USER GUIDE

SecuMesh DVR

LeadTech Corp.

FCC NOTICE

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TOW CONDITION: (1)THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDERSIRED OPERATION.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit difference from that to which the receiver is connected.
- Consult the dealer of an experienced radio/TV technician for help.

NOTE : The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

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SecuMesh DVR User Guide for Windows®

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DVR Overview

• **Substituting** the current **CCTV/VTR**(analog recording) video surveillance system, **DVR(Digital Video Recorder) is an emerging new method for automatic control, monitoring, alarm and messaging using more reliable digital recording by high-tech computer system with much less human and material resources** than the CCTV/VCR system.

• **DVR system** can record, compress, retrieve and search video images **without need of any extra equipment.**

• High level of reliability of the digital recording in the hard disks **guarantees permanent quality of the video recording.**

• **The best economy** is possible through easy installation, simple operation, and low cost of maintenance of the system.

• **Access to & control of the remote system is possible through the web or the network.**

• Motion detecting & sensing, remote control of cameras **up to 16 independent channels recording** which can be scheduled.

System Requirement & Technical Specification

System Requirement

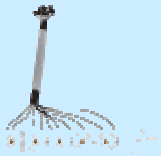
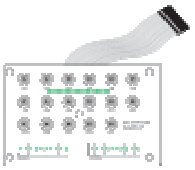
CPU	Pentium IV 1.5GHz or above
OS	Windows 98, ME
Memory	128 MB or above
HDD	40 GB or above
VGA	AGP 32 MB or above
Power	220 VAC

Technical Specification

Display	Max. 120 frames/sec
Recording	Max. 100 frames/sec
Resolution	320 X 240
Codec	MJPEG
Frame size	4 ~ 12 Kbytes/frame
Screens	1, 4, 9, 16
Recording Mode	Continuous, Sensor triggered, Motion triggered
Pan/Tilt	Yes, (Camera dependent)
Communication	LAN (TCP/IP), ISDN, PSTN
Language support	English, Chinese, Japanese, Korean
Client	Remote access to control & monitor the system over Web and network.

DVR Packing List

Item	Quantity
SecuMesh DVR 4CH Board	1
User Guide	1
Application Program CD	1
Accessories	1

Basic Package	Guide Type & Accessories		
	Standard	Option 1	Option 2
SecuMesh DVR board User Guide Program CD	Basic  SMP 4		
		SMC 16 SMP 16	
			 LTC-16BP-C

DVR Server Setup & Guide

All instructions are based on Windows 98

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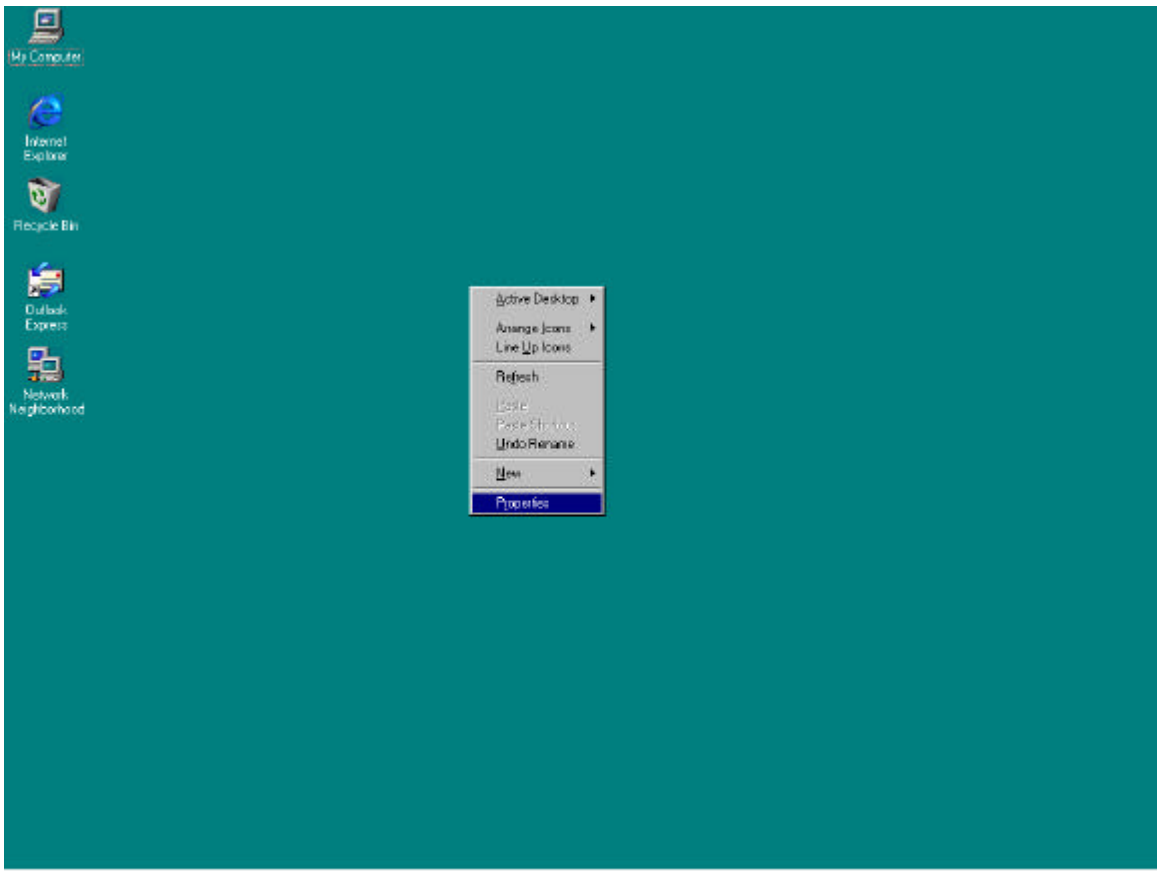
Check Points before Installation

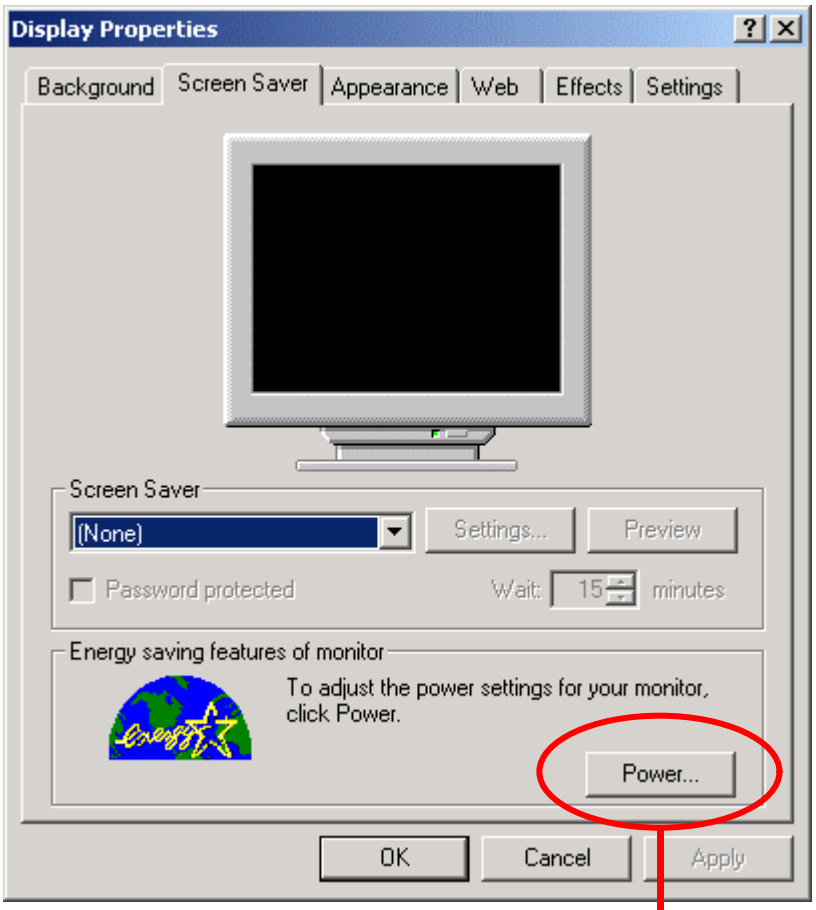
- System Specification
  Refer to system requirement section
- Operating System
  Windows 98, Windows ME
- Direct X should be installed.
- Recycle Bin setup
  Check the check box of "Do not move files to the Recycle Bin. Remove files immediately when deleted." in the Properties menu of the Recycle Bin

