Real Time DVR user manual

SAMSUNG



Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

AB82-01484A Rev-00

SAMSUNG

SHR-5040
SHR-5042
English

Real Time DVR
user manual

imagine the possibilities

Thank you for purchasing a Samsung product.
To receive a more complete service, please register your product at

www.samsung.com/global/register

SAMSUNG

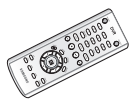
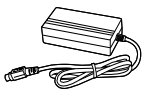
key features of your DVR

Your purchased digital video recorder (DVR) compresses a 4-channel camera input into an MPEG4 video; also, it provides the functions that record to the HDD in real-time and play the content by compressing the 4-channel audio input with ADPCM. Also through the network, it transmits video and audio to an external device in real-time and allows monitoring the video and audio through a PC from a remote location.

- 4-Channel Composite Input Connectors
- NTSC/PAL Video Source Compatible
- The CIF size (NTSC : 352X240 / PAL : 352X288) of video can be saved at a speed of 120ips(NTSC)/100ips(PAL) (Image Per Second).
- 4-Channel Loop Through Video Connectors
- Supports the overwrite mode of HDD.
- Large capacity HDD backup by using the USB 2.0 interface
- Backup by using the USB 2.0 memory and CD-RW
- Record, play, and simultaneous video and audio transmissions to the Windows Network Viewer (Net I).
- Possible to record and play the 4-channel audio
- Various saving modes (Continuous, Motion, Alarm In and Schedule)
- Alarm interface (input: 4, output: 2)
- Remote monitoring function by using the Windows Network Viewer (Net I)

WHAT'S INCLUDED WITH YOUR DVR

When you have purchased this product, please take off the packing and place this device on a flat floor or put it down on the place desired for use. And then, check whether all the following components are included in the box. If a component is found to be missing, please contact the place that you have purchased this product.

			
Remote control unit (RCU)	1 power cable	Software CD (including the PDF manual)	Special 4 screws
			
Adaptor	2 EA of AAA batteries	User's Manual	

safety regulations

Please be sure to keep the following in mind for the right use of the product to prevent proprietary risk or damage.

- **Do not use multiple plugs at once.**
  This may cause abnormal heat generation or fire
- **Do not put a vase, flowerpot, cup, cosmetics, medicine, or vessel with water around you.**
  This may cause fire.
- **Do not bend the power cord forcibly nor put a heavy material on it.**
  This may cause fire.
- **Do not touch the power plug with wet hands.**
  This may cause electric shock.
- **Insert the power plug firmly enough not to shake.**
  This imperfect connection may cause fire.
- **Keep the product off humidity, dust, or soot.**
  This may cause fire or electric shock.
- **Do not put metals (coin, hair pin, metal piece, etc.) or inflammable materials (match, paper, etc.) in the ventilation hole.**
  This may cause fire.
- **Keep the surrounding temperature between 0°C to 40°C and keep the product off humidity.**
  This may cause breakdown.
- **Secure sufficient ventilation.**
  This may cause abnormal operation due to high temperature.
- **Keep the product off direct ray of light or heat from the heating device.**
  This may cause fire.
- **Do not disassemble, repair, or remodel the product.**
  This may cause fire, electric shock, or injury due to abnormal operation.
- **Do not pull out the power cord.**
  This may destroy the power cord, eventually, cause fire or electric shock.
- **Plug out in the event of thunder or lightning.**
  This may cause fire.
- **Keep your children off the battery after you take it out of the product. They tend to swallow it unconsciously.**
  If your children swallow it, please see the doctor immediately.
- **Install the product at a safe place or attach the product to the wall or ceiling with a stand firmly enough not to fall to the ground.**
  This may injure people.



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:

- SEC retains the copyright on this manual.
- This manual cannot be copied without SEC'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.
- You may download open source codes from the following website: http://www.samsung.com.
- Before installing any external device such as external memory or HDD, please check the compatibility of the device with Samsung DVR. The list of the compatible devices with Samsung DVR can be obtained from your vendor.

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: 220mAh
- Continuous standard load: 0.2mA
- Operating temperature: -30 to +60°C

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 **Power** (⏻/I)button on the front of your **DVR**. After selecting "**OK**" in the pop-up menu, you can pull off the power cord.
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 USP retailer.)
To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.
This apparatus shall always be connected to a mains socket outlet with a protective earthing connection.

Operating Temperature

The guaranteed operating temperature range of this product is 0°C to 45°C (32°F to 113 °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 to 55°C (41°F to 113 °F). Likewise, the hard drive may not work at a temperature below the guaranteed one.

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.

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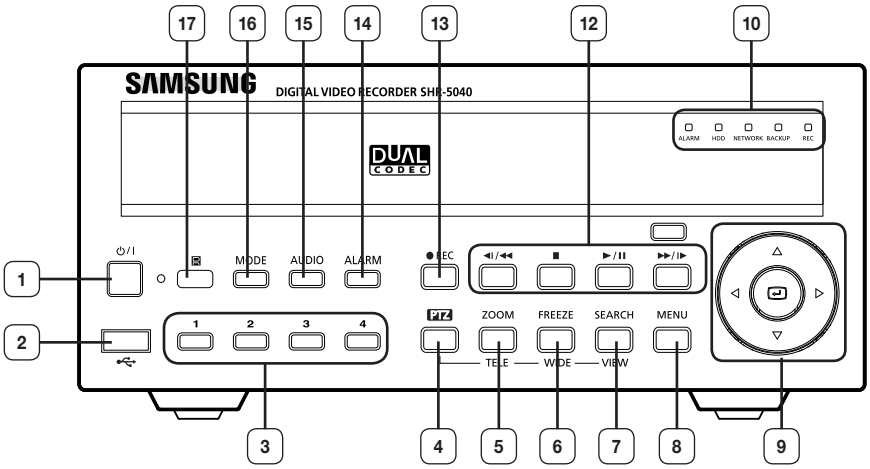
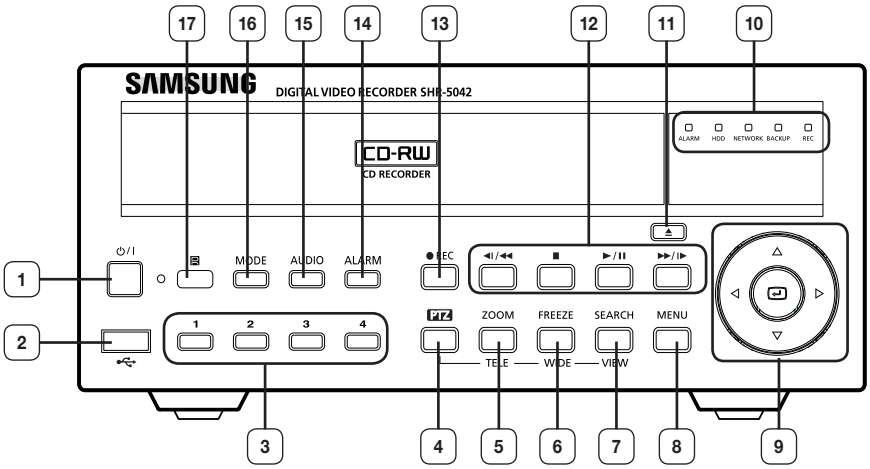
introducing your real time DVR

CONTROLS ON THE DVR

SHR-5040



SHR-5042

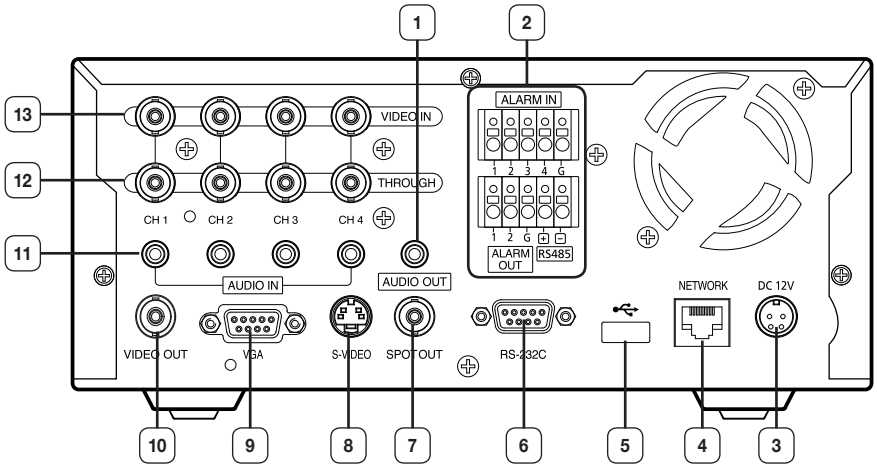


No.	Name		Function	
1		**Power** Button	User authentication will be requested if the power button is pressed when you try to terminate the system operation. It is used when you turn on/off the DVR system power.	
2		USB Port	This is the port used for connecting a USB type of device. It is used when you upgrade the system software. It is used as a USB mouse connection port.	
3		**Channel** Button	It is used when the channel selected on the Display mode is switched over to the full screen. It is used as a numeric input button from the numeral input mode.	
4		**PTZ** Button	Perform the TELE, WIDE, or VIEW function when selecting the **PTZ** button.	
5		**ZOOM (TELE)** Button	Provide the function of enlarging the digital image twice as big. Press the **Enter**(↵) button after designating the area to be enlarged. (Perform the TELE function when selecting the **PTZ** button.)	
6		**FREEZE (WIDE)** Button	Perform the FREEZE function on the Display mode. (Perform the WIDE function when selecting the **PTZ** button.)	
7		**SEARCH (VIEW)** Button	This is the function that switches over to the Search mode. (Perform the VIEW function when selecting the **PTZ** button.)	
8		**MENU** Button	This is the function that switches the system over to the Setup mode. It is used when you move from a lower menu to the upper menu or escape from the system setup mode.	
9		**Direction** Button	◁ ▷	When moving to a menu, they are used as direction buttons. (They are used as the direction buttons for the PTZ operation.)
			△ ▽	When setting the details of a menu, they are used for changing a value or direction. (They are used as the direction buttons for the PTZ operation.)
			Enter(↵)	When setting up a menu, it is used as the **Enter** button. Press the **Enter** button when changing the setup value of a menu.

No.	Name		Function	
10	ALARM	**ALARM LED**	If an event (like a motion or alarm) occurs, the ALARM LED is lighted on.	
	HDD	**HDD LED**	This LED indicates whether the HDD is normally accessed. When accessing the HDD, this LED repeatedly blinks.	
	NETWORK	**NETWORK LED**	This LED indicates the status of network connection and data transmission.	
	BACKUP	**BACKUP LED**	This LED indicates the status of backup operation.	
	REC	**REC LED**	This LED indicates the recording status.	
11	⏏	**EJECT** Button	It performs the open/close function of CD-RW.	
12	◄I/◄◄	**Search** Button	**Fast/Step Reverse**	**Fast Reverse**: This function is used when you perform a fast search in the reverse direction while in play. **Step Reverse**: This function is used when you search scene by scene in the reverse direction at a Pause state.
	■		**Stop**	This function is used when you terminate a search while in play.
	►/II		**Play/ Pause**	This function operates by toggling this button for the Play/ Pause operation while in play.
	►►/I►		**Fast/Step Forward**	**Fast Forward**: This function is used when you perform a fast search in the forward direction while in play. **Step Forward**: This function is used when you search scene by scene in the forward direction at a Pause state.
13	● REC	**REC** Button	This is the function that records all the camera channels regardless of the recording schedule.	
14	ALARM	**ALARM** Button	When an alarm occurs, it cancels the alarm.	
15	AUDIO	**AUDIO Setup** Button	Set up the audio On/Off function.	

No.	Name		Function		
16	MODE	**Split Screen/ Selection** Button	**Live Mode**		Display the 4-split screens.
					Display the Picture in Picture (PIP) screen.
					Screen Switchover: It will be switched over to the single channel screen according to the time set from the system setup.
		Search Mode/ Selection Button	**Search Mode**		Display the 4-split screens.
					Display the 9-split screens.
17		**Remote Control Signals Receiver**	This is the part that receives the signals of remote controller.		

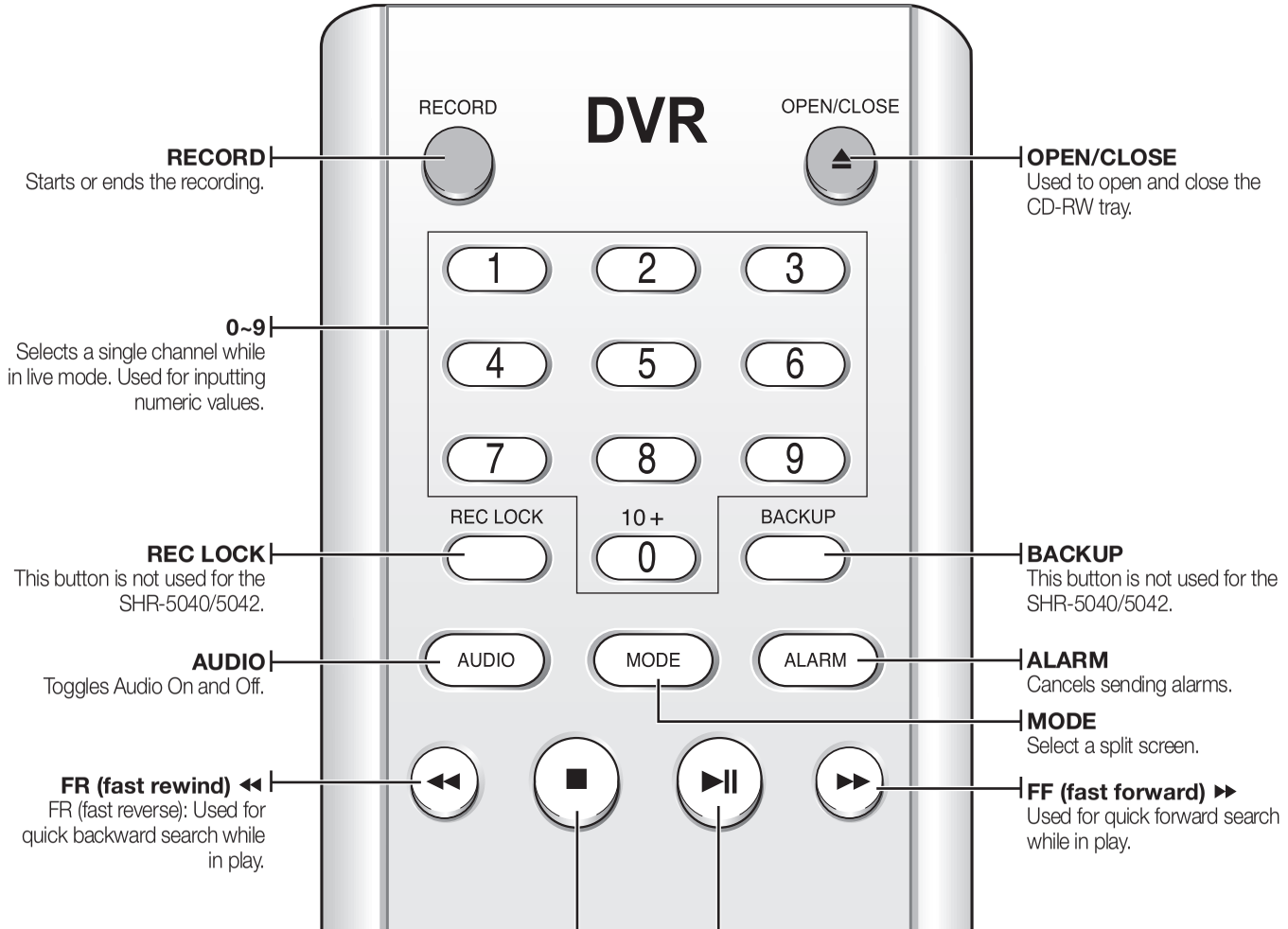
REAL PANEL JACKS

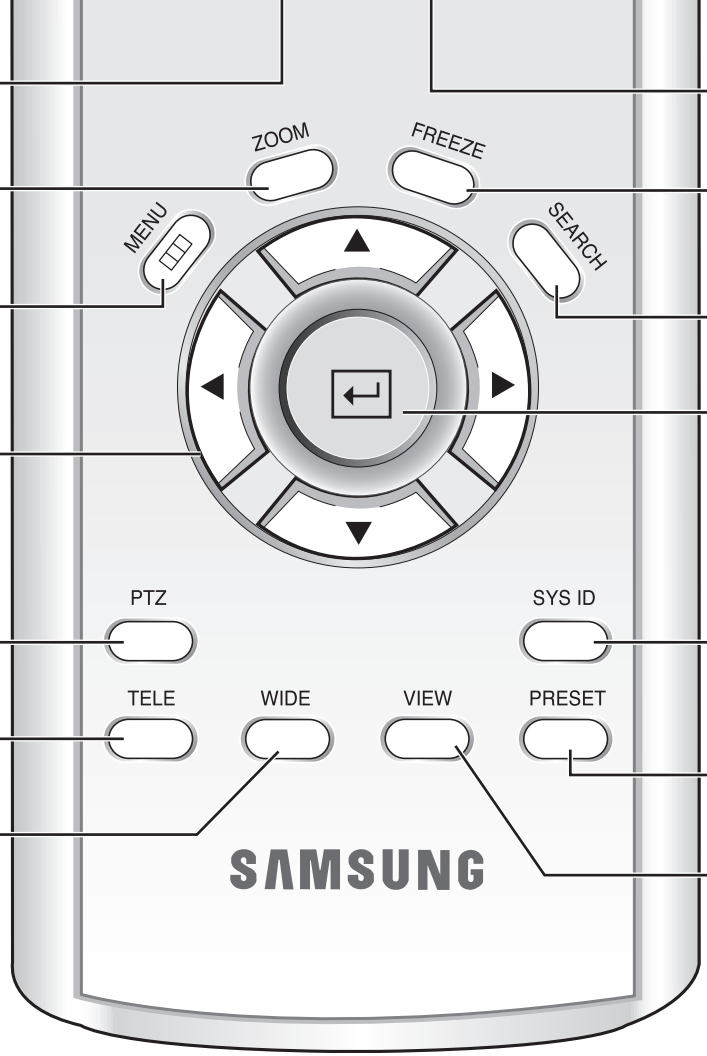


1 **AUDIO OUT**	This is the port (RCA Jack) for an audio signal output. (When outputting an audio signal, please use the speaker with a built-in audio amplifier.)
2 **ALARM**	ALARM IN 1~4: This is the port for an alarm input. ALARM OUT 1~2: This is the port for an alarm output. RS485: This is the port for connecting PTZ.
3 **DC-IN**	This is the connector for a 12V power socket.
4 **NETWORK**	This is the port for connecting to a network.
5 **USB**	This is the port for connecting a USB type of device. It is used when you backup a video data or upgrade the system software.
6 **RS-232C**	This is port for engineering use (no DVR functionality).
7 **SPOT OUT**	This is the port (BNC-type) for the SPOT OUT output.
8 **S-VIDEO**	This is the port for the S-Video signal output.
9 **VGA**	This is the port for the VGA signal output.
10 **VIDEO OUT**	This is the port (BNC-type) for a composite audio signal output.
11 **AUDIO IN**	This is the port (RCA Jack) for an audio signal input.
12 **THROUGH**	The THROUGH port can be used to send a video signal to another video device.
13 **VIDEO-IN**	This port is the port (BNC-type) for a composite video signal input. It supports both the NTSC and PAL video signals.

Using the NUMERIC Buttons

CHANNEL 1–9	Press the 1 to 9 button respectively.
CHANNEL 10	Press the 0(10+) button, release, and press the 0 button again within 3 seconds.Or press the 0(10+) button, release, and wait 3 seconds.
CHANNEL 11–16	Press the 0(10+) button, release, and press the 1 (or 2, 3, 4, 5, 6) button again within 3 seconds.





STOP ■
Ends playing.

ZOOM
Implements the digital zoom (x2).

MENU
Goes to the system menu screen or moves to the upper menu.

UP▲DOWN▼ LEFT◀RIGHT▶
Used for changing settings or for moving the cursor up/down/left/right.

