

Canon

CONSOLE

Image Control & Storage Software

Version 1.1



CONSOLE is a software that enables you to adjust the settings of a camcorder from a computer and to record on the tape in the camcorder and onto the computer's hard disk by connecting the camcorder using an IEEE1394 (DV) cable. You can adjust and save the Custom Preset settings of the camcorder and analyze a shooting image using a waveform monitor and a vector scope to compose the image you want.

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This software is for use with Windows® XP (Service Pack 2) only.

English

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Read This First

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Canon camcorder compatible with CONSOLE

Following camcorder can be used with CONSOLE.

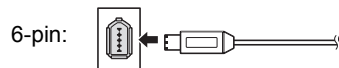
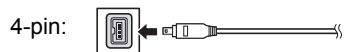
| | | | |
|-------|-------|--------|------|
| XH G1 | XH A1 | XL H1* | XL2* |
|-------|-------|--------|------|

*Unable to use some functions

Required Accessories

- Canon digital camcorder compatible with CONSOLE
- IEEE1394 (DV) Cable

Check the manual of your computer for which type of cable to use:



System Requirements

| | |
|-----------|---|
| OS | Microsoft Windows XP Home Edition or Professional* (Installation of Service Pack 2 required) Proper operation is not guaranteed on Windows XP that has been upgraded from a previous version. |
| CPU | <ul style="list-style-type: none"> Pentium M 1.5GHz or better Pentium 4 2GHz or better (Pentium 4 3.2GHz or better recommended) |
| RAM | 512 MB or more (1 GB or more recommended) |
| Hard Disk | For installation: 100MB or more of free space required For video recording: 1GB or more of free space required File System: NTFS |
| Display | 1024 x 768 or more required, Full Color (32bit) required |
| Sound | Windows XP compatible sound system |
| Interface | IEEE1394 (OHCI compliant) |

***The software cannot be operated on Windows XP Professional x64 Edition.**



- Proper operation is not guaranteed on all of the systems that meet the requirements outlined above.
- Recordings cannot be made on FAT32 or FAT16 formatted hard disks.
- If you set the video folder to an external hard disk, an error message "Delayed Write Failed" may be displayed while recording onto the hard disk, and the recording may be lost.**
- Recordings cannot be saved on a hard disk recognized as [Removable Disk].
- If you connect 4 or more devices (including the connected computer and the XL H1 itself) by IEEE1394, CONSOLE will not run properly.
 - Proper operation cannot be guaranteed if you are using a repeater.
- If your computer has an IEEE1394 (DV) board/card in addition to the standard IEEE1394 (DV) board/card, or if you have several IEEE1394 (DV) boards/cards added to the computer, the computer may not recognize the camcorder properly. In such case, see *Camcorder will not be recognized or controlled.* (□ Appx-59)
- This software will not operate properly if more than one camcorder is connected to the computer.
- Depending on the setting of the power scheme of the laptop PC, the preview images may not be played back smoothly. Select [Always On] in the [Power Options Properties] window. (□ Appx-60)
- When the computer enters stand-by mode or hangs up while running CONSOLE, proper operation is not guaranteed after recovering.
- When dealing with HDV recordings, regardless of the operations, the CPU usage may go up to the maximum. If the usage continuously goes over the 100% for a long time, data dropping from a file may occur, or the computer may become unstable. In such case, see *The recorded picture is lacking.* (□ Appx-60) and change the software settings to reduce the usage.
- To edit a file recorded in HDV, use editing software that supports the HDV standard.
- This software can also be used with the recordings in 24F (NTSC only). Use an editing software that supports the 24F frame rate.

Read This First

What is CONSOLE?

CONSOLE is a software that enables you to adjust the settings of a camcorder from a computer and to record on the tape in the camcorder and onto the computer's hard disk by connecting the camcorder using an IEEE1394 (DV) cable. You can adjust and save the Custom Preset settings of the camcorder and analyze a shooting image using a waveform monitor and a vector scope to compose the image you want.

