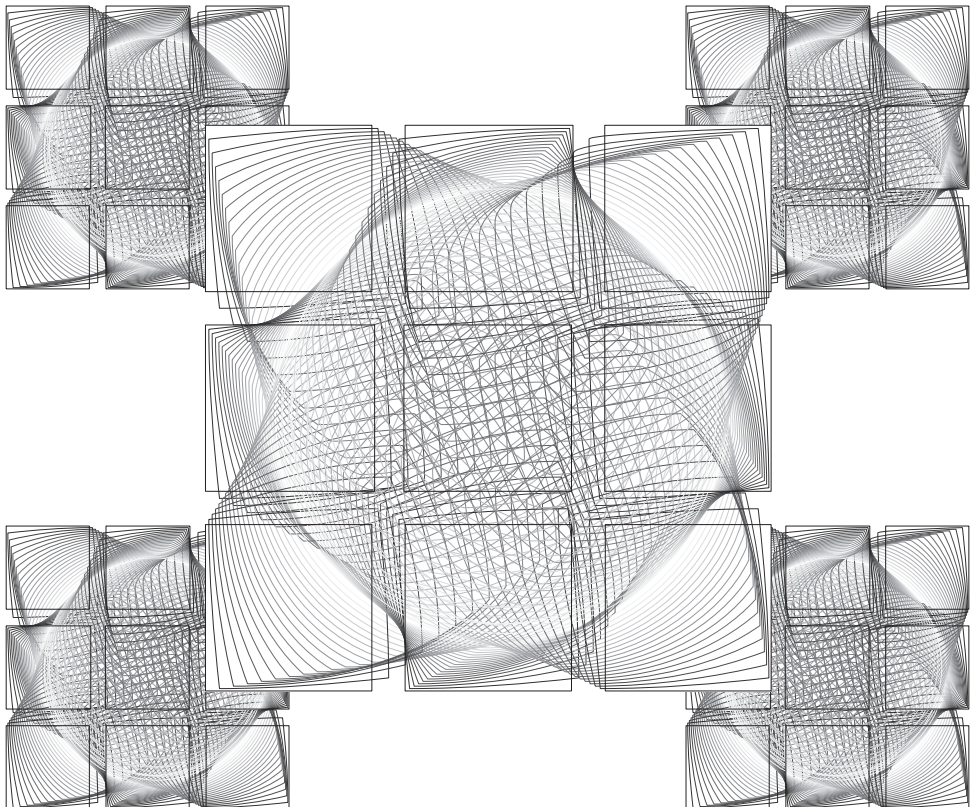




# INSTRUCTION MANUAL

# VA-SW3050

**Network Recorder**



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# Introduction

Network Recorder is an application software for use with Sanyo's CCD cameras via network connection. Installing the Network Recorder on your PC and connecting the PC to a CCD camera(s) through the option board (VA-50LAN) enable you to operate the camera(s) remotely on the PC display.

## ■ Features

- Views live video from up to 128 cameras
- Switches screen display between single screen, 4-part split screen or 16-part split screen
- Records and plays live video
- Records live video automatically with timer or alarm recording functions
- Searches the recorded videos by specifying their recorded date and time
- Prints and saves the video images
- Operates cameras remotely and configures the settings stored on the camera
- Accesses cameras simultaneously from up to 16 PCs, including PCs using Web browser
- Registers up to 10 users per PC and sets operating privileges for each camera
- Provides various functions that support monitoring tasks

## ■ System Requirements

The system requirements for the VA-SW3050 are as follows:

- **PC:** IBM PC/AT and compatibles
- **OS:** Windows 2000 Professional SP4,  
Windows XP Home Edition SP2, Windows XP Professional SP2
- **CPU/Memory:**

**When the number of cameras connected is 4 or fewer:**

CPU: Pentium 4, 2.0 GHz or higher, Memory: 512 MB or more

**When the number of cameras connected is between 5 and 16:**

CPU: Pentium 4, 3.0 GHz or higher, Memory: 1 GB or more

### **MEMO:**

When you record live videos from 17 or more cameras simultaneously on a single PC, recording operation may fail depending on your monitoring system configuration. When the recording operation fails, add PCs used for recording so that the number of cameras to record simultaneously per PC becomes 16 or fewer.

- **Network interface:** 100Base-TX
- **Display card:**
  - 1024 x 768 pixels or higher, 16 million colors or higher
  - AGP graphics card supporting hardware overlay
  - Or PCI Express graphics card (Requires the latest DirectX 9.0c compatible driver.)
  - **Recommended graphics chip**
    - ATI : RADEON9000 series or higher
    - nVidia : GeForce4 series or higher
    - Quadro4 series or higher
    - Matrox : MillenniumP series or higher

# Installing the VA-SW3050 Software

Start the installation program, and use the interactive dialog boxes to advance the installation.

**1 Set the supplied installation CD-ROM into the drive.**

The installation program starts automatically.

**Note:**

If the VA-SW3050LITE, which is supplied with the VA-50LAN option board, already has been installed on your PC, uninstall the VA-SW3050LITE before installing the VA-SW3050.

**2 In the [Welcome to the VA-SW3050 Setup Wizard] dialog, click [Next].**

The setup wizard for the VA-SW3050 starts.

**3 In the [License Agreement] dialog, select the [I accept the agreement] option and click [Next].**

Be sure to read the license agreement thoroughly before proceeding the installation.



**4 In the [License information] dialog, enter the serial number and click [Next].**

The serial number is shown on the envelope containing the installation CD-ROM.

**Example:** 1234-5678-9012-3456



**5 In the [Select Destination Location] dialog, click [Next].**

If you want to change the install destination folder, click [Browse] to select the desired folder.

**6 In the [Select Start Menu Folder] dialog, click [Next].**

If you want to change the Start menu folder, type the new folder name into the box, or select the desired folder from the existing folder list.

**7** In the [Ready to Install] dialog, click [Install].

The installation starts, and the status of the installation progress is displayed in the [Installing] dialog.

**8** After the [Completing the VA-SW3050 Setup Wizard] dialog appears, click [Finish].

This completes the software installation and closes the dialog. The shortcut icon for the VA-SW3050 appears on the desktop.



**MEMO:**

Depending on your system configuration, restarting the operating system may be required after installing the VA-SW3050. When restarting the system is required, follow the instruction displayed on the screen.

**Installing the .NET Framework Components**

The **.NET Framework 1.1** and **.NET Framework Service Pack 1** are required for the VA-SW3050 to work.

When these components have not been installed on your PC, the confirmation dialog for installing them appears automatically before and after the setup wizard. Clicking [Yes] in the dialog and following the instructions on the screen install the .NET Framework components along with the VA-SW3050.

**To Uninstall the VA-SW3050 Software**

To uninstall the VA-SW3050 software, open the [Add or Remove Programs] window from the Control Panel, and select "Network Recorder" to begin the uninstall procedure.

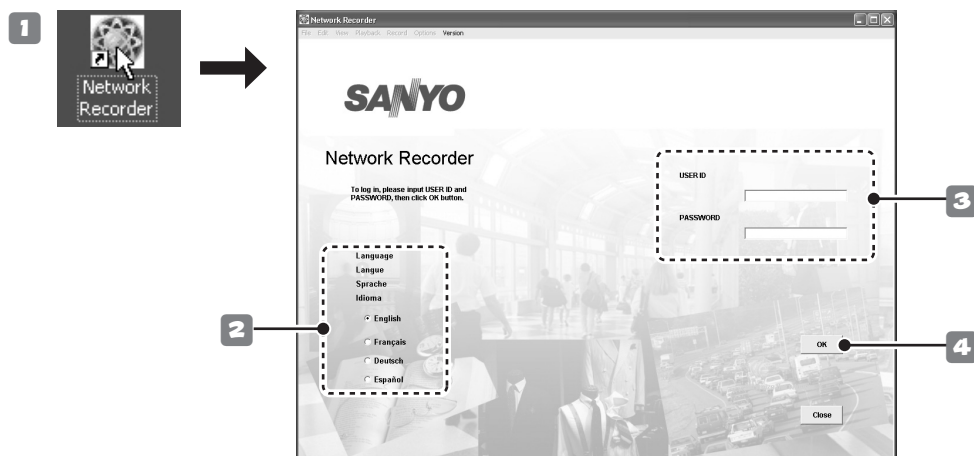
**MEMO:**

Uninstalling the VA-SW3050 does not delete the configured files and the recorded data stored on the PC. When you install the VA-SW3050 again, the newer installation inherits those files and data.

**PC Time Setting**

Since the timing of recorded data on this software is managed according to the PC's internal clock, before activating the software, make sure that the correct time is set in the PC. If the time setting of the PC is changed while the software is activated, restart the software.

# Starting and Logging in to the VA-SW3050 Software



## 1 Double-click the shortcut icon on the desktop.

The VA-SW3050 starts and the login screen appears.

### MEMO:

The VA-SW3050 icon appears in the task tray in the right bottom corner of the screen.

## 2 Click the appropriate radio button to select the display language.

### Available display languages:

English, French, German, and Spanish

## 3 Enter the user ID and password.

When you log in to the software for the first time, use the factory setting values below.

**USER ID** : admin

**PASSWORD**: admin

### Note:

- For security reasons, be sure to change the password for the “admin” user from the factory setting value (see page 36).
- If an invalid user ID or password is entered three consecutive times, the dialog displaying the authentication error message appears. Clicking [OK] closes the login screen automatically.

## 4 Click [OK].

- **When you start the software for the first time or no cameras are registered:**  
The [Camera Setting] screen appears. Register the camera(s) with the software (refer to “Registering the Camera with the Software” on page 7).
- **When cameras are registered:**  
Live video is displayed in the main screen (refer to “Basic Operations in the Main Screen” on page 11).


The following operations are common to each screen following login.

## ■ Logging Off

Click [Log Off] in the [File] menu.

The login screen is returned to.

## ■ Closing the Screen

Click the  button in the top right corner of the screen.

Alternatively, click [Close] in the [File] menu (the [Close] button on the login screen).

This operation closes the screen and stores the software in the task tray icon.

Since this is continually activated as permanent software, the software remains operating and functional.

## ■ Opening the Screen

Right-click the icon in the task tray to display the context menu, and click [Return].

Alternatively, double-click the task tray icon.

The screen appears again.



## ■ Exiting from the Software

Right-click the icon in the task tray to display the context menu, and click [Exit].

This exits from the software, and the task tray icon disappears.



## Concurrent Access via Web Browser

The camera can also be accessed concurrently by multiple admin users via Web browsers.

However, when the user who uses the software performs one of the following actions, other Web-based concurrent admin users are disconnected:

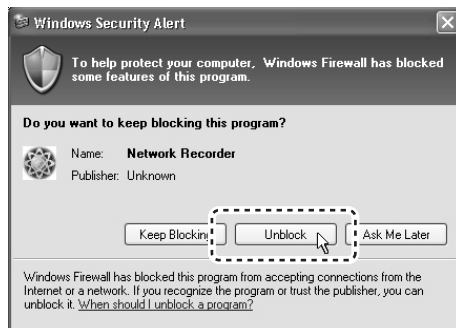
- Camera registration
- Clock settings
- Alarm settings

## Disabling the Firewall Protection

When Windows XP Firewall or some other firewall program is active on your computer, the computer is blocked from communicating with the cameras and thus the system fails to operate correctly. This means that you must disable the firewall protection before you begin using the VA-SW3050 software.