PTZ
Toggles PTZ mode On and Off.

TELE
Performs the TELE function in PTZ mode.

WIDE
Performs the WIDE function in PTZ mode.

Play/Pause ▶||
Pauses or resumes playing.

FREEZE
Performs the FREEZE function in live mode.

SEARCH
Goes to the search select screen.

ENTER ↵
Shows the cursor for channel selection in live mode or used as the selection button for menu configuration.

SYS ID
Use for inputting or confirming system or remote control ID.

PRESET
This button is not used for the SHR-5040/5042.

VIEW
Performs the VIEW function in PTZ mode.

- When the product is initially shipped, the remote controller ID is set to '**00**'.
- When changing the remote controller ID, press the **SYS ID** button and enter the "Remote ID" set to the DVR.

installation

You should pay attention to the following before you use the product.

- Do not use it outdoor.
- Do not place water or liquid near the connection part or the product.
- Do not impose excessive shock or force.
- Do not pull out the power cord unreasonably.
- Do not disassemble the product on your own.
- Do not exceed the rated input or output voltage range.
- Use the certified power cord only.
- For the product with an input ground, use a power plug with a ground pin.

CHECKING INSTALLATION ENVIRONMENT

Samsung Digital Video Recorder (hereinafter referred to "DVR") is a high-tech security equipment that contains a high-capacity HDD and top-notch circuits. High temperature inside or outside of the product may reduce the product life, deteriorate performance (see the Figure 1 below; it explains the correlation between temperature and product life), and lead to a malfunction.

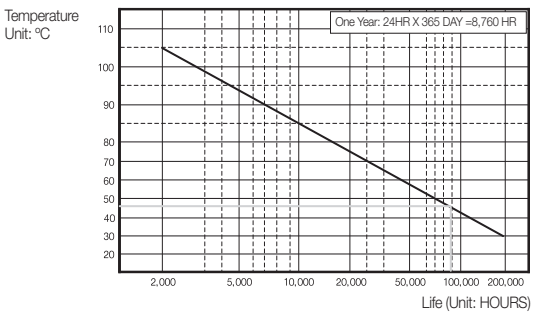


Figure 1

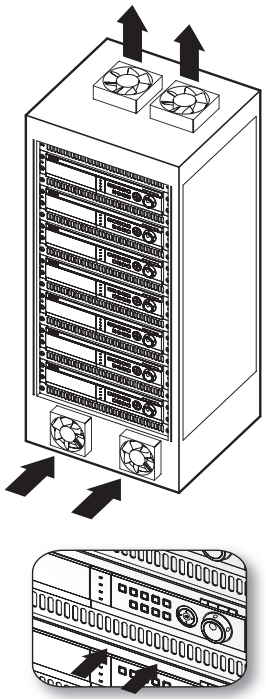


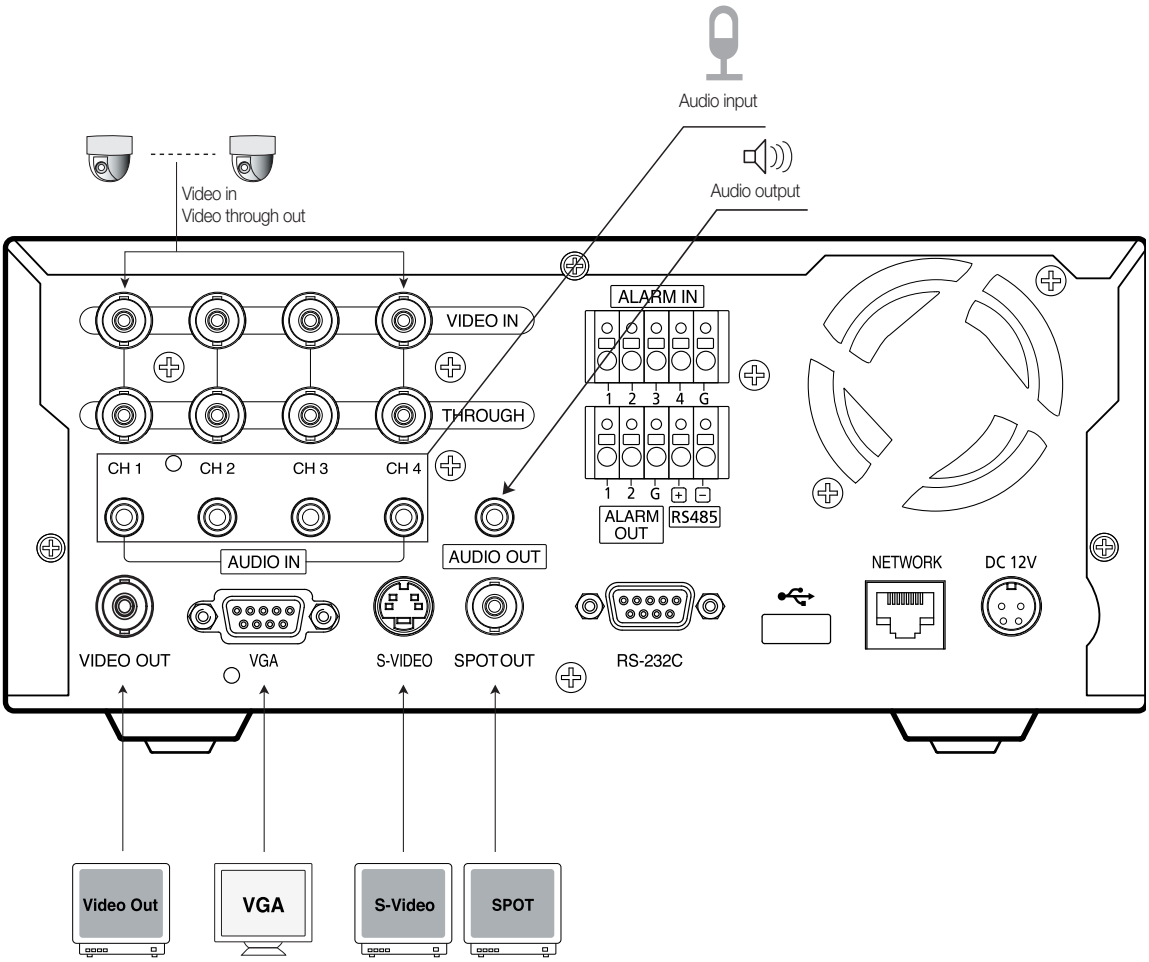
Figure 2

Please keep the following instructions for rack-mounting the Samsung DVRs to proceed with the installation.

1. The rack on which the DVR is mounted should not be sealed off.
2. And it also can allow air circulation through the vent.
3. As shown in the Figure 2, we recommend you to heap the product with other DVRs or use rack-mount devices at a certain space, or install a vent system to accommodate airflow.
4. For forming a natural convection, the air intake hole should be positioned at the bottom and the emission at the top.
5. We recommend you to install each of the air intake and emission holes with fan motors for sufficient airflow. (The air intake fan should be equipped with a filter to prevent possible inflow of dust and other impurities.)
6. As shown in the Figure 1, the temperature inside the rack and around the DVR should maintain between 5 and 45°C.

connecting with other devices

CONNECTING VIDEO, AUDIO, AND MONITOR

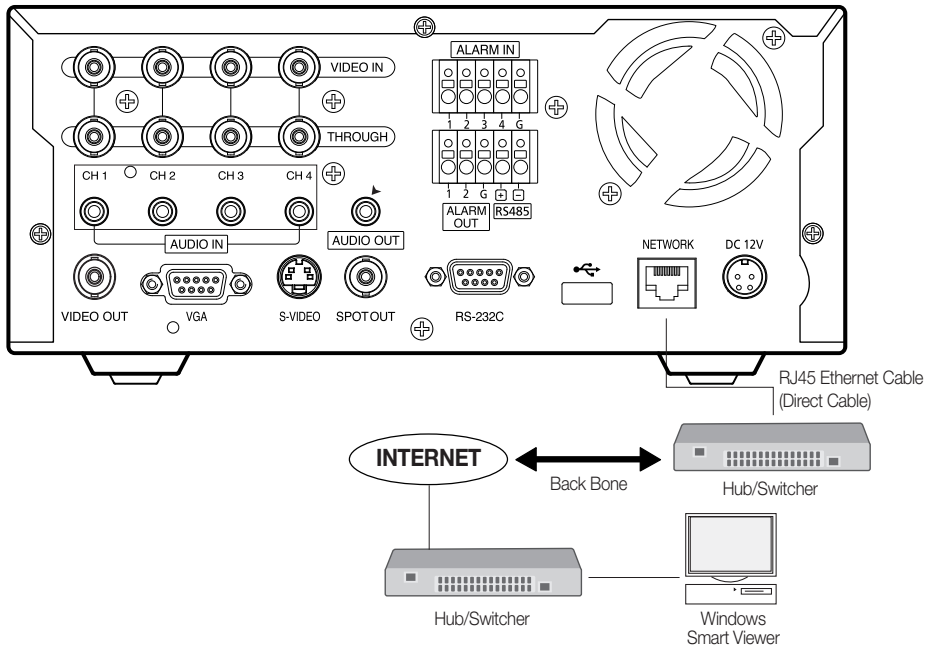


Caution

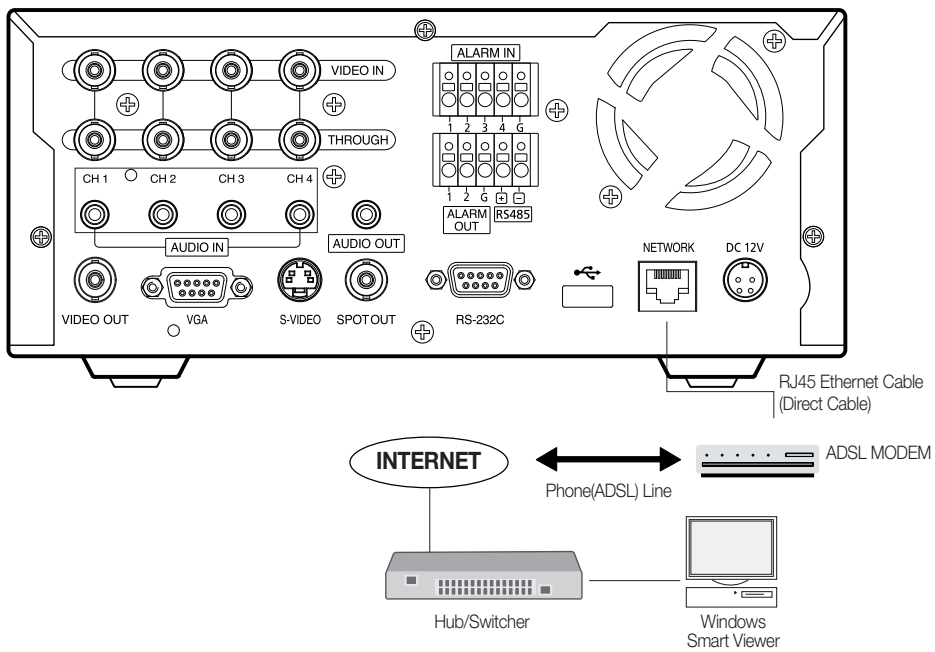
- Since it may have a risk of an electric shock on the video cable connected to the camera according to the grounding state of the power cable, please connect the video cable when the system power is turned off.

CONNECTING THE NETWORK

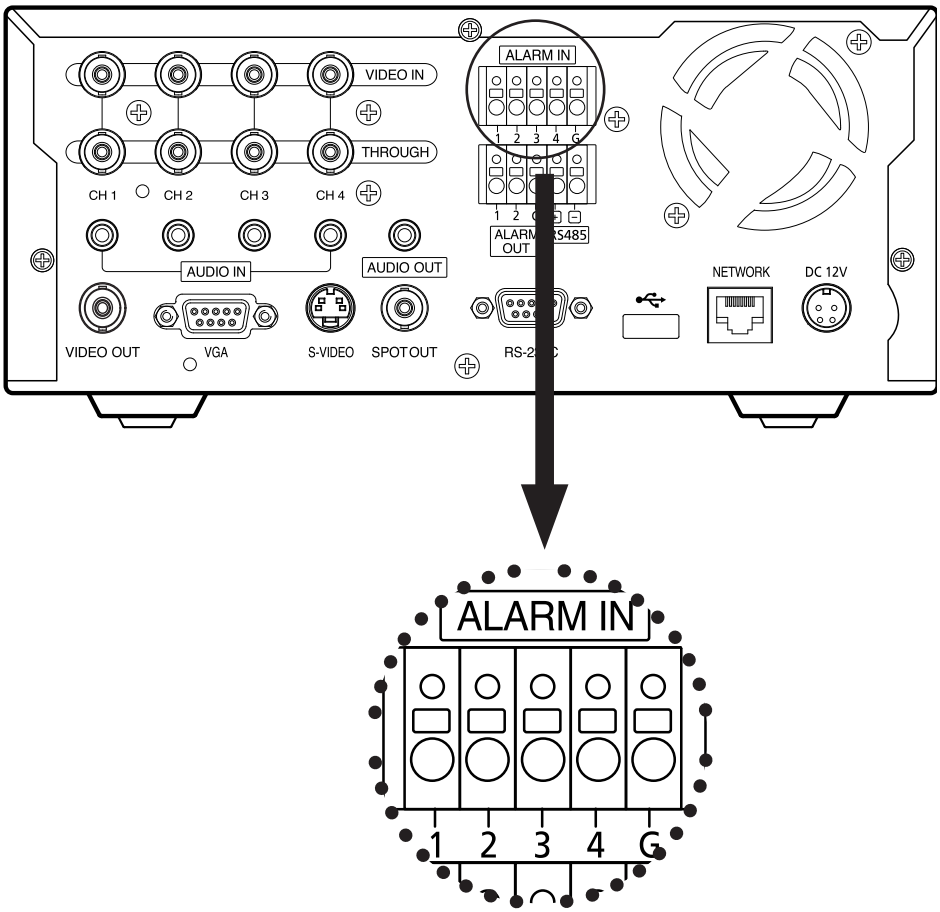
Connecting to Internet through Ethernet (10/100BaseT)



Connecting to Internet through ADSL



CONNECTING THE ALARM INPUT

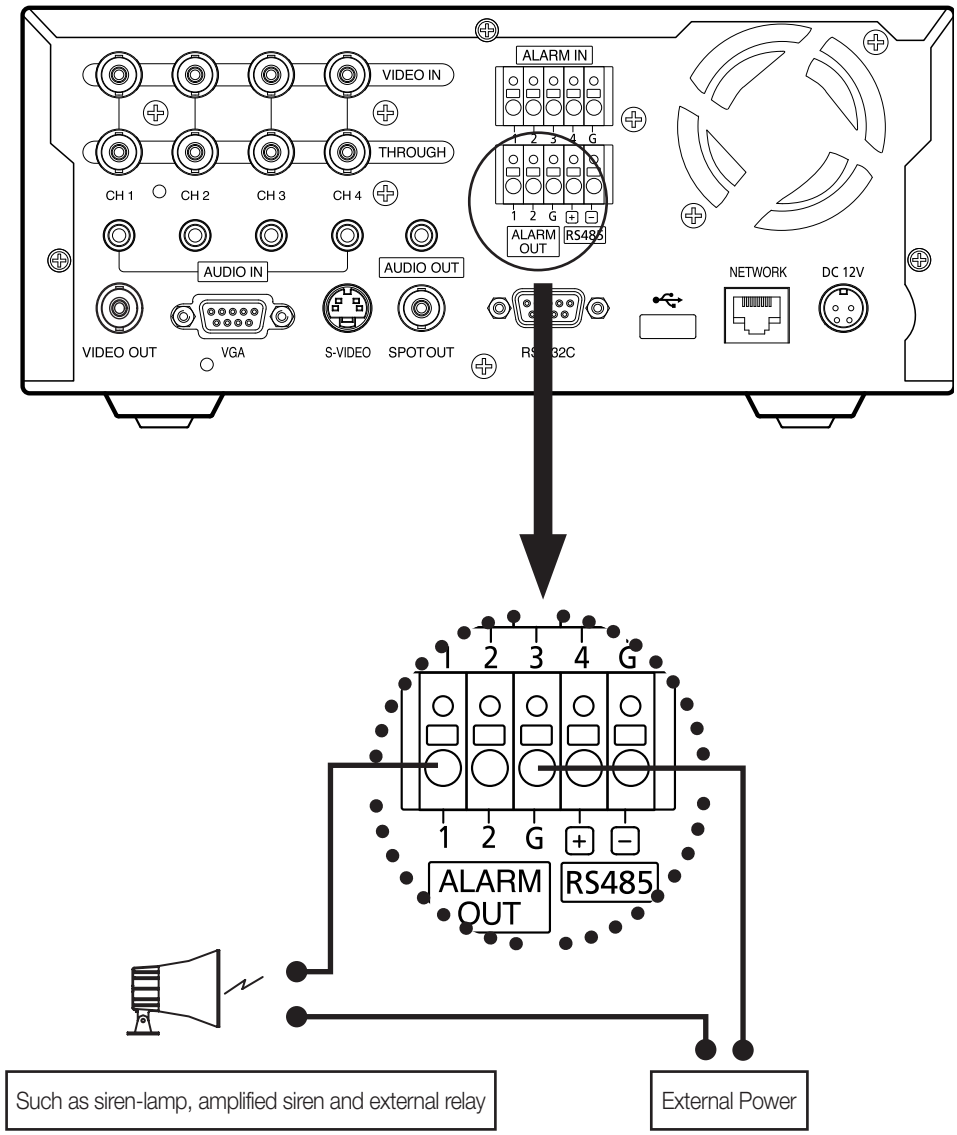


Connect one wire of the signal cable (2 wires) of various sensors (such as IR sensor, hot-wire detector and magnetic sensor) to the GROUND port and connect the remaining signal wire to the desired ALARM input port number.

Caution

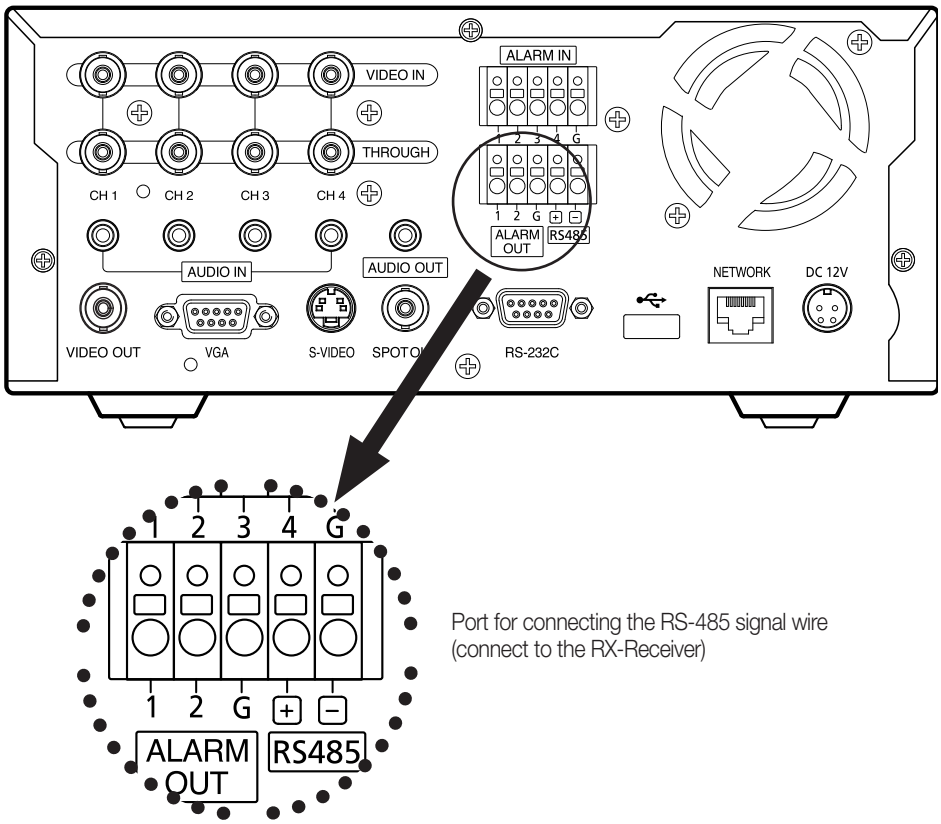
- Please use the power ADAPTER suitable to the power specifications of various sensors.

