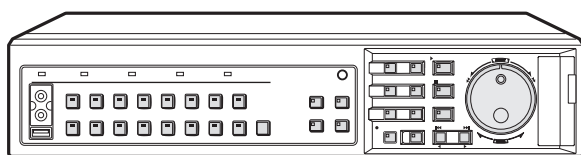


Digital Video Recorder

DSR-5016P DSR-5009P

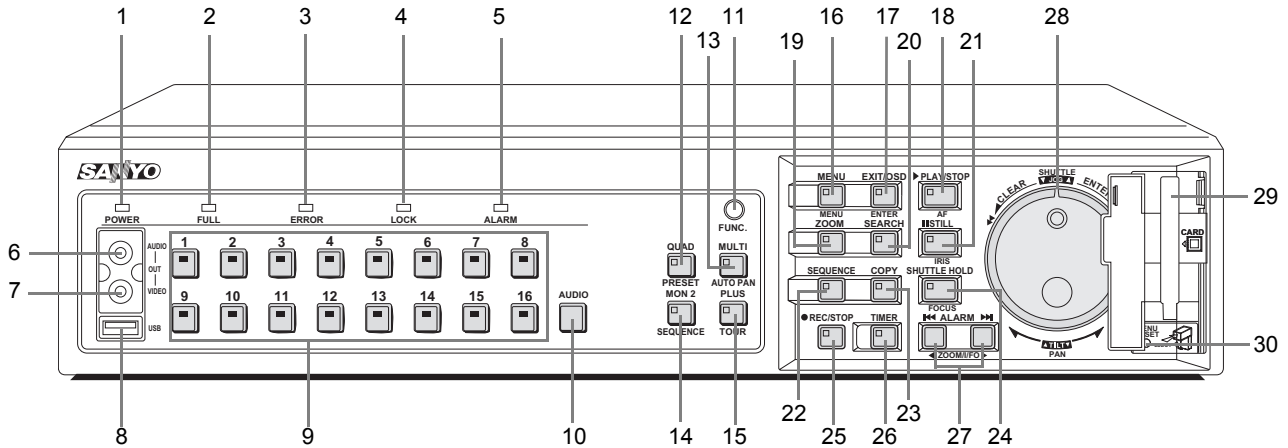
Quick Guide

See "INSTRUCTION MANUAL" for menu settings or details of the operation.



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DSR-5016P



Front panel

1. POWER indicator

Lights up when the power is on.

2. FULL indicator

Flashes when the amount of available memory in the hard disk's recording area drops to the percentage specified using menu settings.

In addition, recording stops automatically when no more memory is available, and the FULL indicator switches to a permanently lit condition.

The indicator can then be turned off by performing "AREA FULL RESET".

3. ERROR indicator

This indicator flashes if the HDD or fan begins to malfunction.

4. LOCK indicator

Lights up when operations have been locked.

The LOCK indicator turns off when the lock condition is cancelled.

5. ALARM indicator

Flashes during alarm recording.

The ALARM indicator lights up during pre-alarm recording.

6. AUDIO OUT (RCA) terminal

Connect this terminal and VIDEO OUT terminal to a commercially-available VCR or DVD recorder to enable copying of recorded audio and video. (Same as the audio output terminal on the rear panel)

7. VIDEO OUT (RCA) terminal

Connects to a commercially-available VCR or DVD recorder to enable copying of recorded video. (Same as the MAIN MONITOR output terminal on the rear panel)

8. USB terminal

Connects to a recordable CD or DVD drive.

For compatibility, refer to the SANYO homepage.

<http://www.sanyosecurity.com/>

The rear panel and front panel USB terminals cannot be connected to simultaneously.

9. [CAMERA SELECT] buttons and indicators

When one or more cameras have been connected to the VIDEO IN terminals on the digital video recorder's rear panel and the appropriate [CAMERA SELECT] button is pressed, the corresponding indicator lights up and the video feed from that camera is displayed on-screen.

- During quad, multi 9, or multi 16 screen display:

The indicators corresponding to the cameras being displayed on the monitor light up.

- During video loss:

The indicator starts to flash.

- If an alarm occurs:

The indicator for the corresponding camera starts to flash.

10. [AUDIO] button

Audio input channels connected to the rear panel AUDIO IN terminal can be switched.

Each time this button is pressed, the channel changes in the following order: 1+2, OFF, 1, 2.

11. [FUNC.] button

Activates dome camera operation mode. The operation of other buttons changes. Use also for advanced menu functions.

12. [QUAD] button and indicator

Displays video in quad screens. The indicator lights up while in quad screen display.

The indicator turns off when using a different screen display mode.

13. [MULTI] button and indicator

Displays video in multi 9 or multi 16 screen display.

The indicator lights up while in multi 9 or multi 16 screen display.

The indicator turns off when using a different screen display mode.

The DSR-5009P can only display video in nine screens.

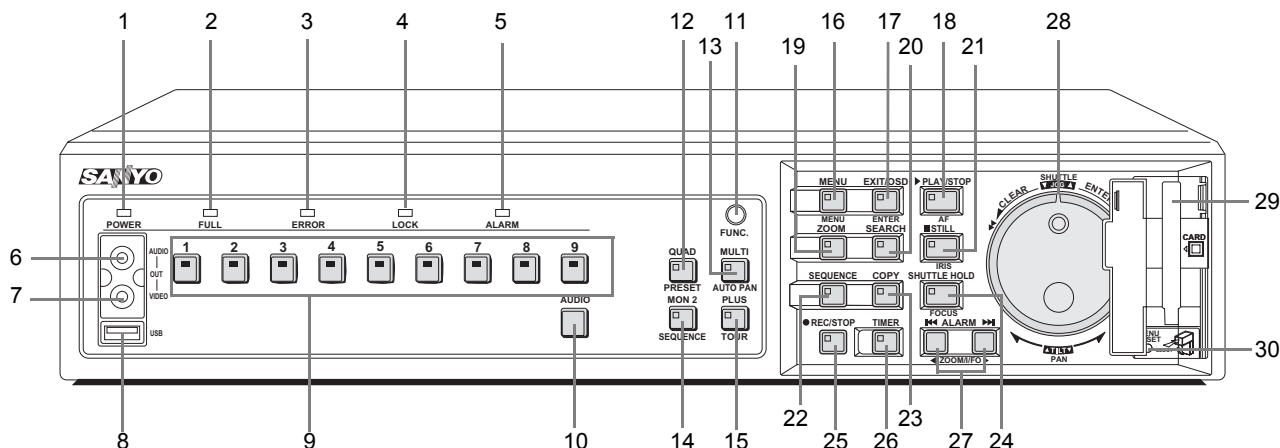
14. [MON2] button and indicator

If the [MON2] button is pressed while a monitor is connected to the MON2 output terminal on the rear panel, it is possible to change the monitor 2 video. The [CAMERA SELECT], [SEQUENCE], [QUAD], [MULTI] and [PLUS] buttons can be used. The indicator lights up when this mode is selected.

15. [PLUS] button

Changes the video from a single camera to quad screen size during multi 9, multi 16, full screen or quad screen display. For DSR-5009P, this operation is available when in multi 9, quad and full screen display.

DSR-5009P



16. [MENU] button and indicator

Displays the menu screens (i.e., setting screens), and the indicator lights up while any of these screens is being displayed.

17. [EXIT/OSD] button and indicator

● EXIT:

Exits the main menu or a sub-menu. When a menu is displayed, the indicator turns off.

● OSD:

Each time the [OSD] button is pressed while the digital video recorder is recording, playing, or stopped, the operation display area changes position between the top and bottom of the screen or becomes hidden; furthermore, the indicator lights up whenever this information is being displayed.

18. [PLAY/STOP] button and indicator

When the [PLAY/STOP] button is pressed, the video from the recording area is played and the indicator lights up. When pressed during playback, this button stops the digital video recorder.

19. [ZOOM] button and indicator

When the [ZOOM] button is pressed during playback or monitoring of camera video on a full screen, a portion of the playback video is magnified and the indicator lights.

20. [SEARCH] button and indicator

When the [SEARCH] button is pressed while the digital video recorder is recording or stopped, the search menu is displayed and the indicator lights up. Press this button again to close the search menu.

21. [STILL] button and indicator

When the [STILL] button is pressed during playback, the current frame is displayed as a still image and the indicator lights up. Press this button again to cancel.

22. [SEQUENCE] button and indicator

Automatically switches the camera video during monitoring. When this button is pressed, the indicator begins flashing and the display is changed automatically. The [CAMERA SELECT] button indicator lights in accordance with screen changes.

23. [COPY] button and indicator

Copies recorded video to the HDD's archive area, CompactFlash card, Microdrive, CD-R/RW, or DVD+R/+RW. The indicator lights up during the copy process.

24. [SHUTTLE HOLD] button and indicator

Locks shuttle dial operation for a constant speed during playback or slow playback. The indicator lights up while the shuttle dial is locked.

25. [REC/STOP] button and indicator

Starts normal recording, and the indicator lights up during this process.

Press this button for at least three seconds to stop recording and turn off the indicator.

26. [TIMER] button and indicator

If the [TIMER] button is pressed while the recording is stopped, timer recording standby mode is selected and recording starts automatically at the set time. The indicator lights up while in timer recording standby mode.

If the button is pressed during timer recording, this process is stopped and the indicator turns off. Furthermore, if the [TIMER] button is pressed when in timer recording standby mode, timer recording is cancelled.

27. [ALARM] button

When an [ALARM] button is pressed during playback or still, the digital video recorder skips to the next earlier or next later alarm.

28. Jog dial (inside) and shuttle dial (outside)

● During playback:

Use the jog dial to change the playback speed.

Use the shuttle dial to perform fast-forward or fast-reverse playback.

