

STANDALONE DVR
USER Manual



4CH DVR / 8CH DVR / 16CH DVR

DSP BASED STANDALONE DVR SOLUTION

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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 CONTROLL

Designed to be controlled by mouse and easy to use.

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 or CD.

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

Software is provided to allow remote connection to up to 4 DVRs in one session. Depending on 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 activated or motion activated. For each type of recording, frame rates, image quality and audio recording properties can be adjusted per hour, per 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 3 main monitor outputs (Composite, VGA and S-Video) 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)

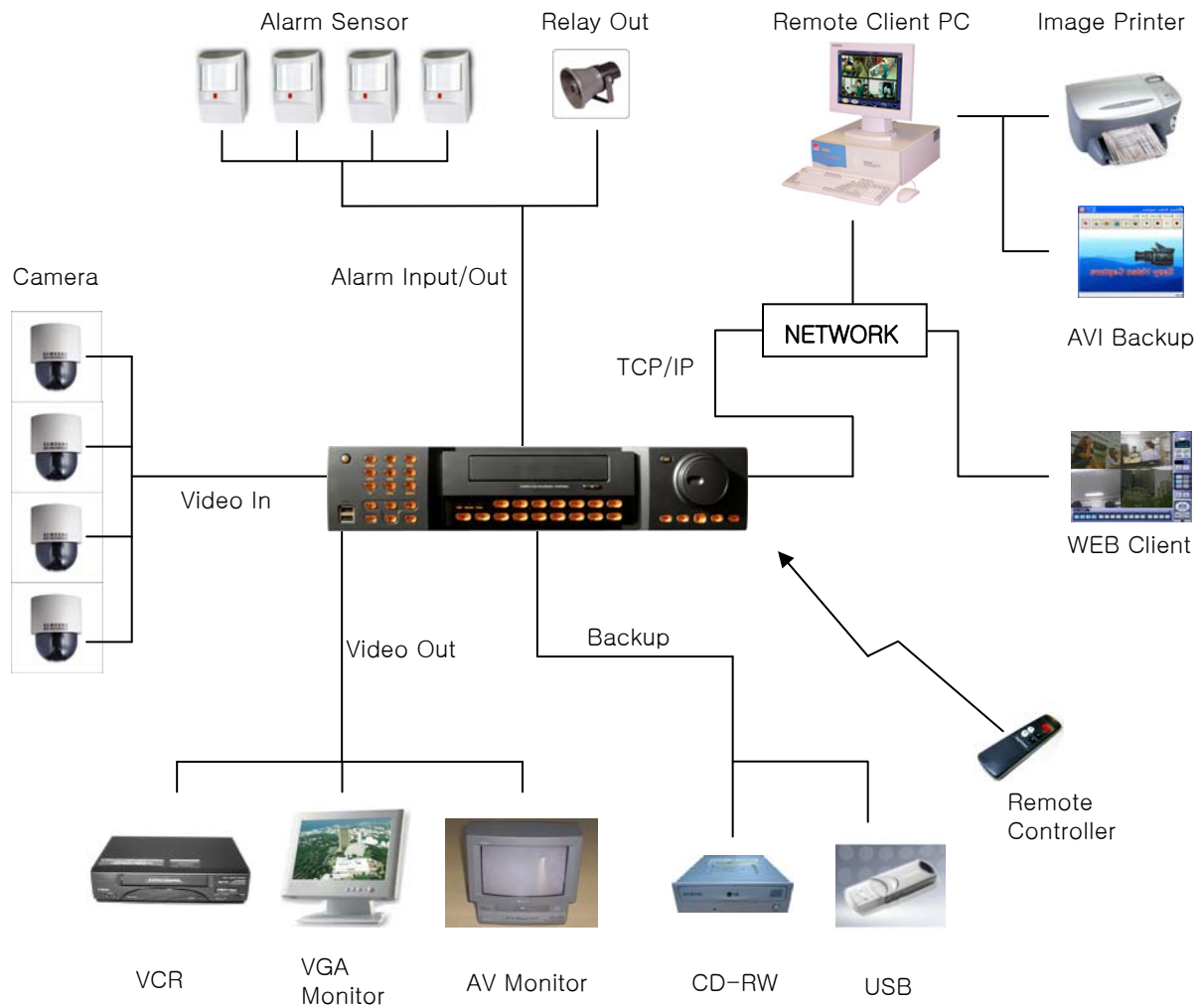
CONFIGURATION BACKUP

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, hard drive failure etc.

SYSTEM ORGANIZATION



SYSTEM CONTENTS

① Basic Contents



Power Cable



User's Manual



Remote Controller



Remote Client
Program Install CD



AAA Battery X 2

② Option Contents



HDD



CD-RW



USB Memory

SYSTEM CONFIGURE (8CH, 16CH)

1. Front panel description.

POWER BUTTON

(page 14)

DISPLAY

Selects various display modes in live display and playback (page 16 & page 60)

SEQ

Calls the currently defined sequence mode (page 19)

PANIC

Selects panic recording mode (page 19)

ZOOM

Selects digital zoom mode in live display (page 18)

LOCK

Locks the front panel buttons (page 20)

ARCHIVE

Displays the archive menu (page 65)

PTZ

Selects PTZ mode in live display (page 20)

SETUP

Displays the setup menus (page 22)

SEARCH

Displays the search menu (page 60)

SHUTTLE WHEEL

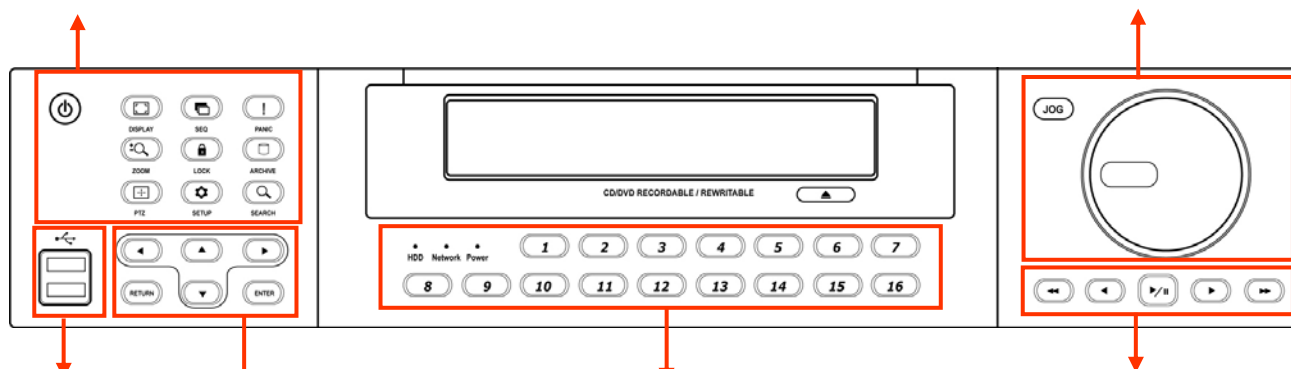
Used to quickly adjust playback speed and direction (page 62). Also used to control camera zoom when in PTZ mode (page 20), and digital zoom level in live display (page 18)

JOG RING

When playback is paused, used to move footage forwards or backwards, frame by frame (page 62)

HOLD

Locks the current function of the SHUTTLE WHEEL so it can be released (page 62)



USB ports

Supports a wide variety of USB memory stick for archive, system setting backup and firmware upgrade. An additional USB port is also provided on the rear panel

CURSOR KEYS, ENTER and RETURN buttons

Used for navigating setup menus, search and archive screens. Also used when the DVR is in PTZ mode (page 20)

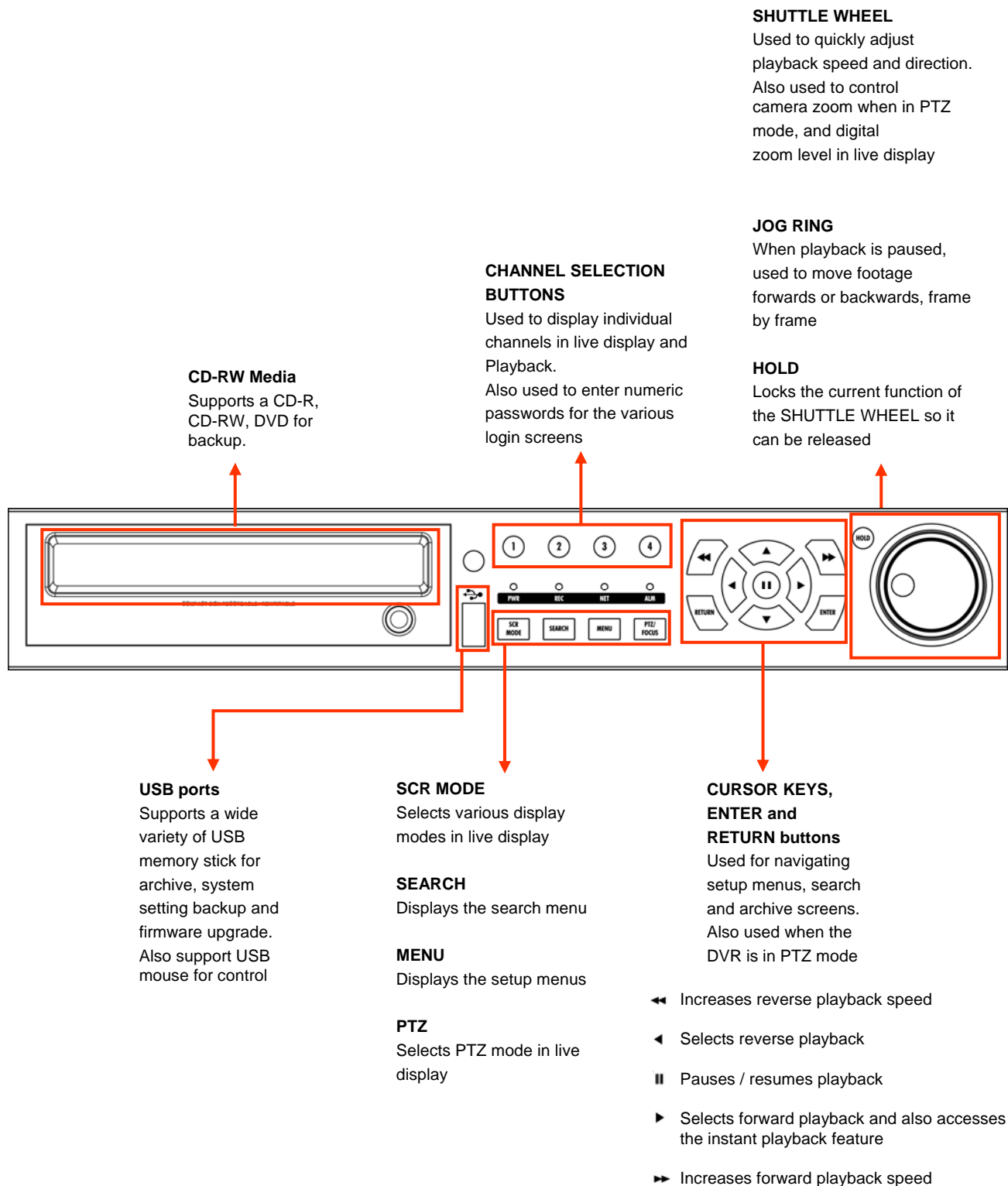
CHANNEL SELECTION BUTTONS

Used to display individual channels in live display and playback (page 17 & page 60). Also used to enter numeric passwords for the various login screens

- ◀◀ Increases reverse playback speed
- ◀ Selects reverse playback
- || Pauses / resumes playback
- ▶ Selects forward playback and also accesses the instant playback feature
- ▶▶ Increases forward playback speed

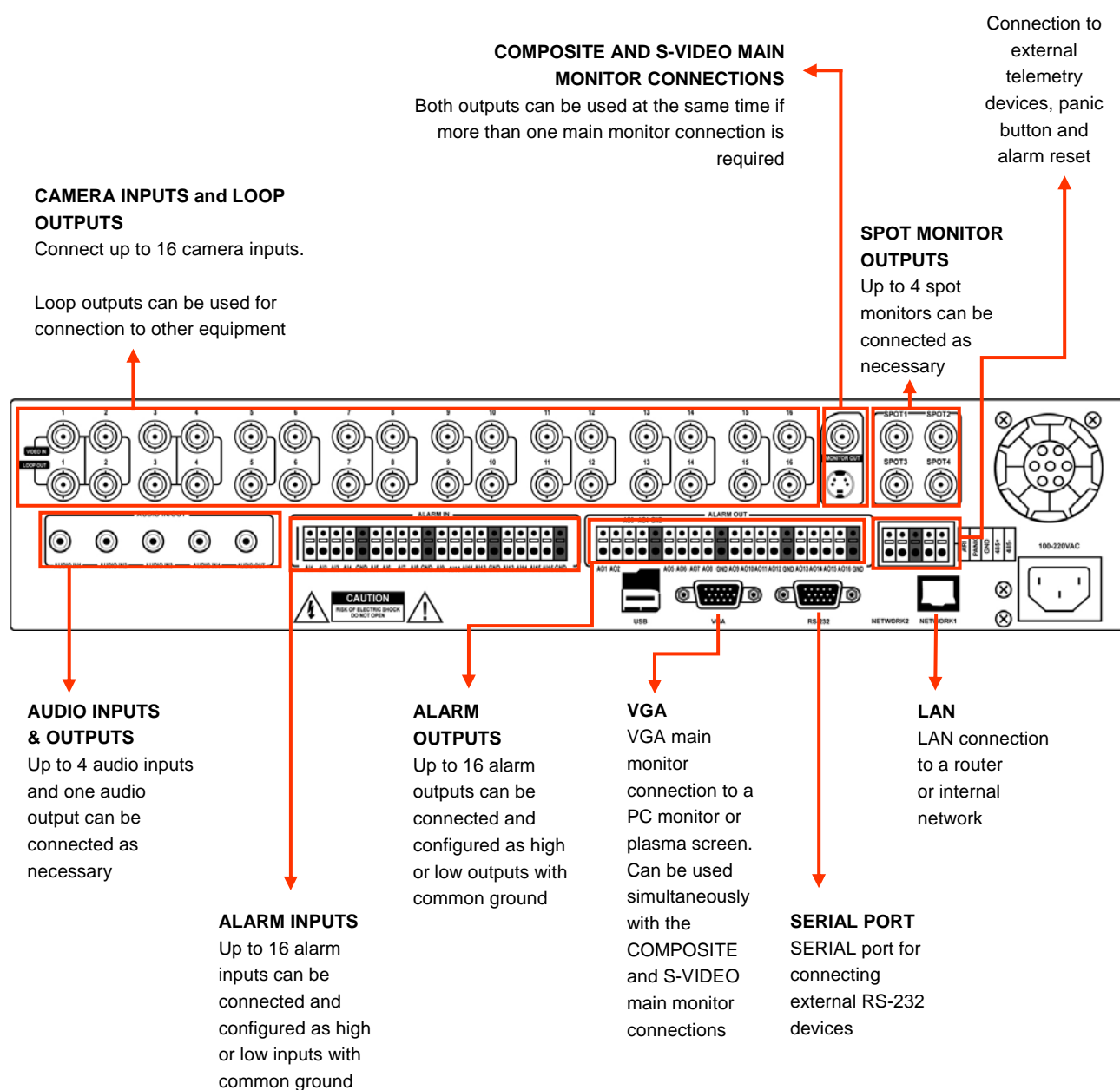
SYSTEM CONFIGURE (4CH)

