

ADVANCED DIGITAL VIDEO PLATFORM

4 / 8 / 16 Channel Hybrid Standalone DVR Recorder

4CH / 8CH / 16CH Hybrid Video Recorder User's Guide

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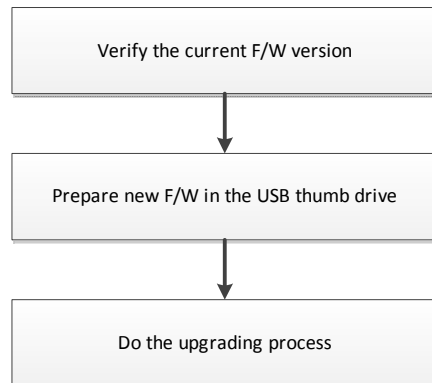
1. BEFORE INSTALLING

- Installation should be carried out only by qualified personnel and in accordance with electrical regulations in force.
- The DVR must be placed on a stable surface or mounted in an approved cabinet. Adequate ventilation must be provided, taking particular care not to block any of the air vents on the DVR.
- Adequate protection against lightning strikes and power surges must be installed to prevent damage to the DVR.
- Any safety warnings on the DVR and in these instructions must be adhered to.
- If cleaning is necessary, shutdown the DVR and disconnect the power source first. Use a soft dry cloth only – never use an abrasive cleaner.
- Do not attempt to service or repair the DVR as opening or removing covers may expose dangerous voltages or other hazards. Refer all servicing to qualified service personnel

1.1 UPDATING SYSTEM F/W

1.1.1 WITH THE USB THUMB DRIVE

User can upgrade the system firmware by himself if required. F/W upgrading could be required to increase the stability and the reliability or apply the new updated features. The following steps are a progress to upgrade the f/w.



1.1.1.1 How to verify the F/W version

You may need to check the F/W version provided and the F/W version currently used in the system. From the [MANAGEMENT section under the SYSTEM menu](#), you can see the current version of F/W.

SYSTEM INFO.	
F/W VERSION	1.07
H/W VERSION	WH-N2
UI VERSION	1.1.3.0
VIDEO SIGNAL TYPE	NTSC
HDD 1 (149 GB)	ST3160310CS/SC14
IP ADDRESS (1/2)	192.168.0.200 / 192.168.172.130
MAC ADDRESS (1/2)	00:0A:2F:00:29:6C / 00:0A:2F:00:29:6D
DDNS SERVER ADDR	dynamicmv.com
DVR SERVICE PORT	9000
WEB SERVICE PORT	80
FAN STATUS	5555 RPM
TEMPERATURE	39 °C / 102.2 °F

- F/W version of new provided one: From the filename of the provided F/W file, you can see the version number.

- ✚ Check the F/W version.



➤ The 'v1.0.0' in the file name means the F/W version.

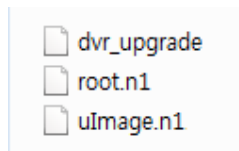
- Please avoid updating if the version number of F/W file is lower than the current F/W version.

1.1.1.2 Preparing new F/W in the USB thumb driver

Unzip the file which received from dealer or downloaded yourself(in case you receive original file not zipped, then you don't need unzip)



Using zip/unzip software, unzip firmware file.

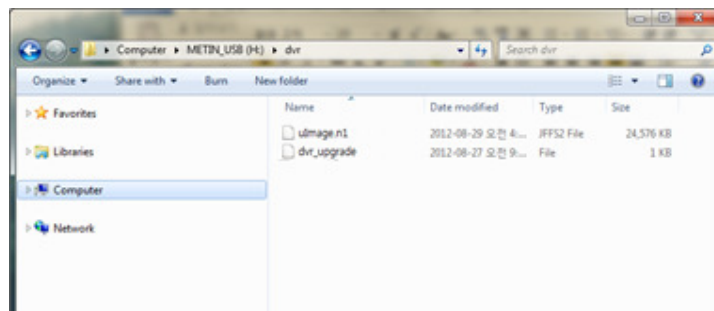


After unzip, you can see above system file.

- According to Upgrade field, number of downloaded file would be different.

All the required F/W files should be copied under the 'dvr' folder. Refer to the following steps to do.

- ✚ Plug in the USB thumb drive.
- ✚ Make the 'dvr' folder at the top of the USB thumb drive.
- The characters, 'd','v','r', in the folder name have to be a lower case not a capital.
- ✚ Copy the released F/W zip file into the 'dvr' folder in the USB thumb drive.
- ✚ Extract the zip file under the 'dvr' folder. Finally all files should be located under the 'USB thumb drive\dvr'. Refer to the below picture.



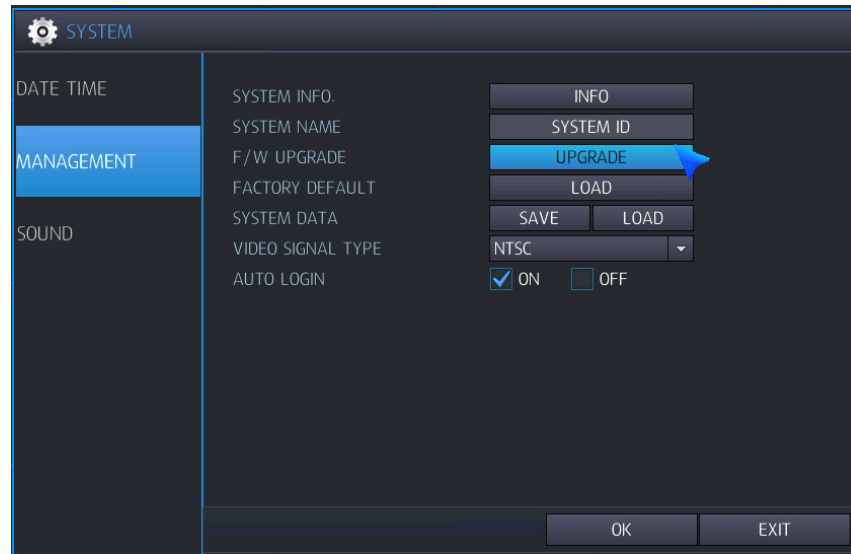
- ✚ Do 'Safe Remove Hardware and Eject Media' from your Windows.

- Note) Upgrading F/W file in Boot system is different compared to upgrading F/W files in main menu.
- Note) F/W upgrade must be followed by manufacturer's direction.

1.1.1.3 Upgrading System from the System Menu

Following steps will guide you into the way to upgrade the system with the new F/W.

- ✚ Plug the prepared USB thumb drive in the USB port of DVR.
- ✚ You need to move to [management menu](#) of System Section.



- ✚ Press and enter 'Upgrade'.
- ✚ You need to step following procedure of Firmware upgrade.
 - The whole upgrading process can take some times from several minutes to tens of minutes.
 - Don't remove the USB thumb driver during upgrading.
 - Don't turn off power of system during upgrading.
- ✚ If the firmware upgrade is finished, system will start auto re-booting.
- Note) if the USB thumb driver exists during the reboot, the upgrading process will start again. If so, you must wait one more upgrading to avoid the system F/W being broken.

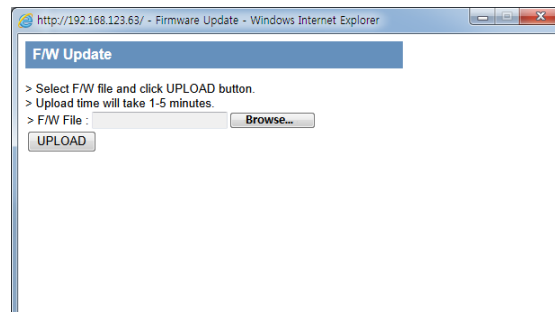
1.1.2 UPDATING FROM THE WEB MENU

The web menu service prepared in the DVR provides the way to update the system F/W remotely. The following steps explain how to do this.

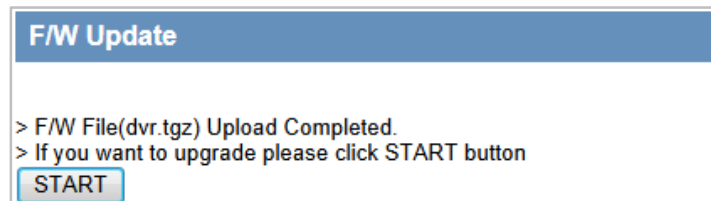
- To know the way how to access the internal web menu service, refer the [section 7.1, 'WEB SERVER'](#) of this user's guide.
- ✚ Login the web server in the DVR
- ✚ Enter the 'SYSTEM MANAGEMENT' page under the 'SYSTEM' menu page. Refer to the below picture.



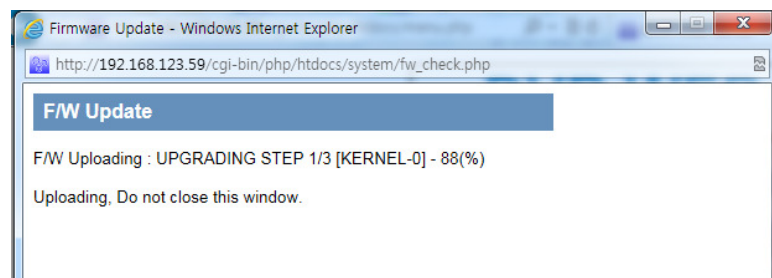
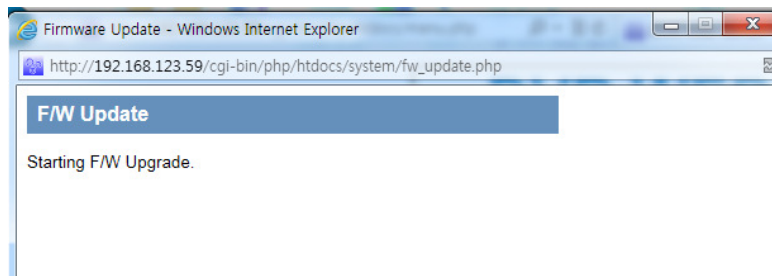
- Click the button 'UPGRADE' and open the update page.
- In the update page, click the 'BROWSE' button and call the file open window.
- Choose the provided F/W files which has the file extension 'tar.gz or tgz'.

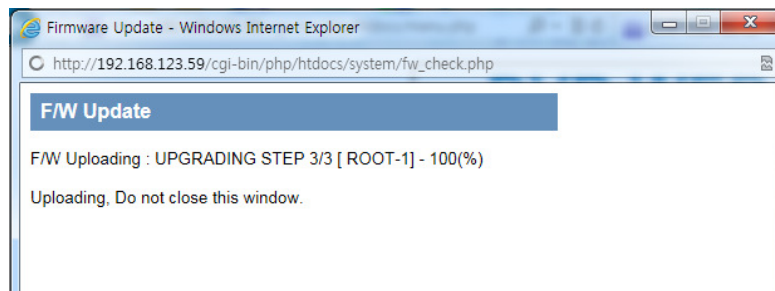


- Click the 'F/W UPLOAD' button and let the system uploading the F/W into the system.
- When uploading is finished successfully, the system is going to be ready to update and wait to start. Click the 'START' button triggers the updating processes.



- While the update is on, the progress steps will appears such as below.



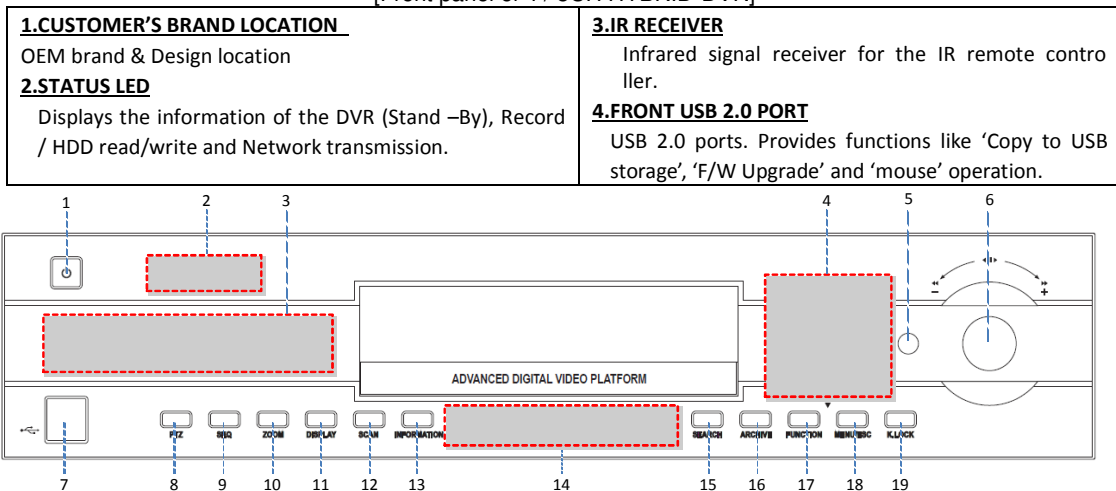


- ✚ System shows the [COMPLETE] when it finish of updating step and reboot automatically.
- ✚ When the whole update is completed, the DVR will restart and be ready to work.
- Turning off the power in any process of f/w updating cause the damage of the system.

1.2 DESCRIPTION OF FRONT PANEL



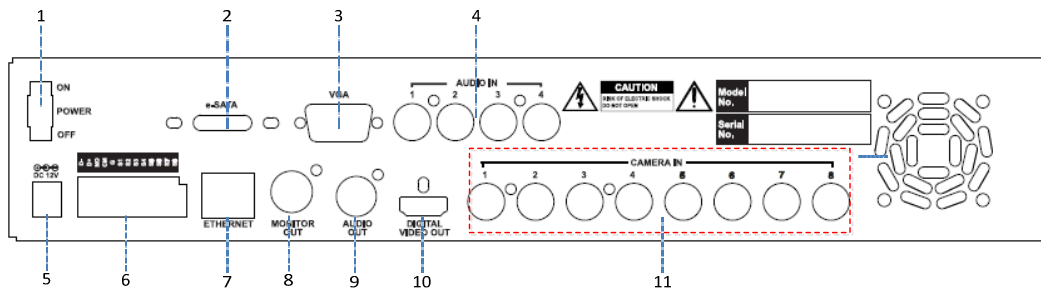
[Front panel of 4 / 8CH HYBRID-DVR]



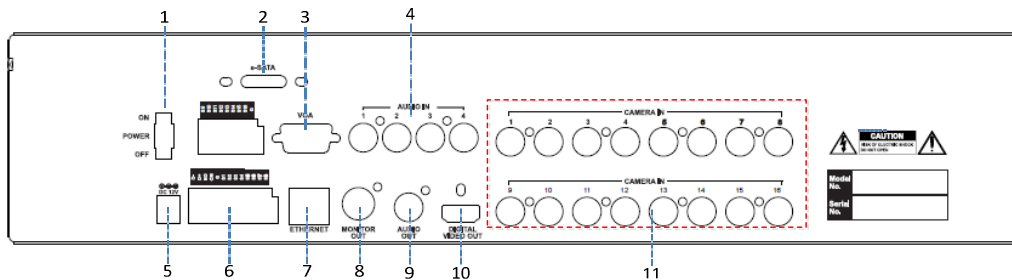
[Front panel of 16CH HYBRID-DVR]

<p>1.Power Switch Switch to turn the DVR ON & OFF.</p> <p>2.STATUS LED Displays the information of the DVR (Stand -By) , Record and Network transmission.</p> <p>3.CHANNEL SELECT / NUMERIC KEYPAD / MULTI</p> <ul style="list-style-type: none"> Selects the desired channel and show it with the full scale. Enter the number on the numbers required to be input, Password, IP address, Time & Date and Etc. <p>4.Direction button/ Enter button</p> <ul style="list-style-type: none"> Direction button: On menu, move to above/below/left/right Enter button: This button is used to confirm selection in any of the menu. <p>5.IR RECEIVER Infrared signal receiver for the IR remote controller.</p> <p>6.Jog&Shuttle Using the jog&shuttle can control the playback screen</p> <p>7.FRONT USB 1/2 2.0 PORT Top Device: USB 2.0 ports. Provides functions like 'Copy to USB storage', and Etc Bottom Device: USB 2.0 ports. Provides functions like 'Copy to USB storage', 'F/W Upgrade' and Etc</p>	<p>8.Pan/ tilt button enter into pan/tilt mode</p> <p>9. AUTO SEQUENCE</p> <ul style="list-style-type: none"> Enters PTZ control mode. <p>10. DIGITAL ZOOM Enters digital zoom mode.</p> <p>11.Display button</p> <ul style="list-style-type: none"> In live view and playback, switch display mode to 4ch or 9ch and 16ch <p>12.Scan button Search supported camera configure in DVR</p> <p>13. INFO</p> <ul style="list-style-type: none"> Executes the selected function in the menu screen or enters the selected submenu. Accesses the status window from the live screen. <p>14.Playback control button In playback, backward quick search/backward still search/search & pause/ forward still search/forward quick search.</p> <p>15.SEARCH Enters the search menu screen.</p> <p>16. Simple Copy Button is used to enter to Easy copy menu</p> <p>17.Special Feature button It is used to Special feature on HYBRID-DVR</p>
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1.3 DESCRIPTION OF REAR PANEL



[Rear panel of 8ch Hybrid-DVR]



[Rear panel of 16ch Hybrid-DVR]

1.Power Switch(Only the 4CH HYBRID-DVR)

Switch to turn the DVR ON & OFF.

2.eSATA Connection Port(Optional)

connect e-SATA storage to expand HDD

3.VGA Output (Video Graphic Array)

15-pin D-sub connector for the analogue VGA output.

4.Audio Inputs

RCA connectors for the audio signal inputs. (Line In)

5.Power In

12V DC Power socket.

6.Alarm(Sensor) Inputs, RS-485, and Relay Output

- Alarm inputs x 4
- RS-485 Signals. (G: Ground, D+: RX/TX + signal, D-: RX/TX- signal)
- 4CH HYBRID-DVR: Relay output for the relay 1 (NO: Normal Open, NC: Normal Closed, CM: Common)
- 8&16CH HYBRID-DVR: Relay output for the relay 2 (NO: Normal Open, NC: Normal Closed, CM: Common)

7.RJ-45 Network Port(1G Base-T)

Network port is used to 1G base-T, PC application software or Mobile application.

8. CVBS Monitor Output

Composite video output for the spot live screen. (BNC)

9.Audio Outputs

RCA connectors for the audio signal outputs. (Line out)

10.DIGITAL VIDEO OUT

Digital video output for the main monitor.

11. HD-SDI or Analog Camera Input

analog Camera input or HD-SDI video inputs for each camera

2. GETTING STARTED

Controlling and setting Hybrid-DVR by remote control is limited to some of function, recommend you to use mouse operation of HYBRID-DVR for using all the function.

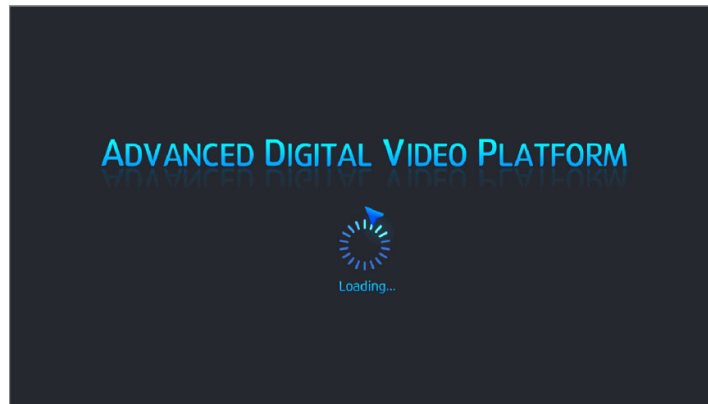
2.1 CONNECT AND SWITCH ON

- Please check if power of HD-SDI or SDI camera is turn on.
- Connect one or more monitors to Hybrid-DVR using Digital Video output, VGA and CVBS.
- Connect power to Hybrid-DVR. Press the power button on the back panel of Hybrid-DVR to begin operation. 8/16ch Hybrid-DVR automatically when power on.
- When you make system boot up, you can view following system loading process after boot up logo image.



[Logo Image]

- Depending on Monitor which you connect to Hybrid-DVR, initial logo is not displayed because your monitor is not support low resolution, so it is not a defect.
- Initial set resolution is 1024 x 768, so you should use monitor higher than 1024x768

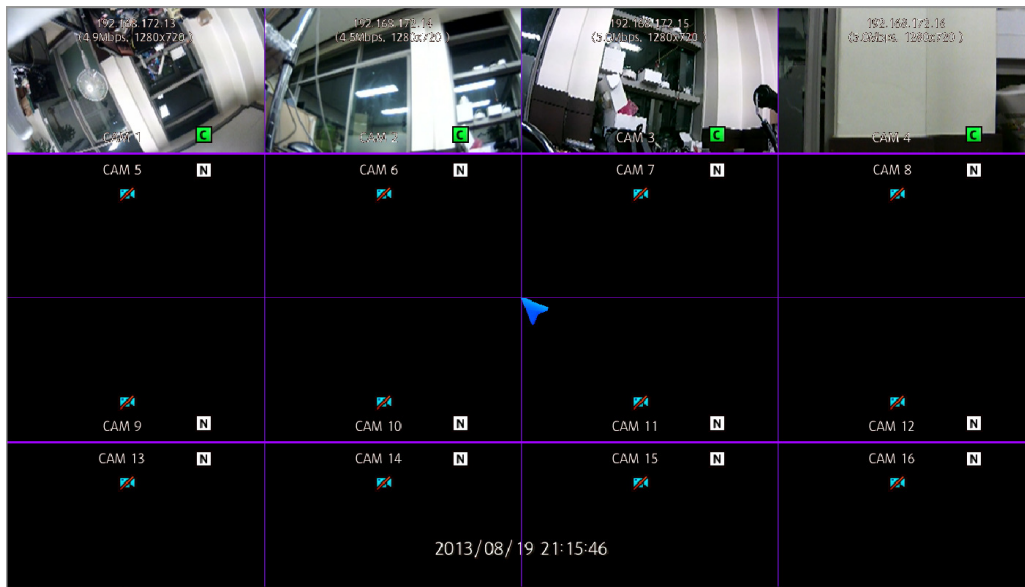


[Loading....]

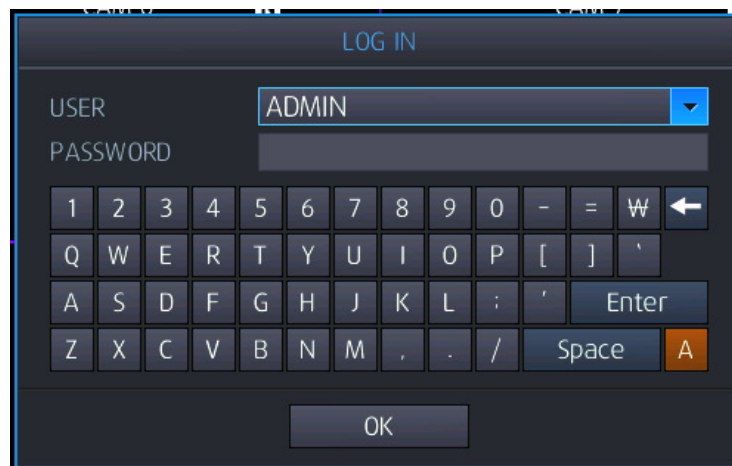
When Hybrid-DVR is prepared for initial operation, display system preparing screen as above and show booting progress.

- From loading screen display, recording starts according to pre-set condition.
- When loading, screen could be flashed, happening odd color while HYBRID-DVR is processed to optimize display.

All operation of Hybrid-DVR is ready, automatically log-in and show as below screen.



If start-up diagnostics are complete, the operator must log-in to the system. You need to type the default user name as "ADMIN" and the default password as "1234" and press the enter button. In case you don't use the automatic log in, select log-in account using mouse and type the pin code, then press enter button or confirm, then you can log in.



[Log-In]

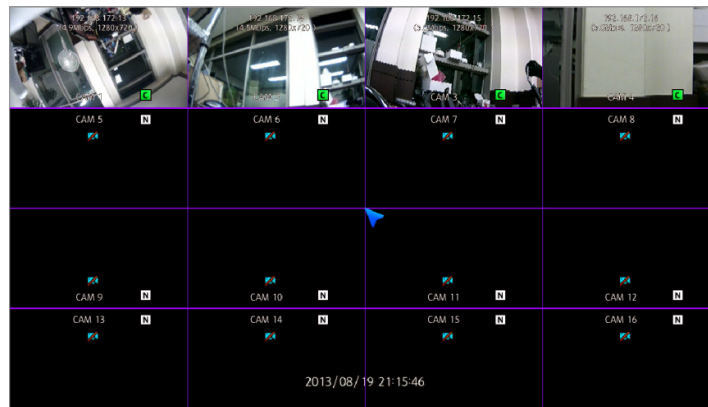
- Log in with remote controller, operate as below
 - Using direction button, move to user's selected menu, press "enter" on remote controller and move to user account selection mode.
 - Using Up/Down key, select account, and press "Enter" on remote controller for selecting user's account
 - Using numeric key and input pin code,
 - If required, using direction key and move to virtual keyboard and input pin code.
 - After inputting pin code, using direction key, move to 'enter' or 'confirm' over virtual keyboard and press 'enter' (↵) to log-in



[live mode of 4 channels]



[live mode of 8 channels]



[live mode of 16 channels]

Logging in after inputting account and pin code, if you log-in, then show above screen.

- Recommend you to connect camera first before HYBRID-DVR starts.

Bottom of screen show the tool-box for operation. Tool box has current time and date, network connection status (📶), back up storage connection status (💾), automatic screen switch operation (🔄), HDD installation (💿), currently working audio (🔊). Also tool box include log on/off for HYBRID-DVR operation (🔌), Setup menu (⚙️), VA related menu button (👤), easy copy button (📄), search (🔍), Screen display selection (📺), Pan/tilt (👉), Digital zoom (🔍), system log (📋).

