



INSTRUCTION MANUAL (Supplement)

DSR-2004

Digital Video Recorder

The instruction manual has been updated with changes and additions to reflect the latest improved product specifications.

When referring to specific parts of the instruction manual, use this supplement to identify what changes or additions exist.

Note that the network operation software has been updated from “Sanyo DVR Utility 2004” to “Sanyo DVR Utility 2000S”.

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Note: Parenthesized numbers indicate the corresponding pages in the instruction manual.

Additions and Changes to Main Unit Operating Procedures

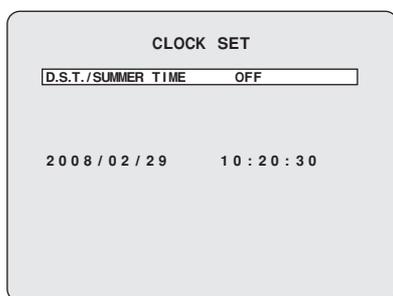
Setting the Summer Time (P9)

The procedure for setting the summer time has been changed.

To set the summer time, display the CLOCK SET screen and then follow the steps below:

1 Display the CLOCK SET screen.

As instructed in the instruction manual, access the menu screen and choose [SYSTEM] → [CLOCK SET]. When the CLOCK SET screen appears, the cursor is automatically placed in the [D.S.T./SUMMER TIME] field.



2 Select the summer time region using the right and left control buttons (<>).

- **OFF**

Turns off the summer time.

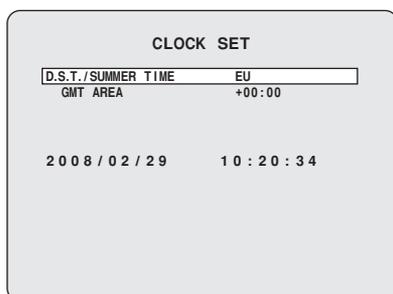
- **U.S.A**

Applies USA summer time.

- **EU**

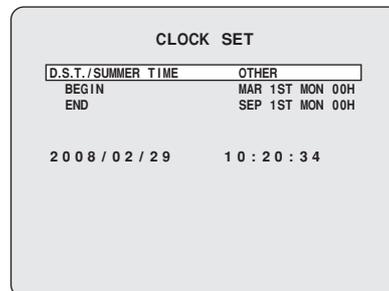
Applies EU summer time.

Select the GMT AREA using the down control button (▼), and set the time difference using the right and left control buttons (<>).

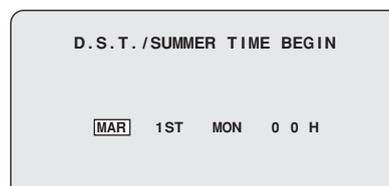


- **OTHER**

If your summer time region is neither USA nor EU, you have to set the beginning (BEGIN) and end (END) of the summer time period:



- ① Use the down control button (▼) to choose [BEGIN] and then press the ENTER button to access the screen where you can set the beginning of the summer time period.



- ② Use the right and left control buttons (<>) to choose the appropriate item and then use the up and down control buttons (▲▼) to select the desired setting.

When you are done, press the ENTER button.

- ③ Repeat the same steps to set the end (END) of the summer time period.

3 Place the cursor in the [D.S.T./SUMMER TIME] field, and press the ENTER button.

The cursor moves to the date and time field.

The subsequent steps are unchanged. Set the current date and time following the instructions given in the instruction manual.

Setting the Recording Time (P13, 14, 28)

The upper limits for BY MOTION and BY EXT. SENSOR recording times (POST EVENT RECORD) have been extended to 15 minutes.

Available ranges:

2 - 30 SECONDS, 1 - 5, 10, 15 MINUTES

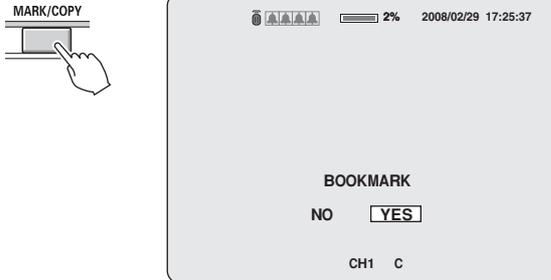
Additions and Changes to Main Unit Operating Procedures

Marking and Copying Live Videos (P21)

You can mark and immediately copy a live video.

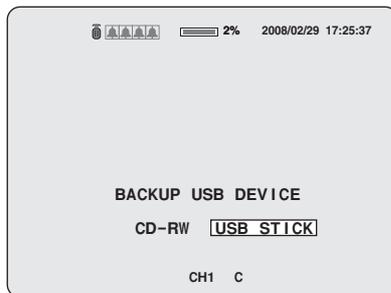
- 1 While monitoring a live video, press the **MARK/COPY** button.

The BOOKMARK screen appears.



- 2 Choose **"YES"** and press the **ENTER** button.

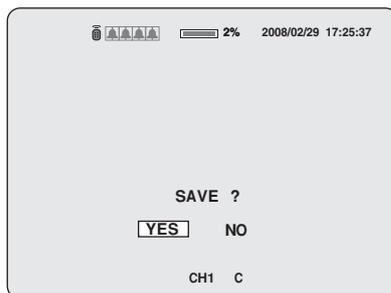
The current frame of the video is marked as a still image, and the **BACKUP USB DEVICE** screen appears.



- 3 Select the destination and press the **ENTER** button.

A confirmation screen appears.

Choose **"YES"** and press the **ENTER** button to copy the image.



Memo: Whenever you mark a live video by pressing the **MARK/COPY** button, the current frame of the video is saved so that you can later search for and play back the marked video through the search (**BOOKMARK**) menu regardless of whether you copy it (by choosing **"YES"**) or just mark it (by choosing **"NO"**). This is also true when you have marked a playback video.