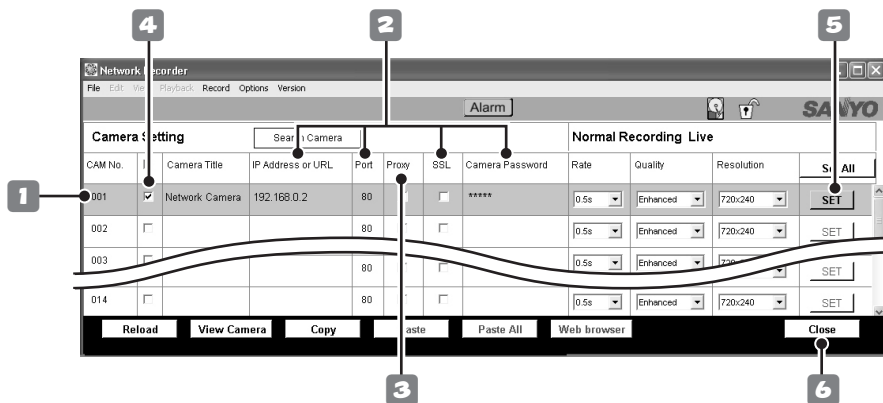
### MEMO:

Note that, if you are using Windows XP SP2, its firewall protection is enabled by default. When the VA-SW3050 searches for cameras after startup, the dialog confirming the firewall setting appears. In this dialog, select [Unblock]. This operation disables the protection against the VA-SW3050 and allows the connection to the camera.



# Registering the Camera with the Software

Registering the cameras with the VA-SW3050 is required for accessing the cameras to display live video. Set the IP address of registered cameras using “FIX” (manual) mode (see “NETWORK SETTINGS” on page 12 in the option board instruction manual).



- **When no cameras are registered:**

After the login procedure, the [Camera Setting] screen automatically appears.

- **When you register additional cameras or change the camera settings:**

Select [Camera Setting] from [Options] in the menu bar.

- 1 Click the camera number to register in the [CAM No.] column.**

The color of the clicked camera row changes.

- 2 Enter basic information for the camera.**

Enter appropriate values according to the camera settings.

- ① IP Address or URL**

When changing the address or URL, use the camera search function (see page 8).

- ② Port**

The default setting can be “80” or “443” depending on the [SSL] setting.

- ③ SSL**

When you use the SSL communication for accessing the camera, select the check box corresponding to the camera.

- ④ Camera Password**

Enter the password for a **guest** user configured on the camera. The default setting is “guest”.

- 3 When you use proxy server, select the check box corresponding to the camera.**

To use proxy server, complete the proxy settings under the [Options] menu (see page 43).

- 4 In order to make the settings valid, select the check box corresponding to the camera.**

- 5 Click [SET].**

This operation completes the registration procedure and starts accessing the camera.

**When you register multiple cameras, repeat steps 1 to 5.**

- 6 Click [Close].**

The [Camera Setting] screen closes, and the main screen opens with the live video from the camera registered.



## ■ Using the Camera Search Function

The camera search function automatically retrieves the IP addresses for all cameras connected to the network.

- This function configures the IP addresses all at once for the cameras found, eliminating the need to enter IP addresses manually.
- When there are overlapping IP addresses, you can specify a new IP address on the [Camera Setting] screen.

### MEMO:

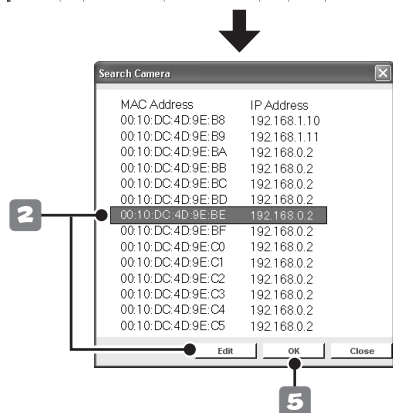
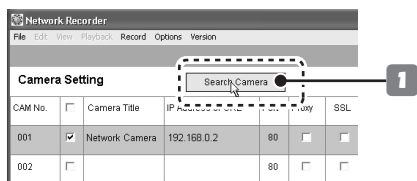
At the time of factory shipment, the IP address for every camera is set to “192.168.0.2”. When you connect multiple cameras with the factory setting, use the camera search function to configure the unique IP address to the cameras.

### Note:

- When the confirmation dialog on firewall appears while performing the camera search function, disable the firewall function to allow the connection to the camera (see page 6).
- The camera search function may detect network devices other than cameras.

### 1 Click [Search Camera].

The MAC and IP addresses for the cameras detected are listed in the [Search Camera] dialog. The addresses are displayed in the order of the MAC addresses.



- 2 If there are any overlapping IP addresses, in the [Search Camera] dialog, select the camera(s) for which the IP address needs to be changed and click [Edit].**

The [Edit IP Address] dialog appears.

### 3 Enter new IP address.



To change the IP address for a camera, you must first change the subnet mask and default gateway values (for the IP address) on the PC, according to the camera. Note that you must use the same subnet mask and the default gateway values as those for the camera.

### 4 Click [OK].

The new IP address is transferred to the camera.

The [Edit IP Address] dialog closes, and the IP address in the [Search Camera] dialog is also updated.

**Use the same procedure (steps 2 to 4) until there are no overlapping addresses remaining.**

### 5 Click [OK] in the [Search Camera] dialog.

This operation closes the [Search Camera] dialog, and all the IP addresses displayed in the [Search Camera] dialog are automatically reflected in the [Camera Setting] screen.

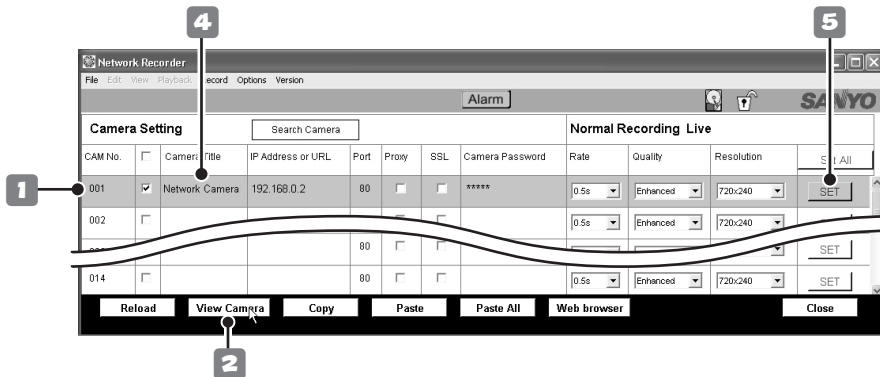
### Note:

If there are any overlapping IP addresses, the “IP Address Duplication Error!!” message is displayed. When this error occurs, configure the IP address again.

# Registering the Camera with the Software

## ■ Specifying the Camera Title

For a registered camera, set the camera title while monitoring its live video.

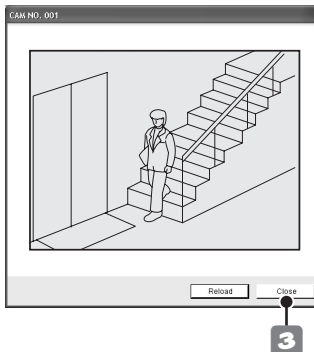


- 1 Select the camera for which you want to specify the title by clicking the corresponding row.**

The color of the clicked camera row changes.

- 2 Click [View Camera].**

The still image from the camera you selected is displayed in the popup window. To update the displayed image, click [Reload].



### MEMO:

When the camera has not been registered or is not registered appropriately, a communication error occurs and the image is not displayed.

- 3 Click [Close].**

This closes the window.

- 4 Enter the camera title.**

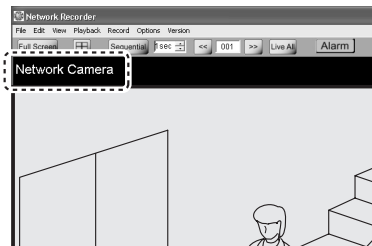
It is recommended to set the title according to the camera location and so on for easier management on the display.

The title can be up to 16 alphanumeric characters.

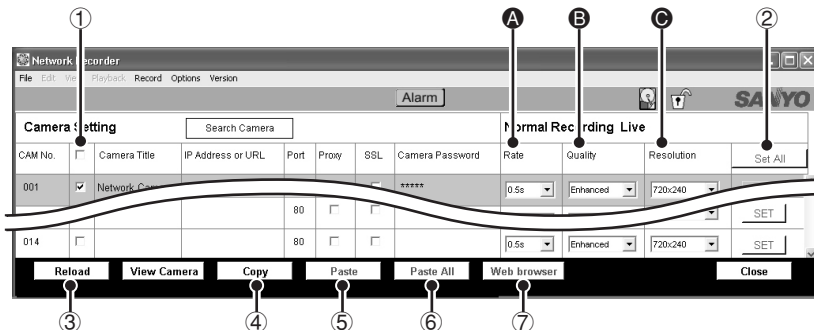
- 5 Click [SET].**

This completes the setting procedure and the camera title is transferred to the camera.

The camera title you specified appears in the main screen or other setting screens.



## Other Setting Options and Buttons in the [Camera Setting] Screen



### <Setting Options>

#### A Rate:

Specifies the recording interval for normal recording.

#### B Quality:

Changes the video quality preferences for live video and normal recording configured on the camera.

#### C Resolution:

Changes the video resolution preferences for live video and normal recording configured on the camera.

After specifying the options above, select the check box corresponding to the camera and click [SET].

### <Operation Buttons>

#### ① Select all check box

Selecting this check box in the title row selects all the check boxes corresponding to the cameras listed on the [Camera Setting] screen.

#### ② [Set All] button

Executes the [SET] command for all cameras.

#### ③ [Reload] button

Reloads the setting information (Camera Title, Quality, Resolution) to display.

#### Note:

#### When registering cameras on two or more PCs

If you don't want to change the contents set in the camera, after inputting the IP address and camera password, load the current setting information using the [Reload] button.

#### ④ [Copy] button

Copies the settings for the selected camera and retains them in memory.

#### ⑤ [Paste] button

Overrides the settings for the selected camera with the copied contents.

#### ⑥ [Paste All] button

Overrides the settings for all cameras with the copied contents.

#### ⑦ [Web browser] button

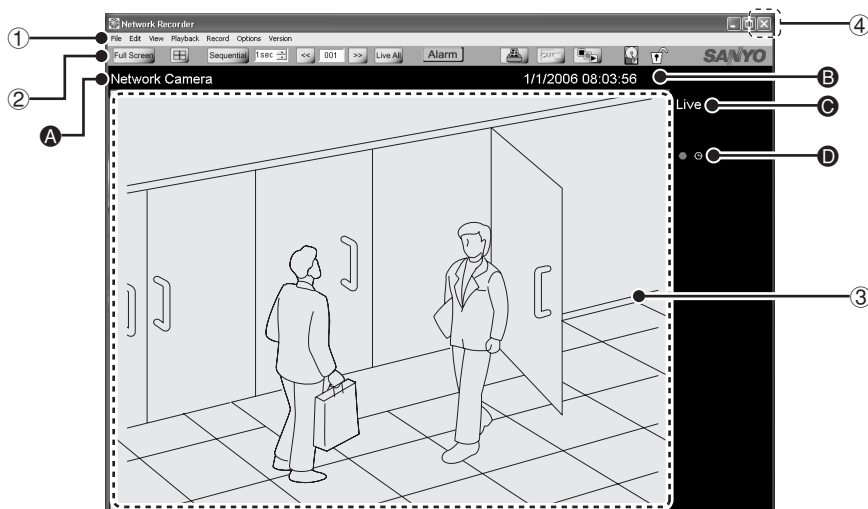
Starts the Web browser to automatically access the selected camera.

Refer to the option board instruction manual for operations following access.

# Basic Operations in the Main Screen

After registering the camera(s), the live video is displayed in the main screen.

The main screen appears immediately after login when a camera has already been registered.



## ① Menu bar (see page 13)

You can access various commands for the VA-SW3050 from the menu bar.

Clicking the menu on the menu bar displays the pull-down menu. Select the desired command from the pull-down menu to execute.