● During menu display:

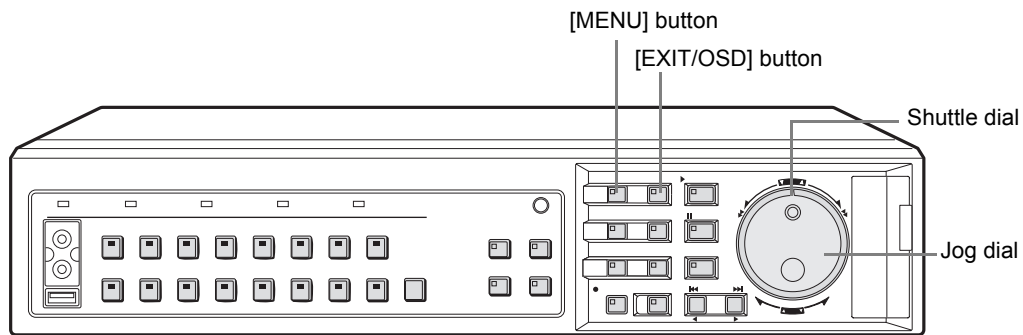
Use the jog dial to move the cursor and to change setting values. Use the shuttle dial to confirm settings.

29. CompactFlash card slot

This slot is used to house a CompactFlash card or Microdrive.

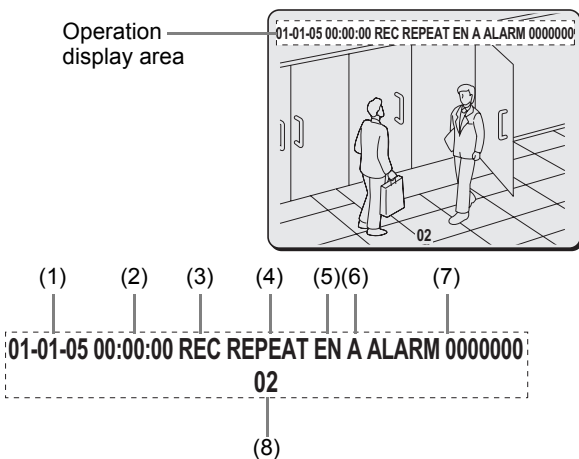
30. [MENU RESET] button

Restores displayed menus to default menu settings.



Operation display

When the power is turned on, the operation display is shown at the top of the monitor screen. This area indicates the date, time, picture quality and other information needed for operation.



* The above is an example display. This is not the default.

(1) Date display (→P.5)

Be sure to specify the correct date using menu settings.

(2) Time display (→P.5)

Make sure to specify the time using menu settings. Recording is not possible until the time is set.

(3) Operation symbol display

Displays the current operation, such as recording or playback.

REC: Recording	▶▶: Fast-forward playback
EXT: External timer recording	◀◀: Fast-rewind playback
▶: Normal playback	▮▮: Slow playback
◀: Reverse playback	◀◀: Reverse slow playback
▮▮: Still	

! CAUTION

- The digital video recorder uses the date and time to manage recording and playback points. Accordingly, if the time has not been set correctly, it is not possible to effectively search for video data.

NOTE

- During simultaneous recording and playback, the display indicates playback (▶).

(4) Remaining memory in recording area

It is displayed while recording.

Displays the remaining area memory as a percentage when overwriting in the recording area is not permitted. If overwriting is permitted, "REPEAT" is displayed.

(5) Picture quality display

Displays the quality of the video that can be recorded on the hard disk. Set to "EN" (Enhanced) by default setting.

[Settings] (◆ indicates default setting)

BA	Basic
NO	Normal
◆EN	Enhanced
FI	Fine
SF	Super Fine

(6) Audio recording display

"A" is displayed when audio is being recorded. "A" is displayed when audio is being played back if audio is recorded. When the [AUDIO] button is pressed, the audio channel (OFF/A1/A2/A12) is displayed.

(7) Alarm display and alarm count display

When an alarm is set using the "ALARM REC MODE SET" menu item, the following information is displayed.

- When alarm recording is set; "ALARM" and the alarm number are displayed in stand-by mode. "ALARM" flashes during alarm recording.
- When pre-alarm recording is in progress; "PRE" and the alarm number are displayed in stand-by mode. When an alarm occurs, "PRE" disappears and "ALARM" and the alarm number are displayed.
- When performing playback from the archive area; "ARCHIV" and the backup number are displayed.

(8) Camera title display

The camera number or camera title is displayed. Also, when an alarm occurs the camera number and alarm “EA”, “SA”, or “ES” are displayed.

- When an external alarm signal is activated; “EA” flashes to the left of the camera number.
- When a motion sensor alarm signal is activated; “SA” flashes to the left of the camera number.
- When an external alarm signal and motion sensor signal are activated; “ES” flashes to the left of the camera number.

NOTE

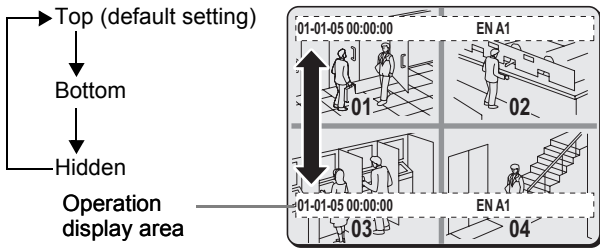
- Although operations such as playback, copying and data transfer are possible while recording, this unit gives priority to recording, and other operations may be delayed as a result.

Changing the display position of the operation display area

1 Press the [EXIT/OSD] button.



Each time the [EXIT/OSD] button is pressed, the operation display moves to a different location or is hidden.



Changing the language

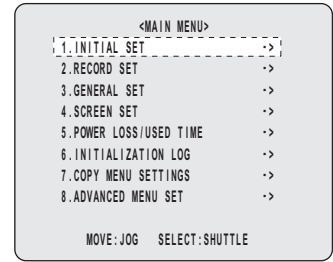
The language displayed on the monitor can be changed.

[Settings] (◆ indicates default setting)

Item	Setting	Description
LANGUAGE	◆ ENGLISH	Sets the language to English.
	FRANCAIS	Sets the language to French.
	DEUTSCH	Sets the language to German.
	ESPAÑOL	Sets the language to Spanish.

1 Press the [MENU] button.

The MENU indicator lights up and the <MAIN MENU> is displayed.



2 Turn the jog dial to select “1.INITIAL SET” and then turn the shuttle dial clockwise.

The <INITIAL SET> screen is displayed.



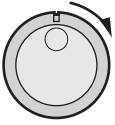
3 Turn the jog dial to select “1.LANGUAGE/CLOCK SET” and then turn the shuttle dial clockwise.

The <LANGUAGE/LANGUE/SPRACHE/IDIOMA> screen is displayed.



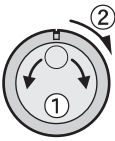
4 Turn the shuttle dial clockwise.

"ENGLISH" flashes.



5 Turn the jog dial to select the language and then turn the shuttle dial clockwise.

The language is selected and the cursor moves to the next item.



6 Press the [EXIT/OSD] button.

The setting is completed and the display returns to the normal screen.

EXIT/OSD



Setting the time

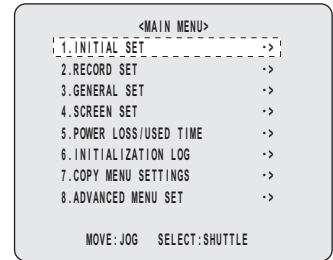
(Default setting: 01-01-2005 SAT 00:00:00)

Be sure to set the correct date and time as these settings are used during playback and searching.

Example: Setting 8:30 on 26 October, 2005.

1 Press the [MENU] button.

The MENU indicator lights up and the <MAIN MENU> is displayed.



2 Turn the jog dial to select "1.INITIAL SET" and then turn the shuttle dial clockwise.

The <INITIAL SET> screen is displayed.



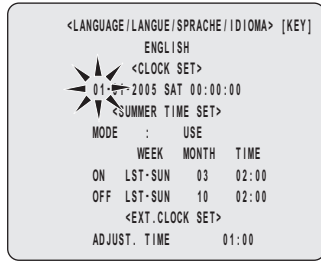
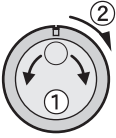
3 Turn the jog dial to select "1.LANGUAGE/CLOCK SET" and then turn the shuttle dial clockwise.

The <LANGUAGE/LANGUE/SPRACHE/IDIOMA> screen is displayed.



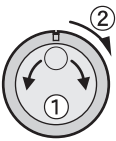
4 Turn the jog dial to select "01" and then turn the shuttle dial clockwise.

"01" flashes (indicating the day).



5 Turn the jog dial to select "26" and then turn the shuttle dial clockwise.

The day is set to "26" and the month "01" flashes.



6 Use the same procedure to set the month (10), year (2005), hour (08) and minute (30).

When the minutes are set, the cursor moves to the next item.

26-10-2005 WED 08:30:00

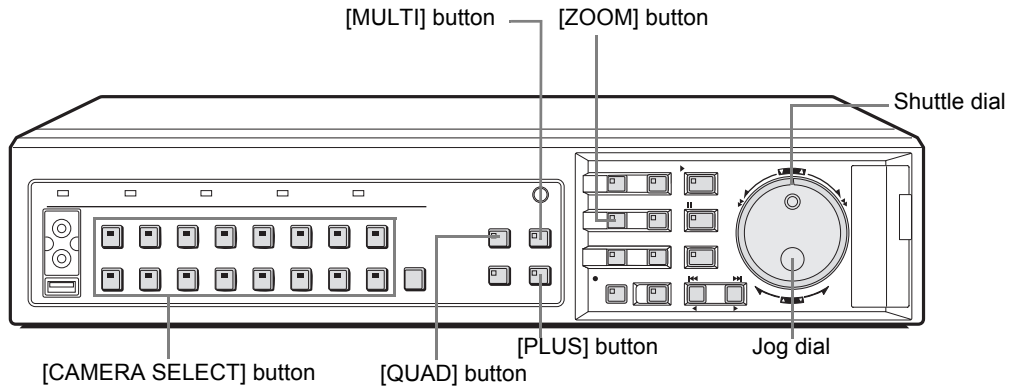
- The day of the week is set automatically.
- The clock stops during date and time settings.
- The clock starts counting from 00 seconds.