3. TOOL BAR

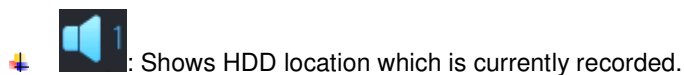
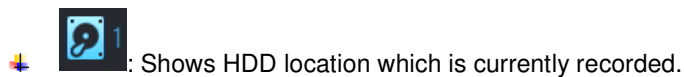
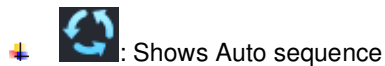
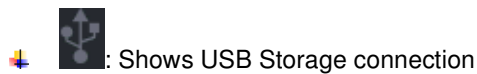
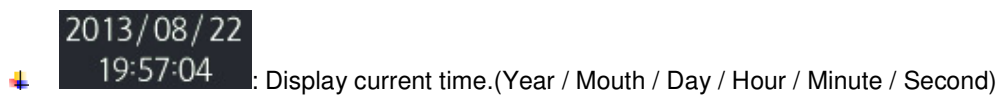
You can view following Tool Bar when you move the mouse to the bottom of screen.

The Tool-box display when the mouse pointer move to bottom of screen, disappear after pre-defined menu setting time or exit with exit button (). In the menu you can set with all-time display.



3.1 STATUS DISPLAY

You can check current time / Network connection/ USB storage connection/ Auto sequence/ HDD location currently recorded / Audio.



3.2 LOG OFF

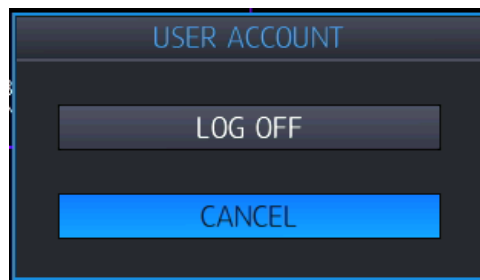
There are two way for log off. One is manual log off and the other one is automatic log off after configured time passed.

User manually do log off or in the menu you can set automatic log off after certain time.

[Log-Off by using TOOL BAR]



Once Log off selected as above, current account can be log off.



Once user log out, you can view log in window .

And also, you can set up the log out menu at Main menu for automatic log off.

Once you log off, you can't operate HYBRID-DVR , otherwise log in again.

[Log off with user menu setup]

Over Main Setting Menu, user-> log out, you can set up automatic log off after some period.

3.3 Main Menu POP-UP

If you press main menu button, main menu will be POP-UP.



3.4 QUICK COPY MENU POP-UP

If you click following icon, instant Backup menu will be pop up. You can save the data 10 minutes from the current time.



3.5 SEARCH MENU POP-UP

To search a particular section of recorded footage, press the **SEARCH** button.

To protect unauthorized viewing of footage, only authorized users can playback footage.

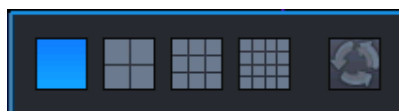


3.6 DISPLAY POP-UP



You can configure display mode by pressing display button of Tool bar.






You can select Quad / Single/ Auto sequence by selecting item in pop-up menu.



  : Single Screen Mode

  : Quad Screen Mode.

-  : 9-split Mode.
-  : 16-split Mode.
-  : Auto Sequence Mode.

3.7 PTZ POP-UP

You can move to the PTZ control mode.

When the display mode is quad, the PTZ control panel will be opened for the selected camera which is previously highlighted by mouse click. If there is no highlighted camera, the PTZ control panel is opened for controlling the camera 1. In single display mode, the PTZ control panel is opened for the currently displayed camera.

- Support only after PTZ IP camera integration with HYBRID-DVR completed.



[PTZ Controller Screen]



- 1: Select channel for PTZ control.
- 2: Display PTZ control parameters which are set under the 'DETAIL' of PTZ menu settings
- 3: Number to configure Preset.
- 4: Save current screen as Preset.
- 5: Move to configured Preset Number.
- 6: Control the value of Zoom/ Focus/ Iris.
- 7: Move the PTZ camera to Left/ Right/Tom/Bottom
- 8: Move to the Home position of PTZ camera.

3.8 DIGITAL ZOOM

You can move to the Zoom mode by selecting the menu in Tool bar.
You can use mouse or tool bar to zoom in or Zoom out.

[Zoom by using TOOL BAR]

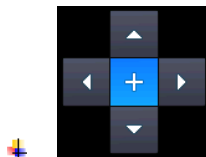
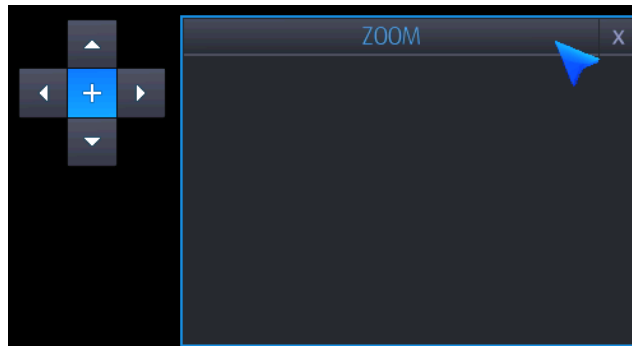
At 4-Split screen mode, you have to enter Zoom mode through channel number 1.

At Full screen mode, you can enter Zoom mode at current Full screen.

In case opening digital zoom at Split screen mode, if there were pre-selected channel using mouse, then move to that channel's camera, if there were no pre-selected camera, goes 1ch camera for digital zoom



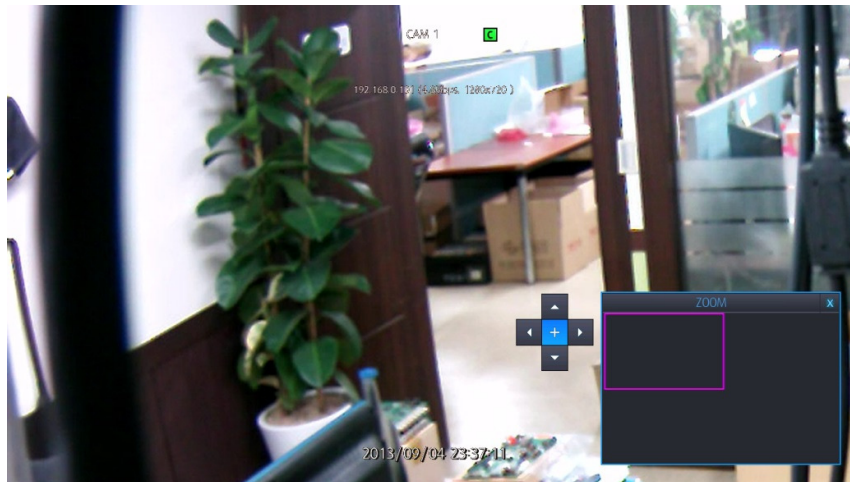
In tool box, once select digital zoom, screen convert single screen, show below digital zoom control window.



: You can move Zoom Box



: If you press this button, you can control zoom box by 5 levels.



● Currently Zooming screen.

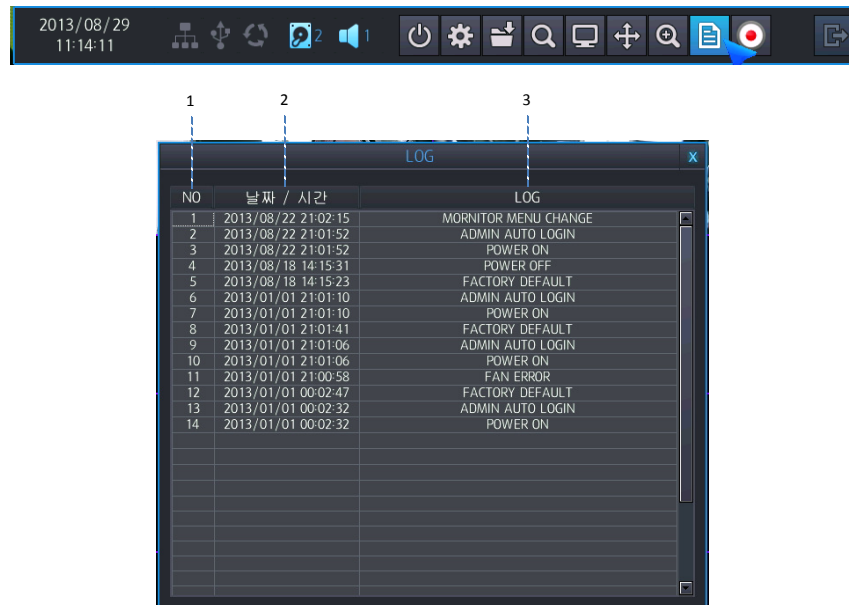
[Zoom by using Mouse]

At full screen mode, you can select the area to zoom in/out by clicking left button of Mouse. (Drag), Clicking on the zoomed screen, the display returns to the original screen.

- ✚ Digital Zoom supported at Live / Play mode
- ✚ Digital Zoom supported at only Full screen mode.

3.9 LOG LIST

You can view the log list by selecting log list button in Tool bar.



1 : Display number from currently triggered (Max 10,000 list can be recorded)

2 : Date / Time

3 : Log list

Items listed in log list.

- Power ON/OFF
- Backup Start
- Disk Format
- Factory Default
- Camera Menu Change
- PTZ Menu Change
- OSD Menu Change
- Monitor Menu Change
- Sequence Menu Change
- Date/Time Menu Change
- System Management Menu Change
- Sound Menu Change
- User Management Menu Change
- Authority Menu Change
- Logout Menu Change

- Network Menu Change
- DDNS Menu Change
- Alarm In Menu Change
- Alarm Out Menu Change
- Buzzer Out Menu Change
- E-Mail Notification Menu Change
- Disk Management Menu Change
- Record Configuration Change
- Record Schedule Change
- Camera Menu Change
- Firmware Upgrade Success
- Firmware Upgrade Fail
- Admin(User 1 ~ 10) Auto Login
- Admin(User 1 ~ 10) Login
- Admin(User 1 ~ 10) Password Fail
- HDD 1(1 ~ 5) Error For Write
- HDD 1(1 ~ 5) Fail For Write
- HDD 1(1 ~ 5) Error For Read
- HDD 1(1 ~ 5) Fail For Read
- Network Connected
- Time Adjust
- Network Disconnected
- DVR Watchdog Reset
- Menu Data Backup Succeeded
- Menu Data Load Succeeded
- Menu Data Backup Failed
- Menu Data Load Failed
- Camera Menu Changed In Remote
- PTZ Menu Changed In Remote
- OSD Menu Changed In Remote
- Monitor Menu Changed In Remote
- Sequence Menu Changed In Remote
- Date&Time Menu Changed In Remote
- System Management

- User Management Menu Changed in Remote
- Authority Menu Changed in Remote
- To Logout Menu Changed in Remote
- Network Menu Changed in Remote
- DDNS Menu Changed in Remote
- E-Mail Menu Changed in Remote
- Alarm input Menu Changed in Remote
- Alarm Output Menu Changed in Remote
- Buzzer Menu Changed in Remote
- Buzzer Menu Changed in Remote
- E-Mail Event Menu Changed in Remote
- Disk Menu Changed in Remote
- Continuous Record Menu Changed in Remote
- Schedule Record Menu Changed in Remote
- Record Misc Menu Changed in Remote
- FAN Error
- Copy Success
- Copy Fail
- Backup Start
- Backup Stop
- Power OFF

3.10 PANIC RECORD

You can make "Panic Record" as ON by selecting panic record button in Tool bar menu.



PANIC REC START: Starts the panic record mode. Use the Left mouse click to select.







If you make Panic Record as on, recording mode will be changed to Panic record mode already configured in record menu.




Panic record will be stopped after panic record time passed at Record menu/ Misc.

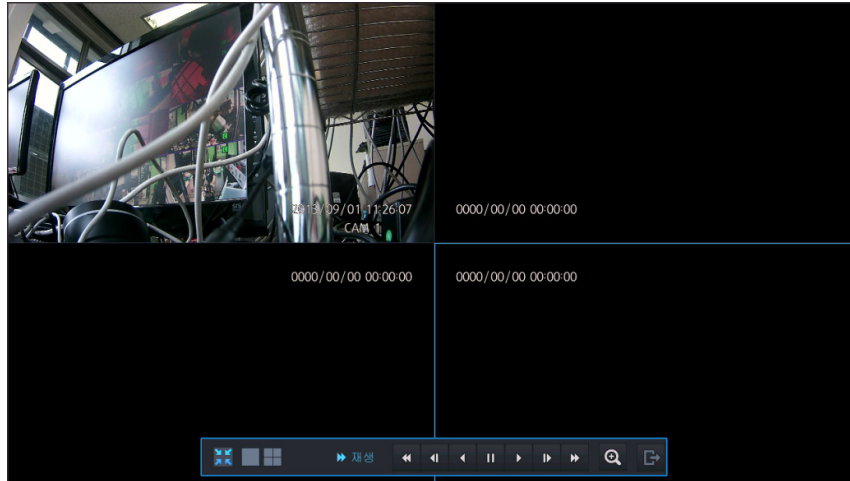
4. SEARCH & PLAYBACK

4.1 TIME / CALENDAR SEARCH



You can search the recorded data by a calendar and timeline for quick access to recorded footage.

-  1 : Select Search Mode : You can select the search mode.
 - **TIME:** The recorded data can be searched using the calendar.
 - **PANORAMA:** If you select the channel for panorama view, search mode will be changed to PANORAMA Mode
 - **EVENT:** The recorded data can be searched using the event list.
-  2 : SEARCH HDD : You can select the HDD to search
 - **RECORD:** You can search HDD which is selected as Record.
 - **MIRRORING:** You can search HDD which is selected as Mirroring.
-  3: CALENDAR: If the data recorded in each date, orange color will be displayed.
 - If you select the date having the recorded data, you can make a display of recorded data by hour.
-  4. Select Split screen
 -  : Single screen playback mode
 -  : Quad screen playback mode






-  : 9-split screen playback mode
-  : 16-split screen playback mode
-  : You can make a playback at full screen mode



- In playback mode in full screen, using tool box, control playback speed and direction same as live view.
- In this single screen, using digital zoom button, digital zoom function can be used.

-  : Return to Search menu.
-  : Close playback screen and return to live screen

5: PLAY CONTROL: Playback speed and direction control.

-  : Reverse Fast Play
-  : Reverse Slow Play
-  : Reverse Play
-  : Pause
-  : Play (x1)
-  : Slow Play
-  : Fast Play

6: COPY: You can copy the data to external storage.

- ✚ 7: VIDEO WINDOW: Searched video will be displayed
- ✚ 8: When you return to live menu from Search Menu
- ✚ 9: HOUR SELECT LINE: You can select the data by hour. If certain time has recorded data, blue color will be displayed.
- ✚ 10: Minutes / seconds display information for the unit : Minutes / seconds for display to help in selection.
- ✚ 11: MINUTE SELECT LINE: You can search the data by minute. If certain minute has recorded data, the blue color will be displayed.
- ✚ 12: RECORD DATA STATUS: You can view recording status of each channel. The blue color shows recorded data.
- ✚ 13: SECOND SELECT LINE: You can select the data by second after starting playback by choosing the desired minute.


4.2 PANORAMA SEARCH

By using Panorama Search, user can search, playback, copy by hour/minute/second at 16ch view mode.



4.2.1 BASIC OPERATION

- ✚ If you select the panorama channel, search mode will be changed to PANORAMA Mode.
 - Using front channel key or mouse double click, select channel among 16ch multi-channel.
 - Front key 1 can be chosen for first-left channel among 16ch
- ✚ If you select the date of Calendar, panorama playing back will be started from first recorded data in selected date.
- ✚ If you choose the hour you want, will be displayed in minutes.
- ✚ If you choose the minutes you want, will be displayed in second.
- ✚ Using below button, you can change search by hour, minute, second, or display below time.

➤  : You can see playback with selected time as below



- Copy time (from ~ to): If you can select panorama on screen, be input the automatically.

COPY	
FROM	2013/09/04 19:12:00
TO	2013/09/04 19:22:00
TAG	test
DEVICE	USB FRONT
CHANNEL	CHANNEL
BURN	

- **HOUR** : If you select hour, hour will be displayed. (ex: if currently playback by minutes, then move to hour search)
- **MIN** : If you select minute, minute will be displayed (ex: if currently playback by hour, then move to playback by minute)
- **SEC** : If you select second, second will be displayed (ex: if currently playback by minutes, then move to playback by second)
- **PREVIOUS** : Shows previous panorama. (ex: if currently playback 17~33 sec, then move to playback by 1~16sec)
- **NEXT** : Shows next panorama. (ex: if currently playback by 1~15sec, then move to playback by 17~33sec)
- **CHANNEL** CH1 : Selectec channel can be playback by panorama.

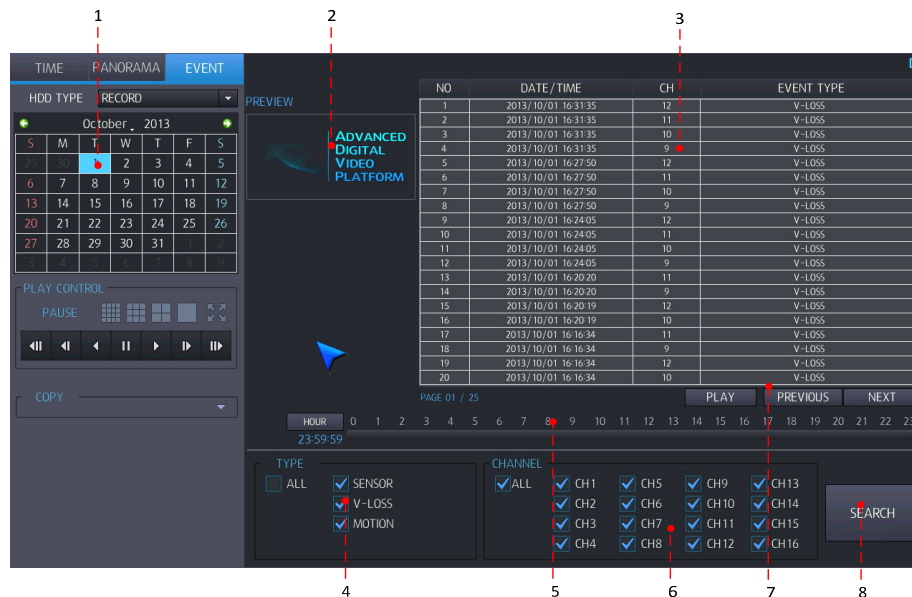
4.3 EVENT SEARCH



- ✚ If you want to search the Event, you need to select date and event menu tab.
- ✚ If you press Event, Event Search will be started from selected start time.

Hour selection for event search, you can select required hour at time bar by mouse

- 🔴 Event list show 20 event per page, 25page can be searched (max. 500 event)
- 🔴 Event list exceed 500 events, then re-search after adjusting event search period.



- ✚ 1. Select date which you want to search event.
- ✚ 2. Preview: Events selected in the list displays a preview of the record.
- ✚ 3. Search result: event list displayed.

Max 10,000 event log is marked, during search operating, 500 event list marked.

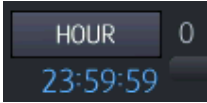
- No: Number of event display, recent event display with No.1
- DATE/TIME: Display Event triggered time.


- CHANNEL: Display Event channel
- EVENT TYPE: Display Event type.
- Event list display 20 each /page, total 25page(max 500 event)
- Event list exceed 500, then retry search after adjusting searching time.

4: You can select Event Type will be displayed in Event list.

- ALL: Display all events.
- SENSOR: Display Sensor Event.
- VIDEO LOSS: Display Video loss Event.
- MOTION DETECTION: Display motion Event.

5: Search for events by hours / minutes can be selected.

➤ : Event search by hour

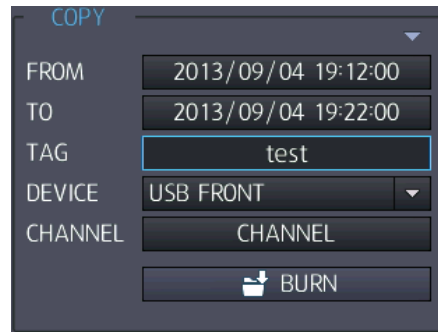
➤ : Event search by minute

6: You can select channel which will be displayed in Event list.

7: Switch Events List page. A total 500 events are shown on page 25.

8 : You can configure a search condition again by stepping above 4 ~ 7.

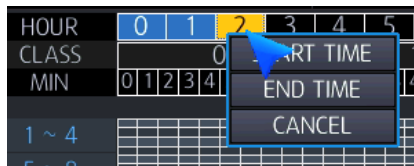
4.4 COPY



A screenshot of the 'COPY' menu in a DVR interface. The menu is titled 'COPY' in blue. It contains the following fields and options:

- FROM: 2013/09/04 19:12:00
- TO: 2013/09/04 19:22:00
- TAG: test
- DEVICE: USB FRONT (with a dropdown arrow)
- CHANNEL: CHANNEL
- A 'BURN' button with a disc icon.

- ✚ FROM: You can select the start time to copy.
- ✚ TO: You can select the end time to copy.
- ✚ TAG NAME: You can folder name copy data.
- ✚ DEVICE: You can select the port of USB to copy.
- ✚ CHANNEL: You can select the channel to copy.



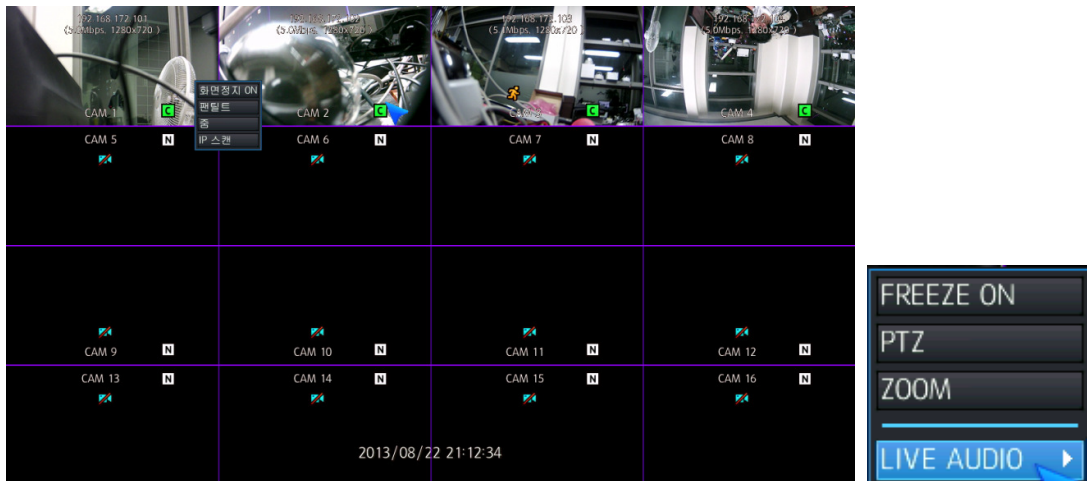
A screenshot of a calendar search interface. It shows a grid for selecting dates. The 'HOUR' row is highlighted with a blue background. The 'CLASS' row has a dropdown arrow. The 'MIN' row has a dropdown arrow. The '1 ~ 4' row has a dropdown arrow. A blue arrow points to the 'START TIME' button, which is also highlighted. Below it are 'END TIME' and 'CANCEL' buttons.


- ✚ : You can select Start/ End Time at Calendar search on Time line to copy.
- ✚ Copy start: copy start with selected time and condition. Since start copy, display copy progress status, you can select 'copy stop' for stopping copy.

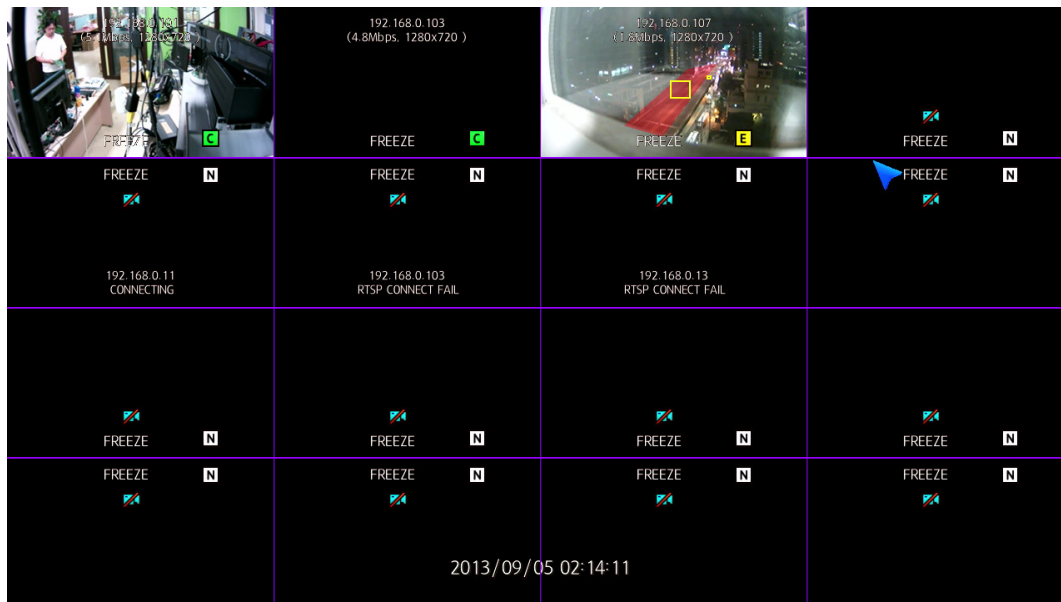
5. QUICK MENU


If you are using USB mouse to control the HYBRID-DVR, pressing the right button of mouse will bring up the Quick Menu.

