
DIGITAL RECORDER

OPERATION QUICK GUIDE

MODEL

DX-TL2500E

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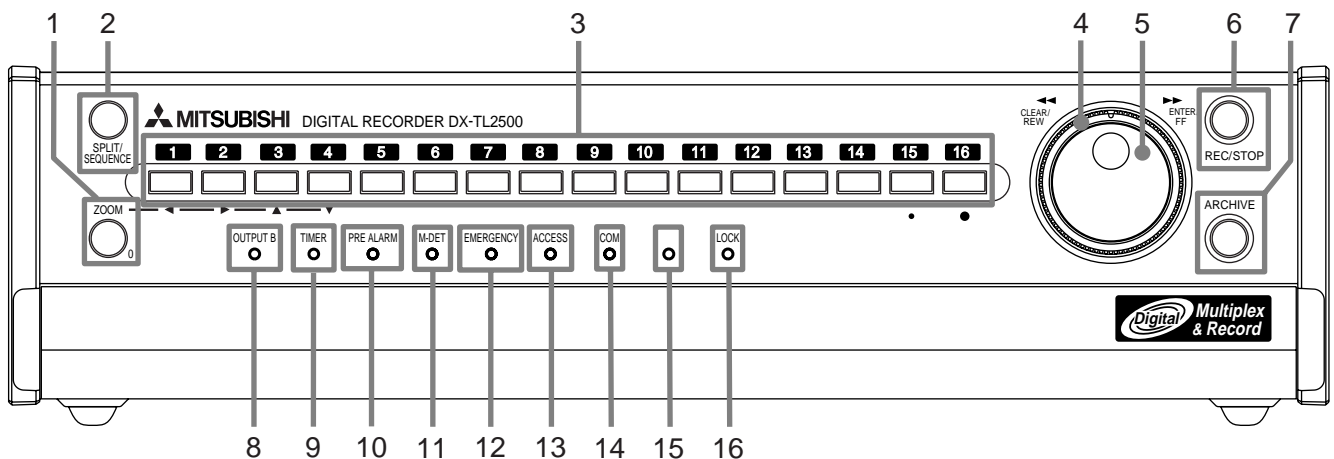


SLD Security &
Communications



Major operations and their functions

■ Front View



1. ZOOM button

When pressing this button once during single screen display, the screen is magnified by 100%. In the same way, pressing the button twice magnifies the screen by 200% and pressing the button three times magnifies the screen by 400%. Pressing a camera number button (1, 2, 3, or 4) will move the magnification centre point.

2. SPLIT/SEQUENCE button

Press the button to display SPLIT16, SPLIT9, SPLIT4 screen or SEQUENCE screen setting on multiplexer functions.

3. Camera number buttons (1 to 16)

Press the button to display the image from the camera connected to this input on to the monitor.

4. SHUTTLE ring

Used to set various menus and search functions, adjusting the playback speed, and rewinding or forwarding the recording images.

5. JOG dial

Used to set various menus and search functions, forwarding or rewinding the image during playback (field-by-field).

6. REC/STOP button

When pressing this button, recording starts and the button lights. When pressing the button for more than 1 second, the recording stops and the light turns off. When pressing this button for more than 1 second during alarm recording, recording stops. During timer recording, recording will not stop even if the button is pressed.

7. ARCHIVE button

Press the button to archive. When pressing the button for more than 1 second, archive stops. The unit will not start to archive if an archive device is not connected to the unit.

8. OUTPUT B indicator

Illuminates when pressing the OUTPUT B button.

9. TIMER indicator

Illuminates during timer recording or timer recording stand-by.

10. PRE ALARM indicator

Illuminates during pre-alarm recording mode.

11. M-DET indicator

Illuminates when the motion detection function is on.

12. EMERGENCY indicator

Flashes during emergency recording and lights when recording is completed.

13. ACCESS indicator

Illuminates during access to hard disk drive, Compact Flash Card or peripheral recording devices.

14. COM (COMMUNICATION) indicator

Illuminates when establishing the communication with personal computer.

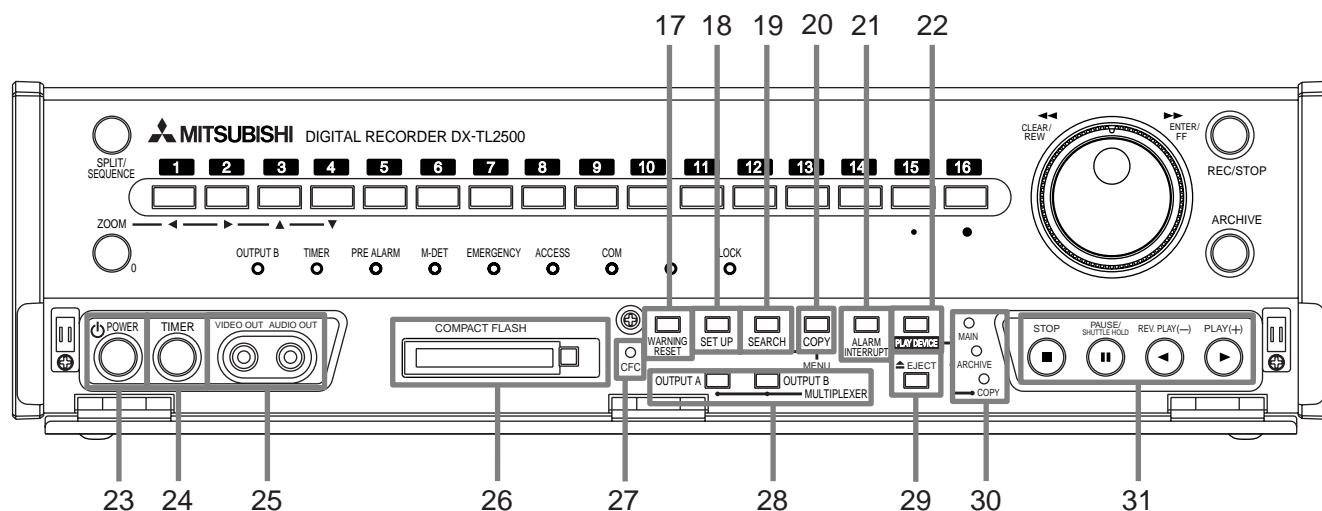
15. LOCK button

Pressing it with a pointed object (such as a ballpoint pen) while the MAIN switch (main power) on the rear of the unit is on, will activate the simple lock or password lock. Moreover, the PASSWORD can be set on the <PASSWORD SETTING> screen. The indicator will light while the lock is active.

16. LOCK indicator

Illuminates when simple lock or password lock is on.

■ Front View (Inside of the door)



17. WARNING RESET button

This button is used to clear on-screen warning display and clear data.

18. SET UP button

Press this button to display the <SETTINGS> menu.

19. SEARCH button

Press this button to display the <SEARCH > menu.

20. COPY button

Press this button to display <COPY> menu. This button lights when performing copy operation. Copies cannot be made when the copy device is not connected or a card is not in the COMPACT FLASH slot.

21. ALARM INTERRUPT button

When pressing this button, the unit will not accept alarm signals or motion detection for 5 minutes. During this time, the button will flash. This allows device set-up changes to be made without being disturbed by ALARMS. Press this button once again to cancel.

22. PLAY DEVICE button

Press this button to select PLAYBACK device.

23. POWER button

When pressing this button while the MAIN switch on the rear of this unit is set to ON, the power turns on and the button lights. When the button is pressed again, the unit will be in stand-by and the light will turn off. When the unit is in operational transition such as booting, the button will flash and other operations are not accepted.

24. TIMER button

When pressing this button, the unit is set to timer recording/stand-by and the TIMER indicator lights. When pressing this button for more than 1 second, timer recording/stand-by is cancelled and the TIMER indicator turns off.

25. ANALOGUE OUT connectors

VIDEO OUT connector

Output connector for video signal (RCA pin).

AUDIO OUT connector

Output connector for audio signal (RCA pin).

26. COMPACT FLASH slot

Compact Flash Card can be used for saving/loading data and menus. When not using the slot, attach the COMPACT FLASH slot cover to prevent dust from entering within the unit.

* Compact Flash™ is a trademark of SanDisk Corporation.

27. CFC (Compact Flash Card) indicator

Illuminates only when the CFC is selected by pressing the PLAY DEVICE button.

28. MULTIPLEXER buttons

OUTPUT A button

When this button is pressed operation of the camera number buttons and the SPLIT/SEQUENCE button switches image output to the OUTPUT A connector and ANALOGUE OUT connectors.

OUTPUT B button

When this button is pressed operation of the camera number buttons and the SPLIT/SEQUENCE button switches image output to the OUTPUT B connector. Please note that with this function, playback display of an already recorded image is not possible. A playback image can not be output to the OUTPUT B connector.

☞ To display image of the monitor connected to OUTPUT B, set to "ON" in the setting of the "OUTPUT B ON/OFF" of the <MPX DISPLAY SETTINGS> screen.

29. EJECT button

Use this button to remove media from externally connected devices.

30. PLAY DEVICE indicator

Lights the indicator corresponding to the device selected with the PLAY DEVICE button.

31. OPERATION buttons

STOP button

Press to stop playback.

PAUSE / SHUTTLE HOLD button

When pressing this button during playback, the unit switches to still frame playback and the button lights. When pressing this button again, the unit resumes playback and the button turns off. When pressing this button during shuttle playback, the set playback speed is maintained even when letting go of the SHUTTLE ring.

REV. PLAY (REVERSE PLAY) button

When pressing this button, the unit switches to reverse playback and the button lights.

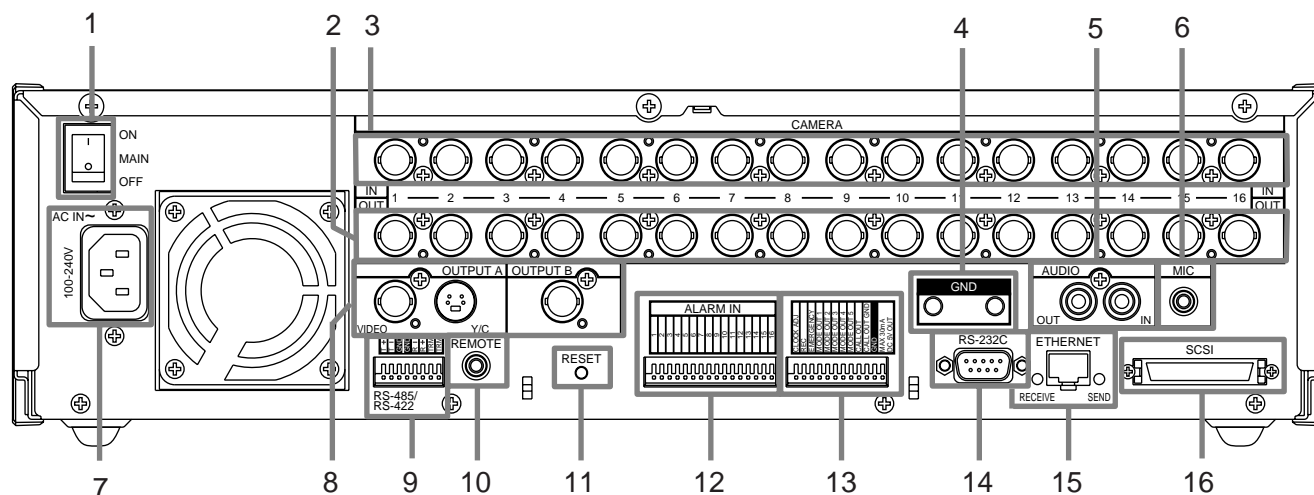
PLAY button

When pressing this button, the unit starts playback and the button lights.

