

# **USER MANUAL**

# ***IMPORTANT SAFETY INSTRUCTIONS***

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding type plug.
  - A polarized plug has two blades with one wider than the other.
  - A grounding type plug has two blades and a third grounding prong.
  - The wide blade or the third prong is provided for your safety.
  - When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use the attachments/accessories specified by the manufacturer.
- 12) Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.
  - When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) This equipment is indoor use and all the communication wirings are limited to inside of the building.
- 16) The socket-outlet shall be installed near the equipment and shall be easily accessible.
- 17) CAUTION
  - RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
  - DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

# Operation Max temperature : 40 °C

# USB Load condition: USB Ports( 5 Vdc, Max. 500 mA)

## *BEFORE INSTALLATION*

- Installation should be carried out only by qualified personnel and in accordance with any electrical regulations in force at the time.
- 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 power first.  
Use a soft dry cloth only never use any abrasive cleaners.
- 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.

# **MAIN FEATURES**

## **MOUSE CONTROL**

Designed to be controlled and easy to use with a mouse.

## **ENHANCED GRAPHICAL USER INTERFACE [GUI]**

The DVR menu structure and on screen display is presented in a simple to use and logical GUI format.

## **GENUINE PENTAPLEX OPERATION**

The DVR will continue to record at full frame rate during local playback, local setup, multi user remote viewing and playback and remote setup.

## **AUDIO**

4 audio inputs are supported which can be assigned to any video channel. Live and recorded audio can be monitored remotely over the internet and remote 'talkback' audio transmission to the DVR is also possible.

## **BACKUP**

Recorded footage (including audio) can be archived to USB memory stick or CD/DVD.

Playback software is embedded with the backup files and the backup also contains the system event log and backup log for full traceability.

## **REMOTE CONNECTION**

Depending on the user level, full DVR control is available over the internet as well as the ability to remotely configure the DVR. Alarm outputs on the DVR can be remotely triggered over the internet.

## **COMPREHENSIVE RECORDING SETUP**

Recording can be scheduled, alarm or motion activated. For each type of recording, frame rates, image quality and audio recording properties can be adjusted per hour, day and for each individual channel.

The DVR also has a panic recording feature (from the front panel or external input) which overrides all other recording settings to provide the best quality recording in the event of an emergency.

## **PTZ CONTROL**

Full PTZ control is available from the front panel or remote connection and a wide number of speed dome protocols are supported. Protocols can be set individually for each channel and PTZ speed can be adjusted to suit particular speed domes.

# *MAIN FEATURES*

## **TELEMETRY CONTROL**

Full telemetry control is available from the front panel or remote connection and a wide number of speed dome protocols are supported. Protocols can be set individually for each channel and telemetry speed can be adjusted to suit particular speed domes.

## **EXTENSIVE MONITOR SUPPORT**

The DVR has 4 main monitor outputs (Composite, VGA, S-Video and HDMI) which can be used simultaneously. Support is also provided for up to 4 spot monitors and each spot monitor output can be programmed in the DVR setup.

## **LIVE DISPLAY**

The DVR displays single or multi screen images and also has several sequence modes (standard and user definable).

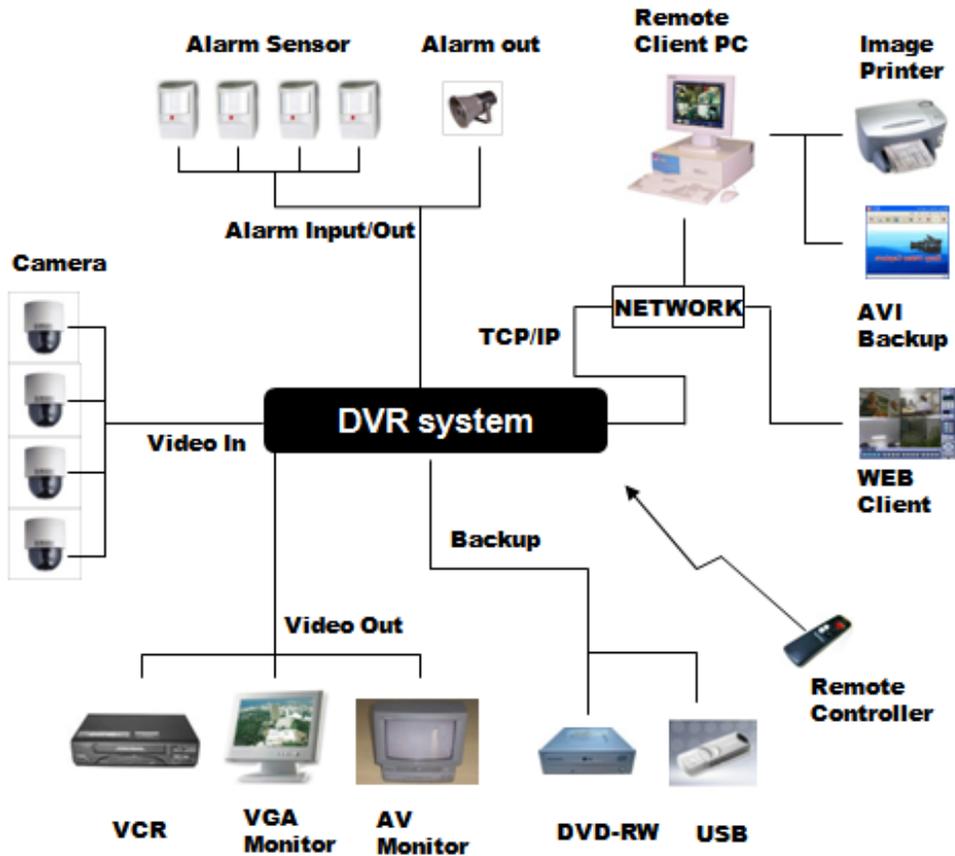
## **CONFIGURATION BACKUP**

All configuration settings on the DVR can be saved to USB memory stick or a PC file remotely. The saved data can then be uploaded to other DVR units allowing rapid deployment where more than one DVR is being installed.

## **EMAIL SUPPORT**

The DVR can send emails to specific users to notify events such as alarm, motion detection, video loss, hard drive failure, & etc.

# SYSTEM ORGANIZATION



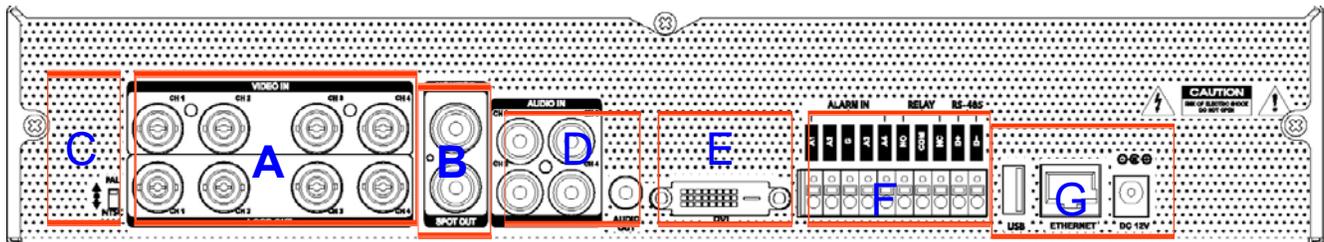
# SYSTEM CONFIGURATION

## 1. Front panel description.

| KEY                                  | DESCRIPTION   |
|--------------------------------------|---|
| <b>Function Key</b>                  |   |
| <b>POWER</b>                         | Turn On/Off the system power  |
| <b>DISPLAY</b>                       | Selects various display modes in live display and playback  |
| <b>PTZ</b>                           | Selects PTZ mode in live display  |
| <b>SETUP</b>                         | Displays the setup menus  |
| <b>SEARCH</b>                        | Displays the search menu  |
| <b>Control Key</b>                   |   |
| <b>CHANNEL SELECTION<br/>BUTTONS</b> | Used to display individual channels in live display and playback<br>Also used to enter numeric passwords for the various login screens                |
| <b>CURSOR KEYS</b>                   | Allow to Navigate on the menu   |
| <b>ENTER</b>                         | Apply or Select an item   |
| <b>RETURN</b>                        | Cancel or go to Previous menu   |
| <b>Playback Control</b>              |   |
| <b>Shuttle Wheel</b>                 | Used to quickly adjust playback speed and direction.<br>Also used to control camera zoom when in PTZ mode ,<br>and digital zoom level in live display |
| <b>JOG</b>                           | When playback is paused, used to move footage forwards or backwards, frame by frame   |
| <b>HOLD</b>                          | Locks the current function of the SHUTTLE WHEEL so it can be released   |
| ◀◀                                   | Increases reverse playback speed  |
| ◀                                    | Selects reverse playback  |
|                                      | Pauses / resumes playback   |
| ▶                                    | Selects forward playback and also accesses the instant playback feature   |
| ▶▶                                   | Increases forward playback speed  |

# SYSTEM CONFIGURATION

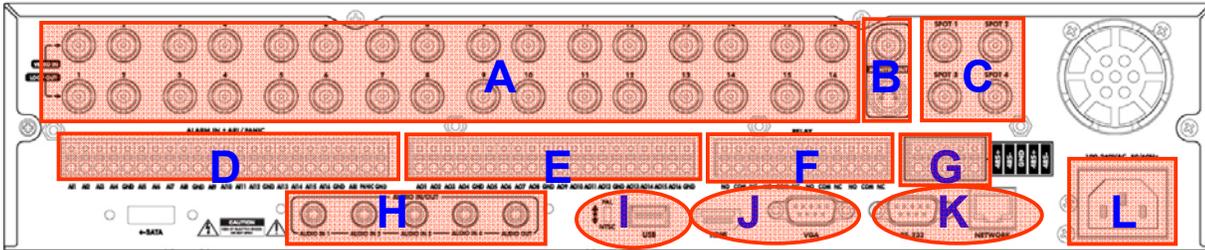
## 2. Rear panel description. (4CH)



- A. **VIDEO IN** : BNC Port for Connection of DVR & Camera. (4 Camera Connectable)  
**LOOP BACK** : Output DVR Camera Video to Loop Back Port. (4 BNC Port)
- B. **MONITOR OUT** : Output DVR Video to AV Monitor.  
**SPOT OUT** : Output Spot-out Video to AV Monitor.
- C. **NTSC/PAL** : Select NTSC or PAL Type.
- D. **AUDIO OUT** : Output Audio Data.  
**AUDIO IN** : Audio Input Terminal Related with #1~4 Camera.
- E. **DVI OUT** : Output Video to a Computer Monitor by Connected DVI.
- F. **ALARM / RELAY / RS 485** : Connect Port for Sensor, Relay, & PTZ.
- G. **USB PORT** : USB port for use the USB memory stick and USB HDD Backup  
**ETHERNET (TCP/IP)** : Port for Cross cable. (For Remote Surveillance.)  
**DC Power Input** : Power Supply by DC 12V Adaptor.

# SYSTEM CONFIGURATION

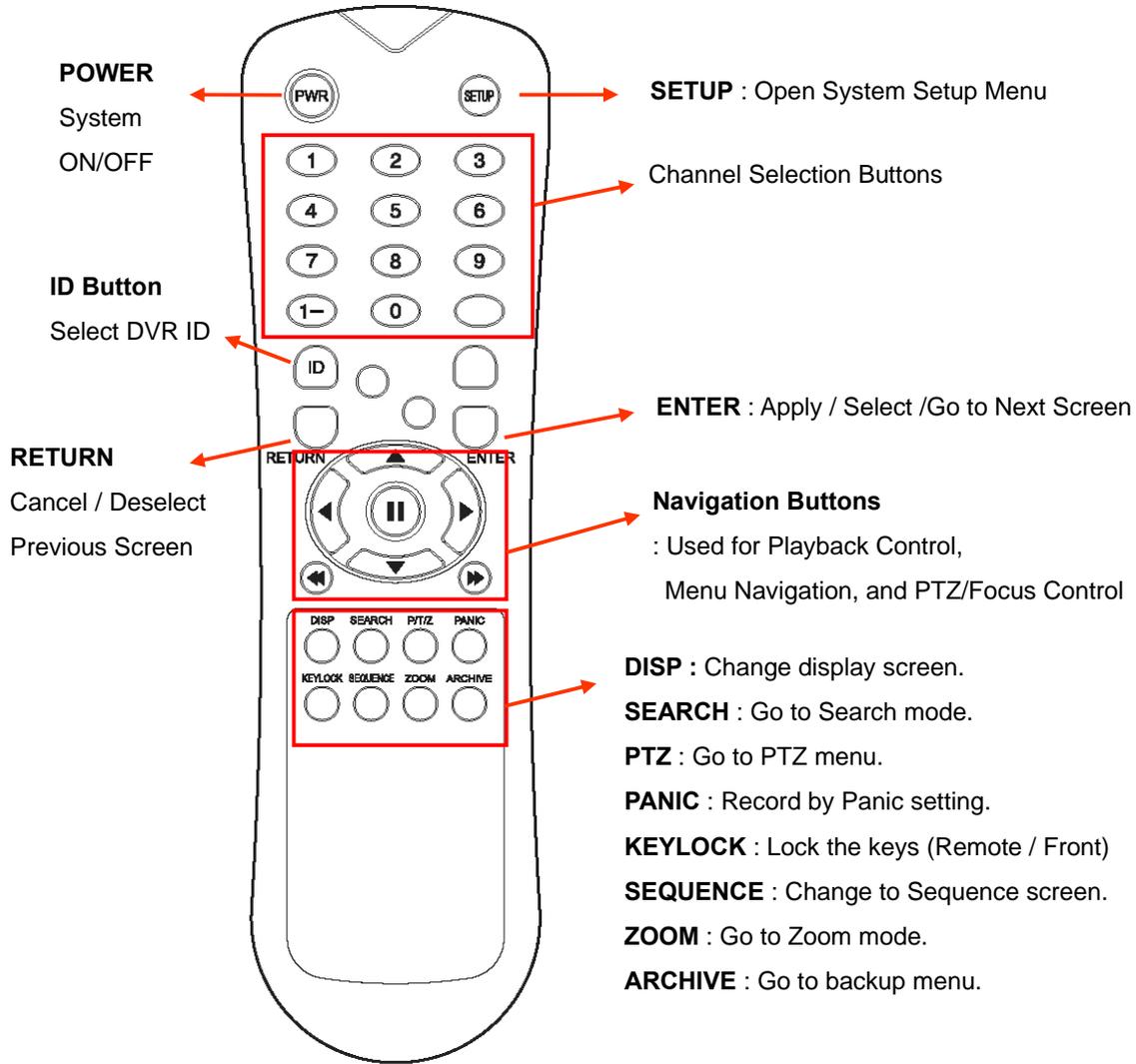
## 2. Rear panel description. (8CH / 16CH)



- A. CAMERA INPUTS and LOOP OUTPUTS :**  
Connect up to 16 camera inputs. Loop outputs can be used for connection to other equipment.
- B. COMPOSITE AND S-VIDEO MAIN :**  
MONITOR CONNECTIONS Both outputs can be used at the same time if more than one main monitor connection is required.
- C. SPOT MONITOR OUTPUTS :** Up to 4 spot monitors can be connected as necessary.
- D. ALARM INPUTS :** Up to 16 alarm inputs can be connected and configured as high or low Inputs with common ground.
- E. ALARM OUTPUTS :** Up to 16 alarm outputs can be connected and configured as high or low outputs with common ground.
- F. RELAY OUTPUTS :** Up to 4 Relay outputs can be connected and configured as high or low outputs with common ground.
- G. RS485 :** Can connect PTZ camera and controller by two RS485 connectors.  
Left side : for PTZ. Right side : for keyboard controller.
- H. AUDIO INPUTS & OUTPUTS :** Up to 4 audio inputs and one audio output can be connected as necessary.
- I. VIDEO SIGNAL SWITCH :** Can change Video input signal type.
- USB PORT :** Can connect USB mouse or USB device for backup.
- J. HDMI :** Can connect HDMI monitor output.
- VGA :** Can connect VGA monitor output.
- K. RS232 :** Serial port.
- LAN :** Can connect to a router or internal network.
- L. POWER :** Can connect Power cable.

# SYSTEM CONFIGURE – Remote Controller

## 3. Remote Controller description.



※ If there are many DVRs on stack, each DVR must be set with different ID, the remote controller sets each ID per DVR, then all DVRs can be controlled with one remote controller by each ID.

### How to set ID on the remote controller

: Press the **ID** button then displayed **INPUT ID** statement.

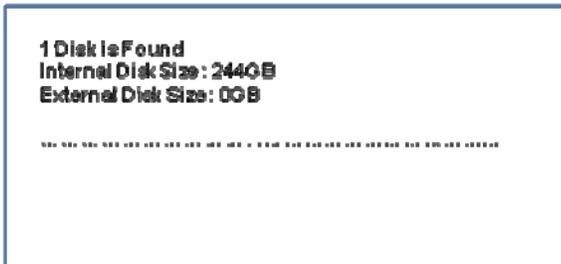
Press the set ID and Press the **RETURN** button (The default ID is 01).

For returning to the original situation, press the **ID** button again.

And Input the **255** and press the **RETURN** button of remote controller.

# CONNECT & POWER ON

- Connect up to 16 **CAMERA INPUTS** as necessary.  
The DVR also has **LOOP OUTPUTS** so that any signals can be fed to other equipment if required.  
Termination is automatically set by the DVR depending on connection type.
- Connect one or more monitors to the DVR using the **COMPOSITE, VGA, S-VIDEO or HDMI** connections
- Connect power to the DVR. The DVR checks for proper power connection and emits two beeps.  
Press the **POWER BUTTON** on the front panel of the DVR to begin operation.



The DVR startup screen detects and checks the status of hard drives and the CDRW / DVD-RW drive.



After startup diagnostics are complete, the operator must logon to the system. The default user name is 'ADMIN'.

Using the **CHANNEL SELECTION** buttons, key in the default password of '1234' and press the **ENTER** button.



The DVR begins normal operation and shows the default display of all 16 channels.

The status bar(Include menu control) at the bottom of the screen shows menu first time. After that, it will show the current time and date.

A title for each channel is shown.

The red square and letter 'T' in the top right of each channel display shows that the channel is recording in Timer / Schedule mode.

# MENU CONTROL



All menus can be controlled from above 'Status Bar' with mouse or front buttons.

## LIVE DISPLAY

### DIVISION SCREEN



Select the 'DISPLAY' button and screen division menu will appear.

Select the screen type (1,4,6,8,9,16 and rotation sequence).

### Sequence mode

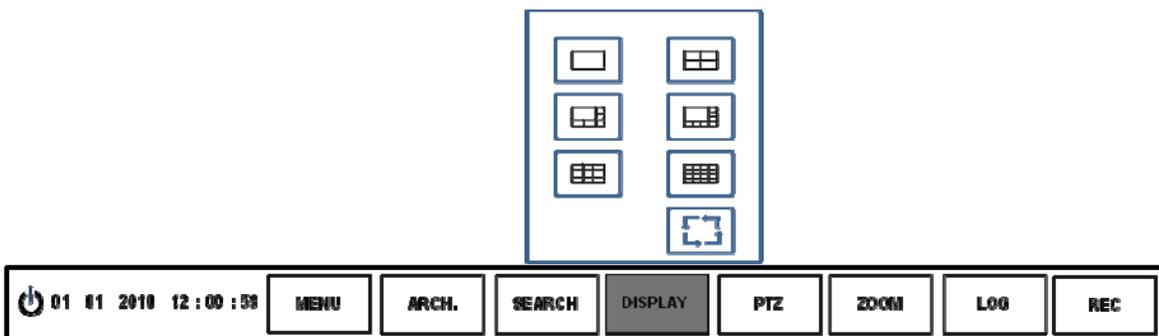


User can select the type from display menu.

