

# ccHDtv DVR

# **User Manual**

**VDH-CK Series** 



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## Foreword [Notices]



## **WARNING**

- ➤ Do not expose the DVR under the sunlight, heat or wet environment while installation. As it could decrease the performance of DVR and damage the machine.
- > Do not touch the power plug or case with wet hands as this could result electric shock.
- Do not forcedly bend or put heavy object on power cable as this could result in injury to personal or equipment.
- Do not operate with damaged power cord or loose electrical outlet as this could result in electric shock or accident.
- Please use individual power instead of share electrical outlets with other electrical equipment as this could result in damage or accident.
- Do not attempt to service this DVR by yourself as it may expose you to dangerous voltage or other hazards. Please refer all service to the qualified servicing distributor.
- Please do not remove the machine housing during operation.
- > It may cause electric shock or accidental injury.



## **CAUTION**

- Do not place the machine on an uneven surface or it would decrease the DVR efficiency or malfunction.
- Avoid any shock or bumping of the DVR while recording.
- Improper handling could damage the system.



## **CAUTION**

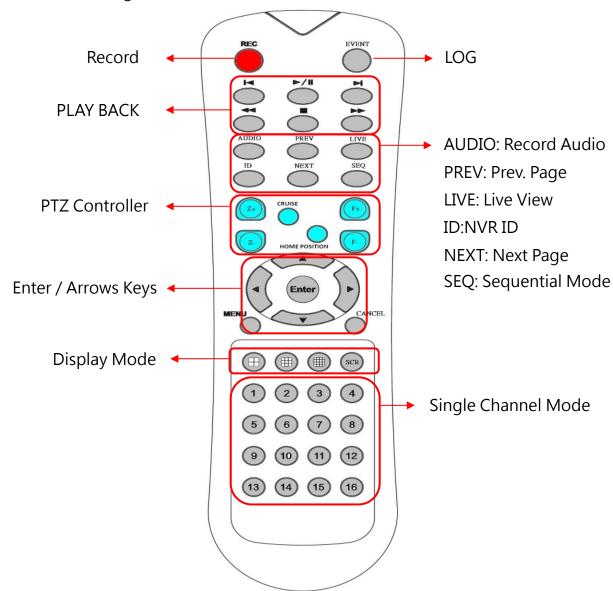
Make sure the voltage selector switch is set to appropriate setting before plug in!





## Chapter 1 【Operation Options】

- Operating with a Mouse and a Remote
  - 1. Operating with a Mouse
  - 1) Right click at Live View screen to open system menu.
  - 2) Click to enter selected item.
  - 3) Scroll mouse wheel to change value at drop down menu.
  - 4) Press [APPLY ALL CHANNEL] button to apply current settings to all channels or right click at edit box to enter characters over screen keypad.
  - 2. Operating with a Remote
  - 1) Operation of remote controller and front panel are identical. Please refer the diagram of the remote controller below:

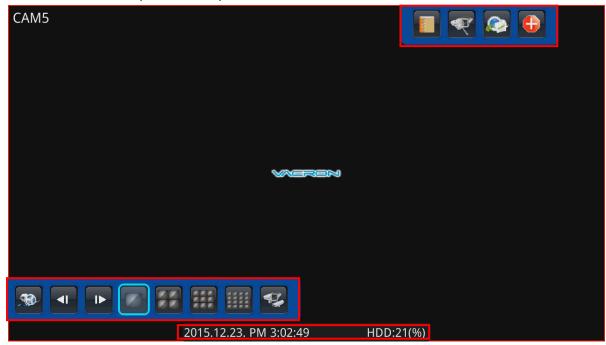




## Chapter 2 [Operation Options]

#### 1. Main menu

- 1.1 DVR has two menu bars. Right click on the screen, menu bars on top-right and bottom –left will pop up. Right click again to close menu bars. (See below)
- 1.2 Viewing channel display in DVR may relocate freely on screen. Simply click and hold the left button and drag to the desired display channel.(See Below)



- 1.3 System time and HDD status are shown at the bottom of the screen.
- 1.4 Double click on time display to zoom-in and zoom-out. To move it, click, hold and drag to the desire location.
- 1.5 Please format HDD before use.
  If HDD is not found, please format it again. To format HDD, go to
  SETUP and STORAGE menu.