PLAY MODE buttons

The playback interval can be changed during normal and reverse playback by pressing PLAY(+) or REV. PLAY(-).

■ Rear View



1. MAIN switch

This is the main power switch. When using this unit, set this switch to ON. Otherwise, the power cannot be turned on/off using the POWER button on the front of the unit.

2. CAMERA OUT connectors

Camera video output connectors for use of BNC connectors. If the MAIN switch is ON, the loop through output is possible for the camera image inputted into each CAMERA IN connector.

3. CAMERA IN connectors

Input connector for signal of camera (BNC connector).

4. GND terminals

It is the common GND terminal.

5. AUDIO connectors

AUDIO IN connector

Input connector for audio signal (RCA pin).

AUDIO OUT connector

Output connector for audio signal (RCA pin).

6. MIC jack

Input connector for microphone (600 ohm impedance). Use of MIC for audio recording has priority to use of the AUDIO IN connector.

7. AC power socket

This socket connects to the power cord. Earth terminal is for safety. Use the 100 ~ 240V plug with earth for the power of this unit.

⚠ This unit must be earthed at all times. Never connect this unit to a power outlet which does not have an earth terminal.

⚠ Please use the AC power cord accessory.

8. VIDEO OUT connectors

OUTPUT A VIDEO connector

Output connector for video signal to monitor (BNC connector).

OUTPUT A S(Y/C) connector

This is output connector for video signals that separate brightness signals and color signals for higher picture quality. Simultaneous output along with OUTPUT A VIDEO is also possible.

OUTPUT B connector

Output connector for video signal to monitor only for live image (BNC connector).

9. RS-485/RS-422 connectors

Connectors for operations of pan, tilt and zoom when these connectors are connected to dome camera.

10. REMOTE jack

Input connector for wired remote control.

11. RESET button

Pressing this button resets the unit and the power turns off. In this case, video data, menu settings and the current time are kept.

12. ALARM IN terminals

Input terminal for alarm signal.

13. I/O terminals

CLOCK ADJ terminal

Input terminal to set the present time. Time display is adjusted to the nearest hour (00 minutes 00 seconds) when this terminal receives the CLOCK ADJ signal.

INFORMATION

The on-screen clock can be reset to the nearest hour, by applying a signal to the CLOCK ADJ terminal. For example, if the current time is 11:29:59, it will be reset to 11:00:00, and if the current time is 11:30:00, it will be reset to 12:00:00.

REC terminal

Input terminal to start recording. Not available during timer recording.

EMERGENCY terminal

Input terminal initiating immediate shift to EMERGENCY recording mode compulsorily.

MODE OUT 1 ~ MODE OUT 5 terminals

Output terminal to indicate the unit's current mode. Select the unit's condition by MODE OUT 1 ~ MODE OUT 5 setting in the <REAR TERMINAL SETTINGS> menu.

CALL OUT terminal / CALL OUT GND terminals

This is the ISOLATION output terminal. Information that can be transmitted externally consists of CALL OUT settings made on the <REAR TERMINAL SETTINGS> menu screen as well as fixed output settings.

DC 5V OUT terminal

Will only output when both the MAIN switch and POWER button are ON. The maximum electric current is 30mA.

14. RS-232C connector

This connector is used to connect to host device with RS-232C connector. This unit can be controlled by another device through this connector.

15. ETHERNET connector

Use a 10BASE-T cable to connect to the Ethernet terminal. Please use the cable adapted to 10BASE-T. DUPLEX MODE is HALF DUPLEX.

RECEIVE indicator

Illuminates when the unit is receiving a signal.

SEND indicator

Illuminates when the unit is transmitting a signal.

16. SCSI connector

This connector is used to connect to peripheral recording device.

■ Inserting/Ejecting Compact Flash Card

ⓘ Before using the Card, read the cautionary notes described in the manual included with Compact Flash Card.

<Inserting Card>

1. Remove the COMPACT FLASH slot cover attached to the unit.

2. Please turn down the side which contains notch in right and left, securely insert the Card until the CFC EJECT button pops out.

ⓘ Do not eject the Card when copying/restoring, copying/loading menus, or immediately after inserting the Card. The Card or the contained data may become damaged.

ⓘ Securely insert the Compact Flash Card. Otherwise, the unit may not work properly.

ⓘ Please use the Compact Flash Card which we recommend. When a non recommended Card is used, there is a possibility that reading and writing of data may not operate correctly.

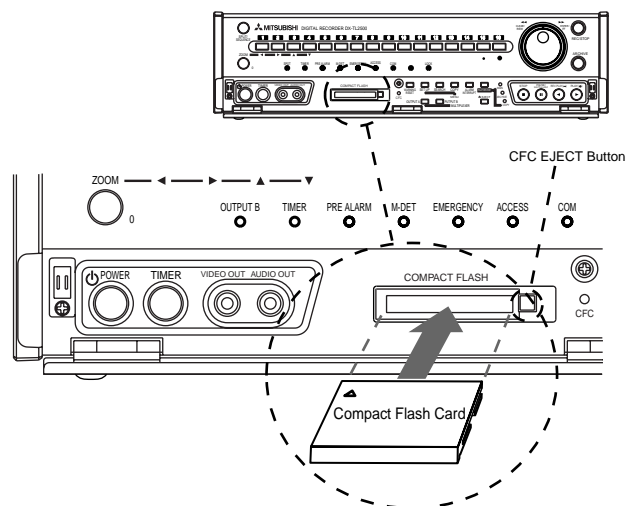
ⓘ For usable Compact Flash Card check with your dealer of purchase.

ⓘ When using a new Card, be sure to execute CFC DATA CLEAR in the <INFORMATION/SERVICE> screen.

<Ejecting Card>

1. Press the CFC EJECT button and eject the Card.

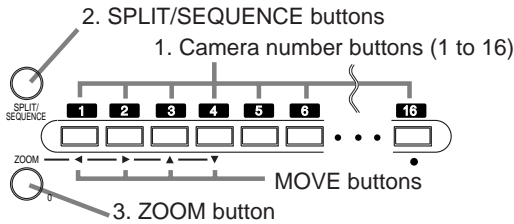
2. Attach the COMPACT FLASH slot cover.



■ Multiplexer functions

Buttons on the front of the unit can be used to perform some of the multiplexer functions.

◆ Multiplexer buttons



1. Camera number buttons (1 to 16)

Video images of cameras connected to CAMERA IN terminals 1 to 16 on the rear of the unit are displayed.

- By pressing a camera number button, video images can be displayed even if the camera is not set for recording.

2. SPLIT/SEQUENCE button

The screen switches in order of SPLIT16, 2 types of SPLIT9 SCREEN SETTING (a, b), 4 types of SPLIT4 SCREEN SETTING (a, b, c and d), SPLIT9 SEQUENTIAL, SPLIT4 SEQUENTIAL, and SINGLE SEQUENTIAL set in the <MPX DISPLAY SETTINGS> screen (SEQUENTIAL display is skipped during playback).

- Pressing the OUTPUT B button on the front of this unit can switch the operation of camera number buttons and the SPLIT/SEQUENCE button to the screen of the monitor connected to the OUTPUT B connector. Pressing the OUTPUT A button can switch to the screen of the monitor connected to the OUTPUT A connector.

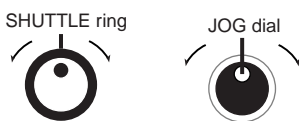
3. ZOOM button

When this button is pressed during single screen display, magnification 100% screen appears and the magnification centre point (X) is displayed at the centre. Pressing the button again will switch the magnification to 200% and then 400%. By pressing the MOVE buttons, the magnified screen can be moved vertically/horizontally with the centre point as the axis.

When the ZOOM button is pressed, camera number buttons 1 to 4 become the MOVE buttons.

■ Menu settings

The operational conditions of this unit can be set in the menu screens according to use. Although the setting method will differ slightly depending on the menu screen, the basic setting method of using the JOG dial and SHUTTLE ring will remain the same. e.g. setting the display mode.



Example : Set DISPLAY MODE to "3" (default : "1").

1. Set the MAIN switch on the rear of the unit to ON. Press the POWER button on the front after the ACCESS indicator turns off.

- "SETTING UP..." appears on the screen and the unit is booted.
- POWER button operation will not be accepted while the ACCESS indicator is flashing. Press the POWER button after the indicator turns off.

2. After boot-up, press the SET UP button inside the door on the front of the unit.

- The <SETTINGS> screen appears.

```
<SETTINGS>
>>TIME DATE/DISPLAY SETTINGS
MPX DISPLAY SETTINGS
MOTION DETECTION SETTINGS
RECORD SETTINGS
TIMER PROGRAM SETTINGS
INITIAL SET UP/INFORMATION

QUICK SETTINGS

MEMO :
```

- When the SET UP button is pressed and the menu screen appears, the background darkens and the displayed characters become easier to see.

3. Check to see that the cursor (>>) is positioned at "TIME DATE/DISPLAY SETTINGS", and then turn the SHUTTLE ring clockwise.

- The <TIME DATE/DISPLAY SETTINGS> screen appears.

```
<TIME DATE/DISPLAY SETTINGS>
>>TIME DATE ADJUST
DISPLAY MODE 1
CLOCK LOCATION SETTING
CAMERA DISPLAY NUMBER
CAMERA TITLE/MEMO SETTING
DUPLEX MODE DISPLAY BOTTOM

<MODE 1>

01-01-2003 00:00:00
```

4. Turn the JOG dial to move the cursor to "DISPLAY MODE" and turn the SHUTTLE ring clockwise.

- The background of the "DISPLAY MODE" setting turns red and flashes.

- When turning the JOG dial clockwise, the cursor (>>) moves down. When turning counterclockwise, the cursor (>>) moves up.

5. Turn the JOG dial to display "3".

- The display mode sample on the bottom of the screen changes to <MODE 3>.

6. Turn the SHUTTLE ring clockwise.

- The setting is confirmed and flashing stops.
- To continue with other settings, repeat steps 4 and 5.

- When turning the SHUTTLE ring counterclockwise while the setting is flashing, the setting will return to the previous setting.

