USER MANUAL
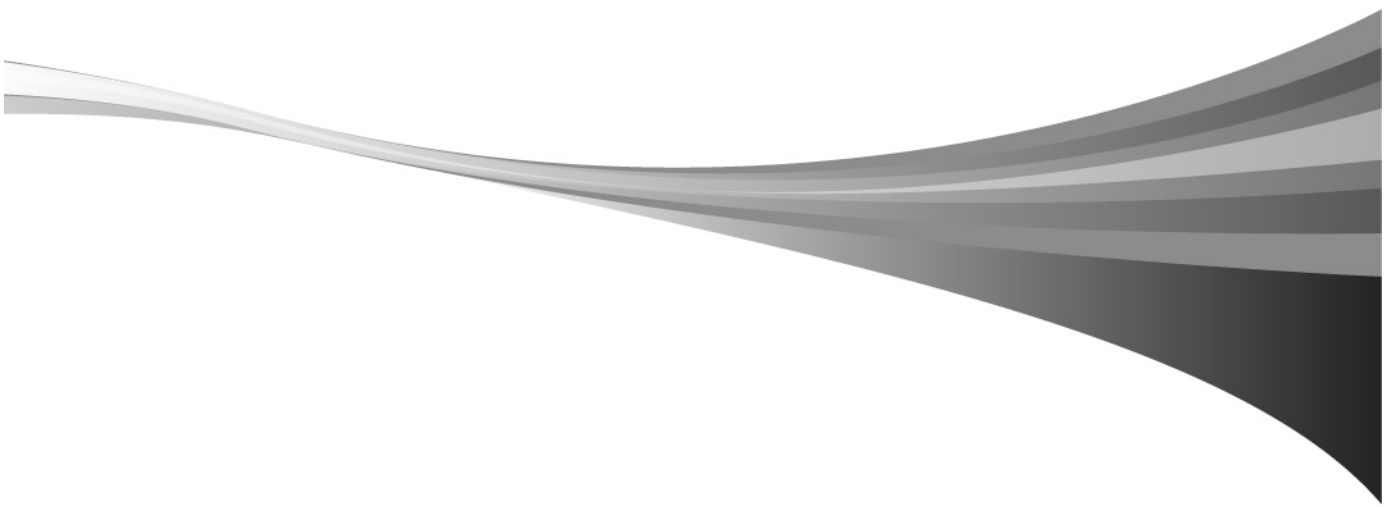
IMPORTANT SAFETY INSTRUCTIONS

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℃

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 TRIPLEX 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.

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 2 main monitor outputs (Composite and VGA).

One 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 files 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,
hard drive failure, & etc.

SYSTEM ORGANIZATION
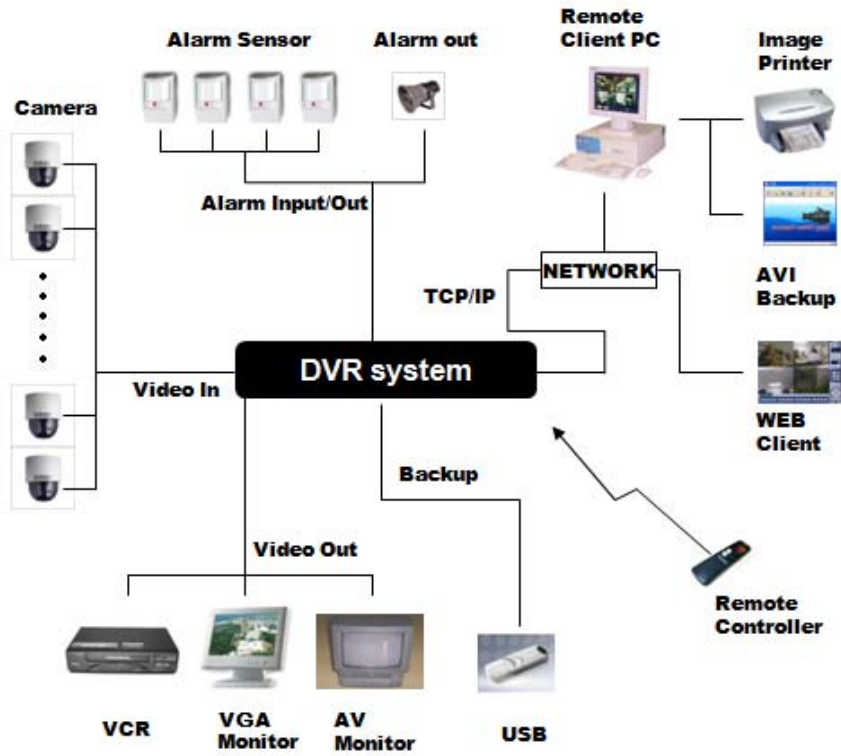
SYSTEM CONFIGURATION

1. Front panel description.

KEY	DESCRIPTION
Function Key	
POWER	Turn On/Off the system power
DISPLAY	Selects various display modes in live display and playback
SETUP	Displays the setup menus
SEARCH	Displays the search menu
Control Key	
CURSOR KEYS	Allow to Navigate on the menu
ENTER	Apply or Select an item
RETURN	Cancel or go to Previous menu
Playback Control	
◄◄	Increases reverse playback speed
◄	Selects reverse playback
►/ II	Selects forward playback and also accesses the instant playback feature and Pauses / resumes playback
►►	Increases forward playback speed

SYSTEM CONFIGURATION

2. Rear panel description.
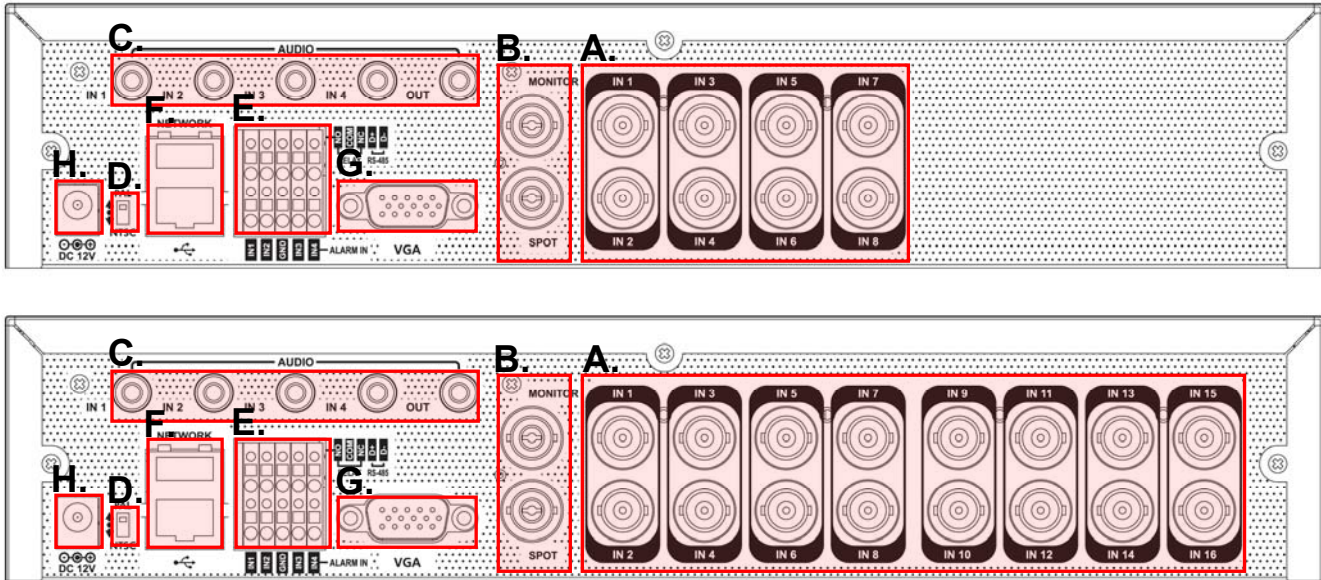
A.   **CAMERA INPUT :** Connect up to 8 /16 camera inputs.

B.   **MONITOR :** Main BNC monitor.

        SPOT OUT : BNC Spot monitor.

C.   **AUDIO INPUTS & OUTPUTS :**

        Up to 4 audio inputs and one audio output can be connected as necessary.

D.   **PAL / NTSC** :

        Change Camera input type.

E.   **ALARM INPUTS :**

        Up to 4 alarm inputs can be connected and configured as high or low inputs

        with common ground.

        RELAY OUTPUT :

        1 alarm outputs can be connected and configured as high or low outputs with common ground.

        RS485 : Connect PTZ camera.

F.   **LAN :** LAN connection to a router or internal network.

G.   **VGA :** VGA main monitor connection to a PC monitor or plasma screen.

H.   **POWER :** Connect 12V / 3.33A adaptor.

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.
- Connect monitors to the DVR using the **COMPOSITE or VGA** 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.
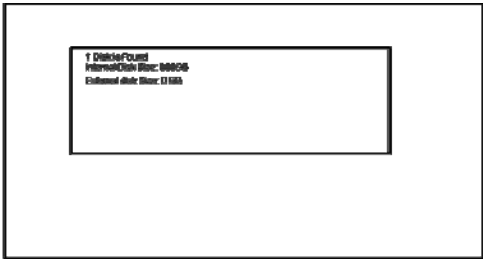
The DVR startup screen detects and checks the status of hard drive.
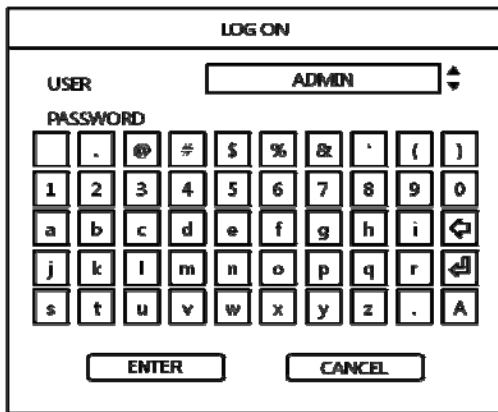
After startup diagnostics are complete, the operator must logon to the system. The default user name is 'ADMIN'.
Using the **CHANNEL SELECTION** buttons, key in
the default password of '1234' and press the **ENTER** button.
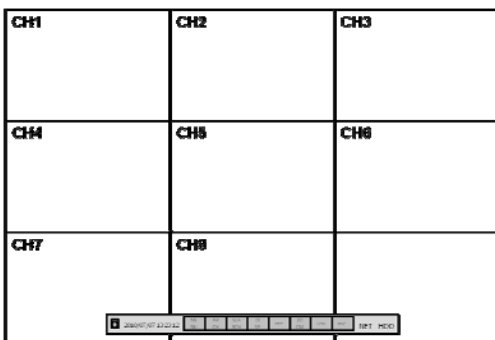
The DVR begins normal operation and shows the default display of all 8 OR 16 channels.

