SAMSUNG TECHWIN

4 CHANNEL DVR
User Manual

SRD-450

SAMSUNG

overview

FEATURES

This product enables you to record 4 channels of camera image and voice source simultaneously. This feature provides an excellent picture quality for both real time monitoring and search.

- You can also monitor remote videos or search for your previous recordings and change the menu settings of the DVR via the network.
- As this product can bypass the Windows operating system to implement the DVR-specific operating system on its hardware components, the overall operation is stable.
- This product compresses the 4 channels of camera input into a format of H.264 before converting analog to digital video, which enables you to make an effective use of your hard disk.
- You can use the remote control, mouse, search buttons on the front panel or a combination of them to perform freeze, fast playback, backward playback as well as monitoring an event of detection such as time, motion and alarm.
- It provides various recording modes including continuous, motion and alarm recordings.
- Supports DDNS (use dynamic IP as like static IP)
- USB Back Up
- Separate resolution settings for each channel
- Separate motion area settings for each channel
- Supports a triplex tasking of Save and Remote View during a search.
- Motion Detection Recording
- Prevents unauthorized user control and data loss using the password system
- Supports operations of the remote control and mouse
- BNC camera is supported
- NTSC : Up to 120 frames(Based on 352 x 240)
  PAL : Up to 100 frames(Based on 352 x 288)
- Record and play in high quality
  - NTSC : Based on 704 x 480
  - PAL : Based on 704 x 576
- High/low speed search (search list/speed search)
- Continuous recording in HDD Overwrite mode

IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit.
Follow all the safety instructions listed below.
Keep these operating instructions handy for future reference.

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 dry cloth.

7) Do not block any 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 (including amplifiers) 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 are provided for your safety. if 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 attachments/accessories specified by the manufacturer.

12) Use only with the 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.

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	CAUTION	
⚡	RISK OF ELECTRIC SHOCK. DO NOT OPEN	!

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.

This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

- To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.
- To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

WARNING

1. Be sure to use only the standard adapter that is specified in the specification sheet.
   Using any other adapter could cause fire, electrical shock, or damage to the product.
2. Incorrectly connecting the power supply or replacing battery may cause explosion, fire, electric shock, or damage to the product.
3. Do not connect multiple cameras to a single adapter. Exceeding the capacity may cause abnormal heat generation or fire.
4. Securely plug the power cord into the power receptacle. Insecure connection may cause fire.
5. When installing the camera, fasten it securely and firmly. The fall of camera may cause personal injury.
6. Do not place conductive objects (e.g. screwdrivers, coins, metal parts, etc.) or containers filled with water on top of the camera. Doing so may cause personal injury due to fire, electric shock, or falling objects.
7. Do not install the unit in humid, dusty, or sooty locations. Doing so may cause fire or electric shock.
8. If any unusual smells or smoke come from the unit, stop using the product. In such case, immediately disconnect the power source and contact the service center. Continued use in such a condition may cause fire or electric shock.
9. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way. (SAMSUNG is not liable for problems caused by unauthorized modifications or attempted repair.)
10. When cleaning, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock.
11. Do not expose the product to the direct airflow from an air conditioner.
    Otherwise, it may cause moisture condensation inside the Clear Dome due to temperature difference between internal and external of the dome camera.
12. If you install this product in a low-temp area such as inside a cold store, you must seal up the wiring pipe with silicon, so that the external air can not flow inside the housing.
    Otherwise, external high, humid air may flow inside the housing, pooling moisture or vapor inside the product due to a difference between internal and external temperature.

CAUTION

1. Do not drop objects on the product or apply strong blows to it. Keep away from a location subject to excessive vibration or magnetic interference.
2. Do not install in a location subject to high temperature (over 50°C), low temperature (below -10°F), or high humidity. Doing so may cause fire or electric shock.
3. If you want to relocate the already installed product, be sure to turn off the power and then move or reinstall it.
4. Remove the power plug from the outlet when there is a lighting storm. Neglecting to do so may cause fire or damage to the product.
5. Keep out of direct sunlight and heat radiation sources. It may cause fire.
6. Install it in a place with good ventilation.
7. Avoid aiming the camera directly towards extremely bright objects such as sun, as this may damage the CCD image sensor.
8. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
9. The Mains plug is used as a disconnect device and shall stay readily operable at any time.
10. When using the camera outdoors, moisture may occur inside the camera due to temperature difference between indoors and outdoors. For this reason, it is recommended to install the camera indoors. For outdoor use, use the camera with built-in fan and heater.

CAUTION

1. Risk of explosion if battery is replaced by an incorrect type.
   Dispose of used batteries according to the instructions.
2. LAN Ethernet cable should not be extended to outside of building.

overview

BEFORE START

This user's manual provides Information for using DVR such as brief introduction, part names, functions, connection to other equipment, menu setup, and the like.
You have to keep in mind the following notices:

• SAMSUNG retains the copyright on this manual.

• This manual cannot be copied without SAMSUNG's prior written approval.

• We are not liable for any or all losses to the product incurred by your use of non-standard product or violation of instructions mentioned in this manual.

• If you want to open the case of your system for checking problems, please consult the expert from the shop where you bought the product.

• Before installing an additional HDD or connecting an external storage device (USB memory or USB HDD) to this DVR, check the compatibility. Consult your provider for the compatibility list.

Warning

❖ **Battery**

Exchanging a wrong battery in your product may cause an explosion. Therefore you must use the same type of battery as the one being used in the product.
The following are the specifications of the battery you are using now.

• Normal voltage: 3V
• Normal capacity: 170mAh
• Continuous standard load: 0.2mA
• Operating temperature: -20°C ~ +85°C
  (-4°F ~ +185°F)

> **CALIFORNIA USA ONLY**
> This Perchlorate warning applies only to primary CR (Manganese Dioxide) Lithium coin cells in the product sold or distributed ONLY in California USA. "Perchlorate Material - special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate."

❖ **System Shutdown**

Turning off the power while the product is in operation, or taking not permitted actions may cause damage to the hard drive or the product. Also it can cause a dysfunction to the hard disk while using the product.
Please turn off the power using the Remote Controller or Mouse.
After entering password in the pop-up menu, you can turn off the power switch.
You may want to install a UPS system for safe operation in order to prevent damage caused by an unexpected power stoppage. (Any questions concerning UPS, consult your UPS retailer.)

❖ **Operating Temperature**

The guaranteed operating temperature range of this product is 0°C ~ 40°C (32°F ~ 104°F).
This product may not work properly if you run right after a long period of storage at a temperature below the guaranteed one.
When using the device after a long period of storage at low temperature, place the product at room temperature for a while and run it.
Especially for the built-in HDD in the product, its guaranteed temperature range is 5°C ~ 55°C (41°F ~ 131°F). Likewise, the hard drive may not work at a temperature below the guaranteed one.

❖ **Ethernet Port**

This equipment is in door use and all the communication wirings are limited to inside of the building.

> ■ Mouse is optional (not included in the pack). Please consult compatibility list with Manufacturer.
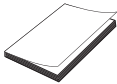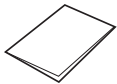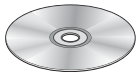
Standards Approvals

FC **CE**

✎ ▪ This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Package Contents

Please unwrap the product, and place the product on a flat place or in the place to be installed.
Please check the following contents are included in addition to the main unit.

User Manual	Quick Guide	CD
Remote Control / Battery (AAA×2)	Adaptor	Power Cable

overview

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● OVERVIEW

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PART NAMES AND FUNCTIONS (FRONT)

	Part Names	Functions
1	Power	Used to turn on or off the system.
2	DISPLAY	Each time you press in Live mode, the screen will be switched in the sequence of 4-split, Single and Auto Sequence in order.
3	SERACH	Goes to the search screen.
4	MENU	Goes to the system menu screen.
5	Direction	▲ ▼ ◄ ► : Used to select a system menu item.
	Enter	⏎ : Selects and runs a menu item. This will operate as Book mark (Reverse) button during playback.
6	Speed Playback	►► : Used for quick forward playback.
		◄◄ : Used for quick backward playback.
	Freeze	‖ : Freezes the screen or resumes playing.
	Return	↩ : Used to move one level up in the menu screen.
7	LED	**NETWORK** : Displays both network connection and data transfer status.
		REC : Flashes while the recording is in progress.
		ALARM : Flashes if an event occurs.
		POWER : Displays the status (ON/OFF) of power connection.
8	USB Port	Used to connect a USB storage device.

PART NAMES AND FUNCTIONS (REAR)
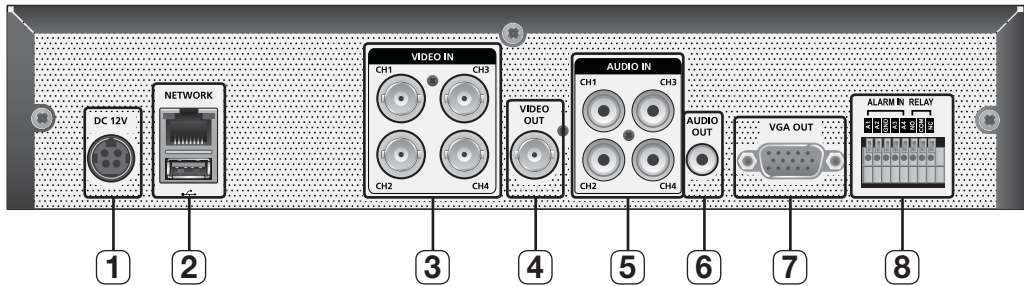
	Part Names	Functions
1	**DC Input (DC12V)**	Power connection port for 12V/4A adaptor
2	**NETWORK**	RJ-45 port for network connection.
	USB	Supports USB 2.0 protocol that enables you to back up the video signal stored in the HDD using an external memory device and to connect USB memory.
3	**VIDEO IN**	Composite video signal input port (BNC type port).
4	**VIDEO OUT**	Composite video signal output port (BNC type port).
5	**AUDIO IN**	Audio signal input port (RCA jack).
6	**AUDIO OUT**	Audio signal output port (RCA jack).
7	**VGA OUT**	Video output port for video output to a VGA monitor.
8	**ALARM IN**	Alarm input port
	RELAY	Alarm output port

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overview

REMOTE CONTROL

DVR

Available after switching to DVR mode by pressing the [**DVR**] button on the remote control.

SEARCH
Switches to search mode for video search.
At the moment, you should select an authorized user and enter the password.

MODE
Changes the display mode.

POWER
Turns on/off or logout the system.

Channel
If you press a channel number in real time monitoring or search mode, the camera's input of the selected channel is displayed in full screen.

BACKUP
Switches to backup mode.

DVR
Activates the DVR function.

ID
Sets the ID.
Select 2 digits from 0~9 while pressing the ID Key.

Play
Plays the search screen or adjusts the speed.

RETURN
Cancels the setting and moves to the previous screen.

MENU
You will see various menu items including settings, search and backup.

Directions
Used to move between menu items in searching for or playing recorded video.

ENTER
Selects a menu item or applies your setting.

REC
Performs the recording.

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Changing Remote Control ID

In a multi-DVR system using a single remote control, you can control only the DVR that matches the ID that you have set using the ID button.

1. Press the [**ID**] button to check the ID of each of "**REMOCON ID**" and "**SYSTEM ID**".
   - ■ The defaults are 00 for the System ID and 00 for the Remote ID, respectively.

2. To change the Remote ID of the IR REMOTE CONTROLLER, press and hold the [**ID**] button while entering a desired combination of two digits from 00 to 99.

3. To change the ID of the DVR, refer to "**REMOTE CONTROLLER > REMOTE CONTROLLER ID**". (Page 26)

4. Press the ID button of the IR REMOTE CONTROLLER to check the ID.

   ■ If the system number defined in "**REMOTE CONTROLLER**" is different from the number specified using the remote control, no other button than the [**ID**] buttons will operate.

connecting with other device

CONNECTING THE AUDIO, SPEAKER, MOUSE, AND POWER CABLE
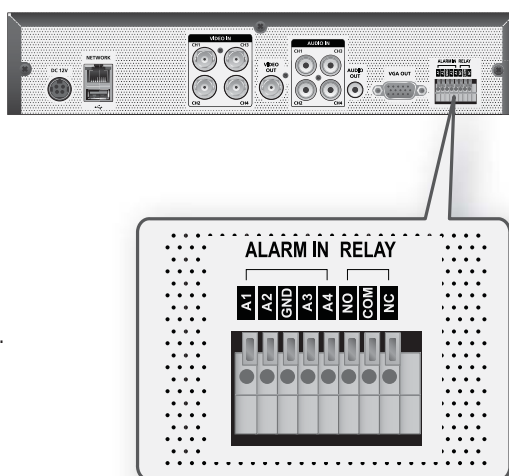
Network
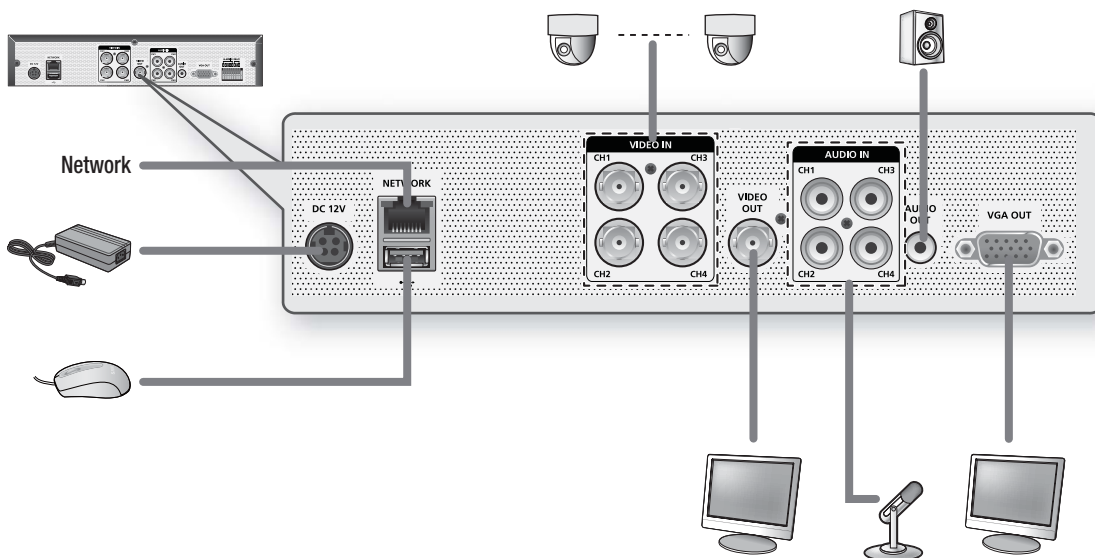
CONNECTING THE ALARM I/O

Connecting the alarm Input signal

Connection port for the alarm input signal. Connect one strand of the sensor signal line (two strands) to the alarm input port and connect the other to the [**G**] port.

Connecting the alarm output signal

Connection port for the alarm output signal.
- **NO** (Normal Open) : Sensor is open in normal condition, it generates alarm if the sensor is closed.
- **COM** : Connect the grounding cable.
- **NC** (Normal Close) : Sensor is closed in normal condition, it generates alarm if the sensor is open by interruption.

ALARM IN RELAY

A1 A2 GND A3 A4   NO COM NC

Local System Configuration

Use the router or hub in the same local network to connect to the DVR and local PC where you can control the remote DVR or check the recording data in the DVR.

