DIGITAL RECORDER
OPERATION QUICK GUIDE

MODEL
DX-NT400E

THIS INSTRUCTION MANUAL IS IMPORTANT TO YOU. PLEASE READ IT BEFORE USING YOUR DIGITAL RECORDER.
1. **HDD tray**
   Attach the HDD which is commercially available to here. Due to the removable structure, you can attach or remove the HDD easily.

2. **Key**
   Used to lock the HDD tray. The HDD tray cannot be removed while it is locked.

3. **POWER button**
   When pressing this button while the MAIN switch on the rear panel is set to ON, the power turns on and the button lights up. When pressing the button again, the unit is in standby mode and the light turns off. When the unit is in operational transition such as boot-up, the button flashes and other operations are not accepted.

4. **REMOTE Jack**
   Input connector for supplied wired remote control.

5. **Lever**
   Used when attaching or removing the HDD tray.

6. **ACCESS indicator**
   Illuminates while accessing the HDD.

7. **REC indicator**
   Illuminates while recording.

8. **ALARM INTERRUPT indicator**
   When pressing ALARM INTERRUPT button, the unit does not accept alarm signals or motion detection for 5 minutes. During this time, the indicator flashes.

9. **WARNING indicator**
   Illuminates when a warning is displayed on the monitor. To clear the warning display, press the WARNING RESET button for more than 3 seconds.

10. **LINK indicator**
    Illuminates when the link between this unit and the device connected to ETHERNET terminal is fixed.

11. **RX/TX indicator**
    Illuminates while communicating with the device connected to ETHERNET terminal on the rear panel.
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 or off using the POWER button on the front panel.

2. **VIDEO OUT connector**
Output connector for video signal to monitor (BNC connector).

3. **CAMERA IN connectors**
Input connector for signal of camera (BNC connector).
   - Only the standard PAL type signal is supported. The unit may malfunction when a out-of-sync signal is input.

4. **AC power socket**
This socket connects to the power cord. Earth terminal is for safety. Use the 100 - 240 V 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.

5. **AUDIO OUT connector**
Output connector for audio signal (RCA pin).

6. **GND terminals**
It is the common GND terminal.

7. **AUDIO IN connector**
Input connector for audio signal (RCA pin).

8. **RESET button**
Pressing this button resets the unit and the power turns off. At this time, video data, menu settings, and the present time are kept.

9. **I/O terminals**
   - **ALARM IN 1 - 4 terminals**
     Input terminal for alarm signal.
   - **EMERGENCY terminal**
     Input terminal for shifting the unit mode to emergency recording forcibly.
   - **MODE OUT 1 - 5 terminals**
     Output terminal to indicate the current status of the unit. Select the status of the unit to be output by “MODE OUT 1” to “MODE OUT 5” in the <REAR TERMINAL SETTINGS> screen.

10. **RS-232C connector**
This connector is used to connect a host device equipped with RS-232C connector. This unit can be controlled by the other device through this connector.

11. **ETHERNET connector**
Use the cable applies to 10BASE-T to connect this terminal. The duplex mode is half duplex. Auto negotiation is not supported.
Major operations and their functions (continued)

5. REC/STOP buttons
   When pressing both buttons, recording starts and the REC indicator on the front panel lights up. When pressing both buttons during recording, recording stops and the REC indicator turns off. During timer recording, recording does not stop even when both buttons are pressed.

6. REV.P (REVERSE PLAY) button
   When pressing this button during stop mode, the reverse playback speed changes in the 4 grades (normal → 25 fields/second reverse playback → 30 MB units → 300 MB units → normal).

7. PAUSE button
   When pressing this button during playback, the still frame playback picture is displayed. When pressing this button again, the unit resumes playback.

8. SPLIT/SINGLE button
   Press to switch the display between the single screen display and the split/sequential screen display.

9. ZOOM button
   When pressing this button during single screen display, the screen is magnified by 100%, 200%, and 400%.

10. +, – buttons
    When pressing these buttons during single screen display, the camera number is switched. When pressing these buttons during split/sequential screen display, the screen display is switched between the split screen display and the single sequential screen display. (Single sequential screen display is skipped during playback.)

LOCK button (+ button)
Pressing this button for more than 3 seconds while the MAIN switch on the rear panel is turned ON activates simple lock or password lock. When the password for unlocking is not set, lock function executes in simple lock. When the password for unlocking is set, lock function executes in password lock.

WARNING RESET button (– button)
Press this button for more than 3 seconds to clear the on-screen warning display or to clear the data.

11. ENTER button
    Press to determine the selection when using menus.

### Wired remote control R-400 (supplied)

![Remote Control Diagram]

1. SEARCH button
   Press to display the search screen.

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

3. JOG buttons
   Press to move the cursor or change the setting item while displaying the menu screen. When pressing during still frame playback, the image forwards/reverses frame-by-frame. Press to move the centre point of the magnification screen vertically or horizontally.

ALARM INTERRUPT button
When pressing this button, the unit does not accept alarm signals or motion detection for 5 minutes. During this time, ALARM INTERRUPT indicator on the front panel flashes. This button does not function while the menu screen or the search menu is displayed on the monitor.

4. CLEAR button
   Press to return to the previous menu layer.
12. TIMER ON/OFF buttons
When pressing both buttons, the unit is set to timer recording/standby mode. When pressing both buttons again, timer recording/standby mode is cancelled.

13. PLAY button
When pressing this button during stop mode, the playback speed changes in the 4 grades (normal ➔ 25 fields/second ➔ 30 MB units ➔ 300 MB units ➔ normal).

14. STOP button
Press to stop playback.
Attaching and removing the HDD to the DX-NT400E

— Make sure that the POWER button on the front panel and the MAIN switch on the rear panel are both turned OFF when attaching or removing the HDD tray.

— Do not remove the top cover of the unit.

— HDDs are very sensitive to sudden shocks and vibration which can permanently damage the internal components. To avoid damage to the HDD:
  i) Hold tray firmly with both hands while transporting.
  ii) DO NOT use an electric screwdriver.
  iii) DO NOT place the HDD directly on a desk or table. use a cushion.

— This unit does not operate when the HDD is not attached. Be sure to attach the HDD before using the unit.