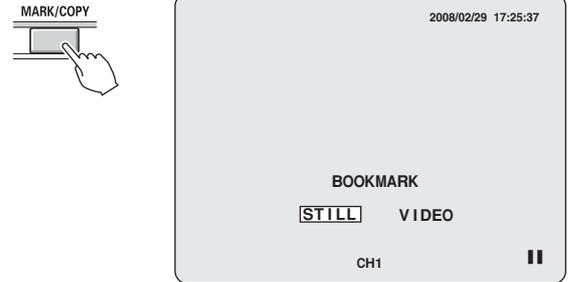
Marking and Copying Playback Videos (P22)

You can mark and immediately copy a playback video in the same way as a live video.

- To copy a still image from a playback video:

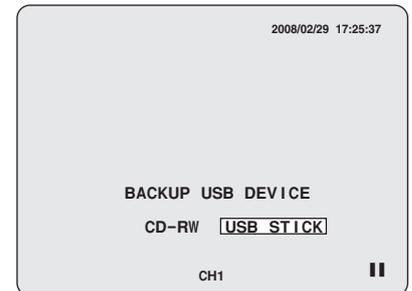
- 1 While playing back a recorded video, press the **MARK/COPY** button

The **BOOKMARK** screen appears.



- 2 Choose **"STILL"** and press the **ENTER** button.

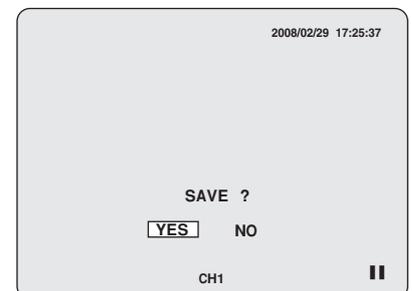
The current frame of the video is marked as a still image, and the **BACKUP USB DEVICE** screen appears.



- 3 Select the destination and press the **ENTER** button.

A confirmation screen appears.

Choose **"YES"** and press the **ENTER** button to copy the image.



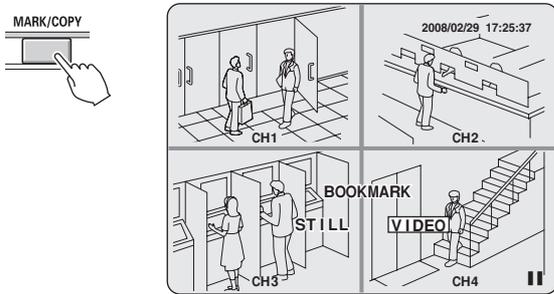
Additions and Changes to Main Unit Operating Procedures

● To copy a video clip from a playback video:

When you copy a video clip from a playback video, you can select which channel(s) to copy.

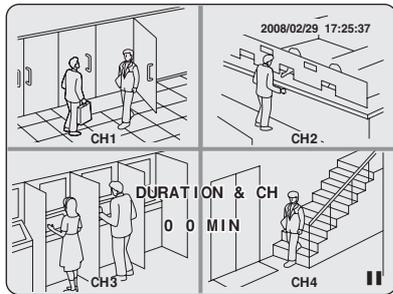
1 While playing back a recorded video, press the MARK/COPY button

The BOOKMARK screen appears.



2 Choose "VIDEO" and press the ENTER button.

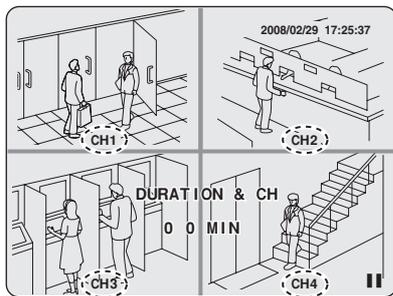
The video is marked as the source of a video clip, and the DURATION&CH screen appears.



3 Select the channel(s) to copy using the channel buttons (1 - 4).

The text color of each channel number toggles each time the corresponding button is pressed:

- **Yellow (default): Copies the channel.**
- **White: Does not copy the channel.**

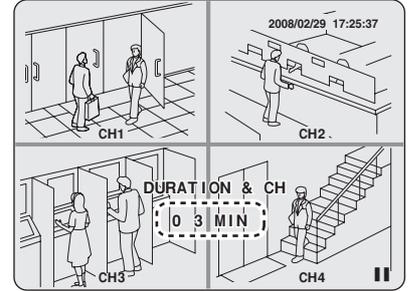


Memo: For a single channel video, the channel number is always displayed in yellow ("copy the channel") and its color cannot be toggled.

4 Set the length of the video clip you want to save.

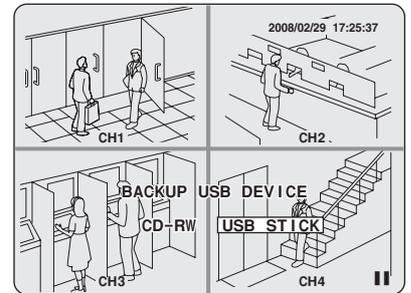
Use the right and left control buttons (<>) to move between the digits, and use the up and down control buttons (▲▼) to select the desired value.

The length of the video clip can be specified in units of minutes and the maximum length is 30 minutes.



5 Press the ENTER button.

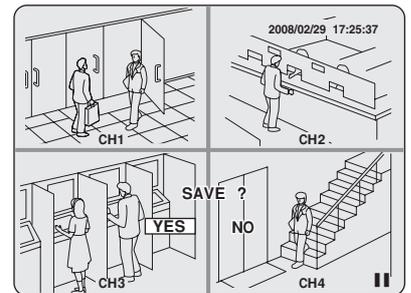
Then the BACKUP USB DEVICE screen appears.