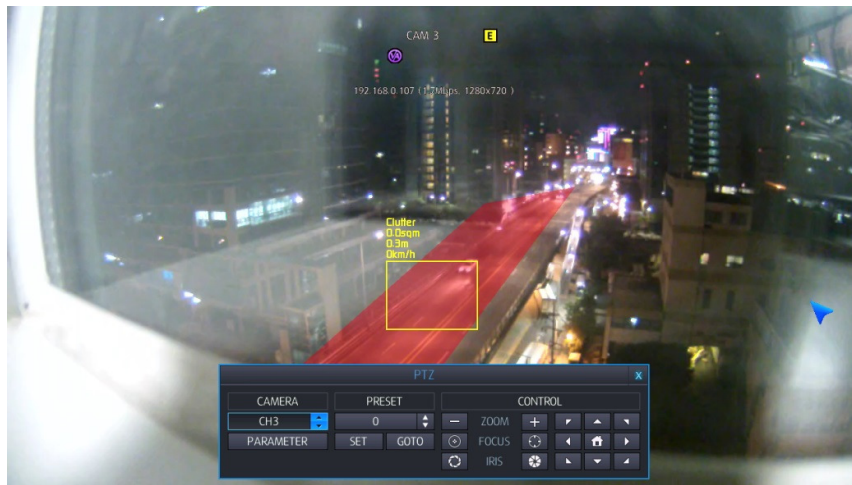
Here you can use display pause, pan tilt control, zoom control, live audio select.



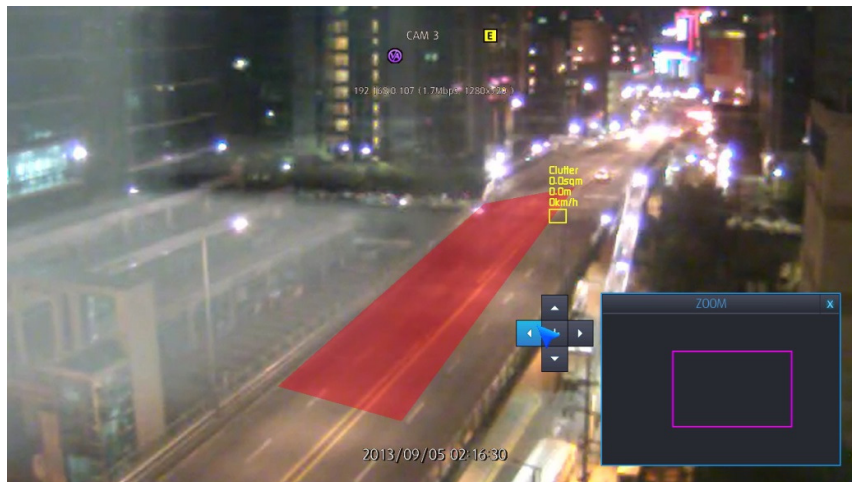
 **FREEZE ON** : If you press Freeze button, all screen will be stopped.



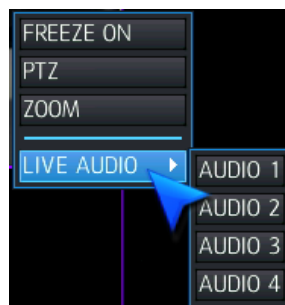
 **FREEZE OFF** : You can release Freeze mode by pressing Freeze Off.



- PTZ: Selecting PTZ will bring up PTZ control screen. PTZ can only be controlled by an authorized user. PTZ mode will be activated in the channel you selected by mouse.

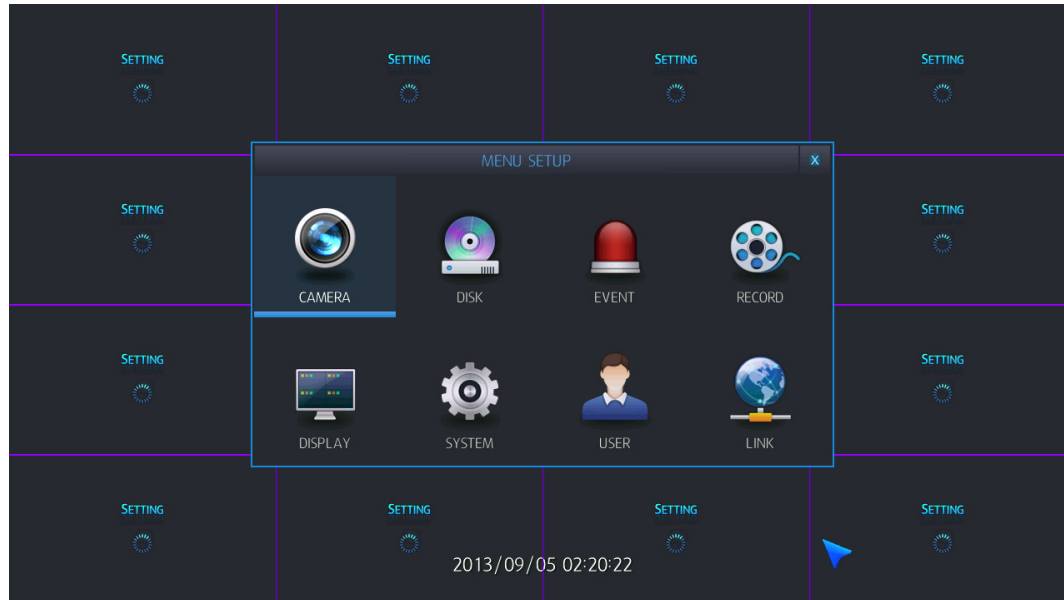


- ZOOM : This execute digital zoom control screen. Zoom mode will be activated in the channel you selected by mouse.
- Live Audio: Select the live audio channel.



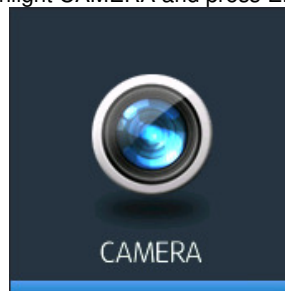
6. HOW TO CONFIGURE

To view the setup menu in each configuration items, press menu button of toolbar. Following screen will be displayed.




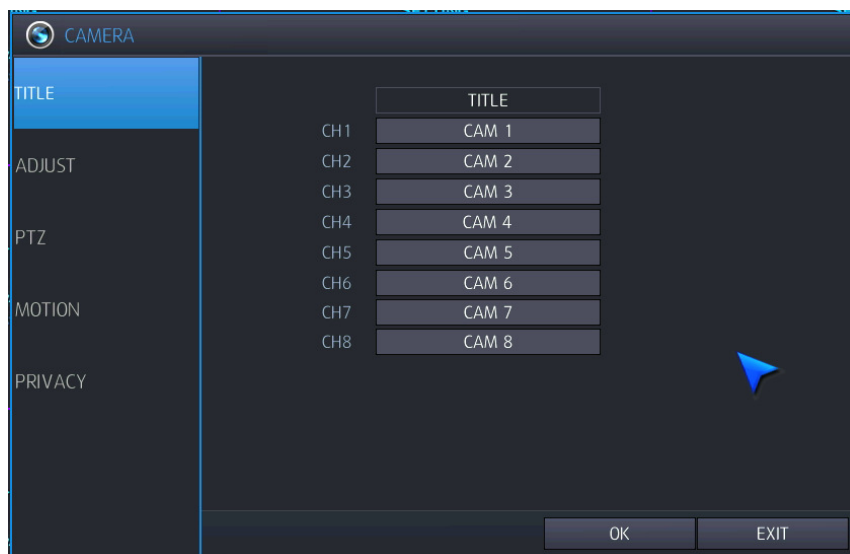
6.1 CONFIGURING CAMERA

To set-up the various camera options, highlight CAMERA and press ENTER.




6.1.1 TITLE

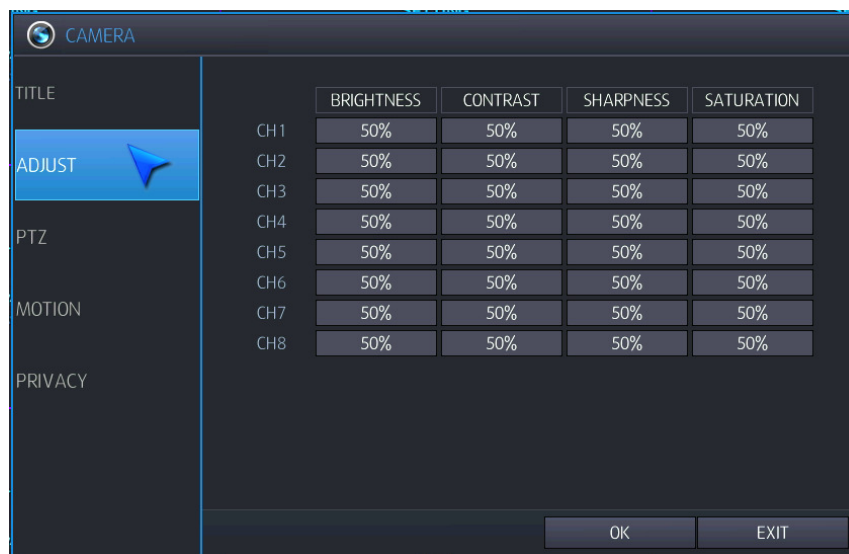
 TITLE: Up to 10 characters could be set by using the virtual keyboard.



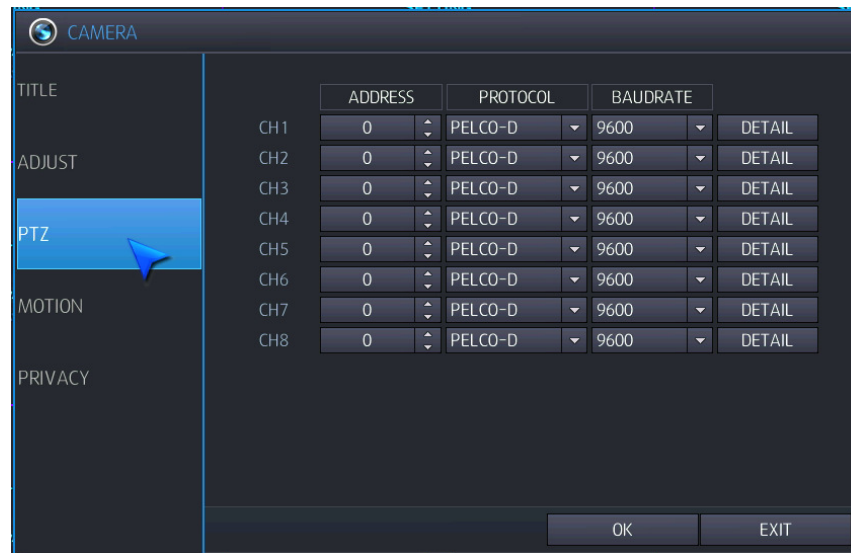
6.1.2 ADJUST

You can choose the 'ADJUST' menu for setting of video features of camera. You can adjust the video features such as 'BRIGHTNESS', 'CONTRAST', 'SHARPNESS' and 'SATURATION' by clicking one of the value for the required channel. Refer to the following pictures.

 The range of the value for each setting is from 0 ~ 100. Refer to the following pictures.

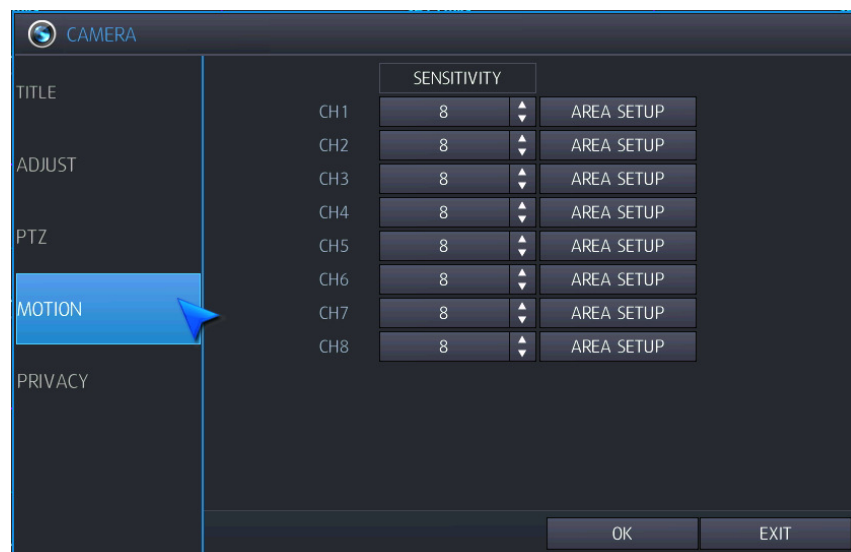


6.1.3 PTZ

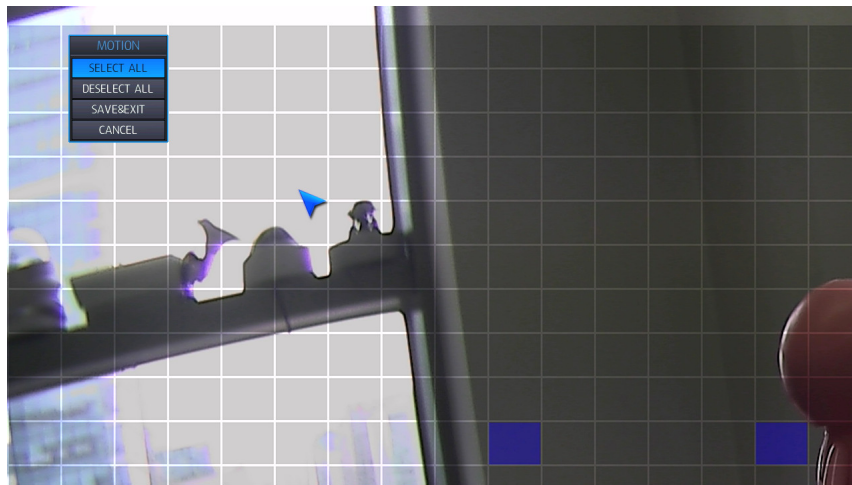


- ADDRESS: The unique ID of the PTZ device.
- PROTOCOL: The protocol of the PTZ device.
- BAUD RATE: The baud rate of the PTZ device.
- PTZ properties can also be adjusted for each channel by selecting the DETAIL and pressing **ENTER**. Auto Focus, Auto IRIS, P/T speed, zoom speed, focus speed, IRIS speed
 - Note that some settings, such as AUTO FOCUS, may not be compatible with particular PTZ equipment. If this is the case, changing this value will have no effect on PTZ control.

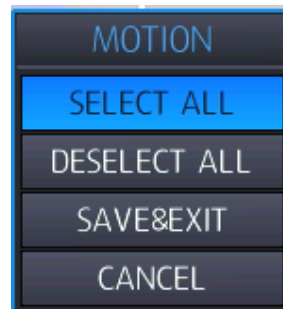
6.1.4 MOTION



- SENSITIVITY:** Between 1 (Lowest) and 10 (Highest) determines the degree of sensitivity of motion detection required.
- AREA SETUP:** Choosing this option allows the operator to define which areas of the image are monitored for motion detection. Green grid squares represent detection areas, blank areas are ignored. The default is that motion will be detected across the entire image.



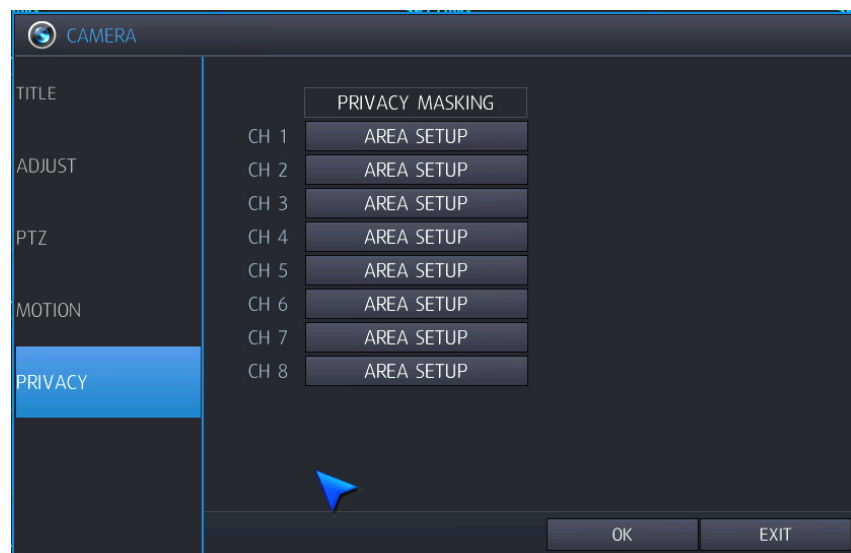
To quickly select or deselect the entire grid, use **the Right mouse click** to bring up the motion menu. To select or deselect specific areas, use the left mouse click. Clicking on each cell toggles the setting to be enabled or disabled.




By dragging with the left button down, the rectangle area can be selected. Selecting 'SELECT ALL' or 'DESELECT ALL' after dragging will define the activity of the selected area. Refer to the below picture. Repeat the above sequence as necessary to mask-off or include other areas of the image

Once the detection area has been defined, choose SAVE & EXIT to save the area and return to the motion setup menu

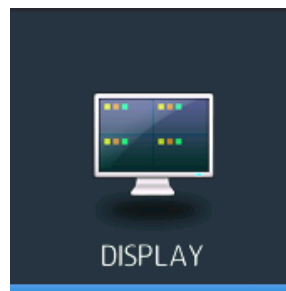
6.1.5 PRIVACY



 **AREA SETUP:** Choosing this option allows the operator to define which areas of the image are monitored for privacy areas. Gray grid squares represent privacy areas, blank areas are ignored. The default is that privacy area will be detected across the entire image.

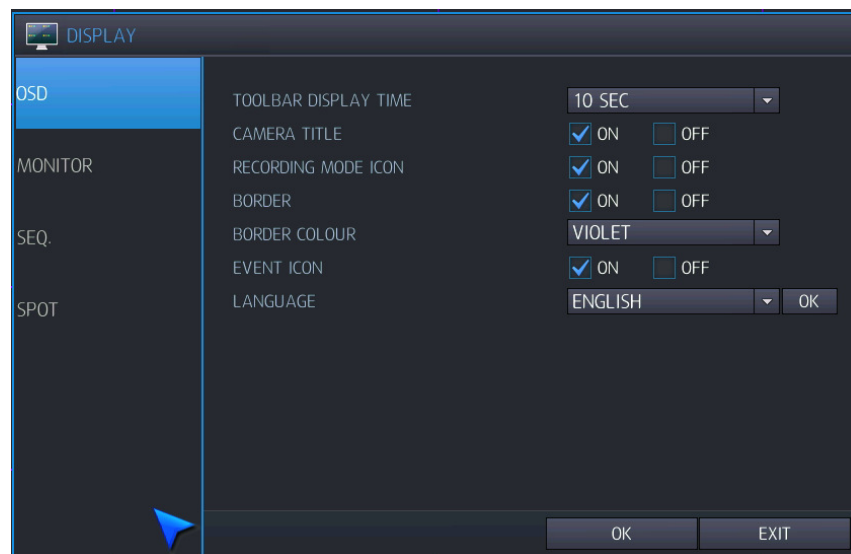
6.2 CONFIGURING DISPLAY

To set-up the various display options, highlight DISPLAY and press ENTER.



6.2.1 OSD

To set-up the various display options, highlight DISPLAY and press ENTER.
Configure camera title / boarder/ language here.

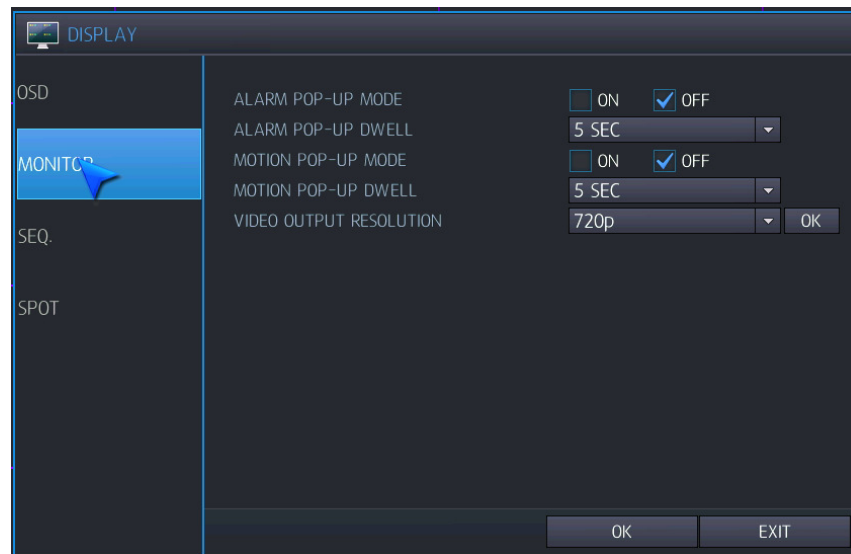


- ✚ **TOOLBAR DISPLAY TIME:** Turns the Tool bar at the bottom of the live display ALWAYS ON or auto off after display time.
- ✚ **CAMERA TITLE:** Determines whether the camera title is displayed.
- ✚ **RECORDING MODE ICON:** Determines whether the recording status is shown at the top right of each channel display window.
- ✚ **BORDER:** Determines whether there is a border around each channel in multi screen display mode.
- ✚ **BORDER COLOUR:** If the border is ON, you can choose the color.
- ✚ **EVENT ICON:** Determines whether the event (Alarm, V-loss) icon is displayed.
- ✚ Camera information: currently connected camera's resolution/bit rate display can be selected.
- ✚ **LANGUAGE:** Select the language of display.

➤ ENGLISH / KOREAN / GERMAN / POLISH / JAPANESE / FINNISH / CHINESE / RUSSIAN

6.2.2 MONITOR

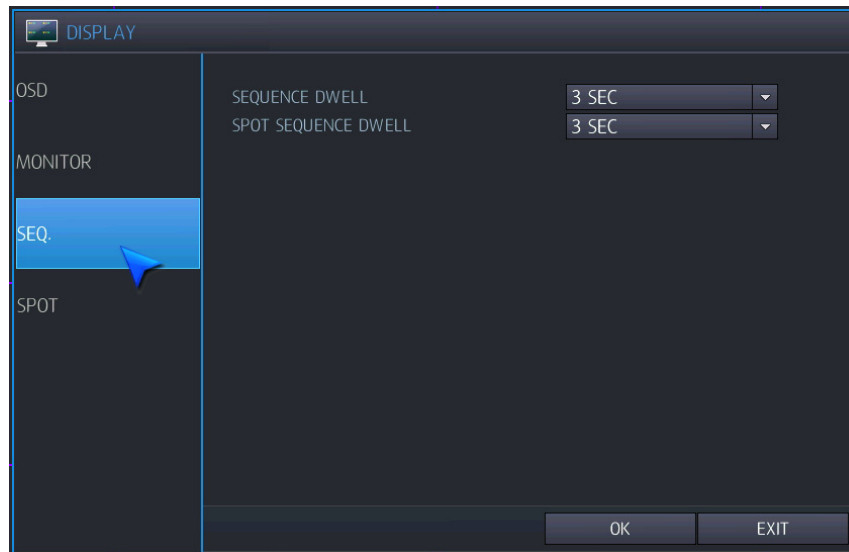
HYBRID-DVR's resolution / screen switch can be changed here.



- ✚ ALARM POP-UP MODE: When you set ON, an alarm input will cause the associated channel to display full screen.
- ✚ ALARM POP-UP DWELL: Determines how long the full screen popup is displayed after an alarm input.
- ✚ MOTION POP-UP MODE: When you set to ON, motion detection will cause the associated channel to display full screen.
- ✚ MOTION POP-UP DWELL: Determines how long the full screen pop-up is displayed after motion detection.
 - If motion continues, the popup screen is displayed constantly.
- ✚ VIDEO OUTPUT RESOLUTION(MAIN VIDEO OUTPUT MODE) : You can configure video output resolution of main video like 1024x768 / 1280x1024 / 720p / 1080P 30Hz
 - OK: You can press OK button to confirm configured video output.
 - Depending on monitor doesn't support HD resolution, then configure VGA resolution on HYBRID-DVR.
 - In case HD resolution like 720p/1080p connect with VGA cable, when installation, firstly connect VGA cable and power on for HYBRID-DVR.
 - Factory default resolution is 1024x 768, so you should use monitor supporting at least **1024 x 768**.

6.2.3 SEQUENCE

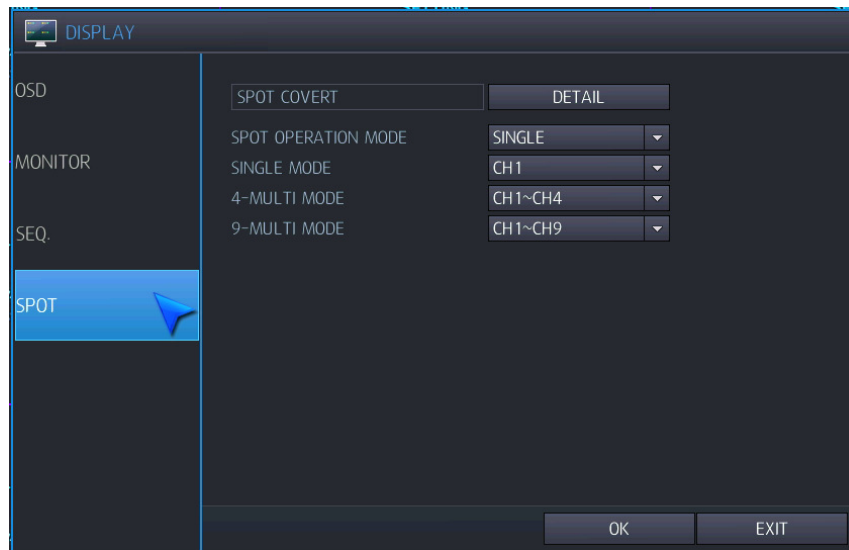
Screen auto switch time can be configured here.



- SEQUENCE DWELL: The time that each screen is displayed in a sequence operation.
- SPOT SEQUENCE DWELL: The time that each screen is displayed in a SPOT sequence operation.

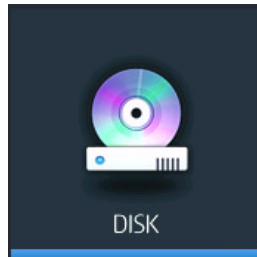
6.2.4 SPOT

Hybrid-DVR provides the single channel or Multi screen SPOT monitoring video output. In this menu page, you can configure the default channel for SPOT output after the boot-up.