— When replacing the HDD only for playing back the recorded image, replace the recorded HDD together with the tray. When you remove the top cover of the tray and remove only one HDD or replace the MASTER HDD or the SLAVE HDD with another one, the recorded image cannot be played back.

— When the protection sheet is stuck on the attaching part of the HDD tray on the front of the unit, remove it before using.

Caution

The following HDDs have been tested and compatibility is ensured. This information is as of June 2003. Supply of these HDDs may be stopped or they may be changed without notice by their respective manufacturers. Consult your dealer for the latest information or use of other HDDs. When you attach 2 HDDs, normally use the HDDs of the same capacity and the same model name.

<MAXTOR>
  4G120J6 (120 GB)
  4R120L0 (120 GB)
  4R160L0 (160 GB)
  4A250J0 (250 GB)
  <SEAGATE>
  ST3160022ACE (160 GB)

All the company names appearing herein are the property of their respective owners.
The unit may not operate correctly depending on type or condition of the HDD.

Caution

Do not attach or remove the HDD tray unnecessarily. The HDD tray is presumed to be removed and attached only a few times a month because of the structure of the connectors.
Attaching and removing the HDD tray

♦ Removing the HDD tray from the unit
1. Put the key into the unit and turn it clockwise.
   • The lever on the unit is unlocked.
2. Move the lever to the left.
   • The HDD tray is unlocked and ejected.
3. Pull out the HDD tray until it stops.
   🚸 See the label on the top cover of the HDD tray.
4. While moving the lever to the right, pull out the HDD tray slightly to unlock the HDD tray.
5. Hold the HDD tray with both hands and pull it out.
   ⚠️ Be sure to use both hands when pulling out the HDD tray in order to prevent the trouble of the HDD or injury due to the fall or the shock.

♦ Attaching the HDD tray to the unit
1. Insert the HDD tray into the unit until it stops.
2. Move the lever to the right.
   • The HDD tray is fixed to the unit.
3. Turn the key counterclockwise to lock the lever and then pull out the key.
Attaching the HDD to the HDD tray

5. Connect the middle connector of the ATA LEAD to the HDD.

- Make sure that the lead between the PCB and the HDD is clamped. (A)

6. Unclamp the POWER LEAD and connect to the HDD.
- Clamp the POWER LEAD again after connecting to the HDD. (B)

7. Check the wiring.
A: The lead between the PCB and the HDD is clamped.
B: The POWER LEAD which is connected to the HDD is clamped.
C: The POWER LEAD and the ATA LEAD that are not connected are clamped near their ends.
D: Push the POWER LEAD and the ATA LEAD between the middle connector and the outer connector into the space between the PCB and the HDD.

When attaching one HDD:
1. Remove the top cover from the HDD tray.
   - Remove the 2 screws and lift the top cover.

2. Remove the HDD holder on the right side of the HDD tray.
   - Remove the 4 screws attached to the HDD holder to remove the HDD holder.

3. Attach the HDD holder on the side of the HDD.
   - Use the supplied 4 screws to attach the HDD holder.
   - Set the jumper of the HDD to “MASTER.” Refer to the instruction book of HDD for setting the jumper.

4. Attach the HDD holder to the HDD tray.
   - Use the 4 screws that were removed in step 2.

- Attach the HDD to the HDD tray

- Make sure that the lead between the PCB and the HDD is clamped. (A)
8. Attach the top cover of the HDD tray.
   - To attach the top cover, put the hooks of the top cover in the openings of the HDD tray.
   - Use the 2 screws that were removed in step 1.
   - Make sure that the lead is not caught in the top cover.

5. Connect the POWER LEAD to the additional HDD.
   - Make sure that the POWER LEAD between the HDDs is clamped. (D)

6. Check the wiring.
   A: The lead between the PCB and the HDD is clamped.
   B, D: The POWER LEAD which is connected to the HDD is clamped.
   C: The ATA LEAD is clamped.
   E: Push the POWER LEAD and the ATA LEAD between the middle connector and the outer connector into the space between the PCB and the HDD.

7. Attach the top cover of the HDD tray.
   - To attach the top cover, put the hooks of the top cover in the openings of the HDD tray.
   - Use the 2 screws that were removed in step 1.
   - Make sure that the lead is not caught in the top cover.

   Be sure to carry out HDD SELF TEST after attaching the HDD. (See the next page.)
HDD SELF TEST

Before using the HDD attached to this unit, test the HDD whether to be used correctly. There are 3 types of the test method and choose one in the <HDD SELF TEST> screen. When choosing, refer to the table below which describes the details of each method.

⚠️ When the HDD is newly attached for recording, it is recommended to execute “READ/WRITE TEST” and format all the area of the HDD before it is used for recording. Be sure that all the data in the HDD will be erased when executing “READ/WRITE TEST.”

<table>
<thead>
<tr>
<th>Test mode</th>
<th>Time needed</th>
<th>Contents of the test</th>
<th>Effect of the test</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUICK TEST</td>
<td>approx.1 minute</td>
<td>The reading and writing test executed in the part of the HDD. The recorded contents will not be affected by this test.</td>
<td>Tests the compatibility between the HDD and the recorder.</td>
</tr>
<tr>
<td>READ TEST</td>
<td>more than 1 hour (for 240 GB)</td>
<td>The reading test executed in all the sectors in the HDD. The recorded contents will not be affected by this test.</td>
<td>In addition to the compatibility test, criticizes the partial sector defects in reading the data.</td>
</tr>
<tr>
<td>READ/WRITE TEST</td>
<td>more than 10 hours (for 240 GB)</td>
<td>The reading and writing test executed in all the sectors in the HDD. All the recorded contents will be erased. The HDD will be formatted to record or playback the data stably.</td>
<td>In addition to the compatibility test, criticizes the partial sector defects in reading or writing. Also uses for the screening effect by age or for erasing all the data when dumping the HDD.</td>
</tr>
</tbody>
</table>

⚠️ The recorded contents will not be affected when executing “QUICK TEST” or “READ TEST.” When executing “READ/WRITE TEST,” be sure that all the recorded contents of both HDD (A and B) will be erased. When you execute “READ/WRITE TEST,” attach one HDD to be tested and remove the other HDD with the contents you do not want to erase.