1. Front panel description.



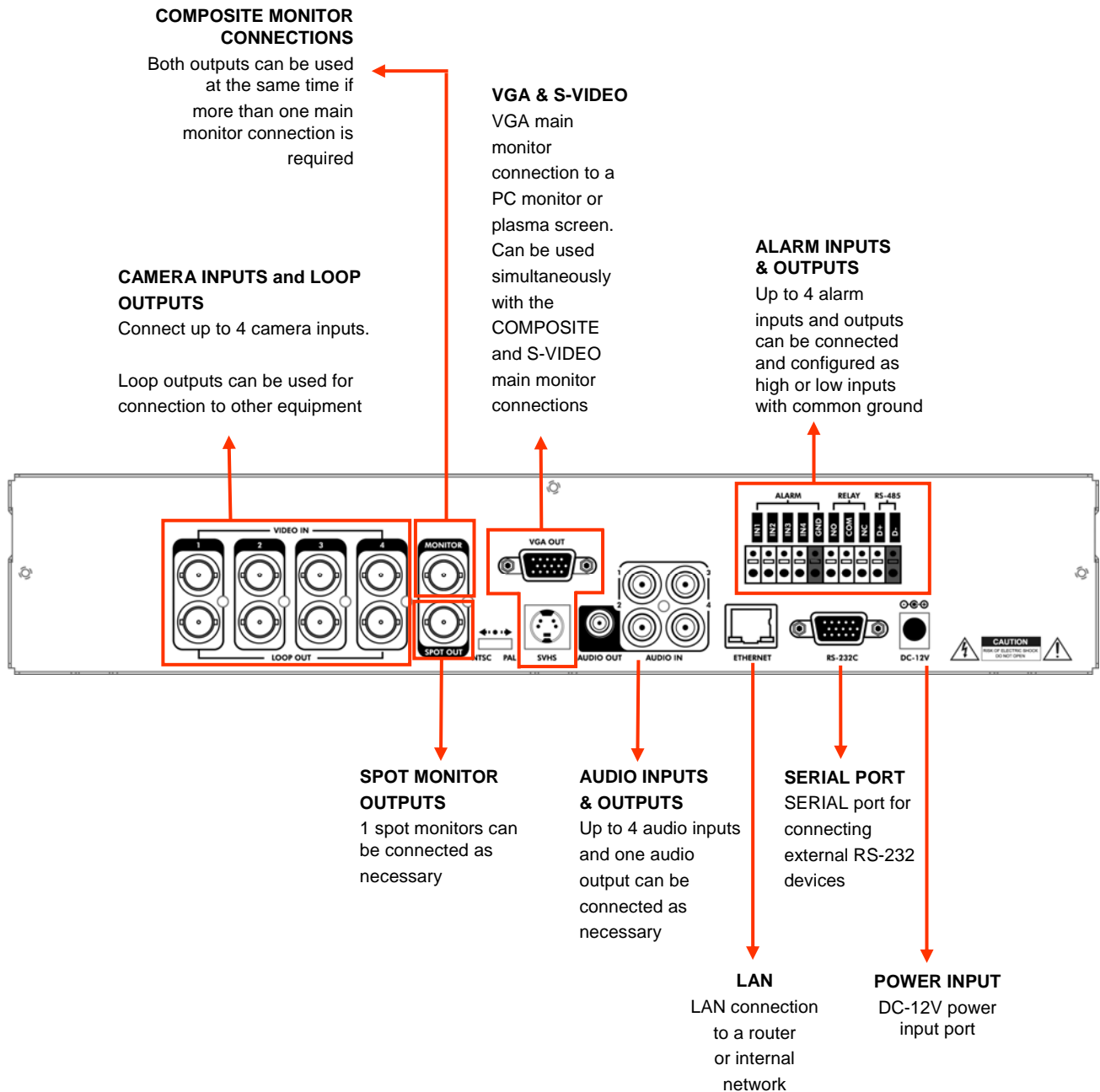
SYSTEM CONFIGURE (8CH, 16CH)

2. Rear panel description.



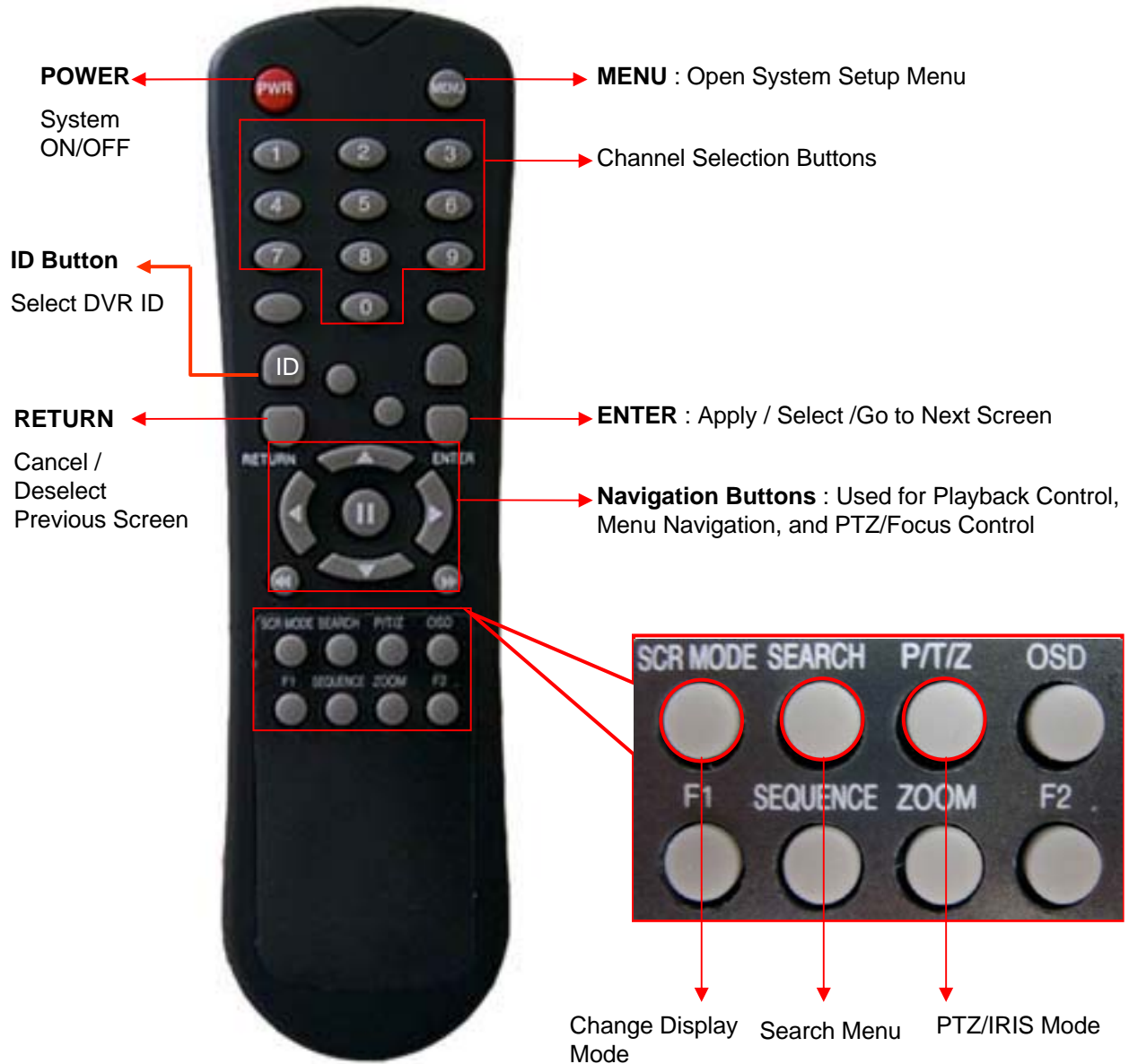
SYSTEM CONFIGURE (4CH)

2. Rear panel description.



SYSTEM CONFIGURE – Remote Controller

3. Remote Controller description.



※ If there are many DVRs on stack, each DVR must be set different ID then Remote controller set each ID on DVR. Can control all DVRs on 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 DVR ID, see the page45.

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

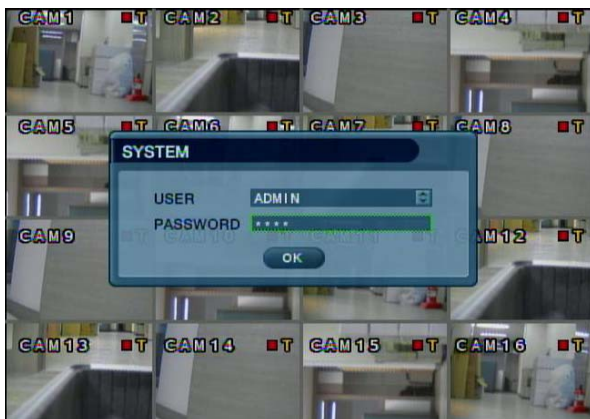
And Input the **255** and press the **RETURN** button of remote controller.

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 or S-VIDEO** 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 / DVR-RW drive.



After startup diagnostics are complete, the operator must login 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.



Double click on the Password tap then the Virtual Keyboard will be appeared. Then click the password and click the  button.



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

The status bar at the bottom of the screen shows current time and date and percentage of hard drive used.

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.

LIVE DISPLAY

DIVISION SCREEN



Click the right mouse button on the Live Display screen and Click the **SCR MODE** menu.




8 different display modes are supported by the 16 channel DVR.

By repeatedly pressing the **DISPLAY** button, the operator can choose between single screen, 4 screen, 6 screen, 8 screen, 9 screen, 13 screen, 16 screen and basic sequence modes.



Click the right mouse button on the Live Display screen and Click the **SEQUENCE** menu.



All the display modes are static with the exception of the sequence mode. In this mode, the sequence symbol () is displayed and each channel is shown in full screen for a set period of time (default 3 sec) before switching to the next channel.

The sequence runs indefinitely until a different display mode is chosen.

LIVE DISPLAY

LIVE display edit mode



For each multi screen view mode, the operator can decide which channels to view and in what position. Use the **DISPLAY** button to choose the multi screen mode to edit and then press **ENTER** to select LIVE DISPLAY EDIT MODE.



In this example, the default 8 screen mode displays channels 1-8. To display channel 10 instead of channel 5.

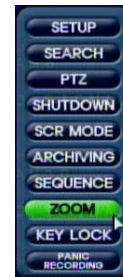
Using the **CHANNEL SELECTION** buttons, press number 5 – channel 5 changes to a blue screen.

LIVE DISPLAY

Digital Zoom

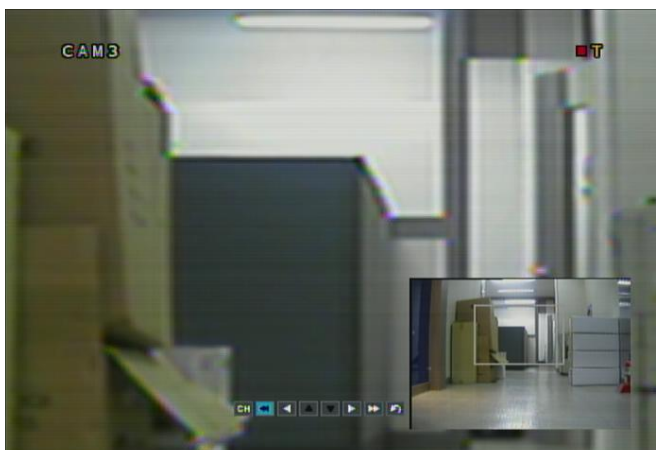


Click the right mouse button on the Live Display screen and Click the **ZOOM** menu.



When viewing a channel in full screen, the operator can zoom in to a particular area by up to 8 times.

To use 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.



Click the following button.



RETURN

To adjust the zoom level, turn the **SHUTTLE WHEEL** clockwise to increase zoom or anticlockwise to decrease zoom. To move the zoom area around the image, use the **CURSOR KEYS** to adjust the position of the zoom square.

Press the **RETURN** button to return to normal live display mode.

LIVE DISPLAY

Sequence



Click the right mouse button on the Live Display screen and Click the **SEQUENCE** menu.



Press the **SEQ** button. Each channel is shown in full screen for a set period of time (default 3 sec) 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 (page 25).

Panic Recording



Click the right mouse button on the Live Display screen and Click the **PANIC RECORDING** menu.



Panic recording will override all standard recording settings to provide, by default, continuous recording on all channels.

Press the **PANIC** button. The top right of the display shows a red square only to indicate that the DVR is in panic recording mode.

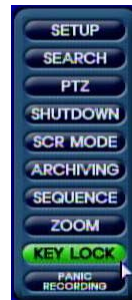
Press the **PANIC** button again to return to normal cording mode.


LIVE DISPLAY

Key Lock Function



Click the right mouse button on the Live Display screen and Click the **KEY LOCK** menu.



Double click on the Password tap then the Virtual Keyboard will be appeared. Then click the password and click the  button.

An operator with ADMIN rights can choose to lock the DVR front panel to prevent any un authorized control.

Press the **LOCK** button, enter the default password '1234'

And press **ENTER**. All buttons are now disabled.

To unlock, press the **LOCK** button again and enter the default password '1234'.

PTZ Camera Control



Click the right mouse button on the Live Display screen and Click the **PTZ** menu.



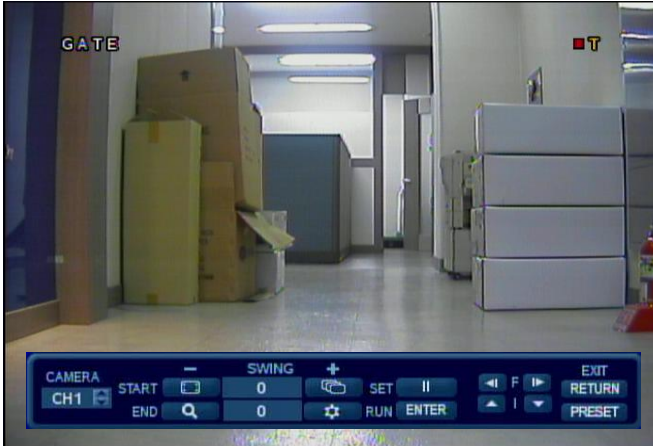
Speed domes and other telemetry devices connected to the DVR, can be fully controlled from the front panel.

In live display mode, press the **PTZ** button. To select a camera to control, use the **CHANNEL SELECTION** buttons.

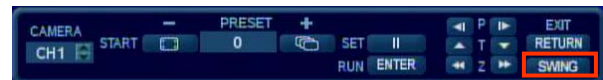
Pan and tilt movement is controlled by the **CURSOR KEYS**, zoom is controlled by turning the **SHUTTLE WHEEL**.

LIVE DISPLAY

PTZ Camera Control continued



Click the **SWING** menu.



◀ & ▶ controls focus, ▲ & ▼ controls the iris.

Press **DISPLAY** or **SEQ** buttons to decrease or increase the swing number.

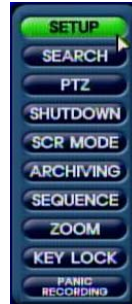
Press **PAUSE** to program the preset, or **ENTER** to call an existing swing.

Press **RETURN** to exit PTZ mode and return to live view.

SYSTEM SETUP



Click the right mouse button on the Live Display screen and Click the **SETUP** menu.



Double click on the Password tap then the Virtual Keyboard will be appeared. Then click the password and click the **↓** button.

Press the **SETUP** button to bring up the menu login screen.

Only operators with ADMIN rights can configure the DVR. Enter the default password of '1234'.



Click the **SYSTEM SETUP** menu.

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

DISPLAY

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

DISPLAY - OSD



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

STATUS BAR : Turns the status bar at the bottom of the live display ON or OFF.

CAMERA TITLE : Determines whether the camera title is displayed.

EVENT 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 COLOUR : If the border is ON, the operator can choose the color.

MENU TRANSPARENCY : During menu setup, the live view can be seen behind the menu screen.

Changing this value determines whether the live view is more (higher value) or less (lower value) visible.

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

OFF – normal display mode.

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

INACTIVE – areas where no motion is detected are highlighted with colored blocks.

MOTION COLOR: The color of the blocks displayed when MOTION SENSOR DISPLAY is set to ACTIVE or INACTIVE.

MOTION TRANSPARENCY : Determines the transparency of the colored blocks when MOTION SENSOR DISPLAY is set to ACTIVE or INACTIVE.

To change any of these settings, highlight OSD and press **ENTER** to select. Use the **CURSOR KEYS** to navigate to the option required. Press **ENTER** to select the option (the cursor changes to orange) and use the **CURSOR KEYS** to change the setting. Press **ENTER** to save the setting or **RETURN** to cancel.

SYSTEM SETUP

DISPLAY : MONITOR



Click the **MONITOR** menu and click the ON/OFF menu.

Then click the  button for ON/OFF.

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

SPOT-OUT DWELL : The time that 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 judder during playback.

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

ALARM POP-UP DWELL : Determines how long the full screen popup is displayed after an alarm input. 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.

DISPLAY MODE : The DVR output can be optimized for display on a VGA or AV (CRT) monitor.

To change any of these settings, highlight MONITOR and press **ENTER** to select.

Use the **CURSOR KEYS** to navigate to the option required. Press **ENTER** to select the option (the cursor changes to orange) and use the **CURSOR KEYS** to change the setting. Press **ENTER** to save the setting or **RETURN** to cancel.