IP Router or HUB

Local PC #1   Local PC #2   DVR
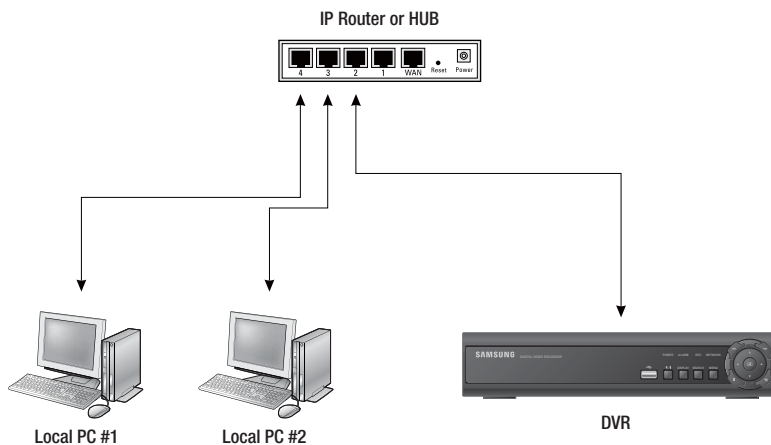
1. Connect the network port on the rear DVR panel to the router or hub.

2. Connect the network port on the local PC to the router or hub.

3. Enter "**IP ADDRESS:WEB SERVER PORT**" for the DVR on the local PC.
   The Web Viewer screen of the DVR appears.

   ▪ For more information, refer to "**Network Connection and Settings**". (Page 38)

● CONNECTING WITH OTHER DEVICE

connecting with other device

Total System Configuration

You can use the 10/100 Mbps Ethernet connector on the product to connect to the network.
Connecting to the network enables you to perform various functions including remote monitoring, remote search and remote control.
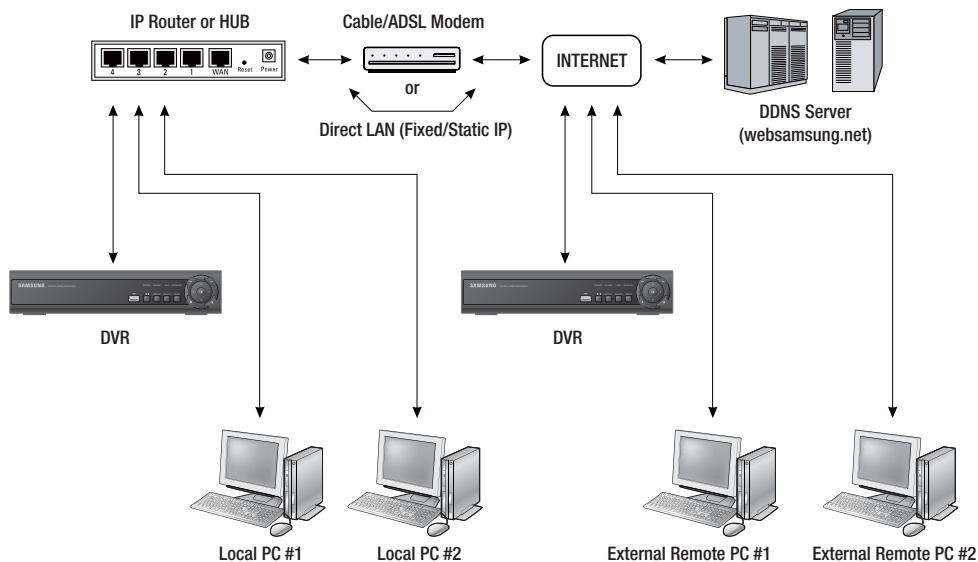
1. Connect LAN cable of Cable/ADSL modem or Direct Fixed/Static IP LAN Line to WAN port of IP Router.

2. Connect LAN ports of IP Router to Ethernet port DVR to be set up and to Ethernet port of Local PC to use during setup.

3. Connect Video cable of Camera to Monitor.

4. Turn on the Monitor power.
   - If you have a Static (Fixed) IP line or Dynamic IP line (Cable Modem or ADSL Modem) with one IP address (whether it's dynamic or fixed), but have more than one internet device to use (such as a PC and a DVR or several DVRs): you must use an IP Router (different from a simple Network Hub); You must set up the Router to work with the DVR and you must use a network capable PC within The local Router network to do the setup.
   - If you are using an existing Router which is already set up, you may not need to redo the basic setup of the Router again, but it is highly recommended that you at least read all the instructions below and go through the steps. Whether you are using an existing Router or a new Router, you must go through the Port Forwarding portion of the setup.

getting started

STARTING THE SYSTEM

1. Connect the power cable of the DVR to the wall outlet.

2. You will see the initialization screen.

LOG ON

To make use of the DVR, you must log on after the system started.
You must log on before you can use the features of the DVR.

1. Select a user account that you want to log on with.

2. Enter the password.
- The default user is "**admin**" and password is "**4321**".

getting started

LOG IN

To access menu items of Logout, System Setup, Record Setup, Backup and Search, you must have logged in.

1. If you try to access restricted menus, the login dialog pops up.

2. Select a user account, enter the password and press the <**ENTER**> button.
- The default user is "**admin**" and password is "**4321**".
- The user who has a limited access to the menu will not be displayed in the user list.

3. The menu screen to access appears.
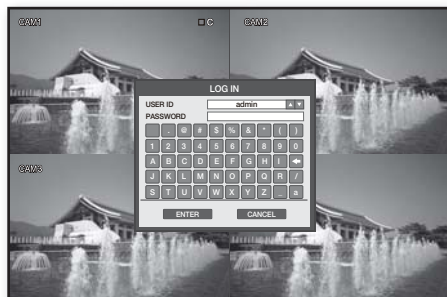
LOG OFF

If you do not use the system for an extended time, please log out to restrict access from other users.

1. Press the <⏻> button on the launcher menu or press the [**POWER**] button on the remote control.

2. Press the <**LOG OFF**> button.
It automatically logs off.
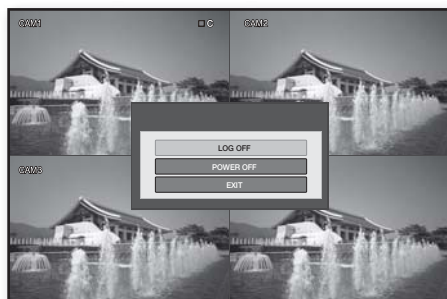
POWER OFF

You can shut down the system only if you have logged in to the DVR.

1. Press the <⏻> button on the launcher menu or press the [**POWER**] button on the remote control.

2. Press the <**POWER OFF**> button.

3. Enter the password and press the <**ENTER**> button.

4. Turn off the power switch.

live

LIVE SCREEN CONFIGURATION

Icons on the Live Screen

Name	Description
1 **Camera Name**	Displays the name of the camera.
2 **Recording Modes**	ℂ : Indicates continuous recording.
	𝔸 : Indicates alarm recording.
	𝕄 : Indicates motion detection recording.
	𝕀 : Indicates instant recording.
3 **Launcher Menu**	Displays the current time, menu and status.

live

VIEW THE LAUNCHER MENU

You can use the Launcher menu appearing on the bottom of the live screen to access it.

1. On the Live screen, move the cursor or press the [**MENU**] button on the remote control to display the Launcher menu.

2. Use the direction buttons or the cursor to select a desired menu.

> ▧ ■ You can adjust the display time of the Launcher in "**DISPLAY** > **OSD** > **STATUS BAR TIMEOUT**". (Page 30)
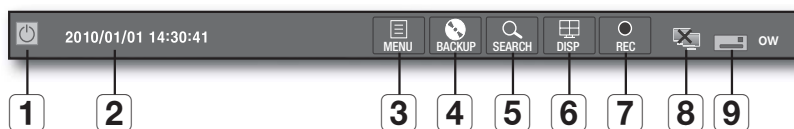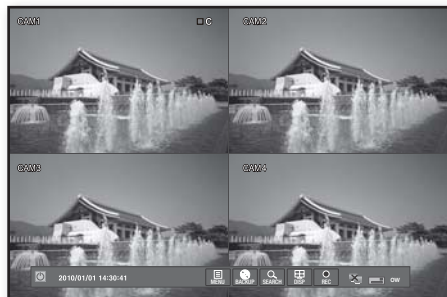
| Name		Description
1	Logout/Power off	The logout or power-off dialog appears.
2	Date/Time	Displays the current time.
3	MENU	Displays the system, record setup menu window appears.
4	BACKUP	Accesses the backup screen.
5	SEARCH	Accesses the search screen.
6	DISP	Displays a dialog to switch between split mode and sequence.
7	REC	Starts the manual recording.
8	Network Status	Indicates the Web Viewer connection status.
9	HDD	Displays HDD mode whether it is overwrite or not.

DISPLAY

You can select a screen split mode or perform the auto sequence function.

Switching the screen mode

You select a screen mode from single and 4-split.

1. Press the <**DISP**> button from the Launcher menu.

2. Select a split mode in the split option menu.
Press the [**MODE**] button on the front panel or the remote control to switch the mode in the sequence of the launcher menu items.
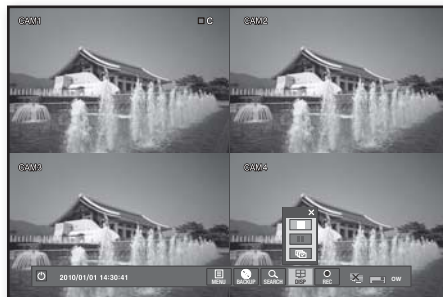
Auto Sequence

You can perform the auto sequence function.

1. Press the <**DISP**> button from the Launcher menu or press the [**MODE**] on the remote control.

2. When the split mode selection menu appears, press the < �'> button.
The screen mode switches to Single while transition.

📝 ■ You can adjust the screen transition interval in "**SYSTEM SETUP** > **DISPLAY** > **MONITOR** > **SEQUENCE DWELL**". (Page 31)

■ You can also add a sequence using the same menu.

Single mode
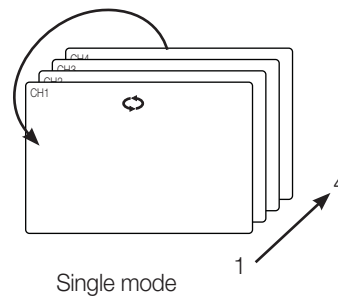
RECORD

In addition to the existing recording, you can proceed with recording directly in Live mode.

1. Press the <**REC**> button from the Launcher menu or press the [**REC**] on the remote control.

■ This can be done by right-clicking any area to display the context menu where you select <**RECORD START**>.

■ When the recording starts, <**RECORD START**> will switch to <**RECORD STOP**>.

2. The recording starts immediately with the <**I**> mark displayed on the top right corner.

3. To stop recording, press the <**REC**> button or click <**RECORD STOP**>.

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● LIVE

live

PLAYBACK

In Live screen, you can immediately play any of the previous recordings in the selected channel.

To playback by time option

1. Select a channel to play, and right-click it to display the context menu where you select <**PLAYBACK**>.

2. Select a desired start time of playback.

To playback by time selection

1. You can select <**GO TO..**> if you want to select a playback start time.

2. When the "**TIME SELECTION**" window appears, specify the start time and click <**OK**>.

3. The playback screen appears from the selected time point.

PLAYBACK SCREEN

You can adjust the play speed of the instant recording screen that is currently played.

`2010/01/01 10:28:02` : Shows the playback time.

◄◄ : Plays backward in the following speed
X2, X4, X8, X16, X32, X64
Reduces the speed in forward playback.

◄ : Plays backward.

❚❚ : Pauses playing temporarily.

▶ : Plays forward.

▶▶ : Plays forward in the following speed
X2, X4, X8, X16, X32, X64
Reduces the speed in backward playback.

✕ : Closes the playback screen.

> ✎ ▪ In "**INSTANT PLAYBACK**" mode, SRD-450 plays the video without the audio.
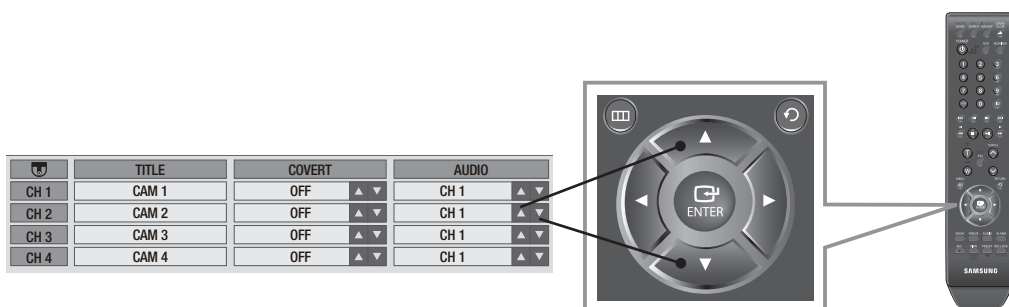
DVR setup

BEFORE STARTING SETTING UP

You can configure the DVR settings to your preference.

How to use remote control and mouse

You can use either the remote control or the cursor to select or change the setting of each menu item.

To change the setting using the remote control

1. Use the four direction (▲▼◄►) buttons to move to a desired item and press the [**ENTER**] button.
   - You must press the [**ENTER**] button to confirm the selected item.

2. Use the up/down (▲▼) buttons to adjust the given option values.
   - UP (▲) : Adjusts to the previous value of the selected item.
   - DOWN (▼) : Adjusts to the next value of the selected item.

3. Change the setting and press [**ENTER**] before your change can be applied.

4. To return to the previous menu, press the [**RETURN**] menu.
   The player will return to the previous menu without saving your changes.

🎥	TITLE	COVERT			AUDIO		
CH 1	CAM 1	OFF	▲	▼	CH 1	▲	▼
CH 2	CAM 2	OFF	▲	▼	CH 1	▲	▼
CH 3	CAM 3	OFF	▲	▼	CH 1	▲	▼
CH 4	CAM 4	OFF	▲	▼	CH 1	▲	▼

SYSTEM SETUP

You can configure the System menu settings to your preference.

To start the SYSTEM SETUP

1. Press the [**MENU**] button on the remote control or press the <**MENU**> button on the launcher menu.
   The SETUP menu screen appears.

2. Use the direction buttons to move to <**SYSTEM SETUP**> and press the [**ENTER**] button.
   The login dialog appears.

3. Select a user account and enter the password.
   - Only those users who have the right permissions can access the Setup menu.

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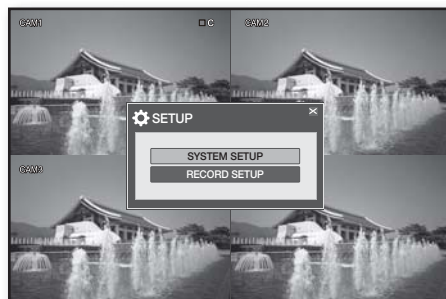
DVR setup

SYSTEM

You can configure the settings of DATE/TIME, SYSTEM MANAGEMENT and REMOTE CONTROLLER.
See the previous section to repeat steps 1~3. (Page 23)

DATE/TIME

You can specify the display time.

Using the mouse may help easy setup.

1. Use the direction buttons to move to the upper
   <**SYSTEM**> icon and press the [**ENTER**] button.
   The DATE/TIME setup screen appears.