- Setup Display



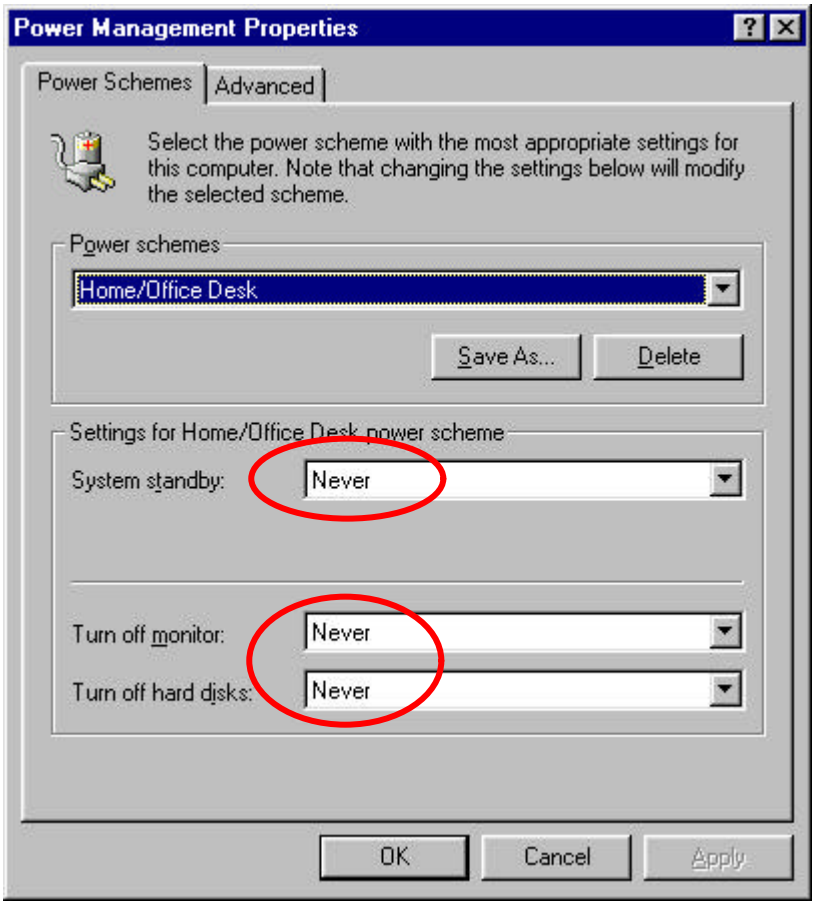
- Click right button of the mouse to choose " Properties"

- Click "Screen saver" tab.



Click "Power ..." button for Power Management Properties setting.

- Set power schemes for both monitor and hard disks to“Never”.

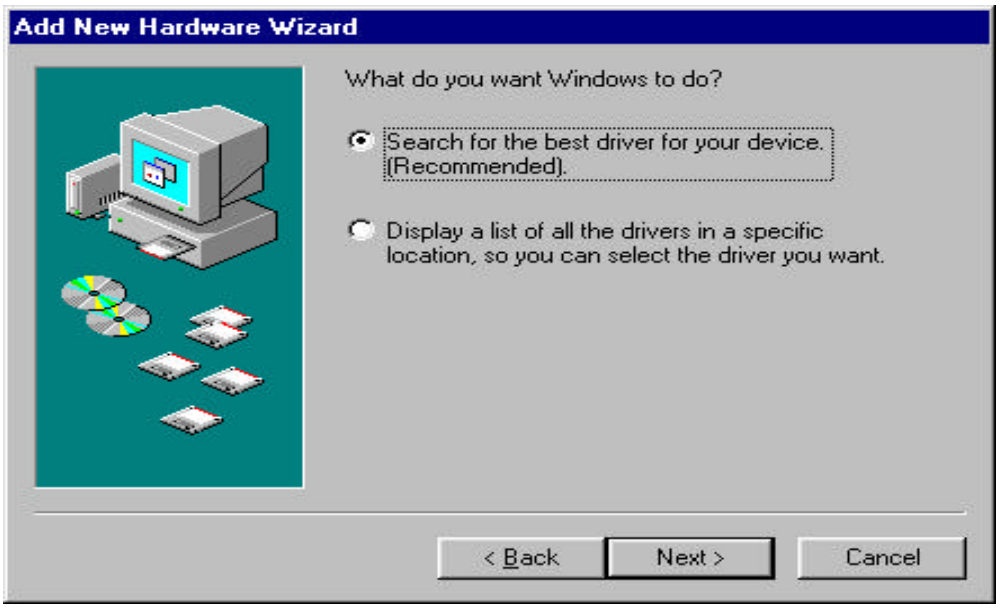


Driver Installation

4 Drivers each for the CAP120 Video Device and the CAP120 Sound Device will be installed. (Totally 8 drivers will be installed.)

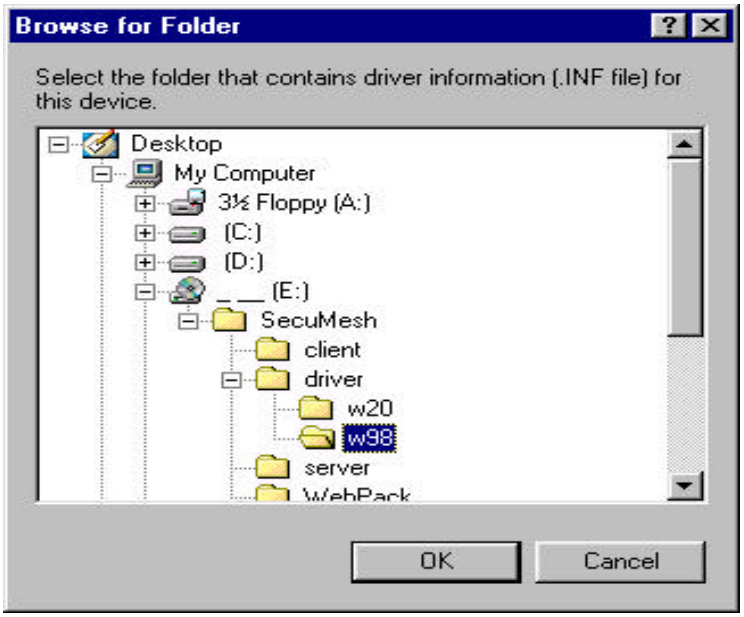
1. Start the system. OS will detect the DVR board and "Add/Remove Hardware Wizard" will prompt. Click "Next"

2. Check the "Search for the best driver for your device (recommended)" option and click "Next".



3. Check the "Specify a location" option and click "Browse.." button.

4. At the "Browse for Folder" window, find the "Driver" directory in the provided program CD and click "Open"



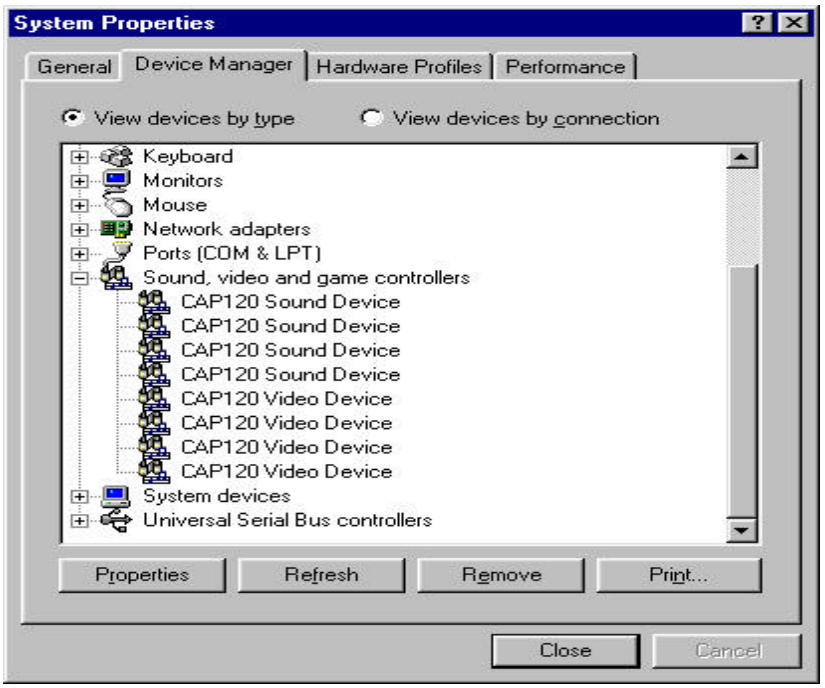
5. At the “Add New Hardware Wizard” window, click “Next” button.