7 Press the [EXIT/OSD] button.

The setting is completed and the display returns to the normal screen.

EXIT/OSD



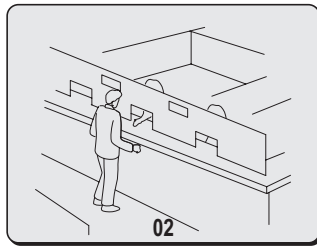


Viewing on a full screen

Example: Selecting Camera 2

1 Press the No. 2 [CAMERA SELECT] button.

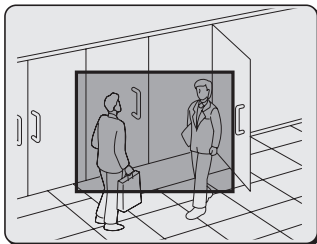
The CAMERA SELECT indicator lights up and video from Camera 2 is displayed on a full screen.



Viewing enlarged live images

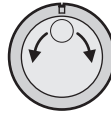
1 Press the [ZOOM] button during monitoring of camera video.

Press the button corresponding to the camera for which video is being magnified. The ZOOM indicator lights up and a blue zoom frame appears in the center of the screen.



2 Move the zoom frame to the area to be magnified.

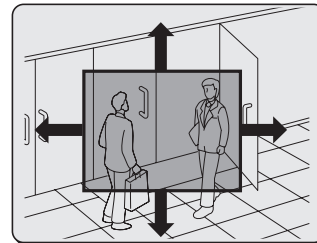
- Turn the jog dial to move the zoom frame to the left or right.



- Turn the shuttle dial clockwise and then turn the jog dial to move the zoom frame vertically.

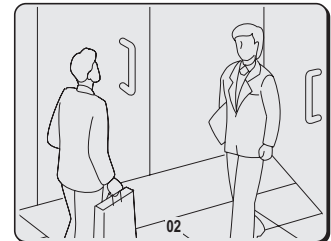
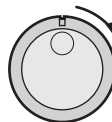


Move the zoom frame to the area to be magnified.



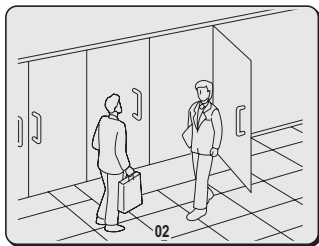
3 Turn the shuttle dial clockwise.

The area enclosed by the zoom frame is magnified (by a factor of 2).



4 Press the [ZOOM] button to return to normal magnification.

Magnification is cancelled and the display returns to the normal screen.
The ZOOM indicator turns off.



! CAUTION

- Magnified video has a slightly coarser appearance when compared with normal video.

NOTE

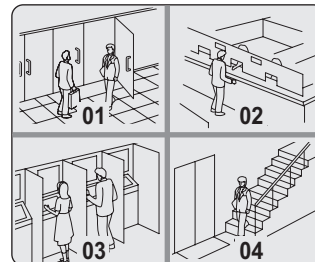
- Images cannot be enlarged in multi-screen format.

Viewing on quad screens

Images from multiple connected cameras can be displayed simultaneously.

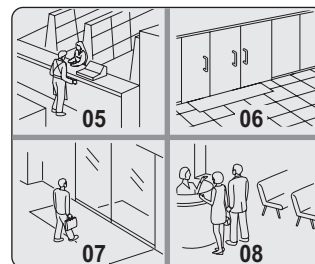
1 Press the [QUAD] button.

The QUAD indicator lights up and video from four separate cameras is displayed simultaneously.
Video from Camera No. 1 through Camera No. 4 is initially displayed.

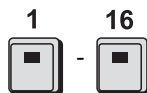


2 To view video from other cameras, press the [QUAD] button again.

Each time this button is pressed, the four images on the quad screen change, in order of cameras No. 1-4, 5-8, 9-12 and 13-16 (default setting).
On the DSR-5009P, the images change in order of cameras No. 1-4, 5-8, 9-3, etc.



3 To return to full screen display, press a [CAMERA SELECT] button.

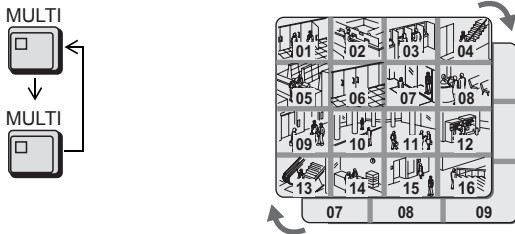


On the DSR-5009P, press the [CAMERA SELECT] 1-9 button.

Viewing on multi 9 or multi 16 screens

1 Press the [MULTI] button.

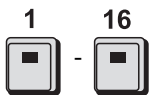
The MULTI indicator lights up and video from 16 separate cameras is displayed simultaneously. Press the [MULTI] button again to display multi 9 screens. The DSR-5009P can only display video from nine cameras.



NOTE

- In the case of both quad and multi 9/16 screen display, you can change the positions in which video from the various cameras is displayed. (→INSTRUCTION MANUAL, P.126)

2 To return to full screen display, press a [CAMERA SELECT] button.



On the DSR-5009P, press the [CAMERA SELECT] 1-9 button.

Enlarging video

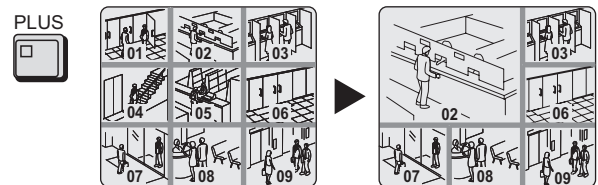
Enlarges the video from a single camera to quad screen size during multi 9 or multi 16 screen display. (enlarged video) In addition, video can also be enlarged during full screen and quad screen displays.

For DSR-5009P, this operation is available when in multi 9, quad and full screen display.

Example: Enlarging video during multi 9 screen display

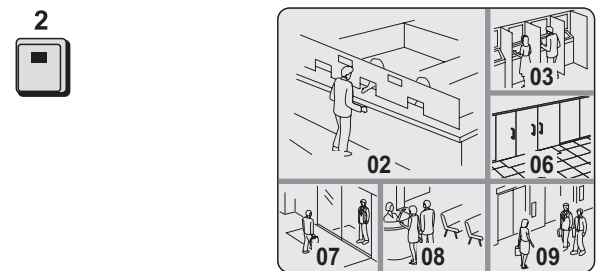
1 Press the [PLUS] button during multi 9 screen display.

The PLUS indicator lights up and the video from one camera is enlarged.

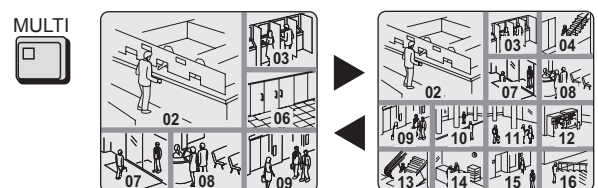


2 Press a [CAMERA SELECT] button.

The video from the selected camera is enlarged.

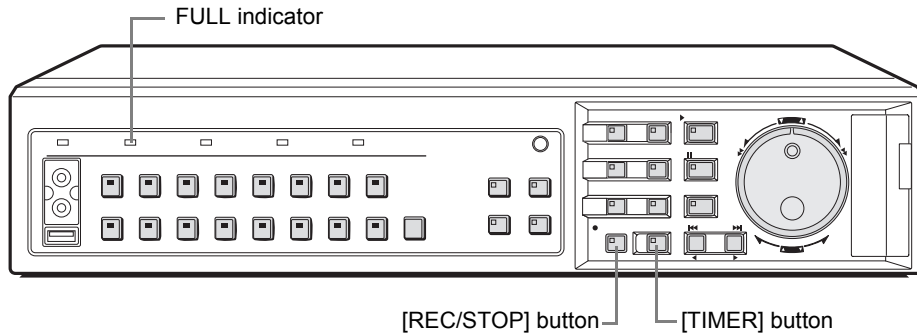


3 Press the [MULTI] button during plus screen display to change display.



4 Press the [PLUS] button to return to the screen from before enlarging video.





Normal recording

Use the following procedure to record monitored video.

! CAUTION

- Be sure to set the time when using the digital video recorder for the first time. Recording is not possible until the time is set. (→P.5)

1 Press the [REC/STOP] button.

The REC/STOP indicator lights up, "REC" (i.e., the recording symbol) appears in the operation display and recording starts.

● REC/STOP



Recording symbol



NOTE

- When recording for the first time, the default settings are used. (→INSTRUCTION MANUAL, P.83)
- When "OVERWRITE" on the <RECORDING CONDITIONS SET> screen is set to "OFF" and the space remaining in the recording area becomes insufficient, the FULL indicator begins to flash. If recording is continued beyond this point, the recording area becomes full and recording stops. Perform AREA FULL RESET to enable recording. (→INSTRUCTION MANUAL, P.79)
- Playback is possible even while recording. (→INSTRUCTION MANUAL, P.18)

2 Press and hold the [REC/STOP] button for approximately 3 seconds to end normal recording.

"REC" disappears from the operation display and recording ends.

● REC/STOP



Timer recording

Use the following procedure to record monitored video for a preset length of time.

! CAUTION

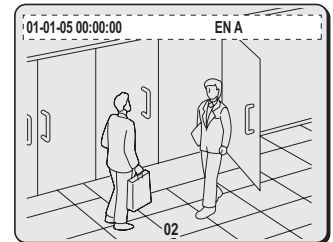
- Be sure to set the time when using the digital video recorder for the first time. Recording is not possible until the time is set. (→P.5)

1 Set timer recording. (→INSTRUCTION MANUAL)

2 Press the [TIMER] button.

The TIMER indicator lights up and the digital video recorder enters timer recording standby mode.

