

4/8/16 CH
1080P HALF REAL-TIME AND
1080P REAL-TIME
AHD/TVI DVR
User's Manual

V. 1.0

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 Users 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 Users 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 4/8/16CH 1080P AHD/TVI DVR transmits Full HD (1080P) / 720P or Analog video image over coaxial cables. It performs the high definition image with zero loss and low latency of image data when viewing the video. The AHD/TVI DVR provides the easy-to-install benefit that allows users to view the HD megapixel image without requiring having the complicated knowledge of IP based system. It is the ultimate solution for high-quality and reliable surveillance system.

1.1 Features

- AHD/TVI 1080P DVR supports AHD/TVI 1080P/720P/Analog cameras seamless inputs
- Dual -Core CPU demonstrates the extreme and industry-leading performance in recording, playback and networking
- Support maximum 16ch 1080p30 real-time recording and simultaneous real-time playback
- Support maximum up to 480fps recording with 1080p30 of each channel
- Dual stream support for remote access from a PC and/or a cell phone at low bandwidth
- Programmable dual monitor
- Bi-directional audio
- Remote access through Web, CMS, Mobile App (Android or iOS *VS Viewer Pro II* Apps)
- Easy data export via USB drive, webpage and USB external HDD
- Search control by date/time, alarm, channel search
- Free bundle CMS for multiple device management
- Free DDNS server provided for Dynamic IP address

1.2 Product Specification

4CH 1080P AHD/TVI DVR

System		ATHDVR2104	ATHDVR2204
Operating System		Embedded Linux	
Operations		Live, Recording, Playback, Backup & Remote access	
Control Mode		USB mouse, Webpage, CMS	
Video			
Input	TVI: 1080P @ 30/25 fps, 720P @ 60/50 fps, 720P @ 30/25 fps AHD: 1080P @ 30/25 fps, 720P @ 60/50 fps, 720P @ 30/25 fps 960H / D1 @ 30/25 fps		
Output	1x HDMI, 1xVGA (Max. 1920x1080), 1xCVBS		
Dual Stream	Support		
Audio			
Input	4 x RCA		
Output	1 x RCA		
2-way Audio	Support	Support	
Display			
Display mode	Full screen/Multi-screen/Sequence		
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	NTSC 1080p 60fps; 720p 120 fps PAL 1080p 50fps ; 720p 100 fps	NTSC 1080p 120fps; 720p 120 fps PAL 1080p 100fps ; 720p 100 fps	
Pre Recording	5 seconds		
Post Recording	Max. 255 seconds		
Network			
Support	TCP/IP,SMTP,DHCP,DDNS,PPPoE,UDP,SSL,RTP,RTSP,NTP		
Ethermet	1x 10/100Mbps		
Remote Software	IE Browser, CMS Pro, VS Viewer Pro II for iOS or Android Apps		
Playback & Backup			
Display Mode	Full screen/Multi-screen		
Playback Capability	4ch simultaneous playback		
Playback Control	Play/Pause/Step/Fast forward/Rewind/Fast rewind		
Search Control	By Date/Time, Events, Channel		
Export	Through USB/Webpage/CMS Pro		
Internal Storage	2 SATA Ports , 6TB capacity for each HDD		
Alarm & I/O			
USB	2; 1 for mouse control and 1 for backup		
Alarm	4 input / 1 output		
RS485	1; Support Pelco D, Pelco P		
Event Log	Up to the 10000 events		
OSD and DVR Control Mode			
Watermark	Yes		
User Privilege	3 Levels of User Access Support		
GUI Multi-language	English, Traditional Chinese, Simplified Chinese, Japanese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish,Norwegian,Finnish, Danish, Russian,Turkish,Polish, Czech, Hungarian,Greek,Korean, Hebrew,Thai		
OSD Multi-language	Support		
System FW/SW Upgrade	USB flash drive, webpage, CMS Pro		
Environmental			
Power	12V DC /42W		
Dimension	319(W)x53(H)x302(D) mm± 5mm		
Operating Humidity	10% ~ 80%		
Operating Temperature	0℃ ~ 40℃		

Note: The specifications are subject to change without any notice.

8CH 1080P AHD/TVI DVR

System	ATHDVR2108		ATHDVR2208	
Operating System	Embedded Linux			
Operations	Live, Recording,Playback,Backup & Remote access			
Control Mode	USB mouse, Webpage, CMS			
Video				
Input	TVI: 1080P @ 30/25 fps, 720P @ 60/50 fps, 720P @ 30/25 fps AHD: 1080P @ 30/25 fps, 720P @ 60/50 fps, 720P @ 30/25 fps 960H / D1 @30/25 fps			
Output	1x HDMI,1xVGA(Max. 1920x1080), 1x CVBS			
Dual Stream	Support			
Audio				
Input	4 x RCA			
Output	1 x RCA			
2-way Audio	Support			
Display				
Display mode	Full screen/Multi-screen/Sequence			
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	NTSC 1080p 120fps; 720p 120 fps PAL 1080p 100fps ; 720p 100 fps		NTSC 1080p 240fps; 720p 240 fps PAL 1080p 200fps ; 720p 200 fps	
Pre Recording	5 seconds			
Post Recording	Max. 255 seconds			
Network				
Support	TCP/IP,SMTP,DHCP,DDNS,PPPoE,UDP,SSL,RTP,RTSP,NTP			
Ethernet	1x 10/100Mbps		1x 10/100/1000Mbps	
Remote Software	IE Browser, CMS Pro, VS Viewer Pro II for iOS or Android Apps			
Playback & Backup				
Display Mode	Full screen/Multi-screen			
Playback Capability	8 ch simultaneous playback			
Playback Control	Play/Pause/Step/Fast forward/Rewind/Fast rewind			
Search Control	By Date/Time, Events, Channel			
Export	Through USB/Webpage/CMS Pro			
Internal Storage	2 SATA Ports , Up to 6TB capacity for each HDD			
Alarm & I/O				
USB	2; 1 for mouse control and 1 for backup			
Alarm	4 input / 1 output			
RS485	1; Support Pelco D, Pelco P			
Event Log	Up to the 10000 events			
OSD and DVR Control Mode				
Watermark	Yes			
User Privilege	3 Levels of User Access Support			
GUI Multi-language	English, Traditional Chinese, Simplified Chinese, Japanese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish,Norwegian,Finnish, Danish, Russian,Turkish,Polish, Czech, Hungarian,Greek, Korean, Hebrew,Thai			
OSD Multi-language	Support			
System FW/SW Upgrade	USB flash drive, webpage, CMS Pro			
Environmental				
Power	12V DC /42W			
Dimension	319(W)x53(H)x302(D) mm± 5mm			
Operating Humidity	10% ~ 80%			
Operating Temperature	0℃ ~ 40℃			

Note: The specifications are subject to change without any notice.

16CH 1080P AHD/TVI DVR

System	ATHDVR3116		ATHDVR3216
Operating System	Embedded Linux		
Operations	Live, Recording, Playback, Backup & Remote access		
Control Mode	USB mouse, Webpage, CMS		
Video			
Input	TVI: 1080P @ 30/25 fps, 720P @ 60/50 fps, 720P @ 30/25 fps AHD: 1080P @ 30/25 fps, 720P @ 60/50 fps, 720P @ 30/25 fps 960H / D1 @ 30/25 fps		
Output	1x HDMI, 1xVGA (Max. 1920x1080), CVBS		
Dual Stream	Support		
Audio			
Input	4 x RCA		
Output	1 x RCA		
2-way Audio	Support		
Display			
Display mode	Full screen/Multi-screen/Sequence		
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	NTSC 1080p 240fps; 720p 480 fps PAL 1080p 200fps; 720p 400 fps	NTSC 1080p 480fps; 720p 480 fps PAL 1080p 400fps; 720p 400 fps	
Pre Recording	5 seconds		
Post Recording	Max. 255 seconds		
Network			
Support	TCP/IP,SMTP,DHCP,DDNS,PPPoE,UDP,SSL,RTP,RTSP,NTP		
Ethernet	1x10/100/1000 Mbps		
Remote Software	IE Browser, CMS Pro, VS Viewer Pro II for iOS or Android Apps		
Playback & Backup			
Display Mode	Full screen/Multi-screen		
Playback Capability	16 ch simultaneous playback		
Playback Control	Play/Pause/Step/Fast forward/Rewind/Fast rewind		
Search Control	By Date/Time, Events, Channel		
Export	Through USB/Webpage/CMS Pro		
Internal Storage	4 x SATA Ports and each disk up to 6TB capacity		
Alarm & I/O			
USB	2; 1 for mouse control and 1 for backup		
Alarm	16 input / 4 output		
RS485	1; Support Pelco D, Pelco P		
Event Log	Up to the 10000 events		
OSD and DVR Control Mode			
Watermark	Yes		
User Privilege	3 Levels of User Access Support		
GUI Multi-language	English, Traditional Chinese, Simplified Chinese, Japanese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish, Norwegian, Finnish, Danish, Russian, Turkish, Polish, Czech, Hungarian, Greek, Korean, Hebrew, Thai		
OSD Multi-language	Support		
System FW/SW Upgrade	USB flash drive, webpage, CMS Pro		
Environmental			
Power	12V DC/ 84W		
Dimension	420(W)x 65(H)x305(D) mm ± 5mm		
Operating Humidity	10% ~ 80%		
Operating Temperature	0°C ~ 40°C		





Note: The specifications are subject to change without any notice.

1.3 Front Panel and real panel of 4/8/16 1080P AHD/TVI DVR

4/8CH 1080P AHD/TVI DVR Front Panel

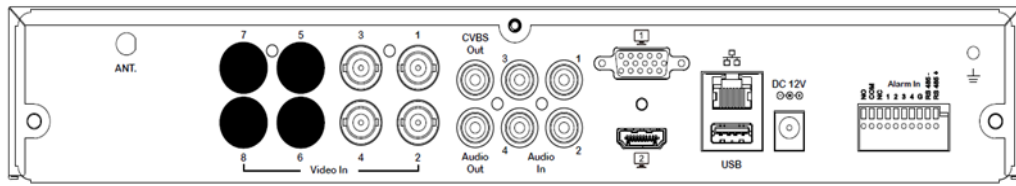
The front panel includes:



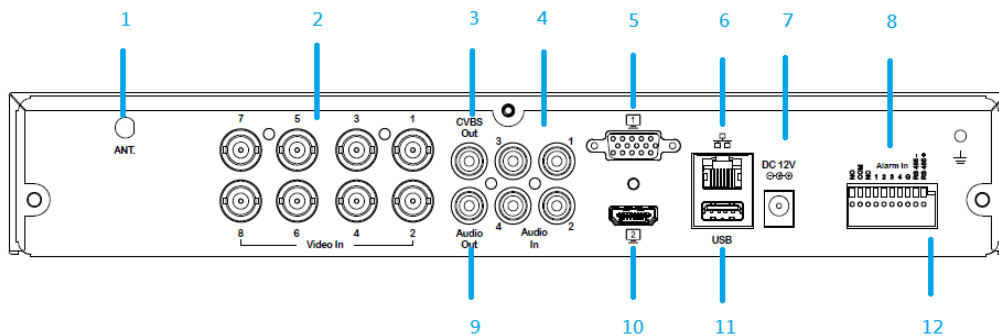
1.  Power/ Alarm: Power indicator turns on when AHD/TVI DVR turns on. Alarm indicator blinks when the alarm is detected.
2.  Network : Network indicator turns on when AHD/TVI DVR network access is connected.
3.  Record : Rec indicator turns on when AHD/TVI DVR is recording.
4.  USB Port: USB2.0 port for connecting devices, such as USB mouse or USB flash drive.

4/8CH 1080P AHD/TVI DVR Rear Panel

4CH 1080P AHD/TVI DVR Rear Panel



8CH 1080P AHD/TVI DVR Rear Panel



Item	I/O	Description
1	Antenna	Reserved for connecting to Zigbee device
2	Video In	Connect Analog or AHD/TVI cameras' video output to the AHD/TVI DVR video input connectors.
3	CVBS Out	Connect a CVBS Monitor to the CVBS output connector.
4	Audio In	Connect the microphone or camera audio output to the audio input connectors.
5	VGA	Connect a VGA Monitor to the VGA output connector.
6	Network	For RJ-45 network connection.
7	Power	Plug the DV12V power source into the power socket.
8	Alarm In/ Alarm Out	Connect up to 4 alarm inputs to the alarm input connectors. N.C or N.O type alarm signal out.
9	Audio Out	Connect a speaker or other audio output device to the audio output connectors.
10	HDMI	Connect a HDMI monitor to the HDMI output connector.

11	USB Port	USB 2.0 port for connecting devices, such as USB mouse or USB flash drive.
12	RS485	Connect a Pan/Tilt/Zoom camera to the RS485 port.

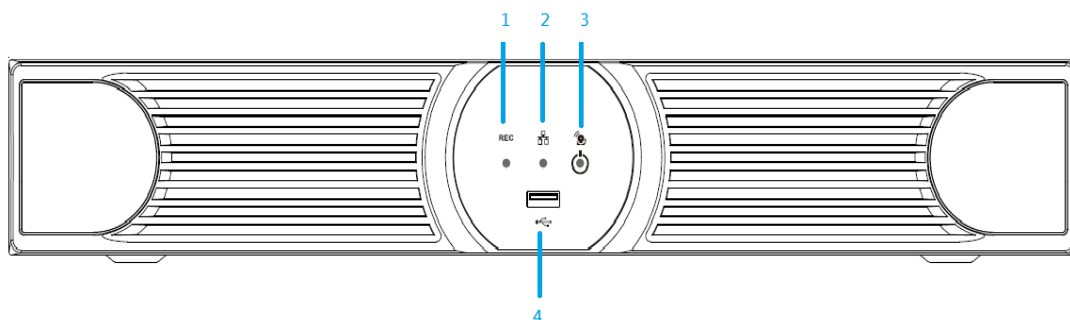
4/8CH AHD/TVI DVR Packing Content





The package contains the following items:

- AHD/TVI DVR x 1
- Quick Install Paper x1
- SATA connection cable x 2 (The quantities might vary based on different models.)
- Screws for mounting hard drive x 10 pcs (The quantities might vary based on different models.)
- HDD mounting bracket x 4 pcs (The quantities might vary based on different models.)
- Screws for mounting bracket x 10 pcs (The quantities might vary based on different models.)
- User manual/Quick Install/CMS disc x 1
- Power adapter x1

16CH 1080P AHD/TVI DVR Front Panel

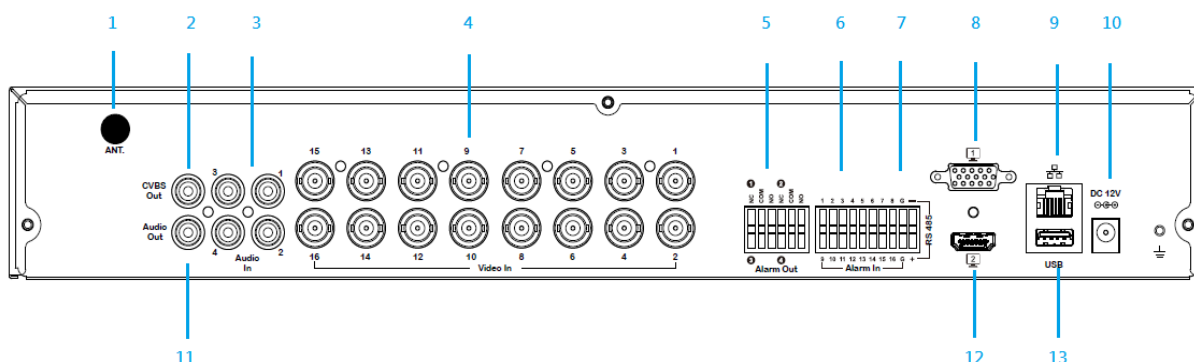
The front panel includes:



1.  Record : Rec indicator turns on when AHD/TVI DVR is recording.
2.  Network : Network indicator turns on when AHD/TVI DVR network access is connected.
3.  Power/ Alarm: Power indicator turns on when AHD/TVI DVR turns on. Alarm indicator blinks when the alarm is detected.
4.  USB Port: USB2.0 port for connecting devices, such as USB mouse or USB flash drive.

16CH 1080P AHD/TVI DVR Rear Panel

16CH 1080P AHD/TVI DVR Rear Panel



Item	I/O	Description
1	Antenna	Reserved for connecting to Zigbee device
2	CVBS Out	Connect a CVBS Monitor to the CVBS output connector for 4/8/16ch AHD/TVI DVR.
3	Audio In	Connect the microphone or camera audio output to the audio input connectors.
4	Video In	Connect Analog or AHD/TVI cameras' video output to the AHD/TVI DVR video input connectors.
5	Alarm Out	N.C or N.O type alarm signal out.
6	Alarm In	Connect up to 16 alarm inputs to the alarm input connectors.
7	RS485	Connect a Pan/Tilt/Zoom camera to the RS485 port.
8	VGA	Connect a VGA Monitor to the VGA output connector.
9	Network	For RJ-45 network connection.
10	Power	Plug the DV12V power source into the power socket.
11	Audio Out	Connect a speaker or other audio output device to the audio output connector.
12	HDMI	Connect a HDMI monitor to the HDMI output connector.
13	USB Port	USB 2.0 port for connecting devices, such as USB mouse or USB flash drive.

16CH AHD/TVI DVR Packing Content

The package contains the following items:

- AHD/TVI DVR x 1
- Quick Install Paper x1
- SATA connection cable x 4 (The quantities might vary based on different models.)
- Screws for mounting hard drive x 20 pcs (The quantities might vary based on different models.)
- HDD mounting bracket x 4 pcs (The quantities might vary based on different models.)
- Screws for mounting bracket x 10 pcs (The quantities might vary based on different models.)
- User manual/Quick install/CMS disc x1
- Power adapter x1

1.4 Hard Disk Installation

4/8CH 1080P AHD/TVI DVR HDD Installation

Follow the steps to install or replace the hard disk.

Step1. Take out the screws on the cover of the unit.



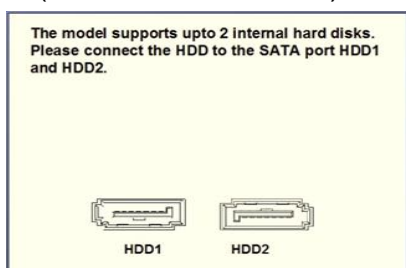
Step2. Slide opens the top cover.

Step3. Use the HDD mounting screws attached in the accessory pack to fix the mounting brackets to the hard drive.

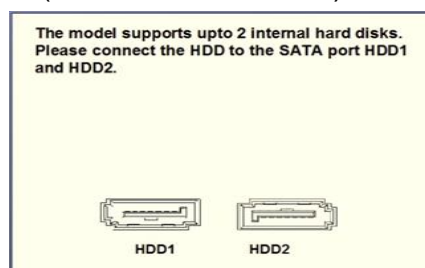


Step4. Connect SATA & Power wire to Hard Disk and put it on right position of the case. Use the HDD mounting screws attached in the accessory pack to fix the hard drive with bracket firmly on to the chassis.

4CH AHD/TVI DVR (ATHDVR2104/2204)



8CH AHD/TVI DVR (ATHDVR2108/2208)





16CH 1080P AHD/TVI DVR HDD Installation

Follow the steps to install or replace the hard disk.

Step1. Take out the hard disk mounting bracket and hard disk screws from the accessory pack.



Step2. Fix the hddisk on to the hddisk mounting bracket and fix the screws on to the screw holes as indicated in the diagram. Each set of hddisk brackets can mount 2 hddisks.

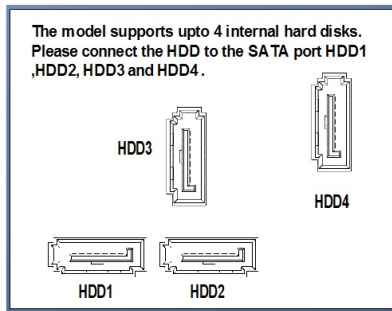


Step3. Use the HDD mounting screws attached in the accessory pack to fix the mounting brackets to the hard drive.

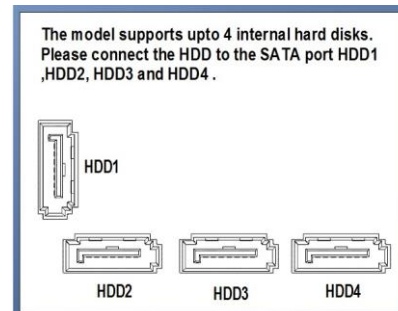


Step4. Connect SATA & Power wire to Hard Disk and put it on right position of the case. Use the HDD mounting screws attached in the accessory pack to fix the hard drive with bracket firmly on to the chassis.

**16CH AHD/TVI DVR
(ATHDVR3116)**



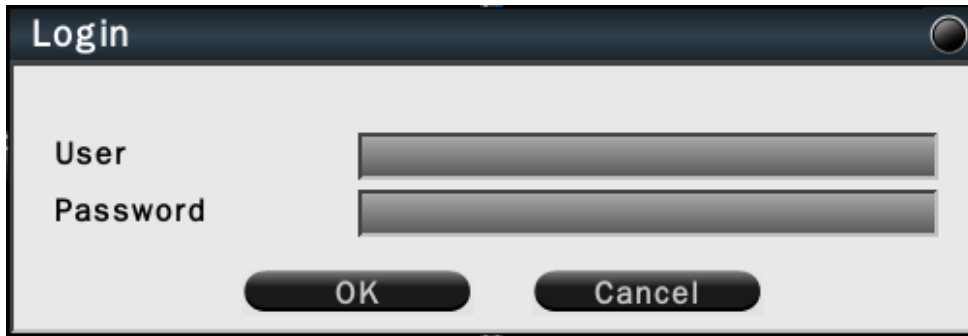
**16CH AHD/TVI DVR
(ATHDVR3216)**



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 user account and password to login to the system.



The default user name/password is:

Note

Administrator: admin/admin

Operator: operator/operator

Guest: 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.

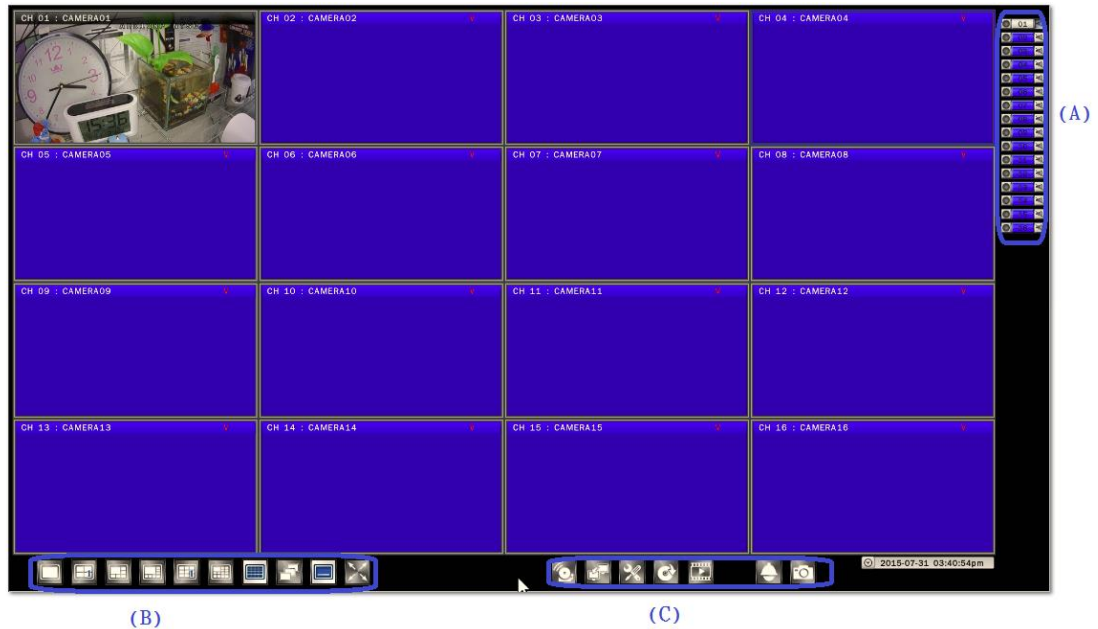
Authority Instructions based on 3 levels of Users

	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 Live Viewing

2.2.1 Basic Operation

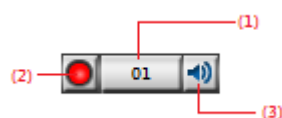
The AHD/TVI DVR will enter into the Live View mode after users login to the system. Use mouse to double click on any video channel to bring it up to full screen display.



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.

Blue – Video Lost.

Yellow – Motion triggered.

Red – Alarm triggered.

(2) Recording status indicator

Red – Recording

White – Not Recording

(3) Audio output selection

Click on the Audio icon on the channel you 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 you wish to display, the channel will be switched.

(B) Display mode control :



Single view display mode



Quad display mode



First/Second/Third/Forth Quad display mode



1+5 display mode



1+7 display mode



9-up display mode



First/Second 9-up display mode



1+12 display mode



16-up 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 bring up Call Monitor Setup menu



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 Basic operation

To search and playback the video, click **Playback** icon  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.



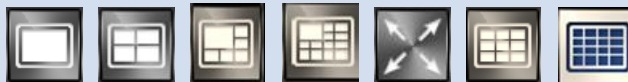
Click to switch to live view mode



Click to take the picture of the selected video

Note

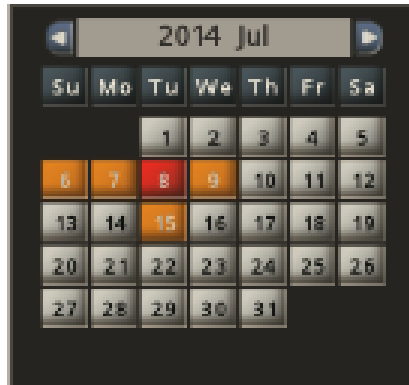
Click the display icons



to playback multiple channels simultaneously.

3.2 Calendar

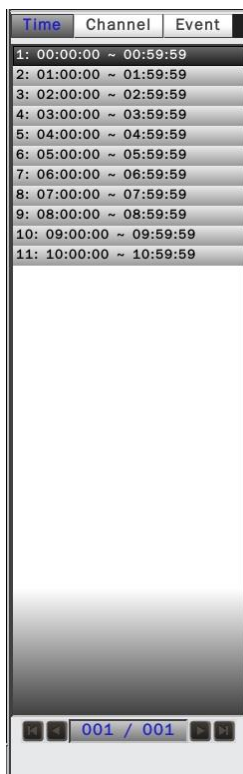
The calendar on the screen shows the recorded data contains in the hard drives. The date highlighted in orange means there's recorded data of the date in the hard drives. The red highlighted date indicates the current search date. Click on the calendar to select the date users would like to search.



3.3 Playback operation

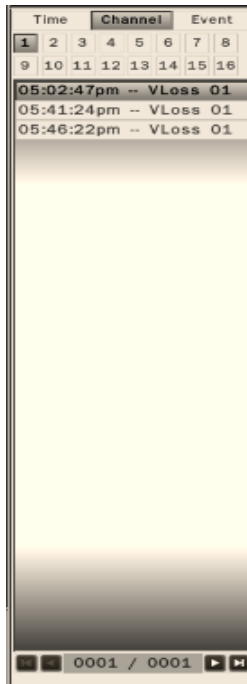
The recorded file list is showing in the column below, the files can be searched by **Time**, **Channel** and **Event**. Select the search type and the results will show in the list below. Double click on the selected file then the video will start to play on the display window.

3.3.1 Search by Time



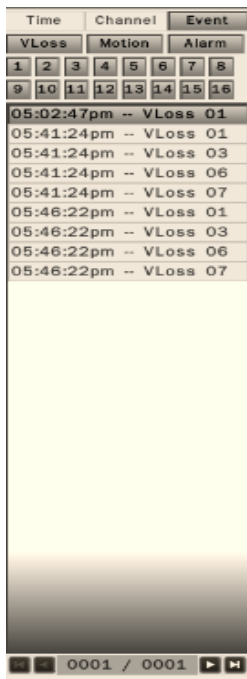
Select Time Search, all the video files of the selected date will be shown in the list. Each file contains maximum 60 minutes of the video. Select the time range Users would like to view and double click the item to start to play on the display window.