- To exit the screen, turn the SHUTTLE ring counterclockwise.

```
<TIME DATE/DISPLAY SETTINGS>
TIME DATE ADJUST
>>DISPLAY MODE 3
CLOCK LOCATION SETTING
CAMERA DISPLAY NUMBER
CAMERA TITLE/MEMO SETTING
DUPLEX MODE DISPLAY BOTTOM

<MODE 3>

01-01-2003 WED
00:00:00 12.5P 99% A00001
```

```
<TIME DATE ADJUST>
>>DAYLIGHT SAVING OFF
DAY 01
MONTH 01
YEAR 2003
TIME 00:00:00
DAYLIGHT SETTING
DAY OF WEEK MONTH TIME
IN SUN LAST MAR 01:00
OUT SUN LAST OCT 02:00
JOG :SELECT
SHUTTLE>> :EXECUTE
```

◆ To return to the normal screen from a menu screen

The procedure to return to the normal screen after completing menu screen settings using the JOG dial/SHUTTLE ring is detailed below.

1. Check to see that the setting item is no longer flashing and the item has been changed to the desired setting.

- The setting has not been confirmed if the item is flashing. Refer to the above setting procedure to confirm the setting.
- To continue with other settings or to check the setting item, **turn the SHUTTLE ring counterclockwise once to return to the previous screen.**

⊙ This operation is not accepted when the setting item is flashing.

2-1. (To return to the normal screen by moving up menu screens one at a time •••)

- Turn the SHUTTLE ring counterclockwise for the amount of menu screens opened. The previous menu screen is displayed every time the SHUTTLE ring is turned counterclockwise.

2-2. (To directly return to the normal screen •••)

- Press the SET UP button to clear the menu screen and return to the normal screen.

ⓘ The menu screen will not be cleared even when pressing the SET UP button when the setting item is flashing.

◆ DAYLIGHT SAVING/DAYLIGHT SETTING

The clock is put forward one hour by activating this setting. The default setting for this function is "OFF". On the DAYLIGHT SAVING in <TIME DATE ADJUST> menu, turn the JOG dial to flash "AUTO" (the daylight saving function is automatically activated). Turn the SHUTTLE ring clockwise to enter the selection.

In the "DAYLIGHT SETTING" setting, start/end time of the "DAYLIGHT SAVING" function can be checked and changed.

Example : Set the start time of the "DAYLIGHT SAVING" function "IN" to "MON", "1ST", "APR" and "02:00". (default : "SUN", "LAST", "MAR", "01:00").

1. Press the SET UP button to display the <SETTINGS> screen.

2. Check to see that the cursor (>>) is positioned at "TIME DATE/DISPLAY SETTINGS", and then turn the SHUTTLE ring clockwise.

- The <TIME DATE/DISPLAY SETTINGS> screen appears.

3. Check to see that the cursor is positioned at "TIME DATE ADJUST", and then turn the SHUTTLE ring clockwise.

- The <TIME DATE ADJUST> screen appears.

4. Turn the JOG dial to move the cursor (>>) to "IN" and turn the SHUTTLE ring clockwise twice.

- The "DAY" display reverses in color when the SHUTTLE ring is turned the first time. When the ring is turned for the second time, the display turns red and flashes.

5. Turn the JOG dial to display "MON" and turn the SHUTTLE ring clockwise.

- The setting is confirmed and flashing stops.

6. Turn the JOG dial clockwise to move the cursor (>>) to "WEEK".

7. Repeat steps 4, 5 and 6 to set "WEEK", "MONTH" and "TIME".

8. Turn the SHUTTLE ring clockwise.

- The setting is confirmed and flashing stops.

9. Turn the SHUTTLE ring counterclockwise or press the SET UP button.

◆ TIME DATE ADJUST

ⓘ Before starting recording, it is necessary to set accurately the current date and time.

Example : Set the date/time to 28/10/2003 6:30pm (18:30)(default : "01/01/2003 00:00:00").

1. Press the SET UP button to display the <SETTINGS> screen.

2. Check to see that the cursor (>>) is positioned at "TIME DATE/DISPLAY SETTINGS", and then turn the SHUTTLE ring clockwise.

- The <TIME DATE/DISPLAY SETTINGS> screen appears.

3. Check to see that the cursor is positioned at "TIME DATE ADJUST", and then turn the SHUTTLE ring clockwise.

- The <TIME DATE ADJUST> screen appears.

```
<TIME DATE ADJUST>
>>DAYLIGHT SAVING OFF
DAY 01
MONTH 01
YEAR 2003
TIME 00:00:00
```

4. Turn the JOG dial to move the cursor to "DAY" and turn the SHUTTLE ring clockwise.

- The background of "DAY" changes to red and flashes.

```
<TIME DATE ADJUST>
DAYLIGHT SAVING OFF
>>DAY 01
MONTH 01
YEAR 2003
TIME 00:00:00
```

5. Turn the JOG dial to display "28" and turn the SHUTTLE ring clockwise.

- The setting is confirmed and flashing stops.

<TIME DATE ADJUST>	
DAYLIGHT SAVING	OFF
>>DAY	28
MONTH	01
YEAR	2003
TIME	00:00:00

6. Turn the JOG dial clockwise to move the cursor (>>) to "MONTH".

⊖ When turning the JOG dial clockwise, the cursor (>>) moves down. When turning counterclockwise, the cursor (>>) moves up.

7. Repeat steps 4 ~ 6 to set "MONTH" and "YEAR".

8. Turn the JOG dial to move the cursor (>>) to "TIME" and turn the SHUTTLE ring clockwise twice.

• The "TIME" display reverses in color when the SHUTTLE ring is turned the first time. When the ring is turned for the second time, the display turns red and flashes.

<TIME DATE ADJUST>	
DAYLIGHT SAVING	OFF
DAY	28
MONTH	10
YEAR	2003
TIME	00:00:00

9. Turn the JOG dial to display "18" and turn the SHUTTLE ring clockwise.

• The setting is confirmed and flashing stops.

<TIME DATE ADJUST>	
DAYLIGHT SAVING	OFF
DAY	28
MONTH	10
YEAR	2003
TIME	18:00:00

⊖ The time is indicated using the 24-hour system.

10. Repeat steps 8 and 9 to set "MINUTE" and "SECOND".

11. Turn the SHUTTLE ring clockwise.

• The setting is confirmed and flashing stops.

<TIME DATE ADJUST>	
DAYLIGHT SAVING	OFF
DAY	28
MONTH	10
YEAR	2003
TIME	18:30:00

12. Turn the SHUTTLE ring counterclockwise.

◆ Present time display

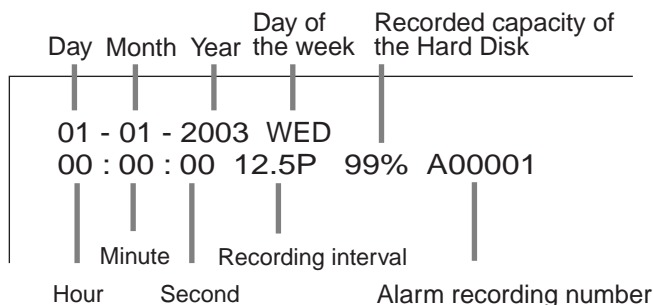
When turning on the unit power, the time/date display shown to the right appears (in the case of DISPLAY MODE 3).

⊖ During recording, the used HDD space is displayed. When recording is stopped, the display is cleared (with the exception of when pausing recording). The HDD usage display appears again after a few moments when recording is started once more.

INFORMATION

This unit uses 4 digits to display the year. The allowed display range is 99 years between 1/1/2001 ~ 31/12/2099. The unit is also equipped with a function to automatically calculate leap years. The date returns to the year 2001 after 31/12/2099.

◆ Recorded capacity display function



This unit displays the used space of the specified recording device (HDD) on the screen when "REMAIN HDD" of the <REAR TERMINAL SETTINGS> screen is set to "MAIN", "SUB", "LPA". The "%" indicates the ratio detected as HDD against the total HDD capacity. The following settings are required to enable this function.

- 1) Select the device and set the remaining capacity using "REMAIN HDD" of the <REAR TERMINAL SETTINGS> screen.
- 2) Select "3" for "DISPLAY MODE" in the <TIME DATE/DISPLAY SETTINGS> screen.

Relationship between the number of operational cameras and available "PPS" (pictures per second)

PPS \ Number of operational cameras	#1 / #2	#3 / #4	#5 / #6	#7 / #8	#9 / #10	#11 / #12	#13 / #14	#15 / #16
SHORT ↑ Recording interval ↓ LONG	25P	12.5P	8.33P	6.25P	5P	4.17P	3.57P	3.125P
	12.5P	6.25P	4.165P	3.125P	2.5P	2.085P	1.785P	1.563P
	8.333P	4.167P	2.777P	2.083P	1.667P	1.39P	1.19P	1.042P
	6.25P	3.125P	2.083P	1.563P	1.25P	1.043P	0.893P	0.781P
	5P	2.5P	1.666P	1.25P	1P	0.834P	0.714P	0.625P
	4.167P	2.083P	1.388P	1.042P	0.833P	0.695P	0.595P	0.521P
	3.125P	1.563P	1.041P	0.781P	0.625P	0.521P	0.446P	0.391P
	2.5P	1.25P	0.833P	0.625P	0.5P	0.417P	0.357P	0.313P
	1P	0.5P	0.333P	0.25P	0.2P	0.167P	0.143P	0.125P
	0.5P	0.25P	0.167P	0.125P	0.1P	0.083P	0.071P	0.063P
	0.25P	0.125P	0.083P	0.063P	0.05P	0.042P	0.036P	0.031P
	0.125P	0.063P	0.042P	0.031P	0.025P	0.021P	0.018P	0.016P

Basic manual recording

Normal recording using manual operation is explained here. Before starting recording, recording settings must be checked. After checking the settings of "HDD REPEAT REC MAIN", "HDD REPEAT REC SUB" in the <HDD SETTINGS> screen, the REC mode settings are made.

ⓘ Settings here are for normal recording only. For timer recording, settings must be made on the <TIMER PROGRAM SETTINGS> screen.

Setting the recording interval and recording picture quality for normal recording

To perform normal recording, "PPS" and "GRADE" must be set for each camera.

Setting of "PPS" (default : "1.563P")

"3.125P", "1.563P", "1.042P", "0.781P", "0.625P", "0.521P", "0.391P", "0.313P", "0.125P", "0.063P", "0.031P", "0.016P", "- - - - -"

"- - - - -" : Recording cannot be performed with camera set to this item.

ⓘ Available recording intervals will vary according to the number of cameras operating or ALARM RECORDING settings. Interval displays will be according to the chart.

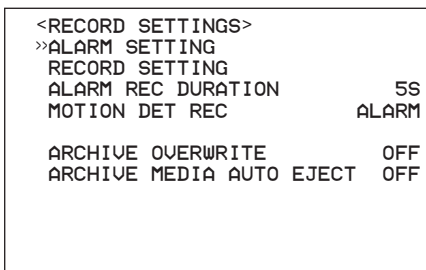
Setting of "GRADE" (default : "STD")

"SUPER", "HIGH", "STD"(STANDARD), "BASIC", "LONG"

Example : Set "PPS" of camera number " ① " to "0.313P" and "GRADE" to "HIGH" for normal recording.