CONNECTING THE ALARM OUTPUT



Connect one wire of the signal cable (2 wires) of an external device (such as siren-lamp, amplified siren and external relay) to the GROUND port and connect the remaining signal wire to the desired ALARM output port number.

CONNECTING THE RS-485 DEVICE



Port for connecting the RS-485 signal wire
(connect to the RX-Receiver)

Caution

- Please check that the RS-485 device is supported by the SHR-5040/5042 product. And, a caution shall be made when connecting to the RS-485 jack since it has the polarity (+ and –).

CONNECTING THE USB

1. It has a total of 2 USB connection ports on the front and rear sides of SHR-5040/5042.
2. Connect the USB HDD, USB memory through the front/rear ports of SHR-5040/5042.
3. Only one USB device can be connected to each USB port.
4. It provides the hot-plugging function that allows connecting/disconnecting a USB device while operating the system.

Caution

- You can connect the same type of USB devices to the USB ports on the front and rear sides of SHR-5040/5042.

OPERATING THE SYSTEM

Turn on the power and the following Samsung logo appears.



- Perform the initialization job to operate the system after the logo screen has appeared.
- The live video appears if the initialization process is normally completed.
- It may take about 40 to 60 seconds until the live video appears.
- When the live video appears, the system setup environment set previously will be maintained; and if the system has been re-started, the live video will appear and you can start recording.

- When installing a new HDD, it may require much more time until the live video appears due to the HDD initialization time.
- If the live video does not appear, please check whether the internal and external connections are normal. If the problem persists, please contact the place where you have purchased this product.

LIVE SCREEN MODE

Live screen icons

The live screen icon indicates the setup and function status of each screen.



◯/Ⓔ/Ⓢ : **Recording** Icon
It indicates the respective recording states of Normal/ Event (motion + alarm)/Schedule.

Ⓝ / Ⓒ: **Recording Video Size** Icon
It shows the respective recording sizes of Large/Normal/ CIF.

- **Large:** Full D1 - (NTSC) 704X480
  (PAL) 704X576
- **Normal:** Half D1 – (NTSC) 704X240
  (PAL) 704X288
- **CIF:** CIF - (NTSC) 352X240
  (PAL) 352X288

: **Record Lock** Icon

It indicates that the record lock is activated.
This icon appears when you are recording video images while the record lock is set. To cancel the recording, enter the preset password.

: **PTZ** Icon

The channel that the PTZ function has been set shows the PTZ icon. It is changed to yellow when the PTZ function is now active.

: **Audio** Icon

This icon indicates the Audio On/Off state and if it is turned on, the icon is changed to yellow.

This icon does not appear when the Video or Audio is disabled.

: **Zoom** Icon

It appears when the zooming function is active and disappears when it is cancelled.

: **Freeze** Icon

It appears when the Freeze function is active and disappears when it is cancelled.

: **Insufficient HDD Space** Icon

It appears when the HDD writing space is not enough.

: **Screen Switching** Icon

It appears when it is in the screen switching mode.

V.Loss / V.Off : Video Input Status

If no video inputs are detected even when the Video Setup is set to On, the [V.Loss] icon appears on the corresponding channel; and the channel that the Video Setup is set to Off shows the [V.Off] icon.

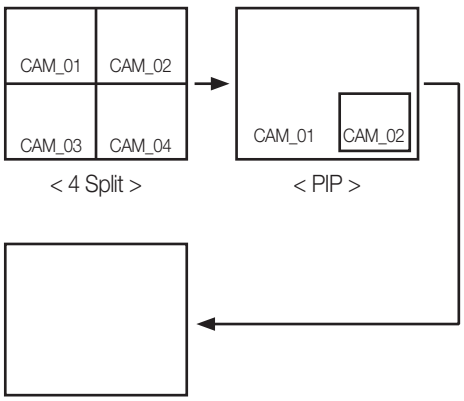
Caution

OSD Position Control Function

- It is possible to control OSD position of CH1 and CH3 on live screen by Up/Down/Left/Right buttons when in quad division mode.

Live screen modes

After taking 4 live video inputs, images are displayed in the following 3 modes.



- **4 Split Mode:**

  It shows 4 video channels on the respective split screens. Any channel that is shown on the split screen can be arbitrarily selected.

- **PIP (Picture in Picture):**

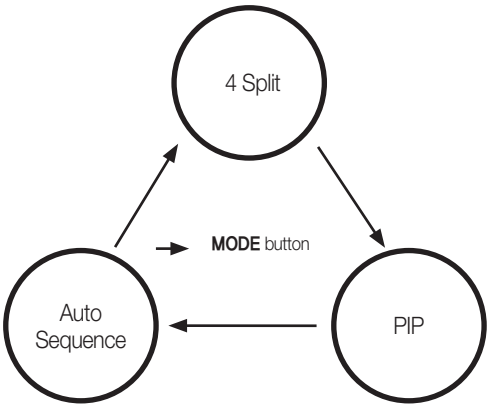
  The 1/4-sized small screen appears on the full screen. The channels for both full and small screens can be arbitrarily selected.
  The location of PIP screen can be set to any of 5 locations within the full screen by using the ▲ or ▼ button.

- **Auto Sequence Mode:**

  Multiple channels are sequentially displayed on the full screen at the preset interval.

Selecting live screen mode

Each mode can be selected by using the **MODE** button and **CH1** to **CH4** buttons.
The following figure shows the diagram of changing modes.



- The starting mode is the 4 split screen mode.
- Modes except for the full screen can be sequentially selected by using the **MODE** button.
- Whenever pressing the **MODE** button, the mode is switched in the following sequence: [4 Split] → [PIP] → [Auto Sequence] → [4 Split].
- You can see the full screen for each channel by selecting the respective buttons of **CH1**~**CH4**.
- When switching to the full screen from the split screen mode, you can return to the previous split mode screen by pressing the **MODE** button.

SETTING THE AUDIO ON/OFF

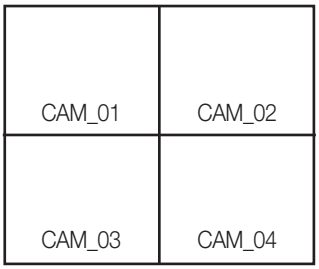
From the split mode except for the full screen mode and auto sequence mode, any channel displayed on each split mode can be arbitrarily selected. Also, in live mode, you can activate or deactivate the channels with Audio On settings.

Audio On/Off setting in the full screen mode

In the full screen mode, the audio function of the selected channel is automatically turned on and you can set the Audio On/Off function by toggling the **AUDIO** button. The **Audio** icon is changed to yellow or white on the corresponding channel according to the Audio On/Off state.

Audio On/Off setting in 4-split mode

If you press the **Enter**(⏎) button in the 4 split mode, the selection cursor appears as shown in the figure below and the corresponding channel is selected.
If the **AUDIO** button is pressed after selecting a channel, you can set the Audio On/Off function of the corresponding channel. At this time, the audio icon is changed to yellow or white on the corresponding channel according to the Audio On/Off state.



Channel Seletion & Audio On/Off Setting in PIP mode

If you press the **Enter**(⏎) button in the 4 split mode, the selection cursor appears and the corresponding channel is selected.
After selecting a channel, you can enter the channel using the **CH1** to **CH4** buttons and can set the Audio On/Off function as in the 4 split mode by using the **AUDIO** button. At this time, the **Audio** icon is changed to yellow or white on the corresponding channel according to the Audio On/Off state.

FREEZING AND ZOOMING

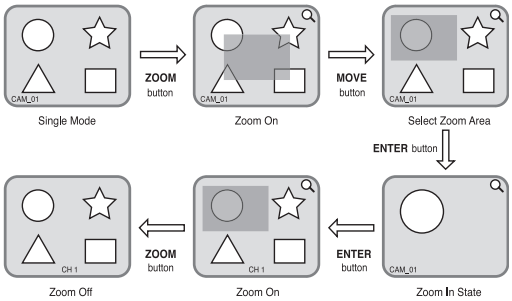
Freeze function

The Freeze function, temporarily stops the video on the current live screen but it is active only in the live mode. You can set the Freeze On/Off function by using the **FREEZE** button.

Zoom function

The Zoom function doubles the size of the selected area but it is active only in the full screen mode.

The zoom setup area appears when the **ZOOM** button is pressed in the full screen mode. You can adjust the location of the zoom setup area by using the **Direction** (▲▼◀▶) buttons. If you press the **Enter**(↵) button after selecting a setup area, the selected area is shown twice as big as the previous size. The image location can be adjusted by using the **Direction** (▲▼◀▶) buttons even after enlarging the size. If the **Enter**(↵) button is pressed again under the enlarged state, it will return to the zoom setup area and you can perform the Zoom Off function by using the **ZOOM** button.



EVENT MONITORING

The event monitoring function displays the channel linked to the event when a specific event (sensor/motion) occurs. The event monitoring On/Off and event Duration functions can be set by using the command "**MENU**" → "**Monitoring**" → "**Live Mode**".

When the event monitoring time has been set to 5 seconds, for example, the channel-2 appears for 5 seconds in the full screen mode if an event initially occurs in the channel-2 as shown in the figure below. If another event occurs within 5 seconds, it is also displayed together with the existing event.

When events occur from the channels 1 and 3 within 5 seconds after an event has occurred in the channel 2 (as shown in the figure). Then, the channels 1, 2 and 3 are switched to the full screen.

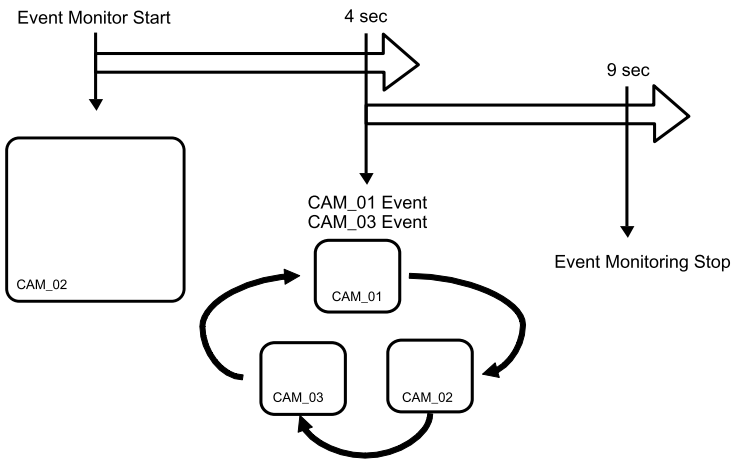
If no new event occurs within the event display duration, it will return to the previous live mode. If you press the **ALARM** button before the event display time exceeds, the event monitoring stops. If an event occurs, the ALARM LED lights and the ALARM LED is turned off if you press the **ALARM** button while the LED lights. The alarm setting is initialized when the **ALARM** button is pressed. In this case, the Event icon disappears. The monitoring function can be cancelled while in event monitoring. The event recording with pre-event time and post-event time resumes after a new alarm occur.

SPOT-OUT MONITORING

The Spot-out monitoring is the function that monitors the entire screen of a specific channel with the output different from the live screen output. If a monitoring item is selected from the menu screen, you can select a specific channel as the Spot-out channel among the channels 1 to 4 and you can also monitor all the channels at an interval of auto sequence time. The live screen icons do not appear for Spot-out monitoring.

At this time, the auto sequence time internal is identical to the auto sequence time of the live mode.

If the Spot-out event monitoring is active, the channel where an event occurs can be regarded as the Spot-out output. If events occur simultaneously from several channels, the channel with the lowest number has priority and is output to the Spot-out.



menu setup

BEFORE USE

- **Selection**
  The yellow cursor shows the current selection window. As for the directional operation, move the cursor on the menu that you want to change by using the **direction** (▲▼◀▶) buttons on the front panel of the system.
  It enters the sub window if you press the **Enter**(↵) button when the cursor is located on the desired menu.
  To select an item from the menu, press the **Enter**(↵) button. On a drop-down menu, use the ▲ **or** ▼ button to move the cursor on your desired item.

- **"OK" and "Cancel" in Each Setup Window**
  Once any changes are made in a setup window, they can be applied by selecting "**OK**". When "**Cancel**" is selected, the changed settings are not applied and it returns to the upper menu.

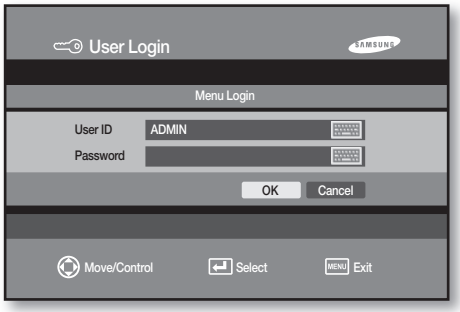
- **MENU** and **SEARCH** Buttons
  The **MENU** or **SEARCH** button, if pressed first, acts as an entrance button. After an entrance menu appears, if the button is pressed, the screen changes to the previous page.

- **Symbol(▶) Next to the Title**
  It displays the drop-down menu when selected.

- **Virtual Keyboard**
  Inputting characters is enabled by (⌨) or (▦). For entering a character, move the cursor on a desired character key and press the **Enter**(↵) button.

USER LOGIN

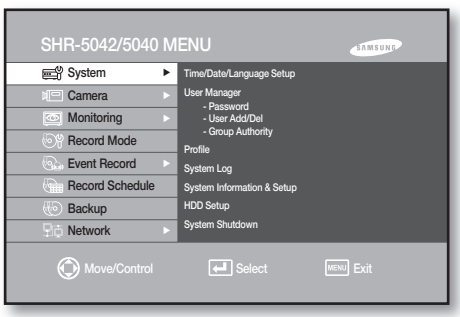
Press the **MENU** button in order to enter the menu screen.



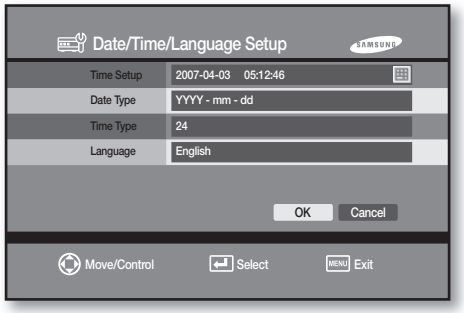
In order to use various DVR functions such as the system environment setup and search, you need to log on to the system with the proper user privilege. You can log on to the system by entering the user ID and password.
(When this product is shipped, the password of '**ADMIN**' user account will be set to '4321'.)

SYSTEM

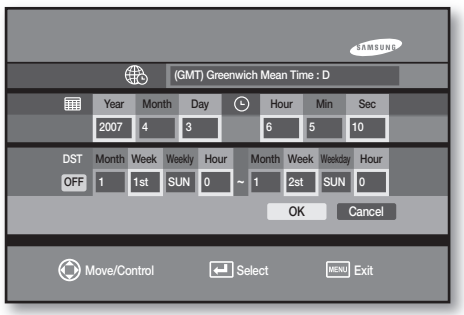
The details of the system menu are as follows:



Time/Date/Language Setup



- **Time Setup**
  The following screen appears if the **Enter**(↵) button is pressed.



Select the standard time zone suitable to the corresponding region.
To change the date and time, move the cursor to the corresponding item and press the **Enter**(↵) button. Then, change the day/month/year or second/minute/hour using the ▲ **or** ▼ buttons. Escape from the change mode by pressing the **Enter**(↵) button again.
When the time is changed, the date and time will be halted until "**OK**" or "**Cancel**" is pressed.

⚠ Caution

- If the date and time are changed to earlier values, the data written prior to the change may be deleted. For example when the 8 o'clock in the morning is changed to the 7 o'clock in the morning, the data written between 7 and 8 in the morning will be deleted.

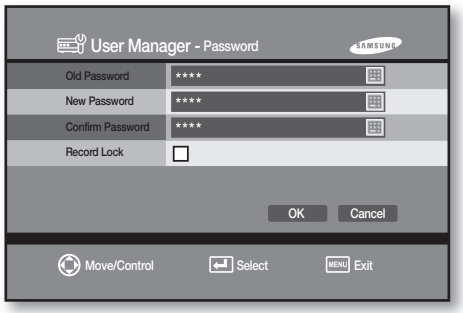
- **DST (Daylight Saving Time)**
  DST sets the clock one hour ahead the local standard time. This setting enables the system to display the time adjusted for DST. If the date set for DST comes, the system time runs one hour faster.
  If the DST is set to "**OFF**", it will not be applied. It is impossible to enter the date menu on the right. When you set the DST to "**ON**", designate the start time on the left and the end time on the right while basing on the "**~**" mark.

- **Date Type**
  It supports a total of 9 formats (such as Year-Month-Day / Day-Month-Year / Month-Day-Year).

- **Time Type**
  It supports two formats of 24 hours / 12 hours (AM/PM).

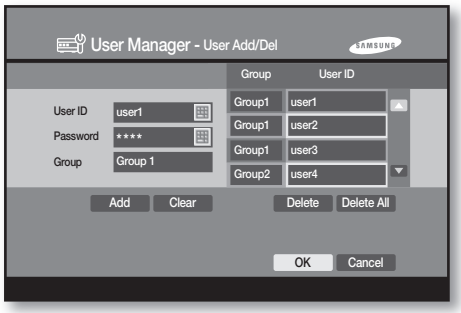
- **Language**
  After selecting a language, OSD is displayed in the selected language. The available languages are displayed in the list.

Password



- **Old Password**
  The default password was not designated.
  Use it when changing the password.
- **New Password**
  A virtual keyboard will appear if the **Enter**(↵) button is pressed. You can input characters one by one up to 16 characters.
- **Confirm Password**
  This is the menu for confirming a newly changed password. You need to enter "**New Password**" first. If you enter the "**Confirm Password**" first without entering the "**New Password**", no response is made on the entry.
- **Record Lock**
  If the **Record Lock** is set to **On**, a pop-up window, asking for the password appears while disabling the recording.

User Add/Del



- **User Add**

  You may enter "**User ID**" and "**Password**".
  As for the group that the user can belong to, select one from "**Group1**", "**Group2**" and "**Group3**".

  After granting user rights by each group, designate a user to that group.

  If you press "**Add**", the entry is registered to the list on the right.

  If you press "**Clear**", the User ID and Password on the left are deleted.

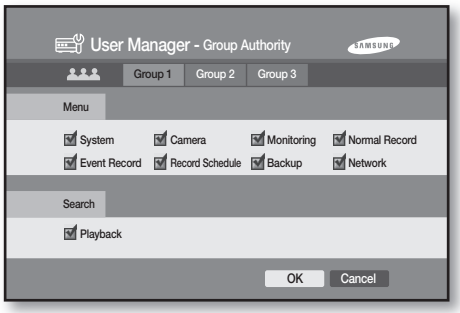
- **User Delete**

  After moving the cursor on the User ID to be deleted from the list on the right, select it by pressing the **Enter**(↵) button.

  If you press "**Delete**", only the selected User ID is deleted from the list.

  If you press "**Delete All**", all the User IDs registered to the list are deleted.

Group Authority



- **Group**
  User group is divided into 3 groups of Group1, Group2 and Group3.

  Press the **Enter**(↵) button after moving the cursor on the group that a user right is to be granted.

- **Menu**
  You can grant the system setup and monitoring rights to the group partially or entirely.
  As for the right granting setup, you can set/cancel it by pressing the **Enter**(↵) button after moving the cursor on the corresponding item.

  The "**System**" item allows granting the rights for 'Time/Date/Language Setup', 'User Manager', 'Profile', 'System Log', 'System Information & Setup', 'HDD Setup' and 'System Shutdown'.

  The "**Camera**" item allows granting the rights for 'Camera Configuration', 'PTZ Device' and 'Screen Setup'.

  The "**Monitoring**" item allows granting the rights for 'Live Mode' and 'Spot Mode'.

  The "**Record Mode**" item allows granting the setup rights for 'Quality', 'Frame' and 'Video Size'.