2.1 It generates event log of the system that are considered abnormal.

Users may click and retrieve the event log of a specific date on the



calendar.

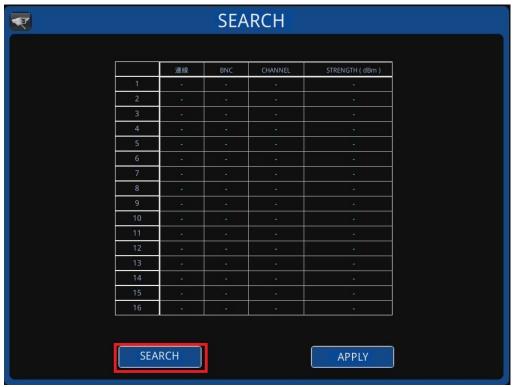
2.2 Click on [LOG] to open the Log page, click on the date you want to view, the event logs will appear on the right side of screen.





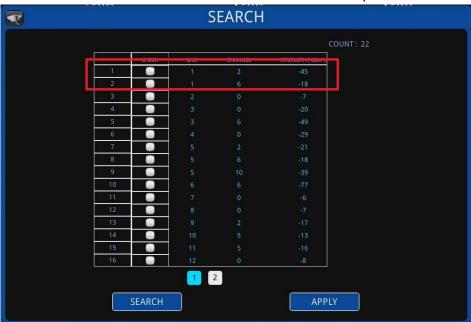
**SEARCH** 

1) Enter SEARCH menu, click [SEARCH], the system will generate a list of cameras that are found and connected to the network.





2) After auto search, the number of cameras listed might exceed the actual number of cameras connected. We can distinguish the real cameras from these echoes by signal strength (dbm). For example, the table below has listed BNC port 1 has several cameras with signal strength of -18 and -45 dbm. The camera with the higher dbm is the actual camera connected to BNC port 1.





## Manual Record

- 3.1 Right click then click on [Emergency] at quick launch bar to record video streaming sent from all available cameras.
- 3.2 Click it to start recording. Click it again to stop recording.
- 3.3 After emergency recording, all manual recording channels will be blocked with blue squares.
- 3.4 The data is indicated in blue color on time bar in playback.



CETLID

Local device settings

You can bring up the setting menu by clicking on the setting icon in Live



View mode. There are 8 DVR setting options listed as below.







- 1) OUTPUT: Support HD Out and VGA display simultaneously.
- 2) RESOLUTION: 1080P, WXGA, 720P, SXGA, XGA.
- 3) CVBS CHANNEL 1: Choose the video source for the VIDEO OUT in the back board. One channel each time. It can be NONE, channel1, Channel2, Channel3 and channel4. Default is NONE. (Some DVR not support)
- 4) SEQ INTERVAL: Selections of 5, 10, 20, 30& 60 seconds; default sequence duration is 5 seconds.
- 5) DATE FORMAT: Choose the DATE FORMAT in LIVE View. There are 8 formats available.



## 6) color





## **CAMERA**

## ◆ SETUP

- 1) Choose one supported camera in the TYPE menu, the related setting options will be listed.
- 2) After the camera is assigned, there will be setting options for CONNECT, DISPLAY, TITLE, CHANNEL and FLICKER CONTROL.
- 3) When the value of the channel and FREQUENCY CHANGE if not the same (ex: TV 1, FREQUENCY CHANGE value 2-201000khz), this time there will be no video out. So when manually set, then, to pay attention to this part (after the automatic search will not have this problem)
- 4) APPLY ALL CHANNEL: Apply the present settings to other cameras. Press "SAVE" to save the settings.
- 5) CHANNEL LIST: show the frequencies of the connected BNC cameras.
- 6) CONTROL CHECK: check the camera whether it can return to control.
- 7) FLICKER CONTROL: 50HZ(PAL) OR 60HZ(NTSC).
- 8) Sync Time: Sync time for all the devices connected to the DVR.
- 9) Flicker Control: The ccHDtv is set to off/outdoor (none flicker) by

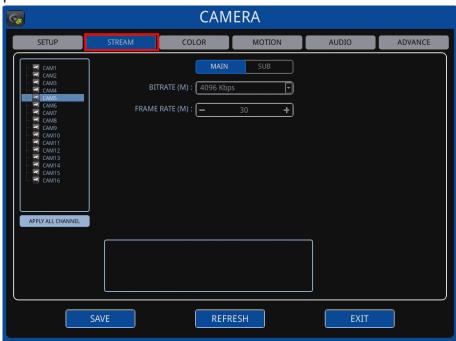


default. If the camera is to be installed indoor, the flicker frequency (50Hz or 60Hz) has to be changed via DVR.