3.3.2 Search by Channel



Select the channel that users would like search. All the event video files of the selected date and channel will be shown in the list. Select the event video users 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 Users 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

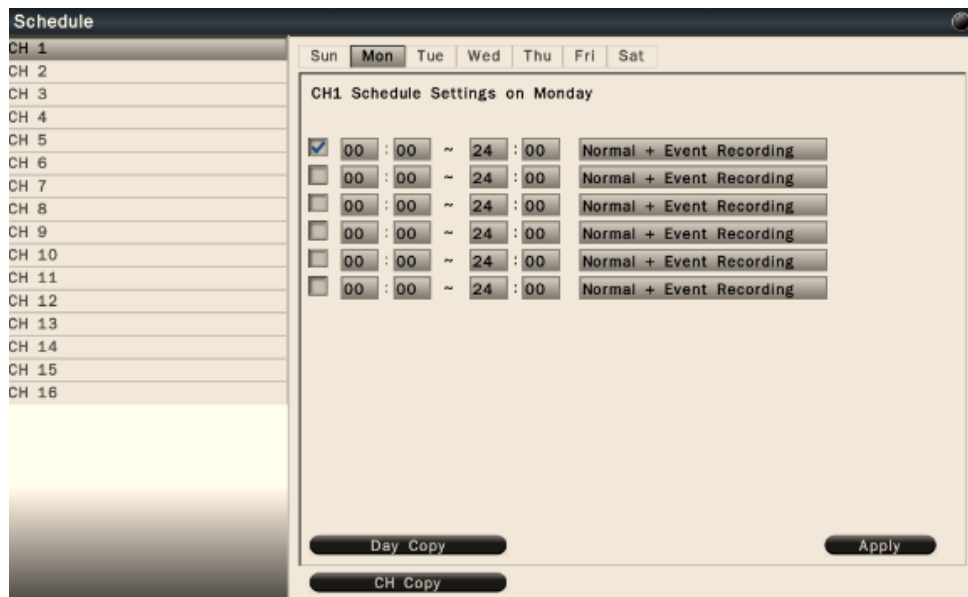
4. Recording

AHD/TVI DVR is set to continually record once the system startup. AHD/TVI DVR supports the following recording mode.

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

4.1 Schedule Recording Settings

In the Camera-Schedule sub menu, users 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) users would like to set schedule, check in the column to enable the timelines and select the recording behaviors. Users can configure multiple timelines for each day.
- Click **Day Copy** to select the day users would like to copy to.
- Click **CH Copy** to allow users 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, users 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.

- Bitrate Type – VBR for Variable bitrate, CBR for Constant bitrate.
- Record Audio – Enable or Disable the audio recording.
- Pre-event – Set the pre-event recording duration. The maximum pre-recording duration is 5 seconds.
- Post-event – Set the post-event recording duration.
- Normal record – Set the recording resolution, frame rate and quality under normal record condition.
- Event record – Set the recording resolution, frame rate and quality under event record condition.
- Record timestamp – Select to enable or disable timestamp and set the position on the recording data.
- Copy – To copy the setting to the other channels.

Click **Apply** to save the changes.

5. PTZ Control



Click on the **PTZ** icon 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.

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.
- Zoom + / - : Zoom in or Zoom out
- Focus + / - : To adjust focus to near or far
- Iris + / - : To adjust Iris to open or close
- 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 AHD/TVI DVR hard disk to external USB drive device or self-powered USB external hard drive.

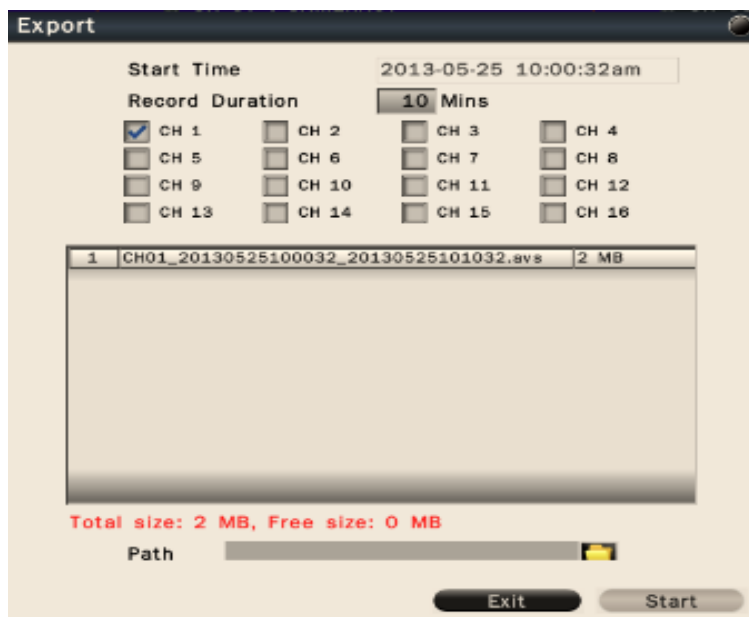
6.1 Export Video

1. Insert a USB drive or USB external hard drive into AHD/TVI DVR 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 users 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.

Users can assign the recording path by clicking the “ **Open Folder**” icon.

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

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

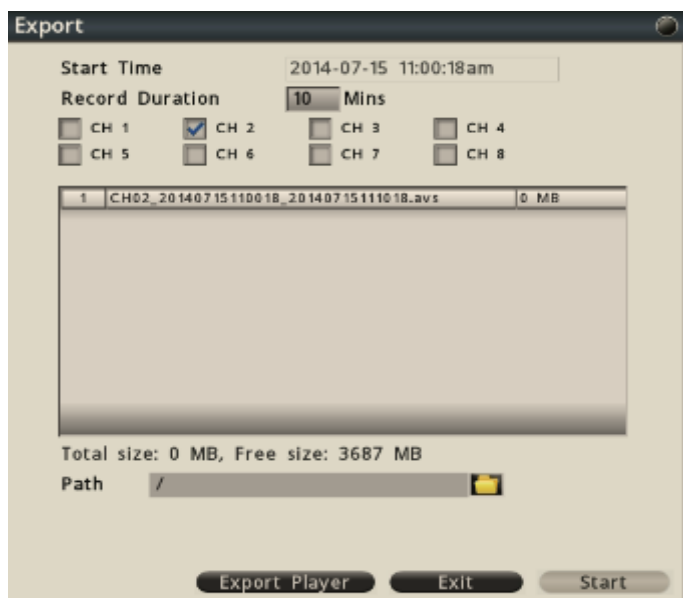
7. Export Player

The Export Player allows users to view video exported from the AHD/TVI DVR 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 AHD/TVI DVR or Web Viewer.

On the AHD/TVI DVR, 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.

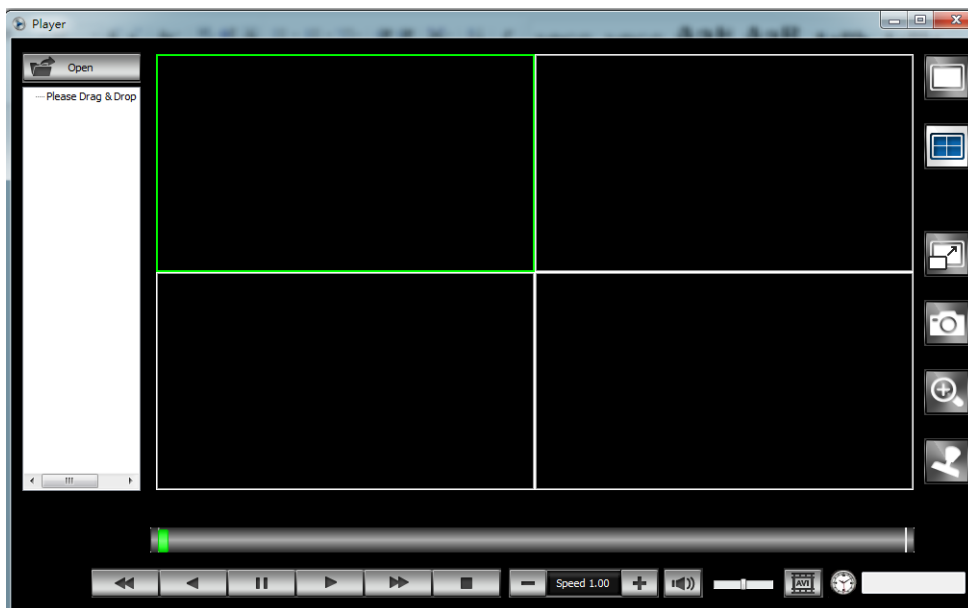


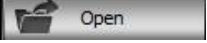
7.2 Starting the Player Program and Viewing exported video file




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. Users can playback exported .avs video files in 4-up screen. If users 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.

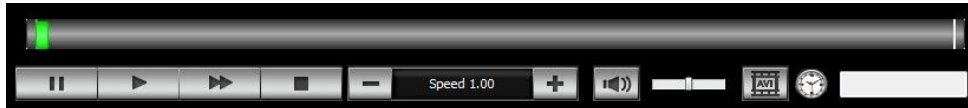
Right click on the mouse to drag on the screen to zoom in the selected area.



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 users 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 users to configure the behaviors related to the input video. Please refer to Figure 8.1.



Figure 8.1

8.1.1 Camera Settings

Display the current camera connecting status, including camera title, camera type and camera status.



ID	Camera Title	Camera Type	Status
01	CAMERA01	AHD: 1080P30	Normal
02	CAMERA02	AHD: 1080P30	Normal
03	CAMERA03	AHD: 1080P30	Normal
04	CAMERA04	AHD: 1080P30	Normal
05	CAMERA05	AHD: 1080P30	Normal
06	CAMERA06	AHD: 1080P30	Normal
07	CAMERA07	AHD: 1080P30	Normal
08	CAMERA08	AHD: 1080P30	Normal
09	CAMERA09	AHD: 1080P30	Normal
10	CAMERA10	AHD: 1080P30	Normal
11	CAMERA11	AHD: 1080P30	Normal
12	CAMERA12	AHD: 1080P30	Normal
13	CAMERA13	AHD: 1080P30	Normal
14	CAMERA14	AHD: 1080P30	Normal
15	CAMERA15	AHD: 1080P30	Normal
16	CAMERA16	AHD: 1080P30	Normal

Figure 8.2

Click on the camera for detail setup of each camera. Please refer to Figure 8.2.

8.1.1.1 Basic Setting



Camera

CH 1

Basic Advanced Video Loss Handle Motion Handle PTZ

Enabled ☐ OFF ☒ ON

Camera Title

Copy Back Apply

Figure 8.3

- Enabled – To enable or disable the selected camera. Please refer to Figure 8.3.

Note

When disable the selected camera, AHD/TVI DVR will stop recording for the selected camera

- Camera title – Click on the column, the virtual keyboard will pop-up for users to input the camera title.
- Copy – Click Copy to copy the settings to other cameras.

Click **Apply** to save all the changes, or **Back** to back to the previous setup page.

8.1.1.2 Advanced Setting

The advance setting allows users to enable covert, or configure camera image or configure the privacy mask or motion detection area or enable COC function to configure camera by AHD/TVI DVR directly. Please refer to Figure 8.4.



Figure 8.4

8.1.1.2.1 Covert

When users enable **covert** function, only administrator and operator privilege can view the video. Please refer to Figure 8.5. The video will indicate as “black” image when “guest” authority login into the system.



Figure 8.5

Please follow the below steps to enable covert function.

Step 1. Please enable **covert** first.

Step 2. Please enable “**Auto Authentication**” in the System-Device sub menu to logout from the system. After logout the system first and login again by administrator or operator privilege, the covert function is enabled.

8.1.1.2.2 Image Setting


Click Image Setting  button to bring up the image setting setup page. Please refer to Figure 8.6. Users are able to adjust the camera image setting including brightness, contrast, saturation and hue.



Figure 8.6.

8.1.1.2.3 Privacy Mask Settings


Click Privacy Mask Setting  button to bring up the privacy mask setup page. Please refer to Figure 8.7.



Figure 8.7

- Enabled – To enable or disable privacy mask for the selected channel.
Click on the mouse to drag the area that would like to be masked.
Click **Undo** to undo the step, **Clear** to clear all the set area, **Exit** to leave the setting page.

8.1.1.2.4 Motion Area Settings

Click Motion Area Setting  button to bring up the motion area setting page as below. Please refer to Figure 8.8.

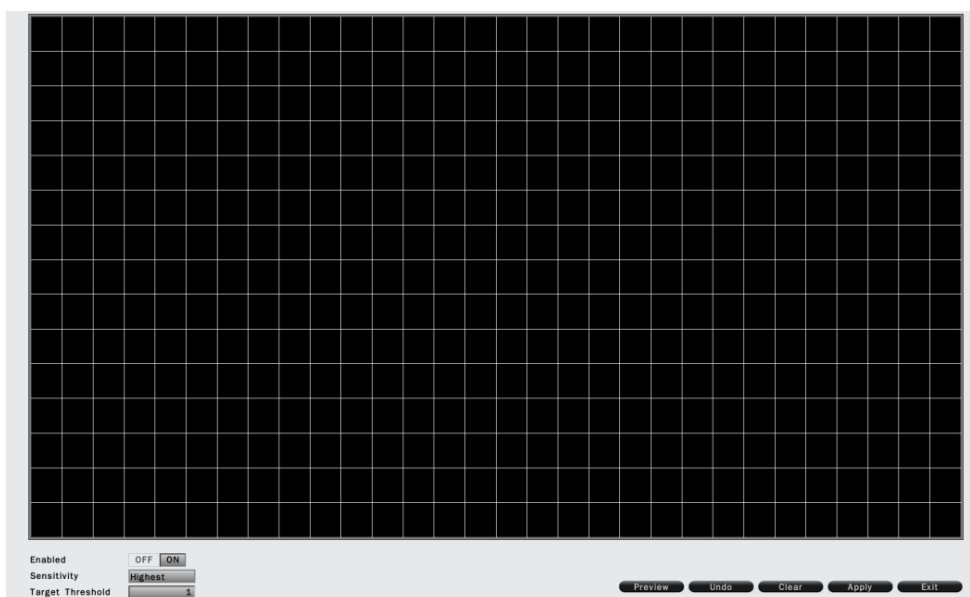


Figure 8.8

- Enables – Select On/Off to enable or disable the option.
 - Sensitivity – Select the sensitivity, from lowest to highest.
 - Target Threshold – The target quantity to trigger the motion.
- Click **Apply** to apply the setting, **Undo** to undo the step, **Clear** to clear all settings, **Preview** to view the current settings, **Exit** to leave the setup page.

8.1.1.2.5 Control over coax (COC)

Click Control over coax (COC)  button to bring up camera menu.

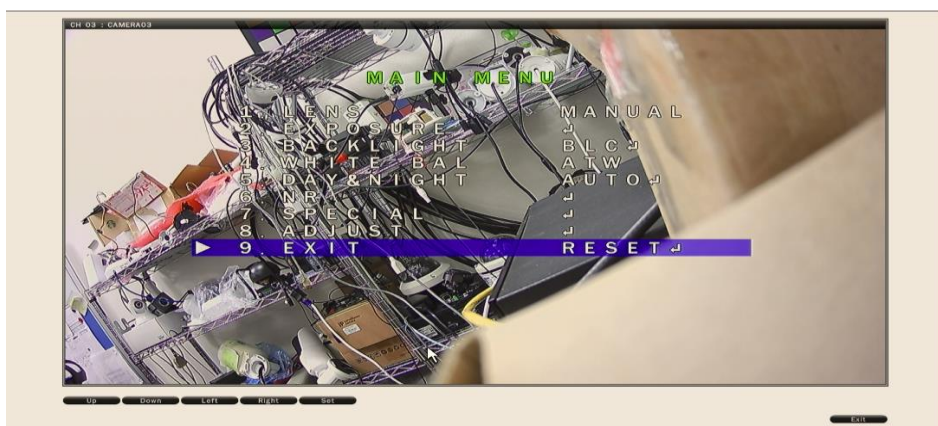


Figure 8.9

Users are able to control camera menu directly from AHD/TVI DVR by clicking



buttons. Please refer to Figure 8.9.

Note

AHD/TVI camera must provide COC function in order to enable it in AHD/TVI DVR.

8.1.1.3 Video Loss Handle Settings

Allows users to define the system behaviors while there's video loss triggered. Please refer to Figure 8.10.

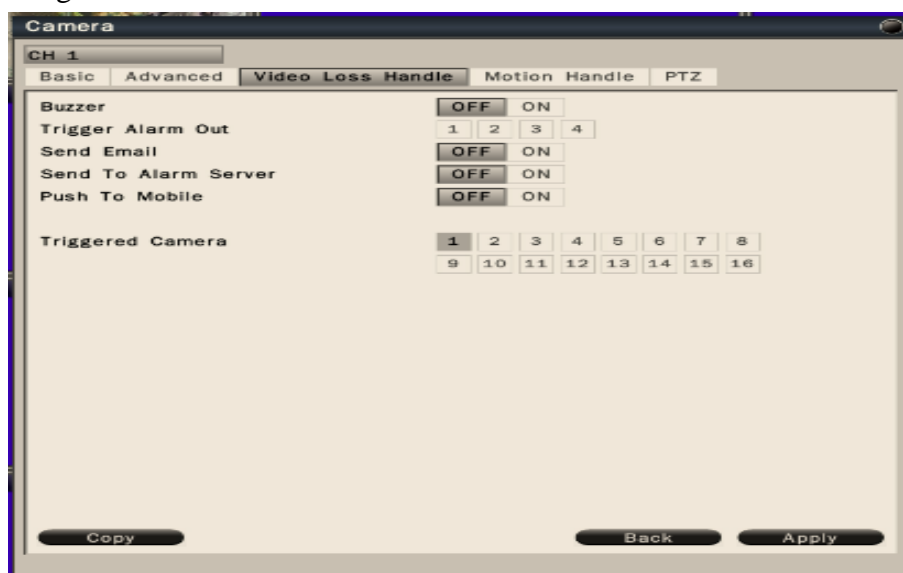


Figure 8.10

- Buzzer – Select On to trigger buzzer when video loss is detected.
- Trigger Alarm Out – The corresponding alarm output setting.

- Send E-mail – Select On to send e-mail to the preset mail account when video loss is detected. For detailed setting information, please refer to “8.2.2 Notification”.
- Send to Alarm Server – Select On to send alarm notification when video loss detected. For alarm server setting, please refer to “ 8.2.3 Alarm Notification”.
- Push to Mobile –Select On to enable **push to mobile** function to iOS or Android VS *Viewer Pro II* Apps when video loss is detected.
- Triggered Camera – The system allows users to trigger multiple cameras for event recording, select the cameras that would like to be triggered when video loss is detected.

8.1.1.4 Motion Handle Settings

Allow users to set the motion schedule and define the system behavior while there's motion triggered. Please refer to Figure 8.11.

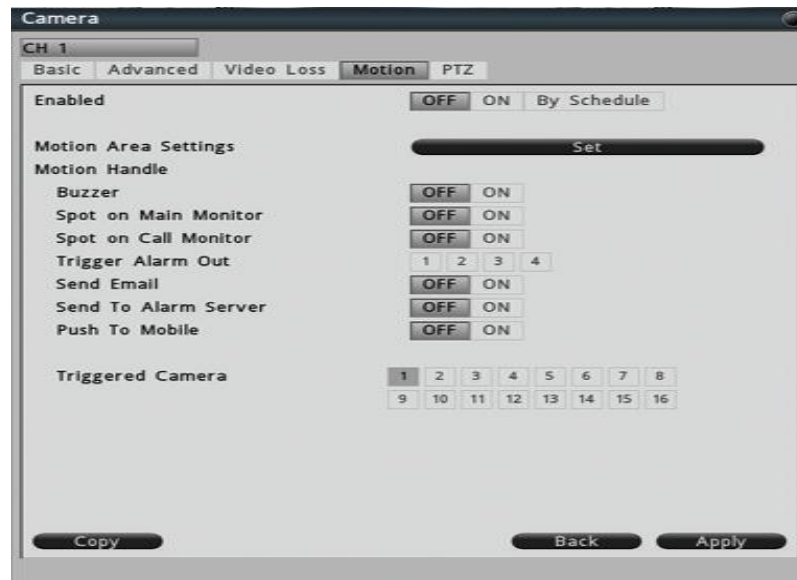


Figure 8.11

- By Schedule – Users are able to set motion schedule by selecting “By Schedule”. For detailed information, please check “8.1.1.4.1 Motion Schedule Settings” .
- The below indicates the motion handle actions when motion is triggered.
 - A. Buzzer – Select On to trigger buzzer when motion is detected.
 - B. Spot on Main Monitor – Select On to Spot on main monitor when motion is detected.
 - C. Spot on Call Monitor – Select On to Spot on call monitor when motion is detected.
 - D. Trigger Alarm Out – The corresponding alarm output setting.
 - E. Send E-mail – Select On to send e-mail to the preset mail account when motion

is detected. For detailed setting information, please check “8.2.2 Notification”.

- F. Send to Alarm Server – Select On to send alarm notification when motion detected. For alarm server setting, please refer to “ 8.2.3 Alarm Notification”.
- G. Push to Mobile –Select On to enable push to mobile function to iOS or Android VS Viewer Pro II Apps when motion is detected.
- H. Triggered Camera – The system allows users to trigger multiple cameras for event recording, select the cameras that would like to be triggered when motion is detected.

8.1.1.4.1 Motion Schedule settings

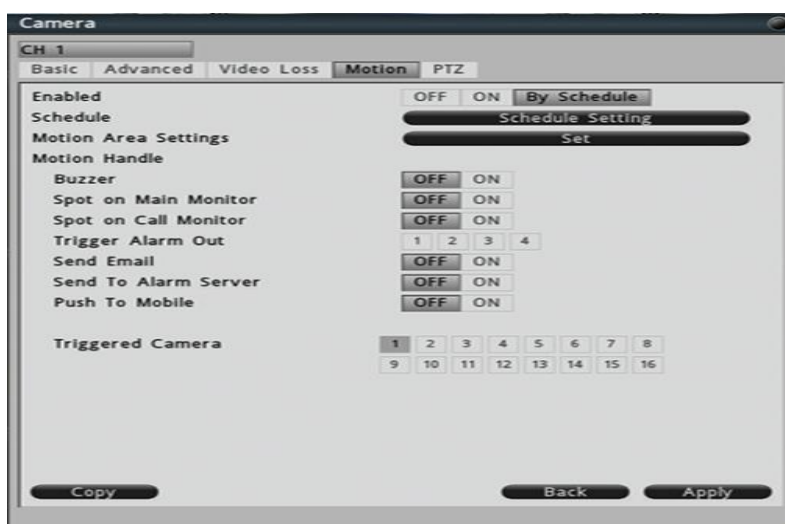


Figure 8.12

Users are able to set motion schedule by selecting “By Schedule”. Please refer to Figure 8.12. By clicking “Schedule Setting”, user can choose specific motion recording date and timeframe. Please refer to Figure 8.13.

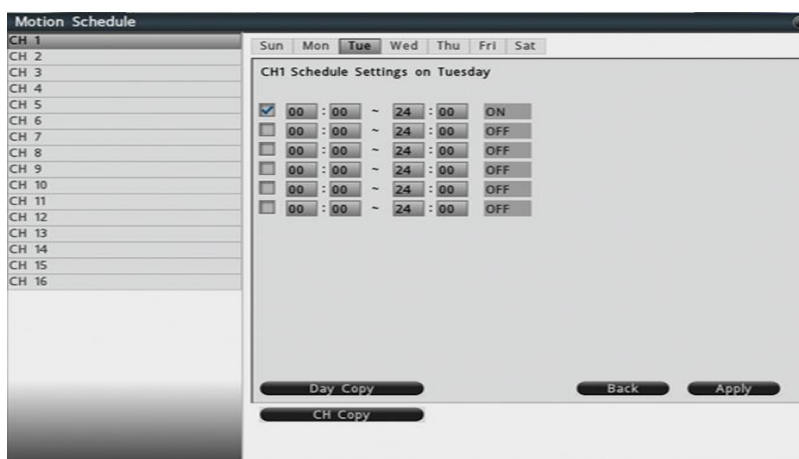


Figure 8.13

8.1.1.5 PTZ settings

Allows users to configure the settings if the system is connected to a PTZ camera. Please refer to Figure 8.14.



Figure 8.14

- Buzzer – Select On to enable PTZ setting if it is connected to a PTZ camera.
- PTZ Protocol – Select the correct PTZ protocol type.
- Baud Rate – Select the speed used to transmit instruction or information through the RS485 port on the AHD/TVI DVR.
- Data Bit - The data bit used for transferring. This can be set to 8 or 7.
- Parity: This selects the transmission level of the 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 that PTZ camera.

8.2 Network

8.2.1 Network Settings

The Network function must be enabled and configured properly in order to access the AHD/TVI DVR over the network.

8.2.1.1 LAN Setting

The AHD/TVI DVR provides the options for users to access to the AHD/TVI DVR through DHCP, Fixed IP or PPPoE. Select the option you would like to use to enable and configure the settings. Please refer to Figure 8.15.

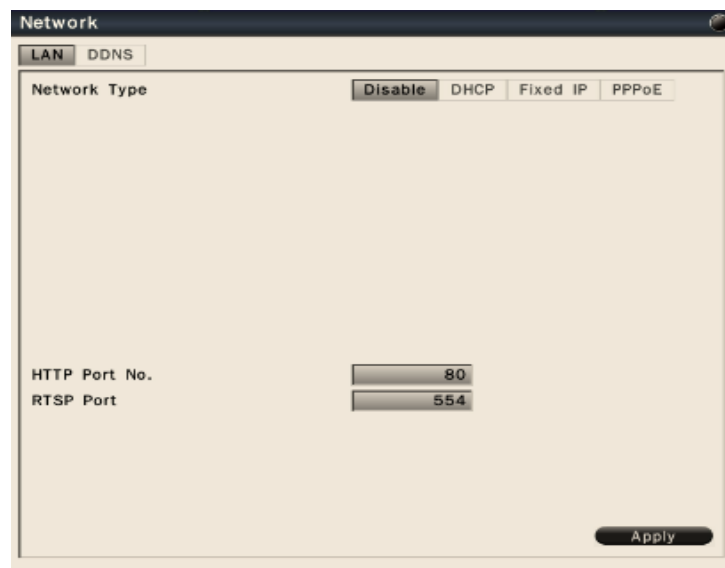


Figure 8.15

8.2.1.1.1 DHCP

If users have a DHCP server set in the network environment, select DHCP and the AHD/TVI DVR will automatically obtain the IP address and other network setting showing as below. Please refer to Figure 8.16.

The screenshot shows a 'Network' configuration window with two tabs: 'LAN' and 'DDNS'. The 'LAN' tab is active. At the top, there are four radio buttons for 'Network Type': 'Disable', 'DHCP' (which is selected), 'Fixed IP', and 'PPPoE'. Below these are several text input fields: 'IP Address' (000.000.000.000), 'Subnet Mask' (000.000.000.000), 'Default Gateway' (000.000.000.000), 'Primary DNS' (000.000.000.000), 'Secondary DNS' (000.000.000.000), and 'MAC Address' (08:7d:21:f1:a1:56). At the bottom left, there are two more fields: 'HTTP Port No.' (80) and 'RTSP Port' (554). An 'Apply' button is located at the bottom right.

Figure 8.16

Click **Apply** to save the settings.

8.2.1.1.2 Fixed IP

Select **Fixed IP** to enable and configure the fixed IP settings.

Enter the network information and click **Apply** to save the settings. Please refer to Figure 8.17.

The screenshot shows the same 'Network' configuration window, but now the 'Fixed IP' radio button is selected. The 'IP Address' field is now 192.168.001.049, 'Subnet Mask' is 255.255.255.000, 'Default Gateway' is 192.168.001.001, 'Primary DNS' is 168.095.001.001, and 'Secondary DNS' is 202.043.195.052. The 'MAC Address' remains 08:7d:21:f1:a1:56. The 'HTTP Port No.' and 'RTSP Port' fields are still 80 and 554 respectively. The 'Apply' button is at the bottom right.