## ② Tool bar (see page 15)

The tool bar contains the commands and information display buttons that are frequently used.

## ③ Video display area

Displays the live video and recorded data.

You can use the button on the tool bar to select the number of cameras to be displayed (single screen, 4-part split screen or 16-part split screen) (see page 15).

### MEMO:

In the following cases, only the following message is displayed respectively with no video.

**When image signals are interrupted for approximately 30 seconds or more:**

Communication Error

**When no camera is registered:**

SANYO

**When there is no video to display during playback operation:**

No Data

## ④ Close button

Clicking the button closes the screen and the software is stored in the task tray icon (see page 6).

## Information Displayed in the Monitor Section

The following information is displayed in the video display area.

### A Camera title

The camera title specified in the [Camera Setting] screen is displayed.

### B Date and time information

<b>Live video</b>	Current date and time
<b>Playback video</b>	Recorded date and time

#### MEMO:

Date and time are displayed according to the Windows setting.

### C Video type

<b>Live video</b>	Live
<b>Playback video</b>	Play (Recorded video by normal recording)
	Play Alarm (Recorded video by alarm recording)
	Still (Still image from recorded video)

### D Recording information

The recording status is displayed using marks or text.

●(red)	During recording (manual, timer or alarm recording)
⌚(white)	Timer recording standby
⌚(red)	During timer recording
<b>Alarm (red)</b>	During alarm recording

## Selecting the Camera to Operate

When a video is clicked, a red frame is displayed around it showing that the camera has been selected.

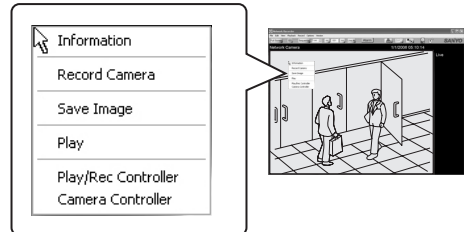
In this software, it is necessary to select a camera in the following cases:

- **When displaying the camera controller**
- **When performing recording, playback or saving operation**

Clicking the video again or clicking another video deletes the red frame and disables selection of the camera.

## Using the Context Menu

Right-clicking the video displays the context menu.



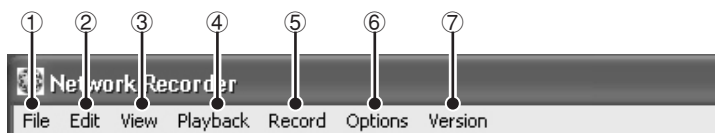
The context menu enables you to perform the following commands without using the controller or menu bar.

- **Information:**  
Displays the camera information.
- **Record Camera/Record Stop Camera:**  
Starts or stops recording.
- **Save Image:**  
Saves the video image.
- **Play/Live:**  
Starts or stops playing.
- **Play/Rec Controller:**  
Displays the recording and playback controller.
- **Camera Controller:**  
Displays the camera controller.

## Basic Operations in the Main Screen

### ■ Menu Bar Functions and Operating Privileges

The VA-SW3050 allows you to configure the user privileges (Live View, Playback, Record, Camera Control, Camera Menu Setup, Menu Setup) on an individual camera basis. The necessary privileges for executing individual operation are shown enclosed in parentheses in the sub-menu column of the table below (see “Setting the User Privileges for Operating the Camera” on page 38).



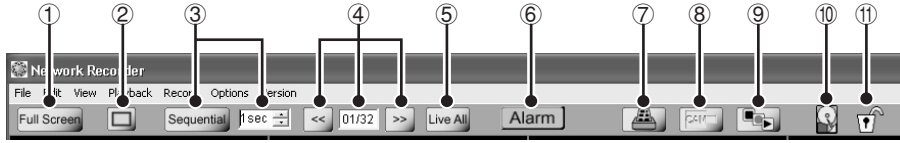
Menu	Sub-menu (Privilege)		Description	Refer to
① File	Backup (Menu Setup)		Backs up recorded data.	Page 34
	◆ Print (Live View)		Prints the video image.	Page 27
	Log Off		Logs off the software and displays the login screen.	Page 6
	Close		Closes the screen and stores the software in the task tray icon.	Page 6
② Edit	Search Image (Playback)		Searches videos.	Page 28
③ View	◆ Full Screen (Live View)		Displays the video in the full screen mode.	Page 15 - ①
	◆ 4 x 4 (Live View)		Displays videos in the 16-part split screen.	Page 15 - ②
	◆ 2 x 2 (Live View)		Displays videos in the 4-part split screen.	
	◆ 1 x 1 (Live View)		Displays video from a single camera.	
	Controller	◆ Camera Controller (Camera Control)	Displays the camera controller.	Page 17
		◆ Play/Rec Controller (Playback)	Displays the recording and playback controller.	Pages 20, 26
④ Playback	◆ Live (Live View)		Stops the playback and displays live video.	Page 26
	◆ Playback (Playback)		Starts playback.	
	◆ Reverse Playback (Playback)		Starts playback in reverse direction.	
	◆ Playback Speed (Playback)		Changes the playback speed.	
	◆ Pause (Playback)		Stops playback temporarily.	
	Frame Skip	◆ Previous (Playback)	Plays the video frame-by-frame in reverse direction.	
		◆ Next (Playback)	Plays the video frame-by-frame.	
	◆ Fast Forward (Playback)		Starts fast-forward playback.	
	◆ Rewind (Playback)		Starts fast-rewind playback.	
	Alarm Skip	◆ Previous (Playback)	Skips to the previous alarm video.	
		◆ Next (Playback)	Skips to the next alarm video.	

**MEMO:** The menu item with the ◆ mark can be operated using the tool bar buttons (see page 15).

Menu	Sub-menu (Privilege)		Description	Refer to
⑤ Record	Record All Camera (Record)		Records live videos from all cameras simultaneously.	Page 20
	Record Stop All Camera (Record)		Stops recording for all cameras simultaneously.	
⑥ Options	Camera Setting (Menu Setup)		Registers the camera with the software.	Page 7
	Camera Layout Setting (Menu Setup)		Changes the split screen layout.	Page 39
	Timer Setting (Menu Setup)		Sets the timer recording.	Page 21
	Alarm Setting (Menu Setup)		Sets the alarm recording.	Page 23
	Delete Data (Menu Setup)		Deletes recorded data.	Page 42
	Others	DATA Storage (Menu Setup)	Configures the options for storing videos on HDD.	Page 41
		Proxy (Menu Setup)	Sets the proxy server.	Page 43
		Clock (Menu Setup)	Automatically adjusts the time.	Page 43
		User Registration (Menu Setup)	Registers the user.	Page 35
		Start Up (Menu Setup)	Automatically activates this software.	Page 44
		Popup (Menu Setup)	Automatically displays the alarm image.	Page 44
		Buzzer (Menu Setup)	Sets the alarm buzzer.	Page 44
		Display (Menu Setup)	Sets display information.	Page 44
⑦ Version	Web Page		Displays Sanyo's homepage.	—
	About		Displays the version information of the VA-SW3050.	

# Basic Operations in the Main Screen

## ■ Tool Bar Functions



### ① Screen mode selection button

When selecting the full screen mode, live video is maximized across the display without the title and menu bars.

	Full screen
	Normal screen

### ② Split screen mode selection button

Three modes are available for the screen display pattern.

	Single screen mode
	4-part split screen mode
	16-part split screen mode

#### MEMO:

In the 4-part or 16-part split screen mode, double-clicking a specific video displays the video in single screen mode.

### ③ Auto screen change button

Use this button to display all the pages sequentially at specified intervals in the order of the page number.

	Enables or disables the auto screen change function.
	Sets the page switching intervals as 1, 2 or 3 seconds.

#### MEMO:

- The total number of pages depends on the number of the cameras and the split screen mode.
- When the auto screen change function is enabled, no operations can be executed apart from setting the page switching interval. To perform any other operations, disable this function.

### ④ Screen change buttons

Switches the displayed page forward or backward manually.

	Goes back to the page before.
	Goes to the next page.
	The currently displayed page and total number of pages

### ⑤ Live All button

Stops the playback for all cameras simultaneously and displays live video.

### ⑥ Alarm button (see page 33)

The color of the button indicates the alarm status.

Clicking the button opens the [Alarm] dialog for viewing the alarm history and image.

### ⑦ Print button (see page 27)

This button allows you to print out the image from live video or recorded video.

	Displays the dialog for printing out the image.
--	-------------------------------------------------

### ⑧ Camera controller display button (see page 17)

Displays the camera controller to operate the camera remotely from PC.

	Displays the camera controller.
--	---------------------------------

#### Note:

Cannot be operated when no camera is selected.



⑨ **Button for displaying the recording and playback controller (see pages 20, 26)**

Displays the recording and playback controller that can be used to perform recording or playback operations.



Displays the recording and playback controller.

⑩ **Indicator for available hard disk space**

The following icons are used for representing the available hard disk space.

When the hard disk space is full, the recording stops.



100% to 10% of the hard disk space is available.



10% to 5% of the hard disk space is available.



5% to 0% of the hard disk space is available.

**MEMO:**

The icons above do not appear when the [When HDD is fully recorded] option is set to "Overwrite" in the [DATA Storage] screen under the [Options] menu.

⑪ **Lock button**

This button can be used to lock the buttons and controls for avoiding operation mistakes.



All screen operations are locked.



Releases the lock function.

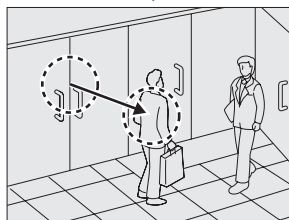
**Adjusting the Camera Orientation**

If the camera has a panning-tilting function, click the video in the single screen mode for exploiting the function.

Clicking the video in the single screen mode changes the camera orientation so that the point where you click is located at the center of the image.

**A Changing the camera orientation**

Click on the video.



**B Changing the camera orientation and zooming-in**

Double-click on the video.

**C Changing the camera orientation and zooming-out**

Pressing down and holding the [Shift] key, double-click on the video.

# Operating the Camera

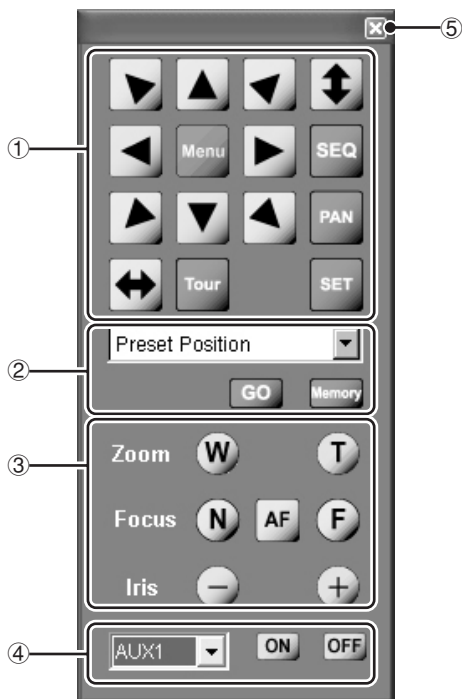
The VA-SW3050 allows you to operate the camera remotely from PC using the camera controller on the screen.

- 1 Click on the video from the camera you want to operate.

A red frame appears around the selected video.

- 2 Click  in the tool bar.






Displays the camera controller.





## Camera Controller Functions

If the camera is not equipped with panning-tilting functions, certain buttons do not work (only the shaded buttons are usable).

### ① Control buttons

	Changes the camera orientation horizontally and vertically.
	Changes the camera orientation diagonally.
	Scans the monitored area end to end vertically or horizontally, and stops at the current camera position.
	Starts or stops the sequence, auto-panning or tour action mode, respectively. <ul style="list-style-type: none"> <li>The tour action mode is not available for some models.</li> </ul>
	Displays the configuration menu for the camera.