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 'C' in the top right of each channel display shows that the channel is recording in Continuous / Schedule mode.

MENU CONTROL

| [⊙] 2010/07/07 13:23:12 | MENU | ARCH | SEA RCH | DISP | PTZ | ZOOM | LOG | REC | NET | HDD |

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

LIVE DISPLAY

DIVISION SCREEN

DISP

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

| [⊙] 2010/07/07 13:23:12 | MENU | ARCH | SEA RCH | DISP | PTZ | ZOOM | LOG | REC | NET | HDD |

11
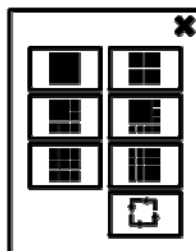
LIVE DISPLAY

PTZ
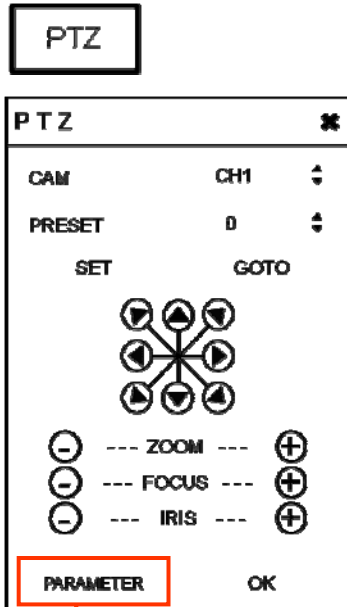
1) CAM: Select the Channel

2) Sequence: If pressing the "START" button after assigning the "Preset" in advance, sequence will be started.

3) Position name: Input the name after assigning the "Preset" location.

4) Avail. Position: User can see the available Preset location. If clicking the "GOTO" button after selecting it, camera will be moved. Press the "REMOVE" button to delete the saved Preset location.

5) Zoom, Focus, IRIS: User can control each item with + or - button.
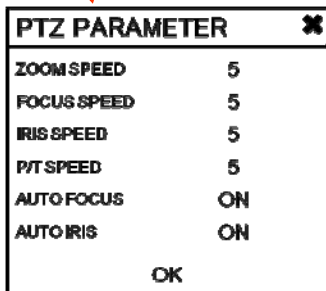
6) Parameter

Press this button and another window will appear.

User can select each item from PTZ parameter menu.

Digital Zoom
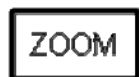
Select the "ZOOM" button.

When viewing a channel in full screen, the operator can zoom in to a particular area by up to 2 times.

To use the digital zoom, select the required channel and press the **ZOOM** button.

LIVE DISPLAY

LOG

User can see the current log immediately.

Panic Recording

REC
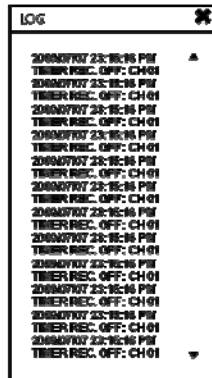
This menu is used to start and stop the Panic recording.
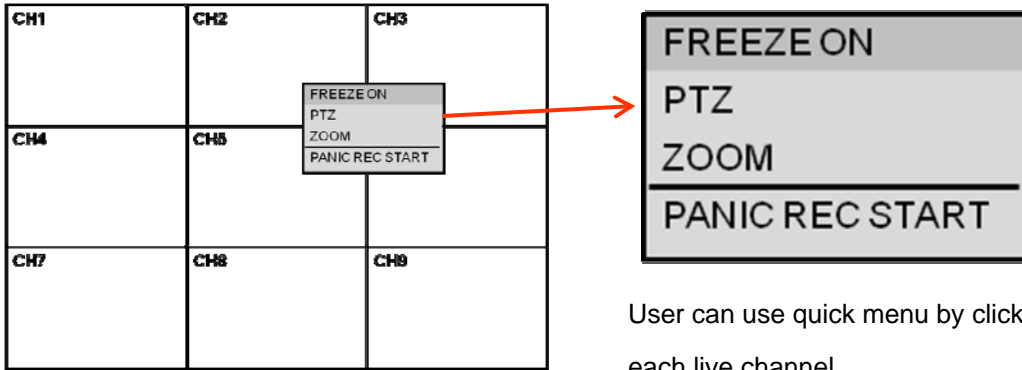
If the panic recording is started, record icon will change to red square with "P".

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 12.

3. ZOOM

 Please refer to "ZOOM" menu of Page 12.

4. PANIC REC START (Stop)

 Please refer to "Panic record" menu of Page 13.

SYSTEM SETUP

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

SYSTEM SETUP
RECORD SETUP
EXIT

SYSTEM SETUP

CAMERA
DISPLAY
SOUND
SYSTEM
USER
NETWORK
EVENT / SENSER
DISK
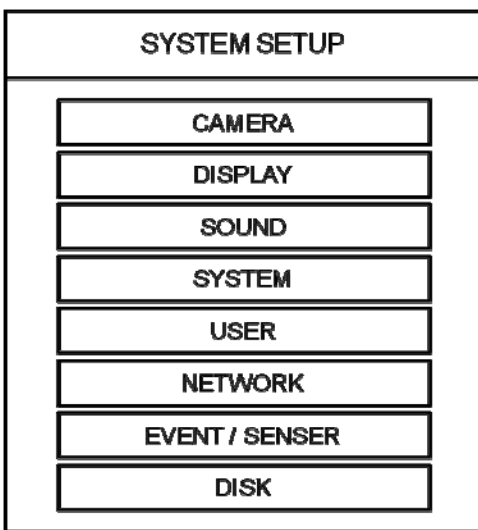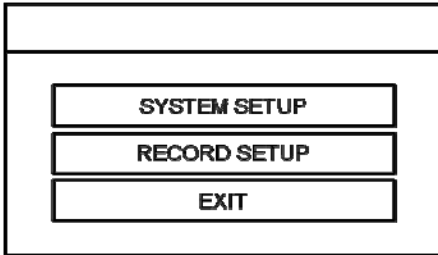
To navigate around any items in the setup menu, use the **CURSOR KEYS** and the **ENTER** and **RETURN** buttons.

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

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.
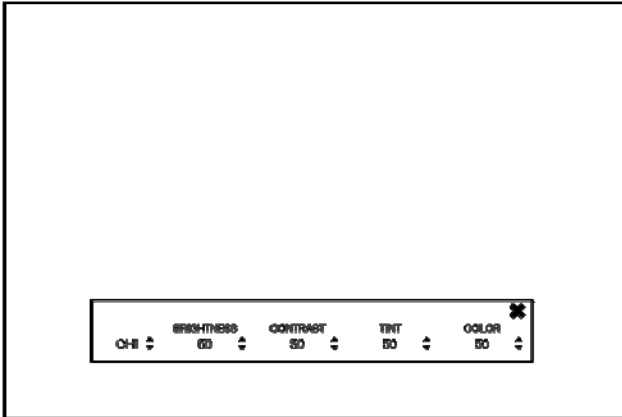
AUDIO: Determines the audio recording channel.

CAMERA : COLOR SETUP

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

Highlight each channel to modify and press ENTER.

SYSTEM SETUP

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

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)

SYSTEM SETUP

DETAIL

PTZ PARAMETER	✖
ZOOM SPEED	5
FOCUS SPEED	5
IRIS SPEED	5
PIT SPEED	5
AUTO FOCUS	ON
AUTO IRIS	ON
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.
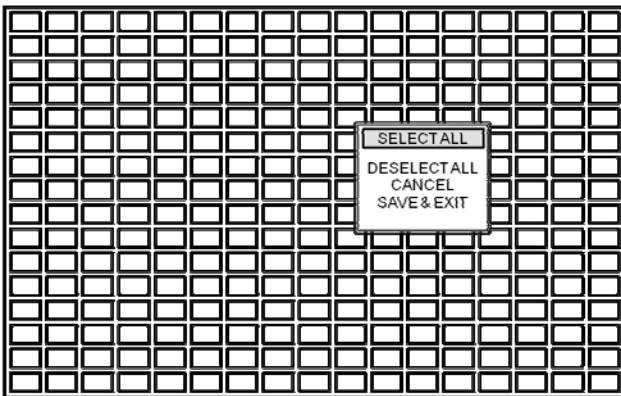
SYSTEM SETUP

CAMERA : MOTION SENSOR

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

Change the value with ![button] 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
- Yellow line area: Non selected area

SYSTEM SETUP

DISPLAY

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

DISPLAY - OSD

```
┌─────────────────────────────────────────┐
│ D I S P L A Y                            │
│ ┌──────┐  STATUS BAR TIMEOUT    10 SEC ▲▼│
│ │ OSD  │  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, this should be set to ON to prevent shudder during playback.
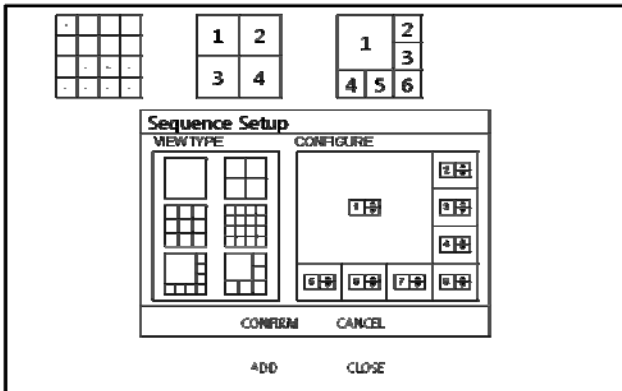
ALARM POP-UP MODE : When set to ON, an alarm input will cause the associated channel to display in full screen.

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.
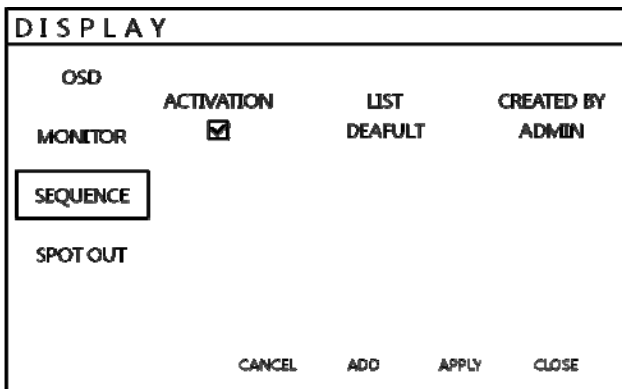
SYSTEM SETUP

DISPLAY : SEQUENCE

Click the **SEQUENCE** menu.

When the **SEQ** button is pressed, the default sequence will cycle through all 8/16 channels, one by one.

Sequence setup allows the operator to define a custom sequence, using mixed multi screen views and any desired channels.

Click the **ADD** menu.

To add a new sequence, highlight ADD and press **ENTER**.

Sequence title is highlighted – press **ENTER** to bring up the virtual keyboard and key in a name or reference number for the new sequence.

Click on the ACTIVATION tab and click [button] button for select ON/OFF.

Select the **SAVE.** Then, below menu will appear.

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

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

The DVR has **1 SPOT MONITOR OUTPUT (Analog Spot)**.

User can assign the SPOT OUT display for each channel.

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

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 display only)

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

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    ▲▼
└─────────┘   DEAFULT AUDIO CHANNEL         CH1   ▲▼
   BUZZER
              NETWORK AUDIO TRANSMISSON      ON    ▲▼
              NETWORK AUDIO RECEIVE          ON    ▲▼
```
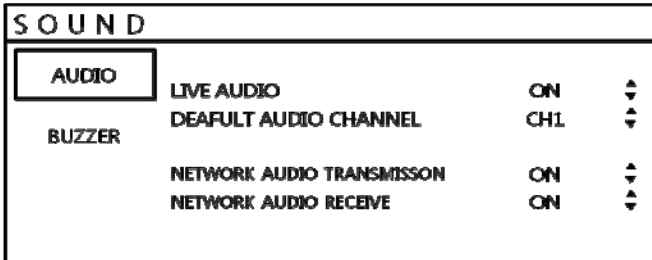
Click the **AUDIO** menu and click the ON/OFF menu.
Then, click the ▲▼ button for ON/OFF.

