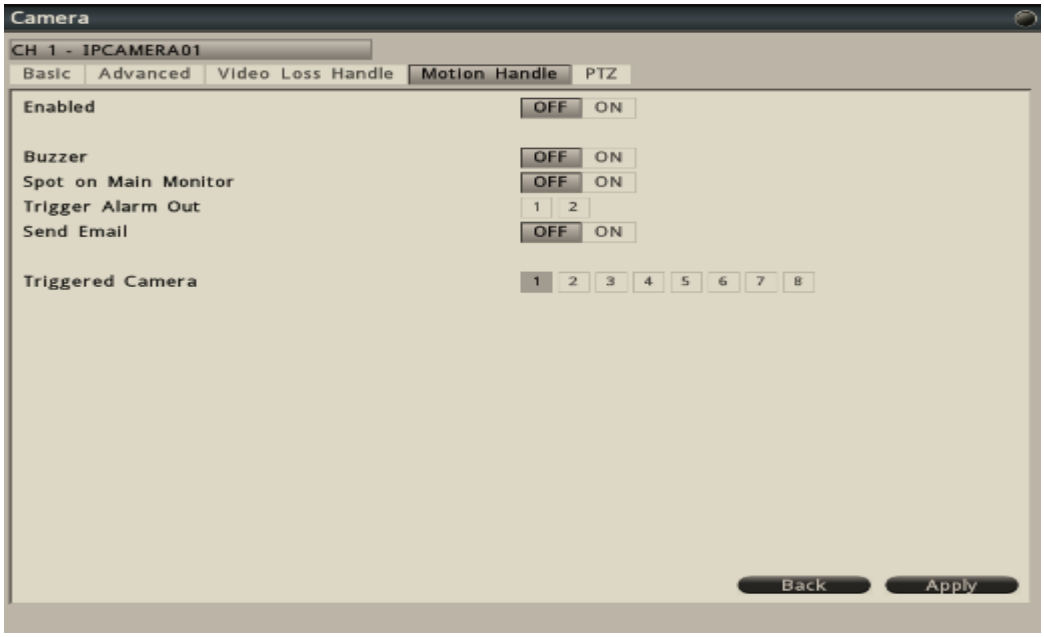


- **Buzzer** – Select On to trigger buzzer when video loss is detected.
- **Trigger Alarm Out** – The corresponding alarm output setting.
- **Send Email** – Select On to send e-mail to the preset mail account when video loss is detected.
- **Triggered Camera** – The system allows user to trigger multiple cameras for event recording, select the cameras that would like to be triggered when video loss is detected.

Click **Apply** to save the settings.

8.1.1.4 Motion Handle Settings

In the Camera-Settings-Motion Handle Settings sub menu, it allows user to define the system actions while there's motion triggered.



- **Enabled** – Select On to enable motion handle.
- **Buzzer** – Select On to trigger buzzer when motion is detected.
- **Spot on Main Monitor** – Select On to spot on main monitor when motion is detected.
- **Trigger Alarm Out** – The corresponding alarm output setting.
- **Send Email** – Select On to send e-mail to the preset mail account when motion is detected.
- **Triggered Camera** – The system allows user to trigger multiple cameras for event recording. Select the cameras that would like to be triggered when motion is detected.

Click **Apply** to save the settings.

8.1.1.5 PTZ settings

In the Camera-Settings-PTZ sub menu, it allows user to configure the settings if the NVR is connected to a RS485 PTZ camera or Network PTZ camera.

- **Enabled** – Select On to enable PTZ control.
- **PTZ Type** – It will display RS485 PTZ or Network PTZ. It depends on which PTZ type NVR connects.
- **PTZ Protocol** – Select the correct PTZ protocol type. NVR support Pelco P and Pelco D protocols.
- **Baud Rate** – Select the speed used to transmit instruction or information through the RS485 port on the NVR.
- **Data Bit** - The data bit used for transferring. This can be set to 8 or 7 through RS485 connection.
- **Parity** - This selects the transmission level of the connection through RS485 connection. Choose either None, Odd, or Even .
- **Stop Bit** - This field is to set the stop bit for the RS485 connection. This can be set to 1 or 2.
- **Address** - The address must set to the same address of RS485 PTZ camera.

Click **Apply** to save the settings.

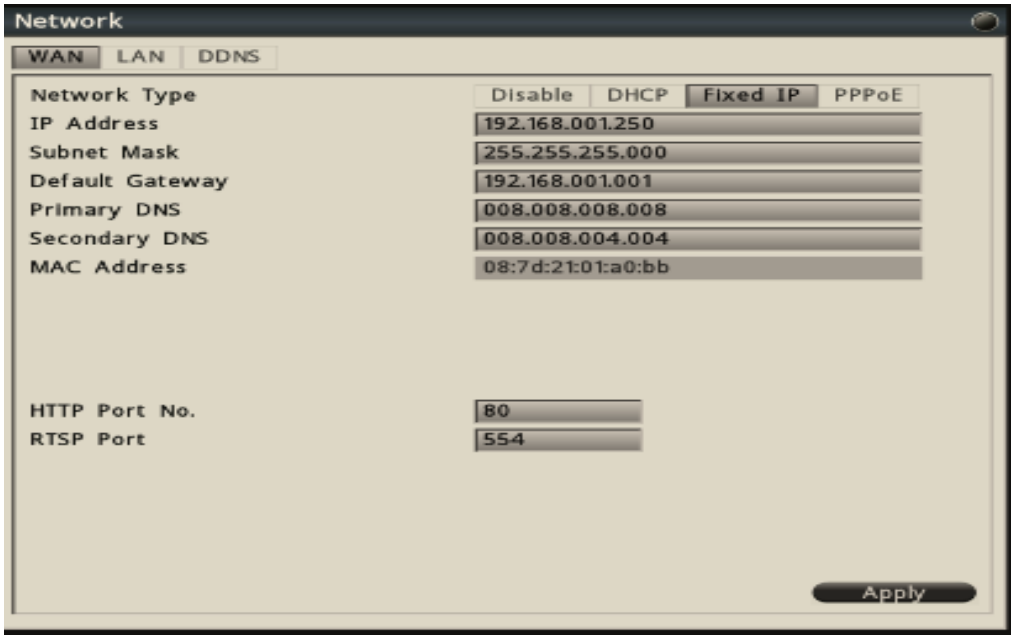
8.2 Network

8.2.1 Network Settings

The Network function must be enabled and configured properly in order to access and configure the IP cameras and NVR.

8.2.1.1 WAN Settings

In the Network-Settings-WAN sub menu, user is required to set up the WAN setting properly in order to access NVR via internet.



- The NVR provides the options for user to access to the NVR through DHCP or Fixed IP or PPPoE. Select the option user would like to use to enable and configure the settings.

Click **Apply** to save the settings.

To Configure ports:

1. Configure HTTP port and RTSP Port fields are needed.
2. HTTP Port No.: It is used to enable the system connection of Web Viewer. The default port number is **80**.
3. RTSP Port: It is used for specific application. The default port number is **554**.

8.2.1.2 LAN settings

In the Network-Settings-LAN sub menu, user is required to set up the LAN setting properly in order to access IP cameras via intranet.

- The NVR provides the options for DHCP or Fixed IP in LAN environment. Select the option user would like to use to enable and configure the settings.

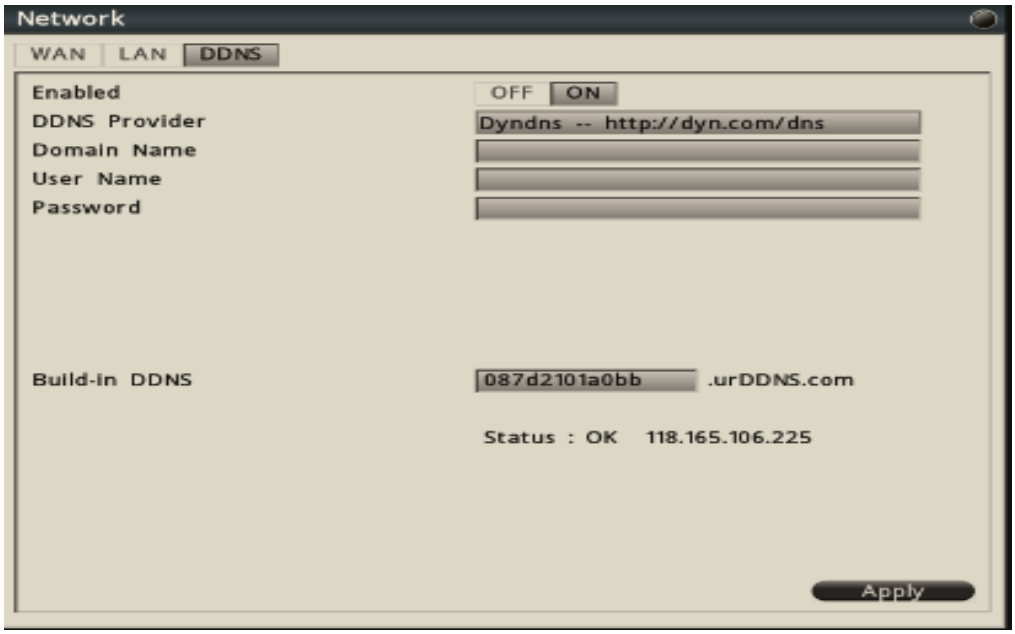
Click **Apply** to save the settings.

8.2.1.3 DDNS

In the Network-Settings-DDNS sub menu, user can select DDNS provider to configure the Dynamic DNS.

To configure DDNS settings:

1. Enable Network-WAN setting. Ensure the WAN networking setting is properly configured and system is able to connect to internet.
2. Select **ON** to enable DDNS
3. Enter the **Domain Name**.
4. Choose the **user name** and **password**.
5. Click **Apply** to save the settings.



The built-in DDNS allows user to enter **urDDNS** settings.

Prerequistes of urDDNS:

1. Enable Network-**WAN** setting. Ensure the WAN networking setting is properly configured and system is able to connect to internet. Please refer to *8.2.1.1 WAN Settings.*
2. Select **On** to enable DDNS.
3. Input **Built-in DDNS** domain name.
4. Click **Apply** to save the settings.
5. If DDNS is applied successfully, it will pop up **Success** message. If DDNS account is not registered successfully, it will pop up **Failed** message. Once it pops up Failed message, user needs to check network setting to ensure NVR to internet without problem. Or users probably use the same domain name as others' so please use another domain name to register DDNS account to ensure the registration successfully.

8.2.2 Network Service

8.2.2.1 Service

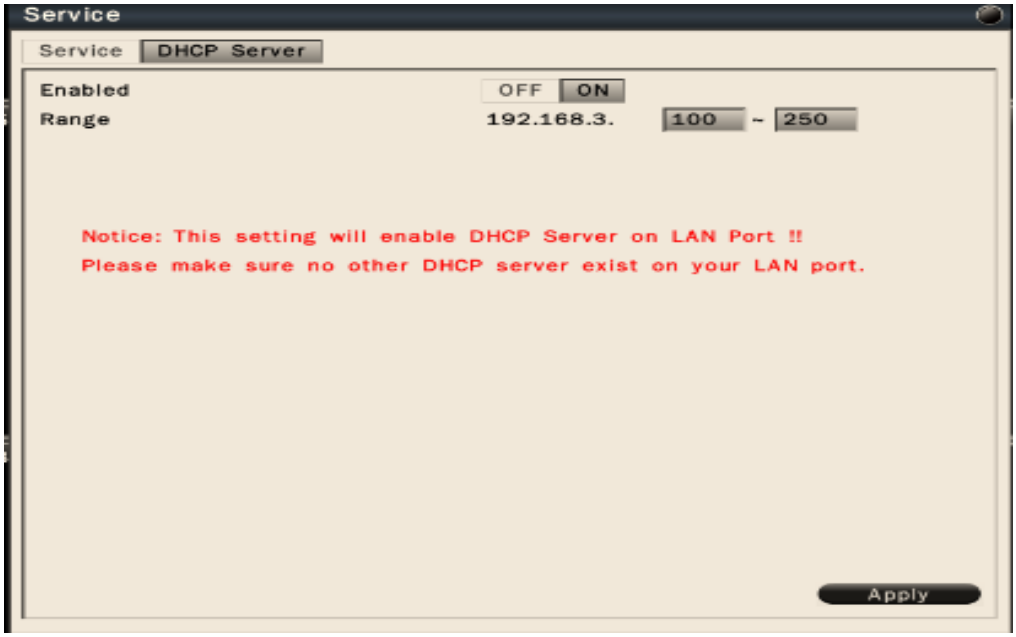
In the Network-Service-Service sub menu, user can enable/disable NTP Server and enable/disable UPnP.

- **NTP Server**: User can enable NTP Server to make NVR as NTP Server. After enable NTP Server, IP camera can synchronize the date and time with NVR.
- **UPnP**: User can enable or disable UPnP on NVR. After enabled, the NVR connects to a network and NVR automatically establishes working configurations with other devices.

Click **Apply** to save the settings.

8.2.2.2 DHCP Server

In the Network-Service-DHCP Server sub menu, user can select on to make NVR as DHCP Server.



- After enable **DHCP Server**, NVR is able to assign IP address to IP camera in the LAN environment. The range is from 0 ~ 255.

Click **Apply** to save the settings.

8.2.3 Network Notification

8.2.3.1 E-Mail Notification

In the Network-Notification-E-mail Notification sub menu, user is able to set the Email addresses and input related information. User can configure the system to send out the e-mail notification for motion detection or other events.

> **Note**
> To send out the e-mail notification, user must enable the Send Email option for video loss handle, motion handle and exception. For details, please refer to *8.1.1.3 Video Loss Handle Settings,8.1.1.4 Motion Handle Settings, and 8.3.2 Exception Management.*

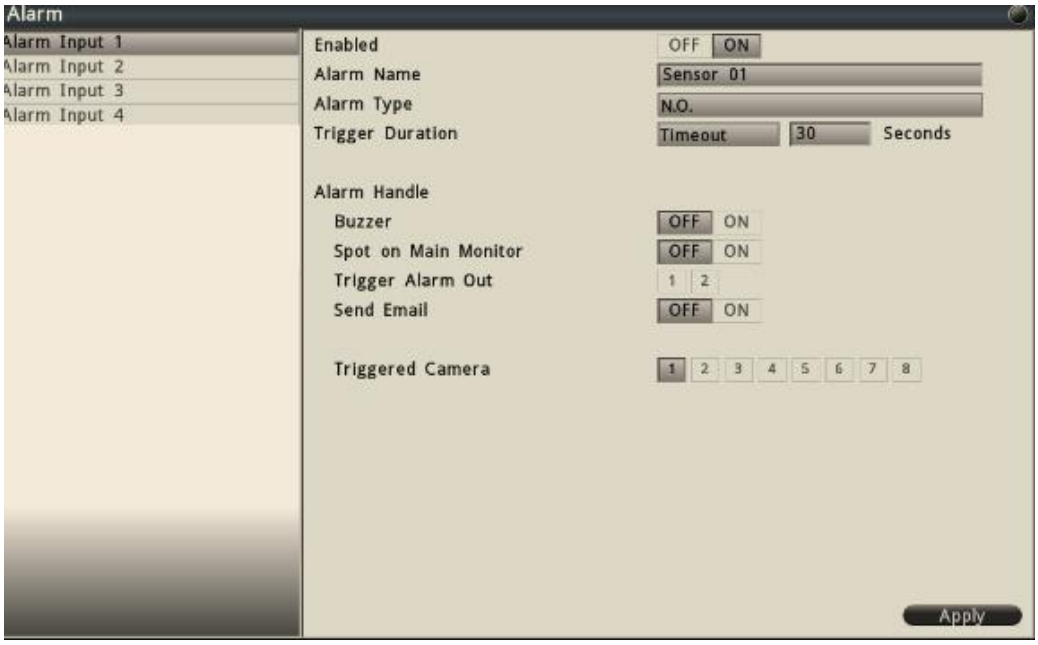
- **To Email address 1-3** – Allows user to input up to 3 email address for alarm message to send to.
- **From Email address** – Input the Email address of the sender (NVR)
- **Email Subject** – Input email subject for e-mail alerts.
- **SMTP Server** – Assign the SMTP (e-mail) server's name.
- **SMTP Port** – Assign the port number used by the SMTP server.
- **SSL** – To enable SSL if mail server needs to be encrypted by SSL.
- **Authentication** – To enable if the SMTP server requires authentication. (user name / password).
- **User name / Password** – Input the login user name and password if the SMTP Server requires authentication.
- **Send test mail** – Click to send the test email according to the current settings.

Click **Apply** to save the settings.

8.3 Alarm Settings

8.3.1 Alarm Input Settings

In the Alarm-Settings sub menu, user can define the alarm behaviors and the corresponding actions for triggered alarm.



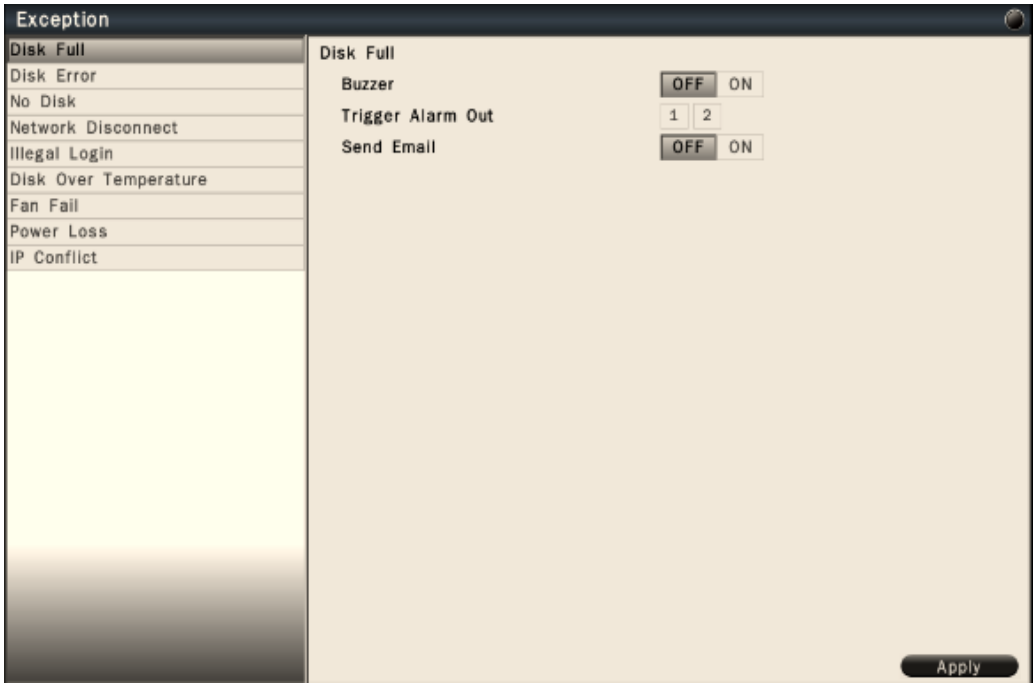
Alarm input – Select the alarm input number from 1 to 8, the corresponding settings will show in the window.

- **Enabled** – Select On to enable the alarm.
- **Alarm name** – Input the name for the alarm.
- **Alarm type** – Select the alarm trigger type.
  N.O. – Normal open contact, N.C – Normal Close contact
- **Trigger Duration** – Select the trigger type and time duration
  Timeout – The alarm will last for the set time duration.
  Transparent – The alarm output remains active until the triggered event ends.
  Non-Stop – The alarm will be continuously active until user presses "ACK" key.
- **Alarm Handle** – To configure the system monitor and alert behavior when the alarm is triggered. The settings include buzzer, spot option, trigger alarm out, send Email.
- **Triggered Camera** – The system allows user to trigger multiple cameras for event recording, select the cameras that would like to be triggered when alarm is detected.

Click **Apply** to save the settings.

8.3.2 Exception Management

In the Alarm-Exception sub menu, it allows user to define the system behavior when there's an exceptional event occurred.



The exceptional events are including Disk full, Disk error, No disk, Network Disconnect, Illegal Login, Disk Over Temperature, Fan Fail, Power loss and IP conflict.

Select the exception and define the behaviors as below:

- **Buzzer** – Select On to enable buzzer when the exceptional events occur.
- **Trigger Alarm Out** – Select the Alarm out to trigger when the exceptional events occur.
- **Send Email** – Select On to send Email when the exceptional events occur. For detailed e-mail notification settings, please refer to *8.2.3.1 for E-Mail Notification*.

8.4 System Settings

8.4.1 Device Setting

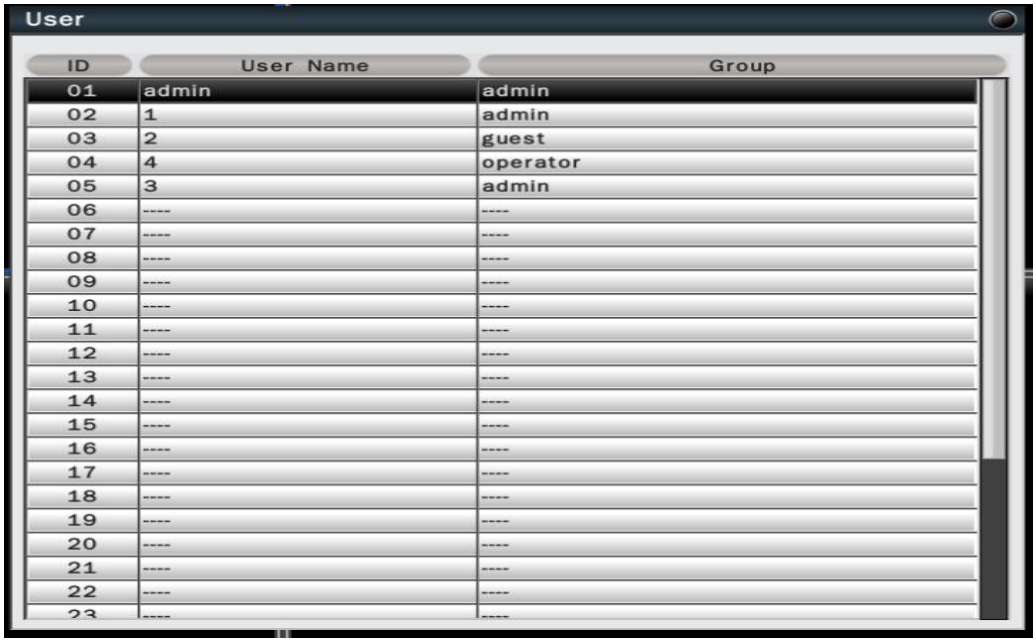
In the System-Device sub menu, user can configure the device related settings.

- **Device Name** – Input the name for the NVR.
- **Device No**. – Input the number for the NVR.
- **Language** – Select from the list for the language to be displayed on the local NVR.
- **IR Remote Controller** – Set the IR remote control ID for remote control use. Each IR remote controller can control up to 9 NVRs. For example, if user set NVR IR remote controller as ID#1, user can press "ID" and "1" on the IR remote controller to control ID#1 NVR.
- **Enable Audio** – Select On to enable **audio icon display** on the UI. If user select Off, no audio icon will be displayed.
- **Enable Authentication** – Select On to active the user login. If user select Off, no user name or password is required to access the system.
- **Auto Scan & Add IP-Cameras** –Select On to active auto scan & add IP cameras. The NVR will continually scan the IP camera and check whether there is a new IP camera in the LAN environment. When the NVR detect a new IP camera in the LAN environment, NVR will automatically add the IP camera into NVR when there is still spare channel existing in the NVR.
- **Install Wizard** – Click "Go" to bring up Install Wizard menu.

Click **Apply** to save the settings.

8.4.2 User Settings

User setting page is where user can add or delete users on the system.



The default user name and password are as below.

Note
Administrator user name/password: admin/admin
Operator user name/password: operator/operator
Guest user name/password: guest/guest

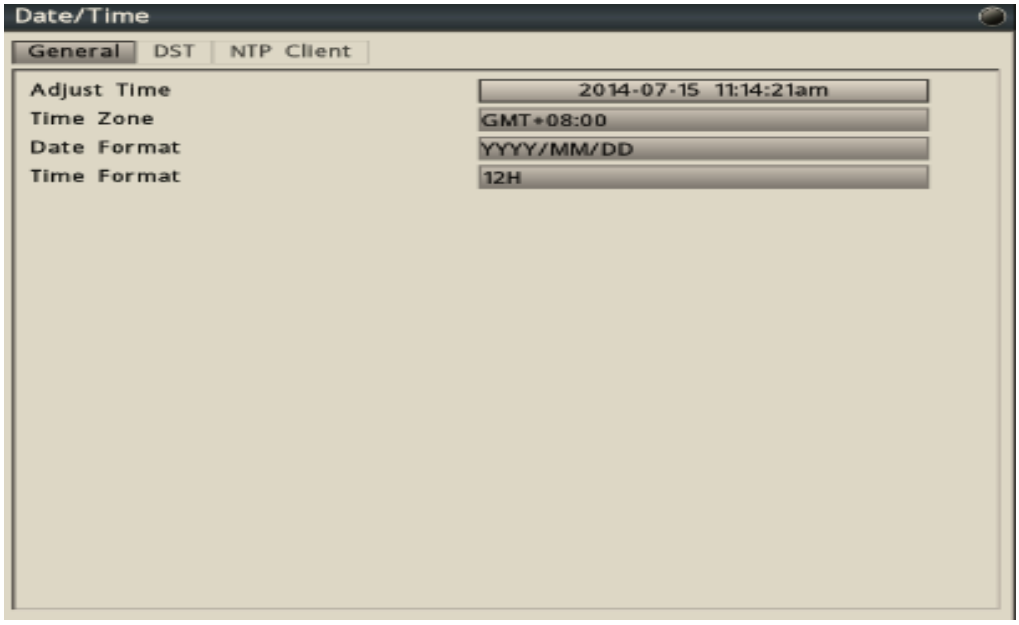
- Double click the selected user or click on to edit the user settings.
- Click on to delete the user. However, at least one administrator is required to remain to operate the system.
- Click on to add new user.

Authority Instructions based on 3 levels of users

	Administrator	Operator	Guest
View live	Yes	Yes	Yes
OSD	Yes	Yes	Yes
Live Multiple-up	Yes	Yes	Yes
Zoom	Yes	Yes	Yes
Pan/Tilt/Zoom (PTZ)	Yes	Yes	No
Playback	Yes	Yes	No
Export	Yes	Yes	No
Acknowledge Alarm	Yes	Yes	No
Configuration	Yes	No	No

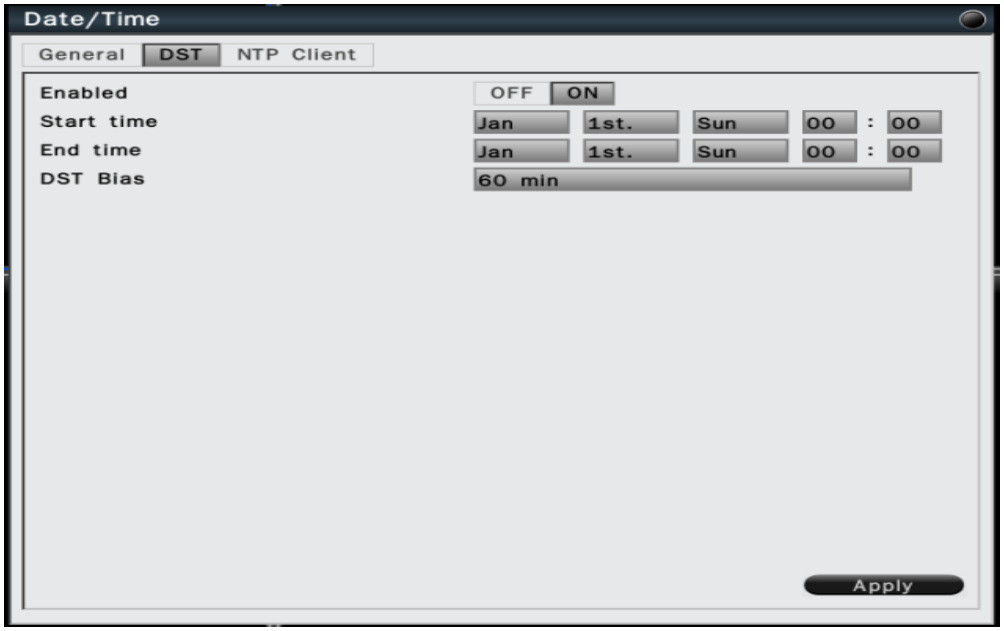
8.4.3 Date/Time Settings

8.4.3.1 General Setting



- **Adjust Time** – Click on the column and the Calendar will pop up on screen for user to adjust the system date and time. Click "Apply" to enable the settings.
- **Time Zone** – Set the time zone that the NVR adjusts to when updating from the time server.
- **Date Format** – Select date format from DD/MM/YYYY, MM/DD/YYYY or YYYY/MM/DD.
- **Time Format** – Select time format between 12 Hours and 24 Hours.