1. Press the SET UP button to display the <SETTINGS> screen.
2. Turn the JOG dial to move the cursor to "RECORD SETTINGS" and turn the SHUTTLE ring clockwise.

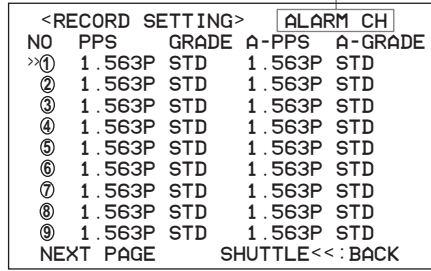
• The <RECORD SETTINGS> screen appears.



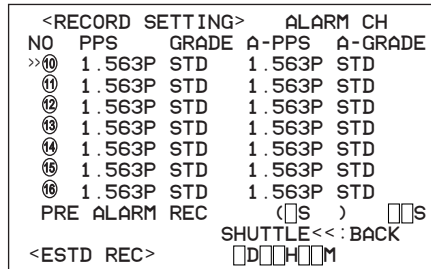
3. Turn the JOG dial to move the cursor to "RECORD SETTING" and then turn the SHUTTLE ring clockwise.

• The <RECORD SETTING> screen appears.

<RECORD SETTING> 1/2
Camera selection during alarm recording



<RECORD SETTING> 2/2



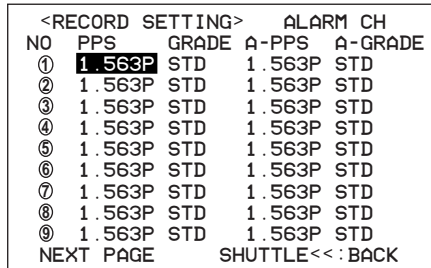
About <ESTD>

• The estimated recordable time is displayed as <ESTD> depending on the "PPS" and "GRADE" settings. (The time will not change when changing the alarm recording settings.)

➡ The RECORD SETTING consists of 2 pages. The next page appears when select "NEXT PAGE" as shown below in the screen and turn the SHUTTLE ring clockwise.

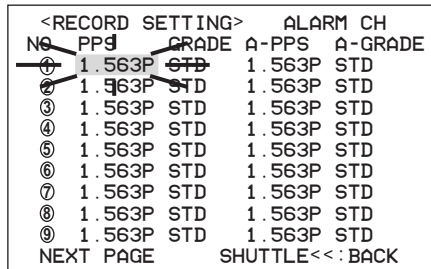
4. Check to see that the cursor is positioned at " ① ", and then turn the SHUTTLE ring clockwise.

• The "PPS" setting reverses in color.



5. Turn the SHUTTLE ring clockwise again.

• The background of the "PPS" setting turns red and flashes.



ⓘ The menu screen will not be cleared even when pressing the SET UP button when the setting item is flashing.

6. Turn the JOG dial to select "0.313P" and turn the SHUTTLE ring clockwise.

- Setting is confirmed and flashing stops.

<RECORD SETTING>		ALARM CH	
NO	PPS GRADE	A-PPS	A-GRADE
①	0.313P STD	1.563P	STD
②	1.563P STD	1.563P	STD
③	1.563P STD	1.563P	STD
④	1.563P STD	1.563P	STD
⑤	1.563P STD	1.563P	STD
⑥	1.563P STD	1.563P	STD
⑦	1.563P STD	1.563P	STD
⑧	1.563P STD	1.563P	STD
⑨	1.563P STD	1.563P	STD
NEXT PAGE		SHUTTLE<<:BACK	

7. Turn the JOG dial clockwise to reverse display "GRADE" and turn the SHUTTLE ring clockwise.

- The background of the "GRADE" setting turns red and flashes.

<RECORD SETTING>		ALARM CH	
NO	PPS GRADE	A-PPS	A-GRADE
①	0.313P STD	1.563P	STD
②	1.563P STD	1.563P	STD
③	1.563P STD	1.563P	STD
④	1.563P STD	1.563P	STD
⑤	1.563P STD	1.563P	STD
⑥	1.563P STD	1.563P	STD
⑦	1.563P STD	1.563P	STD
⑧	1.563P STD	1.563P	STD
⑨	1.563P STD	1.563P	STD
NEXT PAGE		SHUTTLE<<:BACK	

ⓘ When the setting item is flashing, the menu screen cannot be cleared even when pressing the SET UP button.

8. Turn the JOG dial to select "HIGH" and turn the SHUTTLE ring clockwise.

- The setting is confirmed and flashing stops.

<RECORD SETTING>		ALARM CH	
NO	PPS GRADE	A-PPS	A-GRADE
①	0.313P HIGH	1.563P	STD
②	1.563P STD	1.563P	STD
③	1.563P STD	1.563P	STD
④	1.563P STD	1.563P	STD
⑤	1.563P STD	1.563P	STD
⑥	1.563P STD	1.563P	STD
⑦	1.563P STD	1.563P	STD
⑧	1.563P STD	1.563P	STD
⑨	1.563P STD	1.563P	STD
NEXT PAGE		SHUTTLE<<:BACK	

9. When the setting is complete, turn the SHUTTLE ring counterclockwise.

- The cursor moves to the camera number on the left.
- When continuing with other camera number settings, turn the JOG dial to move the cursor to the desired camera number and repeat steps 4 ~ 8 to perform settings.

<RECORD SETTING>		ALARM CH	
NO	PPS GRADE	A-PPS	A-GRADE
>①	0.313P HIGH	1.563P	STD
②	1.563P STD	1.563P	STD
③	1.563P STD	1.563P	STD
④	1.563P STD	1.563P	STD
⑤	1.563P STD	1.563P	STD
⑥	1.563P STD	1.563P	STD
⑦	1.563P STD	1.563P	STD
⑧	1.563P STD	1.563P	STD
⑨	1.563P STD	1.563P	STD
NEXT PAGE		SHUTTLE<<:BACK	

10. Turn the SHUTTLE ring counterclockwise or press the SET UP button to return to the normal screen.

11. Press the REC/STOP button.

- The REC/STOP button turns on and recording starts.

12. To stop recording, press the REC/STOP button for more than 1 second.

- Recording stops and the REC/STOP button turns off.



■ Basic playback

This unit allows recorded video to be played back using various methods. The basic playback described here is the most common method for playback.

1. Press the PLAY button (inside the front door) on the front of the unit.

- Recorded contents of the HDD are played back.
- After turning the power on, the oldest recorded video is played back first. Otherwise, playback resumes at the position of the previous playback.



ⓘ When the "HDD REPEAT PLAY" setting in the "HDD SETTINGS" is set to "OFF", playback is stopped when reaching the end of the physical HDD or recorded section. When the "HDD REPEAT PLAY" setting is set to "ON", recorded video data is played back repeatedly.

2-1. (To change HDD, archive/copy device, or Compact Flash Card playback device ...)

- Select the device you wish to playback by using the PLAY DEVICE button on the front of the unit.

ⓘ Selection can still be made with the PLAY DEVICE button even if "ID4•ID5" has been set to "ARCHIVE•COPY" and a peripheral recording device is not connected to ID4•ID5. Moreover, selecting "HDD" will cause it to skip.

- PLAY DEVICE indicators

MAIN : Plays data from MAIN, SUB and LPA.

ARCHIVE : Plays data from the peripheral recording device connected to ID4 when "ID4•ID5" is set to "ARCHIVE•COPY".

COPY : Plays data from the peripheral recording device connected to ID5 when "ID4•ID5" is set to "ARCHIVE•COPY".

CFC : Plays data from the Compact Flash Card.

2-2. Press the PLAY button.

- Plays from the playback device that has been selected.

3. To pause playback, press the PAUSE button.
 - To resume playback, press the PAUSE button again or press the PLAY button.
4. To stop playback, press the STOP button.
 - During HDD playback/pause, playback will start the next time from the paused position.
 - During CFC playback/pause, playback will start the next time from the oldest recorded video on the media.

Basic search

This unit displays a menu of most used search functions simply by pressing the SEARCH button.

TIME DATE SEARCH

On this unit, various search functions are available for searching the start point of video clips. In this section, the most common search method referred to as time/date search is explained. With this method, searching is possible by date, hour, minute, second and specified camera number.

Example : Search a scene recorded on the MAIN HDD with time/date stamp of 03/03/2003 9:25:40pm (21:25:40) using camera number " ③ ".

1. Press the SEARCH button to display the <TIME DATE SEARCH> screen.
 - The default setting of the search menu displayed when pressing the SEARCH button is "TIME DATE SEARCH".

```

<TIME DATE SEARCH>
>>01-01-2003  00:00:00

EXECUTE (FORWARD)

MAIN
START      02-02-2003 00:00:00
END        04-04-2003 12:30:15

PUSH SEARCH KEY FOR
SEARCH SELECTION
    
```

2. Check to see that the cursor is next to the search date and turn the SHUTTLE ring clockwise twice.
 - The display reverses in color when the SHUTTLE ring is turned the first time. When the ring is turned for the second time, the display turns red and flashes.
3. Turn the JOG dial to display "03" for "DAY" and turn the SHUTTLE ring clockwise.
 - Setting is confirmed and flashing stops.
4. Turn the JOG dial to reverse display "MONTH" and turn the SHUTTLE ring clockwise.
 - The background of the setting item changes to red and flashes.
5. Turn the JOG dial to display "03" for "MONTH" and turn the SHUTTLE ring clockwise.
 - Setting is confirmed and flashing stops.
6. Repeat steps 4 and 5 to set "YEAR", "HOUR", "MINUTE" and "SECOND".

```

<TIME DATE SEARCH>
>>03-03-2003  21:25:40

EXECUTE (FORWARD)

MAIN
START      02-02-2003 00:00:00
END        04-04-2003 12:30:15

PUSH SEARCH KEY FOR
SEARCH SELECTION
    
```

⏪ To exit the <TIME DATE SEARCH> screen without searching, turn the SHUTTLE ring counterclockwise or press the SEARCH button twice.

7. Press the SEARCH button to display the <SEARCH SELECTION> screen.

8. Check to see that the cursor is positioned at "SELECTION CAMERA NUMBER", and then turn the SHUTTLE ring clockwise.
 - The background of the setting item changes to red and flashes.

9. Turn the JOG dial to select " ③ " and turn the SHUTTLE ring clockwise.

- Setting is confirmed and flashing stops.
- Setting (default : "ALL")

"ALL", " ① ", " ② ", " ③ ", " ④ ", " ⑤ ", " ⑥ ", " ⑦ ", " ⑧ ", " ⑨ ", " ⑩ ", " ⑪ ", " ⑫ ", " ⑬ ", " ⑭ ", " ⑮ ", " ⑯ "

"ALL" : Search is conducted for all camera number " ① " ~ " ⑯ " and displays the results on SPLIT16 screen.