  The "**Event Record**" item allows granting the rights for 'Event Record Setup', 'Alarm Detection Setup', 'Motion Detection Setup' and 'Video Loss Detection Setup'.

  The "**Record Schedule**" item allows granting the recording schedule setup right.

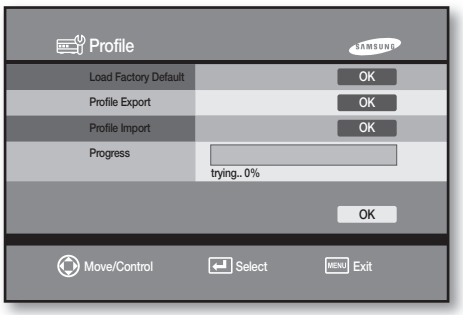
  The "**Backup**" item allows granting the backup setup right.

  The "**Network**" item allows granting the rights for 'IP Setup', 'IP Test', 'DDNS Setup', 'NTP Setup', 'Callback Setup' and 'Transfer Picture Setup'.

• **Search**

The "**Playback**" item allows granting the search right.

Profile



• **Load Factory Default**

This function is used when you reset all menu setting values to the factory default values.

If you press "**OK**", the restart message window appears. You can select "**Yes**". The recorded data will not be deleted.

• **Profile Export**

This function is used when you export the profile currently set to the system to the storage device connected to a USB port. The profile file will be copied to the USB memory if you press "**OK**". (Filename: SetupData.tar)

• **Profile Import**

This function is used when you import the system profile file stored in a USB memory and apply to the current system. The profile file will be copied to the current system if you press "**OK**". Then, the restart message window appears. You can select "**Yes**".

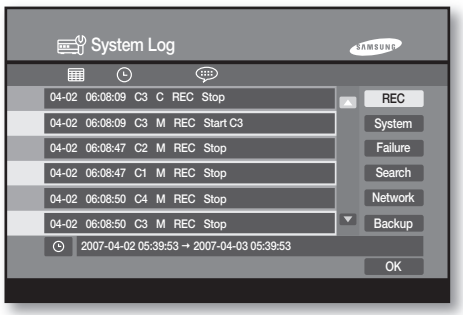
• **Progress**

This function will show the progress status of the job that the system is currently executing.

⚠ Caution

• Please do not remove the USB memory when you run the profile export/import function. The system profile file may not be copied properly or may not be applied to the system.

System Log



This function shows a series of logged tasks made in operating the DVR system and when the system runs abnormally, it allows finding the error easily so that the problem can be fixed.

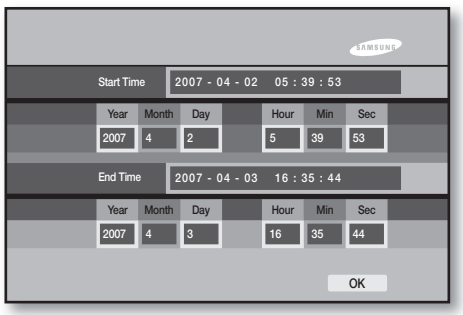
Press the **Enter**(↵) button after moving the cursor on the desired log item.

(▲): Move to the previous page.

(▼): Move to the next page.

• **Scope Designation**

If the (🕒) icon is pressed, the following screen appears.



For the log data, set the "**Start Time**" and "**End Time**" to be searched. To change the date and time, move the cursor to the corresponding item and press the **Enter**(↵) button. Then, change the day/month/year or second/minute/hour using the ▲ or ▼ buttons. Escape from the change mode by pressing the **Enter**(↵) button again.

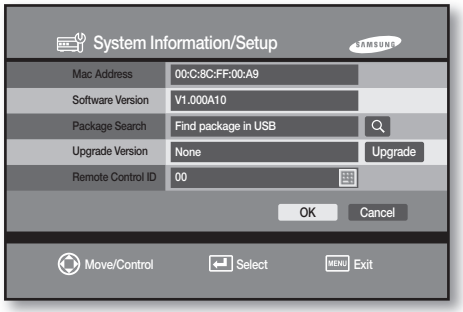
- **REC**
  Displays the recording information according to the recording event and schedule.
- **System**
  Displays the system start/stop, system access user and setup change information.
- **Failure**
  Displays the error information that occurs due to the hardware failure.
- **Search**
  Displays the time information between the entry and exit of the search mode.
- **Network**
  Displays the time and IP address for the connected system through the remote software.
- **Backup**
  Displays the backup information.

System Log List

Log Type	Log Details	Description
REC	C(Channel) C REC START/STOP	Continuous Recording Start/Stop
	C(Channel) A REC START/STOP	Alarm In Recording Start/End
	C(Channel) M REC START/STOP	Motion Recording Start/End
System	SYSTEM START/STOP	System Power ON/OFF
	SYSTEM NET TIMESET	System Time Change
	SYSTEM SHUTDOWN	System Termination
	SYSTEM REBOOT	System Restart
	SETUP START/END	Menu Mode Login/Logout
	WEAK SIGNAL START CH	Weak Video Output Signal
	WEAK SIGNAL STOP CH	Video Output Signal Restoration
	HDD Format M	HDD(Master) Format
	HDD Format S	HDD(Slave) Format
Failure	VIDEO LOSS START/STOP	Video Loss/Recovery
	FAN FAILURE/RECOVERY	Fan Failure/Recovery
	SMART ERROR HDD-M	HDD(Master) Smart Check Failure
	SMART ERROR HDD-S	HDD(Slave) Smart Search Failure
	HDD ERR COUNT M	HDD(Master) Write Error Count
	HDD ERR COUNT S	HDD(Slave) Write Error Count

Log Type	Log Details	Description
Search	SEARCH IN/OUT	Login/Logout with the Search Mode
Network	NETWORK CONNECTED	Remote Software Connection
	NETWORK DISCONNECTED	Disconnecting the Remote Software Connection
	BACKUP AVI-OK/FAILED	AVI Backup Success/Failure
	BACKUP SDB-OK/FAILED	SDB Backup Success/Failure
	BACKUP SFX-OK/FAILED	SFX Backup Success/Failure
	BAKCUP BMP-OK/FAILED	BMP Backup Success/Failure
	BACKUP JPEG-OK/FAILED	JPEG Backup Success/Failure
	USB PROBLEM DETECTED	Removing the Media While Backing up to a USB Storage
	CD-ROM WRITE FAIL	CD Write Failure
	CD Media Size Full	No CD Space Remained
	CD Media Not Exist	No CD Media
BACKUP	BACKUP AVI-OK/FAILED	AVI Backup Success/Failure
	BACKUP SDB-OK/FAILED	SDB Backup Success/Failure
	BACKUP SFX-OK/FAILED	SFX Backup Success/Failure
	BAKCUP BMP-OK/FAILED	BMP Backup Success/Failure
	BACKUP JPEG-OK/FAILED	JPEG Backup Success/Failure
	USB PROBLEM DETECTED	Removing the Media While Backing up to a USB Storage
	CD-ROM WRITE FAIL	CD Write Failure
	CD Media Size Full	No CD Space Remained
	CD Media Not Exist	No CD Media

System Information & Setup



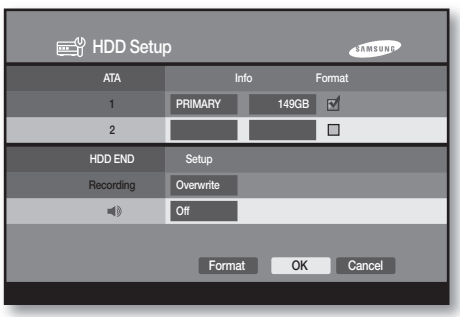
- **Mac Address**
  Displays the unique number of the network hardware device attached to the system.
- **Software Version**
  Displays the current software version.
- **Package Search**
  After connecting the USB device (holding the DVR software) to a USB port, press the ( ) icon and the DVR software will be automatically searched. If the DVR software does not exist in the USB device, the upgrade version will not be displayed.
- **Upgrade Version**
  The software version to be upgraded will be shown. If you press the "**Upgrade**", the restart message window appears. You can select "**Yes**" to proceed with the upgrade.
- **Remote Control ID**
  In order to control the DVR with a remote commander, set the DVR and the remote control ID.

Caution

- For the DVR to recognize the update file the file should be inserted into a folder named "update". So this folder should be created on a USB memory and then the upgrade file copied inside the folder.
- When upgrading the software, you must neither turn off the power nor remove the USB device. The system may run abnormally.
- When using a USB memory, please use the USB device that can support Linux 2.6.0 or higher. The system cannot support the device that does not support Linux.
- The file system for the USB device must be either FAT16 or FAT32. The system does not support NTFS or other file systems.
- Since some USB devices either have no power supply or have a low voltage, a separate power supply may be needed to recognize them.

- When shipping this product, the remote controller ID is set to '**00**'.
- When changing the remote control ID, press "**Remote Control ID**" and enter the DVR ID.

HDD Setup



- **HDD Info**
  Shows the installed HDD information and the capacity. The first installed HDD is displayed as the Primary and the second HDD is shown as the Secondary.

- **HDD Format**

  When initializing the HDD, move the cursor to the corresponding HDD and press the **Enter**(↵) button. Then, the (Format) icon is activated.

  If you press "**Format**", the HDD format window appears. You can select "**OK**" to initialize the HDD.

- **HDD END**

  Stop: Recording stops when the HDD becomes full while in recording.

  OverWrite: If the HDD becomes full while in recording, the data recorded at the earliest time will be deleted and new data will be written.

- **HDD END ALARM (🔊)**

  On: If the HDD becomes full while in recording, it gives an alarm.

  Off: If the HDD becomes full while in recording, it does not give any alarm.

- If the HDD space is not enough, the Disk_Full (FULL) icon appears.

Caution

- Because all data will be deleted when the HDD formatting is executed, please proceed with the initialization after backing up important data to other place.
- If the repeated HDD recording is set to "**OverWrite**" and the data to be backed up are overwritten, either the backup start time can be changed or the backup is cancelled.

Caution

Checking HDD Data

Please, pay attention to Following information to minimize the chance of losing HDD data.

- Remember that you should protect HDD from any impact or misuse as this may cause damaged.
- The Manufacturer is not responsible for missing data or defects caused by the user's mishandling.

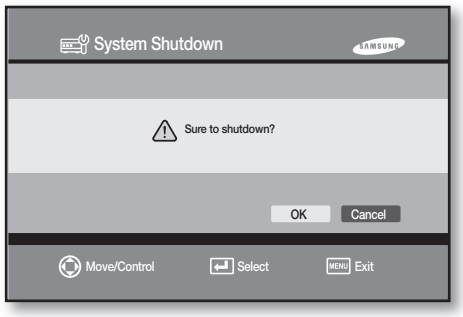
Note: Adding Extra HDD.
Check in advance that the HDD is compatible with the manufacturer's DVR.

Examples that can cause loss of data or damage HDD.

- Any outside Impact on the case which could happen whilst disassembling or setting up the DVR.
- Power cut or incorrect shutdown whilst the DVR is operating. (Refer to page 27: how to turn off DVR)
- Moving or causing any impact on the DVR during operation.

Please, back up events as soon as possible to minimize disappointment should HDD data be lost.

System Shutdown



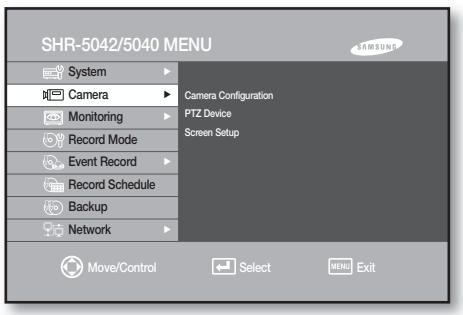
This function is used when either terminating the running jobs safely or turning off the power.
If you see the system shutdown message after pressing "**OK**" on the confirmation window, turn off the power.

Caution

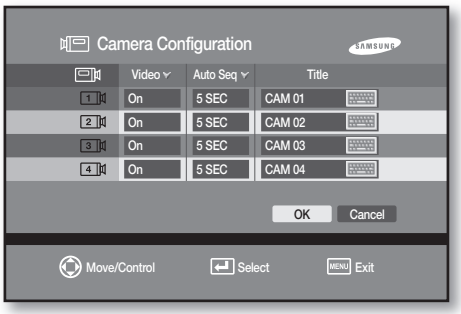
- If the system is turned off without terminating it using the system shutdown menu, it may cause a problem such as data loss and disk failure. When turning off the power, please terminate the system first using the system shutdown menu.

CAMERA

The details of the camera menu are as follows:



Camera Configuration



- **Video**

  On: It shows the video of the selected channel.
  Off: It does not show the video of the selected channel.

  Covert: It shows the remaining information except for the video information of the selected channel.
  The functions such as audio/camera name/auto sequence are not available for the Off channel.

- **Auto Seq**

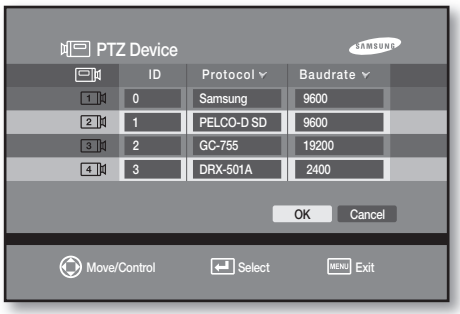
  You can set the auto sequencing interval for each channel. The setting applies in the live mode. The channel set with "**Off**" or "**Covert**" is not shown in the auto sequence mode.

- **Title**

  The camera name of the selected channel can be set.
  A virtual keyboard appears if you press the **Enter**(↵) button.
  Characters can be input one by moving the cursor. You can input up to 10 characters. If you press "**Shift**", you can input the uppercase letters and numeric keys.



PTZ Device



- **ID**

  Select the PTZ ID(0~99).

- **PTZ**

  In order to set the PTZ function, move the cursor to the desired channel and press the **Enter**(↵) button. Then, select PTZ by using the ▲ **or** ▼ button. Escape from the change mode by pressing the **Enter**(↵) button again.

- **Baudrate**

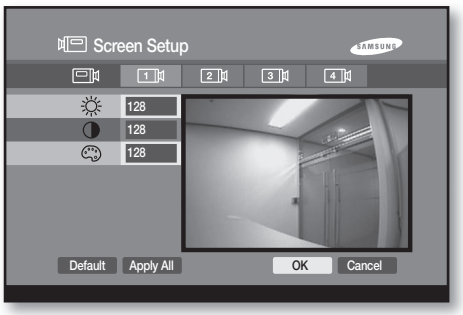
  Select the PTZ Speed.
  (4800/9600/19200/38400)

Available PTZ Lists

NO	Manufacturer	Model
1	SAMSUNG	Samsung PTZ Camera
2	TECHWIN	SPD-1600, SPD-3300

- The above items should be matched with the settings of PTZ device. For more details, please refer to the manual provided by the PTZ device manufacturer.
- Only the Half Duplex method is supported for transmission.

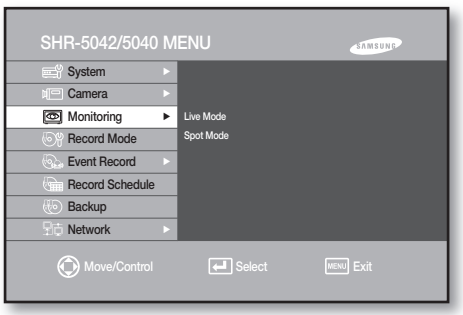
Screen Setup



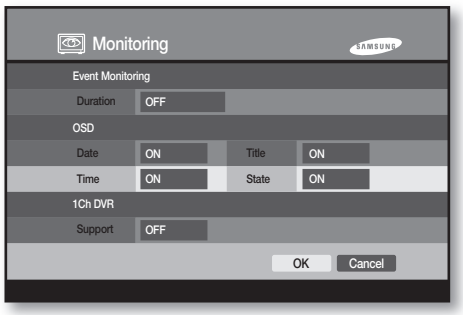
This is the screen that sets the Brightness/Contrast/Color values for the camera image of each channel.
Place the cursor on the the desired channel for adjustment and select it to set the Brightness/Contrast/Color values.
The selected channel appears within the PIP zone on the right.
The adjustment can be made from '0' to '255' using the ▲ or ▼ button.
If you press "**Apply All**", the values for the last updated channel are copied to entire channels.
If you press "**Default**", the values for the current channel are reset with '128'.

MONITORING

The details of the monitoring menu are as follows:



Live Mode



- **Event Monitoring Duration**
  It can be set to any of Off, 30 seconds, and CONTINUE.
  OFF: The event monitoring that switches to the event screen does not operate.
  30 Seconds: It sets the display duration of the current channel until the next channel is displayed.
  CONTINUE: The event monitoring screen will be maintained until it is cancelled by pressing the **ALARM** button on the front panel.

- **OSD**
  Date: When it is On, the date will be displayed on the screen. When it is Off, the date will not be displayed on the screen.
  Time: When it is On, the time will be displayed on the screen. When it is Off, the time will not be displayed on the screen.
  Title: When it is On, the camera name will be displayed on the screen. When it is Off, the camera name will not be displayed on the screen.
  State: When it is On, the Audio/PTZ will be displayed on the screen. When it is Off, the Audio/PTZ will not be displayed on the screen.

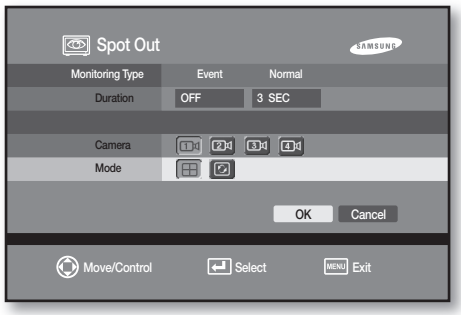
- **1Ch DVR**

  The 1-channel DVR is supported. If the 1-channel support is set to On, it becomes the 1-channel DVR; and if the 1-channel support is set to Off, it becomes the 4-channel DVR. If the 1-channel support is On, the system will be restarted and it becomes the 1-channel DVR.

⚠ Caution

- If the 1-channel support is enabled, the functions such as Event Monitoring, Spot Out Channel and Spot Out Event Monitoring are not available. As for the resolution of 1-channel support, Full D1, Half D1 and CIF are supported.
- If the 1-channel support is Off and the Full D1 is set, the resolution in the 4-channel mode becomes CIF.
- When setting up the 1-channel mode, the system setup values will be initialized.
- Displays 640x480(60Hz) VGA output on NTSC and PAL.
- Some noise on vertical lines or oversized image can occur on LCD monitor if 640x480 mode is not available.

Spot Mode



When you have two monitors, the Spot Out channel can be used for monitoring a specific channel on a dedicated monitor.

- **Event Duration**

  Sets whether or not to run the Event Monitoring function for the Spot-out channel. It can be set to any of Off, 30 seconds, and CONTINUE.

  OFF: The Event Monitoring function is not available on the Spot Out channel.

  CONTINUE: The Event Monitoring screen will be maintained until it is cancelled by pressing the **ALARM** button on the front panel.

- **Normal Duration**

  1~60 Seconds: It sets the display duration of the current channel until the next channel is displayed.

- **Camera**

  Sets the desired channel for use with the Spot Out function.

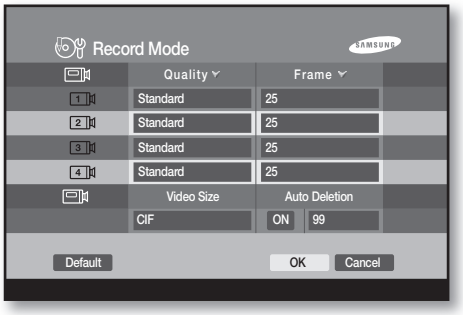
- **Mode**

  (): This is the mode that outputs the Spot Out channel with a 4 split screen.

  (): This is the mode that switches the Spot Out channel screen in the full screen mode.

RECORD MODE

The details of the record menu are as follows:



Set the recording mode values to be applied when pressing the **REC** button on the front panel.

- **Quality**
  Sets the recording video quality.
  Set to any of Very High, High, Standard and Low.
- **Frame**
  Sets the number of frames for recording. The number of frames refers to the number of screens recorded per second.
- **Video Size**
  Set the screen size for recording.

