



HD IP CAMERA

VN-H37U VN-H137U Instructions VN-H137BU VN-H237U (SD Card Function Settings) VN-H237BU VN-H237VPU VN-H57U VN-H257U VN-H257VPBU VN-H157WPU

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This manual details the SD card recording and playback functions.

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Regarding the notation of product names

In the main text, product names are written without suffixes like B or C.

■ Precautions for using SD cards

- Do not insert anything into the camera.
 - If anything other than an SD card is inserted into the SD card slot, it may cause a fire, electrical shock or failure of the unit.
- Before turning the camera off or removing the SD card, be sure to set the SD card setting to [Disable].
(☞ Page 9)
If you turn the camera off or remove the SD card while data is being written to the SD card, data stored on the SD card becomes corrupt.
- If the data in an SD card becomes corrupt, it will be automatically repaired when the camera starts up. This repair function enables the card to be written to again; it does not repair corrupted video data.
- If recording is still not possible after a data repair operation, the data has been damaged excessively. Format the SD card again. In such a case, the recorded data becomes unplayable.
- Do not use or store SD cards in a place where they may be affected by static electricity or electrical noise.
- Insert the SD card in the correct direction. If you insert the SD card in the incorrect orientation, the camera or the card may be damaged. (☞ Page 3)
- Our company will not be liable for damages arising out of data loss due to an unexpected accident. (Please save your data.) (☞ Page 17 “Export menu”)
- Use this unit under the stated conditions of use. Do not use this unit in the following locations.
A location exposed to direct sunlight, near a heated appliance, inside a closed car in a sunny environment, in a humid place, or a corrosive environment, etc.
- Do not bend or drop this unit, and do not subject this unit to strong impact or vibration.
- Do not moisten this unit with water.
- Do not touch the card connectors.
- If you format or delete data using the camera's functions, only the file management information is changed. The data is not erased completely. If you wish to completely delete the data, use commercially available data erasing software or physically destroy the SD card using a hammer or other device.
- If the SD card degrades, you may be unable to write to it. By reformatting the SD card, you may be able to continue using it temporarily.
- Do not disassemble or modify the SD card.
- Do not let dust, dirt, liquid, or other foreign objects come into contact with the connectors.
- Do not peel the label off of the SD card, or attach any other label or sticker to the SD card. This may result in damage.
- Do not use a pencil or ballpoint pen when writing on the SD card. Be sure to use an oil-based pen.

■ SD Cards

This unit can record the images you shoot in an SD card (sold separately) inserted in the card slot.

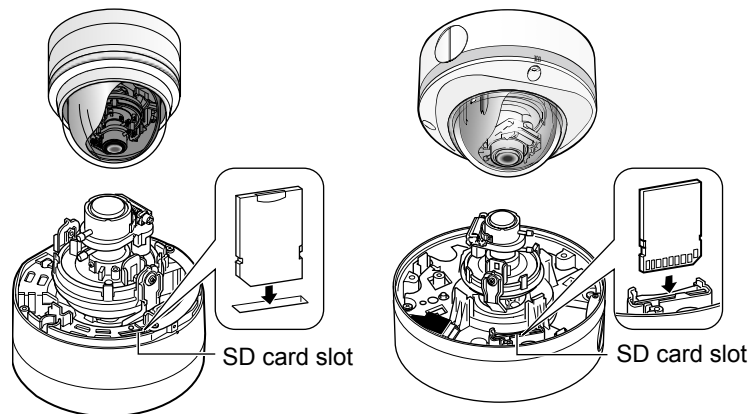
● Inserting and removing an SD card

If you insert the SD card in the incorrect direction, the camera or the card may be damaged. Always check that the card has been inserted in the correct direction as shown in the illustration of the SD card slot.

Memo:

- If the SD card's switch is set to "Lock", recording and playback cannot be performed. Make sure there is no critical data on the SD card before disengaging the lock.

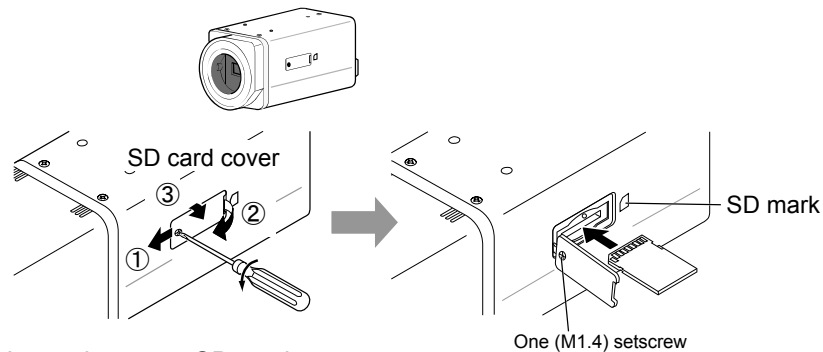
When using VN-H257U/H237U/ H257VPU/H237VPU



Remove the dome cover and insert the SD card.

Insert the SD card into the slot until it clicks.

When using VN-H37U/H57U/H137U



Follow the steps below to insert an SD card.

1. Loosen the setscrew (1) by rotating it about 3 times, and then open the SD cover.

Note:

- Rotating the setscrew 10 times or more may cause it to fall out.

①Lift the setscrew side of the SD cover slightly from the camera body.

※You can pull the setscrew up by its edge to keep it suspended.