6 Select the destination and press the ENTER button.

A confirmation screen appears.

Choose "YES" and press the ENTER button to copy the specified channels in order.



Memo: Empty channels, if any, are skipped.

Additions and Changes to Main Unit Operating Procedures

Configuring Alarm Notification E-mail (P36)

Options have been added to the alarm notification (EVENT ALARM) settings available through the SEND E-MAIL screen. In addition to the OFF/ON setting, which was the only option in the previous release, you can now narrow down the sending conditions based on alarm event types.

SEND E-MAIL	
IP NOTIFICATION	OFF
EVENT ALARM	OFF
MAIL ADDRESS	
MAIL SERVER NAME	
ID	
PASSWORD	
RETURN MAIL ADDRESS	

- **OFF**

Selecting this option prevents the DVR from sending any notification e-mail when an alarm event has occurred.

- **BY EXT. SENSOR**

Selecting this option causes the DVR to send a notification e-mail when a sensor or similar device connected to the DVR's external sensor terminal is activated.

- **BY MOTION**

Selecting this option causes the DVR to send a notification e-mail when its built-in motion sensor has detected movement.

- **ALL**

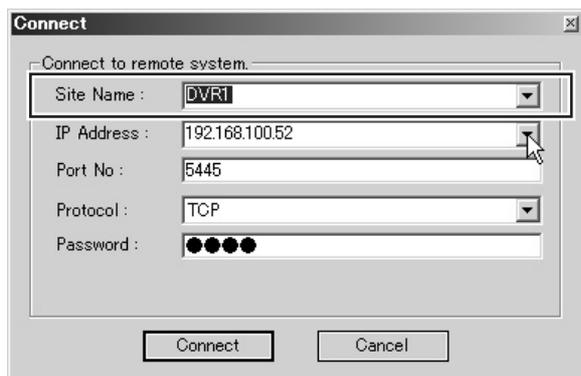
Selecting this option causes the DVR to send a notification e-mail when an external sensor or its built-in motion sensor is activated.

Additions and Changes to Network Operations

Connecting to the DVR through the Network (P41)

Connecting to the DVR through the network for the first time requires you to fill in the [Site Name] field of the [Connect] dialog box.

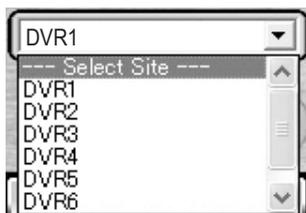
You cannot connect to the DVR when the [Site Name] field is blank.



Connecting to a Different Site (P41)

You can view the DVR connection information by opening the [---Select Site---] pull down menu at the top of the operation panel, which contains a list of site names.

To connect to another site, highlight and click the site name from the pull down menu. This disconnects the current connection and automatically establishes a new connection to the specified site.

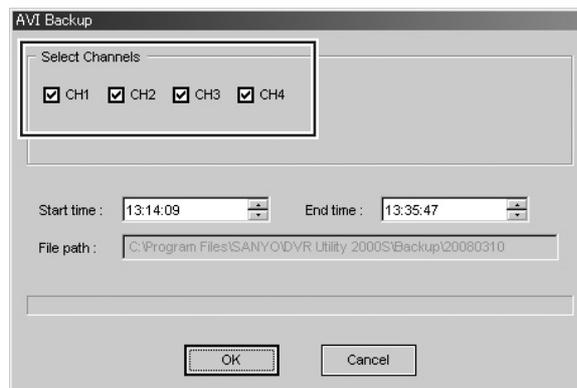


Memo: The connection information you register with the [Connect] dialog box when connecting to the DVR can be changed later by choosing [Site] from the setup menu.

Backing Up Recorded Videos (P49)

The [AVI Backup] dialog box is now complete with channel selector check boxes.

You can specify which channel(s) to back up by selecting the channel boxes. Your specified channels will be backed up in the order of the channel numbers.



Memo: Empty channels, if any, are skipped.

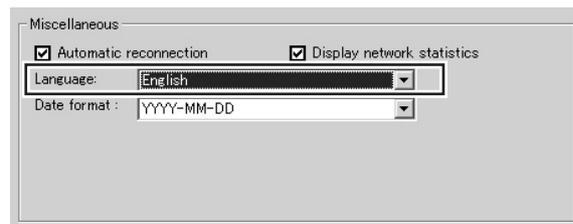
Selecting the Display Language (P50)

Now you can select the display language used on the network operation screens.

To select the display language, use [General] (Miscellaneous - Language) on the setup menu.

Available languages:

English, Thai, Italian, German, French, Spanish, Japanese

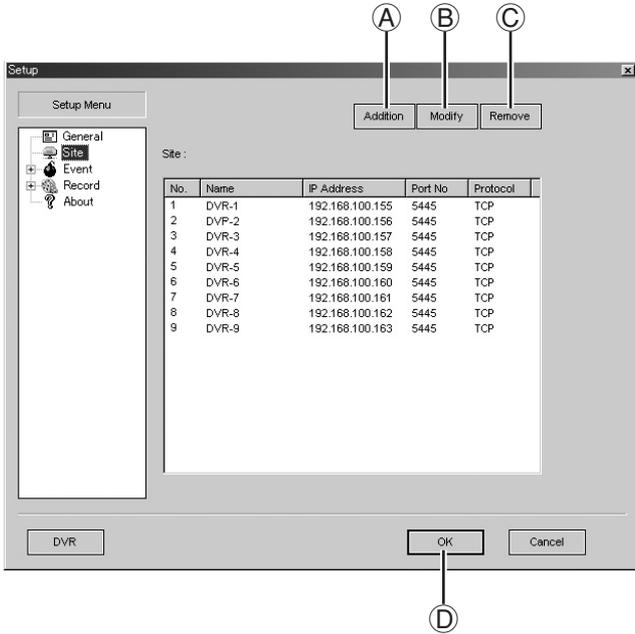


Memo: After changing the settings, restart this software to put the new settings into effect.