## **♦** STREAM

In the STREAM tab, we can set the BITRATE, FRAME RATE of the main and sub streams. Click [apply all channel] to apply identical parameters to all cameras.





## ◆ Color

Color parameters of cameras can be adjusted ,including brightness, contrast and saturation. Click [apply all channel] to apply identical parameters to all cameras.



## **♦** MOTION

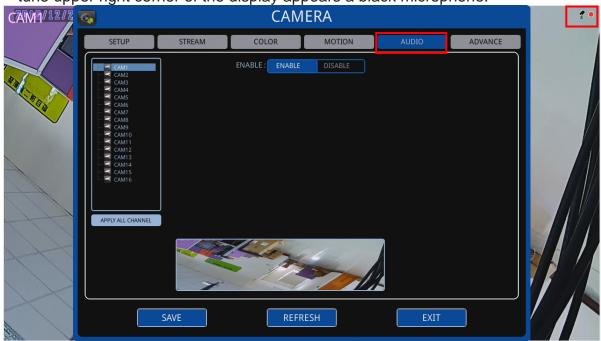
In the MOTION tab, we can enable MOTION DETECTION, set SENSITIVITY level and select motion areas. Click [apply all channel] to apply identical parameters to all cameras.





## ◆ Sound

Sound part: choose whether to open the recording function, complete tune upper right corner of the display appears a black microphone.



## ◆ Advance Setting:

Change image quality and composition of the camera.



- 1. Exposure mode can be changed to 1. Auto or 2. Manual. Auto Mode:
  - 1) Auto Mode: Automatically sensing light sources, the stage will be exposed evenly under strong light.

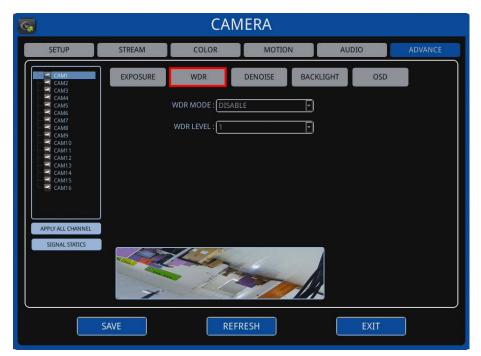


- 2) Manual Mode: A. Low noise. B. Frame rate
  - A. Low Noise: exposure can be set to MIN (minimum) or MAX (maximum).

MIN: To be used under strong light condition, higher number means (slower shutter speed) more emphasized exposure.

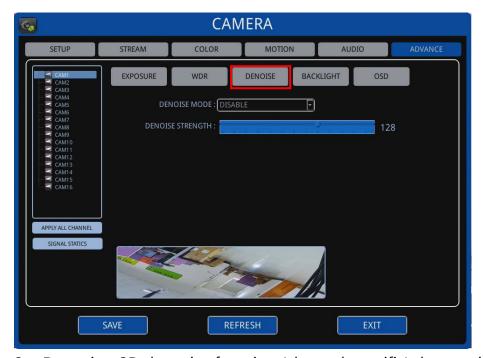
MAX: To be used for low noise situation, higher number means (slower shutter speed) increased environment brightness.

B. Frame Rate:Lower frame rate to improve noise level, the frame rate is also reduced (from 30 frames per second to 10 frames per second for example) to increase light emission. MIN: To be used under strong light condition, higher number means (slower shutter speed) more emphasized exposure.



2. Wide Dynamic Range: WDR technology can increase image quality under highly contrasted environment, where both shadowy and highly illuminated area is present. WDR can capture clearer image detail in this type of environment.