Please note: When display modes are changed, the DVR must be shutdown and restarted for changes to take effect

SYSTEM SETUP

DISPLAY : SEQUENCE



Click the **SEQUENCE** menu.

When the **SEQ** button is pressed, the default sequence will cycle through all 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.

SYSTEM SETUP

DISPLAY : SEQUENCE continued



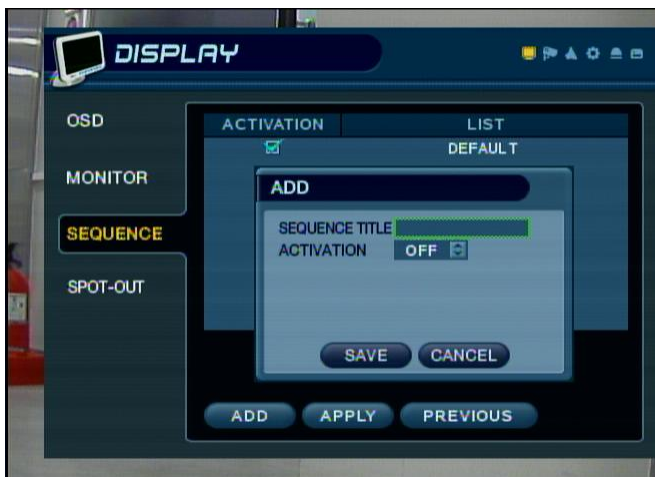
Double click on the **SEQUENCE TITLE** tap.


Virtual Keyboard will be appeared. Then click the any name and click the  button.

Move around the virtual keyboard using the **CURSOR KEYS** and **ENTER** to select a character.

To delete a character, use ← To change keyboard case and access symbols, use ↑

To exit, press **RETURN**.



Click on the ACTIVATION tap and click  button for select ON/OFF.

Set ACTIVATION to ON, highlight SAVE and press **ENTER** to display the sequence programming screen.

SYSTEM SETUP

DISPLAY : SEQUENCE continued



Double click on the box then the box color change to the orange.

When click each time, the split screen change.

The square on the top left of the display represents the first sequence screen that will be displayed.

To edit the screen, press **ENTER** to turn the cursor orange. Using the up and down **CURSOR KEYS**, choose the screen type (single or various multi screen options).



Right mouse click on the selected split screen. Then click camera number that user want.



When the correct screen type is displayed, use the **CHANNEL SELECTION** button to enter the channels required for each portion of the multi screen.

Note: Only one instance of each channel can be displayed.

To remove a channel, press the appropriate **CHANNEL SELECTION** button again.

SYSTEM SETUP

DISPLAY : SEQUENCE continued

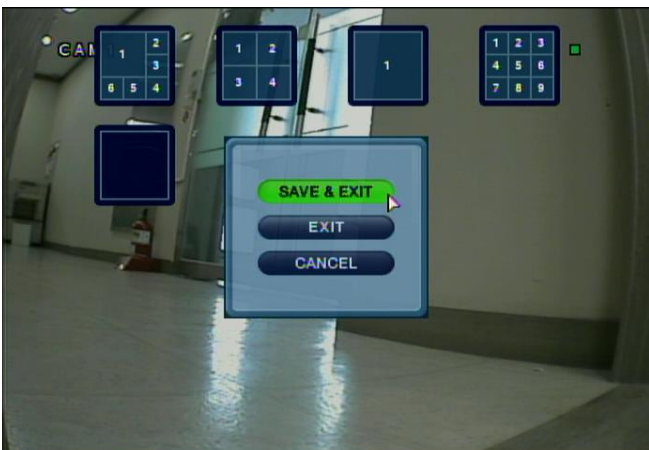


When finish selecting the camera number, click on the screen. Then next split screen appears.

Make the split screen and select camera number.

When all the channels have been completed, press **ENTER** to save the sequence screen and begin creating the next one.

Up to 16 different sequence screens can be created.



To finish, right mouse click on the screen.

Click the **SAVE & EXIT** menu.

To finish editing the sequence, press **RETURN** and then **ENTER** to save & exit.

SYSTEM SETUP

DISPLAY : SEQUENCE continued



When click the **SEQUENCE** menu by right mouse button, new saved split screen activate.

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

DISPLAY : SPOT-OUT



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

The DVR has **4 SPOT MONITOR OUTPUTS**. Each one displays a full screen sequence of particular channels, depending on the settings configured in this menu.

For each spot monitor, the operator can decide which channels are displayed.

For example, spot 1 could display channels 1-4, spot 2 could display channels 5-8 and so on.

SYSTEM SETUP

DISPLAY : SPOT-OUT continued

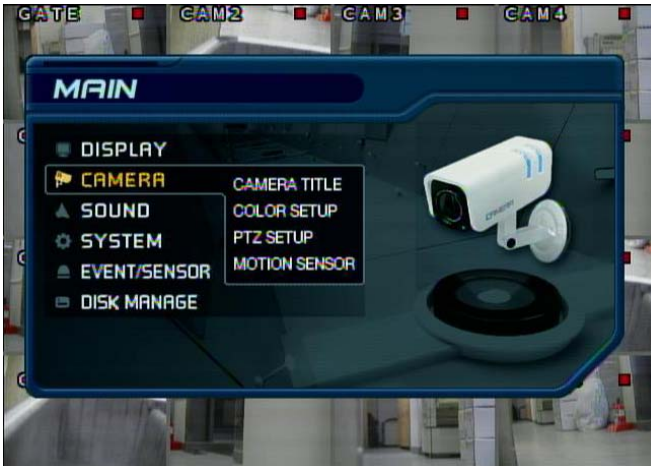


Click the camera number that user want.

To change the behavior of the spot monitor outputs, first choose the spot CHANNEL to modify,
And then use the **CURSOR KEYS** and **ENTER** button to move around the channels and tick to include or un-tick to exclude from the spot out sequence.
When all changes have been made, highlight APPLY and press **ENTER** to save.

SYSTEM SETUP

CAMERA



Click the **CAMERA** menu.

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

CAMERA : CAMERA TITLE



Click the **CAMERA TITLE** menu and click the ON/OFF menu on the COVERT menu. Then click the  button for ON/OFF.

Click the CAM No on the TITLE menu and change the camera name.

COVERT: When set to ON, the camera image is not displayed in live display but continues to be recorded.

TITLE: For each camera, a title of up to 11 characters can be set using the virtual keyboard.

SYSTEM SETUP

DISPLAY : COLOR SETUP



Click the **COLOR SETUP** menu and click the value on the BRIGHTNESS, CONTRAST, TINT and COLOR menu.

Brightness, contrast, tint and color can be adjusted for each individual channel.
Highlight which channel to modify and press **ENTER**.

DISPLAY : COLOR SETUP continued



Click the each value by  button.

The selected channel is displayed in full screen.
BRIGHTNESS, CONTRAST, TINT and COLOUR can be changed as necessary.
To modify a different channel, highlight CAMERA and choose the desired channel.
Press **RETURN** when all changes are complete.

SYSTEM SETUP

DISPLAY : PTZ SETUP



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

Change the value by [button] 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.

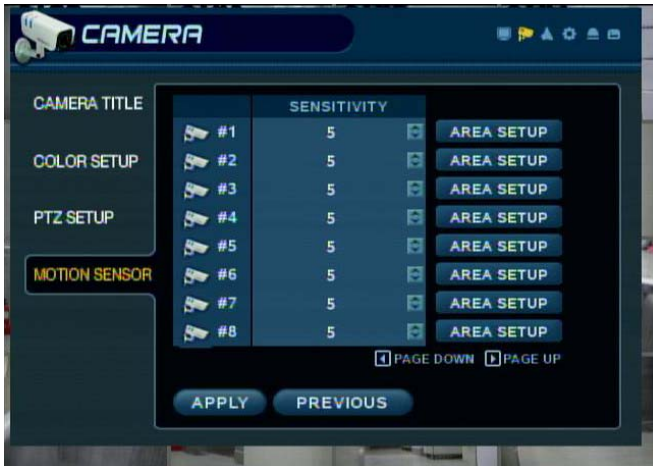


Click the [button] button and change the detail value by [button] button.


PTZ properties can also be adjusted for each channel by selecting the [button] icon and pressing ENTER. Note that some settings, such as AUTO FOCUS, may not be compatible with particular PTZ equipment. If this is the case, changing this value will have no effect on PTZ control.

SYSTEM SETUP

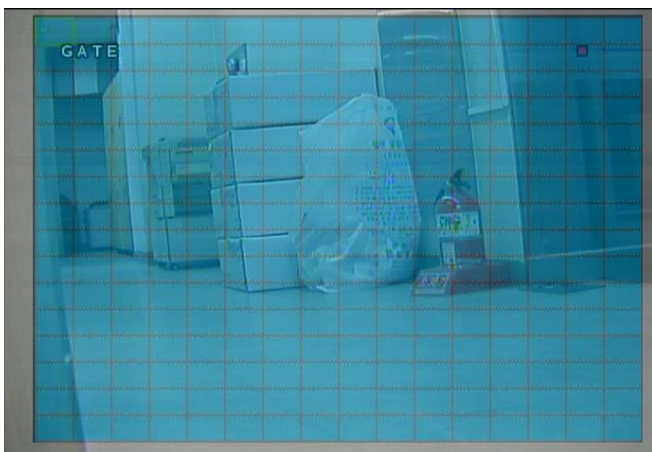
DISPLAY : MOTION SENSOR



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

Change the value by  button.

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



Click the **AREA SETUP** button.

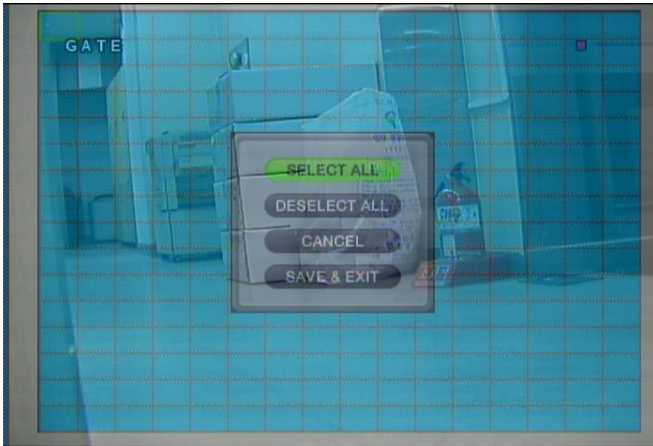
AREA SETUP : Choosing this option allows the operator to define which areas of the image are monitored for motion detection.

Light blue grid squares represent detection areas, grey grid squares are ignored.

The area on the right shows that motion will be detected across the entire image.

SYSTEM SETUP

DISPLAY : MOTION SENSOR continued



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

To quickly select or deselect the entire grid, press **RETURN** to bring up the motion menu. Highlight **SELECT ALL** or **DESELECT ALL** as appropriate and press **ENTER**.



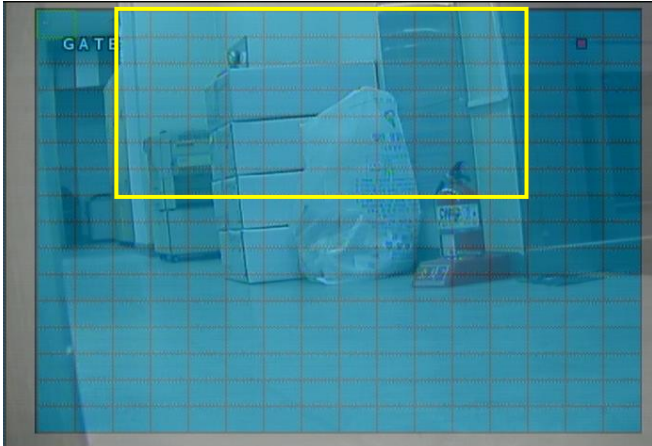
Drag the grid by the left mouse.

To select or deselect specific areas, press **ENTER** to bring up the green cursor square in the top left of the display.

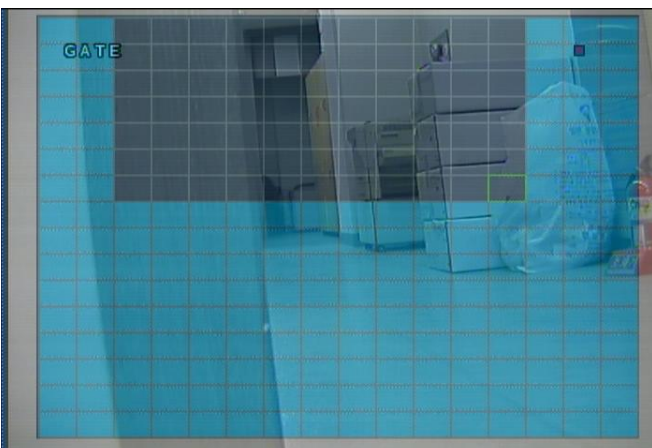
Move the cursor using the **CURSOR KEYS** to the first corner of the area to be set and press **ENTER** – the cursor turns orange.

SYSTEM SETUP

DISPLAY : MOTION SENSOR continued



Use the **CURSOR KEYS** to increase the size of the motion cursor as required.



Press **ENTER** to change from selected to deselected (or vice versa). Repeat the above sequence as necessary to mask off or include other areas of the image.



Click the right mouse button and select the **SAVE & EXIT** menu.

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

Please note

: a motion detection recording schedule must be defined in the **RECORD MENU** described on page 51

SYSTEM SETUP

SOUND




Click the **SOUND** menu.

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

SOUND : AUDIO



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

LIVE AUDIO : When 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.

SYSTEM SETUP

SOUND : BUZZER



Click the **BUZZER** menu and click the ON/OFF menu.

Then click the  button for ON/OFF.

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

IR REMOTE: When set to ON, each command received from the IR remote is confirmed by a beep.

SYSTEM



Click the **SYSTEM** menu.

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

SYSTEM SETUP

DATE / TIME



Click the **DATE / TIME** menu and click the ON/OFF menu.

Then click the  button for ON/OFF.

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 : should be set according to the region that the DVR is used in.


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

SYSTEM SETUP

SYSTEM : NETWORK



Click the **NETWORK** menu and click the ON/OFF menu.

Then click the  button for ON/OFF.

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

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.

WEB SERVICE : When enabled, 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.

DDNS SERVER : 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.


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

Please note: If any network settings are modified, the DVR will need to be restarted for changes to take effect

SYSTEM SETUP

SYSTEM : MAIL



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

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.

Please note : A USER must be entered for the mail function to operate correctly. The username must not contain spaces

SYSTEM : USER MANAGEMENT



Click the **USER MANAGEMENT** menu and double click the **ADMIN** on the GROUP menu.

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**.

SYSTEM SETUP

SYSTEM : USER MANAGEMENT continued



For edit, double click on the each tap.
After changing, click the  button.

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

PASSWORD : Change the password using the virtual keyboard.

NOTE: To delete the existing password use the ◀◀ key.

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

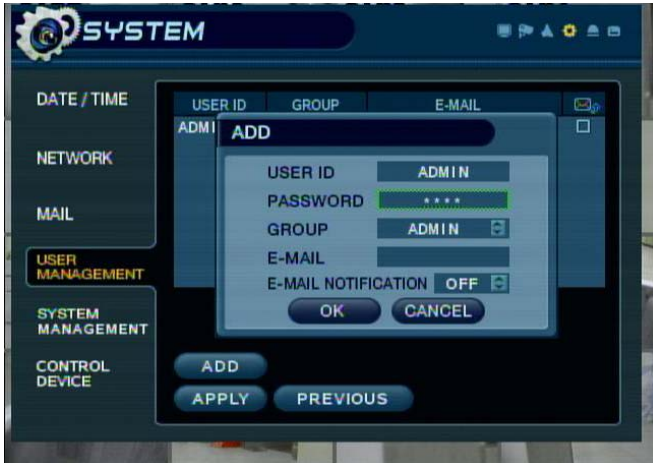
E-MAIL : Enter the users email address if email notification is required.

E-MAIL NOTIFICATION : Enable or disable email notifications for this particular user.


Please note: For security reasons, it is recommended that the ADMIN user password is changed as soon as possible

SYSTEM SETUP

SYSTEM : USER MANAGEMENT continued



Click the **ADD** menu Enter the USER ID and PASSWORD by double click.

After click the USER ID and PASSWORD, click  button.

To add users, highlight ADD and press **ENTER**.

The new user details can be added using the steps outlined above.

More Information about user management

Up to seven individual users can be created, and each user can belong to one of three user groups.