Additions and Changes to Network Operations

Editing Site Information (P51)

The connection information you register with the [Connect] dialog box when connecting to the DVR can be updated later with additions, changes, and/or deletions by choosing [Site] from the setup menu.



- 4** On the [Channels] list, click your desired channel to highlight it in blue, and then click it again. The field becomes an input box.
- 5** Enter the channel name. Your entered channel name will be displayed when, for example, you monitor the video from a camera.
- 6** Click [OK]. Close the [Addition] dialog box. The new DVR is added to the [Site] list.

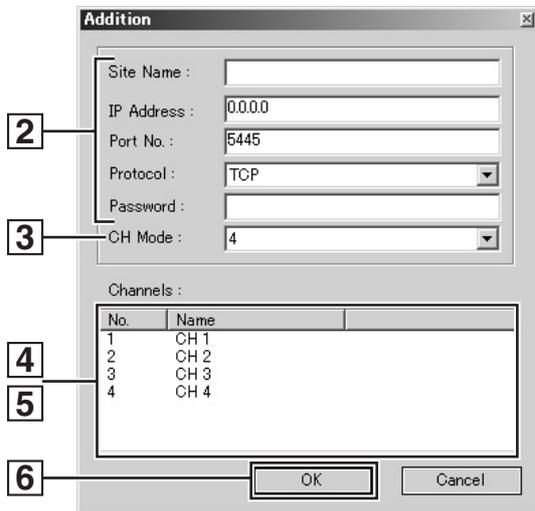
■ To change the registered information (Modify):

- 1** On the [Site] list, click the site you want to change. The selected site row is highlighted in blue.
- 2** Click [Modify] (B). The [Modify] dialog box appears.
- 3** Change the information displayed on the dialog box as appropriate.
- 4** Click [OK]. Close the [Modify] dialog box. The [Site] list is updated.

Memo: You cannot set channel names when you connect to the DVR. To set the name of each channel, you have to change the registered information using the [Modify] dialog box, as described above.

■ To register an additional DVR (Addition):

- 1** Click [Addition] (A). The [Addition] dialog box appears.



■ To delete the registered information (Remove):

- 1** On the [Site] list, click the site you want to delete. The selected site row is highlighted in blue.
- 2** Click [Remove] (C). The selected site is deleted from the [Site] list.

☞ When you are done, click [OK] (D). Your changes are applied and saved.

- 2** Enter necessary connection information such as addresses. You can enter the information in the same way as when using the [Connect] dialog box (refer to page 41 of the instruction manual).
- 3** In [CH Mode], set the number of DVR channels to "4".

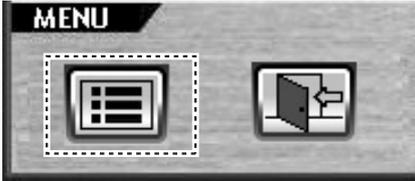
New Feature for Network Operations (Remote Setup)

Now you can use the new network feature called Remote Setup.

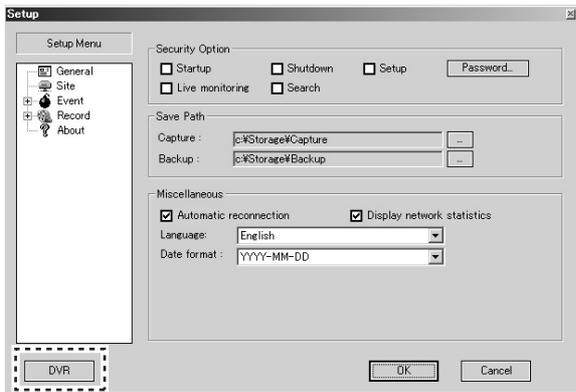
With Remote Setup, you can connect your personal computer to the DVR over the network and remotely set up the DVR through settings menus.

How to Use Remote Setup

- 1 Click the menu button on the operation panel.
The [Setup] screen appears.

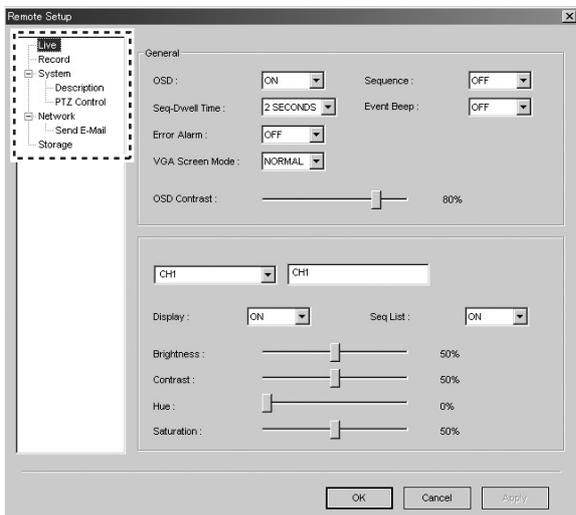


- 2 Click [DVR] at the lower left corner of the screen.
The [Remote Setup] screen appears.



Memo: Some DVR models provide no support for Remote Setup. If this is the case, pressing the [DVR] results in an error message.

- 3 Highlight and click your desired settings menu on the tree list.
Your specified menu screen appears.

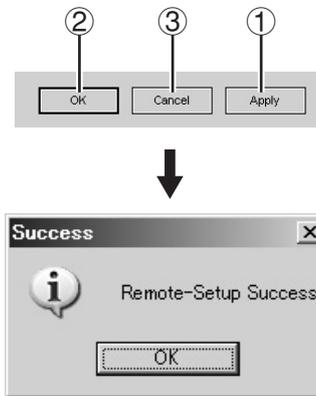


- 4 Configure the settings using the menu items displayed on screen.