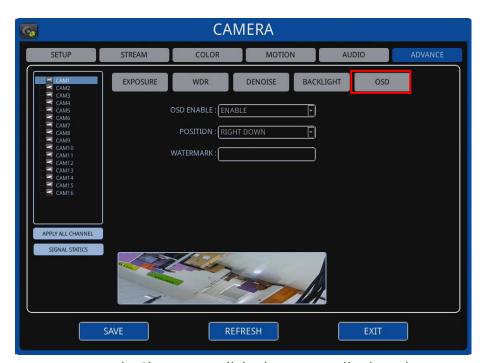


3. De-noise: 2D de-noise function (channel specific) that retains greater image details while providing clean, smooth and natural assimilated area in images. 3D digital de-noise can reduce noise interference of frames with weaker signal. As image noise appears at random, the noise ratio differs with each frame. 3D digital de-noise compare consecutive frames to filter out none interlacing signals (noise), this in turn will produce a better image.





4. Backlight Compensation: Automatically compensation camera light ratio when an object under strong backlit condition, this will make an object brighter.



5. Watermark: Choose English characters displayed on your video stream.





### **RECORD**

#### **♦** SETUP

- 1) In This menu, the recording schedules of each camera can be set individually.
- 2) Motion detection is available, including PREV/POST DURATION. The Recording schedule of a camera can be set here.
- 3) Click RECORD EVENT TYPE drop-down list and select one type. Then set the event type for a specific time: Green means NORMAL; RED means MOTION; ORANGE means SENSOR(Some DVR not support) and White means NONE. Each cell represents one hour unit.
- 4) Click [SELECT ALL IPCAM] to apply to all cameras.
- 5) Click [SAVE] to save and exit schedule record setting.

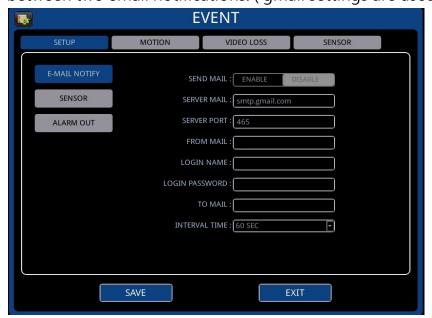




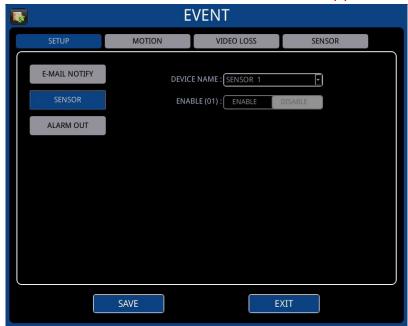


## **♦** SETUP

1) E-MAIL NOTIFY: Click [ENABLE] to enable email notification of an event. Server mail, server port, from email, login name, login password, and to mail must be set correctly as well as interval time between two email notifications. (gmail settings are used here.)



2) SENSOR: SENSOR function needs ALARM IN device (Optional). Our DVR supports 4 ALARM Ins. When some ALARM IN is triggered, it can send an e-mail /alarm-out. (Some DVR not support)

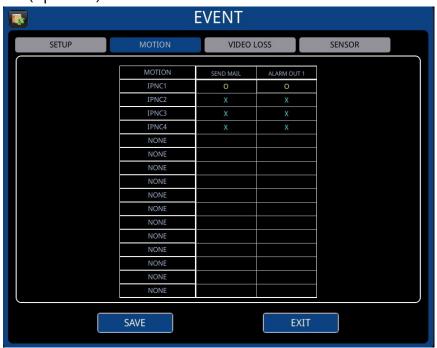




3) ALARM OUT: ALARM OUT function needs ALARM OUT devices (optional). Our DVR supports 1 ALARM out. When MOTION, VIDEO LOSS or SENSOR happen, it can enable the ALARM OUT. DURATION TIME also can be set here. (Some DVR not support)



Detection Setup
 Check the actions for MATION DETECTION: SEND MAIL/ALARM
 OUT (optional).





## ♦ VIDEO LOSS:

Check the actions for VIDEO LOSS: SEND MAIL/ALARM OUT (optional).