" ① " ~ " ⑯ " : This search mode scans for matches to search criteria in the selected camera and displays the results on 1 screen.

```

<SEARCH SELECTION>
SEARCH TYPE      TIME DATE
>>SELECTION CAMERA NUMBER  ③

PLAYBACK DEVICE      MAIN

MAIN

START      02-02-2003 00:00:00
END        04-04-2003 12:30:15
    
```

- 10-1. (To change the playback device of the internal HDD ●●●) Turn the JOG dial to select "PLAYBACK DEVICE" and turn the SHUTTLE ring clockwise.

- The background of the setting item changes to red and flashes. Turn the JOG dial to display the desired playback device and confirm.
- Setting (default : "MAIN")

"MAIN" : Select when playing back MAIN HDD contents.

"SUB" : Select when playing back SUB HDD contents.

"LPA" : Select when playing back LPA HDD contents.

⚠ "SUB" is appeared on the screen when "PARTITION" ("LONG PRE-ALARM") is selected on "HDD SETTING" of the <INITIALIZATION> screen.

❗ “LPA” is appeared on the screen when “LONG PRE-ALARM” is selected on “HDD SETTING” of the <INITIALIZATION> screen after installig EXTRA HDD to “INTERNAL HDD A”.

10-2. (To change the search type •••)

Turn the JOG dial to select “SEARCH TYPE” and turn the SHUTTLE ring clockwise.

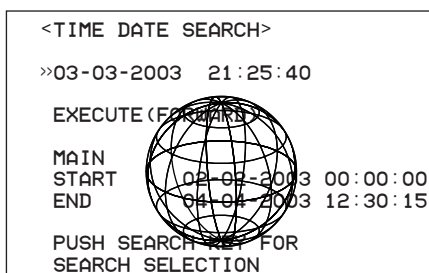
- The background of the setting item changes to red and flashes. Turn the JOG dial to display the desired search menu and confirm.
- Setting (default : “TIME DATE”)
 “TIME DATE”, “INDEX”, “ALARM INDEX”, “ALARM SKIP”, “ALARM LIST”

11. When the setting is complete, turn the SHUTTLE ring counterclockwise.

- The display returns to the <TIME DATE SEARCH> screen and the cursor appears on the left of the search date.

12. Turn the JOG dial to select “EXECUTE(FORWARD)” and turn the SHUTTLE ring clockwise.

- When the TIME DATE SEARCH is executed, the video of the set date/time (or the video closest to the search) will appear in still frame.
- The search result will appear using SPLIT16 screen when “ALL” is selected in “SELECTION CAMERA NUMBER” of the <SEARCH SELECTION> screen. If a camera number has been selected individually, the still frame will be displayed in full screen.



➡ When there is no recording of the set time, the video of the closest time and date for the set camera number will be displayed in still frame.

➡ Depending on the recording condition, TIME DATE SEARCH may not operate correctly.

❗ To display full screen view by selecting a camera number from the SPLIT16 screen of the search result when “ALL” is selected in the “SELECTION CAMERA NUMBER” setting, press the SEARCH button to clear the SEARCH menu and press the desired camera number button. The desired video is displayed in full screen.

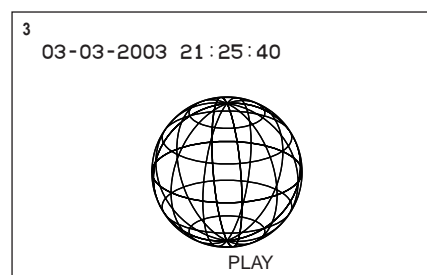
13. To playback the searched image.

- Press either the PLAY button or the PAUSE button.

14. To stop playback/still frame playback, press the STOP button.

- The display returns to the normal screen.

15. Press the SEARCH button twice to clear the <SEARCH SELECTION> screen.



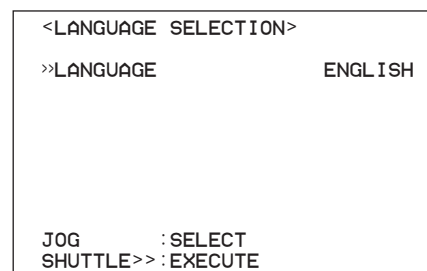
■ LANGUAGE SELECTION

With this unit, the menu screen display can be selected from 5 languages. As “ENGLISH” is selected for the initial setting, please perform setting according to the following procedure if you want to select a language other than “ENGLISH”.

Setting (default : “ENGLISH”)

- “ENGLISH”, “FRANCAIS”, “DEUTSCH”, “ESPAÑOL”, “РУССКИЙ”

1. Press the SET UP button → <SETTINGS> → Select “LANGUAGE SELECTION” in the <INITIAL SET UP/ INFORMATION> screen and display the desired setting.



2. Turn the SHUTTLE ring counterclockwise or press the SET UP button.

Recording time table

■ Continuous recording time table

◆ HDD continuous recording time (for 120GB drive)

Displays the estimated recordable time (when recording on a 120GB HDD).

ⓘ The following table shows estimated recordable time when operating with 2 cameras and the recording interval is set at a constant PPS rate given at the top of the column.

• Without Audio recording

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P	NUMBER OF RECORDING FIELD
SUPER	13h	1d3h	1d17h	2d7h	2d21h	3d11h	4d15h	5d19h	14d12h	29d	58d	116d1h	2,500,000
HIGH	18h	1d12h	2d7h	3d1h	3d20h	4d14h	6d3h	7d16h	19d4h	38d9h	76d18h	153d13h	3,310,000
STD	1d7h	2d14h	3d21h	5d5h	6d12h	7d19h	10d10h	13d	32d14h	65d4h	130d8h	260d16h	5,630,000
BASIC	1d19h	3d14h	5d10h	7d5h	9d	10d20h	14d11h	18d1h	45d4h	90d9h	180d18h	361d13h	7,800,000
LONG	3d23h	7d22h	11d22h	15d21h	19d21h	23d20h	31d19h	39d18h	99d10h	198d20h	397d17h	795d10h	17,180,000

• With Audio recording <Audio recording using 12.8KHz PCM sampling is possible.>

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P
SUPER	13h	1d3h	1d17h	2d5h	2d18h	3d7h	4d10h	5d12h	12d11h	22d7h	58d	116d1h
HIGH	18h	1d12h	2d7h	2d23h	3d16h	4d10h	5d22h	7d3h	16d12h	27d16h	76d18h	153d13h
STD	1d6h	2d13h	3d17h	4d23h	6d2h	7d8h	9d13h	11d16h	25d5h	39d17h	130d8h	260d16h
BASIC	1d18h	3d12h	5d4h	6d19h	8d8h	9d21h	12d17h	15d9h	31d19h	48d21h	180d18h	361d13h
LONG	3d10h	6d20h	10d5h	13d15h	16d19h	19d12h	24d12h	29d1h	51d5h	68d23h	397d17h	795d10h

d : day, h : hour

ⓘ Continuous recordable time and the estimated time displayed on the menu screen is the continuous recordable time when operating this unit and is not the product warranty period. Furthermore, it is not the period that guarantees life time at the unit.

ⓘ Audio recording cannot be performed when “PPS” of “RECORD SETTING” are all set to smaller than “0.333P” for normal recording.

• In this case, (X) appears to the right of recordable time display.

ⓘ Audio recording cannot be performed when the camera selection for alarm recording is as follows:

“ALARM CH” : “A-PPS” of all cameras set for alarm recording are set to smaller than “0.333P”.

“ALARM PLUS”, “ALARM25” : “PPS” and “A-PPS” of all cameras set for normal recording and alarm recording are set to smaller than “0.333P”.

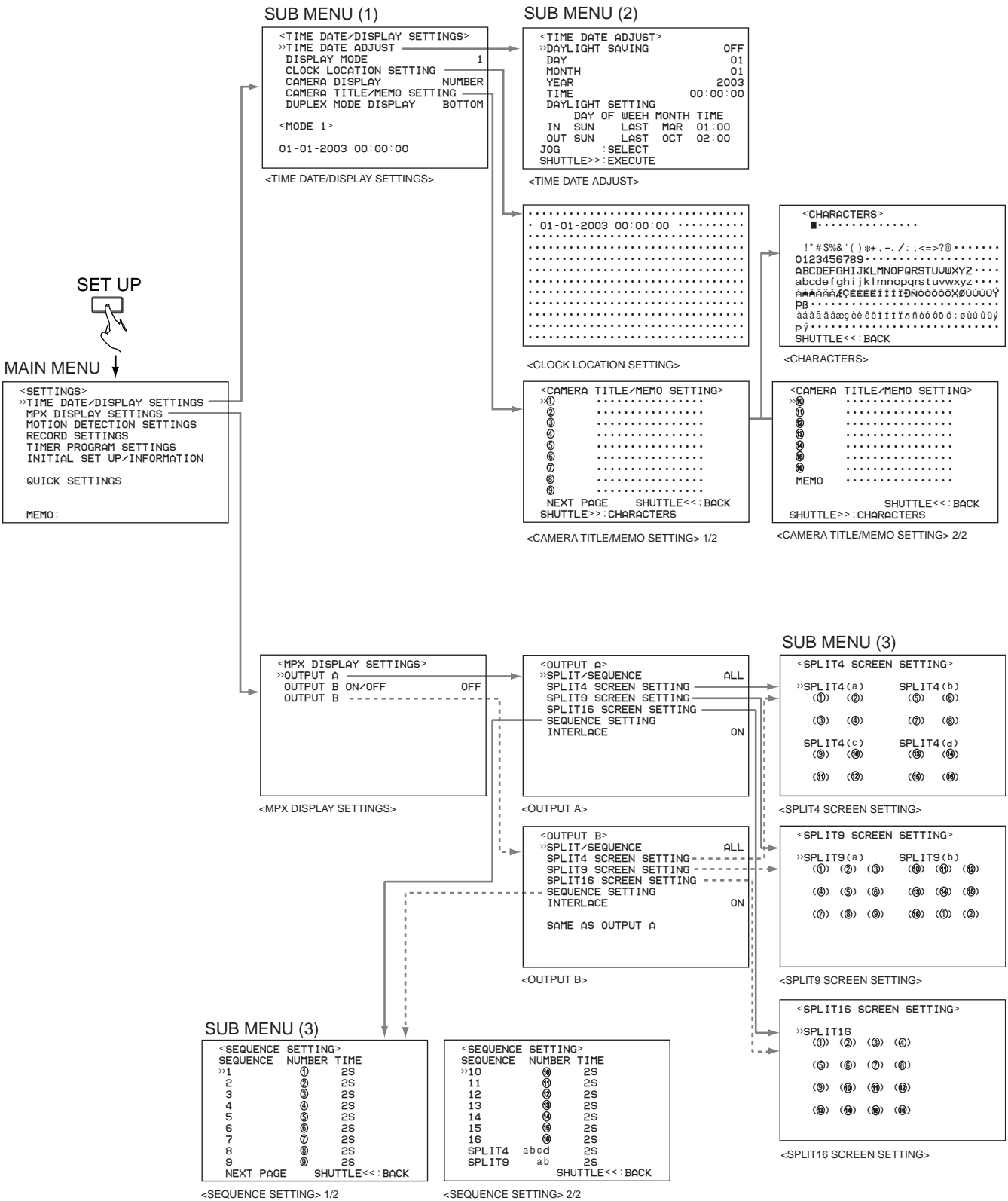
ⓘ □ : Since audio recording cannot be made during recording interval of 0.25P and 0.125P, even when the recording with audio recording is set to ON, the recordable time is the same for when setting audio recording to OFF.