### ② Preset position buttons

	Applies the registered configuration for camera orientation, zoom status and focusing position. <ul style="list-style-type: none"> <li>Select the number for registered configuration from the pull-down menu and click [GO].</li> </ul>
	Registers the current camera orientation along with the zoom and focus positions as the preset configuration. <ul style="list-style-type: none"> <li>Select the number to be used for preset configuration from the pull-down menu and click [Memory].</li> </ul>

### ③ Shooting function buttons

	Zooms in or out.
	Adjusts the focus.
	Performs automatic focus adjustment.
	Adjusts the iris level.

### ④ ON/OFF buttons for extended settings (AUX)

	Select an appropriate number from the pull-down menu and then select the setting between ON and OFF.
--	------------------------------------------------------------------------------------------------------

### ⑤ Close button

	Closes the camera controller.
--	-------------------------------

#### Note:

Depending on the functions or specifications of the camera, some operations may not work though the button is displayed.

## ■ Changing the Camera Configuration

You can change the shooting preferences stored on the camera using the control buttons (①).

	Displays the configuration menu for the camera.
<div style="border: 1px solid black; padding: 10px; margin: 10px;"> <p>             D&gt;SYNC                      INT              BLC                        OFF              IRIS                        SET   ↓              WHITE BALANCE            ATW              AGC GAIN                NORM              GAMMA                    0.45              SHUTTER                  60              APERTURE                HIGH              DAY/NIGHT                AUTO   ↓              OPTION                  SET   ↓              PRESET                  OFF              MENU                     END           </p> <p style="text-align: center;"><b>The configuration menu example</b></p> </div>	
	Moves the cursor up/down in the configuration menu.
	Moves the cursor to the left/right in the configuration menu or changes the setting value.
	Switches to the next screen or confirms the setting value specified.

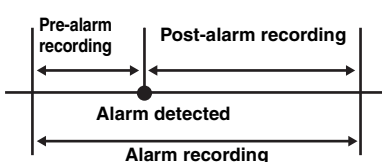
#### Note:

- “Camera Menu Setup” operating privilege is required.
- The menus displayed depend on the camera model. For details, refer to the instruction manual supplied with the camera.

# Recording Live Video

## ■ About Live Video Recording

The VA-SW3050 enables you to record live video from cameras in the following four ways.

Recording Mode	Recording Method	Description	Refer to
Normal recording	Manual recording	Records live video in manual operation. In manual recording, the following recording operations are available: <ul style="list-style-type: none"> <li>Recording by specifying the camera to record the live video</li> <li>Recording live videos from all cameras simultaneously</li> </ul>	Page 20
	Timer recording	The timer recording enables you to record live video automatically by specifying the start and end times. Use the <b>[Timer Setting]</b> screen to configure the timer recording.	Page 21
Alarm recording	The alarm recording starts live video recording automatically, triggered by an input signal from a device connected to the camera such as door switch or infrared sensor.		
	Recording on the PC's hard disk drive directly	Records the post-alarm video after the alarm signal for specified duration on the PC's hard disk drive. Use the <b>[Alarm Setting]</b> screen to configure the recording duration.  <b>Note:</b> In this recording method, the pre-alarm recording is not available.	Page 23
	Recording on the camera's memory temporarily	Records both the pre- and post-alarm video before and after the alarm signal respectively on the camera's memory by specifying the recorded video size. The recorded alarm video is transferred one by one to the PC and stored on the hard disk drive. Use the <b>[Alarm Setting]</b> screen to configure the total alarm video size and the ratio between the pre- and post-alarm video size in alarm recording.   <p>When you perform the pre-alarm recording, you can check the video from the point immediately before the alarm signal while playing the alarm video.</p>	

### MEMO:

- The recorded video data is stored on the PC's hard disk drive. The preferences on storing the recorded video can be configured in the **[DATA Storage]** screen (see page 41).
- Set video quality, etc. in normal recording on the **[Camera Setting]** screen (see page 10).

### Note:

- If simultaneously accessing from multiple PCs, alarm recording can only be performed from one.
- Depending on the network environment, PC performance or number of PCs connected, it may not be possible to record at the designated recording rate.

## ■ Recording Video Manually

### Recording by Specifying the Camera to Record the Live Video


- 1 Click on the video from the camera you want to record.

A red frame appears around the selected video.

- 2 Click  in the tool bar.

The recording and playback controller appears.




- 3 Click  (1) in the controller.

This starts recording and the ●(red) mark appears to the right of the live video.

**You can record live video from multiple cameras by repeating steps 1 and 3 above.**

- 4 To stop recording:

Click the video you want to stop recording. After confirming the red frame showing that the video has been selected, click  (2) in the controller.

This stops recording and the ●(red) mark disappears.

#### MEMO:

- You can perform recording operations while playing the video.
- You can also use the menu bar or context menu to display the recording and playback controller or to start and stop recording.

### Recording Live Videos from All Cameras Simultaneously

- 1 Select [Record All Camera] from [Record] in the menu bar.

This starts recording for all cameras and the ●(red) mark appears to the right of each live video.



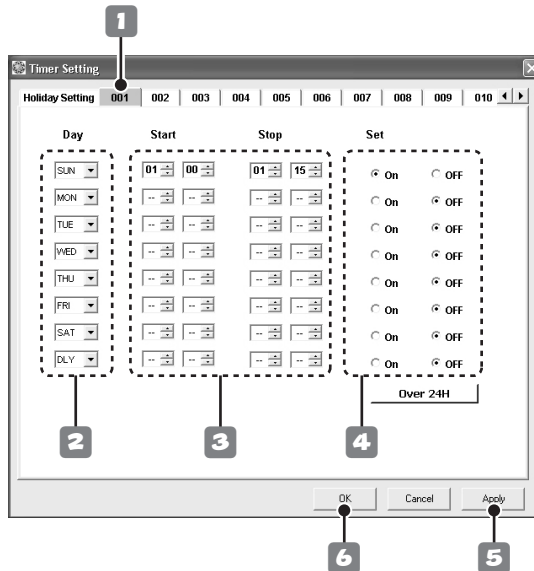
- 2 To stop recording for all cameras simultaneously:

Select [Record Stop All Camera] from [Record] in the menu bar.

This stops recording for all cameras and the ●(red) marks disappear.



## ■ Setting the Timer Recording



### ● Select [Timer Setting] from [Options] in the menu bar.

The [Timer Setting] screen appears. The timer recording is configured on an individual camera basis.

- 1** Click the camera number tab corresponding to the camera for which you want to configure the timer recording.

Use the buttons to scroll the tab display.

- 2** Select the day of the week (“SUN” to “SAT”) from the pull-down menu under the [Day] column.

When you want to record for the same time everyday, select [DLY].

- 3** Specify the start and end times for recording under the [Start] and [Stop] columns respectively.

- 4** To enable the setting, select the “On” radio button under the [Set] column.

**When you configure multiple timer recording settings, use the same procedure (steps 2 to 4) for the other timer setting rows.**

You can configure up to 8 timer recording settings per camera.

- 5** Click [Apply].

This saves the settings for timer recording.

- 6** Click [OK].

This completes settings and closes the [Timer Setting] screen.

### MEMO:

- After completing the timer recording setting, the VA-SW3050 enters the standby status for timer recording and the (white) mark appears to the right of the video from the camera.
- The timer recording is performed according to the clock on the PC where the VA-SW3050 is installed.

### Setting the Timer Recording Across Midnight

You can set the timer recording across midnight by specifying the end time earlier than the start time.

#### Example:

The screenshot shows a timer setting interface with a dashed border. It contains four date-time pickers. The first picker is set to 'SUN' (Sunday). The second and third pickers are set to '20' and '00' respectively, representing 20:00. The fourth and fifth pickers are set to '10' and '00' respectively, representing 10:00.

The recording starts at 20:00 on Sunday and ends at 10:00 on the next Monday.

### Setting the Timer Recording for 24 Hours

The timer recording is performed for 24 hours by specifying the same time for both the start and end times.

#### Example:

The screenshot shows a timer setting interface with a dashed border. It contains four date-time pickers. The first picker is set to 'SUN' (Sunday). The second and third pickers are set to '00' and '00' respectively, representing 00:00. The fourth and fifth pickers are set to '00' and '00' respectively, representing 00:00.

The recording starts at 00:00 on Sunday and lasts for 24 hours.

### Setting the Timer Recording for Longer than 24 Hours

#### 1 Click [Over 24H].

The two rows from the bottom (the 7th and 8th rows) are changed to the format for specifying the over 24-hour timer recording.

#### 2 In the upper row, specify the day of the week and time for the start of recording.

#### 3 In the lower row, specify the day of the week and time for the end of recording.

#### Example:

The screenshot shows a timer setting interface with a dashed border. It contains four date-time pickers. The first picker is set to 'SAT' (Saturday). The second and third pickers are set to '16' and '00' respectively, representing 16:00. The fourth and fifth pickers are set to '22' and '00' respectively, representing 22:00.

The timer recording is performed for 30 consecutive hours from 16:00 on Saturday through 22:00 on the next Sunday.

#### MEMO:

- Only one setting can be made with the timer recording for over 24 hours.
- Clicking [Over 24H] again restores the normal format.

### Setting Holidays

By setting national holidays or anniversaries as holiday, holidays are treated as Sunday and the timer recording is performed accordingly.

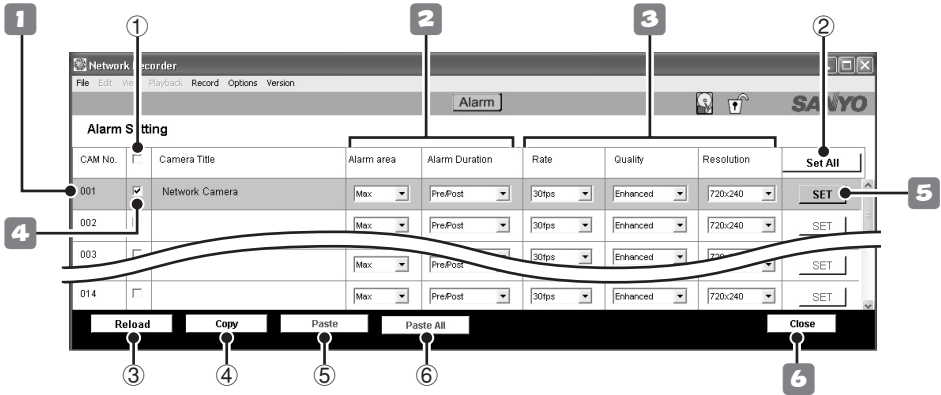
Clicking the [Holiday Setting] tab displays the screen for holiday setting. Use the pull-down menu to select the date to treat as holiday.

The screenshot shows a 'Timer Setting' dialog box with the 'Holiday Setting' tab selected. The dialog has a title bar with 'Timer Setting' and a close button. Below the title bar is a tab bar with 'Holiday Setting' and tabs numbered 001 to 010. The main area is a calendar grid with columns for 'Month' and 'Day'. The grid shows days 1 through 20. At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Apply'.

#### MEMO:

- Up to 20 days can be set as holiday.
- If you select a day that has already been set as holiday, the "HOLIDAY DUPLICATION ERROR!!" message appears.

## ■ Setting the Alarm Recording



### ● Select [Alarm Setting] from [Options] in the menu bar.

The [Alarm Setting] screen appears. The alarm recording is configured on an individual camera basis.

#### 1 Click the camera for which you want to configure the alarm recording.

The color of the clicked camera row changes.

#### 2 Select the recording method.

You can record the alarm video on the PC's hard disk drive directly or on the camera's memory temporarily. The alarm video on the camera is transferred to the PC later and stored on the hard disk drive.