## **♦** SENSOR

Check the actions for SENSOR: SEND MAIL/ALARM OUT (optional).





# Sound Recording

1) Enable or disable sound recording on DVR. A red microphone icon will appear on top-right corner when sound recording is enabled. Supports AIC and HDMI output.





## **STORAGE**

- 1) This menu is used to allocate the storage space for DVR and choose if you will change the file saving mode.
- 2) The hard drives must be formatted sequentially to establish an overall storage space.
- 3) Use REFRESH to update the available hard drive information. New installed drives must be formatted by the NVR before using.
- 4) Display REC represents the current data being written to this hard drive.
- 5) FILE LIST will list the recording files.



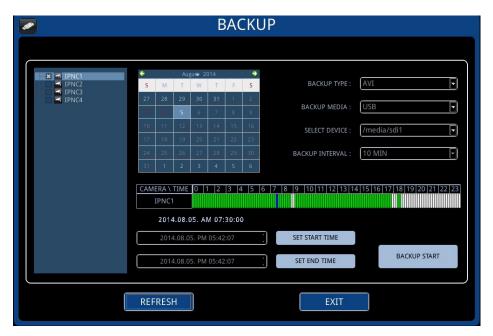




## BACKUP

- 1) In this tab, we can back up the recorded videos. Insert a USB flash memory device to the USB slot on the NVR and its information will be shown.
- Select a camera from the left list and the date on the calendar.
   Use the mouse in the CAMERA TIME to choose the time range roughly.
- 3) For fine-tuning, click up / down arrows of SET START/END TIME to change start/end times.
- 4) Set backup file type to AVI and device. Click [BACKUP START] to begin backup.



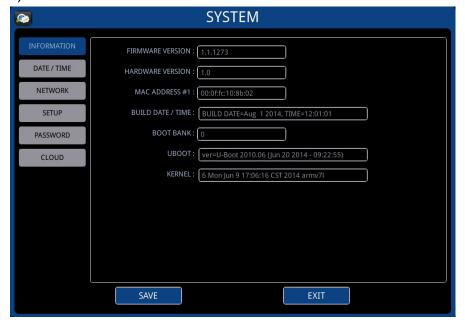




## **SYSTEM**

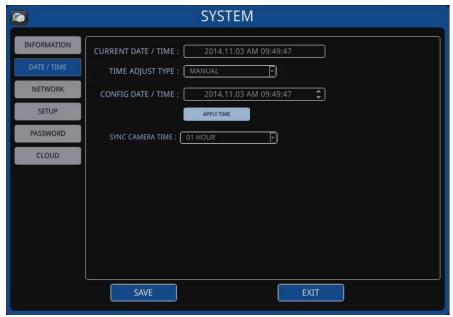
## **♦ INFORMATION**

- 1) Show Current firmware and hardware versions.
- 2) DVR MAC addresse, build date/time and BOOT BANK.
- 3) UBOOT and KERNAL versions and release time.





## ◆ DATE / TIME



- 1) This page offers the user to modify the system time, click on the up/down keys to make adjustments. Use APPLY TIME to update.
- 2) After setting, camera time will be synchronized.
- 3) TIME ADJUST TYPE:MANUAL OR NTP When using the NTP function, enter the NTP server web address and time zone can be obtained at the time zone.

## **♦** NETWORK



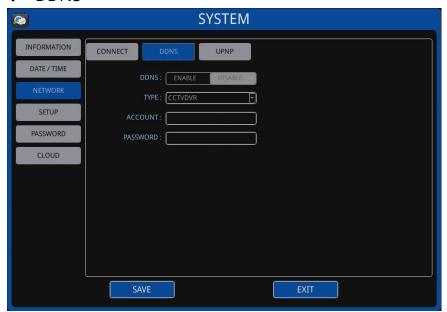
- 1) This page provides network information.
- 2) Click ip address cell to get the on-screen keyboard. Change ip



address if needed. Click again to close the on-screen keyboard.