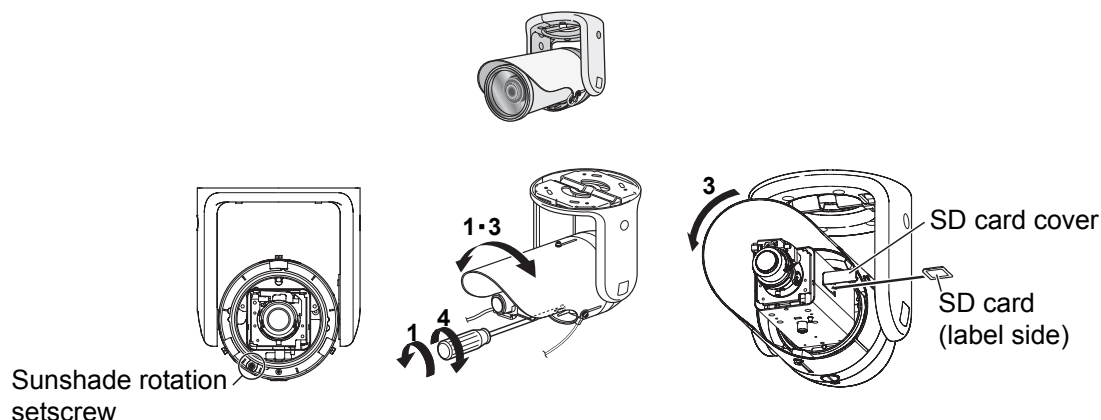
②Slide the SD cover to the direction of the setscrew side.

③Lift and open the side with a slit of the SD cover from the camera body.

2. Insert the SD card into the slot until it clicks.

3. Close the SD cover, and retighten the setscrew.

When using VN-H157WPU



Follow the steps below to insert an SD card.

1. Loosen the screw at the bottom of the camera, and rotate the sunshade enough so that the SD card can be inserted.
2. Perform insertion (or removal) of the SD card.
(If an SD card cover is attached, pull it off to remove it.)
Insert the SD card into the slot until it clicks.
3. Return the sunshade to its original position.
4. Fasten the screw after the adjustment.

Memo:

- If the sunshade cannot be rotated because it is difficult to access, turn the camera before performing this procedure. After finishing, return the camera to its original angle, verify the camera image, and readjust settings if necessary.

● SD cards usable with this camera

Use the following SD cards.

SDHC cards (4 to 32 GB) of Class 10 or above

Use SD cards with a guaranteed operation temperature of 85°C or higher.

The following SD cards are confirmed to function correctly with this camera:

- Panasonic : RP-SDW04GJ1K
- Toshiba : SD-FX004G
- SanDisk : SDSDX-004G-J95

- Operation of all SD cards that meet the above conditions is not guaranteed.

Memo:

- Do not leave the SD card cover, dome cover, or front cover open for a long period of time. Dust may enter inside and cause malfunctions.
- Make sure to set [SD Card] on the [SD Card Record] page to [Disable] before removing an SD card or turning off this camera. (☞ Page 9)
- When using an unsupported SD card, it can be set to record, but recording errors may occur.
- You can easily remove the SD card by lightly pushing it inward to release the lock. The SD card may pop out when you eject it. Exercise care not to lose it.
- Some SD cards on the market may be difficult to remove from the camera body. After the card has been inserted and removed several times, it will be easier to remove.
- Turn off camera before inserting or changing the SD card.

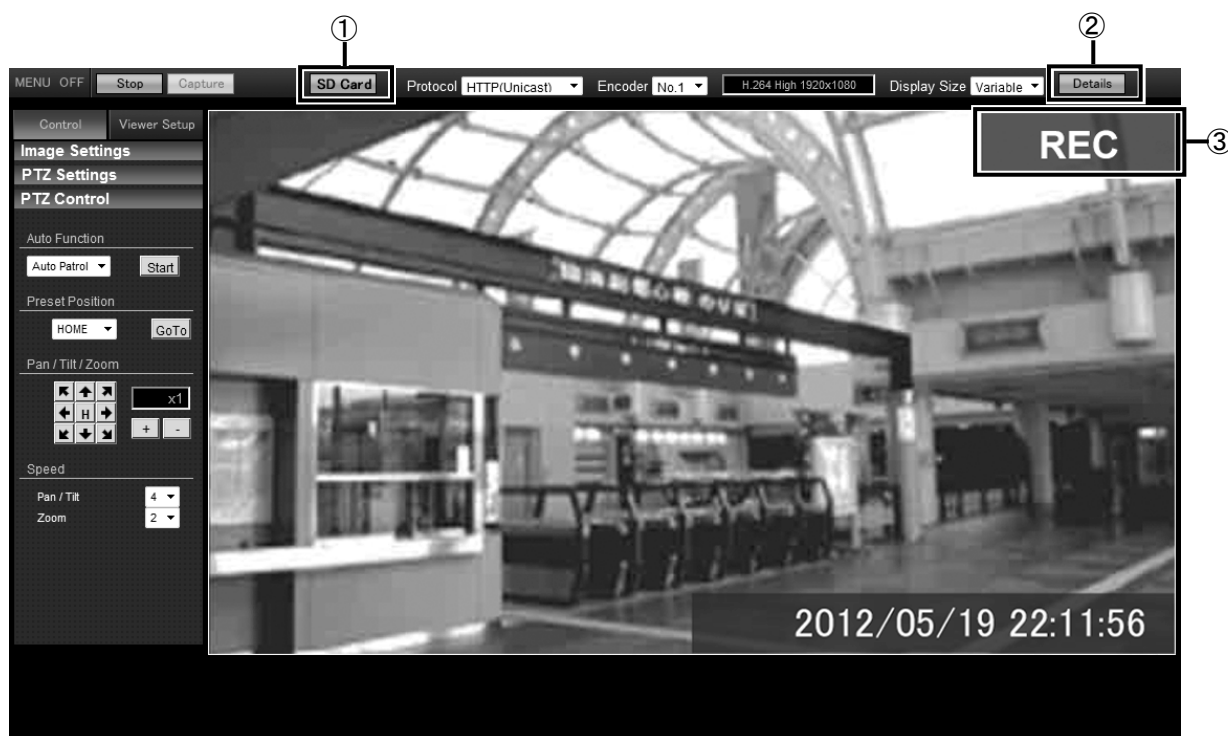
■ Built-in Viewer Screen Configuration

This camera includes a Built-in Viewer.

Start the Built-in Viewer by entering the IP address of the camera in the address bar of Internet Explorer.

You can access the SD card recording settings screen and SD card playback screen display from the Built-in Viewer.

For operation steps not explained in this manual, refer to the "Instructions (Setting)" of the attached CD-ROM.