Figure 8.17

8.2.1.1.3 PPPoE

The AHD/TVI DVR also allows users to use Point-to-Point Protocol over Ethernet (PPPoE) service. Select **PPPoE** to enable and configure the settings. Please refer to Figure 8.18.

Network

LAN DDNS

Network Type: Disable DHCP Fixed IP **PPPoE**

IP Address: 000.000.000.000

Subnet Mask: 000.000.000.000

Default Gateway: 000.000.000.000

Primary DNS: 000.000.000.000

Secondary DNS: 000.000.000.000

MAC Address: 08:7d:21:00:00:30

PPPoE

User Name: pppoe user

Password: *****

MTU: 0

HTTP Port No.: 80

Apply

Figure 8.18

Click **Apply** to save the settings.

8.2.1.2 DDNS Settings

In the Network-Settings-DDNS sub menu, users can select DDNS provider to configure the Dynamic DNS. Please refer to Figure 8.19.

To configure DDNS settings:

1. Enable Network-LAN setting. Ensure the LAN 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.

Network

LAN **DDNS**

Enabled: OFF **ON**

DDNS Provider: DynDNS -- http://dyn.com/dns

Domain Name:

User Name:

Password:

Build-in DDNS: 087d21f1a156 .urDDNS.com

Status : Failed (#3)

Internet does not work.
Please ensure device is able to access to Internet.

Apply

Figure 8.19

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

Prerequisites of urDDNS:

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

8.2.2 Notification

In the Network-Notification-E-mail Notification sub menu, users are able to set the Email addresses and input related information. Users can configure the system to send out the e-mail notification for motion detection or other events. Please refer to Figure 8.20.

Note

To send out the e-mail notification, users 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*.

The screenshot shows a web-based configuration window titled "Notification". It has two tabs: "E-mail Notification" (selected) and "Alarm Notification". The "E-mail Notification" tab contains the following fields and controls:

- To E-mail Address 1: Text input field
- To E-mail Address 2: Text input field
- To E-mail Address 3: Text input field
- From E-mail Address: Text input field
- Subject: Text input field with "Alert" entered
- SMTP Server: Text input field
- SMTP Port No.: Text input field with "25" entered
- SSL: Toggle switch (OFF/ON)
- STARTTLS: Toggle switch (OFF/ON)
- Authentication: Toggle switch (OFF/ON)
- User Name: Text input field
- Password: Text input field
- Send Test Mail: Button labeled "Send"
- Apply: Button at the bottom right

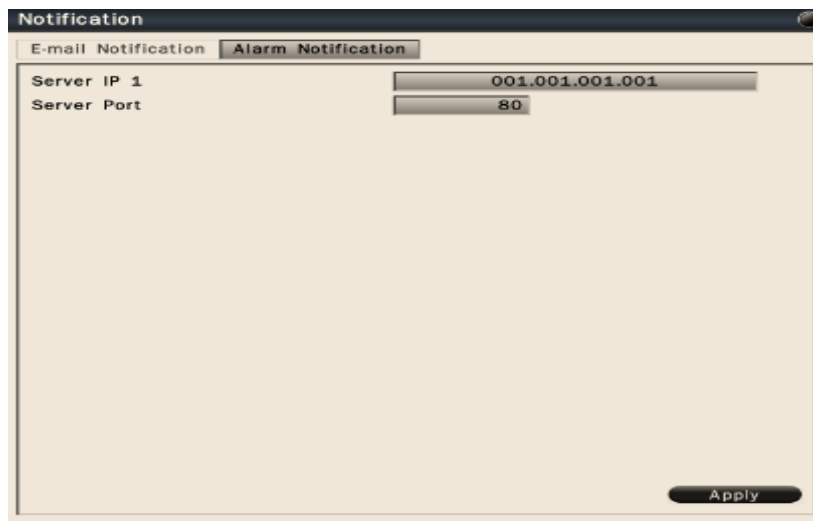
Figure 8.20

- **To Email address 1-3:** Allows users to input up to 3 email address for alarm message to send to.
- **From Email address :** Input the Email address of the sender (AHD/TVI DVR)

- **Email Subject:** Input email subject.
 - **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.
 - **STARTTLS:** To enable STARTTLS if mail server needs to be encrypted by STARTTLS.
 - **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.

8.2.3 Alarm Notification

In the Network-Notification-Alarm Notification sub menu, users are able to send the alarm notification to event server in CMS Pro. Please input **IP address (Server IP 1)** and network **port number (Server Port)** of the PC installed CMS Pro to AHD/TVI DVR to complete the Alarm Server setting. Please refer to Figure 8.21.



The screenshot shows a window titled "Notification" with two tabs: "E-mail Notification" and "Alarm Notification". The "Alarm Notification" tab is active. It contains two input fields: "Server IP 1" with the value "001.001.001.001" and "Server Port" with the value "80". An "Apply" button is located at the bottom right of the window.

Figure 8.21

8.3 Alarm Settings

8.3.1 Alarm Input Settings

Users can define the alarm behaviors and the corresponding actions for triggered alarm. Please refer to Figure 8.22.

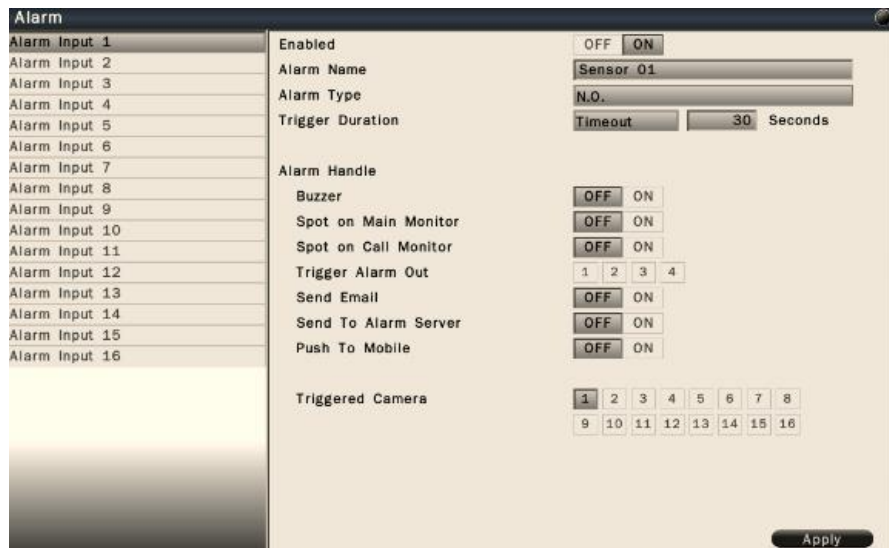


Figure 8.22

- **Alarm input:** Select the alarm input number from 1 to 16, 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 users 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, send to alarm server and push to mobile (Android and iOS *VS Viewer Pro II* Apps).
- **Triggered Camera :** The system allows users 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 users to define the system behavior when there's an exceptional event occurred. Please refer to Figure 8.23.

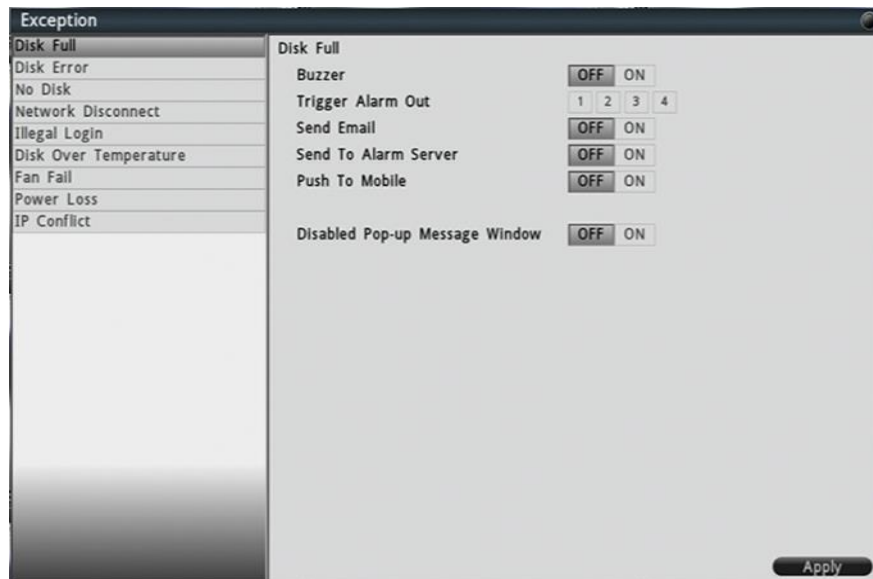


Figure 8.23

The exceptional events are including Disk full, Disk error, No disk, Network disconnect, Illegal Login, Disk over temperature, Fan failed, 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 8.2.2 for *E-Mail Notification*.
- **Send To Alarm Server**– Select On to send alarm notification to alarm server when system exception is detected. For alarm server setting, please refer to “ 8.2.3 Alarm Notification”.
- **Push to Mobile** –Select On to enable push to mobile function to iOS or Android VS Viewer Pro II Apps when system exception is detected.
- **Disabled Pop-up Message Window**– Select On to disable system exception Pop-up warning message display on the screen. Select Off to enable exception Pop-up warning message display on the screen.

8.4 System Settings

8.4.1 Device Setting

In the System-Device sub menu, users can configure the device related settings. Please refer to Figure 8.24.



Figure 8.24

- **Device Name:** Input the name for the AHD/TVI DVR.
- **Device No. :** Input the number for the AHD/TVI DVR.
- **Language:** Select from the list for the language to be use on the GUI of AHD/TVI DVR.
- **Push to Mobile Test :** After LAN is enabled and finish the related network setting, please click **Send** button to test push to mobile function. Users will get the test message via Android or iOS *VS Viewer Pro II* Apps.
- **Enable Authentication:** Select On to active the user login and can set up auto logout timeframe from 1min , 5 mins, 30 mins or 60 mins. Users also can enable **Select Privilege to Use Export** for administrator or operator authority level. Please refer to Figure 8.25. If users select Off, no users name or password is required to access the system, and all users operate with administrator's right.

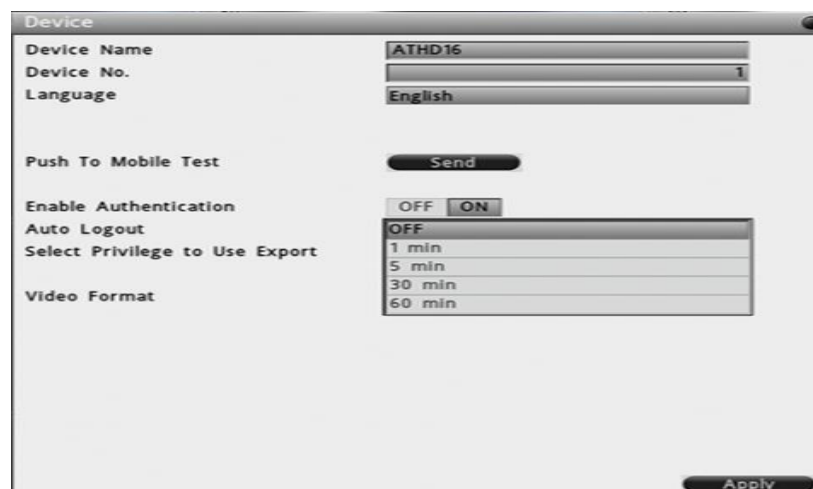


Figure 8.25

Click **Apply** to save the settings.

8.4.2 User Settings

User setting page is where users can add or delete users on the system. Please refer to Figure 8.26.



The screenshot shows a window titled "User" with a table containing three columns: ID, User Name, and Group. The table lists several users, including 'admin', '1', '2', '4', '3', and several empty rows. The 'Group' column shows 'admin', 'admin', 'guest', 'operator', and 'admin' for the first five rows respectively.

ID	User Name	Group
01	admin	admin
02	1	admin
03	2	guest
04	4	operator
05	3	admin
06		
07		
08		
09		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		

Figure 8.26




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 users. However, at least one administrator is required 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

For System Date/Time settings, please refer to Figure 8.27.

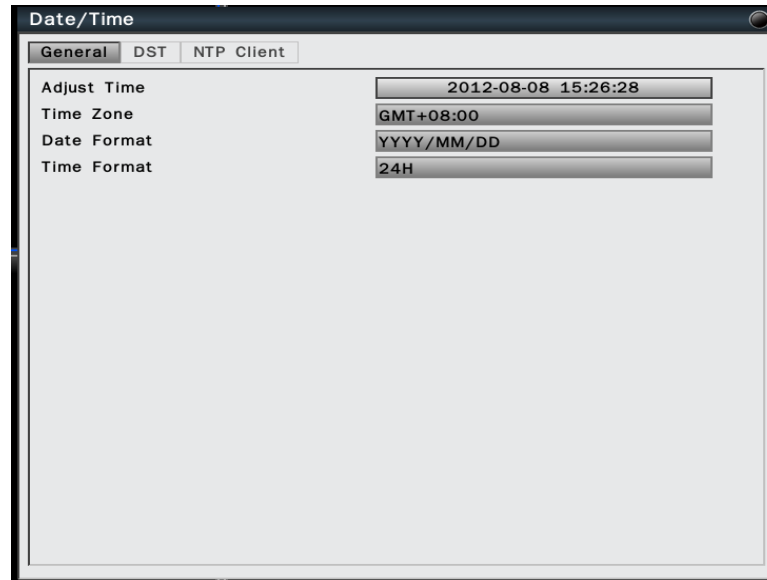


Figure 8.27

- **Adjust Time** : Click on the column and the Calendar will pop up on screen for users to adjust the system date and time. Click Apply to enable the settings.
- **Time Zone**: Set the time zone that the AHD/TVI DVR 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)

Users can set daylight saving time start time and end time. Please refer to Figure 8.28.

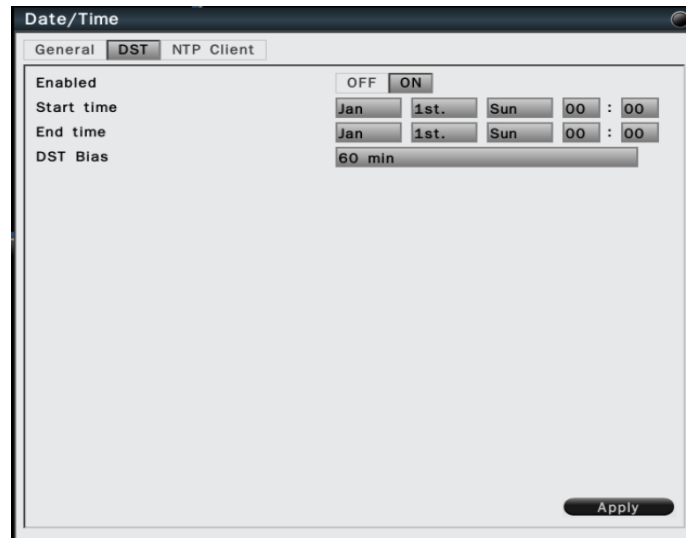


Figure 8.28

- **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

Users can sync NVR clock with an Internet NTP time server. Please refer to Figure 8.29.

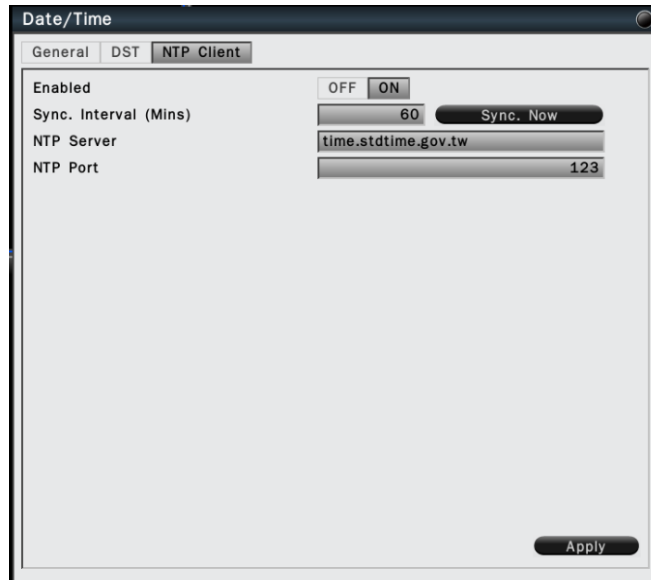


Figure 8.29

- **Enabled:** Select On to enable NTP synchronization.
- **Sync. Interval (mins):** Input the frequency that the system automatically updates the time. Click the button “Sync Now” if immediately synchronization is needed.
- **NTP Server:** Input the time server address for time synchronize. The default NTP server is “time.stdtime.gov.tw”.
- **NTP Port:** The default setting is “123”, users can define NTP port according to the network environment.

Click **Apply** to save the settings.

8.4.4 Display

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

8.4.4.1 General Settings

In the System-Display-General sub menu, users can select the proper resolution for connected HDMI and VGA monitors. Please refer to Figure 8.30.



Figure 8.30

- **Monitor Output:** To define the monitor display type for HDMI and VGA output. Both monitor output can be for main monitor or call monitor output.
- **Monitor resolution:** Select the proper resolution for the connected monitor output. The supported resolutions are: 1920x1080, 1440x900, 1366x768, 1280x1024, 1024x768. Select Auto for system to identify resolution automatically.

8.4.4.2 Main Monitor Settings

In the System-Display-Main Monitor sub menu, users can configure the main monitor display mode and the contents. Please refer to Figure 8.31.

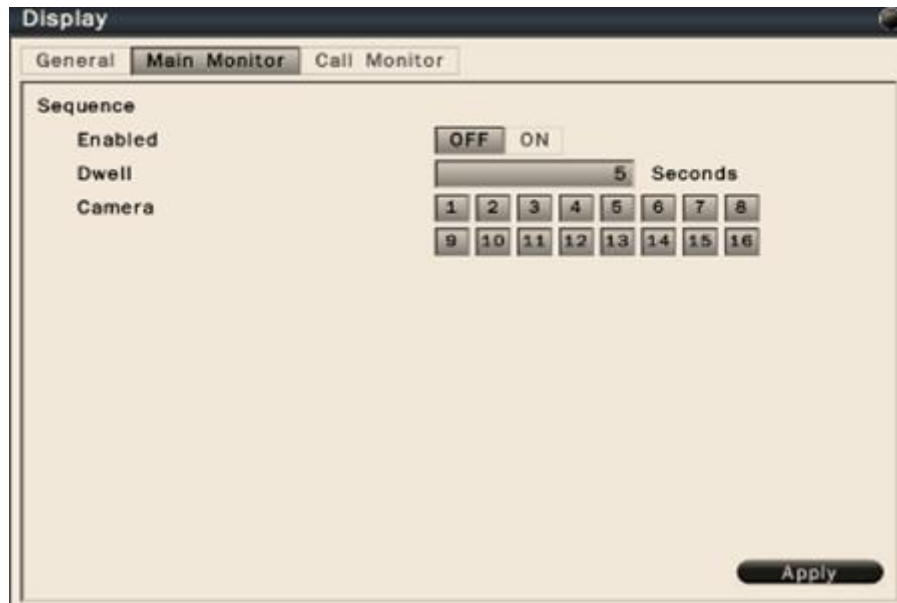


Figure 8.31

- **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.

8.4.4.3 Call Monitor Settings

In the System-Display-Call Monitor sub menu, Users can configure the call monitor display mode and the contents. To define the call monitor display type for HDMI or VGA output. CVBS monitor output is always defined as call monitor. Please refer to Figure 8.32 and 8.33.

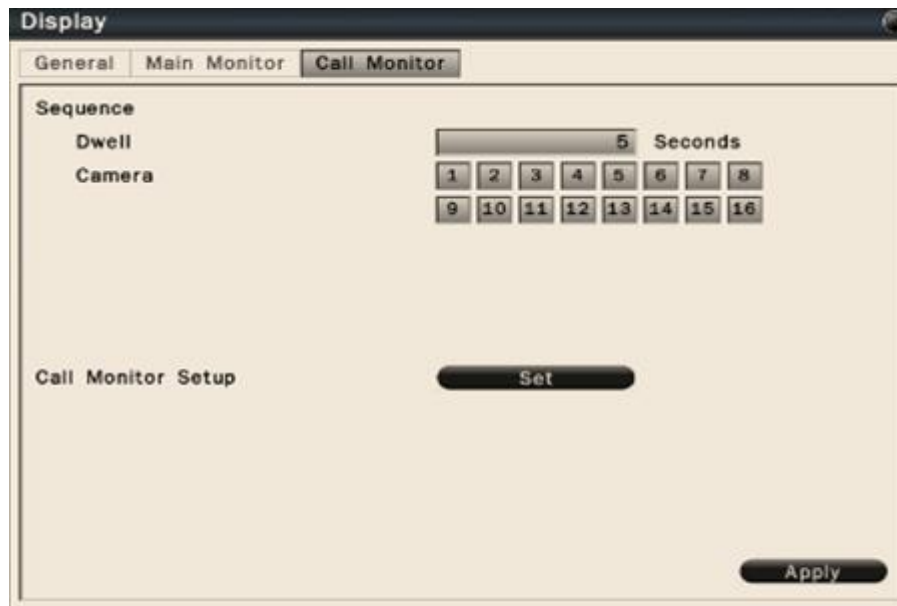


Figure 8.32

- **Sequence Dwell:** Input the dwell time in seconds for sequence display.
- **Camera:** Select the cameras to be appeared on the sequence display.
- **Call monitor setup:** Click to bring up the call monitor setup menu as below.

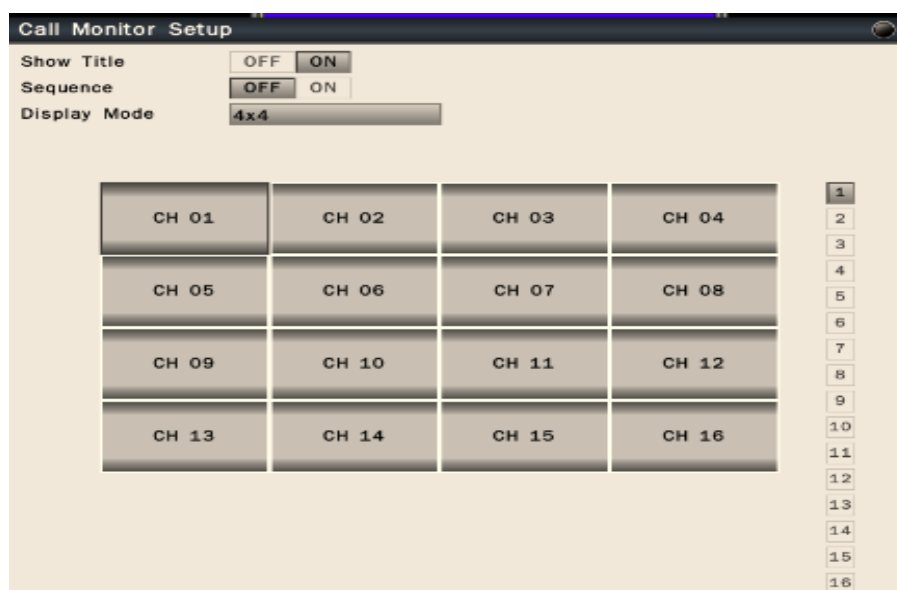


Figure 8.33

- **Show Title:** Select On to enable display title on call monitor.
- **Sequence:** Enable or disable the sequence display mode. Under sequence display, the display mode is always full screen.
- **Display mode:** Users can select the display mode of call monitor. It includes 1x1, 2x2, 1+5, 1+7, 3x3, 1+12, 4x4 screen.
Also Users can assign the display video in each cameo by clicking the channel icons on the right side.

8.4.5 HDD

In the System-Disk sub menu, Users can review and manage the hard disk settings of the AHD/TVI DVR. It allows Users to configure overwrite, auto delete and format HDD.

8.4.5.1 HDD General Settings

In the System-Disk-General sub menu, users can enable or disable overwrite. users are also able to select the auto delete days. Please refer to Figure 8.34.



Figure 8.34

- **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. Please refer to Figure 8.35.

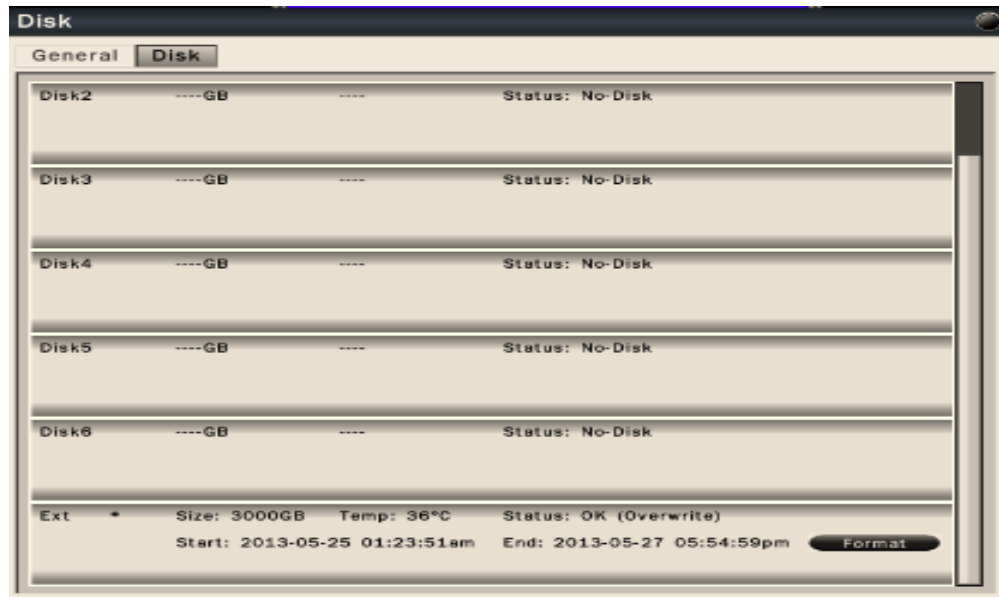


Figure 8.35

- Click **Format** to format the selected hard disk.
- HDD quantities support might vary according to different AHD/TVI DVR 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, users can select to reboot or shutdown the System. Please refer to Figure 8.36.

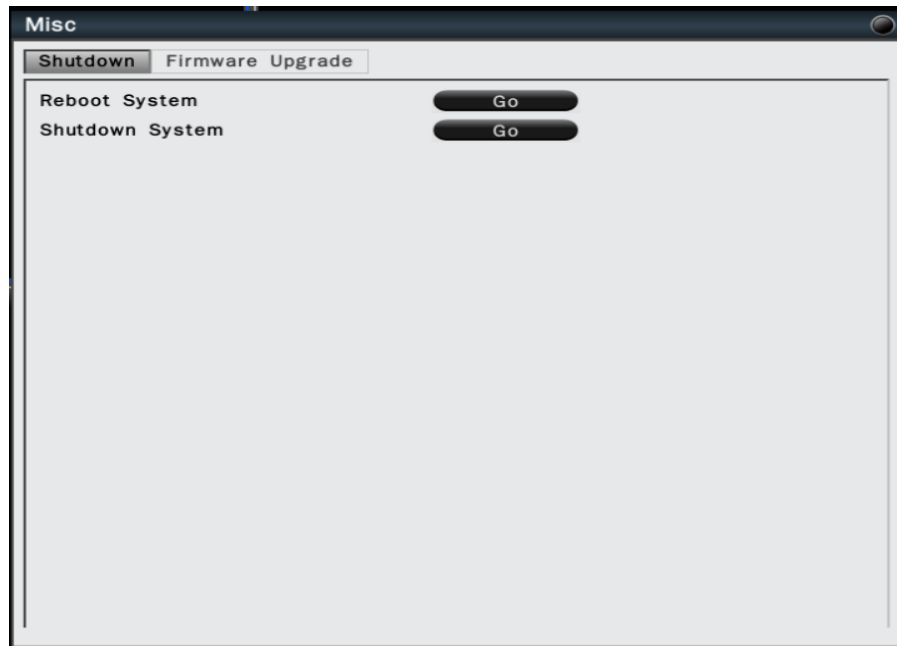


Figure 8.36

8.4.6.2 Firmware Upgrade

In the System-Misc-Firmware upgrade sub menu, users are able to upgrade AHD/TVI DVR firmware by store the firmware in USB drive. Please refer to Figure 8.37.