2. Use direction buttons (▲▼◄►) to move to a desired
   item, and press the [**ENTER**] button to set the value.
   - DATE TIME: Set the current time and date.
   - DATE FORMAT: Set the date format.
     YYYY/MM/DD, DD/MM/YYYY, MM/DD/YYYY
   - TIME FORMAT: Set the time format to either AM/PM or
     24 hours.
   - NETWORK TIME SERVER SETUP: Set the current time
     using the time server.
     If you press the <**SYNC.**> button while connected to
     Internet, the time will be set from the time server.
     If the player has an existing recording data in the same time schedule, you are prompted to delete it.
     - Please check the followings if NTP does not work properly.
       IP ADDRESS, GATEWAY, SUBNET MASK, 1st DNS SERVER, 2nd DNS SERVER of IP SETUP in NETWORK menu.
   - TIME ZONE SETUP: Set the GMT standard time of your area.
   - D.S.T: Turn on or off the daylight saving time.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
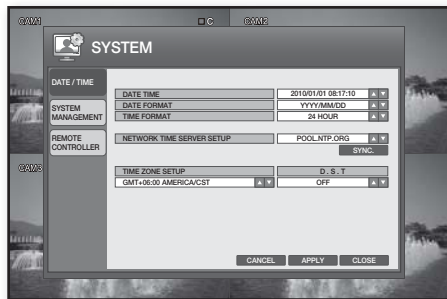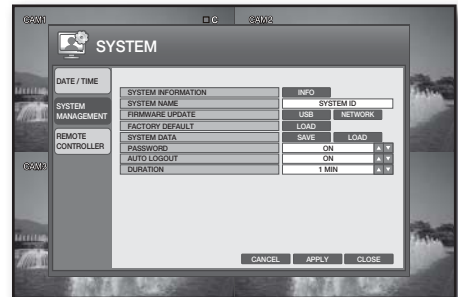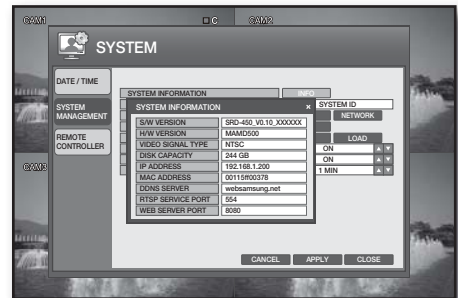
SYSTEM MANAGEMENT

You can check, update and initialize the system information.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**SYSTEM MANAGEMENT**> in the left corner of the SYSTEM setup menu and press the [**ENTER**] button.

2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.

- **SYSTEM INFORMATION**: Can check the current system version and system-related settings.
  Press the <**INFO**> to display the "**SYSTEM INFORMATION**" window.
  - S/W VERSION: Displays the software version.
  - H/W VERSION: Displays the hardware version.
  - VIDEO SIGNAL TYPE: Displays the signal type of the current video.
  - DISK CAPACITY: Displays the capacity of the HDD.
  - IP ADDRESS: Displays the IP address of the DVR.
  - MAC ADDRESS: Displays the DVR's MAC address.
  - DDNS SERVER: Displays the domain name of the appropriate set.
  - RTSP SERVICE PORT: Indicates the number of a port used when the remote management software program accesses the DVR.
  - WEB SERVER PORT: Indicates the number of a port used to connect to the DVR using the web browser.
- **SYSTEM NAME**: Set the system name using virtual keyboard. You can type in up to 15 bytes.
- **FIRMWARE UPDATE**: You can upgrade the current software version.
  - For more information about the firmware update, refer to "**To update the firmware**". (Page 26)
- **FACTORY DEFAULT**: Restore the DVR settings to the factory default.
- **SYSTEM DATA**: Save the system setup data or import the system information of other device.
  - SAVE : Stores the setting information of the DVR into the storage device.
    Connect the storage device to the USB port of the system.
  - LOAD : Applies the setting information in the storage device to the DVR.
    Connect the device to store the system data to the USB port.
- **PASSWORD**: Turns on or off the popup of the "**LOG IN**" dialog if you access a menu item such as Power Off, System Setup, Record Setup, Backup, Search.
- **AUTO LOGOUT**: Select to set the auto logout when no input is made after you logged in.
- **DURATION**: Specify the period for the auto logout.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

● DVR SETUP

DVR setup

## To update the firmware

1. Connect the device storing the update files to the USB port.

2. Press <**USB**> button in system management menu.

3. Select device, you will see the firmware list.

4. Select update file in <**FIRMWARE LIST**>.

5. Press <**UPDATE**> button in the Firmware upgrade window.

6. The update status bar appears and the system will perform the upgrade.

7. When the upgrade is completed, the system restarts.
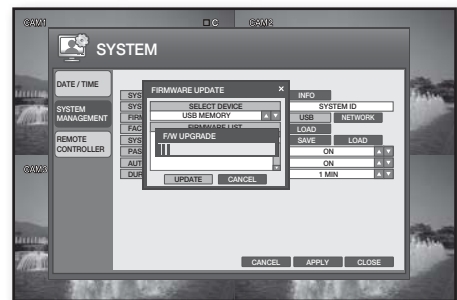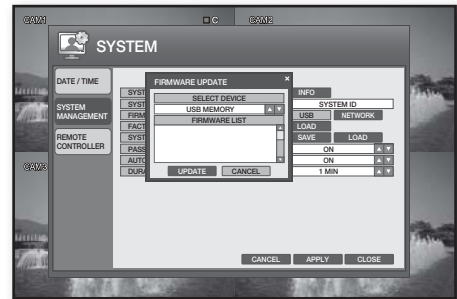
To update the network

Search the network system for an updateable file before proceeding with the update.
Check if the network connection is made properly.

1. Press the <**NETWORK**> button.

2. Click <**CHECK**> to check if there is any new updateable file in the network.
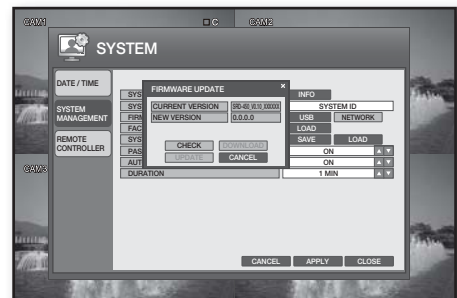
REMOTE CONTROLLER

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**REMOTE CONTROLLER**> in the left corner of the SYSTEM setup menu and press the [**ENTER**] button.

2. Use direction buttons (▲▼◄►) to move to a desired item, and set the <**REMOTE CONTROLLER ID**>.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
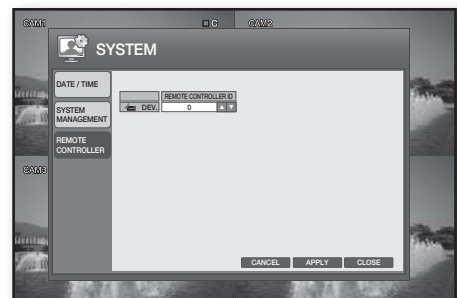
CAMERA

You can configure the settings of each connected CAMERA, COLOR and MOTION SENSOR.

CAMERA

You can configure the camera settings of TITLE, COVERT and AUDIO to your preference.

Using the mouse may help easy setup.

1. Use the direction buttons to move to the upper <**CAMERA**> icon and press the [**ENTER**] button. The CAMERA setup screen appears.

To change the camera title

2. Select an item in the title column. The virtual keyboard appears.

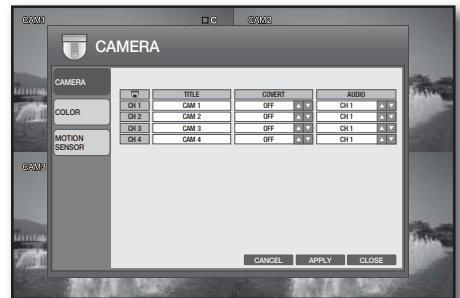**3.** Use the remote control or the cursor to select a desired character. You can enter up to 8 bytes.

Using the Virtual Keyboard

To enter alphanumeric characters for the ID, password and camera name, you can use the cursor or the remote control.

1. Use the direction buttons on the remote control to move to a desired item and press the [**ENTER**] button.
Or simply double-click a desired item.

2. Use the direction button to move to a desired character and press the [**ENTER**] button, or simply click the character.
Selecting < a > will switch the selected character to the lower case.
Selecting < ← > will erase the previous character.

3. When done, press the <**ENTER**> button on the bottom.

VIRTUAL KEYBOARD

CAM1

```
    .  @  #  $  %  &  *  (  )
1   2  3  4  5  6  7  8  9  0
A   B  C  D  E  F  G  H  I  ←
J   K  L  M  N  O  P  Q  R  /
S   T  U  V  W  X  Y  Z  _  a
        ENTER      CANCEL
```
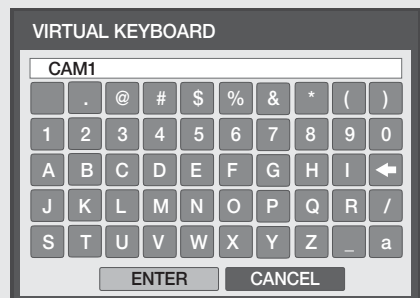
DVR setup

Covert

1. Select a camera channel to covert.

2. Use the up/down (▲▼) buttons in the right corner to select either <**ON**> or <**OFF**> and press the [**ENTER**] button.
   - If set to <**ON**>, no information of the corresponding channel will be displayed. However, it continues recording.
   - If set to <**OFF**>, video input from the corresponding camera will be displayed.

Audio Connection

1. Select a camera channel to connect to the audio source.

2. Select an audio input port.

3. When your settings are completed, press <**APPLY**> button on the bottom.
   Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

COLOR

You can adjust the brightness, contrast, tint and color of the image input to each camera channel.

Using the mouse may help easy setup.

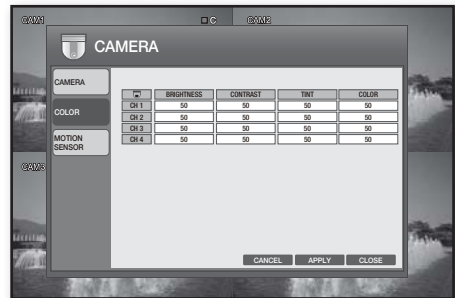1. Use the direction buttons to move to <**COLOR**> in the left corner of the CAMERA setup screen and press the [**ENTER**] button.

2. Use the direction buttons to move to a desired item of the camera channel to adjust its color and press the [**ENTER**] button.
   The color adjustment menu appears.

3. Use the up/down (▲▼) button in the bottom right corner to select a channel that you want to adjust the color of.

4. Select an item and use the numeric values to adjust the color option values.
   - BRIGHTNESS : Adjusts the brightness of the monitor.
   - CONTRAST : Adjusts the contrast of the monitor.
   - TINT : Adjusts the luminance of the monitor.
   - COLOR : Adjusts the display color of the monitor.

5. To complete your changes and exit the menu, click < ✕ > in the upper right corner.

6. When your settings are completed, press <**APPLY**> button on the bottom.
   Your settings will be applied.

7. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

MOTION SENSOR

You can set the event recording so that the DVR can detect the event and specify the recording area.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**MOTION SENSOR**> in the left corner of the CAMERA setup menu and press the [**ENTER**] button.

2. Select a channel and specify the sensitivity of the motion detection.

3. Press the <**AREA SETUP**> button.
   The motion area setup screen appears.

To select a motion area

① Move the cursor to display a white rectangle box.

② Move the box to the motion area and click the yellow box.

③ The selected area will be marked in a white box.

To deselect the motion area

① Move the cursor to the selected area.

② Click the yellow cell again.

③ The yellow rectangle will disappear with the motion area deselected.

To select / deselect all

① Right-click any area or press the [**RETURN**] button on the remote control.

② From the context menu that pops up, select a desired item.
   - SELECT ALL : Selects all areas.
   - DESELECT ALL : Deselects all areas.
   - CANCEL : Cancels your settings.
   - SAVE & EXIT : Saves your settings and exits the menu.
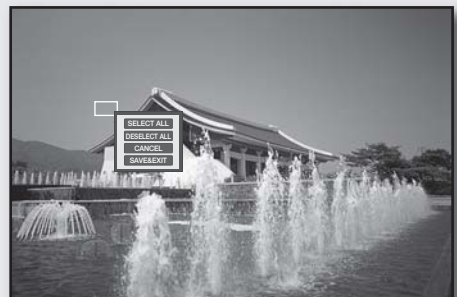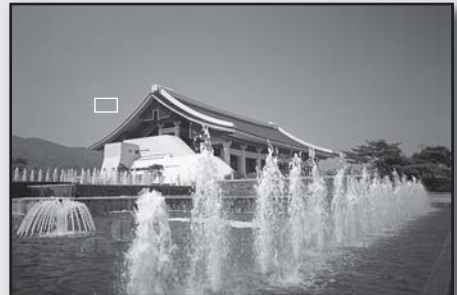
4. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

5. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

DVR setup

DISPLAY

You can configure the settings of OSD, MONITOR and SEQUENCE.
See the previous section to repeat steps 1~3. (Page 23)

OSD

You can specify the color and language for the time, title, border and motion displayed on the screen.
Using the mouse may help easy setup.

1. Use the direction buttons to move to the upper
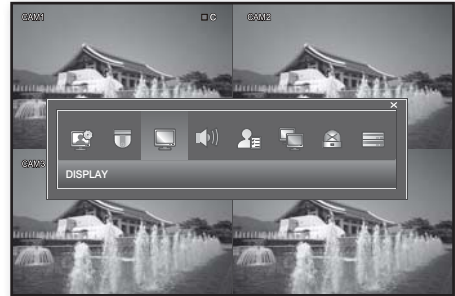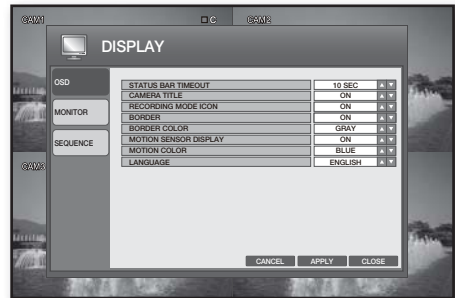   <**DISPLAY**> icon and press the [**ENTER**] button.
   The OSD setup screen appears.

2. Use direction buttons (▲▼◄►) to move to a desired
   item, and press the [**ENTER**] button to set the value.
   - STATUS BAR TIMEOUT: Specify the display time of the
     Launcher that appears on the screen.
   - CAMERA TITLE: Set to display the camera name on the
     screen.
   - RECORDING MODE ICON: Set to display the recording
     mode icon on the screen.
   - BORDER: Set to display the inter-channel borders in a
     split mode.
   - BORDER COLOR: Select a color for the border.
   - MOTION SENSOR DISPLAY: Set to display the motion event in the motion sensor area when it occurs.
   - MOTION COLOR: Select a color of a detected motion that is displayed on the screen.
   - LANGUAGE: Select a menu language.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

MONITOR

You can specify the items and time interval that are displayed on the monitor.
Using the mouse may help easy setup.

1. Use the direction buttons to move to <**MONITOR**> in the
   left corner of the DISPLAY setup screen and press the
   [**ENTER**] button.
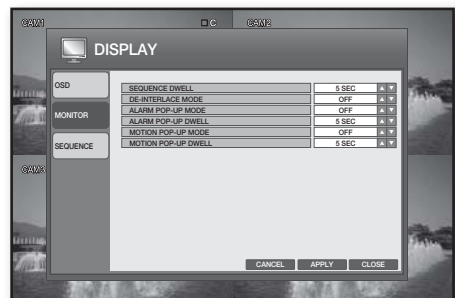
2. Use direction buttons (▲ ▼ ◄ ►) to move to a desired item, and press the [**ENTER**] button to set the value.
- SEQUENCE DWELL: Specify the auto sequence dwell time.
- DE-INTERLACE MODE: Set to correct option of the screen trembling during playing in 4CIF size.
- ALARM POP-UP MODE: Set to turn on or off the display of the alarm channel if an alarm occurs.
- ALARM POP-UP DWELL: Set the duration of the alarm dwell time if an alarm occurs.
- MOTION POP-UP MODE: Set to turn on or off the switching to the motion detecting channel's full screen mode if a motion is detected.
- MOTION POP-UP DWELL: Set the dwell time of the motion pop-up.
  This will display the motion popup for as much time as you specified and return to the split screen.
  - If an alarm occurs or a motion is detected in more than one channel, the screen will switch to a split mode for the display.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

SEQUENCE

You can select a split mode of the sequence and add or adjust the sequence dwell time.
Using the mouse may help easy setup.