8.4.3.2 DST Settings (Daylight Saving Time)

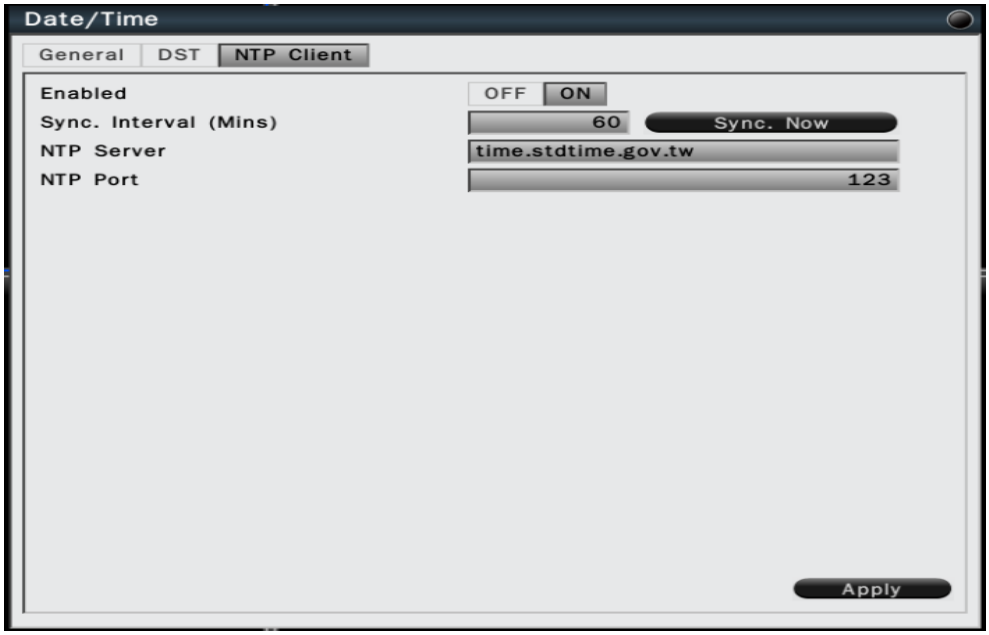


- **Enabled** – Select On to enable daylight saving time.
- **Start time** – Set the start date and time of daylight saving time.
- **End time** – Set the end date and time of daylight saving time.
- **DST Bias** – This allows users to select the amount of time to move forward from the standard time for daylight saving time. Available options are 30, 45, 60, 90 and 120 minutes

Click **Apply** to save the settings.

8.4.3.3 NTP Client Settings

User can sync NVR clock with an Internet NTP time server.



To sync with Internet NTP server

1. Ensure the system to be able to connect to internet. For details, please refer to *8.2.1.1 WAN Settings, page 63.*
2. Enabled – Select **On** to enable NTP synchronization.
3. **Sync. Interval (Mins)** – Input the interval that the system will sync the time with the selected server. Click the button "Sync. Now" if immediately synchronization is needed.
4. **NTP Server** – Input the time server address for time synchronization. The default NTP server is "pool.ntp.org".
5. **NTP Port** – The default setting is "123", user can enter NTP server port number.

Click **Apply** to save the settings.

8.4.4 Display

The Display setting allows user to define the monitor output behavior.

8.4.4.1 General Settings

In the System-Display-General sub menu, user can select the proper resolution for connected HDMI and VGA monitors.

- **Monitor Resolution** –Select Auto for system to identify resolution automatically for connected HDMI and VGA monitors. The supported resolutions are: 1920x1080, 1440x900, 1366x768, 1280x1024,1024x768. User also can select the display resolution manually.

8.4.4.2 Main Monitor Settings

In the System-Display-Main Monitor sub menu, user can configure the main monitor display mode and the contents.

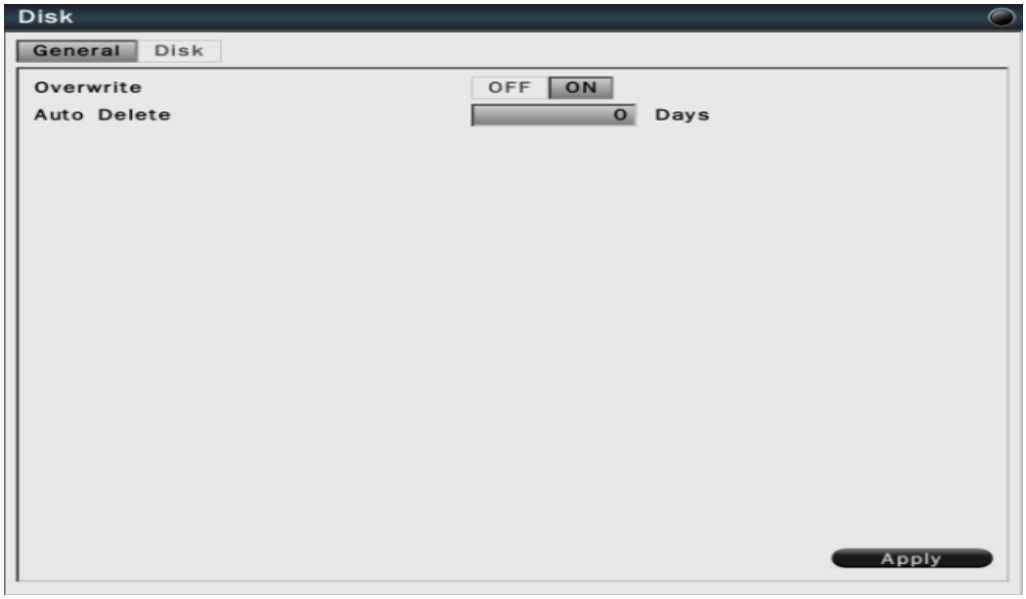
- **Sequence enabled** – Select On to enable sequence display on main monitor.
- **Dwell** – Input the dwell time in seconds for sequence display.
- **Camera** – Select the cameras to be appeared on the sequence display.

8.4.5 HDD

In the System-Disk sub menu, user can review and manage the hard disk settings of the NVR. It allows user to configure overwrite, auto delete and format HDD.

8.4.5.1 HDD General Settings

In the System-Disk-General sub menu, user can enable or disable overwrite. User is also able to select the auto delete days.

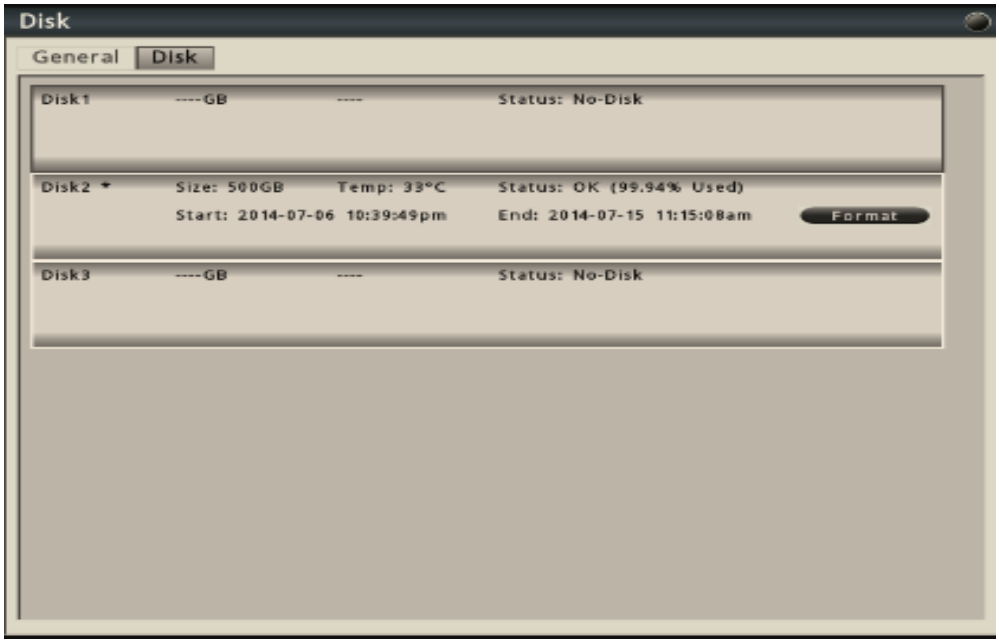


- **Overwrite** – Select On to enable hard disk overwrite when it's full.
- **Auto delete** – The hard disk will automatically erase the data after the selected number of days. Select "0" to disable the function.

Click **Apply** to save the settings.

8.4.5.2 HDD Management

In the System-Disk-Disk sub menu, it is to manage and display the information of all the available hard disk. The information is including the hard disk total storage size, current temperature, usage status, available data start/end time.



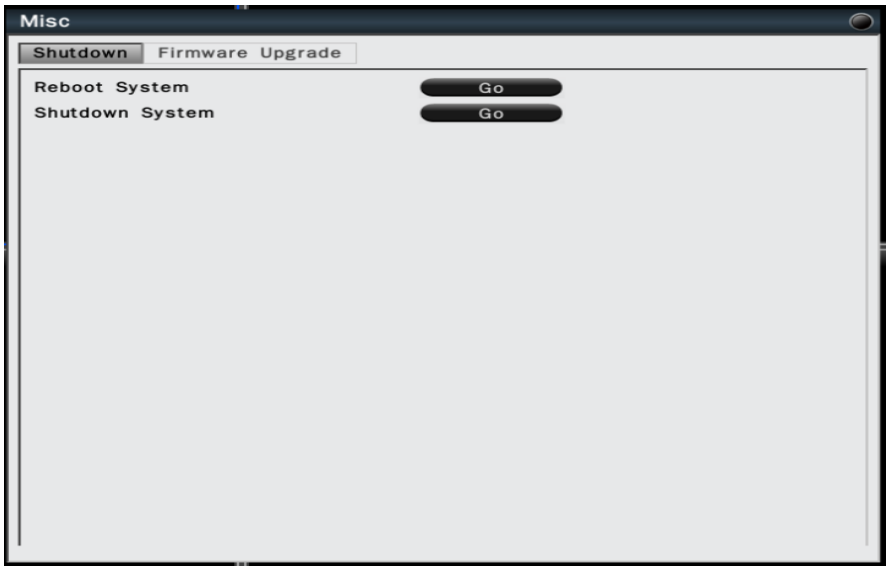
- Click **Format** to format the selected hard disk.
- HDD quantities support might vary according to different NVR models.

! **Caution**
Format the hard disk will erase all existing data on the hard disk!

8.4.6 Miscellaneous

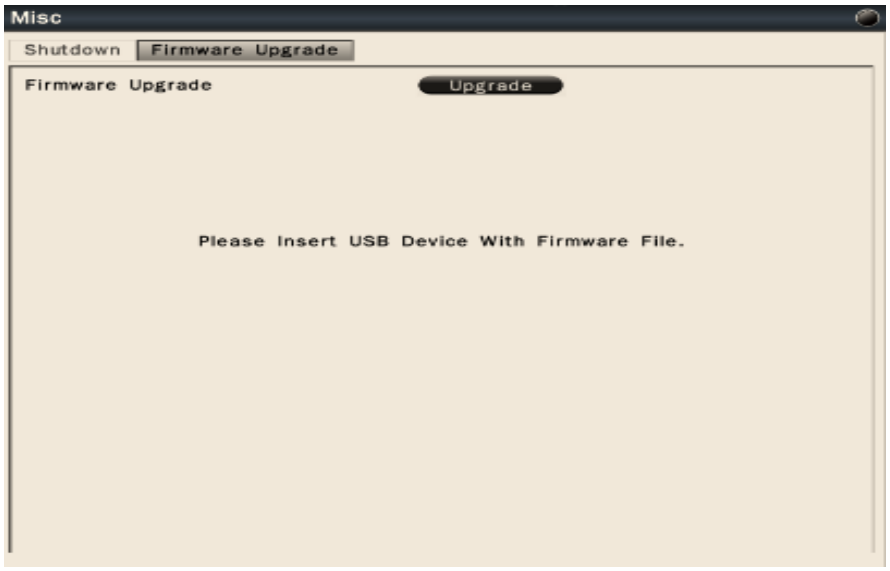
8.4.6.1 Shutdown or Reboot the system

In the System-Misc-Shutdown sub menu, user can select to reboot or shutdown the System.



8.4.6.2 Firmware Upgrade

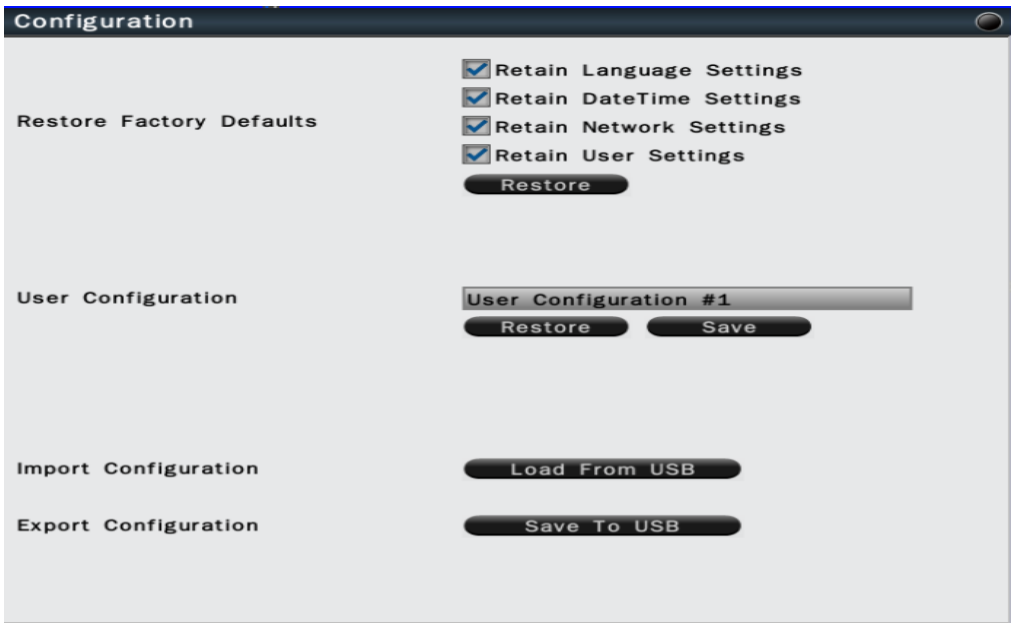
In the System-Misc-Firmware upgrade sub menu, user is able to upgrade NVR firmware by store the firmware in USB drive.



To upgrade the firmware, connect a USB flash device which contains the firmware version user would like to update. Click “Upgrade” to start the firmware upgrading. The system reboot is required to complete the firmware upgrade.

> ! **Caution**
> Do not disconnect USB device or turn off the NVR power during the upgrading firmware otherwise it might cause NVR defective.

8.4.7 Restore factory default and use configuration

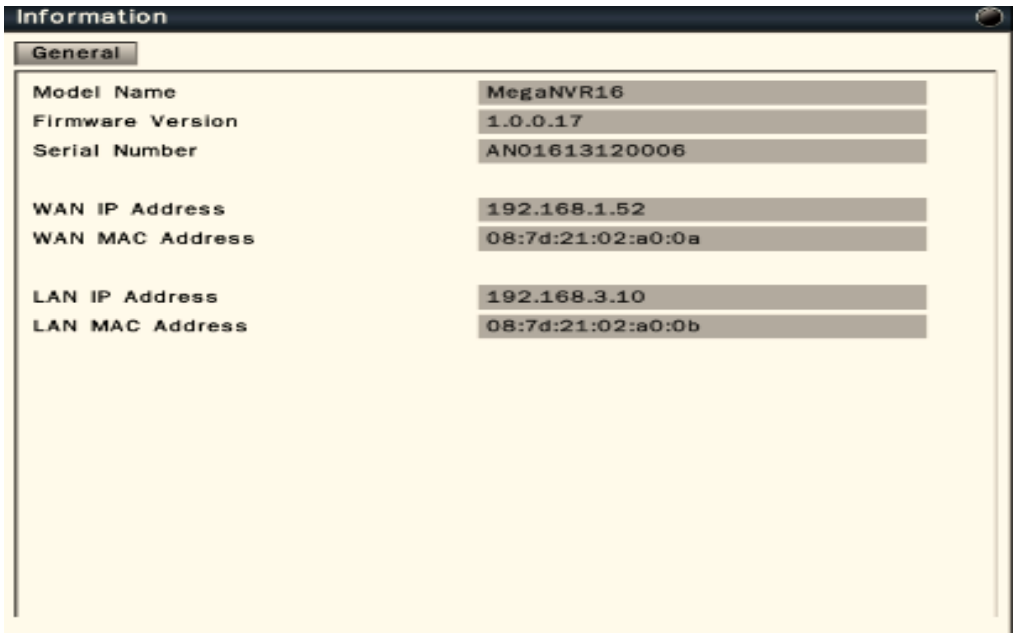


- **Restore Factory Default**– User can load factory default by clicking "Restore" button. Select the items that would like to be excluded from back to the factory default, the selected items will remain as the current values
- **User Configuration** – Select the configuration name and click "Save" to save the current configuration settings. Or user can select the configuration from the list and click "Restore" to restore the selected settings.
- **Import Configuration** – Click "Load from USB" button to upload NVR configuration settings from a USB flash device.
- **Export Configuration** – Click "Save to USB" to save the current NVR configuration settings to a USB flash device.

8.5 Information

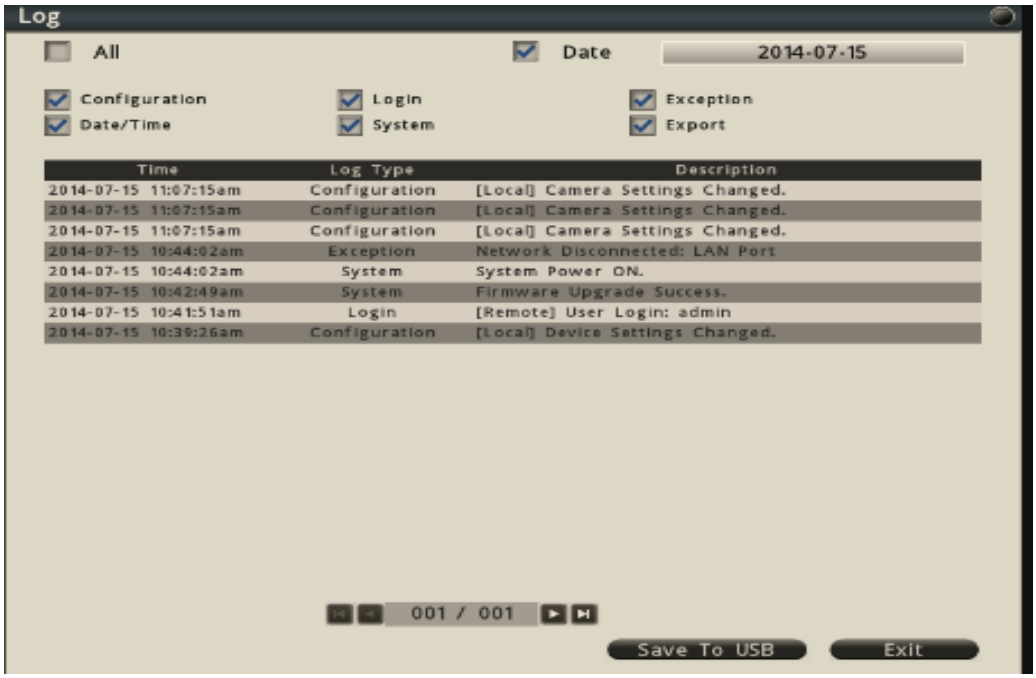
8.5.1 General Information

In the Information-Information menu, it displays the general system information. The information includes model name, firmware version, serial number, WAN IP address, WAN MAC Address, LAN IP address and LAN MAC address.



8.5.2 Log

In the Information-Log sub menu, it allows user to filter and review the system event log.



- Click the **Date** column and the calendar will pop up for user to select the day to be displayed.
- Click the checkbox of **configuration, Login, Exception, Date/Time, system, Export** user would like to review and to show in the event log. The filtered log will be displayed in the page.
- Click **Save to USB** with a USB flash device connected to the unit, the filtered log will be saved to the USB device.

9. Web Viewer Operation

9.1 Connecting to NVR

Users can remote access the NVR through Microsoft Internet Explorer to view live/recorded video and manage the NVR. Before accessing the web viewer, make sure that the PC and NVR are both connected to the internet and the network feature is enabled.

For NVR network setup, please refer to *Chapter 8, 8.2.1.1 WAN Settings.*

System Requirement

The following are minimum system requirements for web viewer.

Description	Requirement
Operating System	Windows XP/Vista/7/8
CPU	Intel i3 or higher
Memory	4GB
Independent Graphic Card	Minimum 256MB
Internet Explorer Version	IE9, IE10, IE11

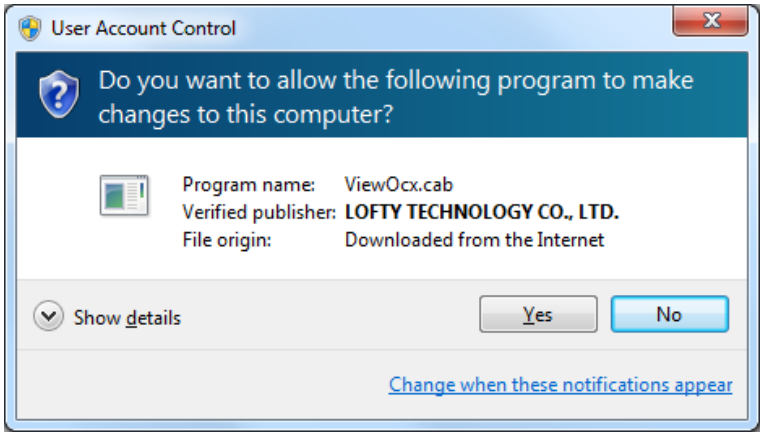
Note
Web Viewer is compatible with Internet Explorer (32 bit), Chrome, and Mozilla Firefox.

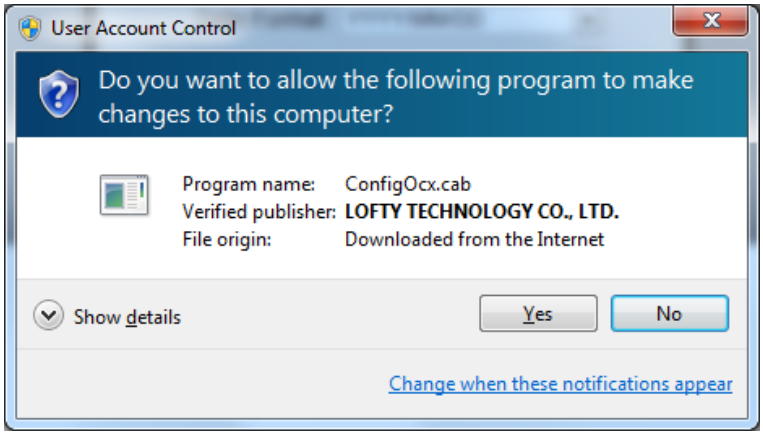
To view the system in Internet Explorer:

1. It is suggested to select **RUN as Administrator** to ensure Web Viewer complete functionality.
2. Please enter the IP address or DDNS address of NVR followed by the HTTP Port. For example, http://192.168.2.3 or http://089d21011a0ad.urDDNS.com.
3. Please **allow to install** ActiveX plugins to proceed to the next steps.
4. Enter the system **user name and password** to login the system.

9.2 Login

Open IE browser and input NVR IP address in the address bar. When accessing this feature for the first time, user will be prompted by the browser to install Active X. The browser will pop up the below dialog for installation, click “Yes” to accept and start the installation.





After installing the ActiveX plugins, the login page will be displayed for users to enter the User name and Password. Users can also select the OSD language, date format and time format from the login page. Click **Login** to enter the web viewer.

The user name/password are the same as the NVR login, the defaults are:

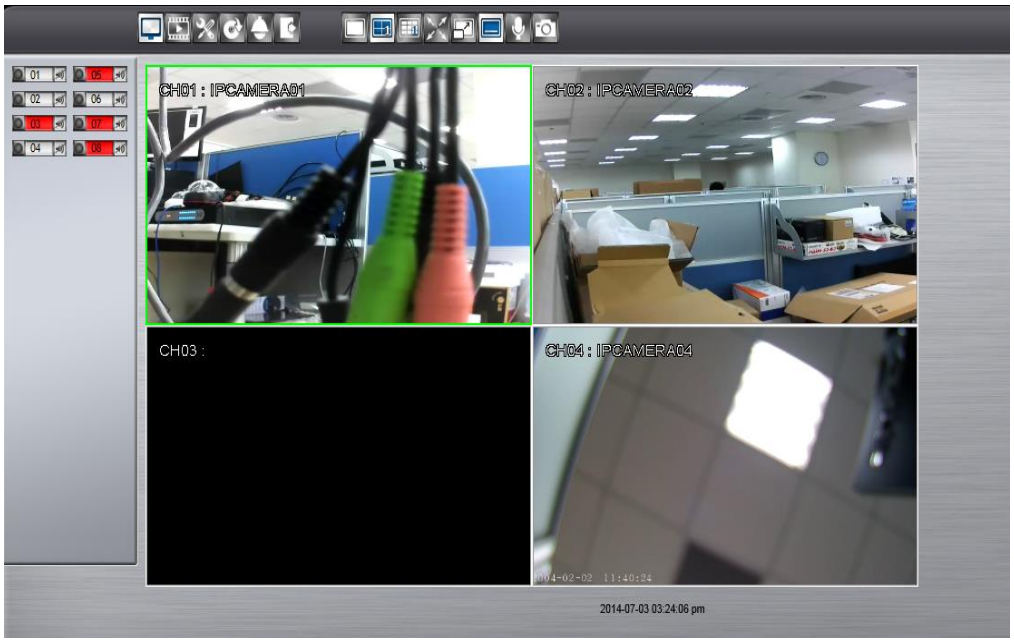
Note

Administrator user name/password : admin/admin

Operator user name/password: operator/operator

Guest user name/password: guest/guest

9.3 Remote Live View



After login to the system, the web viewer will automatically display a 4-screen live video. Double click on a video display window and it will display full screen in the selected channel. The system indicators on the screen show the system status, channel status and for user to control the audio display channel *(Refer to Chapter 8 General Operation)*.

The basic operation icons are showing on the main screen, the functions are:

Click for Live view mode

Click to switch to search and playback mode

Click to switch to Setup menu

Click to switch to Export mode

Click to enable the PTZ control panel

Click to Logout from the current user's privilege.