Menu functions

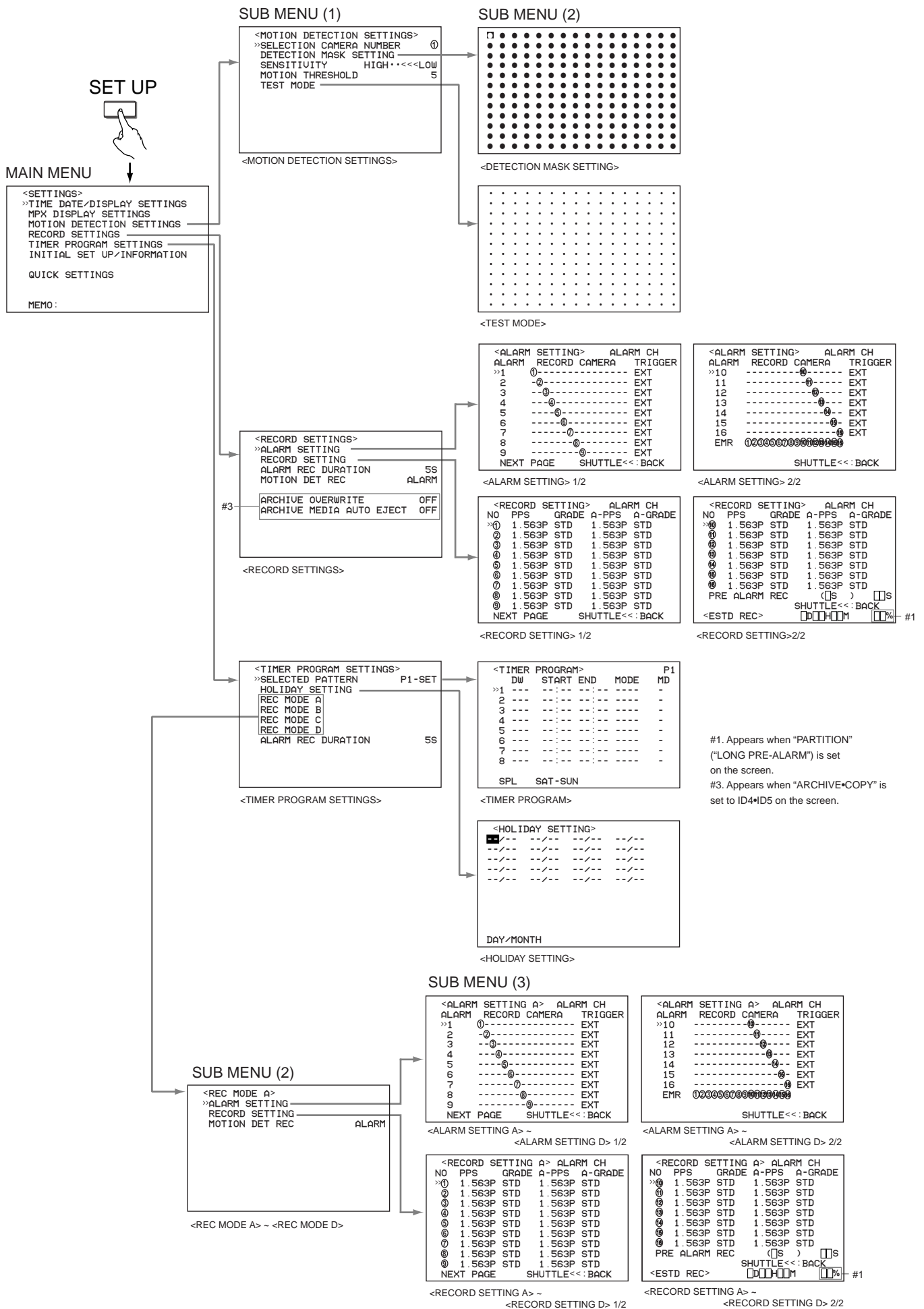
■ MENU SETTING

You can set the basic settings for this unit in the MENU SETTING.

⌚ During playback, recording, pre-alarm recording stand-by mode you cannot change setting of some MENUS.



Menu functions (continued)



SET UP



MAIN MENU

```

<SETTINGS>
>>TIME DATE/DISPLAY SETTINGS
MPX DISPLAY SETTINGS
MOTION DETECTION SETTINGS
RECORD SETTINGS
TIMER PROGRAM SETTINGS
INITIAL SET UP/INFORMATION
QUICK SETTINGS

MEMO:
    
```

SUB MENU (1)

```

<INITIAL SET UP/INFORMATION>
>>HDD SETTINGS
AUDIO RECORDING OFF
REAR TERMINAL SETTINGS
COMMUNICATION PORT SETTINGS
CAMERA CONTROL
INFORMATION/SERVICE
PASSWORD
LANGUAGE SELECTION
    
```

SUB MENU (2)

```

<HDD SETTINGS>
>>HDD REPEAT REC MAIN ON
HDD REPEAT REC SUB OFF #2
HDD REPEAT REC LPA OFF #6
HDD REPEAT PLAY OFF
IM-CHECK PLAY OFF
SEQUENTIAL PLAY OFF
FIFO OVERWRITE MODE OFF #3
ARCHIVE SOURCE HDD MAIN #5
ARCHIVE START POSITION RESET #3
    
```

#2. Appears when "PARTITION" ("LONG PRE-ALARM") is set on the screen.
 #3. Appears when "ARCHIVE*COPY" is set to ID4*ID5 on the screen.
 #5. Appears when "PARTITION" ("LONG PRE-ALARM") and "ARCHIVE*COPY" are set respectively to ID4*ID5 on the screen.
 #6. Appears when "LONG PRE-ALARM" is set on the screen after installing EXTRA HDD to "INTERNAL HDD A".

<INITIAL SET UP/INFORMATION>

<HDD SETTINGS>

SUB MENU (3)

```

<REAR TERMINAL SETTINGS>
>>MODE OUT 1 OFF
MODE OUT 2 OFF
MODE OUT 3 OFF
MODE OUT 4 OFF
MODE OUT 5 OFF
KEY SOUND ON
BUZZER OFF
REMAIN HDD MAIN-10%
CALL OUT SETTINGS
EMERGENCY REC DURATION 10M
    
```

```

<CALL OUT SETTINGS>
>>HDD MAIN REMAIN OFF
HDD MAIN FULL OFF
HDD SUB REMAIN OFF #2
HDD SUB FULL OFF
HDD LPA REMAIN OFF #6
HDD LPA FULL OFF
ARCHIVE REMAIN OFF #3
ARCHIVE FULL OFF
    
```

<REAR TERMINAL SETTINGS>

<CALL OUT SETTINGS>

SUB MENU (4)

```

<COMMUNICATION PORT SETTINGS>
>>RS-232C
ETHERNET
    
```

```

<RS-232C>
MODE REMOTE A
>>SETTINGS
    
```

```

<RS-232C SETTINGS>
>>TRANSMISSION MODE 9600
DATA BIT LENGTH 8BIT
PARITY BIT NONE
STOP BIT LENGTH 1BIT
DELIMITER CR
    
```

<COMMUNICATION PORT SETTINGS>

<RS-232C>

<RS-232C SETTINGS>

```

<CAMERA CONTROL>
NO PTZ CONTROL ADDRESS
>>① ---- 001
② ---- 001
③ ---- 001
④ ---- 001
⑤ ---- 001
⑥ ---- 001
⑦ ---- 001
⑧ ---- 001
⑨ ---- 001
NEXT PAGE
    
```

```

<CAMERA CONTROL>
NO PTZ CONTROL ADDRESS
>>⑩ ---- 001
⑪ ---- 001
⑫ ---- 001
⑬ ---- 001
⑭ ---- 001
⑮ ---- 001
⑯ ---- 001
    
```

<CAMERA CONTROL> 1/2

<CAMERA CONTROL> 2/2

```

<ETHERNET>
>>IP ADDRESS 192.168.000.100
SUB NET MASK 255.255.255.000
GATEWAY 000.000.000.000
E-MAIL ADDRESS
SERVICE PORT SETTING
ALARM NOTIFICATION SETTING
<MAC ADDRESS> 08-00-70-2E-3F-FF
PLEASE PRESS SET UP BUTTON
TO APPLY NEW SETTING
    
```

<ETHERNET>

```

<E-MAIL ADDRESS>
SMTP SERVER
RECORDER ID
USER ADDRESS
1
2
3
4
5
    
```

<E-MAIL ADDRESS>

```

<SERVICE PORT SETTING>
>>WEB *00080
USER ACCESS 53705
SUPER USER 53706
LIVE USER1 53707
LIVE USER2 53708
LIVE USER3 53709
LIVE USER4 53710
    
```