ADDING SEQUENCE

1. Use the direction buttons to move to the <**SEQUENCE**> in the left corner of the DISPLAY setup screen and press the [**ENTER**] button.

2. Press the <**ADD**> button on the bottom.

3. When the "**ADD**" window appears, select the TITLE input box.

4. Use the virtual keyboard to enter the name and press the <**SAVE**> button.

- For using the virtual keyboard, refer to "**Using the Virtual Keyboard**". (Page 27)

● DVR SETUP

English _**31**
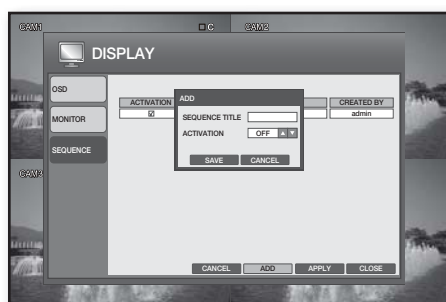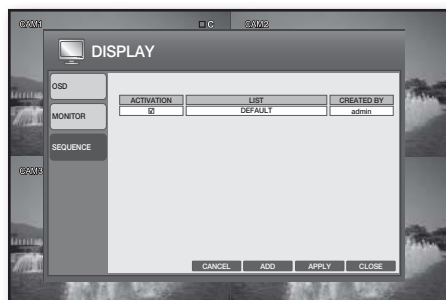
DVR setup

5. When the ADD SEQUENCE window appears, press the <**ADD**> button.

6. When the SEQUENCE SETUP window appears, Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.

- VIEW TYPE: Select a split mode to sequence.
- CONFIGURE: Select a channel to display on each split screen.
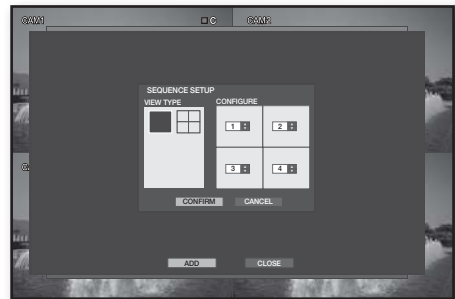
7. Press the <**CONFIRM**> button.
The set sequence mode will be confirmed and displayed on the ADD window.

8. When completed, press the <**ADD**> button on the bottom.
The set sequence type will be saved and you will move to the previous screen.
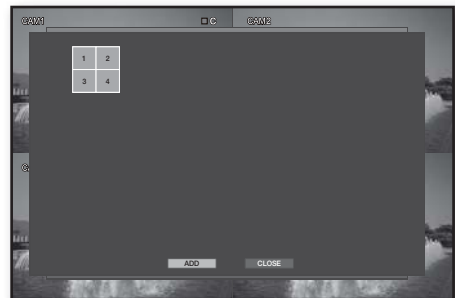
EDITTING SEQUENCE

1. Select a list to edit.
The EDIT window appears.

2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.

- SEQUENCE TITLE : Select the TITLE input box.
- ACTIVATION : Set to perform the sequence.
- MODIFY : You can change the sequence mode setting.
  - For setting the sequence mode, refer to "**ADDING SEQUENCE**". (Page 31)
- DELETE : Deletes the selected sequence list.
- CANCEL : Cancels your changes.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
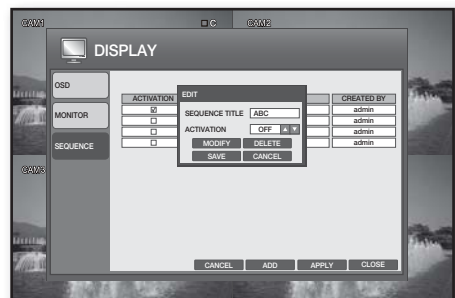
SOUND

You can configure the settings of AUDIO and BUZZER.
See the previous section to repeat steps 1~3. (Page 23)

AUDIO

You can select to input the live audio source and select an audio channel.

Using the mouse may help easy setup.

1. Use the direction buttons to move to the upper <**SOUND**> icon and press the [**ENTER**] button. The AUDIO setup screen appears.

2. Use direction buttons (▲▼◀▶) to move to a desired item, and press the [**ENTER**] button to set the value.
   - LIVE AUDIO: Turn on or off the audio output. However, the channel that is set to COVERT does not output sound. (Page 28)
   - DEFAULT AUDIO CHANNEL: Select an audio channel to monitor among voice signals incoming from audio ports 1 through 4.

3. When your settings are completed, press the <**APPLY**> button on the bottom. Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
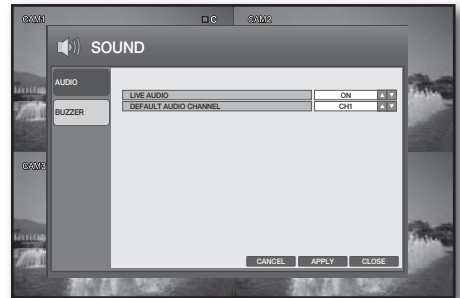
BUZZER

You can use the remote control to activate the buzzer.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**BUZZER**> in the left corner of the SOUND setup screen and press the [**ENTER**] button.

2. Use direction buttons (▲▼◀▶) to move to <**REMOTE CONTROLLER**> and press the [**ENTER**] button to set the value.

3. When your settings are completed, press the <**APPLY**> button on the bottom. Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

● DVR SETUP

English _**33**

DVR setup

USER

You can configure the settings of USER MANAGEMENT, USER AUTHORITY and LOGOUT.
See the previous section to repeat steps 1~3. (Page 23)

USER MANAGEMENT

Add a user account whose information you can edit later.

Using the mouse may help easy setup.

1. Use the direction buttons to move to the upper <**USER**>
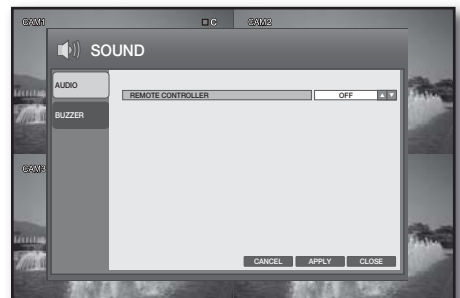   icon and press the [**ENTER**] button.
   The USER MANAGEMENT setup screen appears.

2. Use the direction (▲▼◄►) buttons to move to a desired
   item and add, delete or change the user account.
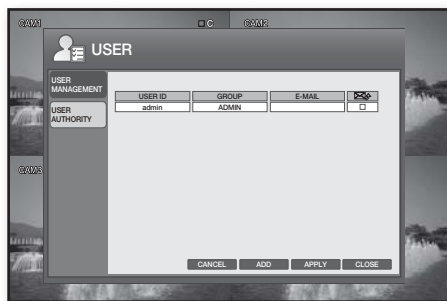
To add a user account

1. Press the <**ADD**> button on the bottom of the USER
   MANAGEMENT menu screen.

2. Use the direction (▲▼◄►) buttons to move to a desired
   item and press [**ENTER**] to select it.

   ■ Provide necessary information for the user to add.

   • USER ID: Enter the user ID.

   • PASSWORD: Enter the password.

   • GROUP: Select a group where the user belongs from
     <**MANAGER**> and <**USER**>.

   • E-MAIL: Enter the email address at which you will be
     notified that an event occurs.

   • E-MAIL NOTI.: You can select to receive the email notification when an event occurs.

3. When done, press the <**OK**> button.
   The added user account will be listed.

4. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

5. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
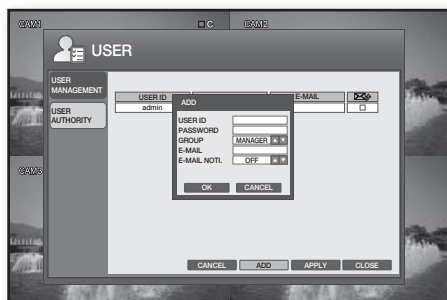
To change the user information

1. Select a user account that you want to change in the user list.
   The "**EDIT**" window appears.

2. Make necessary changes and press the <**OK**> button.
   ▪ The "**admin**" ID can not be removed.

3. To remove a user account, press the <**DELETE**> button.

4. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

5. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
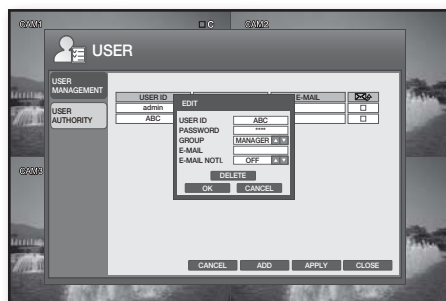
USER AUTHORITY

You can set to allow or deny access of a user according to the user group.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**USER AUTHORITY**> in the left corner of the USER setup screen and press the [**ENTER**] button.

2. Select all the menu items that a user can access with the MANAGER or USER account by checking the applicable checkboxes.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
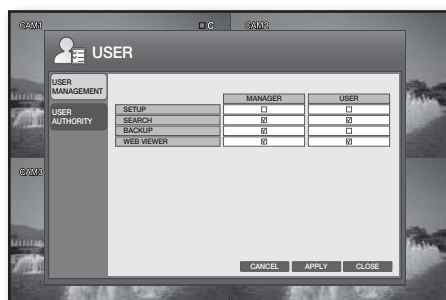
DVR setup

NETWORK

You can configure the settings of IP SETUP, DDNS and E-MAIL.
See the previous section to repeat steps 1~3. (Page 23)

IP SETUP

You can specify the IP of the DVR according to the network connection.

Using the mouse may help easy setup.

1. Use the direction buttons to move to the upper
<**NETWORK**> icon and press the [**ENTER**] button.
The IP Setup screen appears.

2. Use direction buttons (▲▼◄►) to move to a desired
item, and press the [**ENTER**] button to set the value.

- DHCP: Set the IP address of the DVR to a dynamic IP.
  - If <**DHCP**> is selected, the setting values of IP ADDRESS,
    GATEWAY, SUBNET MASK, 1st DNS SERVER and 2nd
    DNS SERVER will be automatically filled.
  - If <**DHCP**> is not selected, you should manually enter
    the setting values of IP ADDRESS, GATEWAY,
    SUBNET MASK, 1st DNS SERVER and 2nd DNS
    SERVER.
    - For the IP address, contact the network administrator.
- IP ADDRESS: Enter an IP address.
- GATEWAY: Enter a gateway address.
- SUBNET MASK: Enter a subnet mask address.
- 1st DNS SERVER: Enter the first DNS server address.
- 2nd DNS SERVER: Enter the second DNS server address.
- RTSP SERVICE PORT: Indicates a port used when the remote management software program
  accesses the DVR.
- WEB SERVER PORT: Indicates a port used to connect to the DVR using the web browser.
- AUTO PORT: Registers connectable address from outside to DDNS HOST NAME automatically.
- DELETE PORT: Unblock registered port forwarding status.
- PORT TEST: Check the current RTSP PORT, HTTP PORT status by itself whether it is connectable.
- DDNS HOST NAME: Displays the MAC address of the DVR that connects to the DDNS.
- MAX TX SPEED: Set the network transfer speed.
  Select one from 56, 128, 256, 512, 1024, 2048, 4096, 8192KBYTE.
  The video will be transferred below the set speed, which may differ according to the network
  connection status.
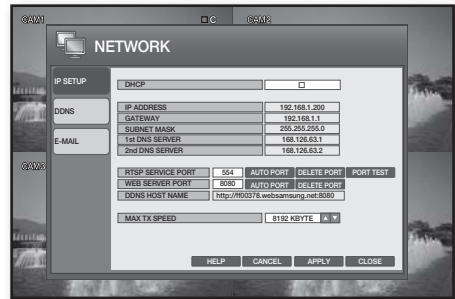
3. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

To view the HELP

You can view the explanation of each item of the IP SETUP menu.

1. Press the <**HELP**> button in the lower corner of the IP SETUP menu.

2. Read through the help and press the <**CLOSE**> button to close the window.
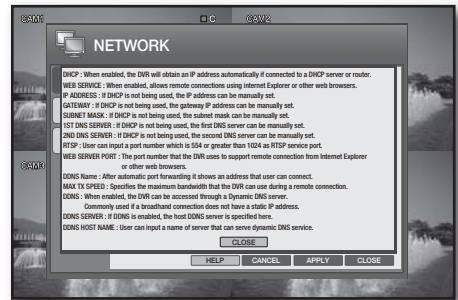
DDNS

You can specify a DDNS site to access when a remote user connects to the network.

Using the mouse may help easy setup.

> DDNS is an acronym for Dynamic DNS(Domain Name System).
>
> DNS is a domain service that directs the character-based (easy to remember) domain name (ex: www. google.com) to the number-based IP address (64.233.189.104).
>
> DDNS(Dynamic DNS) is the IP registration service that registers a domain name that the user remembers and a changed IP address with the DDNS server so that the user can redirect to the registered domain name if the previous IP address is changed in a dynamic IP environment.

1. Use the direction buttons to move to <**DDNS**> in the left corner of the NETWORK setup menu and press the [**ENTER**] button.

2. Use direction buttons (▲ ▼ ◄ ►) to move to a desired item, and press the [**ENTER**] button to set the value.

   • DDNS: Select to set the DDNS connection.
   • DDNS SERVER: Select a DDNS server to connect to.
   • TEST: Try a test connection to the DDNS server.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
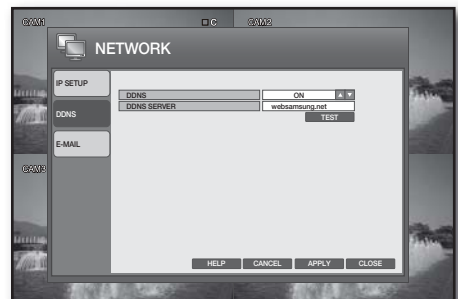
DVR setup

E-MAIL

You can send an email notice to DVR registered users at a certain interval or when an event occurs.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**E-MAIL**> in the left corner of the NETWORK setup menu and press the [**ENTER**] button.

2. Use direction buttons (▲▼◄►) to move to a desired item, and set the value.

    • SERVER: Set the mail server.
      This is a mail server used when the DVR notifies with email.
      You must use the mail server that supports Microsoft Outlook.
      Enter the mail server using the virtual Keyboard. (Page 27)
    • PORT: Enter the mail server port.
    • SECURITY:
      - If set to <**ON**>, your email will be sent in secure mode.
        ■ However, the email will not be sent if the server you entered does not support SSL.
      - If set to <**OFF**>, this will send emails of the server that does not support SSL.
    • USER: Enter the mail account ID of the sender.
    • PASSWORD: Enter the mail account password of the sender.
    • FROM: Provide the sender email that will be displayed in the email notice.
    • TEST E-MAIL: Sends a test email to check if the current setting can send emails normally.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
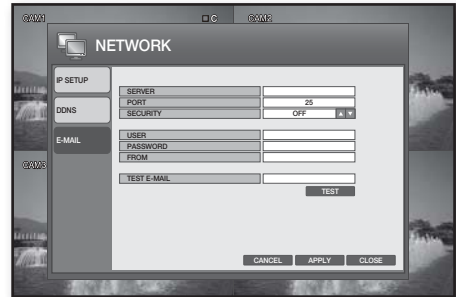
Network Connection and Settings

According to the user network connection, configure a proper network settings so as to change the settings of a remote DVR and to search and play the recording data via a local or external Internet connection.