1x1 display mode

Click to first 2x2 or second 2x2 display mode

3x3 display mode

4x4 display mode

Switch display to full screen display mode

Click to keep the image aspect ratio

Show/Hide OSD

Talk to Server

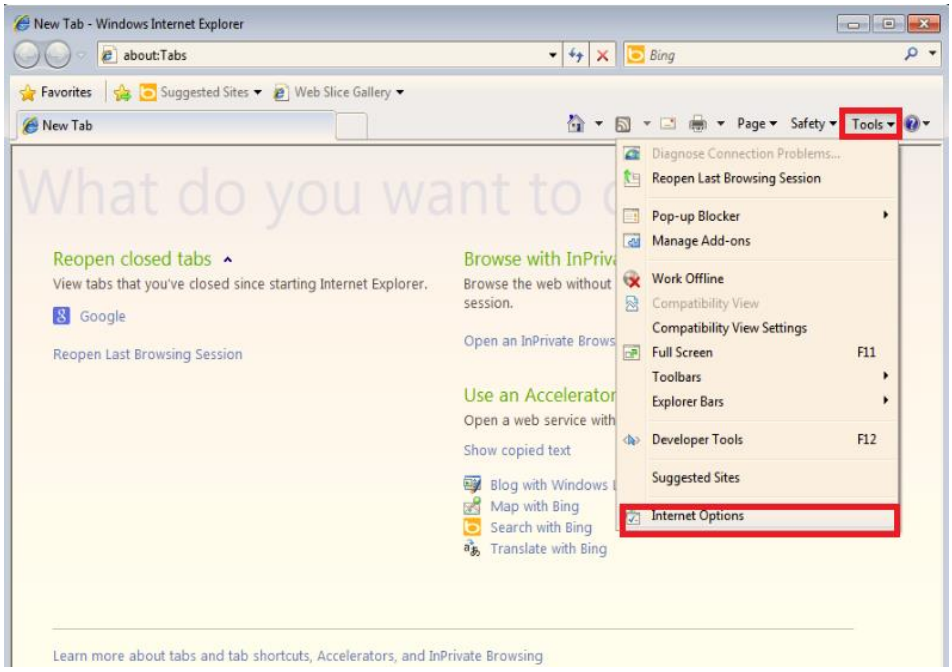
In full screen, click to zoom in/out of the selected video in 2x, 4x and 8x.

Click to take a snapshot of the selected video.

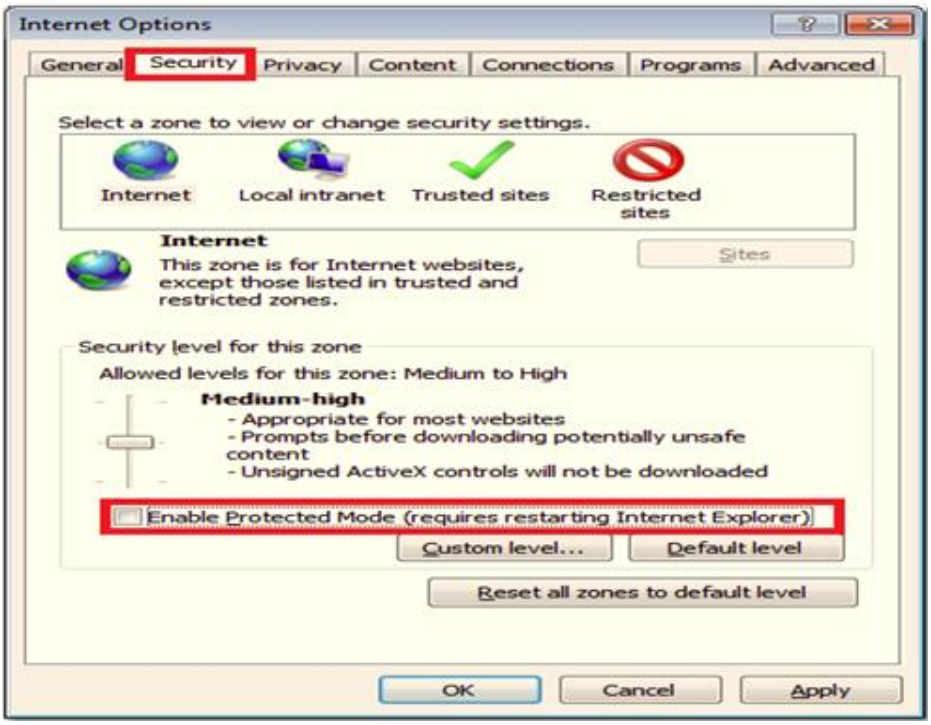
Note
For remote snapshot, please disable the protected mode in the IE browser.

Please follow the below 2 steps to ensure the remote snapshot perform normally.

Step 1. Please click IE browser **Tools-Internet** Options.



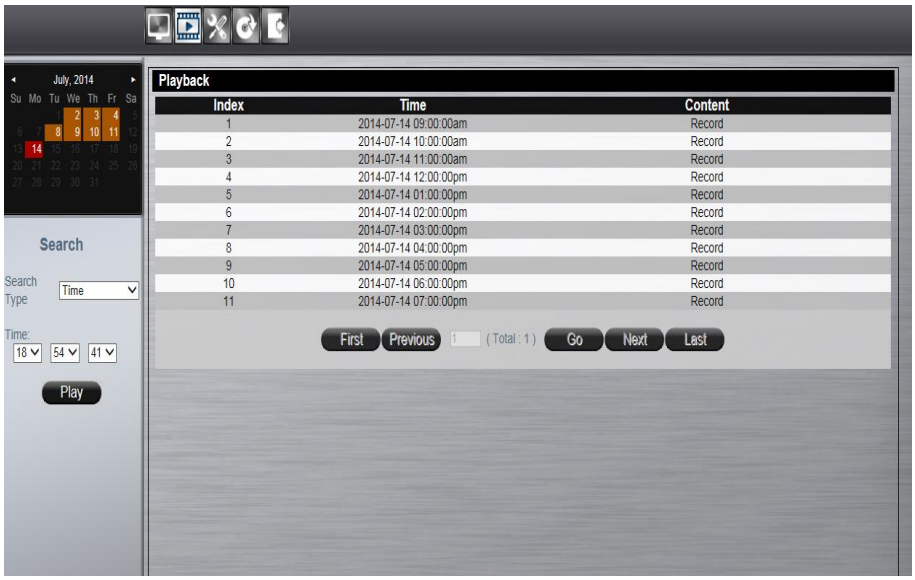
Step 2. Please **un-click Enable Protected Mode** to disable protected mode. Then snapshot will perform normally in un-protected mode.



9.4 Remote Search and Playback

Click the **Playback** button to switch to playback mode. The video can be searched by Time, Channel and Event, select the search type to start searching.

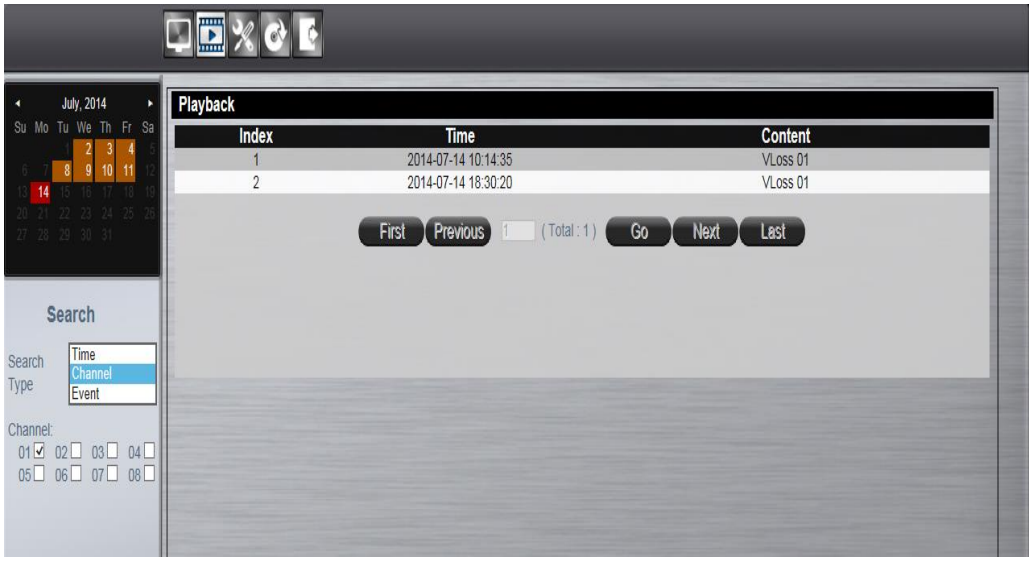
9.4.1 Search by Time



The calendar on the screen shows the recorded data contains in the NVR hard drives. The date highlighted in orange means there's recorded data of the date in the hard drives. The red highlighted date indicates the current search date. The recorded section list of the current selected day will be shown on the screen. Double click on the selected recorded file to start the playback.

User also can input the search time manually to playback the recorded data.

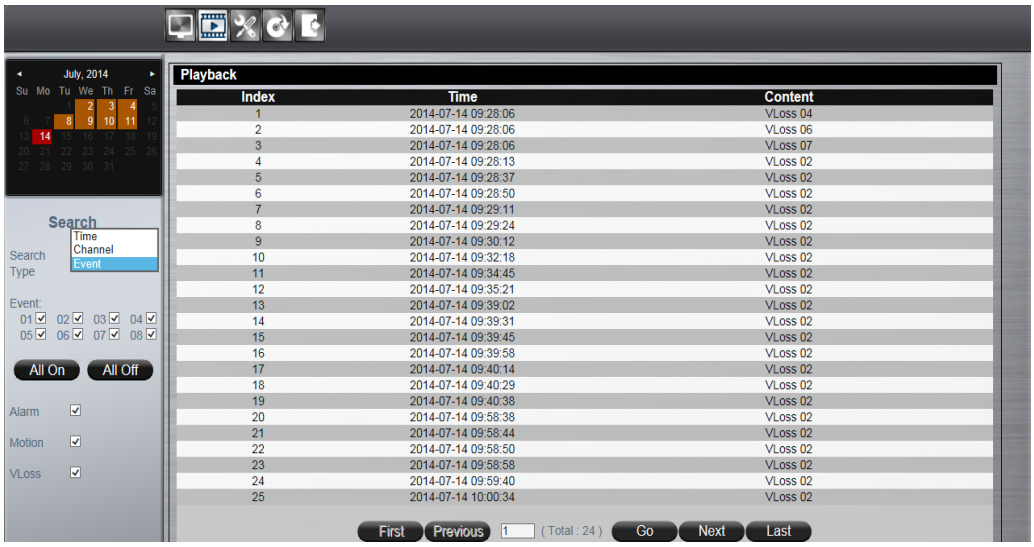
9.4.2 Search by Channel



Search by **Channel** allows user to search the event video by channel. Select the date from the calendar, and select the channel user would like to view. The event video list of the selected channel will be shown on the screen.

Double click on the selected recorded file to start the playback.

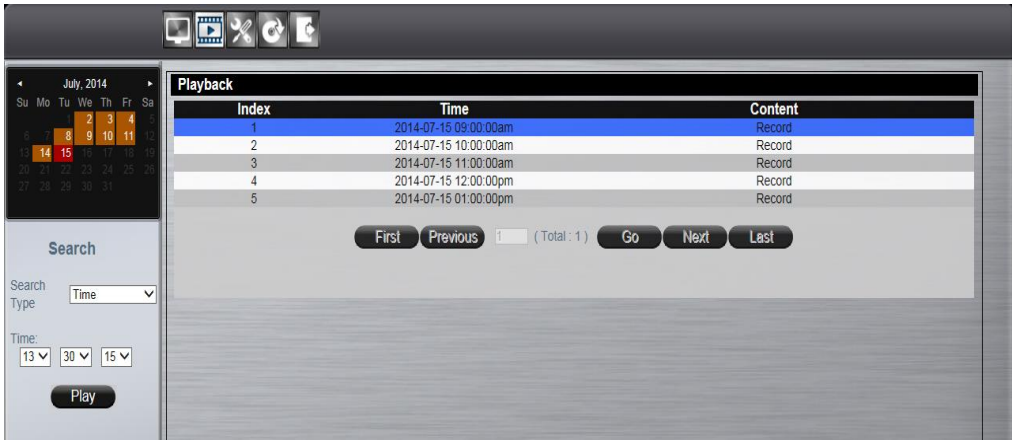
9.4.3 Search by Event

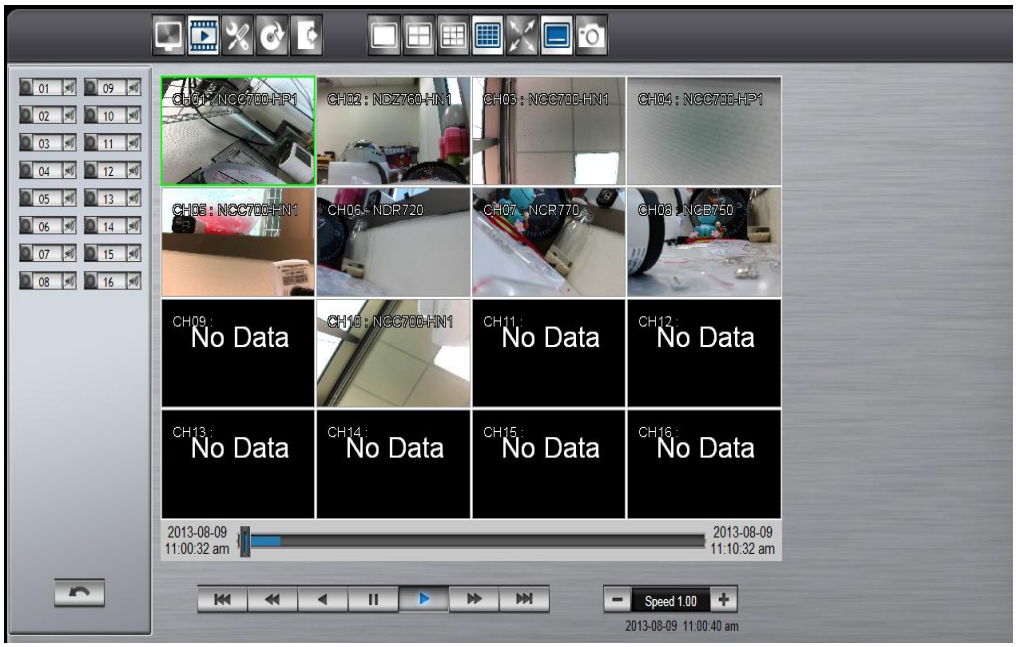


Search by **Event** allows user to search the event video list by channel and by event type. Select the channel user would like to view (user can also click **All On** or **All off** to enable or disable all channels), then select the event type (Alarm, Motion and Video Loss), the event video list of the selected channel and event type will be shown on the screen. Double click on the selected recorded file to start the playback.

9.4.4 Web Viewer Playback Operation

Click on the search result and start to proceed the playback operations.





The progress bar shows the current playback status and timeline. Drag the time indicator on the progress bar to move to the selected timeline to playback.

On the time bar, it also indicates the initial and end time of the current playback section.

Click to playback video

Click to pause video

Click to switch to fast forward playback (2x), user can also control the playback speed by clicking and , in x0.25, x0.5, x1, x2, x4 and x8.

Click to fast forward to the next section

Click to fast backward to the previous section

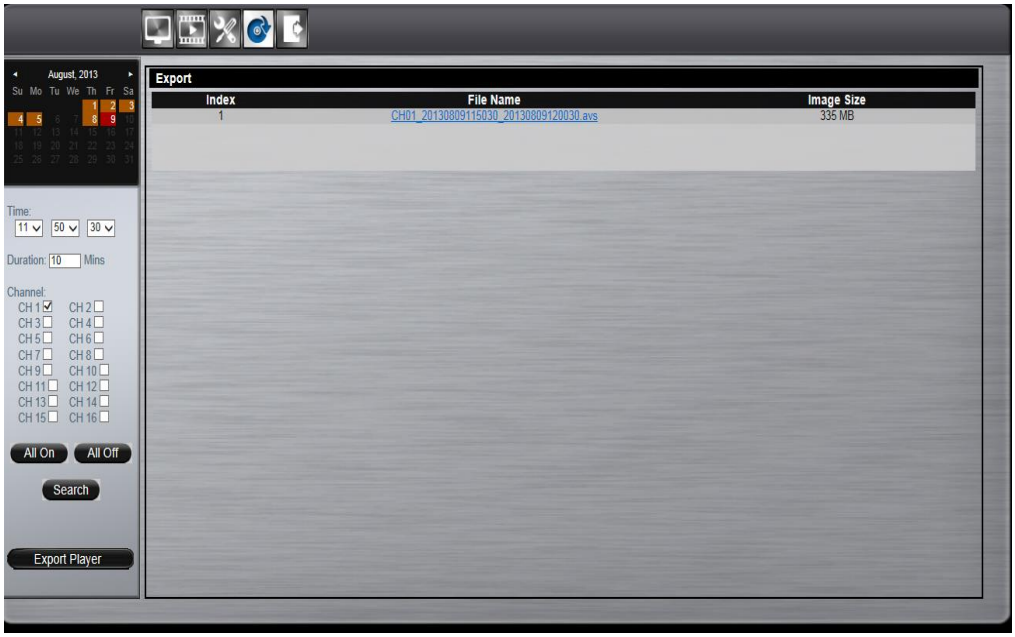
9.4.5 Web Viewer Setup Menu

Click on the **Config** button to switch to the setup menu page as below.

User can configure all the NVR settings remotely through the web viewer. The setup menu operation is the same as in the NVR. Please refer to the *Chapter 8 Main Menu Operations.*

9.4.6 Remote Export

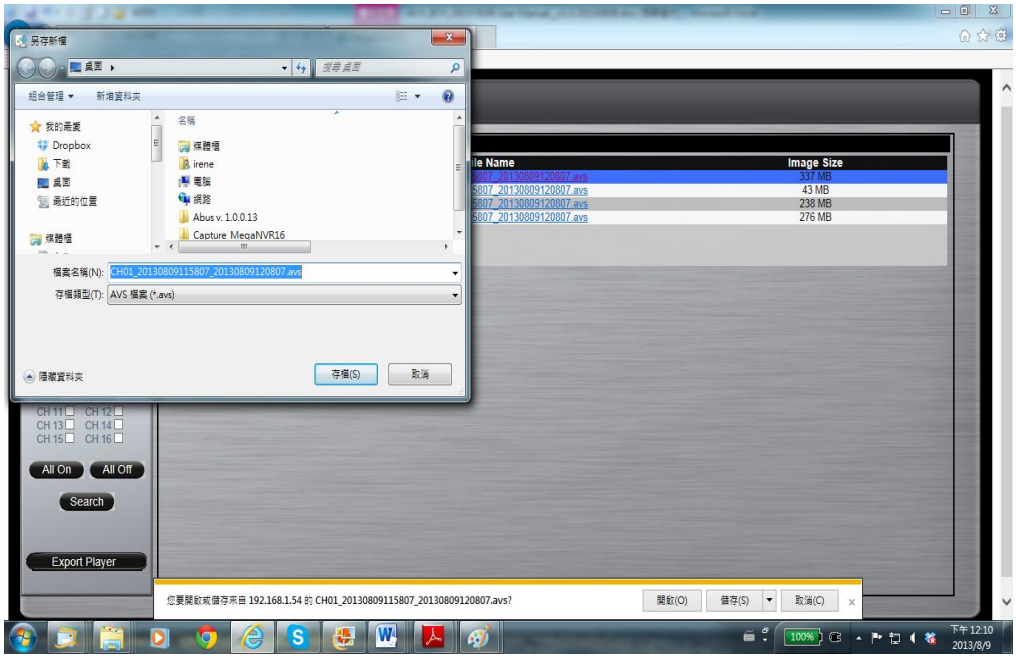
Click on the **Export** button to bring up the remote export menu, this allows user to export the video file from the NVR.



To export the video, select the date from the calendar, the starting time of the video and channels that user would like to export. (Click **All On** or **All off** to enable or disable all channels.) Input the duration time user would like to export, the maximum search duration is 60min. Click **Search** to start, the searched video files will be listed on screen.

The maximum video file size is 2000MB, the system will automatically create new file if the searched result is over 2000MB.

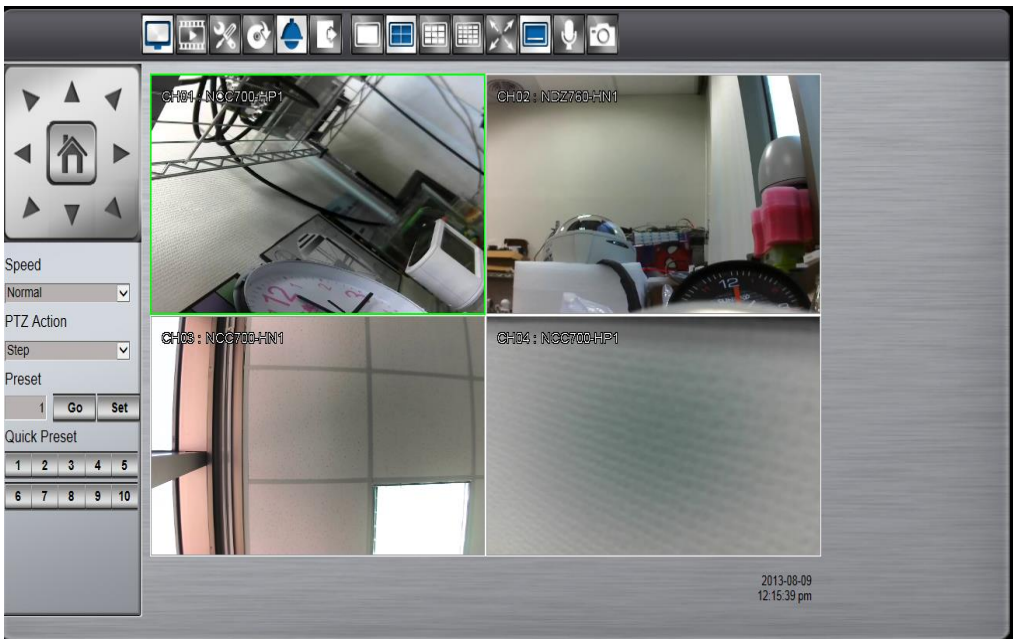
Double click on the selected item and the system will pop up message as below, select the location user would like to store then click Save to execute the downloading.



User can view the exported file on the Export Player. If the user does not have the Player installed in the PC, click Export Player button to download the player to the PC. Please refer to *Chapter 6 Export(Backup) Video*.

9.4.7 Remote PTZ Control

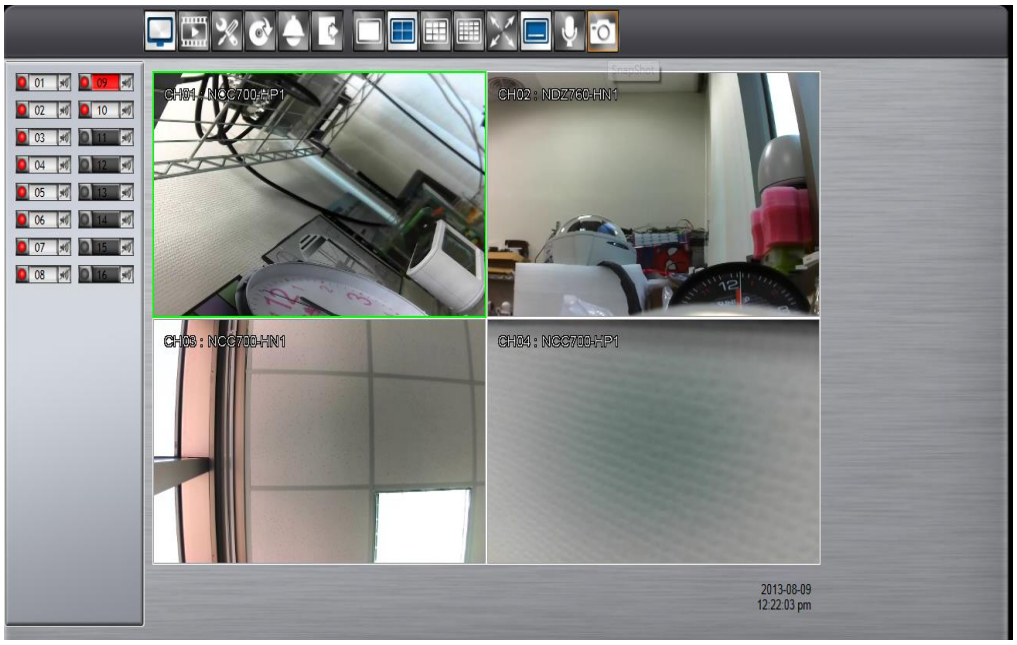
Click the **PTZ** button to enable the PTZ control panel. This allows user to control the connected PTZ camera.

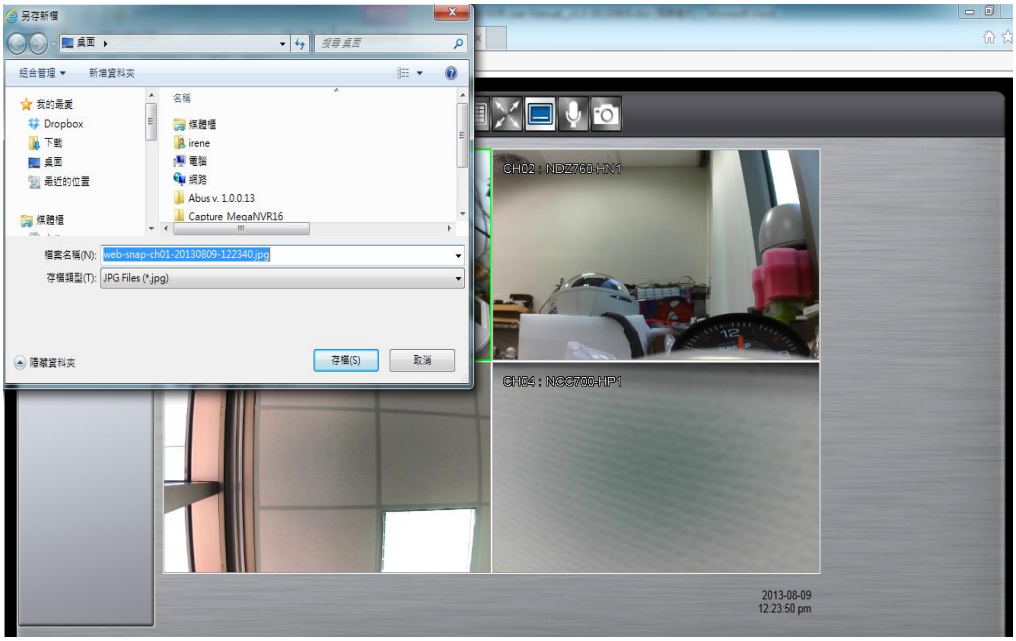


The basic operation is the same as the NVR PTZ control. Please refer to *Chapter 5 PTZ Control* for detail operation.

9.4.8 Remote Snapshot

Click the **Snapshot** button in live mode or playback mode to store the current image as a still image and save in the PC folder.

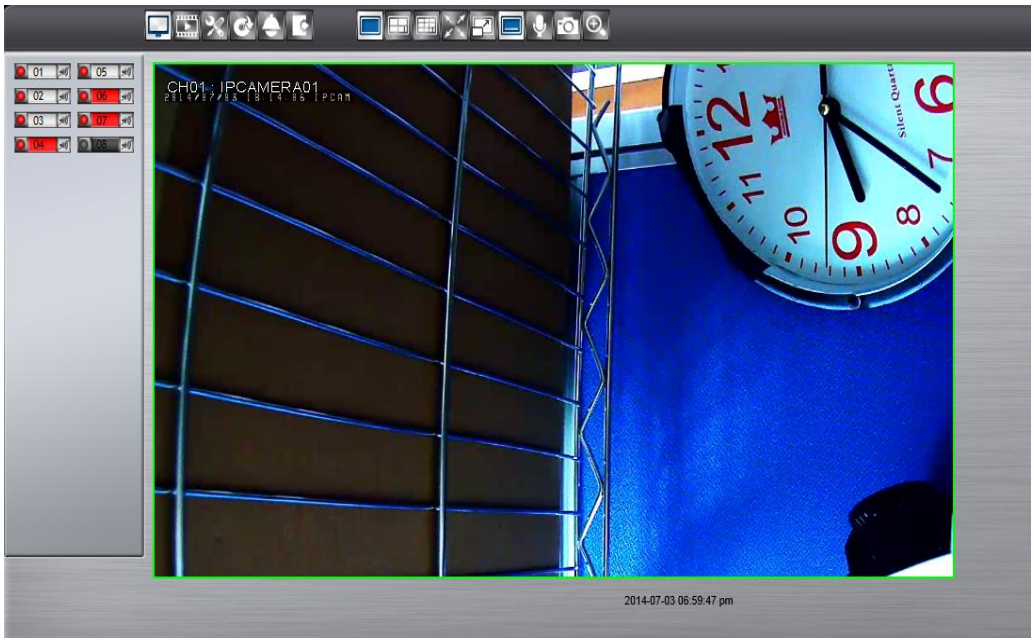




9.4.9 Remote Digital Zoom

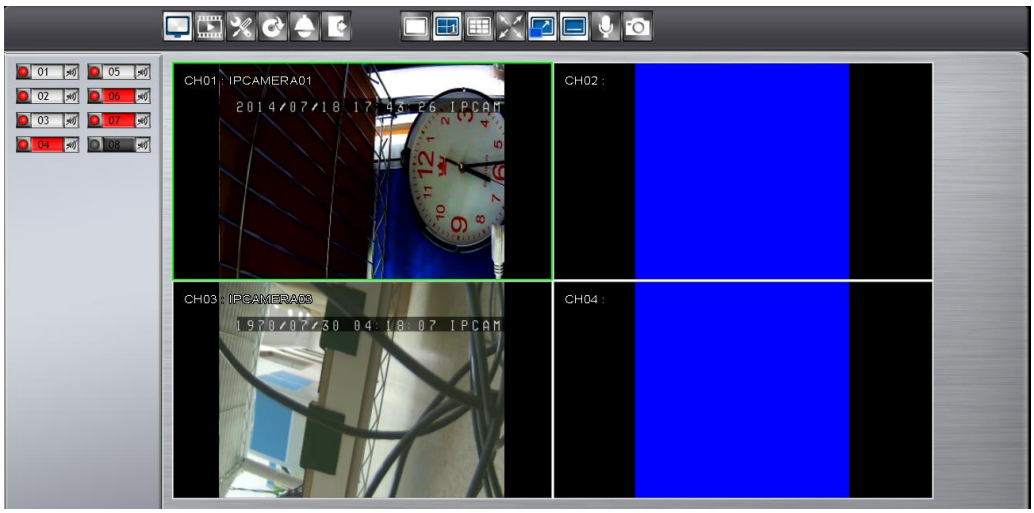
Click **Digital Zoom** button to allows user to enlarge the live video at 2x, 4x and 8x in live mode or in playback mode. Move the focus to the selected video. Click

Full Screen button first and then click **Digital Zoom** icon and the selected area which user would
like to enlarge.