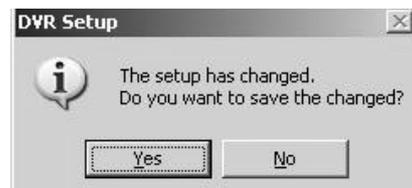
These settings are basically the same as those available through DVR-side menus. For more information on the settings, refer to the corresponding pages of the instruction manual.

- 5 Click [Apply] or [OK].
A "Remote-Setup Success" message appears on the [Success] dialog box, and the settings are sent to the DVR.

Click [OK] to close the dialog box.



- 1 If you click [Apply]:
The [Remote Setup] screen remains displayed after you close the [Success] dialog box. When you have finished all necessary Remote Setup operations, click [OK] to close the [Remote Setup] screen.
- 2 If you click [OK]:
This action closes both the [Success] dialog box and [Remote Setup] screen.
- 3 If you click [Cancel]:
A dialog box that asks whether to save the settings is displayed if there have been any settings changed on the screen.



Choosing "No" cancels changes to the settings and closes the [Remote Setup] screen.

Choosing "Yes" saves changes to the settings and closes the [Remote Setup] screen.

New Feature for Network Operations (Remote Setup)

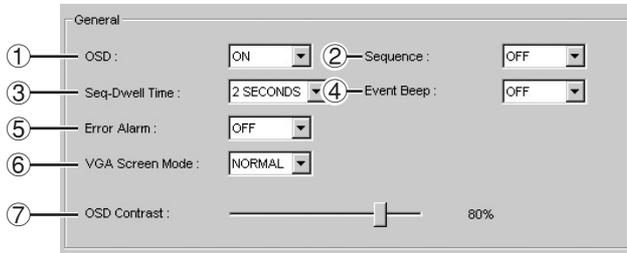
Live Settings

(P25)

You can use the LIVE settings menu to configure live mode settings such as how to monitor live videos.

● Common settings (General)

These settings are applied to all the channels.



① OSD

Allows you to choose whether to display date/time and channel number information on screen.

- **ON:** Displays the images from this channel.
- **OFF:** Does not display images from this channel.

② Sequence

Allows you to enable or disable Camera Switch (Sequence) mode, in which a single screen displays the available channels one after another in the order of the channel numbers.

- **ON:** Enables Camera Switch mode.
- **OFF:** Disables Camera Switch mode.

③ Seq-Dwell Time

Allows you to specify the interval (1 - 60 seconds) at which to switch from one camera to another in Camera Switch mode.

④ Event Beep

Allows you to choose whether to generate an audible alarm when an alarm event has occurred.

- **ON:** Enables the generation of an audible alarm.
- **OFF:** Disables the audible alarm.

⑤ Error Alarm

Allows you to choose whether to output an alarm signal when the live video is disrupted or a hard disk error occurs.

- **OFF:**
Even if the live video is lost or if there is a hard disk error no alarm is output.
- **VIDEO LOSS:**
An alarm is output when a live video loss occurs.
- **HDD FAIL:**
An alarm is output when a hard disk error occurs.
- **ALL:**
An alarm is output when both a live video loss and a hard disk error occur.

⑥ VGA Screen Mode

Allows you to set how to display the software on a monitor connected to the VGA port of the DVR.

- **FULL:** Displays the software in full screen mode.
- **NORMAL:** Displays the software with certain margins around it.



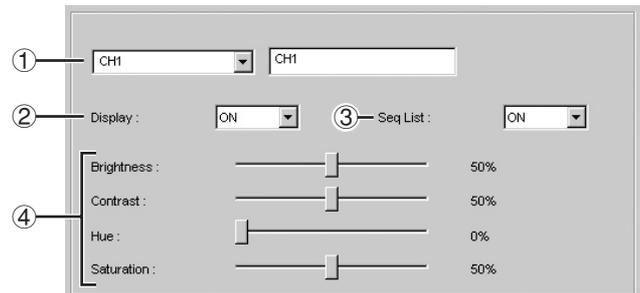
Changing this setting forcibly restarts the DVR.

⑦ OSD Contrast

Allows you to adjust the contrast of the text displayed on the screen.

● Channel-specific Settings

These settings are specific to a particular channel.



① Channel selector (CH1 - CH4)

② Display

Allows you to choose whether to display images from this channel on the monitor.

- **ON:** Displays the images from this channel.
- **OFF:** Does not display images from this channel.

③ Seq List:

Allows you to choose whether to display images from this channel in Camera Switch (Sequence) mode.

- **ON:** Displays the images from this channel.
- **OFF:** Does not display images from this channel.

④ Display adjustment sliders

- **Brightness:** Allows you to adjust the brightness.
- **Contrast:** Allows you to adjust the contrast.
- **Hue:** Allows you to adjust the hue.
- **Saturation:** Allows you to adjust the saturation.

New Feature for Network Operations (Remote Setup)

Record Settings

(P27)

You can use the RECORD settings menu to configure recording conditions.

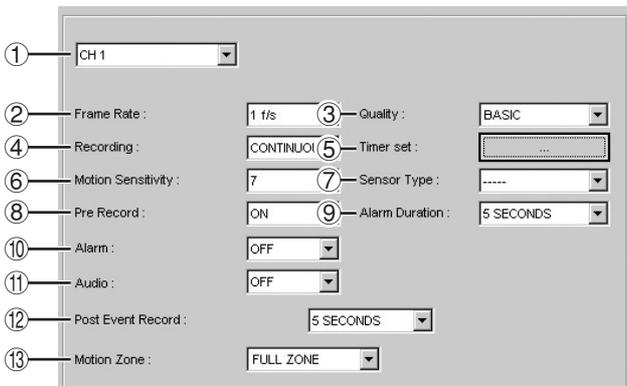
● Resolution (common to all channels)

Allows you to set the recorded video resolution. This setting is applied to all the channels.