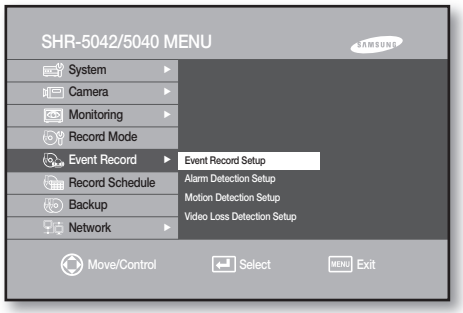
Video Source	Full D1	Half D1	CIF
NTSC	704 X 480	704 X 240	352 X 240
PAL	704 X 576	704 X 288	352 X 288

- **Auto Deletion**
  You can select any of **OFF** and **ON** by pressing "**OFF**."
  If "**ON**" is selected, the date for search is limited.
  The date can be limited to 1 to 99 days. If "**OFF**" is selected, the cursor cannot be moved to the date selection area and the date for search is not limited.
  If you press "Default", it returns the initial values.

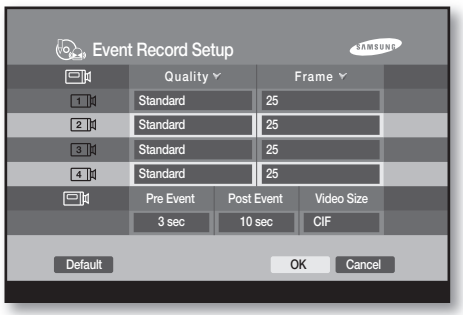
  The Normal Recording frame rate should be set less or equal to the event recording frame rate.

EVENT RECORD

The details of the event recording are as follows:

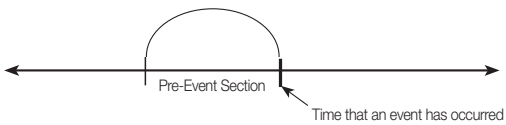


Event Record Setup



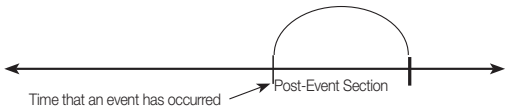
Set the recording mode values to be applied when an event occurs.

- **Quality**
  Sets the recording video quality for any event.
- **Frame**
  Sets the number of frames for recording. The number of frames indicates the number of screens recorded per second.
- **Pre Event**



Record the pre-conditions from the point that an event has occurred.
3~5 Seconds: Set the recording time prior to the event occurrence.

• **Post Event**



Record the post-conditions from the point that an event has occurred.

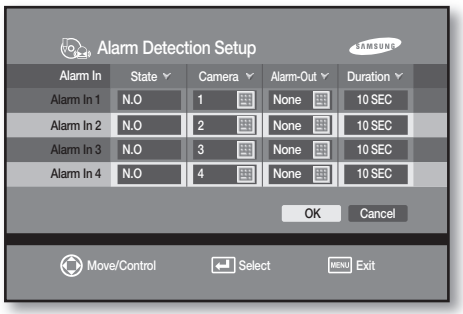
5 Seconds~5 Minutes: Set the recording time after the event occurrence.

• **Video Size**
Screen setup size displayed on record mode.

Video Source	Full D1	Half D1	CIF
NTSC	704 X 480	704 X 240	352 X 240
PAL	704 X 576	704 X 288	352 X 288

• If the 1-channel DVR support is set to On in the monitoring menu, the resolution is changed to Full D1.

Alarm Detection Setup



• **State**

The Alarm In type can be set to "**N.O**" or "**N.C**".

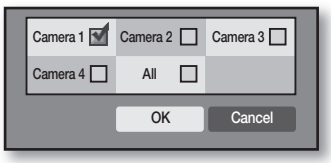
N.O (Normally Open): Sensor remains open. But if it gets closed, an alarm is issued.

N.C (Normally Closed): Sensor remains closed. But if it gets open, an alarm is issued.

• **Camera**

Sets the camera linked to the current Alarm In. The default value is set to the current Alarm In number. At least one link between Alarm In and camera has to be established. Multiple selections are possible.

The following screen will appear if the **Enter**(↵) button is pressed by moving the cursor from the camera item.

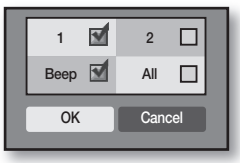


• **Alarm Out**

Sets an alarm-out method when an event has occurred from the Alarm In.

Currently, this system supports 2 Alarm Out functions and 1 built-in speaker (beep) output.

The following screen will appear if the **Enter**(↵) button is pressed by moving the cursor from the Alarm Out item.



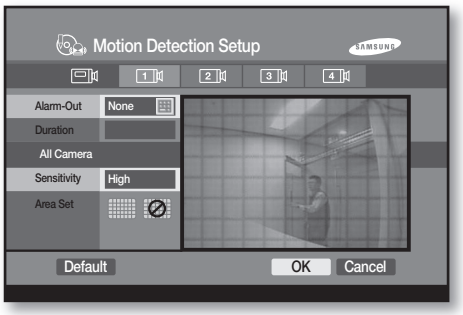
• **Duration**

Sets the duration for Alarm Out. The alarm sound will be maintained with the value set.

CONTINUE: The alarm output sound will be maintained until it is cancelled by pressing the **ALARM** button manually on the front panel.

10~300 Seconds: You can set the duration for the alarm output.

Motion Detection Setup



Set the motion detection area, sensitivity and alarm for each camera video.

Press the **Enter**(↵) button after moving the cursor on the camera to be set.

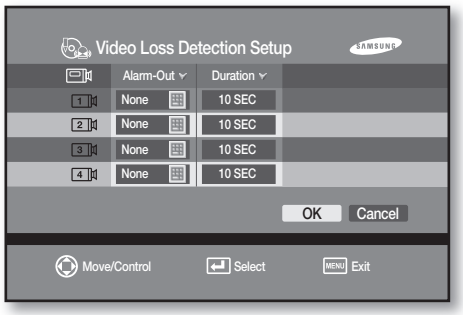
- **Alarm Out**
  It sets the alarm output when a motion is detected. Currently the system supports 2 Alarm Out functions and 1 built-in speaker output.

- **Duration**
  Sets the duration for Alarm Out. The alarm sound is sustained for the preset period.
  CONTINUE: The alarm output sound will be maintained until it is cancelled by pressing the **ALARM** button manually on the front panel.
  10~300 Seconds: Sets the duration for alarm output.

- **Sensitivity**
  It relates to configuration for motion detection and sensitivity.
  The sensitivity can be set to Very High, High, Medium, Low or Very Low.

- **Area Set**
  If you press the **Enter**(↵) button after moving the cursor to the video display area on the right, the motion area can be set/cancelled.
  (▦): Sets the whole part as the motion area.
  (▨): Cancels the whole motion area.
  If you press "**Default**", the motion setup is reset to the initial values.

Video Loss Detection Setup



If a video loss occurs from each channel, it can be set to generate an alarm output sound.

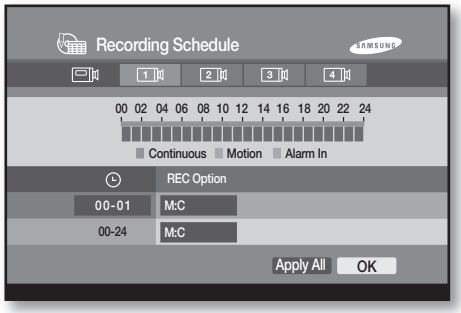
- **Alarm Out**
  Sets an alarm-out method when an event has occurred from the Alarm In.
  Currently, this system supports 2 Alarm Out functions and 1 built-in speaker (beep) output.
  The following screen appears when you press the **Enter**(↵) button after moving the cursor to the Alarm Out item.



- **Duration**
  Sets the duration for Alarm Out. The alarm sound is sustained for the preset period.
  CONTINUE: The alarm output sound is maintained until it is cancelled by pressing the **ALARM** button manually on the front panel.
  10~300 Seconds: Sets the duration for alarm output.

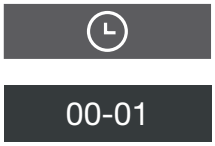
RECORD SCHEDULE

The details of the record schedule menu are as follows:



You can set the system to automatically record images by setting the desired time frames.
Press the **Enter**(↵) button after moving the cursor on the camera to be set.

- **Time Selection**
  In order to select the recording time slot hourly, move the cursor to the part shown as in the figure below and press the **Enter**(↵) button. And, select the recording time slot while using the ▲ **or** ▼ button. You can exit from the change mode by pressing the **Enter**(↵) button again.

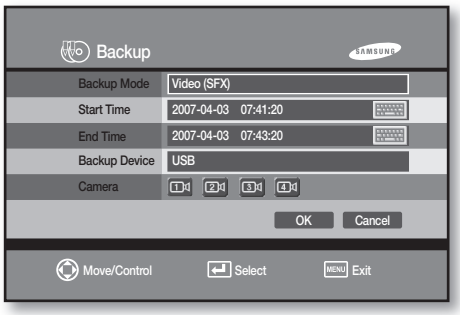


- **REC Option**
  Sets the recording method. Please see the following table for the types of recording methods.
  You can apply the preset recording method for the selected time slot if the ▲ **or** ▼ button is used after pressing the **Enter**(↵) button.
  "**00–24**": The recording method can be identically set to a range between zero hour and 24 hours.
  If you press "**Apply All**", the values for the current channel are copied to entire channels.

Recording Type	Recording Support	Setup Screen Symbol
C: Continuous M: Motion A: Alarm In	No Recording	NONE
	Continuous Recording	C
	Motion Recording	M
	Alarm In Recording	A
	Continuous & Motion Recording	C : M
	Continuous & Alarm In Recording	C : A
	Motion & Alarm In Recording	M : A
	Continuous & Motion & Alarm In Recording	C : M : A

BACKUP

The details of the backup menu are as follows:



This is to back up the video data stored on the HDD to a backup device.

- **Backup Mode**
  Selects which mode is to be used for backup. As for the backup mode, this system supports 2 backup modes such as SFX and AVI.
  Press the **Enter**(↵) button and select the backup mode by using the ▲ **or** ▼ button. You can exit from the change mode by pressing the **Enter**(↵) button again.
  SFX: This mode runs a backup job together with the auto-executable video player. If the backup file is executed, the player will be automatically launched to play the video. The SFX backup data is saved with an executable file extension (.EXE).
  AVI: This mode saves in the video format that can be played from the Windows Media Player.

- **Start Time & End Time**
  Sets the date and time for backup.

- **Backup Device**
  Sets the storage device for backup. The backup device supports the USB storage device and CD.
  Press the **Enter**(↵) button and select the backup device by using the ▲ **or** ▼ button. Escape from the change mode by pressing the **Enter**(↵) button again.

- **Camera**
  Sets the camera channel for backup.

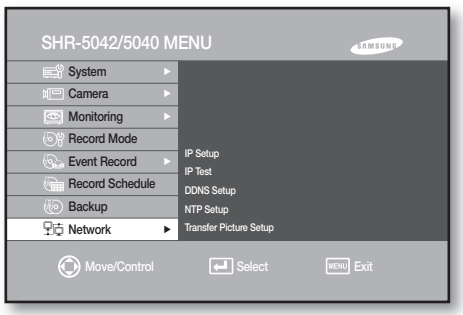
- The backup file can be played on PC, but can not be played from a DVR.
- In case of the AVI backup, you may need a DivX codec to play the saved file. You can obtain the DivX codec from the website www.divx.com.
- A warning message appears if no backup device exists.

Caution

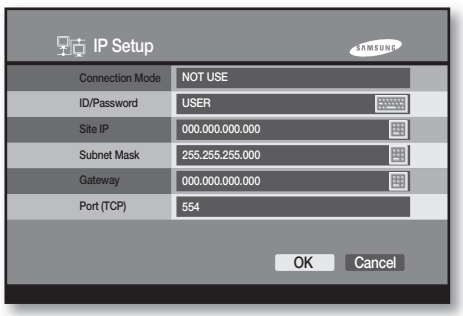
- Please do not remove the storage device during backup or do not turn off the system power. The system may run abnormally.
- The system speed may be slowed down during backup.
- When backing up the data to CD, the recorded data may be damaged according to the conditions of disk recording surface.

NETWORK

The details of the network menu are as follows:



IP Setup



- **Connection Mode**
  Sets the network type for the main system.
  Press the **Enter**(↵) button and select the network by using the ▲ **or** ▼ button.
  NOT USE: Select it when you do not use a network.

STATIC-IP: Select it when the main system is connected to the network that is using the fixed IP.

DHCP: Select it when the main system is connected to the network whose IP address is dynamically assigned by DHCP.

ADSL(PPPoE): Select it when the main system is connected to the ADSL network using PPPoE.

- **ID/Password**

  You can manually enter the ID/PASSWORD when ADSL is selected.
  When the main system is connected to the ADSL network, you need to enter the user ID and password provided by the ADSL carrier. The user ID and password may be entered by using the virtual keyboard.



- **Site IP**

  Sets the IP address for the main system to be connected to the network. If the connection mode is set to STATIC-IP, the user needs to enter the IP address directly.
  If the connection mode is either DHCP or ADSL, the IP address provided by the DHCP server or ADSL carrier will be automatically displayed. If a DHCP or ADSL connection attempt fails, 000.000.000.000 will be displayed. In this case, turn off the power of the main system and wait for a while. And then, turn on the power and retry the connection.

- **Subnet Mask**

  Sets the subnet mask address for the main system.

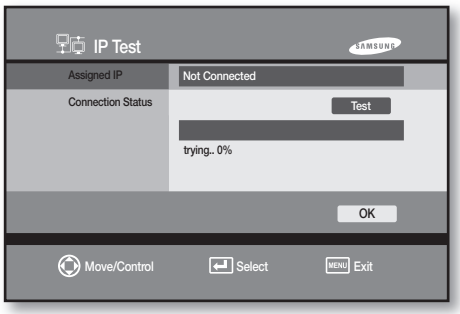
- **Gateway**

  Sets the gateway address for the main system.

- **Port(TCP)**

  The port number is selectable from 554 to 2048.

IP Test



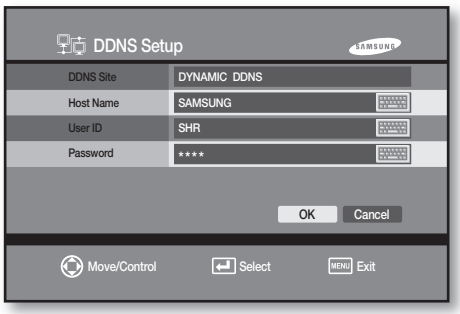
- **Assigned IP**

  Displays the IP address assigned to the current system.

- **Connection Status**

  If you press "**Test**", it tests whether the IP address can be connected through the network.
  If "**OK**" is displayed, it is a usable IP address;
  if "**Failed**" is displayed, it is an unusable IP address.

DDNS Setup

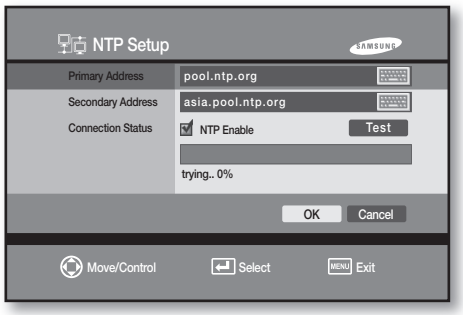


DDNS Setup function allows you to use the dynamic IP address connected to the system as if it is a fixed IP address.

- **DDNS Site**
  The DDNS site is selectable among SAMSUNG, DYNAMIC DDNS, NO IP and CHANGE IP.
  When SAMSUNG is selected, The IP will be registered to the DDNS being operated by Samsung Electronics. DYNAMIC DDNS, NO IP and CHANGE IP are the public DDNS websites that allow registering a dynamic IP and assigning a URL free of charge. Set the host name, user ID and password after joining in the corresponding website and registering the URL.
- **Host Name**
  Sets the host name of the DDNS site.
- **User ID**
  Sets the user ID entered when joining in the DDNS site.
- **Password**
  Sets the password entered when joining in the DDNS site.

- If you have set a public DDNS (dyndns.com, no-ip.com or changeip.com), it may take 30 to 60 seconds until the IP address of the host name (URL) can be updated in the DNS.
- When using the network by connecting an IP router to the main system, the network port has to be designated from the setup menu of the IP router. The main system uses 1494ports (554-2048) for the TCP communication. When using it by assigning IP addresses dynamically to the main system while using the DHCP function supported by the IP router, the port number for the IP address dynamically assigned from the setup menu of the IP router needs to be designated. When using an IP router, it is recommended to designate the IP address and port number to be assigned to the main system from the setup menu of the IP router, to set a fixed IP address for the connection mode of the main system, and to enter the IP address designated to the IP router. Please refer to the IP router manual or contact the manufacturer for the IP router setup method.

NTP Setup



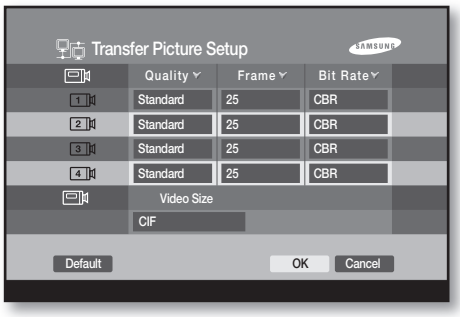
- **Primary Address & Secondary Address**
  Sets the NTP server address.
- **Connection Status**
  You can check the connection status with the NTP server by pressing “Test” after entering the NTP server address.
  If the message “**Success**” is displayed, the NTP server is in the state possible to communicate; if the message “**Failed**” is displayed, it is not possible to communicate.
- **NTP Enable**
  When using the NTP function, please check the “**NTP Enable**” box.

- When the DVR system time prior to operating the NTP setup function is set faster than the NTP standard time (in other words, the DVR system time is set to a past time through the NTP setup), the recording function will not operate for the protection of previously recorded data. The recording function will operate normally from the point that the newly set time exceeds the original time value.
- When the NTP function is in use, a time change can not be made from the time setup menu and it only allows setting the standard time zone.
- The synchronization between NTP server and DVR system will be performed every hour.

NTP(Network Time Protocol) Server List

ISO	Area	NTP Server Address
Worldwide		pool.ntp.org
Asia		Asia.pool.ntp.org
Europe		Europe.pool.ntp.org
North America		North-america.pool.ntp.org
Oceania		Oceania.pool.ntp.org
South America		South-america.pool.ntp.org
AT	Austria	at.pool.ntp.org
AU	Australia	au.pool.ntp.org
BE	Belgium	be.pool.ntp.org
CA	Canada	ca.pool.ntp.org
CH	Switzerland	ch.pool.ntp.org
CL	Chile	cl.pool.ntp.org
DE	Germany	de.pool.ntp.org
DK	Denmark	dk.pool.ntp.org
ES	Spain	es.pool.ntp.org
FI	Finland	fi.pool.ntp.org
FR	France	fr.pool.ntp.org
GT	Guatemala	gt.pool.ntp.org
IE	Ireland	ie.pool.ntp.org
IT	Italy	it.pool.ntp.org
JP	Japan	jp.pool.ntp.org
MX	Mexico	mx.pool.ntp.org
MY	Malaysia	my.pool.ntp.org
NL	Netherlands	nl.pool.ntp.org
NO	Norway	no.pool.ntp.org
NZ	New Zealand	nz.pool.ntp.org
PH	Philippines	ph.pool.ntp.org
PL	Poland	pl.pool.ntp.org
PT	Portugal	pt.pool.ntp.org
RU	Russia	ru.pool.ntp.org
SE	Sweden	se.pool.ntp.org
US	USA	us.pool.ntp.org

Transfer Picture Setup



Set the video information to be sent over the network.

- **Quality**
  Sets the image quality to be transmitted.
  Sets to any of Very High, High, Standard, Low.

- **Frame**
  Sets the number of frames for recording. The number of frames indicates the number of screens recorded per second.