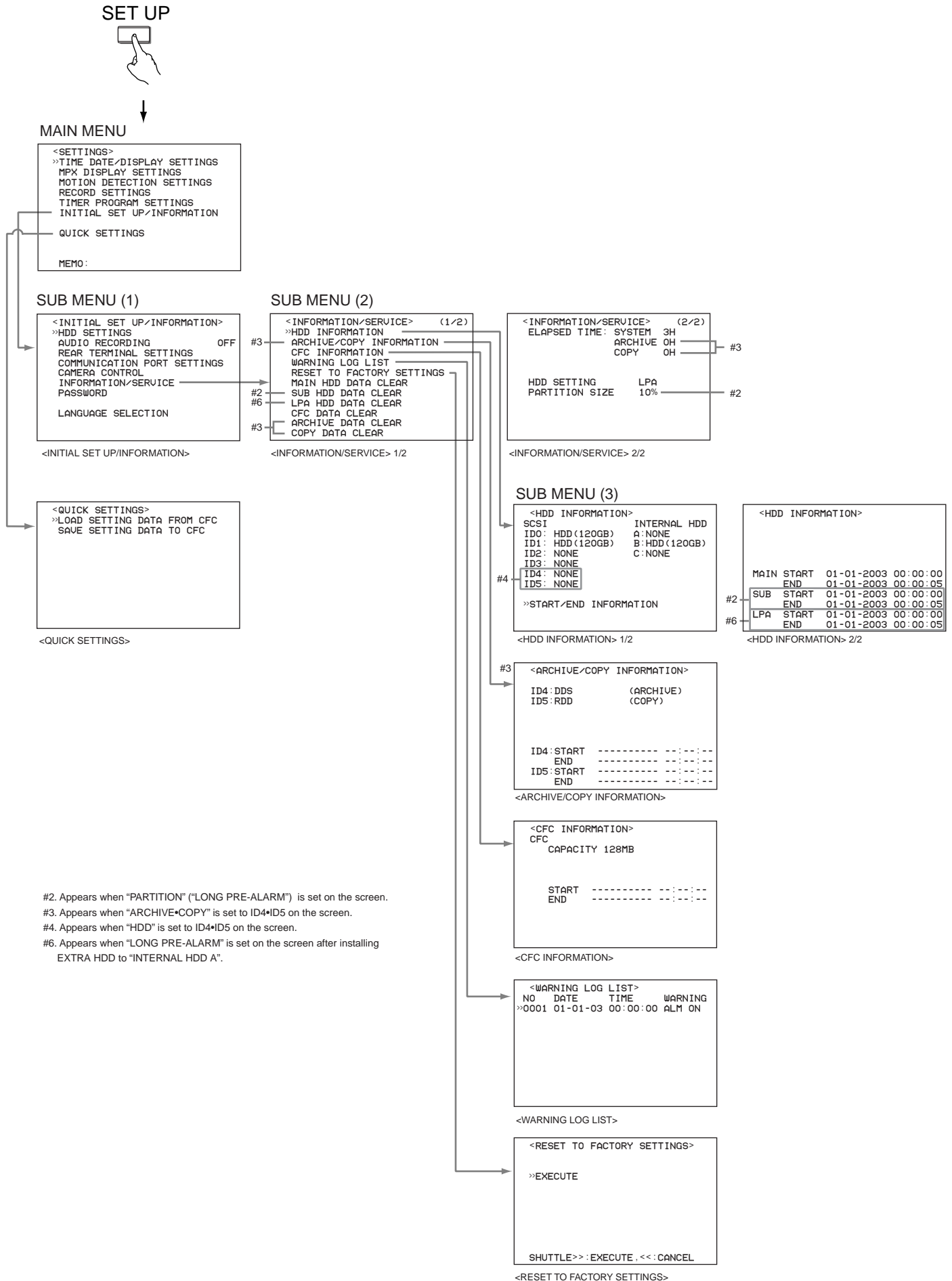
<SERVICE PORT SETTING>

```

<ALARM NOTIFICATION SETTING>
NO IP ADDRESS TARGET OWN
>>1 000.000.000.000*55111 01111
2 000.000.000.000*55111 01112
3 000.000.000.000*55111 01113
4 000.000.000.000*55111 01114
5 000.000.000.000*55111 01115
WARNING OFF
ALARM SENS OFF
REC MODE OFF
RETRY TIME 10S
    
```

<ALARM NOTIFICATION SETTING>

Menu functions (continued)



SET UP



MAIN MENU

```

<SETTINGS>
>>TIME DATE/DISPLAY SETTINGS
MPX DISPLAY SETTINGS
MOTION DETECTION SETTINGS
RECORD SETTINGS
TIMER PROGRAM SETTINGS
INITIAL SET UP/INFORMATION
QUICK SETTINGS
MEMO:
    
```

SUB MENU (1)

```

<INITIAL SET UP/INFORMATION>
>>HDD SETTINGS
AUDIO RECORDING OFF #3
REAR TERMINAL SETTINGS
COMMUNICATION PORT SETTINGS
CAMERA CONTROL
INFORMATION/SERVICE #2
PASSWORD #6
LANGUAGE SELECTION #3
    
```

SUB MENU (2)

```

<INFORMATION/SERVICE> (1/2)
>>HDD INFORMATION
ARCHIVE/COPY INFORMATION
CFC INFORMATION
WARNING LOG LIST
RESET TO FACTORY SETTINGS
MAIN HDD DATA CLEAR
SUB HDD DATA CLEAR
LPA HDD DATA CLEAR
CFC DATA CLEAR
ARCHIVE DATA CLEAR
COPY DATA CLEAR
    
```

```

<INFORMATION/SERVICE> (2/2)
ELAPSED TIME: SYSTEM 3H
ARCHIVE 0H #3
COPY 0H
HDD SETTING LPA #2
PARTITION SIZE 10%
    
```

SUB MENU (2)

```

<PASSWORD>
>>OPERATION CONTROL
HDD DATA CLEAR
    
```

SUB MENU (3)

```

<PASSWORD SETTING>
>>1 FIRST SECOND
---- ----
2 ---- ----
3 ---- ----
PRESS WARNING RESET BUTTON
TO CLEAR PASSWORD
SHUTTLE>>: TO SET PASSWORD
    
```

SUB MENU (3)

```

<MAIN HDD DATA CLEAR>
PUSH WARNING RESET KEY
FOR 1 SECOND TO CLEAR
    
```

```

<SUB HDD DATA CLEAR>
PUSH WARNING RESET KEY
FOR 1 SECOND TO CLEAR
    
```

```

<LPA HDD DATA CLEAR>
PUSH WARNING RESET KEY
FOR 1 SECOND TO CLEAR
    
```

```

<CFC DATA CLEAR>
PUSH WARNING RESET KEY
FOR 1 SECOND TO CLEAR
    
```

```

<ARCHIVE DATA CLEAR>
PUSH WARNING RESET KEY
FOR 1 SECOND TO CLEAR
    
```

```

<COPY DATA CLEAR>
PUSH WARNING RESET KEY
FOR 1 SECOND TO CLEAR
    
```

```

<LANGUAGE SELECTION>
>>LANGUAGE ENGLISH
JOG :SELECT
SHUTTLE>>:EXECUTE
    
```

- #2. Appears when "PARTITION" ("LONG PRE-ALARM") is set on the screen.
- #3. Appears when "ARCHIVE*COPY" is set to ID4*ID5 on the screen.
- #6. Appears when "LONG PRE-ALARM" is set on the screen after installing EXTRA HDD to "INTERNAL HDD A".

REC/STOP + POWER button

```

<INITIALIZATION>
>>ID4 ID5 ARCHIVE *COPY
HDD SETTING LONG PRE-ALARM #2
PARTITION SIZE 10% #6
PRE-ALARM DURATION 30M
BOOT UP DELAY 30S
POWER OF
INITIALIZATION
ALL DATA WILL BE ERASED
WHEN PROCEED INITIALIZATION
    
```

<INITIALIZATION>

■ COPY MENU

MAIN MENU

```
<COPY>
>>DIRECTION      MAIN HDD>CFC
MODE             OVERWRITE
TRANSFER PERIOD  START·END
START           01-01-2003 00:00:00
END             01-01-2003 00:00:10

EXECUTE
```

<COPY>

```
<RESTORE>
>>DIRECTION      ARC>MAIN HDD
MODE             OVERWRITE
TRANSFER PERIOD  START·END
START           01-01-2003 00:00:00
END             01-01-2003 00:00:10

EXECUTE
```

<RESTORE>

■ SEARCH SELECTION MENU

SEARCH



■ Communications by Web Browser

The Web browser on the personal computer can capture the pictures that have been recorded and live pictures from the camera that is connected to this equipment.

◆ The personal computer product requirements

- OS : Microsoft Windows 98SE, Windows 2000, Windows ME or Windows XP.
- CPU : IBM PC/AT compatible with an Intel Pentium series processor of at least 500MHz.
- RAM : 256MB or more.
- Hard disk drive : System drive with unused space of at least 200MB.
- Web Browser Soft : Microsoft Internet Explorer 5.01SP2 or later.
- Display device : XGA (1024 pixels x 768 pixels) or higher.

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(The official name of Windows is Microsoft Windows Operating System.)

All other company and product names appearing herein are the property of their respective owners.

- Windows 98SE is an abbreviation of Microsoft Windows 98 Second Edition.
- Windows 2000 is an abbreviation of Microsoft Windows 2000 Professional.
- Windows Me is an abbreviation of Microsoft Windows Millennium Edition.
- Windows XP is an abbreviation of Microsoft Windows XP Home Edition/Professional.

ⓘ The product requirement described above cannot guarantee operations in all environments.

ⓘ Lack of compatibility between Web functions and the PC peripheral driver may, in rare instances, result in abnormal operation. If this happens, upgrade to the newest version of Internet Explorer and try again.

◆ Connections

• When making a direct connection between this equipment and a personal computer (here in after PC), use a cross cable, and when making a connection through a HUB, use a straight cable.

- The duplex mode is half duplex.
- Refer to the PC instruction manual for instructions on how to set the Web settings on the PC.

◆ AUTHENTICATION

Start up the Microsoft Internet Explorer and log in.

1. Start up the Microsoft Internet Explorer and enter the address.

- The “[Authentication]” screen will appear.



2-1. (When logging in •••)

First, enter the “userID” and then enter the “password”. When shipped from the factory, the userID for the full-rights user is “root”, and the password is “admin000”, the userID for the live user is “guest” and the password is “guest”.

ⓘ More than one user can log in simultaneously using the same userID and password.

ⓘ However, there are restrictions due to authorization. The maximum number of users that can be connected at the same time is 10.

2-2. Select “log in” and then left-click or press ENTER.

- The “Welcome” screen will appear.



3-1. (If you make an error in entering the userID or password •••)

- The “[Rejection]” screen will appear.

3-2. Select “[Back to Authentication]” and either left-click or press ENTER.

- The “[Authentication]” screen will appear.

3-3. Follow the steps in step 2-1 and enter the correct “userID” and “password”.

4-1. (If you do not log in •••)

Select “If you don’t want to log in, click here to exit.” and left-click.

4-2. The message “SessionID removed in recorder & browser. Please shut this Web Browser down to clear of your browser’s cache.” will display. Close the Web Browser.

5-1. (To change password •••)

The password can be changed in the “[Authentication]” screen only by the user who has the authorization to change a password. Follow the instructions in the menu and enter the present “userID” and “password”.

5-2. Enter the new password in “new password:” and again in “retype new password:”.

- ❗ The number of characters that can be used in registering a password is 16. Both alphabet letters and numbers can be used with a distinction made between upper and lower case. You cannot use spaces.

5-3. To change into a new password, select “change” and left-click or press ENTER. To stop the change, select “clear”, and left-click or press ENTER.

◆ Welcome

This is the screen for selecting, from “Menu”, “live monitor” with which live pictures will be retrieved and displayed, “playback” with which pictures that have already been recorded will be retrieved and displayed, “user maintenance”, with which the settings for user authorization will be configured, “log out” for ending a job, or “change log in user” for making a change in the logged-in user.

- ❗ Depending on what the user’s authorization is, there are certain menus that cannot be selected. If a request is made for a live picture by communication during the playback of a recorder, the recorder playback will be stopped.

- ❗ The user’s sessionID (connection data) will be lost in 5 minutes from the final operation that includes image retrievals.

- ❗ If no operations are made within that 5 minutes, no other operations can be made after that so close the browser and then log in again.

- ❗ If the recorder’s MAIN switch is “OFF”, live and recorded images cannot be retrieved.

1. Select the desired “Menu” and left-click.



• Live monitor

Retrieves live images and displays the images on the PC screen.

1. Select “live monitor” and left-click.

- The “live monitor” screen will display.

- ❗ When image acquisition is tried for the first time with the Web browser of a personal computer, a message as shown below will be displayed. Please click “Yes”.