##### When Recording on the PC's Hard Disk Drive Directly

This recording method can set long recording hours and is suitable **when giving priority to the recording time**.

In this method, the pre-alarm recording is not available.

- **Alarm area:**  
Set this option to "PC".
- **Alarm Duration (Post):**  
Set the recording duration per alarm recording. During an alarm recording, no other alarms will be processed.

##### When Recording on the Camera's Memory Temporarily

This recording method can set the recording rate high and is suitable **when giving priority to the recording rate**.

In this method, the pre-alarm recording is available.

- **Alarm area:**  
Specify the amount of the memory on the camera ("0.5MB" to "Max") allocated to the alarm recording (for detailed duration available in alarm recording, see page 45).
- **Alarm Duration (Pre/Post):**  
Specify the memory usage ratio between pre- and post-alarm recording.



### 3 Specify the video options in alarm recording.

- **Rate:**  
Configures the recording rate for the alarm recording.  
The available options depend on the [Alarm area] and [Resolution] settings.
- **Quality:**  
Can change the alarm video quality setting in the camera.
- **Resolution:**  
Can change the alarm video resolution setting in the camera.

### 4 In order to make the settings valid, select the check box corresponding to the camera.

### 5 Click [SET].

This completes the setting procedure and the configuration is transferred to the camera.

**When you configure the alarm recording for multiple cameras, repeat steps 1 to 5.**

#### MEMO:

When the value for the [Alarm Duration] option is not selected, the alarm recording for the camera is disabled. Be sure to select the value according to the message on the dialog.

### 6 Click [Close].

The [Alarm Setting] screen closes.

#### Note:

**When recording on the camera's memory temporarily**

- Pre-alarm video may not be recorded under the following settings. Change one of the settings according to the contents in the parentheses.  
**Alarm area:** 0.5MB (increase capacity)  
**Alarm Duration (Pre/Post):** 10%90% (raise the ratio)  
**Quality:** Super Fine (lower picture quality)
- During alarm recording, the alarm video being received from the camera is displayed. Since there is a time lag before video is received, the displayed video will differ from the live video.

### Other Buttons in the [Alarm Setting] Screen

#### ① Select all check box

Selecting this check box in the title row selects all the check boxes corresponding to the cameras listed on the [Alarm Setting] screen.

#### ② [Set All] button

Executes the [SET] command for all cameras.

#### MEMO:

When the value for the [Alarm Duration] option is not selected, the alarm recording for the camera is disabled. Be sure to select the value according to the message on the dialog.

#### ③ [Reload] button

Reloads the setting information to display.

#### MEMO:

While the setting information is being accessed concurrently, [Reload] button can be used to load and check the current setting information retained on the camera.

#### ④ [Copy] button

Copies the settings for the selected camera and retains them in memory.

#### ⑤ [Paste] button

Overrides the settings for the selected camera with the copied contents.

#### ⑥ [Paste All] button

Overrides the settings for all cameras with the copied contents.

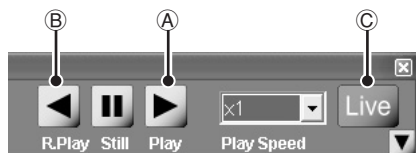
# Playing Recorded Video

- 1 Click on live video from the camera for which you want to play the recorded video.

A red frame appears around the selected video.

- 2 Click  in the tool bar.

The recording and playback controller appears.



- 3 Click  (A) or  (B) in the controller.

This starts playback (or reverse playback) and the video type indicator changes from "Live" to "Play".

You can play recorded videos from multiple cameras by repeating steps 1 and 3 above.


- 4 Operate the playback using the controller.

Playback operations such as fast-forward and pause can be made with the buttons on the controller (see page 26).


## MEMO:

You can also perform the playback operations using the [Playback] menu commands in the menu bar.


- 5 To stop playback:

Click the video you want to stop playback. After confirming the red frame showing that the video has been selected, click  (C) in the controller. This stops the playback and the live video is displayed again.

## MEMO:

Clicking  in the tool bar simultaneously stops the playback for all the recorded videos currently played and all the live videos of the cameras for which the recorded video is played are displayed again.

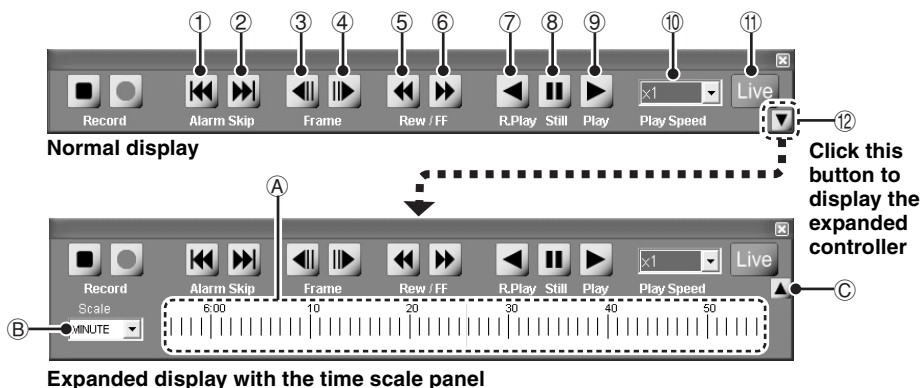
## About Playback Basic Operations

- Whether normal or alarm recording, all the recorded videos are played in chronological order.
- When you play the recorded video next time, the playback starts from the point where the playback stopped last time.
- When you play the recorded video next time after exiting from the VA-SW3050, the playback starts from the oldest one.
- When the playback comes to the end of the recorded videos, the playback pauses and the still image is displayed.  
Clicking  (C) in the controller displays the live video again.
- When the reverse or fast-rewind playback goes to the beginning of the oldest video, the normal playback starts. When the frame-by-frame reverse playback goes to the beginning of the oldest video, the playback pauses and the still image is displayed.
- You can perform playback operations while recording live video.

## MEMO:

- You can also use the menu bar or context menu to display the recording and playback controller or to start and stop playback.
- You can use the video search function to play the recorded video that matches the conditions you specify (see page 28).

## ■ Playback Operations Using the Recording and Playback Controller



### The Recording and Playback Controller

- ① : Displays the beginning of the alarm video currently played (If you click the button when the position near the beginning of the video is played, this button displays the beginning of the previous alarm video).
- ② : Displays the beginning of the next alarm video.
- ③ : Plays the video frame-by-frame in reverse direction during playback pause.
- ④ : Plays the video frame-by-frame in forward direction during playback pause.
- ⑤ : Fast-rewinds the video at 120X speed.
- ⑥ : Fast-forwards the video at 120X speed.

#### Note:

When you want to fast-forward or fast-rewind the video, press and hold the button.

- ⑦ : Starts playback in reverse direction.
- ⑧ : Stops the playback temporarily and displays the still image.
- ⑨ : Plays the video.
- ⑩ : Changes the playback speed (1/20X to 100X speed, 0.5S).

#### MEMO:

- When "0.5S" is selected, video is played back at the rate of two frames per second. The video is continuously played back even when there is a break.
- The playback speed remains the same even when the playback video (red framed video) is changed. If you want to change the playback speed, reset it or click the playback button (⑨).

- ⑪ : Stops playing the recorded video and displays the live video.
- ⑫ : Opens the time scale panel.

### Time Scale Panel

Clicking (⑫) displays the time scale panel in the lower area of the controller.

#### A Time scale

The center line of the time scale represents the recorded date and time for the video currently played.

#### MEMO:

Dragging the time scale to the left or right changes the current play point of the recorded video.

<b>Drag to right</b>	Turns back the playing date and time.
<b>Drag to left</b>	Advances the playing date and time.

#### B Scale

Selects the unit used for the time scale.

<b>MINUTE</b>	60 scales for 60 minutes
<b>HOURL</b>	24 scales for 24 hours
<b>DAY</b>	30 (or 31) scales for 30 (or 31) days

#### C (Close button)


Closes the time scale panel.

# Printing and Saving Video Images

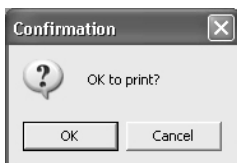
The VA-SW3050 allows you to print or save the video image from the live or recorded video displayed on the screen.

## ■ Printing Video Images

You can print the video image in the video display area of the main screen.

- 1 Click  in the toolbar while the live or recorded video is played.

The video changes to the still image and the confirmation dialog appears.



- 2 When you want to print the image, click [OK].

The [Print] dialog appears.

- 3 Confirm the settings and click [OK].

The still image is printed out.

After the printing completes, the still image changes back to the live or recorded video.

### MEMO:

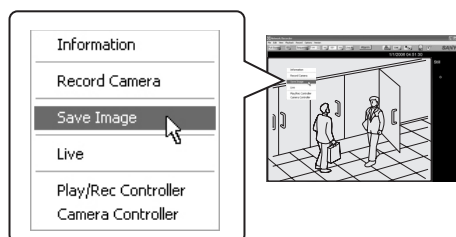
The preferences for displaying the camera title and the date/time information can be configured in the [Display] settings under the [Options] menu (see page 44).

## ■ Saving Video Images

You can save the video image from the camera you selected in JPEG format.

- 1 Right-click on the video image you want to save while playing live or recorded video.

A red frame appears around the selected video and the context menu is displayed.



- 2 Click [Save Image].

The [Save As] dialog appears.

- 3 Specify the target folder and file name for saved image and click [OK].

The still image at the moment when you click [OK] is saved on the PC.

The "Image Viewer" (HTML file) used for viewing the saved image is also saved to the target folder.

### Note:

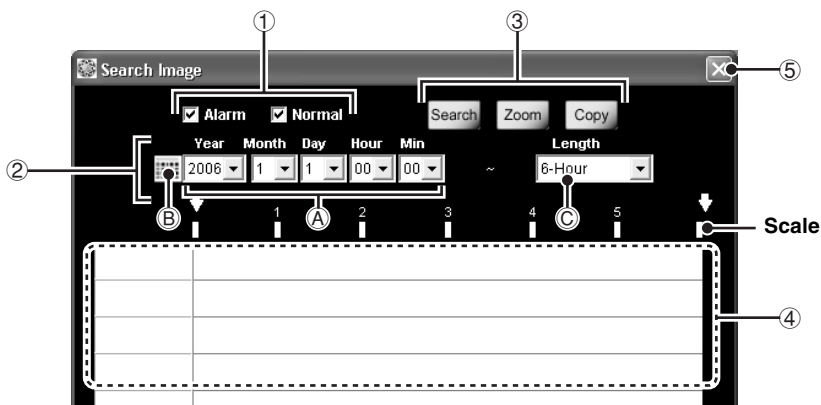
When you use the "Image Viewer", only the most recently saved image file in the folder is displayed. If you want to save and view two or more image files, change the target folder every time you save the image file.

- 4 To view the saved image:

Open the "Image Viewer" in the target folder. The saved image file is displayed in the frame of the Image Viewer (see page 32).

# Video Search

The VA-SW3050 enables you to search recorded videos by specifying the date and time.



## ● Select [Search Image] from [Edit] in the menu bar.

The [Search Image] screen appears.

### ① The video to be searched

Use the following check boxes to specify the video to be searched.

- **Alarm (alarm recording video)**
- **Normal (normal recording video)**

### ② The beginning date and time and the duration for search

#### Ⓐ Year/Month/Day/Hour/Min

Specify the beginning date and time for search by using the pull-down menu.

#### Ⓑ Calendar icon

Clicking the icon opens the [Date and Time] dialog. This dialog also can be used for specifying the beginning date and time for search.

#### Ⓒ Length

Specify the duration from the beginning date and time for search (3-Hour to 7-Day) by using the pull-down menu.