Figure 8.37

To upgrade the firmware, connect a USB flash device which contains the firmware version you 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 AHD/TVI DVR power during the upgrading firmware otherwise it might cause AHD/TVI DVR defective.

8.4.7 Configuration

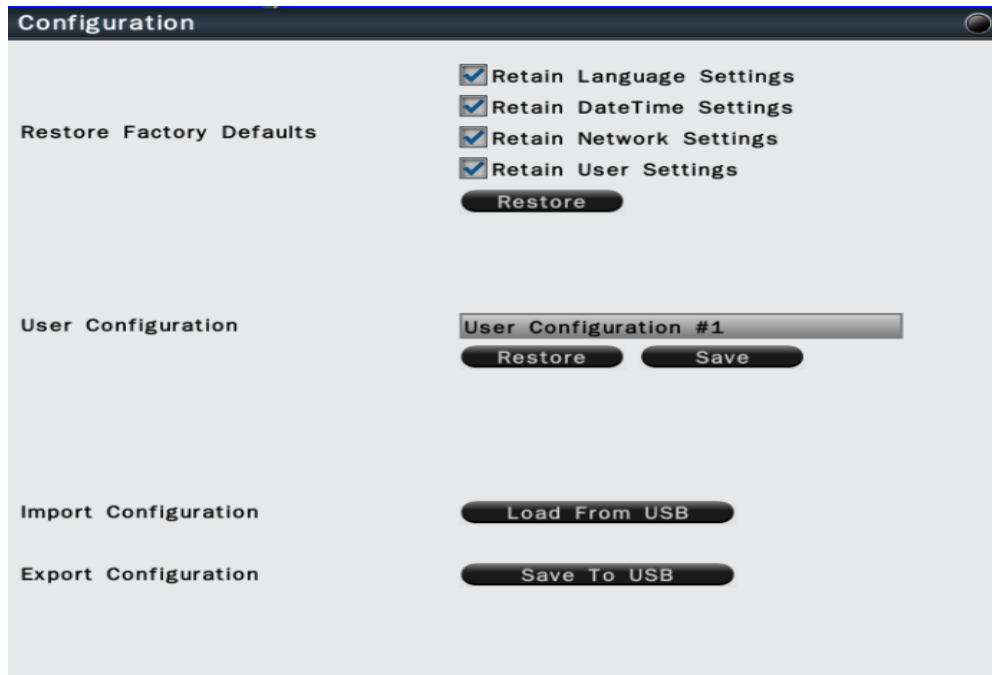


Figure 8.38

- **Restore Factory Default:** Users 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 users can select the configuration from the list and click “Restore” to restore the selected settings.
- **Import Configuration:** Click “Load from USB” button to upload AHD/TVI DVR configuration settings from a USB flash device.
- **Export Configuration:** Click “Save to USB” to save the current AHD/TVI DVR 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. It includes model name, firmware version, serial number, LAN IP address and LAN MAC address. Please refer to Figure 8.39.

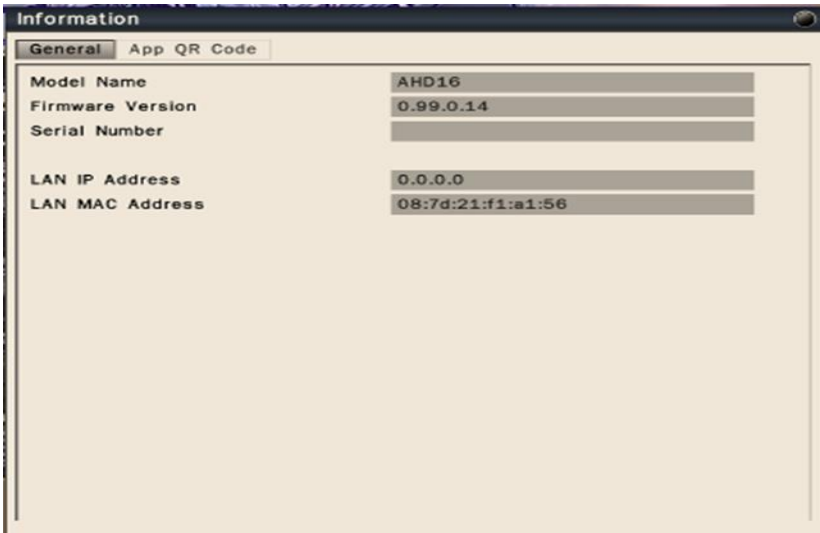


Figure 8.39

8.5.2 App QR Code

In the Information-App QR Code sub menu, users can use mobile to scan the APP QR code to download VS Viewer Pro II App. Please refer to Figure 8.40.



Figure 8.40

8.5.3 P2P

In the Information-P2P UID sub menu, users can input the UID number to set up AHD/TVI DVR P2P connection. If you do not have P2P UID number, please contact your supplier. After set up the P2P connection in the system, users can input the UID number in Android or iOS *VS Viewer Pro II* Apps to connect to the system to monitor anywhere. Please refer to Figure 41.

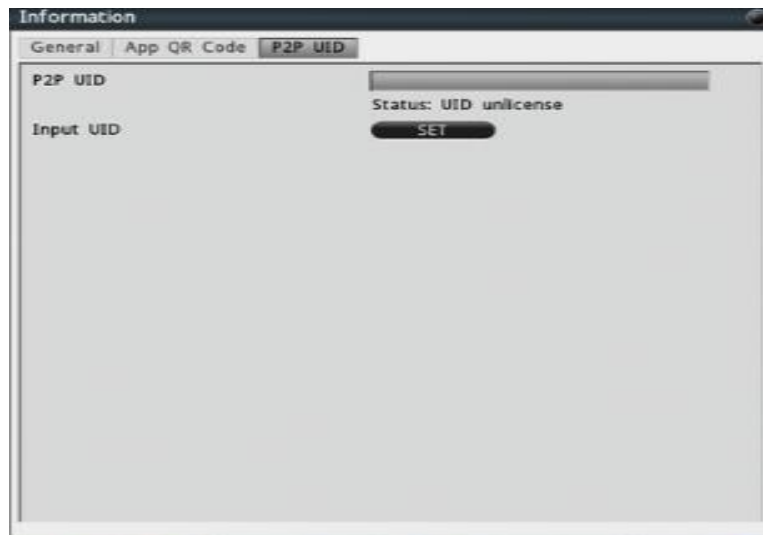
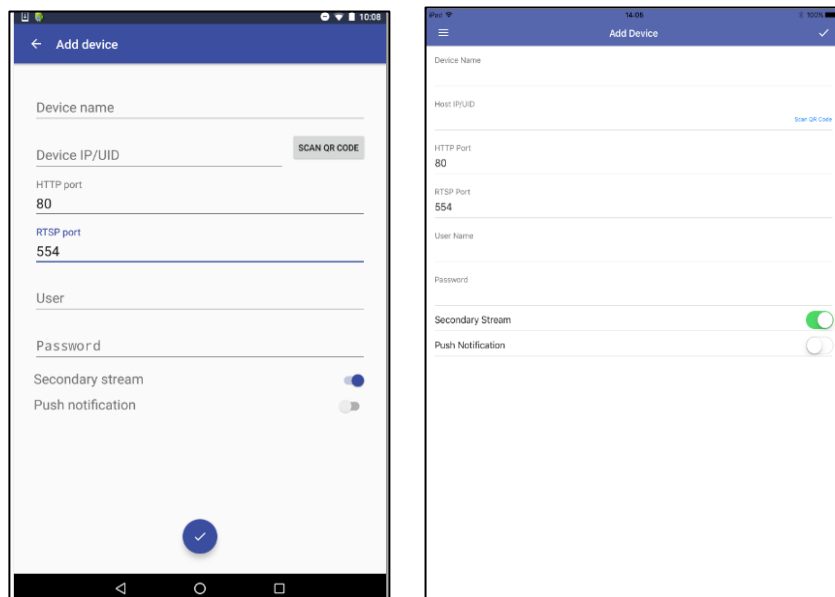


Figure 41

For mobile devices, please log in VS Viewer Pro II. Please input AHD/TVI DVR UID number, http port number, RTSP port number, user name and password to access the system via P2P network connection.



8.6 Log

In the Information-Log sub menu, it allows users to filter and review the system event log. Please refer to Figure 8.42.

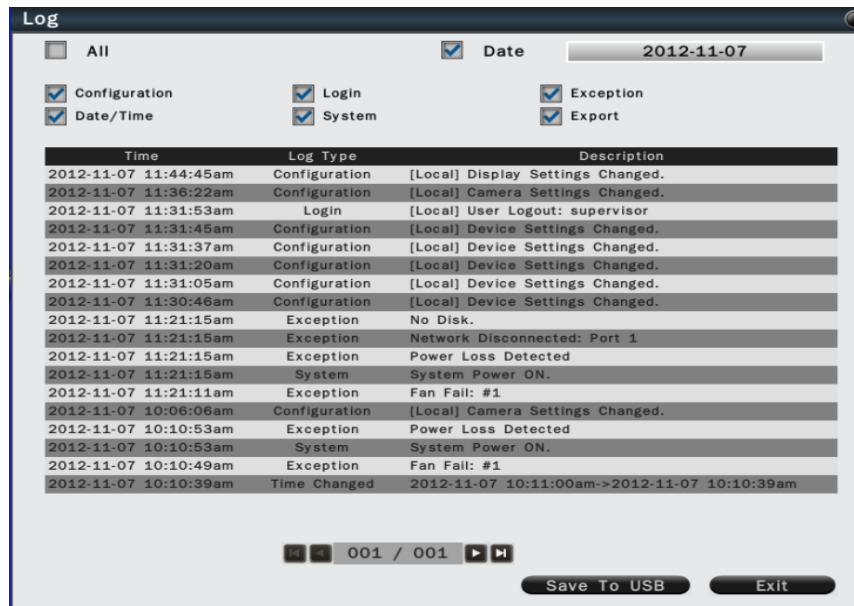


Figure 8.42

- Click the **Date** column and the calendar will pop up for users to select the day to be displayed.
- Click the checkbox of **configuration, Login, Exception, Date/Time, system, Export** users 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 AHD/TVI DVR

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

For AHD/TVI DVR network setup, please refer to *Chapter 8, 8.2.1.1 LAN Settings*.

System Requirement

The following are minimum system requirements for web viewer.

Description	Requirement
Operating System	Windows XP/Vista/7/8/10
CPU	Intel i3 or higher
Memory	4GB
Independent Graphic Card	Minimum 128MB
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

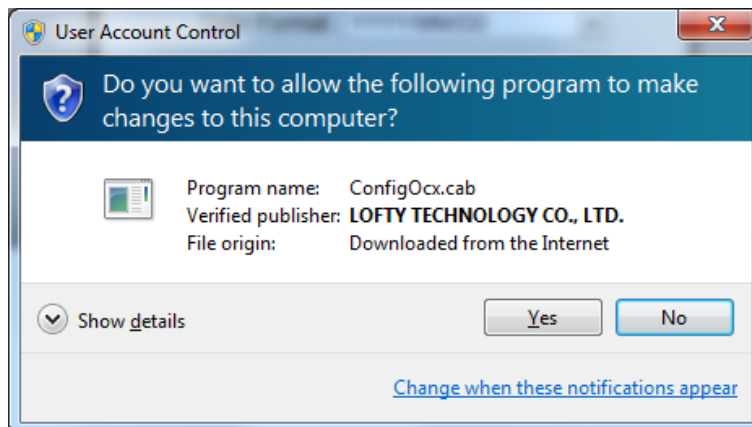
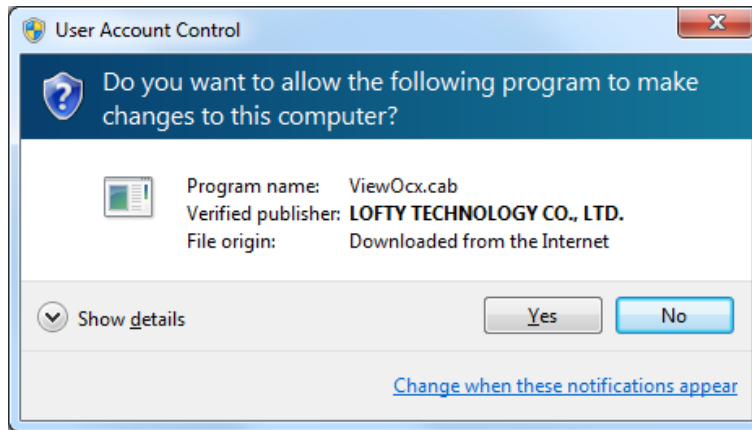
example, <http://192.168.2.3> or <http://089d21011a0ad.urDDNS.com>.

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 AHD/TVI DVR IP address in the address bar.

When accessing this feature for the first time, you 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 Active X, 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.

 A login page interface with a metallic background. In the center, there is a white rectangular box with a black border. Inside this box, there are five input fields: "User Name:" with a text box, "Password:" with a text box, "Language:" with a dropdown menu showing "English", "Date Format:" with a dropdown menu showing "YYYY/MM/DD", and "Time Format:" with a dropdown menu showing "12H". Below these fields is a black button with the word "Login" in white.

The user name/password are the same as the AHD/TVI DVR 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 users 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 users' privilege.



Full screen display mode



Quad display mode



First/Second/Third/Fourth display mode



9-up display mode



First/Second 9-up display mode



16-up display mode



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



Show/Hide OSD



Two-way audio



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



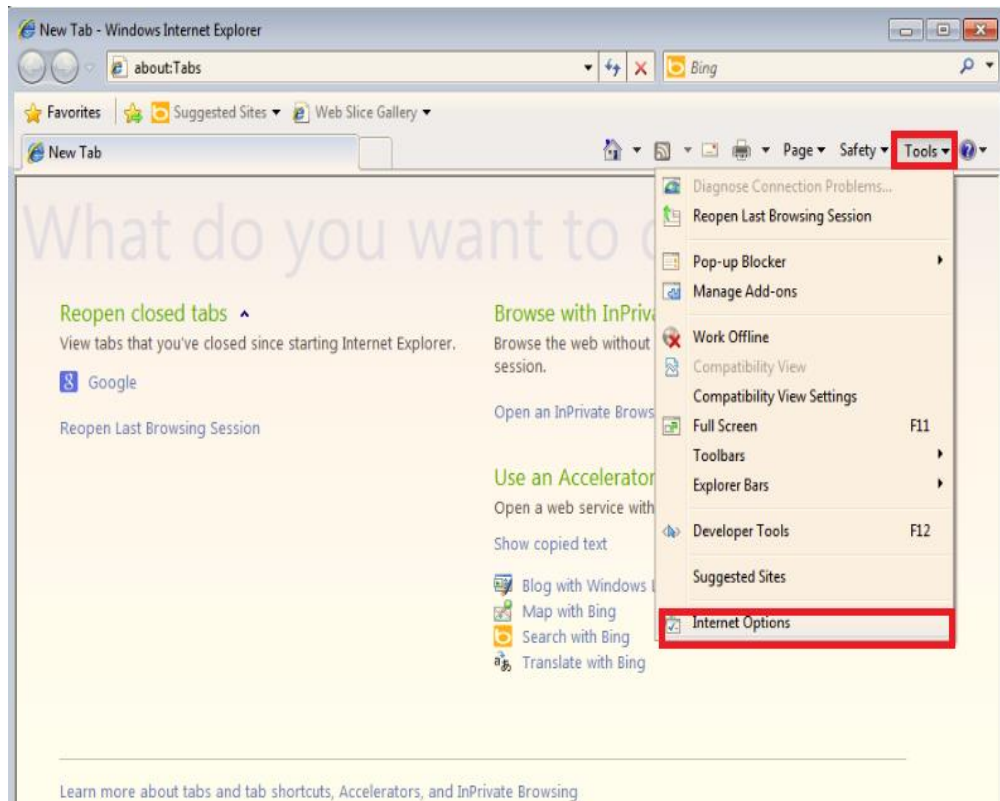
Click to take a snapshot of the selected video.

Note

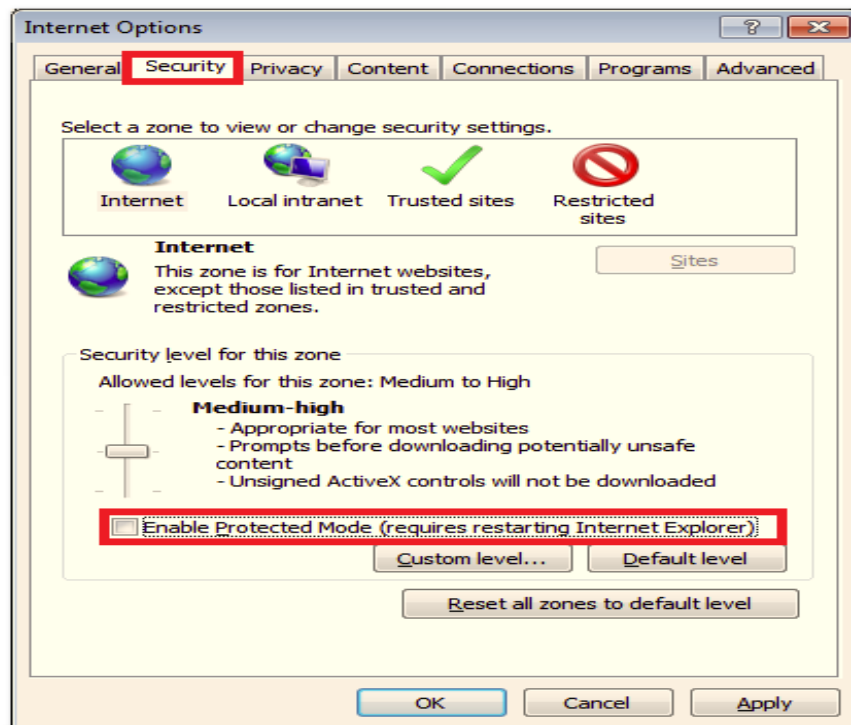
For remote snapshot, please disable the protected mode in the IE browser.

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.

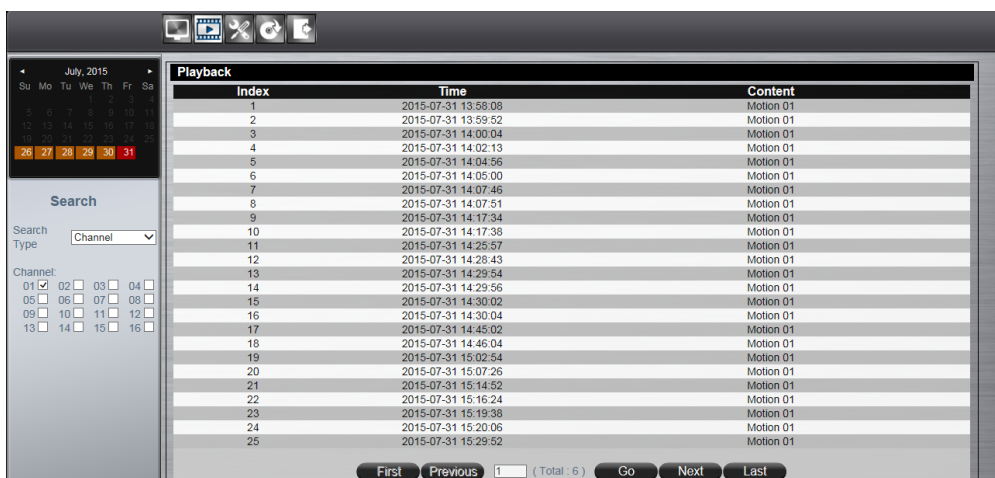
9.4.1 Search by Time



The calendar on the screen shows the recorded data contains in the AHD/TVI DVR 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.

Users also can select the specific time to playback the recorded data.

9.4.2 Search by Channel



Search by **Channel** allows users to search the event video by channel. Select the date

from the calendar, and select the channel users 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

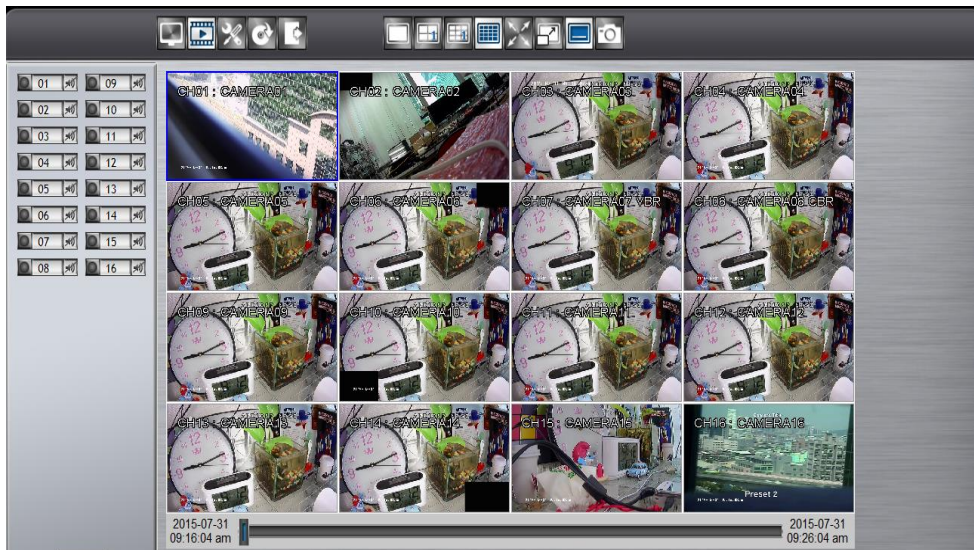


Search by **event** allows users to search the event video list by channel and by event type.

Select the channel users would like to view (users 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), users can also control the playback speed by clicking  and , in x0.25, x0.5, x1, x2, x4 and x8.




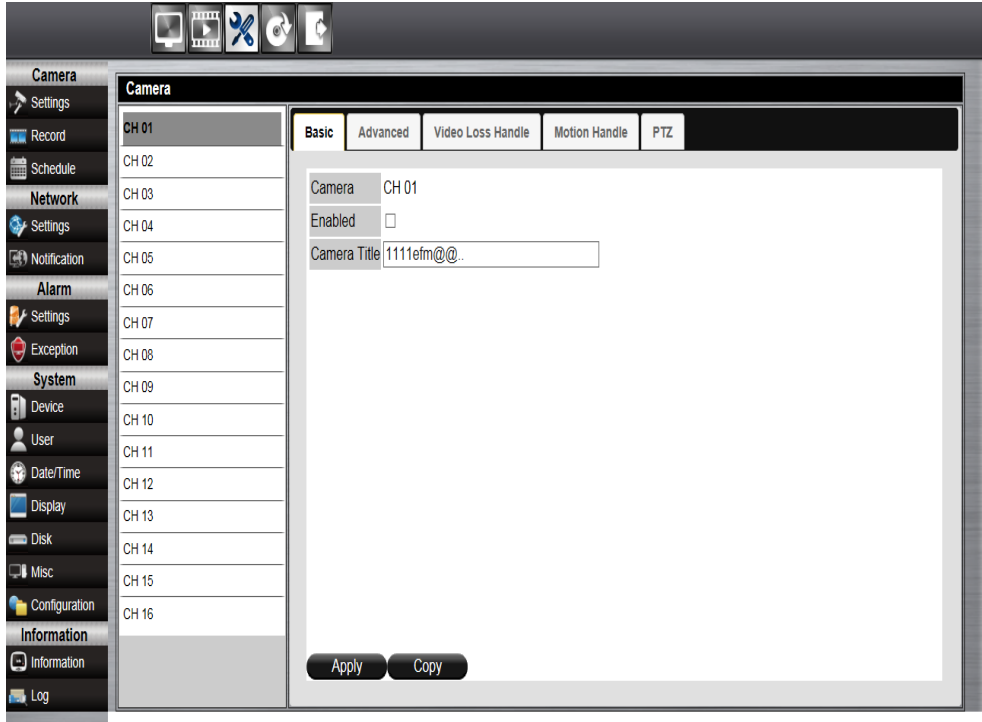
Click to fast forward to the next section



Click to fast backward to the previous section

9.4.5 Web Viewer Setup Menu

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

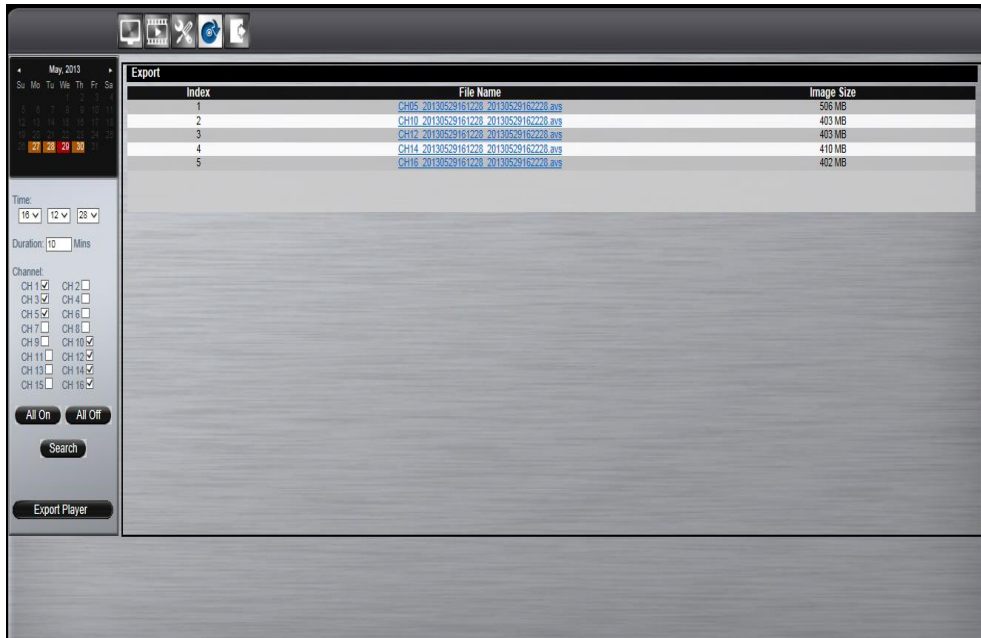


Users can configure all the AHD/TVI DVR settings remotely through the web viewer. The setup menu operation is the same as in the NVR. Please refer to the *Chapter 8 Main Menu Operations*.

9.4.6 Remote Export

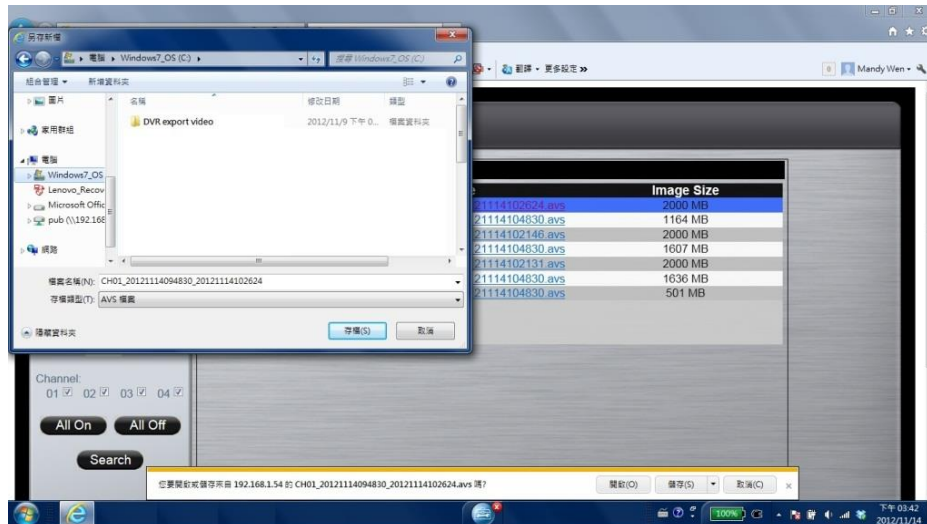


Click on the **Export** icon to bring up the remote export menu, this allows users to export the video file from the AHD/TVI DVR.



To export the video, select the date from the calendar, the starting time of the video and channels that users would like to export. (Click **All On** or **All off** to enable or disable all channels.) Input the duration time users 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 users would like to store then click Save to execute the downloading.



Users can view the exported file on the Export Player. If the users 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** icon to enable the PTZ control panel. This allows users to control the connected PTZ camera.