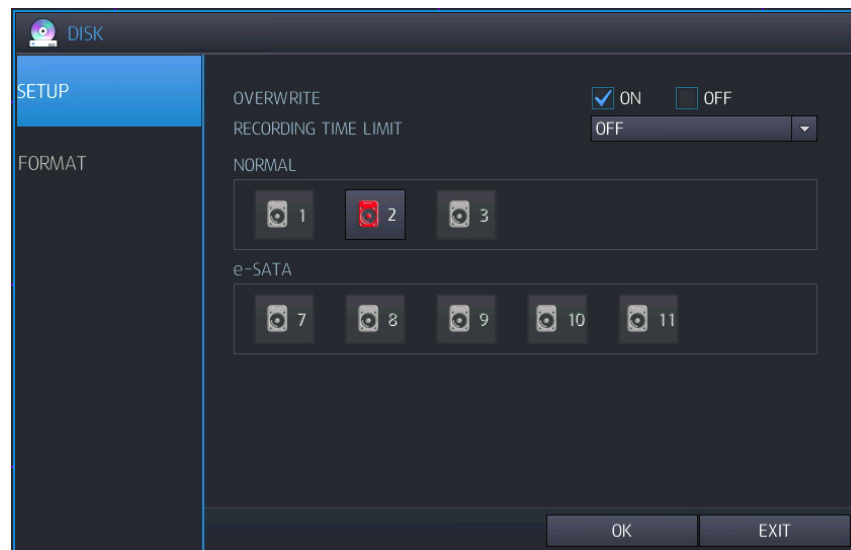
6.3 CONFIGURING DISK

Recording device related configuration and operation can be executed here

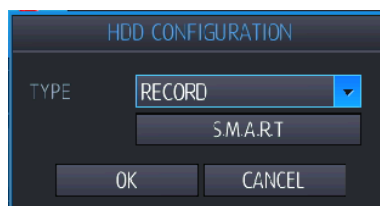
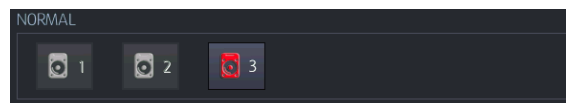


6.3.1 SETUP

You can configure DISK operation like Recording Time Limit / Overwrite / HDD Type / HDD Configuration.



- ✚ OVERWRITE: IF you select "ON", overwrite mode will be activated.
- ✚ RECORDING TIME LIMIT: You can configure the data from current time to configured time (12hr – 2 month).
- ✚ Recording HDD setup: HDD connecting to HYBRID-DVR, can be configured as recording or mirroring, click Red marked HDD and configure operation mode and mark S.M.A.R.T.



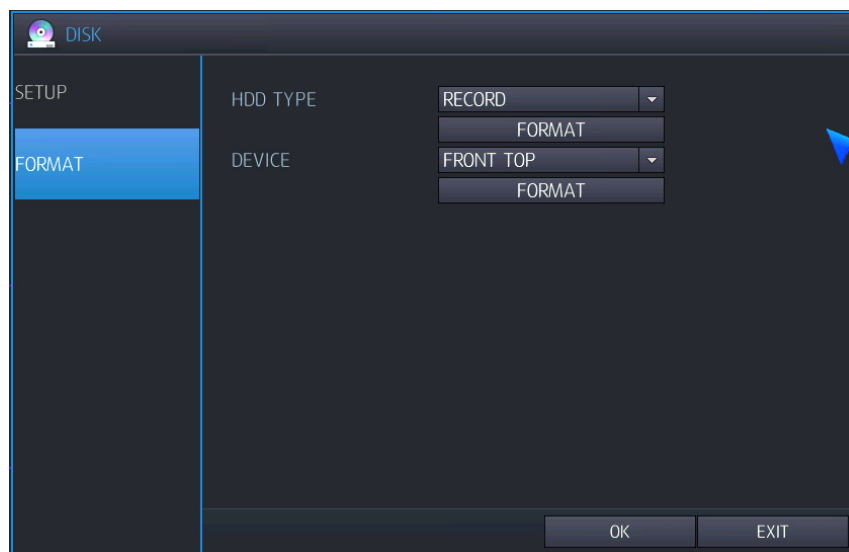
- RECORD : You can select HDD as record HDD.

- **MIRRORING** : You can select HDD as mirroring HDD.
- **S.M.A.R.T**: You can view HDD's user configuration connected to HYBRID-DVR and S.M.A.R.T.








HDD S.M.A.R.T					
HDD 2 S.M.A.R.T RESULT		GOOD			
ENTRY	CURRENT	WORST	RAW	TYPE	UPDATE
RAW READ ERROR RATE	117	99	52134	Pre-fail	Always
SPINUP TIME	98	97	0	Pre-fail	Always
START/STOP COUNT	100	100	630	Old-age	Always
REALLOCATED SECTOR COUNT	100	99	29	Pre-fail	Always
SEEK ERROR RATE	72	60	56005	Pre-fail	Always
POWER-ON HOURS COUNT	90	90	8866	Old-age	Always
SPINUP RETRY COUNT	100	100	32	Pre-fail	Always
POWER CYCLE COUNT	99	99	1372	Old-age	Always
END TO END ERROR COUNT	100	100	0	Old-age	Always
REPORTED UNCORRECTABLE ERROR	100	100	0	Old-age	Always
REPORTED COMMAND TIMEOUTS	100	98	81	Old-age	Always
HIGH FLY WRITES	1	1	428	Old-age	Always
AIRFLOW TEMPERATURE	58	53	42	Old-age	Always
HDA TEMPERATURE	42	47	42	Old-age	Always
HARDWARE ECC RECORVED	57	38	52134	Old-age	Always
CURRENT PENDING SECTOR COUNT	100	100	0	Old-age	Always
UNCORRECTABLE SECTOR COUNT	100	100	0	Old-age	Offline
UDMA CRC ERROR RATE	200	200	6	Old-age	Always

- **GOOD**: It shows current HDD condition is good.
- **BAD**: It shows current HDD condition is bad.
- HDD's S.M.A.R.T information would not be supported depending on HDD.

6.3.2 FORMAT

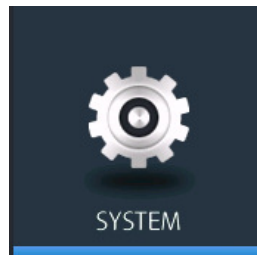


- ✚ **HDD TYPE**: You can select HDD when you try to format.
 - **RECORD**: You select HDD of record to format at HDD configuration.
 - **MIRRORING**: You select HDD of mirroring to format at HDD configuration.
- ✚ **FORMAT**: You can format the HDDs..
 - Formatting HDD time on HYBRID-DVR would be different depending on recorded capacity.

-  Device: In HYBRID-DVR, select USB connecting location to format.
-  Device: Select USB processing
 -  May USB memory stick and external hard drive cannot be used in HYBRID-DVR, in this case
 -  HYBRID-DVR support format function of USB memory stick and external hard drive
-  FORMAT: You can format the USB Device..
 -  HYBRID-DVR, HDD formatting time is different depending on recorded capacity.
 -  External record device can be happened data loss, be cautious before using HYBRID-DVR.

6.4 CONFIGURING SYSTEM


To set-up the various system options, highlight SYSTEM and press ENTER.



6.4.1 DATE/TIME

- ✚ **DATE&TIME:** Allows the operator to set or modify the current date & time.



- After changing data/ time, be sure to press () to confirm
- When data and time set up, same time is duplicated, record data will be error.

- ✚ **DATE FORMAT:** Determines how the date is displayed.

- YYYY/MM/DD(Default), MM/DD/YYYY, DD/MM/YYYY

- ✚ **TIME FORMAT:** Determines how the time is displayed.

- 24 Hour(Default), AM/PM

- ✚ **NETWORK TIME SERVER SETUP:** If the HYBRID-DVR is connected to the Internet, you can synchronize the time and date with sever.

- Default Server: pool.ntp.org

- ✚ **ADJUST PERIOD (INTERVAL):** Configuration synchronize interval with Network Time server.

- Network time server synchronization just starts after HYBRID-DVR configure power on/operation interval setup.

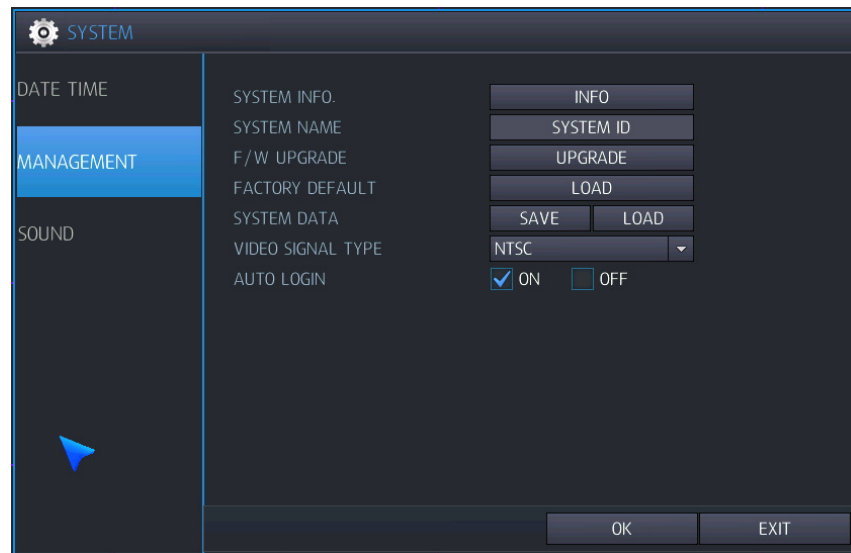
- ✚ **TIME ZONE SETUP:** Should be set according to the region that the HYBRID-DVR is installed.

- When Time zone set up, if same time duplicate on configuration, data error would be happened.

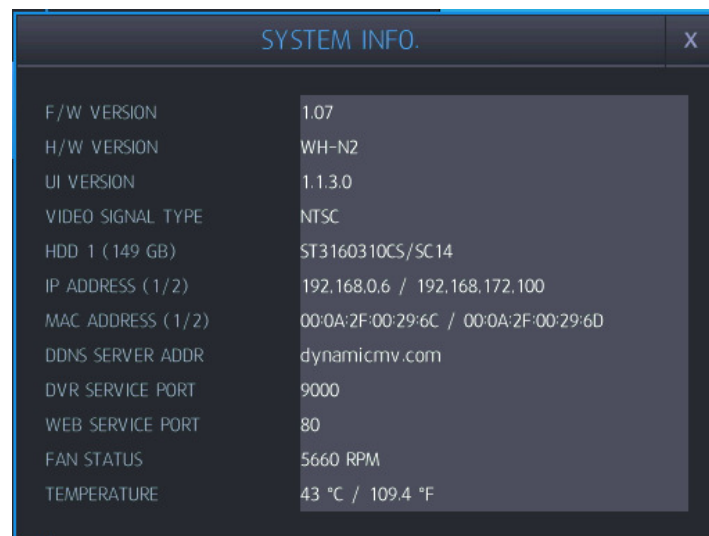
- ✚ D.S.T: When set to ON, the HYBRID-DVR will automatically adjust the time by one hour on the relevant date in spring and autumn
 - FROM: D.S.T Start time of DST
 - End : D.S.T End Time of DST

6.4.2 MANAGEMENT

HYBRID-DVR's system information/ firmware upgrade can be processed here.



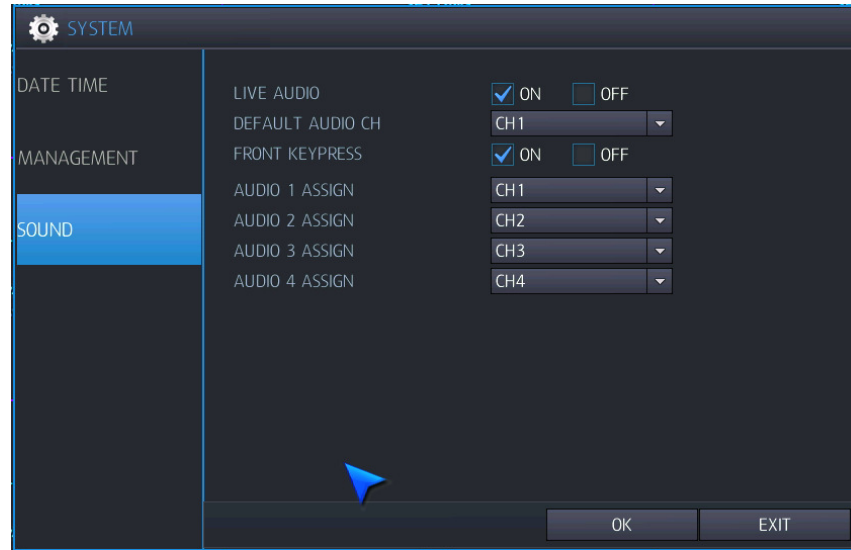
- ✚ SYSTEM INFORMATION: Select INFO to display. Following window will be displayed.







- F/W VERSION: Shows the firmware version of the HYBRID-DVR.
- H/W VERSION: Shows the hardware version of the HYBRID-DVR.
- UI VERSION : Shows the UI version of the HYBRID-DVR
- VIDEO SIGNAL TYPE: The HYBRID-DVR can be selected between PAL and NTSC via a selector
- HDD NUMBER: Shows the hard drive capacity installed.

- IP ADDRESS 1(Ethernet Port): Shows either the manual IP address entered in NETWORK setup or the IP address assigned by a DHCP server if enabled.
- IP ADDRESS 2(Local Port): Shows either the manual IP address entered in NETWORK setup or the IP address assigned by a DHCP server if enabled.
- HYBRID-DVR display two IP address for Ethernet and Local port each.
- If same range of IP address used, then HYBRID-DVR can be error.
- MAC address 1(Ethernet port): show mac address configured by manufacturer.
- Mac address 2 (local port): show mac address configured by manufacturer.
- HYBRID-DVR's display two MAC address for Ethernet and Local port each.
- DDNS SERVER ADDRESS: If DDNS is enabled, the host DDNS server is specified here.
- HYBRID-DVR SERVICE PORT: port number for HYBRID-DVR network operation
- WEB SERVER PORT: The port number that the HYBRID-DVR uses to support remote connections.
- FAN STATUS: Display FAN Speed of internally installed to HYBRID-DVR (RPM).
- Cooling fan's speed is lower than certain level, alarm is occurred.
- TEMPERATURE: Display internal temperature of HYBRID-DVR(°C/°F).
- ✚ SYSTEM NAME: A system name of up to 15 characters can be defined. It is used so that notification emails can be identified.
- ✚ F/W UPGRADE: Firmware updates may be released periodically to enhance system performance and add extra features. The operator can upgrade the firmware using a USB memory stick.
- ✚ FACTORY DEFAULT: If settings have been changed which causes erratic behavior, the factory default settings can be loaded.
- ✚ SYSTEM DATA: System settings can be saved to a USB memory stick. The settings can be reloaded in case of accidental factory reset or can be transferred to another HYBRID-DVR.
- Caution) 4ch HYBRID-DVR: USB port is used in front panel.
- 8/16ch HYBRID-DVR: Below USB port in Front should be used.
- ✚ VIDEO STANDARD: You can select Video Signal and selected video signal will be adapted as main value automatically.
- If you change the video signal, the power of HYBRID-DVR will be OFF/ON.
- ✚ AUTO LOGIN (PASSWORD): Selects if a password is required 'ON / OFF'.
- Note) Password must be selected to 'ON' if USER MANGEMENT options are required.

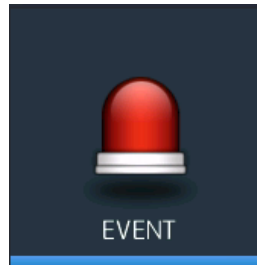
6.4.3 AUDIO



-  **LIVE AUDIO:** If you select “on”, Audio output is available at Live mode.
-  **DEFAULT AUDIO CHANNEL:** Specify which one of the 4 AUDIO INPUTS is routed to the AUDIO OUTPUT when the MV8004S is in quad screen mode.
-  **FRONT PANEL KEYPRESS:** When set to ON, each front panel button press is confirmed by a beep. This setting will also turn the IR Remote confirmation beep on or off .
-  **AUDIO 1 ~ 4 ASSIGN:** Is synchronized with the audio channel and video channels.

6.5 CONFIGURING EVENT / SENSOR

You can configure Event activation like Alarm Input / Alarm Output / Buzzer Out / E-Mail / PTZ Pre-set.



6.5.1 ALARM INPUT



You can configure Alarm input .

- + **OPERATION:** You can configure activation when Sensor is triggered.
 - **DISABLE:** When Sensor input is triggered, Event is not working.
 - **ENABLE:** When Sensor input is triggered, Event is working.
- + **TYPE:** If the operation is enabled.
 - **N/O:** Keep Normal Open of Sensor's normal status
 - **N/C:** Keep Normal Close of Sensor's normal status.
- + **TEXT:** If event is triggered after Sensor input, you can make a title of channel will be displayed.

6.5.2 ALARM OUTPUT SETUP

EVENT

ALARM INPUT

ALARM OUTPUT

BUZZER OUTPUT

E-MAIL

PTZ

PRESET

ALARM OUT: RELAY 1

OPERATION: ENABLE

MODE: TRANS.

DURATION: 5 SEC

TYPE: NONE

HDD EVENT: ☐ ON ☒ OFF

	ALARM	V-LOSS	MOTION
CH1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OK EXIT

You can configure activation of Relay output.

- ✚ ALARM OUT : You can select Relay for the operation to be configure
- ✚ OPERATION: You can configure output status of Relay.
 - DISABLE: Relay is not working
 - ENABLE: Relay is working once event is triggered.
- ✚ MODE: You can configure activation of Relay output.
 - TRANSPARENT: Keep Relay output until event triggering stopped.
 - LATCHED: Keep relay output for duration time from the event triggered lately.
- ✚ DURATION: If the alarm output mode is configured as Latched. You can configure duration time for relay output.
- ✚ TYPE : Define the transition of the signal of Alarm output
 - N/O (Active Low): When event triggered, the relay will go to 'Close' state from the 'Open'.
 - N/C(Active High): When event triggered, the relay will go to 'Open' state from the 'Close'
- ✚ HDD EVENT: If you select "ON", when HDD related Event is triggered, relay output will be started.
- ✚ ALARM: When sensor input, relay output will be started.
- ✚ VIDEO LOSS: When video loss occurred, relay output will be started.
- ✚ MOTION: When motion triggered, relay output will be started.

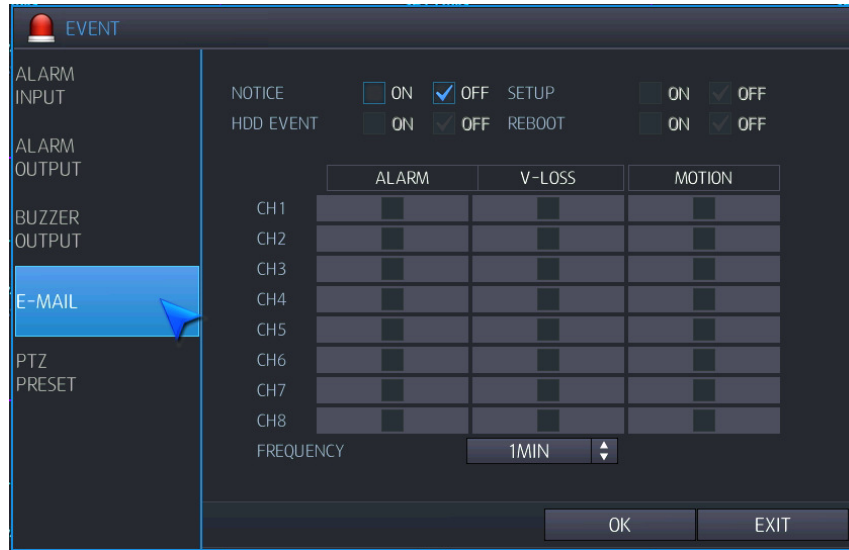
6.5.3 BUZZER OUTPUT SETUP

	ALARM	V-LOSS	MOTION
CH1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CH8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You can configure Buzzer output when event triggered.

- ✚ OPERATION: You can configure the output status of Buzzer.
 - DISABLE: Buzzer is not working when event is triggered.
 - ENABLE: Buzzer is working when event triggered.
- ✚ HDD EVENT: If HDD related event is triggered, Buzzer output will be started.
- ✚ MODE: You can configure operation mode of Buzzer output.
 - TRANSPARENT: Keep buzzer output until event operation is stopped.
 - LATCHED: Keep buzzer output for the duration time from event is triggered lately.
- ✚ DURATION: You can configure duration time for buzzer output at latched mode.
- ✚ ALARM: When sensor input, buzzer output will be started.
- ✚ VIDEO LOSS: When video loss occurred, buzzer output will be started.
- ✚ MOTION: When motion triggered, buzzer output will be started.

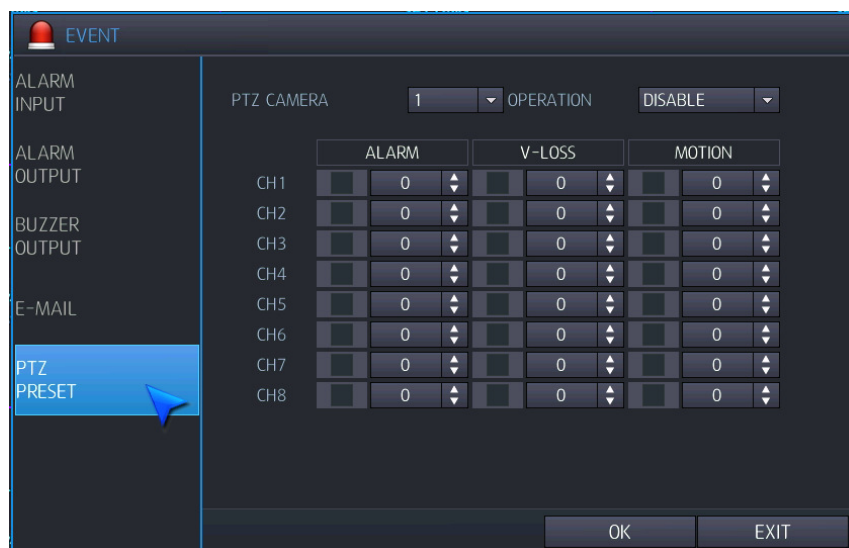
6.5.4 E-MAIL SETUP



You can configure E-mail notification when event triggered like follows.

- ✚ NOTIFICATION: If you select "ON", E-mail will be sent when event triggered.
- ✚ SETUP CHANGE: If you select "ON", E-mail will be sent when menu configuration is changed.
- ✚ HDD EVENT: If you select "ON", E-mail will be sent when HDD related event is triggered.
- ✚ BOOT EVENT: If you select "ON", E-mail will be sent when HYBRID-DVR boot-up.
- ✚ ALARM: E-mail will be sent, when sensor is triggered.
- ✚ VIDEO LOSS: Email will be sent, when video loss occurred.
- ✚ MOTION: Email will be sent, when motion triggered.
- ✚ FREQUENCY: You can configure E-Mail notification period.

6.5.5 PTZ PRESET

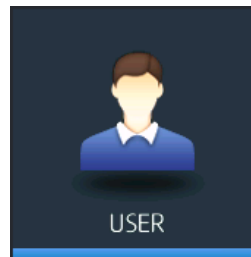


You can configure PTZ preset operation when event triggered.

- ✚ PTZ CAMERA: Select the PTZ camera for the following configuration to be applied.
- ✚ OPERATION: You can configure the operation of PTZ Preset, when event triggered.
- ✚ DISABLE: PTZ preset is not working
- ✚ ENABLE: PTZ preset is working.
- ✚ ALARM PRESET: You can configure Preset when Sensor is triggered.
- ✚ V-LOSS PRESET: You can configure Preset when Video loss is occurred.
- ✚ MOTION PRESET: You can configure Preset, when motion is triggered.

6.6 CONFIGURING USER

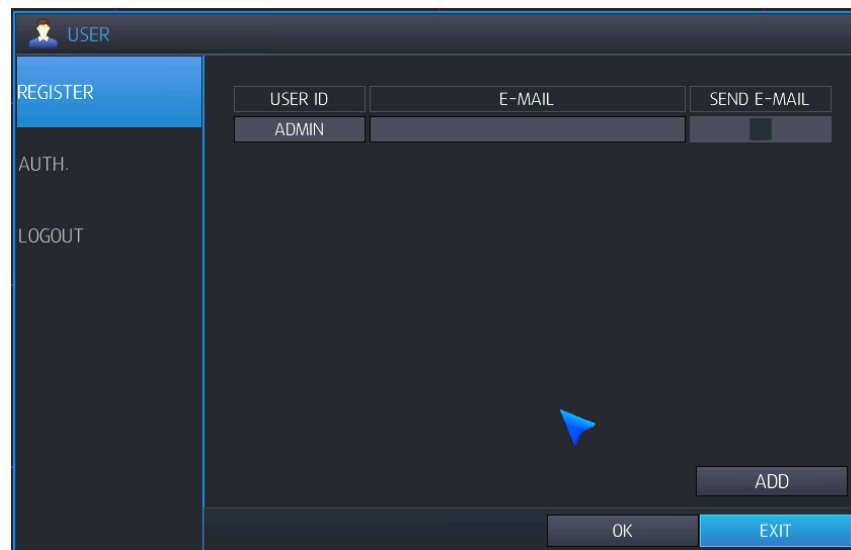
To set-up the User Authority options, highlight USER and press ENTER



6.6.1 USER REGISTER

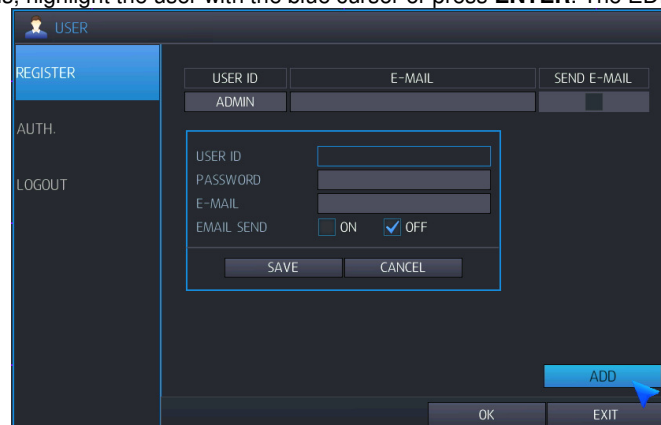
By default, the HYBRID-DVR is configured with a USER ID of ADMIN belonging to the ADMIN group and with a password of 1234.