> ■ For more information, refer to "**Network Setup Guide**" that comes with the DVR.
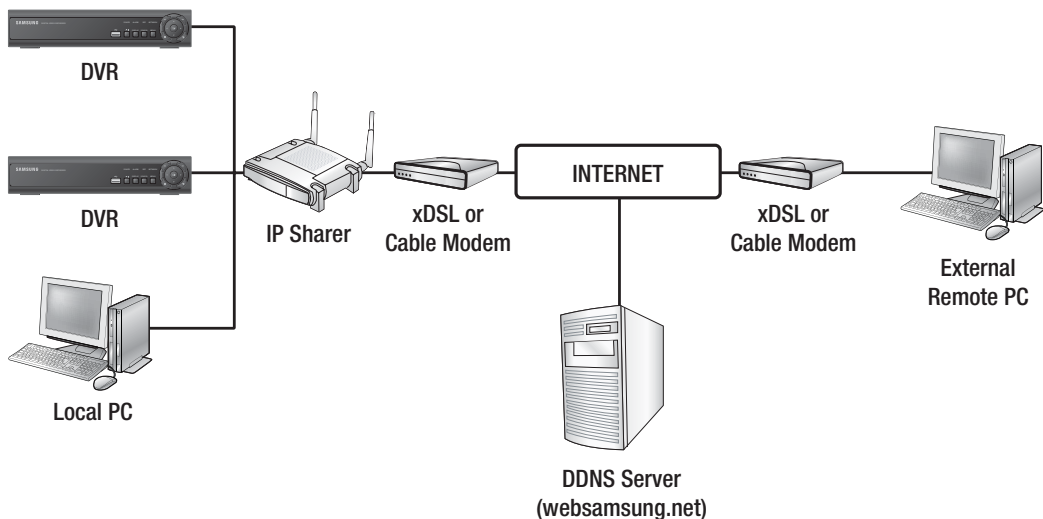
If not using a router for network connection

Static IP Setup Mode

- Internet Connection: Use ADSL or the dedicated line for the static IP, or connect between DVR and remote users in the LAN environment.
- DVR Network Setup: Check the network status of the connected DVR.
  - For other options of IP, gateway and subnet mask, contact the network administrator.
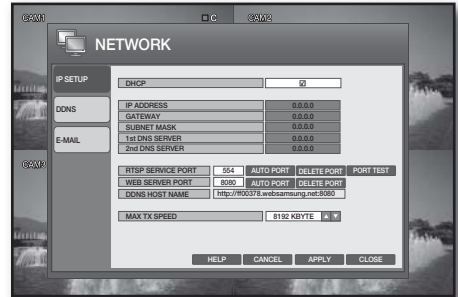
Dynamic IP (DHCP) Setup Mode

- Internet Connection: Connect the DVR directly to the cable modem, to a DHCP-based ADSL modem, or to the optical LAN.
- DVR Network Setup: Check the <**DHCP**> checkbox of the <**IP SETUP**> menu.

If using a router

Connect the DVR to the IP router that is connected to the ADSL/Cable modem, or connect the DVR to the IP router in the LAN environment.

> ■ For more information, refer to "**Network Setup Guide**" that comes with the DVR.

Router DHCP IP Address Setup

1. To access the setup menu of the IP router, provide the IP address of the router in the address bar of the Internet browser on a local PC that is connected to the IP router. (ex: http://192.168.0.1)

2. First, check the local connection properties from the "**Network Connection**" on the local PC.
Ex) IP : 192.168.0.200
    Subnet mask : 255.255.255.0
    Gateway : 192.168.0.1

3. Provide the IP router address to display the login dialog where you enter the router ID and password.

4. Access the DHCP setup menu to switch the router mode to DHCP server mode and provide the start address and the end one.
Enter the start (192.168.0.100) and the end (192.168.0.200) addresses.
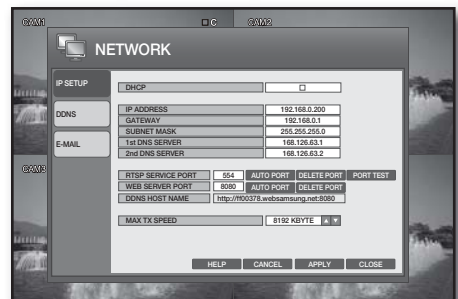
> ■ The addresses mentioned above may differ depending on the router so refer to the router manual for more information.

● DVR SETUP

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DVR setup

DVR Connection

1. Use the direction buttons to move to the upper <**NETWORK**> icon in the SYSTEM SETUP menu screen and press the [**ENTER**] button.
   The IP SETUP screen appears.

2. Deselect the <**DHCP**> checkbox.

3. Locate the local PC in connection with the same router and check information of gateway, subnet mask 1st DNS and 2nd DNS server.

4. Provide the IP address, gateway, subnet mask 1st DNS, 2nd DNS server as appropriate.

   ▨ ▪ If the DHCP server has the start address (192.168.0.100) and the end one (192.168.0.200) specified, change each of them to one between "192.168.0.2~ 192.168.0.99" and "192.168.0.201 ~ 192.168.0.254".

Router Port Forwarding

To access the PC or DVR in the local LAN area of the router, set the port forwarding for the router.
The DVR will use <**RTSP SERVICE PORT**> and <**WEB SERVER PORT**> for this purpose. You must set the port forwarding for both ports.

   ▨ ▪ For more information, refer to "**Network Setup Guide**" that comes with the DVR.

To check the connection status

1. Provide the IP address for the local PC or remote PC.

2. When the login dialog appears and prompts you to enter the ID and password, this means you have set the connection properly.

EVENT / SENSOR

You can configure the settings of HDD EVENT, ALARM INPUT, ALARM OUTPUT and BUZZER OUTPUT.
See the previous section to repeat steps 1~3. (Page 23)

HDD EVENT

You can set to sound the alarm if the HDD has a problem or is full.

Using the mouse may help easy setup.

1. Use the direction buttons to move to the upper <**EVENT / SENSOR**> icon and press the [**ENTER**] button.
   The HDD EVENT screen appears.
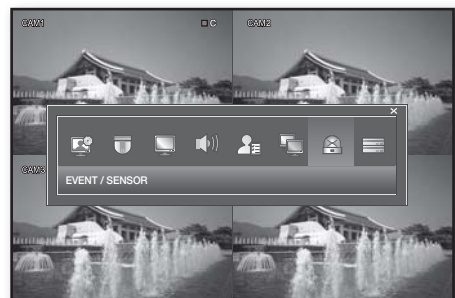
2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.

- SMART ALARM: Specify the availability of the alarm if the HDD has a problem.
- DISK FULL EVENT: Set to notify the user when the HDD is full.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
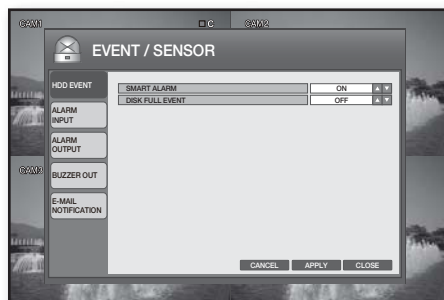
ALARM INPUT

You can specify the availability of the alarm input and the alarm operation type.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**ALARM INPUT**> in the left corner of the EVENT/SENSOR setup screen and press the [**ENTER**] button.

2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.

- OPERATION: Set the connection status of the alarm sensor to either ENABLE or DISABLE.
  - If the alarm sensor is set to <**ENABLE**> and you have set to perform recording if an alarm occurs, the Live screen displays the alarm recording standby mode. (Page 47)
- TYPE: Specify the sensor type.
  - N/O (Normal Open) : The sensor stays open at all times while the alarm operates if the sensor is closed.
  - N/C (Normal Close) : The sensor stays closed at all times while the alarm operates if the sensor is open.
- TEXT: To easily locate the alarming point when an event occurs, rename the alarming point.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
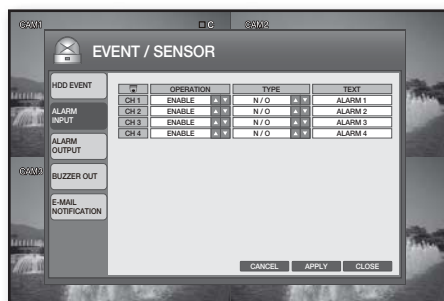
● DVR SETUP

DVR setup

ALARM OUTPUT

You can specify the alarming conditions and the operating time.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**ALARM OUTPUT**> in the left corner of the EVENT/SENSOR setup screen and press the [**ENTER**] button.

2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.

- OPERATION: Set the operation of the alarm output.
  - If set to <**ENABLE**>, the applicable menu is activated where you can set other options.
  - If set to <**DISABLE**>, other items will be disabled.
- MODE: Set the output mode of the alarm.
  - If set to <**LATCHED**>, the alarm will sound for as much time as defined in DURATION.
  - If set to <**TRANSPARENT**>, the DURATION item will be disabled.
- DURATION : Set the duration of the alarm output.
  - If you select <**UNTIL KEY**>, the buzzer will be stopped when you press any button on the front panel or the remote control.
- HDD EVENT: Set to use the alarm output if the HDD is full.
- ALARM, VIDEO LOSS, MOTION: Set the alarm output for each channel if an event of alarm, video loss or motion detection occurs.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
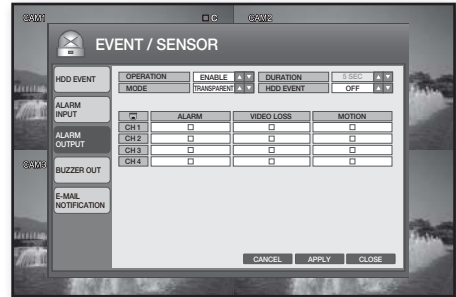
BUZZER OUT

You can specify the alarm input channel and the event conditions for the buzzer.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**BUZZER OUT**> in the left corner of the EVENT/SENSOR setup screen and press the [**ENTER**] button.

2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.

- OPERATION: Set the operation of the buzzer output.
- HDD EVENT: Set the buzzer output if a HDD event occurs.
- MODE: Set the output mode of the buzzer.
  - If set to <**LATCHED**>, the buzzer will sound for as much time as defined in DURATION.
  - If set to <**TRANSPARENT**>, the DURATION item will be disabled.
- DURATION : Set the duration of the buzzer output.
  - If you select <**UNTIL KEY**>, the buzzer will be stopped when you press any button on the front panel or the remote control.
- ALARM, VIDEO LOSS, MOTION: Set the buzzer output for each channel if an event of alarm, video loss or motion detection occurs.
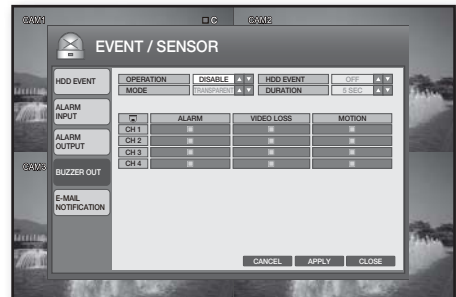
3. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

E-MAIL NOTIFICATION

You can specify the conditions so that you can send an email notice to DVR registered users at a certain interval or when an event occurs.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**E-MAIL NOTIFICATION**> in the left corner of the EVENT/ SENSOR setup screen and press the [**ENTER**] button.

2. Use direction buttons (▲ ▼ ◄ ►) to move to a desired item, and press the [**ENTER**] button to set the value.

- NOTIFICATION: Turn on or off the notification of an event if it occurs.
  - If set to <**ON**>, the applicable menu is activated where you can set other options.
  - If set to <**OFF**>, other items will be disabled.
- SETUP CHANGE: Turn on or off the notification of a setup change if it occurs.
- HDD EVENT: Turn on or off the notification of a HDD event if it occurs.
- BOOTING EVENT: Turn on or off the notification of an email when the system boots.
- SNAPSHOT NOTI.: Specify the sending of the snapshot when an event occurs.
- ALARM, VIDEO LOSS, MOTION: Set the event notification for each channel if an event occurs such as alarm, video loss or motion detection.
- FREQUENCY: Set the notification interval for events occurred.

✐ ▪ A photo taken in a low contrast scene naturally causes a lot of noise, and often occurs an unnecessary motion event, which may cause damage to the camera set. In such case, set a function of E-MAIL NOTIFICATION to OFF, or set FREQUENCY to a longer time (ex: 30 MIN).

3. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

● DVR SETUP

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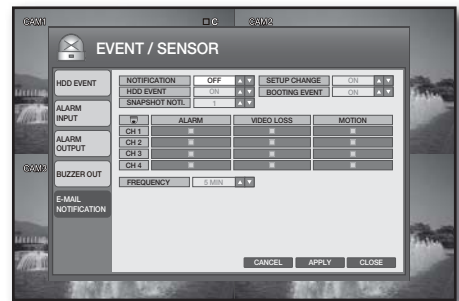
DVR setup

DISK MANAGEMENT

You can specify the recording auto deletion and overwrite options and format the HDD recording data.
See the previous section to repeat steps 1~3. (Page 23)

1. Use the direction buttons to move to the upper <**DISK MANAGEMENT**> icon and press the [**ENTER**] button. The DISK MANAGEMENT screen appears.

2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.

- AUTO DELETE: Specify the auto deletion period. You can search for recording data only in that specified period.
  - The Auto Delete function is available only if OVERWRITE is set to ON.
  - The NTSC-type model does not support the function of AUTO DELETE.
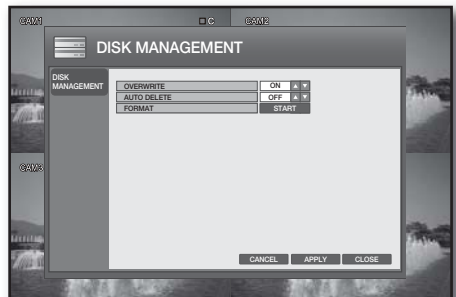
  > ▪ If there remains a large-sized data file, setup may take a while. Note that recording will be disabled until setup is completed.
  >
  > ▪ It will be disabled if OVERWRITE is set to OFF.

- OVERWRITE
  - If set to <**ON**>, recording will proceed by overwriting the existing data even if the size of the recording data exceeds the HDD capacity.
  - If set to <**OFF**> and the HDD is full, the DVR stops recording and sounds the buzzer or alarm that is set to operate in <**EVENT / SENSOR**>. (Page 40) A message of "**DISK FULL**" is displayed on the screen.
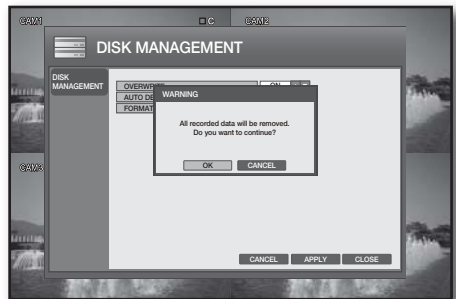
- FORMAT : Format the hard disk drive.
  ① Press the <**START**> button.
  ② You will see the alert that recording data can be deleted.
  ③ Press the <**OK**> button.

  > ▪ Note that formatting the HDD will delete all existing data.

3. When your settings are completed, press the <**APPLY**> button on the bottom. Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

RECORD SETUP

You can configure the settings of record-related options such as RECORDING OPERATIONS, CONTINUOUS/ MOTION RECORDING, ALARM RECORDING, INSTANT RECORDING.

To start the RECORD SETUP

1. Press the [**MENU**] button on the remote control or click <**MENU**> button on the launcher menu.
   The SETUP menu screen appears.

2. Use the direction buttons to move to <**RECORD SETUP**> and press the [**ENTER**] button.
   The login dialog appears.