Press the **SEQ** button. Each channel is shown in full screen for a set period of time before switching to the next channel.

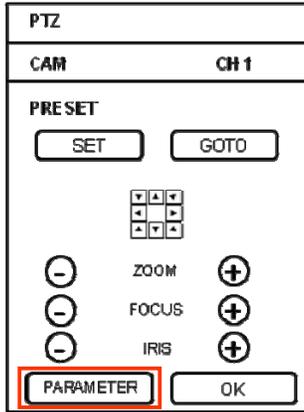
To stop the sequence on a particular channel, press the **SEQ** button again.

More complex sequences can be programmed through the setup menu

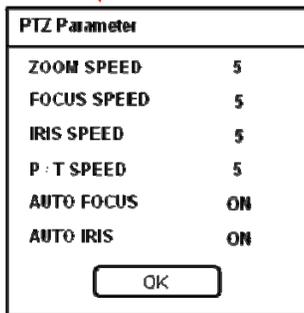


# LIVE DISPLAY

**PTZ**



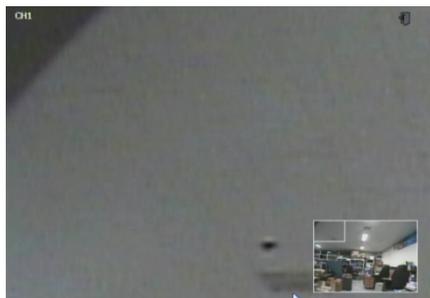
- 1) CAM: Select the Channel
- 2) Preset : Input preset numbers 1~255.  
Click SET to save current view (camera position) as a preset.  
Click GOTO to move the camera to a saved preset position.
- 3) Zoom, Focus, IRIS: User can control each item with + or - button.
- 4) Parameter : Press this button and another window will appear.  
User can view each item from PTZ parameter menu.  
(Parameter values can be set in **CAMERA : PTZ SETUP**)



## Digital Zoom

**ZOOM**

Select the "ZOOM" button.



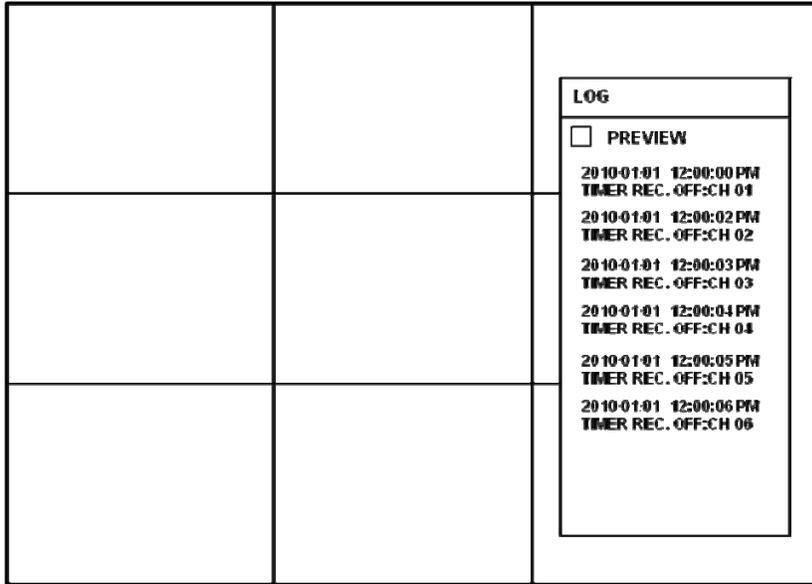
When viewing a channel in full screen, the operator can zoom in to a particular area by up to 8 times.  
To use the digital zoom, select the required channel and press the **ZOOM** button.  
The small window at bottom right shows the full image and the main display area shows the zoomed portion.

## LIVE DISPLAY



User can see the current log immediately.

Click once after selecting log, recorded data will be played. This is in case of selecting the "PREVIEW" option)



## Panic Recording



This menu is used to start and stop the Panic recording.

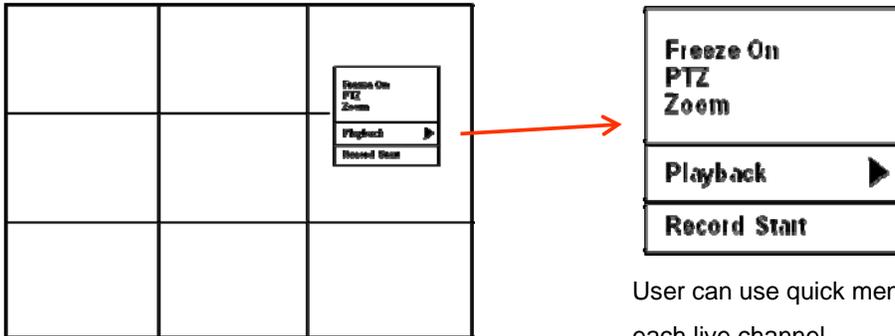
If the panic recording is started, record icon will change to red square with "P".

Select once more to return to previous.

- Panic recording setup will be assigned from Record menu.

# LIVE DISPLAY

## Quick Menu



User can use quick menu by clicking the right of the mouse on each live channel.

Click the right of the mouse on live channel that user wants to control.

1. Freeze On/Off: User can stop the live display of channel that user wants. Even though other channels show live display, this particular channel display is stopped. Click once more to return to previous.

2. PTZ

Please refer to "PTZ" menu of Page 13.

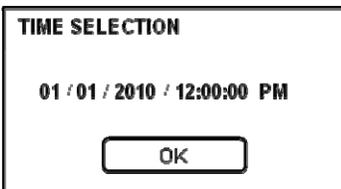
3. Zoom

Please refer to "ZOOM" menu of Page 13.

4. Playback

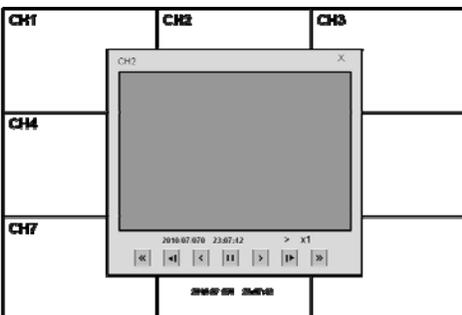


User can playback immediately with selected time (10, 20, 30 seconds or 1 minute ago).



In case of selecting "go to" menu, this menu will appear.

After selecting the time, press "OK".



5. Record Start (Stop)

Please refer to "Panic record" menu of Page 14.

# SYSTEM SETUP

**MENU**

Click the "MENU" and click the **SYSTEM SETUP** menu.

**SETUP**

**SYSTEMSETUP**

**RECORD SETUP**

**EXIT**

**MAIN**

**CAMERA**

**DISPLAY**

**SOUND**

**SYSTEM**

**USER**

**NETWORK**

**EVENT / SENSOR**

**DISK MANAGEMENT**

To navigate around any items in the setup menu, use the **CURSOR KEYS** and the **ENTER** and **RETURN** buttons.

In general, the **ENTER** button is used to select and change a particular item and the **RETURN** button is used to cancel a change or exit from a particular setup screen.

To setup all main system functions, highlight **SYSTEM SETUP** and press **ENTER**.

# SYSTEM SETUP

## CAMERA

Click the **CAMERA** menu.

### CAMERA : CAMERA SETUP

| CAMERA       |      |       |        |       |
|--------------|------|-------|--------|-------|
| CAMERA SETUP |      | TITLE | COVERT | AUDIO |
|              | CH 1 | CH 1  | OFF    | CH 1  |
|              | CH 2 | CH 2  | OFF    | CH 1  |
|              | CH 3 | CH 3  | OFF    | CH 1  |
|              | CH 4 | CH 4  | OFF    | CH 1  |
|              | CH 5 | CH 5  | OFF    | OFF   |
|              | CH 6 | CH 6  | OFF    | OFF   |
|              | CH 7 | CH 7  | OFF    | OFF   |
|              | CH 8 | CH 8  | OFF    | OFF   |

▼ DOWN ▲ UP

To setup the various camera options, highlight CAMERA and press **ENTER**.

**TITLE:** Input the camera title.

**COVERT:** When it is set to ON, the camera image is not displayed in live display but continues to record.

**AUDIO:** Determines the audio recording channel.

### CAMERA : COLOR SETUP

| CAMERA       |      |            |          |      |       |
|--------------|------|------------|----------|------|-------|
| CAMERA SETUP |      | BRIGHTNESS | CONTRAST | TINT | COLOR |
|              | CH 1 | 50         | 50       | 50   | 50    |
|              | CH 2 | 50         | 50       | 50   | 50    |
|              | CH 3 | 50         | 50       | 50   | 50    |
|              | CH 4 | 50         | 50       | 50   | 50    |
|              | CH 5 | 50         | 50       | 50   | 50    |
|              | CH 6 | 50         | 50       | 50   | 50    |
|              | CH 7 | 50         | 50       | 50   | 50    |
|              | CH 8 | 50         | 50       | 50   | 50    |

▼ DOWN ▲ UP

Brightness, contrast, tint and color can be adjusted for each individual channel.

Highlight each channel to modify and press **ENTER**.

# SYSTEM SETUP

|      | BRIGHTNESS | CONTRAST | TINT | COLOR |
|------|------------|----------|------|-------|
| CH 1 | 50         | 50       | 50   | 50    |

Click each value with  button.

The selected channel is displayed in full screen.

BRIGHTNESS, CONTRAST, TINT and COLOR can be changed as necessary.

To modify a different channel, highlight CAMERA and choose the desired channel.

Press **RETURN** when all changes are complete.

## CAMERA : PTZ SETUP

| CAMERA           |      |         |          |           |        |        |
|------------------|------|---------|----------|-----------|--------|--------|
| CAMERA SETUP     |      | ADDRESS | PROTOCOL | BAUD RATE | DETAIL | PRESET |
| COLOR SETUP      | CH 1 | 90      | 50       | 90        | DETAIL | PRESET |
|                  | CH 2 | 50      | 50       | 50        | DETAIL | PRESET |
|                  | CH 3 | 50      | 50       | 50        | DETAIL | PRESET |
| <b>PTZ SETUP</b> | CH 4 | 50      | 50       | 50        | DETAIL | PRESET |
|                  | CH 5 | 50      | 50       | 50        | DETAIL | PRESET |
|                  | CH 6 | 50      | 50       | 50        | DETAIL | PRESET |
| MOTION SENSOR    | CH 7 | 50      | 50       | 50        | DETAIL | PRESET |
|                  | CH 8 | 50      | 50       | 50        | DETAIL | PRESET |

▼ DOWN   ▲ UP

Click the **PTZ SETUP** menu and click each value on the ADDRESS, PROTOCOL and BAUD RATE menu.

Change each value with  button.

**ADDRESS:** The unique ID of the PTZ device.

**PROTOCOL:** The protocol of the PTZ device.

**BAUD RATE:** The baud rate of the PTZ device.

**DETAIL :** Detail setting for PTZ device. (Refer to the next page)

**TOUR :** Tour setting for PTZ device. (Refer to the next page)

# SYSTEM SETUP

## DETAIL

| PTZ Property |         |
|--------------|---------|
| CHANNEL NO.  | 1       |
| PTZ DRIVER   | PELCO-D |
| AUTO FOCUS   | ON      |
| AUTO IRIS    | ON      |
| P/T SPEED    | 5       |
| ZOOM SPEED   | 5       |
| FOCUS SPEED  | 5       |
| IRIS SPEED   | 5       |
| OK           |         |

Click the “DETAIL” button and change the detail value with  button.

Note that some settings, such as AUTO FOCUS, may not be compatible with particular PTZ equipment.

If this is the case, changing the value will have no effect on PTZ control.

## PRESET

| TOUR SETTING |            |            |      |      |            |
|--------------|------------|------------|------|------|------------|
| CH           | 1          |            | MODE |      |            |
| STEP         | PRESET NO. | DWELL TIME | AUTO | STEP | PRESET NO. |
| 1            | 1          | 1          | 9    | NONE | NONE       |
| 2            | 2          | 4          | 10   | NONE | NONE       |
| 3            | 3          | 4          | 11   | NONE | NONE       |
| 4            | 4          | 3          | 12   | NONE | NONE       |
| 5            | NONE       | NONE       | 13   | NONE | NONE       |
| 6            | NONE       | NONE       | 14   | NONE | NONE       |
| 7            | NONE       | NONE       | 15   | NONE | NONE       |
| 8            | NONE       | NONE       | 16   | NONE | NONE       |

Click the “TOUR” button and set the MODE to [AUTO] to use TOUR function.

First of all, please set PRESET number on the live PTZ mode.

Then set the PRESET number 1 to 16 and DWELL Time.

DWELL TIME means staying time on position until move next preset position.

# SYSTEM SETUP

## CAMERA : MOTION SENSOR

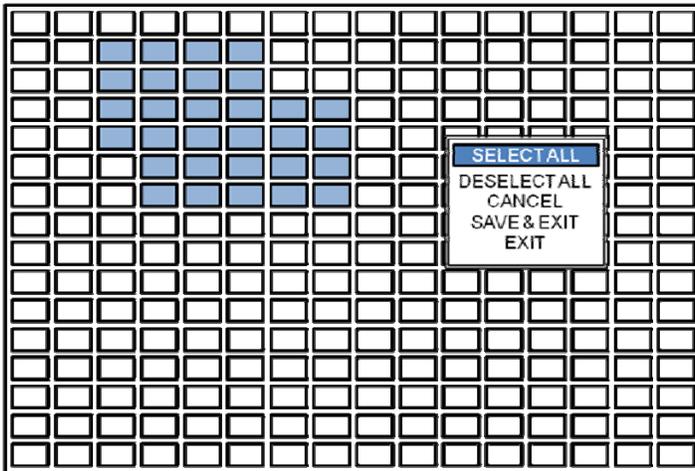
| CAMERA        |      |             |   |            |
|---------------|------|-------------|---|------------|
| CAMERA SETUP  |      |             |   |            |
|               |      | SENSITIVITY |   |            |
| COLOR SETUP   | CH 1 | 10          | ⬇ | AREA SETUP |
|               | CH 2 | 10          | ⬇ | AREA SETUP |
|               | CH 3 | 10          | ⬇ | AREA SETUP |
| PTZ SETUP     | CH 4 | 10          | ⬇ | AREA SETUP |
|               | CH 5 | 10          | ⬇ | AREA SETUP |
|               | CH 6 | 10          | ⬇ | AREA SETUP |
| MOTION SENSOR | CH 7 | 10          | ⬇ | AREA SETUP |
|               | CH 8 | 10          | ⬇ | AREA SETUP |

▼ DOWN ▲ UP

Click the **MOTION SENSOR** menu and click the value on the SENSITIVITY menu.

Change the value with  button.

**SENSITIVITY** : Between 1 (Lowest) and 10 (Highest) and determines the degree of motion required before recording is activated.



Click the **AREA SETUP** button.

**AREA SETUP** : Choosing this option allows the operator to define which areas of the image are monitored for motion detection.

For quick select or deselect the entire grid, click the right mouse button and click the **SELECT ALL** or **DESELECT ALL** menu.

- Red line area: Selected area
- White line area: Non selected area

# SYSTEM SETUP

## DISPLAY

To setup the various display options, highlight DISPLAY and press **ENTER**.

## DISPLAY - OSD

| DISP L A Y |                       |         |    |
|------------|-----------------------|---------|----|
| OSD        | STATUS BAR TIMEOUT    | 10 SEC  | ▲▼ |
|            | CAMERA TITLE          | ON      | ▲▼ |
|            | RECORDING MODE ICON   | ON      | ▲▼ |
| MONITOR    | BORDER                | ON      | ▲▼ |
|            | BORDER COLOR          | GRAY    | ▲▼ |
| SEQUENCE   | MOTION SENCER DISPLAY | ON      | ▲▼ |
|            | MOTION COLOR          | BLUE    | ▲▼ |
| SPOT OUT   | LANGUAGE              | ENGLISH | ▲▼ |

Click the **OSD** menu.

Then click the  button for ON/OFF and change the value.

**STATUS BAR** : Determines the time to turn from the menu of status bar to time display.

**CAMERA TITLE** : Determines whether the camera title is displayed.

**RECORDING MODE ICON** : Determines whether the DVR 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 COLOR** : If the border is ON, the operator can choose the color.

**MOTION SENSOR DISPLAY** : If false motion recording is occurring, the operator can use this feature to determine and rectify the cause in real-time.

**OFF** – normal display mode.

**ON** – areas where motion is detected are highlighted with colored blocks.

**MOTION COLOR**: The color of the blocks displayed when MOTION SENSOR DISPLAY is set to ON.

**LANGUAGE**: Determines the language type.

# SYSTEM SETUP

## DISPLAY : MONITOR

| DISPLAY  |                     |       |  |    |
|----------|---------------------|-------|--|----|
| OSD      | SEQUENCE DWELL      | 6 SEC |  | ▲▼ |
|          | SPOT DWELL          | 6 SEC |  | ▲▼ |
| MONITOR  | DE-INTERLACE MODE   | ON    |  | ▲▼ |
|          | ALARM POP-UP MODE   | OFF   |  | ▲▼ |
| SEQUENCE | ALARM POP-UP DWELL  | 6 SEC |  | ▲▼ |
|          | MOTION POP-UP MODE  | OFF   |  | ▲▼ |
| SPOT OUT | MOTION POP-UP DWELL | 6 SEC |  | ▲▼ |

Click the **MONITOR** menu

Then click the  button for ON/OFF and change the value

**SEQUENCE DWELL** : The time each screen is displayed in a sequence operation.

**SPOT DWELL** : The time each screen is displayed on the spot monitor outputs.

**DE-INTERLACE MODE** : When recording any channels in D1 resolution (704 x 576), this should be set to ON to prevent shudder during playback.

**ALARM POP-UP MODE** : When set to ON, an alarm input will cause the associated channel to display in full screen.

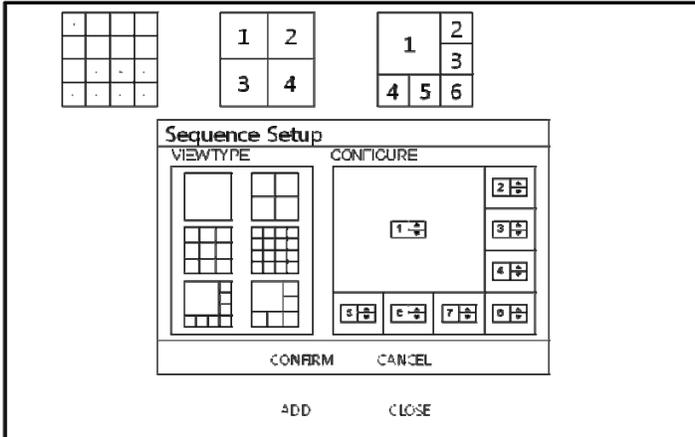
**ALARM POP-UP DWELL** : Determines how long the full screen popup is displayed after an alarm input. If the alarm condition continues, the popup screen is displayed constantly.

**MOTION POP-UP MODE** : When set to ON, motion detection will cause the associated channel to display full screen.

**MOTION POP-UP DWELL** : Determines how long the full screen popup is displayed after motion detection. If motion continues, the popup screen is displayed constantly.



# SYSTEM SETUP

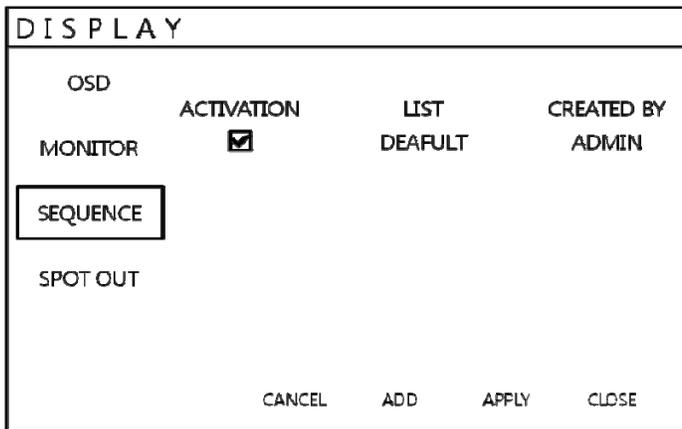


Press **ADD**. Then, "Sequence Setup" menu appears.