TIMER



- At the time specified for the start of timer recording, the REC/STOP indicator lights up, "REC" (i.e., the recording symbol) appears in the operation display and recording starts.
- At the time specified for the end of timer recording, the REC/STOP indicator turns off and recording ends. The TIMER indicator remains lit. If the [TIMER] button is pressed, the TIMER indicator turns off.

NOTE

- When "OVERWRITE" on the <RECORDING CONDITIONS SET> screen is set to "OFF" and the space remaining in the recording area becomes insufficient, the FULL indicator begins to flash. If recording is continued beyond this point, the recording area becomes full and recording stops. Perform AREA FULL RESET to enable recording. (→INSTRUCTION MANUAL, "Setting overwrite permission", P.79)
- Playback is possible even while recording.

3 Press the [TIMER] button to end timer recording before the end time.

The TIMER indicator turns off and recording ends.

TIMER



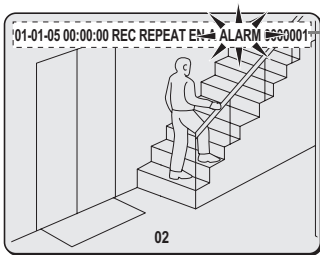
Alarm recording

Use the following procedure to record alarm video when an alarm signal is detected.

1 Set alarm recording. (→INSTRUCTION MANUAL, “Setting alarm recording”, P.93)

2 When an alarm signal is detected

- When an alarm signal is detected, “ALARM” flashes in the operation display and alarm recording starts (indicated by “REC”).
- Whenever an alarm occurs, the number of alarms indicated in the operation display is incremented.



Counts the number of alarms. Displays up to 9999999. After 9999999, the counter returns to 0000000 and resumes counting from 1.

- If an alarm occurs during normal recording or timer recording, recording ends.
- A maximum of 1,000,000 alarm recordings can be made on one hard disk. The number of maximum recordings can be increased to 6,000,000 by expanding the optional hard disk. However, the maximum number of recordings is affected by set recording conditions. Be sure to check the menu settings and display content.

3 End alarm recording.

When the alarm duration has expired (default setting: 20 seconds), both “REC” and “ALARM” stop flashing on the operation display and recording stops.

! CAUTION

- Be sure to set the time when using the digital video recorder for the first time. Recording is not possible until the time is set. (→P.5)
- When alarm recording total exceeds 1,000,000 and “OVERWRITE” on the <RECORDING CONDITIONS SET> screen is set to “ON”, older recordings are overwritten even if the hard disk has remaining memory capacity. Alarm recording is not performed when “OFF” is set.

NOTE

- When “OVERWRITE” on the <RECORDING CONDITIONS SET> screen is set to “OFF” and the space remaining in the recording area becomes insufficient, the FULL indicator begins to flash. If recording is continued beyond this point, the recording area becomes full and recording stops. Perform AREA FULL RESET to enable recording. (→INSTRUCTION MANUAL, P.79)

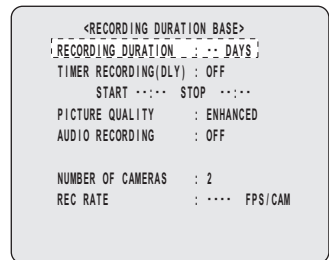
Normal recording easy setup

Use the following procedures to make simple recording settings. Two different setting methods may be used -- one based on recording days; the other based on recording rate.

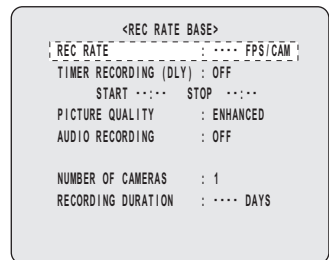
1 Set normal recording easy setup.

- (1) Select “1. NORMAL REC EASY SET” from the <RECORD SET>.
- (2) Select “RECORDING DURATION BASE” to make settings based on recording days; select “REC RATE BASE” to make settings based on recording rate.
- (3) The setting screen is displayed. See INSTRUCTION MANUAL for more details on setting.

RECORDING DURATION BASE



REC RATE BASE

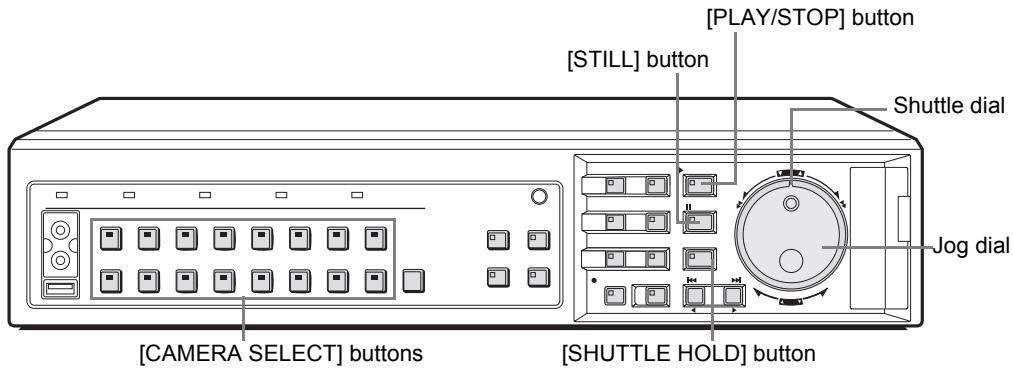


2 Press the [EXIT/OSD] button.

The setting procedure is ended and the display returns to the normal screen.



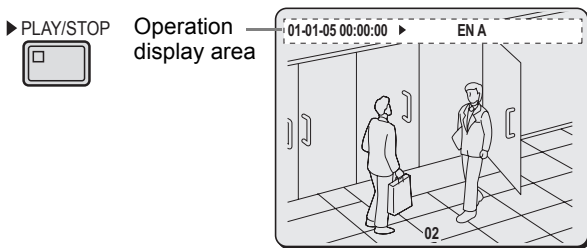
Use the following procedure to play normal or timer recording video stored in the hard disk.



Playing video on a full screen

- 1 Press the [CAMERA SELECT] button for the camera to play and then press the [PLAY/STOP] button.

The PLAY/STOP indicator lights up and ► appears in the operation display. Normal or timer recording video is played back. To view video from another camera, press the [CAMERA SELECT] button of the desired camera.



NOTE

- Video playback begins at the playback point where the previous recording ended.
- If the playback point has been reset, video playback begins from the earliest recording.
- If playback is stopped, the playback point is reset and playback resumes from that point when the [PLAY/STOP] button is next pressed.
- When playback ends, the operating display automatically indicates that playback is paused (||) and the STILL indicator lights up.

- 2 Press the [PLAY/STOP] button to end playback.

Playback ends.

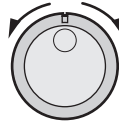


■ Playing video near the point of recording

The digital video recorder priorities recording operations, and as a result, video playback may pause temporarily.

Fast-forward and fast-rewind playback

- 1 Turn the shuttle dial clockwise or counter-clockwise during video playback.



Turn the shuttle dial to use fast-forward and fast-rewind playback.

When turned clockwise, ►► appears in the operation display and fast-forward playback begins.

When turned counter-clockwise, ◀◀ appears in the operation display and fast-rewind playback begins.

Fast-forward and fast-rewind speed increase the more the shuttle dial is turned.

Return the shuttle dial to continue normal playback.

NOTE

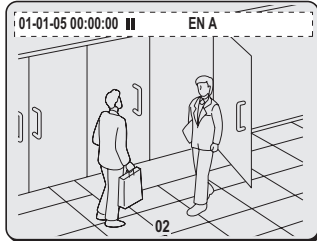
- Press the [SHUTTLE HOLD] button while either ◀◀ or ►► is displayed to fix the speed of fast-forward or fast-rewind playback without having to hold the shuttle dial. Press the [SHUTTLE HOLD] button again to continue normal playback.

Viewing still images

Pause playback and display still images.

1 Press the [STILL] button during playback.

The STILL indicator lights up and playback video is paused. **II** appears in the operation display.



2 Press the [STILL] button again to resume normal playback.

Normal playback resumes.

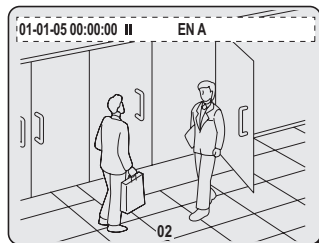


Frame advance (forward/reverse)

1 Turn the jog dial while playback is paused.

Clockwise: The still image is moved forward by one frame or field.

Counter-clockwise: The still image is moved back by one frame or field.

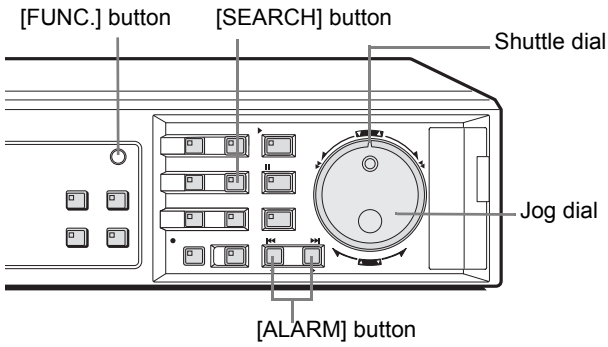


! CAUTION

- If normal, fast-forward or fast-rewind playback is performed either for playback during alarm recording or for continuous playback from the normal recording area and alarm recording area, the image may appear to pause in certain cases.

NOTE

- The jog dial can be turned to increase the speed of frame advance.

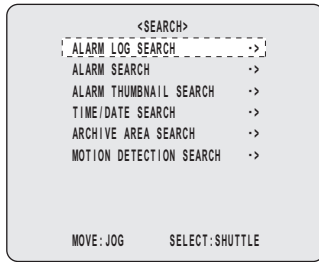


Alarm log search

Use the following procedure to perform an alarm search or alarm thumbnail search by defining the period (month, week, day or time) of the alarm recorded video.