⚠️ This function temporarily tests the HDD whether it will be used correctly, and not completely criticize the defect involved in the HDD.
1. Attach the HDD to the unit, and connect the cameras, the monitors, and the wired remote control.

2. Turn on the MAIN switch on the rear panel and wait until the ACCESS indicator is turned off.

3. Make sure that the POWER button on the front panel is turned off. Press the WARNING RESET button for more than 3 seconds until <HDD SELF TEST> screen appears.

4. Press the JOG ▲▼ buttons to move the cursor to the desired setting and then press the ENTER button.
   - There are 3 types of the test method. Refer to the table on the previous page for choosing the desired method.
   - The power turns off when pressing the CLEAR button.
   - The test screen of the selected method appears.

   (When selecting “QUICK TEST”•••)

   <QUICK TEST>
   >>EXECUTE

   ALL DATA WILL NOT BE ERASED
   ESTIMATED TIME ABOUT 1 MIN.
   ENTER: EXECUTE, CLEAR: BACK

   (When selecting “READ TEST”•••)

   <READ TEST>
   >>EXECUTE

   ESTIMATED TIME MORE THAN 1H
   ENTER: EXECUTE, CLEAR: BACK

   (When selecting “READ/WRITE TEST”•••)

   <READ/WRITE TEST>
   >>EXECUTE

   ALL DATA WILL BE ERASED
   ESTIMATED TIME MORE THAN 10H
   ENTER: EXECUTE, CLEAR: BACK

5. Press the ENTER button to execute the test.
   - The test is executed and the status screen appears.
   - When you attach the 2 HDDs, test for the HDD of drive A is executed first, and then test for the HDD of drive B is executed.
   - When testing the 2 HDDs, the percentage displayed on the screen indicates the total value of the 2 HDDs.
   - When the problem is found during testing the drive A, the test of drive A finishes and the testing of the drive B starts. In this case, the value of the percentage is skipped.

6. When the test is completed, the test result screen appears.

   <HDD SELF TEST>

   20%

   DO NOT POWER OFF DURING TEST
   CLEAR: CANCEL

7. Press the CLEAR button twice.
   - When pressing the button once, the screen returns to <HDD SELF TEST> screen which appears in step 3. When pressing the button again, the power turns off.

8. (When the problem is not found •••)
   Press the POWER button to turn the power on, and then set the unit to start operating.
   (When the problem is found •••)
   Replace the HDD and execute the test again.
Basic operations

Multiplexer functions
SPLIT/SINGLE, ZOOM, +, – and JOG buttons are used to perform some of the multiplexer functions.

♦ Multiplexer operation
Each time you press the SPLIT/SINGLE button, the screen display is switched between the single screen display and the split/sequential screen display.

When the +, – button is pressed during single screen display, the camera number is switched.

When the +, – button is pressed during split/sequential screen display, the screen display is switched between the split screen display and the single sequential screen display. (Single sequential screen display is skipped during playback.)

Zoom operation
When the ZOOM button is pressed during single screen display, magnification 100% screen appears and the magnification centre point (X) is displayed at the centre of the screen. Pressing the button again switches the magnification to 200% and then 400%. The centre point moves vertically or horizontally by pressing the JOG buttons.

Menu settings
Menu screens are used to set the operational conditions of this unit. Although the setting method differs slightly depending on the menu screen, the basic setting method of using the JOG, ENTER, and CLEAR buttons is described in the example below.

Example: Setting “DISPLAY MODE” to “3.” (default: “1”)

1. Set the MAIN switch on the rear panel to ON. Press the POWER button on the front panel after the ACCESS indicator turns off.
   • “SETTING UP...” appears on the screen and the unit boots-up.
   • POWER button operation is not 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.
   • The <SETTINGS> screen appears.

3. Check that the cursor (>>) is positioned at “TIME DATE/DISPLAY SETTINGS” and then press the ENTER button.
   • The <TIME DATE/DISPLAY SETTINGS> screen appears.

4. Press the JOG ▲,▼ buttons to move the cursor to “DISPLAY MODE” and then press the ENTER button.
   • The background of the setting item turns red and flashes.

5. Press the JOG ▲,▼ buttons to display “3.”
   • The display mode sample on the bottom of the screen changes to <MODE 3>.
6. Press the ENTER button.
   • The setting item is determined and flashing stops.
   • To continue with other settings, repeat steps 4 to 6.

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   **6. Press the ENTER button.**
   - The setting item is determined and flashing stops.
   - To continue with other settings, repeat steps 4 to 6.

   **TIME DATE/DISPLAY SETTINGS**
   **TIME DATE ADJUST**
   **DISPLAY MODE** 3
   **CLOCK LOCATION SETTING**
   **CAMERA DISPLAY NUMBER**
   **CAMERA TITLE/MEMO SETTING**
   **DUPLEX MODE DISPLAY**

   **DAYLIGHT SAVING/DAYLIGHT SETTING**

   Auto daylight saving function is used to set the time period to move the clock an hour. To activate this function, set the desired time period in “DAYLIGHT SETTING” and then set “DAYLIGHT SAVING” to “AUTO.”

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

   1. Press the SET UP button to display the <SETTINGS> screen.
   2. Check that the cursor (>>) is positioned at “TIME DATE/DISPLAY SETTINGS” and then press the ENTER button.
      - The <TIME DATE/DISPLAY SETTINGS> screen appears.
   3. Check that the cursor is positioned at “TIME DATE ADJUST” and then press the ENTER button.
      - The <TIME DATE ADJUST> screen appears.

   **<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** 01:00
   **OUT SUN** 02:00
   **DAYLIGHT SAVING**
   **AUTO**
   **ENTER : EXECUTE**

   4. Check that “DAYLIGHT SAVING” is set to OFF.
   5. Press the JOG ▲,▼ buttons to move the cursor (>>) to “IN” and then press the ENTER button twice.
      - The setting item of “DAY” is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.
   6. Press the JOG ▲,▼ buttons to display the desired setting and press the ENTER button.
      - The setting item is determined and flashing stops.
   7. Press the JOG ▼ button to move the highlighted display to “WEEK” and then press the ENTER button.
   8. Repeat steps 6 and 7 to set “WEEK,” “MONTH,” and “TIME.”
   9. Press the CLEAR button.
      - The cursor reappears.
   10. Press the JOG ▲,▼ buttons to move the cursor to “DAYLIGHT SAVING” and then press the ENTER button.
       - The background of the setting item turns red and flashes.
   11. Press the JOG ▲,▼ buttons to display “AUTO” and press the ENTER button.
       - The setting item is determined and flashing stops.
       - Confirm the setting of the present time.
   12. Press the CLEAR button or the SET UP button.