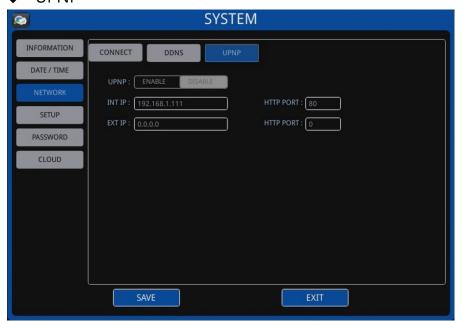
3) The ETHERENT can select STATIC \ DHCP or PPPoE.

## **♦** DDNS



- 1) This page provides DDNS information.
- 2) Enable DDNS / DDNS TYPE (Default : CCTVDVR)
- 3) Before using CCTVDVR, apply a new account from FUHO. Enter the ACCOUNT/PASS and SAVE to enable DDNS.

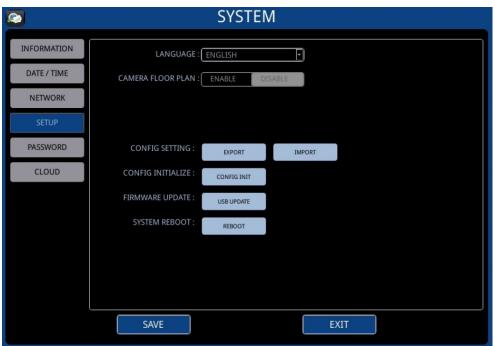
## **♦** UPNP





Ip router must support UPnP function, when the IP router's UPnP function is enabled, it will automatically assign an IP to the DVR. INT IP for internal, EXT IP for external

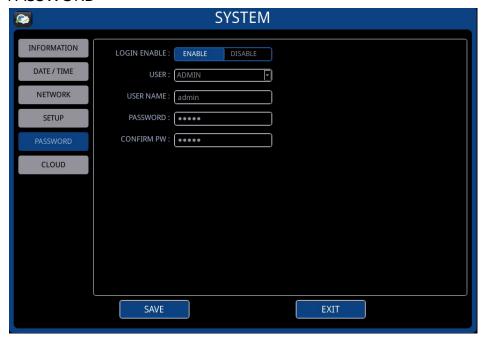
### ◆ SETUP



- 1) LANGUAGE: System must reboot to change the language.
- 2) Enable the map function and import new maps.
- 3) CONFIG SETTING: EXPORT the current machine settings for future use or IMPORT the saved machine settings for this machine.
- 4) Config Initialize: Click [CONFIG INIT] to reset the system to the factory default settings of DVR.
- 5) Firmware update: Save the new firmware on a USB and insert it to the USB slot on the front panel. Click [USB UPDATE]. (Note: the new firmware must be saved on the root directory of the USB).
- 6) System Reboot: Click [REBOOT] to reboot the system.



## PASSWORD

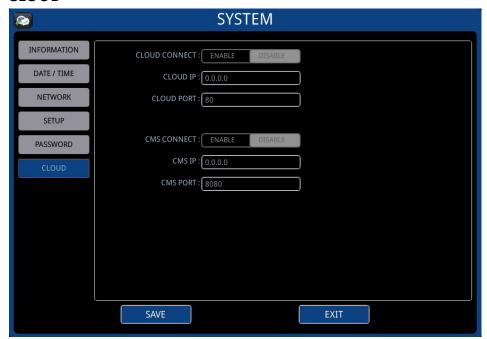


Click [ENABLE] to enable password setting.

Administrator has the highest authorities of operation.

Administrator can authorize USERs different features here by enabling/disabling playback, setup, and PTZ. Enter user name, password, and confirm password. Click [SAVE] to save and exit setting.

#### ◆ CLOUD



1) CLOUD CONNECT: ENABLE/DISABLE CLOUD function



- 2) CLOUD IP: Enter the IP address of the CLOUD service.
- 3) CLOUD PORT: Enter the PORT of the CLOUD IP (Default :80).
- 4) CMS CONNECT: ENABLE/DISABLE CMS CONNECT
- 5) CMS IP: Enter the IP address of the CMS.
- 6) CMS PORT: Enter the PORT of the CMS (Default :8080).