● Channel-specific Settings

These settings are specific to a particular channel.



① Channel selector (CH1 - CH4)

② Frame Rate

Allows you to set the frame rate at which to record the video (NTSC: OFF/1 - 30f/s, PAL: OFF/1 - 25f/s).

③ Quality

Allows you to choose one of three quality levels: BASIC, NORMAL, and FINE.

④ Recording

Allows you to set the recording mode.

- **DISABLE:** Disables recording.
- **CONTINUOUS:** Continuously records the video as long as the DVR is on.
- **BY MOTION:** Selecting this option causes the DVR to record the video when its built-in motion sensor has detected a motion.
- **BY EXT. SENSOR:** Selecting this option causes the DVR to record the video when a sensor or similar device connected to the DVR's external sensor terminal is activated.
- **BY SCHEDULE:** Selecting this option causes the DVR to record the video during the scheduled time window.

⑤ Timer set

Set the operational schedule for timer recording (BY SCHEDULE) using the [Schedule] screen. (For more information on how to define the schedule, see Page 10.)

⑥ Motion Sensitivity

Allows you to set the motion sensor sensitivity (1 - 9). The smaller the setting, the higher the sensitivity.

⑦ Sensor Type

Allows you to set the signal polarity of alarm input from an external sensor.

- **----- :** Ignores alarm input.
- **N/O (Normally Open):** Choose this option if the signal line is normally open and gets closed when an alarm occurs.
- **N/C (Normally Closed):** Choose this option if the signal line is normally closed and gets opened when an alarm occurs.

⑧ Pre Record

Allows you to configure the pre-event recording feature. When enabled, this feature always maintains the most recent five frames while overwriting the previously saved frames; this means that you can record the immediately preceding five frames when an alarm event occurs.

- **ON:** Enables the pre-event recording feature.
- **OFF:** Disables the pre-event recording feature.

⑨ Alarm Duration

Allows you to set the duration of alarm signal output (1 - 60 SECONDS).

⑩ Alarm

Allows you to choose whether to output an alarm signal in response to an alarm event.

- **ON:** Enables the output of an alarm signal.
- **OFF:** Disables the output of an alarm signal.

⑪ Audio

Allows you to enable or disable audio recording.

- **ON:** Records video with audio.
- **OFF:** Disables audio recording.

⑫ Post Event Record

Allows you to set the post-event recording time (2 - 30 SECONDS, 1 - 5, 10, 15 MINUTES).

⑬ Motion Zone

Allows you to set the motion sensor detection zone.

The "**PARTIAL ZONE**" option requires you to define the detection zone. (For more information on how to define the detection zone, see Page 10.)

- **FULL ZONE:** Detects a motion throughout the entire screen.
- **PARTIAL ZONE:** Detects a motion within a user-defined zone (area) only.

New Feature for Network Operations (Remote Setup)

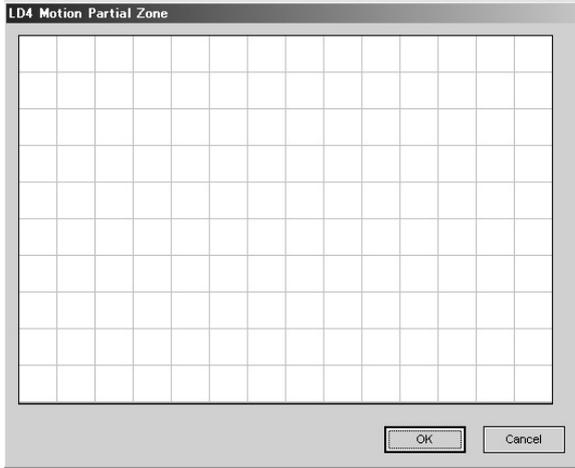
● How to define the detection zone

Allows you to set the motion sensor detection zone.

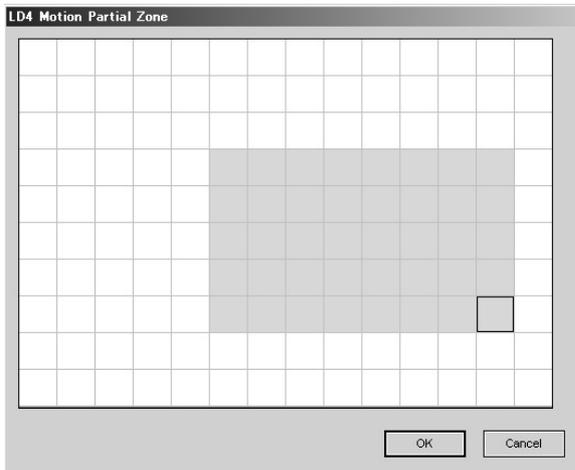
- 1 Set [Motion Zone] to "PARTIAL ZONE".**
A button appears on the right-hand side.



- 2 Click the button.**
You are presented with a screen that prompts you to define the detection zone.



- 3 Define the detection zone by clicking (or dragging) the appropriate grid cells.**
This configures the sensor to detect a motion within your defined zone.

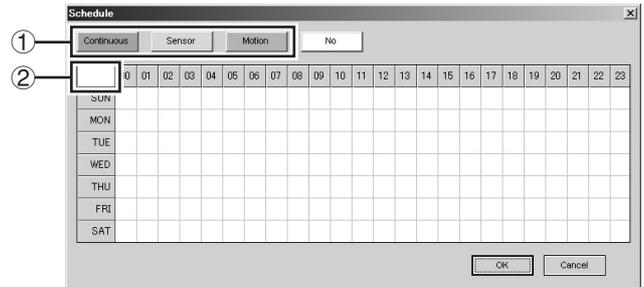


- 4 Click [OK].**
New settings are saved, and the zone definition screen is closed.