Using this, max 10 user account can be registered and configure authority separately.



As well as the ability to add new users, existing user's defaults can be modified. The maximum number of users that can be created is 8.

To modify user details, highlight the user with the blue cursor or press **ENTER**. The EDIT screen appears.



- ✚ USER ID: Edit the user ID using the virtual keyboard. (Max 10 characters).
- ✚ PASSWORD: Change the password using the virtual keyboard. (Max 8 characters)
 - Note: To delete the existing password, use the "Clear" on the virtual keyboard.
- ✚ E-MAIL: Enter the user's email address if email notifications are required.
- ✚ E-MAIL SEND: Enable or disable email notification for the particular user.
 - Note) Maximum 10 users can be registered.
 - NOTE) Any user can be deleted except the default ADMIN user.

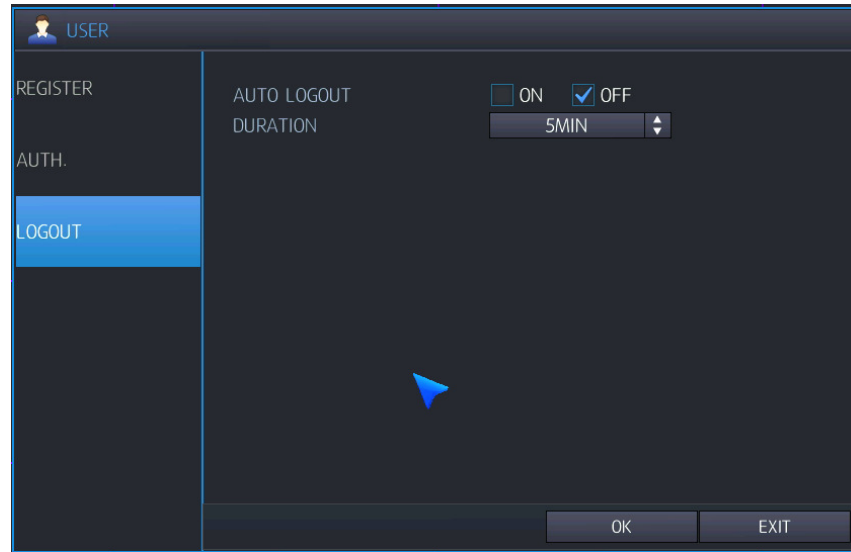
6.6.2 USER AUTHORITY



AUTHORITY	NONE	NONE	NONE	NONE	NONE
SEARCH&PLAY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COPY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PTZ CONTROL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
POWER OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CAMERA	DETAIL	DETAIL	DETAIL	DETAIL	DETAIL

User authority (except ADMIN) can be selected.

- ✚ Search & Play : Right to enter Search Menu/ Instant Play
- ✚ Backup : Right to enter backup menu
- ✚ Power OFF : Right to enter Power Off
- ✚ Camera: Right to see camera screen.
 - Detail: Configure the channel assigned for user.

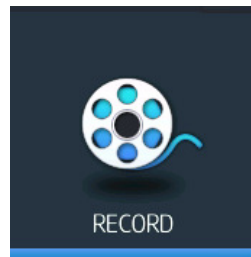
6.6.3 LOG-OUT



-  **AUTO LOGOUT:** Selects if auto log-out is ON or OFF.
-  **DURATION:** If auto log is set to ON, this determines the time. (in 1 - 10 Min)

6.7 CONFIGURING RECORD

To set-up the various recording options, highlight RECORD and press ENTER.





6.7.1 SETUP

Recording configuration is set up here.



- **SIZE:** You can select what resolution of video will be recorded as follows.
- **Resolution:** FULL HD(1080p) : 100% : 1920x1080 / 50% : 1920x544 / 25% : 960x544
- **HD(720p)** : 100% : 1280x720 / 50% : 1280x360 / 25% : 640x360
- **Analog(SDI)** : 100% : 944x480 / 50% : 944x240 / 25% : 472x240
- **ALL:** Set the resolution for all channels

 **FPS:** You can select recording frame rate as 0 / 1 / 2 / 4 / 5 / 8 / 10 / 15 / 30 at NTSC mode or 0 / 1 / 2 / 4 / 5 / 7 / 10 / 13 / 25 at PAL mode.

 **QUALITY :** You can select recording video quality as 5 levels like; Low / Standard / High / Highest / Super

- **LOW** : 2Mbps / **Standard** : 3Mbps / **High** : 4Mbps / **Highest** : 5Mbps / **Super** : 6Mbps
- **AUDIO:** Audio: If you select "ON", audio data will be recorded.

6.7.2 EVENT

When event triggered, you can configure recording condition like follows;

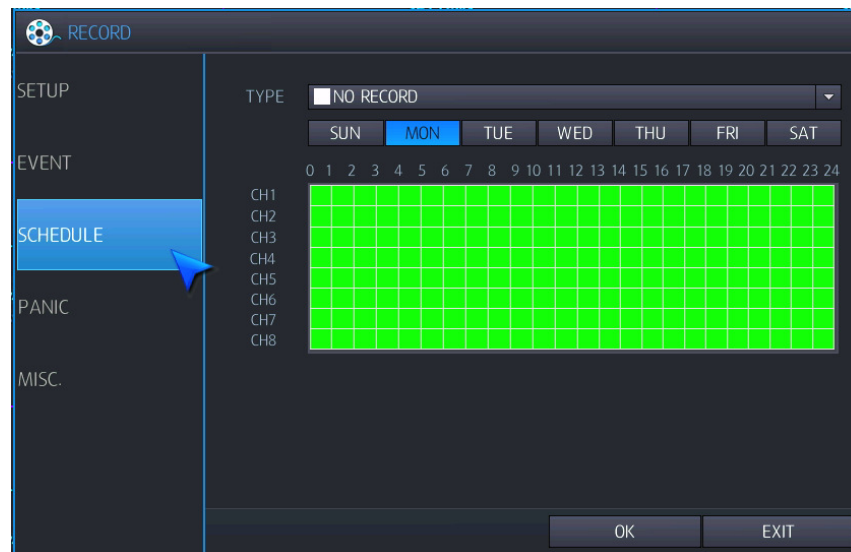


🔧 MOTION EVENT: You can configure recording condition when motion triggered.

🔧 ETC EVENT: You can configure recording condition at Alarm / V-Loss occurred.

- FPS: NTSC: You can configure frame rate as 0 / 1 / 2 / 4 / 5 / 8 / 15 / 30 at NTSC Mode or 0 / 1 / 2 / 4 / 5 / 7 / 13 / 25 at PAL mode.
- QUALITY: You can configure video quality as 5 levels as Low / Standard / High / Highest / Super.
- Audio: If you select "ON", audio data will be recorded.
- Recording resolution for the event record mode follows the size in the CONTINUOUS record setting.

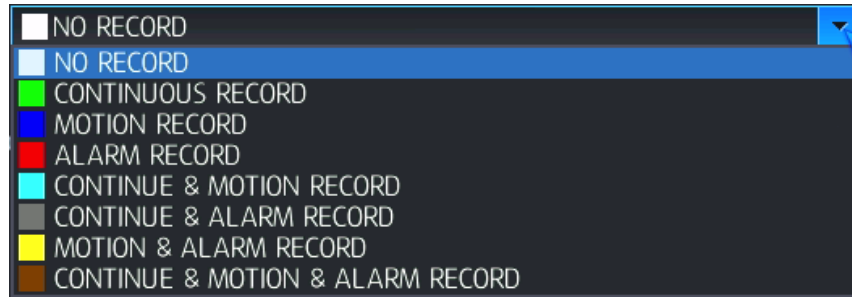
6.7.3 SCHEDULE



You can configure schedule recording mode as Day / Week.

- Daily: set up one schedule and apply to every day.
- Weekly: set up 7 schedules from Monday to Sunday, and use it for every week.
- Select daily ,weekly in menu(record-> MISC)

- ✚ DAYLY: You can configure the recording type by a hour and by a channel. This mode is for the demand that all days have the same recording schedule regardless of the day of the week.
- ✚ WEEKLY: In this mode, you can configure the recording type by a hour, by a channel and by the day of the week. This mode is suitable for the user who wants to configure the separate schedule according to the day of the week.
- ✚ TYPE: You can select recording mode out of total 8 modes. Refer to the below picture

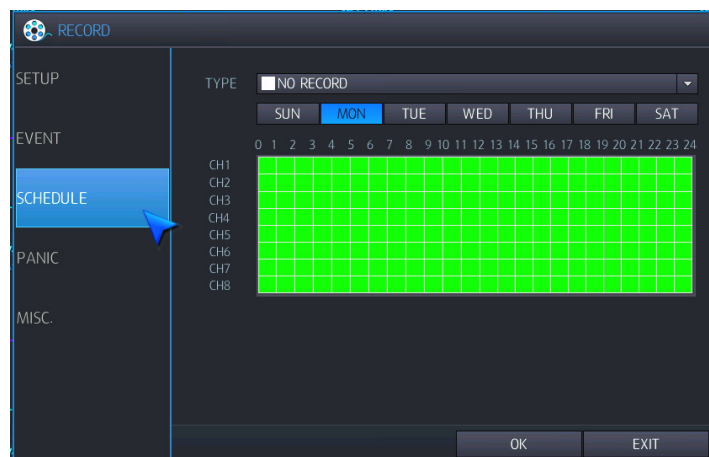


- No record.
- Continuous record
- Motion record.
- Alarm record
- Continuous & Motion Record
- Continuous & Alarm Record
- Motion & Alarm Record
- Continuous & Motion & Alarm Record

- Note) You can enable Day or Week recording mode at the configuration of 'MISC' menu
- Note) you can configure schedule time table by drag using left mouse click.

6.7.4 PANIC

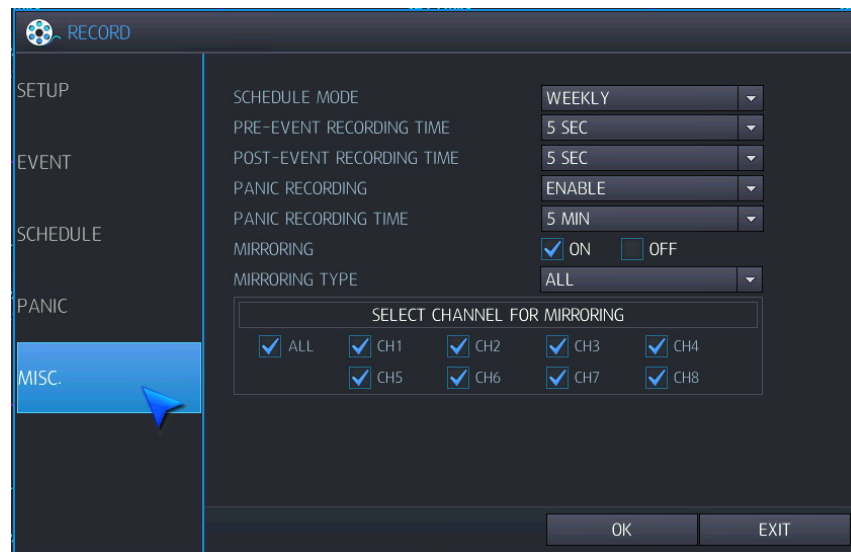
During panic recording mode, the Hybrid-DVR will override all other recording settings and record continuously on all channels at the settings configured here.



- ✚ SIZE: You can select what resolution of video will be recorded as follows;


- ✚ Resolution: FULL HD(1080p) : 100% : 1920x1080 / 50% : 1920x544 / 25% : 960x544
- ✚ HD(720p) : 100% : 1280x720 / 50% : 1280x360 / 25% : 640x360
- ✚ Analog(SDI) : 100% : 944x480 / 50% : 944x240 / 25% : 472x240
- ALL: Set the resolution for all channels
 - ✓ The resolution setting value is represented with the ratio of the input resolution to the recording resolution because there could be mixed connection with 720p camera and 1080p camera inputs.
 - ✓ 25%: 480x270 for 1080p input, 320x180 for 720p input
 - ✓ 50%: 960x540 for 1080p input, 640x360 for 720p input
 - ✓ 100%: 1920x1080 for 1080p input, 1280x720 for 720p input

6.7.5 MISC



- ✚ SCHEDULE MODE: Either DAILY (one schedule will apply to every day of the week) or WEEKLY (each day of the week has its own schedule).
- ✚ PRE-EVENT RECORDING TIME: When the HYBRID-DVR is not in continuous recording mode, this setting determines the amount of footage that is always recorded before an event occurs (VA, motion detection, alarm input etc.)
- ✚ POST-EVENT RECORDING TIME: You can configure how long the system keep event recording after event triggered.
 - Event triggered repeatedly before finishing recording, post event recording can be recorded after last event.
- ✚ AUDIO RECORDING: If you select "ON", audio data will be recorded.
 - ON: audio transmitted to HYBRID-DVR record with video, which also display on live view.
 - OFF: audio transmitted to HYBRID-DVR on live view.
- ✚ Mirroring: You can enable mirroring recording mode or not.
 - ON: Select mirroring record and record as per mirroring way.

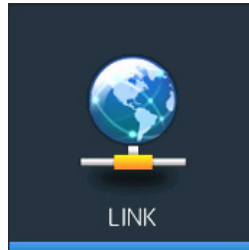
- ✓ EVENT: Just event data will be recorded to mirroring HDD.
- ✓ ALL: Same data will be recorded to mirroring HDD same as current recording data.
- OFF: Mirroring record off

 **SELECT CHANNEL FOR MIRRORING:** You can check which channel will be recorded to mirroring HDD.

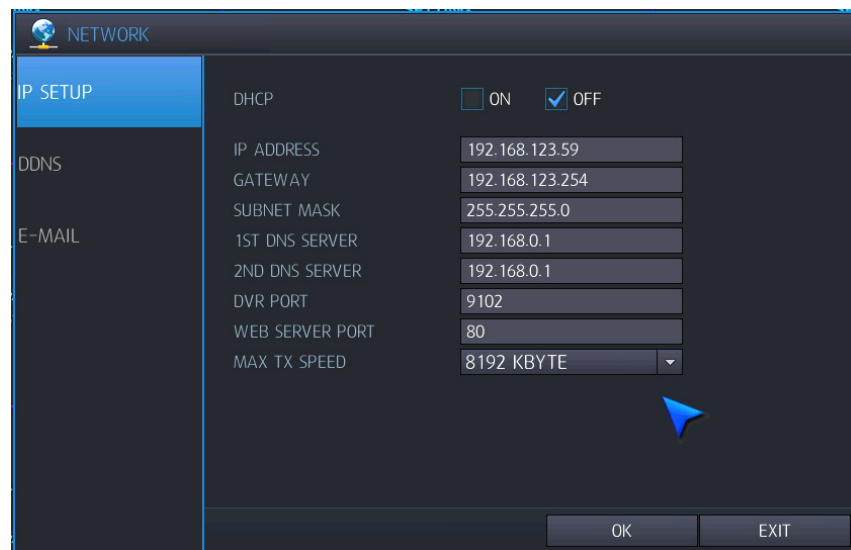
- All: all channel with mirroring record.
- Channel 1~16: selected channel record with mirroring.

6.8 CONFIGURING NETWORK

To set-up the Network options, highlight NETWORK and press ENTER. Configure all the menu of network.



6.8.1 IP SETUP



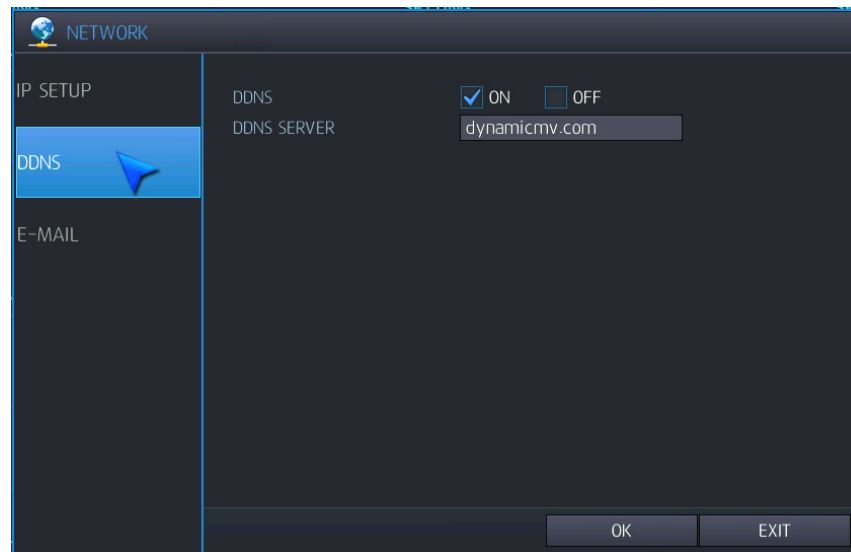
IP set up menu is used when you use PC software and mobile software which HYBRID-DVR support.

- ✚ DHCP: When selected the HYBRID-DVR will obtain an Ethernet IP address automatically if connected to a DHCP server or router.
- ✚ IP ADDRESS: If DHCP is not being used the IP address can be manually set.
- ✚ GATEWAY: If DHCP is not being used the Gateway can be manually set.
- ✚ SUBNET MASK: If DHCP is not being used the subnet mask can be set manually.
- ✚ 1ST DNS SERVER: If DHCP is not being used the 1st DNS server can be manually set.
- ✚ 2ND DNS SERVER: If DHCP is not being used the 2nd DNS server can be manually set.
- ✚ HYBRID-DVR PORT: The port number that the HYBRID-DVR uses to support to the remote software.
- ✚ WEB SERVER PORT: The port number that the HYBRID-DVR uses to support remote connection from Internet Explorer or other web browsers.

● Using Internet router, If connect more than one HYBRID-DVR, you should configure service port and web service port differently.

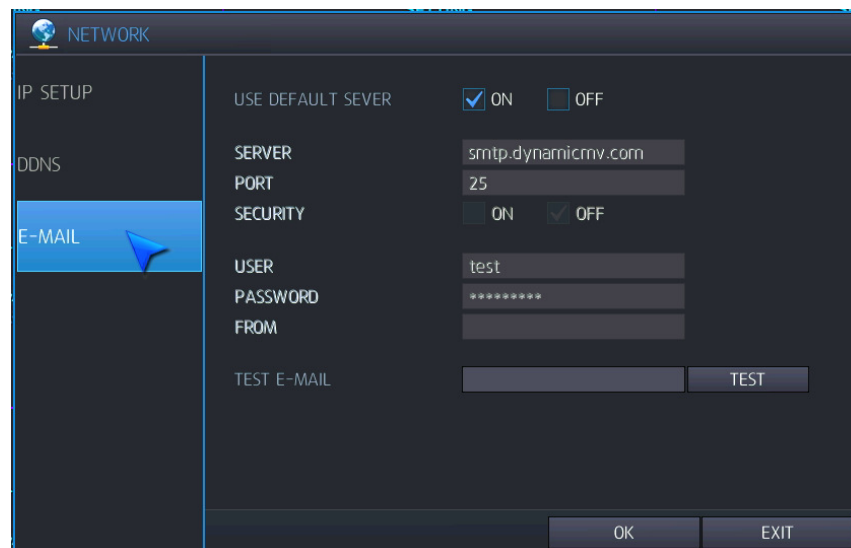
- ✚ **MAX TX SPEED:** Specifies the maximum bandwidth that the HYBRID-DVR can use during a remote connection.
- Note) Both HYBRID-DVR & WEB SERVER PORT will need a firewall rule creating for remote Connection
- Note) uPNP (Auto Port Forwarding) is activated always background.
- Note) Upnp function for automatic forwarding setup would not compatible depending on router and hub, in this case user should configure port forwarding properly.

6.8.2 DDNS











- ✚ **DDNS:** When enabled the HYBRID-DVR can be accessed through a dynamic DNS server. Commonly used if a broadband connection does not have a static IP address.
- ✚ **DDNS SERVER:** DDNS server Name.


6.8.3 E-MAIL



- ✚ **USE DEFAULT SERVER:** Selects On or OFF. If you make Default sever as ON, mail will

be sent by our own mail server (mail sever).

-  **SERVER:** The SMTP outbound email server that should be used to send email notifications.
-  **PORT:** The outbound email port number.
-  **SECURITY:** Set to OFF if the SERVER does not require a username and password to connect.
-  **USER:** Enter a username to identify the HYBRID-DVR in email messages.
-  **PASSWORD:** If SECURITY is set to ON, enter the password here.
-  **FROM:** Input an email address or text.
-  **TEST E-MAIL:** Send a test e-mail with the specified server information to verify the delivery.
-  **Test:** it is to confirm that Pre-set email is right. Test email is transmitted using pre-set information.

 To use email function, you have to configure 'user's menu' and 'event/sensor menu → email menu'.

7. REMOTE

7.1 WEB SERVER

HYBRID-DVR prepares the web server internally. This server consists of two services. One is for the remote configuration of HYBRID-DVR setup and the other is for the client viewer based on the Active-X. Using the remote configuration, you can configure all feature sets of HYBRID-DVR. And the live preview, search and PTZ control can be served by the 'WebView'. And the live preview, search and PTZ control can be served by the 'WebView'.

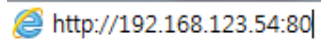
The table below shows the recommended PC specification for the proper operation.

[Minimum & Recommended Specification of PC]

	Minimum	Recommended
Operating System	Windows XP	Windows 7
CPU	Core2Duo @2.53GHz or Equivalent	Core i5 @3.3GHz or Higher
Memory	1 GB	2 GB
Video Card Memory	512MB	512MB
HDD Capacity	50MB	2GB
VGA Resolution	1280x1024x16	1920x1080x32
Direct-X	DirectX 7.0	DirectX 9.0c
Network	Ethernet 10/100B-TX	

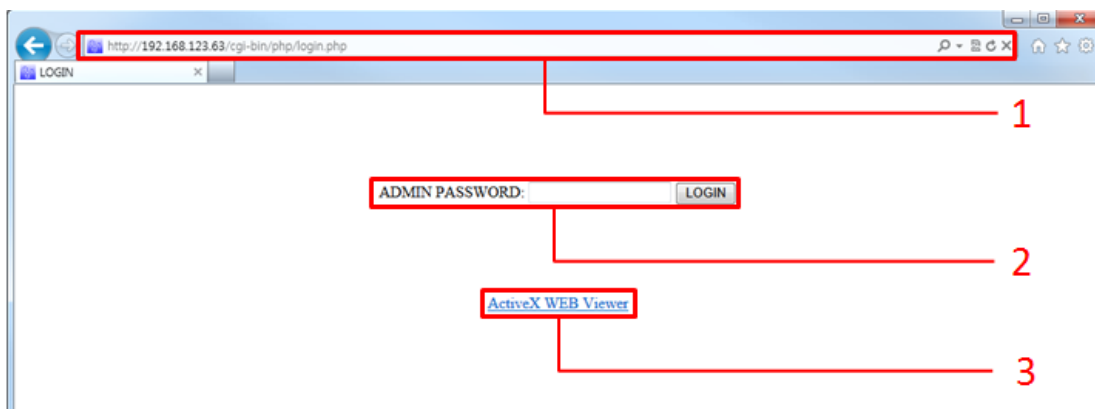
7.1.1 CONNECT TO WEB SERVER

Enter the IP address of HYBRID-DVR into the ULR bar referring to the below picture.



- NOTE) You can know the IP address of HYBRID-DVR from the 'INFO' section under the [OPERATION SETUP](#) of HYBRID-DVR menu. If the local IP which starts with '192.168.xxx.xxx' is used in the HYBRID-DVR, you have to set the 'Port Forwarding' properly in your router. The port number to set can be get from 'HYBRID-DVR PORT' in the [NETWORK SETUP](#). If your router supports the 'uPNP' feature, there is no need to set 'Port Forwarding' manually because the HYBRID-DVR supports the 'Auto Port Forwarding' function using the 'uPNP' protocol. (Some routers can make the compatibility issues to the uPNP protocol of HYBRID-DVR)
- NOTE) If the access to the web server can't be established after setting the 'Port Forwarding', you may need to check the firewall of router and your PC. The port used in the HYBRID-DVR should be allowed to access by the firewall.

[The initial screen of Web Server]



- 1: Enter the IP address of your HYBRID-DVR. If you don't use the default port number of HTTP, 80, you may add the port number following the IP address. Ex.
http://192.168.123.63:80
- 2: Input the administrator's password beside of the 'ADMIN PASSWORD'. Only administrator can log in for the HYBRID-DVR configuration. Clicking the 'LOGIN' button will guide you to the HYBRID-DVR configuration pages.
- 3: ActiveX based Web Viewer: Clicking the link execute the 'WebViewer' or initiate the installation of ActiveX plugin.

7.1.2 WEB CONFIGURATION PAGE

In the web configuration page, you can set the HYBRID-DVR operations remotely.

Tested Web Browser List

- Microsoft Internet Explorer®
- Mozilla Firefox®
- Google Chrome Browser®
- Opera Browser®
- Apple Safari®

Features

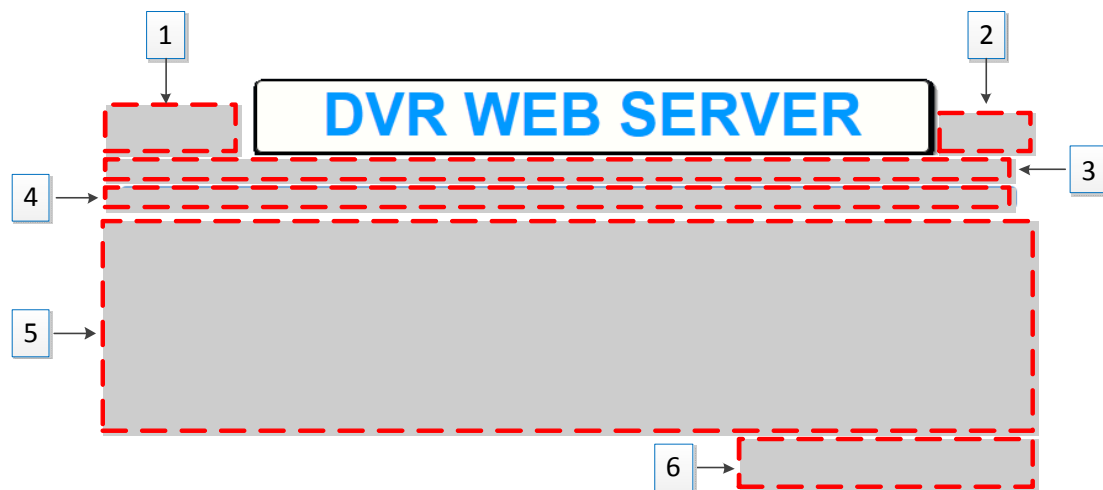
- ✚ Configuring the HYBRID-DVR setup remotely

After giving the ADMIN's password and clicking 'LOGIN', you can move into the page where you can configure the setup menu of HYBRID-DVR.