6. Click “Next” button if everything is O.K.

7. After the driver of "CAP120 Video Device" is installed, click the "Finish" button.

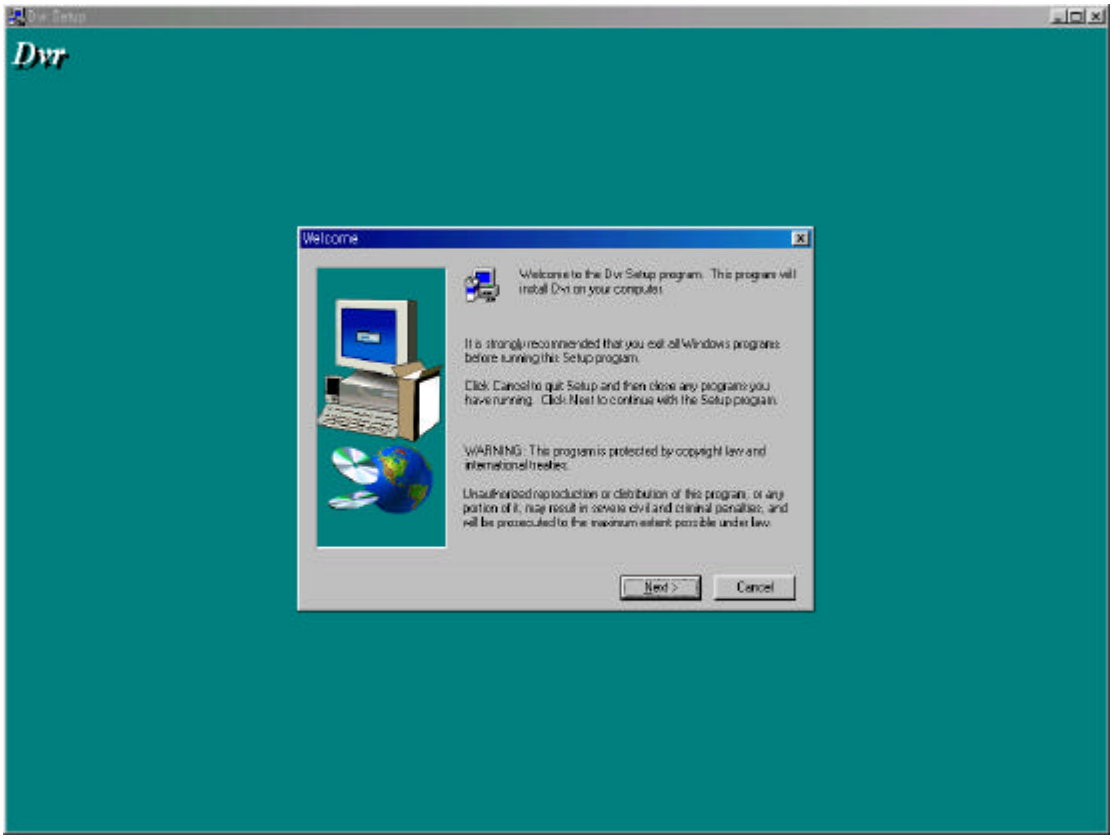
8. Clicking the "Finish" button at above window will automatically start and finish all remaining installation.

9. Follow through "Start → Settings → Control Panel → System → Device Manager → Sound, video and game controllers", and you can check the drivers as below if they are correctly installed.

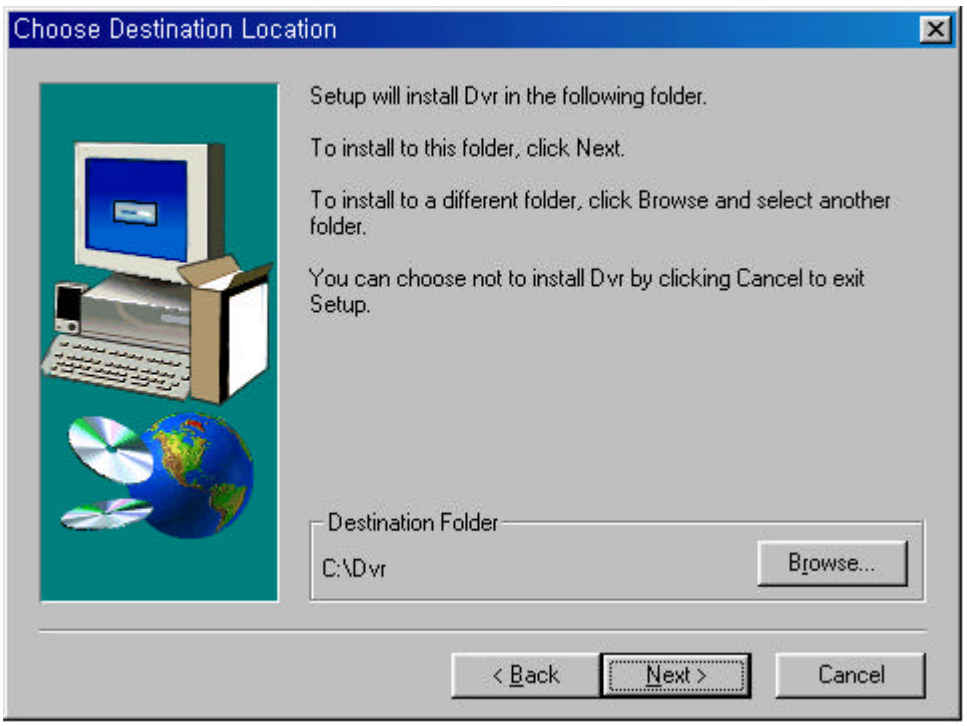


DVR Server Program Installation

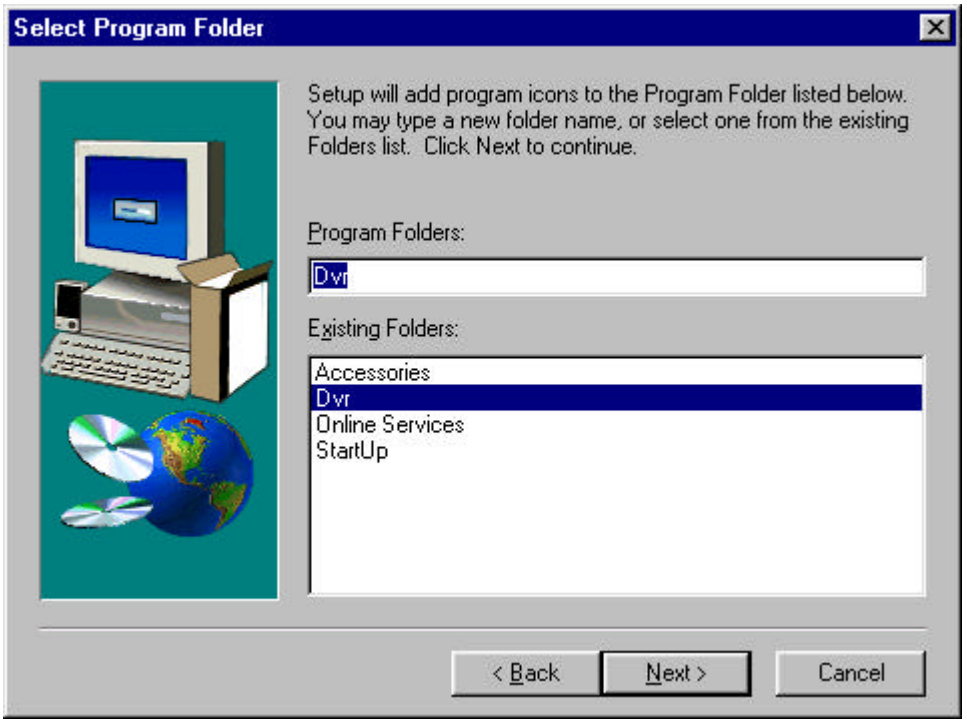
1. Insert the installation CD provided with DVR and select “SecuMesh → DVR sever → setup.exe” and Click “next” button at the first screen as follows.