Playback

## 5.1 Playback

- 1) Live Viewing: Chick to go ro the channel live viewing.
- 2) Previous Page: Click to go back to previous viewing page.
- 3) Next Page: Click to go to next viewing page.
- 4) 1/4/9/16 Channel: Click to different channel viewing. (some DVR not support 9/16 channel)
- 5) Optional four channel: so that users can quickly tap four channel playback.(some dvr not support)

### 5.2 Search



- 1) Find the month and date on the calendar ito view.
- 2) After selecting the date to view, there will be a day table of recording status below. Move the mouse on the table, time information will be shown. Click on the specific time of the day to view the recorded video.
- 3) Each cell represents time of recording. It can be set from one to four minutes (default) per cell. (The unit indicator shows recording unit per cell). Click to zoom in the time unit. Maximum one minute per cell.
- 4) After enlarging the time bar, it may not display the entire day in screen.

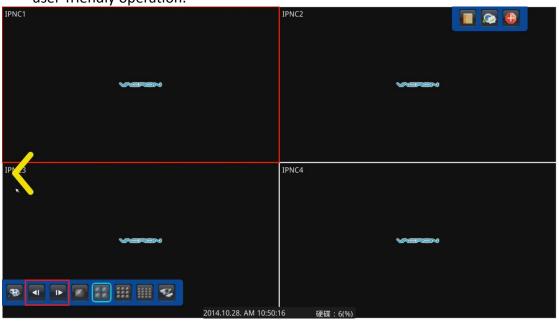


- Click to move to the specific time span.
- 5) Click 1 · 1 to move to the specific playback time.
- 6) Use the playback control buttons as chart below after finding the specific time to view.

: Play	: Stop	: Pause
: Reverse Playback	: Fast Forward	: Reverse Playback
	Playback	by Frame
: Forward Playback		
by Frame		

- 6. Previous and Next Page
  - 6.1 Click to go to previous / next viewing page.
  - 6.2 Previous viewing page is the one before the current page.
  - 6.3 Next viewing page is the one next to the current page.
  - 6.4 Click the yellow arrows on center point of left and right side of screen to . move to previous/next viewing page.

6.5 Use and together for better user-friendly operation.







Display Mode

- 7.1 Click for 1/4/9/16 channel Display mode.(SOME DVR NOT SUPPORT 9/16 channel)
- 7.2 Use these icons for better user-friendly operation.



Sequence

8.1 In 1/4/9 display mode, Sequence feature is used to view channel by turns. (SOME DVR NOT SUPPORT 4/9 channel)



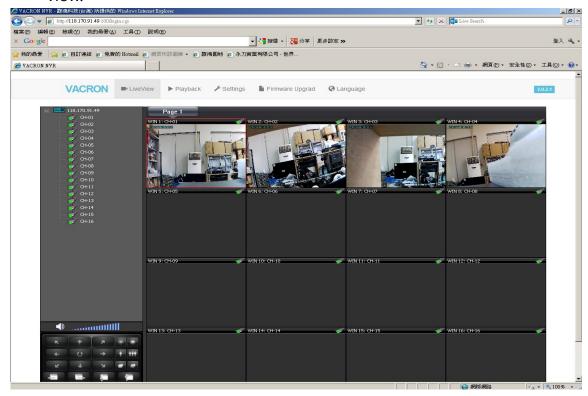
## Chapter 3 【Advanced Features】

- 1. Digital Zoom-in of Single Display Mode
  - 1.1 Double click on a channel window, it will change to single display mode.
  - 1.2 The yellow arrow for changing channel is located on the center of left/right side of the channel. Click left arrow for previous channel and right arrow for next channel.
  - 1.3 For digital zoom-in, use the left mouse button to define the zoom-in area.
  - 1.4 Release the left button on the mouse to see the zoomed-in area. Zoomed-in area can be changed by mouse operation.
  - 1.5 A miniature of the video image is shown in the bottom-right. The zoomed-in area is marked in it for easy understanding/operation.
  - 1.6 If some area is blocked by the miniature, it is movable by mouse operations. This allows users to monitor the area easier. Click right button to end zoom-in function.