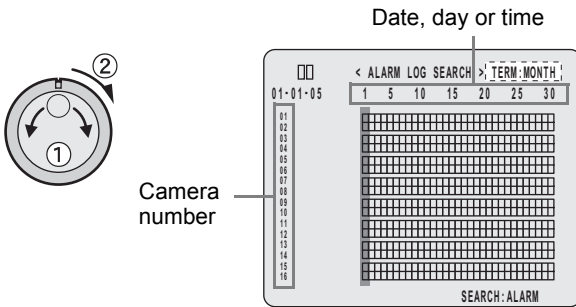
- 1 Press the [SEARCH] button while the digital video recorder is recording or stopped.**

The SEARCH indicator lights up and the <SEARCH> screen is displayed.



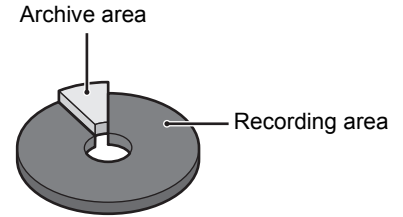
- 2 Turn the jog dial to select "ALARM LOG SEARCH" and then turn the shuttle dial clockwise.**

The <ALARM LOG SEARCH> screen is displayed.



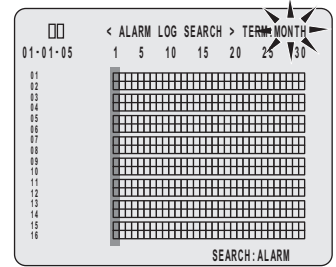
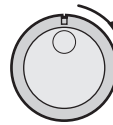
On the DSR-5009P, cameras No. 01-09 are displayed.

Video stored in the recording area or archive area can be located by searching and then played back. Use one of six search methods to locate the required video.



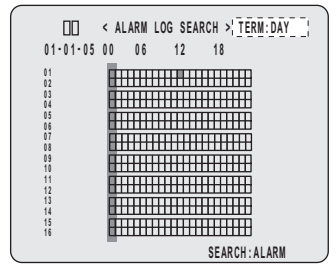
- 3 Turn the shuttle dial clockwise.**

The "TERM" setting flashes.



- 4 Turn the jog dial to select "TERM" and then turn the shuttle dial clockwise.**

The screen display changes to reflect the specified period. Press the ◀◀ or ▶▶ [ALARM] button to change the month/week/date/time.



[Settings] (◆ indicates default setting)

Setting	Description
◆ MONTH	Displays one month.
WEEK	Displays one week.
DAY	Displays one day.
HOUR	Displays one hour.

5 Turn the jog dial to select the date, time or minute and then turn the shuttle dial clockwise.

The selected day (or hour or minutes) is indicated with a yellow frame.

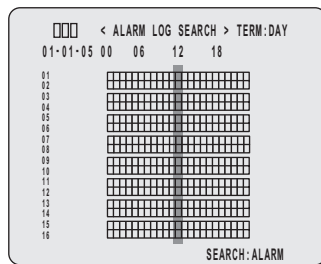
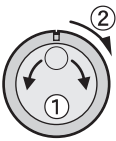
Alarm recording areas are indicated in red and areas with no recordings in gray.

Reselecting the area cancels the original selected area.

■ To confirm normal recording

Press the [FUNC.] button to search for normal recording. A blue mark is displayed at the top left of the screen, and normally recorded parts are displayed in blue. (The search for normal recording may take some time.)

To abort the search, turn the shuttle dial counter-clockwise.

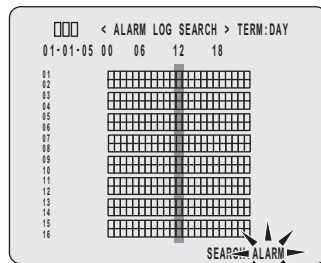
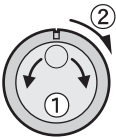


NOTE

- If "MONTH" is selected in step 4 above, each frame represents one day. If "WEEK" is selected, four frames represent one day. If "DAY" is selected, each frame represents one hour. If "HOUR" is selected, each frame represents two minutes.

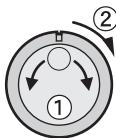
6 Turn the jog dial to select "SEARCH" and then turn the shuttle dial clockwise.

"ALARM" flashes.



7 Turn the jog dial to select "ALARM" or "THUMBNAIL" and then turn the shuttle dial clockwise.

Now perform alarm search (→P.15) or alarm thumbnail search (→P.18).



[Settings] (◆ indicates default setting)

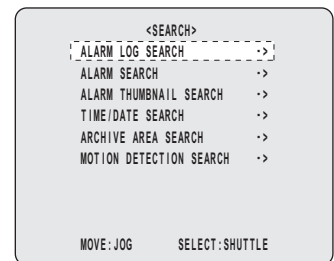
Setting	Description
◆ALARM	The <ALARM SEARCH> screen (→P.15) is displayed and the search results are displayed in a list.
THUMBNAIL	The <ALARM THUMBNAIL SEARCH> screen (→P.18) is displayed and the search results are displayed in a list.

Alarm search

Use the following procedure to search and play back alarm video. If pre-alarm video is being recorded, video from immediately before the alarm can also be played back.

1 Press the [SEARCH] button while the digital video recorder is recording or stopped.

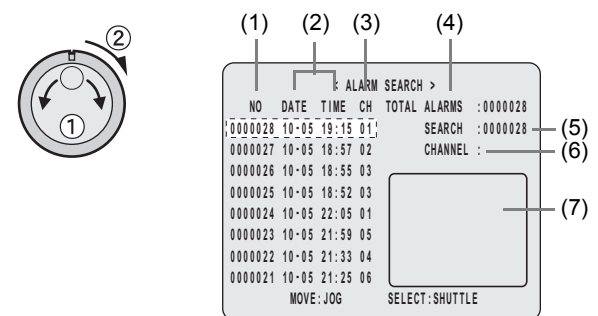
The SEARCH indicator lights up and the <SEARCH> screen is displayed.



2 Turn the jog dial to select "ALARM SEARCH" and then turn the shuttle dial clockwise.

The <ALARM SEARCH> screen is displayed.

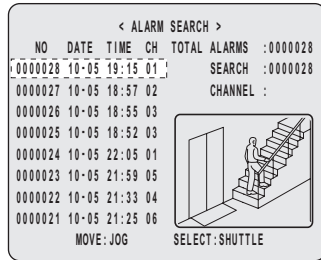
This screen lists the eight most recent alarm recordings.



- (1) **NO:**
Indicates the alarm number.
- (2) **DATE/TIME:**
Indicates the date and time at which the alarm video was recorded.
- (3) **CH:**
Indicates the alarm video's channel (or camera number).
- (4) **TOTAL ALARMS:**
Indicates the total number of alarm video recordings.
- (5) **SEARCH:**
Search by specifying an alarm number. (→P.16)
- (6) **CHANNEL:**
Search by specifying a camera number. (→P.17)
- (7) **Preview:**
Displays the selected alarm video.

3 Turn the jog dial to select the video for playback from the list.

A preview of the selected alarm video is displayed in the preview screen. In this case, the video at the time the alarm occurred is displayed.



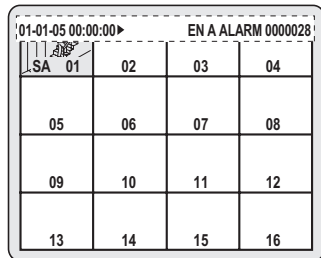
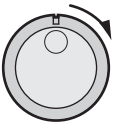
- **To display the next or previous recording**
Turn the jog dial clockwise or counter-clockwise accordingly.
- Press the ►► [ALARM] button to display the next eight recordings, and ◀◀ for the previous eight recordings.

NOTE

- To end search mode
Press the [SEARCH] button. The SEARCH indicator turns off.

4 Turn the shuttle dial clockwise.

The selected recording is played back on multi 16 screens. Playback is also available for another camera image being recorded simultaneously. On the DSR-5009P, the recording is played back on multi 9 screens.



NOTE

- When searching by specifying a camera number, playback is performed on a full screen.

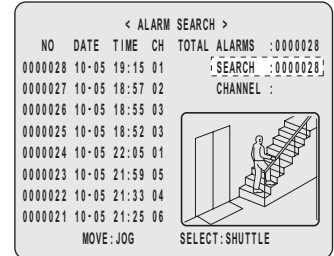
■ To view pre-alarm video

After beginning playback of an alarm video identified by an alarm search, use the shuttle dial to reverse playback.

Entering an alarm number to search for an alarm video

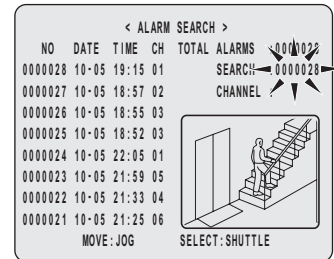
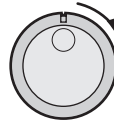
1 In the search screen, press the [FUNC.] button and select "SEARCH".

FUNC.



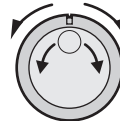
2 Turn the shuttle dial clockwise.

The "SEARCH" input field flashes.

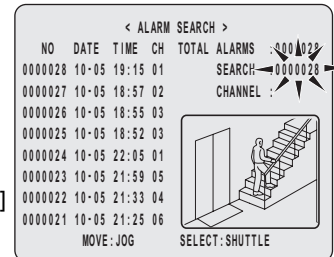


3 Turn the jog dial and shuttle dial to select an alarm number.

Turn the shuttle dial to move through the field and turn the jog dial to select individual numbers (0 through 9).

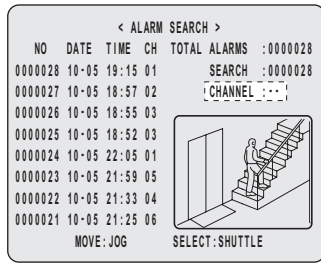
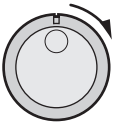


Numbers can be entered with the camera number 1-9 buttons or the [QUAD] button (0).