9.4.10 Remote Keep Aspect Ratio

Click **Keep Aspect Ratio** icon to allow user to keep the image aspect ratio as 4:3 or 16:9 without distortion.



10. Mobile Apps

NVR is compatible with Android, iPhone and iPad devices.

Platform	App Name	From
Android	VS Viewer Pro II	Google Play Store
iOS	VS Viewer Pro II	Apple Store

10.1 Android System

System requirement

To be able to install and run VS Viewer Pro II App, please make sure user's Android device is running Google Android version 4.2.2 or later, and the device is with wireless or internet network supported.

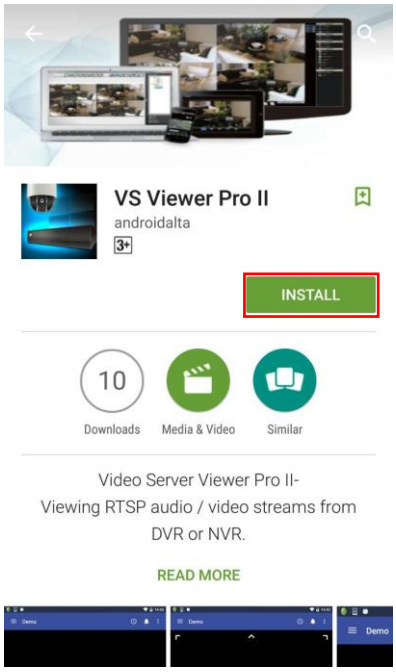
Prerequisites

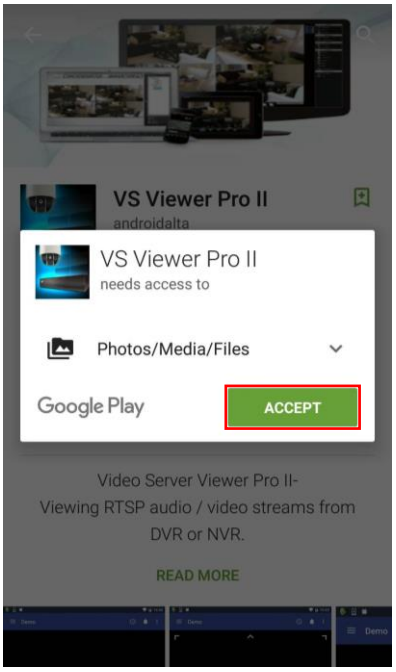
1. NVR must have internet access.
2. User might create a DDNS account and the DDNS settings configured in NVR. User might have DDNS address to log in remotely.
3. Please download **VS Viewer Pro II** Apps. They are free of charge.

10.1.1 Download VS Viewer Pro II Android App

Step 1. Launch "Google Play Store".

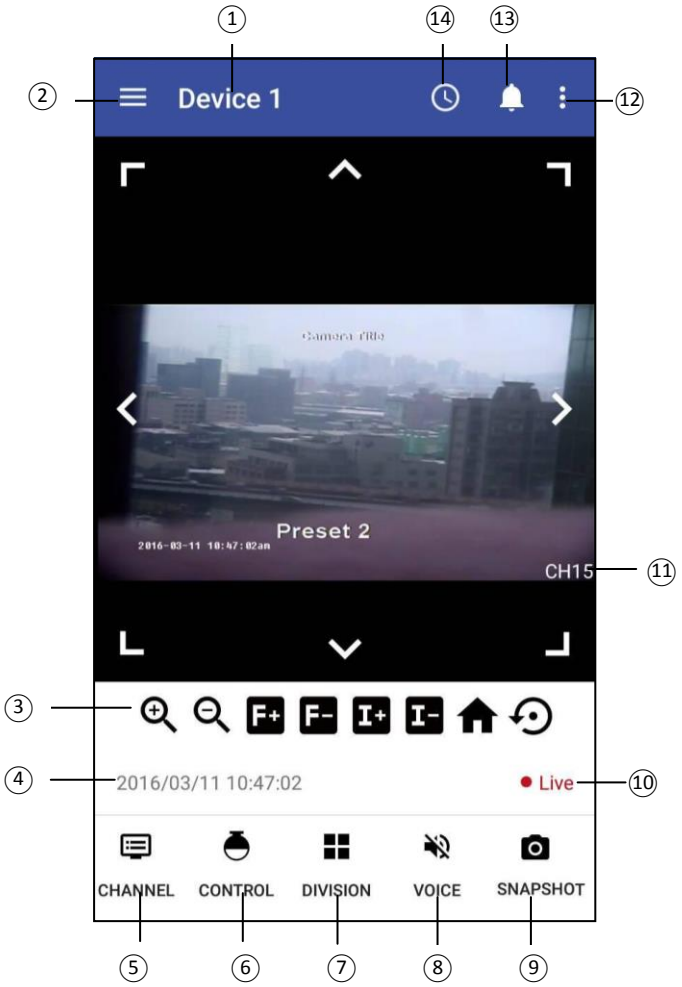
Step 2. Search for **VS Viewer Pro II** App. Tap **Install**, the system will pop up the menu for user to Accept & download the App. The download should then begin. The **VS Viewer Pro II** icon will show on the device after the download is completed.





Step 3. Tap **VS Viewer Pro II** icon to launch Android App.

10.1.2 Main menu



Item	Description
①	Device name
②	Manage devices/Add devices/Version
③	PTZ Control panel
④	Current date and time
⑤	Channel setting
⑥	PTZ Control setting
⑦	Division setting
⑧	Voice setting
⑨	Snapshot setting
⑩	Current Status
⑪	Channel number
⑫	Reorder/Reset order
⑬	Search by event
⑭	Search by date/time

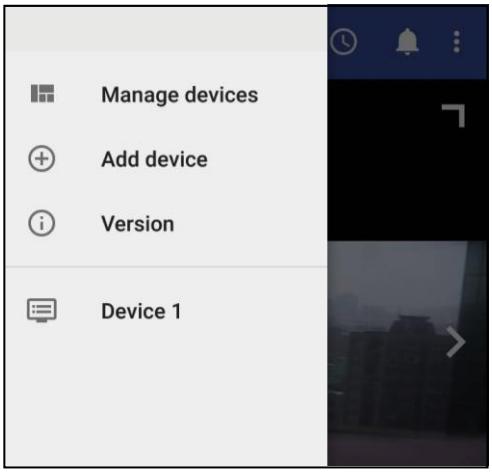
10.1.3 Live view

10.1.3.1 Device name

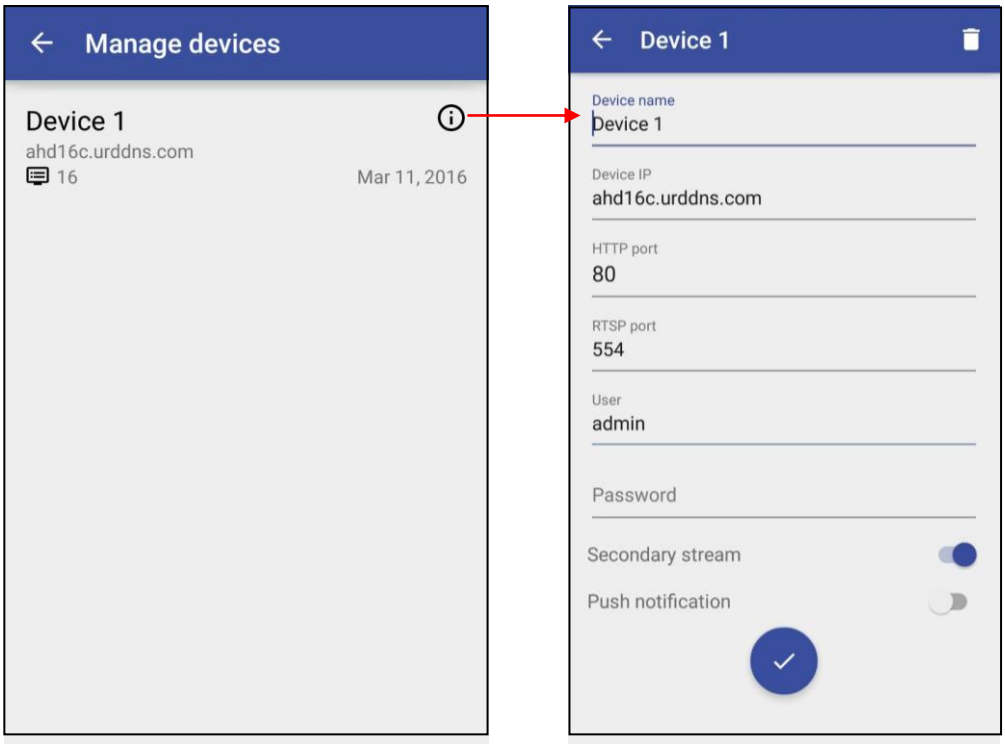
Device name is shown on upper left side of the screen.

10.1.3.2 Manage/add the device

Tap to manage the devices, add a device, check the version number of APP or select a device.

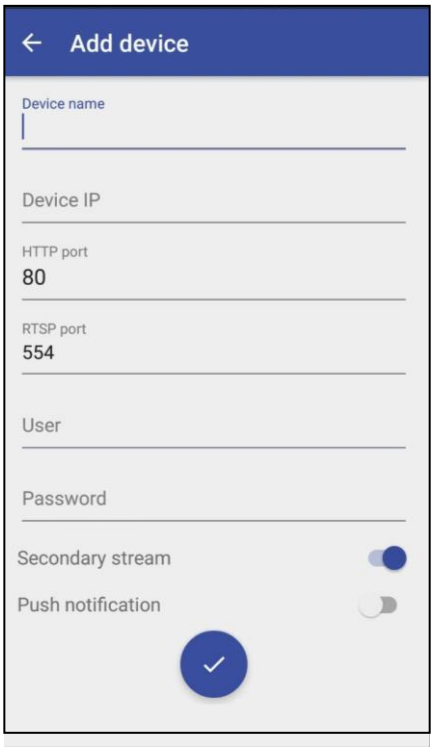


- Tap “manage devices” and a list of all devices will be displayed, as well as the information of each individual device. Tap on a device to view or change other information about the device.



☐ Tap the trash can icon on upper right side of the device information to delete the device.

☐ Tap “Add device” to add a new device. Enter the device name, device IP, HTTP port, RTSP port, User name, password, Secondary stream and Push notification. Tap the check icon to activate the settings.



- Tap “version” to check the version number of VS Viewer Pro II.

- Tap a device from the device list to directly enter the live view of the selected device.

10.1.3.3 PTZ control panel

The PTZ control will apply the PTZ command to the current focus camera channel if it is connected to a PTZ device which includes RS485 PTZ device or Network PTZ device.

The functions are:
8 way pan/tilt control: To pan/tilt the PTZ device to up/down/left/right/up right /up left /down right / down left.

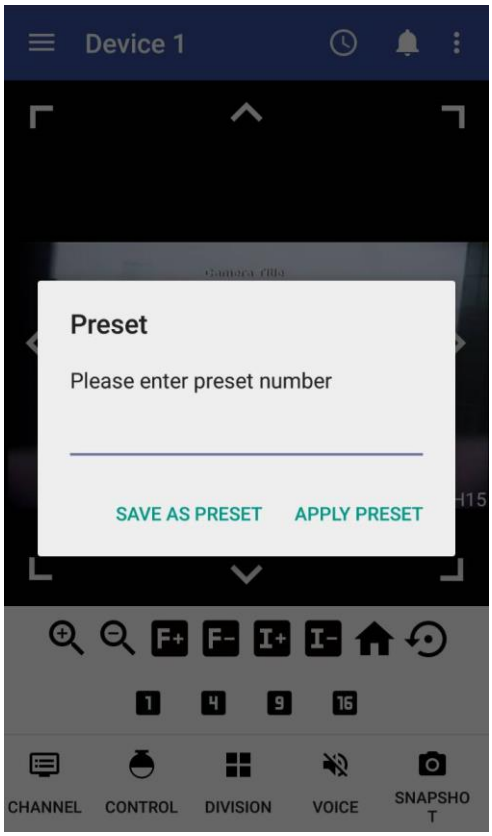
: Tap to Zoom in or Zoom out

: Tap to adjust focus to near or far

: Tap to adjust Iris to open or close

: Tap to go to Home position.

: Tap to bring up the preset menu for operations.



SAVE AS PRESET: Save the current PTZ position as its internal preset position.

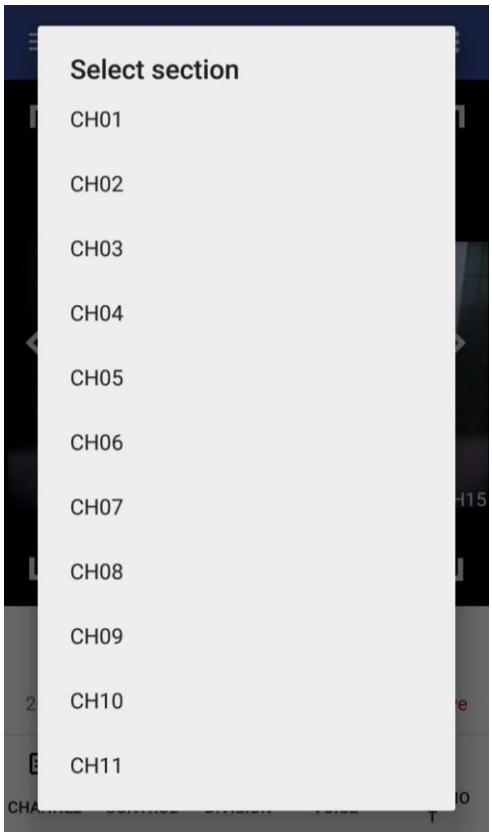
APPLY PRESET : Go to the preset position

10.1.3.4 Current date and time

It displays current date and time.

10.1.3.5 Channel setting

Tap the icon CHANNEL to select the channel to be displayed.



10.1.3.6 PTZ Control setting

Tap the icon CONTROL in full screen to enable PTZ control. It brings up the PTZ control panel, please refer to 10.1.2.3 for details about how to operate PTZ control.

10.1.3.7 Division setting

Tap the icon DIVISION to switch the display mode between single view display, quad display, 9- display and 16-display screen (the division types provided may be different depending on the model). To change the channel to be displayed, tap the icon CHANNEL and a selection of the display will be available.

10.1.3.8 Voice

Tap on Voice icon VOICE to enable/disable audio display

10.1.3.9 Snapshot

Tap on Snapshot icon SNAPSHOT to store the current image as a still image and save in the device folder.

10.1.3.10 Current Status

It displays current status (Live or Playback mode)

10.1.3.11 Channel number

It displays the channel number that is currently in live mode.

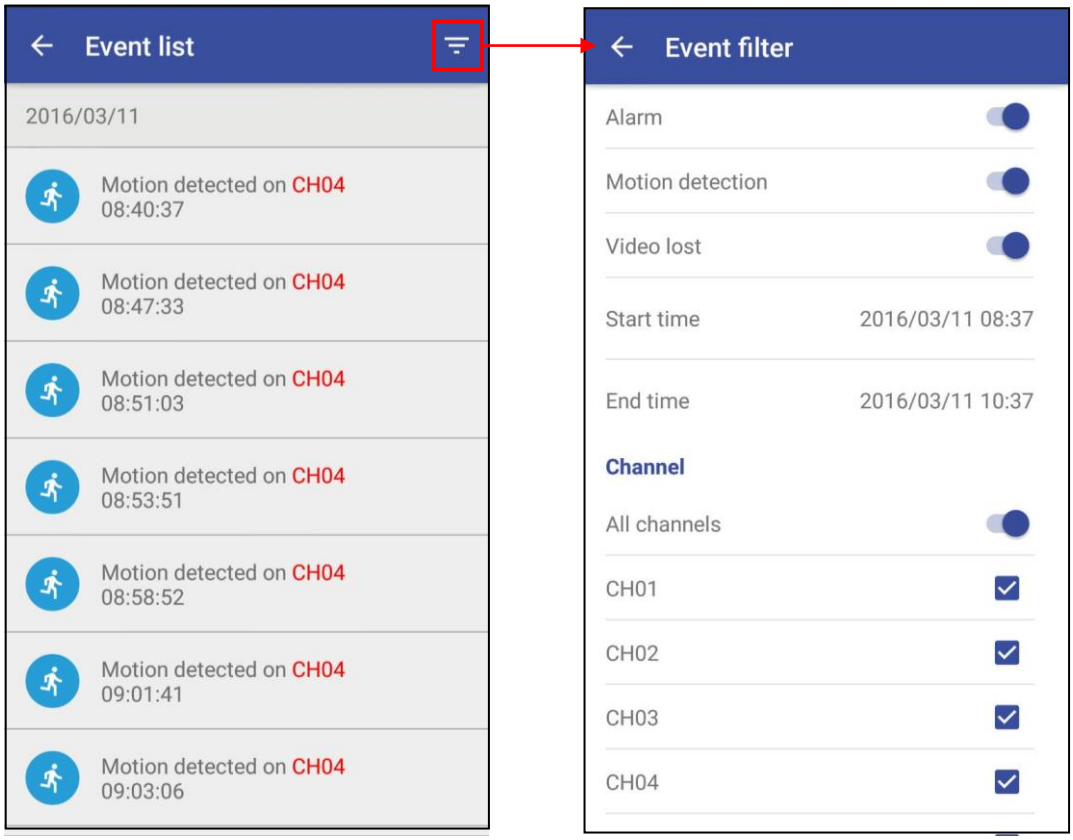
10.1.3.12 Reorder/Reset order

This function allows you to change the selected camera to another channel. First, select a camera, the selected camera will be highlighted with a blue frame. Tap and select “Reorder”, a list of all the channels will pop up. Select the channel to be switched. To set the order to default display, simply tap and select “Reset order”.

10.1.4 Playback mode

10.1.4.1 Search by Event

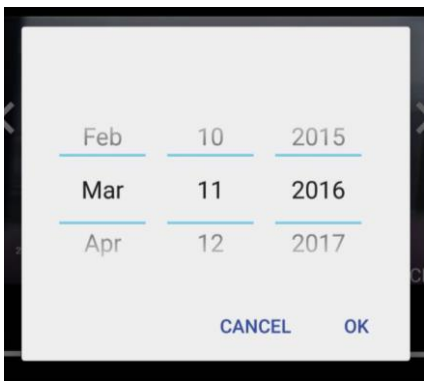
Tap to start searching by event. All the events of the selected channel will be shown on the list. Select an event to start the playback.

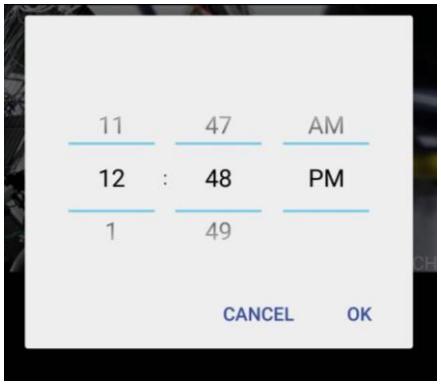


Tap the icon on upper right side of the event list to enter “Event filter” menu. In “Event filter” menu, users are able to search events with a specific filter, ex. Event type, start time/end time and channel number.

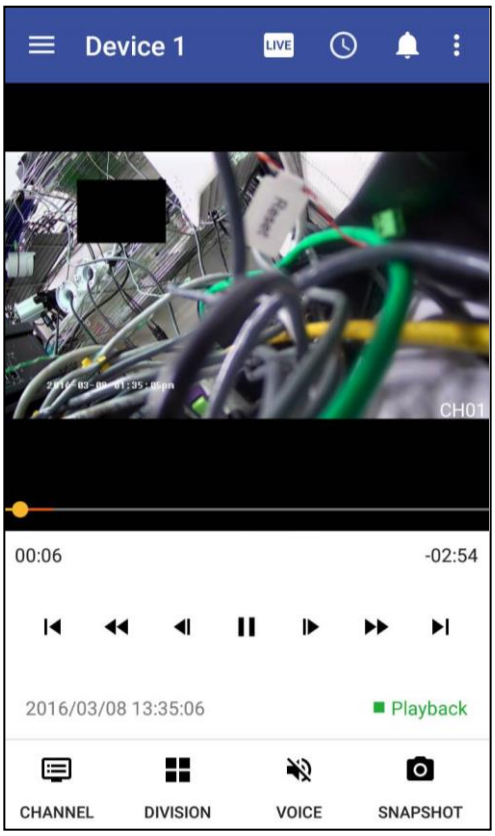
10.1.4.2 Search by Date/Time

Tap on to start searching by date/time. Slide upward or downward on the date and time to select the date/time to playback.





Tap “OK” and the system will automatically start the playback.



The progress bar shows the current playback status and timeline. Drag the time indicator on the progress bar to move to the selected timeline to playback.

On the time bar, it also indicates the initial and end time of the current playback section.

Click to playback video

Click to pause video

Click to switch to fast forward playback, keep tapping the icon to adjust playback Speed, in x1, x2, x4 x8 and x16.

Pause the video and click the button to step forward playback.

Click to fast forward to the next section.

Click to switch to fast reverse playback, keep tapping the icon to adjust playback to adjust playback Speed in x1, x2, x4 x8 and x16.

Pause the video and click the button to step reverse playback.

Click to fast backward to the previous section.

☐ Tap CHANNEL to change the playback channel.

☐ Tap DIVISION to switch from single view and quad view during playback.

☐ Tap VOICE to enable/disable audio display during playback.

☐ Tap SNAPSHOT to store the current image as a still image and save in the device folder. (This function only applies to single channel display).

☐ In playback mode, user can change the selected camera to another channel. First, select a camera, the selected camera will be highlighted with a blue frame. Tap and select “Reorder”, a list of all the channels will pop up. Select the channel to be switched. To set the order to default display, simply tap and select “Reset order”.

☐ Tap LIVE on the top of the screen to return to **Live** mode.

10.2 iOS System

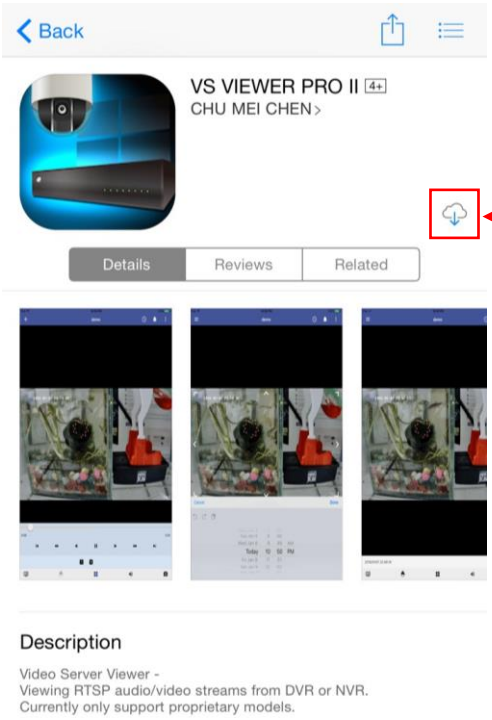
System requirement

To be able to install and run **VS Viewer Pro II** App, please make sure user's iOS device is running iOS 9 or later version, and the device is with wireless or internet network supported.

10.2.1 Download VS Viewer Pro II Apple App

Step 1. Select "App Store"

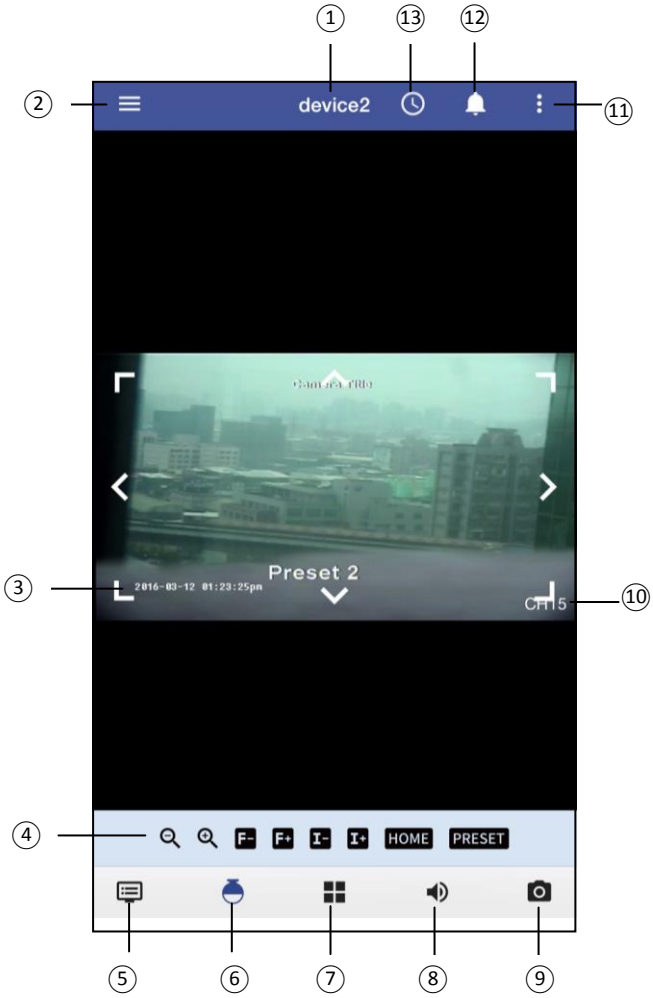
Step 2. Search for **VS Viewer Pro II** App, tap on "Install APP", the system will pop-up the request for user to enter login password to start downloading. The downloading should then begin. The **VS Viewer Pro II** icon will show on the device after the download is completed.