3. Select a user account and enter the password.
   ▪ Only those users who have the right permissions can access the Setup menu.

RECORDING OPERATION

You can specify the recording period with the pre and post recording times.

1. Access <**RECORD SETUP**> to display the RECORDING OPERATIONS setup screen.

2. Use direction buttons (▲ ▼ ◄ ►) to move to a desired item, and press the [**ENTER**] button to set the value.
   - SCHEDULE MODE: Specify the schedule mode. The specified schedule mode will be applied to Continuous/Motion Record and Alarm Record.
   - PRE EVENT RECORDING TIME: Specify the pre event recording time that will be applied if an event occurs. Recording will start before the specified time if an event occurs.
   - POST EVENT RECORDING TIME: Specify the end recording time that will be applied if an event occurs. Recording will continue after the specified time if an event occurs.

3. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

4. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

DVR setup

## CONTINUOUS/MOTION RECORDING

You can specify the continuous recording time, the recording size and the quality.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**CONTINUOUS/ MOTION RECORDING**> in the left corner of the RECORD setup screen and press the [**ENTER**] button.
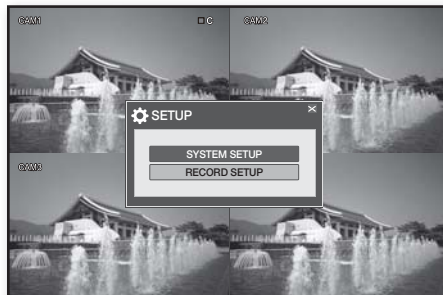
2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.
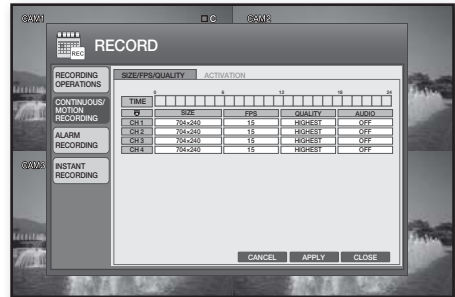
To specify the recording size/FPS/quality

You can specify the recording size and the quality.

1. From the <**TIME**> bar, select a cell that you want to adjust the size.
   The size adjustment window appears.

2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.
   - SIZE: Set the recording resolution.
   - FPS: Set the frame rate per second.
   - QUALITY: Set the recording quality.
     Select one from LOW/STANDARD/HIGH/HIGHEST.
     The recordable time may differ, depending on the recording quality.
   - AUDIO: Select whether to include audio input to the recording.
   - Remaining Rate: If you change the settings of the resolution and the remaining rate, the frame rate available for each resolution will be recalculated.

3. Press the <**OK**> button.
   Your changes are saved and the window is closed.

4. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.
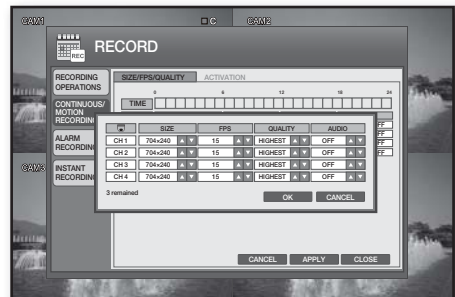
To set the record mode

You can specify the record mode for each channel or time range.

1. From the CONTINUOUS/MOTION RECORDING menu screen, select <**ACTIVATION**>.
   - Your change to the recording size will be applied to the time bar.

2. Drag the cell that you want to adjust the size, or use the direction buttons (▲▼◄►) on the remote control and press the [**ENTER**] button.
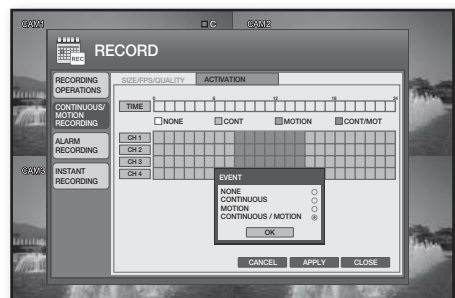
3. Select a desired event recording mode.

- NONE: Does not perform recording.
- CONTINUOUS: Performs the recording continuously.
- MOTION: Performs the recording only if a motion is detected.
  To record a motion, set both <**SENSITIVITY**> and <**AREA SETUP**> in "**CAMERA > MOTION SENSOR**". (Page 29)
- CONTINUOUS/MOTION: Performs both continuous and motion recording modes.

4. Press the <**OK**> button.
The color of the specified area will be changed to the color of the specified record type.

5. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

6. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

ALARM RECORDING

You can specify the recording size and the quality that will be applied if an alarm event occurs.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**ALARM RECORDING**> in the left corner of the RECORD setup screen and press the [**ENTER**] button.

2. From the <**TIME**> bar, select a cell that you want to adjust the size.
The size adjustment window appears.

3. Use direction buttons (▲ ▼ ◄ ►) to move to a desired item, and press the [**ENTER**] button to set the value.

- SIZE: Set the recording resolution.
- FPS: Set the frame rate per second.
- QUALITY: Set the recording quality.
  Select one from LOW/STANDARD/HIGH/HIGHEST.
  The recordable time may differ, depending on the recording quality.
- AUDIO: Select whether to include audio input to the recording.
- ALARM: Select an alarm input port.
- Remaining Rate: If you change the settings of the resolution and the remaining rate, the frame rate available for each resolution will be recalculated.

4. Press the <**OK**> button.

5. When your settings are completed, press the <**APPLY**> button on the bottom.
Your settings will be applied.

6. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

DVR setup

To specify the alarm recording time

You can specify the alarm recording time for each channel.

1. From the ALARM RECORDING menu screen, select <**ACTIVATION**>.
   - Your change to the recording size will be applied to the time bar.

2. Drag the cell that you want to adjust the size, or use the direction buttons (▲▼◄►) on the remote control and press the [**ENTER**] button.

3. The specified cells will turn light green.

4. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

5. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.

INSTANT RECORDING

You can specify the recording size in manual recording mode.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**INSTANT RECORDING**> in the left corner of the RECORD setup screen and press the [**ENTER**] button.

2. Use direction buttons (▲▼◄►) to move to a desired item, and press the [**ENTER**] button to set the value.
   The size adjustment window appears.
   - SIZE: Set the recording resolution.
   - FPS: Set the frame rate per second.
   - QUALITY: Set the recording quality.
     Select one from LOW/STANDARD/HIGH/HIGHEST.
     The recordable time may differ, depending on the recording quality.
   - AUDIO: Select whether to include audio input to the recording.
   - Remaining Rate: If you change the settings of the resolution and the remaining rate, the frame rate available for each resolution will be recalculated.

3. When the size adjustment is done, press the <**OK**> button.

4. When your settings are completed, press the <**APPLY**> button on the bottom.
   Your settings will be applied.

5. Press the <**CLOSE**> button to display the confirmation dialog and return to the previous menu.
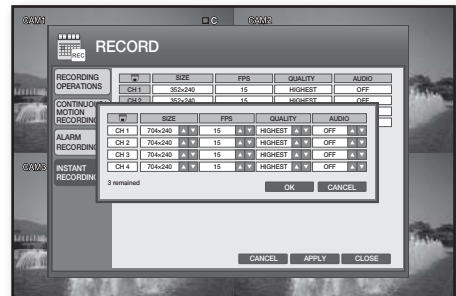
backup

You can check the backup data size and perform backup of a desired channel or at a desired time.

BACKUP

1. Press the [**MENU**] button on the remote control or select <**BACKUP**> button on the launcher menu.
   The login dialog appears.

2. Select a user account and enter the password.

   ▪ Only those users who have the backup permission can access the BACKUP menu.

   ▪ Web Viewer doesn't support data backup including the neighborhood of DST transition (ON → OFF) time.
   If you want to back up this period, do it on the DVR set, please.
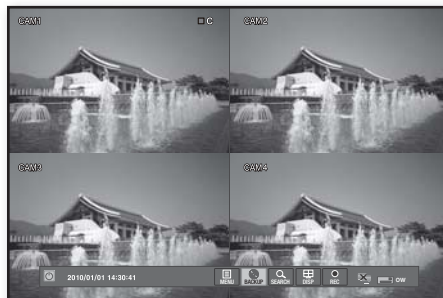
NEW BACKUP

You can backup the reserved data to the connected storage device.

Using the mouse may help easy setup.

1. Access the BACKUP menu to display the <**NEW BACKUP**> setup screen.

2. Use direction buttons (▲ ▼ ◄ ►) to move to a desired item, and press the [**ENTER**] button to set the value.

   • TAG: Enter a name for each data item that you want to reserve.

   • DEVICE: Select an external storage device to which you save the backup data.

   • FROM: Specify the backup start time.

   • TO: Specify the backup end time.

   • LOG: If you want to receive the system log file, check the log item and proceed with the query session.

   • CODEC: Before you can play the backup data properly with Media Player, check the item that you want to play and download the codec as well. Check before proceeding with the query session. (PAL Only)

   ✎ ▪ If <**D.S.T**> set to <**ON**>, you can see overlapped time by pressing < ◄ , ► >.

   ▪ By double-clicking the backup codec, install it in your PC. Then, get started with Media Player. If you forget to check the codec, it will not be backed up properly.

3. Press the <**QUERY**> button.
   The recorded data will be displayed in the backup information column.

4. Check the data size in <**BACKUP INFO**>.

5. To change the search criteria, press the <**RELEASE**> button.
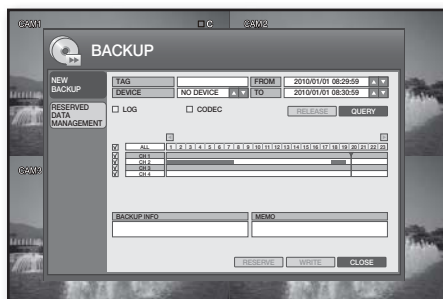
backup

6. Press the <**RESERVE**> or <**WRITE**> button on the bottom.
   - RESERVE: The selected data will be backup to the HDD, which you can check in <**RESERVED DATA MANAGEMENT**>.
   - WRITE: Backs up the selected data to the connected storage device.
7. Press <**CLOSE**> to exit the backup.
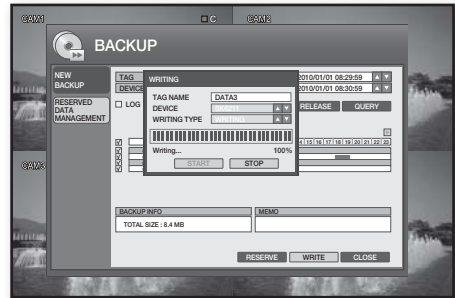
RESERVED DATA MANAGEMENT

You can check the reserved data in <**NEW BACKUP**> and check/delete or back up the data to a storage device.

1. Use the direction buttons to move to <**RESERVED DATA MANAGEMENT**> in the left corner of the BACKUP menu and press the [**ENTER**] button.
2. Use the direction buttons (▲▼◄►) to select a backup data item in the list.
3. To check the data information, press the <**INFORMATION**> button.
4. Select <**DELETE**> if you want to delete data, and select <**WRITE**> if you want to save the data.
5. Press <**CLOSE**> to exit the backup.
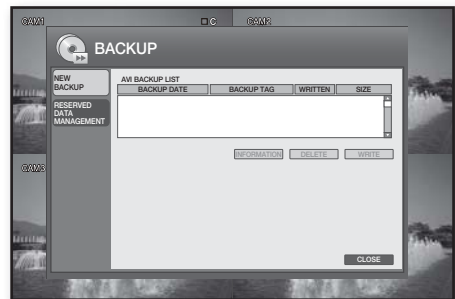
search & play

You can perform the search for recorded data by the time or by the search criteria such as an event.

SEARCH

1. Press the [**SEARCH**] button on the remote control or press the <**SEARCH**> button on the launcher menu. The login dialog appears.

2. Select a user account and enter the password.
   - Only those users who have the search permission can access the SEARCH menu.
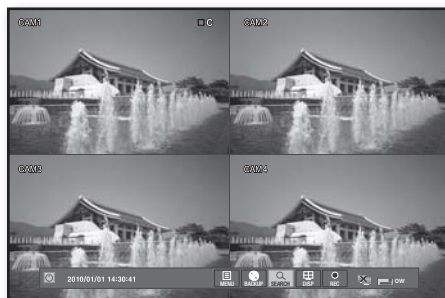
SEARCH BY TIME

You can schedule to search for recording data at a desired time.

Using the mouse may help easy setup.

1. Access the SEARCH menu to display the <**SEARCH BY TIME**> screen.
   If any recording data is found for the search date, the recording portion in the time bar of each channel on that specific time will be highlighted blue.

2. Use the direction buttons to move to the search date and press the [**ENTER**] button.
   The date with a recording schedule will be marked in orange on the left calendar of the search bar.
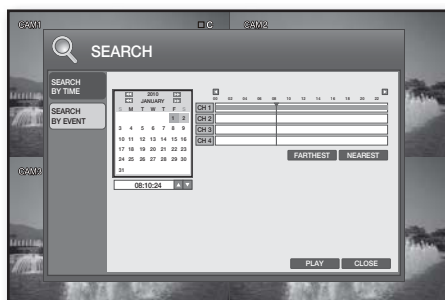
Playback

1. Select a data item to play.

2. Press the <**PLAY**> button on the bottom.

3. The data item will be played.
   Use the lower play bar to adjust the speed or switch the play mode.

   ⊞ : It will turn orange when you place the cursor over it.
   Each time you right-click it, the screen mode will switch to 1 → 4 split mode in sequence.
   Click it to return to the Single mode, and click it again to move to the next channel.
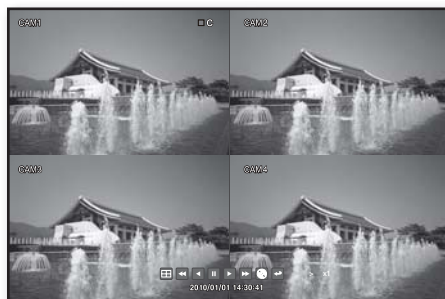
   🔍 : Click it to display the backup window where you can specify the search criteria and perform backup of any satisfied data.

   - You can check the backup data in "**BACKUP** > **RESERVED DATA MANAGEMENT**" and save it to a USB storage media.

   ↩ : Returns to the previous screen.

   - For more information about the play bar, refer to "**Playback Screen**". (page 22)

• SEARCH & PLAY

search & play

SEARCH BY EVENT

You can search for events and play data for a specific channel.

Using the mouse may help easy setup.

1. Use the direction buttons to move to <**SEARCH BY EVENT**> in the left corner of the SEARCH screen and press the [**ENTER**] button.

2. Use the direction buttons (▲▼◄►) to move to a desired item and press the [**ENTER**] button.
   Specify the channel to search and the event period.

3. Specify the search sequence.
   - NEAREST: Displays the list items with the most recent one on the top.
   - FARTHEST: Displays the list items with the oldest one on the top.
   - PAGE LEFT: Moves to the leftmost of the log list.
   - PAGE RIGHT : Moves to the rightmost of the log list.

4. Use the direction buttons (▲▼◄►) to move to a search item or simply double-click it.
   The selected data item will be played.
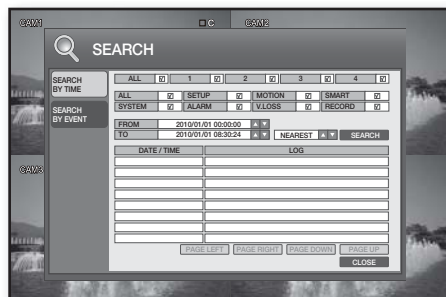
   ▨ ▪ For using the play button bar, refer to "**Playback**". (Page 51)

web viewer

INTRODUCTION

What is web viewer?