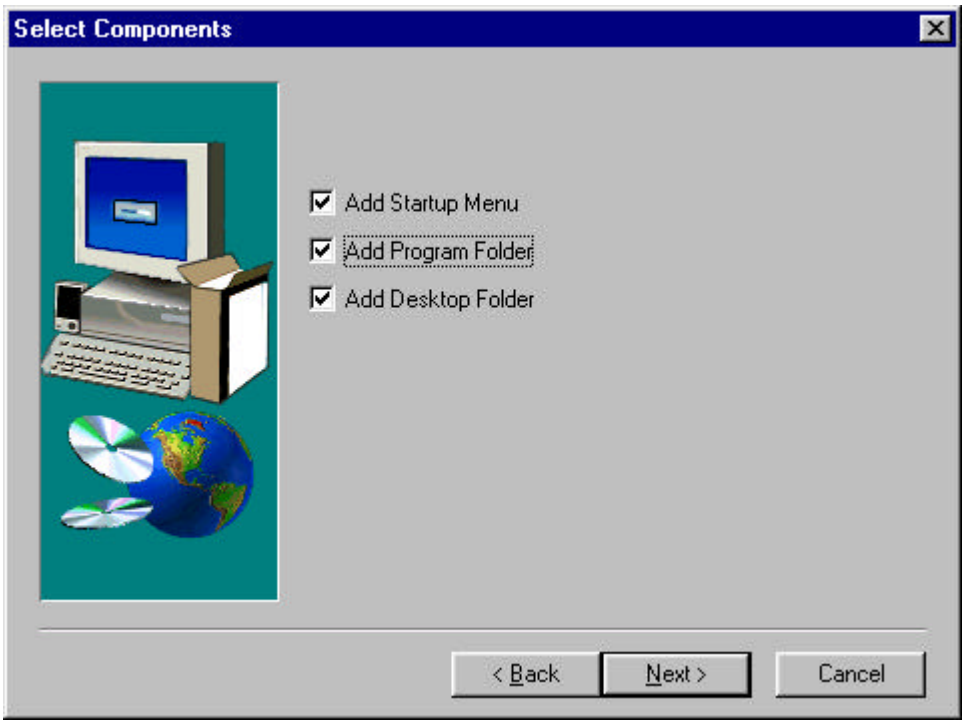
2. Click "Next" button at "Choose Destination Location" window.



3. Click "Next" button at "Select Program Folder" window if you do not want to change the folder name.

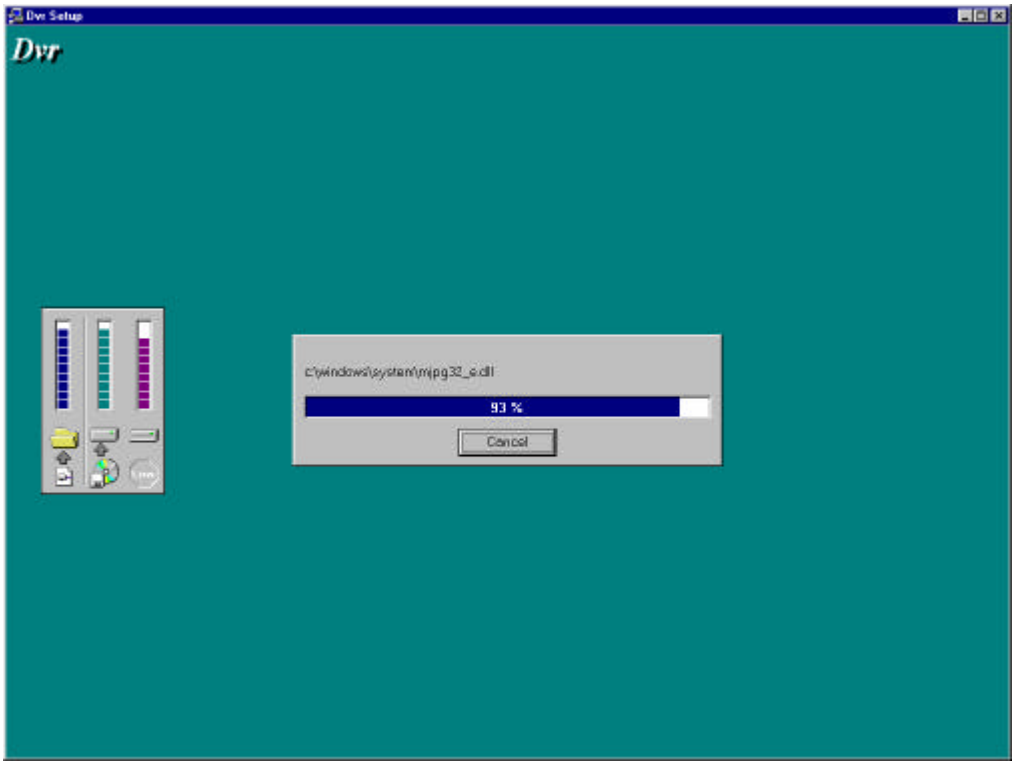


4. Check the boxes of options you want to add.

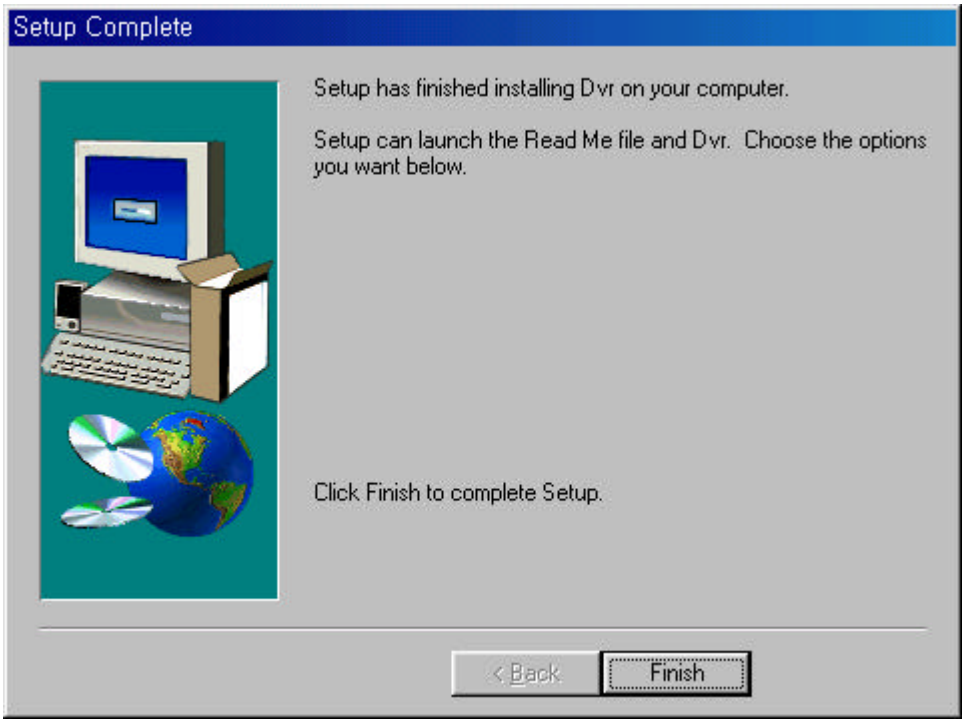


- Add Startup Menu : Program automatically starts when DVR is turned on.
- Add Program Folder : Register in the "Program Files".
- Add Desktop Folder : Register in the "Desktop".