Tap here to start downloading

Step 3. Run “VS Viewer Pro II”

10.2.2 Main menu



Item	Description
①	Device name
②	Manage devices/Add devices/Version
③	Current date and time
④	PTZ Control panel
⑤	Channel setting
⑥	PTZ Control setting
⑦	Division setting
⑧	Voice setting
⑨	Snapshot setting
⑩	Channel number
⑪	Reorder/Reset order
⑫	Search by event
⑬	Search by date/time

10.2.3 Live view

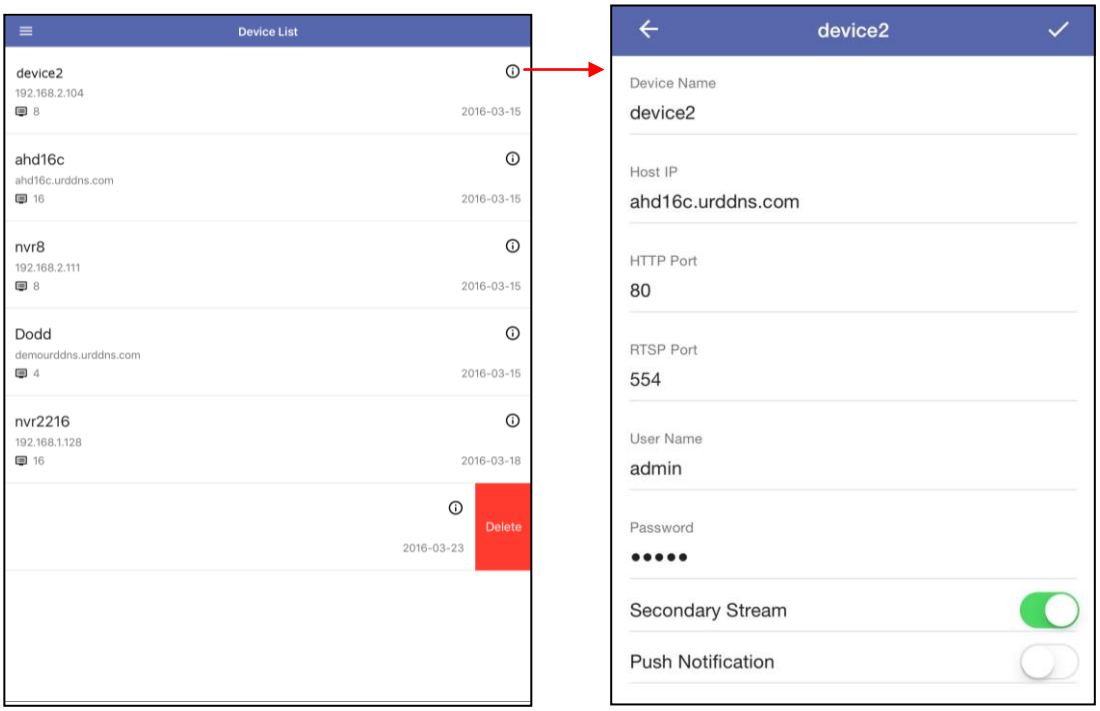
10.2.3.1 Device name

Device name is shown on the top of the screen.

10.2.3.2 Manage/add the device

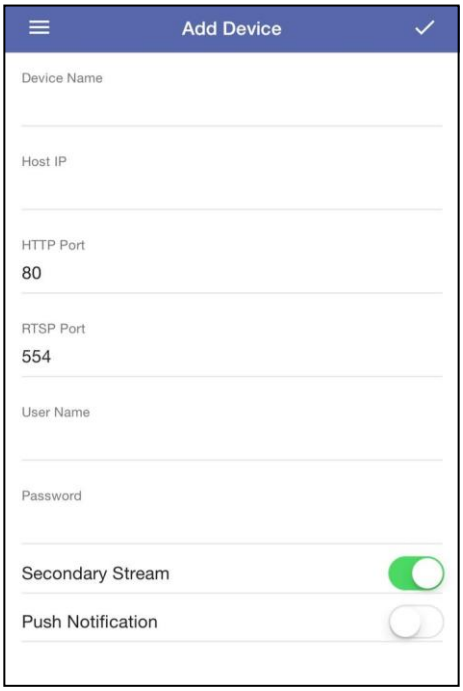
Tap to manage the devices, add a device, check the version number of APP or select a device.

☐ Tap “manage devices” and a list of all devices will be displayed, as well as the information of each individual device. Tap on a device to view or change other information about the device.



- ☐ To delete a device, select the device to be deleted from the “Device List”. Slide on the device from right to left and tap on the “Delete” box.

- ☐ Tap “Add device” to add a new device. Enter the device name, device IP, HTTP port, RTSP port, User name, password, Secondary stream and Push notification. Tap the check icon to activate the settings.



- ☐ Tap “version” to check the version number of VS Viewer Pro II.

- ☐ Tap a device from the device list to directly enter the live view of the selected device.

10.2.3.3 PTZ control panel

The PTZ control will apply the PTZ command to the current focus camera channel if it’s connected to a PTZ device which includes RS485 PTZ device or Network PTZ device.

The functions are:

8 way pan/tilt control: To pan/tilt the PTZ device to up/down/left/right/up right /up left /down right / down left.

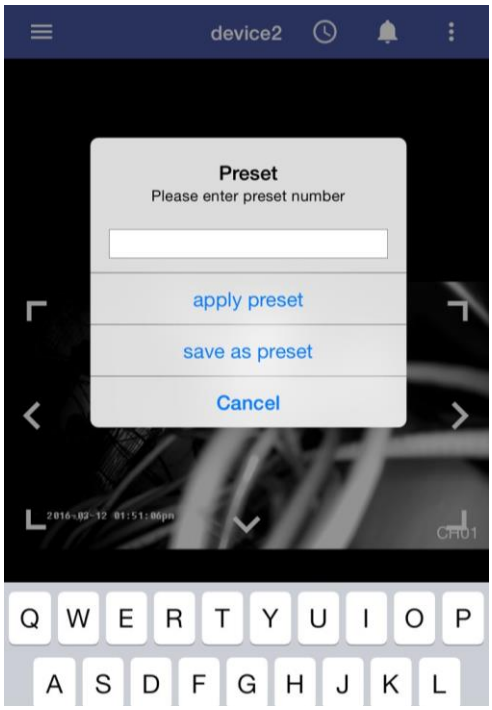
: Tap to Zoom in or Zoom out

F- F+: Tap to adjust focus to near or far

I- I+: Tap to adjust Iris to open or close

HOME: Tap to go to Home position.

PRESET: Tap to bring up the preset menu for operations.



apply preset: Go to the preset position.

save as preset: Save the current PTZ position as its internal preset position.

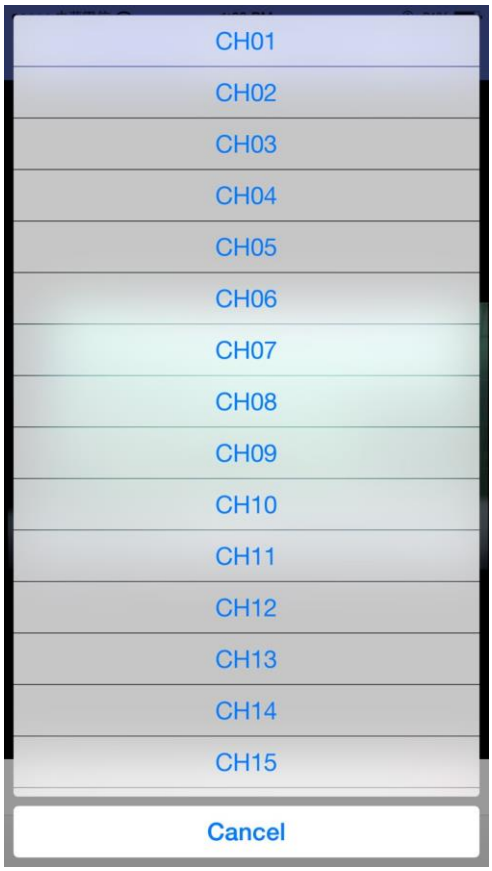
Cancel: Tap to quit without saving.

10.2.3.4 Current date and time

It displays current date and time.

10.2.3.5 Channel setting

Tap the icon to select the channel to be displayed.



10.2.3.6 PTZ Control setting

Tap the icon in full screen to enable PTZ control. It brings up the PTZ control panel, please refer to section 10.2.3.3 for details about how to operate PTZ control.

10.2.3.7 Division setting

Tap the icon to switch the display mode between single view display, quad display, 9- display and 16-display screen (the division types provided may be different depending on the model). To change the channel to be displayed, tap the icon and a selection of the display will be available.

10.2.3.8 Voice

Tap on Voice icon to enable/disable audio display

10.2.3.9 Snapshot

Tap on Snapshot icon to store the current image as a still image and save in the device folder.

10.2.3.10 Current Status

It displays current status (Live or Playback mode)

10.2.3.11 Channel number

It displays the channel number that is currently in live mode.

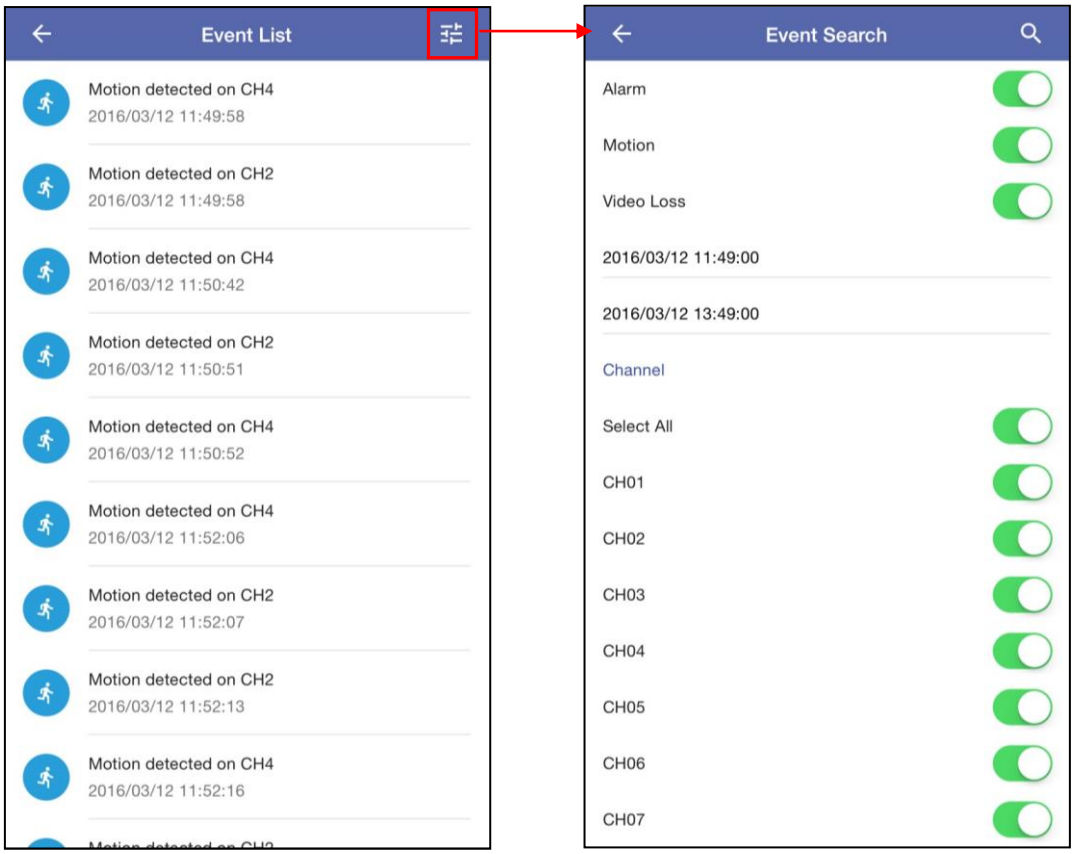
10.2.3.12 Reorder/Reset order

This function allows you to change the selected camera to another channel. First, select a camera, the selected camera will be highlighted with a blue frame. Tap and select "Reorder", a list of all the channels will pop up. Select the channel to be switched. To set the order to default display, simply tap and select "Reset order".

10.2.4 Playback mode

10.2.4.1 Search by Event

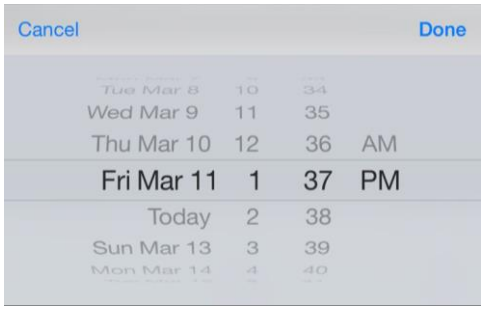
Tap to start searching by event. All the events of the selected channel will be shown on the list. Select an event to start the playback.



Tap the icon on upper right side of the event list to enter “Event Search” menu. In “Event Search” menu, users are able to search events with a specific filter, ex. Event type, start time/end time and channel number.

10.2.4.2 Search by Date/Time

Tap on to start searching by date/time. Slide upward or downward on the date and time to select the date/time to playback.



Tap Done and the system will automatically start the playback.

device2
Preset 2
2016-03-11 01:37:05pm
CH15
0:05
-2:55
2016/03/11 13:37:05
Replay

The progress bar shows the current playback status and timeline. Drag the time indicator on the progress bar to move to the selected timeline to playback.
On the time bar, it also indicates the initial and end time of the current playback section.

- Click to playback video
- Click to pause video
- Click to switch to fast forward playback, keep tapping the icon to adjust playback Speed, in x1, x2, x4 x8 and x16.
- Pause the video and click the button to step forward playback.
- Click to fast forward to the next section.
- Click to switch to fast reverse playback, keep tapping the icon to adjust playback to adjust playback Speed in x1, x2, x4 x8 and x16.
- Pause the video and click the button to step reverse playback.
- Click to fast backward to the previous section.

- ☐ Tap to change the playback channel.
- ☐ Tap to switch from single view and quad view during playback.
- ☐ Tap to enable/disable audio display during playback.
- ☐ Tap to store the current image as a still image and save in the device folder. (This function only applies to single channel display).

- ☐ In playback mode, user can change the selected camera to another channel. First, select a camera, the selected camera will be highlighted with a blue frame. Tap and select “Reorder”, a list of all the channels will pop up. Select the channel to be switched. To set the order to default display, simply tap and select “Reset order”.

11. CMS Pro (Central Management Software)

11.1 Begin Installation

Simply double click user's CD-ROM drive icon **Setup.exe**

to launch the installer. Once the CMS Pro installer starts, it should begin to check the compatibility with the operating system user are running this installation on.

System Requirement

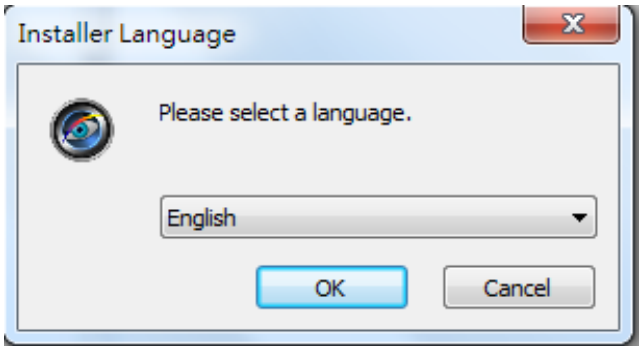
The following are minimum system requirements for CMS.

- Operating System: Microsoft Windows XP, Windows Vista, Windows 7
- CPU : Minimum Intel i5 or higher
- RAM: Minimum 4GB of RAM
- Independent Graphic Card: Minimum 512MB

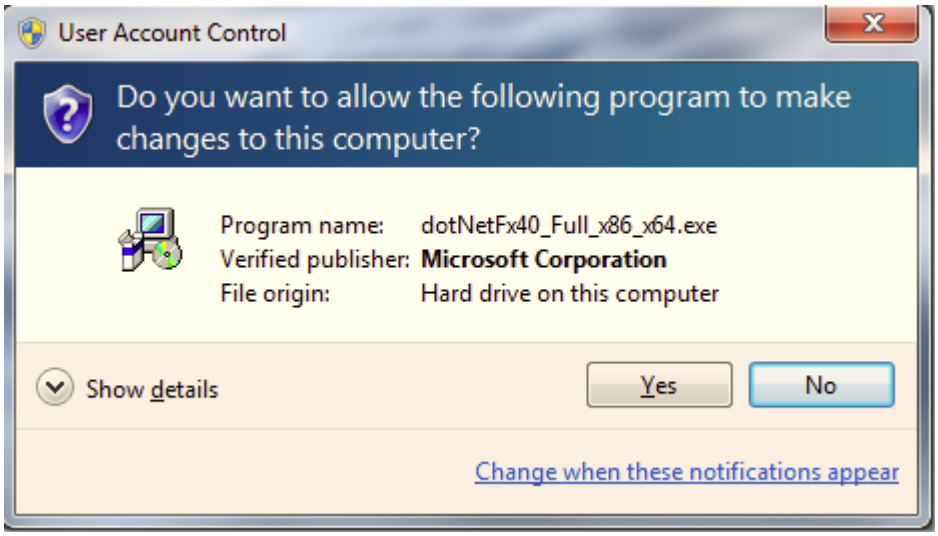
Prerequisites

- NVR must have access to the Internet or local area network (LAN). Please refer to *8.2.1.1 WAN setting.*

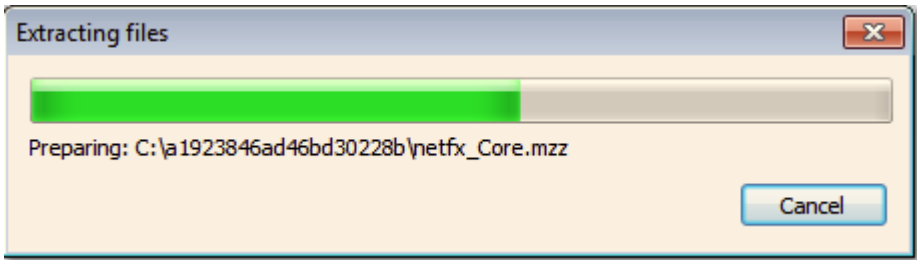
The CMS Pro installer is in multi-language. User can choose the installer language.



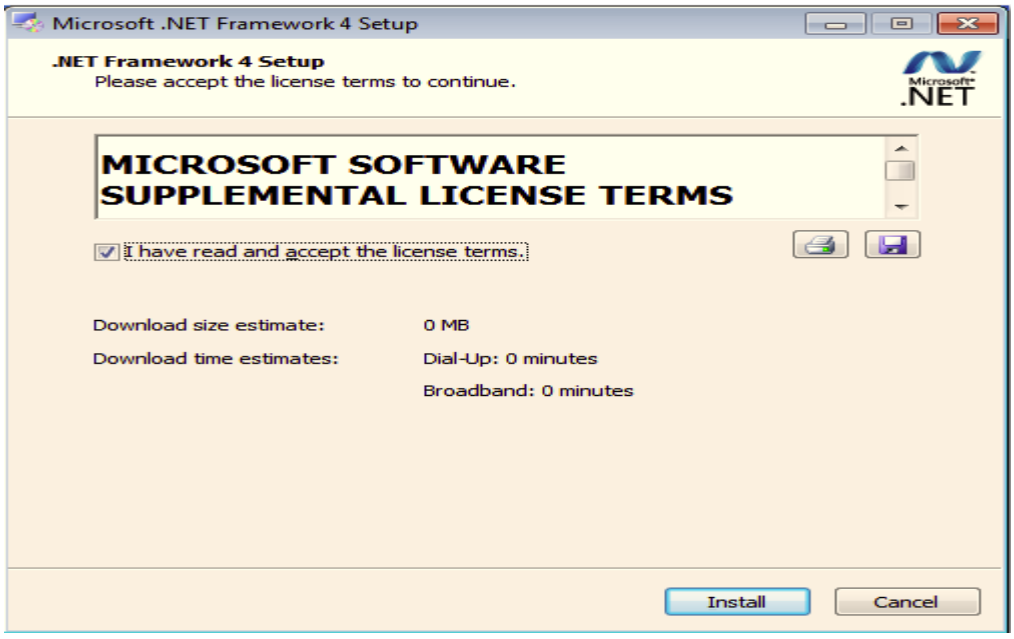
If user's software is without .NET Framework 4.0, the CMS Pro installer will require user to install .**NET Framework 4.0** to ensure CMS operation.



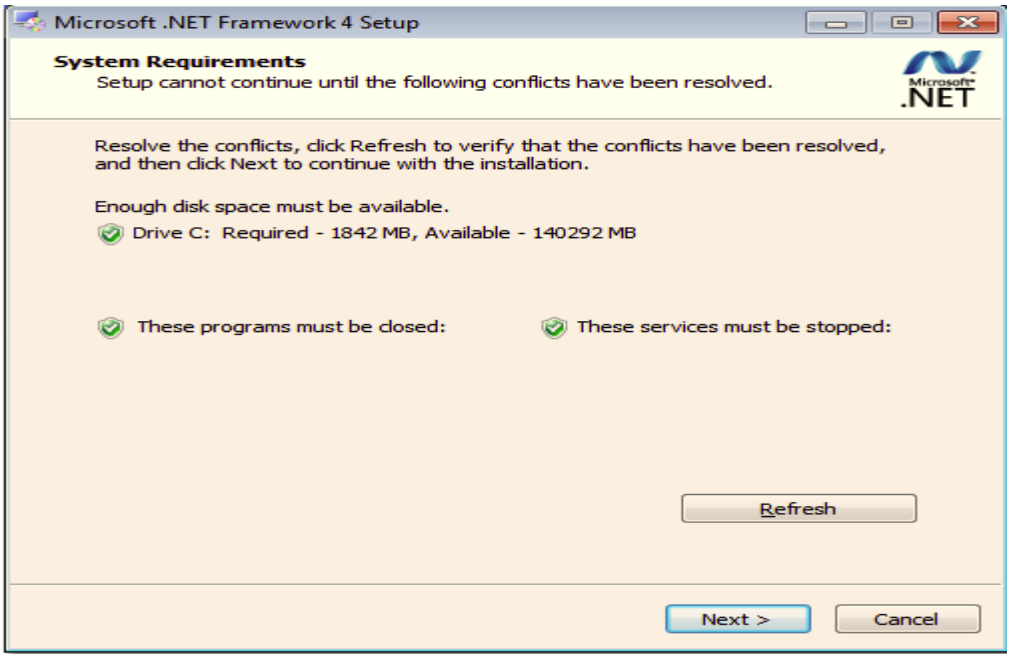
After click **yes**, there will pop up the installation progress bar to indicate the progress.

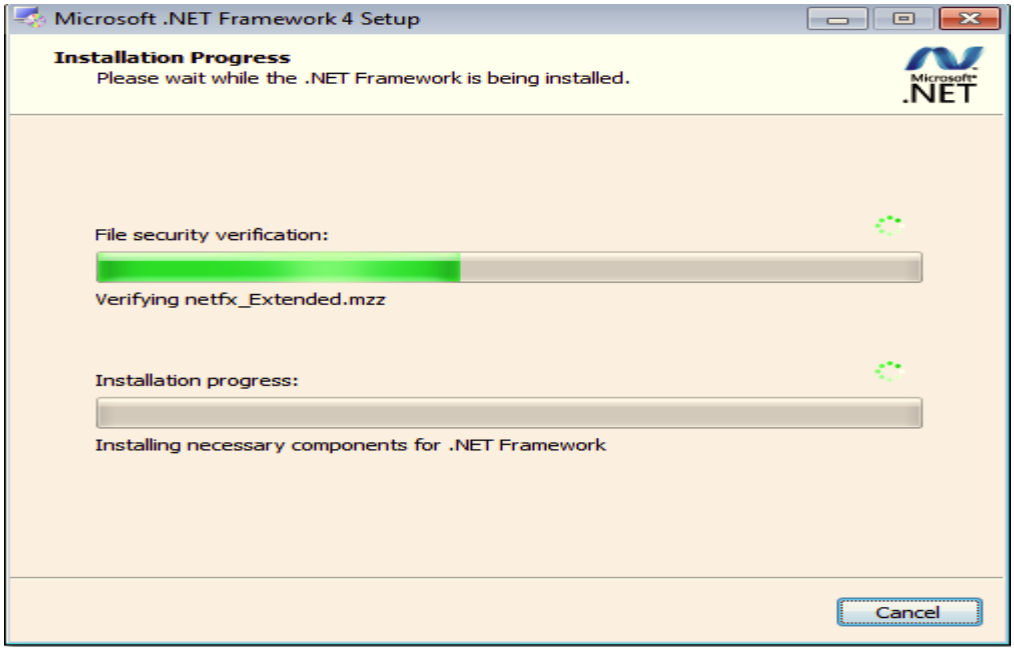


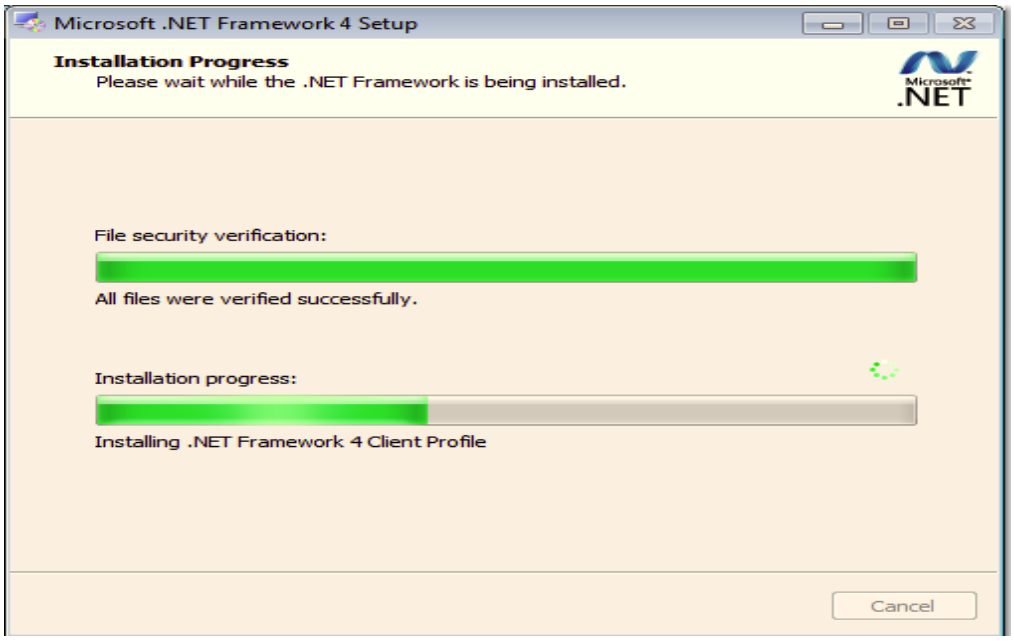
The .NET Framework 4.0 installer will ask user to review the license terms. After user accept the license terms, please click **Install** to proceed further.



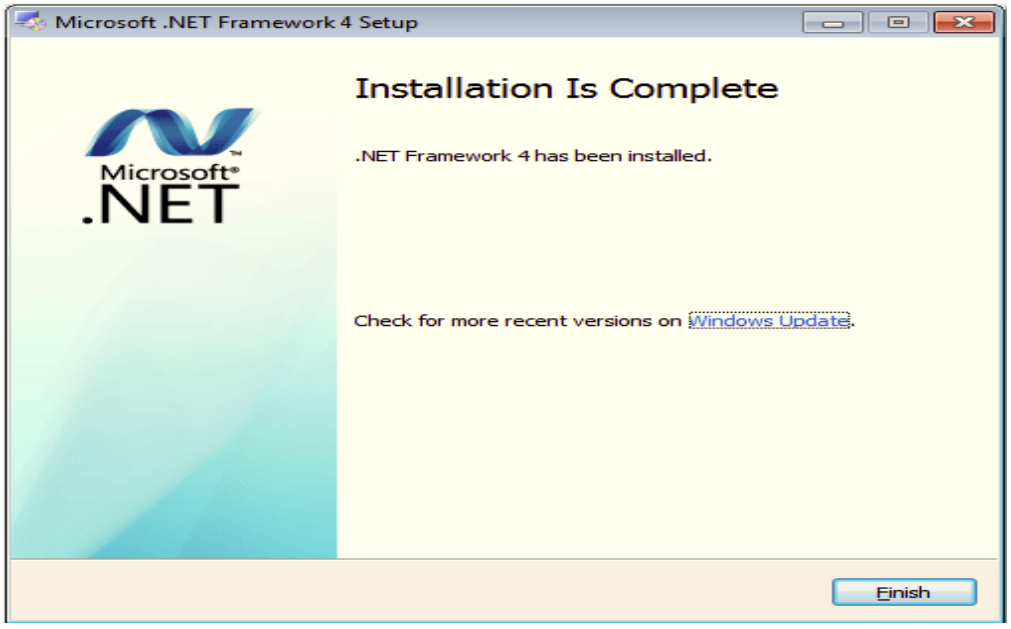
Please click **Next** to proceed further.