### ③ Operation buttons

- **[Search] button**  
Performs searching for the specified period.
- **[Zoom] button**  
Zooms in to enlarge the search result.
- **[Copy] button**  
Saves video from the specified period.

### ④ Search result area

The search results are displayed using bars. The bars correspond to cameras one by one.

- **Blue : normal recording video**
- **Red : alarm recording video**

#### MEMO:

The unit represented by a scale depends on the searched period.

- **Shorter than one hour: One scale for 10 minutes**
- **Shorter than 24 hours to one hour: One scale for one hour**
- **24 hours or longer: One scale for one day**

### ⑤ Close button

Closes the [Search Image] screen.

## Video Search

### ■ Search Procedure

#### <Search example>

In this section, the following conditions are used to explain the search procedure.

- **The cameras and recorded videos to be searched:**

Camera Nos. 1 to 4; alarm and normal recordings

- **Searched period:**

18 hours from 12:00 pm, Jan. 10, 2006

- 1 Set the screen mode to 4-part split screen mode and display the live videos from camera Nos. 1 to 4.**

In searching the recorded video, the cameras from which the live video is displayed are searched.

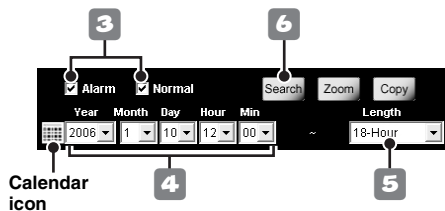
#### MEMO:

You can search recorded videos from 16 cameras simultaneously in the 16-part split screen mode.

- 2 Select [Search Image] from [Edit] in the menu bar.**

The [Search Image] screen appears.

- 3 Select the [Alarm] and [Normal] check boxes.**

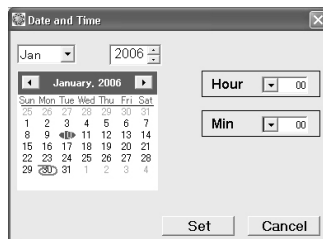


- 4 Specify the beginning date and time to “2006/1/10/12/00” using the [Year/Month/Day/Hour/Min] pull-down menus.**

By clicking the calendar icon on the left end, you can also specify the beginning date and time from the calendar in the [Date and Time] dialog.

### Using the [Date and Time] Dialog

Selecting the month and year displays the calendar of that month. Click the date, specify the time using the [Hour] and [Min] pull-down menus and click [Set]. This sets the beginning of the date and time and closes the dialog.



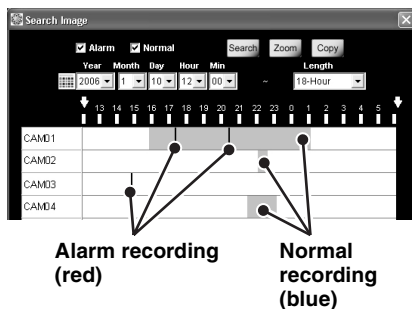
- 5 Set the period to “18-Hour” using the [Length] pull-down menu.**

- 6 Click [Search].**

This starts searching the videos recorded by alarm and normal recording for the specified period.

- 7 The search result display**

The search results are displayed in the search result area. The alarm recording video is shown as the red bar, and the normal recording video is shown as the blue bar.



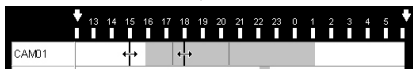
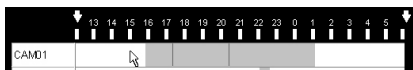
## ■ Zooming in on Search Results

You can zoom in on the search result to enlarge the specific period by selecting the portion.

- 1 **Specify the period to enlarge by clicking and dragging the portion with the mouse.**

The black solid lines appear at the beginning and end of the selected period respectively.

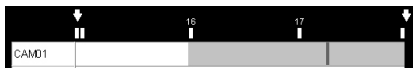
**Click the beginning of the period to enlarge.**



**Drag your mouse to the end of the period to enlarge.**

- 2 **Click [Zoom].**

The period you specified is enlarged and displayed in full for the time scale. The scale unit depends on the enlarging ratio.



### MEMO:

By performing the same procedure (steps 1 and 2 above), you can also zoom in the enlarged period again for the search result to be zoomed in further.

- 3 **To restore the initial search result display:**

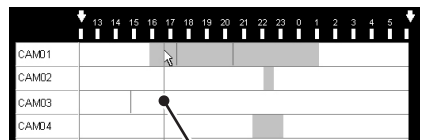
Click [Search].

## ■ Playing Video from Search Results

The videos found in the search can be played in the following way.

### Playing All the Videos Found in the Search Simultaneously

Double-clicking the bar section in the search result area starts playing all the videos from the searched cameras simultaneously in the current multi-part split screen.



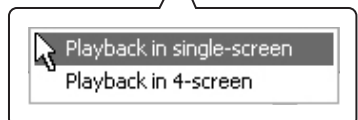
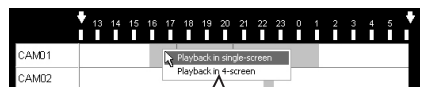
Cursor line

- The video is played back from the double-clicked point at the playback speed of the camera video currently selected.
- The cursor line moves according to the playback point.
- During playback, you can perform the playback operations using the recording and playback controller. Before performing the operations, remember to select the video you want to operate the playback (see page 26).
- When the playback comes to the end of the video found, the playback pauses and the still image is displayed.

### Playing the Specified Video in Single Screen

In the 4- or 16-part split screen, right-clicking on the search result bar displays the context menu.

In this menu, select **[Playback in single-screen]** to start playing the video in single screen from the point where you right-click the bar.



## Video Search

### ■ Saving Video Found in the Search

The VA-SW3050 allows you to save video found in the search in JPEG format.

#### 1 Specify the period to save by clicking and dragging the portion with the mouse.

The black solid lines appear at the beginning and end of the selected period respectively.



**Click and drag the portion to save**

#### 2 Click [Copy].

The [Browse For Folder] dialog appears.



#### 3 Select the folder to save the video and click [OK].

This saves the video.

The “Image Viewer” (HTML file) used for viewing the saved video is also saved to the target folder.

#### **Note:**

When you use the “Image Viewer”, only the most recently saved video file in the folder is displayed. If you want to save and view two or more video files, change the target folder every time you save the video file.

#### **MEMO:**

- The path for the target folder (Default)  
C:\Program Files\SANYO\VA-SW3050
- File name convention  
(CAM + camera number)\_(the date of the first image in the video)\_(4-digit serial number).(file extension (jpg))

**Example:**

CAM001\_060125030450\_0001.jpg

#### **Note:**

You can save up to 9999 images per saving operation.

When the number of saved images exceeds the limit, the dialog with the following message appears to stop the saving operation.

**End copying images!!  
(Count reached 9999.)**



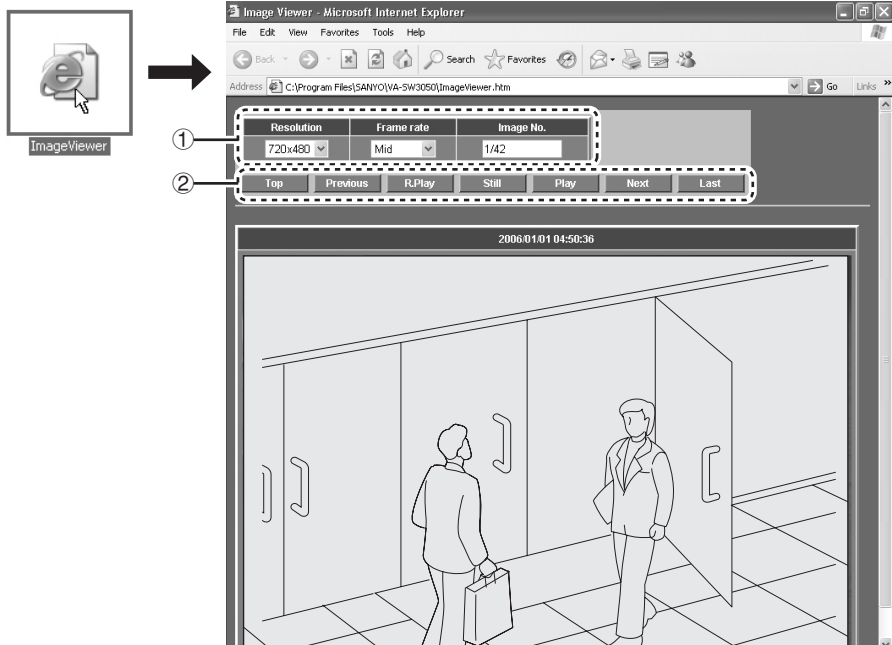
## Viewing the Saved Video Using the Image Viewer

Open the "Image Viewer" in the target folder. The saved video file is displayed in the frame of the Image Viewer.

### MEMO:

Viewing the video files may be limited due to security protection by Internet Explorer.

In such case, click [Allow Blocked Content...], and select [Yes] in the [Security Warning] dialog.



### ① Image display preferences

#### • Resolution:

Specifies the video resolution at four levels. When you select the lower resolution, the displayed video image becomes smaller.

#### • Frame rate:

Specifies the frame rate at five levels.

#### • Image No.:

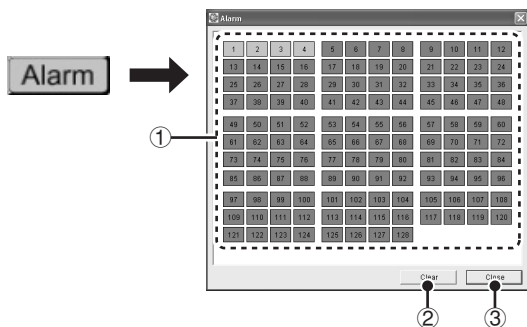
The number of the currently displayed image out of the total number of images appears here.

### ② Playback operations

- **Top:** Jumps to the first image.
- **Previous:** Plays the video frame-by-frame in reverse direction.
- **R. Play:** Plays the video in reverse direction.
- **Still:** The playback pauses and the still image is displayed.
- **Play:** Starts playback.
- **Next:** Plays the video frame-by-frame in forward direction.
- **Last:** Jumps to the last image.

# Checking Alarm Status

You can find the alarm status from the color of the [Alarm] button in the tool bar. Clicking the button opens the [Alarm] dialog for viewing the alarm history and image.



## The [Alarm] Button Functions

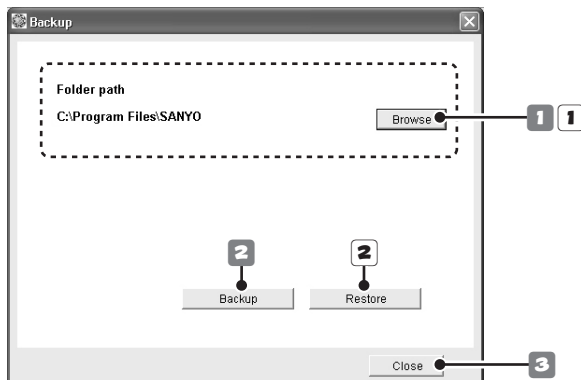
- **Blue:**  
Normal status.
- **Red (flash):**  
Any of the cameras is performing the alarm recording.  
When the alarm recording completes, the indicator turns red without flashing.
- **Red:**  
There is an unchecked alarm recording.  
Use the [Alarm] dialog to find the camera that detected the alarm.  
Clicking the [Alarm] button opens the [Alarm] dialog and the indicator turns blue.