No.	Item	Description
①	SD Card	<p>Move to the SD card playback screen. (☞ Page 15)</p> <p>Memo: _____</p> <ul style="list-style-type: none"> ● If you log in with only user privileges, the [SD Card] button becomes unselectable, and SD card playback cannot be performed.
②	Details	Move to the SD card recording settings screen. (☞ Page 8)
③	REC	The REC icon is displayed while recording to an SD card.

■ Basic Setting2 Page

This page sets fundamental camera and encoding parameters.

This page is displayed by pressing the [Details] button in the Built-in Viewer.

Select the ④ [Set in "SD Card Record" Page] and click [OK] to move to the SD card recording settings page (☞ Page 8).

This page can be used during access using "admin" or "operator".

Click [Basic Setting2].

The screenshot shows the 'Basic Setting2' page. On the left sidebar, 'Basic Setting2' is highlighted. The main area contains the following sections:

- Camera**:
 - Camera ID: VN-H57 (callout 1)
 - Scene file: General (callout 2)
- Lens**:
 - Lens Type: 1 (TAMRON) (callout 3)
- Encode**:
 - A list of encoding options with radio buttons. The option 'Set in "SD Card Record" Page' is selected (callout 4).

At the bottom, there is a warning message: 'Encoder No.2 and No.3 will be OFF, when check it anything other than 'Set in "SD Card Record" Page' and 'Set in "Encoding" Page'. If you change encode settings during multicast streaming, multicast streaming will restart using new settings. Please note that the multicast streaming will stop automatically in case the setting exceeds performance limit. You cannot change encode settings during SD card recording.'

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Memo:

- If you enter the following URL directly into the address bar of Internet Explorer, you can open the [Basic Setting2] page without going through the Built-in Viewer.
<http://192.168.0.2/cgi-bin/display.cgi?basicmenu2.html>
When the camera IP address has been changed from the default settings, replace 192.168.0.2 with the changed IP address.
- Press the [OK] button to enable the new settings.
- If the [OK] button is pressed upon entering an invalid value, a warning message will appear and the entry will be denied. Press the [Cancel] button to restore the invalid entry to the value before the change was made.
- "H.264 High" indicates the H.264 High Profile standard.

No.	Item	Description																																																								
①	Camera ID	Refer to the "Instructions (Setting)" of the attached CD-ROM.																																																								
②	Scenefile																																																									
③	Lens Type	Refer to the [Lens Type] description. (☞ "Instructions (Setting)" – "Internet Explorer Setting" – "Advanced Settings" – [Maintenance] Page) (VN-H37U/H57U only)																																																								
④	Encode	<p>Select the frame size for each screen of JPEG and H.264 from the following seven patterns.</p> <p>■ Selectable distribution size</p> <table><tr><th></th><th>Set value</th><th>Frame Size</th><th>Frame Rate</th><th>Communication speed</th><th>Bit rate</th><th>I Frame Interval</th></tr><tr><td>1</td><td>H.264 High 1920×1080 30 fps</td><td>1920x1080</td><td>30 fps</td><td>8 Mbps</td><td>CBR</td><td>30 frames</td></tr><tr><td>2</td><td>H.264 High 1920x1080 5 fps + monitor output</td><td>1920x1080</td><td>5 fps</td><td>2 Mbps</td><td>CBR</td><td>5 frames</td></tr><tr><td>3</td><td>JPEG 1920x1080 + monitor output</td><td>1920x1080</td><td>5 fps</td><td>200 KB</td><td>AFS</td><td>—</td></tr><tr><td>4</td><td>JPEG 1280x960</td><td>1280x960</td><td>5 fps</td><td>120 KB</td><td>AFS</td><td>—</td></tr><tr><td>5</td><td>JPEG 640x480</td><td>640x480</td><td>5 fps</td><td>30 KB</td><td>AFS</td><td>—</td></tr><tr><td>6</td><td>Set in "SD Card Record" Page</td><td colspan="5">Settings can be configured in the [SD Card Record] page.</td></tr><tr><td>7</td><td>Set in "Encoding" Page</td><td colspan="5">Multi-encoding and details can be set on [Encoding] page.</td></tr></table>		Set value	Frame Size	Frame Rate	Communication speed	Bit rate	I Frame Interval	1	H.264 High 1920×1080 30 fps	1920x1080	30 fps	8 Mbps	CBR	30 frames	2	H.264 High 1920x1080 5 fps + monitor output	1920x1080	5 fps	2 Mbps	CBR	5 frames	3	JPEG 1920x1080 + monitor output	1920x1080	5 fps	200 KB	AFS	—	4	JPEG 1280x960	1280x960	5 fps	120 KB	AFS	—	5	JPEG 640x480	640x480	5 fps	30 KB	AFS	—	6	Set in "SD Card Record" Page	Settings can be configured in the [SD Card Record] page.					7	Set in "Encoding" Page	Multi-encoding and details can be set on [Encoding] page.				
	Set value	Frame Size	Frame Rate	Communication speed	Bit rate	I Frame Interval																																																				
1	H.264 High 1920×1080 30 fps	1920x1080	30 fps	8 Mbps	CBR	30 frames																																																				
2	H.264 High 1920x1080 5 fps + monitor output	1920x1080	5 fps	2 Mbps	CBR	5 frames																																																				
3	JPEG 1920x1080 + monitor output	1920x1080	5 fps	200 KB	AFS	—																																																				
4	JPEG 1280x960	1280x960	5 fps	120 KB	AFS	—																																																				
5	JPEG 640x480	640x480	5 fps	30 KB	AFS	—																																																				
6	Set in "SD Card Record" Page	Settings can be configured in the [SD Card Record] page.																																																								
7	Set in "Encoding" Page	Multi-encoding and details can be set on [Encoding] page.																																																								

* The [Set values] in bold letters are factory defaults.

■ SD Card Record Page

This page sets SD card recording settings.

This is displayed when you press the [Details] button in the Built-in Viewer and click [SD Card Record], or when you click [Set in "SD Card Record" Page] in the [Basic Setting2] page.