- ❗ When a live picture is acquired from the recorder and the <OUTPUT B ON/OFF> setting is “ON”, the updating speed for the Live monitor screen decreases. It is recommended to set the <OUTPUT B ON/OFF> setting to “OFF”.



<Explanation of functions>

- STOP** : Stops the retrieval of an image.
- GO** : Starts (or restarts) the retrieval of an image.
- Display** : For selecting either the display or non-display of a camera number.
- Layout** : For selecting from the 6 types of display patterns.
(default : split4 screen)
- Camera** : Selects the camera number that you want to display and check.
- Size** : Selects one of 7 patterns for the screensize: x2, x1.5, x1, x2/3, x1/2, x1/3, x1/4.
- Transfer Rate** : Selects one of 5 stages from “Lo” to “Hi” for image retrieval speed.
(default : middle)
- Save Layout** : The layout of the screen display is registered to “Local PC” and “Recorder”.
- Back to [Welcome]** : Returns to the “Welcome” menu.
- [Log out]** : For logging out.

⚠ The channel information selected in “Camera” is shared by all multi-screen layouts. The sequence in which camera numbers have been selected is displayed from the top left.

⚠ The screen size regulated by “Size” is applied to the display field at the farthest upper left point in the screen layout.

⚠ Setting “Transfer Rate” too far on “Hi” may present obstacles to PC operation as determined by the performance of the PC you are using. Please set it to the appropriate rate to the image retrieval speed of your machine.

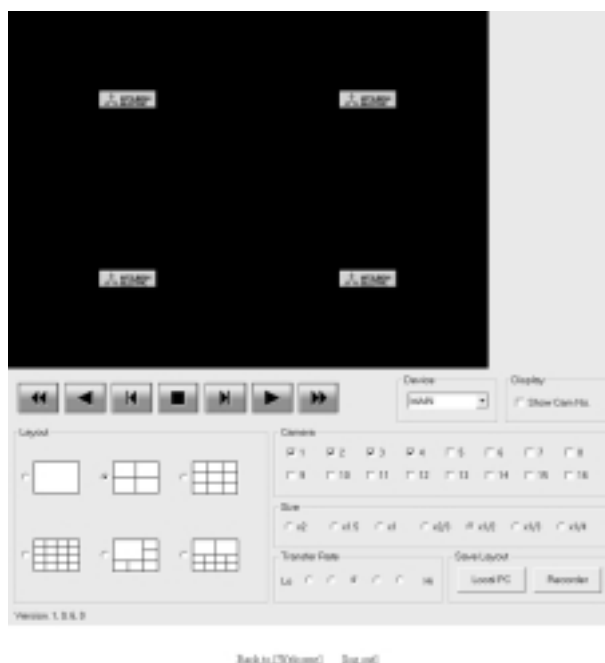
⚠ Depending on the network capacity and the load conditions, the transfer rate may not rise.

⚠ Only a user who has the authorization for “Change Password” can store screen layouts in the “Recorder” side using “Save Layout”. If the user who has authorization for “Change Password” stores screen layouts in both “Local PC” and “Recorder”, the information for “Local PC” is given priority. When storing layouts in “Local PC”, only one layout can be stored for one PC, even if users are different. To delete layouts that are stored in “Local PC”, delete the “Cookies” in the browser.

• **Playback**

Retrieves, plays back and search for images that have been recorded by the recorder.

1. Select “playback” and left-click.
 - The “playback” screen appears.



Communications by Web Browser (continued)

2. Press the PLAY button to start playback.

<Function description>

- ▶ : Press to start playback.
- ▶▶ : Press to start speed search in the forward direction at speeds of x2, x4, x8 and x16.
- ▶| : Press to frame-by-frame playback in the forward direction.
- ◀ : Press to start reverse playback.
- ◀◀ : Press to start speed searches in the reverse direction at speeds of x2, x4, x8 and x16.
- ◀| : Press to frame-by-frame playback in the reverse direction.
- : During playback or searching, press to stop playback for still frame.

Device : Selects the HDD for playback and search.
(default : MAIN)

• The following searches can be selected in single-screen display.



The date and time and the camera number for the image acquired are displayed in "Image Information". Clicking "Save Image" stores the picture that is freeze-frame displayed in the PC in bit map format.

① The function for searching for recorded image data is effective only when the single-screen display has been selected in the "playback" menu. The function cannot operate during image data playback so to make a search of any type first stop the playback.

• Time Search

Select the date and time and click "Search".

• Alarm Search

Click "Alarm List" and the "Alarm List Search - MAIN" screen will appear in the sub-screen. Select the "Alarm No." desired, and then click "Search".

Alarm No.	Date	Camera No.	Sensor No.	Alarm Type
00024	12/03/2003 16:25:34	8	8	EXT
00023	12/03/2003 16:25:34	8	8	EXT
00022	12/03/2003 16:25:14	1	17	EMG
00021	12/03/2003 16:24:42	6	6	EXT
00020	11/03/2003 13:31:23	6	6	EXT
00019	11/03/2003 13:31:05	8	8	EXT
00018	11/03/2003 13:28:18	6	6	EXT
00017	03/03/2003 21:48:46	8	8	EXT
00016	03/03/2003 20:56:26	8	8	EXT
00015	03/03/2003 20:11:01	8	8	EXT
00014	03/03/2003 20:07:05	8	8	EXT
00013	03/03/2003 20:05:59	8	8	EXT
00012	03/03/2003 20:05:02	8	8	EXT
00011	03/03/2003 19:57:46	6	6	EXT
00010	03/03/2003 19:57:45	6	6	EXT
00009	03/03/2003 19:57:45	7	7	EXT
00008	03/03/2003 19:57:44	9	9	EXT
00007	03/03/2003 19:57:43	7	7	EXT
00006	03/03/2003 19:57:43	13	13	EXT
00005	03/03/2003 19:57:42	1	1	EXT
00004	03/03/2003 19:57:42	1	1	EXT
00003	03/03/2003 19:57:41	3	3	EXT
00002	03/03/2003 19:57:41	8	8	EXT
00001	03/03/2003 19:57:40	16	16	EXT

Click "Refresh" to re-acquire the "Alarm List", and click "Close" to hide the "Alarm List Search - MAIN" menu.

• Index Search

Click "Prev" for an index search in the reverse direction and click "Next" for an index search in the forward direction.

• User maintenance

This is the screen for changing the settings for registered user authorization and for deleting a registration. It can also be used for registering new users.

1. Select "user maintenance" and left-click.

- The "[Registration]" screen will appear.

The screenshot shows the "[Registration]" screen. It has a title bar "[Registration]". Below it, there is a section "Review & Change user-attribute" with a table of users. The table has columns for user ID, password, and several authorization checkboxes (LevelMonitor, PlayMode, AllCamera, ChangePassword, Registration). Below this is a "Register new user" section with input fields for user ID and password, and checkboxes for the same authorization options. There are "Close" and "Register" buttons at the bottom.

userID	password	LevelMonitor	PlayMode	AllCamera	ChangePassword	Registration	Change	Remove User
root		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	change	
gent		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	change	remove

2-1. (To change registered user settings •••)
Select the userID for changing the settings in the "Inspection & Change user-attribute" settings.

- Select the items that you want to change.

<User authorization>

Live Monitor	: Allows acquisition of live images. It is a mandatory rank to be registered.
Play Mode	: Allows acquisition of recorded images. This authorization is given only to a one user.
All Camera	: Allows the acquisition of images from a covert camera.
Change Password	: Allows the changing of user's password. Moreover, the screen layout can be saved to the recorder.
Registration	: Allows the viewing and editing of user registration information.

❗ Certain items cannot be selected depending on what the user authorization is.

❗ "Registration" authorization can be used by only one user. From the time that a user logs in until that user logs out and gives up authorization, any other user that logs in is regarded as a user who does not have "Registration" authority.

❗ "Play Mode" authorization can only be used by one user. From the time that a user logs in until that user logs out and gives up authorization, any other user that logs in is regarded as a user who does not have "Play Mode" authority.

2-2. (To change settings •••)
Select "change" and left-click. The "[Change Confirmation]" screen will appear.

2-3. If you want to make the change, left-click "change". If you want to cancel a change, left-click "cancel".

2-4. (When you have selected "change" •••)
The "[User's Attribute Changed]" screen will appear, so then left-click "Back to [Registration]".

- The return will be made to the "[Registration]" screen.

2-5. (When you have selected "cancel" •••)
• The return will be made to the "[Registration]" screen.

3-1. (When you have deleted a registered user •••)
Left-click on "remove" in the userID that you want to delete in "Review & Change user-attribute".

- The "[Remove confirmation]" screen will appear.

3-2. If you want to delete it, left-click "remove". If you don't want to delete it, left-click "cancel".

3-3. (If you have selected "remove" •••)
The "[User Removed]" screen will appear, so left-click "Back to [Registration]".

- The return will be made to the "[Registration]" screen.

3-4. (If you have selected "cancel" •••)
• The return will be made to the "[Registration]" screen.

4-1. (To register a new user •••)
Enter the new userID and new password in "Register new user".

4-2. Refer to step 2-1, select the "access auth." desired and check it.

❗ A userID with the same name cannot be registered. The maximum number of characters that can be used in registering a password is 16. Both alphabet letters and numbers can be used with a distinction made between upper and lower case. You cannot use spaces.

4-3. If you want to make a new registration, left-click "register". If you want to cancel a new registration, left-click "cancel".

4-4. (If you have selected "Register" •••)
It will be added to "Review & Change user-attribute".

4-5. (Selecting "cancel" •••)
Clears the specified contents.

• Log out

In this screen, assign "Log out" settings to end the job.

1. Select "Log out" and left-click.
• The "[Log out]" screen will appear.



2. Close the Web Browser.

❗ If the browser is closed without correctly operating the log out, the user's sessionID will be saved for 5 minutes. If the Log in is made with the same userID within that 5 minutes, operation limits may take effect.

• Change log in user

This screen is for changing the logged in user.

1. Select "Change log in user" and left-click.
 - The "[Authentication]" menu appears.

The screenshot shows a web browser window titled "[Authentication]". At the top, it says "logged in as: root" and "Back to [Welcome] as Current User". Below this is a horizontal line and a link: "If You don't want to log in, click here to exit [log out]". There are two main sections: "Log in(or log in as a different user) : **** New ID and password are case sensitive ****" and "Change Your Password : **** New ID and password are case sensitive ****". The first section has input fields for "userID:" and "password:" with a "login" button. The second section has input fields for "userID:", "password:", "new password:", and "retype new password:" with "change" and "clear" buttons.

2-1. (To change the logged in user •••)

In the "Log in (or log in as a different user):" settings, execute step 2-1 and 2-2 in "♦ AUTHENTICATION" and change the logged in user.

- The logged in user is changed and the "Welcome" screen appears.

2-2. (If the log in is made without changing the user •••)
Select "Back to [Welcome] as Current User" and left-click.

- The logged in user will remain as is and the "Welcome" screen will appear.

2-3. (To log out •••)

Select "If you don't want to log in, click here to exit." and left-click.

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