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 │
└─────────┘
```
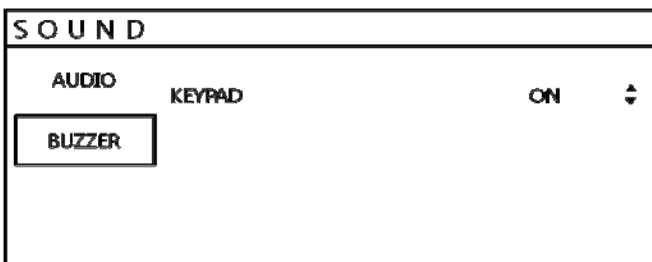
Click the **BUZZER** menu and click the ON/OFF menu.
Then, click the ▲▼ button for ON/OFF.

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  ▲▼
└──────────┘   DATE FORMAT                      ....,/MM/DD  ▲▼
  SYSTEM       TIME FORMAT                      24 HOUR
  MANAGEMENT
  CONTROL      NETWORK TIME SERVER SETUP    POOL.NTP.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 INFORMTION       INFO
SYSTEM           SYSTEM NAME             SYSTEM ID    ↕
MANAGEMENT       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          FIRM WARE Ver.
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
Net Client Port      6400
Web Server Port      8080
```

S/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.

NET CLIENT 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.
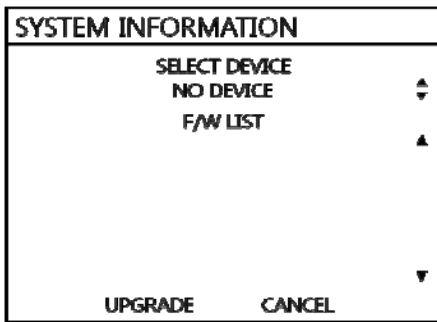
SYSTEM SETUP

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.

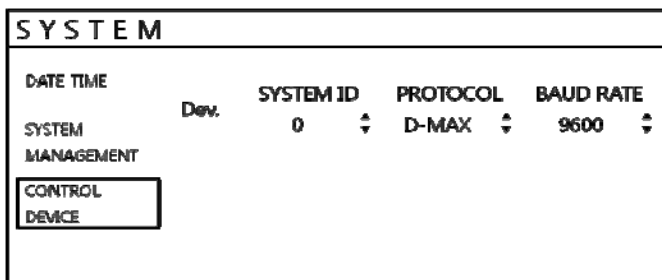After inserting the F/W in USB, Press **UPDATE**. Then, below menu will appear.

```
SYSTEM INFORMATION

        SELECT DEVICE
          NO DEVICE          ▲▼
           F/W LIST
                              ▲




                              ▼
       UPGRADE    CANCEL
```

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

```
SYSTEM

DATE TIME                SYSTEM ID    PROTOCOL    BAUD RATE
                Dev.
SYSTEM                      0    ♦    D-MAX   ♦    9600   ♦
MANAGEMENT

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

USER

Click the **USER** menu.

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

USER : USER MANAGEMENT

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.

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 MANAFEMENT		MANAGER	USER
USER AUTHORITY	SETUP	☐	☐
	PTZ	☐	☐
	SEARCH	☐	☐
LOG OUT	ARCHIVING	☐	☐
	REMOTE AGENT	☐	☐

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 MANAFEMENT		
USER AUTHORITY	AUTO LOGOUT	OFF ⬍
	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

IP SETUP      DHCP                          ☐

DDNS          IP ADDRESS              0.0.0.0
              GATEWAY                0.0.0.0
              SUBNET MASK            0.0.0.0
E-MAIL        1ST DNS SERVER         0.0.0.0
              2ND DNS SERVER         0.0.0.0

              RTSP SERVICE PORT  554  AUTO PORT   DELETE PORT   PORT TEST
              WEB SERVICE PORT   6400 AUTO PORT   DELETE PORT
              ALIAS

              MAX TX SPEED          8192 KBYTE        ↕

                              CANCEL   APPLY    CLOSE
```

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.

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 UPnP (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

```
N E T W O R K

IP SETUP
              DDNS                    ON      ▲▼
DDNS          DDNS SERVER      DVRLINK.NET   ▲▼
                                    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.neet   ➔ User can enter any DDNS Host name.

NETWORK : E-MAIL

```
N E T W O R K

IP SETUP
              SERVER
DDNS          PORT                   25
              SECURITY              OFF     ▲▼
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
├──────────┤   CHECK INTERVAL     1 HOUR    ⬍
  ALARM        DISK FULL EVENT     OFF
  INPUT

  ALARM
  OUTPUT

  BUZZER
  OUT

  E-MAIL
  NOTIFICATION
```

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
  EVENT          OPERATION   TYPE      TEXT
┌──────────┐
│ ALARM    │  CH 1  ENABLE ⬍  N / O ⬍  ALARM 1
│ INPUT    │  CH 2  ENABLE ⬍  N / O ⬍  ALARM 2
└──────────┘  CH 3  ENABLE ⬍  N / O ⬍  ALARM 3
  ALARM       CH 4  ENABLE ⬍  N / O ⬍  ALARM 4
  OUTPUT

  BUZZER
  OUT

  E-MAIL
  NOTIFICATION
```

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

Determine the behavior of each of the 4 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

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

Determine the behavior and actions that will trigger each of the 1 alarm output.

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 EVENT : 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        ☐        ☐          ☐
OUTPUT       CH 2        ☐        ☐          ☐
BU==ER       CH 3        ☐        ☐          ☐
OUT          CH 4        ☐        ☐          ☐
E-MAIL       CH 5                 ☐          ☐
NOTIFICATION CH 6                 ☐          ☐
             CH 7                 ☐          ☐
             CH 8                 ☐          ☐
                                      ▼ DOWN  ▲ UP
```

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

Determine 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 EVENT : 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
INPUT                     ALARM   VIDEO LOSS    MOTION
ALARM        CH 1           □         □           □
OUTPUT       CH 2           □         □           □
BUZZER       CH 3           □         □           □
OUT          CH 4           □         □           □
E-MAIL       CH 5                     □           □
NOTIFICATION CH 6                     □           □
             CH 7                     □           □
             CH 8                     □           □
             FREQUENCY     5MIN ↕        ▼ DOWN  ▲ UP
```

Click the EMAIL NOTIFICATION menu and click each value.

Determine 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.

Action settings

ALARM EVENT : 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
┌─────────────┐
│ DISK        │   RECORD TIME LIMIT      OFF    ▲▼
│ MANAGEMENT  │   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 hour, 1 day, 2 day, 3 day, 4 day, 5 day, 6day, 1 week, 2 week, 3 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** │
└──┘

RECORD MENU

RECORD MENU

MENU │ Click the "MENU".

SYSTEM SETUP

RECORD SETUP

EXIT
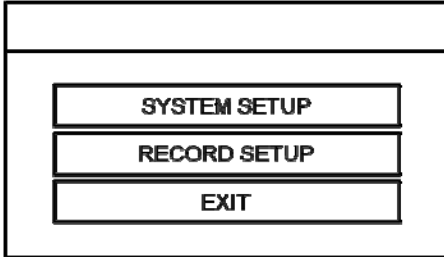
Input the password. Then main menu will appear.

Click the **RECORD** menu.

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

RECORD : RECORDING OPERATIONS

RECORDING

RECORDING OPERATIONS		
CONTINUOUS MOTION RECORDING	SCHEDULE MODE	DAILY
	PRE EVENT RECORDING TIME	5 SEC
	POST EVENT RECORDING TIME	5 SEC
ALARM RECORDING		
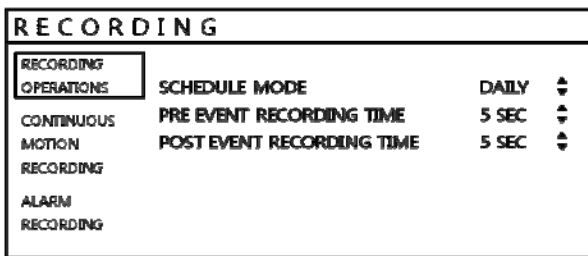
Click the **RECORDING OPERATION** menu and click each value.
Then, click the value with   button to change.

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).

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RECORD MENU

RECORD : CONTINUOUS/MOTION

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.

ACTIVATION : This section determines at what times the DVR will record and whether it is in continuous recording

or motion detection.