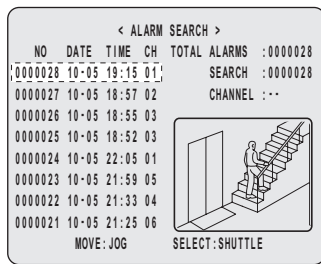
4 Turn the shuttle dial clockwise.

The alarm video with the specified number is displayed in the preview screen.
Image numbers before the selected number are displayed in a list on the left of the screen.



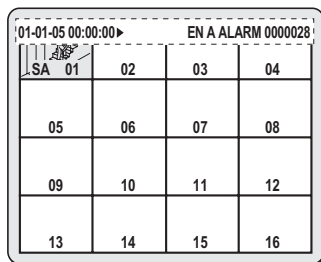
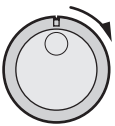
5 Press the [FUNC.] button.

The cursor moves to the list.



6 Turn the jog dial to select the alarm video for playback and then turn the shuttle dial clockwise.

The selected recording is played back on multi 16 screens.
Playback is also available for another camera image being recorded simultaneously.
On the DSR-5009P, the recording is played back on multi 9 screens.

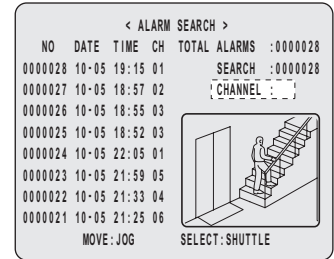
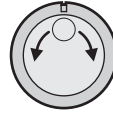


NOTE

- When searching by specifying a camera number, playback is performed on a full screen.

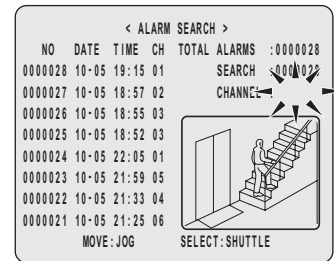
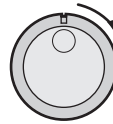
Entering a camera number to search for an alarm video

1 In the search screen, press the [FUNC.] button and select "CHANNEL" with the jog dial.



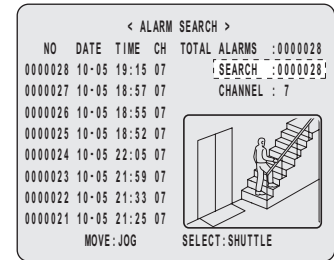
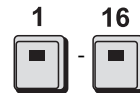
2 Turn the shuttle dial clockwise.

The "CHANNEL" input field flashes.



3 Press the [CAMERA SELECT] button for the camera number to search.

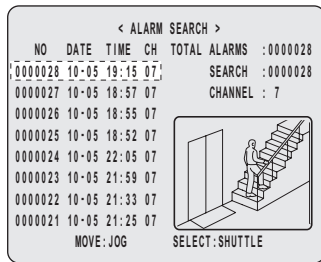
The alarm video with the specified number is displayed in the preview screen.



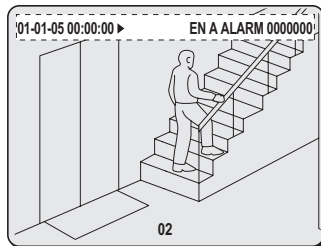
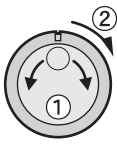
4 Press the [FUNC.] button.

The cursor moves to the list.

FUNC.

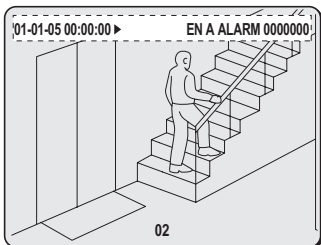


5 Turn the jog dial to select the alarm video for playback and then turn the shuttle dial clockwise.



To view alarm video before or after the current playback

1 Press the [ALARM] button during playback.



- Each time the ◀◀ button is pressed, playback skips to the preceding alarm video.
- Each time the ▶▶ button is pressed, playback skips to the subsequent alarm video.

NOTE

- When playback is performed after an alarm search, the frame at the start and end of each alarm recording is paused. Press the [ALARM] button to play the previous or next recording.
- Use the front-panel buttons, the shuttle dial and the jog dial to perform operations such as pause and fast-forward.

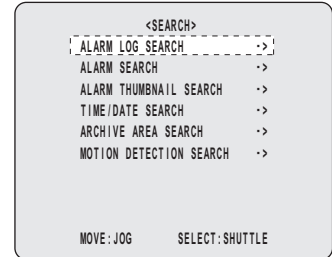
Alarm thumbnail search

Use the following procedure to select alarm videos in the recording area from a thumbnail list.

1 Press the [SEARCH] button while the digital video recorder is recording or stopped.

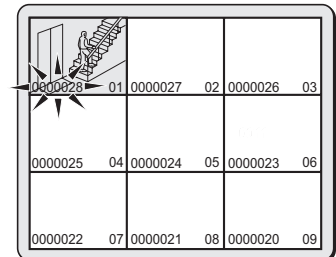
The SEARCH indicator lights up and the <SEARCH> screen is displayed.

SEARCH



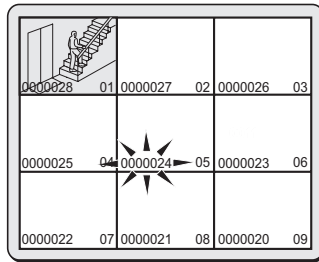
2 Turn the jog dial to select "ALARM THUMBNAIL SEARCH" and then turn the shuttle dial clockwise.

This screen lists the nine most recent alarm recordings. An alarm number and camera number are indicated together with each alarm recording, and the number of the currently selected recording flashes.



3 Turn the jog dial to select the video for playback.

The alarm number for the selected video flashes.



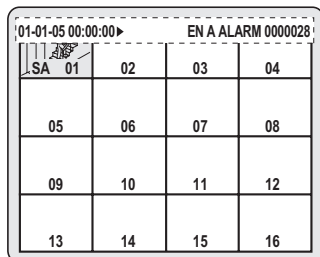
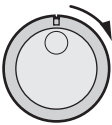
- To display the next or previous recording
Turn the jog dial clockwise or counter-clockwise accordingly.
- Press the ►► [ALARM] button to display the next nine recordings, and ◄◄ for the previous nine recordings.

NOTE

- To end search mode
Press the [SEARCH] button. The SEARCH indicator turns off.

4 Turn the shuttle dial clockwise.

The selected recording is played back on multi 16 screens. Playback is also available for another camera image being recorded simultaneously.
On the DSR-5009P, the recording is played back on multi 9 screens.



CAUTION

- In the same way as for alarm searching, only alarm recordings can be played back. Press the [ALARM] button to play the previous or next recording.

NOTE

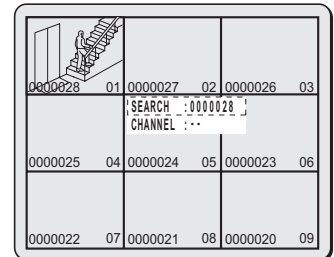
- When searching by specifying a camera number, playback is performed on a full screen. (→P.20)

Search by entering an alarm number

1 In the search screen, press the [FUNC.] button.

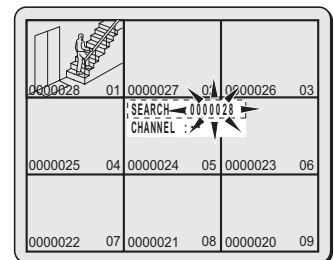
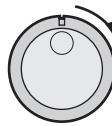
The "SEARCH" and "CHANNEL" input fields are displayed.

FUNC.



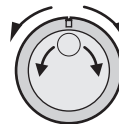
2 Turn the shuttle dial clockwise.

The "SEARCH" input field flashes.

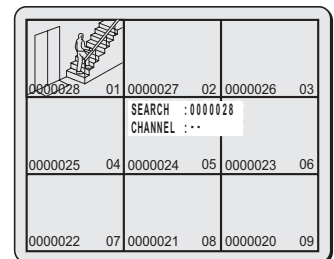


3 Select alarm number by turning the jog dial and shuttle dial.

Move the unit place with the shuttle dial and select numbers 0-9 with the jog dial.

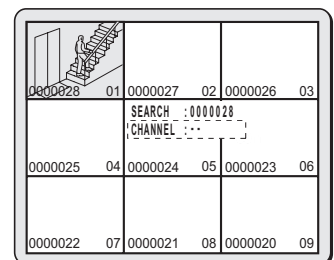
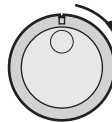


Numbers can be entered with the camera number 1-9 buttons or the [QUAD] button (0).



4 Turn the shuttle dial clockwise.

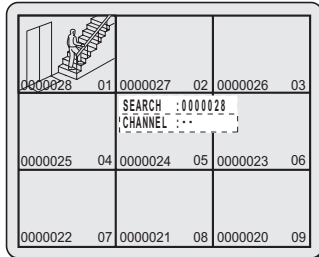
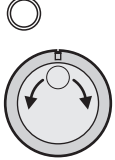
The specified number alarm is searched for and thumbnails are displayed.
Press the [FUNC.] button to cancel SEARCH and CHANNEL input fields.



Search by entering a camera number

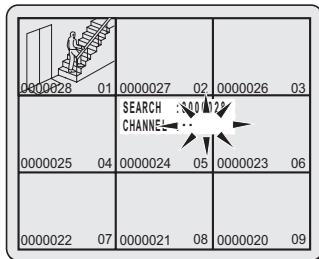
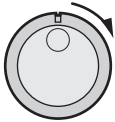
- 1 In the search screen, press the [FUNC.] button and select "CHANNEL" with the jog dial.

FUNC.



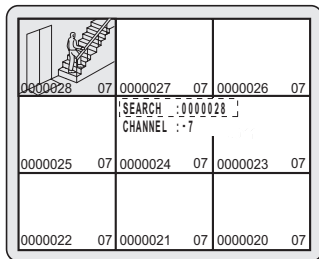
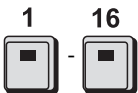
- 2 Turn the shuttle dial clockwise.