Microsoft .NET Framework 4 Setup
System Requirements
Setup cannot continue until the following conflicts have been resolved.
Resolve the conflicts, click Refresh to verify that the conflicts have been resolved, and then click Next to continue with the installation.
Enough disk space must be available.
Drive C: Required - 1842 MB, Available - 140292 MB
These programs must be closed:
These services must be stopped:
Refresh
Next >
Cancel

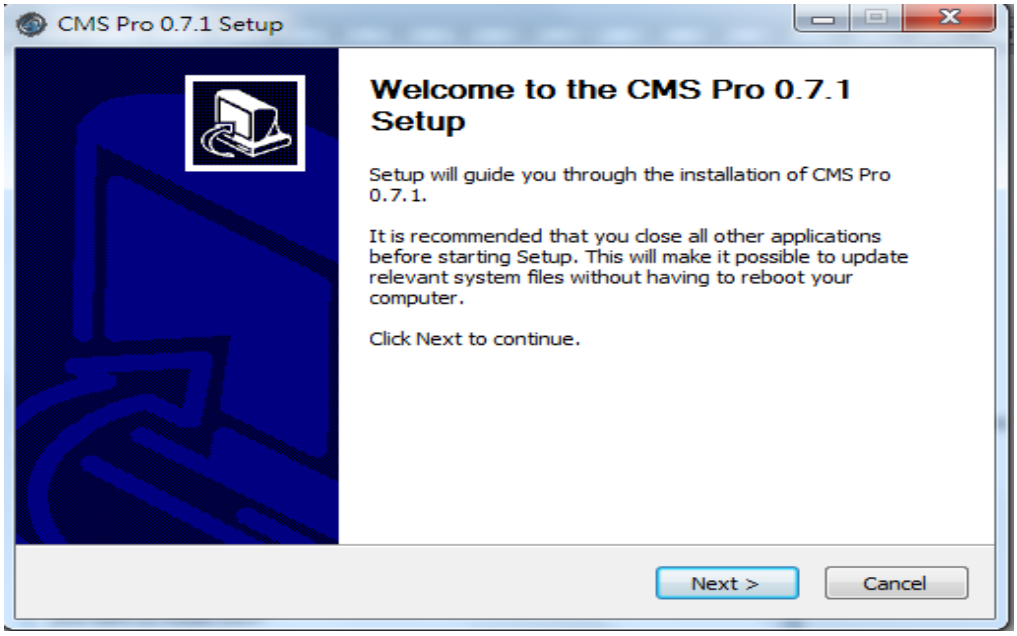

Microsoft .NET Framework 4 Setup
Installation Progress
Please wait while the .NET Framework is being installed.
File security verification:
Verifying netfx_Extended.mzz
Installation progress:
Installing necessary components for .NET Framework
Cancel



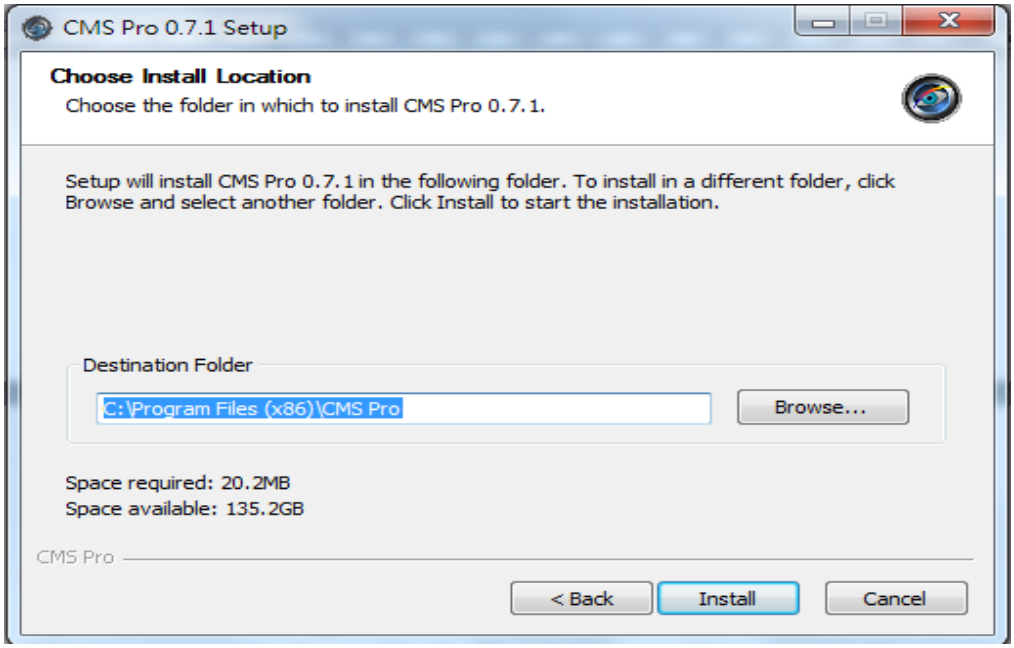
Once .NET Framework 4.0 software install successfully, it will pop up the below complete message. Then user can begin to install CMS Pro software.



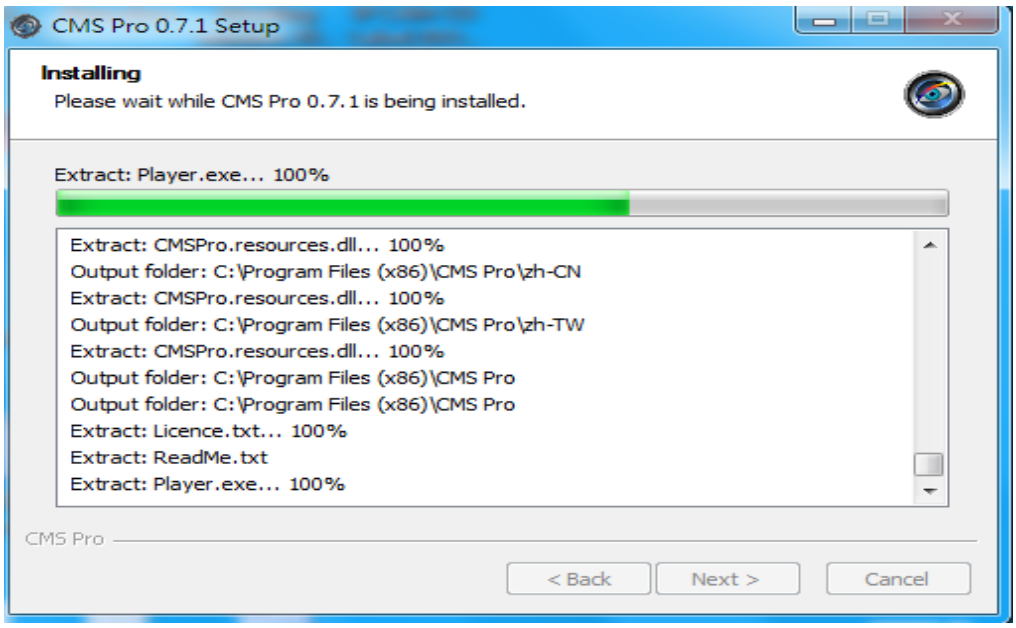
Once the .NET Framework 4.0 install successfully, user can begin the installation by clicking **Next**.



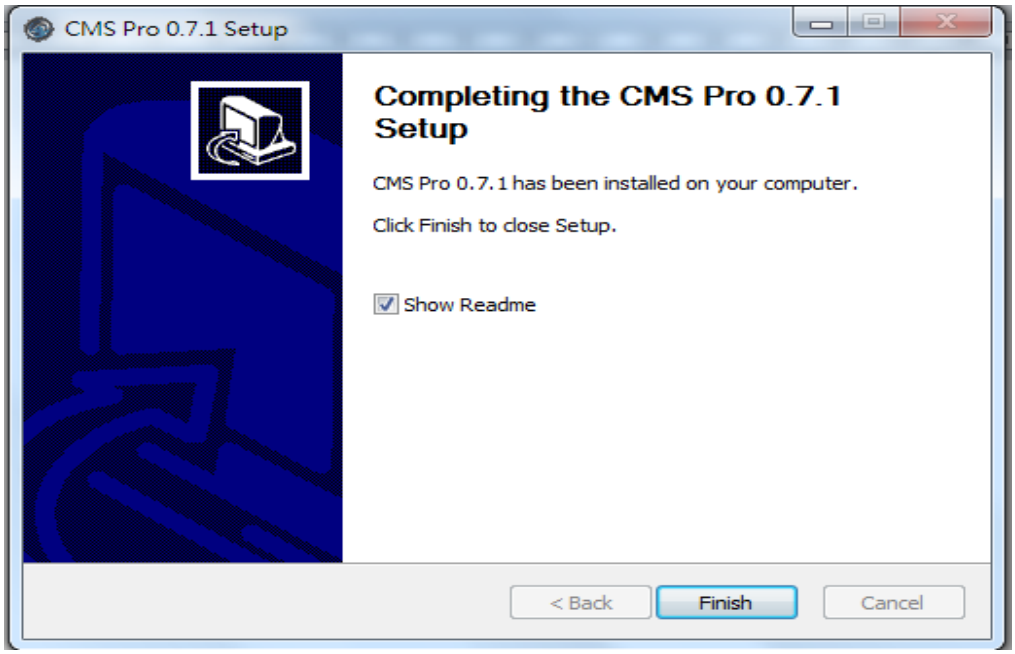
The CMS Pro installer will install the program in a default directory. User can either accept the default or choose the directory user would like to save the installer. And click **Install** to proceed with the installation.



The CMS Pro installer will show the installation process.



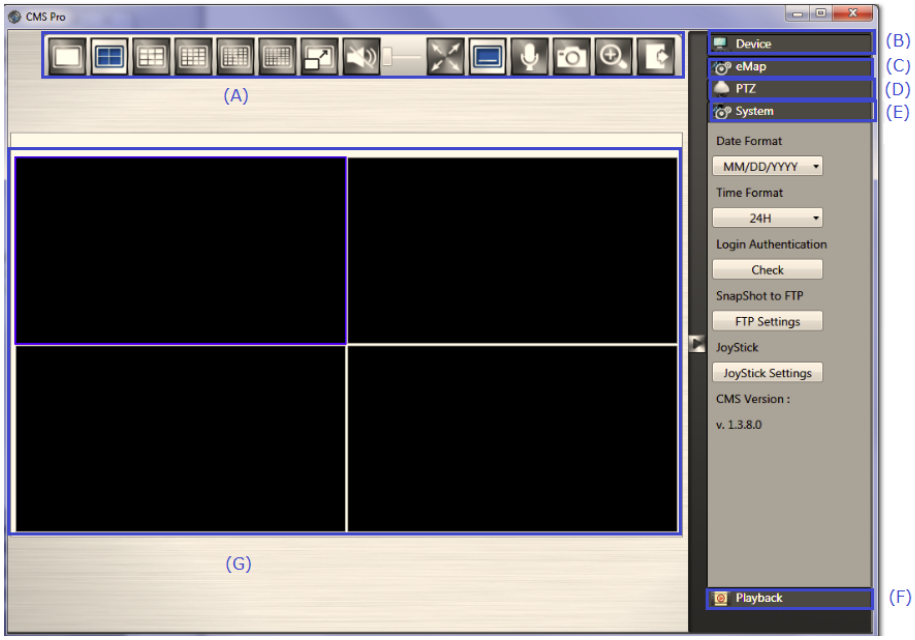
Once the installation is complete, click **Finish** to exit the CMS Pro installer.



11.2 Start CMS Pro from the PC

The program automatically creates a shortcut icon on user's PC after CMS Pro install successfully. Simply double click the icon to launch the program.

11.3 CMS Pro UI Overview



(A) Menu Bar: This is where user can access all functions of the software.

(B) Device List: This is where user can add or delete or edit device group.

(C) eMap: This is where user can create a map showing the locations of the cameras for NVR. This can be customerized to show cameras from different NVRs on the same eMap.

(D) PTZ Control Panel: This is where user can pan, tilt, zoom the selected PTZ cameras.

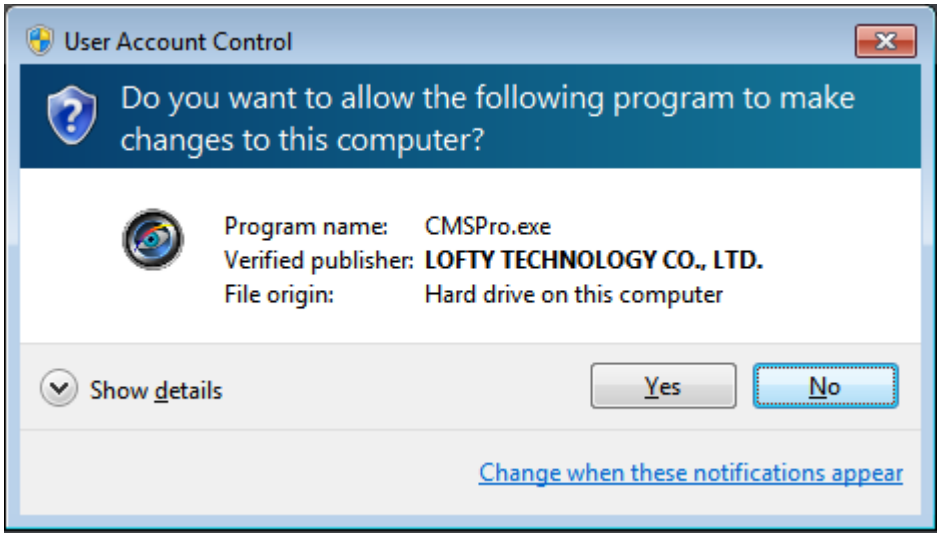
(E) System Information: It provides the information of CMS version. User can change the date format, time format and login authentication per user's requirements.

(F) Playback: Once user presses the playback, it will launch playback control UI to have the further operations.

(G) Video: This is where the video are displayed.

11.4 Login

After installing the below digital signature, the login page will be displayed for users to enter the User name and Password. Click “OK” to enter CMS Pro Software.



The default user name/password for CMS Pro is:

Note
By default, the administrator’s user name is **admin** and password is **admin**.

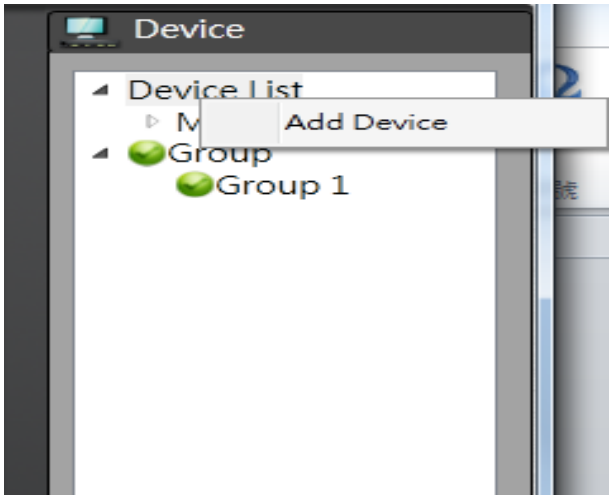
The program provides multi-language support. To change the display language, please select the desired language from the CMS language drop-down menu.

11.5 Add NVRs to CMS Pro

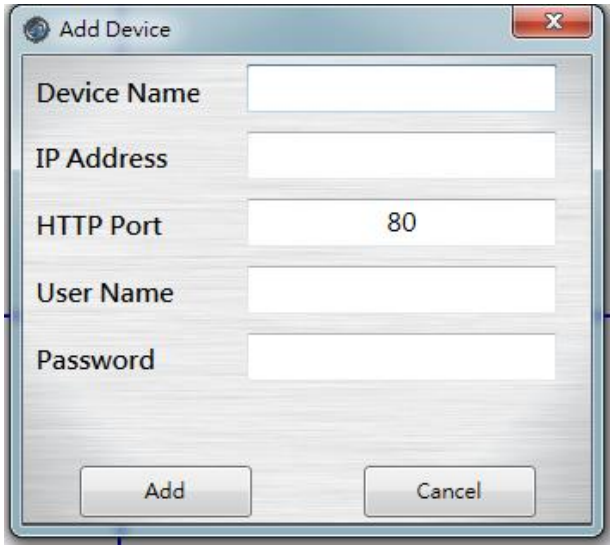
The main purpose of the CMS Pro software is to manage multiple devices. User would need to tell the program which device user needs to manage. User does that by adding one or more devices through the device list.

11.5.1 Add Device

Click the mouse right button on the **Device List** and **Add Device** will pop up in the same page.



- It is required to input the information shown below in order to add the device to the program successfully. Please input device name, IP address, User Name and Password. The http port default value is 80 and user is able to modify the http port based on NVR WAN setting. Please refer to *8.2.1.1 WAN setting.*

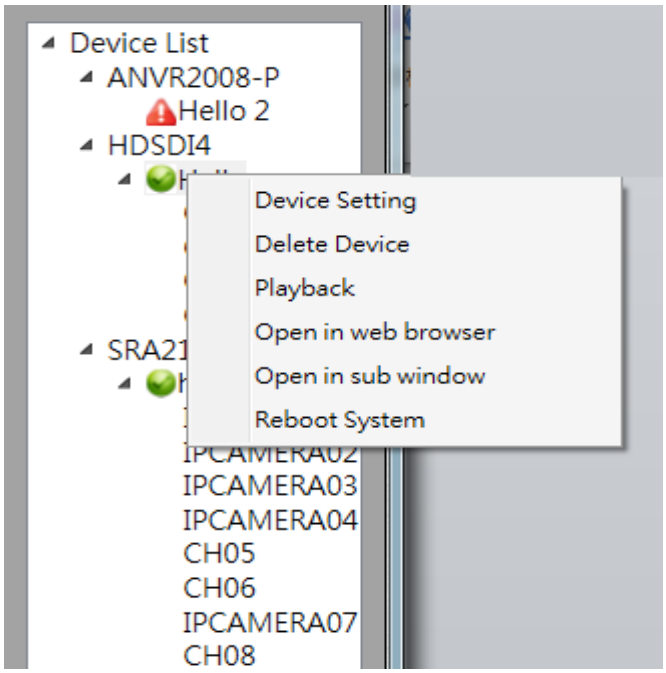


Please note user need to use the CMS Pro administrator's user name and password of the selected device.

Note
Without administrator privilege, user is unable to add the selected device to CMS Pro.

11.5.2 Remove or Edit or configure device setting

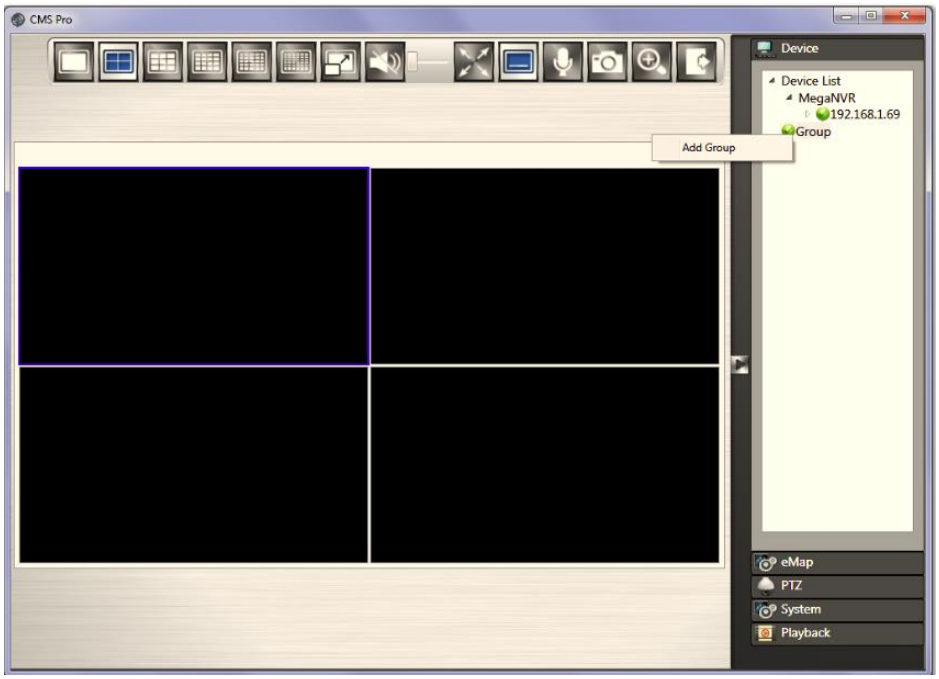
Simply click on the mouse right button on the selected device from the list and choose the corresponding buttons to edit or remove or configure device setting.



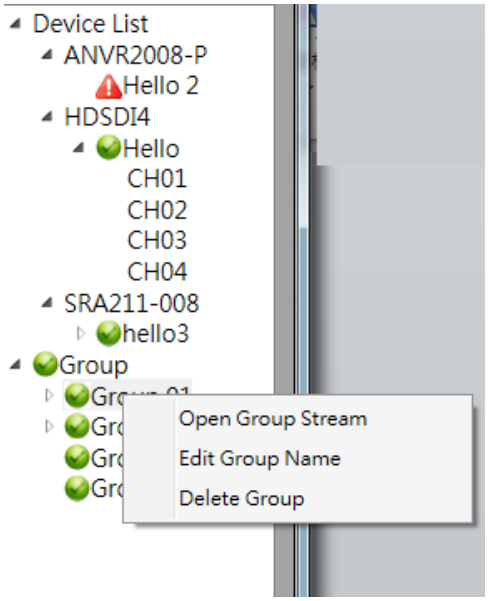
- Device Setting – Once the IP address, user name or password of the selected device has been changed, user can input the new information in the device setting.
- Delete Device – User can remove the device from the device list in the delete device.
- Playback- User can playback the device's video.
- Open in web browser-By click Open in web browser, user is able to access the device's web viewer to configure this device.
- Reboot system- User can click this button to reboot the specific device.

11.5.3 CMS Pro Group Video

User can create the group to contain different videos from different devices. Click the mouse right button on the **Group** and it will pop up **Add Group**.

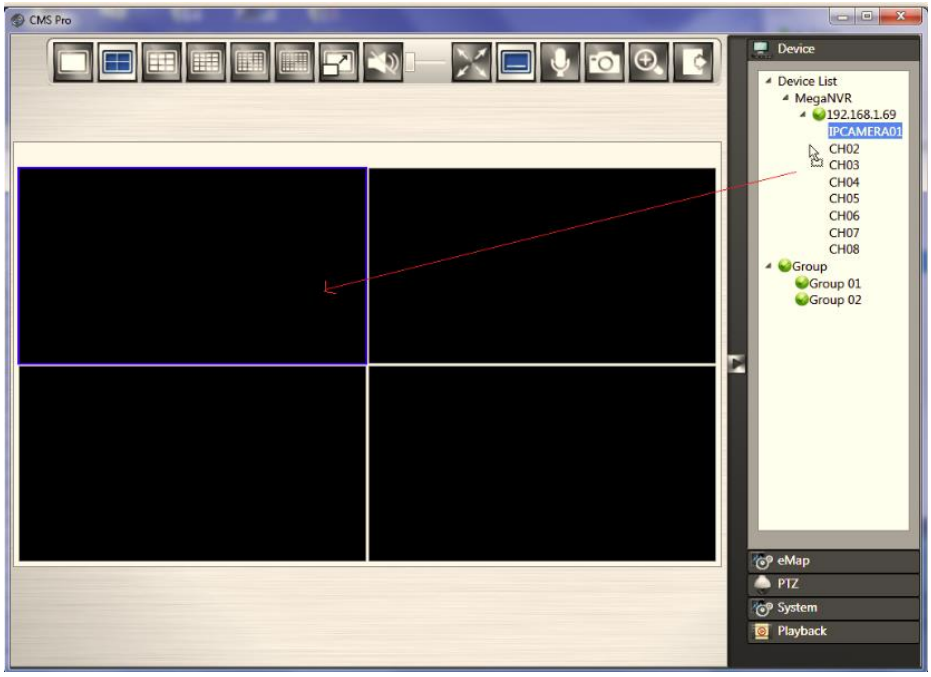


Click the mouse left button on **Add Group** and the default “Group 1” will be generated. The group number is increased by numerical order. Click the mouse right button on “Group 1” and user can configure **Open Group Stream**, **Edit Group Name** or **Delete Group**.



11.5.3.1 Edit Group Content

Then user can drag and drop either devices or channels from the device list to the desired video windows.

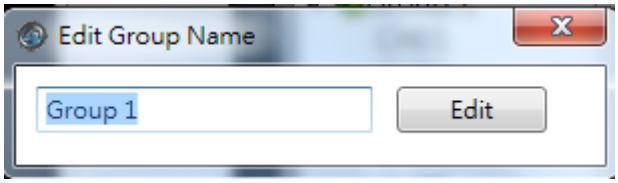


11.5.3.2 Open Group Stream

After finish the edit group content, click **Open Group Stream** on the desired group to play the video streaming.

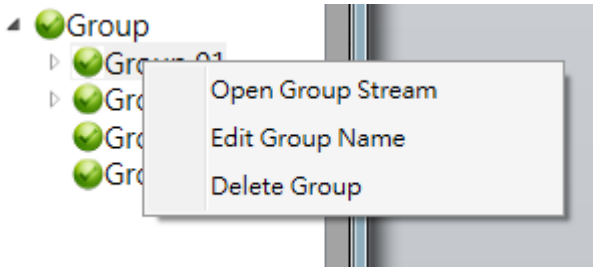
11.5.3.3 Edit Group Name

User can modify the group name.



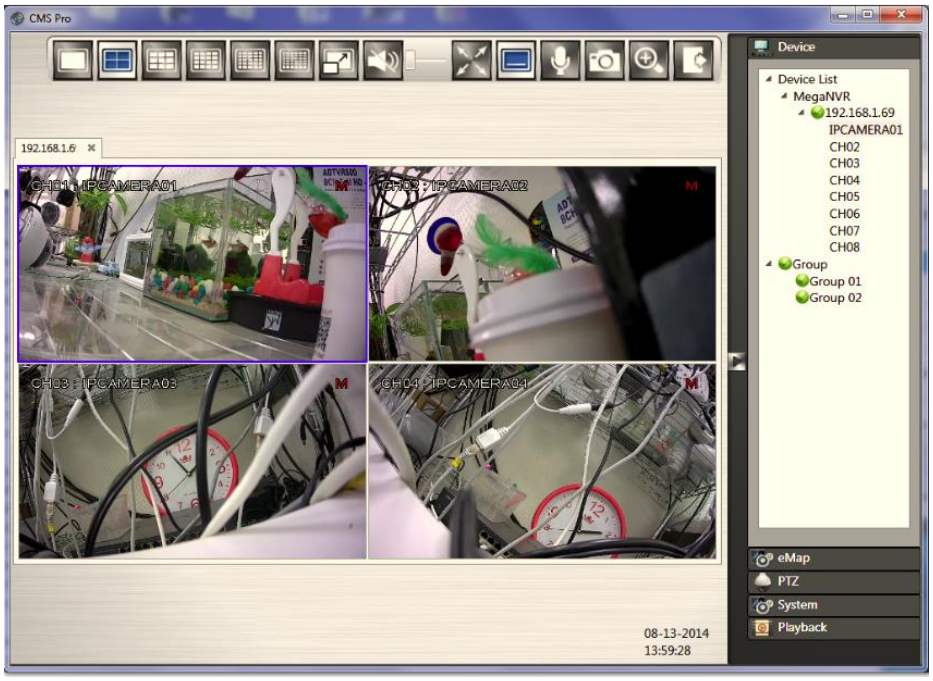
11.5.3.4 Delete Group

User can remove the group from the group list by clicking on the mouse right button on the selected group.



11.6 Live Video

This page basically provides user the ability to view, and manage the video streams of each channel.