   **When pressing the CLEAR button while the setting item is flashing, the setting item returns to the previous setting.**

   **To return to a normal screen from a menu screen**

   The procedure to return to a normal screen after completing menu screen settings is described below.

   1. Check that the setting item is no longer flashing and the item has been changed to the desired setting.
      • The setting has not been determined if the item is flashing. Refer to the above setting procedure to determine the setting.
      • To continue with other settings or to check the setting item, you can return to the previous screen by pressing the CLEAR button.

   2. (To return to the normal screen by moving back menu screens one at a time • • •)
      - Press the CLEAR button as many times as the number of menu screens being displayed. The previous menu screen is displayed each time the CLEAR button is pressed.

   2-1. (To return to the normal screen by moving back menu screens one at a time • • •)
      - Press the CLEAR button as many times as the number of menu screens being displayed. The previous menu screen is displayed each time the CLEAR button is pressed.

   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.

   ① The menu screen is not cleared even when pressing the SET UP button while the setting item is flashing.
Basic operations (continued)

TIME DATE ADJUST

Before you start recording, it is necessary to set accurately the present date and time.

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

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

2. Check that the cursor (>) is positioned at “TIME DATE/ DISPLAY SETTINGS” and then press the ENTER button.
   - The <TIME DATE/DISPLAY SETTINGS> screen appears.

3. Check that the cursor is positioned at “TIME DATE ADJUST” and then press the ENTER button.
   - The <TIME DATE ADJUST> screen appears.

4. Press the JOG ▲,▼ buttons to move the cursor to “DAY” and then press the ENTER button.
   - The background of the setting item turns red and flashes.

5. Press the JOG ▲,▼ buttons to display “28” and then press the ENTER button.
   - The setting item is determined and flashing stops.

6. Repeat steps 4 and 5 to set “MONTH” and “YEAR.”

7. Press the JOG ▲,▼ buttons to move the cursor to “TIME” and then press the ENTER button twice.
   - The setting item of hour digit is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.

8. Press the JOG ▲,▼ buttons to display “18” and then press the ENTER button.
   - The setting item is determined and flashing stops.

9. Press the JOG ▼ button to move the highlighted display to “MINUTE” and press the ENTER button. And then repeat step 8.

10. Repeat step 9 for “SECOND.”

11. Press the ENTER button.
   - The setting item is determined and flashing stops.

12. Press the CLEAR button or the SET UP button.

Present time display

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

During recording, the recorded capacity of HDD is displayed. When recording is stopped, the display is cleared (with the exception of when pausing recording). The recorded capacity of HDD appears again after a few moments when recording is started again.

This unit uses 4 digits to display the year. The available display range is 99 years between 1/1/2001 to 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

When “REMAIN HDD” of the <REAR TERMINAL SETTINGS> screen is set to “MAIN” or “SUB,” the recorded capacity of the specified HDD is displayed on the screen. The “%” indicates the ratio of the recorded capacity to the total HDD capacity. The following settings are required to enable this function.

1) Select HDD and set the remaining capacity in the “REMAIN HDD” of the <REAR TERMINAL SETTINGS> screen.
2) Set “DISPLAY MODE” in the <TIME DATE/DISPLAY SETTINGS> screen to “3.”
Basic manual recording

Normal recording using manual operation is described below. Before you start recording, check the settings of "HDD REPEAT REC MAIN" and "HDD REPEAT REC SUB" in the <HDD SETTINGS> screen, and then set the recording settings.

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

When you set "SHORT," "MEDIUM," or "LONG" in the PRE ALARM REC, normal recording cannot be performed. Set the PRE ALARM REC to "OFF" to perform normal recording or alarm recording.

When you set "SHORT," "MEDIUM," or "LONG" in the PRE ALARM REC, it is recommended not to change the settings in ALARM REC DURATION and RECORD SETTING. If you change these settings, the recording may be performed in the previous settings depending on the timing of the recording.

When you want to change the settings in ALARM REC DURATION and RECORD SETTING while setting the PRE ALARM REC to "SHORT," "MEDIUM," or "LONG," set PRE ALARM REC to "OFF" first.

When you set "A-PPS" in the <RECORD SETTING> screen to "- - - -" for all the cameras, pre-alarm recording is not performed even if PREALARM REC is set to "SHORT," "MEDIUM," or "LONG." In this case, normal recording is performed at the interval which is set in "PPS."

Setting the recording interval and recording picture quality for normal recording

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

<table>
<thead>
<tr>
<th>Number of operational cameras</th>
<th># 1</th>
<th># 2</th>
<th># 3</th>
<th># 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHORT</td>
<td>25P</td>
<td>12.5P</td>
<td>8.33P</td>
<td>6.25P</td>
</tr>
<tr>
<td>Recording interval</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LONG</td>
<td>3.125P</td>
<td>3.125P</td>
<td>3.125P</td>
<td>3.125P</td>
</tr>
<tr>
<td></td>
<td>2.5P</td>
<td>2.5P</td>
<td>2.5P</td>
<td>2.5P</td>
</tr>
<tr>
<td></td>
<td>1P</td>
<td>0.5P</td>
<td>0.5P</td>
<td>0.5P</td>
</tr>
<tr>
<td></td>
<td>0.5P</td>
<td>0.25P</td>
<td>0.25P</td>
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<td>0.25P</td>
<td>0.25P</td>
<td>0.25P</td>
</tr>
<tr>
<td></td>
<td>0.125P</td>
<td>0.063P</td>
<td>0.063P</td>
<td>0.063P</td>
</tr>
</tbody>
</table>

Setting of "PPS" (default: "3.125P")

- 6.25P, 3.125P, 2.083P, 1.563P, 1.25P, 1.042P, 0.781P, 0.625P, 0.25P, 0.125P, 0.063P, 0.031P

- - - - - : Recording is not performed with camera set to this item.