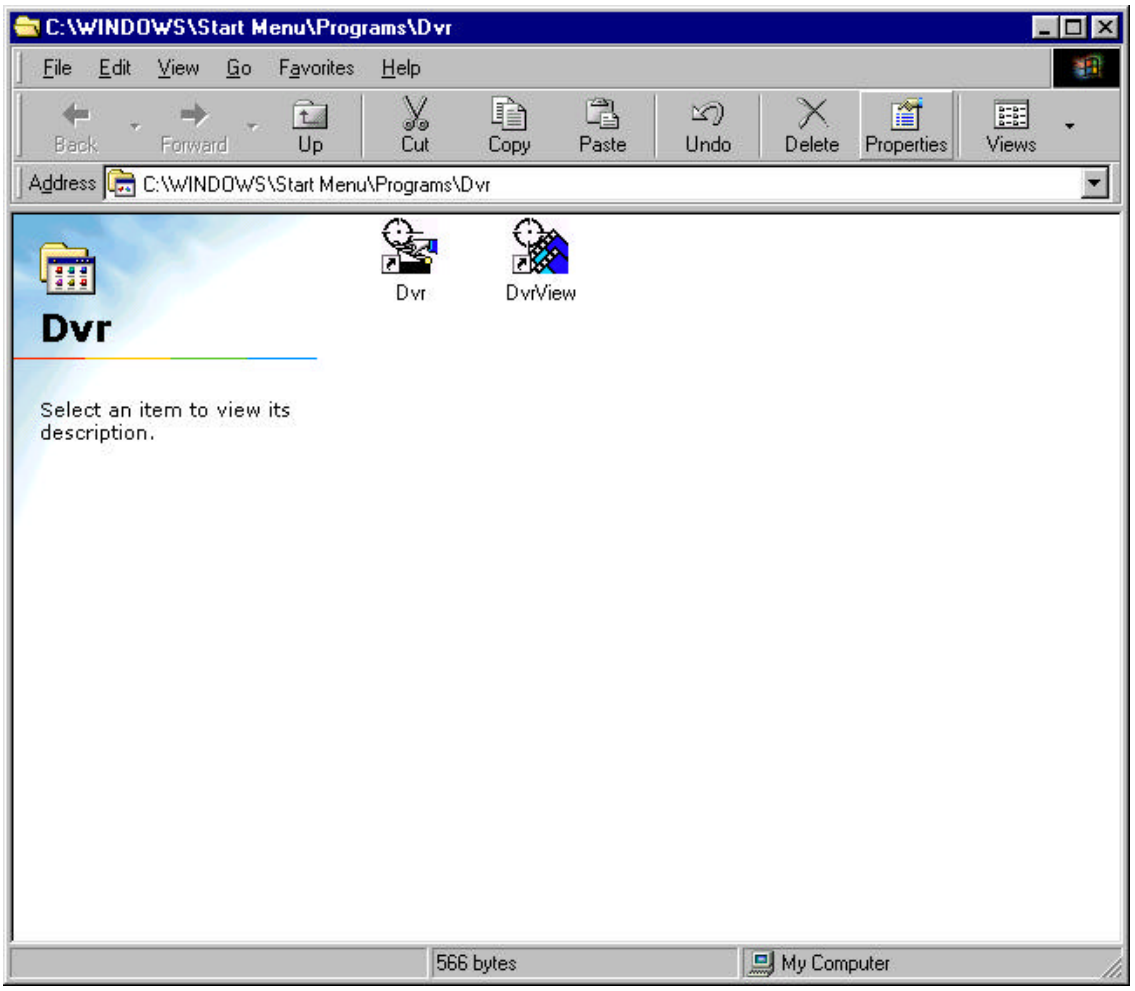
5. Click "Next" button and installation automatically starts.



6. Click "Finish" button when setup is complete.

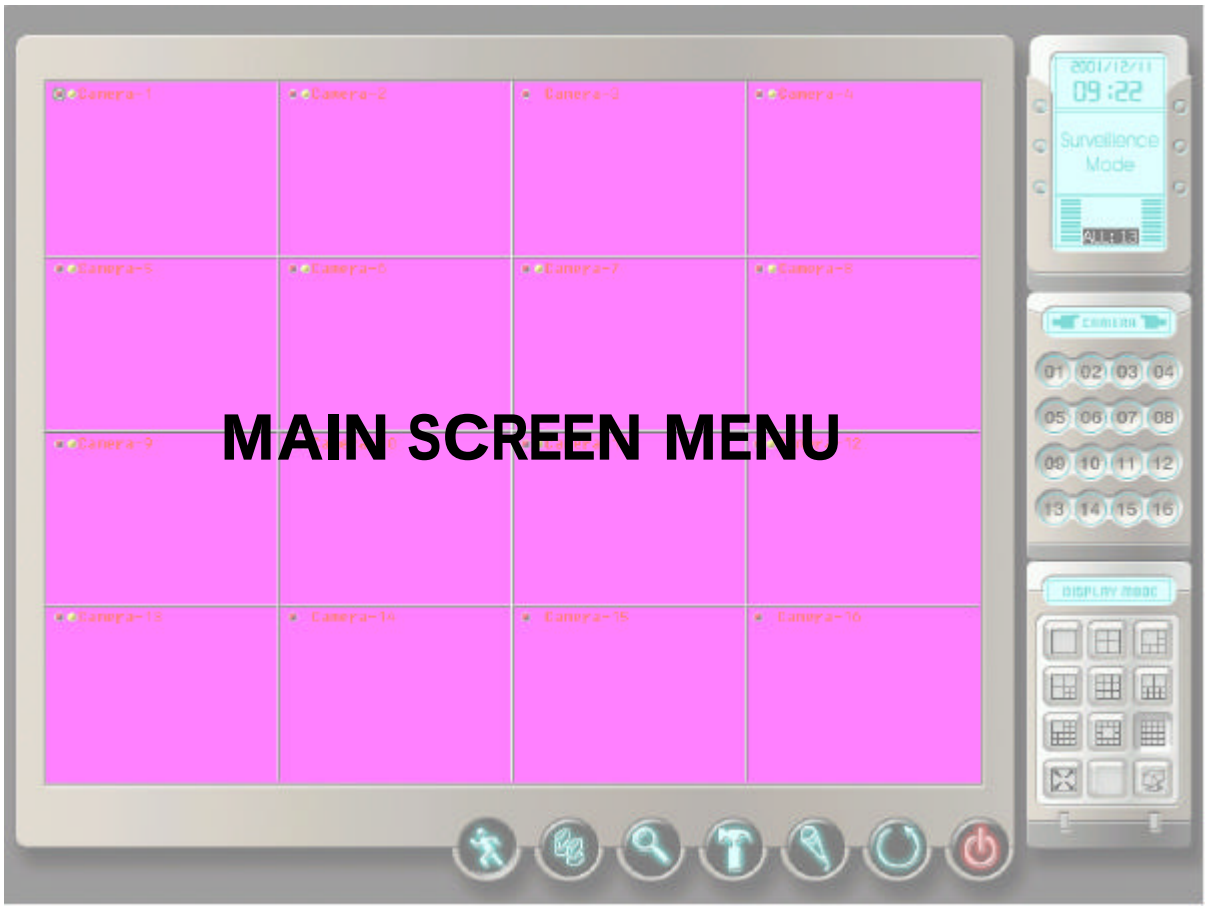


7. Close this window when setup is complete and reboot the system.



If DVR program is not running correctly, check the following.

- Check if SecuMesh 400 board is correctly installed. Click the right button on "My Computer" and Click the "Device Manager" → "Sound, Video, Game Controller" You can check whether the board is working O.K.
- Check if the "16bit" color is selected. You can check this by clicking the right button on desktop and choose "Active desktop" → "Customize desktop" → "Setup".


MAIN SCREEN MENU
09:22
Surveillance Mode
01 02 03 04
05 06 07 08
09 10 11 12
13 14 15 16

Main Screen

① Monitoring display can be divided by up to 16 separate channels.