- **Bit Rate**
  When transmitting a video over the network, select an appropriate bit rate according to the network bandwidth.
  Constant Bit Rate (CBR): The transmission speed will be constantly maintained because the frame size will be fixed regardless of the changed volume of the video. However, the image quality may not be guaranteed.
  Variable Bit Rate (VBR): Although it guarantees the image quality by appropriately distributing the bit rate regardless of the changed volume of the video, the network speed can slow down due to an increase in the frame size.

- **Video Size**
  Sets the screen size for recording.

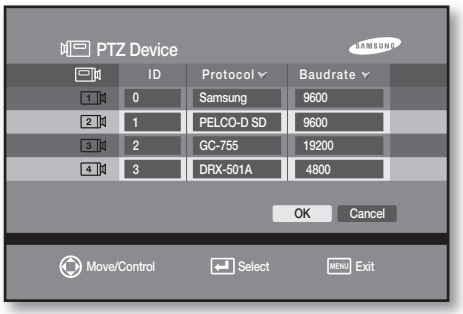
Video Source	Full D1	Half D1	CIF
NTSC	704 X 480	704 X 240	352 X 240
PAL	704 X 576	704 X 288	352 X 288

If you press "**Default**", the property values return the initial values.

PTZ camera control

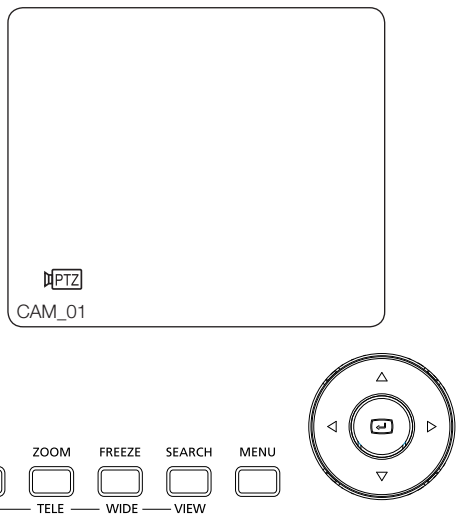
PTZ CAMERA CONTROL MODE

In order to enter into the PTZ device control mode, the PTZ device setup values must be properly set.



If PTZ has been set from the menu, the PTZ icon (PTZ) is displayed on the corresponding channel of the screen.

A blue bar appears on the monitor screen if you press the **Enter**( ) button in the live mode screen. Move to the channel with the PTZ icon by moving this bar using the direction buttons and enter the PTZ device control mode by pressing the **PTZ** button. If you enter the PTZ control mode, the PTZ icon of the live screen will be changed from the white color to the yellow color. Only the basic operations of Pan, Tile and Zoom can be performed in the PTZ device control mode of the split screen.



From the single screen, you can control the basic Pan, Tilt or Zoom operations, preset, camera menu and other functions. From the menu, first select the channel set with PTZ by pressing the **CH1** to **CH4** buttons on the front panel and press the **PTZ** button. If you enter the single screen PTZ device control mode, the PTZ icon of the screen is changed from the white color to the yellow color.

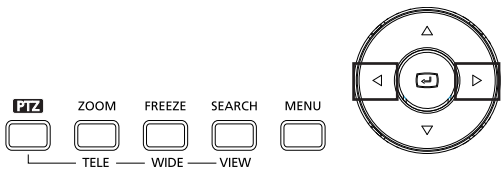
Press the **PTZ** button in the live mode to cancel the PTZ device control mode.

If it is cancelled, the PTZ icon(PTZ) is changed from the yellow color to the white color.

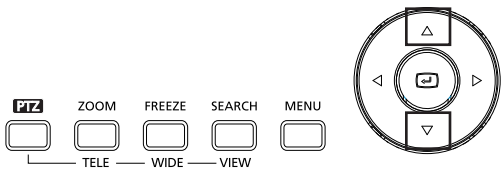
- If no PTZ control is used by the DVR for as long as 5 minutes, the PTZ mode is automatically cancelled. It is intended to have the PTZ control from a remote viewer during the time of no PTZ control.

BASIC OPERATION OF PAN, TILT & ZOOM

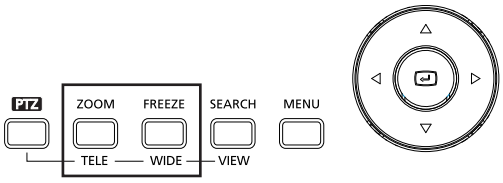
- **PAN**
  The PTZ camera can be controlled in the horizontal direction by using the **direction** (◀ **or** ▶) buttons on the front panel within the PTZ device control mode.



- **TILT**
  The PTZ camera can be controlled in the vertical direction by using the **direction** (▲ **or** ▼) buttons on the front panel in the PTZ device control mode.

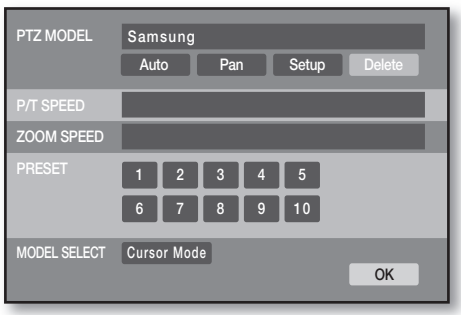


• **ZOOM**
The PTZ camera can perform the enlargement/ reduction function by using the **TELE/WIDE** button on the front panel in the PTZ device control mode.



PTZ DEVICE MENU SETUP

In order to enter the PTZ device menu setup mode, first select the channel set with PTZ by pressing the **CH1** to **CH4** buttons on the front panel and press the **PTZ** button. If you enter the single screen PTZ device control mode, the PTZ icon of the screen is changed from the white color to the yellow color. At this time, the PTZ menu setup window appears if the Search(SEARCH/VIEW) button is pressed.



• **PTZ MODEL**
Displays the currently set PTZ model.
The function menus shown by the PTZ model are displayed. Each menu allows you to set various PTZ functions.
Auto: This traverses a designated location sequentially from the PRESET 1 to 10.
Pan: If you press "**Pan**" after setting the positions of two points 'Start' and 'End' from the internal menu of the PTZ camera, this function makes it to come and go repeatedly between two points. The Pan function can be cancelled by pressing "**Pan**" again.
Setup: Select it either to designate an arbitrary location to the PRESET number or to enter the internal menu screen of the PTZ camera.
Delete: This is the function that deletes the entire position information designated for the PRESET 1 to 10.

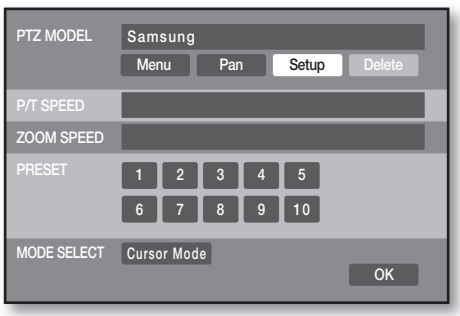
• **P/T SPEED**
You can set the Pan/Tilt speed of the PTZ camera in step-by-step fashion. After moving the cursor to the **P/T SPEED**, press the **Enter**(↵) button and set the speed using the ▲ **or** ▼ button. Escape from the change mode by pressing the **Enter**(↵) button again.

• **ZOOM SPEED**
You can set the zoom speed of the PTZ camera in step-by-step fashion. After moving the cursor to the **ZOOM SPEED**, press the **Enter**(↵) button and set the speed using the ▲ **or** ▼ button. Escape from the change mode by pressing the **Enter**(↵) button again.

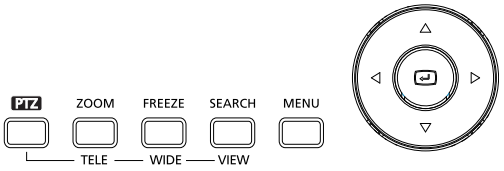
• **MODE SELECT**
It is used when designating a certain position of the PTZ camera to the PRESET ID or controlling the position of the PTZ camera. By toggling the button, it is switched to "**Cursor Mode**" → "**P/T Mode**", "**P/T Mode**" → "**Cursor Mode**".
Cursor Mode: This shows the state that can move between menus.
P/T Mode: This shows the state that can control the Pan, Tilt and Zoom function of the PTZ camera.

PRESET SETUP

This is the function that saves a desired position of the PTZ camera.
It allows storing up to 10 PTZ camera positions.
If the Search(SEARCH/VIEW) button is pressed from the single screen PTZ device control mode, the PTZ menu setup window appears.



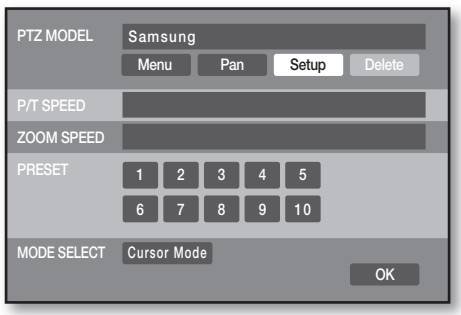
Press the **Enter**(⏎) button to set the PRESET after moving the cursor on the "**Setup**".
If the mode is changed to the "**P/T Mode**" by pressing the "**Cursor Mode**", it will be switched into the PTZ position manipulation mode.
Move the PTZ camera to a desired position by using the **direction** (▲▼◀▶) buttons and **TELE/WIDE** button on the front panel.



You can escape from the PTZ position manipulation mode if you switch to the "**Cursor Mode**" by pressing "**P/T Mode**".
In order to set the current position with the PRESET function, save the setting by pressing the **Enter**(⏎) button after moving the cursor to a desired PRESET number.
You can escape from the PRESET setup mode by pressing the "**Setup**" again.

CAMERA MENU SETUP

If you press the **SEARCH**(VIEW) button in the single screen PTZ device control mode, the PTZ menu setup window appears.



If you press "**Menu**" after pressing the "**Setup**", the menu screen provided by the PTZ camera is displayed. Through this menu, you can set various functions of the PTZ camera.



You can move to the built-in PTZ menu or set the value by using the **direction** (▲▼◀▶) buttons on the front panel.
Press the **MENU** button on the front panel to exit from the built-in camera menu.

REC(NORMAL RECORDING)

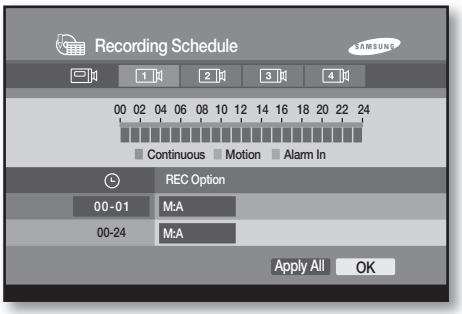
The recording will be made with the record mode setup of the menu by pressing the **REC** button. At this time, the REC LED lights and the record icon appears on the screen. The HDD LED on the front panel blinks while data are saved on the HDD.

If the **REC** button is pressed in the normal record mode, the normal recording stops and the LED is turned off.

- If the job (such as time change, file deletion, HDD format, or HDD connect/release) needing to stop recording is executed, the current recording job is halted.

RECORD SCHEDULE

The scheduled recording job will be automatically executed while the "**Recording Schedule**" function is selected from the recording schedule menu. If the recording schedule function is not set, recording will not be done during the time. The recording icon appears during the scheduled recording time. The HDD LED on the front panel blinks while data are saved on the HDD.



When an event occurs during the time that an event recording is set, the automatic recording function is performed. In this case, the event recording setup of the corresponding channel will be saved within the event recording mode setup sub-item (Quality, Frame, Pre Event, Post Event, Video Size) of the event recording menu item.

- The event recording function is performed only if the event recording function is set from the recording schedule setup menu. If the job (such as time change, file deletion, HDD format, or HDD connect/release) needing to stop recording is executed, the current recording job is halted.

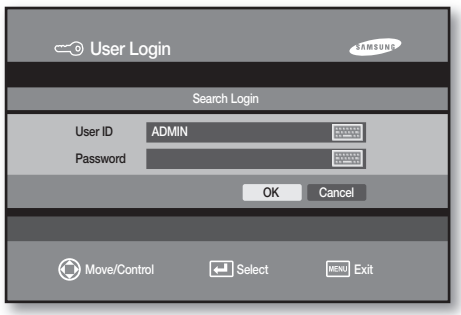
EVENT RECORDING

- **Alarm Detection**
  The Alarm In (sensor) operation mode has to be set to **N.O** (Normally Open) or **N.C** (Normally Close) from the alarm section of the event recording menu.
- **Motion Detection**
  The motion detection region of the event recording menu has to be set.
- **Event Record**
  It sets the form saved when an event has occurred.

- If the job (such as time change, file deletion, HDD format, or HDD connect/release) needing to stop recording is executed, the current recording job is halted.

USER LOGIN

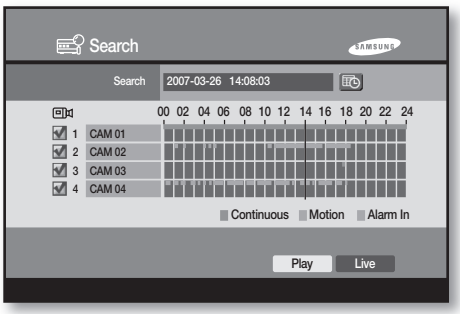
Press the **SEARCH** button in order to enter the search screen.



In order to perform a search, the user with a relevant search right has to be logged on. You may log on as a relevant user by entering the user ID and password. (When this product is shipped, the password of the '**ADMIN**' user account will be set to '4321'.)

SEARCH SCREEN

The details of the search screen are as follows:



SEARCH DATE & TIME SELECTION

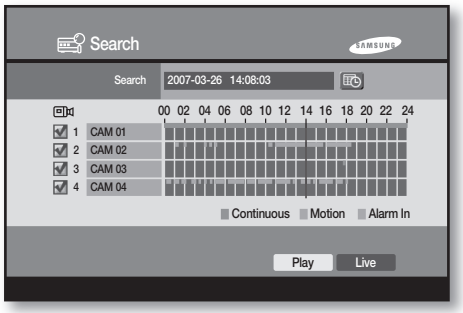
You can move to the recorded date by using the calendar.
If you press the ( ) icon to select the desired date for search, the calendar window appears.



( ): Moves to the previous month.
( ): Moves to the following month.
When setting the search time, move the cursor to the Hour, Min and Sec items and press the **Enter**( ) button. Then, change the hour/minute/second by using the ▲ **or** ▼ button. Escape from the change mode by pressing the **Enter**( ) button again.
The date recorded with a video data is shown in orange.
If you press the **Enter**( ) button after moving the cursor on the date to be searched, the search date is selected.
If you press "**OK**" after selecting a search date, the screen returns the previous screen.

Date Color	Description
Orange	Date that a video data was recorded
Blue	Date that a video data was not recorded
Green	Date that a search date was selected
Red	Date for the holidays

SEARCH CHANNEL SELECTION & RECORDING GRAPH



- **Channel Selection**
  You can select the channel to be searched. After pressing the **CH1** to **CH4** buttons on the front panel or moving the cursor to the channel to be searched, the channel can be selected by pressing the **Enter**(⏎) button.
- **Recording Graph**
  The recording amount of each channel is shown on the Timeline graph.
  The search time can be set by moving the timeline bar to the left or right.
  (◀I/◀◀): Moves the timeline bar to the left.
  (▶▶/I▶): Moves the timeline bar to the right.

Graph Color	Description
Green	Continuous Recording
Orange	Motion Recording
Blue	Alarm In Recording

PLAYBACK

If you press "**Play**" after selecting the channel and date to be searched, the video is played.



During Live mode instant playback can be started by pressing the **Play/Pause** (▶/II)button. Once pressed the DVR will instantly playback recorded data 2 minutes prior to the button activation.

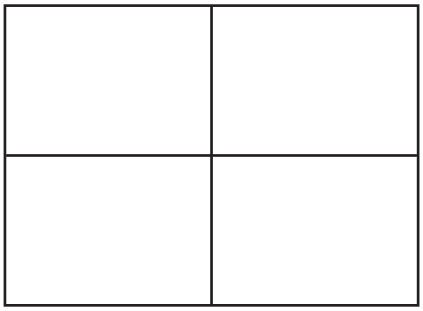
In order to stop playing, press the **Stop** button(■). And if the data position reaches to the end, the play stops and it becomes the pause state.

In order to return to the search screen while playing a video, press the **SEARCH** button.

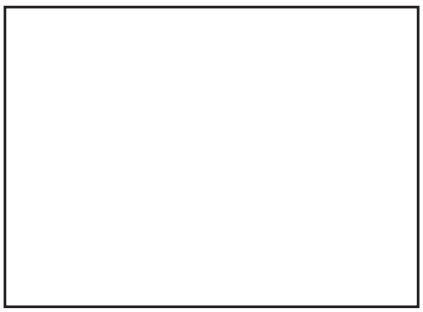
- Because the system does not play a video in the menu state even after the **Play/Pause** button(▶/II) is pressed, you need to exit from the menu first to play the video.

- **Fast Play**
  If you press the left or right button (◀I/◀◀/▶▶/I▶) while in playing, you can see the screen in the reverse or forward direction with the 2-times speed, 3-times speed or 4-times speed.

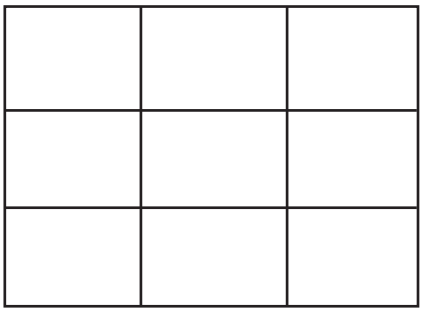
- **Viewing One Scene at a Time**
  If you press the left or right button(◄I/◄◄/►►/I►) while the screen is paused, you can see still images forwardly or reversely. During reverse search, the interval between cuts may vary depending on the recording specification.
- **Audio On/Off**
  You can turn On/Off the play channel audio by pressing the **AUDIO** button from the play screen.
- **Play Screen Mode**



4 Split Screen:
If you select two or more channels from the search screen, the 4 split screen appears.



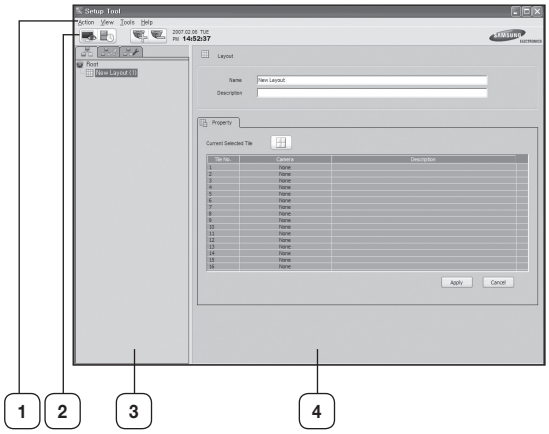
Single Screen:
Only single screen can be selected when a single channel is chosen in the search menu.
If multiple channels are selected in the search menu than the use select between channels in single screen mode using to **CH1** ~ **CH4** buttons.



9 Split Screen:
If the **MODE** button is pressed from the 4 split screen, the 9 split screen appears. The 4 channels being played are displayed on the upper right end of the screen and the live 4 channels are displayed on the lower left end of the screen.

Net I

Net I Setup tool



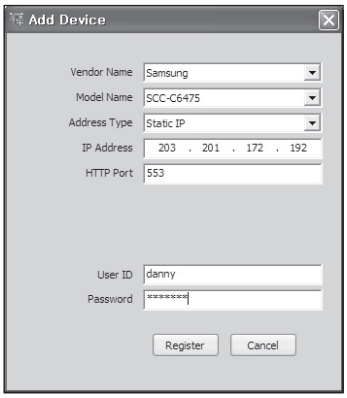
The Setup Tool screen consists of four separate areas:

1. **MENU** area:
   You can see and perform the Setup-related functions.
2. **TOOLBAR** area:
   You can directly perform any of Live Viewer and Search Viewer applications by clicking the icon. Click the icon with the PLUS sign to add a new device. To delete an existing device, click the icon with the MINUS sign.
3. **VIEW TREE** area:
   You can see and configure the view trees such as Logical View Tree, Physical View Tree, and System View Tree.
4. **CONFIGURATION** area:
   You can define the name, description, and the related settings of each entity, and see the settings.