The "CHANNEL" input field flashes.



- 3 Press the [CAMERA SELECT] button for the camera number to search.

The specified camera number alarm is searched for and thumbnails are displayed. Press the [FUNC.] button to cancel SEARCH and CHANNEL input fields.



- 4 Turn the shuttle dial clockwise.

Time/date search

Search and play back video in the recording area (normal recording, timer recording, alarm recording) by specifying camera number, date, or time.

Example: To search for a recording from camera 5 from 8:30 pm on 26 October, 2005

- 1 Press the [SEARCH] button while the digital video recorder is recording or stopped.

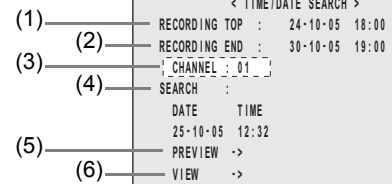
The SEARCH indicator lights up and the <SEARCH> screen is displayed.

SEARCH



- 2 Turn the jog dial to select "TIME/DATE SEARCH" and then turn the shuttle dial clockwise.

The <TIME/DATE SEARCH> screen is displayed.



(1) RECORDING TOP:

Indicates the date/time of the earliest video recording.

(2) RECORDING END:

Indicates the date/time of the most recent video recording.

(3) CHANNEL:

Input a camera number to search.

(4) SEARCH:

Input date and time to search.

(5) PREVIEW:

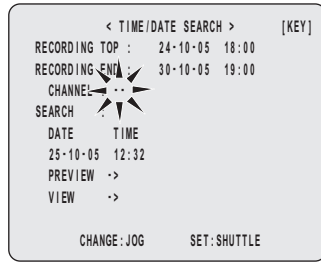
Select this option and turn the shuttle dial clockwise to display the preview screen.

(6) VIEW:

Select this option and turn the shuttle dial clockwise to play the recording.

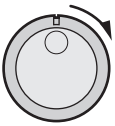
3 Turn the shuttle dial clockwise while “CHANNEL” is selected.

The “CHANNEL” input field flashes.



4 Press the [CAMERA SELECT] 5 button.

The cursor moves to “DATE TIME”.



5 Specify the date and time.

- (1) Turn the shuttle dial clockwise and turn the jog dial to “26” (day).
 - (2) Turn the shuttle dial clockwise and turn the jog dial to “10” (month).
 - (3) Turn the shuttle dial clockwise and turn the jog dial to “05” (year).
 - (4) Turn the shuttle dial clockwise and turn the jog dial to “20” (hour).
 - (5) Turn the shuttle dial clockwise, turn the jog dial to “30” (minutes) and then turn the shuttle dial clockwise again.
- The cursor moves to “PREVIEW”

Date and time for searching

26-10-05 20:30
 (1) (2) (3) (4) (5)

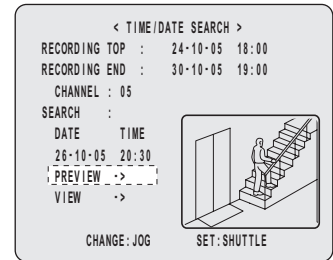
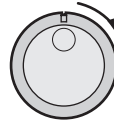


NOTE

- Also use the [CAMERA SELECT] 1-9 button, or the [QUAD] button (0) to input.

6 Turn the shuttle dial clockwise.

“SEARCHING” is displayed and then the preview screen for the date and time settings is displayed.



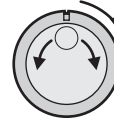
- If no recording exists for the specified time
The closest recording to the specified time is displayed.

NOTE

- To end search mode
Press the [SEARCH] button to end search mode. The SEARCH indicator turns off.

7 Turn the jog dial to select “VIEW” and then turn the shuttle dial clockwise.

The selected recording is played back on the full screen.



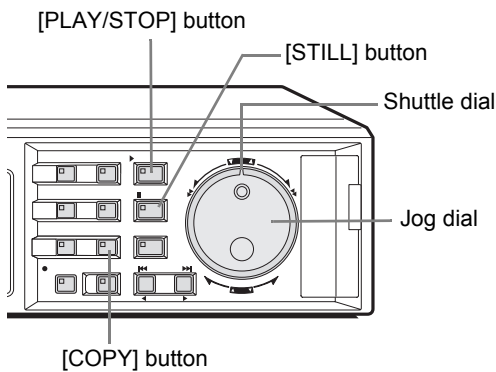
NOTE

- The retrieved recording can be displayed on the full screen without displaying the preview screen by entering the date and time and then selecting “VIEW”.
- If “CHANNEL” is set to “-” and playback is started, the recording is displayed on the multi 16 screens (on multi 9 screens for the DSR-5009P).
Press the [CAMERA SELECT] button to view on a full screen.

Copying to a CompactFlash card or Microdrive

Use the following procedure to copy recording area or archive area video to a CompactFlash card or Microdrive.

The procedure is the same for copying to a CompactFlash card and Microdrive. (The maximum supported capacity for a Microdrive or CompactFlash card is 2 GB.)

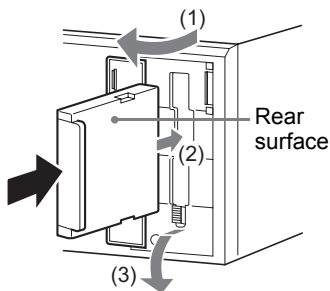


Example: Copying 20 images

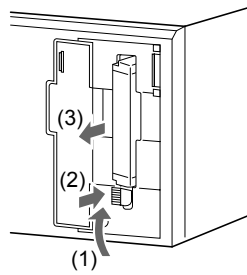
1 Insert a CompactFlash card.

Insertion method

Removal method



- (1) Open the cover.
- (2) Ensuring that it is correctly oriented, insert the CompactFlash card into the CompactFlash card slot.
- (3) Fold down the lever.



- (1) Raise the lever.
- (2) Push in the lever.
- (3) Remove the CompactFlash card.

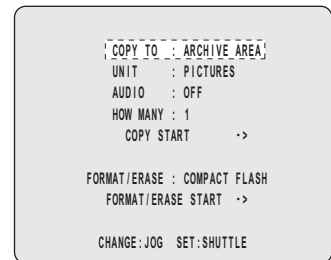
2 Play video to be copied on a full screen.

3 Press the [STILL] button when the frame to be copied is displayed.



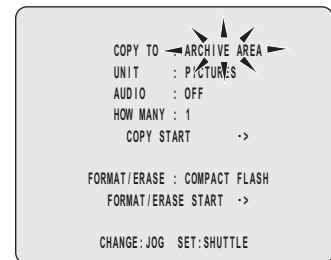
4 Press the [COPY] button.

The COPY indicator lights up and the copy setting screen is displayed.



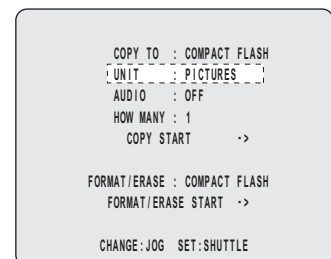
5 Turn the shuttle dial clockwise.

"ARCHIVE AREA" flashes.



6 Turn the jog dial to select "COMPACT FLASH" and then turn the shuttle dial clockwise.

The cursor moves to "UNIT".

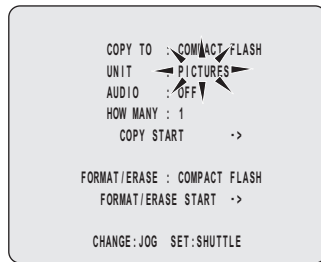
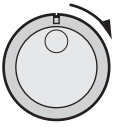


! CAUTION

- Up to 40,000 images can be copied in a single operation. When specifying the number of images using "TIME", copying ends after 40,000 images are copied.
- Alarm recordings can only be copied one event at a time.

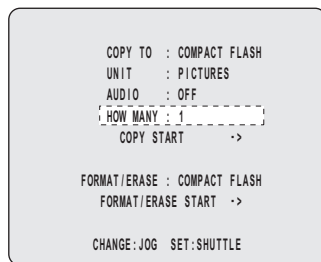
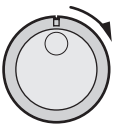
7 Turn the shuttle dial clockwise.

“PICTURES” flashes.



8 Turn the shuttle dial clockwise while “PICTURES” is flashing.

The cursor moves to “HOW MANY”.



[Settings] (◆ indicates default setting)

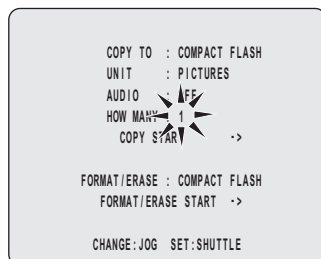
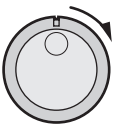
Setting	Description
◆ PICTURES	The specified number of images after the specified location are copied.
TIME	The specified duration after the specified location is copied (TIME:minutes:seconds).
MAXIMUM	The maximum number of images allowable in the copy destination is copied or all the data from the copy source is copied.

NOTE

- If audio is recorded, “ON” or “OFF” can be set for “AUDIO”.

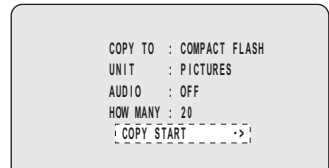
9 Turn the shuttle dial clockwise.

“1” flashes.



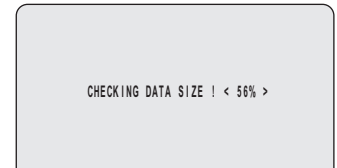
10 Turn the jog dial to select “20” and then turn the shuttle dial clockwise.

The cursor moves to “COPY START”.



11 Turn the shuttle dial clockwise.

The copy data and the capacity of the copy destination are checked.



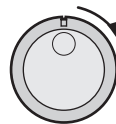
The available space and write capacity are checked.



The available space and write capacity are displayed and the cursor moves to “COPY START”.