Determine the "VIEW TYPE" and assign "CONFIGURE". Then, click **CONFIRM**.

To add an additional mode, click **ADD** continuously. After finishing the setup, press **CLOSE**.

To modify the current one, double click that mode. Then 'Sequence Setup" window will appear again.



The new sequence is now saved and can be started by pressing the **SEQ** button when in live view.

# SYSTEM SETUP

## DISPLAY : SPOT-OUT

| DISPLAY   |                                     |              |            |
|---|-------------------------------------|--------------|------------|
| OSD   | ACTIVATION                          | LIST         | CREATED BY |
| MONITOR   | <input checked="" type="checkbox"/> | SPOT OUT CH1 | ADMIN      |
|   | <input checked="" type="checkbox"/> | SPOT OUT CH1 | ADMIN      |
| SEQUENCE  | <input checked="" type="checkbox"/> | SPOT OUT CH1 | ADMIN      |
|   | <input checked="" type="checkbox"/> | SPOT OUT CH1 | ADMIN      |
| <div style="border: 1px solid black; display: inline-block; padding: 2px;">SPOT OUT</div> |                                     |              |            |
| CANCEL    ADD    APPLY    CLOSE   |                                     |              |            |



Click the **SPOT-OUT** menu and click the camera channel for ON/OFF.

The DVR has **4 SPOT MONITOR OUTPUTS**.

User can assign the SPOT OUT display for each channel.

Double click the spot out channel that requires to be assigned.

| Edit       |                                     |
|------------|-------------------------------------|
| SPOT TITLE | SPOT OUT CH1                        |
| ACTIVATION | ON <input type="button" value="v"/> |
|            | MODIFY                              |
| SAVE       | CANCEL                              |

SPOT TITLE: input the title.

ACTIVATION: Determines ON/OFF.

Press **MODIFY**. (Below is default setup)

To modify the current display, double click the display. Then 'Spot Sequence Setup' window will appear.

How to setup is same as Sequence setup. (User can assign Single and Quad display only)

To add the additional display, press **ADD**.

|     |   |       |   |
|-----|---|-------|---|
| 5   | 6 | 7     | 8 |
| ADD |   | CLOSE |   |

# SYSTEM SETUP

## SOUND

Click the **SOUND** menu.

To setup the various sound options, highlight SOUND and press **ENTER**

### SOUND : AUDIO

| S O U N D |                           |     |      |
|-----------|---------------------------|-----|------|
| AUDIO     | LIVE AUDIO                | ON  | ⬆️⬆️ |
| BUZZER    | DEAFULT AUDIO CHANNEL     | CH1 | ⬆️⬆️ |
|           | NETWORK AUDIO TRANSMISSON | ON  | ⬆️⬆️ |
|           | NETWORK AUDIO RECEIVE     | ON  | ⬆️⬆️ |

Click the **AUDIO** menu and click the ON/OFF menu.  
Then, click the  button for ON/OFF.

**LIVE AUDIO** : When it is set to ON, the selected audio channel can be monitored on the AUDIO OUTPUT.

**AUDIO MONITORING CHANNEL** : Specify which one of the 4 AUDIO INPUTS is routed to the AUDIO OUTPUT.

**NETWORK AUDIO TX** : When set to ON, live and playback audio is transmitted to a remote PC connection.

**NETWORK AUDIO RX** : When set to ON, allows a remote PC connection to send audio back to the DVR.

### SOUND : BUZZER

| S O U N D |        |    |      |
|-----------|--------|----|------|
| AUDIO     | KEYPAD | ON | ⬆️⬆️ |
| BUZZER    |        |    |      |

Click the **BUZZER** menu and click the ON/OFF menu.  
Then, click the  button for ON/OFF.

**KEYPAD**: When it is set to ON, each front panel button press is confirmed by a beep.

# SYSTEM SETUP

## SYSTEM

Click the **SYSTEM** menu.

To setup the various system options, highlight SYSTEM and press **ENTER**.

## DATE / TIME

| SYSTEM     |                           |                     |
|------------|---------------------------|---------------------|
| DATE/TIME  | DATE TIME                 | 2010/07/07 20:00 00 |
| SYSTEM     | DATE FORMAT               | MM/DD               |
| MANAGEMENT | TIME FORMAT               | 24 HOUR             |
| CONTROL    | NETWORK TIME SERVER SETUP | POOLNTP.ORG         |
| DEVICE     |                           | SYNC.               |
|            | TIME ZONE SETUP           | D.S.T               |
|            | Asia/Seoul                | OFF                 |

Click the **DATE / TIME** menu.

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

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

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

**NETWORK TIME SERVER SETUP** : If the DVR is connected to the Internet, the time and date can be accurately set by selecting SYNC and pressing **ENTER**.

**TIME ZONE SETUP** : It should be set according to the region, which the DVR is used in.

**D.S.T.** : When it is set to ON, the DVR will automatically adjust the time by one hour on the relevant date in spring and autumn.

# SYSTEM SETUP

## SYSTEM : SYSTEM MANAGEMENT

| SYSTEM            |                    |              |
|-------------------|--------------------|--------------|
| DATE TIME         | SYSTEM INFORMATION | INFO         |
| SYSTEM MANAGEMENT | SYSTEM NAME        | SYSTEM ID ↕  |
|                   | F/W UPDATE         | UPDATE       |
| CONTROL           | FACTORY DEAFULT    | LOAD         |
| DEVICE            | SYSTEM DATA        | SAVE    LOAD |
|                   | PASSWORD           | OFF    ↕     |

Click the **SYSTEM MANAGEMENT** menu.

**SYSTEM INFORMATION:** User can see the system information as below.

| SYSTEM INFORMATION |                     |
|--------------------|---------------------|
| S/W Version        | 0.0.M.20090324_1800 |
| H/W Version        | HARDWARE ID         |
| Video Signal Type  | NTSC                |
| Disk Capacity      | 244 GB              |
| IP Address         | 192.168.1.1         |
| MAC Address        | 000000000000        |
| DDNS Domain Name   | DVRLINK.NET         |
| RTSP Port          | 554                 |
| Web Server Port    | 8080                |

**F/W version :** Shows the firmware version of the DVR.

**H/W version :** Shows the hardware version of the DVR.

**VIDEO SIGNAL TYPE :** The DVR automatically switches between PAL and NTSC depending on the channel 1 input signal at power on.

**DISK CAPACITY :** The first value shows the amount of hard drive capacity used by recorded footage, the second value shows the total hard drive capacity installed.

**IP ADDRESS :** Shows either the manual IP address entered in NETWORK setup or the IP address assigned by a DHCP server if enabled.

**MAC ADDRESS :** Shows the MAC (Media Access Control) address of the DVR.

It is unique – no other network device has this MAC address.

**DDNS DOMAIN NAME:** If DDNS is enabled, the host DDNS server is specified here.

**RTSP PORT :** The port number that the DVR uses to support remote connection from the client software.

**WEB SERVER PORT :** The port number that the DVR uses to support remote connection from Internet Explorer or other web browsers.

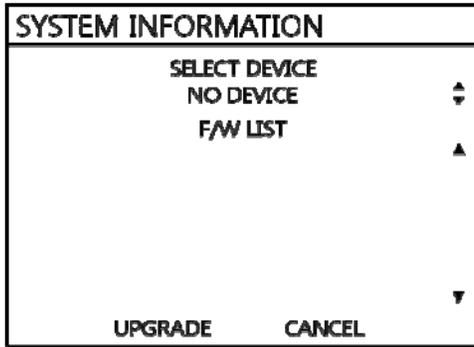
# SYSTEM SETUP

**SYSTEM NAME** : It is used so that notification emails can be identified.

**F/W UPDATE** : 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.

After inserting the F/W in USB or CD/DVD, Press **UPDATE**. Then , below menu will appear.



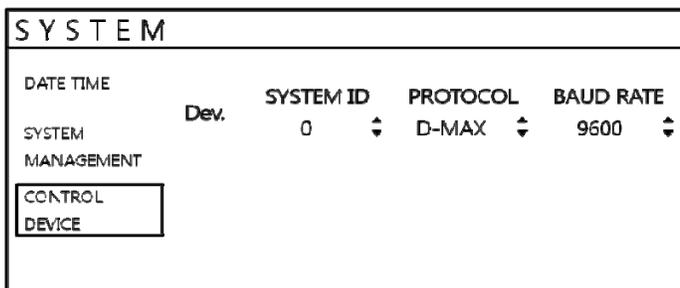
After selecting the F/W from F/W list, press **UPGRADE**. Then, F/W upgrade is started.

**FACTORY DEFAULT** : If settings have been changed , which cause 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 DVR if multiple units need to be installed with the same settings. All information is saved apart from network settings and system name.

**PASSWORD**: Determines the PASSWORD ON/OFF to enter specific menu.

## SYSTEM : CONTROL DEVICE



This will allow up to 254 DVRs to be controlled from the same keyboard.

**SYSTEM ID** : If more than one DVR is connected on the same RS485 bus, each one must have a unique ID.

**Note** : If using more than one DVR on stack, each DVR must have a unique ID for control by remote controller.

**PROTOCOL** : Must be set by Control Device.

**BAUD RATE** : Must be set to match the baud rate of the PTZ controller.

# SYSTEM SETUP

## SYSTEM: POS SETUP

| SYSTEM  |            |         |   |      |         |
|---|------------|---------|---|------|---------|
| DATE/TIME   | POS ENABLE |         |   | ON   | ⬆       |
|   | BAUDRATE   |         |   | 9600 |         |
| SYSTEM  | PROTOCOL   |         |   | AVE  | ⬆       |
| MANAGEMENT  | CH         | ADDRESS |   | CH   | ADDRESS |
|   | 1          | 1       | ⬆ | 8    | 8       |
| CONTROL   | 2          | 2       | ⬆ | 10   | 10      |
| DEVICE  | 3          | 3       | ⬆ | 11   | 11      |
|   | 4          | 4       | ⬆ | 12   | 12      |
|   | 5          | 5       | ⬆ | 13   | 13      |
|   | 6          | 6       | ⬆ | 14   | 14      |
|   | 7          | 7       | ⬆ | 15   | 15      |
|   | 8          | 8       | ⬆ | 16   | 16      |
| <span>CANCEL</span> <span>APPLY</span> <span>CLOSE</span> |            |         |   |      |         |

**POS ENABLE:** This determine POS enable / disable.

**BAUDRATE:** Must be set to match the baud rate of the POS device.

**PROTOCOL:** Must be set by POS device..

**ADDRESS:** This determine POS device address of each channel.

Caution) When POS function is activated, user can't use Live LOG function and Control device..

# SYSTEM SETUP

## USER

Click the **USER** menu.

To setup the various system options, highlight USER and press **ENTER**.

## USER: USER MANAGEMENT

| USER               |         |       |        |                                     |
|--------------------|---------|-------|--------|-------------------------------------|
| USER<br>MANAGEMENT | USER ID | GROUP | E-MAIL | <input type="checkbox"/>            |
| USER<br>AUTHORITY  | ADMIN   | ADMIN |        | <input checked="" type="checkbox"/> |
| LOG OUT            |         |       |        |                                     |

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

As well as the ability to add new users, existing user details can be modified.

To modify user details, highlight the user with the green cursor and press **ENTER**.

The maximum number of users that can be created is 8.

| Edit         |                             |
|--------------|-----------------------------|
| USER ID      | ADMIN                       |
| PASSWORD     | ****                        |
| GROUP        | ADMIN                       |
| E-MAIL       |                             |
| E-MAIL NOTI. | ON <input type="checkbox"/> |
| SAVE         | CANCEL                      |

For editing, double click on the each tab.

After changing, click **OK**.

**USER ID** : Edit the user ID using the virtual keyboard. (Max. 10 characters)

**PASSWORD** : Change the password using the virtual keyboard. (Max. 4 Characters)

**GROUP** : Users can be assigned to one of three groups - ADMIN, MANAGER or USER.

**E-MAIL** : Enter the user's email address if email notification is required. (Max. 64 Characters)

**E-MAIL NOTIFICATION** : Enable or disable email notifications for the specified user.

# SYSTEM SETUP

| Add         |   |
|-------------|---|
| USER ID     | ADMIN   |
| PASSWORD    | ****  |
| GROUP       | ADMIN  |
| E-MAIL      |   |
| E-MAIL NOTI | ON     |
| SAVE        | CANCEL  |

For ADD, double click on the each tap after clicking **ADD**.  
After changing, click **OK**.

**USER ID** : Edit the user ID using the virtual keyboard.

**PASSWORD** : Change the password using the virtual keyboard.

**GROUP** : Users can be assigned to one of three groups - ADMIN, MANAGER or USER.

**E-MAIL** : Enter the user's email address if email notification is required.

**E-MAIL NOTIFICATION** : Enable or disable email notifications for the specified user.

## USER: USER AUTHORITY

| USER       |              |                          |                          |
|------------|--------------|--------------------------|--------------------------|
| USER       |              | MANAGER                  | USER                     |
| MANAGEMENT |              |                          |                          |
| USER       | SETUP        | <input type="checkbox"/> | <input type="checkbox"/> |
| AUTHORITY  | PTZ          | <input type="checkbox"/> | <input type="checkbox"/> |
|            | SEARCH       | <input type="checkbox"/> | <input type="checkbox"/> |
| LOG OUT    | ARCHIVING    | <input type="checkbox"/> | <input type="checkbox"/> |
|            | REMOTE AGENT | <input type="checkbox"/> | <input type="checkbox"/> |

User can give the authority to the MANAGER and USER.

To select authority, click the **APPLY** button after selecting each item.

**Please note:** Any user can be deleted except the default ADMIN user.

## USER: LOG OUT

| USER       |             |       |   |
|------------|-------------|-------|---|
| USER       |             |       |   |
| MANAGEMENT |             |       |   |
| USER       | AUTO LOGOUT | OFF   |  |
| AUTORITY   | DURATION    | 1 MIN |  |
| LOG OUT    |             |       |   |

**AUTO LOGOUT:** Determines the AUTO LOGOUT ON/OFF.

**DURATION:** In case of selecting AUTO LOGOUT ON, determines the duration.

# SYSTEM SETUP

## NETWORK

Click the **NETWORK** menu and determine each value.

### NETWORK: IP SETUP

| NETWORK         |                          |                          |                                    |
|-----------------|--------------------------|--------------------------|------------------------------------|
| <b>IP SETUP</b> | <b>DHCP</b>              | <input type="checkbox"/> |                                    |
|                 | <b>WEB SERVICE</b>       | <input type="checkbox"/> |                                    |
| <b>DDNS</b>     | <b>IP ADDRESS</b>        |                          | 0 . 0 . 0 . 0                      |
|                 | <b>GATEWAY</b>           |                          | 0 . 0 . 0 . 0                      |
|                 | <b>SUBNET MASK</b>       |                          | 0 . 0 . 0 . 0                      |
| <b>E-MAIL</b>   | <b>1ST DNS SERVER</b>    |                          | 0 . 0 . 0 . 0                      |
|                 | <b>2ND DNS SERVER</b>    |                          | 0 . 0 . 0 . 0                      |
|                 | <b>RTSP SERVICE PORT</b> | <b>AUTO PORT</b>         | <b>DELETEPORT</b> <b>PORT TEST</b> |
|                 | <b>WEB SERVICE PORT</b>  | <b>AUTO PORT</b>         | <b>DELETEPORT</b>                  |
|                 | <b>ALIAS</b>             |                          |                                    |
|                 | <b>MAX TX SPEED</b>      | 8192KBPS                 | ⬆                                  |
|                 |                          | <b>CANCEL</b>            | <b>APPLY</b> <b>CLOSE</b>          |

Click the **IP SETUP** menu.

**DHCP** : When enabled, the DVR will obtain an IP address automatically if it is connected to a DHCP server or router.

**WEB SERVICE** : When enabled, it allows remote connections using Internet Explorer or other web browsers.

**IP ADDRESS** : If DHCP is not being used, the IP address can be manually set.

**GATEWAY** : If DHCP is not being used, the gateway IP address can be manually set.

**SUBNET MASK**: If DHCP is not being used, the subnet mask can be manually set.

**1ST DNS SERVER** : If DHCP is not being used, the first DNS server can be manually set.

**2ND DNS SERVER** : If DHCP is not being used, the second DNS server can be manually set.

**RTSP SERVICE PORT** : If connected Router support UP&P (Universal plug and play) function, when you click the **AUTO PORT**, the port forwarding is automatically setup. And also can delete the port & test the port whether working or not.

**WEB SERVER PORT** : : If connected Router support UPNP (Universal plug and play) function, when you click the **AUTO PORT**, the port forwarding is automatically setup. And also can delete the port.

The port number that the DVR uses to support remote connection from Internet Explorer or other web browsers.

**ALIAS** : When you enter the DDNS HOST NAME in DDNS setup (Next page), you can see the information like below  
ex) 1234.dvrlink.net:8080

**MAX TX SPEED** : Specifies the maximum bandwidth that the DVR can use during a remote connection.

# SYSTEM SETUP

## NETWORK: DDNS

| NETWORK                       |  |
|-------------------------------|--|
| IP SETUP                      |  |
| <input type="checkbox"/> DDNS | DDNS ON <input type="checkbox"/>                 |
|                               | DDNS SERVER DVRLINK.NET <input type="checkbox"/> |
|                               | TEST   |
| E-MAIL                        | DDNS HOST NAME                                   |
|                               | CHECK  |

**DDNS** : When enabled, the DVR can be accessed through a Dynamic DNS server.  
Commonly used if a broadband connection does not have a static IP address.

### CAUTION

To use DDNS function, User have to port forwarding.

- a. Default WEB SERVICE PORT : 8080
- b. Default RTSP SERVICE PORT : 554

Default DDNS HOST NAME is Mac Address so user can connect by two different way.

(Mac address / Own host name)

- a. 00115ff00213.dvrlink.net
- b. 1234.dvrlink.net → User can enter any DDNS Host name.

## NETWORK: E-MAIL

| NETWORK                         |                                       |
|---------------------------------|---------------------------------------|
| IP SETUP                        |                                       |
|                                 | SERVER                                |
| DDNS                            | PORT 25                               |
|                                 | SECURITY OFF <input type="checkbox"/> |
| <input type="checkbox"/> E-MAIL | USER                                  |
|                                 | PASSWORD                              |
|                                 | FROM                                  |
|                                 | TEST E-MAIL                           |
|                                 | TEST                                  |

Click the **E-MAIL** menu.

**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 DVR in email messages.

**PASSWORD** : If SECURITY is set to ON, enter the password here.

**FROM**: Input the E-mail address or any text. It is only used for E-mail test (E-mail sender)

**TEST E-MAIL**: User can test after inputting E-mail address to receiving test E-mail

# SYSTEM SETUP

## EVENT / SENSOR

Click the **EVENT / SENSOR** menu.

To setup the various event handling options, highlight EVENT/SENSOR and press **ENTER**.

## EVENT / SENSOR: HDD EVENT

| EVENT / SENSOR |                 |        |
|----------------|-----------------|--------|
| HDD            |                 |        |
| EVENT          | SMART ALARM     | ON     |
| ALARM          | CHECK INTERVAL  | 1 HOUR |
| INPUT          | DISK FULL EVENT | OFF    |
| ALARM          |                 |        |
| OUTPUT         |                 |        |
| BUZZER         |                 |        |
| CUT            |                 |        |
| BUZZER         |                 |        |
| CUT            |                 |        |

Click the **HDD EVENT** menu.