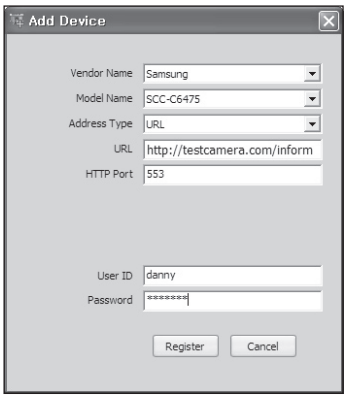
To manually register a device

1. Select **Action** > **Create** > **Device** > **Add Device**, or right-click in the VIEW TREE area and select **Create** > **Device**. You can also use the **Add Device** button ( ) in the TOOLBAR area and select **Device(Manual)**.
2. Set the values for vendor name, model name, and address type.
3. According to the model name or address type value, the displayed items are different.

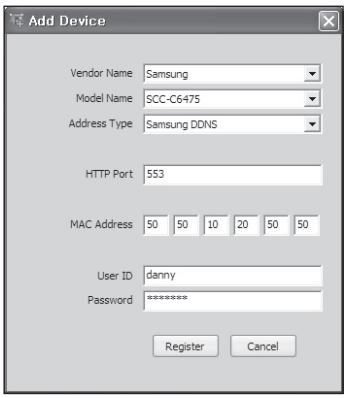
- When the address type is Static IP



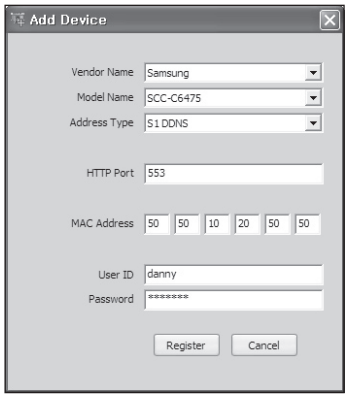
- When the address type is URL



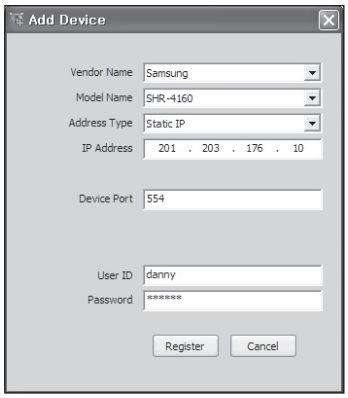
- When the address type is Samsung DDNS



- When the address type is S1 DDNS



- When a DVR is selected



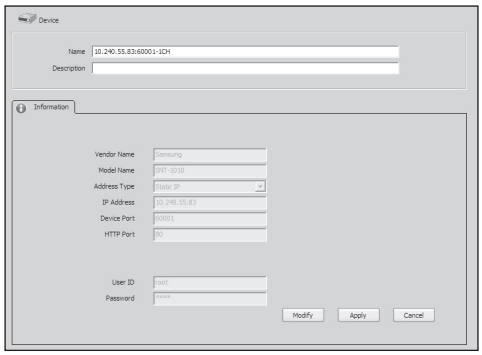
4. Input the values for each address type.
5. Enter the user ID and password and click **Register**.

- If **Cancel** is selected, the values return to the original settings.
- When the MAC address needs to be input depending on the firmware version, the MAC address is required to be input.

When the configuration completes, the registered device is displayed on the physical view tree.
If any registration problem occurs, it is displayed on the reply message box. The possible errors are like the following:

Reply message	Comments
Unused Device	It is a unknown device.
Parameter Error	The registered parameters are wrong.
Disconnected	The device is disconnected.
Not Connected	The device is not listed on the network.
Network Error	The network is not in good status.
Wrong Address	The device has a wrong address.
Wrong User ID	The input user ID is wrong.
Wrong Password	The input password is wrong.
Log-In Fail	The log-on operation has failed.
Access Conflicted	Access conflict has happened.
Exceed the Fixed Number of People	Accessed users are out of limit.
Authority Error	User authorization has failed.
Can't Receive Device's Response	The system cannot receive responses from the device.
MAC Address Conflicted	Duplicate MAC addresses exist.
IP Address Conflicted	Duplicate IPs exist.
Unknown Error	A unknown error has occurred.

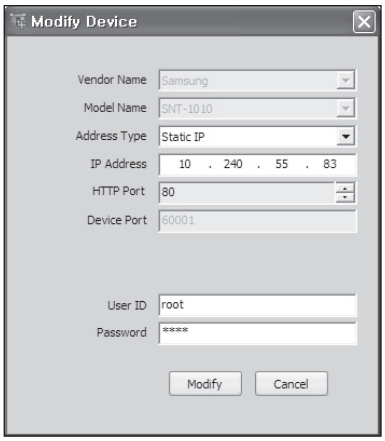
It is set on the phygical view tree. You can see and modify the registered device.



To modify the registered device

1. Select **View** > **Physical**, or click the second icon tab on the VIEW TREE area.
2. Select the device you want to modify and click **Modify**.
3. Modify the values for items and click **Modify**. (Vendor Name, Model Name and MAC Address are not available to modify).

• If Cancel is selected, the values return to the previous settings.



Viewing the device-related settings

The device-related settings can be accessed by selecting **Show Device Page** after right-clicking on a device in the VIEW TREE area.
The device-related settings that have been configured in each device site are displayed here. For furthermore information, refer to each device manual.



Net I Live Viewer



The Live Viewer screen consists of six separate areas:

1. **MENU** area:
   You can see and perform the functions in various menus.

2. **TOOLBAR** area:
   You can directly execute several functions or applications.
   When listed from left to right, the tools are Connect/ Disconnect, Search Viewer, Setup Tool, Save Snapshot, Print Snapshot, Add a Bookmark, Remove the Selected Tile, Start Recording on All Tiles, Stop Recording on All Tiles, and Alarm Indicator.

3. **CAMERA TREE** area:
   You can see the logical view tree, which displays the assigned cameras, layouts, and sites.

4. **CAMERA CONTROLS** area:
   Using the controls, you can handle the videos displayed in the VIEWING area.

5. **VIEWING** area:
   Through the tiles in a layout, you can monitor images from multiple cameras. A layout can permit up to 16 cameras simultaneously in this area. With a dual-screen configuration, you can view maximum 32 cameras. The screen aspect ratio of each tile follows the ratio of the original source.

6. **MESSAGE** area:
   Events received from remote devices and system log messages are displayed in this areas.

But you can also enable or disable the display of four areas (CAMERA TREE, CAMERA CONTROLS, MESSAGE, TOOLBAR areas) using the options on View menu.

For instance, once the **Camera Tree Window** is unchecked, the CAMERA TREE area will disappear.

Using the **Full Screen** function, you can expand the application window size to full screen.

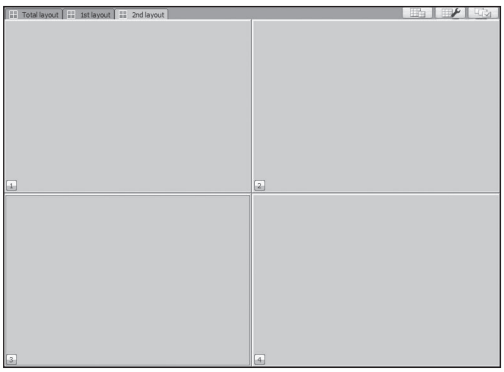


Using layouts

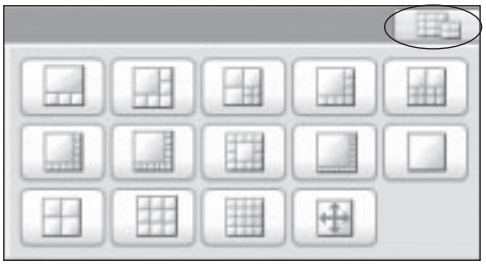


The CAMERA TREE area displays the logical view tree, which contains the cameras, layouts, and sites that have been created through the Setup Tool application.

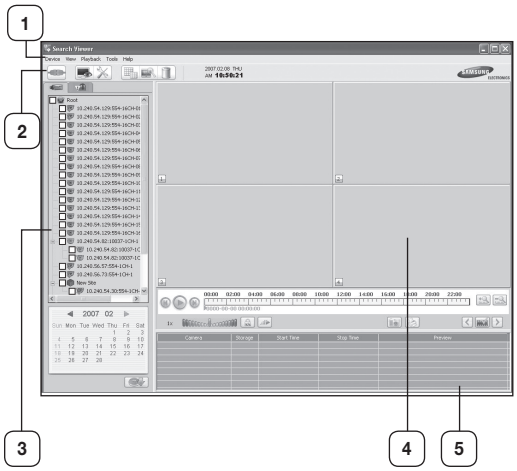
Each displayed entity shows a number next to the entity name. The number is used to separate tiles in the VIEWING area. When a tile is active, it is displayed in orange.



To place multiple layouts in the VIEWING area, double-click each layout in the CAMERA TREE area. Or you can drag the wanted layout in the CAMERA TREE area and drop it in the VIEWING area.
The created layouts have no predefined patterns.
You have to assign patterns to each layout according to the assigned number of cameras and maps. The default layout pattern is given a 2 x 2 pattern.



Net I Search Viewer



The Search Viewer screen consists of five separate areas:

1. **MENU** area:
   You can see and perform the functions in various menus.

2. **TOOLBAR** area:
   You can directly execute several functions or tools. When listed from left to right, the tools are Connect, Live Viewer, Setup Tool, Pattern, Digital Zoom, and Remove Selected.

3. **QUERY GENERATOR** area:
   You can set the condition for query. It includes four different tabs such as Camera Search and Event Search.

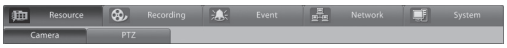
4. **VIEWING** area:
   You can monitor the videos recorded by multiple cameras. A layout can permit up to 16 cameras simultaneously in this area.

5. **QUERY RESULT LIST** and **SYSTEM LOG** area:
   Queried results and system log are displayed here.

• For furthermore information, refer to Net I manual.

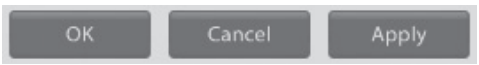
Before use

Setup menu buttons



- By pressing buttons, you can select between each menu.
- The main categories : Resource, Recording, Event, Network, System

Storage/Cancel of Changed Information



- **OK**: Close the windows and saves, any changed information.
- **Cancel**: Close the windows and not saving changed information.
- **Apply**: Dose not close the windows and saves the changed information.

Virtual Keyboard



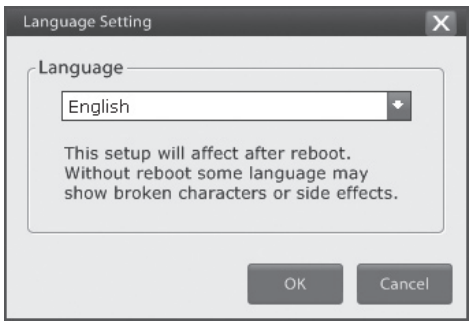
- Click  to operate Virtual Keyboard.
- Click buttons by mouse to input in information.



Language Setting



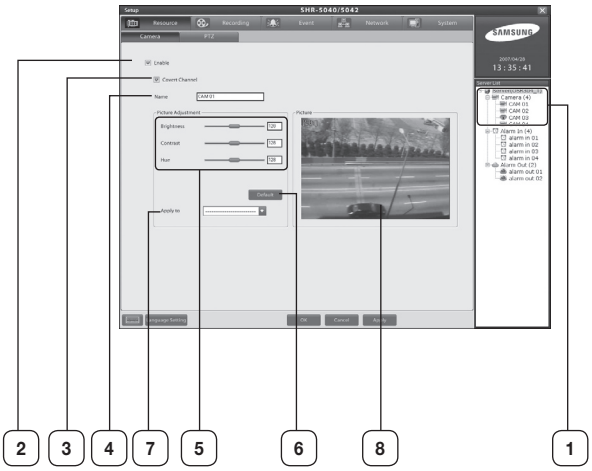
- Click **Language Setting** to change language applied to the system.
- Select language which you want to change, and then Click **OK**.



RESOURCE

Camera

You can set up brightness, contrast, hue, about each cameras. How you choose camera number select camera number in left side of server view.



1. Camera :

Select channel to setup camera.

2. Enable:

setting camera enable or not.

3. Covert Channel:

It is a function of camera picture hide. It is useful for user to conceal camera recording .

- When you watch a screen in remote area. A user who is authorized 'Covert Channel' can see a screen. Please

4. Name:

Input the name of site which camera is installed.

5. Brightness/Contrast/Hue :

Change the setting for the brightness, contrast, hue.

6. Default:

Make initial setting of brightness, contrast, hue.

7. Apply to:

To selected channel setting value can be applied to all or just selected channels.

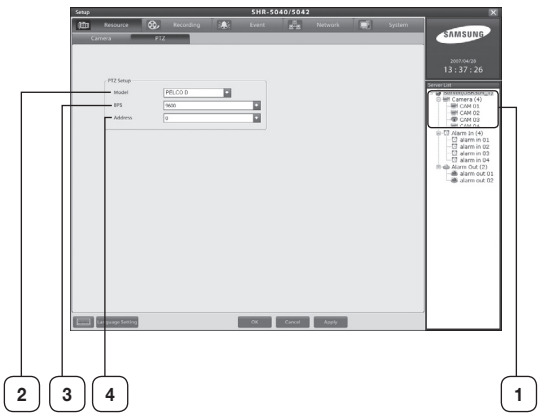
8. Picture:

It shows picture which you select.

- Please check adjustment of camera and monitor because Brightness/Contrast/Hue can not use for change a picture .

PTZ

You can control PTZ or Speed dome which is connected DVR system or external device. To use this device, install RS485 to external device, then set up this device.



1. Camera:

Select channel to setup camera.

2. Model:

Select the PTZ protocol of the installed PTZ.

3. BPS:

Select PTZ transferring speed(4800~19200 Bps).

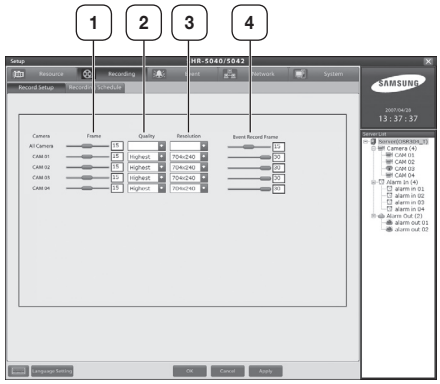
4. Address:

Input PTZ adress(0~99).

RECORDING

Recording setup

Recording information (Recording Frame rate, Quality, Resolution, Event Record Frame rate) can be set up by time and by recording type.



1. Frame:

It can adjust frame number of normal recording.

2. Quality:

It can adjust recording quality.

3. Resolution:

It can adjust recording display size.

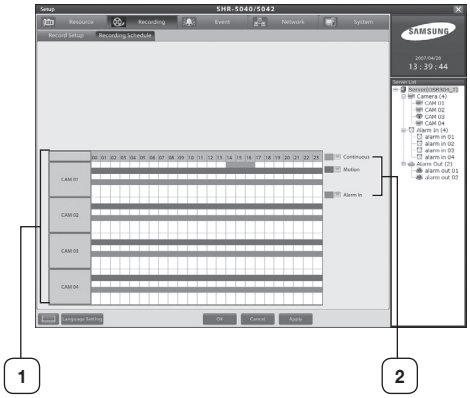
4. Event Record Frame:

It can adjust the number of record frame when “Alarm In” or “Motion” happen.

- The normal record if frame rate should be set less or equal to the event recording frame rate.

Recording Schedule

This function allows you to setup a recording schedule for the DVR by each camera per hour.



1. Schedule Timeline:

You can set a variety of recording mode on time of each cameras. After you select recording mode, designate scope by dragging mouse.

2. Recording Mode:

It shows a variety of recording type. Select recording type and drag it to schedule line.

Continuous: Records continuously.

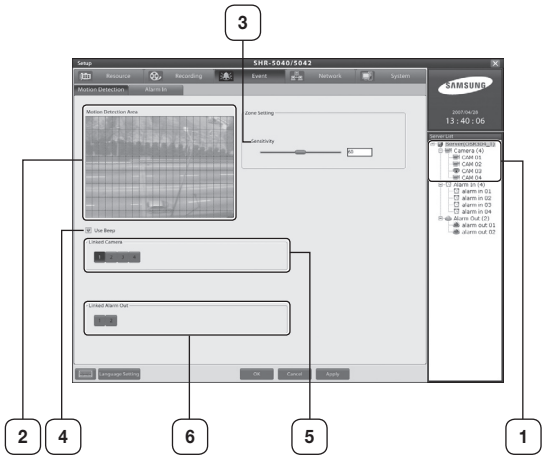
Motion: Recording only when motion is detected on screen.

Alarm In: Recording only when Alarm In is activated.

EVENT

Motion Detection

This Motion Detection uses connected with recording, alarm, emergency when motion is detected.



1. Camera:

Select channel to setup camera.

2. Motion Detection Area:

Designate scope of motion detection area to see movement of picture in camera. It will be marked green color.

Motion detection scope designation: Click mouse left button to designate the area of motion detection

Motion detection scope cancellation: Click mouse right button to cancel the area of motion detection .

3. Sensitivity:

it can set up detection level about motion detection area.

4. Use Beep:

It makes beef when movement is found in motion detection area .

5. Linked Camera:

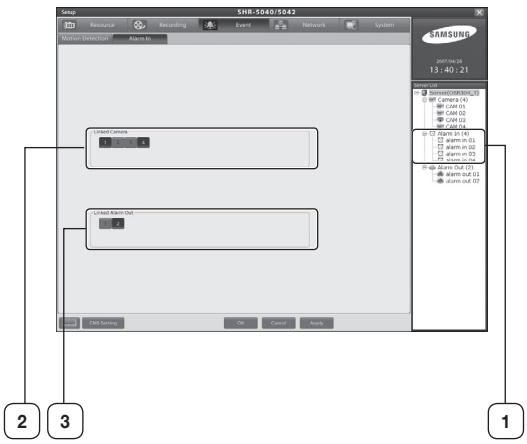
Select camera which will connect with motion detection type camera. If motion detection type camera detect any movement, it will record with selected camera.

6. Linked Alarm Out:

Select alarm out to connect with camera which is set up motion detection.

Alarm In

Alarm In recognize emergency in outer area and use with recording, alarm, PTZ control.



1. Alarm In:

Select channel to setup Alarm In.

2. Linked camera:

Select camera which is linked with Alarm In. It records connected camera together when event occurs.

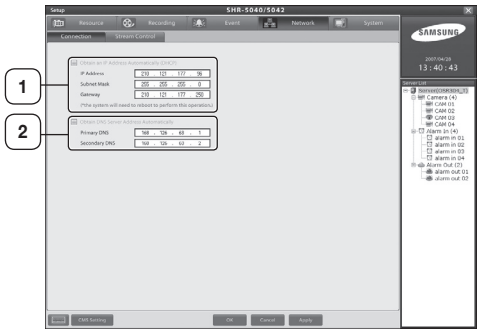
3. Linked Alarm Out:

You can set up emergency sound make when alarm in make event.

NETWORK

Connection

This DVR can set up network components to provide video streaming function and remote control in network.



1. Obtain an IP Address Automatically (DHCP):

Dynamic address assignment is a type of receiving address from DHCP. DVR which receive address automatically from DHCP server set up network address in system.

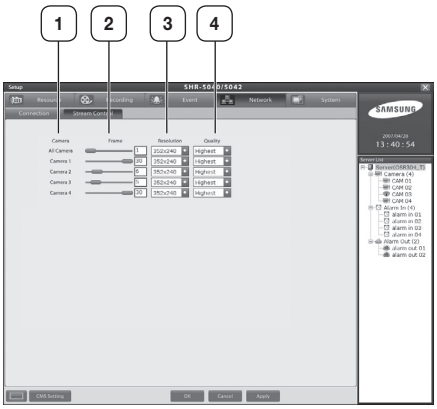
2. Obtain DNS Server Address Automatically:

Input IP address to main DNS server and assistant DNS server.