Web Viewer a user friendly software program that enables you to connect to the DVR in a remote area and control the live or existing video data.

System Requirements

The following lists the minimum suggested hardware and operating system requirements needed to run the Web Viewer.

OS	Windows XP Professional Windows Vista Home Basic /Premium Windows 7
Web Browser	MS Explorer 5.5 up (32 bit only)
CPU	Intel Pentium 2.0 GHz
Memory	512 MB
Monitor	High Color 16-bit 1024 × 768
HDD	50 MB(Installation space required) * Additional HDD space required for recording. Recorded file size will vary depending on recording quality settings.

web viewer

To connect to the Web Viewer

1. Open the browser and provide the IP address of the DVR, or URL in the address bar.

    ■ You must have specified the IP address in "**NETWORK** > **IP SETUP**".
The initial URL of the DVR is the last 6 digits of the MAC address, which you can check in "**SYSTEM** > **SYSTEM MANAGEMENT** > **SYSTEM INFORMATION**". (Page 25)
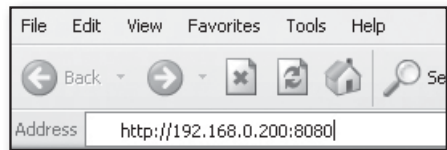
2. As the administrator, you should provide the admin ID and the password.
As a registered user, you should provide the user ID and the password.

3. Click <**Install ActiveX Control...**>.
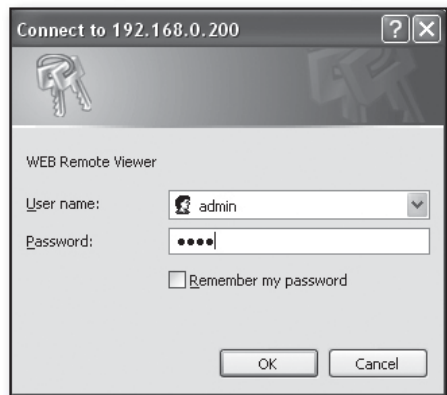
4. Click <**Install**>.

5. When you see the Security Alert popup due to the Windows firewall function, click <**Unblock**> to access the Web Viewer.

6. Click <**Next**> when IMM4 Codec Setup Wizard appears.

7. Click <**Install**>.
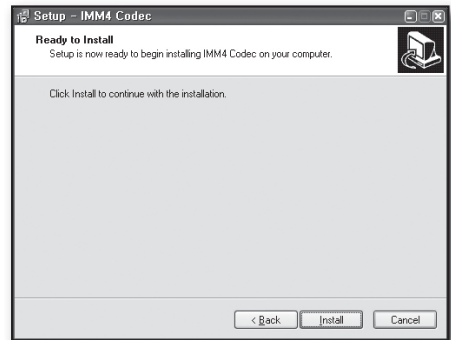
8. Click <**Finish**> to exit setup.

9. The installation is completed.
You will see the main screen of the Live Viewer.

English _**55**

web viewer

LIVE VIEWER

Live Viewer At a Glance
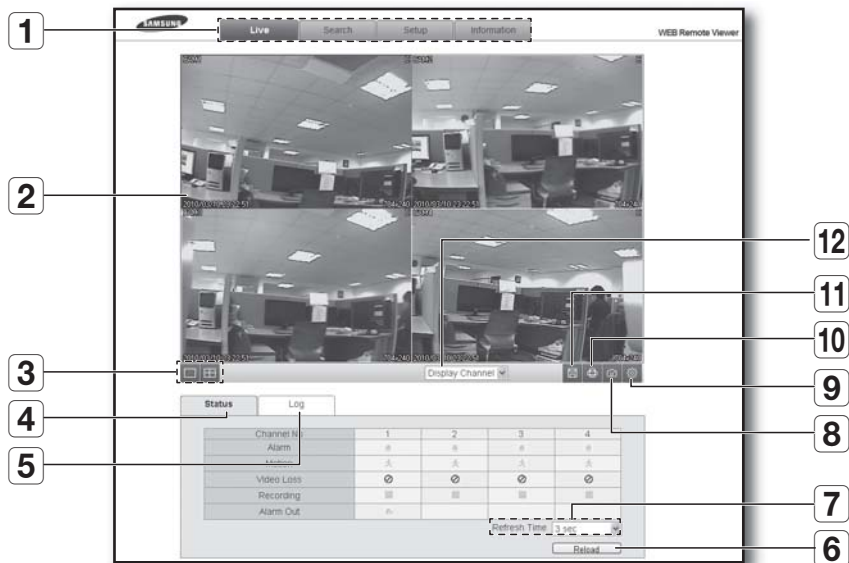
	Name	Description
1	**Viewer Selection Area**	Consists of 4 tabs: <**Live**>, <**Search**>, <**Setup**> and <**Information**>.
2	**Live Viewer Screen**	Displays the Live screen of the currently connected DVR.
3	**Split Screen**	Switches the screen mode to Single, 4-split mode.
4	**Status**	Indicates the status of each channel.
5	**Log**	Shows the log.
6	**Reload**	loads the DVR information again.
7	**Refresh Time**	Specify the refresh time.
8	**Capture Image**	Captures the selected screen.
9	**ActiveX Setting**	Specify the saving path of the recorded or captured screen.
10	**Print**	Prints out the current screen.
11	**Save**	Saves the Live video that is displayed on the screen.
12	**Channel Selection**	Select a channel to display on the screen.

✎ ▪ When you can't save the image, check if the following is applied in your Internet Explorer.
  "**Tools** > **Internet Option** > **Security**" Tab Uncheck "**Enable Protected Mode(requires restarting Internet Explorer)**" and restart Internet Explorer, please!

● WEB VIEWER
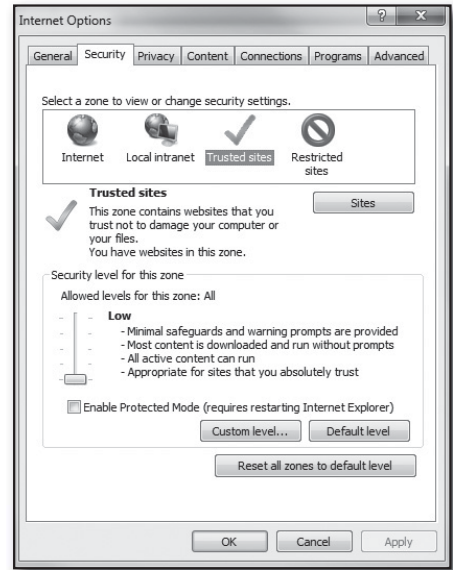
Switching between split modes

Click the mode switch buttons to switch the screen mode as follows.

SINGLE

4-SPLIT

To record video

1. Click < 🖫 >.

2. The video of the selected channel will be saved in the default saving path of the PC.

✎ ▪ Click <**ActiveX Setting**> to display the Settings menu where you can change the default path.

To print the screen

You can print out the Live screen that is currently displayed.

1. Click < 🖨 >.

2. When the Print dialog appears, click <**OK**>.

English _**57**
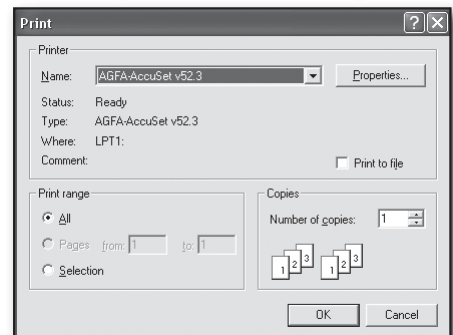
web viewer

Screen Capture

1. Click < 🖼 >.

2. The current screen of the selected channel will be saved in the default saving path of the PC.

📝 ▪ Click <**ActiveX Setting**> to display the Settings menu where you can change the default path.

ActiveX Setting

1. Click < ⚙ >.

2. When the Setting window appears, specify <**Render**> and <**Path**> for the video or the screen to capture.

3. To change the saving path, click <**Save Folder** (⋯)> and specify a new path.

📝 ▪ In Windows Vista, you can not change the file path.

4. Click <**Save**>.
Your changes will be saved.
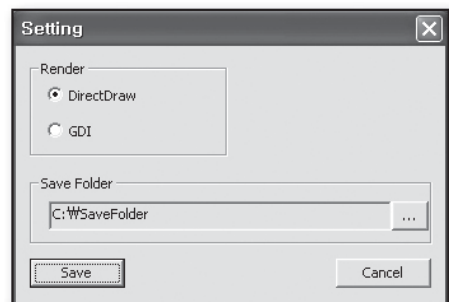
To view the status

Click the <**Status**> tab on the bottom.
You can check the event occurrence status on each channel of the connected DVR.
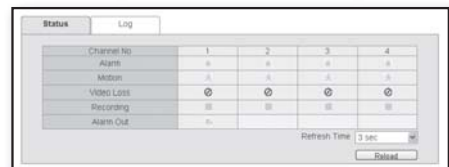
To view the log

Click the <**Log**> tab on the bottom.
You can check the log of the connected DVR.
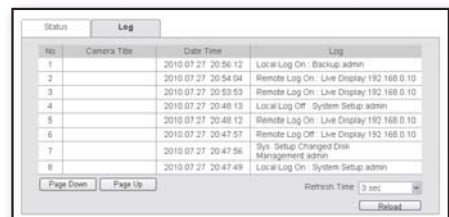
SEARCH VIEWER

Click the <**Search**> tab to display the remote play screen of the DVR.

Search Viewer At a Glance
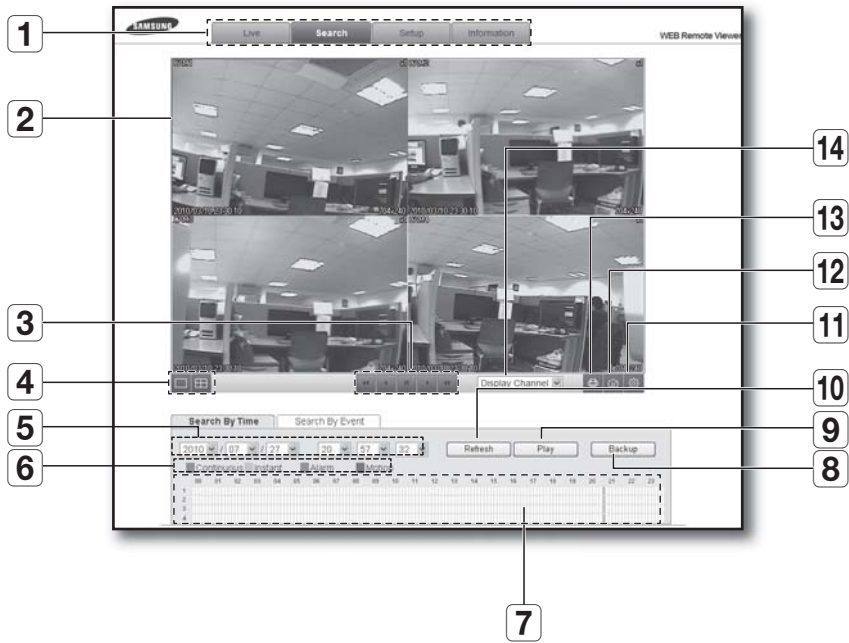
	Name	Description
1	Viewer Selection Area	Consists of 4 tabs: <**Live**>, <**Search**>, <**Setup**> and <**Information**>.
2	Search Screen	Displays the playback screen of the recorded video.
3	Play Bar	Buttons used to control the playback screen.
4	Split Screen	Switches the screen mode to Single or 4-split mode. For more information, refer to "**Live Viewer At a Glance**".
5	Date & Time	Select a time range to play.
6	Record Properties	Set the recording properties as necessary.
7	Timeline	Shows the playback channel, time range and recording properties which you can change.
8	Backup	Backs up the current video.
9	Play	Plays the video that matches the search criteria.

● WEB VIEWER

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web viewer

	Name	Description
10	Refresh	Refreshes the screen
11	ActiveX Setting	Specify the saving path of the recorded or captured screen.
12	Capture Image	Captures the current screen.
13	Print	Prints out the current screen.
14	Channel Selection	Select a channel of the camera that is connected to the DVR.

> ✎ ▪ For details about the ActiveX setting/Capture Image/Print menus, refer to "**Live Viewer**".

SEARCH BY TIME

You can search for recording data in the DVR using the time range.

1. Specify the time range to play.

2. Click <**Play**>.

3. Use the play bar to adjust the play direction and speed as necessary.

   ▪ For more information about the play bar, refer to "**Playback Screen**". (Page 22)

SEARCH BY EVENT

You can search for recording data in the DVR by sorting them by the event.

1. Select an event to search by clicking the checkbox.

2. Specify the time range in <**Period**>.

3. Specify the display sequence of the items found.
   • Nearest: Displays the most recent event on the top.
   • Farthest: Displays the oldest event on the top.

4. Click <**Search**>.
   The event data will be listed in the lower pane.

5. Double-click a desired item.

6. Use the play bar to adjust the play direction and speed as necessary.
   ▪ For more information about the play bar, refer to "**Playback Screen**". (Page 22)
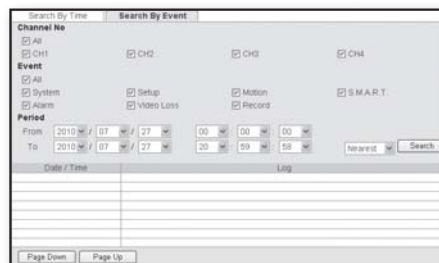
SETUP

Click the <**Setup**> tab to display the DVR remote setup screen.

Setup Viewer At a Glance
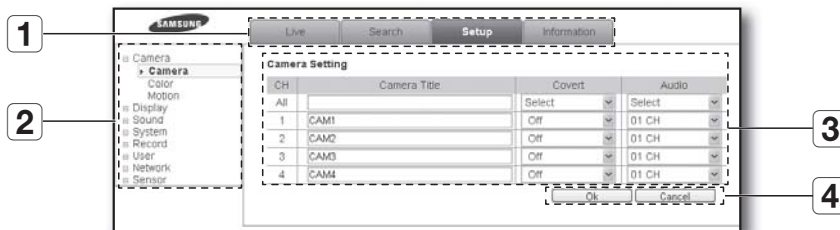
	Name	Description
1	Viewer Selection Area	Consists of 4 tabs: <**Live**>, <**Search**>, <**Setup**> and <**Information**>.
2	Menu Tree	Select a desired menu item.
3	Details	Detailed information of the selected menu item.
4	Ok/Cancel	Saves or cancels your settings.

Camera Setting

You can configure the settings of the camera that is connected to the DVR.

1. From the left menu tree, select <**Camera**>.

2. Make your changes as necessary in details.
   - For more information, refer to "**CAMERA**". (Page 27)

3. Click <**Ok**>.
   Your changes will be saved.

web viewer

Color setting

You can adjust all settings from 0 to 100 for each channel in fine tune mode, and the default is 50.

1. From the left menu tree, select <**Camera**>.

2. Click <**Color**>.

3. Make your changes as necessary in details.
   ▪ For more information, refer to "**COLOR**". (Page 28)

4. Click <**Ok**>.
   Your changes will be saved.
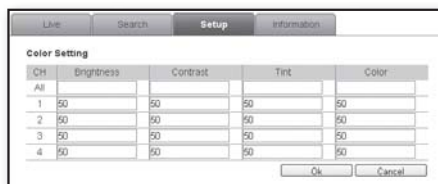
Motion setting

You can specify the motion detection area, and specify the use of the alarm output if a motion is detected.
If a detection area is specified, the system will detect a motion in that area if it occurs.