This page can be used during access using "admin" or "operator".

Click [Advanced Settings] and [SD Card Record].

OK Cancel Keep power to camera at least for 10 seconds after change of settings.

SD Card

SD Card ☒ Use ☐ Disable Status: Use ①

Format Status: Formatted ②

SD Card Record

Record Status ☒ ON ☐ OFF Status: No Recording ③

Recording Mode ☐ Constant ☒ Alarm ☐ Network outage ④

Alarm Settings

Trigger1 Pin Input1 Make ⑤

Interval sec (1 - 3600)

Trigger2 Disable

Encode Setting ⑥

● Setting Pattern 1
Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 IFrame Interval (SD Card REC)
Encoder No.2 1280x720, 5fps, 1024kbps, CBR, 5 IFrame Interval
Encoder No.3 640x360, 5fps, 512kbps, CBR, 5 IFrame Interval

● Setting Pattern 2
Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 IFrame Interval (SD Card REC)
Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 IFrame Interval
Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 IFrame Interval

● Setting Pattern 3
Encoder No.1 1920x1080, 5fps, 2048kbps, CBR, 5 IFrame Interval
Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 IFrame Interval (SD Card REC)
Encoder No.3 640x360, 5fps, 512kbps, CBR, 5 IFrame Interval

● Setting Pattern 4
Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 IFrame Interval
Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 IFrame Interval (SD Card REC)
Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 IFrame Interval

● Setting Pattern 5
Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 IFrame Interval
Encoder No.2 1280x720, 5fps, 384kbps, CBR, 5 IFrame Interval (SD Card REC)
Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 IFrame Interval

● Setting Pattern 6
Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 IFrame Interval
Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 IFrame Interval
Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 IFrame Interval (SD Card REC)

● Setting Pattern 7
Encoder No.1 1920x1080, 5fps, 2048kbps, CBR, 5 IFrame Interval
Encoder No.2 1280x720, 5fps, 1536kbps, CBR, 5 IFrame Interval
Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 IFrame Interval (SD Card REC)

● Setting Pattern 8
Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 IFrame Interval
Encoder No.2 1280x720, 5fps, 384kbps, CBR, 5 IFrame Interval
Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 IFrame Interval (SD Card REC)

Set the status to "Disable" before removing SD card.
Camera will restart after formatting SD card.
FTP recording is disabled during SD card recording.
SD card recording is not available until the formatted card is inserted.
If you change encode settings during multicast streaming, multicast streaming will restart using new settings.
Please note that the multicast streaming will stop automatically in case the setting exceeds performance limit.
Encode settings is Multi-Resolution [H.264 High].

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Memo:

- If the ① [SD card] status is "Read only" or "No insert", nothing can be selected other than the [OK] button or the [Cancel] button.
- When recording to FTP and you attempt to perform SD card recording settings, the display changes to a dialog for interrupting FTP recording and starting SD card recording is displayed. When you press the [OK] button, FTP recording stops and SD card recording starts.
- When recording to an SD card is enabled and you attempt to perform FTP recording settings, the dialog "Set SD card recording to OFF." is displayed. Press the [OK] button, and set the SD card recording setting ③ [Record] to "OFF".

No.	Item	Description
①	SD Card	<p>Sets whether or not to use the SD card.</p> <p>[Set values : Use, Disable]</p> <p>Check "Disable" and press the [OK] button to automatically set recording to OFF and stop recording.</p> <p>Check "Use" and press the [OK] button to enable all the SD card recording-related check boxes.</p> <p>Memo : _____</p> <ul style="list-style-type: none"> ● Video recorded to an SD card can be played via the SD card playback screen that is displayed by clicking the [SD Card] button on the Built-in Viewer screen. (☞ Page 15) ● Only H.264 video will be recorded to the SD card. Audio is not recorded. ● Encoding settings cannot be changed while recording to an SD card. <hr/> <p>[Status : Disable, Use, Read only, No insert]</p> <p>Disable : Displayed when "Disable" is selected.</p> <p>Use : Displayed when "Use" is selected.</p> <p>Read only : Displayed when the SD card's switch is set to "Lock". Remove the SD card and disable the "Lock" in order to record and playback to the SD card.</p> <p>No insert : Displayed when the SD card is not inserted into the camera. Insert an SD card.</p>

* The [Set values] in bold letters are factory defaults.

No.	Item	Description
②	Format	<p>The SD card format status display and the format execute button are located here. The format type is unique to this camera.</p> <p>[Status : Unformatted, Formatting, Formatted, ---]</p> <p>"---" is displayed when the SD card status display is not "Use".</p> <p>"Unformatted" is displayed when the SD card is not formatted, or when an unsupported class of SD card that cannot be formatted is inserted.</p> <p>The [Execute] button cannot be pressed (and becomes grayed out) when the SD card status display is not "Use".</p> <p>To enable the [Execute] button, select "Use" for the "SD Card" setting, click the [OK] button, and confirm that "Use" is displayed for the SD card status.</p> <p>When the [Execute] button is pressed, a confirmation window will appear. Press the [OK] button to begin formatting the SD card. The status becomes "Formatting" during formatting.</p> <p>After formatting the card, the format complete dialog is displayed and the camera restarts. The status becomes "Formatted".</p> <p>Press the [OK] button to close the screen.</p> <p>Memo : _____</p> <ul style="list-style-type: none"> ● Make sure to format the SD card with the camera before using it. Only SD cards formatted with the camera can be used. ● It takes approximately 1 minute to format a 32 GB SD card. It takes approximately 1 minute to format a 32 GB SD card. After the format, restarting takes approximately 1.5 minutes. ● Do not remove the SD card during formatting. ● Do not turn off the power while the card is being formatted. ● You cannot record to the SD card while it is being formatted. ● When you format the SD card, all recorded video on the SD card becomes unplayable. <p>Note : _____</p> <ul style="list-style-type: none"> ● When changing the time of the camera via the following operations, first make sure to stop recording to the SD card. If times on the SD card for recorded video overlap due to changes in the camera's time, the camera may become unable to perform playback correctly. <ul style="list-style-type: none"> - When changing the time via "Setting the PC Time to Camera" (☞ "Instructions (Setting)" — "Internet Explorer Setting" — "Advanced Settings" —[Basic Setting1] Page) - When changing the time via "Time" and "Setting the PC Time to Camera" (☞ "Instructions (Setting)" — "Internet Explorer Setting" — "Advanced Settings" —[Time] Page) - When changing the "Time Zone" setting (☞ "Instructions (Setting)" — "Internet Explorer Setting" — "Advanced Settings" —[Time] Page) ● Playback search may not operate correctly for video with time that overlaps due to the time changes to and from Daylight Saving Time. By shifting this video via fast forward and fast reverse, video playback is possible.