The menu bar is available for each video window. The menu bar provides the following functions:

The basic operations are showing on the main screen, the functions are:

Full screen display mode

Quad display mode

9-up screen display mode

16-up screen display mode

25-up screen display mode

36-up screen display mode

Click to Logout from the current page

Click to turn on/off live audio

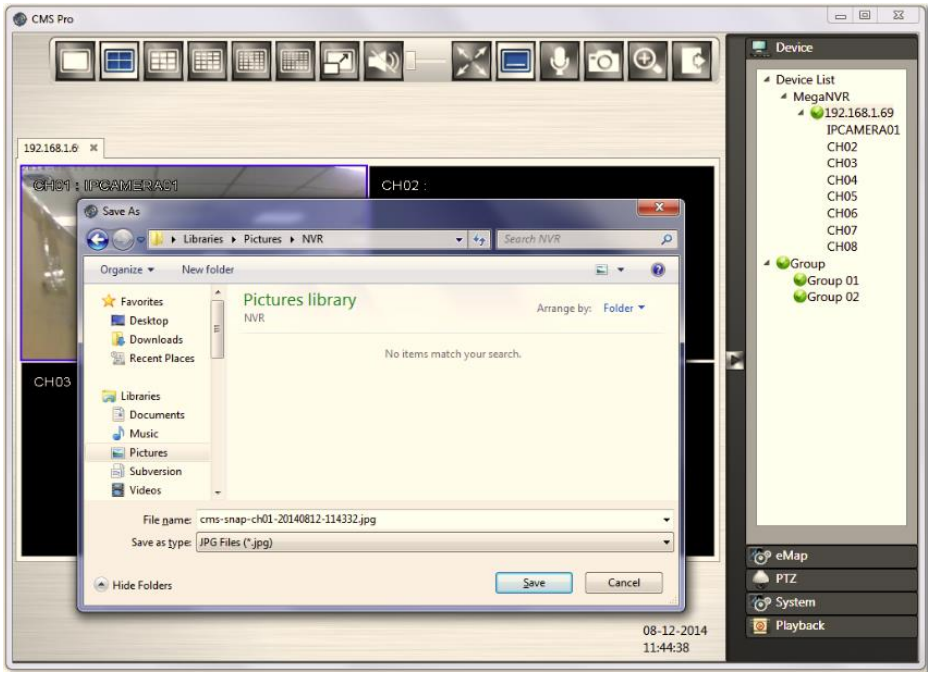
Show/Hide OSD

Talk to Server

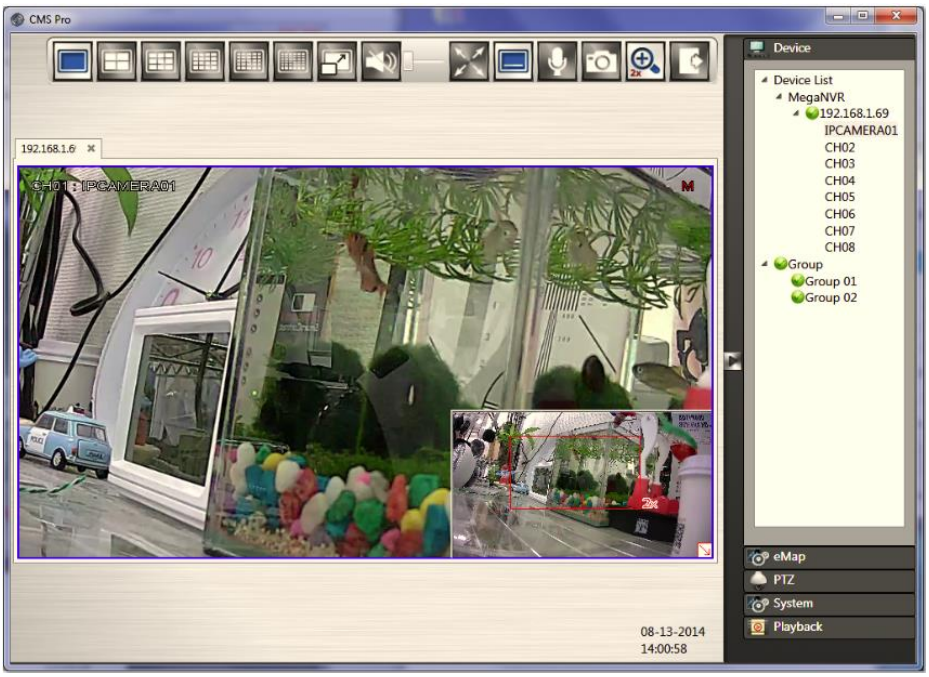
Click to take a snapshot of selected live video

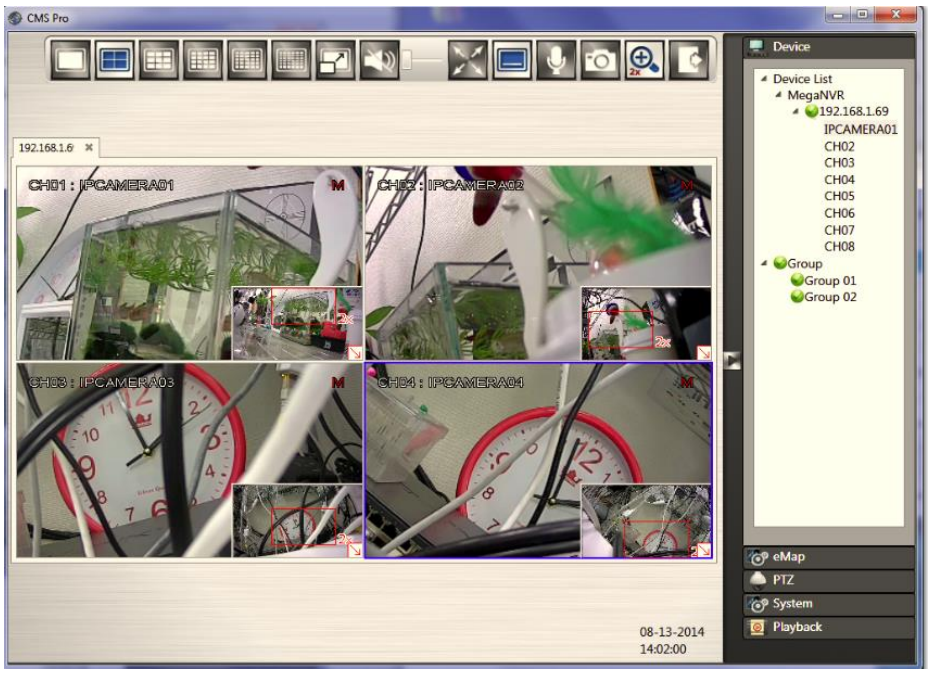
Click to digital zoom the selected live video

- Take a snapshot: The function allows user to take the snapshots of the live video and save them on user's local computer. Move the focus to the selected video and click **Snapshot** icon. User can save the file to a desired directory.



- Digital Zoom: The function allows user to enlarge the live video at 2x, 4x and 8x. Move the focus to the selected video. Then click **Digital Zoom** icon and the selected area which user would like to enlarge. This function also can work in 1-up , 4-up , 9-up and 16-up screen display mode.



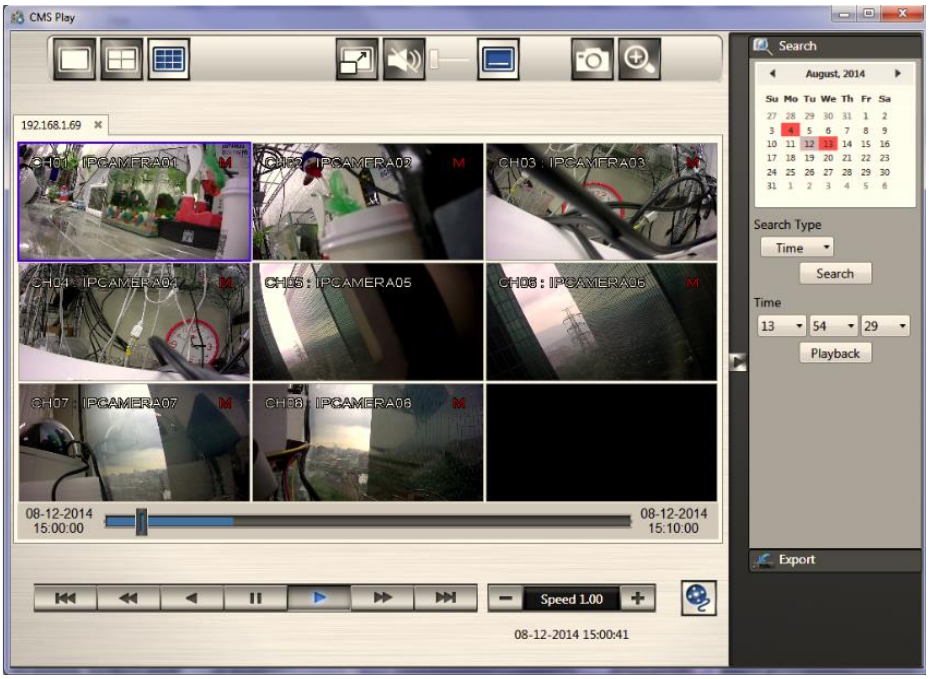


If user clicks the **Minimize** icon in the live mode, user will see the icon display on the tool bar of user's computer.

11.7 Playback Video

The program supports 1 device synchronous playback in full screen or multi-screen view.

To start looking for playback videos, click **Playback** button first.



The menu bar is available for each video window. The menu bar provides the following functions:

The basic operations are showing on the main screen, the functions are:

Full screen display mode

Quad display mode

9-up screen display mode

16-up screen display mode

25-up screen display mode

36-up screen display mode

Click to turn on/off recorded audio

Show/Hide OSD

Talk to Server

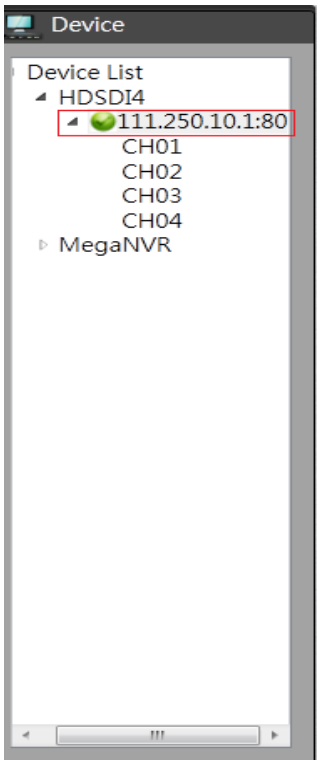
Click to take a snapshot of selected recorded video

Click to digital zoom the selected recorded video

If user click the “Minimize” icon in the playback mode, user will see the icon display on the tool bar of user’s computer.

11.7.1 Search for Playback Videos

Simply select a device from the drop-down device list and double click the selected device. It will pop up the calendar.



11.7.1.1 Calendar

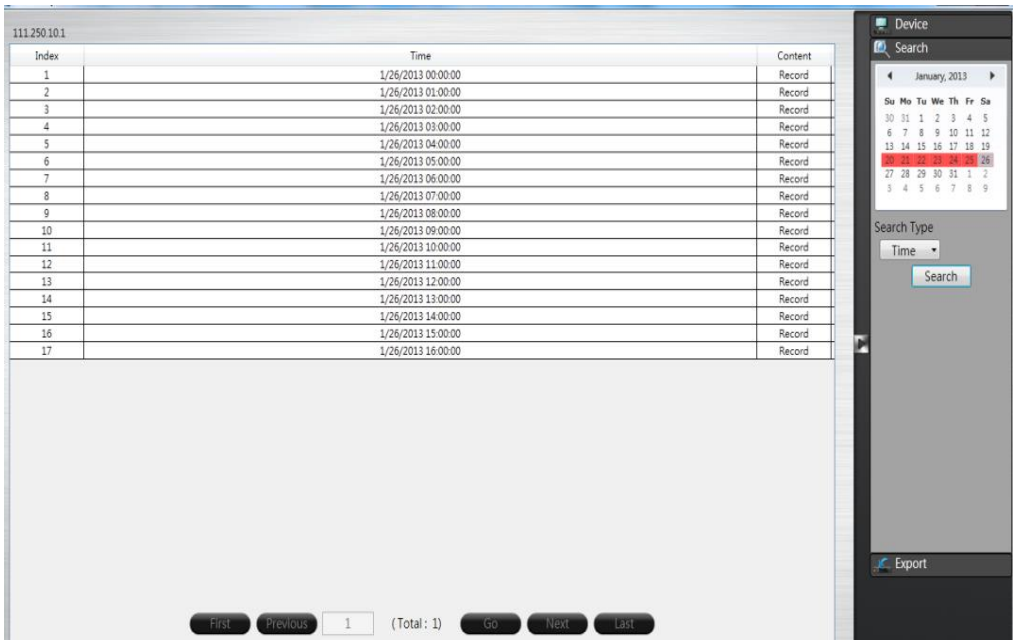
The calendar on the screen shows the recorded data contains in the hard drives. The date highlighted in red means there’s recorded data of the date in the hard drives. The gray highlighted date indicates the current search date. Click on the calendar to select the date user would like to search.

11.7.2 Search operation

The recorded file can be searched by “Time”, “Channel” and “Event”. Select the search type first, choose a date, and click “Search” button. The results will show in the list. Double click on the selected file then the video will start to play on the display window.

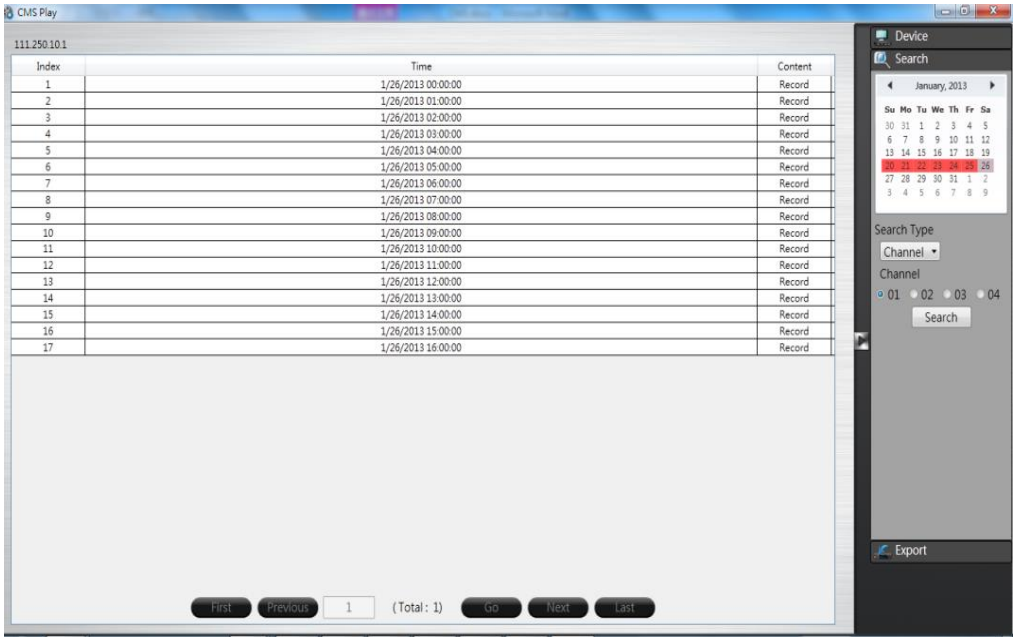
11.7.2.1 Search by Time

The recorded section list of the current selected day will be shown on the screen. Double click on the selected recorded file to start the playback.



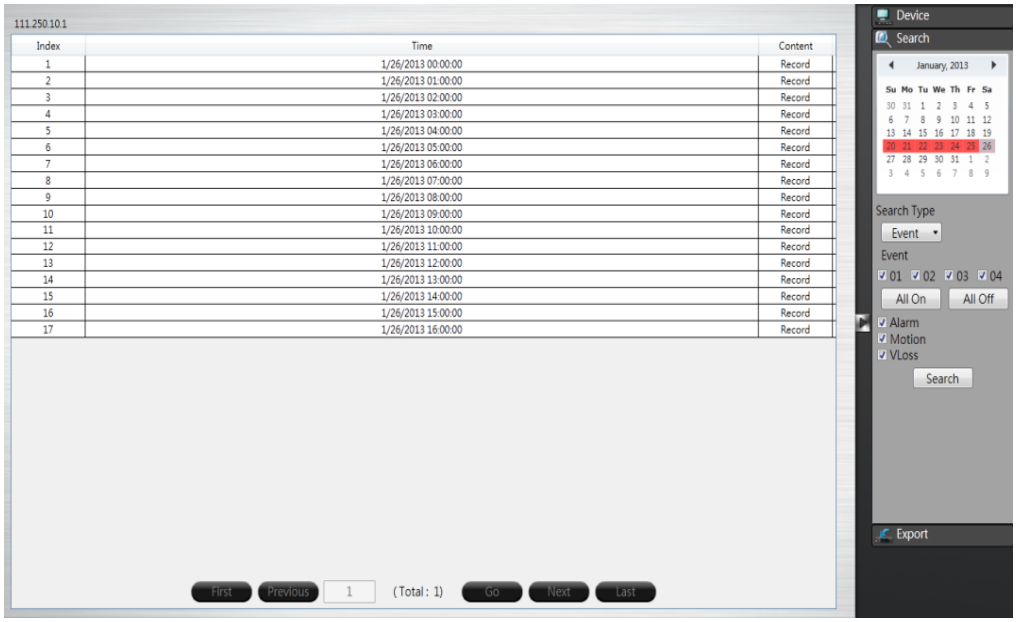
11.7.2.2 Search by Channel

Search by Channel allows user to search the event video by channel. Select the date from the calendar, and select the channel user would like to view. The event video list of the selected channel will be shown on the screen. Double click on the selected recorded file to start the playback.



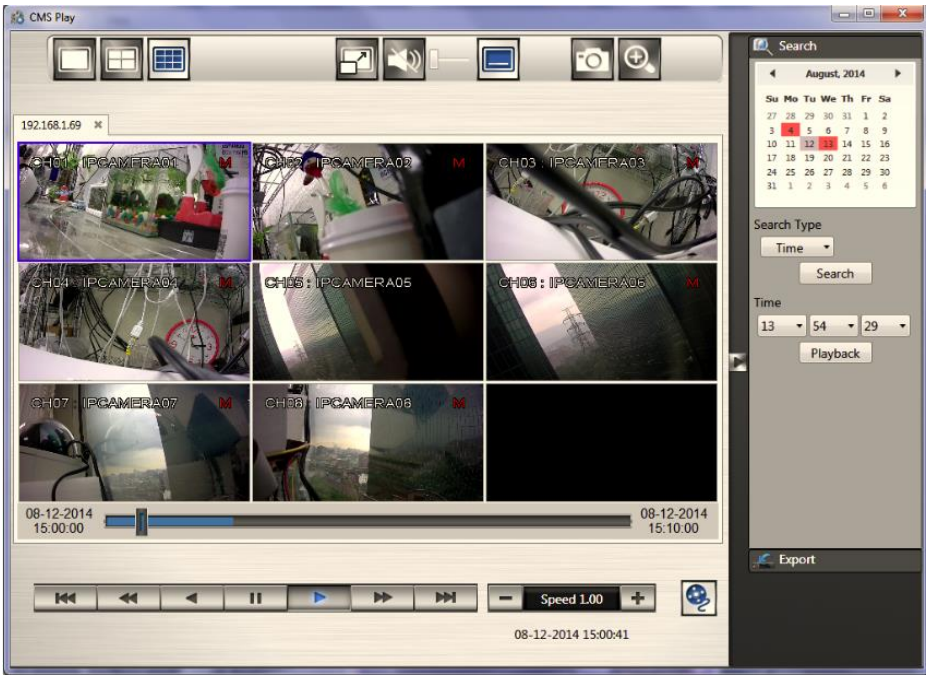
11.7.2.3 Search by Event

Search by event allows user to search the event video list by channel and by event type. Select the channel user would like to view (user can also click **All On** or **All off** to enable or disable all channels), then select the event type (Alarm, Motion and Video Loss), the event video list of the selected channel and event type will be shown on the screen. Double click on the selected recorded file to start the playback.



11.8 CMS Playback Operation

The basic playback operations are as below.



The progress bar shows the current playback status and timeline. Drag the time indicator on the progress bar to move to the selected timeline to playback.

On the time bar, it also indicates the initial and end time of the current playback section.

Click to playback video

Click to pause video

Click to switch to fast forward playback (2x), user can also control the playback speed by clicking and , in x0.25, x0.5, x1, x2, x4 and x8.

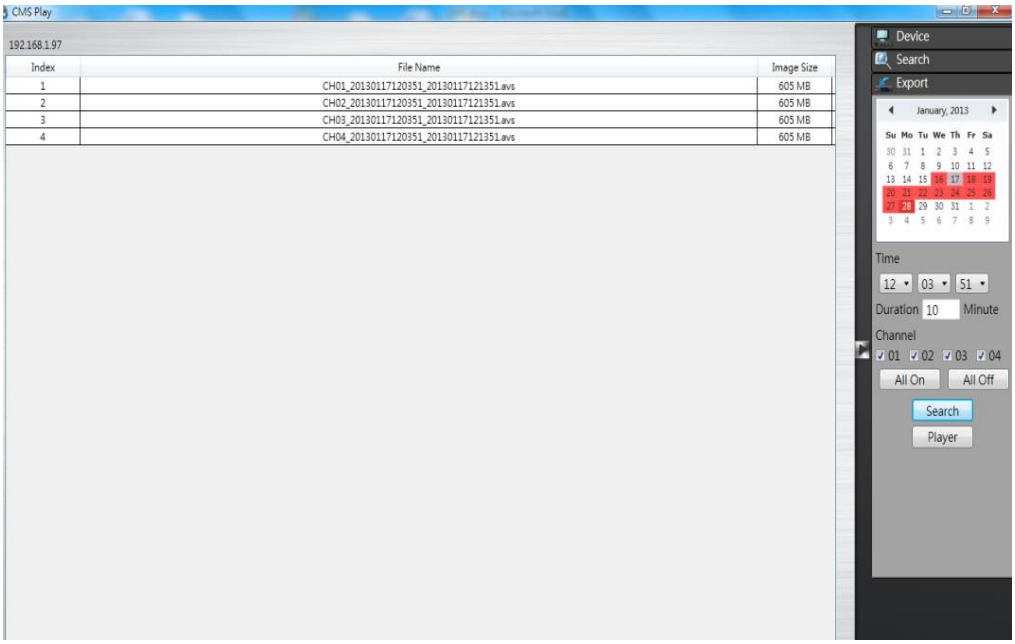
Click to fast forward to the next section

Click to fast backward to the previous section

11.9 CMS Export

Click on the “Export” button

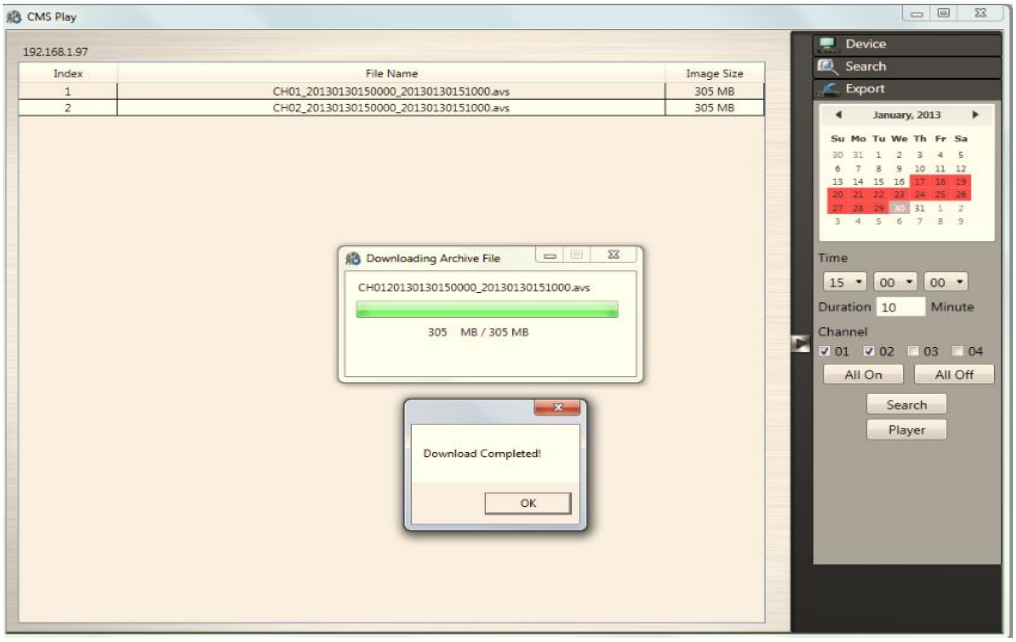
to bring up the export menu, this allows user to export the video file from the device



To export the video, select the date from the calendar, the starting time of the video and channels that user would like to export. (Click All On or All off to enable or disable all channels.) Input the duration time user would like to export, the maximum search duration is 60min. Click Search to start, the searched video files will be listed on screen.

The maximum video file size is 2000MB, the system will automatically create new file if the searched result is over 2000MB.

Double click on the selected item and the system will pop up message as below, select the location user would like to store then click Save to execute the downloading.

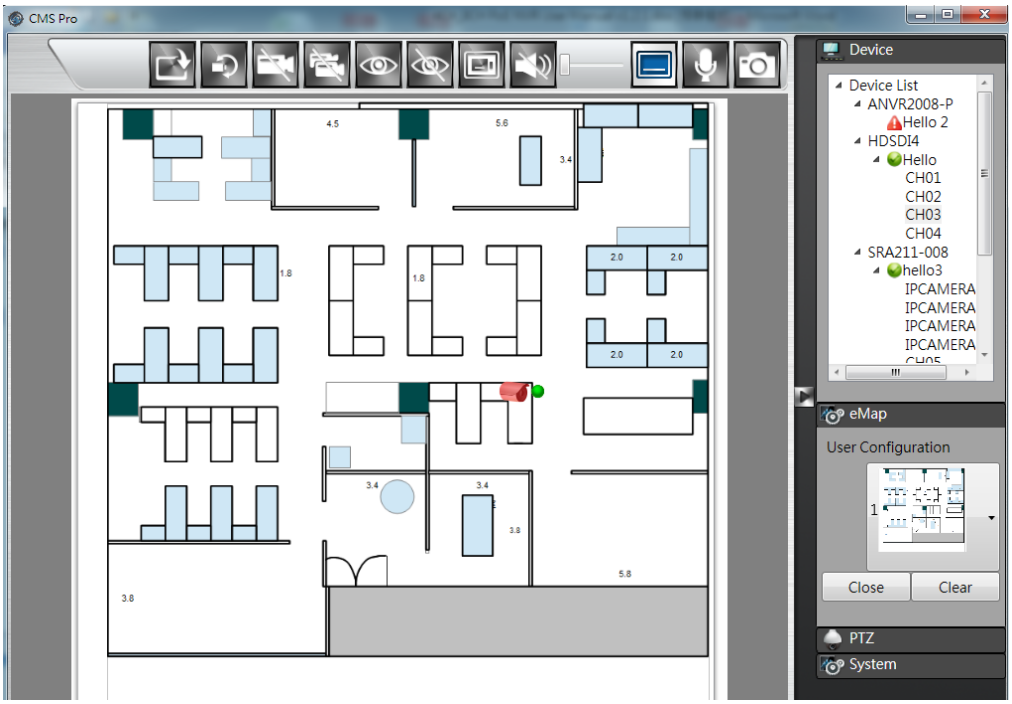


User can view the exported file on the Export Player. If the user does not have the Player installed in the PC, click Export Player button to download the player to the PC. Please refer to *Chapter 7 Export Player*.

11.10 Using eMap

eMap is a method of creating a map showing the locations of the cameras for NVRs. It can be customized to display cameras from different NVRs on the same eMap. If user is unable to get the eMap function, please upgrade the later CMS Pro version to get this function. Click **eMap**

button to bring up the eMap screen.



The basic operations of eMap are showing on the screen, the functions are:

Click to load the eMap image from PC

Click to rotate the selected camera icon

Click to delete the specific camera

Click to delete all cameras

Click to open the video images of all cameras

Click to close the video images of all cameras

Click to show camera title.