- Please contact network administer or internet service provider if you don't know ip address or network structure.

Stream Control

Set the network stream control for all cameras by frame rate, resolution and quality.



1. Camera:

It shows each camera number.

2. Frame:

Control the frame rate which is transferred by each camera across the network.

3. Resolution:

Set the resolution size to be transferred by each camera across the network.

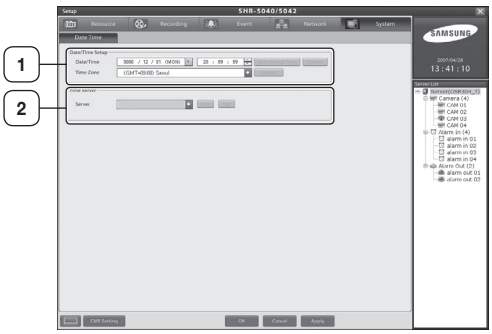
4. Quality:

Set the quality of picture to be transferred by each camera across the network.

SYSTEM

Date/Time

You can set up date and time. Select Date/time set up and save current date and time by NTP server.



1. Date/Time Setup:

You can set up current date and time by use of .

Date/Time:
You can select current time by hands or get current time from NTP server.
And you can adjust current time which received from NTP server to system.
Click Get Internet Time button to receive current time, and click Update button to adjust system.

Time Zone: After you select current time, click Update button.

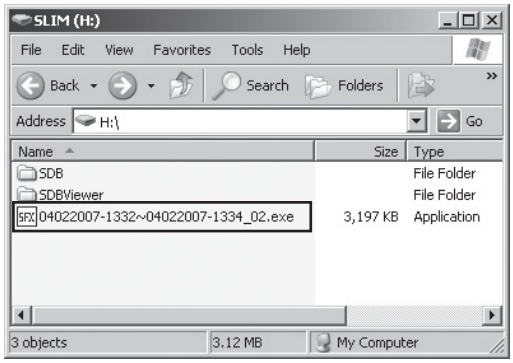
2. Time Server:

Input address of server “NTP (Network Time Server) ” At first. Input NPT server address and click Add button, then NTP server will be added. If you want to delete NTP address, select NTP server will be deleted, then click Del button.

SFX PLAYER

SFX Player Execution

This feature moves SFX backup files to the designated SFX storage folder after the system is connected to your PC. The SFX format files are named with the ‘.exe’ extension as shown below.



Double-click an execution file (.exe file) and the video player plays back the backup data.



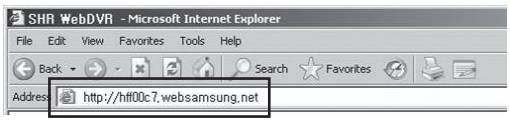
- If you use the SFX Player, a backup data file and a video player are saved in the same execution file. When the execution files are used, you don ’ t need additional video player for playback.

WEBDVR

Connect WebDVR

1. Input DVR IP address or domain (EX : http:// hff00c7.websamsung.net) to connect on Web Browser as below picture.

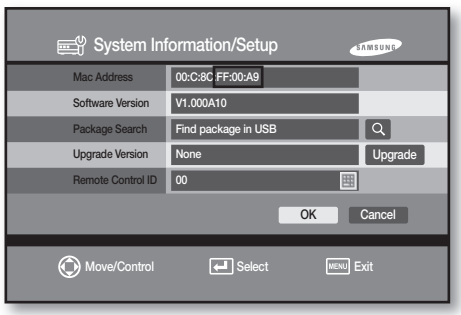
Connect through Domain



Connect through IP address

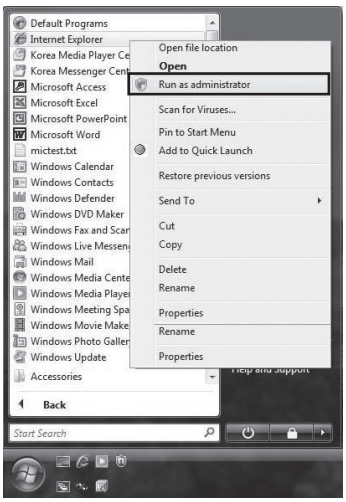


- The domain network connection is available with DDNS setup on SHR-5040/5042 or register DDNS domain to Router.
- If you use SAMSUNG DDNS Service, domain and IP address, Subnet Mask, Gateway will be registered to DDNS server automatically. The automatic assigned domain displays as like **' http://hff00c7.websamsung.net'**.
  - **'ff00c7'**: the last 6 char of MAC Address, **'h '**: DVR(SHR-5040/5042) Identification code. (Please refer page 36, 37 Network section - DDNS setup.)



- If you use on the DVR system public DDNS (dyndns.com, no-ip.com, changeip.com), the registered domain connection is available after joining to the web site.

- To operate WebDVR without errors on Windows Vista, execute "Internet Explorer" as an administrator. And then You can get the right the access to download ActiveX program.
- To execute "Internet Explorer" as an administrator
  1. Click **Start** button.
  2. If you have program lists, wave cursor " Internet Explorer" menu and click right button on the mouse.
  3. If you have pop-up menu, click "Run as Administrator" menu.



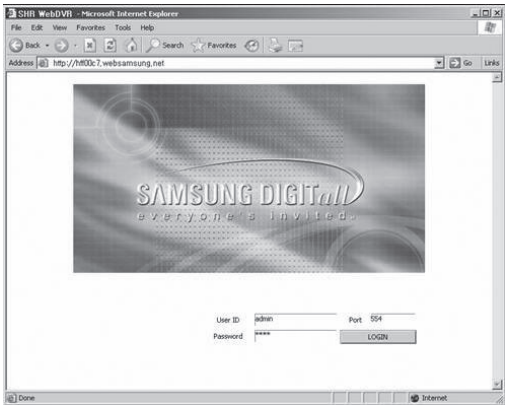
2. Select "Install ActiveX Control" on popup menu.



3. After pop-up message, click [Install] to install software



4. After install is complete, the screen below will be displayed. Insert ID and password to connect to DVR, and then click [LOGIN] .

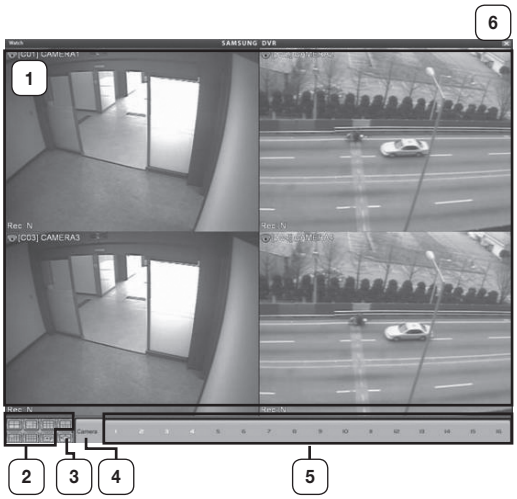


5. If the correct log-in is used the WebDVR program will run and display live video signal.



- We recommended to use ATI VGA card if possible for operation with the WebDVR. Regardless of good compatibility the WebDVR cannot operate on a VGA card which does not support DirectDraw or YUV 4:2:0 YV12 format.
- The recommended size of memory on the VGA card is 64MB or over If not, it can cause the WebDVR not to work.

WebDVR Main Mode



1. [View panel]

This panel displays the live picture from the DVR. And for each channel the screen can be moved to any position by Drag and Drop.

2. [Screen division button]

Choose between 4/6/9/10/16 screen divisions.

3. [Circulation Button]

Button to start and stop circulating the cameras.

4. [Full Screen Button]

Click this button to make the View panel full screen.

5. [Camera Button]

Select camera button to be displayed.

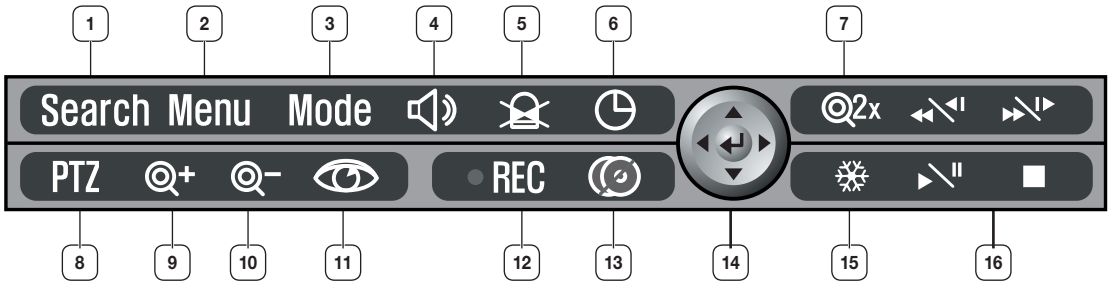
6. [Close Button]

Click to exit the WebDVR program.

POP-UP MENU

Pop-up Menu

You can use this menu by pressing mouse-right button.
Items shown on the pop-up menu are identical with buttons at system's front panel. The benefit of this menu is that user can operate DVR system by simply using mouse.



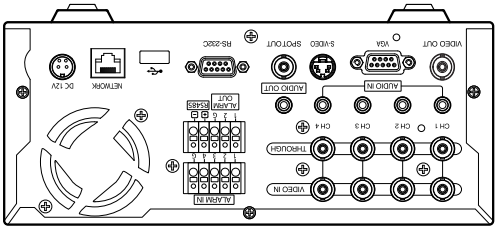
No.	Names		Features	
1	Search	Search button	It starts search mode.	
2	Menu	Menu button	It switches system to setup mode. Users can use this menu to move from lower level menu to upper level menu or when they exit from system setup mode.	
3	Mode	Split Screen Select button	Live Mode	It displays four small screens, PIP screen, and Screen Switch screens.
		Search Mode Select button	Search Mode	It displays four or nine small screens.
4		Audio Setup button	It sets Audio On/Off.	
5		Alarm button	It releases Alarm when Alarm occurs.	
6		Search/Return button	It switches to initial search screen during playing video images.	
7	2x	Zoom button	It magnifies digital image up to 200%.	
8	PTZ	PTZ button	Perform the TELE, WIDE, PRESET or VIEW function when selecting the PTZ button.	
9	+	ZOOM TLLE	It provides Zoom-In feature at PTZ mode.	
10	−	ZOOM WIDE	It provides Zoom-Out feature at PTZ mode.	
11		PTZ Setup menu	It displays PTZ Setup screen at PTZ mode.	
12	REC	REC button	It records video images from all the camera channels regardless of recording schedule.	
13		Backup Cancel button	It cancels backup process.	

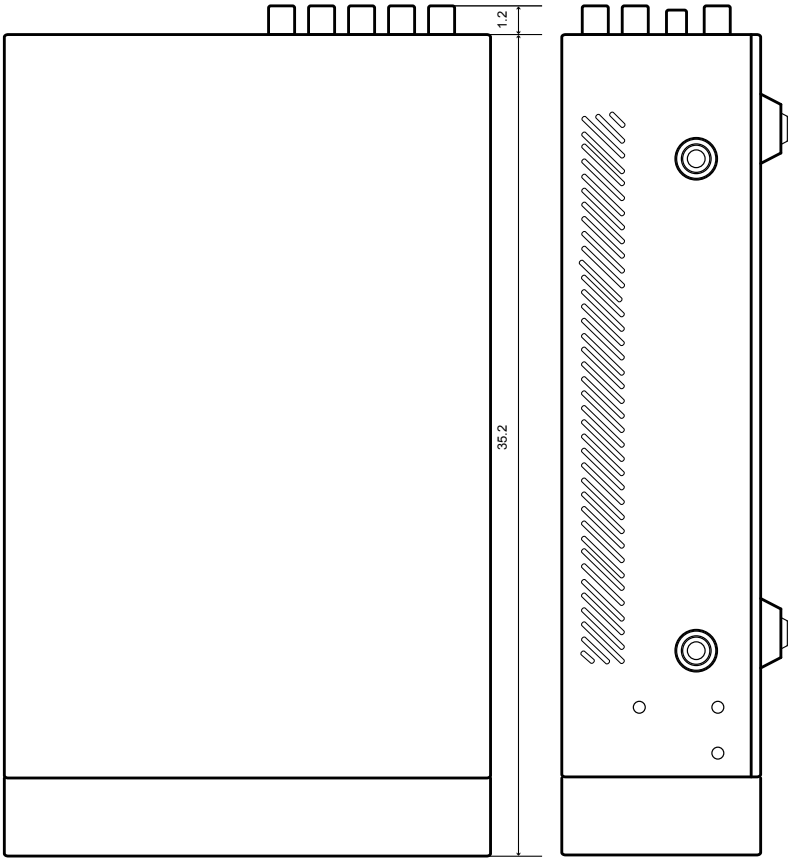
No.	Names		Features
14		Direction button	This button controls PTZ directions at PTZ mode. If user press Enter button, the pop-up menu will disappear.
15		FREEZE button	It executes Freeze feature at Live screen.
16		Fast/Step Reverse	**Fast Reverse**: It performs a search in reverse direction quickly while playing the video. **Step Reverse**: It performs frame-by-frame search in reverse direction while video is paused.
		Fast/Step Forward	**Fast Forward**: It performs a search in forward direction quickly while playing the video. **Step Forward**: It performs frame-by-frame search in forward direction while video is paused.
		Play/Pause	It toggles between Play and Pause operation while playing a video.
		Stop	It terminates Search operation while playing the video.

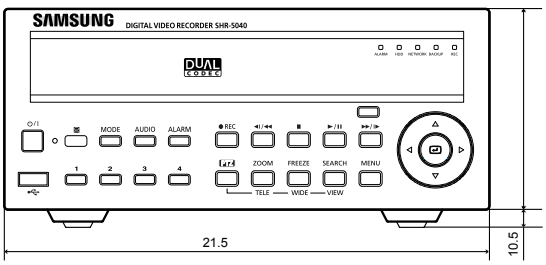
SPECIFICATIONS

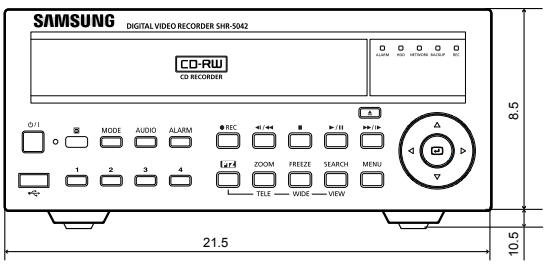
Category		SHR-5040	SHR-5042
OS		Embedded Linux (Version : 2.6.0)	
Compression Method	Video	MPEG-4 ASP	
	Audio	ADPCM	
Video	Input	Composite 4 channel(1Vp-p, 750hm)	
	Output	CVBS 1 Port, VGA 1 Port, S-VIDEO, SPOT 1 Port, Loop Through Out 4 channel	
Audio		4 Channel Recording/1channel Output	
Display	Standard	NTSC(120fps)/PAL(100fps)	
	Resolution	NTSC : 704x480, 352x240/PAL : 704x576, 352x288	
	Live	Single, 4 Split, PIP, Sequence, Freeze, 2x Zoom	
	Playback	Single, 4 Split, 9 Split(Live/Playback)	
Recording	Standard	NTSC(Max 120fps)/PAL(Max 100fps)	
	Resolution	NTSC : 704x480, 704x240, 352x240 PAL : 704x576, 704x288, 352x288	
	Type	REC Mode, Event, Schedule(Countinuous, Motion, Alarm In)	
Alarm In/Alarm Out		4 Ports/2 Ports	
PTZ		RS-485	
HDD		HDD x 2	HDD x 1
CD-RW		None	Supported (Samsung TS-H292c)
USB (Version : 2. 0)		2 Ports	2 Ports
USB Mouse		Supported	
Remote S/W		Supported	
Network		Static IP, DHCP, ADSL(PPPoE)	
Backup	Media	USB	CD-RW, USB
	Type	SFX, AVI	
Dimension		215(W) x 352(D) x 88(H)	
Weight		4.0 Kg	
Power		AC 100-240V, 50/60Hz, 59W (Model : ADP-5412VE)	

OUTLINE DRAWINGS









TROUBLESHOOTINGS(FAQ)

PROBLEM	SOLUTION
Can't turn ON the power of system	• Check if the computer's power cables are all connected properly. • Check the input voltage. • If you can't find any wrong connection, but you still can't turn on the power, you have to consult service center or technisions.
Power is turned ON, but all you can see is a blue screen.	• Check if the monitor's power cables are all connected properly. • Check if the monitor's power button is pressed ON. • Check if the output data cable of SHR-5040/5042 system is properly connected to the monitor. • Disconnect the power cable and connect it. • If you choose VGA mode for video output, you have to wait about 1 minute before you can see surveillance screen on your monitor.
Camera numbers are displayed on the screen, but can't see any visual transferred from camera.	• Check if the output data cable from cameras are properly connected to SHR-5040/5042 system. • Check if the cameras' power cables are all connected properly. • Check the cable connections between camera and SHR-5040/5042. • If video signals are sent to multiple systems, sometimes video splitter generates weak video signal, so monitor displays nothing. In this case, connect the camera directly to the center system to avoid this problem. • Turn OFF and ON the SHR-5040/5042 system.
Video images are displayed, but I can't record these.	• Check if you have set Recording Method at Record Setting. If it is set to 'NONE', you have to set it correctly. • Turn OFF/ON the SHR-5040/5042 system.
Can't find recorded images.	• Check graphs to see if video images were recorded at the time zone you want to find video images. • If no video images were recorded at the time zone, check the setup screen to find if recording method is properly set.
Can't hear audio outputs.	• Check if the cameras' Audio Save Option is set properly. • Check if Audio Play Option is selected already at Search Screen. • Check if microphone and speaker are properly connected the rear side of SHR-5040/5042 system. • Check if the connected microphone input is working properly. • Check if the connected speaker output is working properly.

PROBLEM	SOLUTION
Some cameras show video images in weird color or in abnormal shape.	• Check the cameras connected to the system. Swich the camera that displays defected images with the other camera that displays images correctly, and then you can check which camera is not working properly or whether SHR-5040/5042 system is defected. You can swich cameras by simply switching camera numbers on the screen. • Check camera types. Countries around the world use different video broadcasting standards such as PAL, NTSC, or SECAM. However each standard is incompatible with the other in terms of video image transmission method and consequently video image processing methods. In this case, video images will be displayed, but not in recognizable shape. Check the video image types sent from connected cameras and image processing method set in [System Menu] are identical.
Displayed video signals has a lot of noises.	• Check the video outputs from camera. Swich the camera that displays defected images with the other camera that displays images correctly, and then you can check which camera is not working properly or whether SHR-5040/5042 system is defected. You can swich cameras by simply switching camera numbers on the screen. • Check the cable connections between camera and SHR-5040/5042. Check if these cables are shorted, mixed or disconnected. • Check the surroundings of cable connections between camera and SHR-5040/5042. Check if there is any high-voltage power line around the cable connections. If there is any high-voltage power line nearby the cable connections, it might degrade video image quality or causes noises. • Check the cable connections between camera and SHR-5040/5042. Check if the cables are right for transferring video signals. If you have used power cables for video image transmission, it can cause noises at displayed video images.
Sometimes system is rebooted without any cause.	• If SHR-5040/5042 is not working properly, or there is any malfunction, the embedded self diagnosis feature might cause the system to reboot.
Connected sensors are not working properly.	• Check the sensor types set in Camera Setup menu are identical with the sensors actually connected to the system. • Check if the system's sensors are enabled at [Recording Setup]-[Recording Schedule] menu. • Check if the connected sensors are correctly connected to power source. • Check if the connected sensors' signal lines are correctly connected.
Connected control devices are not working properly.	• Check if the connected control devices are enabled at Camera Setup menu. • Check if the connected control devices are correctly connected to power source. • Check if the signal lines of the connected control devices are correctly connected.

OPEN SOURCE LICENSE REPORT ON THE PRODUCT

This product uses software provided under the name of GPL and LGPL. You can receive the following GPL and LGPL source codes by email request to www.sec.co.kr.

- GPL Software
  Kernel, Busybox, Sysvinit, dvd+rw-tools, cdrtools, dosfstools
- LGPL Software
  gLibc, Inetutils

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