The DVR can monitor the hard drives and detect problems that may be developing.

**SMART ALARM** : Enables SMART disk monitoring.

**CHECK INTERVAL** : Can be adjusted as desired.

**DISK FULL EVENT**: Determines ON/OFF.

## EVENT / SENSOR : ALARM INPUT

| EVENT / SENSOR |      |           |       |         |
|----------------|------|-----------|-------|---------|
| HDD            |      | OPERATION | TYPE  | TEXT    |
| EVENT          | CH 1 | ENABLE    | N / O | ALARM 1 |
| ALARM          | CH 2 | ENABLE    | N / O | ALARM 2 |
| INPUT          | CH 3 | ENABLE    | N / O | ALARM 3 |
| ALARM          | CH 4 | ENABLE    | N / O | ALARM 4 |
| OUTPUT         | CH 5 | ENABLE    | N / O | ALARM 5 |
| BUZZER         | CH 6 | ENABLE    | N / O | ALARM 6 |
| CUT            | CH 7 | ENABLE    | N / O | ALARM 7 |
| E-MAIL         | CH 8 | ENABLE    | N / O | ALARM 8 |
| NOTIFICATION   |      |           |       |         |

Click the **ALARM INPUT** menu and click the OPERATION and TYPE value.

Determines the behavior of each of the 8/16 alarm inputs.

**OPERATION** : Alarm inputs can be enabled or disabled.

**TYPE** : Alarm inputs can be set as normally open or closed.

# SYSTEM SETUP

## EVENT / SENSOR : ALARM OUTPUT

| EVENT / SENSOR |           |                          |                          |                          |
|----------------|-----------|--------------------------|--------------------------|--------------------------|
| HDD            | ALARM OUT | I                        | OPERATION                | ENABLE                   |
| EVENT          | MODE      | LATCHED                  | DURATION                 | 5 SEC                    |
| ALARM          | TYPE      | LOW                      | HDD EVENT                | OFF                      |
| INPUT          |           | ALARM                    | VIDEO LOSS               | MOTION                   |
| ALARM          | CH 1      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| OUTPUT         | CH 2      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| BUFFER         | CH 3      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| OUT            | CH 4      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E-MAIL         | CH 5      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| NOTIFICATION   | CH 6      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                | CH 7      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                | CH 8      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ▼ DOWN ▲ UP    |           |                          |                          |                          |

Click the **ALARM OUTPUT** menu and click each value.

Determines the behavior and actions that will trigger each of the 8/16 alarm outputs.

### Behavior settings

**ALARM OUT** : Choose which alarm output to configure.

**OPERATION** : The selected alarm output can be enabled or disabled.

**MODE** : Can be either TRANSPARENT (the output is active only when the trigger criteria is present) or LATCHED (the output is active for a set period of time after a trigger).

**DURATION** : In LATCHED mode, the time that the alarm output remains active after it has been triggered.

**TYPE** : Can be set to high (0V to +5V when activated) or low (+5V to 0V when activated).

**HDD EVENT** : Determines whether a hard drive event triggers the alarm output.

### Action settings

**ALARM** : Determines whether alarm inputs will trigger the alarm output.

**VIDEO LOSS** : Determines whether video loss on any of the selected channels will trigger the alarm output.

**MOTION** : Determines whether motion detection on any of the selected channels will trigger the alarm output.

**Remember to select APPLY and press ENTER to save all settings before exiting these menus**

# SYSTEM SETUP

## EVENT / SENSOR : BUZZER OUT

| EVENT / SENSOR |           |                          |                          |                          |
|----------------|-----------|--------------------------|--------------------------|--------------------------|
| HDD            | OPERATION | ENABLE                   | HDD EVENT                | OFF                      |
| EVENT          | MODE      | LATCHED                  | DURATION                 | 5 SEC                    |
| ALARM          |           |                          |                          |                          |
| INPUT          |           | ALARM                    | VIDEO LOSS               | MOTION                   |
| ALARM          | CH 1      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| OUTPUT         | CH 2      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>BUZZER</b>  | CH 3      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>OUT</b>     | CH 4      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E-MAIL         | CH 5      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| NOTIFICATION   | CH 6      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                | CH 7      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                | CH 8      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                |           |                          | ▼ DOWN                   | ▲ UP                     |

Click the **BUZZER OUTPUT** menu and click each value.

Determines the behavior and actions that will trigger the internal buzzer.

### **Behavior settings**

**OPERATION** : The internal buzzer can be enabled or disabled.

**HDD EVENT** : Determines whether a hard drive event sounds the buzzer.

**MODE** : Can be either TRANSPARENT (the buzzer sounds only when the trigger criteria is present) or LATCHED (the buzzer sounds for a set period of time after the trigger).

**DURATION** : In LATCHED mode, the time that the buzzer sounds after it has been triggered.

### **Action settings**

**ALARM** : Determines whether alarm inputs will sound the buzzer.

**VIDEO LOSS** : Determines whether video loss on any of the selected channels will sound the buzzer.

**MOTION** : Determines whether motion detection on any of the selected channels will sound the buzzer.

Remember to select **APPLY** and press **ENTER** to save all settings before exiting these menus

# SYSTEM SETUP

## EVENT / SENSOR : EMAIL NOTIFICATION

| EVENT / SENSOR |               |                          |                          |                          |        |
|----------------|---------------|--------------------------|--------------------------|--------------------------|--------|
| HDD            | NOTIFICATION  | ON                       | SETUP CHANGE             | ON                       |        |
| EVENT          | HDD EVENT     | ON                       | BOOTING EVENT            | ON                       |        |
| ALARM          | SNAPSHOT NOTI | 1                        |                          |                          |        |
| INPUT          |               |                          | ALARM                    | VIDEO LOSS               | MOTION |
| ALARM          | CH 1          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |        |
| OUTPUT         | CH 2          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |        |
| BUFFER         | CH 3          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |        |
| OUT            | CH 4          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |        |
| E-MAIL         | CH 5          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |        |
| NOTIFICATION   | CH 6          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |        |
|                | CH 7          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |        |
|                | CH 8          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |        |

▼ DOWN ▲ UP

Click the **EMAIL NOTIFICATION** menu and click each value.

Determines the behavior and actions that will send an email to a remote user.

### Behavior settings

**NOTIFICATION** : Email notification can be turned ON or OFF.

**SETUP CHANGE**: Determines whether a setup change sends an email.

**HDD EVENT** : Determines whether a hard drive event sends an email.

**BOOTING EVENT**: Determines whether a booting event sends an email.

**SNAPSHOT NOTIFICATION** : Determines whether a image(JPEG) of selected channel sends an email

### Action settings

**ALARM** : Determines whether alarm inputs will send an email.

**VIDEO LOSS** : Determines whether video loss on any of the selected channels will send an email.

**MOTION** : Determines whether motion detection on any of the selected channels will send an email.

**FREQUENCY**: E-mail sending period (Max. 60 MIN)

Email settings must also be configured in MAIL and USER MANAGEMENT from USER MANAGEMENT menu.

# SYSTEM SETUP

## DISK MANAGE

| DISK MANAGEMENT                 |                   |       |   |
|---------------------------------|-------------------|-------|---|
| <b>DISK<br/>MANAGEMENT</b>      | RECORD TIME LIMIT | OFF   | ↕ |
| <b>MIRRORING<br/>MANAGEMENT</b> | OVERWRITE         | ON    | ↕ |
|                                 | FORMAT            | START |   |

Click the **DISK MANAGEMENT** menu.

To manage the internal hard drives, highlight DISK MANAGE and press **ENTER**.

**RECORD TIME LIMIT** : In certain circumstances, it may be necessary to limit the amount of footage stored on the DVR (to comply with data protection laws for example).

Recording can be limited to 12 hours, 1 day, 2 days, 3 days, 1 week or one month.

Once the DVR has this amount of footage stored, it will start to overwrite the earliest recorded footage.

**OVERWRITE** : When set to ON, the DVR will start overwriting the earliest recorded footage, once the hard drive becomes full. In this case, the percentage of hard drive used shown in live display will always be 99%. When it is set to OFF, the DVR will stop recording when the disk becomes full.

**FORMAT** : If necessary, all footage can be erased from the DVR using this option.

**Please note: When a RECORD TIME LIMIT is set, the OVERWRITE option cannot be changed**

# SYSTEM SETUP

## DISK MIRRORING

You can set RAID-1(mirroring) on system.

The system must be installed the HDD as pair.

| DISK MANAGEMENT      |                  |          |                          |       |         |
|----------------------|------------------|----------|--------------------------|-------|---------|
| DISK MANAGEMENT      | DISK INFORMATION |          |                          |       |         |
| MIRRORING MANAGEMENT | MODEL            | CAPACITY | MIRRORING                | STATE | REBUILD |
|                      | S*31608155V      | 1.79 GB  | <input type="checkbox"/> | -     | -       |
|                      | S*31608155V      | 1.79 GB  | <input type="checkbox"/> | -     | -       |
|                      | S*31608155V      | 1.79 GB  | <input type="checkbox"/> | -     | -       |
|                      | S*31608155V      | 1.79 GB  | <input type="checkbox"/> | -     | -       |

### How to set

#### 1. Setup on DVR.

##### 1) Assemble HDD on DVR.

(First check the foot prints of HDD on M/B,

HDD must be connected from SATA1, SATA2, SAT3 and SATA4 as sequence)

and also paired SATA1~2 and SATA3~4)

\*HDDs that will be used on mirroring are recommended to use same brand and capacity.

##### 2) Boot up the system and format all HDD.

##### 3) ENTER TO "SYSTEM SETUP"

| SETUP        |
|--------------|
| SYSTEM SETUP |
| RECORD SETUP |
| EXIT         |

##### 4) Go to "DISKMANAGEMENT" menu

| MAIN            |
|-----------------|
| CAMERA          |
| DISPLAY         |
| SOUND           |
| SYSTEM          |
| USER            |
| NETWORK         |
| EVENT/SENSOR    |
| DISK MANAGEMENT |

##### 5) Select "MIRRORING MANAGEMENT" item.

| DISK MANAGEMENT             |                  |          |                          |       |         |
|-----------------------------|------------------|----------|--------------------------|-------|---------|
| DISK MANAGEMENT             | DISK INFORMATION |          |                          |       |         |
|                             | MODEL            | CAPACITY | MIRRORING                | STATE | REBUILD |
| <b>MIRRORING MANAGEMENT</b> | ST31608155V      | 1.43 GB  | <input type="checkbox"/> | -     | -       |
|                             | ST31608155V      | 1.43 GB  | <input type="checkbox"/> | -     | -       |
|                             | ST31608155V      | 1.43 GB  | <input type="checkbox"/> | -     | -       |
|                             | ST31608155V      | 1.43 GB  | <input type="checkbox"/> | -     | -       |

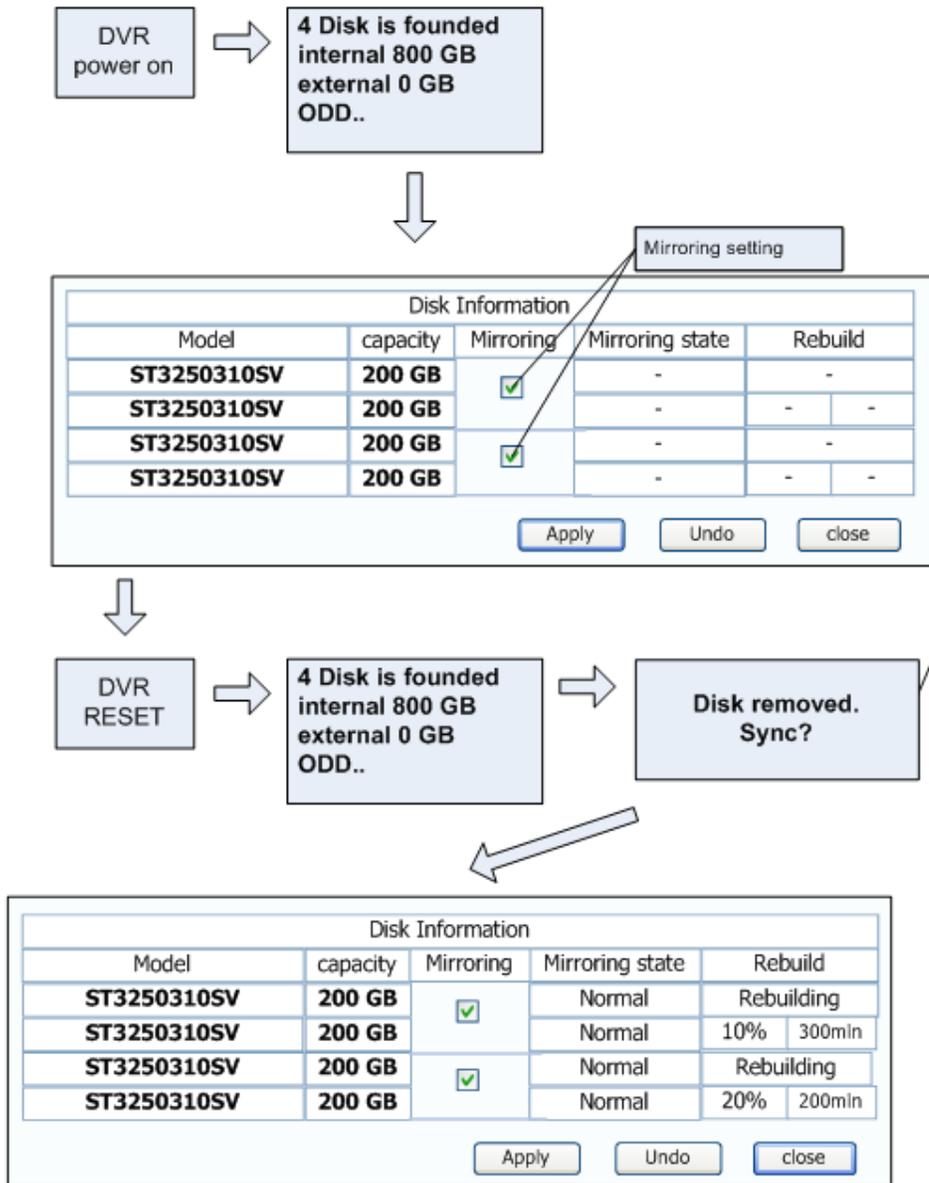
- 6) Check the MIRRORING option at the one of pair of HDD that you want to use as mirroring.  
(Below example is for mirroring on SATA1 and SATA2)

| DISK MANAGEMENT             |                  |          |                                     |       |         |
|-----------------------------|------------------|----------|-------------------------------------|-------|---------|
| DISK MANAGEMENT             | DISK INFORMATION |          |                                     |       |         |
|                             | MODEL            | CAPACITY | MIRRORING                           | STATE | REBUILD |
| <b>MIRRORING MANAGEMENT</b> | ST31608155V      | 1.43 GB  | <input checked="" type="checkbox"/> | -     | -       |
|                             | ST31608155V      | 1.43 GB  | <input type="checkbox"/>            | -     | -       |
|                             | ST31608155V      | 1.43 GB  | <input type="checkbox"/>            | -     | -       |
|                             | ST31608155V      | 1.43 GB  | <input type="checkbox"/>            | -     | -       |

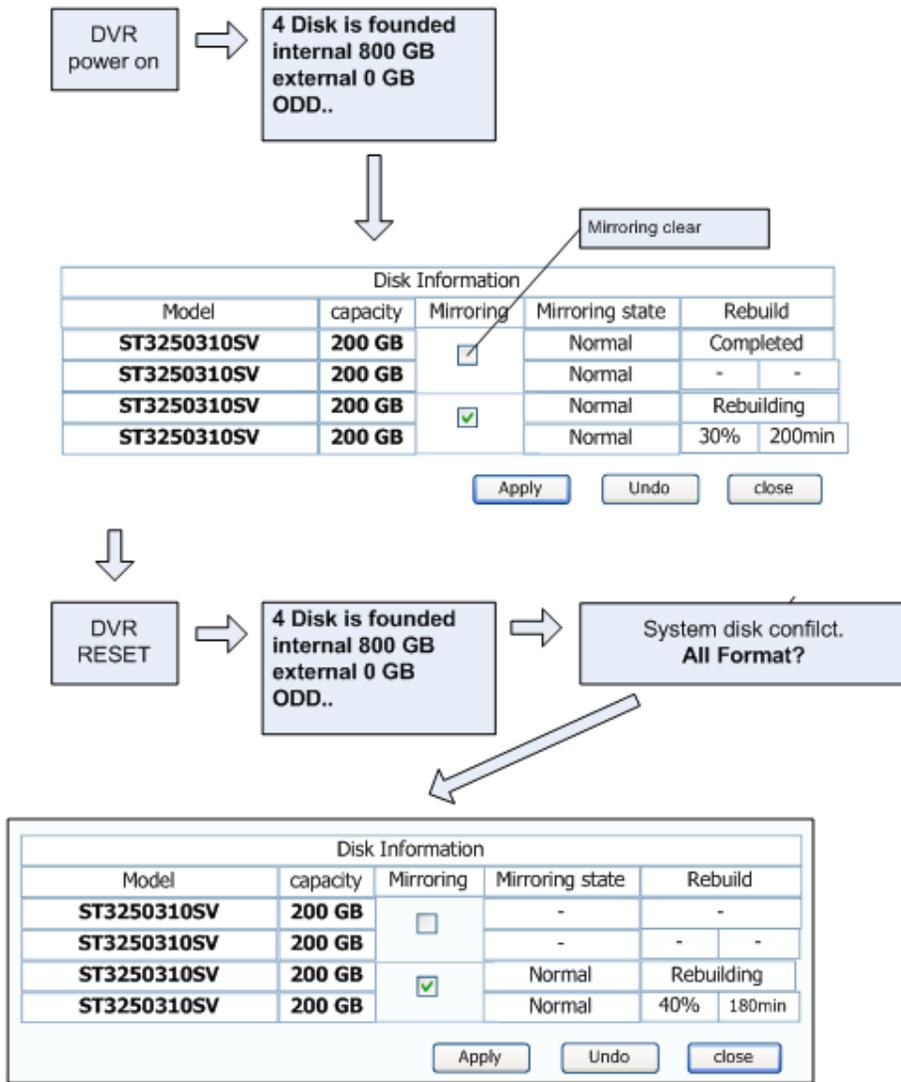
- 7) After select option for Mirroring then press [APPLY] button.  
8) System will reboot itself to build mirroring function on SATA1~2.