## The [Alarm] Dialog Functions

- ① **Camera number buttons**  
The color of the button allows you to confirm the alarm status for the camera.
  - **Red:**  
From the newest alarm to the 4th newest alarm
  - **Orange:**  
Between the 5th and 8th newest alarms
  - **Yellow:**  
Between the 9th and 12th newest alarms
  - **Blue:**  
13th or older alarms, or no alarms so far
  - **Gray:**  
No camera registrationClicking the red, orange or yellow button displays the newest alarm video for the camera in single screen.  
Clicking the blue button displays live video in single screen.
- ② **[Clear] button**  
Clears the alarm history and turns the color of all the buttons with the camera registered to blue.
- ③ **[Close] button**  
Closes the [Alarm] dialog.

# Backing up Recorded Data

The VA-SW3050 allows you to back up the recorded data on the PC to different folder.



## ● Select [Backup] from [File] in the menu bar.

The [Backup] screen appears.

### Note:

- When you make backup of the recorded data, stop all recording and playback operations currently performed.
- While performing backup or restoration, alarm or timer recording is not activated.
- Note that restoring the backup data deletes the recorded data currently stored on the PC.

## Backing Up Recorded Data

### 1 Specify the target folder for backup.

Click [Browse] and select the target folder for backup in the [Browse For Folder] dialog.

#### Note:

Be sure to specify the target folder for backup that is different from the one for saving video (see page 41).

### 2 Click [Backup].

This starts copying the data to the folder you specified.

### 3 Click [Close].

This closes the [Backup] screen.

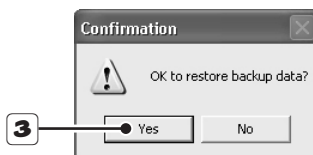
## Restoring the Backup Data

### 1 Specify the folder to be restored from.

Click [Browse] and select the folder to be restored from in the [Browse For Folder] dialog.

### 2 Click [Restore].

The confirmation dialog appears.

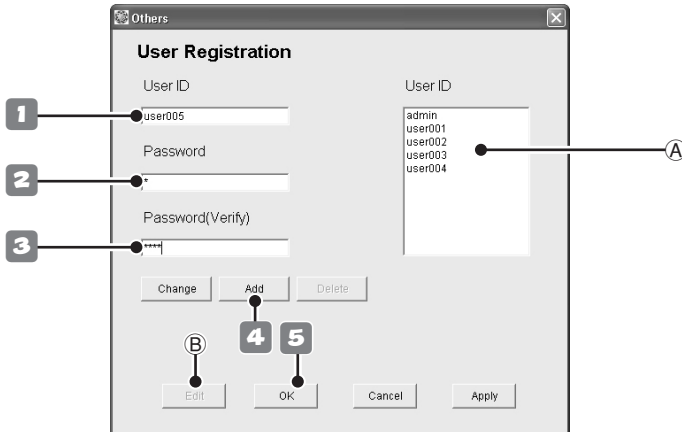


### 3 Click [Yes].

This restores the backup data.

# User Registration

You can register up to ten users (including “admin” user) who log in to the VA-SW3050.



## ■ Registering a New User

- In the menu bar, click [Options] and select [Others]. Then select [User Registration].

The [User Registration] screen appears.

### 1 Enter the user ID.

The user ID can be up to 16 alphanumeric characters. The user ID is case sensitive.

### 2 Enter the password.

The password can be from 4 to 16 alphanumeric characters. The password is case sensitive.

### 3 Enter the same password again for confirmation.

### 4 Click [Add].

The new user is added to the [User ID] list (A).

**When you register multiple users, repeat steps 1 to 4.**

#### MEMO:

To configure the operating privileges for individual users, select the user in the [User ID] list (A) and click [Edit] (B).

The [Edit Authentication] screen appears (see page 38).

### 5 Click [OK].

Click [OK] to complete the registration and close the [User Registration] screen.

#### MEMO:

The notations which can be used for user ID and password are colon (:), period (.), slash (/) and asterisk (\*).



## ■ Changing the User Password

- 1 Double-click the user ID for which you want to change the password in the [User ID] list.

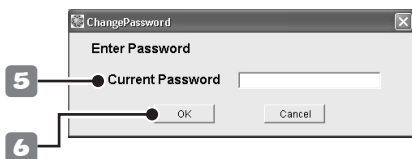
The user ID is highlighted in the [User ID] list and is displayed in the [User ID] box (A).

- 2 Enter the new password.

- 3 Enter the same password again for confirmation.

- 4 Click [Change].

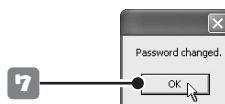
The [Change Password] dialog appears.



- 5 Enter the current password.

- 6 Click [OK].

The dialog confirming the password change appears.



- 7 Click [OK].

Completes the password change.

# User Registration



## ■ Deleting a Registered User

### 1 Click the user you want to delete from the [User ID] list.

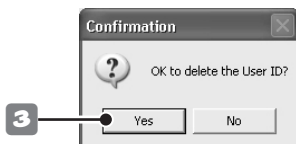
The user ID is highlighted in the [User ID] list.

#### MEMO:

Even when another user ID is displayed in the [User ID] box (A), the user selected in the [User ID] list is targeted for deletion.

### 2 Click [Delete].

The dialog confirming the deletion of the user ID appears.



### 3 Click [Yes].

The user ID is deleted from the [User ID] list (1).

#### Note:

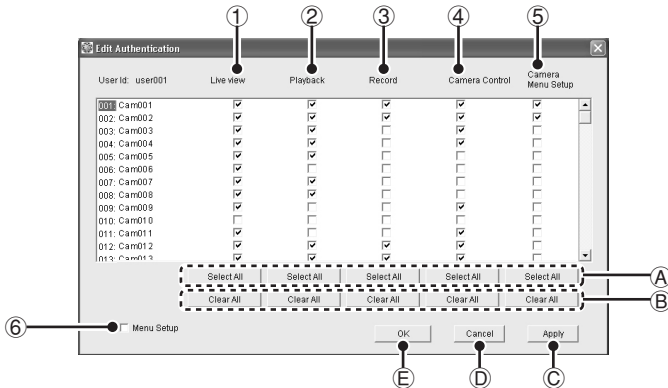
- The user “admin” cannot be deleted. Only the password can be changed.
- The user ID for a registered user cannot be changed.

When you want to change the user ID for a registered user, delete the registered user at first, and then register the user by specifying the new user ID.

## ■ Setting the User Privileges for Operating the Camera

You can configure the user privileges for operating individual camera.

Select the user ID for which you want to configure the privileges in the [User ID] list and click [Edit]. The [Edit Authentication] screen appears. The [Edit Authentication] screen lists all of the registered cameras.



When granting the operating privileges, select the corresponding check box under the operation menu, click [Apply] and then click [OK].

For the detailed operating privileges, see page 13.

### ① Live View

For monitoring live video.

### ② Playback .....(①)

For playing recorded video.

### ③ Record .....(①, ②)

For recording live video.

### ④ Camera Control .....(①)

For operating the camera remotely.

### ⑤ Camera Menu Setup .....(①, ④)

For changing the camera settings.

### ⑥ Menu Setup

For configuring settings for the [Options] menu.  
(Only set this operating privilege for administrative level users.)

## Operation Buttons

### ① [Select All] button

Selects the check boxes for all cameras in the column corresponding to the button.

### ② [Clear All] button

Deselects the check boxes for all cameras in the column corresponding to the button.

### ③ [Apply] button

Saves the settings.

### ④ [Cancel] button

Cancels the settings.

### ⑤ [OK] button

Completes setting and closes the screen.

### Note:

In the case of the user "admin", all administrative user operating privileges are set as default. The operating privileges cannot be changed.

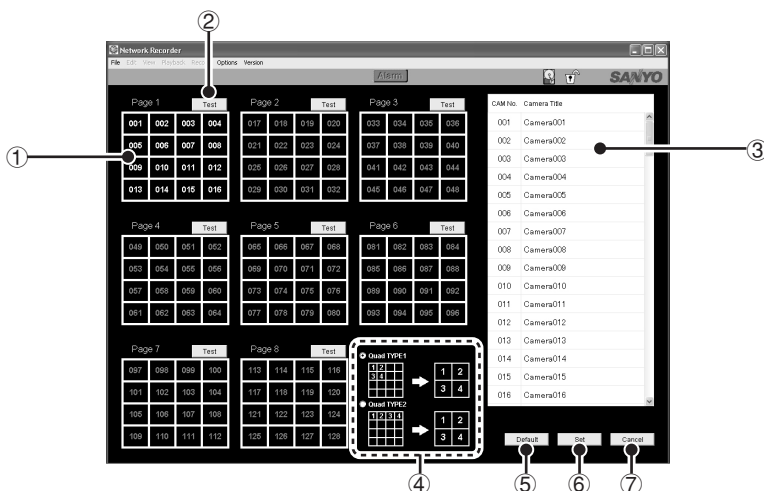
## MEMO:

- In the default settings, check boxes ① - ⑤ are all selected.
- The operations under the menu from ② to ⑤ cannot be performed without the privileges enclosed in parentheses.

# Split Screen Layout

The layout screen for the videos from the cameras can be used to confirm and configure the video display layout for up to 128 cameras.

The video display layout can be customized to your preferences.



## ● Select [Camera Layout Setting] from [Options] in the menu bar.

The video display layout screen appears.

### ① The layout pattern diagram

8 patterns (pages 1 - 8) of 16-part split screens are displayed. Each layout pattern shows the camera numbers and enables the display positions of videos to be confirmed. In the default settings, camera numbers are displayed in their registered order from 001 to 128.

- The color of the camera number changes according to the camera's registration status.

**White: the camera has been registered.**  
**Gray : the camera has not been registered yet.**

- Clicking the camera number highlights the selected camera on the camera list (③), enabling the camera title to be confirmed.

### ② [Test] button

Clicking the button switches to the [Check Camera Layout] screen, enabling actual videos displayed on each page to be confirmed. Click [Return] to return to the previous screen.

### ③ Camera list

The camera registered with the VA-SW3050 is listed with its title.

Clicking the camera displays the number of the selected camera in red on the layout screen, enabling the video layout to be confirmed.

### ④ Quad TYPE

Selects the display pattern in the 4-part split screen.

### ⑤ [Default] button

Resets the display pattern to the initial setting, which displays the videos in the order of the camera number.

### ⑥ [Set] button

Completes setting and closes the screen.

### ⑦ [Cancel] button

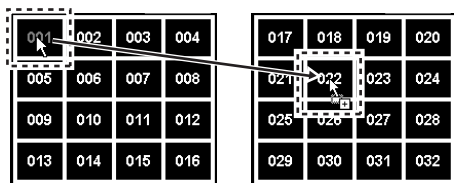
Cancels the settings.



## ■ Changing Video Layout on the 16-part Split Screen

- 1 Drag the camera number (ex. "001") on the display pattern diagram with the mouse and drop it onto the destination (ex. "022").

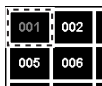
The color of the camera number you are moving changes to red and the [Camera Layout Setting] dialog appears.



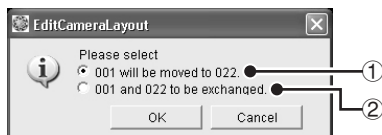
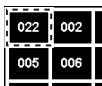
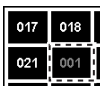
- 2 Select the appropriate radio button to choose the movement option and click [OK].

- When you select option ①, the camera number you want to move is duplicated and displayed in the target position. When you select option ②, the camera number you want to move and the number in the target position are exchanged.

When ① is selected



When ② is selected



### MEMO:

When you select option ①, the camera number in the target position is deleted from the pattern diagram but not from the camera list.

When you want to display the deleted camera number again, drag the camera number from the camera list directly and drop it into the target position.

When you move multiple camera numbers, repeat steps 1 and 2.

- 3 Click [Set].

Saves the layout settings and the main screen appears.

## ■ Setting the Video Layout Pattern on the 4-part Split Screen

- 1 Set the Quad TYPE with the radio button.

- **Quad TYPE1:**

Displays block by block. A block consists of two rows and two columns.