Available recording intervals vary depending on the number of cameras operating or ALARM RECORDING settings. See the chart above for the displaying interval.

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

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

Example: Setting "PPS" of camera number "1" to "1.25P" and "GRADE" to "HIGH" for normal recording.

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

2. Press the JOG ▲,▼ buttons to move the cursor to "RECORD SETTINGS" and then press the ENTER button.
   • The <RECORD SETTINGS> screen appears.

3. Press the JOG ▲,▼ buttons to move the cursor to "RECORD SETTING" and then press the ENTER button.
   • The <RECORD SETTING> screen appears.

4. Check that the cursor is positioned at "1" and then press the ENTER button.
   • The setting item of "PPS" is highlighted.

5. Press the ENTER button again.
   • The background of the setting item turns red and flashes.

About <ESTD REC>

- The remaining recordable time is displayed as <ESTD REC> depending on the "PPS" and "GRADE" settings. (This time is not change when changing the alarm recording settings.)

4. Check that the cursor is positioned at "1" and then press the ENTER button.
   • The setting item of "PPS" is highlighted.

5. Press the ENTER button again.
   • The background of the setting item turns red and flashes.

The menu screen is not cleared even when pressing the SET UP button while the setting item is flashing.
6. Press the JOG ▲,▼ buttons to select “1.25P” and then press the ENTER button.
   • Setting item is determined and flashing stops.

   ![Record Setting Table]

7. Press the JOG ▼ button to highlight the setting item of “GRADE” and then press the ENTER button.
   • The background of the setting item turns red and flashes.

   ![Record Setting Table]

8. Press the JOG ▲,▼ buttons to select “HIGH” and then press the ENTER button.
   • The setting item is determined and flashing stops.

   ![Record Setting Table]

9. When the setting is completed, press the CLEAR button.
   • The cursor reappears to the left of the camera number.
   • To continue with other camera number settings, press the JOG ▲,▼ buttons to move the cursor to the desired camera number and repeat steps 4 to 9.

   ![Record Setting Table]

10. Press the CLEAR button or the SET UP button to return to the normal screen.

11. Press both REC/STOP buttons.
   • The REC indicator lights up and recording starts.

12. To stop recording, press both REC/STOP buttons.
   • Recording stops and the REC indicator turns off.

### Basic playback

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

1. Press the PLAY button.
   - Recorded content of the HDD is played back.
   - When you start playback after turning the power on, the oldest recorded video is played back first. Otherwise, playback resumes from the stopped position of the previous playback.

   ![HDD Repeat Play Setting]

   - When “HDD REPEAT PLAY” in the <HDD SETTINGS> screen is set to “OFF,” playback stops when reaching the physical end of the HDD or the end of the recorded section. When “HDD REPEAT PLAY” is set to “ON,” recorded video is played back repeatedly.

   (To change the playback device • • •)
   - The default setting of the playback device is MAIN HDD.
   - To change the playback device to SUB HDD, display the <SEARCH SELECTION> screen and select “SUB” in “PLAYBACK DEVICE.”

2. To pause playback, press the PAUSE button.
   - To resume playback, press the PAUSE button again or press the PLAY button.

3. To stop playback, press the STOP button.
   - When you start playback again, the playback starts from the stopped position.

### Basic search

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

#### TIME DATE SEARCH

Various search functions are available for searching the start point of video clips. This function allows you to search the video by specifying date, hour, minute, second, and the camera number.

Example: Searching 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 Menu]

   - The default setting of the search menu displayed when pressing the SEARCH button is “TIME DATE SEARCH.”

2. Check that the cursor is next to the date to be searched and then press the ENTER button twice.
   - The setting item is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.
3. Press the JOG ▲,▼ buttons to display “03” for “DAY” and then press the ENTER button.
   - Setting item is determined and flashing stops.

4. Press the JOG ▼ button to highlight “MONTH” and then press the ENTER button.
   - The background of the setting item turns red and flashes.

5. Press the JOG ▲,▼ buttons to display “03” for “MONTH” and then press the ENTER button.
   - Setting item is determined and flashing stops.

6. Repeat steps 4 and 5 to set “YEAR,” “HOUR,” “MINUTE,” and “SECOND.”

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

8. Check that the cursor is positioned at “SELECTION CAMERA NUMBER” and then press the ENTER button.
   - The background of the setting item turns red and flashes.

**Setting (default: **“ALL”**)**

- **“ALL”**: Searches for all the camera numbers, “①” through “④,” and displays search results in SPLIT4 screen.

9. Press the JOG ▲,▼ buttons to select “③” and then press the ENTER button.
   - Setting item is determined and flashing stops.

10. Press the JOG ▲,▼ buttons to display the desired playback device and then press the ENTER button.
   - Setting default: **“TIME DATE”**, **“INDEX”**, **“ALARM INDEX”**, **“ALARM SKIP”**, **“ALARM LIST”**

11. Press the JOG ▲,▼ buttons to display the desired search type and then press the ENTER button.

12. When the setting is completed, press the CLEAR button.
   - The display returns to the <TIME DATE SEARCH> screen and the cursor reappears on the left of the date to be searched.

13. Press the JOG ▲,▼ buttons to select “EXECUTE (FORWARD)” and then press the ENTER button.
   - When the TIME DATE SEARCH is executed, the video of the set date/time (or the video closest to the searched date/time) appears in still frame.