● How to define the schedule for timer recording

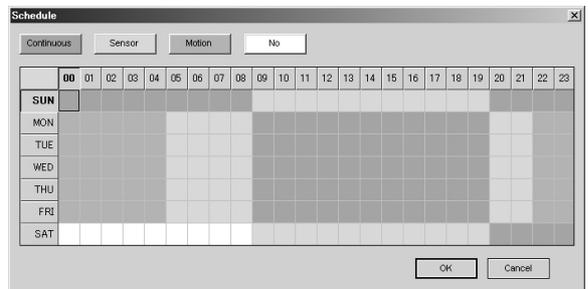
You can define the operational schedule for timer recording (BY SCHEDULE) by using the following steps:

- 1 Click the [Timer set] button.**
The [Schedule] screen appears.

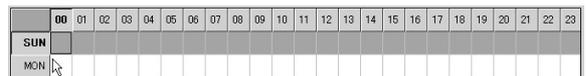


- 2 Highlight and click the recording mode button (1).**
The field (2) at the upper left corner of the schedule table indicates the currently selected recording mode in a specific color.

- 3 By clicking (or dragging) the appropriate grid cells, specify the days of the week and the time windows when recordings should occur.**
This configures the DVR to record the video during the specified time windows.
You can combine multiple recording modes by repeating the steps above.



Memo: Clicking a day of the week button causes the currently selected recording mode to default to all time windows (24 hours).



- 4 Click [OK].**
New settings are saved, and the [Schedule] screen is closed.

New Feature for Network Operations (Remote Setup)

System Settings

You can use the SYSTEM settings menu to configure system and clock settings.

● System Settings

System

- ① DVR ID : DVR
- ② Admin Password : ****
- ③ Network Password : ****
- ④ Date Format : MMDD/YYYY
- ⑤ Language : ENGLISH
- ⑥ Remote Controller ID : 0

① DVR ID (P29)

Allows you to define an identifier unique to the DVR.

② Admin Password (P30)

Allows you to set the password for configuring the DVR through settings menus.

Memo: The default password is "1111".

③ Network Password (P31)

Allows you to set the password for network operations.

Memo: The default password is "1111".

④ Date Format (P8)

Allows you to set the date format.

⑤ Language (P9)

Allows you to set the display language.

⑥ Remote Controller ID (P32)

When using the supplied remote controller to operate the DVR, you can set the remote controller ID (1 - 9) for authentication.

Memo: Accepting the default (0) allows you to use the remote controller without ID authentication.

● Clock Set

Clock Set

- ① Set Date & Time : 02 / 27 / 2008 20 : 29 : 04
- ② D.S.T./SUMMER TIME : OFF

① Set Date & Time (P8)

Allows you to set the current date and time.

Memo: When you change the date/time settings and click the [Apply] or [OK] button on screen, you are presented with a confirmation dialog box.

Responding [Yes] to the dialog message forcibly restarts the DVR so that the new date/time settings are applied.

Clock Set

Update date & time

If you change the time&date setting to old time&date the recorded data in the older time zone will be removed.

Current : 2008/02/28 15:57:46
New : 2008/02/28 16:24:46

Yes No

② D.S.T./SUMMER TIME

Allows you to select the summer time region.

- **OFF (default):**
Turns off the summer time.
- **U.S.A:**
Applies the USA summer time.
- **EU:**
Applies the EU summer time.
- ☞ **Select [GMT Area] and set the time difference from the standard time.**

D.S.T./SUMMER TIME : EU

GMT Area : +00:00

- **OTHERS:**
Applies a non-USA/EU summer time.

☞ **You have to define the beginning and end of the summer time period.**

D.S.T./SUMMER TIME : OTHER

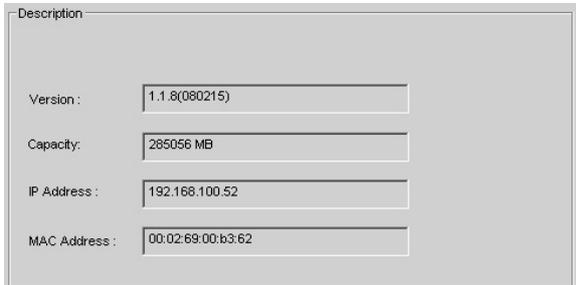
Begin : MAR 1ST MON 00 H

End : SEP 1ST MON 00 H

New Feature for Network Operations (Remote Setup)

Description (P29)

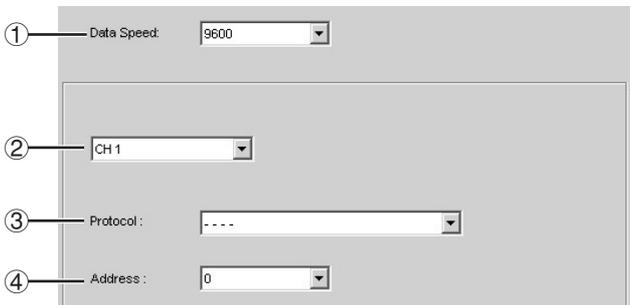
This is a submenu under the SYSTEM settings menu. You can use this menu to check the DVR's version and other information.



- **Version:** Indicates the version of the firmware.
- **Capacity:** Indicates the capacity of the hard disk.
- **IP Address**
- **MAC Address**

PTZ Control Settings (P11)

This is a submenu under the SYSTEM settings menu. When remotely controlling a PTZ camera connected to the RS422/485 terminal, you can use this menu to configure the communication settings.



① Data Speed

Allows you to set the communication rate. This setting is applied to all the channels.