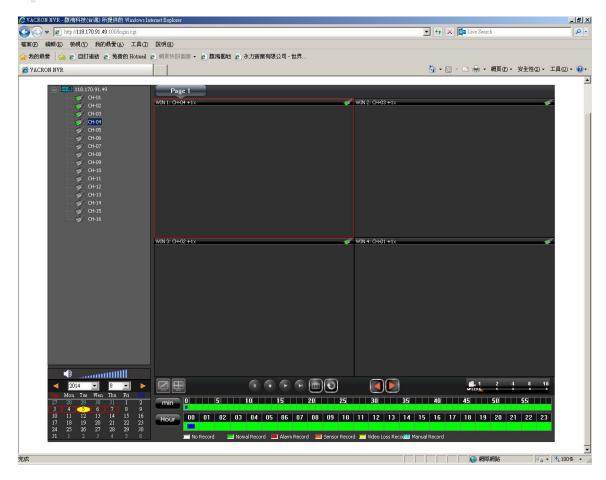


- 2. Remote Monitoring and Playback
  - 2.1 To view DVR remotely, enter its IP address on IE to connect.
  - 2.2 Click on the channels located on left side of screen to connect and view.

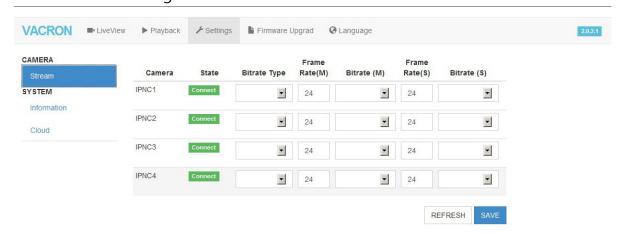


- 2.3 Choose Playback and select channels located on left side of the screen. The time bar and calendar will appear on the bottom of the screen.
- 2.4 Click on the specific time you want to view. At best, DVR supports 4 channels with 1080P playback simultaneously. Operating keys such as fast forward are located on bottom-right side of screen.



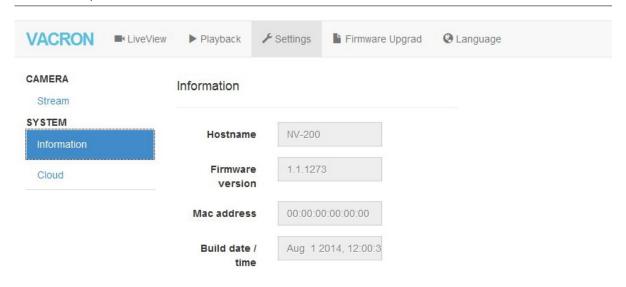


2.5 Choose the settings-stream page, the settings of cameras of the DVR can be assigned.

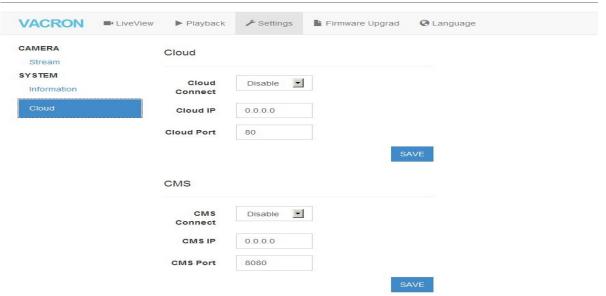




2.6 Choose the settings-Information page will show the current model name, MAC code and version information.

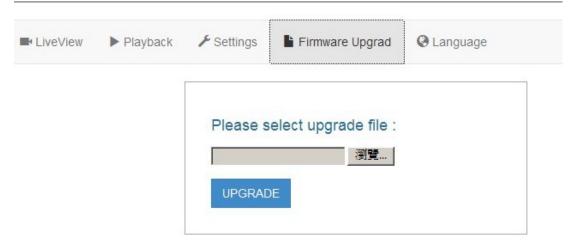


2.7 Choose the settings-Cloud page, Cloud and CMS settings are available. The settings of parameters are the same as in the DVR side.





- 2.8 Firmware upgrade
- 1) Select the upgrade file, click UPGRADE to update firmware of DVR.
- 2) After clicking UPGRADE, the updating status of DVR will be shown in the screen.
- 3) After updating the firmware, the system will reboot and be back to the same screen. All saved settings will be kept unchanged.



2.9 Select the language page and users can change the language of the OCX.Now English, Simplified/ Traditional Chinese are available.