**○** To exit the <TIME DATE SEARCH> screen without searching, press the CLEAR button or press the SEARCH button twice.

**To display a single screen display of the selected camera number from the SPLIT4 screen display of the search result when “ALL” is selected in the “SELECTION CAMERA NUMBER” setting, press the SPLIT/SINGLE button to switch the display to the single screen display and then press + or – button to select the desired camera number.
Basic operations (continued)

14. Press either the PLAY button or the PAUSE button to playback the searched image.

15. To stop playback/still frame playback, press the STOP button.
   • The display returns to the normal screen.

■ LANGUAGE SELECTION

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

Setting (default: “ENGLISH”)
“ENGLISH,” “FRANÇAIS,” “DEUTSCH,” “ESPÀÑOL,” “РУССКИЙ,” “ITALIANO”

1. Press the SET UP button ➔ SETTINGS ➔ INITIAL SET UP/INFORMATION ➔ Select “LANGUAGE” in the <LANGUAGE SELECTION> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

① When the user menu is added, “OTHER” is displayed in LANGUAGE. Select “OTHER” when the user menu is added.
**Menu functions**

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

- During playback, recording, and pre-alarm recording stand-by mode, you cannot change some of the menu settings.

---

### MAIN MENU

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

#### SUB MENU (1)

- **<TIME DATE/DISPLAY SETTINGS>**
  - DISPLAY MODE
    - 1: DATE/TIME
    - 2: TIME ONLY
    - 3: DATE ONLY
    - 4: INVALID
  - CLOCK LOCATION SETTING
  - CAMERA DISPLAY NUMBER
  - DUPLEX MODE DISPLAY BOTTOM

- **<TIME DATE/DISPLAY SETTINGS>**
  - 01-01-2003 00:00:00

#### SUB MENU (2)

- **<TIME DATE ADJUST>**
  - DAYLIGHT SAVING
    - OFF
  - TIME
    - 00:00:00
  - DAY OF WEEK MONTH TIME
    - IN SUN LAST MAR 01 00
    - OUT SUN LAST OCT 02 00

- **<CLOCK LOCATION SETTING>**

- **<CAMERA TITLE/MEMO SETTING>**
  - MEMO
    - CLEAR:BACK
  - ENTER: CHARACTERS

- **<MPX DISPLAY SETTINGS>**
  - SPLIT4 SCREEN SETTING
    - INTERLACE
    - ON

- **<SEQUENCE SETTING>**
  - SEQUENCE NUMBER TIME
    - 1: 0 25
    - 2: 5 25
    - 3: 0 29
    - 4: 5 29

- **<CHARACTERS>**
  - CLEAR: BACK

---

SET UP button
Menu functions (continued)

MAIN MENU

<SETTINGS>
- TIME/DISPLAY SETTING
- MPX DISPLAY SETTINGS
- RECORD SETTING
- INITIAL SET UP
- INFORMATION

MEMO:

SET UP button

SUB MENU (1)

<MOTION DETECTION SETTINGS>
- SELECTION CAMERA NUMBER
- DETECTION MASK SETTING
- SENSITIVITY (HIGH--LOW)
- MOTION THRESHOLD
- TEST MODE
- MD LOCK OUT TIME OFF

SUB MENU (2)

<DETECTION MASK SETTING>
- ALARM RECORD CAMERA TRIGGER
  - 1 -- EXT
  - 2 -- EXT
  - 3 -- EXT
  - 4 -- EXT
  - EMR

<TEST MODE>

<RECORD SETTINGS>
- TRIGGER
  - 1 --- EXT
  - 2 --- EXT
  - 3 --- EXT
  - 4 --- EXT

<ALARM SETTING A>
- ALARM RECORD CAMERA
  - 1 -- EXT
  - 2 -- EXT
  - 3 -- EXT
  - 4 -- EXT

<ALARM TYPE
  - ALARM CH
  - CLEAR BACK

<REC MODE A>
- REC MODE A
- REC MODE B
- REC MODE C
- REC MODE D

<RECORD SETTING>
- ALARM REC DURATION
  - 5S

<RECORD SETTING A>
- ALARM RECORD CAMERA
  - 1 -- EXT
  - 2 -- EXT
  - 3 -- EXT
  - 4 -- EXT

<ALARM TYPE
  - ALARM CH
  - CLEAR BACK

<TIMER PROGRAM SETTINGS>
- SELECTED PATTERN
- HOLIDAY SETTING
- REC MODE A
- REC MODE B
- REC MODE C
- REC MODE D

<TIMER PROGRAM>
- DW
  - START END
  - MODE
  - MD

<RECORD SETTING>
- ALARM REC
  - CLEAR BACK

<HOLIDAY SETTING>
- SPL
  - SAT-SUN

*1: displays when PARTITION is performed.
SET UP button

MAIN MENU

- SETTINGS
- TIME DATE/DISPLAY SETTINGS
- MPX DISPLAY SETTINGS
- MOTION DETECTION SETTINGS
- RECORD SETTINGS
- TIMER PROGRAM SETTINGS
- INITIAL SET UP/INFORMATION

SUB MENU (1)

- INITIAL SET UP/INFORMATION
- HDD SETTINGS
- AUDIO RECORDING
- REAR TERMINAL SETTINGS
- COMMUNICATION PORT SETTINGS
- INFORMATION/SERVICE
- PASSWORD
- LANGUAGE SELECTION

SUB MENU (2)

- HDD SETTINGS
  - HDD REPEAT REC MAIN: ON
  - HDD REPEAT REC SUB: OFF
  - HDD REPEAT PLAY: OFF
  - IM-CHECK PLAY: OFF
  - SEQUENTIAL PLAY: OFF

- 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

SUB MENU (3)

- CALL OUT SETTINGS
  - HDD MAIN REMAIN: OFF
  - HDD MAIN FULL: OFF
  - HDD SUB REMAIN: OFF
  - HDD SUB FULL: OFF

- COMMUNICATION PORT SETTINGS
  - RS-232C
    - TRANSFORMATION MODE: REMOTE A
    - SETTINGS
      - DATA BIT LENGTH: 8BIT
      - STOP BIT LENGTH: 1BIT
      - DELIMITER: CR

- 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

MEMO:

- SUB MENU (1)
- MAIN MENU
- SUB MENU (2)
- SUB MENU (3)
- SETTINGS
- TIME DATE/DISPLAY SETTINGS
- MPX DISPLAY SETTINGS
- MOTION DETECTION SETTINGS
- RECORD SETTINGS
- TIMER PROGRAM SETTINGS
- INITIAL SET UP/INFORMATION

*1: displays when PARTITION is performed.
Menu functions (continued)

**Main Menu**
- **Settings**
  - Time Date/Display Settings
  - Motion Detection Settings
  - Record Settings
  - Timer Program Settings
  - Initial Set Up/Information