ADMIN PASSWORD: LOGIN

- NOTE) Default Password for ADMIN: 1234
- NOTE) Only ADMIN account can access the menu configuration pages.
- NOTE) When no operation more than 5 minutes is, the configuration page will be logged out automatically.

7.1.2.1 Initial Page of Web Configuration



- ✚ 1: log out from the configuration page
- ✚ 2: version number of this web configuration
- ✚ 3: Top menu of HYBRID-DVR
- ✚ 4: Sub menu of HYBRID-DVR
- ✚ 5: Setting or Information section
- ✚ 6: Cancelling or applying the modification
- ✚ CANCEL : ignore any modification and the modification is recovered to the previous setting

✚ APPLY: the modified setting is applied to HYBRID-DVR and saved

- In order to apply or save, you should click the 'APPLY' button. Otherwise all the changes will be lost.

For the detail description of the HYBRID-DVR configuration, please refer the ['5.HOW TO CONFIGURE'](#) section of this manual. Clicking the following link will guide you to the proper section which explains each setup.

✚ [CAMERA](#)

✚ [DISPLAY](#)

✚ [SYSTEM](#)

✚ [USER](#)

✚ [NETWORK](#)

✚ [EVENT/SENSOR](#)

✚ [DISK](#)

✚ [RECORD](#)

- Search, Playback & Copy functions are not supported from the web server. To user these, please use the 'Web Viewer' instead.

7.1.3 WEB VIEWER (Active-X)

Through the 'Web Viewer', you can see the live preview video, search and playback of recordings in the HYBRID-DVR and copy the recordings out from the HYBRID-DVR.

Tested Web Browser

✚ Microsoft Internet Explorer®

✚ Mozilla Firefox®

✚ Google Chrome Browser®

Features

- ✚ This 'Web Viewer' is based on the ActiveX
- ✚ Monitoring the live preview videos from the HYBRID-DVR.
- ✚ Searching & Playback of the recordings in the HYBRID-DVR
- ✚ Copy the recording data in the HYBRID-DVR to the PC remotely
- ✚ PTZ camera control remotely

7.1.3.1 Installation and Execution

[Microsoft IE]

Click the 'ActiveX WEB Viewer' initiate the installation of the 'Web Viewer' if not installed previously. If the 'Web Viewer' is installed already in your IE browser, click will execute this plug-in

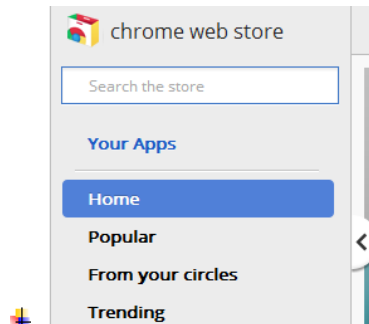
[ActiveX WEB Viewer](#)

- NOTE) To install properly, your PC should be connected to the internet.
- NOTE) 'Web Viewer' is certificated with the name 'NEOXENTEC SYSTEMS CO.,LTD', who designs the application.
- NOTE) First execution of 'Web Viewer' will install the application first.
- NOTE) If new updated version of 'Web Viewer' is found, updating starts automatically before execution.

[Google Chrome]

In order to execute the ActiveX plugin, you have to install the 'IE TAB' from Google web store referring the following steps.

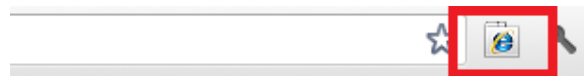
- ✚ Execute the Chrome browser
- ✚ Goto the <https://chrome.google.com/webstore/category/home>
- ✚ Enter the word 'IE TAB' into the 'Search the store' box and press enter.




- ✚ 'Searching' shows the results such as below.



- ✚ Click the 'ADD TO CHROME' and then you can see the IE symbol on the right side of URL Bar



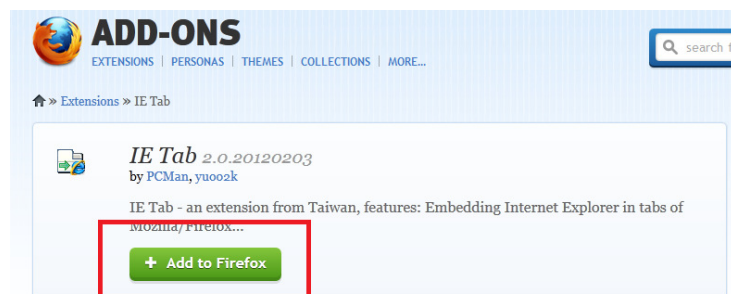
There are two ways to execute the 'Web Viewer' from the Chrome.

1. Click the ICON() on the right side of URL bar. It opens new URL bar to get the URL. Entering the required IP address of HYBRID-DVR will connect the web server.
2. Just entering the IP address of HYBRID-DVR into the URL bar of Chrome and press enter

[Mozilla Firefox]

In order to execute the ActiveX plugin, you have to install the 'IE TAB' from the add-on page of Firefox referring the following steps

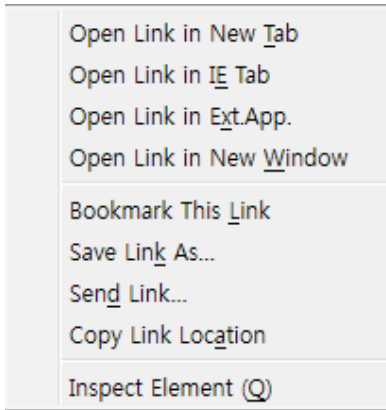
- ✚ Execute the FireFox browser
- ✚ Go to the <https://addons.mozilla.org/en-US/firefox/addon/ie-tab>. And then the following page will show the way to install the 'IE TAB'.



- Click the 'Add to Firefox' will enable supporting Active-X plugin.

Way to execute the 'Web Viewer' from the Firefox

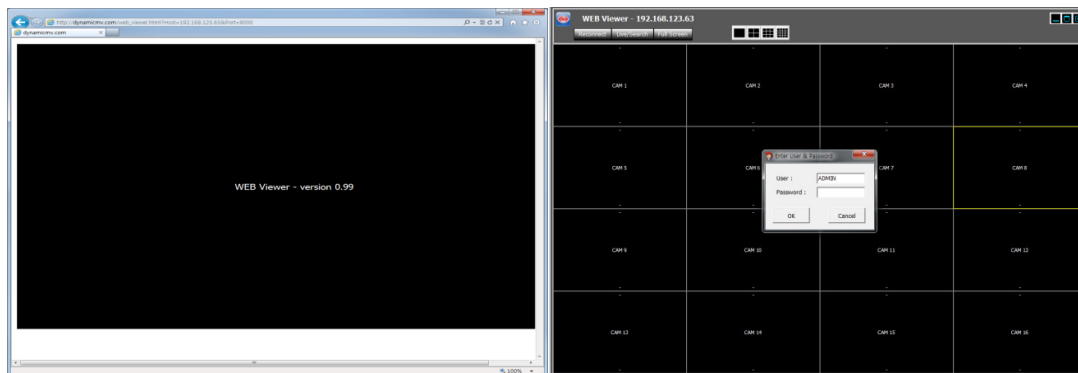
- Enter the IP of HYBRID-DVR into the URL bar of Firefox.
- Right-click the link 'ActiveX WEB Viewer' will show the pop-up menu such as below.



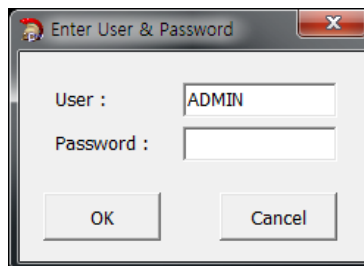
- Select the 'Open Link in IE TAB'. ActiveX
- First execution will install the ActiveX plug-in. And the application will be executed if installed already.

7.1.3.2 Initial Screen of Web Viewer

Executing the 'Web Viewer' opens the application separated from the web browser and show the login window such as below picture.



7.1.3.3 Log In



User :

: Enter the USER name of HYBRID-DVR registered in the HYBRID-DVR

Password :

: Enter the password for the selected user.

- The user authority and allowed functions, live preview, search & playback, PTZ control and etc., are controlled by the setting [USER AUTHORITY setting](#) of HYBRID-DVR setup
- USER ID and password is case-sensitive.

7.1.3.4 Live Preview

After login, the live preview screen will be shown such as below.

Features

- ✚ User log-in/out feature (RECONNECT)
- ✚ Monitoring the live preview
- ✚ Snapshot and save the preview video as JPEG
- ✚ (Admin Only) Control the resolution and quality for transferred video stream directly




- ✚ The yellow rectangle around video shows the currently selected camera

- ✚ 1: IP of HYBRID-DVR connected remotely

- ✚ 2: display split mode selection


-  : Single camera view

-  : Quad split view



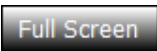


- ✚ 3: WEB Viewer Minimize/Maximize/Close

-  : Minimize the window

-  : Maximize the window

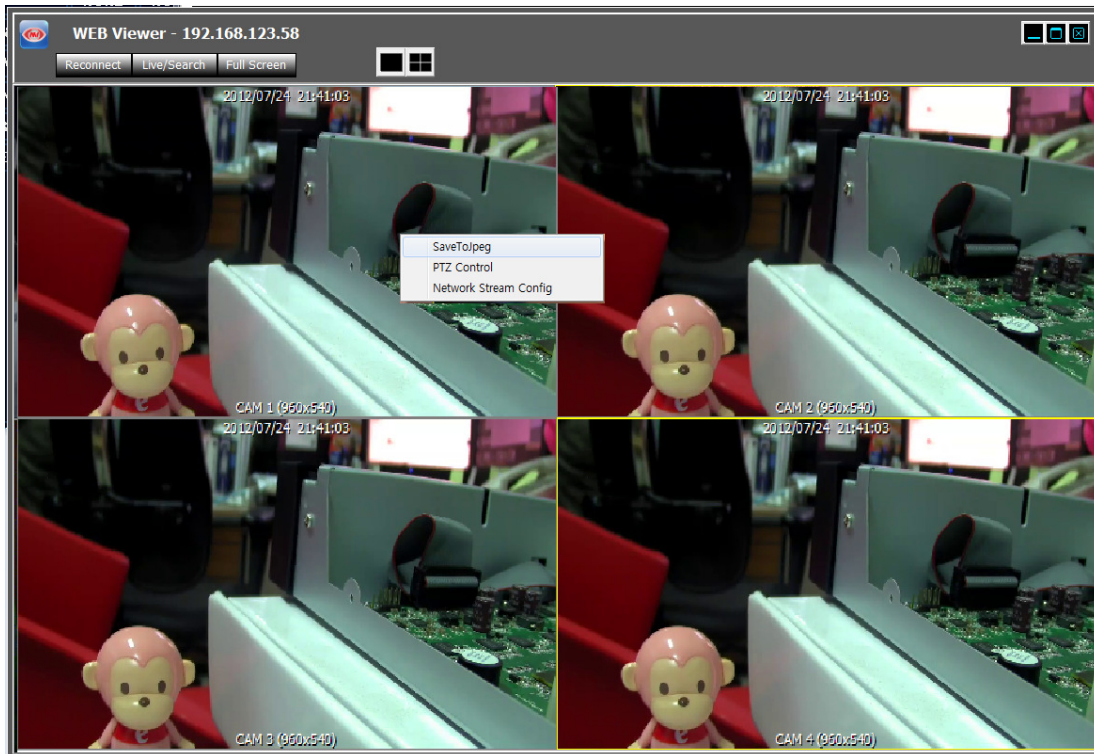
-  : Exit the 'Web Viewer'

- ✚ 4: Reconnect/Live&Search/Full Screen

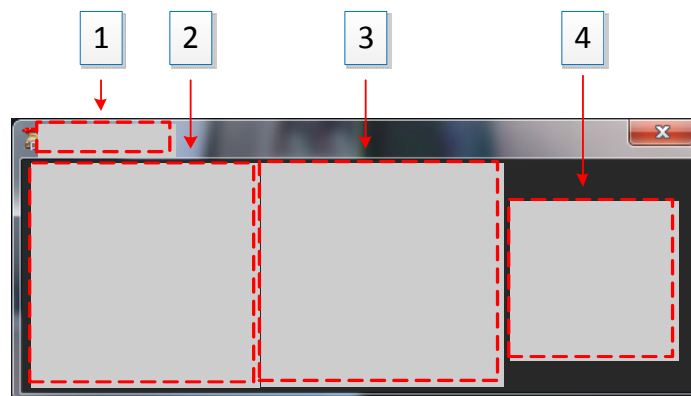
-  : Log out and Reconnect
-  : Switching between the live preview and the search & playback
-  : Full screen video view. Press 'ESC' to return to the window
-  5: Date & Time of Camera transferred from the HYBRID-DVR
-  6 : Channel Title and the resolution of the transferred video

7.1.3.5 JPEG Snapshot/ PTZ control / Video Configuration /Live Audio

In the Web Viewer, you can save the video as JPEG file, control the PTZ of camera and hear the audio from the HYBRID-DVR. And especially, you can configure the transferred video directly from the viewer. The right-click on the video window shows the pop-up menu such as following picture.



- ✚ **SaveToJpeg** : Save the current video of the selected channel with the yellow border into the PC as a JPEG file.
- ✚ **PTZ Control** : Open the PTZ control panel, which controls the PTZ camera of the selected channel.



- ✚ 1: Camera Channel number which is currently selected.
- ✚ 2: [PRESET OPERATION OF PTZ](#)
- ✚ 3: [ZOOM/FOCUS/IRIS CONTROL](#)
- ✚ 4: [DIRECTION CONTROL \(PAN & TILT\)](#)

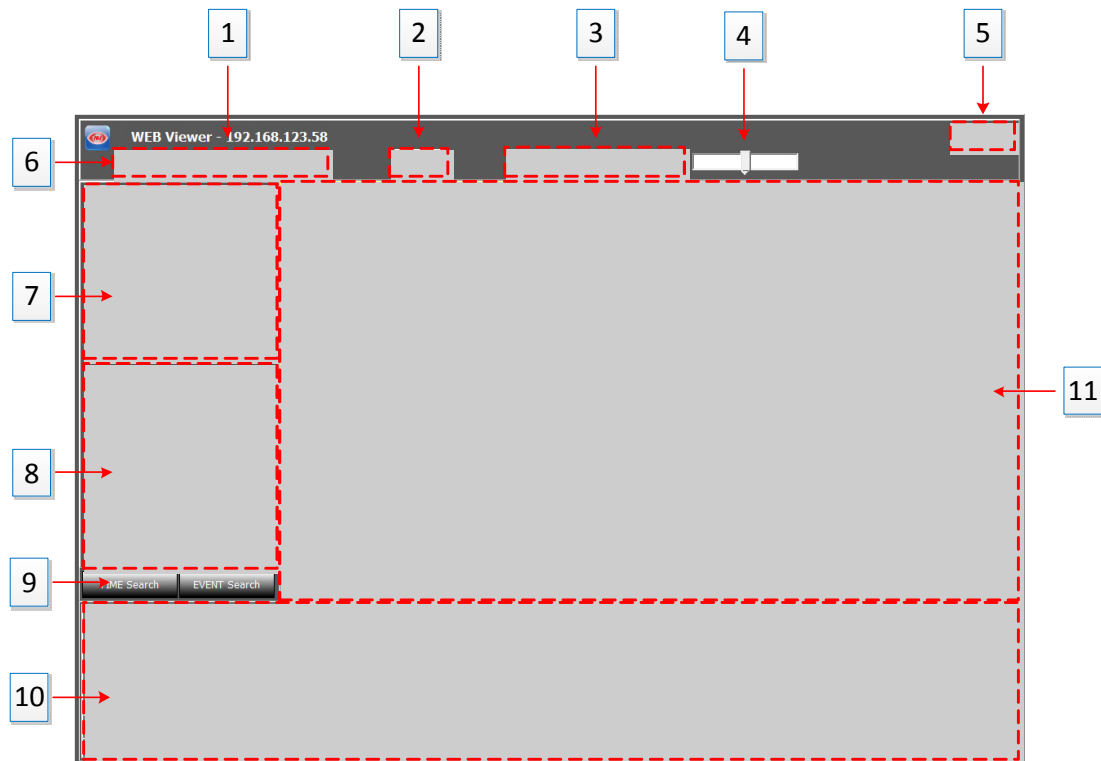
7.1.3.6 Search & Playback

Live/Search

Entering to the search & playback window or Returning to the live preview


Features


- ✚ User log-in/out feature (RECONNECT)
- ✚ Switching between the live preview and the search & playback
- ✚ Search & Playback
- ✚ Copy the recordings in the HYBRID-DVR to the PC remotely



✚ 1: Show the IP address of HYBRID-DVR currently connected

✚ 2: Split mode selection.

➤  : Single camera view

➤  : Quad split view

✚ 3: Playback speed control

➤  : Reverse Fast

➤  : Reverse Slow

➤  : Reverse Normal Speed

-  : Pause
-  : Forward Normal Speed
-  : Forward Slow
-  : Forward Fast




• Steps for fast playback : x2, x4, x8, x16, x30, x60, x120

• Steps for slow playback : 1/2, 1/4, 1/8, 1/16, 1/30, 1/60, 1/120




4: Fast Playback Speed & Direction Control Bar

- Mouse wheel up: faster in forward direction
- Mouse wheel down: reversely faster
- Center click: normal speed playback
- Click on the right half of bar : faster in forward direction
- Click on the left half of bar: reversely faster
- 7 level speed control for each direction

5: View window control

-  : Minimize the window
-  : Maximize the window
-  : Exit the 'Web Viewer'

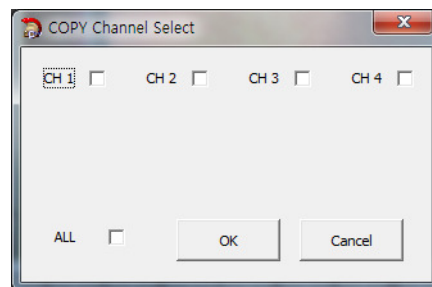
6: Reconnect/Live&Search/Full Screen

-  : Log out and Reconnect
-  : Switching between the live preview and the search & playback
-  : Full screen video view. Press 'ESC' to return to the window

7: Calendar Panel: show the selected date for searching. The green color indicates that the recording data exist. Click the date will trigger the searching for the selected day. The searching result is displayed on the time selection table (10).

8 : Copy the recorded video in the HYBRID-DVR to the PC

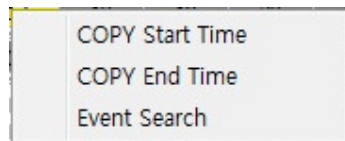
- TAG name: Folder name where the copied AVI file to be saved.
- Channel: Choose the channel required to be copied

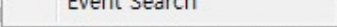
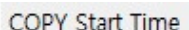
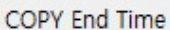
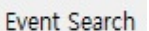
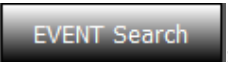


- From: The start time of the recording data to be copied
- To: The end time of the recording data to be copied
- Copy Start: executing the copy operation

- **TIME Search**: select the search mode to 'Time Search'.

- Yellow colored cell indicates the currently selected hour and minute.
- Green colored cell means that there is the recording data by the continuous recording.
- Red colored cell means that there is the event recording data.
- Click or double-click on the cell in the minutes bar will start the playback from the selected time.



-  : Right click on the minute bar will show the pop-up menu such as the left pictures.
-  : Taking the 'COPY START TIME' from the selected time cell and input it into the 'From' of COPY control panel.
-  : Taking the 'COPY END TIME' from the selected time cell and input it into the 'To' of COPY control panel.
-  : Taking the time for 'EVENT SEARCH start time'.
- Selection the second by clicking on the 'second' bar will move the second of playback video to the selected second. This is only available during the playback on-going.
- Each cells in the time selection table indicates whether the recording data exists or not for that time and channel.
-  : Select the search mode to 'EVENT Search'.

Event Type					No	Date Time	Ch	Event		
<input checked="" type="checkbox"/> ALL	CH	ALL	<input checked="" type="checkbox"/>	Research	1	2012/07/24 20:59:16	1	MOTION		
<input checked="" type="checkbox"/> Sensor	CH 1	<input checked="" type="checkbox"/>	CH 2	<input checked="" type="checkbox"/>	2	2012/07/24 20:59:10	1	MOTION		
<input checked="" type="checkbox"/> Video Loss	CH 1	<input checked="" type="checkbox"/>	CH 2	<input checked="" type="checkbox"/>	3	2012/07/24 20:59:07	1	MOTION		
<input checked="" type="checkbox"/> Motion Detection	CH 1	<input checked="" type="checkbox"/>	CH 2	<input checked="" type="checkbox"/>	4	2012/07/24 20:58:51	1	MOTION		
	CH 3	<input checked="" type="checkbox"/>	CH 4	<input checked="" type="checkbox"/>	5	2012/07/24 20:58:37	1	MOTION		
					6	2012/07/24 20:58:36	1	MOTION		
					7	2012/07/24 20:58:26	1	MOTION		
					8	2012/07/24 20:58:05	1	MOTION		
					9	2012/07/24 20:57:56	1	MOTION		
					10	2012/07/24 20:57:54	1	MOTION		

➤ Event Type(Search Condition)

- ✓ All: For all kinds of recording event
- ✓ Sensor: sensor input event
- ✓ Video Loss: lost video event

➤ Motion Detection : motion detection event

➤ CH ALL: Searching for all channels

➤ CH1/CH2/CH3/CH4: choosing the channel to be searched

➤ Research: execute the event search again

🔧 10: Time selection & recording indication table / Event search result window

HOUR	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MIN	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 - 4																								
5 - 8																								
9 - 12																								
13 - 16																								
SEC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Event Type					No	Date Time	Ch	Event		
<input checked="" type="checkbox"/> ALL	CH	ALL	<input checked="" type="checkbox"/>	Research	1	2012/07/24 20:59:16	1	MOTION		
<input checked="" type="checkbox"/> Sensor	CH 1	<input checked="" type="checkbox"/>	CH 2	<input checked="" type="checkbox"/>	2	2012/07/24 20:59:10	1	MOTION		
<input checked="" type="checkbox"/> Video Loss	CH 1	<input checked="" type="checkbox"/>	CH 2	<input checked="" type="checkbox"/>	3	2012/07/24 20:59:07	1	MOTION		
<input checked="" type="checkbox"/> Motion Detection	CH 1	<input checked="" type="checkbox"/>	CH 2	<input checked="" type="checkbox"/>	4	2012/07/24 20:58:51	1	MOTION		
	CH 3	<input checked="" type="checkbox"/>	CH 4	<input checked="" type="checkbox"/>	5	2012/07/24 20:58:37	1	MOTION		
					6	2012/07/24 20:58:36	1	MOTION		
					7	2012/07/24 20:58:26	1	MOTION		
					8	2012/07/24 20:58:05	1	MOTION		
					9	2012/07/24 20:57:56	1	MOTION		
					10	2012/07/24 20:57:54	1	MOTION		

🔧 11: display the playback video as a result of searching.

🔧 12: show the current playback mode, speed and direction.

7.2 Android Viewer / iOS Viewer

PocketViewer is the name of smart phone viewer for Android

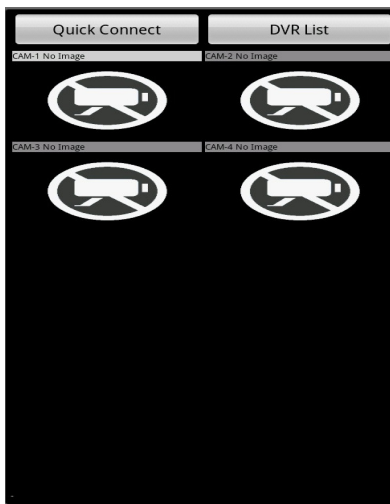
iPocketViewer is the name of smart phone viewer for IOS.

And you can also access to HYBRID-DVR system through 3G/4G phone or Wi-Fi connection.

Main feature

- ✚ Live View
- ✚ Full-Screen
- ✚ Multi Screen Display (4 channel split)
- ✚ PTZ Control (Pan-Tilt, Zoom, Preset configure and Move)
- ✚ Live Zoom & Web Menu connection of HYBRID-DVR will be supported through upgraded version.

7.2.1 How to use



If you start PocketViewer/iPocketViewer, you will see the above screen.

- ✚ **Quick Connect** : If don't want to save the HYBRID-DVR info to mobile phone, just for one time connection usage.
- ✚ **HYBRID-DVR List** : If you want to save the HYBRID-DVR info to mobile phone and control the list of HYBRID-DVR.

7.2.1.1 Quick Connect

If you press Quick Connect button, the above image will be displayed.

- ✦ HYBRID-DVR Address : You need to input IP Address
- ✦ Port Number : You need to input HYBRID-DVR port number that you configured at Network menu at HYBRID-DVR.
- ✦ User ID : You need to input ID that you configured in HYBRID-DVR. (default password of Admin is 1234)
- ✦ Password : You need to input password (default password of Admin is 1234)
- ✦ Connect : You can connect to HYBRID-DVR to view the video pressing Connect button.
- ✦ Cancel : Close Quick Connect.

7.2.1.2 HYBRID-DVR LIST

If you press HYBRID-DVR list button, following window will be displayed.