* The [Set values] in bold letters are factory defaults.

No.	Item	Description
③	Record Status	<p>Starts and stops recording to an SD card.</p> <p>[Set values : ON, OFF]</p> <p>[Status : No Recording, Recording]</p> <p>This is only enabled when the SD card status is "Use" and the format status is "Format complete".</p> <p>When recording, the status changes to [Recording]. When recording is stopped, the status changes to [Stopped]. When only alarm recording is selected, the status becomes [Recording] when the alarm is engaged, and [Stopped] when nothing is detected.</p> <p>After selecting one of the "Setting Pattern" items in "Encode Setting", select [ON] and press [OK] to enable recording to the SD card.</p> <p>If you push [OK] when the encoding setting has not been set, the "Select an encoding setting." dialog is displayed and recording does not start.</p> <p>Select "OFF" and click the [OK] button to stop recording.</p>
④	Recording Mode	<p>For specifying the mode for recording to the SD card.</p> <p>"Constant", "Alarm", and "Network outage" can be selected. Multiple options or all of the options can be selected.</p> <p>Select this by adding a check to the checkbox for the desired mode.</p> <p>To change the Recording Mode, select "OFF" for ③ Record Status, push the [OK] button to stop recording, and then configure settings.</p> <p>If no check is added to either box and you set recording to "ON" and press the [OK] button, the "Set the recording mode." dialog is displayed and recording does not start.</p> <p>Note: _____</p> <ul style="list-style-type: none"> ● "Constant", "Alarm", and "Network outage" for the SD card recording are not theft or fire prevention functions. ● It is not possible for "Network outage" to handle all network interruptions. Our company will not be liable for damages or unexpected accidents. <p>Memo: _____</p> <ul style="list-style-type: none"> ● When the record status is "ON", the setting for Recording Mode cannot be changed. ● If all the free space on the SD card is used, recording will continue by deleting from the oldest recording data to allocate recording space.
	Constant	Constantly records to the SD card.

* The [Set values] in bold letters are factory defaults.

No.	Item	Description
④	Alarm	<p>SD card recording is performed when conditions set for the alarm setting items are met. The alarm event recording interval for when an alarm is triggered is from 60 seconds before the trigger (pre-trigger) to 60 seconds after the trigger (post-trigger), for a total of 120 seconds.</p> <p>Alarm recording-related setting items are displayed when "Alarm" is selected.</p> <p>Memo: _____</p> <ul style="list-style-type: none"> ● Even if another trigger is detected within 60 seconds of the first trigger, it will not register in the event list. ● If another trigger is detected during alarm recording, recording is extended 60 seconds from the original end point. ● If less than 60 seconds have passed since video recording was initially started, the pre-trigger time will be less than 60 seconds.
	Network outage	<p>When the link between the camera and the network is down, the camera image is recorded to the SD card.</p> <p>Memo: _____</p> <ul style="list-style-type: none"> ● When the LAN cable is removed from the camera, the link with the network is down, but when the camera is supplied with electricity by the PoE, as the power is cut at the same time, the camera image will not be recorded to the SD card.
⑤	Alarm Settings	
	Trigger1	<p>Select the 1st trigger to start alarm recording.</p> <p>When using VN-H57U/H257VPU/H157WPU</p> <p>[Set values: Pin Input1 Make, Pin Input1 Break, Pin Input2 Make, Pin Input2 Break, Audio Detection1, Audio Detection2, Position, Motion Detection, Tampering Detection, Day/Night, Time]</p> <p>When using VN-H37U/H137U/H237U/H237VPU</p> <p>[Set values: Position, Motion Detection, Tampering Detection, Time, Day/Night (VN-H37U and VN-H237VPU)]</p> <p>Memo: _____</p> <ul style="list-style-type: none"> ● The "Motion Detection", "Audio Detection1", "Audio Detection2", or "Tampering Detection" trigger for [Trigger1] must first be set to "ON" in the respective [Advanced Settings] configuration page. ● If you set the [Trigger2] to "Disable", an alarm recording will be performed when only [Trigger1] is triggered. (VN-H57U/H257U/H257VPU/H157WPU only) ● When "Audio Detection1", "Audio Detection2", "Motion Detection", "Position", "Tampering Detection", "Day/Night", or "Time" is selected for the [Trigger1] trigger, [Interval] and [Trigger2] cannot be selected. (VN-H57U/H257U/H257VPU/H157WPU only)

* The [Set values] in bold letters are factory defaults

No.	Item	Description
⑤	Interval (VN-H57U/H257U/H257VP U/H157WPU only)	<p>This is available when both [Trigger1] and [Trigger2] are set. Specify the maximum interval between each trigger for [Trigger1] and [Trigger2]. An alarm recording will be performed if [Trigger2] occurs within the maximum time interval after [Trigger1] occurs.</p> <p>[Set values: 1 – 3600] sec</p> <p>Memo:_____</p> <ul style="list-style-type: none"> ● If you set an invalid value, the "Invalid value" dialog is displayed. ● If you leave a value blank, the "Blank value" dialog is displayed.
	Trigger2 (VN-H57U/H257U/H257VP U/H157WPU only)	<p>Select the 2nd trigger to start alarm recording.</p> <p>[Set values: Disable, Pin Input1 Make, Pin Input1 Break, Pin Input2 Make, Pin Input2 Break]</p> <p>Memo:_____</p> <ul style="list-style-type: none"> ● If you set the same items for [Trigger1] and [Trigger2], the "Trigger1 and Trigger2 are the same." dialog is displayed and alarm recording is not started. ● If you set "Day/Night" to [Trigger1], the options "Black and White" and "Color" become selectable.
	Position Number	<p>Enabled when "Position" is set for the trigger for [Trigger1]. Perform registration of position numbers via the Built-in Viewer's "PTZ setting". (☞"Instructions(Setting)" – "Operations" – "Built-in Viewer Operations" – "PTZ Settings")</p> <p>This position condition will also work if you manually move the PTZ, or if the PTZ is automatically moved via auto patrolling.</p> <p>[Set values: 0 – 19]</p>