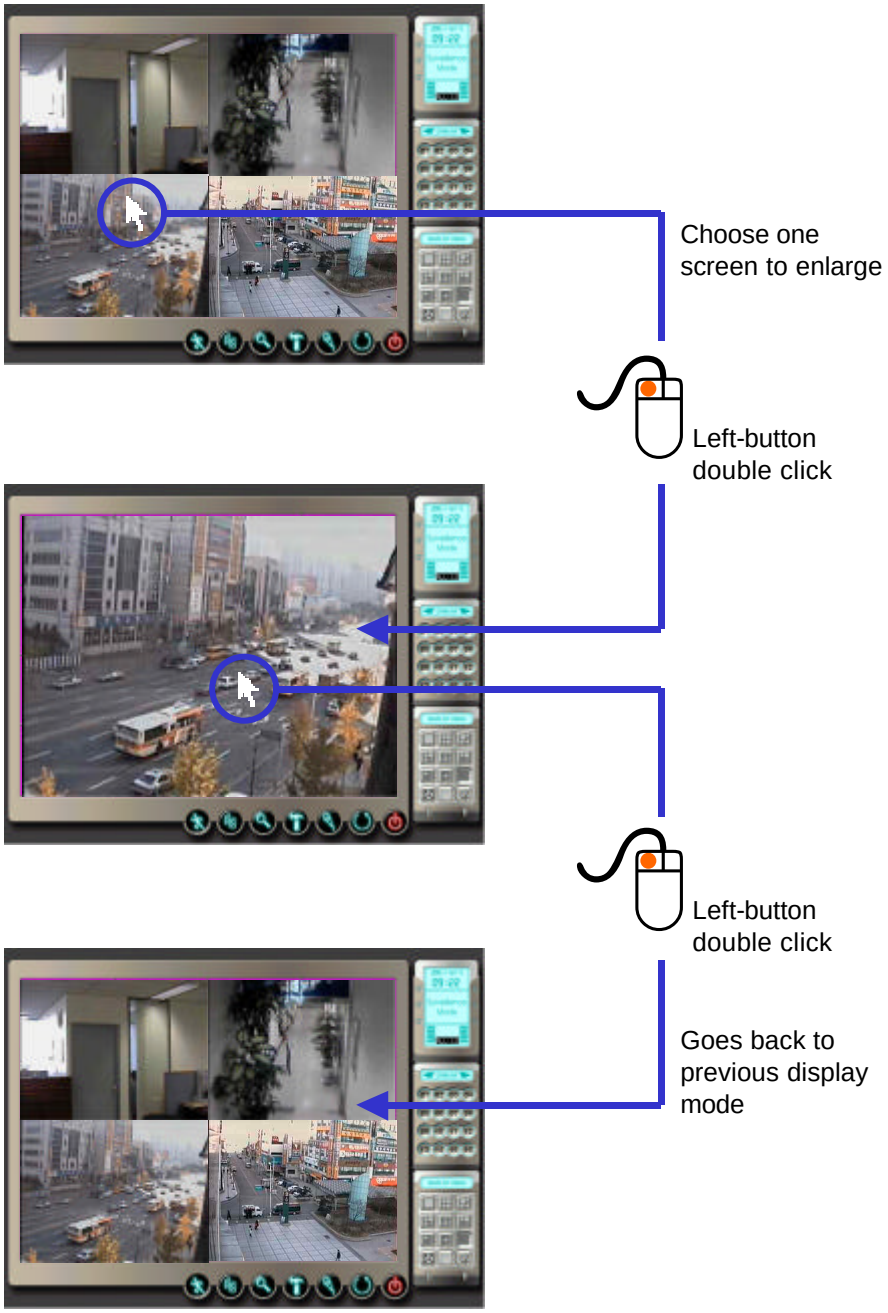
② Day/Time Storage Status Display ☞ page 35

③ Camera selection buttons ☞ page 36

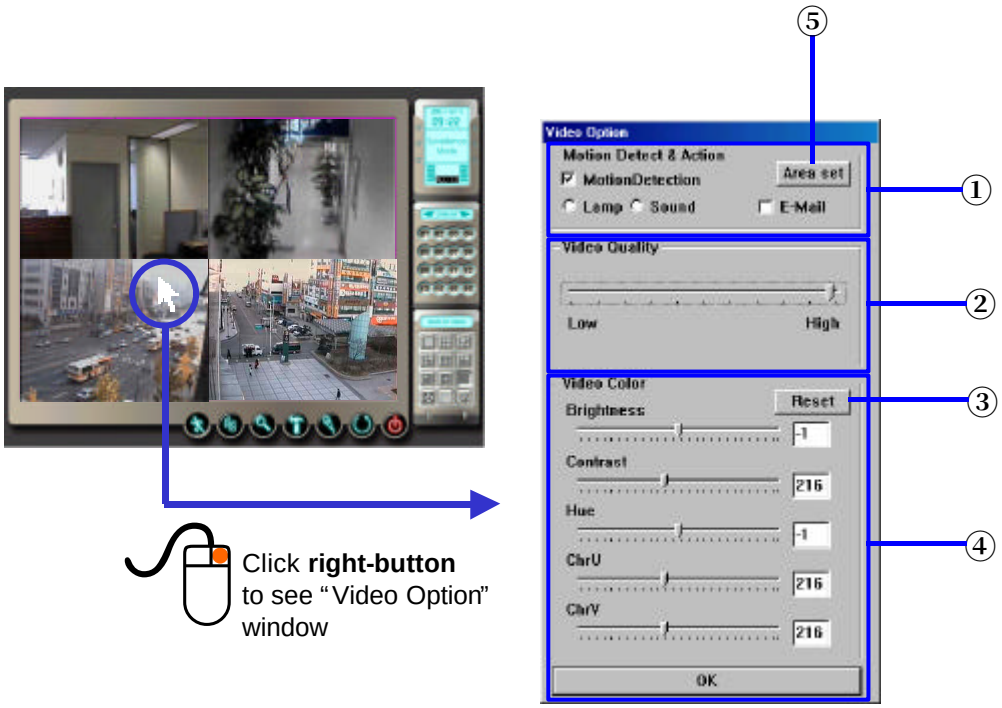
④ Display Option and Pan/Tilt button for camera control ☞ page 37~38

⑤ Function Buttons ☞ page 28~34

Enlarging the screen



Video Option



① Lamp : When motion detected, turn on the lamp on the receiver(RX).

Sound : When motion detected, send alarm to speakers.
(sound card & speaker optional)

E-Mail : When motion detected, send email message when the server is connected to the internet

② Record quality level

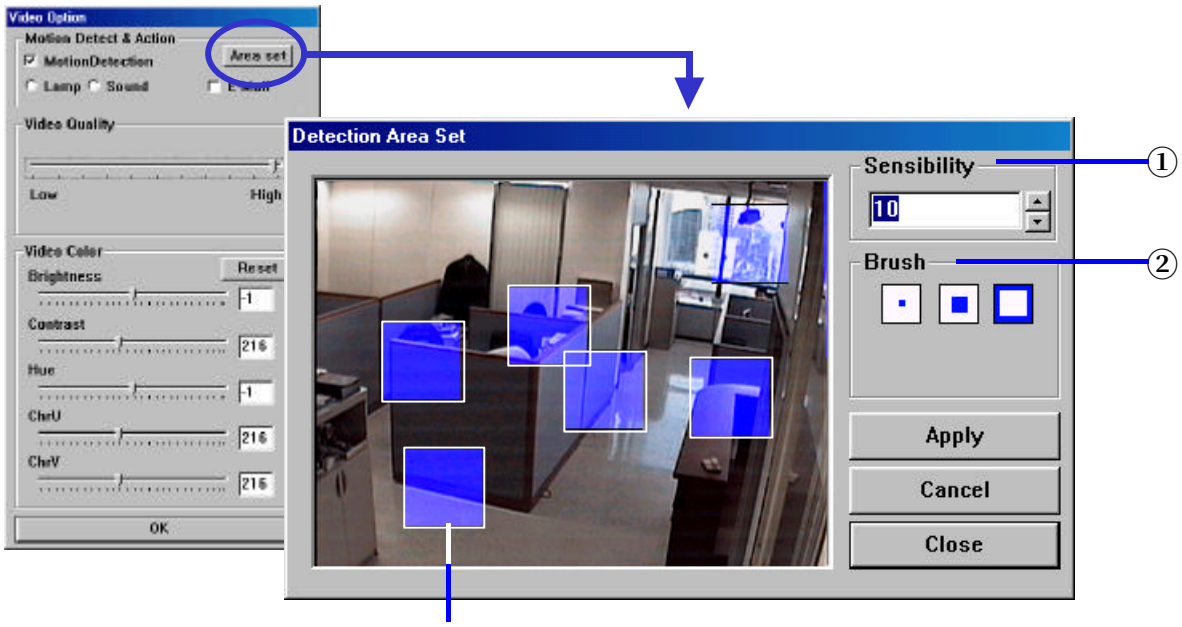
③ Set display option back to default

④ Color brightness and contrast level control

⑤ Setup of motion detection areas ☞ Explained in the next page.

The video option window can be prompted by clicking the right button of the mouse on the main screen and can be setup by each camera independently.

Setup of Motion Detection Area



Blue shadowed image

① Sensibility : The lower, the more sensitive to motion

② Brush : Block size selection.

How to setup

- Area setup ☞ After selecting Brush option, click or drag the left button of the mouse on the screen.