# Case by Case at Mirroring on ITX DVR

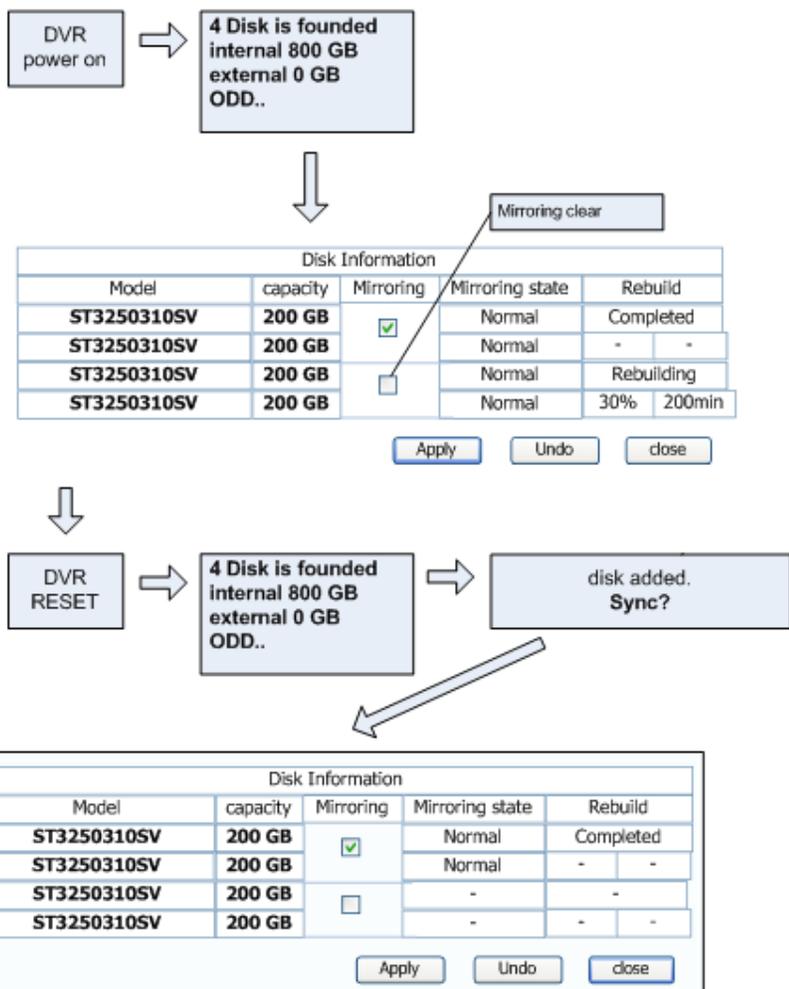
## 1. Mirroring at 4 HDD.



2. Release Mirroring option at fair#1 ( SATA1 & 2)



3. Release mirroring option on Pair#2 ( SATA3~4)

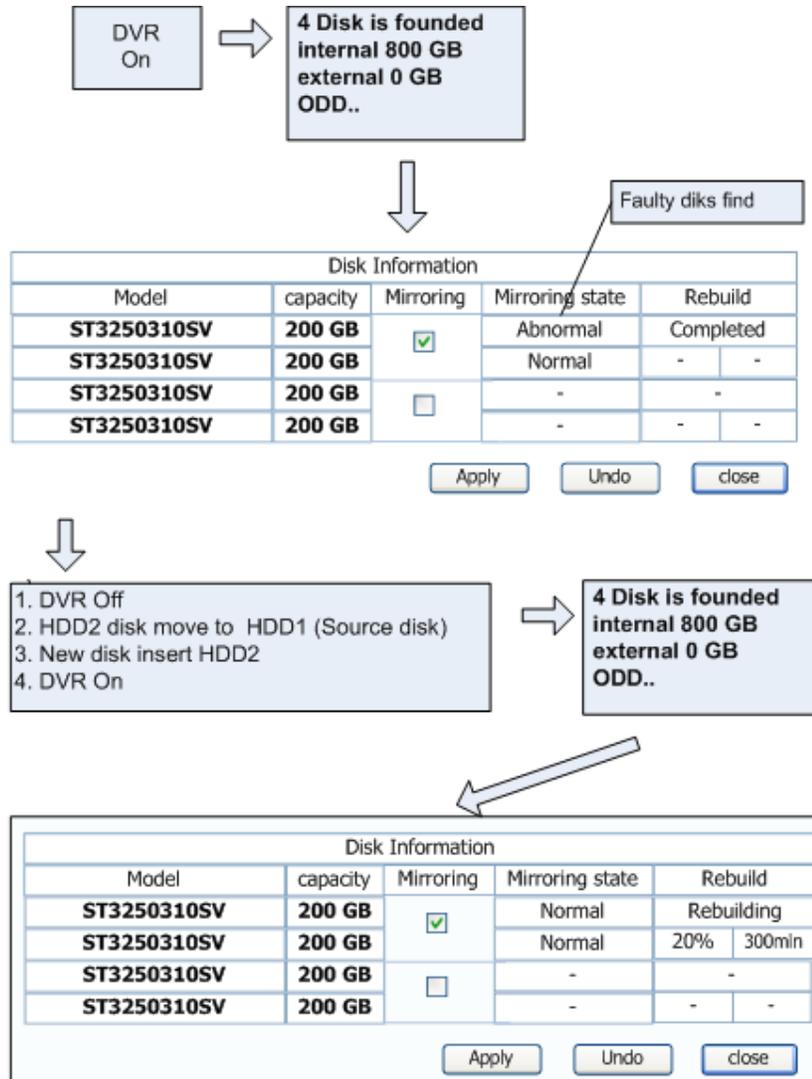


4. Replacing HDD during mirroring.

The HDD on SATA1 and SATA3 is the master HDD for mirroring.

When the HDD on SATA1&3 has faulty, the HDD from SATA1 & 3 must be altered from other HDD.

These port uses for MASTER port during Mirroring.

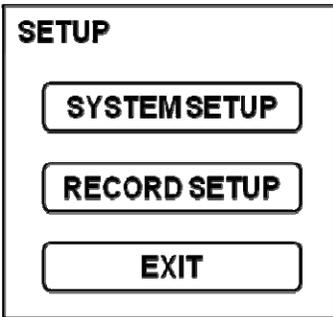


# RECORD MENU

## RECORD MENU



Click the "MENU".



Input the password . Then main menu will appear.  
Click the **RECORD** menu.

To setup the recording behavior of the DVR, highlight RECORD MENU and press **ENTER**.

## RECORD : RECORDING OPERATIONS



Click the **RECORDING OPERATION** menu and click each value.

Then, click the value with  button to change.

**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 DVR is not in continuous recording mode, this setting determines the amount of time that is always recorded before an event occurs. (motion detection, alarm input, etc).

**POST EVENT RECORDING TIME** : When the DVR is not in continuous recording mode, this setting determines the amount of time that is always recorded after an event occurs. (motion detection, alarm input, etc).

**DUAL STREAM** : User can set 2<sup>nd</sup> data stream for network data transmit.

When user selects 'Manual' for quality control, user can set quality for 2<sup>nd</sup> stream also.

# RECORD MENU

## RECORD : CONTINUOUS/MOTION

| RECORDING                            |       |                  |            |         |     |    |
|--------------------------------------|-------|------------------|------------|---------|-----|----|
| RECORDING OPERATIONS                 | SUN   | SIZE/FPS/QUALITY | ACTIVATION |         |     |    |
|                                      | 0     |                  | 6          | 12      | 18  | 24 |
|                                      | TIME  |                  |            |         |     |    |
| <b>CONTINUOUS / MOTION RECORDING</b> | CH 1  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 2  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 3  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 4  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 5  | CIF              | 30         | HIGHEST | OFF |    |
| ALARM RECORDING                      | CH 6  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 7  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 8  | CIF              | 30         | HIGHEST | OFF |    |
| PANIC RECORDING                      | CH 9  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 10 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 11 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 12 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 13 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 14 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 15 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 16 | CIF              | 30         | HIGHEST | OFF |    |
| CANCEL    APPLY    CLOSE             |       |                  |            |         |     |    |

Click the **CONTINUOUS/MOTION SETUP** menu.

This setup screen allows the operator to configure scheduled and motion detection recording.

There are 2 sections:

**SIZE/FPS/QUALITY** : Recording settings for each channel can be defined across a 24 hour period, in blocks (for example between 09:00 and 18:00) or for each individual hour.

Note that when SCHEDULE MODE is set to WEEKLY, each day of the week can also be selected.

**A CTIVATION** : This section determines at what times the DVR will record and whether it is in continuous recording or motion detection.

## SIZE/FPS/QUALITY

| RECORDING                            |       |                  |            |         |     |    |
|--------------------------------------|-------|------------------|------------|---------|-----|----|
| RECORDING OPERATIONS                 | SUN   | SIZE/FPS/QUALITY | ACTIVATION |         |     |    |
|                                      | 0     |                  | 6          | 12      | 18  | 24 |
|                                      | TIME  |                  |            |         |     |    |
| <b>CONTINUOUS / MOTION RECORDING</b> | CH 1  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 2  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 3  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 4  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 5  | CIF              | 30         | HIGHEST | OFF |    |
| ALARM RECORDING                      | CH 6  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 7  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 8  | CIF              | 30         | HIGHEST | OFF |    |
| PANIC RECORDING                      | CH 9  | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 10 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 11 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 12 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 13 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 14 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 15 | CIF              | 30         | HIGHEST | OFF |    |
|                                      | CH 16 | CIF              | 30         | HIGHEST | OFF |    |
| CANCEL    APPLY    CLOSE             |       |                  |            |         |     |    |

Click the **SIZE/FPS/QUALITY** menu.

To change the SIZE/FPS/QUALITY, highlight CONTINUOUS/MOTION SETUP and press **ENTER**.

Ensure the SIZE/FPS/QUALITY is highlighted in yellow and press **ENTER** again.

The 24 hour time bar is highlighted in green.

# RECORD MENU

**RECORDING**

RECORDING SIZE/FPS/QUALITY ACTIVATION  
 OPERATIONS SUN 0 6 12 18 24  
 TIME [Bar]

|                                     | CH    | SIZE | FPS | QUALITY | AUDIO |
|-------------------------------------|-------|------|-----|---------|-------|
| CONTINUOUS /<br>MOTION<br>RECORDING | CH 1  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 2  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 3  | CIF  | 30  | HIGHEST | OFF   |
| ALARM<br>RECORDING                  | CH 4  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 5  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 6  | CIF  | 30  | HIGHEST | OFF   |
| PANIC<br>RECORDING                  | CH 7  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 8  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 9  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 10 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 11 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 12 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 13 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 14 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 15 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 16 | CIF  | 30  | HIGHEST | OFF   |

CANCEL APPLY CLOSE

Click the **TIME BAR** that user wants to have the values changed.

Press ENTER to display the green cursor.

The green cursor shown represents one hour.

The table below the time bar shows the recording settings for this time period.

**RECORDING**

RECORDING SIZE/FPS/QUALITY ACTIVATION  
 OPERATIONS SUN 0 6 12 18 24  
 TIME [Bar]

|                                     | CH    | SIZE | FPS | QUALITY | AUDIO |
|-------------------------------------|-------|------|-----|---------|-------|
| CONTINUOUS /<br>MOTION<br>RECORDING | CH 1  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 2  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 3  | CIF  | 30  | HIGHEST | OFF   |
| ALARM<br>RECORDING                  | CH 4  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 5  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 6  | CIF  | 30  | HIGHEST | OFF   |
| PANIC<br>RECORDING                  | CH 7  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 8  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 9  | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 10 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 11 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 12 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 13 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 14 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 15 | CIF  | 30  | HIGHEST | OFF   |
|                                     | CH 16 | CIF  | 30  | HIGHEST | OFF   |

CANCEL APPLY CLOSE

Drag the time that user wants to have the values changed.

Example: To change the recording settings between 09:00 and 18:00.

Use the CURSOR KEYS to move the green cursor to the 09:00 position and press ENTER.

The cursor changes to orange to show the start position.

Use the CURSOR KEYS to stretch the orange cursor across to the 18:00 position.

# RECORD MENU

|       | RESOLUTION | IMAGE R. | QUALITY | AUDIO | 2 <sup>nd</sup> FPS | 2 <sup>nd</sup> QUALITY |  |           |       |
|-------|------------|----------|---------|-------|---------------------|-------------------------|--|-----------|-------|
| CH 1  | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 2  | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 3  | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 4  | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 5  | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 6  | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 7  | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 8  | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 9  | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 10 | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 11 | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 12 | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 13 | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  |           |       |
| CH 14 | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  | AVAIL FPS | CIF 0 |
| CH 15 | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  | 2CIF      | 0     |
| CH 16 | CIF        | 13       | HIGHEST | OFF   | 13                  | HIGHEST                 |  | D1        | 0     |
|       |            |          |         | OK    |                     | CANCEL                  |  |           |       |

Click the SIZE, FPS, QUALITY and AUDIO value.  
Then click the value with  button to change.

Press **ENTER**. Recording settings for the selected time period are displayed.

**SIZE:** Recording resolutions of 352x240, 704x240 or 704x480(NTSC) can be selected for each channel.

**IMAGE Rate:** Frame rates between 1 and 30 can be set for each channel.

**QUALITY:** Four different picture recording qualities can be set for each channel.

**AUDIO:** If audio devices are connected to the DVR, user can select the audio recording on/off.

any audio channel can be assigned to any of the video channels. Please refer to camera setup menu.

**2<sup>nd</sup> FPS:** Determines network transmit frame independent from recording,

This field will be available when you select dual stream 'ON'.

**2<sup>nd</sup> QUALITY:** Determines network transmit quality independent from recording.

This field will be available when you select DUAL STREAM QUALITY CONTROL as 'MAUAL'

During playback, when a particular channel is selected in full screen, the assigned audio channel will be played back at the same time.

Adjust values as desired ,and select OK to finish and return to the parameter menu.

Other time periods can be configured in the same manner.

**Note :** when you activate the dual stream, the DVR divide the available recording frame rate as Recording and Network.( 480 FPS DVR will be divided as 240fps for recording and 240 fps for network

**Remember that if SCHEDULE MODE is set to WEEKLY, recording settings need to be changed for each day as well as for each particular time.**

**Note:** The DVR supports a maximum recording rate across all channels of 480 frames per second at 352x240 resolution. As settings are adjusted, the 'frames available' at bottom left displays the number of available frames still remaining and must always be zero or higher.

**If, while changing recording settings, this figure becomes negative, recording resolutions and / or frame rates must be lowered to increase the 'frames available' value to zero or above.**

# RECORD MENU

## ACTIVATION

Click the **ACTIVATION** menu.

To change ACTIVATION settings, highlight CONTINUOUS/MOTION RECORDING and press **ENTER**.

Use the **CURSOR KEYS** to highlight ACTIVATION and press **ENTER**.

The schedule box is highlighted in green.

Drag the Time and Channel with left mouse click.

After selecting the area, determines the recording type.

The schedule screen has 4 symbols to show the different recording modes.

**NO COLOR blocks:** No scheduled or motion recording.

**SKY BLUE blocks:** The DVR will record continuously.

**BLUE block:** The DVR will only record while motion is detected.

**PINK block:** The DVR will record continuously and with motion event.

# RECORD MENU

## RECORD : ALARM SETUP

| RECORDING        |       |                  |    |            |     |
|------------------|-------|------------------|----|------------|-----|
|                  |       | SIZE/FPS/QUALITY |    | ACTIVATION |     |
| RECORDING        | SUN   | 6                | 12 | 18         | 24  |
| OPERATIONS       | TIME  |                  |    |            |     |
| CONTINUOUS       | CH 1  | CIF              | 30 | HIGHEST    | OFF |
| MOTION           | CH 2  | CIF              | 30 | HIGHEST    | OFF |
| RECORDING        | CH 3  | CIF              | 30 | HIGHEST    | OFF |
|                  | CH 4  | CIF              | 30 | HIGHEST    | OFF |
| <b>ALARM</b>     | CH 5  | CIF              | 30 | HIGHEST    | OFF |
| <b>RECORDING</b> | CH 6  | CIF              | 30 | HIGHEST    | OFF |
|                  | CH 7  | CIF              | 30 | HIGHEST    | OFF |
|                  | CH 8  | CIF              | 30 | HIGHEST    | OFF |
| PANIC            | CH 9  | CIF              | 30 | HIGHEST    | OFF |
|                  | CH 10 | CIF              | 30 | HIGHEST    | OFF |
| RECORDING        | CH 11 | CIF              | 30 | HIGHEST    | OFF |
|                  | CH 12 | CIF              | 30 | HIGHEST    | OFF |
|                  | CH 13 | CIF              | 30 | HIGHEST    | OFF |
|                  | CH 14 | CIF              | 30 | HIGHEST    | OFF |
|                  | CH 15 | CIF              | 30 | HIGHEST    | OFF |
|                  | CH 16 | CIF              | 30 | HIGHEST    | OFF |

CANCEL    APPLY    CLOSE



Click the **ALARM RECORDING** menu.

The setup is the same as CONTINUOUS/MOTION RECORDING

This setup screen allows the operator to configure alarm input activated recording.

**SIZE/FPS/QUALITY** : Recording settings for each channel can be defined across a 24 hour period, in blocks (for example between 09:00 and 18:00) or for each individual hour.

Note that when SCHEDULE MODE is set to WEEKLY, each day of the week can also be selected.

**ACTIVATION** : This section determines at what times the DVR will monitor the alarm inputs and activate recording.

Please refer to Continuous / Motion setup on setting up SIZE/FPS/QUALITY and ACTIVATION.

Alarm activated recording can be used in conjunction with Continuous / motion recording.

For example, the DVR could be configured to record continuously at a low frame rate (set in Continuous / Motion Recording) and then increase to a higher frame rate during an alarm input (set in alarm setup).

# RECORD MENU

## RECORD : PANIC SETUP

| RECORDING            |       |      |        |         |       |
|----------------------|-------|------|--------|---------|-------|
| RECORDING OPERATIONS |       |      |        |         |       |
|                      |       | SIZE | FPS    | QUALITY | AUDIO |
| CONTINUOUS           | CH 1  | ..IF | 30     | HIGHEST | OFF   |
| MOTION               | CH 2  | ..IF | 30     | HIGHEST | OFF   |
| RECORDING            | CH 3  | ..IF | 30     | HIGHEST | OFF   |
|                      | CH 4  | ..IF | 30     | HIGHEST | OFF   |
| ALARM                | CH 5  | ..IF | 30     | HIGHEST | OFF   |
| RECORDING            | CH 6  | ..IF | 30     | HIGHEST | OFF   |
|                      | CH 7  | ..IF | 30     | HIGHEST | OFF   |
|                      | CH 8  | ..IF | 30     | HIGHEST | OFF   |
|                      | CH 9  | ..IF | 30     | HIGHEST | OFF   |
| <b>PANIC</b>         | CH 10 | ..IF | 30     | HIGHEST | OFF   |
| <b>RECORDING</b>     | CH 11 | ..IF | 30     | HIGHEST | OFF   |
|                      | CH 12 | ..IF | 30     | HIGHEST | OFF   |
|                      | CH 13 | ..IF | 30     | HIGHEST | OFF   |
|                      | CH 14 | ..IF | 30     | HIGHEST | OFF   |
|                      | CH 15 | ..IF | 30     | HIGHEST | OFF   |
|                      | CH 16 | ..IF | 30     | HIGHEST | OFF   |
|                      |       |      | CANCEL | APPLY   | CLOSE |



Click the **PANIC RECORDING** menu.

Select the Size, Frame, Quality and audio.

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

# SEARCH

## SEARCH

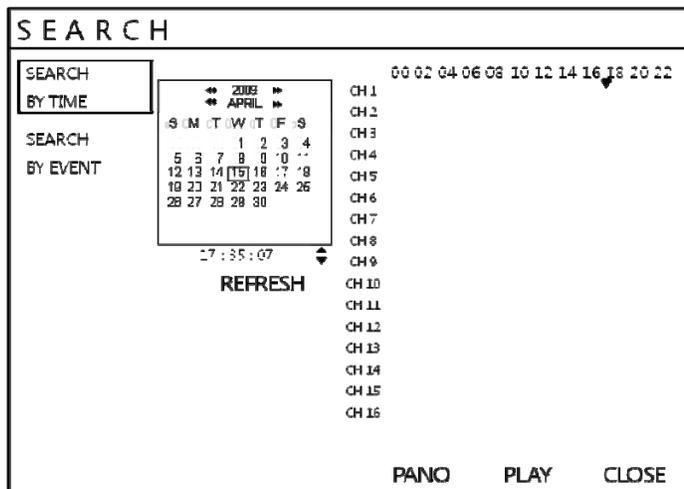


To search for a particular section of recorded footage, press the **SEARCH** button.

To protect unauthorized viewing of footage, only ADMIN and MANAGER user levels can playback footage.

To login as ADMIN, enter the default password of 1234 and press **ENTER**.

## SEARCH : TIME SEARCH



Click the date that user wants to have the values changed.