**SubMenu (1)**
- Initial Set Up/Information
- Operation Control
- HDD Data Clear
- Partition Size 10%

**SubMenu (2)**
- Language Selection
- Partition Size 10%
- Boot Up Delay 30S
- Power Off
- Initialization

**SubMenu (3)**
- HDD Information
  - Main Information
  - Sub Information

**Sub Menu (1)**
- HDD Information
  - HDD Information
  - Warning Log List
  - Main HDD Data Clear

**Sub Menu (2)**
- Password Setting
  - First Second
  - Second First

**Sub Menu (3)**
- Reset to Factory Settings
  - Execute

*1: displays when PARTITION is performed.
SEARCH SELECTION MENU

- **TIME DATE SEARCH**
  - DATE: 01-01-2003 00:00:00
  - EXECUTE (FORWARD)
  - MAIN
  - START: --:--:--
  - END: --:--:--

- **INDEX SEARCH**
  - INDEX: 01
  - EXECUTE (FORWARD)
  - EXECUTE (REVERSE)
  - START: --:--:--
  - END: --:--:--

- **ALARM INDEX SEARCH**
  - INDEX: 01
  - EXECUTE (FORWARD)
  - EXECUTE (REVERSE)
  - START: --:--:--
  - END: --:--:--

- **ALARM SKIP SEARCH**
  - EXECUTE (FORWARD)
  - EXECUTE (REVERSE)

- **ALARM LIST SEARCH**
  - List of alarm events:
    - 00004 01-01-2003 00:00:00
    - 00003 01-01-2003 00:00:04
    - 00002 01-01-2003 00:00:02
    - 00001 01-01-2003 00:00:01

SEARCH button

SUB MENU (1)

- **SEARCH SELECTION**
  - SEARCH TYPE: TIME DATE
  - SELECTION CAMERA NUMBER: ALL
  - PLAYBACK DEVICE: MAIN
  - START: --:--:--
  - END: --:--:--

- **SEARCH SELECTION**
  - SEARCH TYPE: INDEX
  - SELECTION CAMERA NUMBER: ALL
  - PLAYBACK DEVICE: MAIN
  - START: --:--:--
  - END: --:--:--

- **SEARCH SELECTION**
  - SEARCH TYPE: ALARM INDEX
  - SELECTION CAMERA NUMBER: ALL
  - PLAYBACK DEVICE: MAIN
  - START: --:--:--
  - END: --:--:--

- **SEARCH SELECTION**
  - SEARCH TYPE: ALARM SKIP
  - SELECTION CAMERA NUMBER: ALL
  - PLAYBACK DEVICE: MAIN
  - START: --:--:--
  - END: --:--:--

- **SEARCH SELECTION**
  - SEARCH TYPE: ALARM LIST
  - SELECTION CAMERA NUMBER: ALL
  - PLAYBACK DEVICE: MAIN
  - DATE-TIME: 00:00:01
  - START: --:--:--
  - END: --:--:--
Continuous recording time table

• HDD continuous recording time (for 240 GB drive)
Displays the estimated recordable time (when recording on a 240 GB (4R120L0 120 GB x 2) HDD).

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

- Without Audio recording

<table>
<thead>
<tr>
<th>GRADE</th>
<th>PPS</th>
<th>25P</th>
<th>12.5P</th>
<th>8.333P</th>
<th>6.25P</th>
<th>5P</th>
<th>4.167P</th>
<th>3.125P</th>
<th>2.5P</th>
<th>1P</th>
<th>0.5P</th>
<th>0.25P</th>
<th>0.125P</th>
<th>NUMBER OF RECORDING FIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPER</td>
<td>2d05h</td>
<td>4d10h</td>
<td>6d15h</td>
<td>8d20h</td>
<td>11d01h</td>
<td>13d06h</td>
<td>17d17h</td>
<td>22d03h</td>
<td>55d08h</td>
<td>110d16h</td>
<td>221d08h</td>
<td>442d17h</td>
<td>4,850,000</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>2d23h</td>
<td>5d22h</td>
<td>8d21h</td>
<td>11d20h</td>
<td>14d19h</td>
<td>17d18h</td>
<td>23d16h</td>
<td>29d15h</td>
<td>74d02h</td>
<td>148d04h</td>
<td>296d08h</td>
<td>592d16h</td>
<td>6,470,000</td>
<td></td>
</tr>
<tr>
<td>STD</td>
<td>4d23h</td>
<td>9d23h</td>
<td>14d23h</td>
<td>19d23h</td>
<td>24d23h</td>
<td>29d23h</td>
<td>39d23h</td>
<td>49d23h</td>
<td>124d23h</td>
<td>249d22h</td>
<td>499d20h</td>
<td>999d17h</td>
<td>10,870,000</td>
<td></td>
</tr>
<tr>
<td>BASIC</td>
<td>6d22h</td>
<td>13d20h</td>
<td>20d18h</td>
<td>27d16h</td>
<td>34d15h</td>
<td>41d13h</td>
<td>55d09h</td>
<td>69d06h</td>
<td>173d03h</td>
<td>346d07h</td>
<td>692d15h</td>
<td>1385d07h</td>
<td>15,030,000</td>
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</tr>
<tr>
<td>LONG</td>
<td>14d23h</td>
<td>29d22h</td>
<td>44d21h</td>
<td>59d20h</td>
<td>74d19h</td>
<td>89d18h</td>
<td>119d16h</td>
<td>149d14h</td>
<td>373d23h</td>
<td>747d23h</td>
<td>1495d23h</td>
<td>2991d23h</td>
<td>32,390,000</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>GRADE</th>
<th>PPS</th>
<th>25P</th>
<th>12.5P</th>
<th>8.333P</th>
<th>6.25P</th>
<th>5P</th>
<th>4.167P</th>
<th>3.125P</th>
<th>2.5P</th>
<th>1P</th>
<th>0.5P</th>
<th>0.25P</th>
<th>0.125P</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPER</td>
<td>2d05h</td>
<td>4d10h</td>
<td>6d15h</td>
<td>8d20h</td>
<td>10d12h</td>
<td>12d15h</td>
<td>15d08h</td>
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<td>55d08h</td>
<td>110d16h</td>
<td>221d08h</td>
<td>442d17h</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>2d23h</td>
<td>5d22h</td>
<td>8d21h</td>
<td>11d20h</td>
<td>13d17h</td>
<td>16d11h</td>
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<td>69d06h</td>
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<td>346d07h</td>
<td>692d15h</td>
<td></td>
</tr>
<tr>
<td>STD</td>
<td>4d21h</td>
<td>9d13h</td>
<td>14d08h</td>
<td>18d06h</td>
<td>22d07h</td>
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<td>33d03h</td>
<td>40d08h</td>
<td>76d18h</td>
<td>110d16h</td>
<td>249d20h</td>
<td>999d17h</td>
<td></td>
</tr>
<tr>
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<td>6d17h</td>
<td>12d23h</td>
<td>18d20h</td>
<td>24d06h</td>
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<td>43d09h</td>
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<td>92d19h</td>
<td>126d17h</td>
<td>1385d07h</td>
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</tr>
<tr>
<td>LONG</td>
<td>13d17h</td>
<td>26d01h</td>
<td>36d12h</td>
<td>46d03h</td>
<td>54d10h</td>
<td>62d08h</td>
<td>75d02h</td>
<td>85d10h</td>
<td>130d07h</td>
<td>158d21h</td>
<td>2991d23h</td>
<td>32,390,000</td>
<td></td>
</tr>
</tbody>
</table>