Enable or disable audio of the selected camera

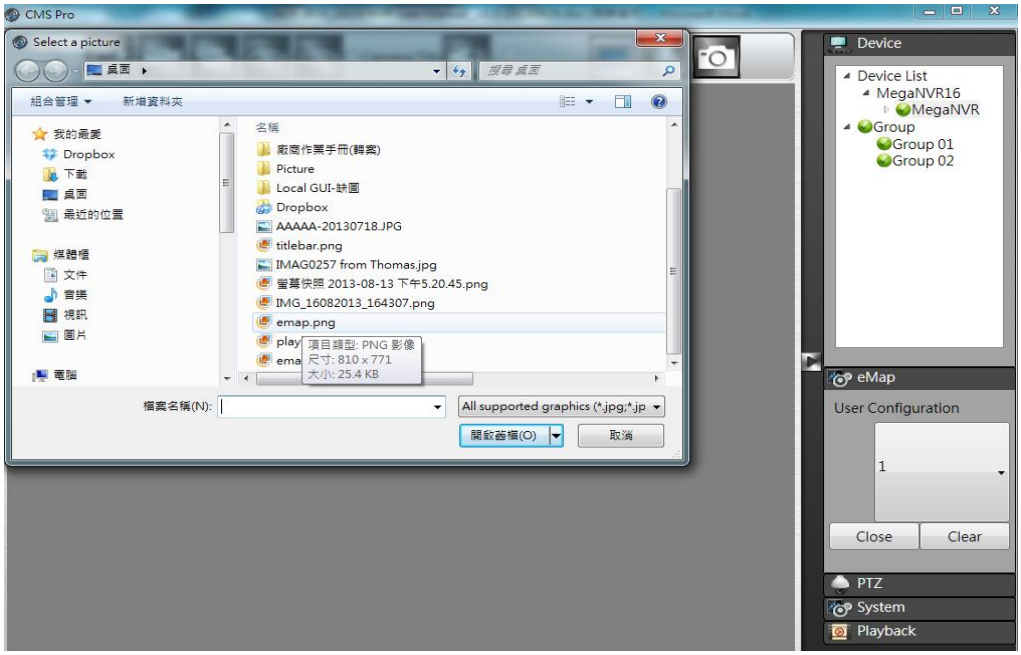
Enable the OSD of the cameras

Enable or disable the **Talk to Server** of the selected camera to talk to the specific NVR

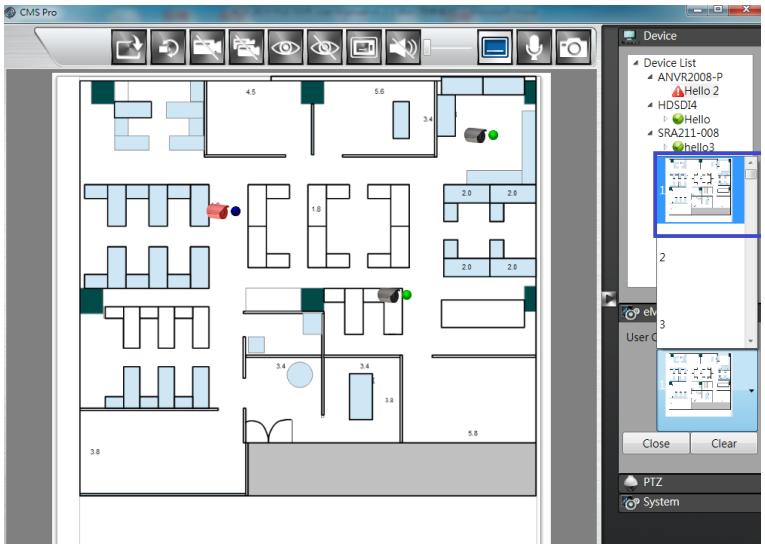
Click to take the snapshot of the selected camera

User needs to create a digital map first before create an eMap. It can be a photo and is required to convert to PNG or JPG format. The file types can be imported is PNG or JPG.

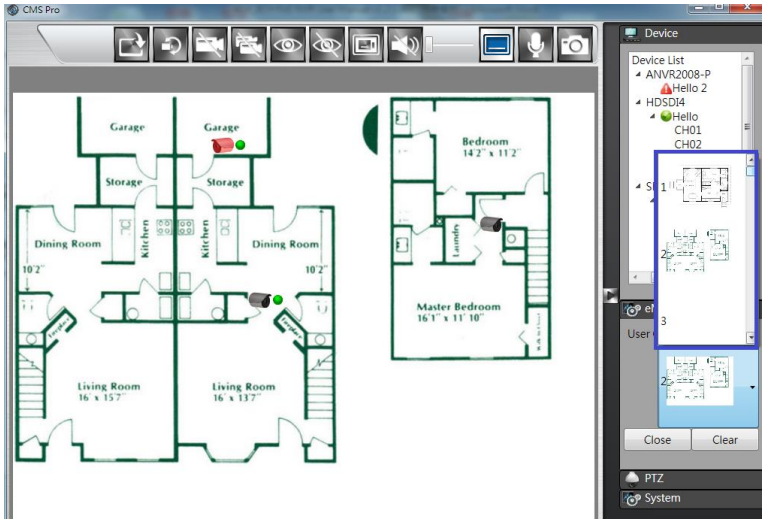
To bring in a PNG or JPG image, click on the **Loading picture** button. Once you click on the "Loading picture" button, you will get a screen shown as below and select the desired image.

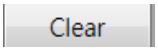


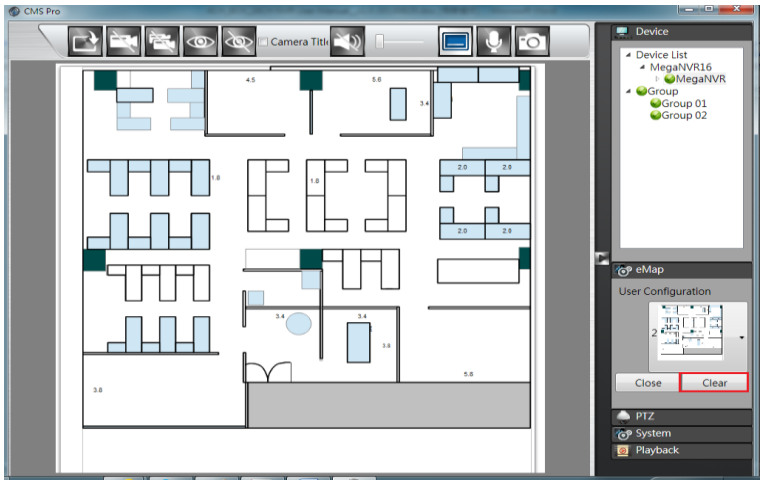
Then double click the desired eMap image and user will get the full screen of the image on the left side.



User is able to create maximum 8 different images once. Select the number in user configuration first and then click on the **Loading picture** to import the image.



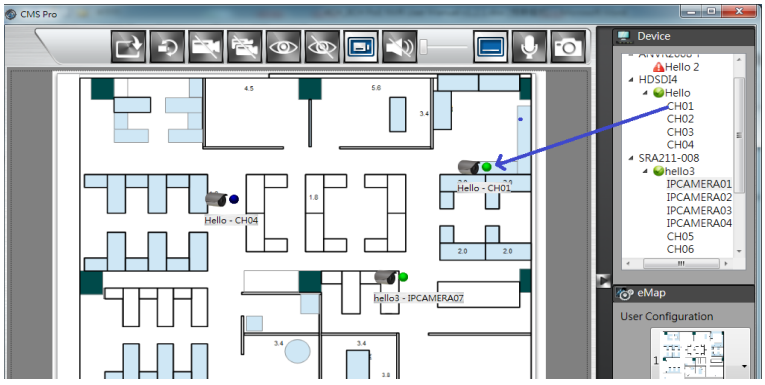
Click on the "Clear"  button to delete the current shown image. Click on the "Close" button to back to the device tree.



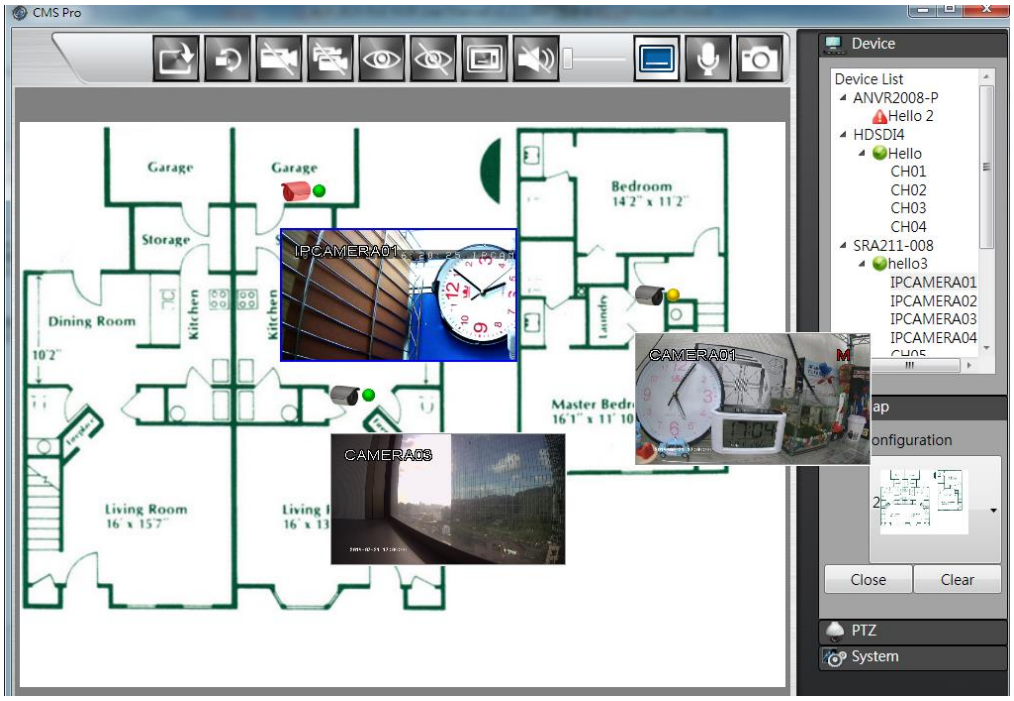
Since the map is in the position, user is able to drag the cameras from different NVRs to the desired spot and camera icons will be displayed shown as below.

The color of the circular dot stands for the status of the specific camera as listed. The selected camera indicates as red color .

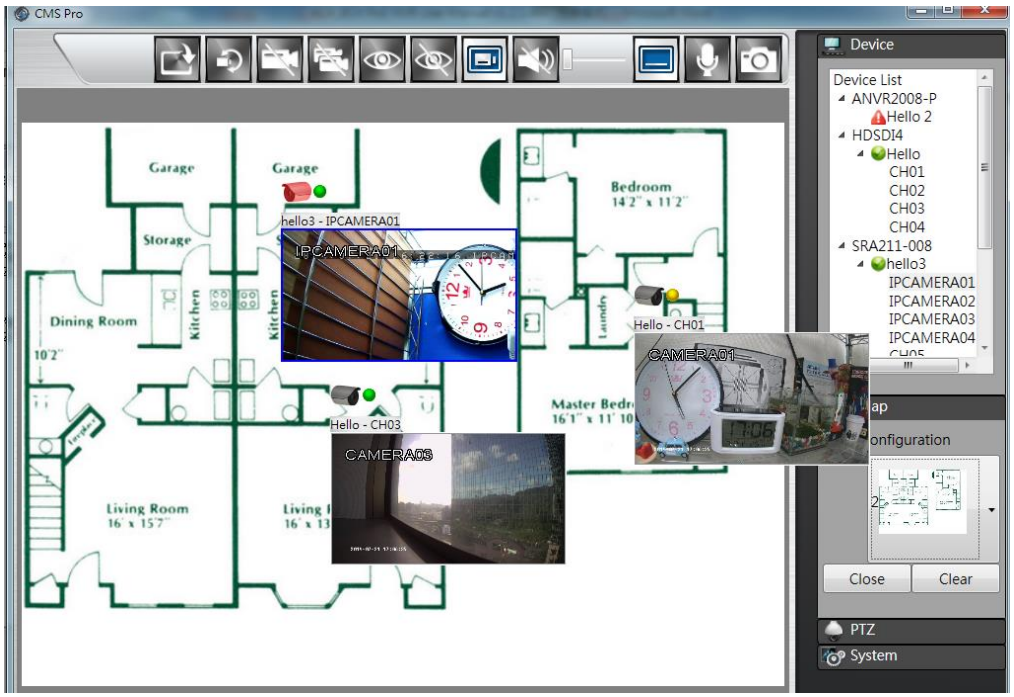
- Green dot – Normal, the camera input is installed and enabled.
- Red dot – Alarm triggered
- Yellow dot – Motion triggered
- Blue dot – Video lost triggered
- Grey dot – The video input is disabled.



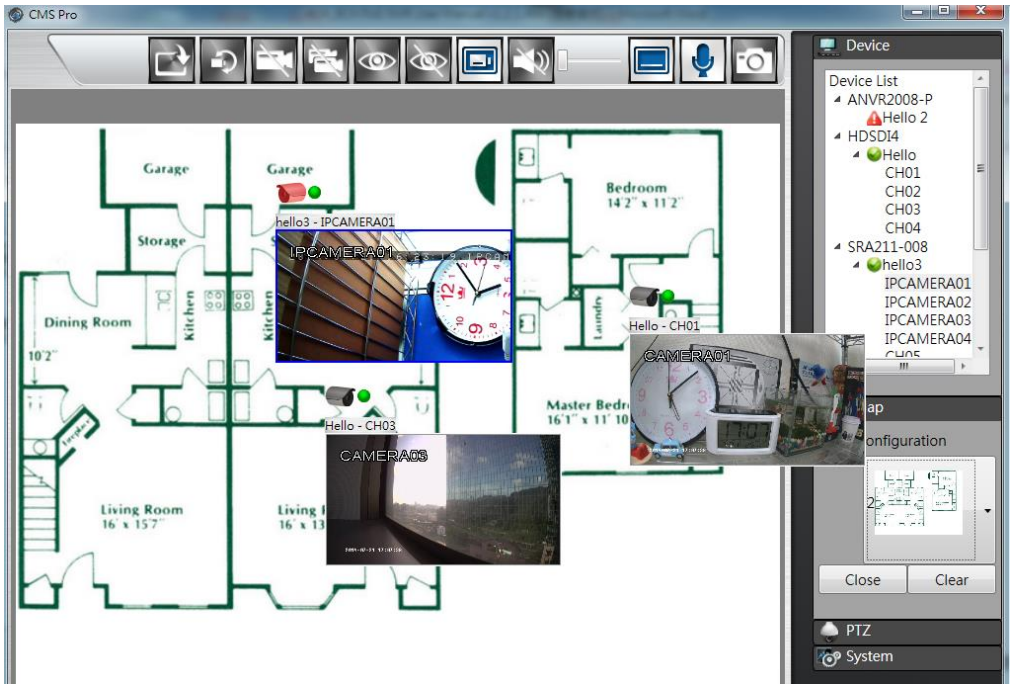
Click on icon to view the video. Double click on the selected video to show in full screen. Click on icon and all images will be closed.



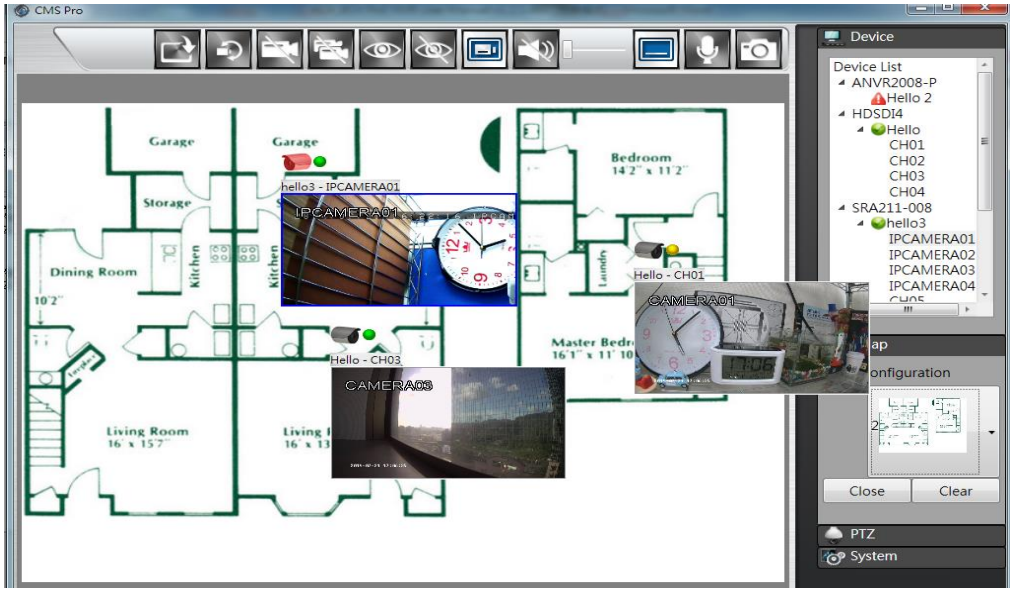
Click the **Camera Title** icon to show the camera name.



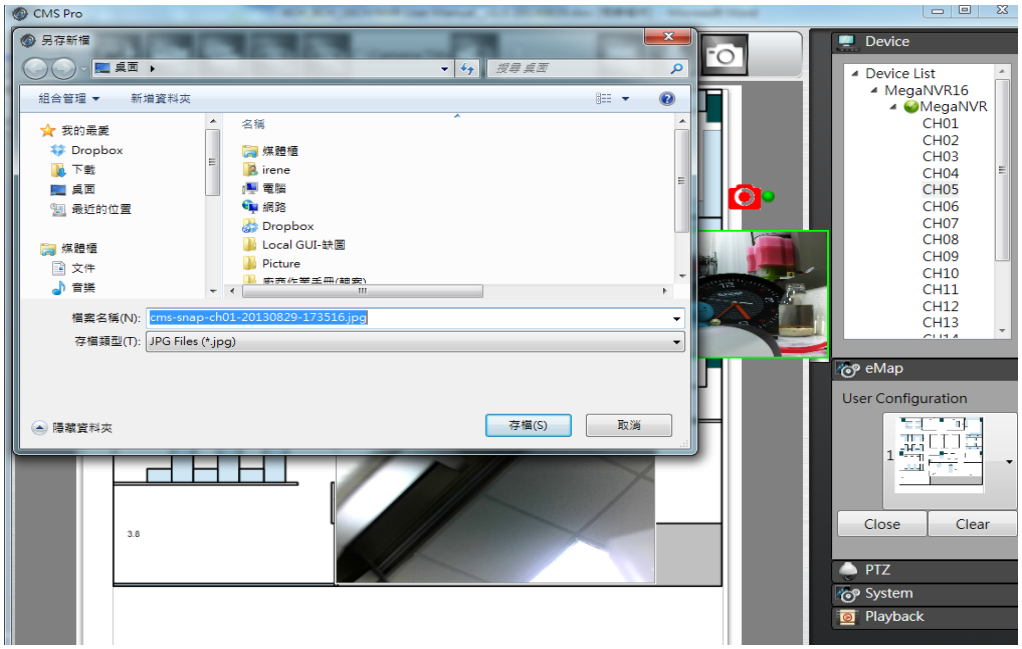
Click on the button to show the camera titles of different cameras shown as below. Click on the button to enable the audio of the selected camera.


CMS Pro
Device
Device List
ANVR2008-P
Hello 2
HDSDI4
Hello
CH01
CH02
CH03
CH04
SRA211-008
hello3
IPCAMERA01
IPCAMERA02
IPCAMERA03
IPCAMERA04
Garage
Garage
Storage
Bedroom
14'2" x 11'2"
Dining Room
10'2"
Kitchen
Kitchen
Laundry
Master Bedr
16'1" x 11' 10
Living Room
16' x 15'7"
Living R
16' x 13'
hello3 - IPCAMERA01
IPCAMERA01
Hello - CH01
CAMERA01
Hello - CH03
CAMERA03
ap
onfiguration
Close
Clear
PTZ
System

User is able to take the snapshot of the specific camera. Click on the icon to select the camera first.



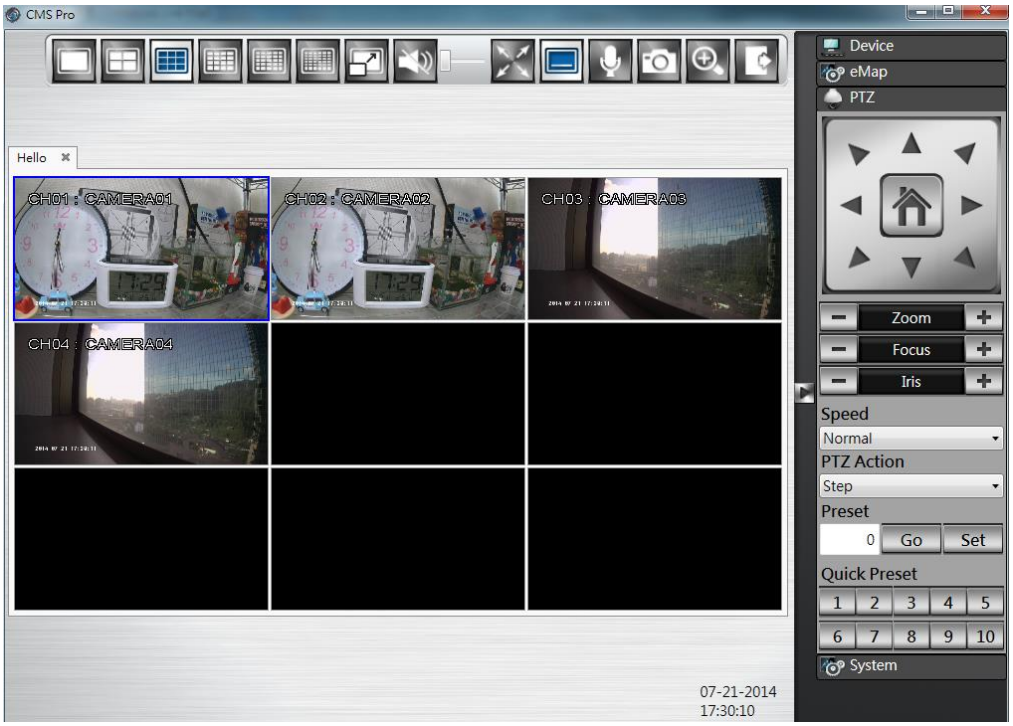
Then click on the icon to take the snapshot of the selected camera. User is able to choose the desired directory of the PC to save the image.



11.11 Using PTZ Configuration

User can synchronize PTZ settings from all cameras connected to the NVR on the network or user can create and add new PTZ preset points to those cameras through CMS Pro.

The basic operation is the same as the NVR PTZ control. Please refer to *Chapter 5 PTZ control* for detail operation.



11.12 Multiple Monitor Support

CMS Pro supports up to 4 monitors. The suggested system specifications are as below. If the system is not as suggested specifications, user will experience the slow performance of the multiple monitor support.

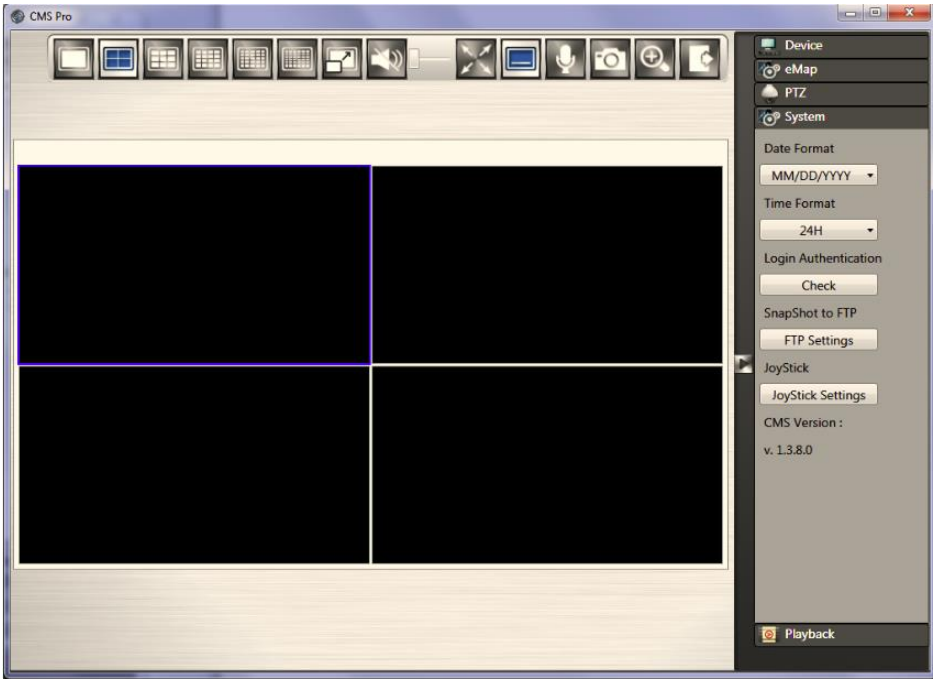
Minimum PC System Requirement

- CPU : Minimum Intel i5 or higher
- RAM: Minimum 6GB of RAM
- Independent Graphic Card: Minimum 1GB

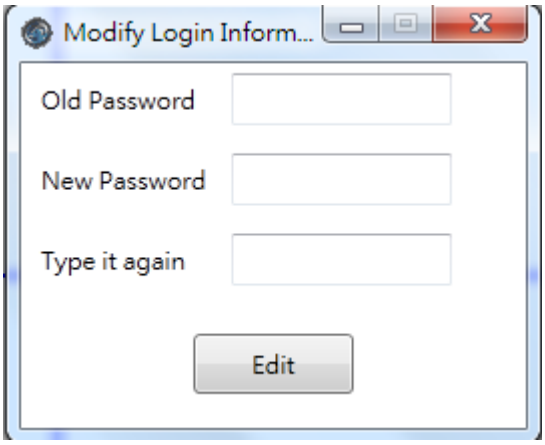
11.13 CMS System

Click on the "System" button

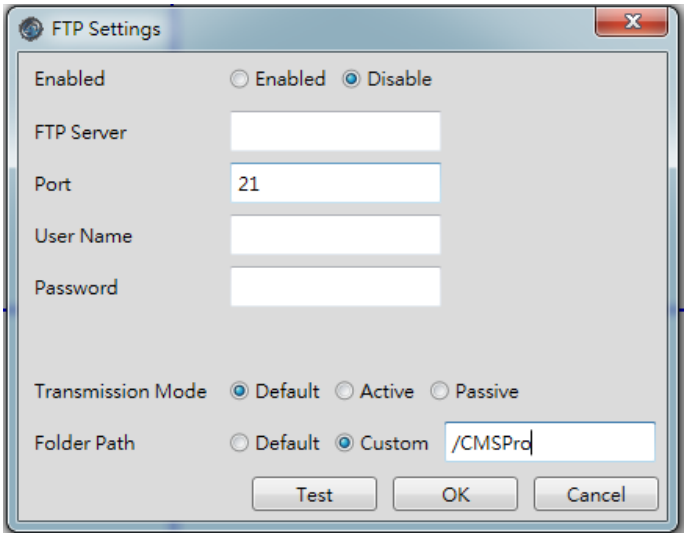
to bring up the system menu, this allows user to change the Date Format, Time Format, Login Authentication, snapshot to FTP setting, JoyStick setting and CMS Version.



- **Date Format**: Select date format from DD/MM/YYYY, MM/DD/YYYY or YYYY/MM/DD.
- **Time Format**: Select time format between 12 Hours and 24 Hours.
- **Login Authentication**: User can change CMS Pro password. Please input the old password and input the desired new password and reconfirm it. After confirmation, click **Edit**, the new password has been updated. The new password will be required when next time user login again.



- **Snapshot to FTP**: It works in CMS Pro live mode. Once user finishes the FTP settings, user is able to save the snapshot picture directly to ftp site. When user clicks on the “FTP Settings” icon, it will pop up FTP settings information. Please input the FTP server, FTP port, user name and password information. Please select FTP transmission mode and folder path. After finish the FTP setting, user can click “Test” button to ensure the settings are correct.



- **Joystick settings**: Plug the Joystick to PC first. Click on the JoyStick Settings and user is able to adjust up/down/left/right/left rotate/right rotate/center directions of the joystick. After finish the correction, user is able to control the directions of the PTZ camera by joystick.
- **CMS Version**: It indicates CMS Pro current version.