USER : Members of this group can only adjust live view settings. Playback and DVR setup is not available.

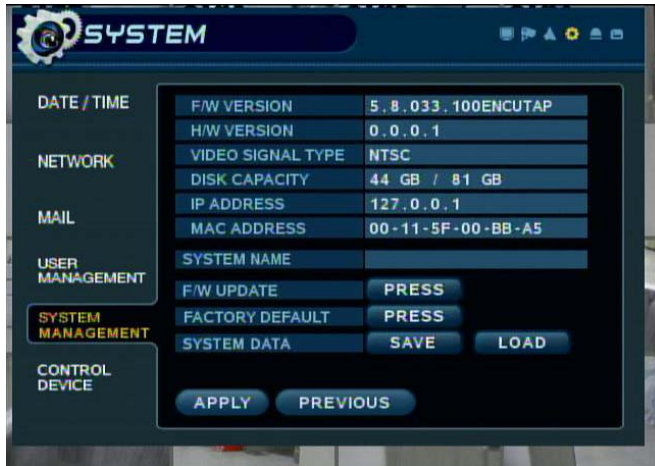
MANAGER : Members of this group can adjust live view settings and playback recorded footage. (including covert cameras)

ADMIN : Members of this group have full control over the DVR including setup.

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

SYSTEM SETUP

SYSTEM : SYSTEM MANAGEMENT



Click the **SYSTEM MANAGEMENT** menu.

And click the PRESS menu for FW Upgrade, Factory Default and System Data.

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.

SYSTEM NAME : A system name of up to 10 characters can be defined. It is used so that notification emails can be identified.

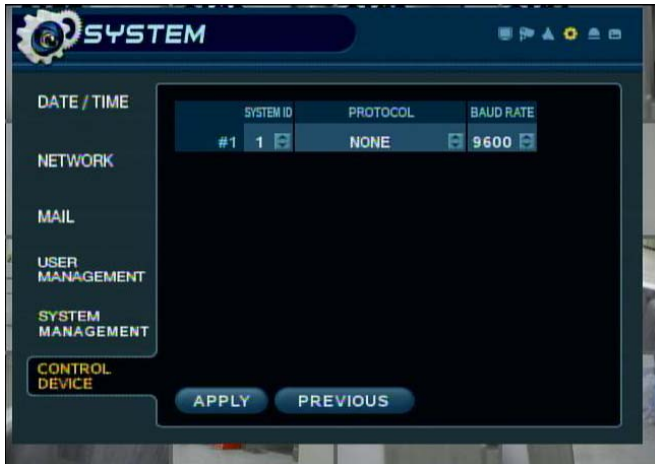
F/W UPDATE : Firmware updates may be released periodically to enhance system performance and add extra features. The operator can upgrade the firmware using a USB memory stick.

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.

SYSTEM SETUP

SYSTEM : CONTROL DEVICE



Click the **CONTROL DEVICE** menu.

And select the SYSTEM ID, PTZ Protocol and camera BAUD RATE.

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 use more than one DVR on stack, each DVR must have 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.

EVENT / SENSOR



Click the **EVENT / SENSOR** menu.

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

SYSTEM SETUP

EVENT / SENSOR : HDD EVENT



Click the **HDD EVENT** menu and click the DRIVE, SMART ALARM and CHECK INTERVAL value.

Then click the value by  button to change .

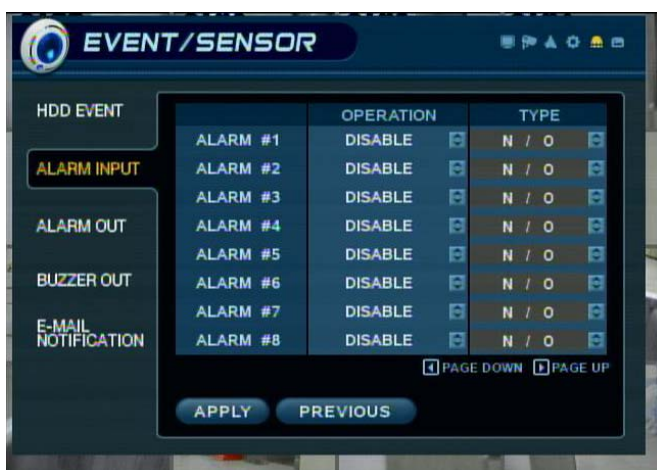
The DVR can monitor the hard drives and detect problems that may be developing.

DRIVE : Selects which hard drive to configure for monitoring.

SMART ALARM : Enables SMART disk monitoring.

CHECK INTERVAL : Can be adjusted as desired.

EVENT / SENSOR : ALARM INPUT



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

Then click the value by  button to change.

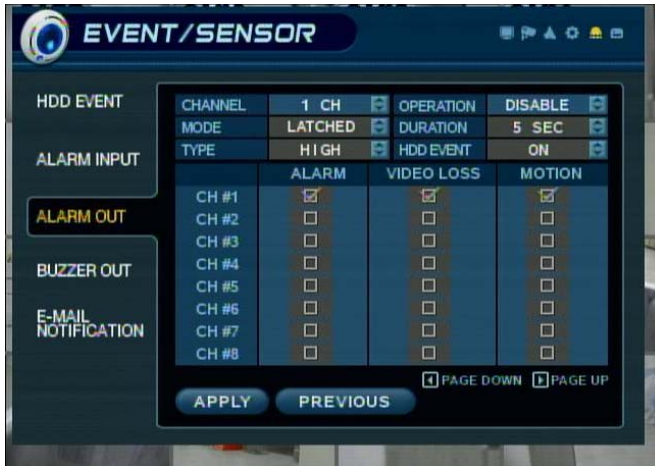
Determines the behavior of each of the 16 alarm inputs.

OPERATION : Alarm inputs can be enabled or disabled.

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

SYSTEM SETUP

EVENT / SENSOR : ALARM OUTPUT



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

Then click the value by  button to change.

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

Behavior settings

CHANNEL : 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.

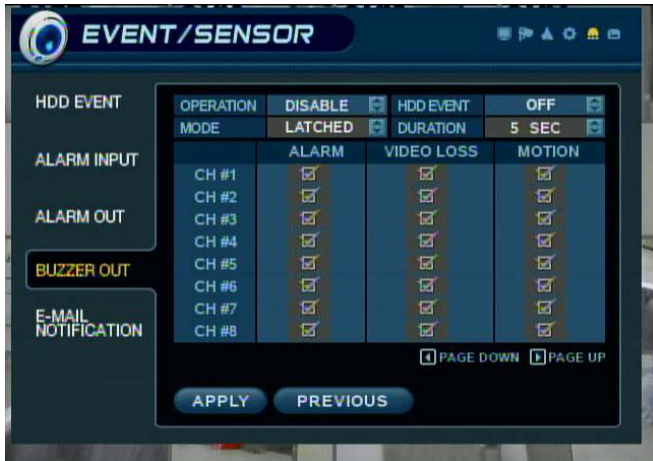
VIDEO LOSS : Determines whether video loss on any of the selected channels will trigger the alarm output.

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



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

Then click the value by  button to change.

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

Behavior settings

OPERATION : The internal buzzer can be enabled or disabled.

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.

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

Action settings

ALARM : Determines whether alarm inputs will sound the buzzer.

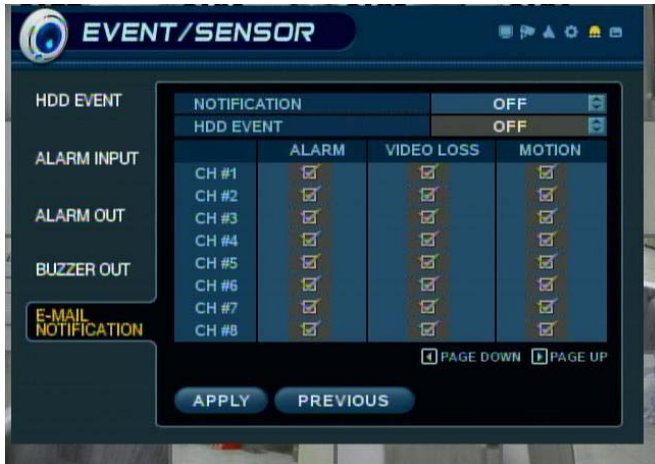
VIDEO LOSS : Determines whether video loss on any of the selected channels will sound the buzzer.

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



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

Then check the usage by click.

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.

HDD EVENT : Determines whether a hard drive event 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.

Email settings must also be configured in MAIL and USER MANAGEMENT settings described on page 42.

SYSTEM SETUP

DISK MANAGE



Click the **DISK MANAGEMENT** menu.

And click the PRESS menu for FW Upgrade, Factory Default and System Data.



Click the RECORD TIME LIMIT & OVERWRITE and select ON/OFF value. .

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 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 set to OFF, the DVR will stop recording when the disk becomes full.

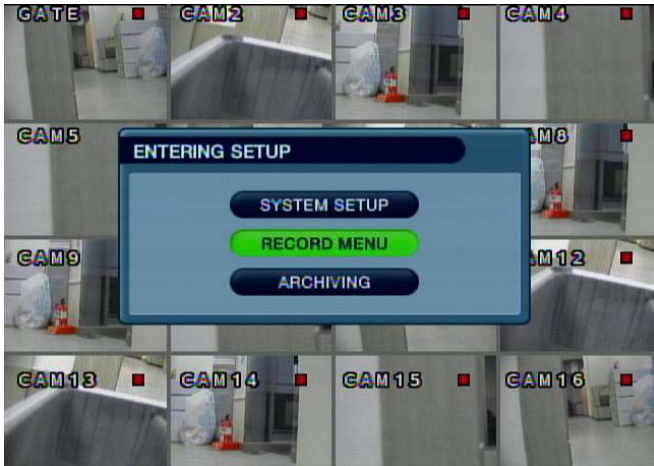
FORMAT : If necessary, all footage can be erased from the DVR using this option.

Please note: When RECORD TIME LIMIT is set, the percentage of HDD used shown in live display mode may never reach 99%.
For example, if the total HDD capacity of the DVR allows for a recording time of 4 days under normal operation, if the RECORD TIME LIMIT is set to 2 days, the percentage of HDD used will never exceed 50%.

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

RECORD MENU

RECORD MENU



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 the each value.

Then click the value by  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 footage 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 footage that is always recorded after an event occurs. (motion detection, alarm input etc.)

RECORD MENU

RECORD : TIMER / MOTION SETUP



Click the **TIMERMOTION SETUP** menu.

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

There are 2 sections:

PARAMETER : 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.

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

PARAMETER



Click the **PARAMETER** menu.

To change PARAMETER settings, highlight TIMER/MOTION SETUP and press **ENTER**.

Ensure PARAMETER is highlighted in yellow and press **ENTER** again.

The 24 hour time bar is highlighted in purple.

RECORD MENU

PARAMETER continued



Click the **TIMEBAR** that user want.

Press **ENTER** to display the green cursor.

The green cursor shown represents one hour. (in this case between 00:00 and 01:00).

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



Drag the time that user want.

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

PARAMETER continued



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

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

SIZE : Recording resolutions of 352x288, 704x288 or 704x576 can be selected for each channel.

FPS : Frame rates between 1 and 25 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, any audio channel can be assigned to any of the video channels.

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

The default settings for all channels is 352 x 288, 7FPS, HIGHEST quality

Note: The DVR supports a maximum recording rate across all channels of 112 frames per second at 352x288 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, whilst 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

SCHEDULE

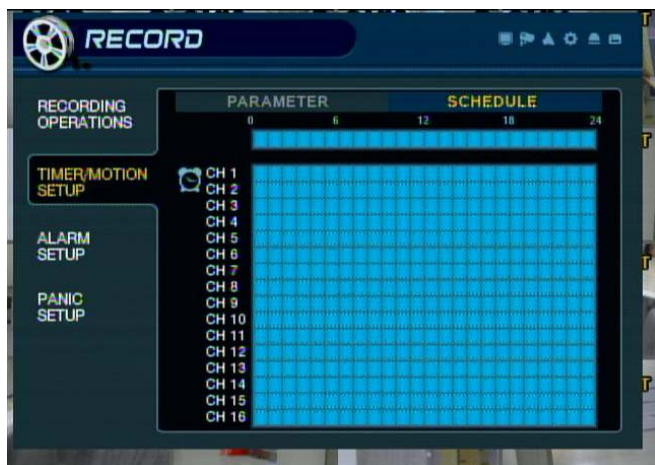


Click the **SCHEDULE** menu.

To change SCHEDULE settings, highlight TIMER/MOTION SETUP and press **ENTER**.

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

The schedule box is highlighted in purple.



Click the Time and Channel.

Press **ENTER** to display the green cursor.

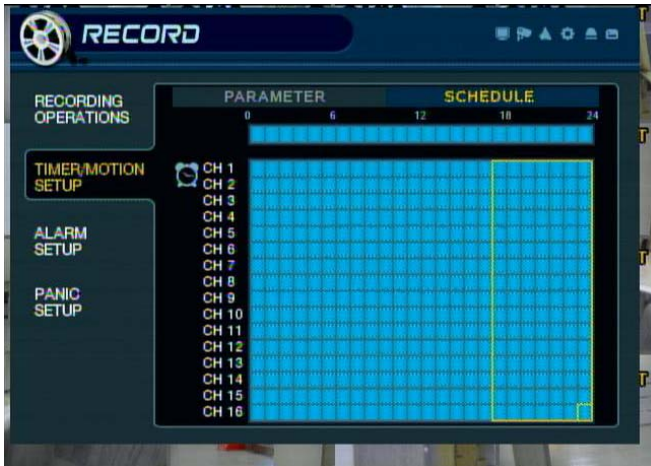
Example : To set all channels to motion detection recording only between 18:00 and 00:00.

Use the **CURSOR KEYS** to move the green cursor to the 18:00 position and press **ENTER**.

The cursor changes to orange to show the start position.

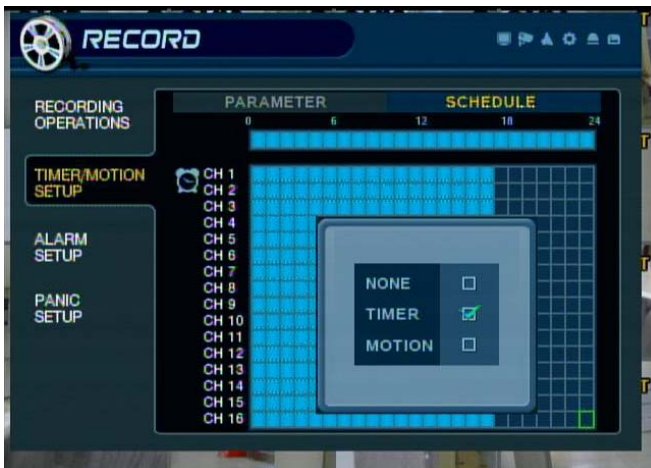
RECORD MENU

SCHEDULE continued



Drag the Time and Channel by left mouse.

Use the **CURSOR KEYS** to stretch the orange cursor across and down to select all channels between 18:00 and 00:00.



After drag, click the Motion.

Press **ENTER**, highlight MOTION and press **ENTER** again.

RECORD MENU

SCHEDULE continued



The selected area now displays the symbol for motion recording (half light blue block).

Repeat the above procedure to set different recording schedules for individual channels and time periods.

The schedule screen has 3 symbols to show the different recording modes.

Dark blue blocks: No scheduled or motion recording.

Light blue blocks: The DVR will record continuously.

Half light blue block: The DVR will only record when motion is detected.

RECORD MENU

RECORD : ALARM SETUP



Click the **ALARM SETUP** menu.

The setting is same as TIMERMOTION SETUP.

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

PARAMETER : 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.

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

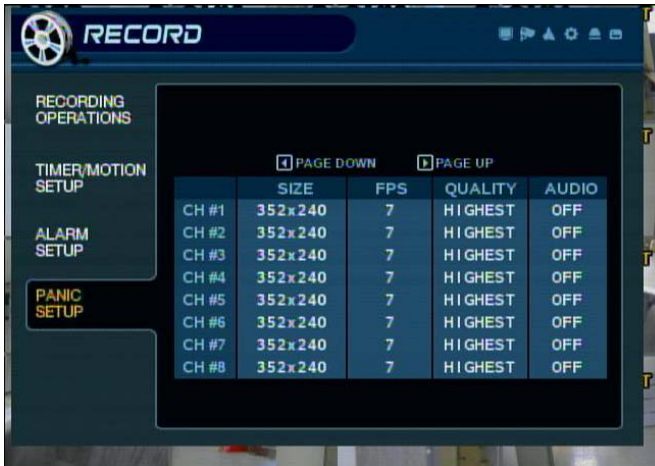
Please refer to Timer / motion setup on page 52 for details on setting up **PARAMETER** and **SCHEDULE**.