* The [Set values] in bold letters are factory defaults

No.	Item	Description																
⑥	Encode Setting	<p>Sets the image quality for video recorded to an SD card, and the image quality for video displayed in the Built-in Viewer.</p> <p>If recording for ③ [Record Status] is set to "ON", these radio buttons become unchangeable.</p> <p>To change the settings, select "OFF" for ③ [Record Status], push the [OK] button to stop recording, and then configure settings.</p> <p>If you set ③ [Record Status] to "ON" and push the [OK] button when the encoding setting has not been set, the "Select an encoding setting." dialog is displayed and recording does not start.</p> <p>Select one of the items from Setting Patterns 1 through 8 in Encode Settings for the recorded image.</p> <p>[Encode Setting]</p> <table><tr><td>Setting Pattern 1</td><td>Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.2 1280x720, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 512kbps, CBR, 5 I Frame Interval</td></tr><tr><td>Setting Pattern 2</td><td>Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 I Frame Interval</td></tr><tr><td>Setting Pattern 3</td><td>Encoder No.1 1920x1080, 5fps, 2048kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 768kbps, CBR, 15 I Frame Interval (SD Card REC)*1 Encoder No.3 640x360, 5fps, 512kbps, CBR, 5 I Frame Interval</td></tr><tr><td>Setting Pattern 4</td><td>Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 I Frame Interval</td></tr><tr><td>Setting Pattern 5</td><td>Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 384kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 I Frame Interval</td></tr><tr><td>Setting Pattern 6</td><td>Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 I Frame Interval (SD Card REC)*1</td></tr><tr><td>Setting Pattern 7</td><td>Encoder No.1 1920x1080, 5fps, 2048kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 1536kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 I Frame Interval (SD Card REC)*1</td></tr><tr><td>Setting Pattern 8</td><td>Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 384kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 I Frame Interval (SD Card REC)*1</td></tr></table> <p>*1:Video from the encoder number with the designation "(SD Card REC)" is recorded to the SD card.</p>	Setting Pattern 1	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.2 1280x720, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 512kbps, CBR, 5 I Frame Interval	Setting Pattern 2	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 I Frame Interval	Setting Pattern 3	Encoder No.1 1920x1080, 5fps, 2048kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 768kbps, CBR, 15 I Frame Interval (SD Card REC)*1 Encoder No.3 640x360, 5fps, 512kbps, CBR, 5 I Frame Interval	Setting Pattern 4	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 I Frame Interval	Setting Pattern 5	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 384kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 I Frame Interval	Setting Pattern 6	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 I Frame Interval (SD Card REC)*1	Setting Pattern 7	Encoder No.1 1920x1080, 5fps, 2048kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 1536kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 I Frame Interval (SD Card REC)*1	Setting Pattern 8	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 384kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 I Frame Interval (SD Card REC)*1
Setting Pattern 1	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.2 1280x720, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 512kbps, CBR, 5 I Frame Interval																	
Setting Pattern 2	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 I Frame Interval																	
Setting Pattern 3	Encoder No.1 1920x1080, 5fps, 2048kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 768kbps, CBR, 15 I Frame Interval (SD Card REC)*1 Encoder No.3 640x360, 5fps, 512kbps, CBR, 5 I Frame Interval																	
Setting Pattern 4	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 I Frame Interval																	
Setting Pattern 5	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 384kbps, CBR, 5 I Frame Interval (SD Card REC)*1 Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 I Frame Interval																	
Setting Pattern 6	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 768kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 256kbps, CBR, 5 I Frame Interval (SD Card REC)*1																	
Setting Pattern 7	Encoder No.1 1920x1080, 5fps, 2048kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 1536kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 I Frame Interval (SD Card REC)*1																	
Setting Pattern 8	Encoder No.1 1920x1080, 5fps, 1024kbps, CBR, 5 I Frame Interval Encoder No.2 1280x720, 5fps, 384kbps, CBR, 5 I Frame Interval Encoder No.3 640x360, 5fps, 128kbps, CBR, 5 I Frame Interval (SD Card REC)*1																	

* The [Set values] in bold letters are factory defaults

■ SD Card Playback Screen

This can be used when accessed as an "admin" or as an "operator".

This is displayed when you click [SD Card] button on the Built-in Viewer screen.

You can play video files stored in the SD card.



Memo:

- Video recorded to an SD card cannot be output from the camera's [MONITOR] terminal.
- SD card playback from 1 camera cannot be performed to multiple viewers.

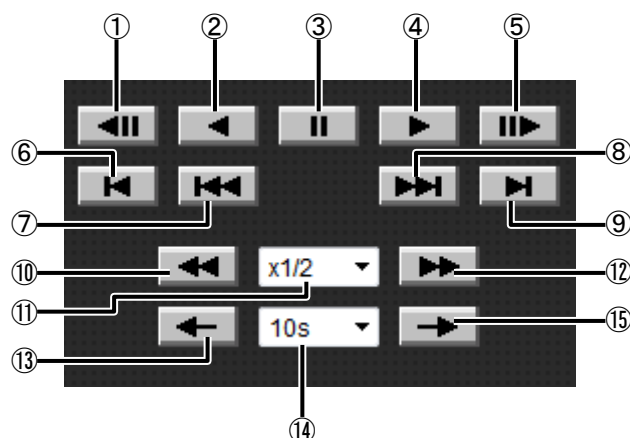
No.	Item	Description
①	MENU ON / MENU OFF	Displays / hides the operation menu. Click [MENU ON] to display the menu on the left side of the page.
②	Video control menu	Controls the video playback state. For an explanation of each button, see "Video control menu". (☞ Page 18)
③	Specified Time Playback menu	Specify the date and time before starting playback. [Playback] button Press the [Playback] button to play videos recorded at the specified date and time. Memo: <ul style="list-style-type: none"> ● If there is no video recorded for the specified date and time, video near that date and time will be played. ● When playing video while recording, video recorded within 5 minutes of the current time cannot be viewed.