12 Turn the shuttle dial clockwise.

Copying begins. The message “COPY TO COMPACT FLASH !” is displayed on-screen during the copy procedure.



When copying is completed, “COPY FINISHED !” is displayed.



■ To cancel copying

Press the [COPY] button.



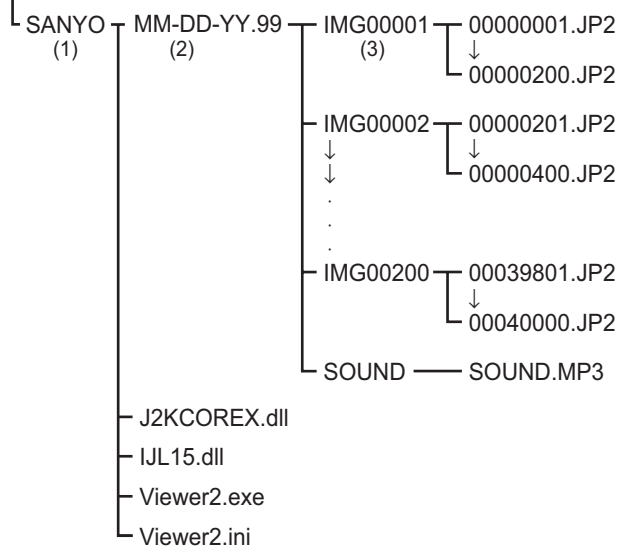
! CAUTION

- If the CompactFlash card becomes full during the copying process, the message "CARD FULL!" is displayed and copying ends. Press any button to return to the normal screen. Copying should now be repeated using a new CompactFlash card. If the CompactFlash card becomes full and copying ends, all data copied at the time the process ended is saved on the CompactFlash card.

Viewing images copied to a CompactFlash card on a PC

When images are copied to a CompactFlash card, the following folders are created and images are saved within them.

CompactFlash card



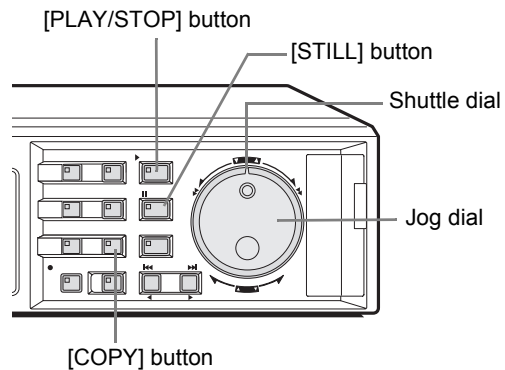
- (1) A folder with the name "SANYO" is created inside the root directory.
- (2) Within this folder, folders are created based on the date of copied images.
- (3) Within each date folder, sub-directories are created in sequence starting with "IMG00001". Each directory can hold up to 200 individual images.

NOTE

- To view recorded images on a PC, double-click "Viewer2.exe" to open the viewer and open the saved folder (date).

Copying to a CD-R/RW or DVD+R/+RW

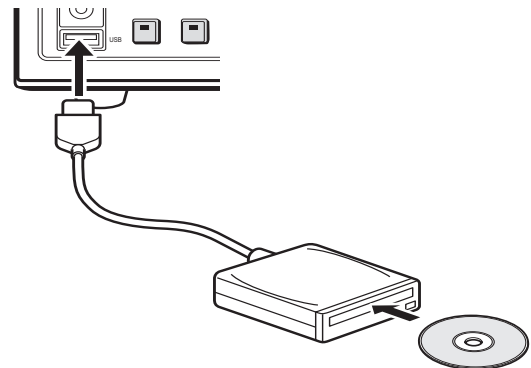
Use the following procedure to copy recording area or archive area video to a CD-R/RW or DVD+R/+RW.



Example: Copying the maximum video to the copy destination

NOTE

- For compatibility, refer to the SANYO homepage. <http://www.sanyosecurity.com/>

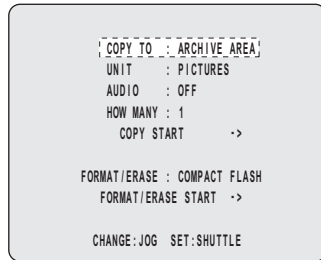
1 Connect a recordable CD or DVD drive and insert a disk.**! CAUTION**

- The digital video recorder has one USB terminal on the front and one on the back, but they cannot be used simultaneously. Connect recordable drive to either terminal. If both sides have devices connected, the front terminal is prioritized.

2 Play video to be copied on a full screen.**3 Press the [STILL] button when the frame to be copied is displayed.**

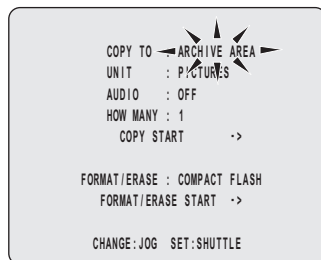
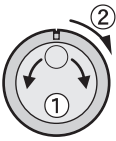
4 Press the [COPY] button.

The COPY indicator lights up and the copy setting screen is displayed.



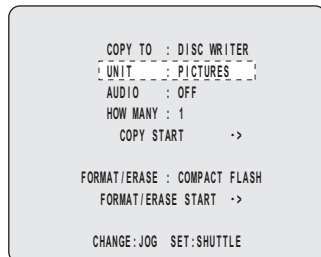
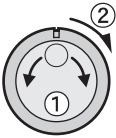
5 Turn the jog dial to select "COPY TO" and then turn the shuttle dial clockwise.

"ARCHIVE AREA" flashes.



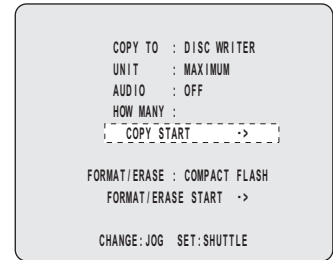
6 Turn the jog dial to select "DISC WRITER" and then turn the shuttle dial clockwise.

The cursor moves to "UNIT".



7 Turn the jog dial to select "MAXIMUM" and then turn the shuttle dial clockwise.

The cursor moves to "COPY START".



[Settings] (◆ indicates default setting)

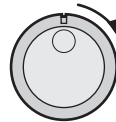
Setting	Description
◆ PICTURES	The specified number of images after the specified location are copied.
TIME	The specified duration after the specified location is copied (TIME:minutes:seconds).
MAXIMUM	The maximum number of images allowable in the copy destination is copied or all the data from the copy source is copied.

NOTE

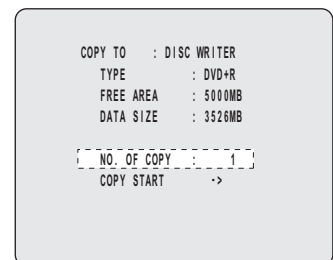
- If audio is recorded, "ON" or "OFF" can be set for "AUDIO".

8 Turn the shuttle dial clockwise.

The copy data and the capacity of the copy destination are checked.



The available space and write capacity are checked.



Free area write capacity is displayed and the cursor appears on "NO. OF COPY".

9 Turn the shuttle dial clockwise.

The number of images flashes.



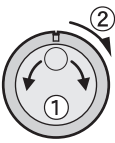
```

COPY TO : DISC WRITER
TYPE    : DVD+R
FREE AREA : 5000MB
DATA SIZE : 3526MB

NO. OF COPY : 1
COPY START
  
```

10 Turn the jog dial to set the number of images to copy, and turn the shuttle dial clockwise.

The cursor appears on "COPY START".



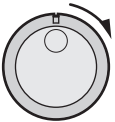
```

COPY TO : DISC WRITER
TYPE    : DVD+R
FREE AREA : 5000MB
DATA SIZE : 3526MB

NO. OF COPY : 1
COPY START ->
  
```

11 Turn the shuttle dial clockwise.

Copying begins. The message "COMPOSING IMAGE DATA!", then "COPY TO DISC WRITER" is displayed on screen during copying.



```

COMPOSING IMAGE DATA ! < 56% >
  
```

When copying is completed, "COPY FINISHED!" is displayed and the tray opens.

```

COPY FINISHED ! < 100% >
  
```

```

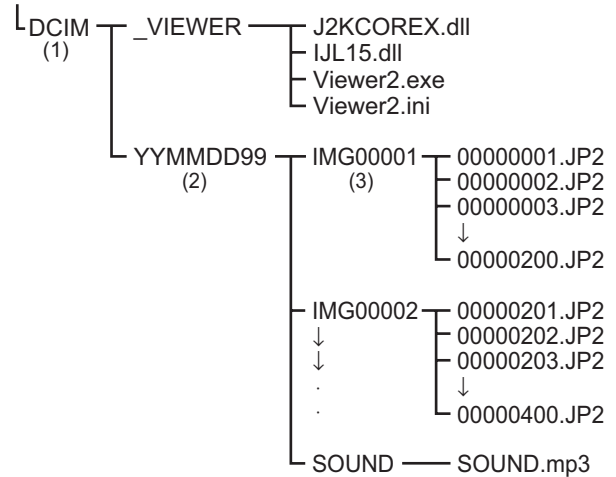
NO. OF COPY : 1 / 2
COPY START ->
PLEASE SET A NEW DISC !
  
```

Viewing images on a PC

Images copied to a CD-R/RW or DVD+R/+RW can be viewed on a PC.

When images are copied to a CD-R/RW or DVD+R/+RW, the following folders are created and images are saved within them.

CD-R/RW or DVD+R/+RW



- (1) The folder "DCIM" is created.
- (2) Within this folder, folders are created based on the date (YY-MM-DD) of copied images.
- (3) Within each date folder, sub-directories are created in sequence starting with "IMG00001".
Each sub-directory can hold up to 200 individual images.

NOTE

- To view images on your PC, open the "YYMMDDXX" folder using the dedicated viewer. To open the viewer, double-click "Viewer2.exe".
(The dedicated viewer and JPEG2000 plug-in are downloaded to the media with the images.)