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

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

RECORD MENU

RECORD : PANIC SETUP



Click the **PANIC SETUP** 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



Click the right mouse button on the Live Display screen and Click the **SEARCH** menu.



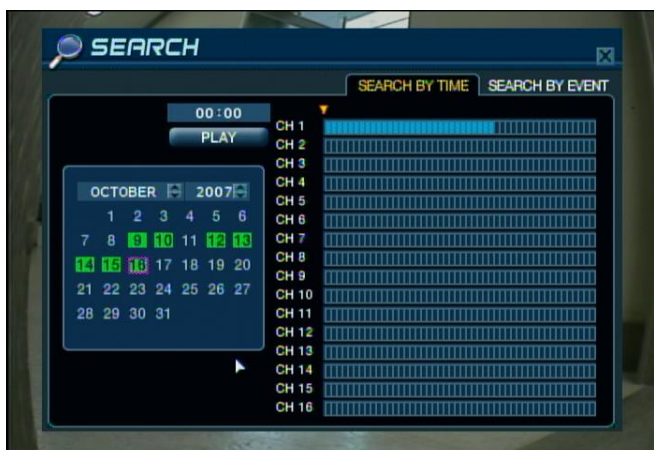
Double click on the Password tap then the Virtual Keyboard will be appeared. Then click the password and click the  button.

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 want.

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

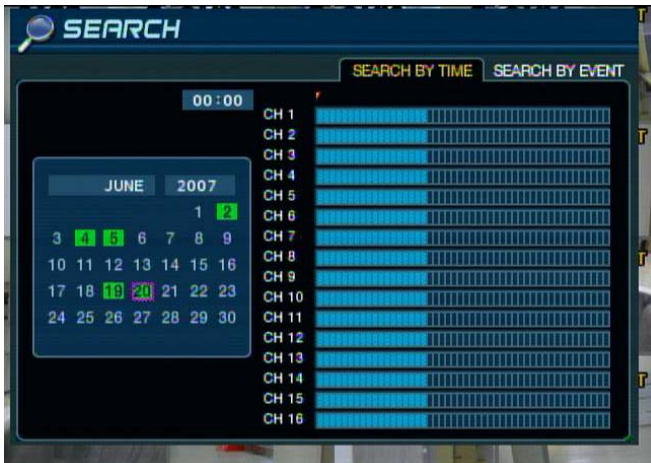
The calendar displayed on the left shows the current month.

Days highlighted in green have recorded footage.

The timeline on the right shows a 24 hour status of all channels for the selected day. Light blue areas show recorded footage.

SEARCH

TIME SEARCH continued



Drag the time bar by left mouse.

Press **ENTER** to select the calendar and use the **CURSOR KEYS** to move the purple square 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** menu.

Use the **CURSOR KEYS** to move the timeline cursor left or right to select the time segment required.

Each movement of the timeline cursor increases or decreases the time by 15 minutes.

The currently selected time is displayed above the calendar.

Press **ENTER** to begin playback from the selected time.

SEARCH

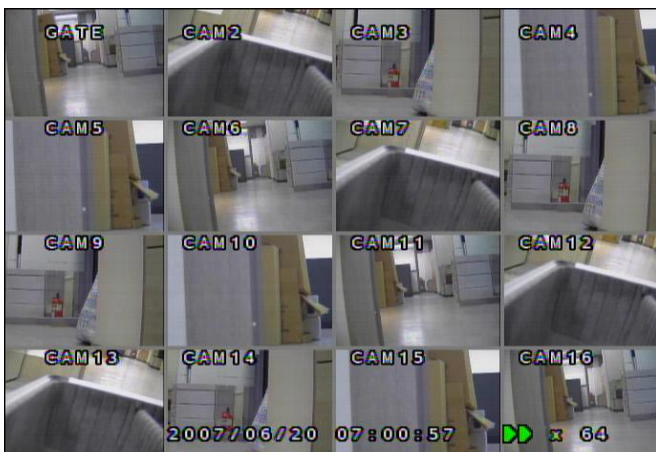
TIME SEARCH continued



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.



Turning steadily anticlockwise 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.



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

SEARCH : EVENT SEARCH



Click the right mouse button on the Live Display screen and Click the **SEARCH** menu.




Double click on the Password tap then the Virtual Keyboard will be appeared. Then click the password and click the  button.

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 each value.

Then click the value by  button to change. Click the **START** menu.

To display the event log screen, press the right **CURSOR KEY** to select SEARCH BY EVENT and press **ENTER**.

Various filters can be used to limit the number of events displayed. Using the **CURSOR KEYS** and **ENTER** button, select the FROM and TO date / time and the events and channels required.

SEARCH

EVENT SEARCH continued



Click the **START** menu.

Highlight **START** and press **ENTER** to display the event log for the criteria selected.

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 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**.

Note: The event log search contains the following selectable entries:

ALARM: When ticked, all alarm input events are displayed for the chosen date range.

TIMER: When ticked, scheduled recording operations are displayed for the chosen date range.

MOTION: When ticked, all motion detection events are displayed for the chosen date range.

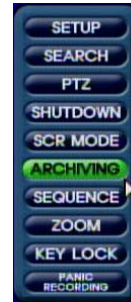
ETC: When ticked, all other events (Video loss, remote connection etc.) are displayed for the chosen date range.


ARCHIVING

ARCHIVING



Click the right mouse button on the Live Display screen and Click the **ARCHIVING** menu.



Double click on the Password tap then the Virtual Keyboard will be appeared. Then click the password and click the  button.

To archive recorded footage to USB memory stick or CD, 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 the each value.

Then click the value by  button to change.

Click the **START** menu.

The Archiving screen allows the operator to choose exactly what to backup and to where.

Use the **CURSOR KEYS** to navigate around the Archiving screen. To change any value or setting:

Press **ENTER** to change the green cursor to orange.

Use the up and down **CURSOR KEYS** to change the value.

Press **ENTER** to accept the value or RETURN to cancel.

To change a tick box setting, press ENTER to toggle on or off.

ARCHIVING

ARCHIVING continued



SELECT DEVICE: Choose between CDR or USB.

FROM / TO: Start and end time to backup.

MODE: 'Backup only' or 'Erase and backup'

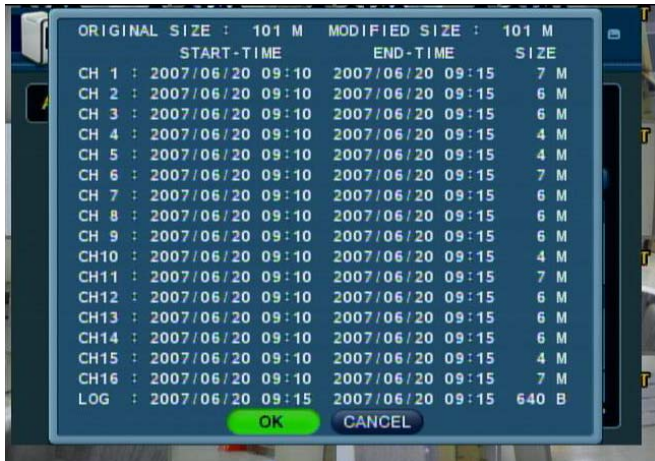
A/V CHANNEL

: Video and audio for any channel can be included or excluded from the backup.

TITLE: The name of the archive set.

EVENT: When selected, the event log for the particular archive time period is included.

Please note: If using a USB memory stick, it must be inserted before selecting the archiving menu



Click the **OK** menu.

Once all the desired archive options have been selected, highlight the START button and press **ENTER**. The DVR displays a list showing the exact information to be archived and the total archive size.

If the ORIGINAL SIZE is larger than the available space on the backup media, the END TIME of the archive set is reduced accordingly.

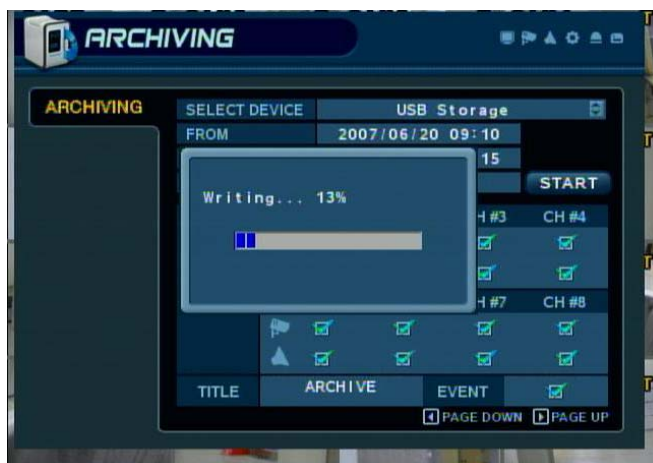
The MODIFIED SIZE is the final file size of the archive set. Select OK and press **ENTER** to begin the archive process.

ARCHIVING

ARCHIVING continued



The footage is extracted to a temporary area on the hard drive.



Once extracted, the footage is copied to CD or USB.

Note that depending on the amount of footage selected for archive, the extracting and burning process may take some time, during which the DVR cannot be used.

Normal recording is unaffected by the archive process.

REMOTE CLIENT SETUP

The DVR is supplied with software to allow remote connections either on a direct LAN connection or over the Internet.

The remote client allows full live viewing of the DVR including control of PTZ cameras.

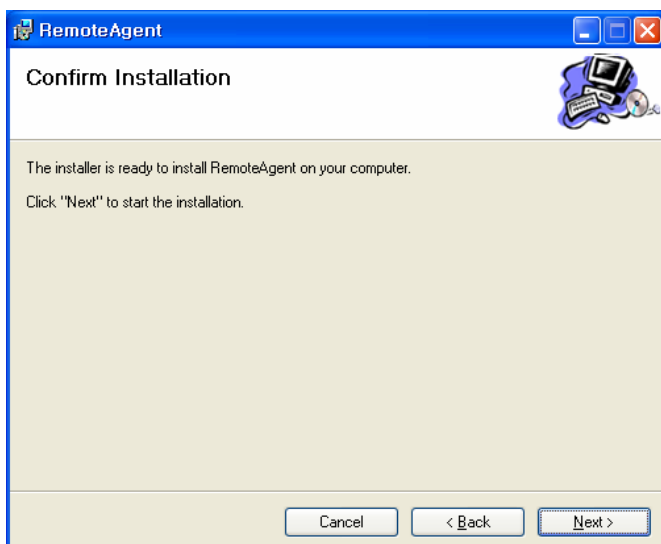
In addition, playback, remote setup, audio talkback, local backup and remote alarm triggering can all be achieved.

Client Software Installation



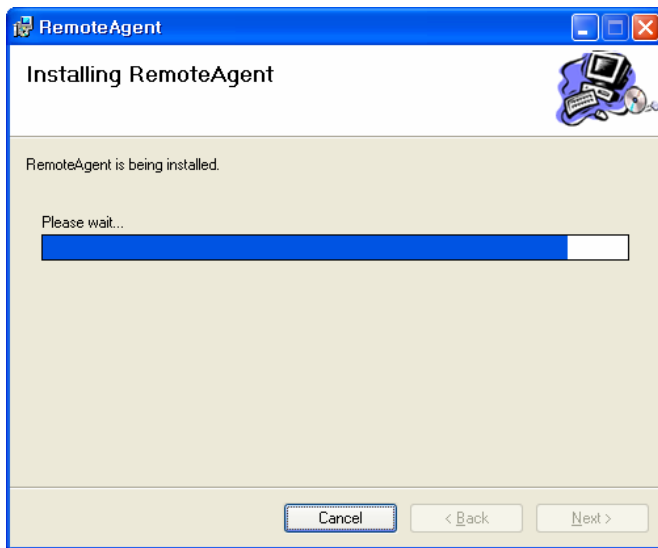
Insert the CD supplied with the DVR into your PC's CD-ROM drive. The install process will begin automatically and display the following screen.

Click 'Next>' to continue.

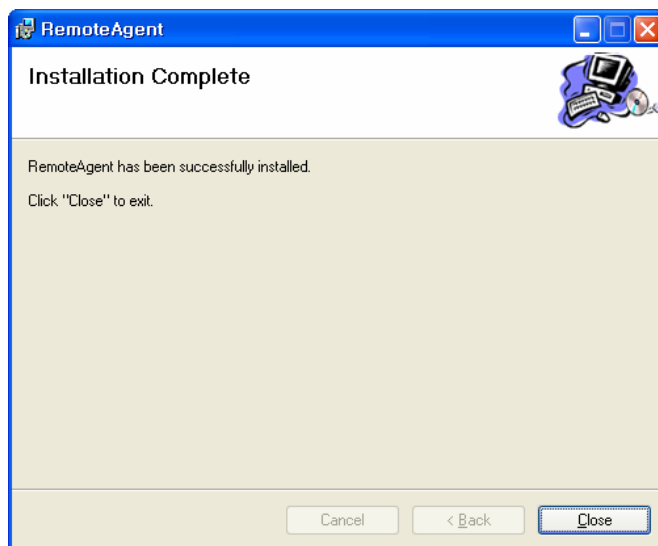


Click 'Next>' to begin installation.

REMOTE CLIENT SETUP



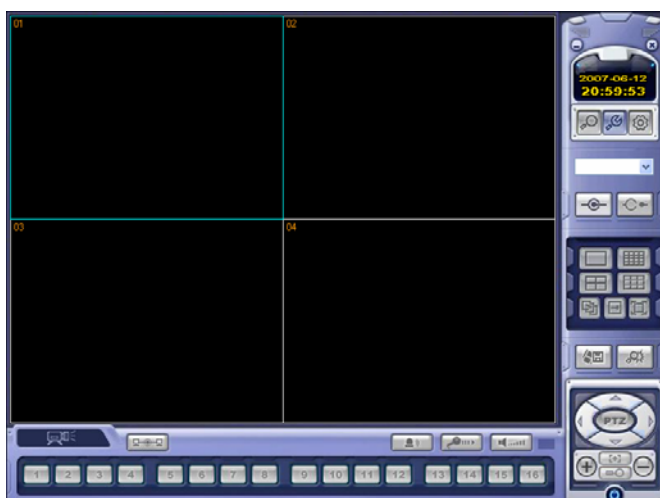
The DVR remote client software is installed.



A final install screen is displayed confirming that installation is successful.

Two icons are created on the PC desktop.

'Remote Agent' is the main software package.
'BackupPlayer' is the software to view archive footage from the DVR.