No.	Item	Description
④	Event List Playback menu	<p>Displays a list of search results for recorded videos filtered by time and event trigger. Select the item from the displayed list that you want to play and begin playback.</p> <p>From/To Displayed videos will be limited to those recorded between the 2 times that you specify.</p> <p>Event Type Displayed videos will be limited to those of the event trigger* type that you specify.</p> <p>* Event Trigger: Pin Input1 Make, Pin Input2 Make, Motion Detection, Position, Day/Night, Audio Detection1, Audio Detection2, Tampering Detection, Time, Network outage</p> <p>Memo: _____</p> <ul style="list-style-type: none"> ● Depending on the camera model, you may be unable to select the event trigger. ● A starting event for continuous recording cannot be specified. ● After opening the Playback Screen with the Built-in Viewer, results may not be displayed if a search is immediately performed. After opening the SD Card Playback Screen, wait at least one second before performing a search. <hr/> <p>[Search] button A list of search results based on the search parameter that you add a check to is displayed. If no search parameter is checked, all events are displayed.</p> <p>Event List Displays a list of recording start dates/times with the event type in chronological order from the newest event.</p> <p>[Prev] / [Next] buttons A maximum of 100 results can be displayed on 1 page. Press [Prev] to move to pages with newer recording start dates/times, and press [Next] to move to pages with older recording start dates/times.</p> <p>[Playback] button Select an event from the list and press the [Playback] button to start playback.</p> <p>Note: _____</p> <ul style="list-style-type: none"> ● When an event is finished playing, the next event is automatically played back. (The list marker in the list does not move to the next event displayed in the list.) ● If you record over the recording start date/time of a video, the event disappears from the list. You can still play portions of the video that have not been overwritten by using the [Specified Time Playback] menu.

No.	Item	Description
⑤	Export menu	<p>Video from the specified [From] date/time to the [To] date/time is saved to your computer. The save location can be specified in [Viewer Setup] - [Other] - [Video Export Folder] via the Built-in Viewer screen.</p> <p>Note: _____</p> <ul style="list-style-type: none"> Depending on the camera's internal recordings, a saved video may be split up as multiple files. For using saved video files, refer to the following URL. http://www3.jvckenwood.com/english/pro/vnetworks/index.html <hr/> <p>[IN] button Specifies the start time of the video being played.</p> <p>[OUT] button Specifies the end time of the video being played.</p> <p>[Export] button After pressing this button, the confirmation screen is displayed, and then the video saving process begins. While saving videos, this button changes to [Cancel].</p> <p>Memo: _____</p> <ul style="list-style-type: none"> While saving videos, the Built-in Viewer screen cannot be switched. Saving may take time depending on the date/time range that you specify. Progress is displayed at the top of the screen. <hr/> <p>[Cancel] button After clicking the [Export] button, this cancels the save operation for the images being output. The file created contains the data written until the point when you press the button.</p> <p>Memo: _____</p> <ul style="list-style-type: none"> When the export process is stopped, this button changes to [Export]. When the time required for exporting video to a computer is less than 5 seconds, this button has no effect.
⑥	[Live] button	Switches to the Built-in Viewer screen.
⑦	Playback indications	Displays playback conditions. (◀ ▶ ⏮ ⏭ ⏮)
⑧	Time Stamp	Shows the recording date and time of the video currently playing.
⑨	Display Time	You can enable/disable the display of the recording time during playback.
⑩	Display Size	Sets the size of the video display area. [Set values: Fixed, Variable] Fixed : Displays at the set number of pixels. Variable : Displays in relation to the window size.
⑪	Video display area	Displays the recorded video.
⑫	Time Stamp	Shows the recording date and time of the video currently playing. ⑨[Display Time] is used for setting whether or not to display this.

* The [Set values] in bold letters are factory defaults.

● Video control menu



No.	Item	Description
①		Returns to the previous frame, and then pauses playback.
②		Starts reverse playback.
③		Pauses playback.
④		Starts playback.
⑤		Advances to the next frame, and then pauses playback.
⑥		Returns to the oldest video, and then pauses playback.
⑦		Jumps to the previous alarm event video.
⑧		Jumps to the next alarm event video.

No.	Item	Description
⑨		Advances to the most recent video, and then pauses playback.
⑩		Fast-reverses the playback position.
⑪		Selects the speed for ⑩ and ⑫. [Set values : x1/2, x1, x3, x10, x30, x60]
⑫		Fast-forwards the playback position.
⑬		Returns by the specified length of time, and then pauses playback.
⑭		Selects the movement time for ⑬ and ⑮. [Set values : 10s, 15s, 30s, 1m, 10m, 30m, 1h, 6h, 12h, 24h]
⑮		Advances by the specified length of time, and then pauses playback.

* The [Set values] in bold letters are factory defaults.

Memo:

- For playback from an SD card, use [Specified Time Playback] menu or [Event List Playback] menu (☞ Page 16) to select the recorded video to play.
- When playback of an event finishes, playback of the next event starts automatically.
- Buttons other than button ④ and button ⑤ are only displayed for I-frame.
- Button ⑦ and button ⑧ are only used to jump to alarm event videos. You cannot jump to a continuous recording event.
- A maximum of 1 second of calculation error from the specified time set via button ⑭ may occur when jumping using button ⑬ and button ⑮.