SIZE/FPS/QUALITY

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

SIZE/FPS/QUALITY	ACTIVATION

SUN
TIME

	SIZE	FPS	QUALITY	AUDIO
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
CH 6	CIF	30	HIGHEST	OFF
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

RECORDING OPERATIONS

CONTINUOUS /
MOTION
RECORDING

ALARM
RECORDING

PANIC
RECORDING

NETWORK
STREAMING

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

SIZE/FPS/QUALITY	ACTIVATION

SUN
TIME

	SIZE	FPS	QUALITY	AUDIO
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
CH 6	CIF	30	HIGHEST	OFF
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

RECORDING OPERATIONS

CONTINUOUS /
MOTION
RECORDING

ALARM
RECORDING

PANIC
RECORDING

NETWORK
STREAMING

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

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.

Maximum recording frame rate is 480FPS at resolution of 1CIF (352x240).

4 channels can be recorded in full D1 (4CIF@704x480) resolution.

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

FPS : Frame rates between 1 and 25 or 30 can be set for each channel.

QUALITY : Five 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.

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.

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
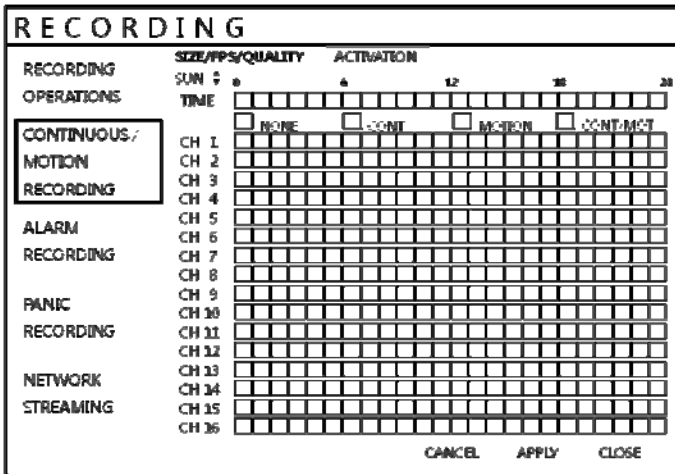
Click the **ACTIVATION** menu.

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.
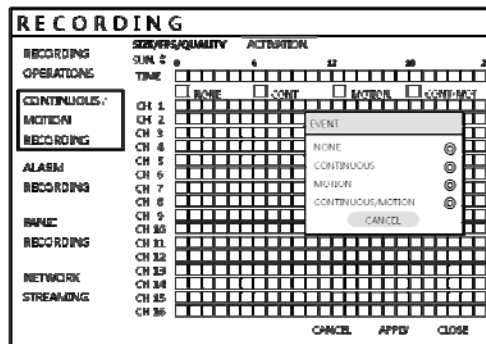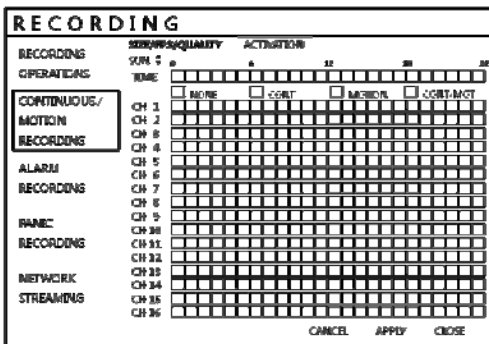
Drag the Time and Channel with left mouse click.

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.

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

RECORD MENU

RECORD : ALARM SETUP

	SIZE	FPS	QUALITY	AUDIO	ALARM
CH 1	CIF	30	HIGHEST	OFF	1
CH 2	CIF	30	HIGHEST	OFF	2
CH 3	CIF	30	HIGHEST	OFF	3
CH 4	CIF	30	HIGHEST	OFF	4
CH 5	CIF	30	HIGHEST	OFF	OFF
CH 6	CIF	30	HIGHEST	OFF	OFF
CH 7	CIF	30	HIGHEST	OFF	OFF
CH 8	CIF	30	HIGHEST	OFF	OFF
CH 9	CIF	30	HIGHEST	OFF	OFF
CH 10	CIF	30	HIGHEST	OFF	OFF
CH 11	CIF	30	HIGHEST	OFF	OFF
CH 12	CIF	30	HIGHEST	OFF	OFF
CH 13	CIF	30	HIGHEST	OFF	OFF
CH 14	CIF	30	HIGHEST	OFF	OFF
CH 15	CIF	30	HIGHEST	OFF	OFF
CH 16	CIF	30	HIGHEST	OFF	OFF

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 · MOTION RECORDING	CH 1	CIF	30	HIGHEST	OFF
	CH 2	CIF	30	HIGHEST	OFF
	CH 3	CIF	30	HIGHEST	OFF
	CH 4	CIF	30	HIGHEST	OFF
ALARM RECORDING	CH 5	CIF	30	HIGHEST	OFF
	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
NETWORK STREAMING	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 **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.

RECORD : NETWORK STREAMING SETUP

RECORDING					
RECORDING OPERATIONS		SIZE	FPS	QUALITY	AUDIO
CONTINUOUS · MOTION RECORDING	CH 1	CIF	7	HIGHEST	OFF
	CH 2	CIF	7	HIGHEST	OFF
	CH 3	CIF	7	HIGHEST	OFF
	CH 4	CIF	7	HIGHEST	OFF
ALARM RECORDING	CH 5	CIF	7	HIGHEST	OFF
	CH 6	CIF	7	HIGHEST	OFF
	CH 7	CIF	7	HIGHEST	OFF
	CH 8	CIF	7	HIGHEST	OFF
PANIC RECORDING	CH 9	CIF	7	HIGHEST	OFF
	CH 10	CIF	7	HIGHEST	OFF
	CH 11	CIF	7	HIGHEST	OFF
	CH 12	CIF	7	HIGHEST	OFF
NETWORK STREAMING	CH 13	CIF	7	HIGHEST	OFF
	CH 14	CIF	7	HIGHEST	OFF
	CH 15	CIF	7	HIGHEST	OFF
	CH 16	CIF	7	HIGHEST	OFF
			CANCEL	APPLY	CLOSE

Click the **NETWORK STREAMING** menu.

Select the Size, Frame, Quality and audio.

During Network Streaming mode, the DVR is possible to set remotely uploaded video, audio stream with using client program like Web RA.

Maximum recording frame rate is 120FPS at resolution of 1CIF (352x240).

SEARCH

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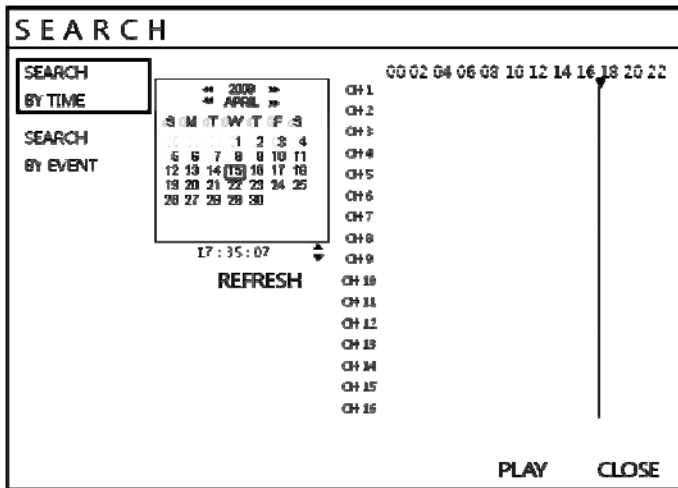
Click the date that user wants to have the values changed.

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
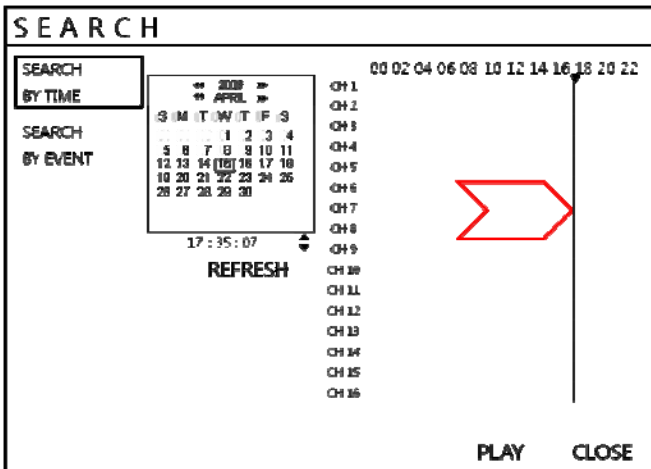
Drag the time bar with left mouse click.

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.
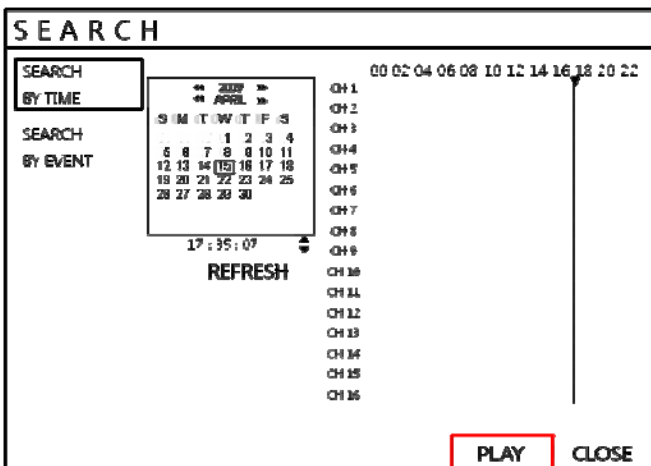
Click the **PLAY (Multi View)** button.

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 : Multi Playback

PLAY (Multi view):

The default playback mode is 16 screen displays.

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.

When playback is paused, the **<<, >>** 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.