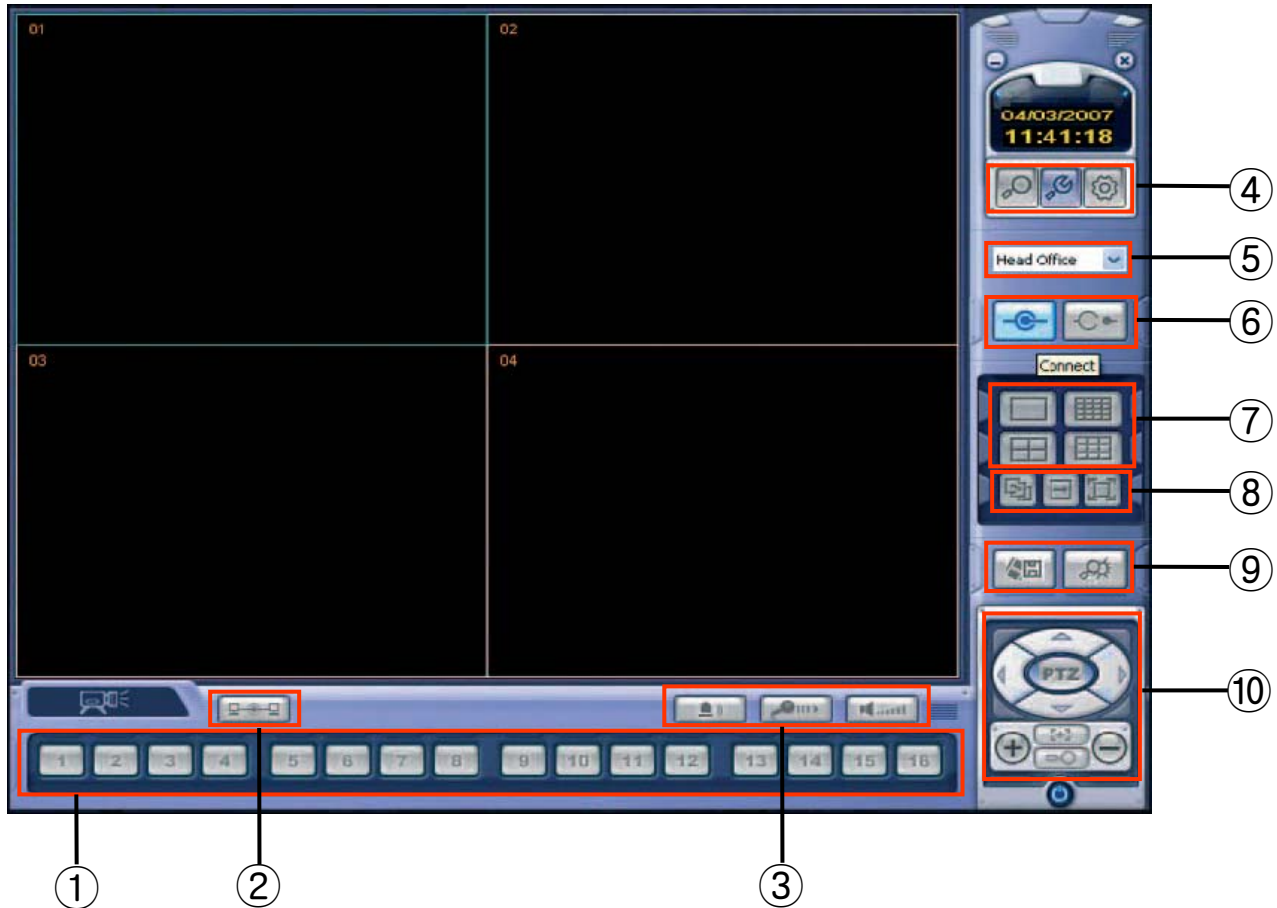
To begin using the remote client software, double click the icon on the desktop or click:

Start – Programs –RemoteAgent – DVR – RemoteAgent.

The main remote client window is displayed.

REMOTE CLIENT SETUP

Client Software Organization



① CHANNEL SELECTION buttons

② STATUS button

③ ALARM button

TALKBACK button

AUDIO button

④ SEARCH button to access remote playback

SETUP button to configure DVR connections

DVR SETUP button to adjust DVR settings remotely

⑤ DROP DOWN LIST to select a DVR connection

⑥ CONNECT button

DISCONNECT button

⑦ DISPLAY button to choose 1,4,9 or 16 screen display

⑧ SEQUENCE button

MANUAL SWITCH button

FULL SCREEN button

⑨ SAVE TO AVI button

EVENT VIEWER button

⑩ PTZ CONTROL button

REMOTE CLIENT SETUP

EXPLANATION OF FUNCTION KEYS

① CAMERA SELECTION Button : Indicate Connected Camera No. & Select camera No to see the image.

② STATUS Button : Show the connected DVR.

③ ALARM Button : Control Alarm output.

TALKBACK Button : Communicate between DVR and Remote Client.

AUDIO Button : Listen live audio (ON/OFF).

④ SEARCH Button : Entering the Search mode to playback the image.

SETUP Button : Entering the client software to change or check the setting.

DVR SETUP Button : Entering the connected DVR to change or check the setting.

⑤ DROP DOWN LIST : Select the group to connect.

⑥ CONNECT Button : Connect DVR.

DISCONNECT Button : Disconnect DVR.

⑦ DISPLAY Button : Change the division screen to 1,4,9 or 16.

⑧ SEQUENCE Button : Change the live screen automatically.

MANUAL SWITCH Button : Change the live screen manually by mouse click.

FULL SCREEN Button : Change to the full screen.

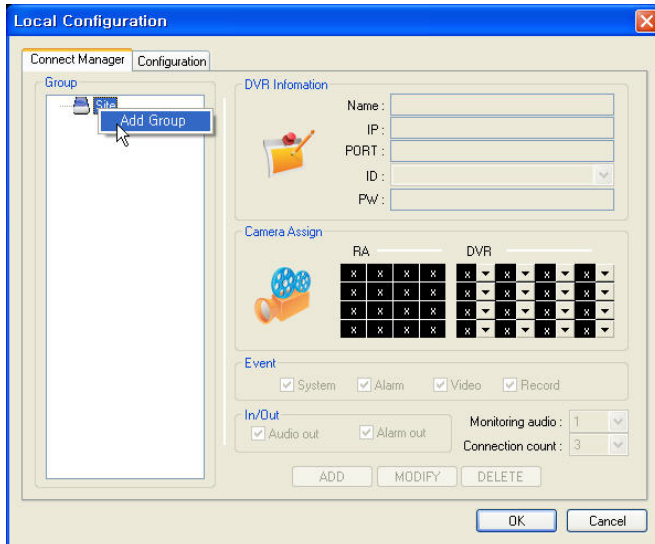
⑨ SAVE TO AVI Button : Save the current displayed image to AVI file.

EVENT VIEWER Button : Show the current event in DVR and find image.

⑩ PTZ CONTROL Button : Control PAN/TILT/ZOOM of camera.

REMOTE CLIENT SETUP

CREATE A CONNECT GROUP

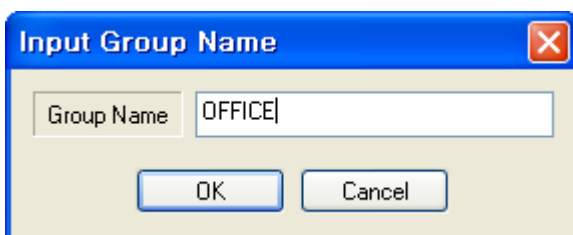


The DVR remote client software can be configured with any number of connection groups.

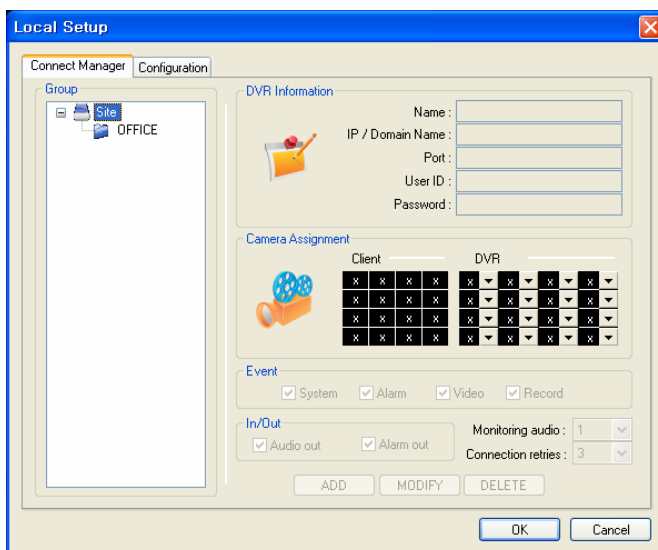
Each connection group can consist of up to 4 DVRs.

To create a connection group, click the **SETUP** button to display the Local configuration screen.

In the 'Group' window on the left, right click 'Site' and choose 'Add Group'



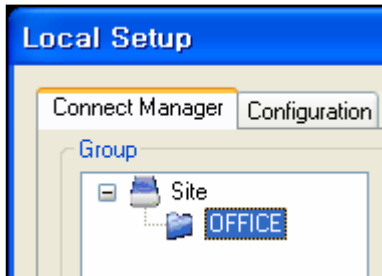
Enter a name to easily identify the connection group and click OK.



The new group is created.

REMOTE CLIENT SETUP

DETAIL SETUP



Details for up to 4 DVRs can be added to the 'OFFICE' group. Click 'OFFICE' to highlight it and then enter the following information in the 'DVR Information' window.

DVR Information

Name : Sales Part

IP / Domain Name : 192.168.123.123

Port : 6100

User ID : ADMIN

Password : *****

Name: Any name that will easily identify the DVR.

IP / Domain Name: The IP or DDNS address of the DVR.

Port: The network port of the DVR.

User ID: A valid user ID already setup on the DVR.

Password: The password assigned to the user ID.

Camera Assignment

Client				DVR			
1	2	3	4	1	2	3	4
x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x

In the 'Camera Assignment' window, specific channels of the DVR can be allocated to the remote client display channels.

Using the drop down lists under DVR, select which channels are displayed and in what position. To ignore certain channels, leave the drop down as 'x'

In this case, only channels 1-4 from the selected DVR will be displayed.

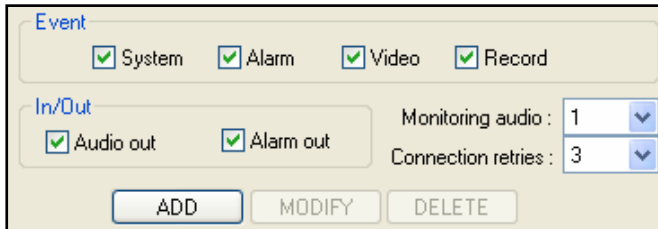
Note : only one instance of each channel can be selected.

Each connection group can display a total of 16 channels from one or more DVRs. For example, a connection group could consist of one 16ch DVR and display all 16 channels.

Or, it might consist of two 16 channel DVRs and display 7 channels from one and 9 channels from another.

REMOTE CLIENT SETUP

DETAIL SETUP continued

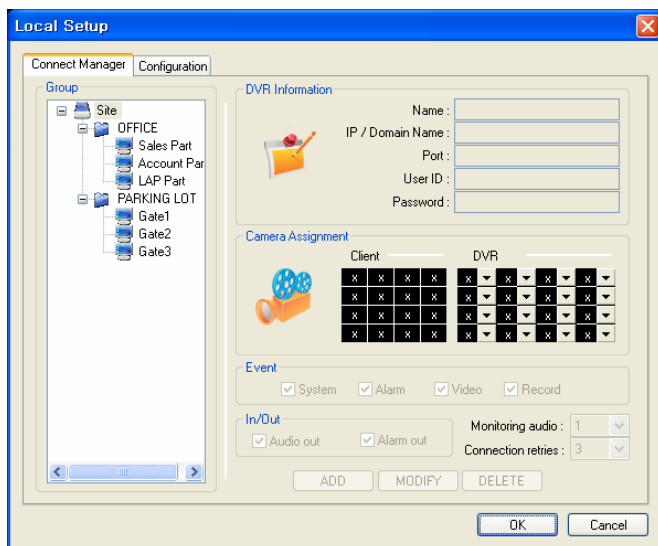


The dialog box is titled 'Event' and contains several configuration options. Under the 'Event' section, there are four checked checkboxes: 'System', 'Alarm', 'Video', and 'Record'. Below this, under the 'In/Out' section, there are two checked checkboxes: 'Audio out' and 'Alarm out'. To the right of these checkboxes, there are two dropdown menus: 'Monitoring audio' set to '1' and 'Connection retries' set to '3'. At the bottom of the dialog, there are three buttons: 'ADD', 'MODIFY', and 'DELETE'.

To complete the details for the selected DVR:

- Tick the event occurrences that the DVR will send to the remote client system log.
- Tick 'Audio out' to enable or disable the audio talkback function.
- Tick 'Alarm out' to enable the remote alarm trigger function.
- In 'Monitoring audio' choose which DVR audio input is transmitted to the remote client software during live display.
- In 'Connection retries' choose the number of times the remote client will attempt to connect before giving an error.

Finally, click ADD to save all the details.



The 'Local Setup' dialog box has two tabs: 'Connect Manager' and 'Configuration'. The 'Configuration' tab is active. On the left, there is a tree view showing a hierarchy of groups: 'Site' (containing 'OFFICE', 'Sales Part', 'Account Part', 'LAP Part') and 'PARKING LOT' (containing 'Gate1', 'Gate2', 'Gate3'). The 'OFFICE' group is selected. On the right, there are several sections: 'DVR Information' with fields for Name, IP / Domain Name, Port, User ID, and Password; 'Camera Assignment' with a grid of checkboxes for Client and DVR; 'Event' with checked checkboxes for System, Alarm, Video, and Record; and 'In/Out' with checked checkboxes for Audio out and Alarm out, and dropdown menus for Monitoring audio (set to 1) and Connection retries (set to 3). At the bottom, there are buttons for 'ADD', 'MODIFY', 'DELETE', 'OK', and 'Cancel'.

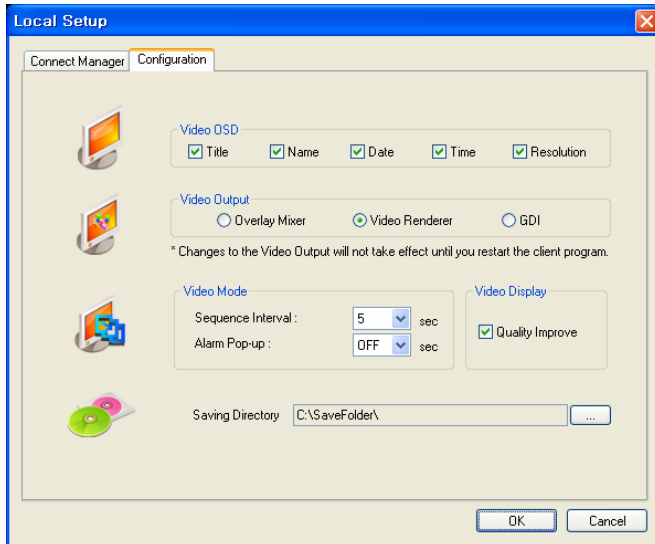
To add up to three more DVRs to this group – simply repeat the steps from the previous page in 'Enter DVR details'.

To create another connection group, repeat the steps from the previous page in 'Create a connection group'

During operation, only one group can be connected at once. For example, 'OFFICE' must be disconnected before connecting to 'Head Office'

REMOTE CLIENT SETUP

ADDITIONAL CONFIGURATION



Click the 'Configuration' tab to setup various remote client program options.

Video OSD

Select or deselect the information that is displayed for each channel when a DVR is connected.

Video Output

For best results, leave set at the default of 'Video Renderer'. Overlay mixer and GDI are provided only for backwards compatibility with older PCs.

Video Mode

Define the sequence time between each channel when in sequence mode. Also, determines the full screen popup time when an alarm is triggered on the DVR.

Video Display

For best results, leave 'Quality improve' selected.

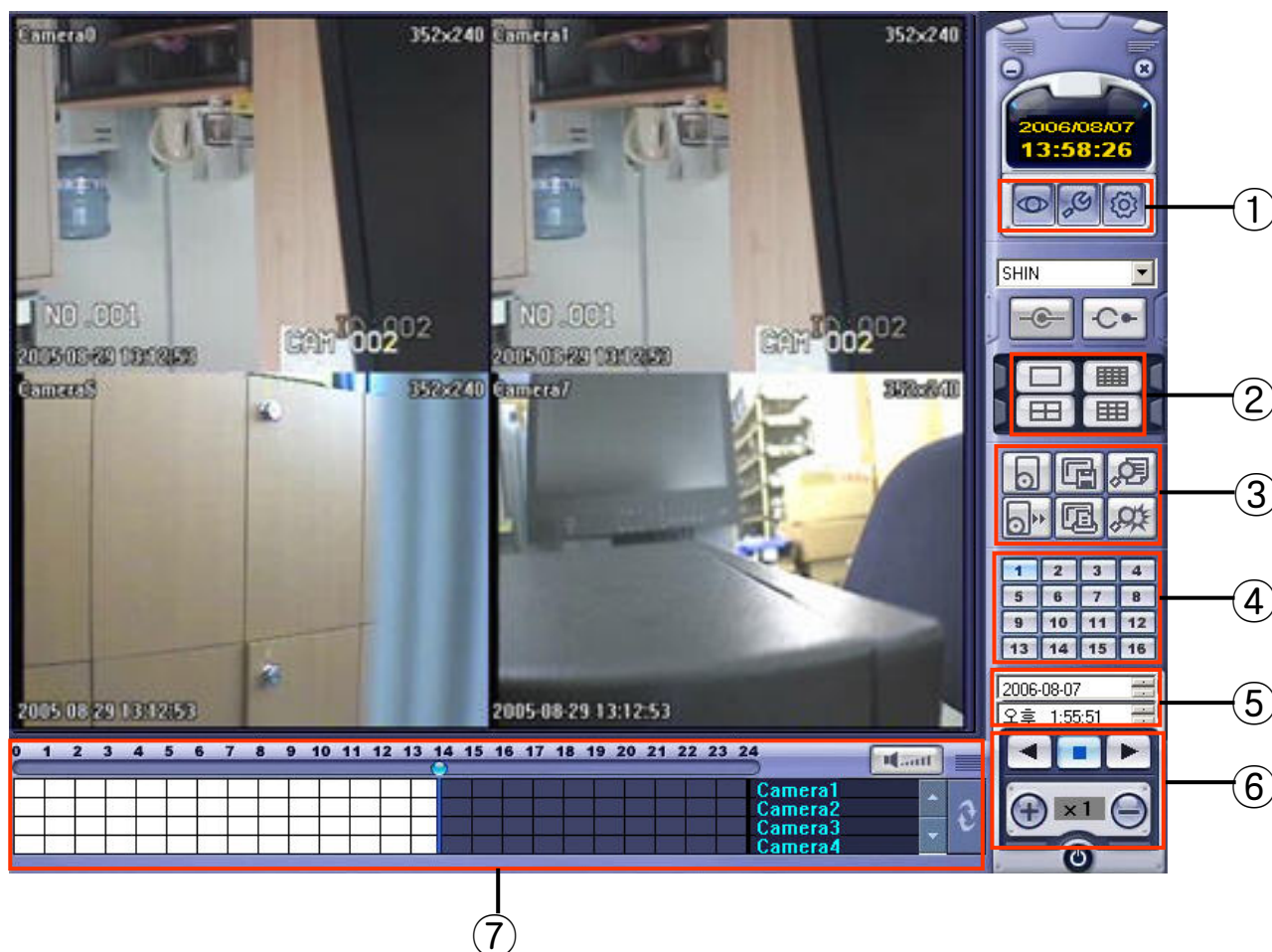
Saving directory












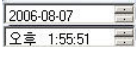

Specify the location where AVI files and snapshots will be saved to the local PC.