② Channel selector (CH1 - CH4)

③ Protocol

Allows you to specify which protocol to use in the specified channel.



When multiple cameras are connected, use the same protocol for all the cameras.

④ Address

Allows you to set the camera ID (0 - 63).

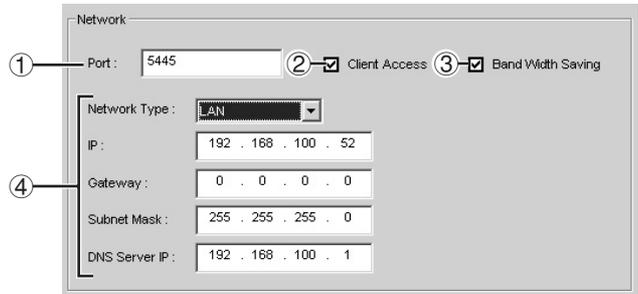
Network Settings (P33)

You can use this menu to configure the DVR's network information.



Changing the settings on this menu forcibly restarts the DVR.

● Network Settings



① Port

When multiple DVRs are connected to the network, you have to configure the port number specific to each DVR.

② Client Access

When you use network operations, make sure that this check box is selected.

③ Band Width Saving

Select this check box when you want to save the network bandwidth.

④ Address settings

Select the appropriate network type from the [Network Type] drop-down list, and enter the necessary information, which differs depending on your selected network type:

• If you select "LAN":

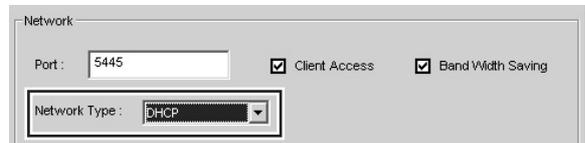
The fields require manual entries:

You have to enter the IP address, gateway, subnet mask, and DNS server address.

• If you select "DHCP":

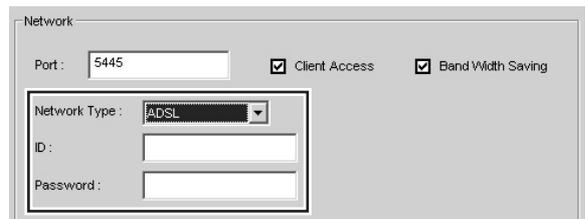
The fields do not require manual entries:

You do not have to enter anything.



• If you select "ADSL":

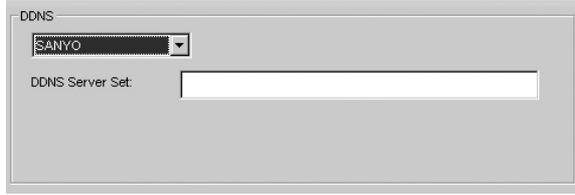
Enter your login ID and password.



New Feature for Network Operations (Remote Setup)

● DDNS Settings

If you intend to use Sanyo's DDNS services, choose "SANYO" and enter your registered domain name.



Memo:

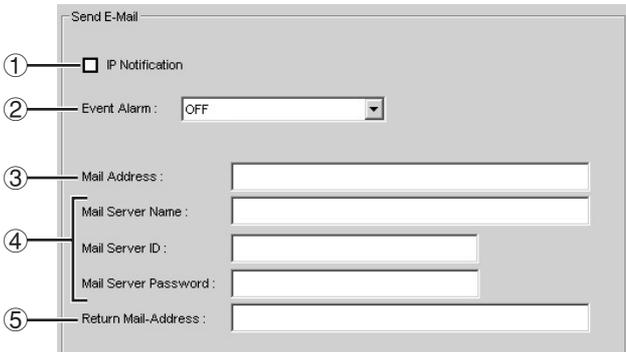
- For information on how to register your domain name, refer to the instruction manual (P35).
- If you want to use third-party DDNS services, consult your dealer or a "Repair Service Center" in your local area.

Send E-Mail Settings (P36)

This is a submenu under the NETWORK settings menu. You can use this menu to configure the DVR to automatically send a notification e-mail to your specified address in response to an alarm event.



Changing the settings on this menu forcibly restarts the DVR.



① IP Notification

Selecting this check box configures the DVR to send a notification e-mail when the DVR's IP address is changed.

② Event Alarm

Allows you to configure the DVR to send a notification e-mail when a specific type of event occurs:

• OFF (default)

Selecting this option prevents the DVR from sending any notification e-mail when an alarm event has occurred.

• By Ext. Sensor

Selecting this option causes the DVR to send a notification e-mail when a sensor or similar device connected to the DVR's external sensor terminal is activated.

• By Motion

Selecting this option causes the DVR to send a notification e-mail when its built-in motion sensor has detected movement.

• All

Selecting this option causes the DVR to send a notification e-mail when an external sensor or its built-in motion sensor is activated.

③ Mail Address

Enter the recipient's e-mail address.

④ Mail server settings

Enter the server name of your SMTP server as well as the ID and password required to log into the SMTP server.

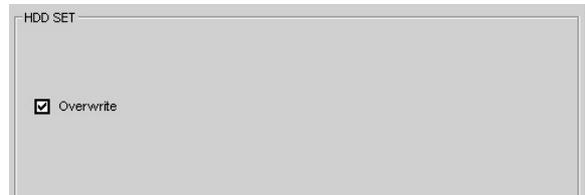
⑤ Return Mail-Address

Enter the return e-mail address.

When a notification e-mail cannot reach the specified recipient e-mail address, then the mail is sent to this address.

Storage Settings (P37)

This menu provides an option to overwrite the hard disk. If the hard disk becomes full and you want to continue recording in overwrite mode, then select the check box provided on this menu.



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L8HBN/WA (0408KP)



SANYO Electric Co., Ltd.