- Area setoff ☞ After selecting Brush option, click or drag the right button of the mouse on the screen.

The blue-shadowed areas are blocked area in which motion can be detected.

<u>All screens are blue shadowed as default.</u>

Recording mode in screen

Transparent Circle

No recording

Green Square

Camera selected

Yellow Circle

FPS Recording Mode

Green Circle

Motion Recording Mode

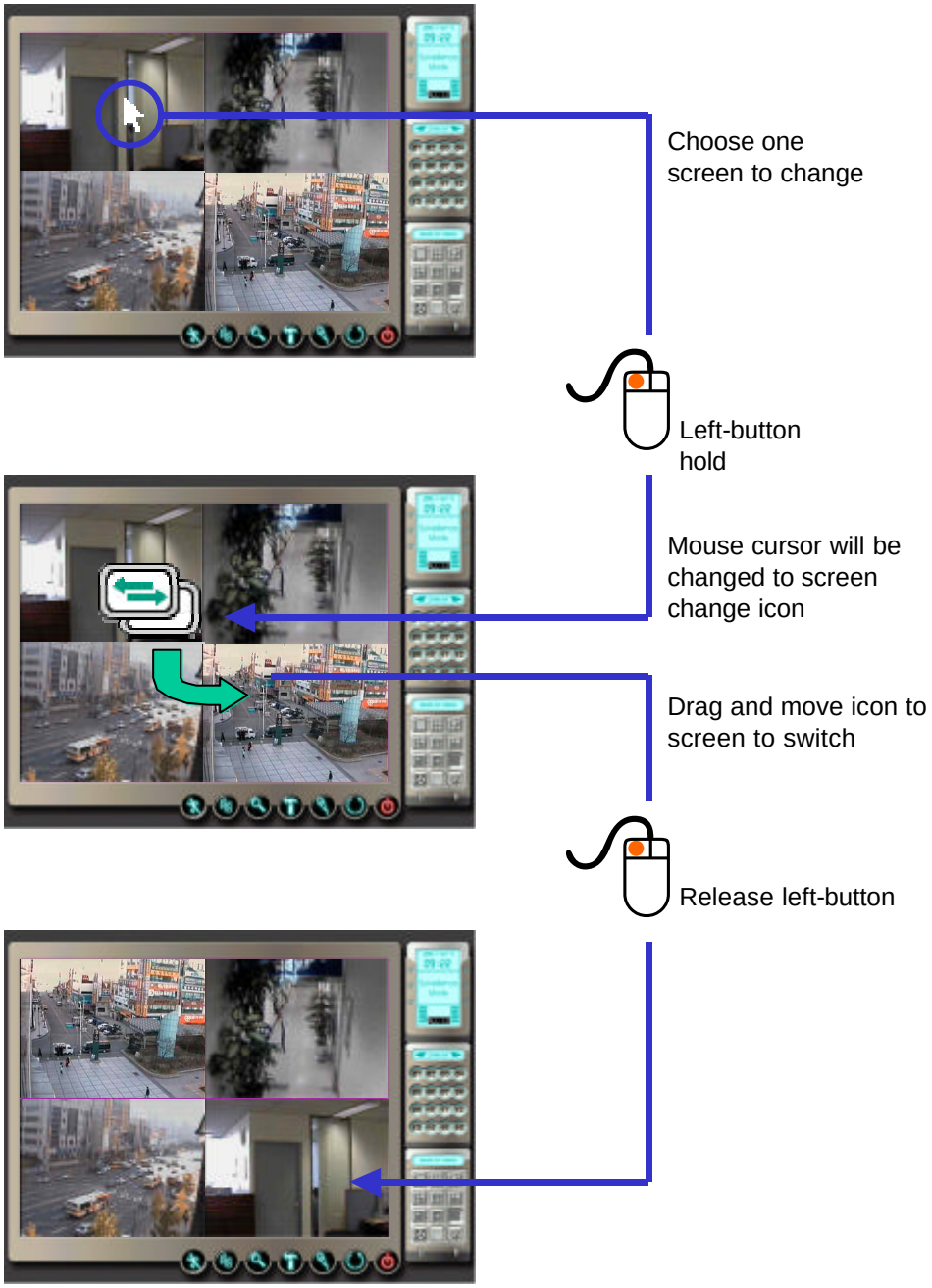
Red Circle

Full Recording Mode

Green and Yellow Circles

Motion Recording Mode and motion detected

Switching Screens



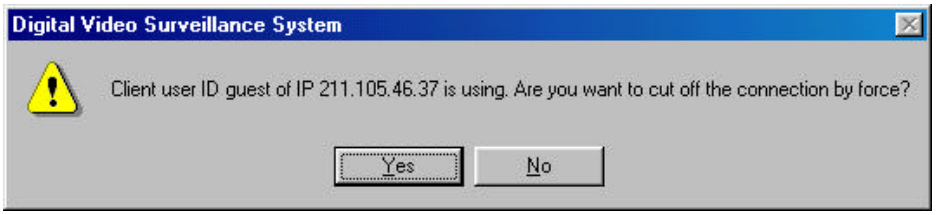
Function Buttons – Motion Detection

ON

1. If motion detect mode is "On", the button turns bright.
2. Motion can be detected by analyzing the change in the recorded digital image sequences.
3. Motion detect can trigger an alarm or sending an email message as determined conditions.
4. All the areas in the all the channels of cameras are set as the default "Motion detect area".
5. Please refer to the page 27 for "Motion detect area" setup.

Function Buttons – Network View

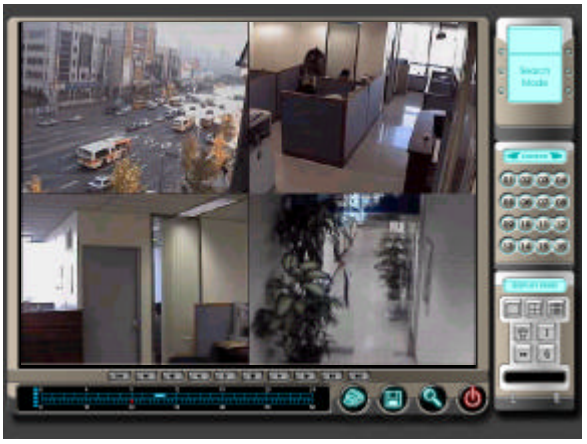
1. Shows IP addresses of the remote client hosts connected to the server.
2. The server can disconnect the clients at will if the server becomes overloaded. In this case, the clients can not connect to the server until the server reopens the connection.



Client IP connected

No Client

Function Buttons – Search



Search mode screen

1. Search mode screen will appear, but the recording is continuing while you are working in the search mode.
2. You can search by date, time or camera.
3. In the case of emergency, back up recorded images first before you work in the search mode.
4. Refer to the page 51~60 for detailed search procedure.

Function Buttons – Setup

1. You can setup following environment of the DVR server.
2. "Basic setup" is for basic factors for server and cameras.
3. "Network setup" is for networking environment factors setup
4. "Recording camera setup" is for recording mode setup and name of cameras.
5. "Surveillance mode setup" is for alarm and email messaging setup .
6. "Storage setup" is for hard disk and file directory setup.
7. "User registration" is for user ID and password information input.
8. "Schedule setup" is for recording schedule setup for each camera.
9. "Sensor schedule setup" is for sensor schedule setup for each camera.

Function Buttons – Microphone

1. Direct conversation between DVR server and the client PC is possible through the microphone and speaker even in the emergency situation without any other help of communication method.
2. The sound card with a full duplex and recording function is necessary for this function.

Function Buttons – Alternating Channel Display

1. When 1, 4, 9-channel display modes are effective, this button makes the respective number of channels alternate by the preset period of time.
2. The alternating period of time can be set from 1 to 100 second in the "**Basic Configuration**" section.
3. This function is not effective in the 16-channel display mode.
4. This function can be interrupted and any channel can be selected in the middle of this mode at any time by clicking the channel.

Function Buttons – Exit

1. This button stops all the activities of the DVR including surveillance and recording.
2. You may need this function before you like to exit Windows.