1. From the left menu tree, select <**Camera**>.

2. Click <**Motion**>.

3. Click a motion area and drag it up to a desired point. The selected cells will turn in a different color, which will be specified as a detection area.
   ▪ For more information, refer to "**MOTION SENSOR**". (Page 29)

4. Click <**Ok**>.
   Your changes will be saved.

OSD setting

You can change the display information.

1. From the left menu tree, select <**Display**>.

2. Click <**OSD**>.

3. Make your changes as necessary in details.
   ▪ For more information, refer to "**OSD**". (Page 30)

4. Click <**Ok**>.
   Your changes will be saved.

Monitor setting

You can adjust the position of the displayed items.

1. From the left menu tree, select <**Display**>.

2. Click <**Monitor**>.

3. Make your changes as necessary in details.
   - For more information, refer to "**MONITOR**". (Page 30)

4. Click <**Ok**>.
   Your changes will be saved.
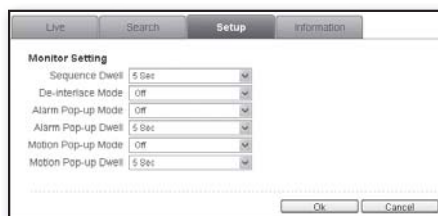
Audio/Buzzer setting

You can configure the audio and buzzer related settings.

1. From the left menu tree, select <**Sound**>.

2. Make your changes as necessary in details.
   - For more information, refer to "**AUDIO**" and "**BUZZER**". (Page 33)

3. Click <**Ok**>.
   Your changes will be saved.

Date/Time setting

1. From the left menu tree, select <**System**>.

2. Make your changes as necessary in details.
   - For more information, refer to "**DATE / TIME**". (Page 24)

3. Click <**Ok**>.
   Your changes will be saved.

Management setting

1. From the left menu tree, select <**System**>.

2. Click <**Management**>.

3. Check the system information in <**System Information Setting**>.
   - For more information, refer to "**SYSTEM MANAGEMENT**". (Page 25)

4. Change the System Name in <**System management Setting**>.

5. Click <**Ok**>.
   Your changes will be saved.

● WEB VIEWER

web viewer
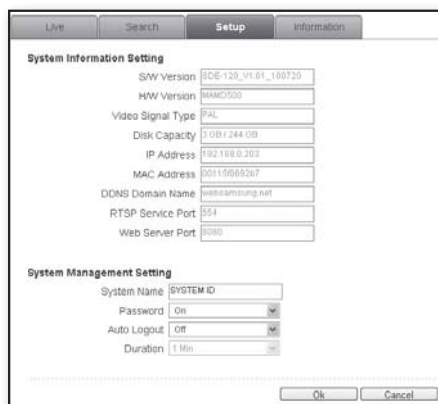
Control Device Setting

1. From the left menu tree, select <**System**>.

2. Click <**Remote Controller**>.

3. Make your changes as necessary in details.
  - For more information, refer to "**REMOTE CONTROLLER**". (Page 26)

4. Click <**Ok**>.
Your changes will be saved.

Recording Operation Setting

1. From the left menu tree, select <**Record**>.

2. Click <**Operation**>.

3. Make your changes as necessary in details.
  - For more information, refer to "**RECORDING OPERATION**". (Page 45)

4. Click <**Ok**>.
Your changes will be saved.

Continuous/Motion Recording Setting

1. From the left menu tree, select <**Record**>.

2. Click <**Continuous/Motion**>.

3. Make your changes as necessary in details.
  - For more information, refer to "**CONTINUOUS/MOTION RECORDING**". (Page 46)

4. Click <**Ok**>.
Your changes will be saved.
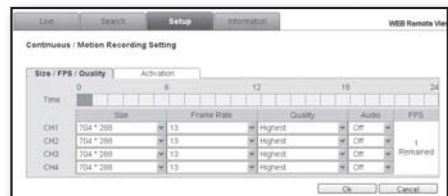
Alarm Recording Setting

1. From the left menu tree, select <**Record**>.

2. Click <**Alarm**>.

3. Make your changes as necessary in details.
  - For more information, refer to "**ALARM RECORDING**". (Page 47)

4. Click <**Ok**>.
Your changes will be saved.
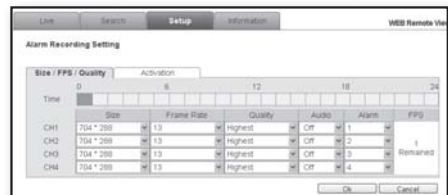
Instant Recording Setting

1. From the left menu tree, select <**Record**>.

2. Click <**Instant**>.

3. Make your changes as necessary in details.
   - For more information, refer to "**INSTANT RECORDING**". (Page 48)

4. Click <**Ok**>.
   Your changes will be saved.
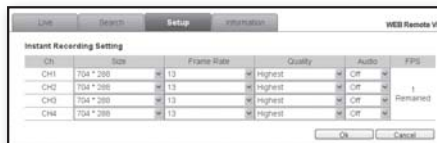
User Management Setting

1. From the left menu tree, select <**User**>.

2. Click <**Management**>.

3. Make your changes as necessary in details.
   - For more information, refer to "**USER MANAGEMENT**". (Page 34)

4. Click <**Ok**>.
   Your changes will be saved.
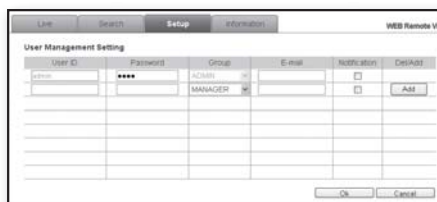
User Authority Setting

1. From the left menu tree, select <**User**>.

2. Click <**Authority**>.

3. Make your changes as necessary in details.
   - For more information, refer to "**USER AUTHORITY**". (Page 35)

4. Click <**Ok**>.
   Your changes will be saved.

● WEB VIEWER

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web viewer

IP Setup Setting

1. From the left menu tree, select <**Network**>.

2. Click <**Network**>.

3. Check the network connection status and make your changes as necessary in details.
   - For more information, refer to "**IP SETUP**". (Page 36)

4. Click <**Ok**>.
   Your changes will be saved.

E-mail Setting

1. From the left menu tree, select <**Network**>.

2. Click <**E-mail**>.

3. Make your changes as necessary in details.
   - For more information, refer to "**E-MAIL**". (Page 38)

4. Click <**Ok**>.
   Your changes will be saved.

HDD Event Setting

1. From the left menu tree, select <**Sensor**>.

2. Click <**HDD Event**>.

3. Make your changes as necessary in details.
   - For more information, refer to "**HDD EVENT**". (Page 40)

4. Click <**Ok**>.
   Your changes will be saved.

Alarm Input Setting

1. From the left menu tree, select <**Sensor**>.

2. Click <**Alarm Input**>.

3. Make your changes as necessary in details.
   - For more information, refer to "**ALARM INPUT**". (Page 41)

4. Click <**Ok**>.
   Your changes will be saved.

Alarm output setting
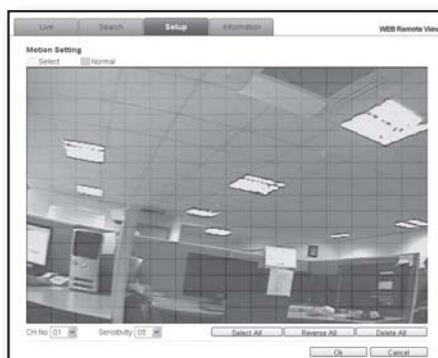
1. From the left menu tree, select <**Sensor**>.

2. Click <**Alarm Output**>.

3. Make your changes as necessary in details.
   ■ For more information, refer to "**ALARM OUTPUT**". (Page 42)

4. Click <**Ok**>.
   Your changes will be saved.

Buzzer out setting

1. From the left menu tree, select <**Sensor**>.

2. Click <**Buzzer Out**>.

3. Make your changes as necessary in details.
   ■ For more information, refer to "**BUZZER OUT**". (Page 42)

4. Click <**Ok**>.
   Your changes will be saved.
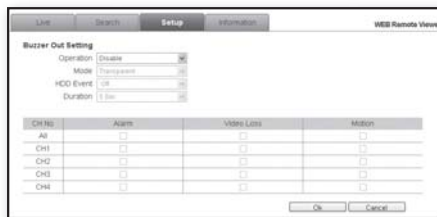
E-mail notification setting

1. From the left menu tree, select <**Sensor**>.

2. Click <**E-mail Notification**>.

3. Make your changes as necessary in details.
   ■ For more information, refer to "**E-MAIL NOTIFICATION**".
   (Page 43)

4. Click <**Ok**>.
   Your changes will be saved.
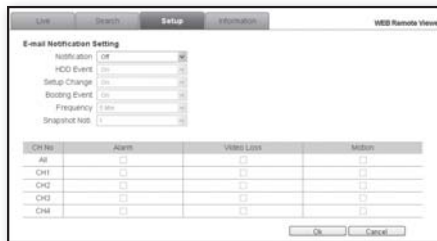
INFORMATION

Click the <**Information**> tab to display the DVR model name and the version of the Web Viewer.

● WEB VIEWER

web viewer

USING THE iPhone

1. Select the Safari browser.

2. Enter the IP address or URL to connect.
And touch the <**Go**> button.
http:// set IP Address: Port No(Default 8080)
Ex)http://f05bb96.websamsung.net:8080

> Untitled   Cancel
>
> p//f05bb96.websamsung.net:8080 ⊗
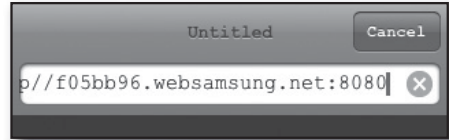
3. Enter the User name and Password then user can see the
Image. (Default ID: admin, PW: 4321)

> Log into this secure website.
>
> Cancel   **Secure Website**   Log In
>
> admin   ⊗
>
> ••••   ⊗
>
> Password will be sent in the clea…

4. Touch <**Refresh**> button to get the image.

> Untitled
>
> 192.168.0.2:8080/… ⟳   Google

CH select —— 01 CH ˅   Max F ˅   Refresh   Info

Frame Rate ——
Manual, Max, 2, 1, 0.5, 0.3, 0.1

In choosing Manual, it updates picture.

DVR Information
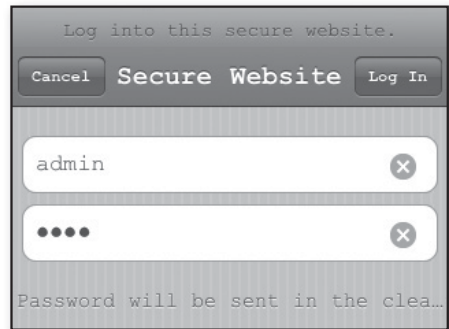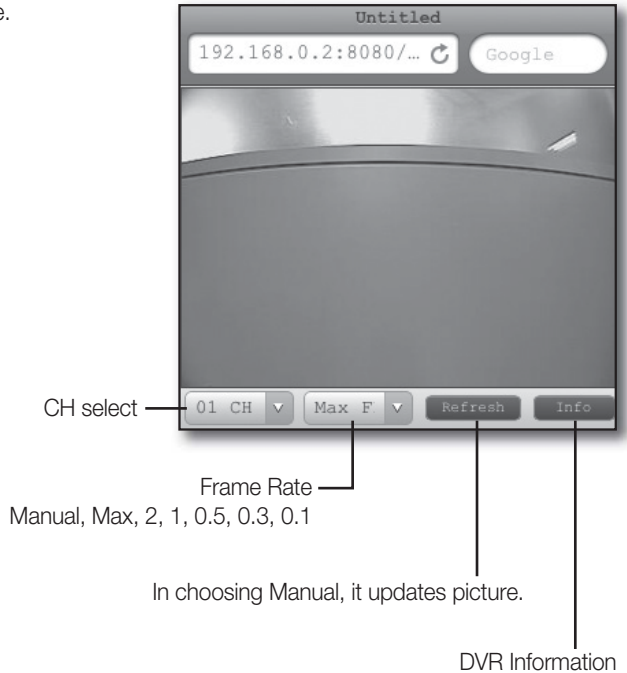
appendix

PRODUCT SPECIFICATION

Item		Details
General	System Format	NTSC / PAL
	Remote Control	Yes
Operation System		Embedded Linux
Video	Input	4CH BNC
	Output	1EA
		BNC 1 CH(CVBS)
Audio	Input	4CH(1Vp-p)
	Output	RCA Type : 1CH
Live	Display Mode	1/4/Sequence
Alarm/Motion	Input	4CH
	Output	Relay : 1CH
	Pre Alarm	1sec~5sec
	Post Alarm	Select between 5 sec to 180 sec
	Buzzer	Yes
	Motion Detection	4CH
	Video Pop-up	Support
Rec/Play/Search	Video Codec	H.264 (Base profile)
	Audio Codec	G.711(64kbps)
	Video REC/PB Speed	NTSC : 120ips(352×240), 60ips(704×240), 30ips(704×480)
		PAL : 100ips(352×288), 50ips(704×288), 25ips(704×576)
	Rec. Quality	Level: Highest/High/Standard/Low
	Performance	Pentaplex (Live, Playback, Recording, Network, Smart Phone)
	# of Video Record	4CH

	REC Mode	• Continuous REC
		• Schedule REC
		• Alarm REC
		• Motion REC
		• Time Laps REC
		  - NTSC : 1, 2, 3, 7, 15, 30ips
		  - PAL : 1, 2, 3, 7, 13, 25ips
		• Instant REC (Panic REC)

	Play Speed	• Play, Pause, Stop • Fast Forward/Reverse - 2x, 4x, 8x,16x, 32x, 64x • Step Play - Forward/Reverse
	Storage	500GB
	Search Mode	• Time Search - Data/Time - Calendar • Event - Continuous, Alarm, Motion, Other

appendix

Item		Details
Web Viewer	Client PC SPEC	• MS Explorer 5.5 up (32 bit only)
	Support OS	Windows XP, Windows Vista, Windows 7

	Web Viewer Function	• Live / Backup / Search
		• Support multi language
		  NTSC : ENGLISH/FRANÇAIS/ESPAÑOL
		  PAL : ENGLISH/FRANÇAIS/DEUTSCH/ESPAÑOL/ITALIANO/TÜRK/
		  РУССКИЙ/SVENSKA/ČESKÝ

	Security	Password / User Name Protection
	Remote Monitoring	4
	Remote Searching	Date/Time, Event List Search
	Connection No	4 (1 Web Viewer/1 PC)
Network	Interface	LAN 1 port (10/100 Mbps Ethernet)
	Network Protocol	DHCP, DNS, DDNS, NTP
Backup	USB 2.0 I/F	• Front 1, Rear 1 • External HDD • USB Memory
	Back up File Format	AVI
Time	Time Adjsutment	GMT Time Zone, DST, NTP Support

Other Functions	Other Functions	• S/W upgrade(USB memory, Network)
		• Live & Network monitoring without HDD
		• Support multi language
		  NTSC : ENGLISH/FRANÇAIS/ESPAÑOL
		  PAL : ENGLISH/FRANÇAIS/DEUTSCH/ESPAÑOL/ITALIANO/TÜRK/
		  РУССКИЙ/SVENSKA/ČESKÝ
		• E-MAIL(JPEG) : Alarm /Motion/Video Loss

Control	Mouse	Support(USB)
	Front Key	Support
	Remote Control	Support
Mechanical (Set)	Weight	1.85Kg
	Dimensions (W X H X D)	290 X 60 X 224.3 mm
Environmental	Operating Temperature	0ºC ~ +40ºC (32°F ~ 104°F)
	Operating Humidity	20% ~ 90%
Electrical	Input Voltage	100~240VAC, 50/60Hz
	Power Consumption	17W

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4 Channel DVR
User Manual

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