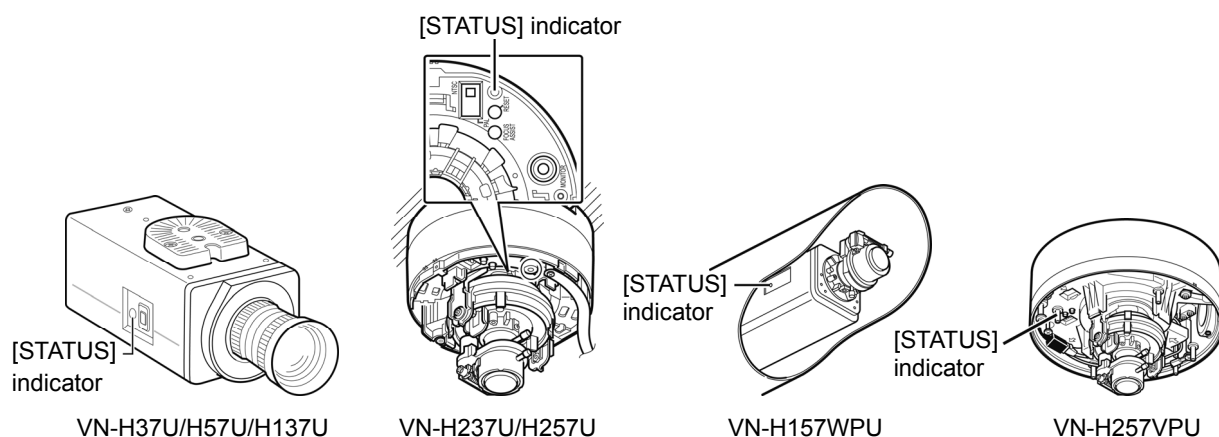
■ Approximate SD Card Recording Times

The following recording times are approximations. They may vary due to the recording environment or the SD card that you use.

● Recording time table

Setting Pattern	Encoding details for SD card recording	Available recording time for each SD card size [in hours]			
		4 GB	8 GB	16 GB	32 GB
Setting Pattern 1	1920x1080, 5 fps, 1024 kbps, CBR, 5 I Frame Interval	5	12	25	52
Setting Pattern 2					
Setting Pattern 3	1280x720, 5 fps, 768 kbps, CBR, 5 I Frame Interval	7	15	34	70
Setting Pattern 4					
Setting Pattern 5	1280x720, 5 fps, 384 kbps, CBR, 5 I Frame Interval	12	27	58	120
Setting Pattern 6	640x360, 5 fps, 256 kbps, CBR, 5 I Frame Interval	19	42	92	189
Setting Pattern 7	640x360, 5 fps, 128 kbps, CBR, 5 I Frame Interval	34	78	169	384
Setting Pattern 8					

■ SD Card Recoding Error Indicator



When the camera [STATUS] indicator lamp flashes orange, it may not be possible to record to the SD card. Check the SD card condition and the camera settings.

[STATUS] indicator

The camera [STATUS] indicator lamp is flashing. When the lamp flashes orange twice and then goes out for one second:	<ul style="list-style-type: none"> The inserted SD card has not been formatted. Format the card from the [SD Card Record] page. (☞ Page 10) The inserted SD card switch is locked and the SD card cannot be recorded on. After cutting power to the camera, remove the SD card, undo the lock, and reinsert the card. (☞ Page 3) The camera is set to record on an SD card, but an SD card has not been inserted. After cutting power to the camera, insert an SD card that can be recorded to.
The camera [STATUS] indicator lamp is flashing. When the lamp flashes orange three times and then goes out for one second:	<ul style="list-style-type: none"> A problem has occurred with the SD card in use. Replace the SD card.

Memo:

- When [LED State] under [Status LED] on the [LED State] page in "Instructions (Settings)" on the included CD-ROM is set to [Disable], the [STATUS] indicator lamp does not flash.
- Set the SD card to [Disabled] on the [SD Card Record] page in order not to use the SD card recording function. The [STATUS] indicator lamp will return to glowing solid green.

■ Additional Cautions

● Cautions for setting the detection function

You cannot set motion detection, audio detection, and tampering detection at the same time.

An error message is displayed when one detection function setting is already enabled and you try to select another. Check the content of the error message, set the already-enabled detection function to "OFF", and then reconfigure the detection function. (☞ "Instructions (Setting)" — "Internet Explorer Setting" — "Advanced Settings" — [Motion Detection] Page, [Audio Detection] Page, [Tampering Detection] Page)

● Cautions for changing the encoding setting

When changing an already-configured encoding setting on the [Basic Settings2] page, [Encoding] page, or [SD recording] page, PTZ and the auto patrol settings are cancelled.

In this case, set PTZ and the auto patrol settings again after setting the encoding setting. (☞ "Instructions (Setting)" — "Internet Explorer Setting" — "Advanced Settings" — [PTZ] Page, [Auto Patrol] Page)

■ Troubleshooting

Check the following items if you cannot record to an SD card.

- Use an SD card that is compatible with this camera. (☞ Page 4)
- Follow the instructions in [SD Card Record] Page (☞ Page 8) to enable SD card recording settings.
- Refer to "SD Card Recording Error Indicator" (☞ Page 19), when the camera [STATUS] indicator lamp flashes orange.

You may become unable to update the screen if you frequently move between the SD card playback screen and the advanced settings screen.

- Press the [Cancel] button, or press the refresh button of Internet Explorer.

Check the following items if the frame rate of images which are recorded to an SD card is lower than the set value or variable.

- When the Sense Up functions activate, (☞ "Instructions (Setting)" — "Internet Explorer Setting" — "Advanced Settings" — [Camera] Page) the sensitivity is increased by decreasing the frame rate of images recorded to the SD card. As a result, the number of playback frames may be lower and proper playback may not be possible.

In some cases, the video output file may not be saved to the computer even when using [Export] (☞ Page 17 ⑤).

- With Windows 7 or Windows Vista, run Internet Explorer as Administrator.
To do so, perform the following:
 1. Right click the Internet Explorer icon.
 2. Select [Run as Administrator].