The DVR uses a calendar and timeline search method for quick access to recorded footage.

The calendar displayed on the left shows the current month.

Days highlighted in yellow have recorded footage.

The timeline on the right shows a 24 hour status of all channels for the selected day.

The recorded time will be displayed with different color on each recording type.

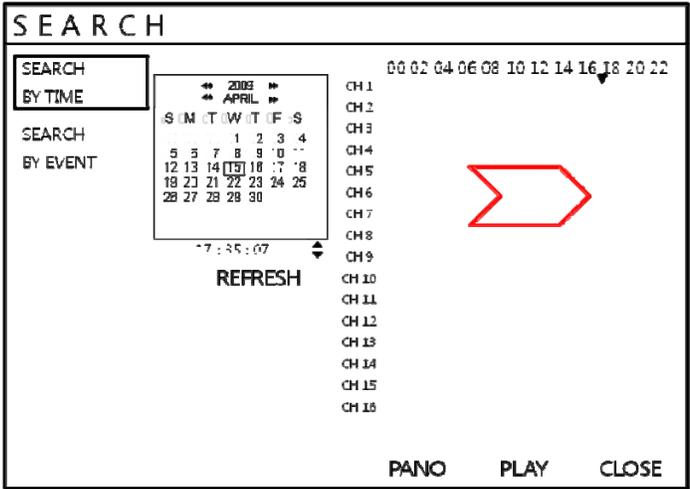
Panic : White

Motion : Green

Continuous : Sky blue

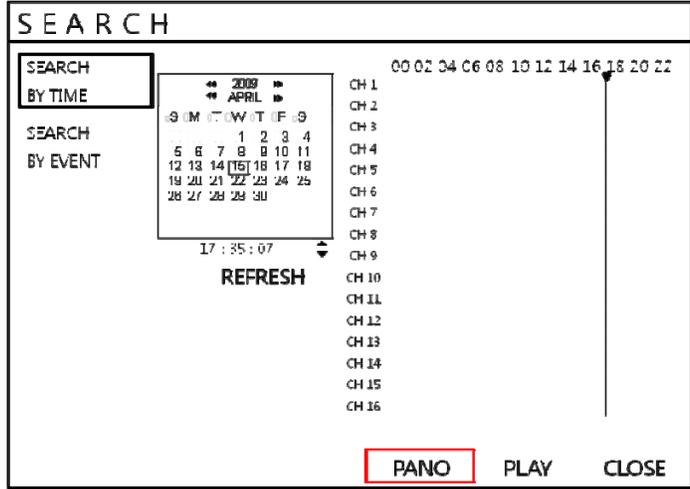
Alarm : Red

# SEARCH



Drag the time bar with left mouse click.

Press **ENTER** to select the calendar and use the **CURSOR KEYS** to move to the required day.  
 As different days are selected, the timeline display also changes to show recorded footage on that day.  
 Press **ENTER** to choose the day and move to the timeline.



Click the **PANO(Thumbnail mode)**  
**PLAY(Multi View)**  
 buttons

Use the **CURSOR KEYS** to move the timeline cursor left or right to select the time segment required.  
 The currently selected time is displayed under the calendar.  
 Press **PLAY** to begin playback from the selected time.

# SEARCH

## SEARCH MODE : PANO

|     |     |     |
|-----|-----|-----|
| CH1 | CH2 | CH3 |
| CH4 | CH5 | CH6 |
| CH7 | CH8 |     |

### PANO( Thumb nail) :

Each Screen show s 3 hour data.

CH1 : 0~3 O'clock

CH2 : 3~6 O'clock

CH8: 21~24 O'clock

User can select different channels and playback with faster speed of up to x64.

## SEARCH MODE : Multi Playback

|     |     |     |
|-----|-----|-----|
| CH1 | CH2 | CH3 |
| CH4 | CH5 | CH6 |
| CH7 | CH8 |     |

### PLAY(Multi view):

The default playback mode is 16 screen display.

By pressing **DISPLAY** or using the **CHANNEL SELECTION** buttons, it is possible to display single screen or other multi screen formats in a similar way to the live display mode.

During playback, turning the **SHUTTLE WHEEL** steadily clockwise increases the playback speed by up to 64 times.



|     |     |     |
|-----|-----|-----|
| CH1 | CH2 | CH3 |
| CH4 | CH5 | CH6 |
| CH7 | CH8 |     |

Turning steadily counter-clockwise will reverse play by up to 64 times. When the **SHUTTLE WHEEL** is released, playback is paused.

If the **HOLD** button is pressed and released during **SHUTTLE WHEEL** operation, the last shuttle function is held, even if the wheel is released.

When playback is paused, the **JOG RING** can be used to accurately move the footage forward or backwards, frame by frame.

Playback speed and direction can also be controlled using the five playback buttons located under the jog wheel.

# SEARCH

During playback, user can reserve the recorded data that needs to be archived.

Press  button at the time the archive is to be started. Then playback is stopped and menu below will appear.

| I N F O R M A T I O N                     |                     |
|---|---------------------|
| TAG                                       | DATA1               |
| FRM                                       | 2010/07/07 21:51:33 |
| TO  | 2010/07/07 21:51:59 |
| MEMO                                      |                     |
| INFC                                      | 117746 Kbytes       |
| A V CHANNEL                               |                     |
| <input checked="" type="checkbox"/>       | CH1                 |
| <input checked="" type="checkbox"/>       | CH2                 |
| <input checked="" type="checkbox"/>       | CH3                 |
| <input checked="" type="checkbox"/>       | CH4                 |
| <input checked="" type="checkbox"/>       | CH5                 |
| <input checked="" type="checkbox"/>       | CH6                 |
| <input checked="" type="checkbox"/>       | CH7                 |
| <input checked="" type="checkbox"/>       | CH8                 |
| <input checked="" type="checkbox"/>       | CH9                 |
| <input checked="" type="checkbox"/>       | CH10                |
| <input checked="" type="checkbox"/>       | CH11                |
| <input checked="" type="checkbox"/>       | CH12                |
| <input checked="" type="checkbox"/>       | CH13                |
| <input checked="" type="checkbox"/>       | CH14                |
| <input checked="" type="checkbox"/>       | CH15                |
| <input checked="" type="checkbox"/>       | CH16                |
| <input checked="" type="checkbox"/>       | LOG                 |
| RESERVE   CONTINUE   START   STOP   CLOSE |                     |

After inputting "TAG" name, press **START**. Then display is returned to playback.

Press  button again to end archiving. Then menu below will appear again.

| I N F O R M A T I O N                     |                     |
|---|---------------------|
| TAG                                       | DATA1               |
| FRM                                       | 2010/07/07 21:51:33 |
| TO  | 2010/07/07 21:51:59 |
| MEMO                                      |                     |
| INFC                                      | 117746 Kbytes       |
| A V CHANNEL                               |                     |
| <input checked="" type="checkbox"/>       | CH1                 |
| <input checked="" type="checkbox"/>       | CH2                 |
| <input checked="" type="checkbox"/>       | CH3                 |
| <input checked="" type="checkbox"/>       | CH4                 |
| <input checked="" type="checkbox"/>       | CH5                 |
| <input checked="" type="checkbox"/>       | CH6                 |
| <input checked="" type="checkbox"/>       | CH7                 |
| <input checked="" type="checkbox"/>       | CH8                 |
| <input checked="" type="checkbox"/>       | CH9                 |
| <input checked="" type="checkbox"/>       | CH10                |
| <input checked="" type="checkbox"/>       | CH11                |
| <input checked="" type="checkbox"/>       | CH12                |
| <input checked="" type="checkbox"/>       | CH13                |
| <input checked="" type="checkbox"/>       | CH14                |
| <input checked="" type="checkbox"/>       | CH15                |
| <input checked="" type="checkbox"/>       | CH16                |
| <input checked="" type="checkbox"/>       | LOG                 |
| RESERVE   CONTINUE   START   STOP   CLOSE |                     |

RESERVE: Press this to reserve current data.

CONTINUE: Press this to reserve more data. Then display will return to playback.

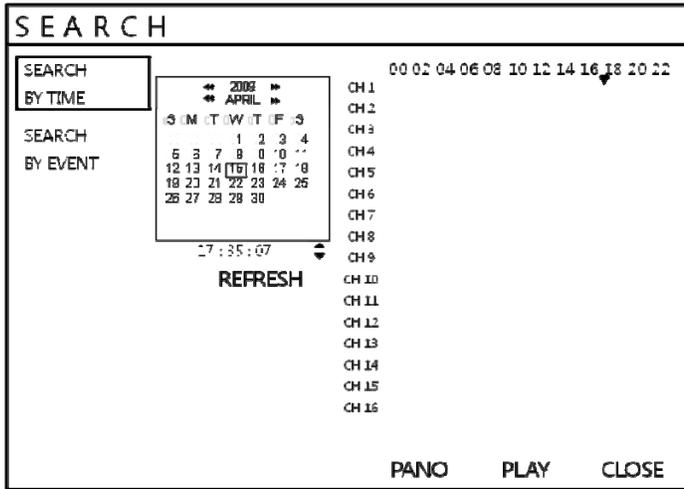
STOP: Make sure to press this button to reserve current data first. Then user can select RESERVE.

START: Press this to start the reserve.

CLOSE: Finish archiving.

Reserved data will be reserved on HDD. User can see the reserved data from "RESERVED DATA MANAGEMENT" on ARCHIVING menu

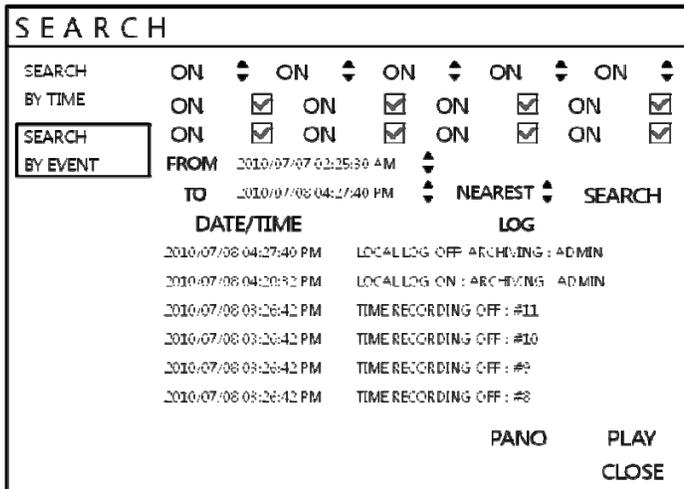
# SEARCH



To exit playback mode and return to the search screen to choose another time and date, press **RETURN**.

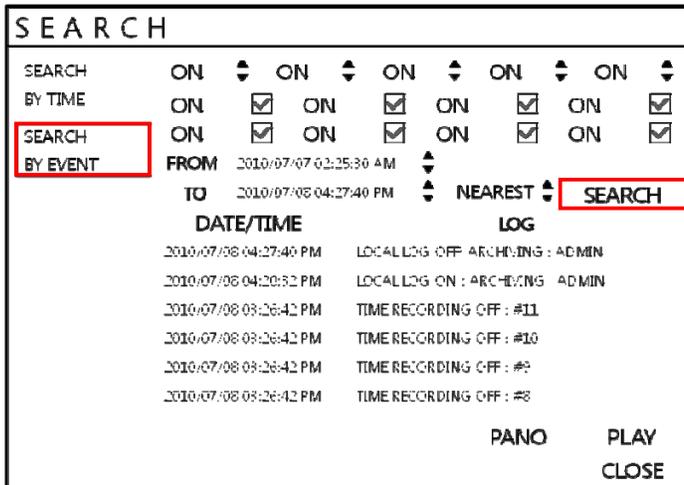
To exit the search screen and go back to live view, repeatedly press **RETURN**.

## SEARCH : EVENT SEARCH



The DVR event log stores events such as motion and alarm activated recording, video loss, etc.

To search for an event and playback the recorded footage, press the **SEARCH** button and log in as ADMIN with the default password of 1234.



Click the **SEARCH BY EVENT** menu and select each desired channel and condition.

Then click the time with  button to change.

Click the **SEARCH** button.

# SEARCH

**SEARCH**

SEARCH ON  ON  ON  ON  ON

BY TIME ON  ON  ON  ON

**SEARCH** ON  ON  ON  ON

BY EVENT FROM 2010/07/08 02:50:00 AM

TO 2010/07/08 04:27:40 PM NEAREST SEARCH

| DATE/TIME              | LOG                              |
|------------------------|----------------------------------|
| 2010/07/08 04:27:40 PM | LOCAL LOG OFF: ARCHIVING : ADMIN |
| 2010/07/08 04:20:32 PM | LOCAL LOG ON : ARCHIVING : ADMIN |
| 2010/07/08 03:26:42 PM | TIME RECORDING OFF : #11         |
| 2010/07/08 03:26:42 PM | TIME RECORDING OFF : #10         |
| 2010/07/08 03:26:42 PM | TIME RECORDING OFF : #9          |
| 2010/07/08 03:26:42 PM | TIME RECORDING OFF : #8          |

PANO    PLAY  
CLOSE

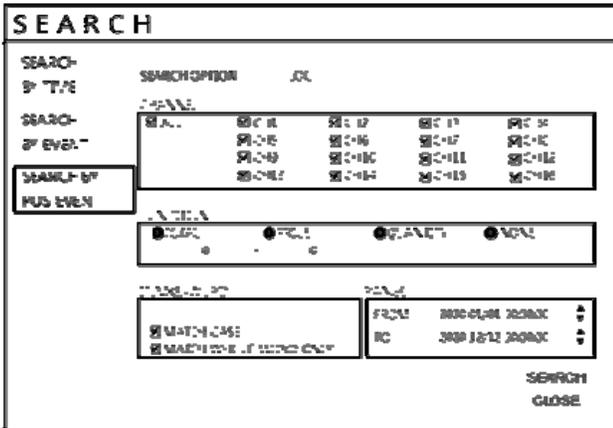
To playback footage for a particular event, select the event from the list using the **CURSOR KEYS** and press **ENTER**.

|            |  |            |
|------------|--|------------|
| <b>CH1</b> | <b>CH2</b>   | <b>CH3</b> |
| <b>CH4</b> | <b>CH5</b>   | <b>CH6</b> |
| <b>CH7</b> | <br>2010-07-07 23:07:42 | [>> x2]    |

Playback resumes from the moment when the selected event occurred and continues until stopped by the operator. During event search playback, the **SHUTTLE WHEEL**, **JOG RING** and playback buttons can be used as normal. To stop playback and return to live view mode, repeatedly press **RETURN**.

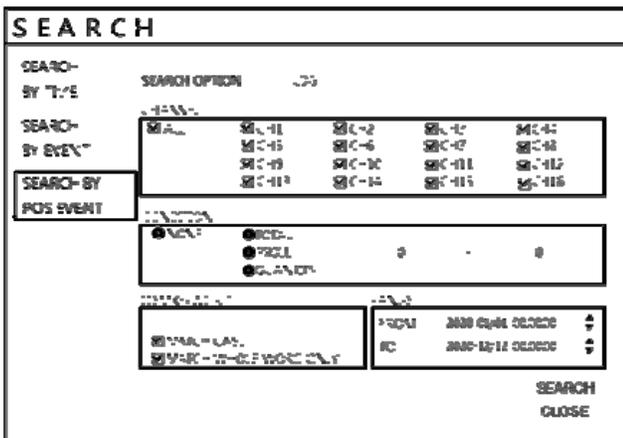
# SEARCH

## SEARCH : POS EVENT SEARCH



The DVR POS event log stores events such as price, quantity, item keyword, date, etc.

On SEARCH BY POS EVENT menu, it can search log price, quantity, item keyword, date, etc, and playback recorded video.



Click the **SEARCH BY POS EVENT** menu and select each desired channel, condition and item keyword.

Then click the time with  button to change.

Click the **SEARCH** button.

| SEARCH              |               |           |                 |
|---------------------|---------------|-----------|-----------------|
| SEARCH BY TYPE      | SEARCH OPTION | LOG       |                 |
| SEARCH BY EVENT     | DATE TIME     | ITEM      | PRICE QTY TOTAL |
| SEARCH BY POS EVENT |               |           |                 |
|                     |               | PAGE DOWN | PAGE UP         |
|                     |               |           | CURSE           |

To playback footage for a particular event, select the event from the list using the **CURSOR KEYS** and press **ENTER**.

|     |   |         |
|-----|---|---------|
| CH1 | CH2   | CH3     |
| CH4 | CH5   | CH6     |
| CH7 | CH8<br><br>2015-07-08 22:07:42 | [>> X2] |

Playback resumes from the moment when the selected event occurred and continues until stopped by the operator.

During event search playback, the playback buttons can be used as normal.

To stop playback and return to live view mode, repeatedly press **RETURN**.

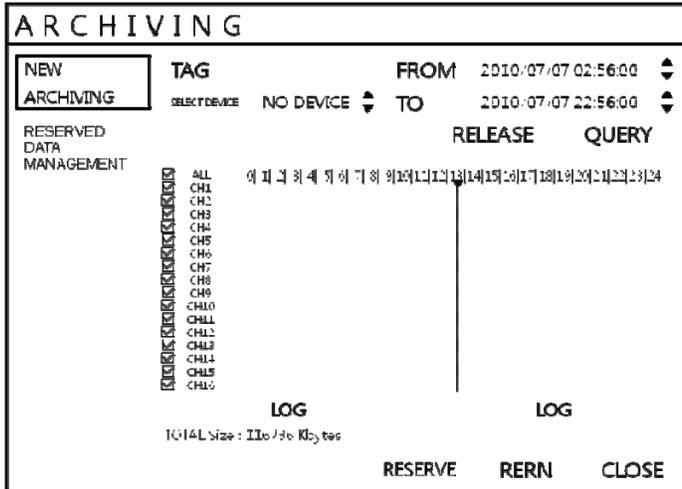
# ARCHIVING

## NEW ARCHIVING

To archive recorded footage to USB memory stick or CD/DVD, press the **ARCHIVE** button.

To protect unauthorized viewing and distribution of footage, only the ADMIN user level can archive footage.

To login as ADMIN, enter the default password of 1234 and press **ENTER**.



Click each desired channel.

Then click the times with  button to change.

Click the **QUERY** menu.

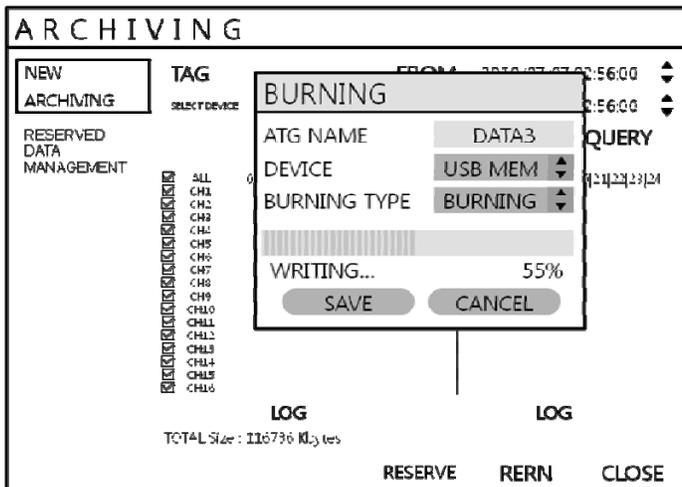
Make sure to press **QUERY** first before selecting **BURN** or **RESERVE**.

Press **RELEASE** to reset after **QUERY**.