- **Quad TYPE2:**

Displays row by row.

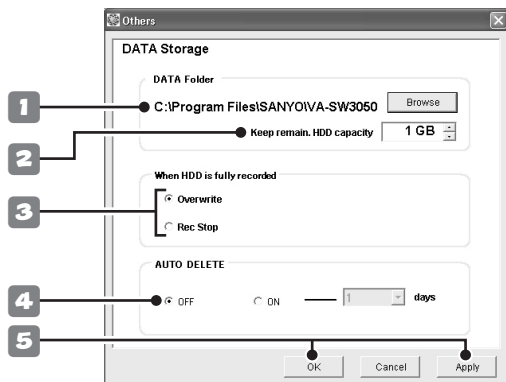


- 2 Click [Set].

Saves the layout settings and the main screen appears.

# Configuring the Options for Storing Videos on HDD

The recorded video data is stored on the PC's hard disk drive. Before performing the recording operations, configure the options for saving data such as the target folder for saving.



## ● Select [DATA Storage] from [Options] in the menu bar.

The [DATA Storage] screen appears.

### 1 Specify the target folder for saving video data.

Click [Browse] and select the target folder for saving in the [Browse For Folder] dialog.

### 2 Set the hard disk space for recording.

Set the available hard disk space according to the remaining capacity.

When the remaining capacity of the hard disk space reaches the specified limit, the available space is considered to be run out.

### 3 Set the recording option when the hard disk space runs out.

- **Overwrite:**  
Overwrites the oldest video data to continue recording.
- **Rec Stop:**  
Stops recording.  
After deleting recorded data to free up hard disk space, the recording operation resumes (see page 42).

### 4 Set the automatic delete function (AUTO DELETE).

This function allows the VA-SW3050 to delete the recorded data that expires automatically.

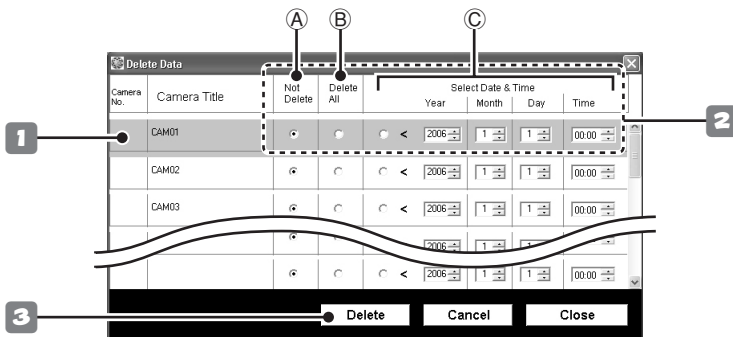
To use this function, select the "ON" radio button and specify the saving duration.

### 5 Click [Apply] and then click [OK].

Completes setting and closes the screen.

# Deleting Recorded Data

The recorded data stored on the PC can be deleted on an individual camera basis.



## ● Select [Delete Data] from [Options] in the menu bar.

The [Delete Data] screen appears.

### 1 Click the camera for which you want to delete the recorded data.

The color of the clicked camera row changes.

### 2 Select the delete option.

The two following options are available for deleting recorded data.

Selecting either of the options deselects the [Not Delete] (A) radio button.

#### Delete All the Recorded Data

Click the [Delete All] (B) radio button.

#### Delete the Recorded Data by Specifying the Period

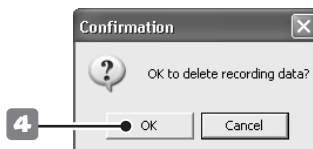
Click [Select Date & Time] (C) radio button, and select the date and time using the [Year/Month/Day/Time] spin buttons.

The recorded data older than the specified date and time is deleted.

When you delete the recorded data for multiple cameras, repeat steps 1 and 2.

### 3 Click [Delete].

The confirmation dialog appears.



### 4 Click [OK].

This deletes the recorded data according to the option you selected.

# Configuring Other Options

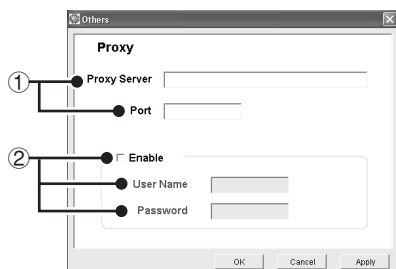
You can configure the following options in relation to using the VA-SW3050.

Select [Others] from the [Options] in the menu bar and click a menu command to open the corresponding screen.

After completing the settings in the screen, click [Apply] and then click [OK].

## ■ [Proxy] Setting

When you select the [Proxy] check box in the [Camera Setting] screen, you need to specify the server information (see page 7).



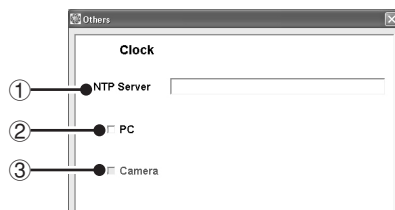
① IP address for the proxy server, and port number used for connecting to the proxy server

② User name and password used for authentication at the proxy server

- When user name and its password are required to use the proxy server, select the [Enable] check box and enter a valid user name and password in the appropriate boxes.
- For the valid user name and password, consult your network administrator.

## ■ [Clock] Setting

The built-in clocks in PCs and cameras can be adjusted automatically by retrieving the correct date and time information from the NTP server.



① NTP Server

When using the automatic clock adjustment function, enter the domain name or IP address of the NTP server.

② PC

This is a PC setting.

When the check box is selected, date and time information is retrieved from the NTP server and the PC internal clock is automatically adjusted at the following intervals:

- When setting this function
- When starting up this software
- At 24-hour intervals after startup

③ Camera

This is a camera setting.

When the check box is selected, date and time information is retrieved from the PC internal clock and the camera's internal clock is automatically adjusted at the following intervals:

- When setting this function
- When starting up this software
- At 24-hour intervals after startup

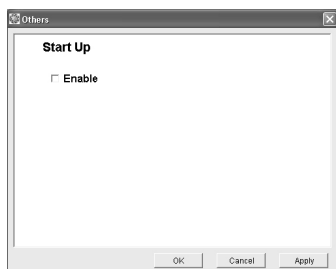
### MEMO:

When starting up the software and acquiring video images for the first time, if the time is not set on the camera side, date and time information is retrieved from the PC internal clock and automatically configured to the camera's internal clock.

## ■ [Start Up] Setting

This option can be used to start the VA-SW3050 automatically on Windows startup.

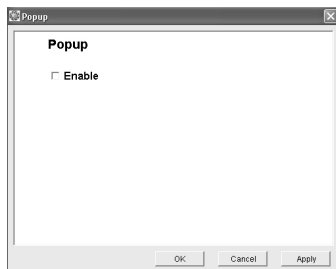
Selecting the check box enables the automatic startup function.



## ■ [Popup] Setting

The option can be used to display the alarm video automatically.

Selecting the check box enables the function, and the alarm video is automatically displayed in the popup window on the PC when the alarm is detected.



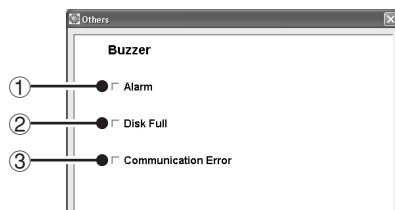
### MEMO:

- This function works even while the VA-SW3050 is stored in the task tray icon with the screen closed or the screen of the VA-SW3050 minimized.
- This function is disabled while you are logged off the VA-SW3050.

## ■ [Buzzer] Setting

This option can be used to warn the user by buzzer.

Selecting the check box enables the function to activate the warning buzzer on the PC when the status specified with the following options occurs.



### ① When the alarm is detected (Alarm)

Clicking the [Alarm] button in the tool bar stops the buzzer.

### ② When available space on hard disk runs out (Disk Full)

Clicking the screen stops the buzzer.

### ③ When image signals are interrupted for approximately 30 seconds or more (Communication Error)

Clicking the screen stops the buzzer.

## ■ [Display] Setting

You can choose whether or not to display the camera title and/or date/time information on full-screen camera images and print images. Select the appropriate check box for the item(s) you want to display.



### MEMO:

The camera title and date/time information are always displayed on the normal screen.

# Appendix

## ■ Reference Table for Alarm Recording Time

When you record alarm video on the camera's memory temporarily, the available recording time depends on the quality or frame rate options for recording.

While displaying the live video, the approximate available recording time for alarm recording using the following options is shown in the table below.

### <Recording options for alarm recording>

- **Alarm area:** Max (8MB)
- **Rate:** 30fps (NTSC) / 25 fps (PAL)
- **Resolution:** 720x240 (NTSC) / 720x286 (PAL)

TV format	Quality	Video data size (KByte)	Frame rate <measurement> (fps)	Available recording time (second)
NTSC	Basic	15	30	18
	Normal	22	30	12
	Enhanced	30	30	9
	Fine	42	30	7
	Super Fine	50	26	6
PAL	Basic	15	25	22
	Normal	22	25	15
	Enhanced	30	25	11
	Fine	42	25	8
	Super Fine	50	22	7

### Note:

- The values contained in the table above are only for reference purposes. The exact values depend on the system configuration or operating environment.
- When you record the video in higher quality or multiple users access the camera simultaneously, the recording may not be performed in the specified frame rate.

## ■ Setting Preference Chart

Setting screen	Setting menu	Options (Default values are shown in bold.)	
Camera Setting	Port	SSL	<b>Disabled: 80</b> <b>Enabled: 443</b>
	Rate	MAX, <b>0.5s</b> , 1s, 2s, 3s, 5s, 10s, 15s, 20s, 30s, 1m, 2m, 3m, 5m, 10m, 15m, 20m, 30m, 1h	
	Quality	Basic, Normal, <b>Enhanced</b> , Fine, Super Fine	
	Resolution	NTSC: 180x120, 360x240, <b>720x240</b> pixel PAL: 180x143, 360x286, <b>720x286</b> pixel	
Alarm Setting	Alarm area	PC, 0.5MB, 1MB, 2MB, 4MB, 6MB, <b>MAX</b>	
	Alarm Duration	<ul style="list-style-type: none"> <li>When [Alarm area] is set to "PC": Post: 5s, 10s, 20s, 40s, 1m, 2m, 3m, 4m, 5m, 10m, 15m</li> <li>When [Alarm area] is set to the option other than "PC": Pre/Post: 0%100%, 10%90%, 20%80%, 30%70%, 40%60%, 50%50%</li> </ul>	
	Rate	<ul style="list-style-type: none"> <li>When [Alarm area] is set to "PC": 1fps, 2fps, <b>3fps</b>, MAX</li> <li>When [Alarm area] is set to the option other than "PC": NTSC: 1fps, 2fps, 3fps, 5fps, 10fps, 15fps, <b>30fps</b> PAL: 1fps, 2fps, 3fps, 5fps, 8fps, 12.5fps, <b>25fps</b> (When you set the [Resolution] option to "640x480", the available options are 1fps, 2fps, and <b>3fps</b>.)</li> </ul>	
	Quality	Basic, Normal, <b>Enhanced</b> , Fine, Super Fine	
	Resolution	NTSC: 180x120, 360x240, <b>720x240</b> , 640x480 pixel PAL: 180x143, 360x286, <b>720x286</b> , 640x480 pixel	
DATA Storage	DATA Folder	Installation folder for the VA-SW3050 (C:\Program Files\SANYO\VA-SW3050)	
	Keep remain.	100 MB, 200 MB - 900 MB, <b>1 GB</b> (100 MB steps)	
	When HDD is fully recorded	<b>Overwrite</b> , Rec Stop	
	AUTO DELETE	<b>OFF</b> , ON	
	Saving duration (days)	<b>1</b> - 99	

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