SEARCH

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

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

```
ARCHIVING SETUP

TAG      DATA1                    A·V·CHANNEL
FROM     2010/07/07 21:51:33      ☑ CH1  ☑ CH2  ☑ CH3  ☑ CH4
TO       2010/07/07 21:51:59      ☑ CH5  ☑ CH6  ☑ CH7  ☑ CH8
MEMO                              ☑ CH9  ☑ CH10 ☑ CH11 ☑ CH12
                                  ☑ CH13 ☑ CH14 ☑ CH15 ☑ CH16

INFO                              ☑ LOG
         117746 Kbytes

            RESERVE    CONTINUE   START    STOP    CLOSE
```

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

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

```
ARCHIVING SETUP

TAG      DATA1                    A·V·CHANNEL
FROM     2010/07/07 21:51:33      ☑ CH1  ☑ CH2  ☑ CH3  ☑ CH4
TO       2010/07/07 21:51:59      ☑ CH5  ☑ CH6  ☑ CH7  ☑ CH8
MEMO                              ☑ CH9  ☑ CH10 ☑ CH11 ☑ CH12
                                  ☑ CH13 ☑ CH14 ☑ CH15 ☑ CH16

INFO                              ☑ LOG
         117746 Kbytes

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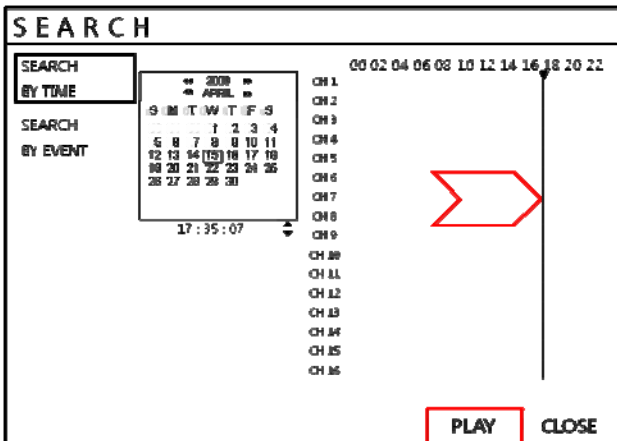
To exit playback mode and return to the search screen to choose another time and date, press **RETURN**.

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

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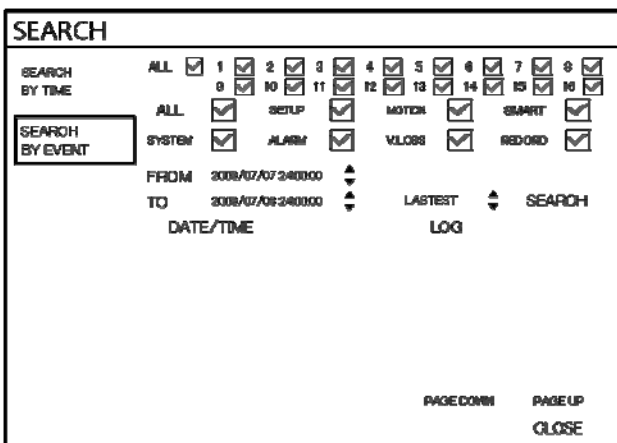
The DVR event log stores events such as motion and alarm activated recording, video loss, etc.