**RESERVE**: Press this after inputting the TAG name.

**OR**

**BURN**: Press this after inputting the TAG name. Then press **START** after menu below appears.



# ARCHIVING

## RESERVED DATA MANAGEMENT

| ARCHIVING                |                        |               |        |          |
|--------------------------|------------------------|---------------|--------|----------|
| NEW                      |                        |               |        |          |
| ARCHIVING                | ARCHIVING DATE         | ARCHIVING TAG | BURNED | SIZE     |
| RESERVED DATA MANAGEMENT | 2010/07/07 21:47:32 PM | DATA1         | 0      | 117 MB ▲ |
|                          | 2010/07/07 21:59:10 PM | DATA2         | 0      | 117 MB   |
|                          | 2010/07/07 22:02:06 PM | DATA3         | 1      | 117 MB ▼ |
|                          |                        | INFORMATION   | DELETE | BURN     |

CLOSE

**AVI ARCHIVING LIST:** User can see the AVI archiving data that was reserved from new archiving menu or archiving of search.

**INFORMATION:** The detailed information of Reserved AVI data.

**DELETE:** User can delete the reserved AVI data

**BURN:** Backup the selected AVI data.

## FTP SETUP

| ARCHIVING |           |      |          |
|-----------|-----------|------|----------|
| NEW       |           |      |          |
| ARCHIVING | HOSTNAME  |      |          |
| FTP SETUP | PORT      |      | 21       |
|           | USER NAME |      |          |
|           | PASSWORD  |      |          |
|           | DIRECTORY | ARCH | FTP TEST |

CANCEL    APPLY    CLOSE

FTP Archiving is possible if setting up the HOST Name, Port number, User Name, and Password having become setting to FTP server.

FTP Archiving is possible on New Archiving or Reserved Data Management..

Archiving data is appeared in Directory of the name that they set up to 'DIRECTORY' if got from FTP backup.

FTP TEST normally uses it to purposes to test Archiving possible to the FTP server which a user set up.

# WEB CONNECTION SETUP

## PRELIMINARY BEFORE CONNECT

For using web connection, 554 and 8080 ports should be done port forwarding set in Router.  
Refer the manual of Router for port forwarding setting

| WEB RA MINIMUM PC REQUIREMENT |                                       |
|-------------------------------|---------------------------------------|
| CPU                           | P4 3.0 or Higher                      |
| RAM                           | 512MB or Higher                       |
| VGA                           | Geforce MS 400, Radeon 7500 or higher |
|                               | Gefore 8 series or higher             |
| VGA MEMORY                    | 64MB                                  |
| MONITOR                       | 1280X1024                             |
| OS                            | WINDOW XP2                            |
| IE VERSION                    | IE6.0 or higher                       |
| NETWORK                       | 100Mbps                               |
| DIRECT X                      | V7.0 or higher                        |

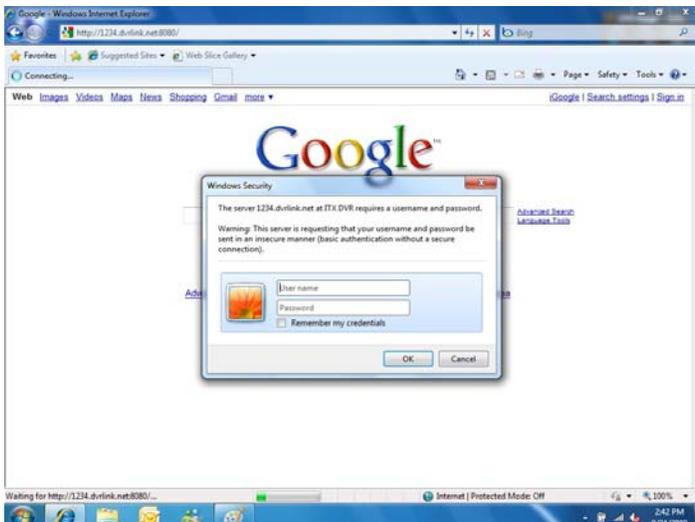
## HOW TO CONNECT

Input the IP Address or URL of the DVR in the Internet Explorer Address Bar.

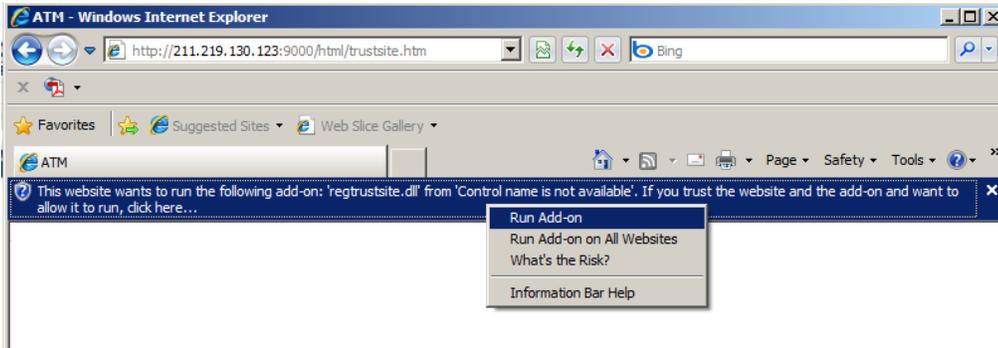
When user uses the DDNS service, input the URL as below.

<http://1234.dvrlink.net:8080> (webport :8080) or

<http://1234.dvrlink.net> (webport :80)



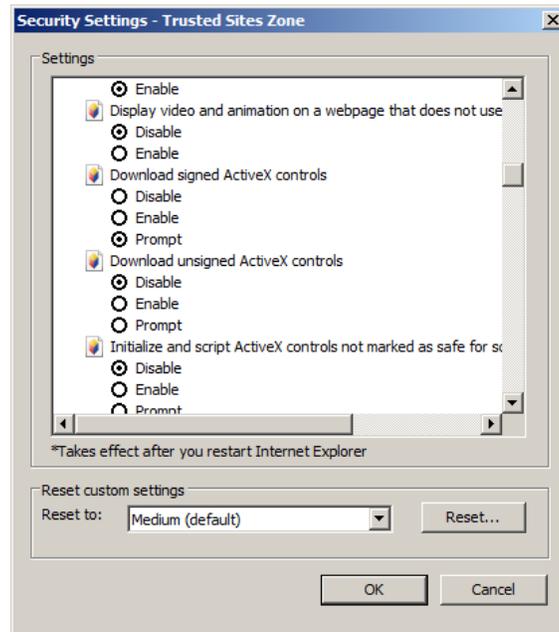
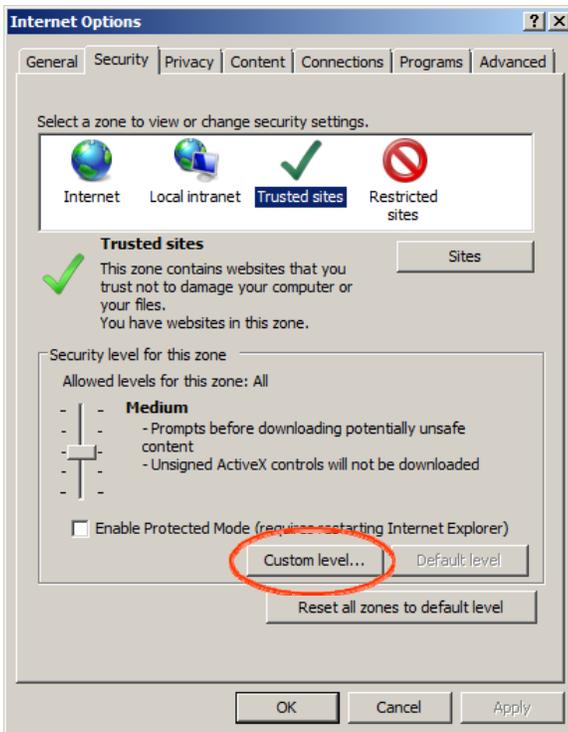
Default ID and password are 'ADMIN' & '1234'



User need to install Active-X, click Run Add-on



In case of, unable to install active-X, User needs to check the option of activeX on IE security menu.

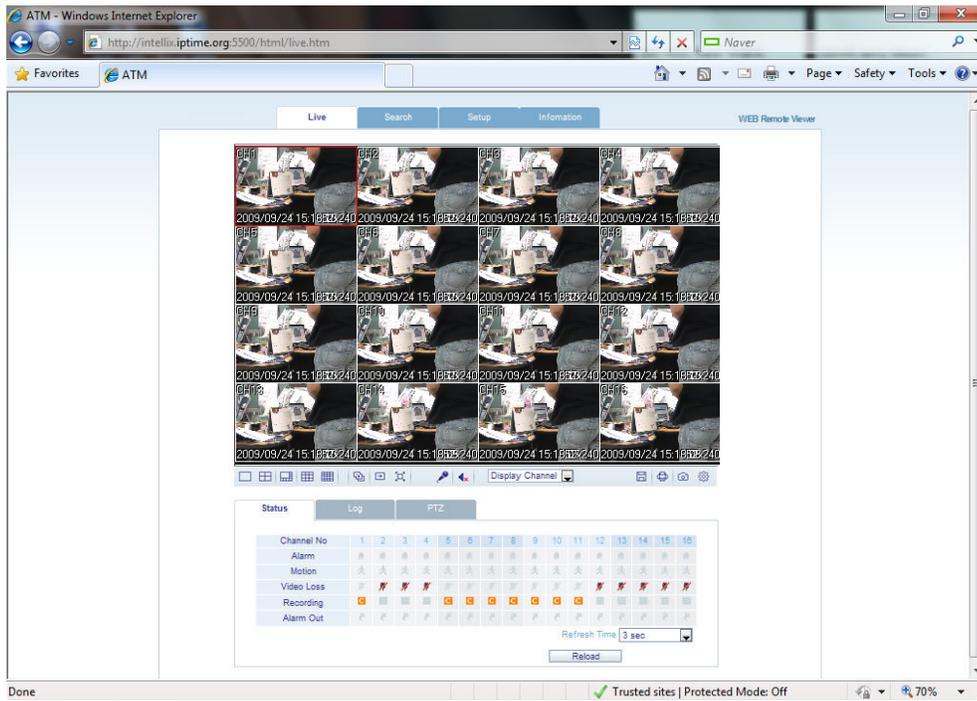


Select Enable for all ActiveX related options.

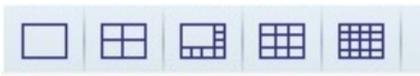
(ex, Download signed ActiveX control, Download unsigned ActiveX control....)

# WEB CONNECTION SETUP

## LIVE MODE



Explanation for function LIVE mode



Select live division screen (1, 4, 8,9,16 split mode)



Sequence mode.

Move to next camera

Full screen.



Select live channel. – select a channel manually.



Activate Mic to send a sound to DVR.

On/Off Sound from DVR



Save the live image.

Print the current screen.

Snapshot the current screen.

Setup [Render] and [Save Folder]

- **Status:** Show active status of DVR
  1. Alarm – Indicator will be marked when system detects Alarm input.
  2. Motion- Indicator will be marked when system detects Motion
  3. Video Loss - Indicator will be marked when system detects Alarm input.
  4. Recording – Display current recording mode  
(T: Continuous, M: Motion, A: Alarm recoding)
  5. Alarm Out - Indicator will be marked when system detect Alarm output.
  6. Refresh Time – set interval of refresh or Reload for manual refresh.

| Channel No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| Alarm      | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔  | 🔔  | 🔔  | 🔔  | 🔔  | 🔔  | 🔔  |
| Motion     | 👤 | 👤 | 👤 | 👤 | 👤 | 👤 | 👤 | 👤 | 👤 | 👤  | 👤  | 👤  | 👤  | 👤  | 👤  | 👤  |
| Video loss | 📺 | 📺 | 📺 | 📺 | 📺 | 📺 | 📺 | 📺 | 📺 | 📺  | 📺  | 📺  | 📺  | 📺  | 📺  | 📺  |
| Recording  | T | T | T | T | T | T | T | T | T | T  | T  | T  | T  | T  | T  | T  |
| Alarm out  | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔 | 🔔  | 🔔  | 🔔  | 🔔  | 🔔  | 🔔  | 🔔  |

Refresh Time: 3 sec  
Reload

- **Log :** Display all system logs with real time

| No. | Camera Title | Date Time           | Log                      |
|-----|--------------|---------------------|--------------------------|
| 1   | CH16         | 2009.09.24 10:57:20 | TIMER RECORDING ON : #16 |
| 2   | CH15         | 2009.09.24 10:57:20 | TIMER RECORDING ON : #15 |
| 3   | CH14         | 2009.09.24 10:57:20 | TIMER RECORDING ON : #14 |
| 4   | CH13         | 2009.09.24 10:57:20 | TIMER RECORDING ON : #13 |
| 5   | CH12         | 2009.09.24 10:57:20 | TIMER RECORDING ON : #12 |
| 6   | CH11         | 2009.09.24 10:57:20 | TIMER RECORDING ON : #11 |
| 7   | CH10         | 2009.09.24 10:57:20 | TIMER RECORDING ON : #10 |
| 8   | CH9          | 2009.09.24 10:57:20 | TIMER RECORDING ON : #9  |

Page Down Page Up Refresh Time: 3 sec Reload

- **PTZ :** User allow to control connected PTZ camera.

**Pattern**  
 0 [Set] [Run]

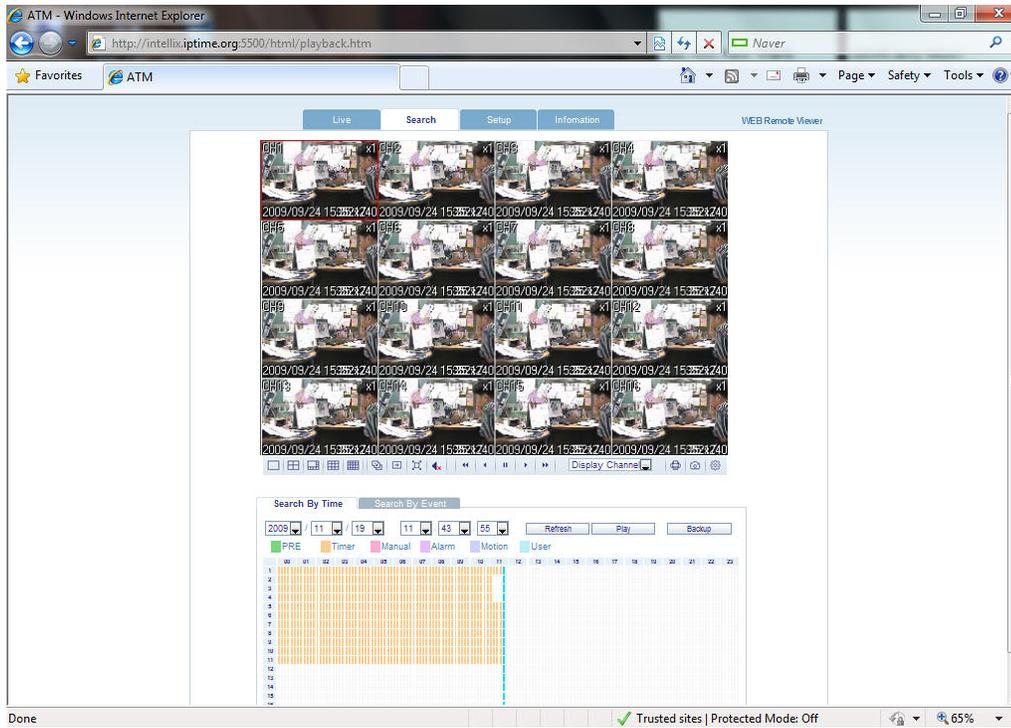
**Preset**  
 0 [Set] [Run]

**Swing**  
 Start 0 [Set] [Run]  
 End 0 [Set] [Run]

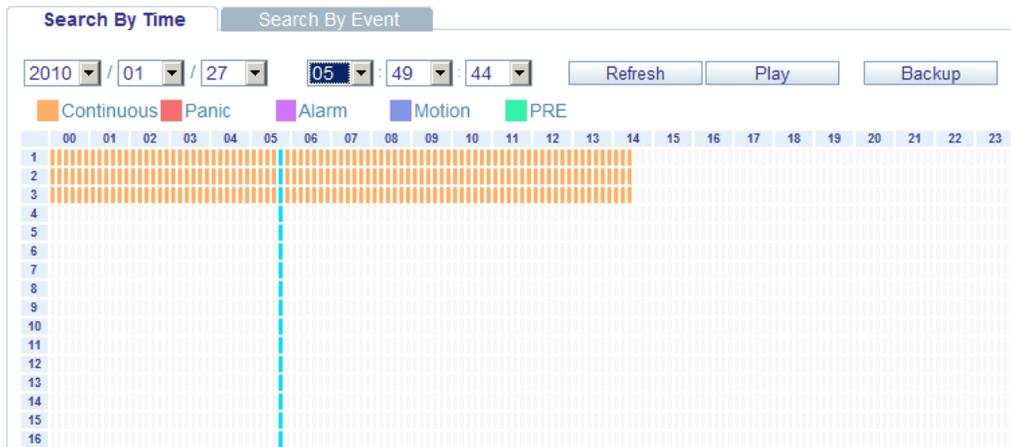
Focus Zoom Iris [PTZ]

1. Pattern – move a camera among several preset position
2. Preset – set a position of camera view.
3. Swing – move a camera between two preset point.

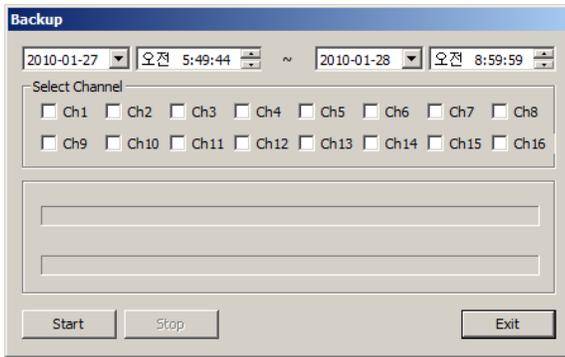
## SEARCH (By time line)



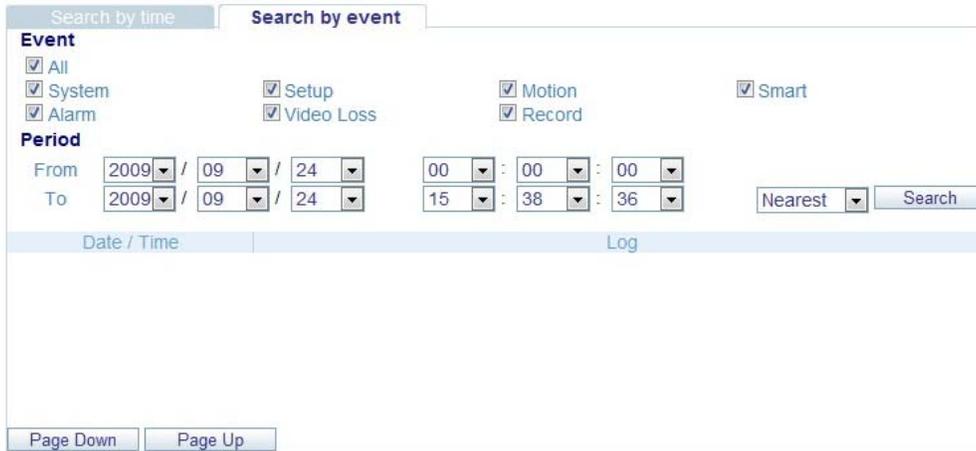
1. Select a time line on time table or set a exact time.
2. Then press 'Play' button



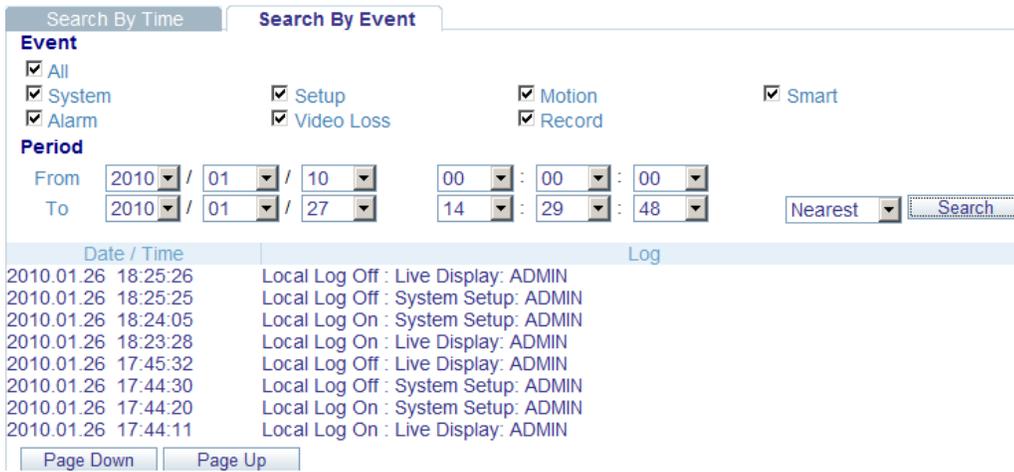
1. Refresh : Refresh the recording table of data.
2. Play : Start to display the recorded data from system.
3. Backup : User can backup the recorded data on remote site.