REMOTE CLIENT SETUP

REMOTE SEARCH

Click the **SEARCH** button to playback.



- ①  **LIVE** button
-  **SETUP** button
-  **DVR SETUP** button
- ②  **DIVISION SCREEN** buttons
- ③  **ARCHIVING** button (P64)
-  **STILL SHOT** button
-  **LOG VIEWER** button
-  **BACKUP PLAYER EXECUTE** button
-  **PRINT** button
-  **EVENT VIEWER** button
- ④  **CAMERA SELECTION** button
- ⑤  **QUICK SEARCH** button
- ⑥  **SEARCH CONTROLLER** button
- ⑦ **SEARCH BAR**

REMOTE CLIENT SETUP

EXPLANATION OF FUNCTION KEYS

① LIVE Button : Return to the Live mode.

SETUP Button : Entering the client software to change or check the setting.

DVR SETUP Button : Entering the connected DVR to change or check the setting.

② DIVISIION SCREEN Button : Change the division screen to 1,4,9 or 16.

③ BACKUP Button : Can backup by channel including audio.

STILL SHOT Button : Can save current image.

LOG VIEWER Button : Can see all log records.

BACKUP PLAYER EXECUTE button : Execute the backup player.

PRINT Button : Can print current image.

EVENT VIEWER Button :Can see all event records.

④ CAMERA SELECTION Button : Can select camera number.

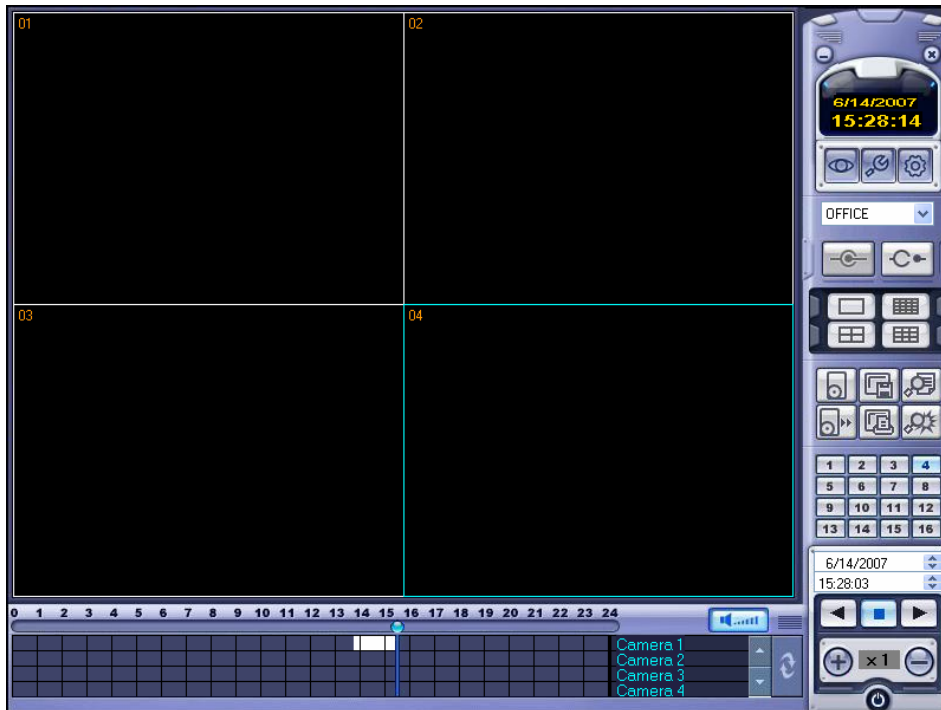
⑤ QUICK SEARCH Button : To playback quickly, select date and time.

⑥ SEARCH CONTROLLER Button : Can control search function.

⑦ SEARCH BAR : Displayed recording status.

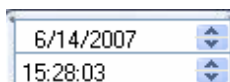
REMOTE CLIENT SETUP

QUICK SEARCH



Click the **SEARCH** button in live display mode to switch to search mode.

The **TIMELINE** at the bottom of the display shows a graphical overview of recorded footage for a particular day. White blocks indicate footage for a particular time segment, whilst blue blocks indicate no footage.



Choose the required date by selecting and then adjusting the date value using the up and down arrows.

As different dates are selected, the **TIMELINE** changes to show the status of recorded footage for that particular date.



Use the mouse to drag the **CURSOR** to the required time.

The exact time selected is displayed under the date.




Click to begin playback from the selected date and time.



To select reverse play, click

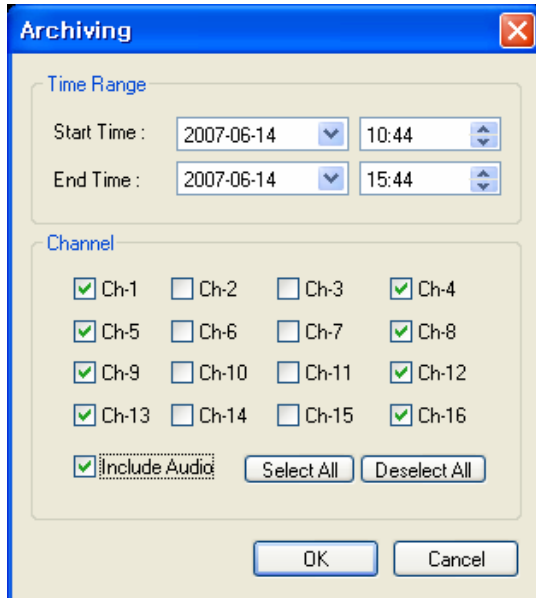


Use + and – to increase or decrease playback speed.

Click  to stop playback and choose another time / date if required

REMOTE CLIENT SETUP

ARCHIVING



Pre-recorded footage on a DVR can be archived to the local PC hard disk.

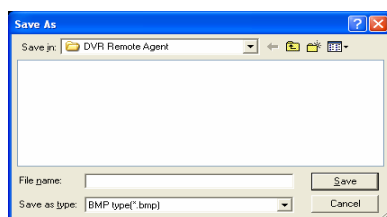
Click the ARCHIVE button to show the archiving screen.

Choose start time, end time, which channels to archive and whether to include audio.

For convenience, choosing 'Select All' will highlight all available channels (including audio) for archiving.

Click OK to begin archiving data to the PC hard drive.

STILL SHOT



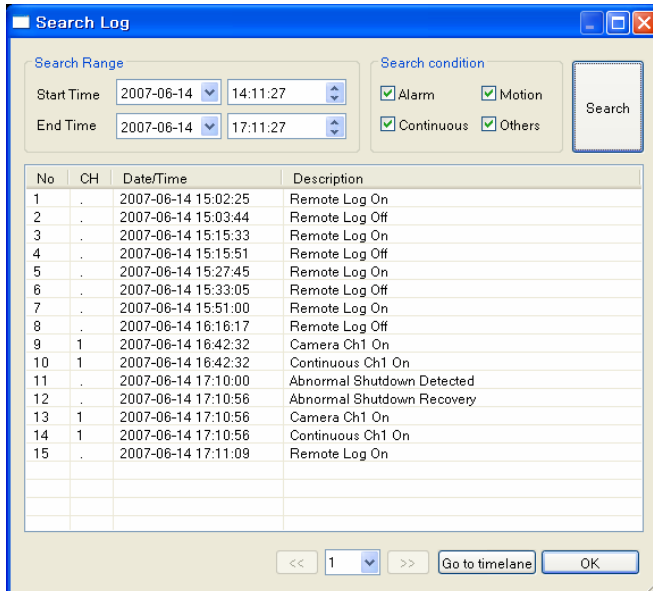
During playback, a still image can be save to the local PC hard disk by clicking the **SNAPSHOT** button.

Specify the file location, file name and choose BMP or JPG format. Click 'Save'.

The snapshot image is saved in the same style as the currently selected screen display, for example, quad screen, single screen etc.

REMOTE CLIENT SETUP

LOG VIEWER



To search for an event and playback the recorded footage, press the **EVENT SEARCH** button.

Choose the 'Start time' and 'End time'. Select which events to include in the search and click 'Search'

The event log for the selected time period is displayed.

Select an event, click 'Go to timeline' and then click OK .

Click ► to begin playback from the selected date and time.

BACKUP PLAYER



To view archives backed up from a DVR, double click the player file.



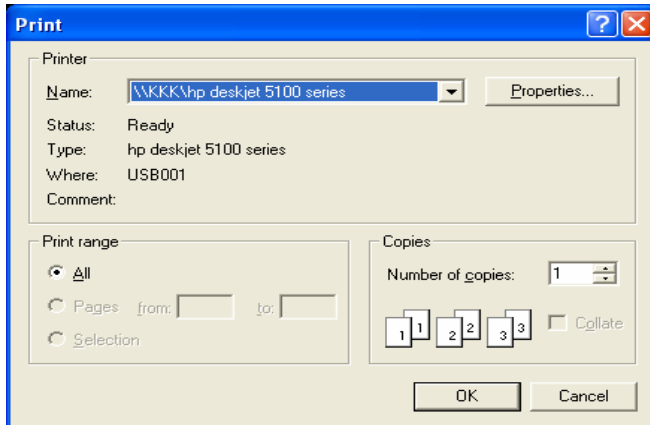
Click to choose which archive file to playback.

Playback of the archive file begins.

The controls under the display can be used to adjust playback direction and speed.

REMOTE CLIENT SETUP

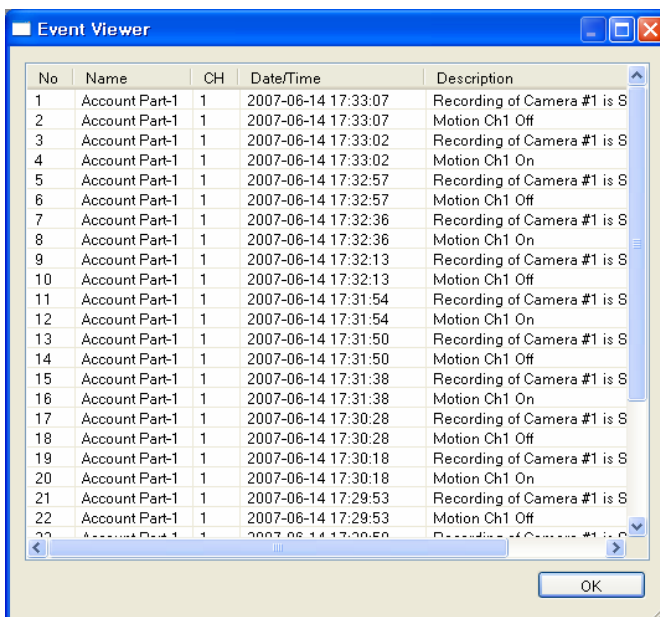
PRINT



During playback, a still image can be printed on the local PC printer by clicking the **PRINT** button.

The printed image is in the same style as the currently selected screen display, for example, quad screen

EVENT VIEWER



During playback, any live events detected on the DVR are sent to the remote client event log. To display this, click the **CURRENT EVENT LOG** button

REMOTE CLIENT SETUP

REMOTE RECORDING SETUP

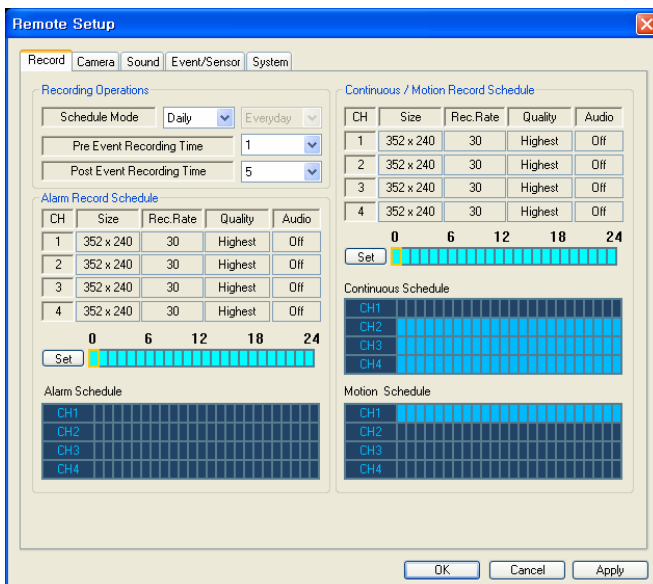
Only the ADMIN user can configure a DVR remotely. With the exception of network settings and certain display options, any of the DVR settings can be changed.

ENTERING SETUP

Click the **SETUP** button, enter the correct password for the ADMIN user and click OK



RECORD



• Record Operations

Schedule Mode: Select Weekly or Daily.

Pre Event Recording Time

: Record image including setting time before event happened. (0 ~ 5 Second)

Post Event Recording Time

: Record image including setting time after event happened. (5 ~ 180Second)

• Alarm Recording Schedule

Click the **SET** Button to set Alarm Recording.

Setup the size, rec. rate, quality and audio.

• Continuous/Motion record Schedule

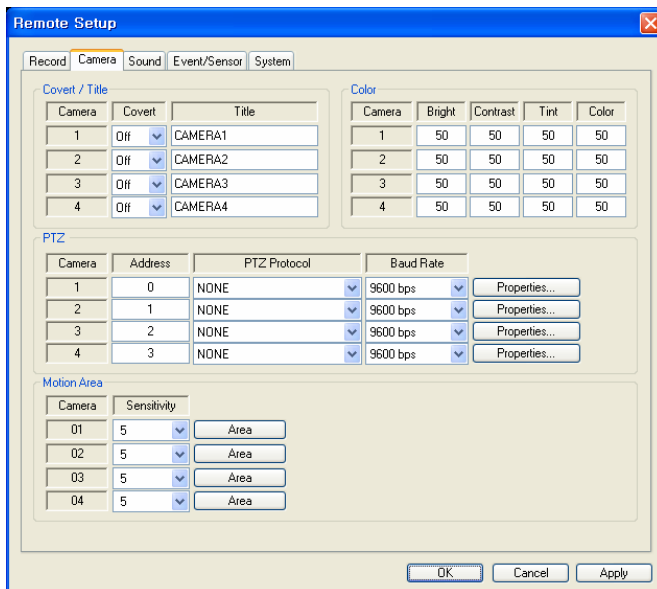
Click the **SET** Button to Continuous/Motion record Schedule.

Setup the size, rec. rate, quality, audio.

REMOTE CLIENT SETUP

REMOTE RECORDING SETUP continued

CAMERA



The 'Remote Setup' window has the 'Camera' tab selected. It contains four sub-sections: 'Covert / Title', 'Color', 'PTZ', and 'Motion Area'.