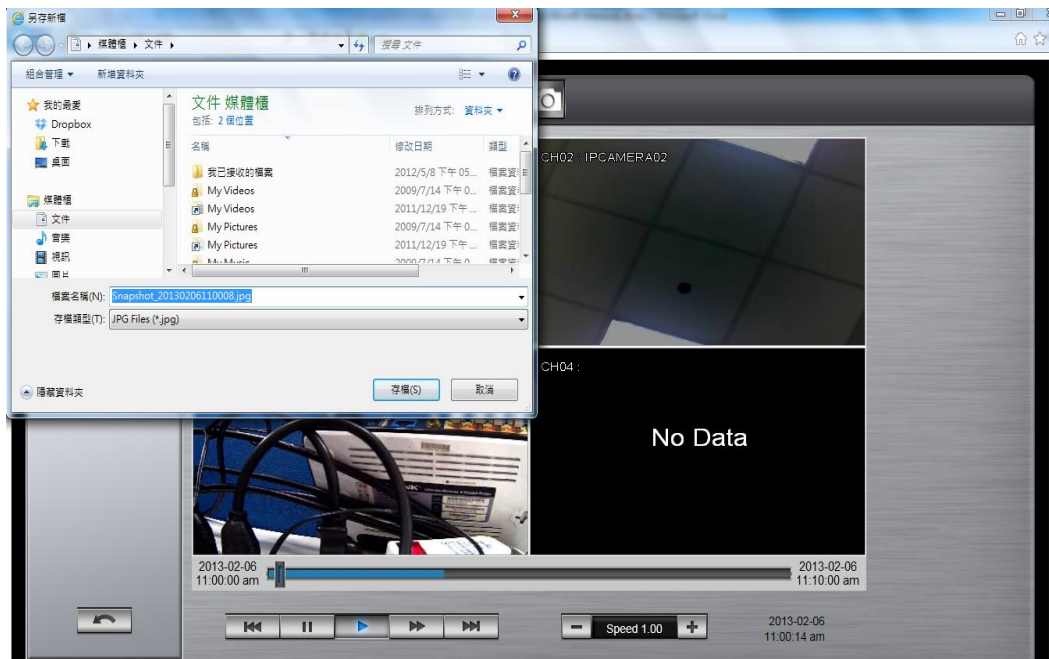
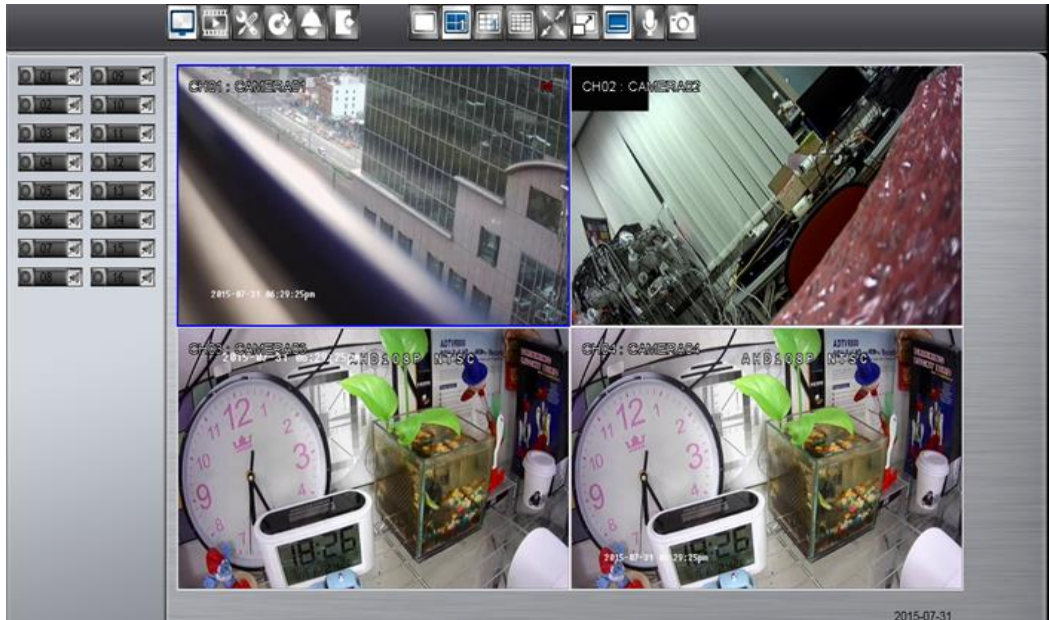


The basic operation is the same as the PTZ control. Please refer to *Chapter 5 PTZ Control* for detailed operation.


9.4.8 Remote Snapshot



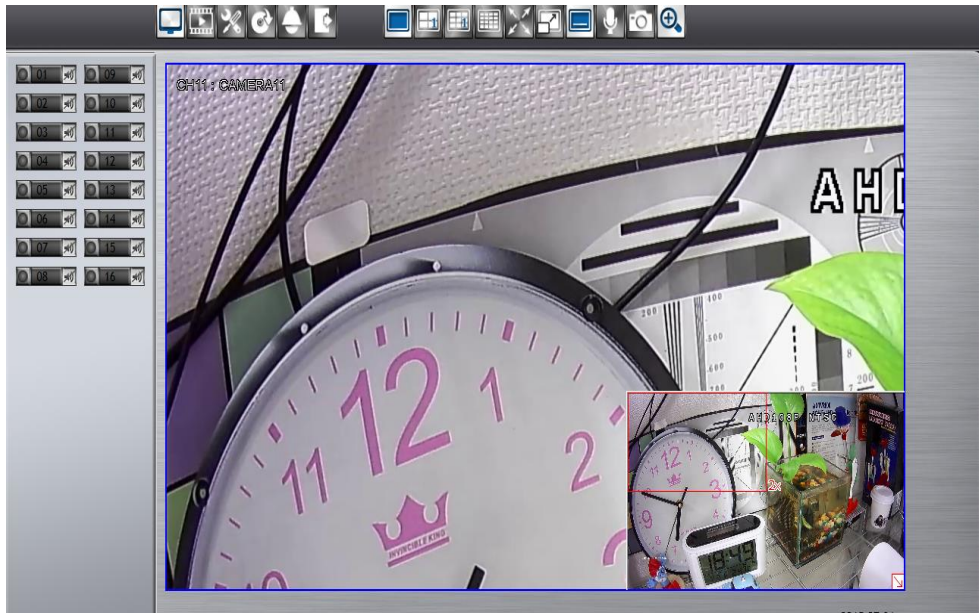
Click the **Snapshot** button in live mode or playback mode to store the current image as a still image and save in the PC folder.



9.4.9 Remote Digital Zoom

Click **Digital Zoom**  button to allow users 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 users would like to enlarge.



10. Mobile Apps

AHD/TVI DVR 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. AHD/TVI DVR must have internet access.
2. Users might create a DDNS account and the DDNS settings configured in AHD/TVI DVR. Users 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

Download the APP

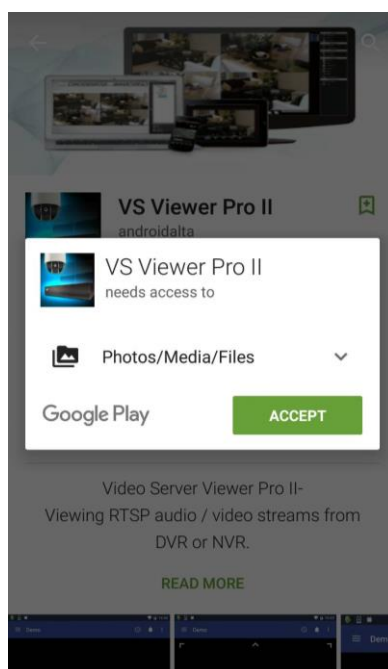
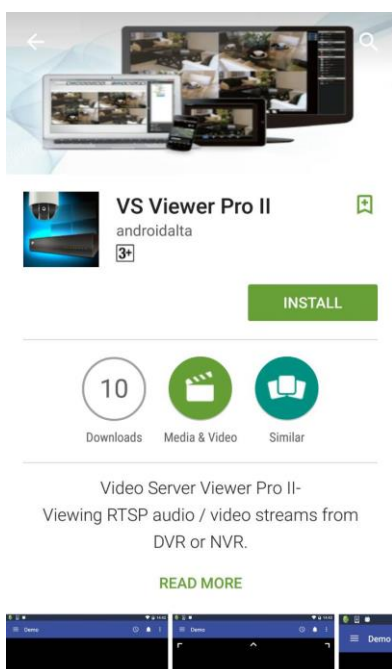
Step1. Launch "Google Play Store"



Step2. Search for "VS Viewer Pro II", tap Install, the system will pop-up the menu for users to Accept & download the APP. The download should then begin. The VS Viewer



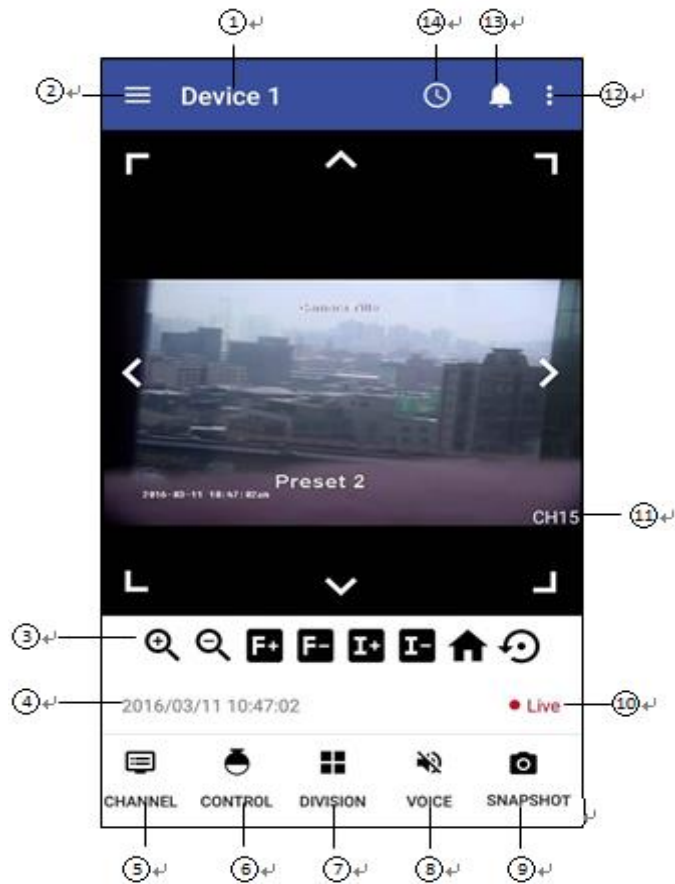
Pro II icon will show on the device after the download is completed.



Step3. Tap **VS Viewer Pro II** icon to launch the 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

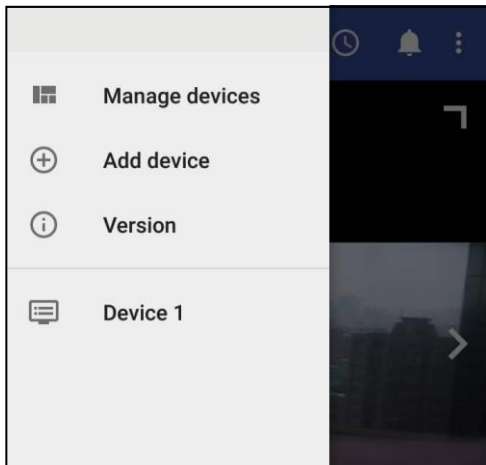
10.1.3 Live View

10.1.3.1 Device name

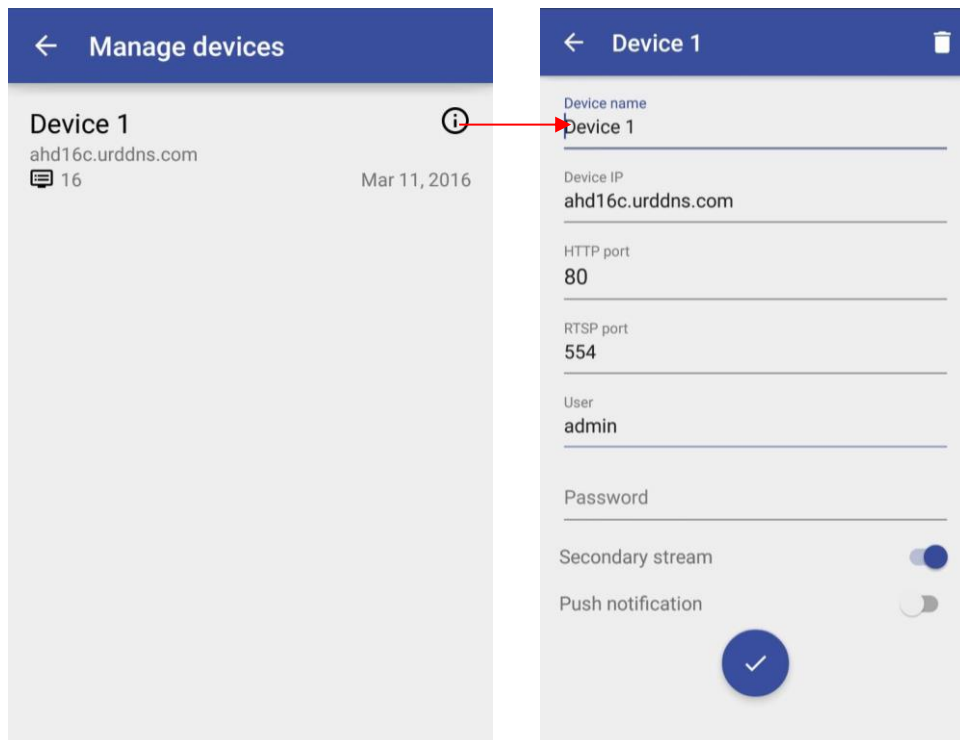
Device name is shown on upper left side of the screen.


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.

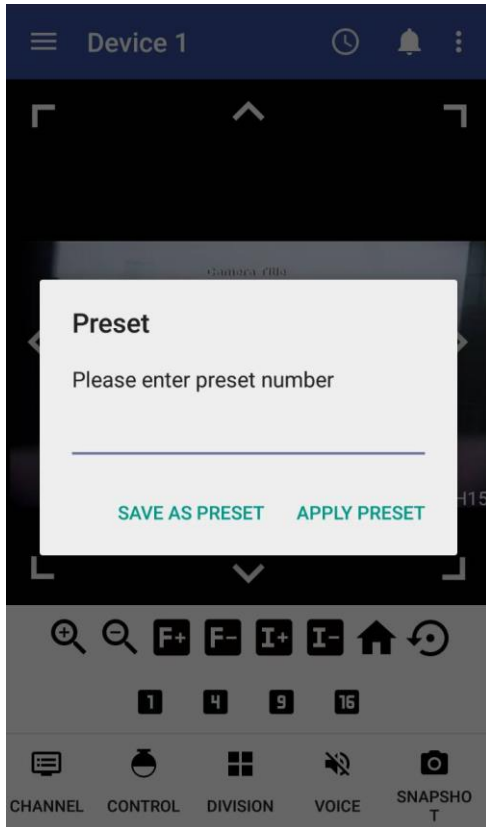
  : Tap to Zoom in or Zoom out

  : 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

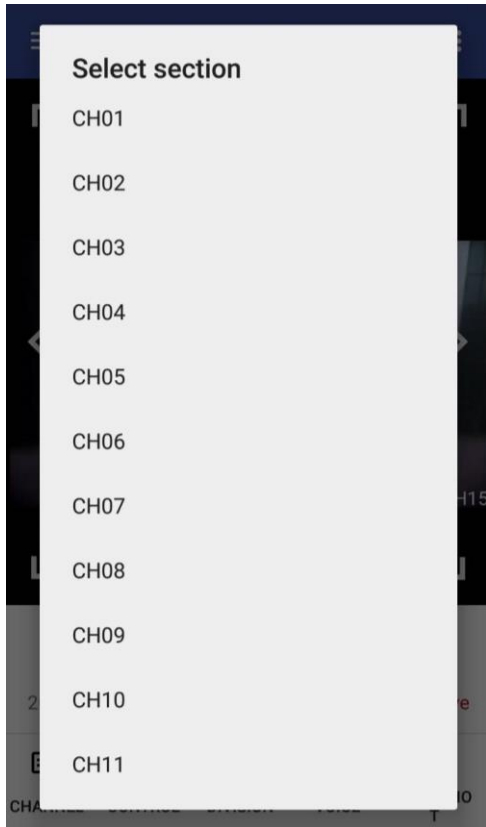
10.1.3.4 Current date and time

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.

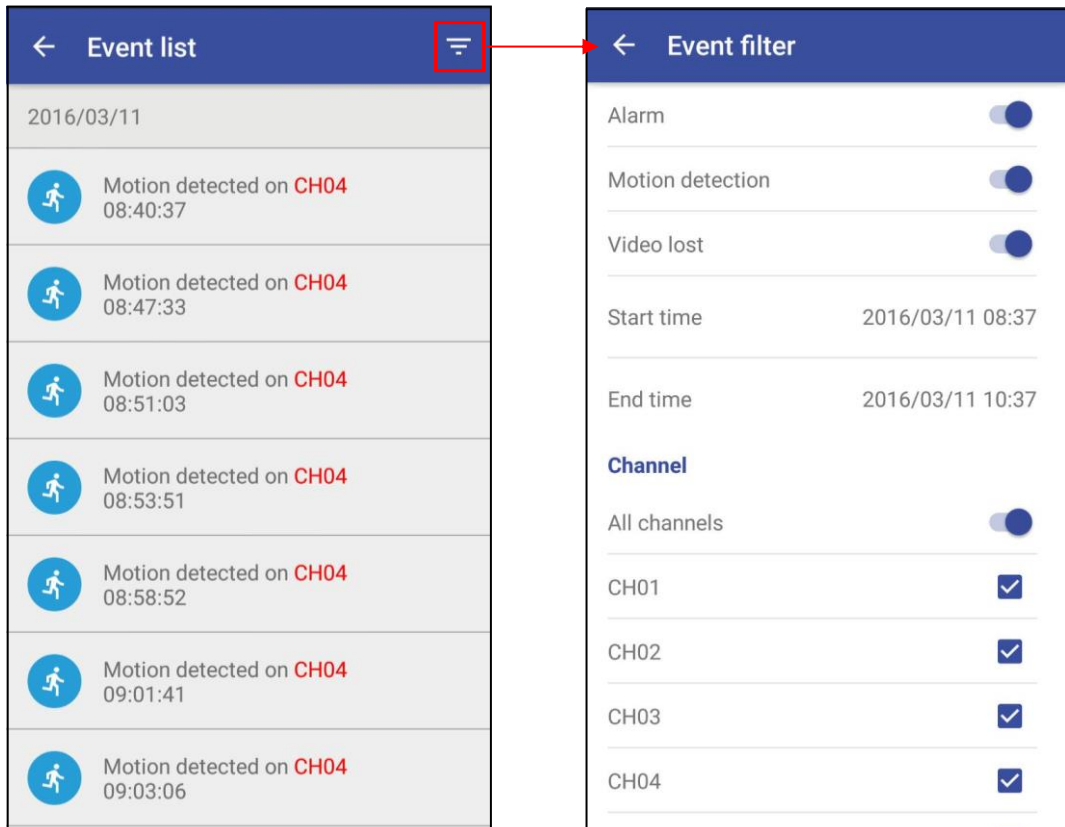
10.1.3.12 Reorder/Reset order


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

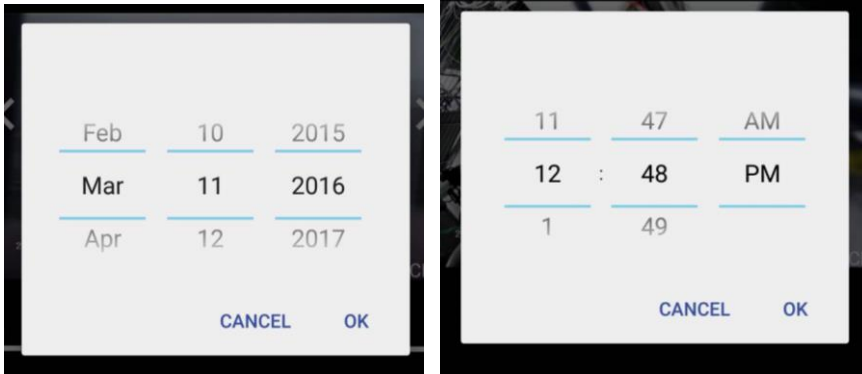
Tap  to start searching by event. All the events of the selected channel will be shown on the list. Select an event to start the playback.



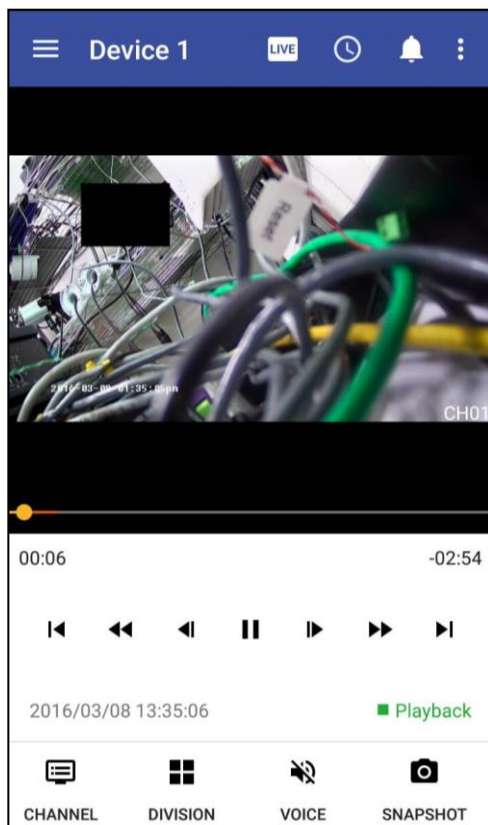
Tap the icon  on upper right side of the event list to enter “Event filter” menu. In “Event filter” menu, users are able to search events with a specific filter, ex. Event type, start time/end time and channel number.

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  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 from Apple App

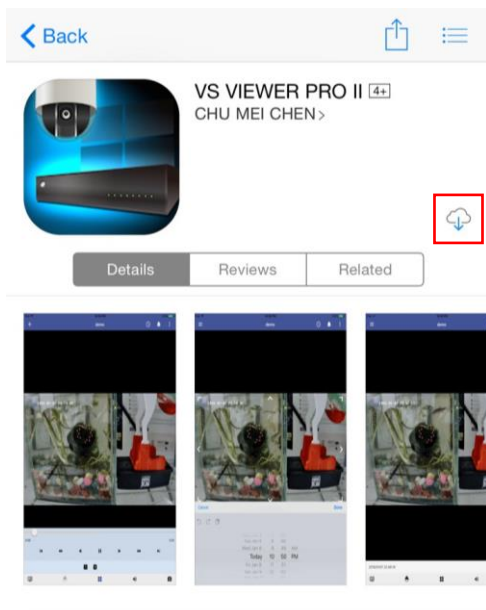
Step1. Select "App Store"



Step2. Search for **VS Viewer Pro II**, tap on "Install APP", the system will pop-up the request for users 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

Description

Video Server Viewer -
Viewing RTSP audio/video streams from DVR or NVR.
Currently only support proprietary models.

Step3. Run “VS Viewer”



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

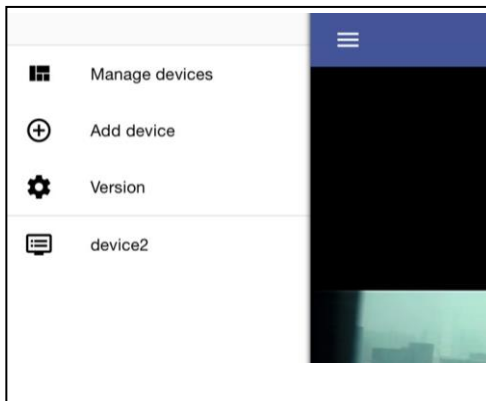
10.2.3 Live view

10.2.3.1 Device name

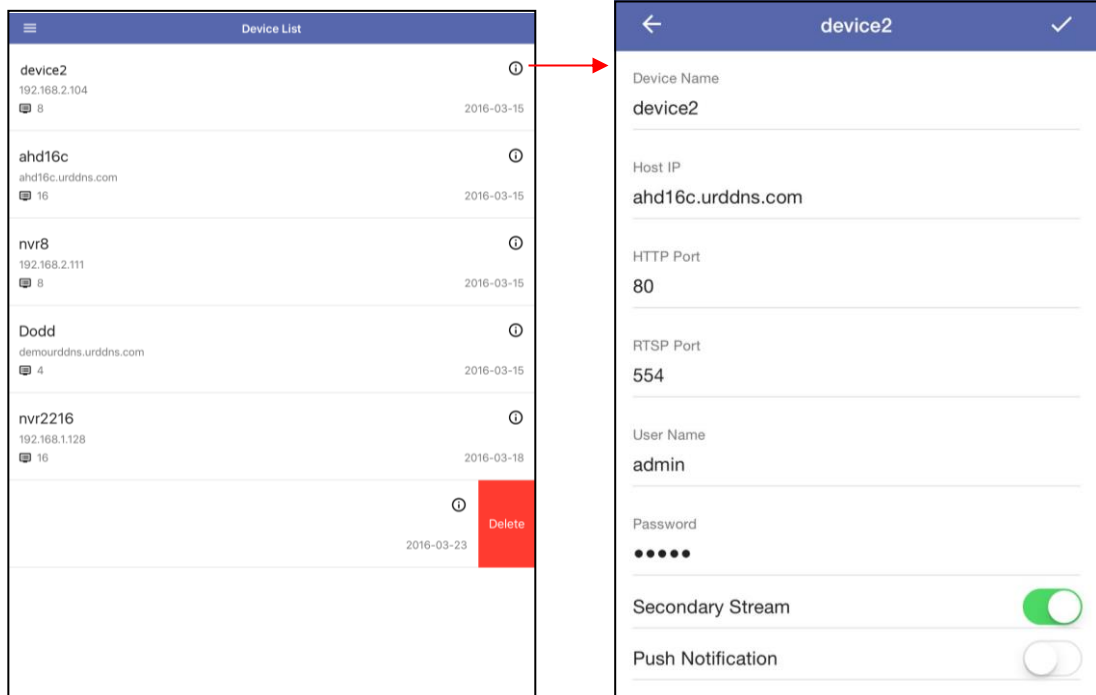
Device name is shown on the top of the screen.


10.2.3.2 Manage/add the device

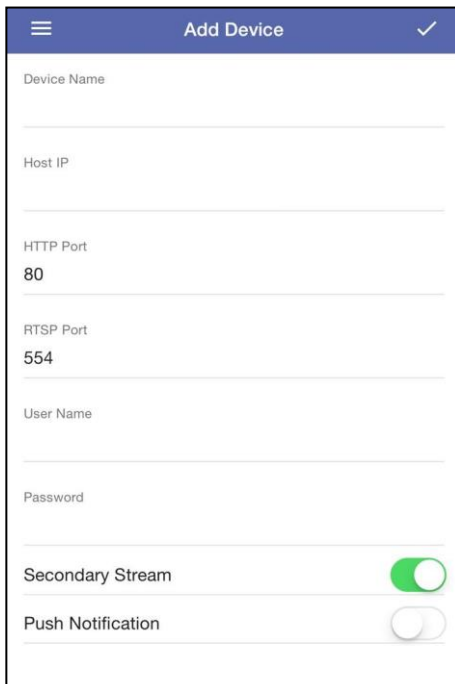
Tap  to manage the devices, add a device, check the version number of APP or select a device.



- 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.