## SEARCH (By event)



1. Event : Select events for querying .
2. Period : Set duration for querying recording data.
3. Search : Start to query and list up all events on the list

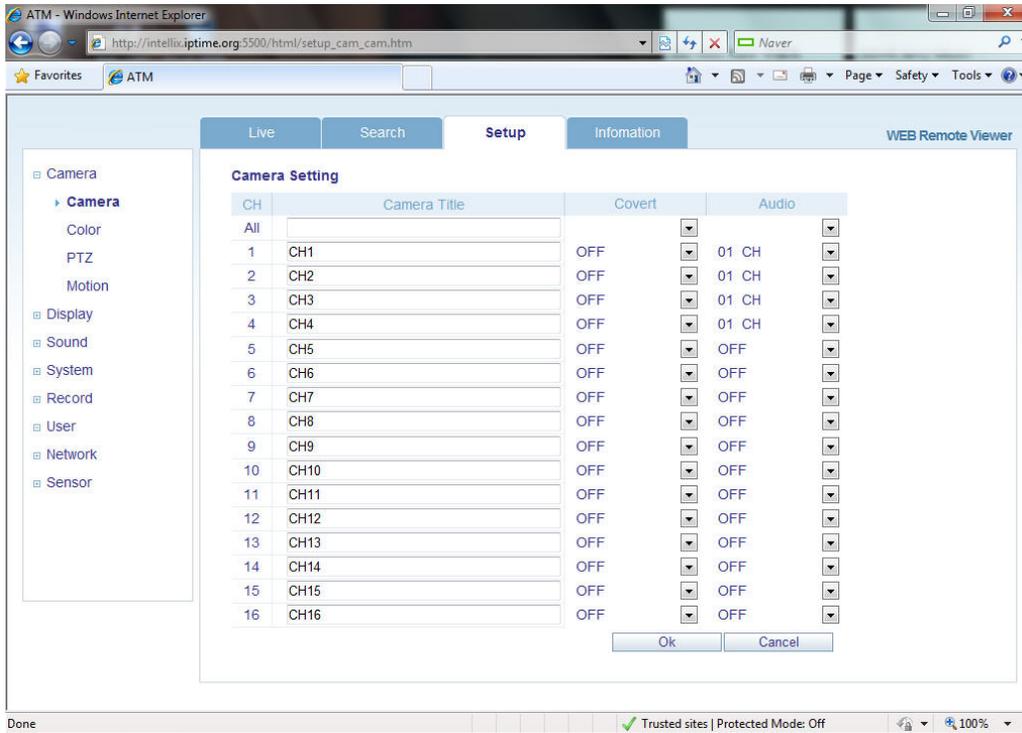


4. Select a event on the list then DVR starting to playback the related camera's image

# SETUP MODE

## 1. CAMERMA

user can configure camera's attribute such as title, live color, PTZ setup or motion



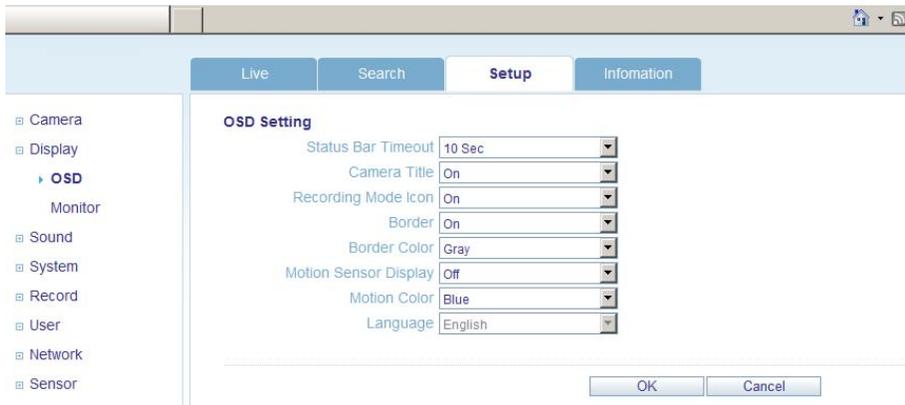
- Motion setup for detecting motion events.



- 1) Select Motion menu tab.
- 2) Select a channel and sensitivity.
- 3) Drag a mouse on image for select detecting area.
- 4) Press OK.

## 2. Display

- 1) OSD – User allow to choose text display items over the image.

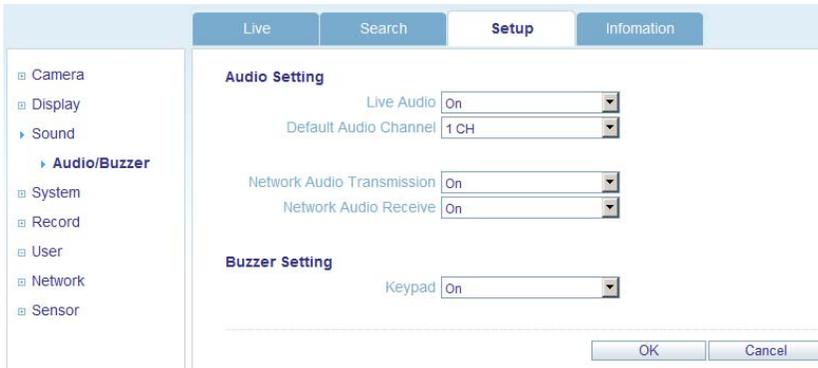


- 2) Monitor - user can set dwell time for sequence or spot, and pop up function.



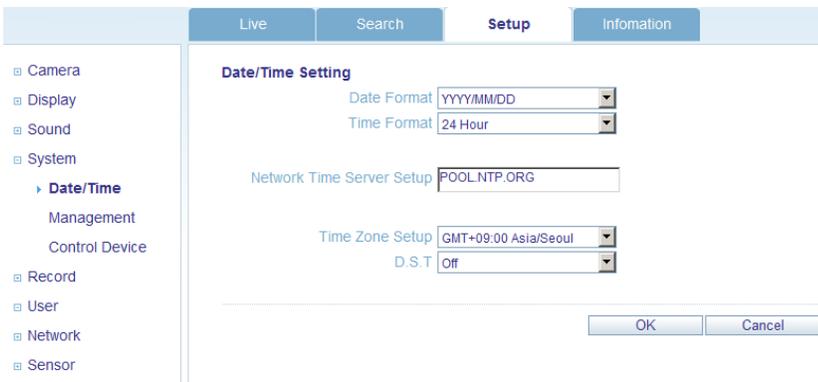
## 3. Sound

- 1) Audio Setting – Select a live audio channel and activation
- 2) Buzzer setting – Activate buzzer out for event notification



#### 4. System

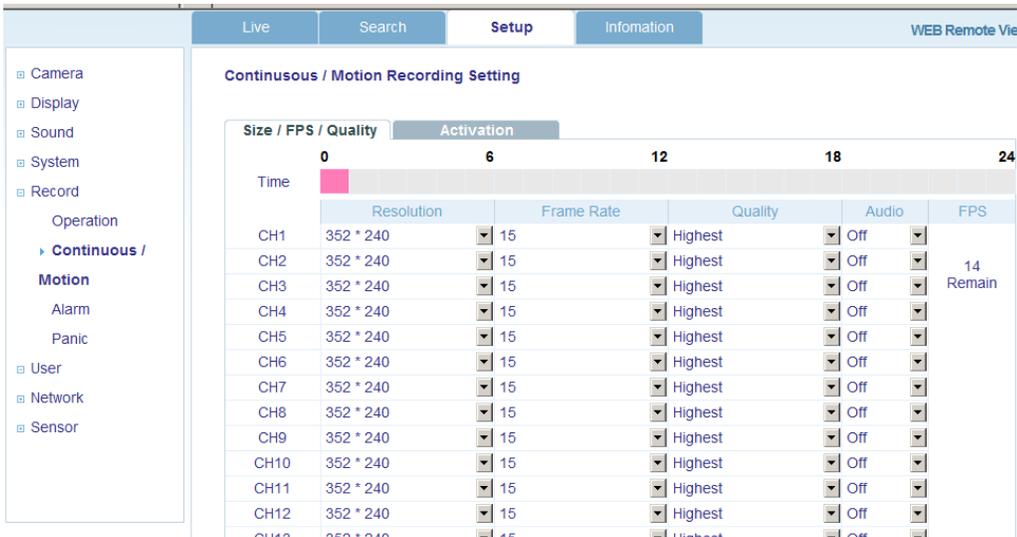
User can configurable DATE of system, check system information and set controller.



#### 5. Recording

User can configure the recording parameter,

Setting detail is same as system.



## 6. User

Allow to add user, select Authority level and Log out time

The screenshot shows the 'User Authority Setting' configuration page. The left sidebar contains a tree view with categories: Camera, Display, Sound, System, Record, User, Management, Authority (selected), Log Out, Network, and Sensor. The main content area has tabs for Live, Search, Setup (selected), and Information. The 'User Authority Setting' table is as follows:

|            | Manager                             | User                                |
|------------|-------------------------------------|-------------------------------------|
| Setup      | <input type="checkbox"/>            | <input type="checkbox"/>            |
| PTZ        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Search     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Archiving  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Web Viewer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Buttons for 'OK' and 'Cancel' are located at the bottom right of the table.

## 7. Network

User can check the system's network information and selectable speed level. But IP settings are not allowed to change on remote site.

Network IP only can set on system.

The screenshot shows the 'IP Setup Setting' configuration page. The left sidebar contains a tree view with categories: Camera, Display, Sound, System, Record, User, Network (selected), Network (sub-category), E-mail, and Sensor. The main content area has tabs for Live, Search, Setup (selected), and Information. The 'IP Setup Setting' form includes the following fields:

- DHCP:
- IP Address: 192.168.0.197
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.0.1
- DNS 1st Server: 192.168.0.1
- DNS 2st Server: 0.0.0.0
- RTSP Service Port: 1500
- Web Server Port: 9000
- Max TX Speed: 8192 Kbyte (dropdown menu)
- DDNS: On (dropdown menu)

For email notification, user can input the SMTP server detail on below setup.

The screenshot shows the 'E-mail Setting' configuration page. The left sidebar contains a tree view with categories: Camera, Display, Sound, System, Record, User, Network, Network (sub-category), E-mail (selected), and Sensor. The main content area has tabs for Live, Search, Setup (selected), and Information. The 'E-mail Setting' form includes the following fields:

- Server: [text input]
- Port: 25
- Security: OFF (dropdown menu)
- User: [text input]
- Password: [text input]
- From: [text input]

Buttons for 'OK' and 'Cancel' are located at the bottom right of the form.

## 8. Sensor

Management can set all device option of Alarm in/out, Buzzer out for event notification.

(HDD EVENT, Alarm Input, Alarm output, Buzzer Out, E-mail notification option)

All detail setup follow DVR system setup

The screenshot shows the 'Setup' tab of the DVR web interface. The left sidebar contains a navigation menu with 'Sensor' expanded to show 'Alarm Output'. The main content area is titled 'Alarm Output Setting' and includes several dropdown menus: 'Alarm Out' (01 CH), 'Operation' (Enable), 'Mode' (Transparent), 'Type' (High), 'Duration' (5 sec), and 'HDD Event' (Off). Below these settings is a table with columns for 'CH No.', 'Alarm', 'Video loss', and 'Motion'. The 'Alarm' column has checkboxes for 'All' and channels CH1 through CH8. The 'Video loss' and 'Motion' columns have checkboxes for each channel.

| CH No. | Alarm                    | Video loss               | Motion                   |
|--------|--------------------------|--------------------------|--------------------------|
| All    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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"/> |

## INFORMATION

Display Model name of DVR and WEB Remote Software version.

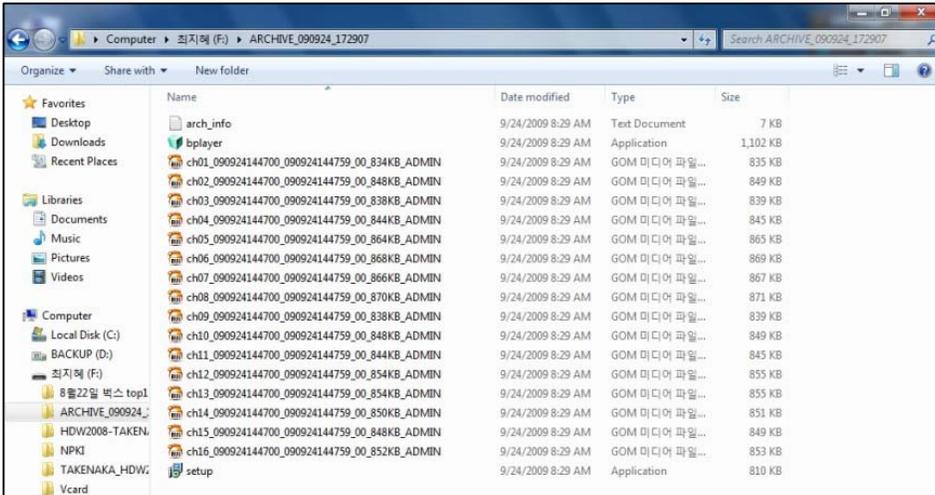
The screenshot shows the 'Information' tab of the DVR web interface. The main content area is titled 'Web Viewer Information' and displays the following details:

- DVR Model : ATM\_1624
- WEB Version : WEB\_v1.22\_1.1.1.7\_091113

The browser window title is 'ATM - Windows Internet Explorer' and the address bar shows 'http://intellixiptime.org:5500/html/versioninfo.htm'. The status bar at the bottom indicates 'Trusted sites | Protected Mode: Off' and '100%' zoom.

# WATERARK PROCESS

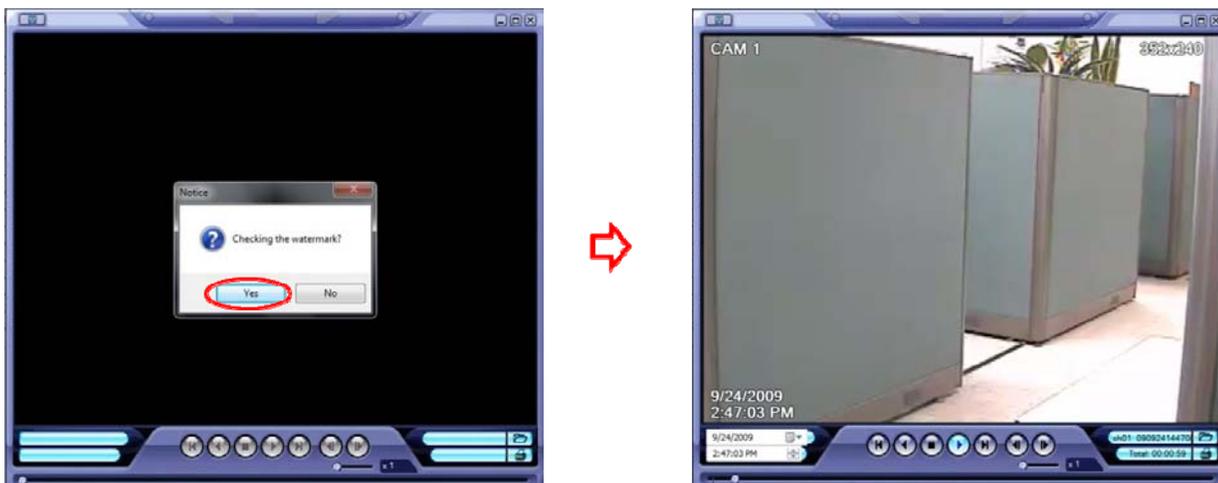
1. Open the backup data from device and Run the [bplayer] which is included in the backup folder.



2. Click the [Open file] button and open the backup file.



3. After open it, can see the following message then click the [Yes] button.

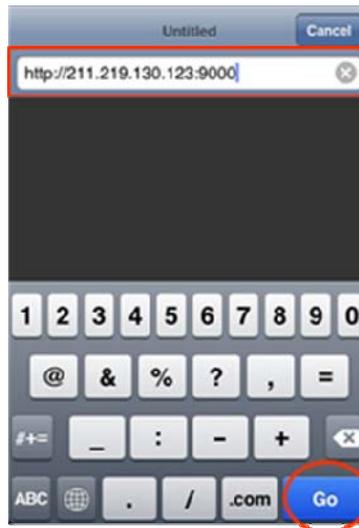


4. If the backed up AVI file is modified, **Verification failed** message will be appeared.

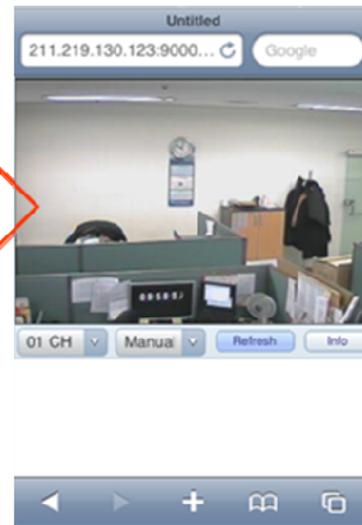
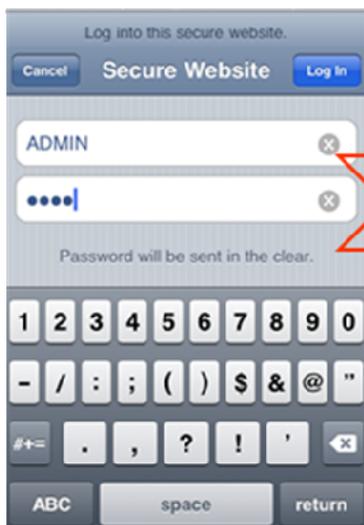
# SMARTPHONE CONNECTION

## ♣ I-PHONE

1. Select the Safari browser.
2. Enter the IP address or URL to connect.  
And Click the [GO] button.



3. Enter the User name and Password then use can see the Image.  
(Default ADMIN / 1234)

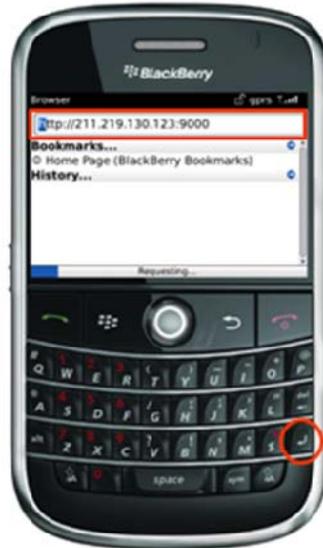


♣ **Black Berry**

1. Select the Web browser.



2. Enter the IP address or URL to connect.  
And press the Enter button.



3. Enter the User name and Password then use can see the Image.  
(Default ADMIN / 1234)