- ✦ New : You can create new HYBRID-DVR will be added to List.
- ✦ Edit : You can edit list currently stored.
- ✦ Delete : You can delete list currently stored.
- ✦ Close : You can close HYBRID-DVR list menu
- ✦ Connect : You can connect one of List already stored.
- ✦ Menu : You can connect to Web menu of HYBRID-DVR (it will be supported in next firmware) after selection one of HYBRID-DVR in the List.

7.2.1.3 How to add HYBRID-DVR to the List

If you press New button, following window will be displayed.

Save Cancel

DVR Name

DVR IP / DDNS

Port Number HTTP Port

9000 80

User Name

ADMIN

Password

- ✚ HYBRID-DVR Name : You can name newly added HYBRID-DVR to the List .
- ✚ HYBRID-DVR IP/DDNS : You can input IP address and DDNS info of HYBRID-DVR.
- ✚ Port Number : You can input HYBRID-DVR port number.
- ✚ HTTP Port : You can input HTTP port info of HYBRID-DVR that you configured at HYBRID-DVR network menu.
- Note) this menu is for connection with Web Menu of HYBRID-DVR. Which will be supported in upgraded version
- ✚ User ID : You can input ID that is configured at HYBRID-DVR menu.
- ✚ Password : You can input password that is configured at HYBRID-DVR menu.
- ✚ Save : You can store the info that you input pressing Save button.
- ✚ Cancel : Close adding List

7.2.1.4 How to connect

New Edit Delete Close

aaaa(192.168.123.12, 9000, 80)

Connect Menu

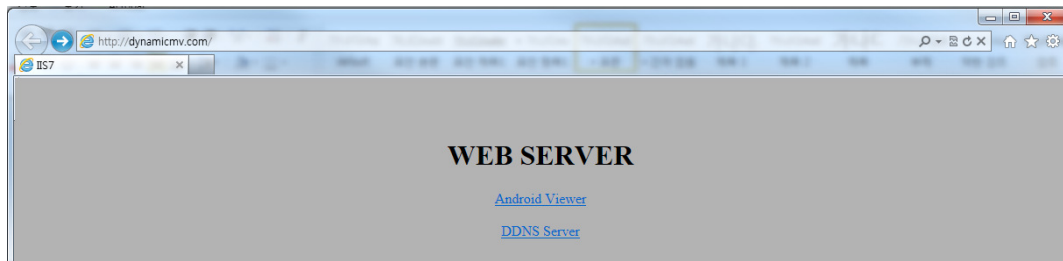
You can select one of list to make a connection to HYBRID-DVR that you want to view.

7.3 DDNS SERVER

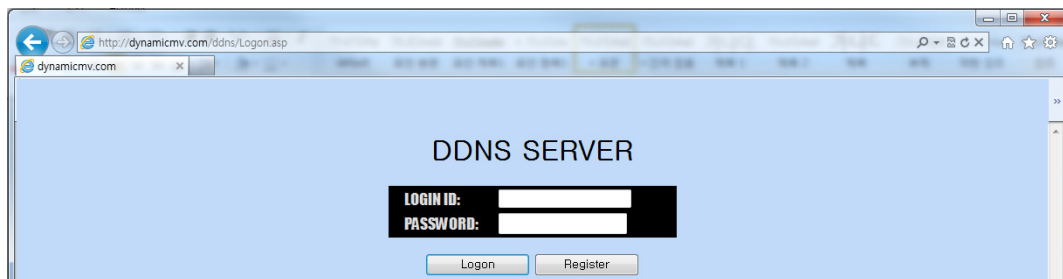
You can get Domain Name Service through DDNS server.

7.3.1 HOW TO REGISTER

You need to input <http://dynamicmv.com> at URL in Web Brower.
You can view following image from DDNS server.



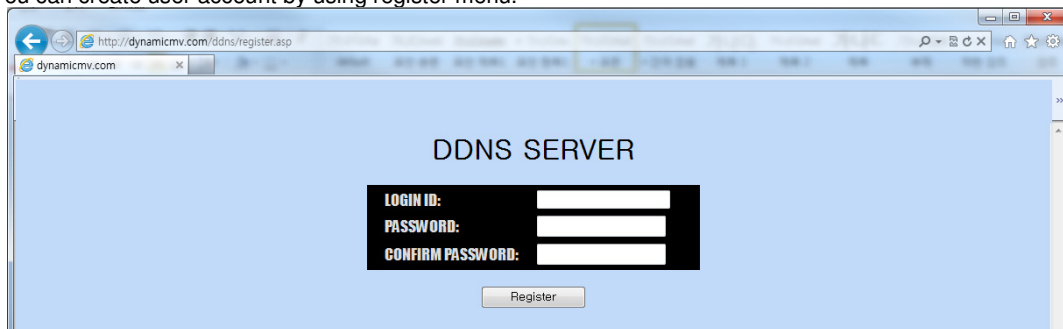
- ✚ ANDROID VIEWER: You can download Android Viewer (iPocketViewer) . Android Viewer : Android Viewer
- ✚ DDNS SERVER: If you press DDNS server button, you will be moved to DDNS server page.



- ✚ LOGIN ID: Input USER ID.
- ✚ PASSWORD: Input Password.
- ✚ Logon: Press Log-in button to log-in
- ✚ Register: You can create user account.

7.3.2 REGISTER

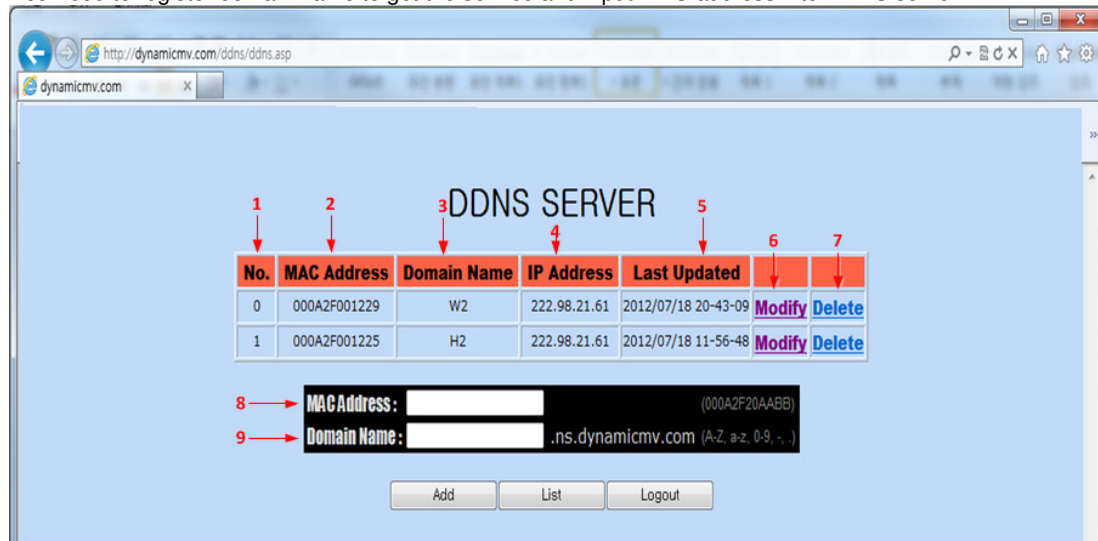
You can create user account by using register menu.



- ✚ LOGIN ID : Create ID.
- ✚ PASSWORD : Create Password..
- ✚ CONFIRM PASSWORD: Input password again to confirm the password.

7.3.3 Input HYBRID-DVR information.

You need to register domain name to get the service and input MAC address into DDNS server.



- ✚ 1 : List number of registered HYBRID-DVR
 - ✚ 2 : Mac address of registered HYBRID-DVR
 - ✚ 3 : Domain name of registered HYBRID-DVR.
 - ✚ 4 : IP address of registered HYBRID-DVR.
 - ✚ 5 : latest time that HYBRID-DVR sent the info to DDNS server.
 - ✚ 6 : Update of Last Update
 - ✚ 7 : Delete of Domain name registered in DDNS server.
 - ✚ 8 : Input Mac Address of HYBRID-DVR that you want to register newly into DDNS server.
 - ✚ 9 : Input Domain name of HYBRID-DVR that you want to register newly into DDNS server.
 - ✚ The Domain name type is "user.ns.dynamicmv.com".
 - ✚ ADD : You can register HYBRID-DVR to the DDNS server pressing ADD button.
 - ✚ LIST : The HYBRID-DVR list registered will be displayed.
 - ✚ LOGOUT : User can log out
- Note) It will take around 10 to 15 minutes to confirm the registration at the Server.

7.4 HYBRID-DVR MANAGER

HYBRID-DVR MANAGER is a 'Remote Client HYBRID-DVR Viewer' which can provide the functions such as 'Monitoring the live video', 'Search & Playback for the Recorded Video in HYBRID-DVR' and 'Download the Recorded Video in HYBRID-DVR(Remote COPY)'.

The following table shows the PC requirement for this application S/W.

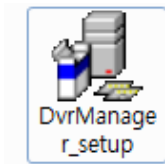
[Minimum & Recommended Specification of PC]

	Minimum	Recommended
Operating System	Windows XP	Windows 7
CPU	Core2Duo @2.53GHz or Equivalent	Core i5 @3.3GHz or Higher
Memory	1 GB	2 GB
Video Card Memory	512MB	512MB
HDD Capacity	50MB	2GB
VGA Resolution	1280x1024x16	1920x1080x32
Direct-X	DirectX 7.0	DirectX 9.0c
Network	Ethernet 10/100B-TX	

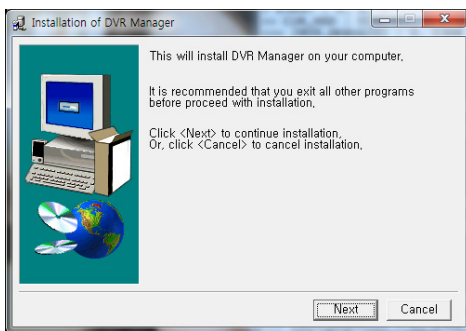
7.4.1 INSTALLATION

You can install the 'HYBRID-DVR Manager' using the 'setup' program which is provided in the bundle CD.

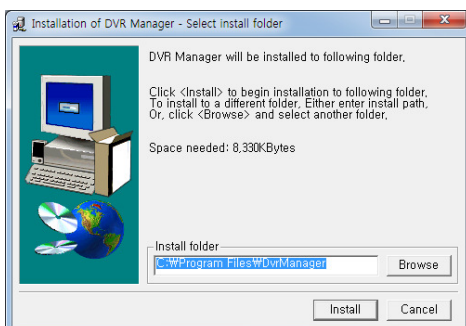
Executing the 'HYBRID-DVRManager_setup.exe' in the HYBRID-DVR Manager folder will guide you to install this.



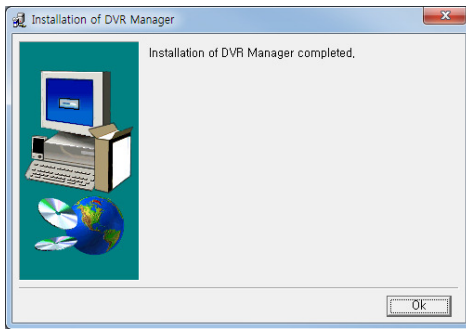
: Setup program of DVRManager



: Introduction of Setup



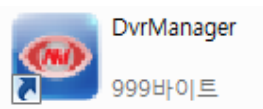
: Specify the folder location for installation.



: Complete Message Window

7.4.2 EXECUTION

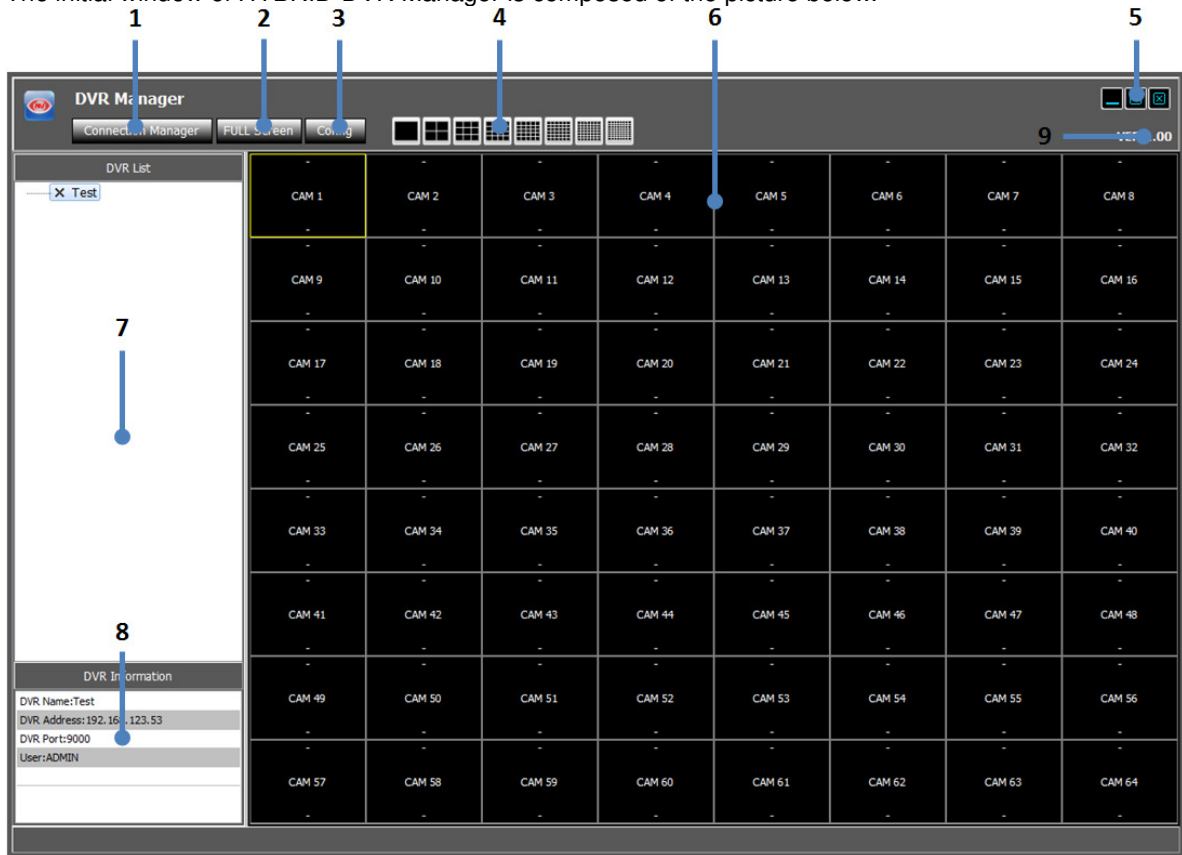
The shortcut of 'DVRManager' is created after the successful installation. Clicking this icon executes the DVRManager.



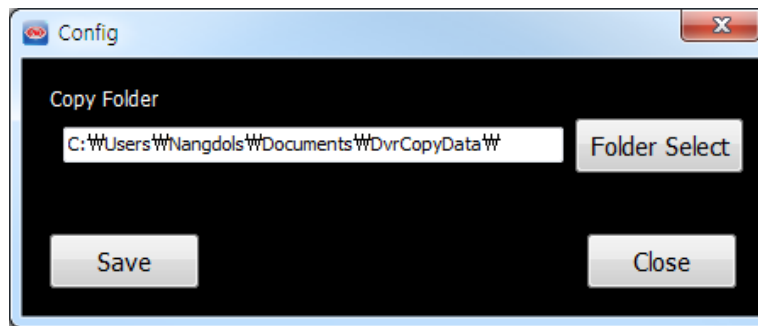
: Shortcut and icon of HYBRID-DVR Manager




7.4.3 LIVE VIDEO MONITORING

The initial window of HYBRID-DVR Manager is composed of the picture below.



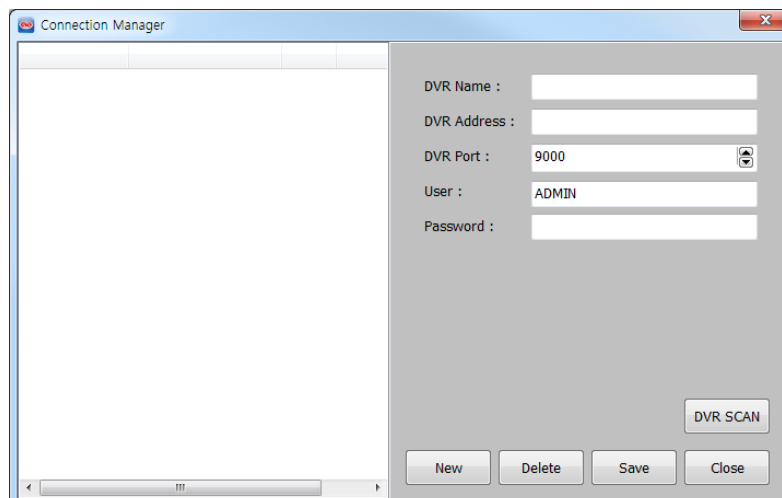
- ✚ 1 : CONNECTION MANAGER: for registering or deleting the HYBRID-DVR to/from the HYBRID-DVR List.
- ✚ 2 :FULL SCREEN : Fill and fit only the video windows into the PC monitor.
- ✚ 3 :CONFIG :



- FOLDER SELECT: Choose or make the folder for the data which is copied out from the HYBRID-DVR remotely.
- SAVE: Apply and save the current modification.
- CLOSE: exit the 'Config' pop-up.
- ✚ 4 : SPLIT MODE SELECTION: choose the number of cameras which will be shown in the live preview window.
 - 1 / 4 / 9 / 16 / 25 / 36 / 49 / 64
- ✚ 5 : Minimize/Maximize/Close HYBRID-DVR Manager
 -  : Minimize the window
 -  : Maximize the window
 -  : Exit the 'HYBRID-DVR Manager'
- ✚ 6 : Live View Window : show the live preview video of the connected HYBRID-DVR.
- ✚ 7 : HYBRID-DVR List Window : list the registered HYBRID-DVRs and indicate the connection status. When the HYBRID-DVR is linked, the cameras connected on that HYBRID-DVR are listed under the HYBRID-DVR.
- ✚ 8 : HYBRID-DVR Information : Show some information of HYBRID-DVR selected.
- ✚ 9 : Version: the version number of HYBRID-DVR Manager

7.4.4 CONNECTION MANAGER

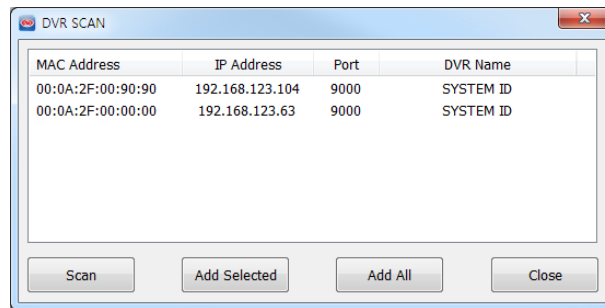
This provides the way to register the HYBRID-DVRs into the HYBRID-DVR list, remove the HYBRID-DVR from the HYBRID-DVR list and editing the HYBRID-DVR connection information.



- ✚ HYBRID-DVR Name : The name which you give to the HYBRID-DVR which has the

following connection information.

- ✚ HYBRID-DVR Address : specify the IP address of the HYBRID-DVR
- ✚ HYBRID-DVR Port : the port number for HYBRID-DVR connection. The value should be same as the one specified port number of your HYBRID-DVR.
- ✚ USER : user ID to be used in the login
- ✚ PASSWORD : password for the selected user.
 - User name and password is case-sensitive.
- ✚ HYBRID-DVR SCAN: scan the local network and show the detected HYBRID-DVRs in the list.



- MAC Address :show the MAC address of HYBRID-DVR resulted from scanning
- IP Address: show the IP address of HYBRID-DVR resulted from scanning.
- PORT : show the PORT number of HYBRID-DVR which has the above MAC and IP address.
- HYBRID-DVR Name: show the name of HYBRID-DVR which has the above MAC and IP address. This is named as a value of 'SYSTEM NAME' under the ['MANAGEMENT' page of 'SYSTEM' menu](#).
- Re-scan: execute scanning the LAN again.
- Add : register the selected HYBRID-DVR into the HYBRID-DVR list of CONNECTION MANAGER.
- Add All : register all the scanned HYBRID-DVR into the HYBRID-DVR list of CONNECTION MANAGER.
- Close: Close the HYBRID-DVR SCAN window.

- ✚ Add: add new HYBRID-DVR into the HYBRID-DVR list.
- ✚ Edit : edit the connection information of the selected HYBRID-DVR.
- ✚ Remove : remove the selected HYBRID-DVR from the HYBRID-DVR list.
- ✚ Close : close the CONNECTION MANAGER

7.4.5 LIVE VIDEO WINDOW

The transferred live camera video are monitored in this window,

Features of LIVE VIDEO WINDOW

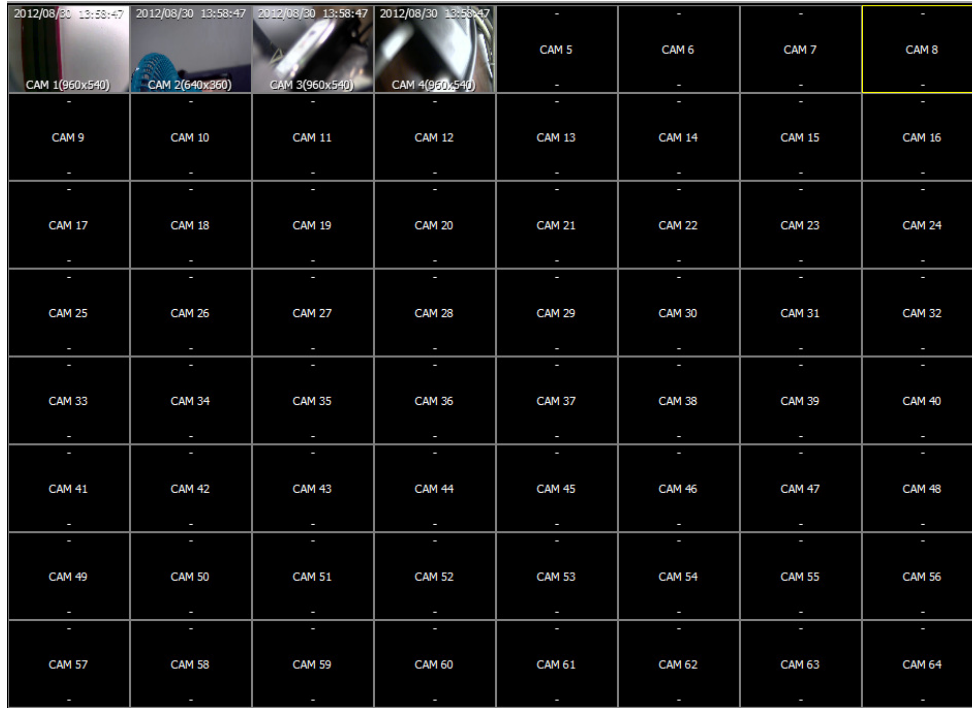
- ✚ Monitoring live camera video
- ✚ Swap the position of two cameras
- ✚ Snapshot and save it into the PC as JPEG file.
- ✚ PAN/TILT Control remotely
- ✚ Configure directly the quality and resolution for the transferred video.(ADMIN account only)
- ✚ Live audio from HYBRID-DVR

Digital Zoom In

7.4.5.1 Monitoring live video stream

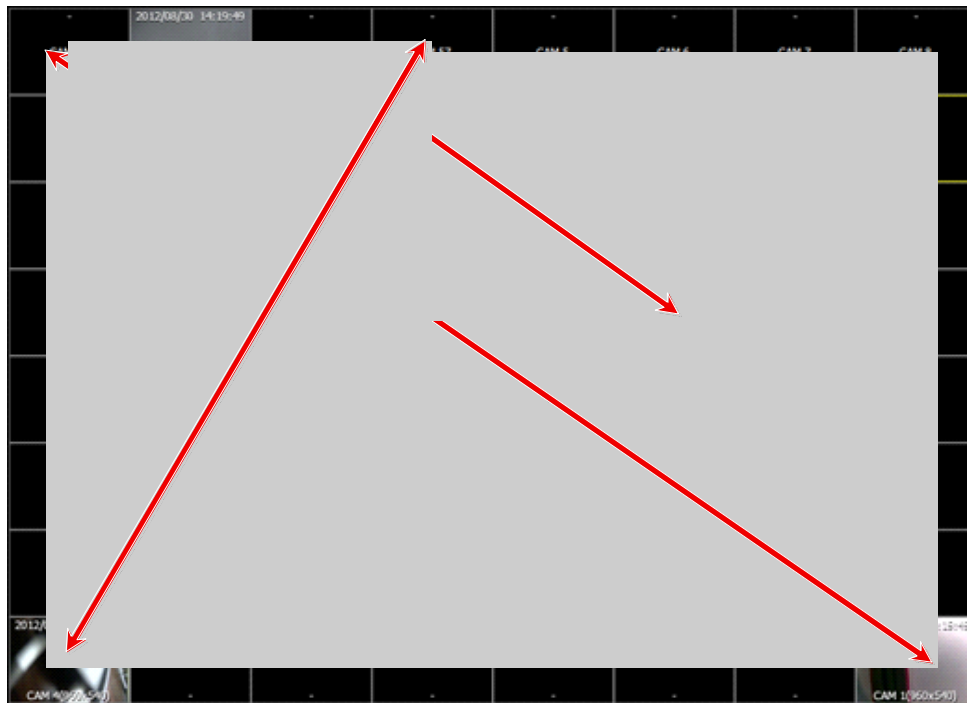
The real-time transferred live videos from the multiple HYBRID-DVRs are displayed in the 'LIVE VIDEO WINDOW'. You can configure the number of camera to be shown by the 'SPLIT MODE SELECTION' button.

- Double click change the split mode to the single channel full scale view and one more double click from the single channel view recalls the previous split mode.