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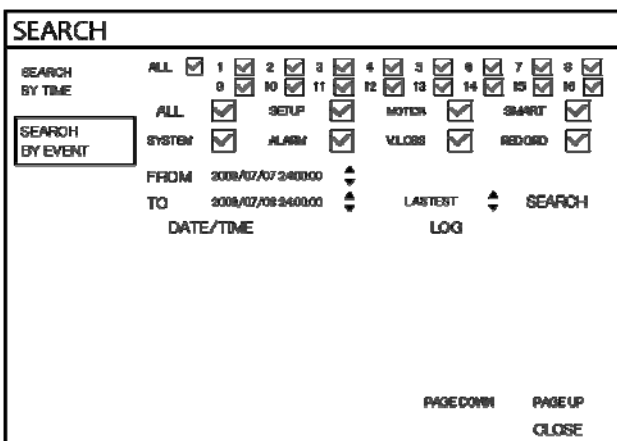
Click the **SEARCH BY EVENT** menu and select each desired channel and condition.

Then click the time with [button] button to change.

Click the **SEARCH** button.

SEARCH

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

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

During event search playback, the playback button 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, 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**.
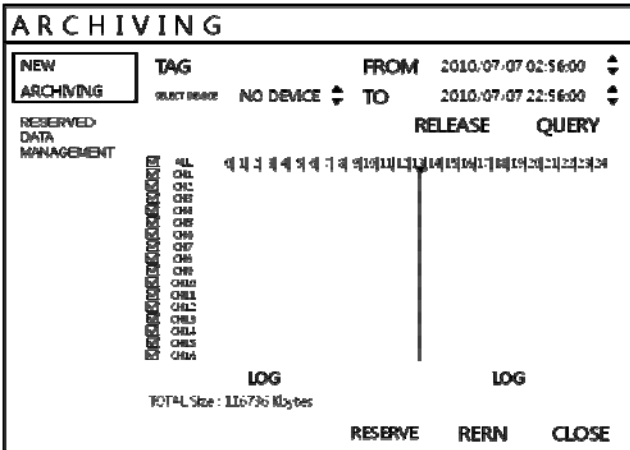
Click each desired channel.

Then click the times with [icon] 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.

Stop by pressing the **STOP** button on Burning.

ARCHIVING

RESERVED DATA MANAGEMENT

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.
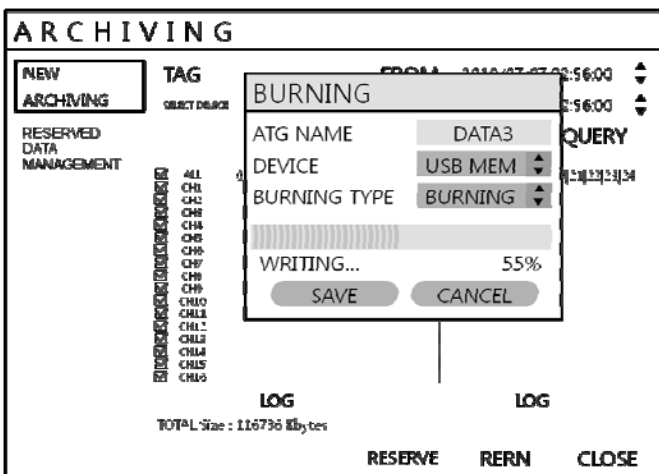
WEB CONNECTION SETUP

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
BROWSER	InternetExplorer, Firefox, Crome, Opera, Safari
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)
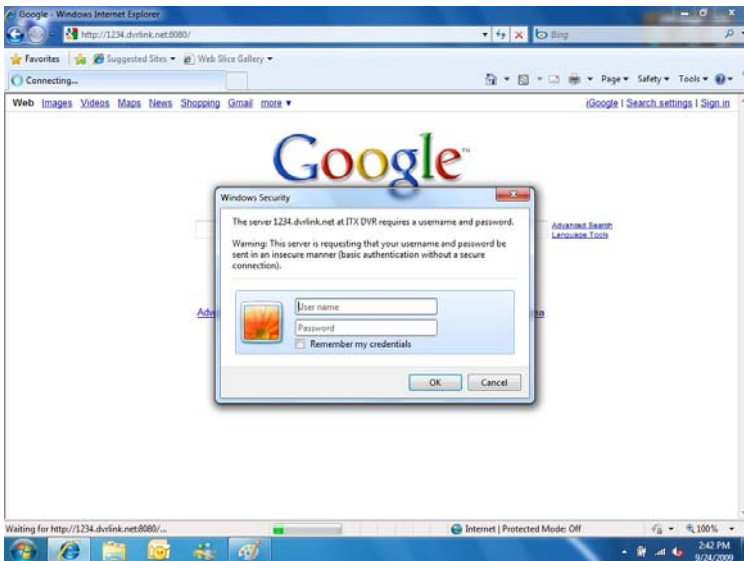
Default ID and password are 'ADMIN' &'1234'
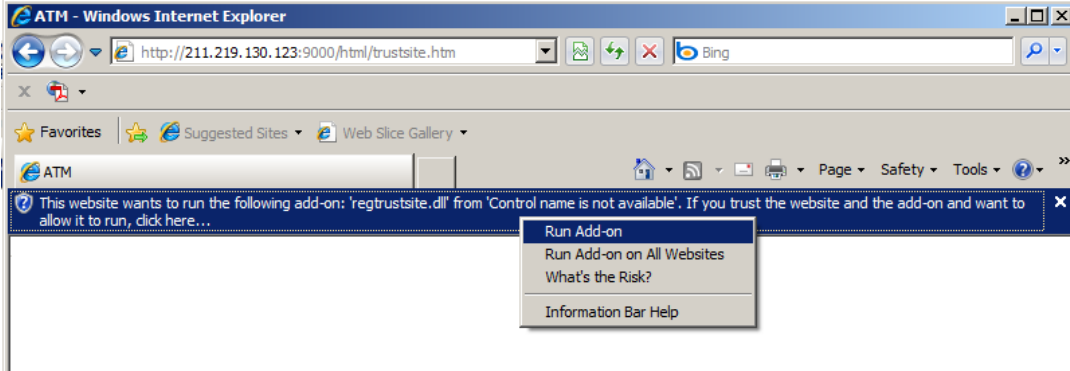
User need to install Active-X, click Run Add-on
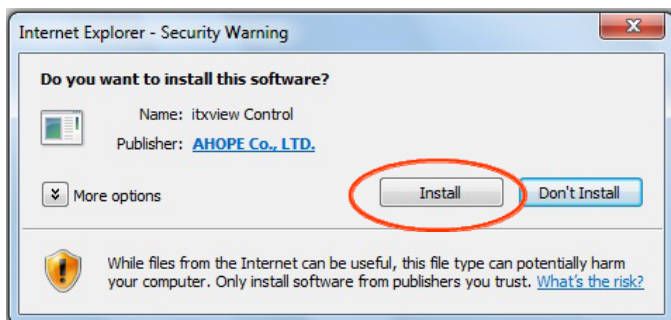
In case of, unable to install active-X, User needs to check the option of activeX on IE security menu.
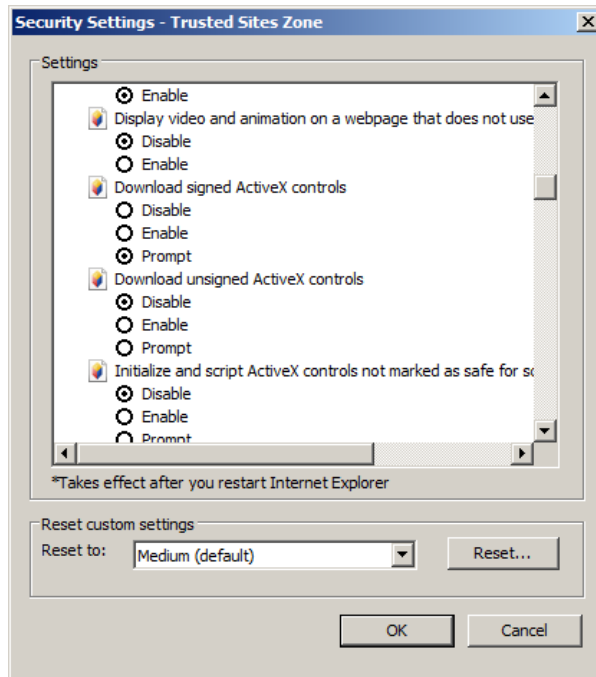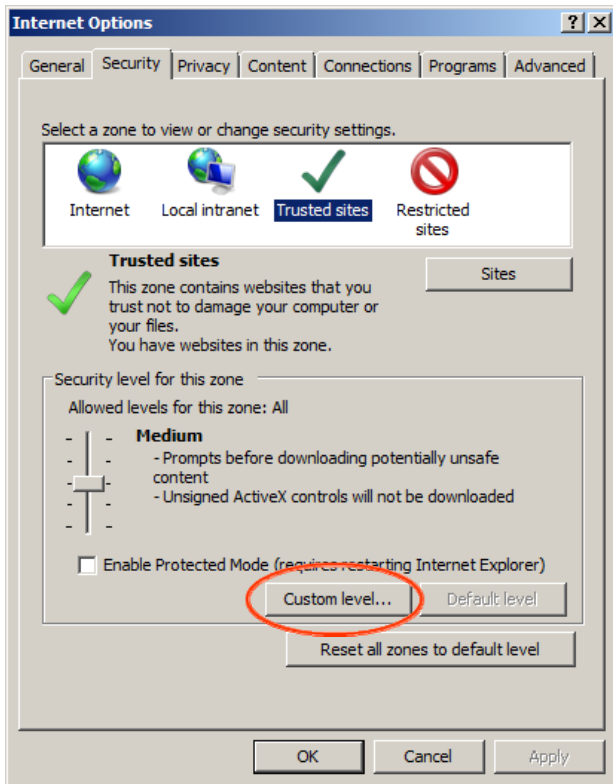
Select Enable for all ActiveX related options.

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