⚠️ While MIRRORING is performed, continuous recording time (with/without audio recording) is half of the time described on the table above.

⚠️ 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 warranty period of the product. Furthermore, it is not the period that guarantees the operation of used parts. The time displayed in the menu screen may differ from the time described on the table.

⚠️ Audio recording is not performed when “PPS” of <RECORD SETTING> are all set to the value smaller than “0.333P” for normal recording.
• In this case, (X) appears to the right of <ESTD REC>.

⚠️ Audio recording is not performed when the camera selection for alarm recording is as follows:
“ALARM CH”: “A-PPS” of all the cameras set for alarm recording are set to the value smaller than “0.333P.”
“ALARM PLUS”: “PPS” and “A-PPS” of all the cameras set for normal recording and alarm recording are set to the value 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.
Communications by Web Browser

This unit can communicate with a PC via Web browser. Live and pre-recorded images can be viewed from this mode.

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 500 MHz.
- **RAM:** 256MB or more.
- **Hard disk drive:** System drive with unused space of at least 200 MB.
- **Web Browser Soft:** Microsoft Internet Explorer 5.01SP2 or later.
- **Display device:** XGA (1024 pixels x 768 pixels) or higher.

AUTHENTICATION

Start up the Microsoft Internet Explorer and log in.

1. Start up the Microsoft Internet Explorer and enter the IP address of this unit.
   - The "[Authentication]" screen appears.

   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." Lower case only.

   2-2. Select "log in" and then left-click or press ENTER.
   - The "Welcome" screen appears.

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

   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 appears.

Connections

- When making a direct connection between this unit and a personal computer (hereinafter 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.
Communications by Web Browser (continued)

3-1. (If you make an error in entering the userID or password)
   - The “[Rejection]” screen appears.

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

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

4-1. (If you do not want to 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.” displays. 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:.”

   ① 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 screen for selecting “live monitor” for live images or “playback” for pre-recorded image for display. User maintenance for setting user authorization can be configured along with “log out” for ending a job, or “change log in user” for marking a change to the logged in user.

   ① Depending on what the user’s authorization, there are certain menus that cannot be selected.

   ② If a request is made for a live picture during playback this unit playback will be stopped.

   ③ The user’s sessionID (connection data) will be lost in 5 minutes from the final operation that includes image retrievals. When the data demand from client PC stops 5 minutes or more, no other operations can be made after that so close the browser and then log in again.

   ④ If this unit’s MAIN switch is “OFF,” live and recorded images cannot be retrieved.

   - Live monitor
   Retrieves live images and displays the images on the PC screen.

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

   ① 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.”
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 2 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 screen size: 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.

Play back
- Retrieves, plays back, and searches for images that have been recorded by this unit.

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

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.

⚠ 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.

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.
Communications by Web Browser (continued)

- 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) SUB when this unit is partitioned.

- The following search functions 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 still (frozen) displayed in the PC in bit map format.

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.”

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 appears.

  2-1. (To change registered user settings • • • )
  Select the userID for changing the settings in the “Review & 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 requirement to register.

Play Mode:
Allows acquisition of recorded images. Playmode, control from one user.

All Camera:
Allows the acquisition of images from a covert camera.

Change Password:
Allows the changing of user's password. Moreover, a screen layout can be saved to this unit.

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 appears.

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 appears, so then left-click “Back to [Registration].”
   • The screen returns 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 appears.

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 appears, so left-click “Back to [Registration].”
   • The screen returns to the “[Registration]” screen.

3-4. (If you have selected “cancel” • • • )
   • The screen returns 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 “clear.”

4-4. (If you have selected “Register” • • • )
It is added to “Review & Change user-attribute.”

4-5. (Selecting “clear” • • • )
Clears the specified contents.

• Time date adjust
This is the screen for setting the clock of the unit via PC.

1. Select “time date adjust” and left-click.
   • The “[Time Date Adjust]” screen appears.

2. (When setting the clock using “Recorder Time” • • • )
Set “date”, “month”, “year”, “hour”, “minute”, and “second” in “Recorder Time” to the desired time, and then click “Set.”
   • The confirmation screen appears.
   • When you click “Clear” without clicking “Set,” the setting returns to the previous setting.

(When setting the clock using “Synchronized with PC Time” • • • )
When you want the clock of this unit to be synchronized with the PC clock, click “Synchronized with PC time.”
   • The clock of the unit sets to the time displayed in “PC Time” and the confirmation screen appears.
Communications by Web Browser (continued)

3. Confirm that the desired time is set.

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

1. Select “log out” and left-click.
   • The “[log out]” screen appears.

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.

   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 remains as is and the “Welcome” screen appears.

   2-3. (To log out • • •)
   Select “If You don’t want to log in, click here to exit [log out]” and left-click.