7.4.5.2 Swap Camera Position

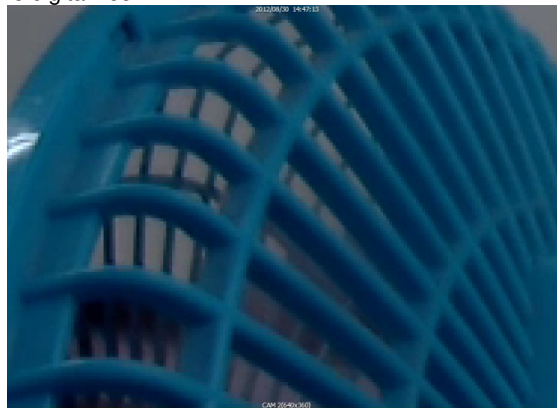
You can swap the display location of the selected two cameras by drag and drop.



- The swapped camera position will go back to the original location in case that the HYBRID-DVR manager restarts or the connection is re-established.

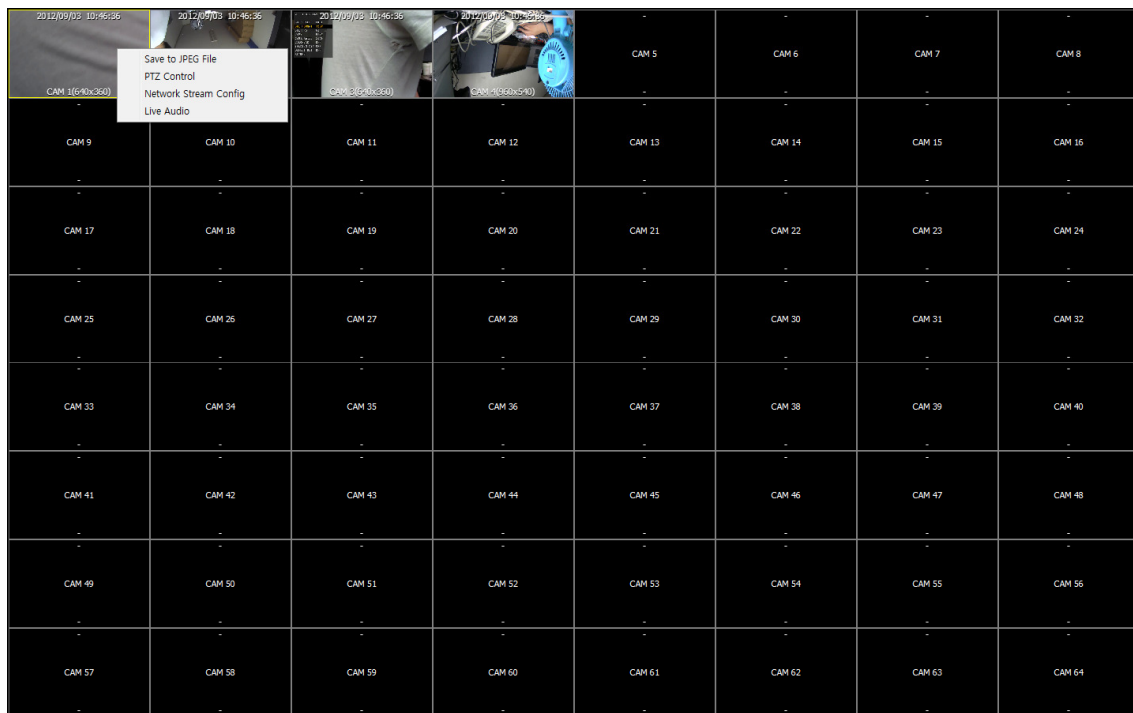
7.4.5.3 Digital Zoom on the Live View


Area selection by mouse dragging on the desired channel will activate the digital zoom for the specified area. And any clicking turns off the digital zoom.




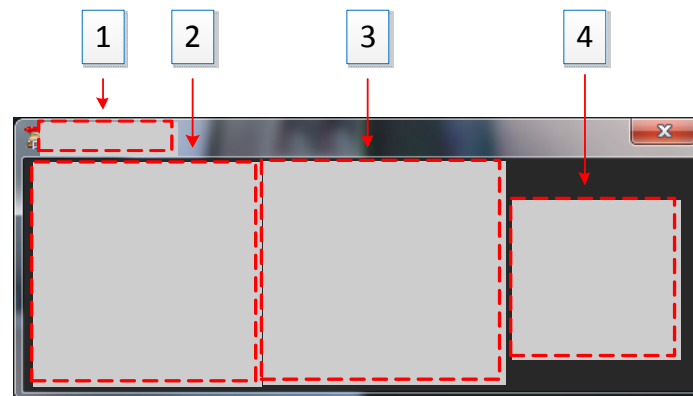
7.4.5.4 JPEG Snapshot/ PTZ control / Video Configuration /Live Audio


you can save the video as JPEG file, control the PTZ of camera and hear the audio from the HYBRID-DVR. And especially, you can configure the transferred video directly from the viewer. The right-click on the video window shows the pop-up menu such as following picture.



 **SaveToJpeg** : Save the current video of the selected channel with the yellow border into the PC as a JPEG file.

 **PTZ Control** : Open the PTZ control panel, which controls the PTZ camera of the selected channel.




 1: Camera Channel number which is currently selected.

 2: [PRESET OPERATION OF PTZ](#)

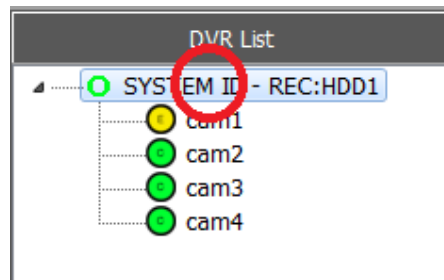
 3: [ZOOM/FOCUS/IRIS CONTROL](#)

 4: [DIRECTION CONTROL \(PAN & TILT\)](#)

 **LIVE AUDIO** : You can hear the audio from the selected camera.

7.4.5.5 HYBRID-DVR List

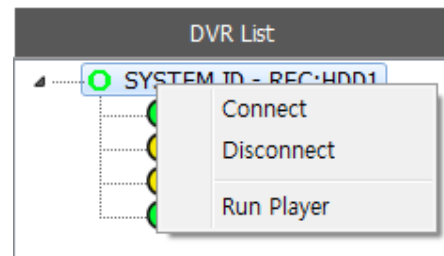
The 'HYBRID-DVR List' shows the HYBRID-DVRs registered using the 'CONNECTION MANAGER'. On the HYBRID-DVR List panel, you can connect/disconnect the HYBRID-DVR, execute the Player for the remote searching and playback, and see the status information of HYBRID-DVR.



- ✚ SYSTEM ID – REC:HDD1 : [The name of HYBRID-DVR]:[HDD number], HDD number means the HDD index currently be accessed for recording.



- ✚ : Show the recording type or status..
- ✚ Clicking the HYBRID-DVR name in the HYBRID-DVR list pops up the menu to connect/disconnect HYBRID-DVR or execute the Player for search & playback such as below picture.



- CONNECT: Connect the HYBRID-DVR selected
- DISCONNECT: Dis-connect the HYBRID-DVR Manager from the HYBRID-DVR
- RUN PLAYER : Execute the Player for the remote search & playback.

7.4.5.6 HYBRID-DVR Information

This panel shows some information of HYBRID-DVR which is currently highlighted from the HYBRID-DVR List.

DVR Information	
DVR Name:	SYSTEM ID
DVR Address:	192.168.123.53
DVR Port:	9000
User:	ADMIN

7.4.6 PLAYER

The Player support the features such as followings.

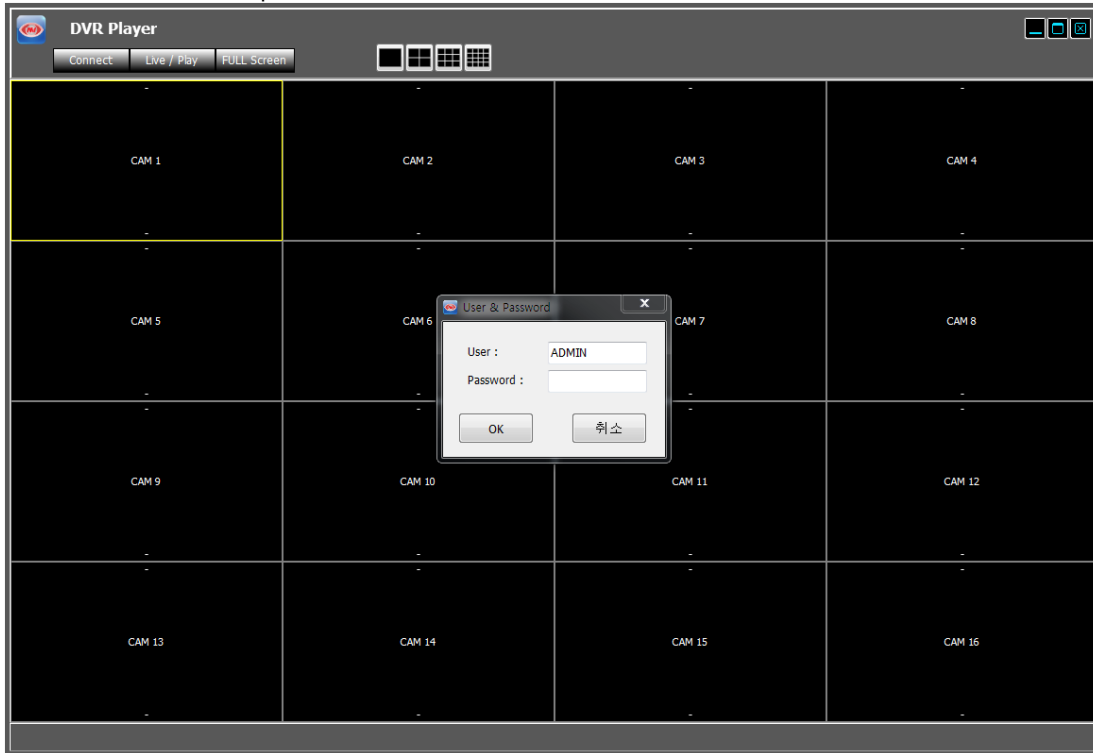
Features of Player

- ✚ Live video monitoring for the connected HYBRID-DVR
- ✚ Remote search and playback for the connected HYBRID-DVR
- ✚ Download the recorded data from the HYBRID-DVR(remote copy)

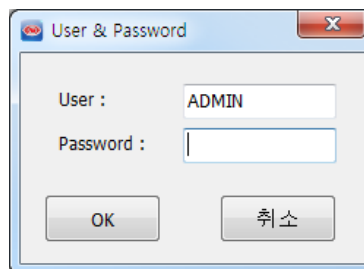
 Control a PAN/TILT camera movement

7.4.6.1 Initial Screen

Executing the 'Player' opens the application separated from the web browser and show the login window such as below picture.



7.4.6.2 Log In



User :

: Enter the USER name of HYBRID-DVR registered in the HYBRID-DVR

Password :

: Enter the password for the selected user.

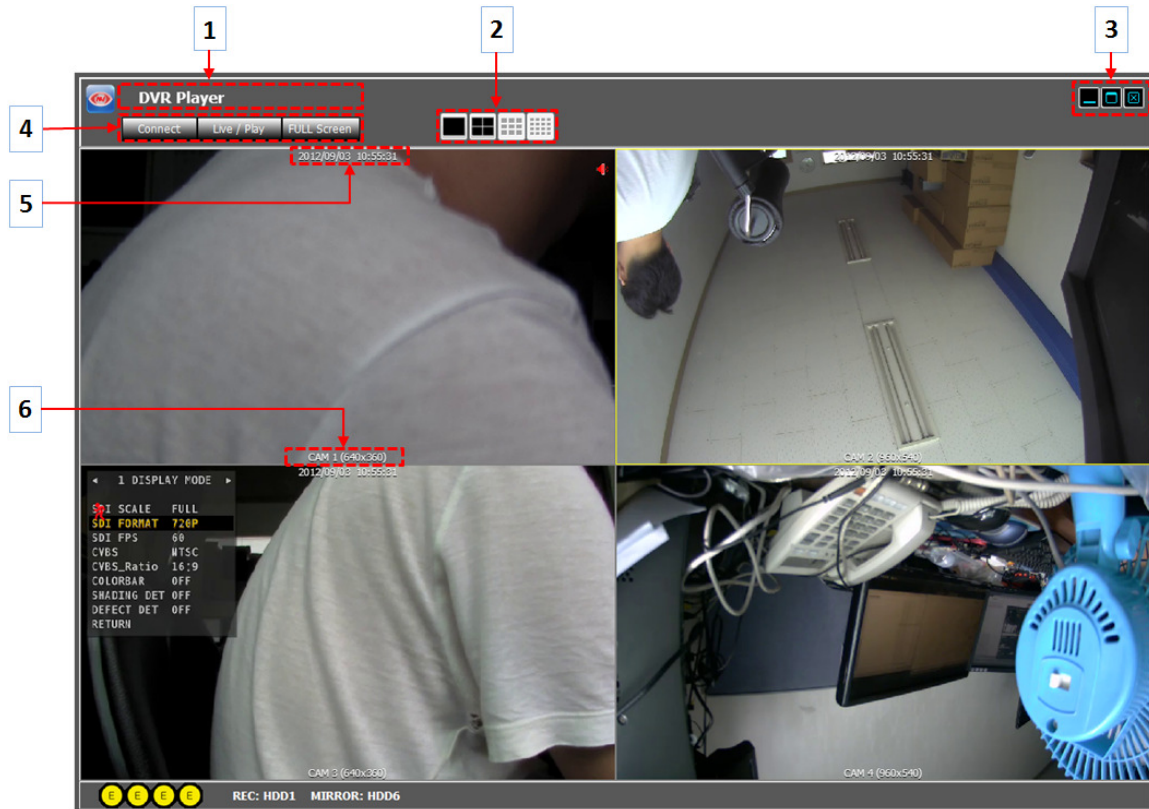
- The user authority and allowed functions, live preview, search & playback, PTZ control and etc., are controlled by the setting [USER AUTHORITY setting](#) of HYBRID-DVR setup
- USER ID and password is case-sensitive.








7.4.6.3 Live Preview


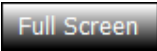
After login, the live preview screen will be shown such as below.

Features


- ✚ User log-in/out feature (RECONNECT)
- ✚ Monitoring the live preview
- ✚ Snapshot and save the preview video as JPEG
- ✚ (Admin Only) Control the resolution and quality for transferred video stream directly




- ✚ The yellow rectangle on video shows the currently selected camera
- ✚ 1: IP of HYBRID-DVR connected remotely
- ✚ 2: display split mode selection
-  : Single camera view
 -  : Quad split view
- ✚ 3: WEB Viewer Minimize/Maximize/Close
-  : Minimize the window
 -  : Maximize the window
 -  : Exit the 'Web Viewer'
- ✚ 4: Reconnect/Live&Search/Full Screen
-  : Log out and Reconnect
-  : Switching between the live preview and the search & playback

  : Full screen video view. Press 'ESC' to return to the window

 5: Date & Time of Camera transferred from the HYBRID-DVR

 6 : Channel Title and the resolution of the transferred video

 For the detail about the JPEG Snapshot/PTZ Control/Video Configuration, refer [to the same feature of Web Viewer](#).

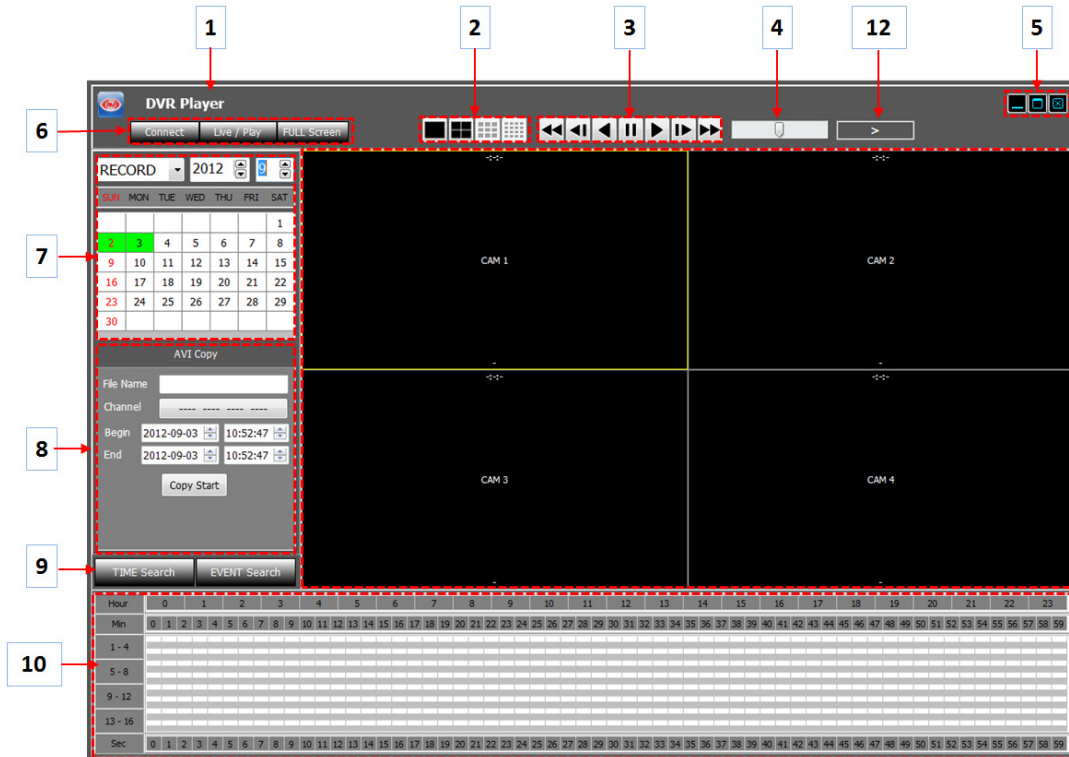
7.4.6.4 Search & Playback

Live/Search

Entering to the search & playback window or Returning to the live preview

Features


- ✚ User log-in/out feature (RECONNECT)
- ✚ Switching between the live preview and the search & playback
- ✚ Search & Playback
- ✚ Copy the recordings in the HYBRID-DVR to the PC remotely



✚ 1: Application title

✚ 2: Split mode selection.

➤  : Single camera view

➤  : Quad split view

✚ 3: Playback speed control

➤  : Reverse Fast

➤  : Reverse Slow

➤  : Reverse Normal Speed

➤  : Pause

➤  : Forward Normal Speed

➤  : Forward Slow

➤  : Forward Fast

• Steps for fast playback : x2, x4, x8, x16, x30, x60, x120


• Steps for slow playback : 1/2, 1/4, 1/8, 1/16, 1/30, 1/60, 1/120


4: Fast Playback Speed & Direction Control Bar

- Mouse wheel up: faster in forward direction
- Mouse wheel down: reversely faster
- Center click: normal speed playback
- Click on the right half of bar : faster in forward direction
- Click on the left half of bar: reversely faster
- 7 level speed control for each direction

5: View window control


➤  : Minimize the window

➤  : Maximize the window

➤  : Exit the 'Web Viewer'

6: Reconnect/Live&Search/Full Screen

➤  : Log out and Reconnect

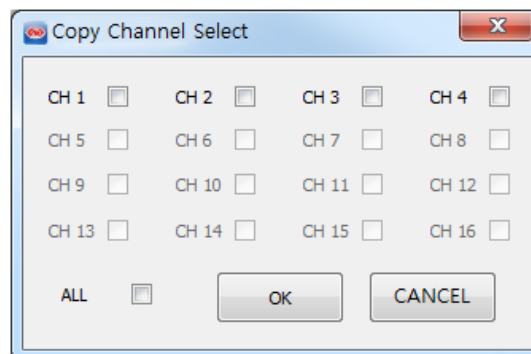
➤  : Switching between the live preview and the search & playback

➤  : Full screen video view. Press 'ESC' to return to the window

7: Calendar Panel: show the selected date for searching. The green color indicates that the recording data exist. Click the date will trigger the searching for the selected day. The searching result is displayed on the time selection table (10).

8 : Copy the recorded video in the HYBRID-DVR to the PC

- TAG name: Folder name where the copied AVI file to be saved.
- Channel: Choose the channel required to be copied

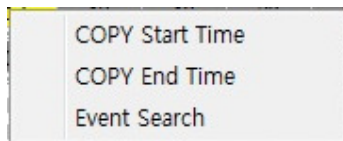
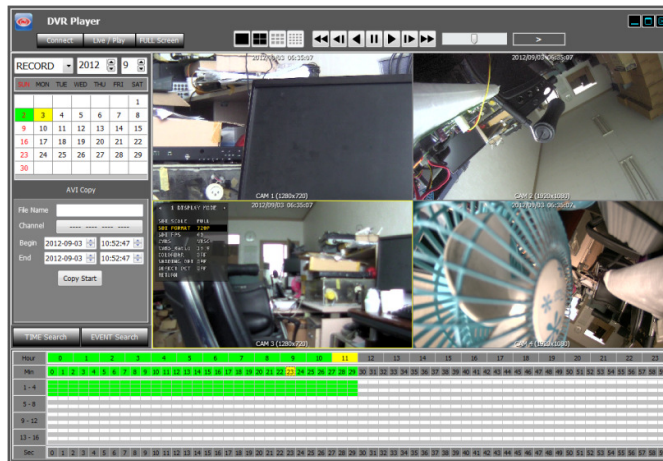


- From: The start time of the recording data to be copied
- To: The end time of the recording data to be copied
- Copy Start: executing the copy operation

- : select the search mode to 'Time Search'.

Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Min	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 - 4																								
5 - 8																								
9 - 12																								
13 - 16																								
Sec	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

- Yellow colored cell indicates the currently selected hour and minute.
- Green colored cell means that there is the recording data by the continuous recording.
- Red colored cell means that there is the event recording data.
- Click or double-click on the cell in the minutes bar will start the playback from the selected time.



- ▶ : Right click on the minute bar will show the pop-up menu such as the left pictures.

- **COPY Start Time** : Taking the 'COPY START TIME' from the selected time cell and input it into the 'From' of COPY control panel.

- **COPY End Time** : Taking the 'COPY END TIME' from the selected time cell and input it into the 'To' of COPY control panel.

- **Event Search**: Taking the time for 'EVENT SEARCH start time'.

- Selection the second by clicking on the 'second' bar will move the second of playback video to the selected second. This is only available during the playback on-going.

- Each cells in the time selection table indicates whether the recording data exists or not for that time and channel.

- EVENT Search: Select the search mode to 'EVENT Search'.

Event Type		NO.	Date / Time	Channel	Type
<input checked="" type="checkbox"/> All Event	ALL <input checked="" type="checkbox"/>	1	2012/09/03 11:32:10	1	MOTION
<input checked="" type="checkbox"/> Sensor		2	2012/09/03 11:32:03	1	MOTION
<input checked="" type="checkbox"/> Video Loss		3	2012/09/03 11:31:58	1	MOTION
<input checked="" type="checkbox"/> Motion Detection		4	2012/09/03 11:31:50	1	MOTION
	CH 1 <input checked="" type="checkbox"/> CH 2 <input checked="" type="checkbox"/> CH 3 <input checked="" type="checkbox"/> CH 4 <input checked="" type="checkbox"/>	5	2012/09/03 11:31:35	1	MOTION
	CH 5 <input checked="" type="checkbox"/> CH 6 <input checked="" type="checkbox"/> CH 7 <input checked="" type="checkbox"/> CH 8 <input checked="" type="checkbox"/>	6	2012/09/03 11:31:08	1	MOTION
	CH 9 <input checked="" type="checkbox"/> CH 10 <input checked="" type="checkbox"/> CH 11 <input checked="" type="checkbox"/> CH 12 <input checked="" type="checkbox"/>	7	2012/09/03 11:30:52	1	MOTION
	CH 13 <input checked="" type="checkbox"/> CH 14 <input checked="" type="checkbox"/> CH 15 <input checked="" type="checkbox"/> CH 16 <input checked="" type="checkbox"/>	8	2012/09/03 11:30:51	1	MOTION
		9	2012/09/03 11:30:44	1	MOTION
		10	2012/09/03 11:30:35	1	MOTION

➤ Event Type(Search Condition)

- ✓ All: For all kinds of recording event
- ✓ Sensor: sensor input event
- ✓ Video Loss: lost video event

➤ Motion Detection : motion detection event

➤ CH ALL: Searching for all channels

➤ CH1/CH2/CH3/CH4: choosing the channel to be searched

➤ Research: execute the event search again

10: Time selection & recording indication table / Event search result window

시간	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
분	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 ~ 4																								
5 ~ 8																								
9 ~ 12																								
13 ~ 16																								
초	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Event Type		NO.	Date / Time	Channel	Type
<input checked="" type="checkbox"/> All Event	ALL <input checked="" type="checkbox"/>	1	2012/09/03 11:32:10	1	MOTION
<input checked="" type="checkbox"/> Sensor		2	2012/09/03 11:32:03	1	MOTION
<input checked="" type="checkbox"/> Video Loss		3	2012/09/03 11:31:58	1	MOTION
<input checked="" type="checkbox"/> Motion Detection		4	2012/09/03 11:31:50	1	MOTION
	CH 1 <input checked="" type="checkbox"/> CH 2 <input checked="" type="checkbox"/> CH 3 <input checked="" type="checkbox"/> CH 4 <input checked="" type="checkbox"/>	5	2012/09/03 11:31:35	1	MOTION
	CH 5 <input checked="" type="checkbox"/> CH 6 <input checked="" type="checkbox"/> CH 7 <input checked="" type="checkbox"/> CH 8 <input checked="" type="checkbox"/>	6	2012/09/03 11:31:08	1	MOTION
	CH 9 <input checked="" type="checkbox"/> CH 10 <input checked="" type="checkbox"/> CH 11 <input checked="" type="checkbox"/> CH 12 <input checked="" type="checkbox"/>	7	2012/09/03 11:30:52	1	MOTION
	CH 13 <input checked="" type="checkbox"/> CH 14 <input checked="" type="checkbox"/> CH 15 <input checked="" type="checkbox"/> CH 16 <input checked="" type="checkbox"/>	8	2012/09/03 11:30:51	1	MOTION
		9	2012/09/03 11:30:44	1	MOTION
		10	2012/09/03 11:30:35	1	MOTION

11: display the playback video as a result of searching.

12: show the current playback mode, speed and direction.