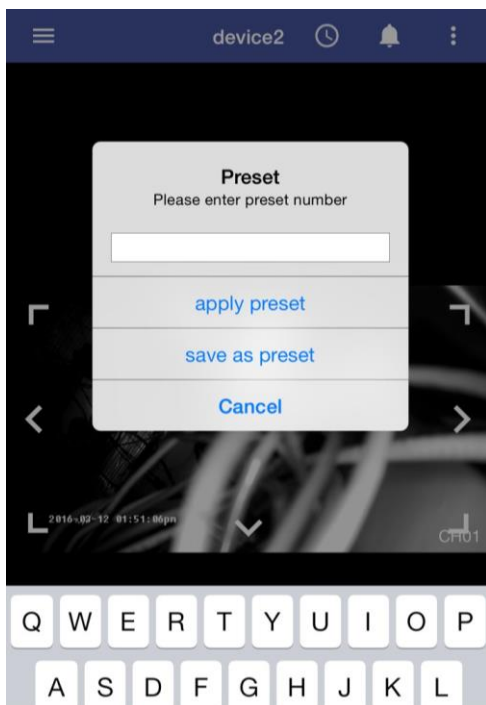
: Tap to Zoom in or Zoom out

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.

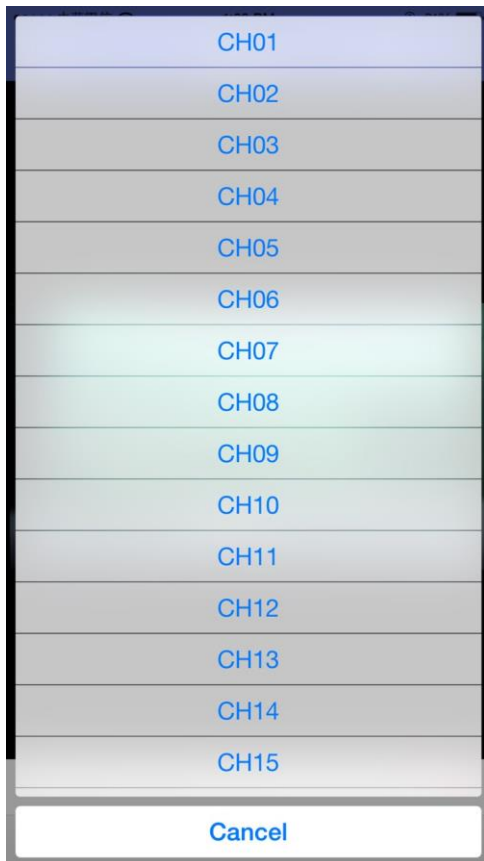
Cancel : Tap to quit without saving.

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.

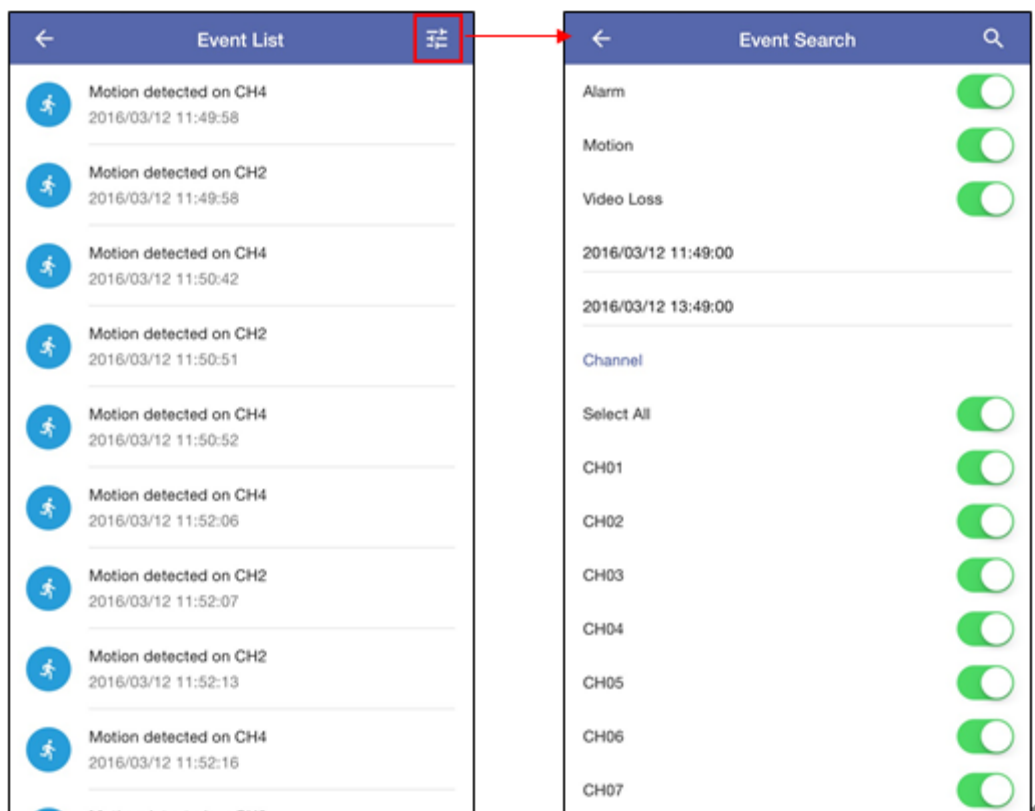
10.2.3.12 Reorder/Reset order


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

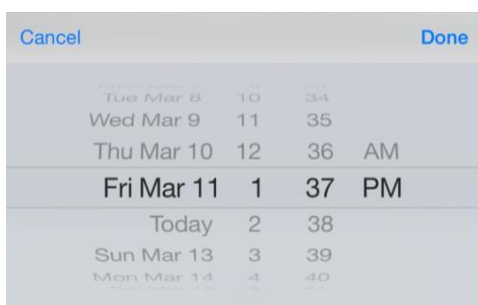
Tap  to start searching by event. All the events of the selected channel will be shown on the list. Select an event to start the playback.



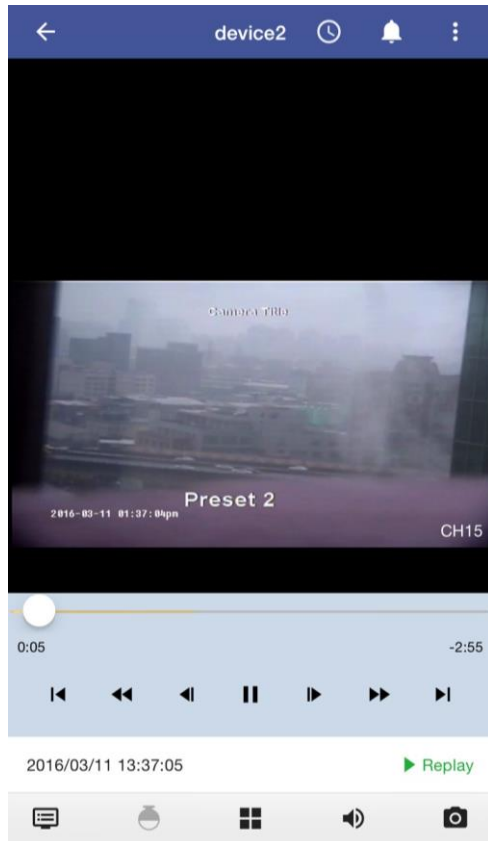
Tap the icon  on upper right side of the event list to enter “Event Search” menu. In “Event Search” menu, users are able to search events with a specific filter, ex. Event type, start time/end time and channel number.

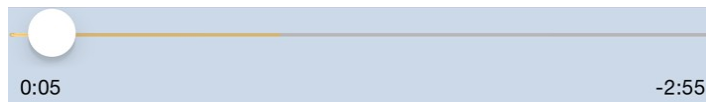
10.2.4.2 Search by Date/Time

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.





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 Operation

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 users are running this installation on.

System Requirement

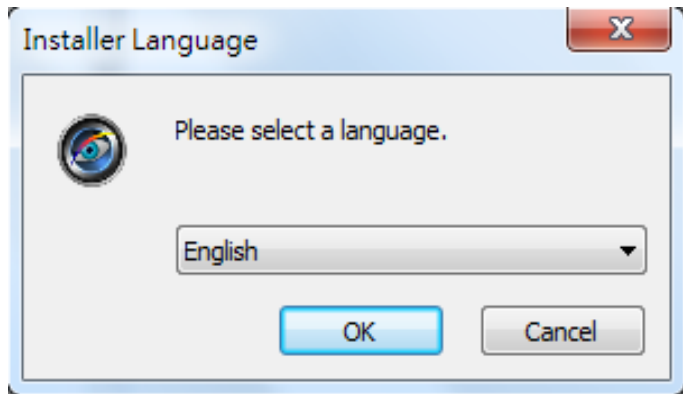
The following are minimum system requirements for CMS.

- 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

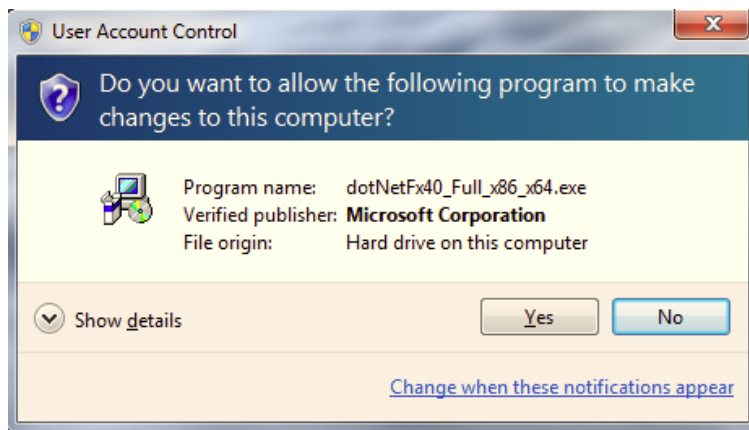
Prerequisites

- AHD/TVI DVR must have access to the Internet or local area network (LAN). Please refer to 8.2.1.1 LAN setting.

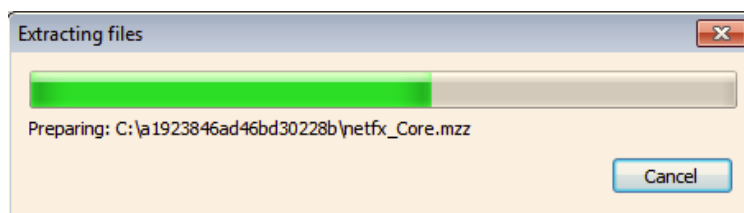
The CMS Pro installer is in multi-language. Users can choose the installer language.



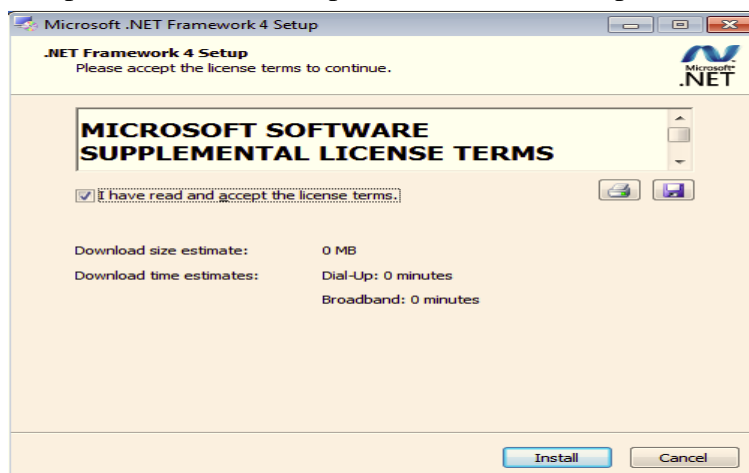
If user's software is without .NET Framework 4.0, the CMS Pro installer will require users to install .NET Framework 4.0 to ensure CMS operation.



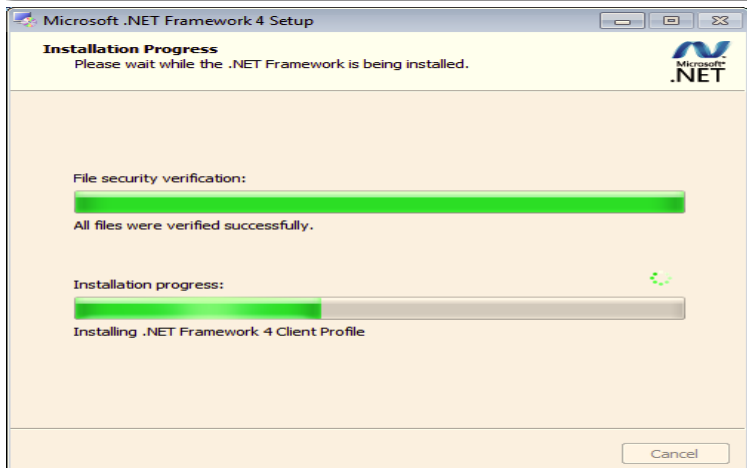
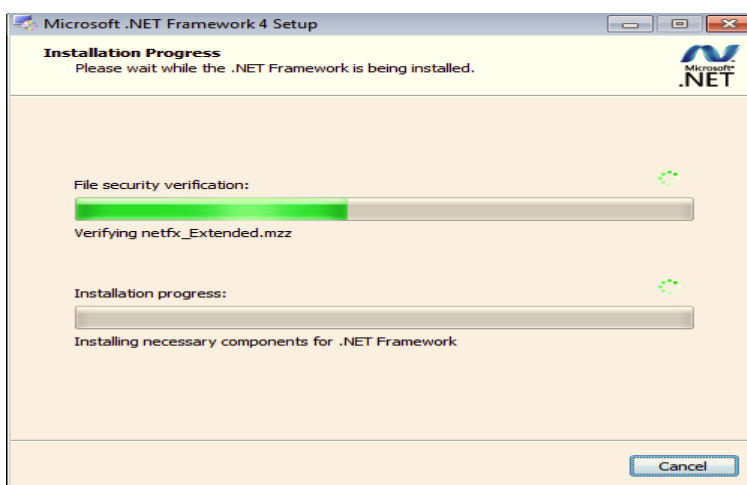
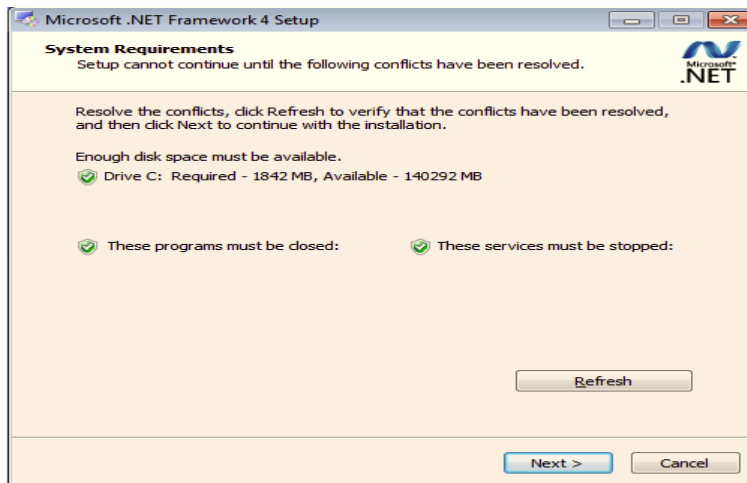
After click yes, there will pop up the installation progress bar to indicate the progress.



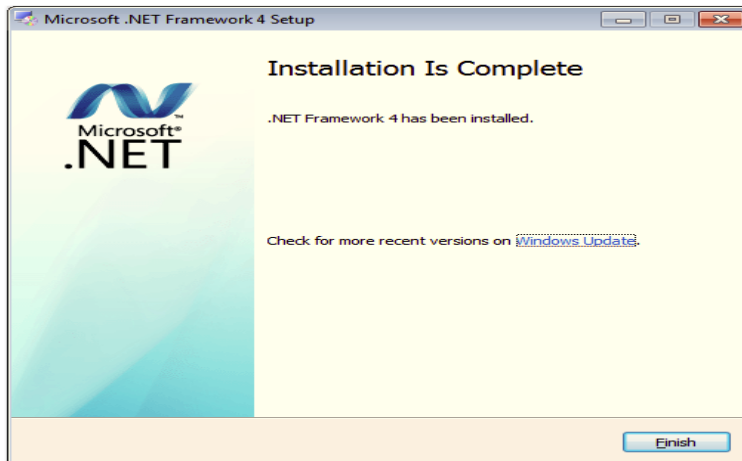
The .NET Framework 4.0 installer will ask users to review the license terms. After users accept the license terms, please click **Install** to proceed further.



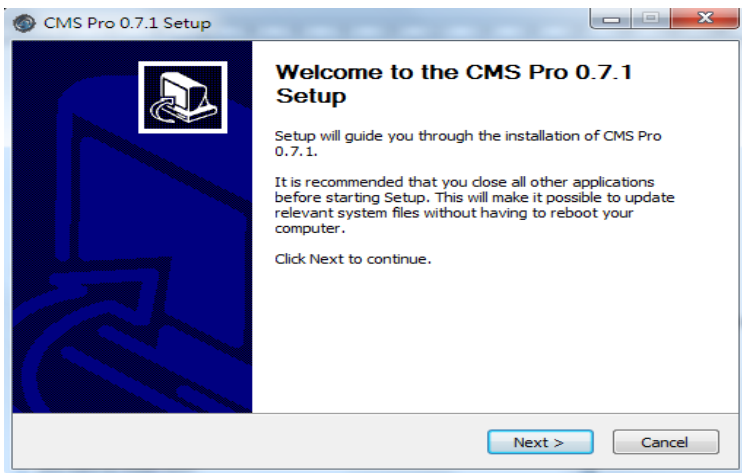
Please click **Next** to proceed further.



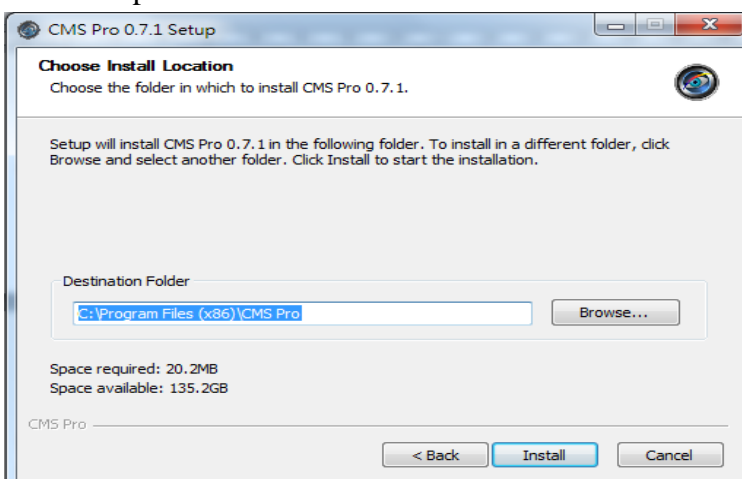
Once .NET Framework 4.0 software install successfully, it will pop up the below complete message. Then users can begin to install CMS Pro software.



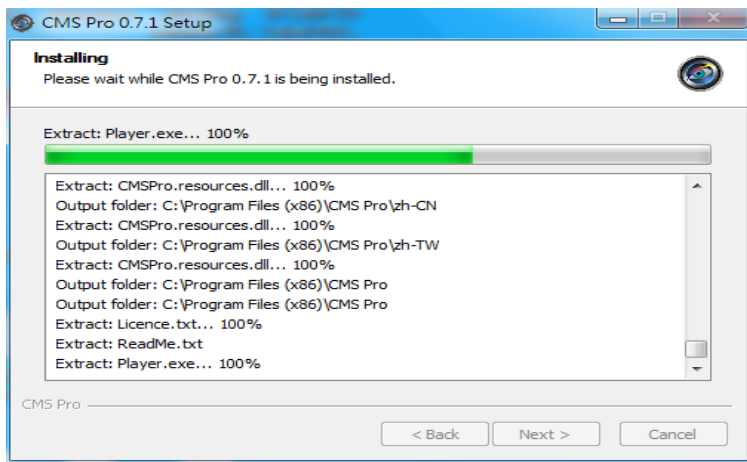
Once the .NET Framework 4.0 install successfully, users can begin the installation by clicking **Next**.



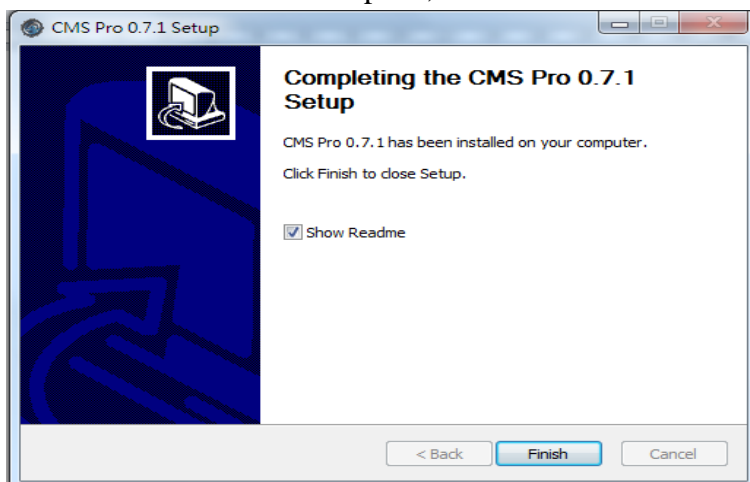
The CMS Pro installer will install the program in a default directory. Users can either accept the default or choose the directory users would like to save the installer. And click **Install** to proceed with the installation.



The CMS Pro installer will show the installation process.



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

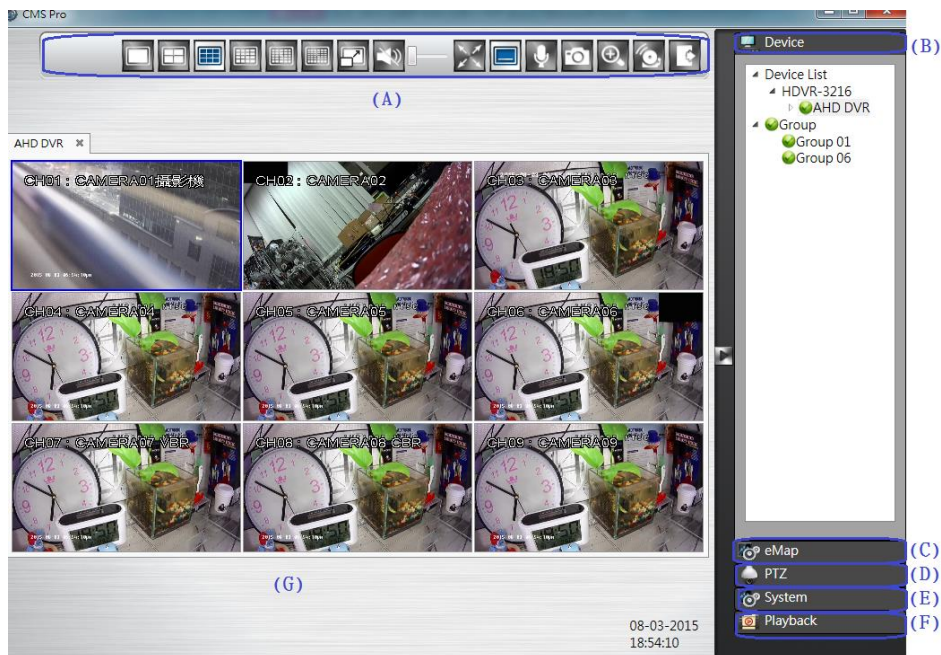


11.2 Start CMS Pro from the PC

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.



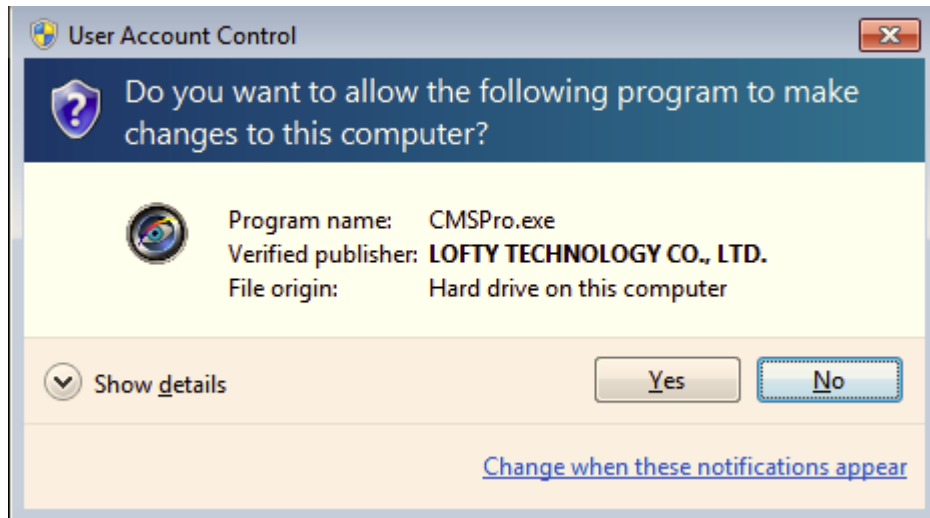
11.3 CMS Pro UI Overview



- (A) Menu Bar: This is where users can access all functions of the software.
- (B) Device List: This is where users can add or delete or edit device group.
- (C) eMap: This is where users can create a map showing the locations of the cameras for AHD/TVI DVR. This can be customized to show cameras from different AHD/TVI DVRs on the same eMap.
- (D) PTZ Control Panel: This is where users can pan, tilt, zoom the selected PTZ cameras.
- (E) System Information: It provides the information of CMS version. Users can change the date format, time format and login authentication per users' requirements.
- (F) Playback: Once users 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**.

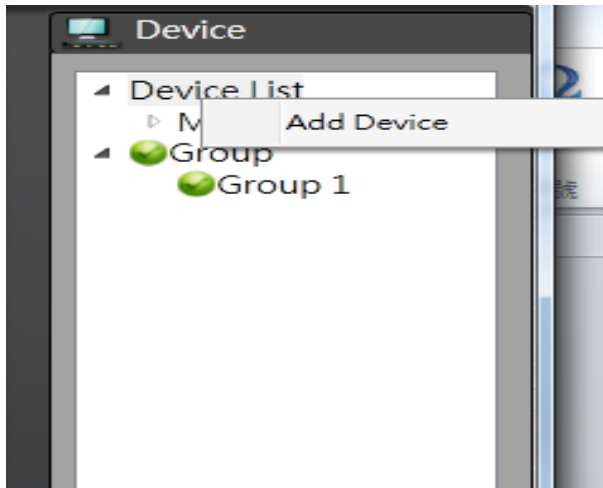
The program provides multi-language support. To change the display language, please select the desired language from the CMS language drop-down menu.

11.5 Add Device to CMS Pro

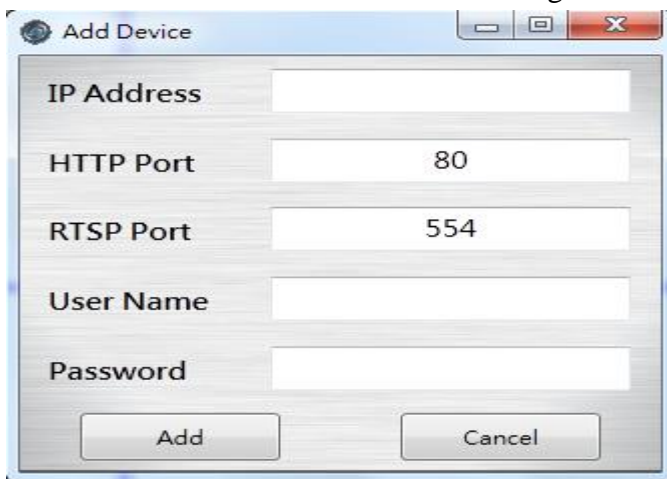
The main purpose of the CMS Pro software is to manage multiple devices. Users would need to tell the program which device Users needs to manage. Users do that by adding one or more devices through the device list.

11.6 Add Device Manually

Click the mouse right button on the **Device List** icon and **Add Device** will pop up in the same page to add it manually.



- 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 AHD/TVI DVR LAN setting. Please refer to 8.2.1.1 LAN setting.

A screenshot of the 'Add Device' dialog box. It features a light blue title bar with the text 'Add Device'. The main area contains five input fields: 'IP Address', 'HTTP Port' (with a default value of 80), 'RTSP Port' (with a default value of 554), 'User Name', and 'Password'. At the bottom, there are two buttons: 'Add' and 'Cancel'.