Status Display

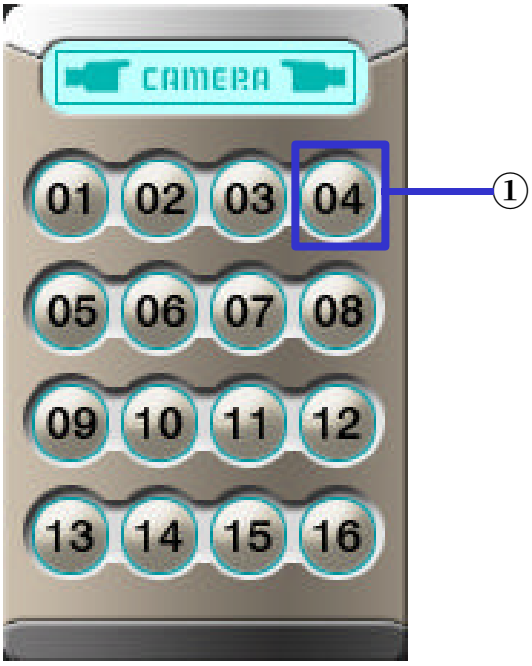
1. Button ① displays date and time.
2. Button ② displays which mode the window is.
3. Button ③ displays selected HDDs and usage percent of selected HDDs.

   ALL:13 → 13% is used in all HDDs

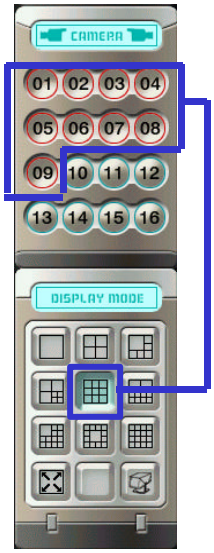
   C:70 → 70% is used in HDD C:

   ☞ HDD can be set with left-button click of mouse.
4. Button ④ displays data storage usage as graph mode.

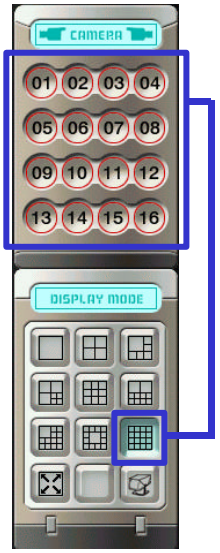
Camera Selection Display



1. Button ① displays number of camera and its status is as follows.

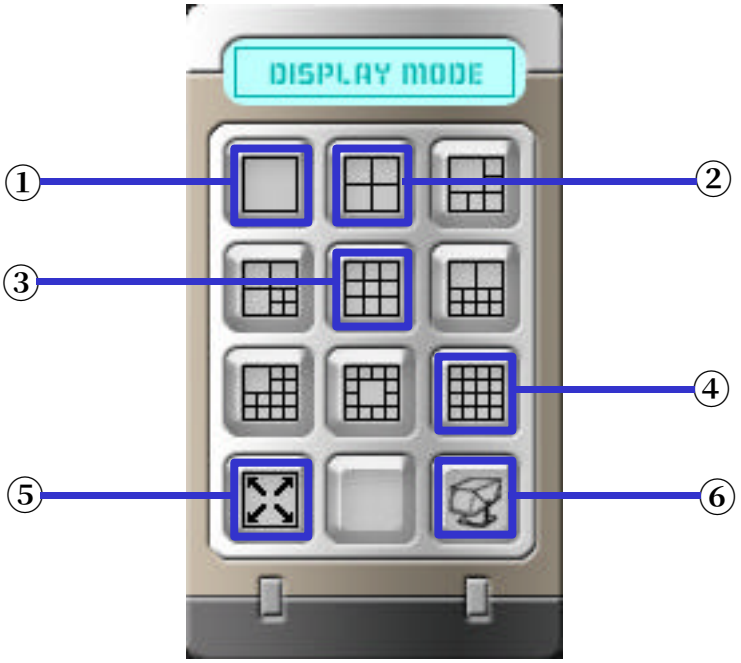


9 channels selected



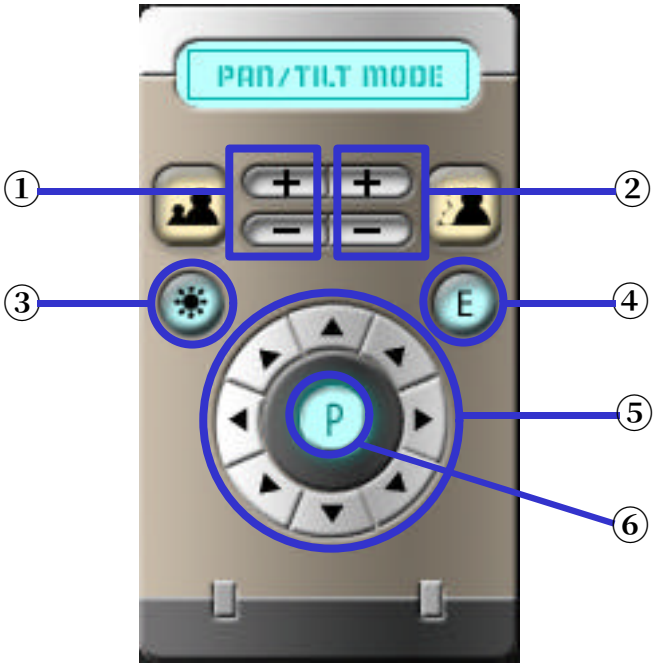
16 channels selected

Display & Camera Control Panel

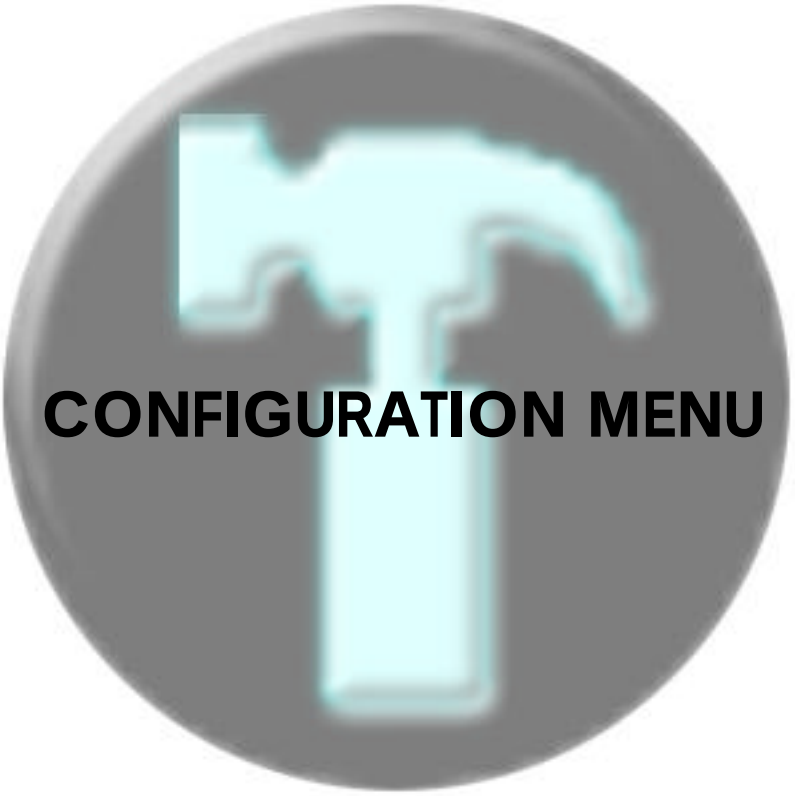


1. Button ① displays one channel on the screen with 800 x 600 resolution.
2. Button ② displays 4 channels on the screen with 400 x 300 resolution.
3. Button ③ displays 9 channels on the screen with 265 x 200 resolutions respectively.
4. Button ④ displays 16 channels on the screen with 200 x 150 resolutions respectively.
5. Button ⑤ expands screen without frame.
6. Button ⑥ activates "Pan/Tilt control of cameras" panel.
7. Other buttons display various display mode as shown on buttons

Pan/Tilt Control of Cameras



1. Because controlling mechanisms of Pan/Tilt/Zoom/Focus of various cameras are all different, please ask your dealer how to use this function correctly.
2. Button ① is for zooming in(“+”) and zooming out(“-”).
3. Button ② is for focusing in(“+”) and focusing out(“-”).
4. Button ③ turns on the camera light.
5. Button ④ is for exit to this Pan/Tilt control.
6. Button ⑤ is for pan/tilt function. Each button makes camera redirect to each direction.
7. Button ⑥ turns on/off of camera power.



CONFIGURATION MENU