WEB CONNECTION SETUP

LIVE MODE
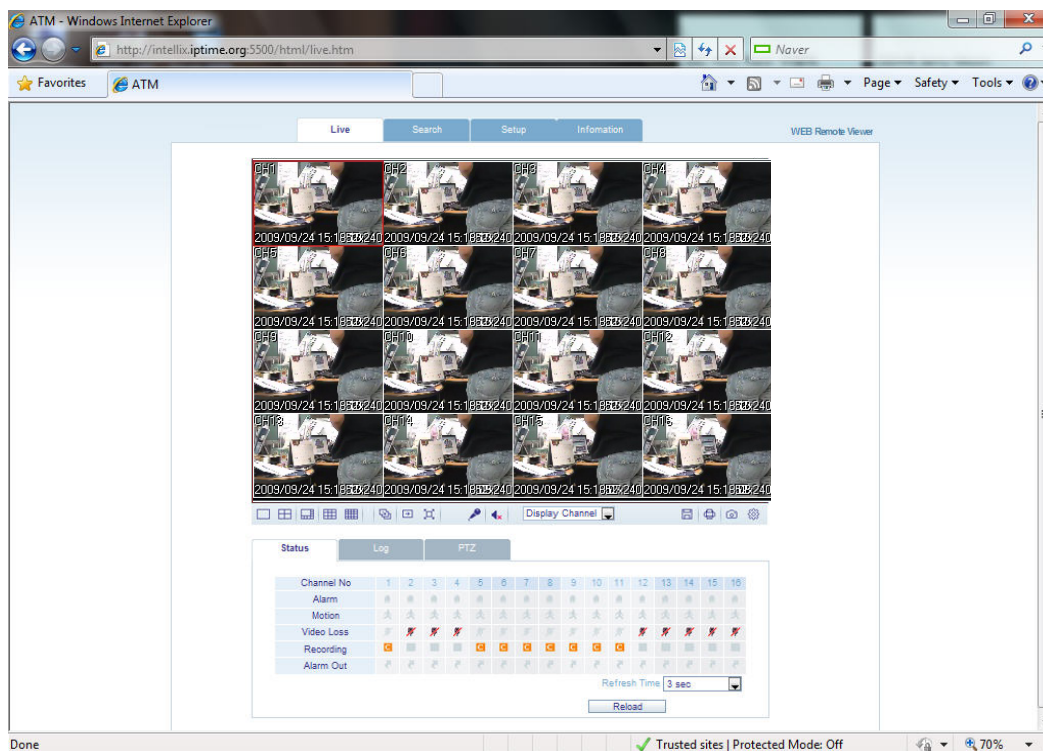
Explanation for function LIVE mode

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

     Sequence mode.

Move to next camera

Full screen.
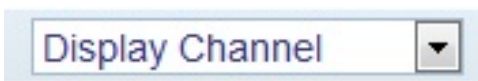
     Select live channel. – select a channel manually.

     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]

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- **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.

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

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

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)
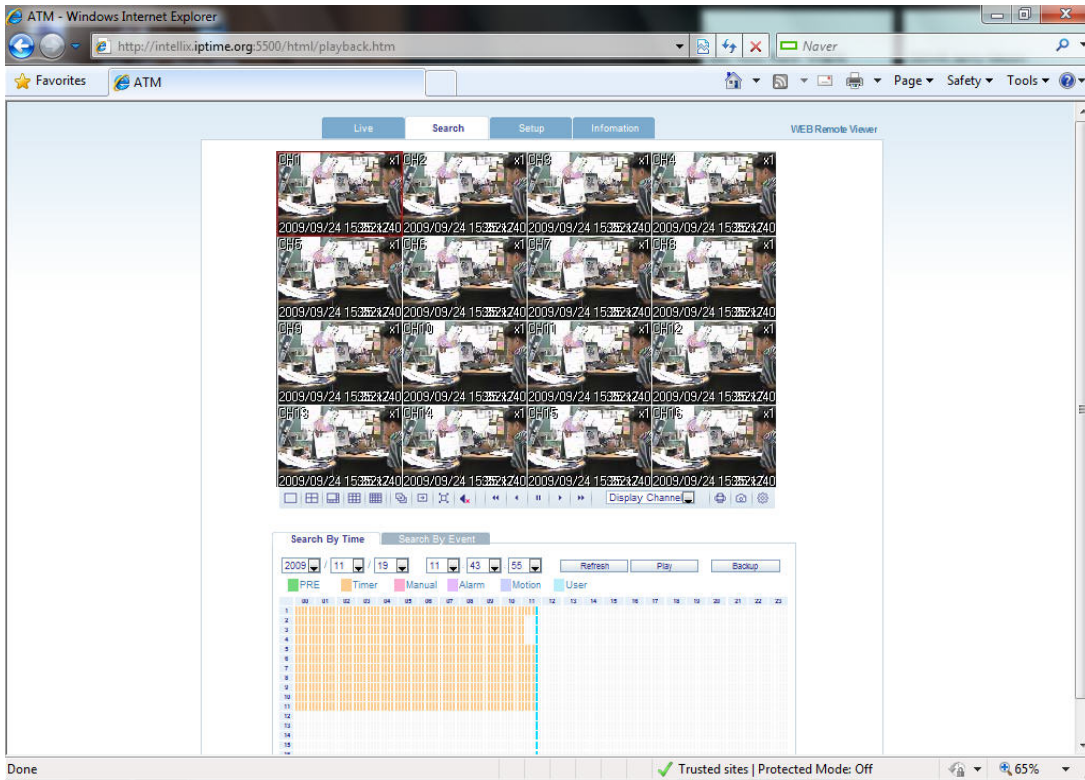
1. Select a time line on time table or set a exact time.

2. Then press 'Play' button
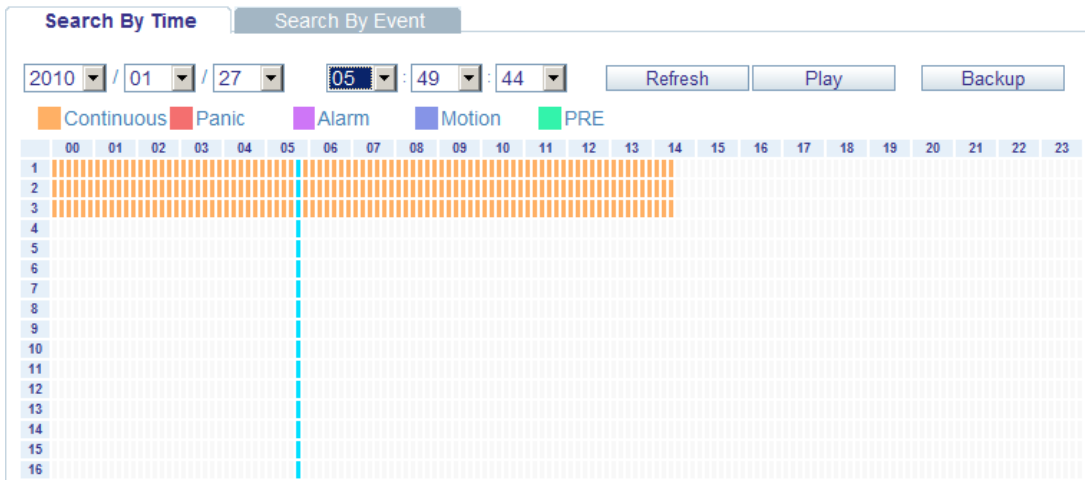
1. Refresh : Refresh the recording table of data.

2. Play : Start to display the recorded data from system.

3. Backup : User can backup the recorded data on remote site.
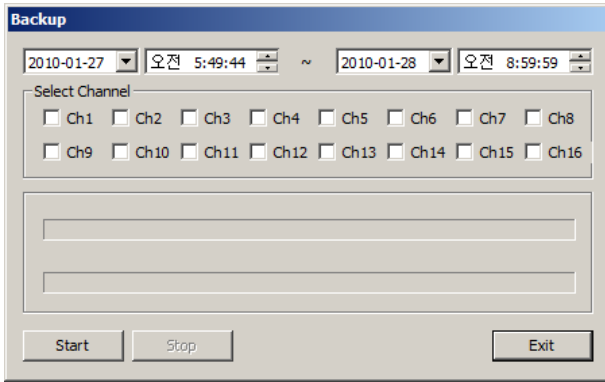
SEARCH (By Event)
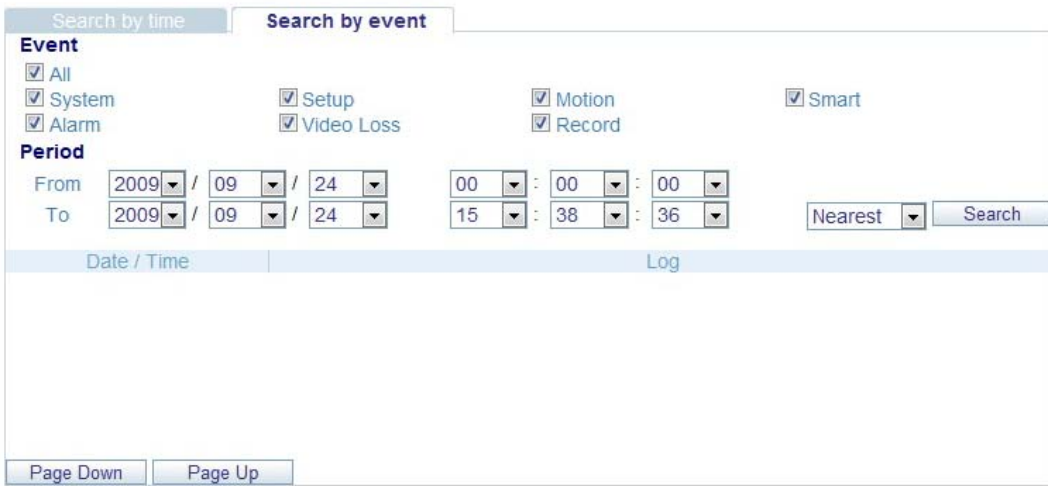
1. Event : Select events for querying .

2. Period : Set duration for querying recording data.

3. Search : Start to query and list up all events on the list
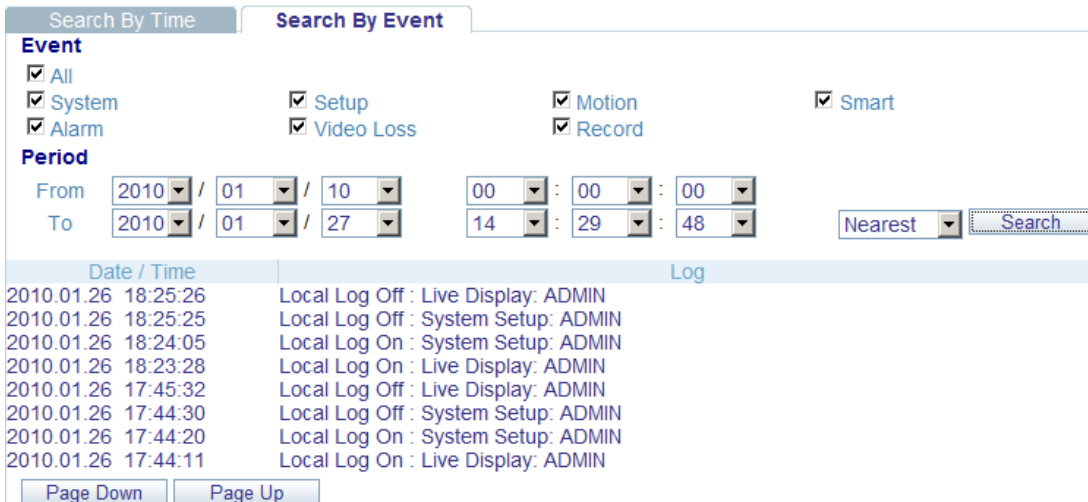
Select a event on the list then DVR starting to playback the related camera's image

SETUP MODE

1. **CAMERMA**

   User can configure camera's attribute such as title, live color, PTZ setup or motion
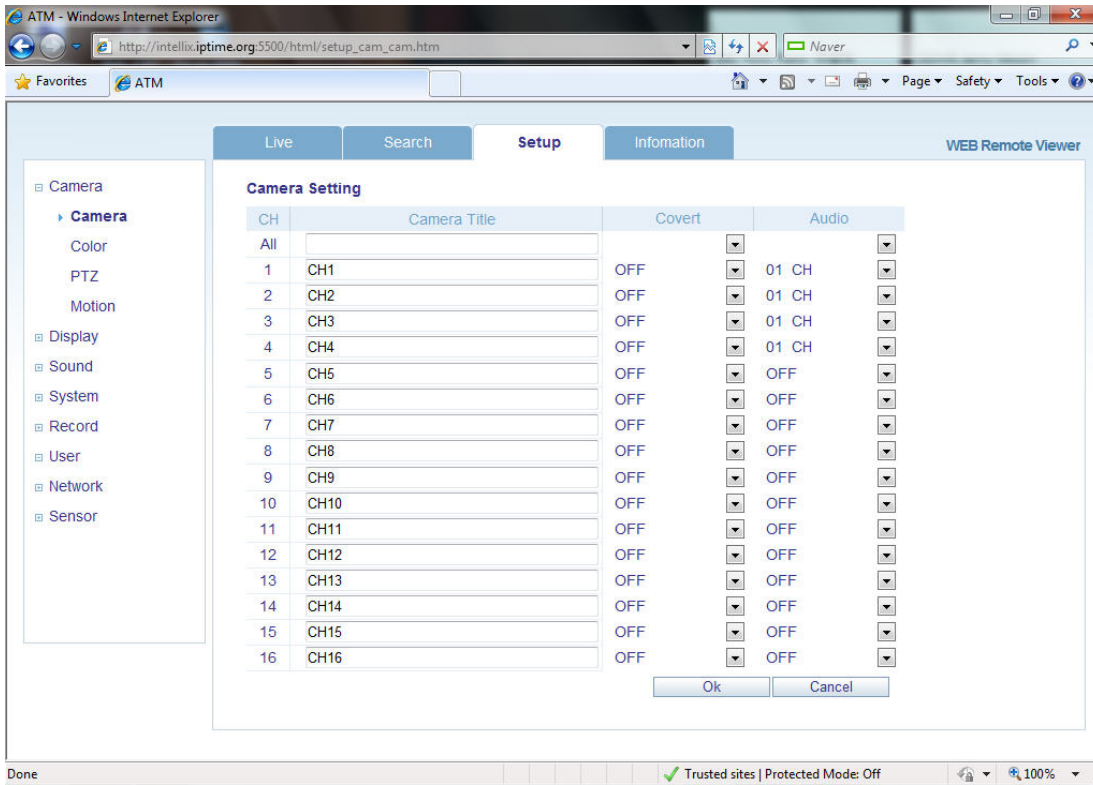