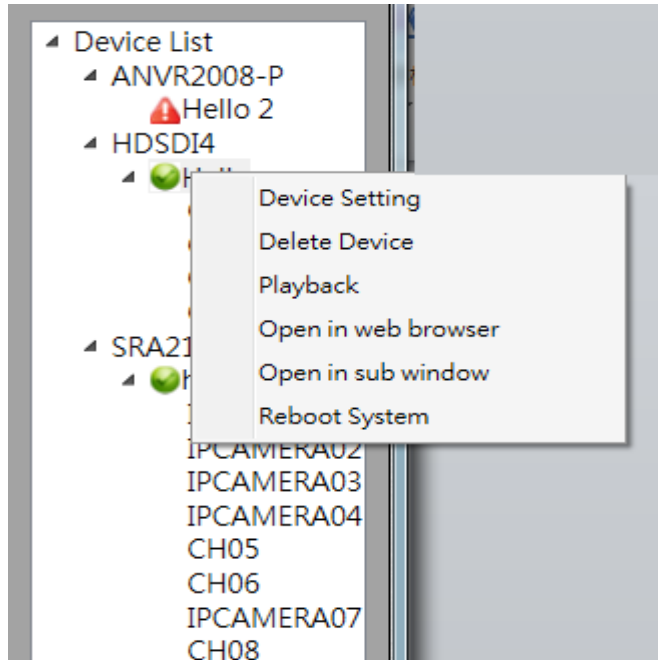
Please note users need to use the CMS Pro administrator's user name and password of the selected device. Without administrator privilege, users are unable to add the selected device.

Note

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

11.6.1 Remove or Edit or configure device setting

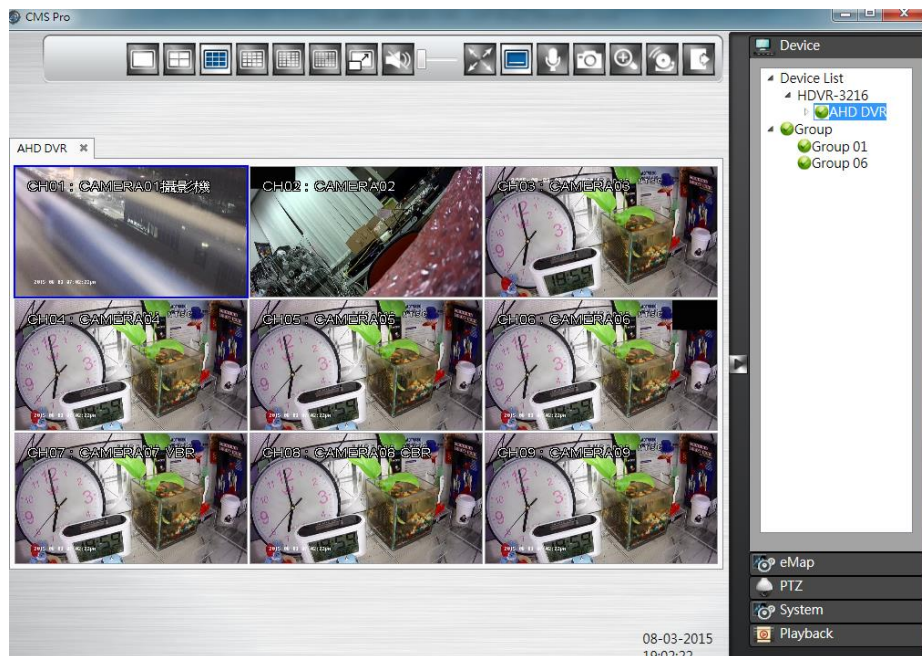
Simply click on the mouse right button on the selected device from the list and choose the corresponding buttons to edit or remove or configure device setting.



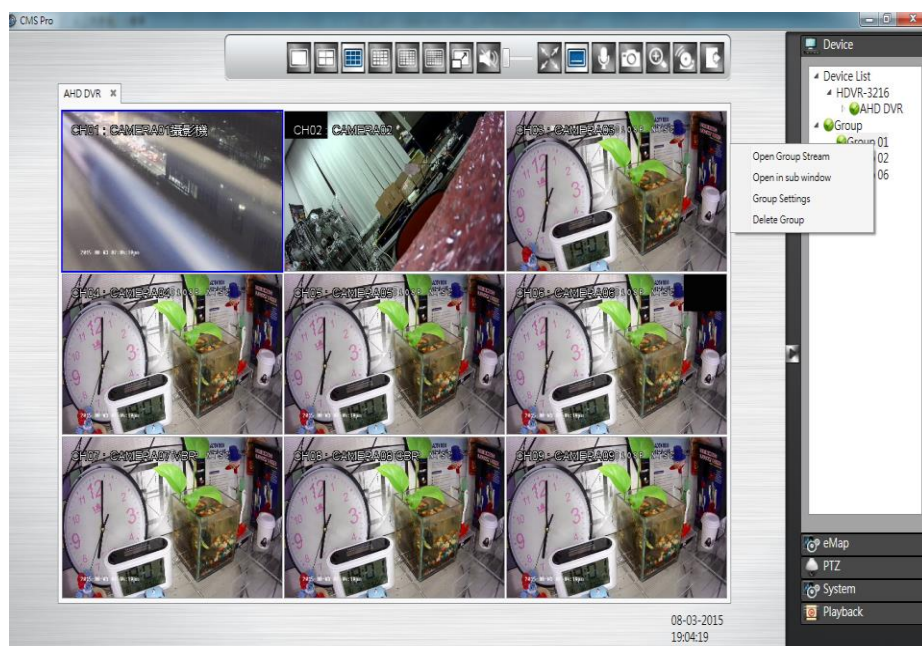
- Device Setting – Once the IP address, user name or password of the selected device has been changed, users can input the new information in the device setting.
- Delete Device – Users can remove the device from the device list in the delete device.
- Playback- Users can playback the device's video.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

11.6.2 CMS Pro Group Video

Users 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**.

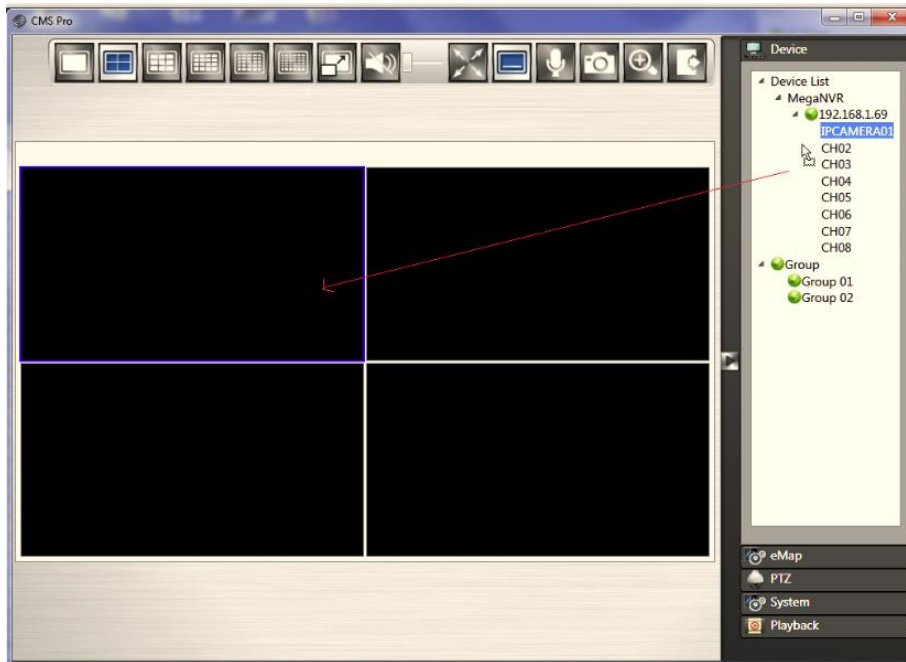


Click the mouse left button on **Add Group** and the default “Group 1” will be generated. The group number is increased by numerical order. Click the mouse right button on “Group 1” and users can configure **Open Group Stream**, **Open in sub window**, **Group Settings** or **Delete Group**.



11.6.2.1 Edit Group Content

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

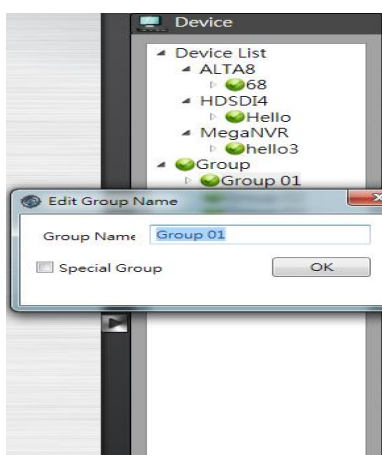


11.6.2.2 Open Group Stream

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

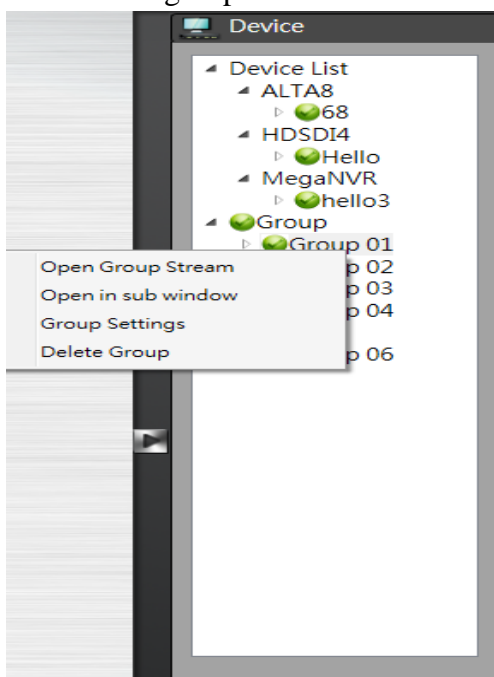
11.6.2.3 Group Settings - Edit Group Name

Users can modify the group name by clicking **Group Settings**. Users also can select this group as a special group. When alarm is triggered, the special group will be monitored.



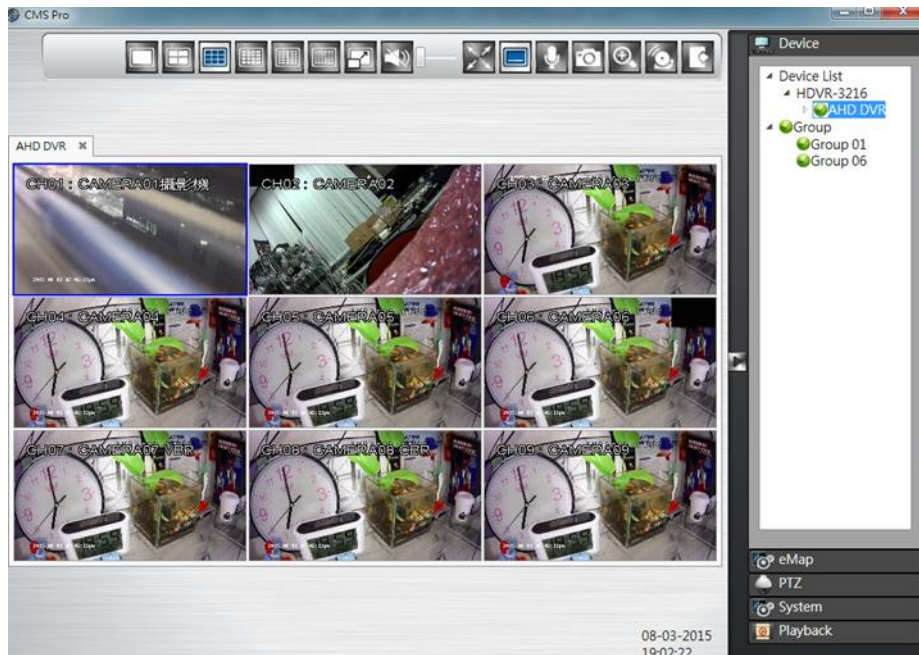
11.6.2.4 Delete Group

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



11.7 Live Video

This page basically provides users 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



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



Show/Hide OSD



Two-way audio



When Alarm Server of CMS Pro receives the alarm from devices, the alarm acknowledge icon will blink. Please click this icon to acknowledge the alarm.

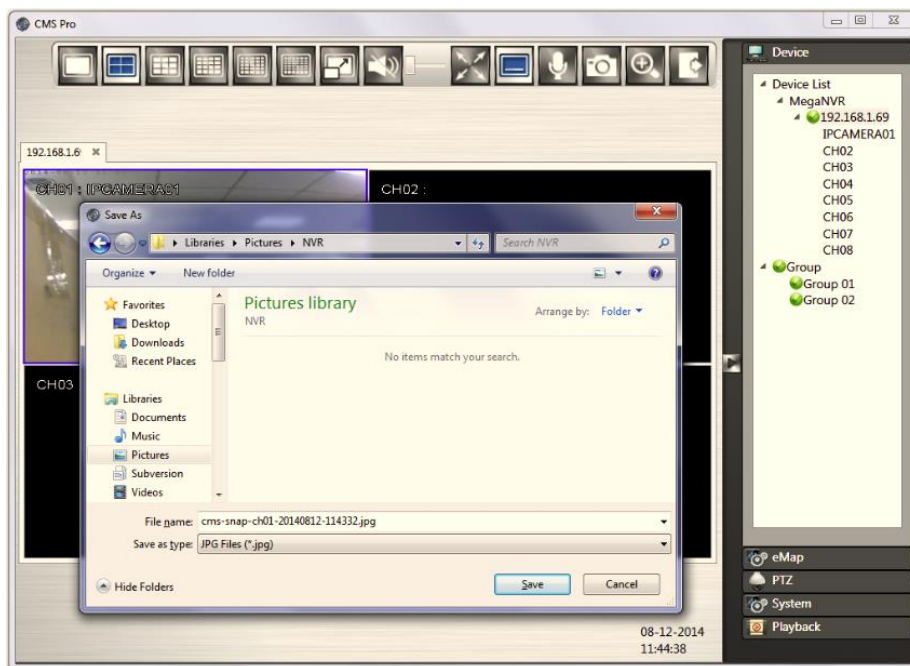


Click to take a snapshot of selected live video




Click to digital zoom the selected live video

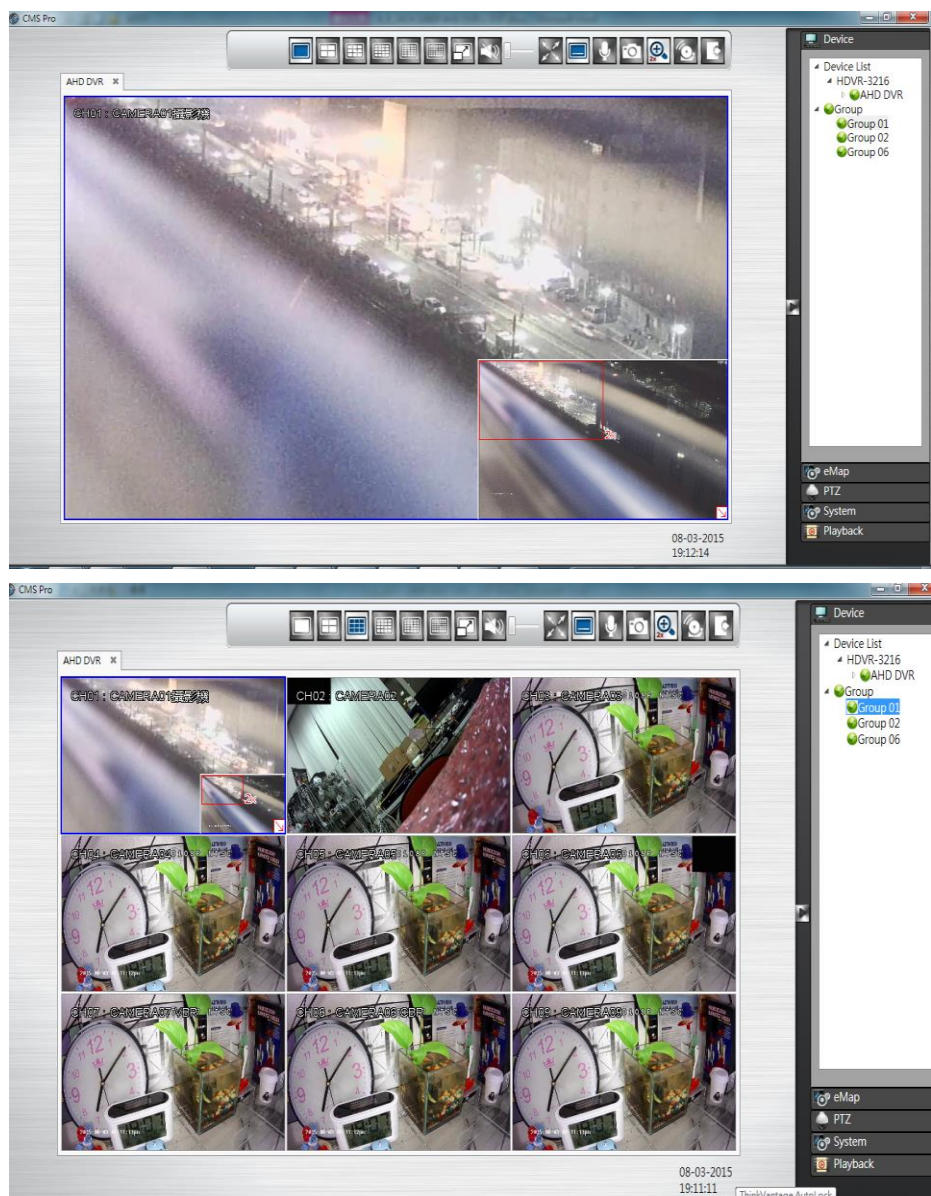
- Take a **snapshot**: The function allows users to take the snapshots of the live video and save them on user's local computer. Move the focus to the selected video and click **Snapshot** icon. Users can save the file to a desired directory.




- Digital Zoom: The function allows users 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 users would like to enlarge. This function also can work in

1-up , 4-up , 9-up  and 16-up  screen display mode.

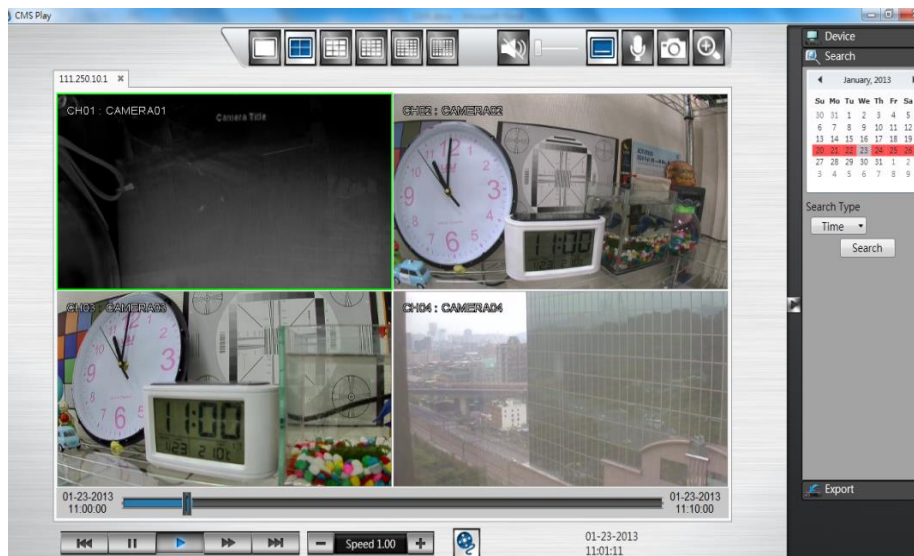


If users click the **Minimize** icon in the live mode, users will see the  icon display on the tool bar of user's computer.

11.8 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  **Playback** 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




Two-way audio



Click to take a snapshot of selected recorded video

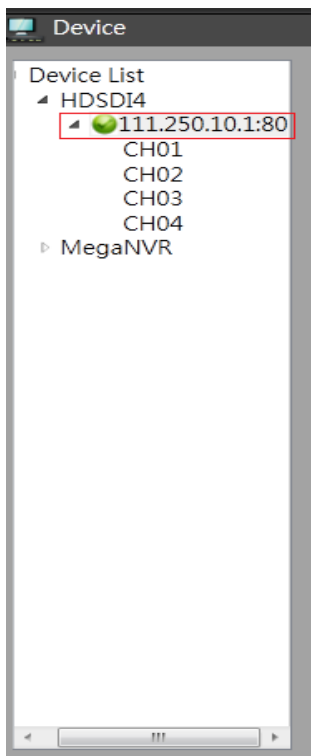


Click to digital zoom the selected recorded video

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

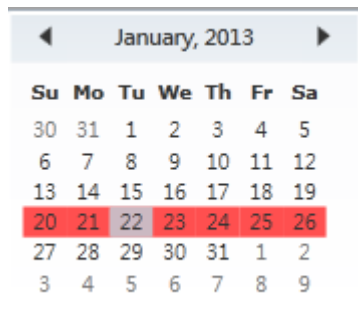
11.8.1 Search for Playback Videos

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



11.8.1.1 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 users would like to search.



January, 2013						
Su	Mo	Tu	We	Th	Fr	Sa
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

11.8.2 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.

11.8.2.1 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.

The screenshot displays a software interface for searching recorded video files. The main area contains a table with the following data:

Index	Time	Content
1	1/26/2013 00:00:00	Record
2	1/26/2013 01:00:00	Record
3	1/26/2013 02:00:00	Record
4	1/26/2013 03:00:00	Record
5	1/26/2013 04:00:00	Record
6	1/26/2013 05:00:00	Record
7	1/26/2013 06:00:00	Record
8	1/26/2013 07:00:00	Record
9	1/26/2013 08:00:00	Record
10	1/26/2013 09:00:00	Record
11	1/26/2013 10:00:00	Record
12	1/26/2013 11:00:00	Record
13	1/26/2013 12:00:00	Record
14	1/26/2013 13:00:00	Record
15	1/26/2013 14:00:00	Record
16	1/26/2013 15:00:00	Record
17	1/26/2013 16:00:00	Record

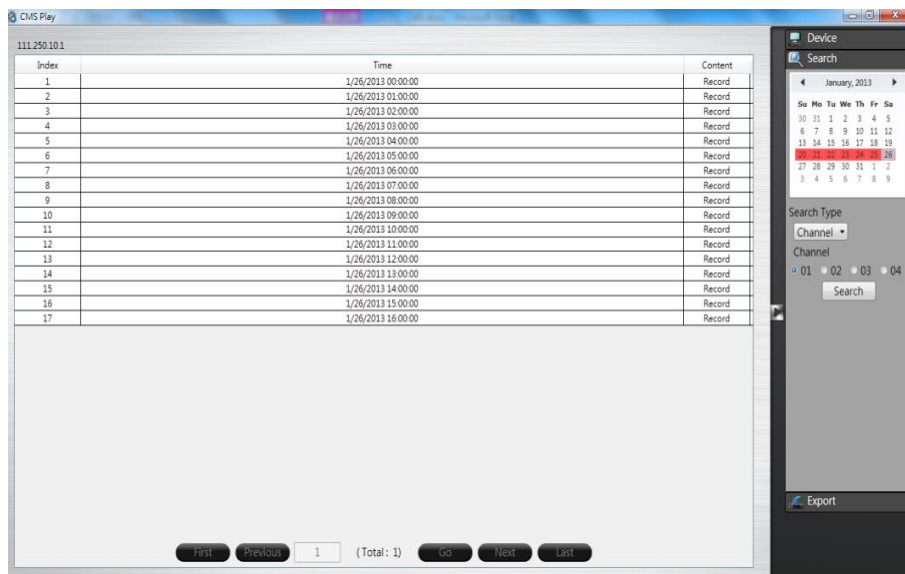
Below the table is a navigation bar with buttons: First, Previous, 1, (Total: 1), Go, Next, Last.

On the right side, there is a sidebar with the following elements:

- Device icon
- Search icon
- Calendar for January, 2013, with the 26th highlighted in red.
- Search Type dropdown menu set to "Time".
- Search button.
- Export button.

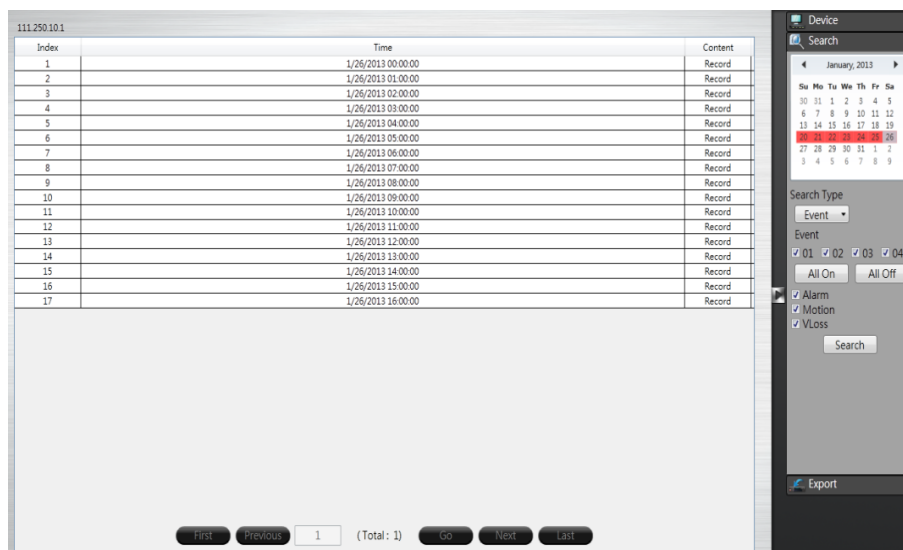
11.8.2.2 Search by Channel

Search by Channel allows users to search the event video by channel. Select the date from the calendar, and select the channel users 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.



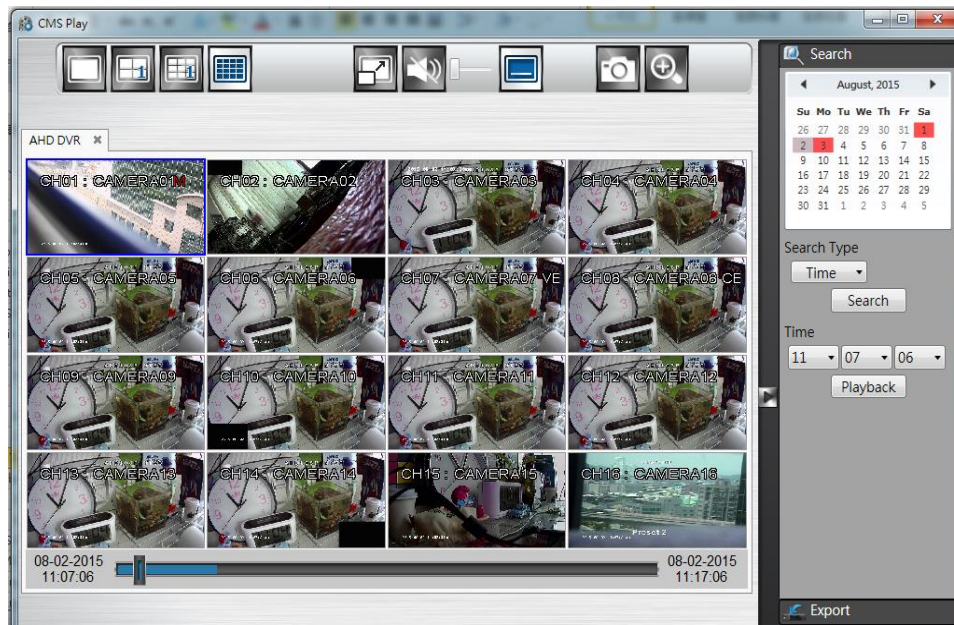
11.8.2.3 Search by Event

Search by event allows users to search the event video list by channel and by event type. Select the channel users would like to view (users 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.



11.9 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), users can also control the playback speed by clicking  and , in x0.25, x0.5, x1, x2, x4 and x8.