Covert / Title

Camera	Covert	Title
1	Off	CAMERA1
2	Off	CAMERA2
3	Off	CAMERA3
4	Off	CAMERA4

Color

Camera	Bright	Contrast	Tint	Color
1	50	50	50	50
2	50	50	50	50
3	50	50	50	50
4	50	50	50	50

PTZ

Camera	Address	PTZ Protocol	Baud Rate	Properties...
1	0	NONE	9600 bps	Properties...
2	1	NONE	9600 bps	Properties...
3	2	NONE	9600 bps	Properties...
4	3	NONE	9600 bps	Properties...

Motion Area

Camera	Sensitivity	Area
01	5	Area
02	5	Area
03	5	Area
04	5	Area

Buttons: OK, Cancel, Apply

- **Covert / Title**

Convert the camera and change the camera name. (Covert function On/Off, Camera Name).

- **Color**

Setup the Bright, Contrast, Tint and Color.

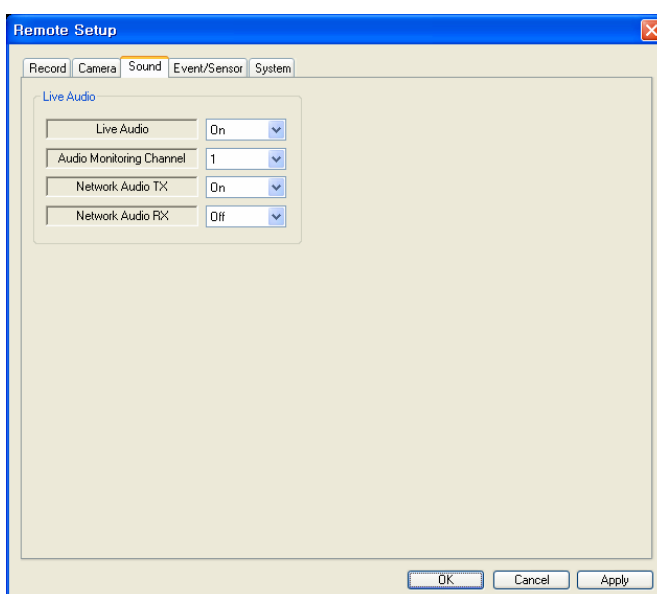
- **PTZ**

Setup the PTZ camera address, Protocol, Baud rate and Properties for detail setup. .

- **Motion Area**

Setup the motion sensitive and motion area.

SOUND



The 'Remote Setup' window has the 'Sound' tab selected. It contains a 'Live Audio' section with four settings.

Live Audio

Live Audio	On
Audio Monitoring Channel	1
Network Audio TX	On
Network Audio RX	Off

Buttons: OK, Cancel, Apply

- **Live Audio Setup**

Live Audio : On/Off.

Audio Monitoring Channel
: Select audio channel for live.

Network Audio TX
: Choose the Audio transmission.

Network Audio RX
: Choose the Audio receive.

REMOTE CLIENT SETUP

REMOTE RECORDING SETUP continued

EVENT / SENSOR

Remote Setup

Record Camera Sound **Event/Sensor** System

Alarm Input

Alarm	Operation	Type
1	Disabled	N/Open
2	Disabled	N/Open
3	Disabled	N/Open
4	Disabled	N/Open

HDD Event

Smart Alarm: Off
Polling Time: 24

Alarm Out

Alarm ☒ 1 ☒ 2 ☒ 3 ☒ 4
V-Loss ☒ 1 ☒ 2 ☒ 3 ☒ 4
Motion ☒ 1 ☒ 2 ☒ 3 ☒ 4

Disk Event: Off
Operation: Off
Mode: Latched
Type: High
Duration: 5 sec

Buzzer Out

Alarm ☒ 1 ☒ 2 ☒ 3 ☒ 4
V-Loss ☒ 1 ☒ 2 ☒ 3 ☒ 4
Motion ☒ 1 ☒ 2 ☒ 3 ☒ 4

Buzzer: Off
Duration: 5 sec
Disk Event: Off
Key Pad: On
Remote Ctrl: On

E-mail Notification

Alarm ☒ 1 ☒ 2 ☒ 3 ☒ 4
V-Loss ☒ 1 ☒ 2 ☒ 3 ☒ 4
Motion ☒ 1 ☒ 2 ☒ 3 ☒ 4

Disk Event: Off
Notification: Off

OK Cancel Apply

- **HDD Event**

Smart Alarm: On/Off.

Polling Time: HDD Checking Time.

- **E-mail Notification**

Check the E-mail Notification.

(Alarm, Video Loss, Motion)

Disk Event: Select the E-mail notification

On & Off for sending e-mail when HDD got a any event.

Notification: Select On & Off for using this function.

- **Alarm Input**

Setup the Alarm Connection & Type of each channel. (Enable /Disable, Normal Open / Normal Close)

- **Alarm Out**

Check the Alarm out event. (Alarm, Video loss, Motion)

Disk Event : Select Alarm On & Off for Alarm out when HDD got a problem.

Operation : Select usage of the Relay Connection with Alarm Sensor or not.

Mode: Select the reacted relay. (Latched/Transparent)

Type: Select the relay type. (Normal Open / Normal Close)

Duration: Setup the reacted relay time duration. (5seconds to 5minutes or Until key-in)

- **Buzzer out**

Check the Buzzer out event. (Alarm, Video loss, Motion)

Buzzer : Select the buzzer On & Off for buzzer sound.

Duration : Setup the Buzzer time duration. (5seconds to 5minutes or Until key-in)

Disk Event: Select Buzzer On/Off for Buzzer when HDD happened any event.

Keypad : Select buzzer sound On & Off when key input.

Remote Ctrl : Select buzzer sound On & off when remote controller input.

REMOTE CLIENT SETUP

REMOTE RECORDING SETUP continued

SYSTEM

The screenshot shows the 'Remote Setup' window with the 'System' tab selected. The window is divided into several sections: 'System Info', 'SMTP', 'Users', and 'Network Speed'. The 'System Info' section contains fields for S/W Version (V1.0), H/W Version (V1.0), Video Signal Type (NTSC), Disk Size (163), Number of HDD (1), IP Address (192.168.150.108), and MAC Address (00-11-5f-01-2e-15). The 'SMTP' section has fields for Server, Port (25), Security (Off), User, and Password (masked with dots). The 'Users' section features a table with columns for User ID, Group, E-mail, and N., and buttons for Add, Modify, and Remove. The 'Network Speed' section has a dropdown menu set to 8 Mbps. The 'Disk Overwrite' section has a dropdown menu set to On. The 'Record Time Limit' section has a dropdown menu set to Off. At the bottom of the window are buttons for OK, Cancel, and Apply.

System Info	
S/W Version	V1.0
H/W Version	V1.0
Video Signal Type	NTSC
Disk Size	163
Number of HDD	1
IP Address	192.168.150.108
MAC Address	00-11-5f-01-2e-15

SMTP	
Server	
Port	25
Security	Off
User	
Password	****

Users			
User ID	Group	E-mail	N.
ADMIN	ADMIN		No

Network Speed	
Network Speed	8 Mbps
Disk Overwrite	On
Record Time Limit	Off

- **System Info**

Check the DVR System information.

- **SMTP**

Type the SMTP server name and user ID & password to use E-mail notification.

- **Users**

Add or delete any user.

- **Network Speed**

Select the network speed.

- **Disk Overwrite**

Select the On & Off for using disk overwrite.

- **Record Time Link**

Select the recording period.

WEB CONNECTION SETUP

• WEB Connection Setup

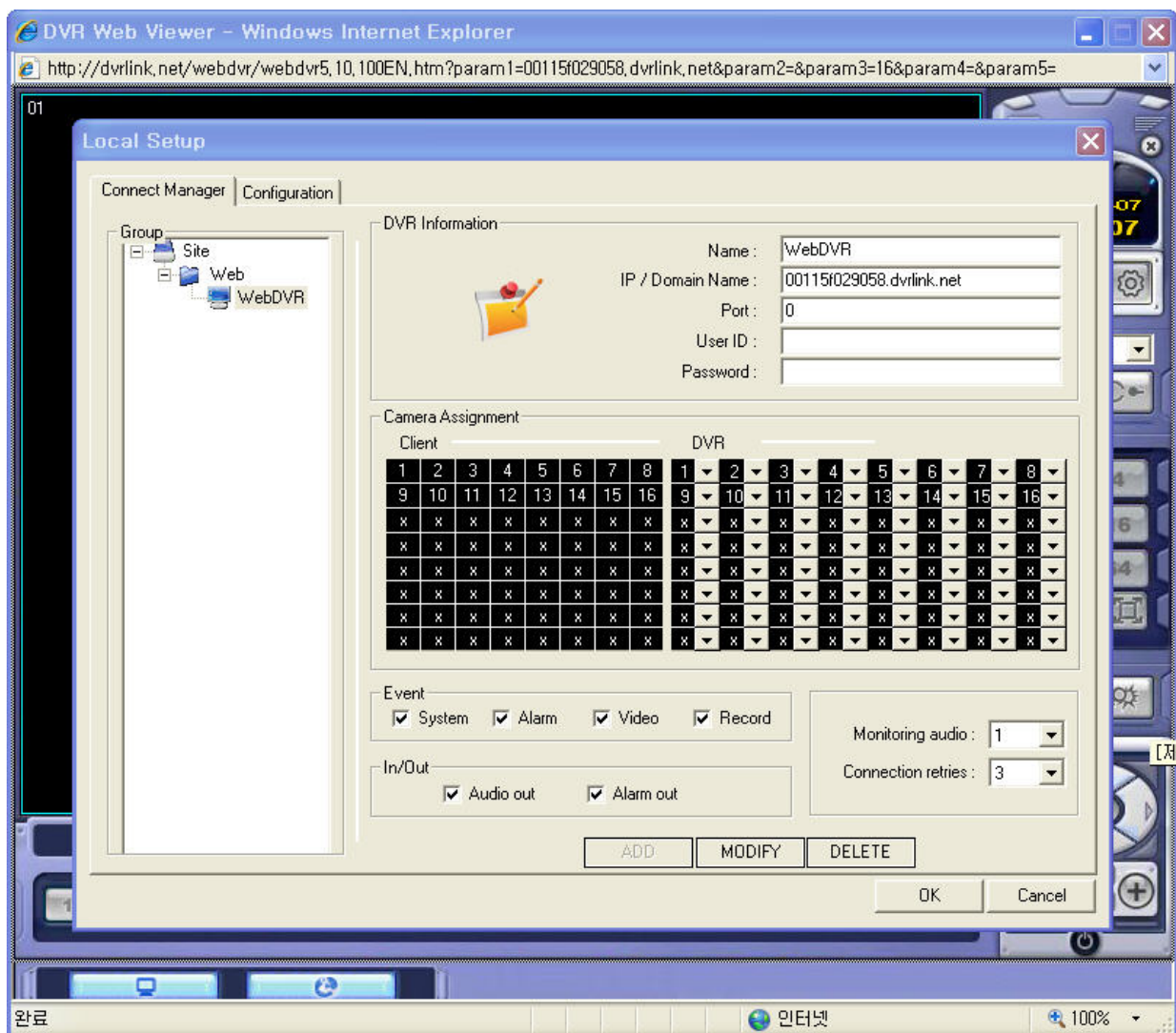
Input the IP Address or URL of the DVR in the Internet Explorer Address Bar.

If when user use the DDNS, input the URL like below.

<http://00115f349021.dvrlink.net>

Then a dialog will appear to confirm download of an **ActiveX control**.

Please click the **CONFIRM** or **CONTINUE** button.



WEB CONNECTION SETUP

- Input the default Port (**6100**) and User ID(**ADMIN**) & Password(**1234**) correctly.
- Then set the **Camera Assignment** like below picture.

Local Setup

Connect Manager | Configuration

Group: Site > Web > WebDVR

DVR Information

Name : WebDVR
IP / Domain Name : 00115f029058.dvrlink.net
Port : 6100
User ID : ADMIN
Password : 1234

Camera Assignment

Client								DVR							
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16	9	10	11	12	13	14	15	16
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Event

☒ System ☒ Alarm ☒ Video ☒ Record

In/Out

☒ Audio out ☒ Alarm out

Monitoring audio : 1
Connection retries : 3

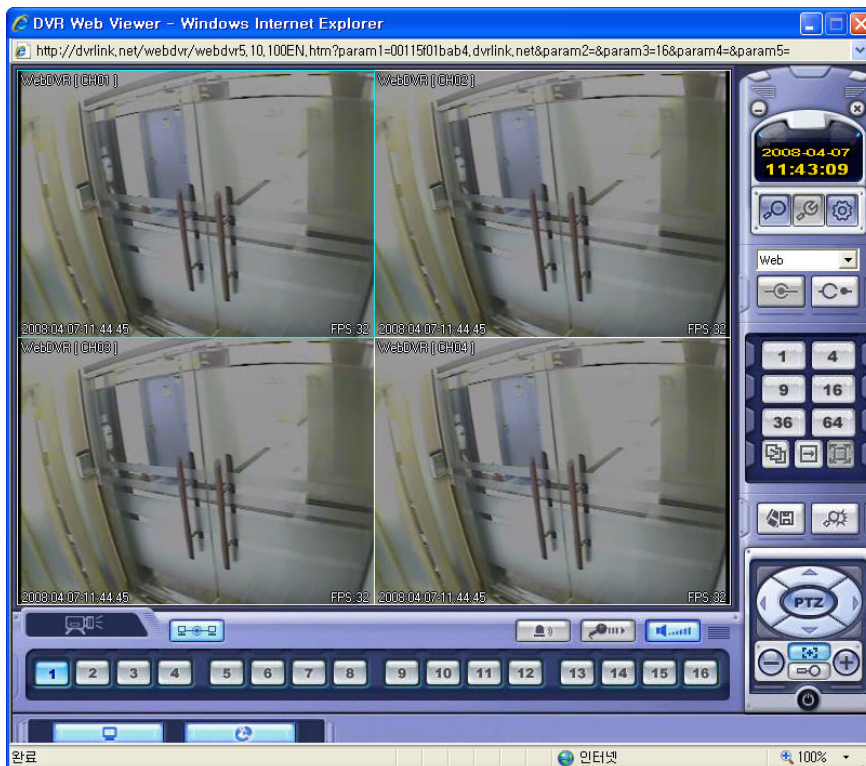
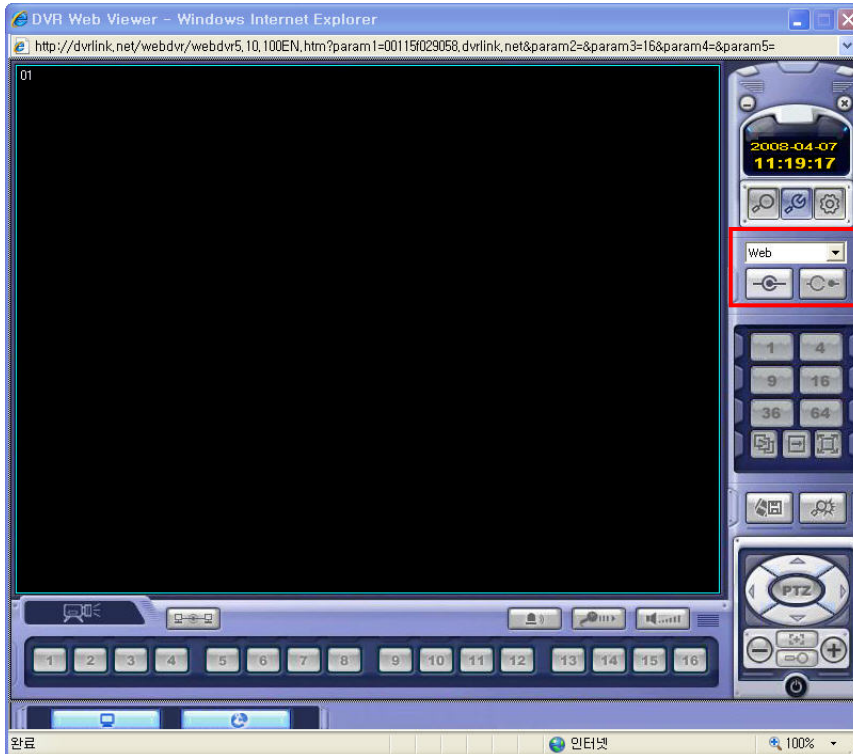
ADD MODIFY DELETE

OK Cancel

- Click the **MODIFY** button and **OK** button.

WEB CONNECTION SETUP

- Click the **CONNECTION** button.



DSP BASED STANDALONE DVR SOLUTION