● Motion setup for detecting motion events.
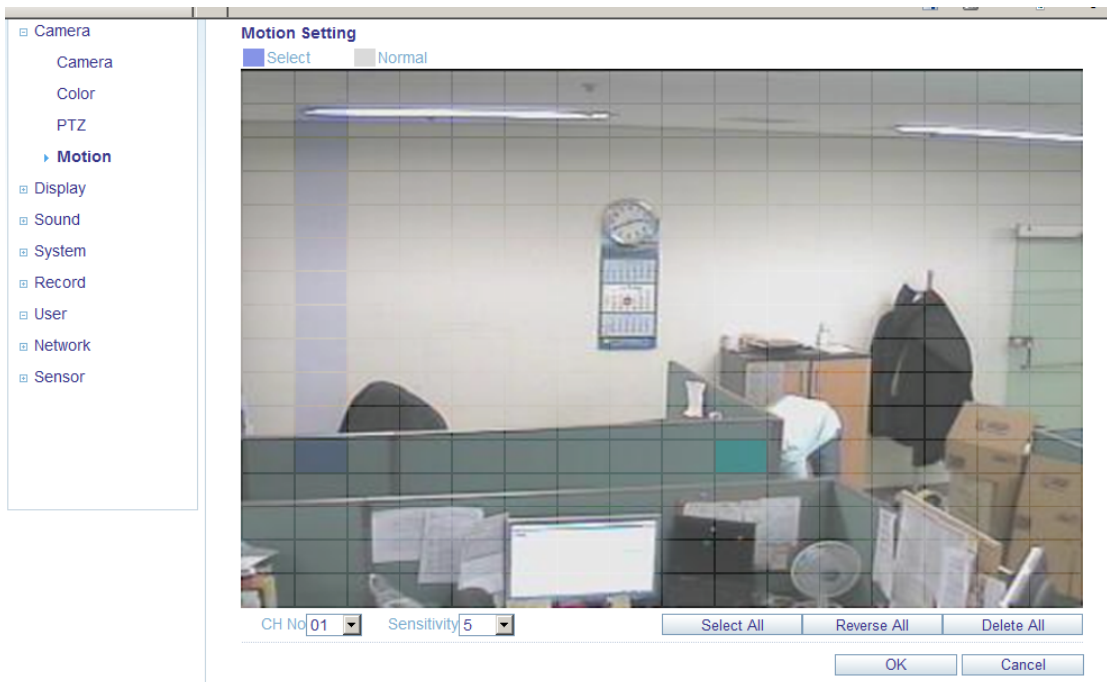
1) Select Motion menu tab.
2) Select a channel and sensitivity.

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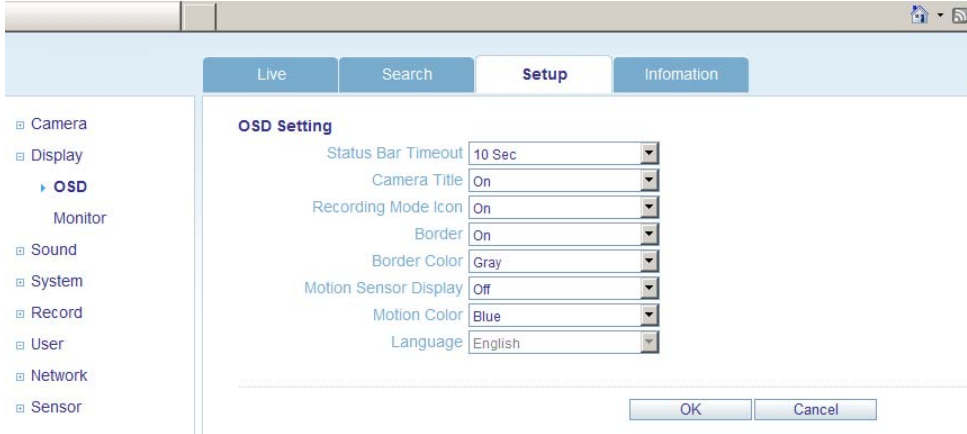
2) Monitor -   user can set dwell time for sequence or spot, and pop up function.
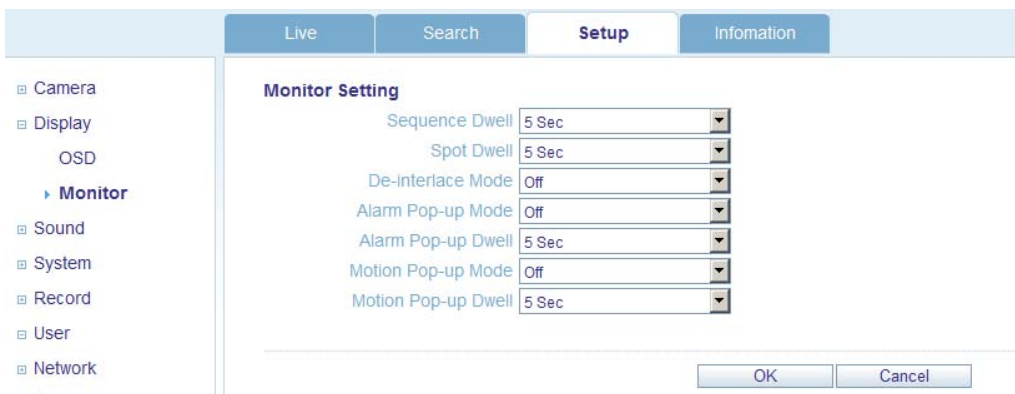
3. Sound

1) Audio Setting – Select a live audio channel and activation

2) Buzzer setting – Activate buzzer out for evnet 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

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.

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

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)

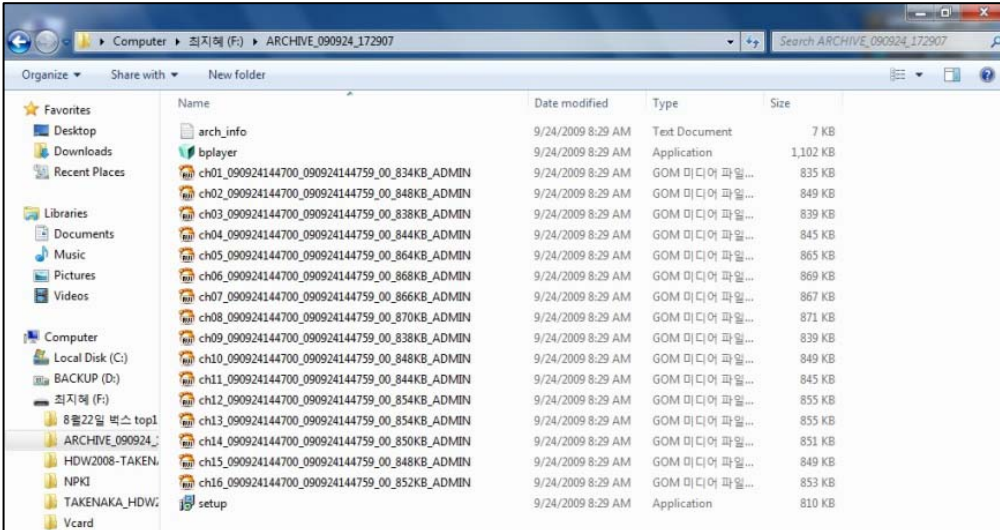All detail setup follow DVR system setup

INFORMATION

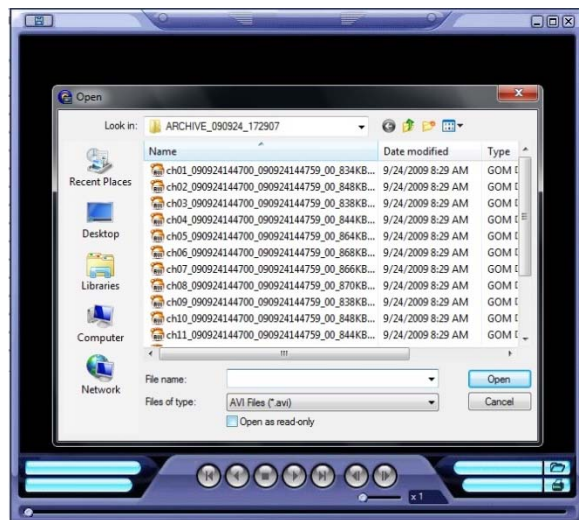Display Model name of DVR and WEB Remote Software version.
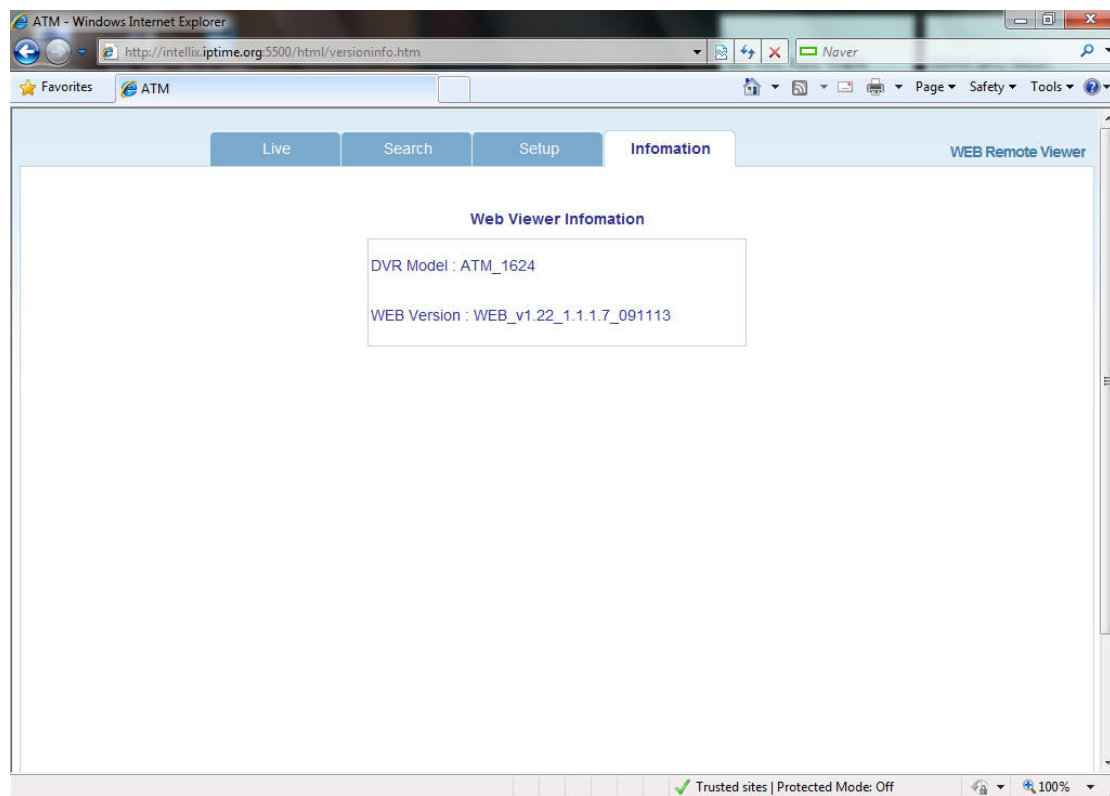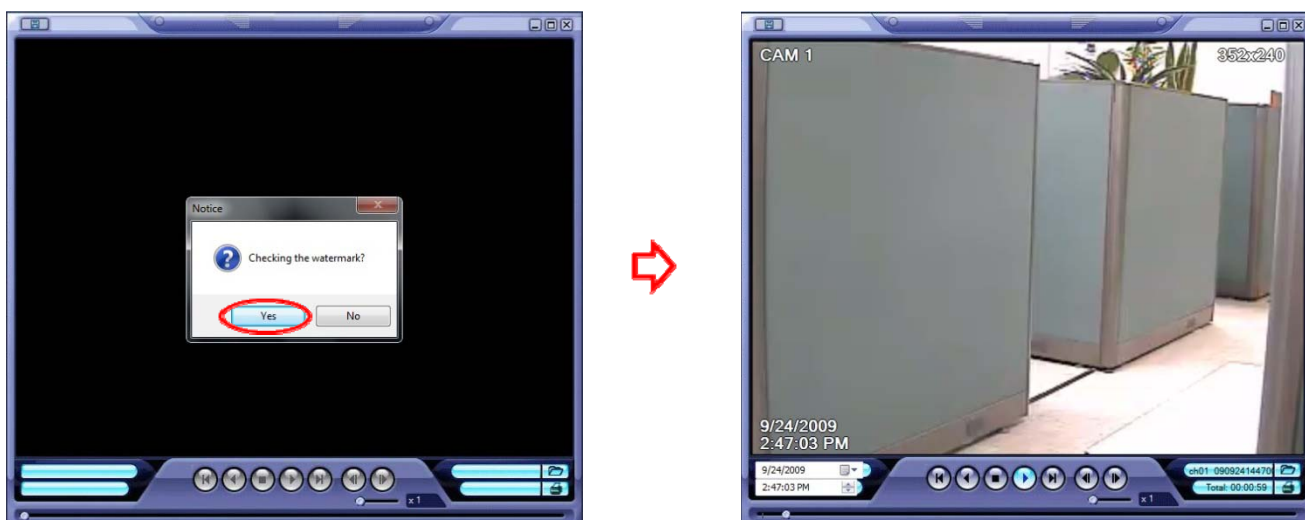
WATERARK PROCESS

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.

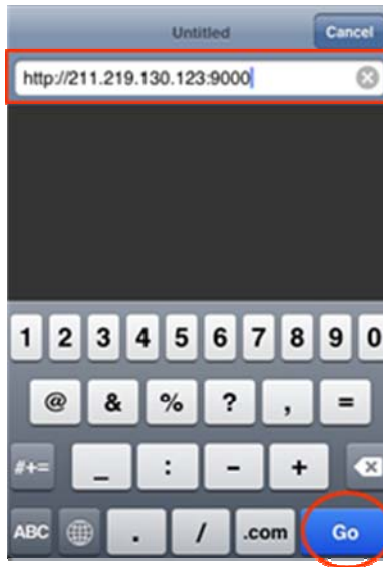3. After open it, can see the following message then click the [Yes] button.

4. If the backuped 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)

♣ **I-PHONE**

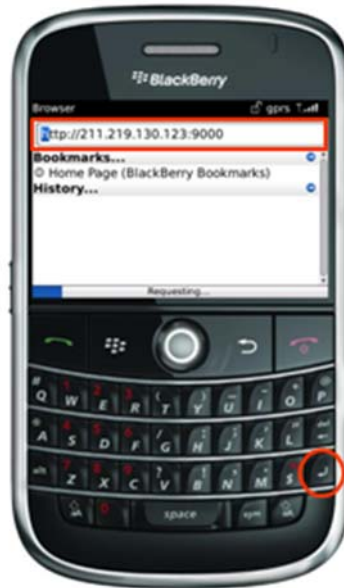1. Select the Web browser.   2. Enter the IP address or URL to connect.
                                                                And press the Enter button.

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