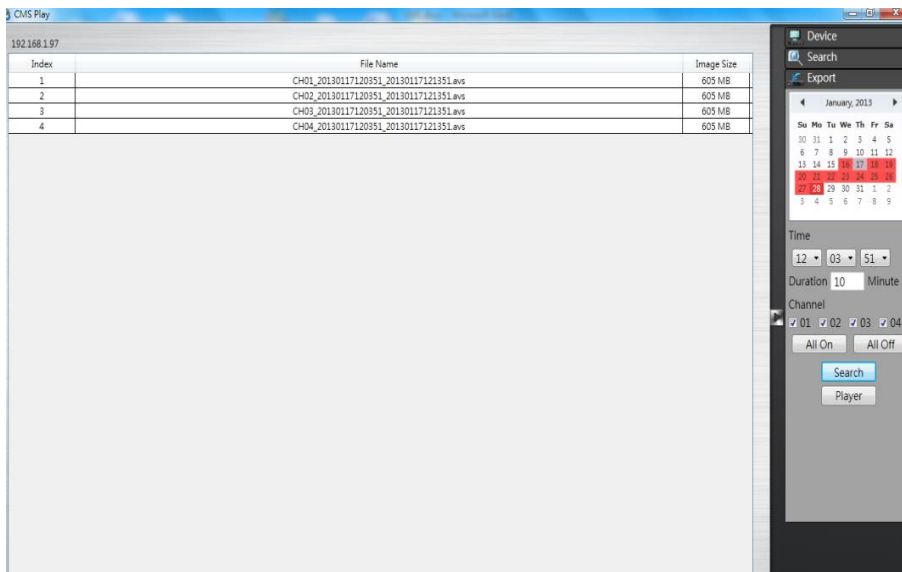
Click to fast forward to the next section



Click to fast backward to the previous section

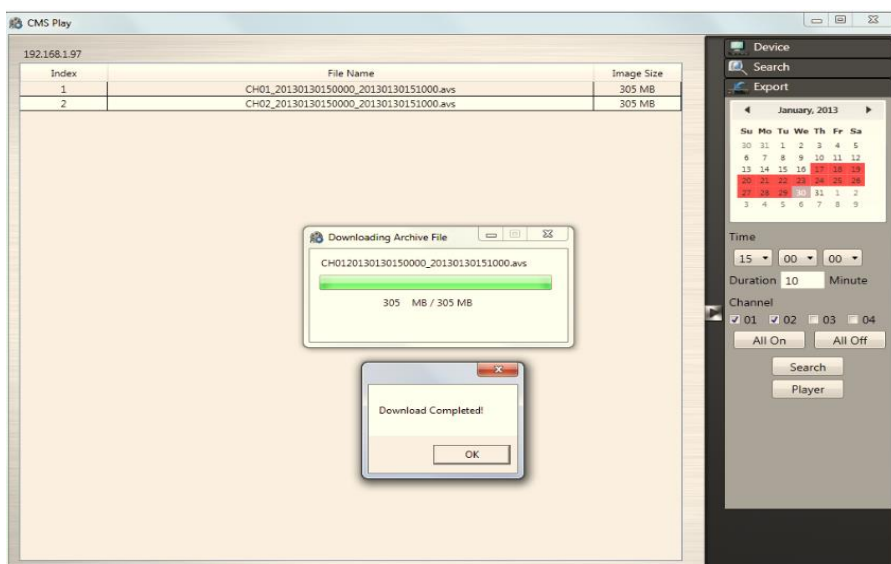
11.10 CMS Export

Click on the **Export** button  **Export** to bring up the export menu, this allows users 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 users would like to export. (Click All On or All off to enable or disable all channels.) Input the duration time users 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 users would like to store then click Save to execute the downloading.

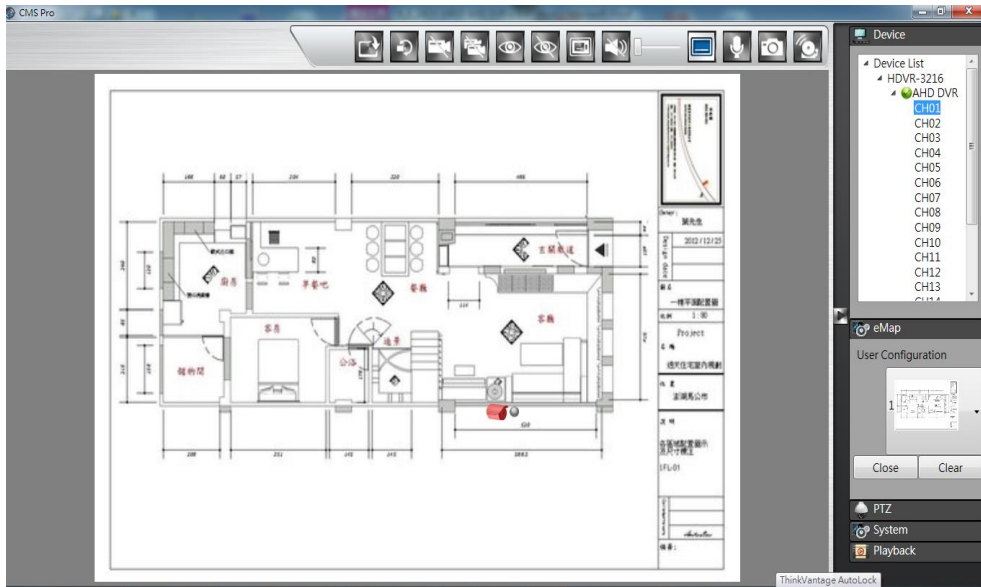


Users can view the exported file on the Export Player. If the users does not have the Player installed in the PC, click Export Player button to download the player to the PC. Please refer to *Chapter 7 for Export Player operation*.

11.11 Using eMap

eMap is a method of creating a map showing the locations of the cameras for AHD/TVI DVRs. It can be customized to display cameras from different AHD/TVI DVRs on the same eMap. If users 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 AHD/TVI DVR




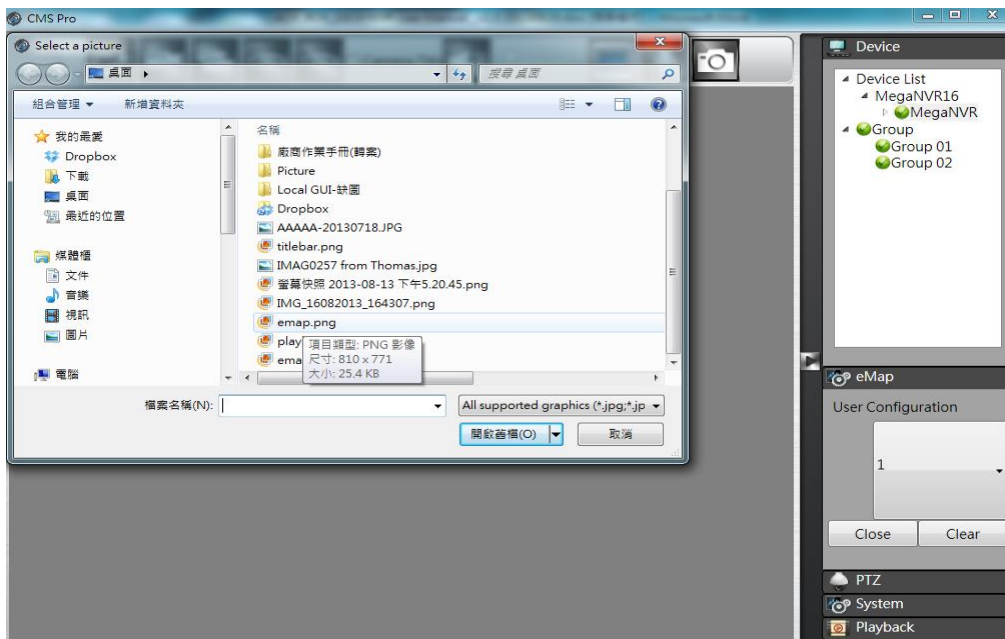
Click to take the snapshot of the selected camera



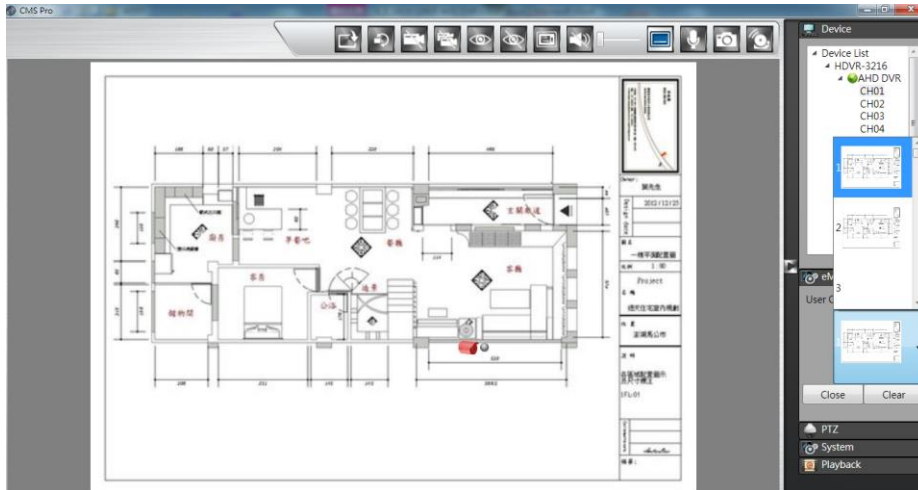
When Alarm Server of CMS Pro receives the alarm from devices, the alarm acknowledge icon will blink. Please click this icon to acknowledge the alarm.

Users need 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.

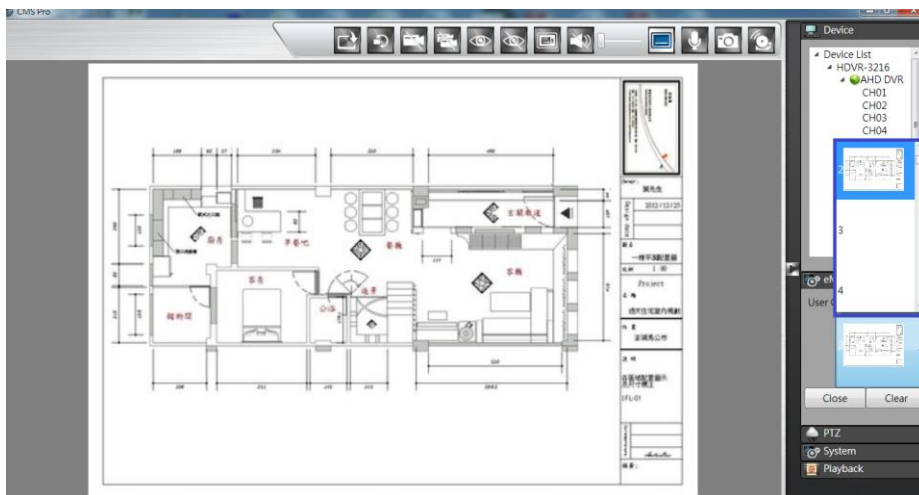


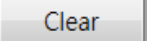
Then double click the desired eMap image and users will get the full screen of the image on the left side.

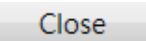


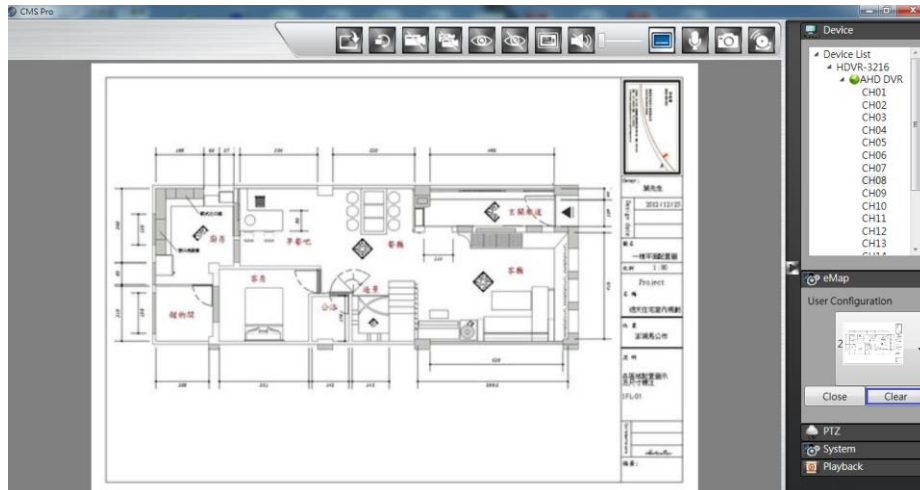
Users are able to create maximum 8 different images once. Select the number in users'

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

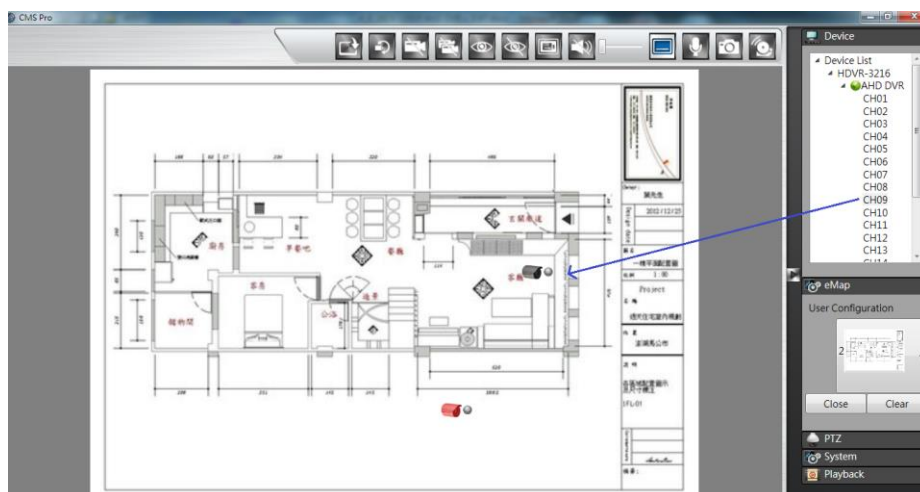
“Close”  button to back to the device tree.





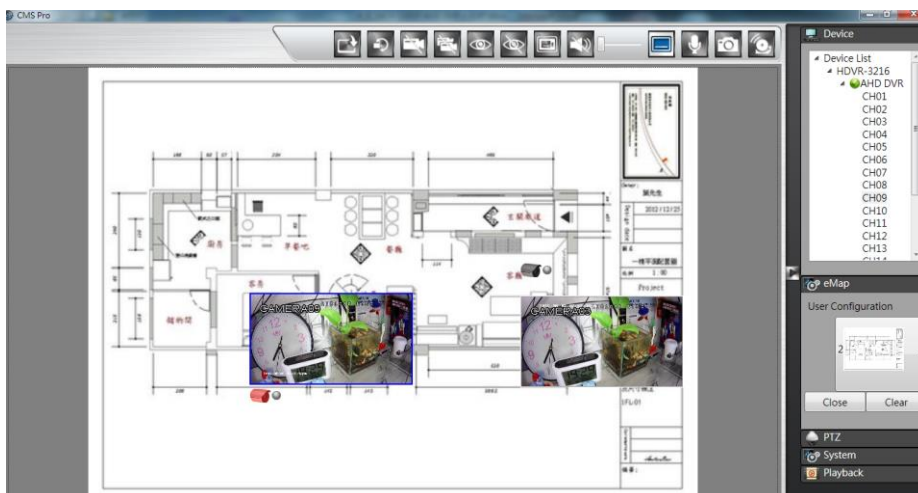
Since the map is in the position, users are able to drag the cameras from different AHD/TVI DVRs to the desired spot and camera icons will be displayed shown as below.

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

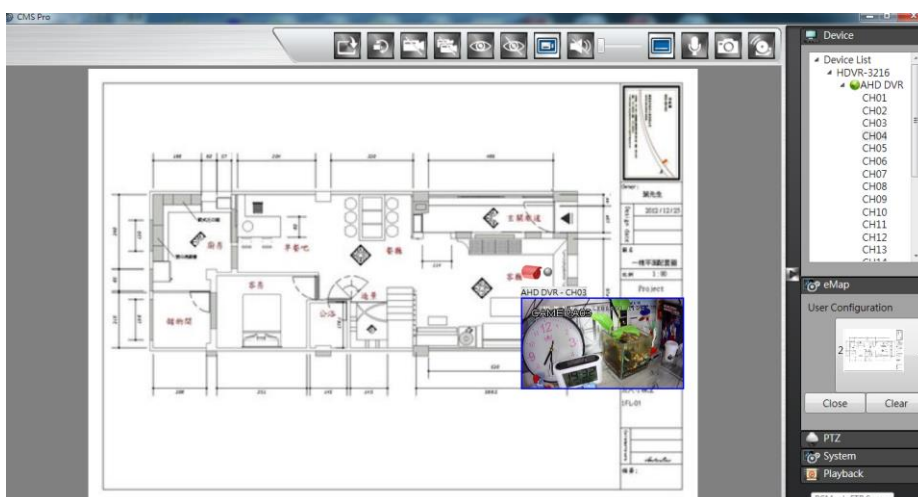
- Green dot – Normal, the camera input is installed and enabled.
- Red dot – Alarm triggered
- Yellow dot – Motion triggered
- Blue dot – Video lost triggered
- Grey dot – The video input is disabled.





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.

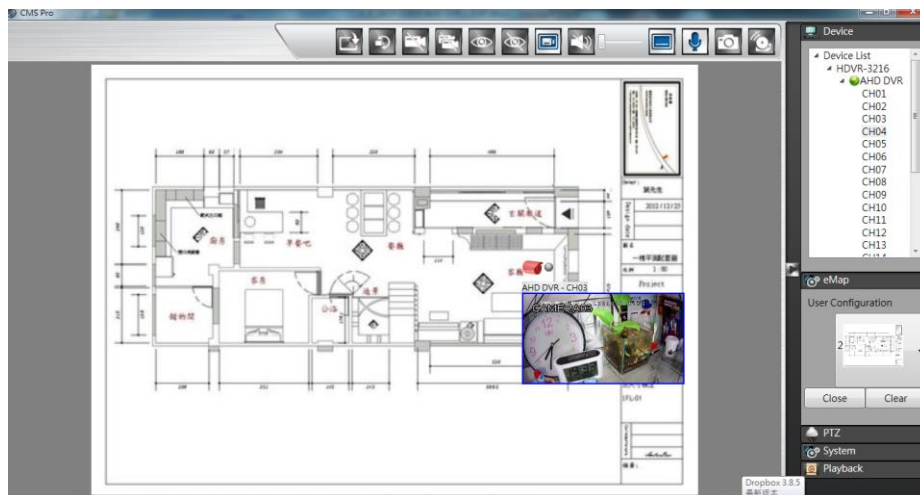


Click the **Camera Title**  icon to show the camera name.



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

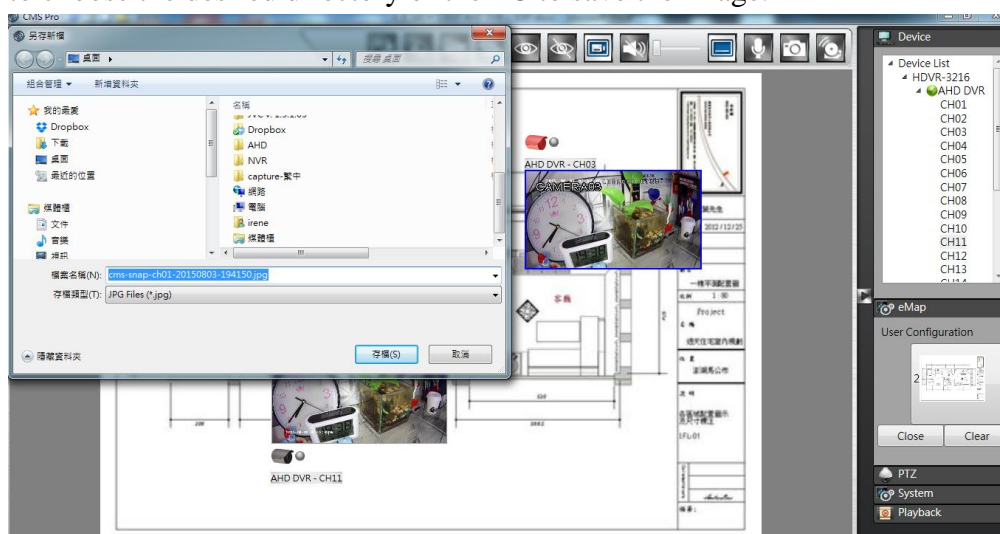
Click on the  button to enable the audio of the selected camera.



Users are able to take the snapshot of the specific camera. Click on the camera icon to select the camera first.



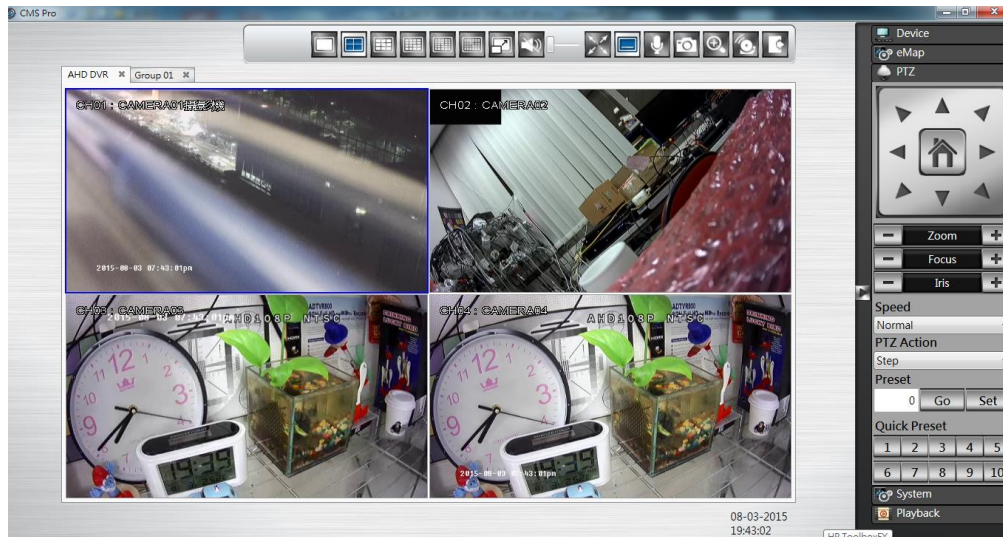
Then click on the icon to take the snapshot of the selected camera. Users are able to choose the desired directory of the PC to save the image.



11.12 Using PTZ Configuration

Users can synchronize PTZ settings from all cameras connected to the AHD/TVI DVR on the network or users can create and add new PTZ preset points to those cameras through CMS Pro.

The basic operation is the same as the AHD/TVI DVR PTZ control. Please refer to *Chapter 5 PTZ control* for detail operation.



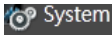
11.13 Multiple Monitor Support

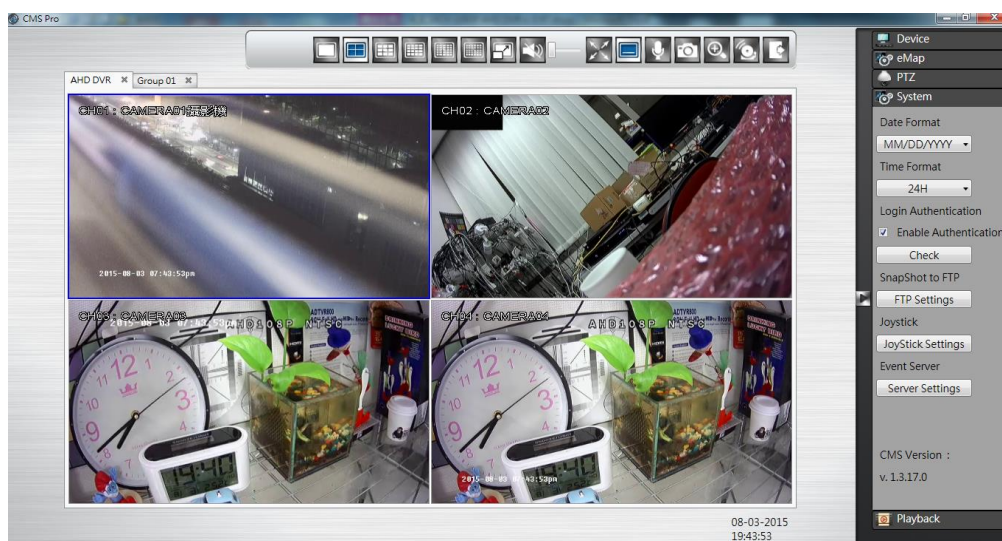
CMS Pro supports up to 4 monitors. The suggested system specifications are as below. If the system is not as suggested specifications, users will experience the slow performance of the multiple monitor support.

Minimum PC System Requirement

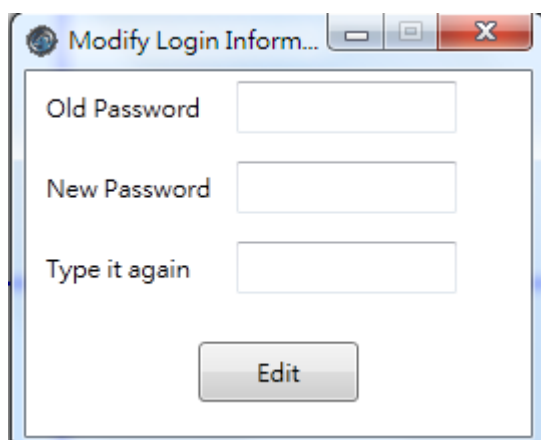
- CPU : Minimum Intel i5 or higher
- RAM: Minimum 6GB of RAM
- Independent Graphic Card: Minimum 1GB

11.14 CMS System

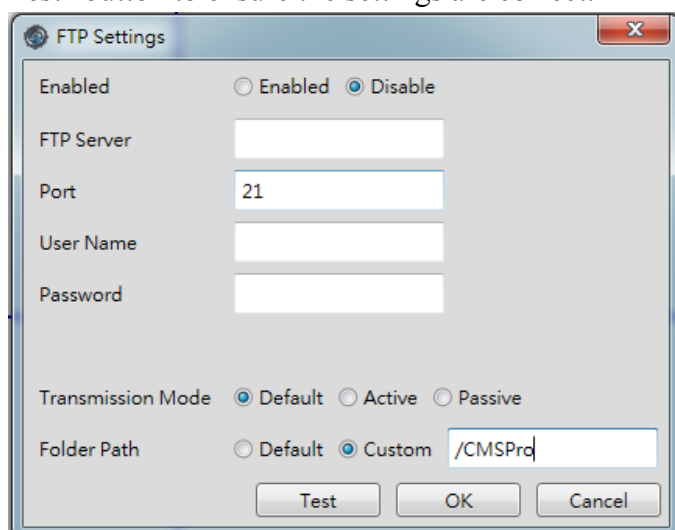
Click on the “System” button  to bring up the system menu, this allows users to change the Date Format, Time Format, Login Authentication, snapshot to FTP setting, JoyStick settings, Event Sever settings, and CMS Version.



- **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:** Users 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 users login again.

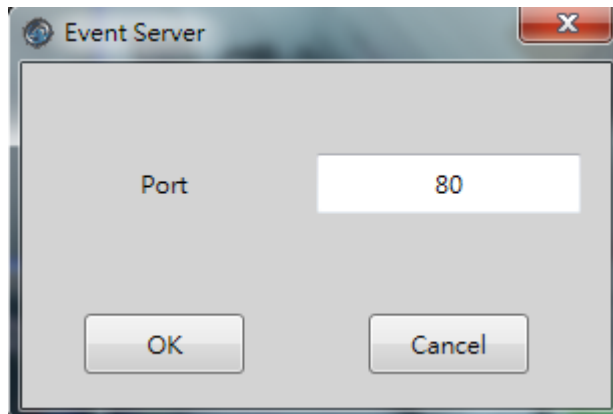


- **Snapshot to FTP:** It works in CMS Pro live mode. Once users finish the FTP settings, users are able to save the snapshot picture directly to ftp site. When users click on the “FTP Settings” icon, it will pop up FTP settings information. Please input the FTP server, FTP port, user name and password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



- **Event Server settings :** CMS Pro is built in with Event Server. Please ensure the port number is correspondent to network port number of PC installed CMS Pro. Please input the IP address of CMS Pro PC to AHD/TVI DVR in order to make alarm server function perform normally. For the detailed Alarm Server setting, please

refer to “8.2.3 Alarm Notification”.



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