With CONSOLE you will be able to:

- Record the camcorder image onto the computer's hard disk.
- Output the image recorded on the hard disk to a monitor via the camcorder.
- Adjust the camcorder's settings (Custom Preset) and export them to the computer's hard disk and the camcorder.
- Analyze the image using a waveform monitor and a vector scope.
- Compare the camcorder image and the recorded image by simultaneously displaying both images in the same window.
- Display a safety zone marker, an aspect marker and several other markers on the window and create new markers.
- Perform the cache and frame recording.

Differences from CONSOLE 1.0

- Supports XH G1 and XH A1
- New plug in: Color Correction, Skin Detail and Sky Detail
- Allowed to save the Custom Preset file to the camcorder when it is set to the Camera mode
- Customizing function of the shortcut keys
- Calling the registered workspace using shortcut keys
- Changing the shortcut keys for displaying/hiding the [Rec Viewer] window and the [Camera Control] window




Limitations During the Trial Period

During the trial period, you can start CONSOLE 50 times limited to within 14 days. During the trial period, the following limitations apply to CONSOLE.

- You can operate CONSOLE for 120 minutes only.
- You can record for 5 minutes only.
- You cannot export or load Custom Preset files.

Functional Comparison

The functions available differ depending on the connected camcorder and the camcorder mode.

- EXT.CONT. mode (EXT. CONT.): This mode is available for remotely controlling the camcorder. When the camcorder is set to EXT.CONT. mode, only the following functions of the camcorder can be used.
 - Camcorder's start/stop button
 - Handle and grip zoom lever
 - ZOOM SPEED switch and dial
 - EJECT switch
 - All audio related adjustments except for AUDIO MONITOR button
- Camera mode (A Tv Av M   ): This mode is available for directly controlling the camcorder.
 - Some functions of CONSOLE cannot be used.
- VCR/PLAY mode (VCR/PLAY): This mode is available to playback or output the picture recorded on the tape.
 - You do not use this mode when you connect the camcorder to the computer.

| Camcorder | XH G1/XH A1 | | XL H1 | | XL2 | |
|---|-------------|--------|------------|--------|------------|--------|
| Mode | EXT. CONT. | Camera | EXT. CONT. | Camera | EXT. CONT. | Camera |
| Custom Preset Settings | ○ | ○ | ○ | ○ | ○ | × |
| Exporting the Custom Preset to the camcorder | ○ | ○ | ○ | ○ | ○ | × |
| Exporting the Custom Preset to the memory card | ○ | × | ○ | × | × | × |
| Exporting the Custom Preset to the computer's hard disk | ○ | ○ | ○ | ○ | ○ | ○ |
| Color Controlling | ○ | ○ | × | × | × | × |
| Camera Control tab | ○ | × | ○ | × | ○ | × |
| Image output | ○ | × | ○ | × | ○ | × |
| Copying files from the memory card | ○ | × | ○ | × | × | × |
| HDV recording | ○ | ○ | ○ | ○ | × | × |
| DV recording | ○ | ○ | ○ | ○ | ○ | ○ |

Chapter 1

Preparation (Installation, Connection, Launch, Activation)

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Preparation (Installation, Connection, Launch, Activation)

Installing the Software and Drivers

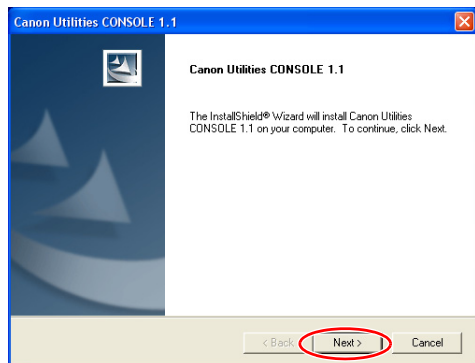
Follow the procedure below to install CONSOLE, Canon Virtual VCR driver and AV/C Camera Storage Subunit-WIA driver.

Installing CONSOLE and the Canon Virtual VCR Driver



- Do not connect the camcorder to the computer when installing the software.
- You need to log in as an administrator before installing the software.
- Close all programs that are running before installing the software.

1

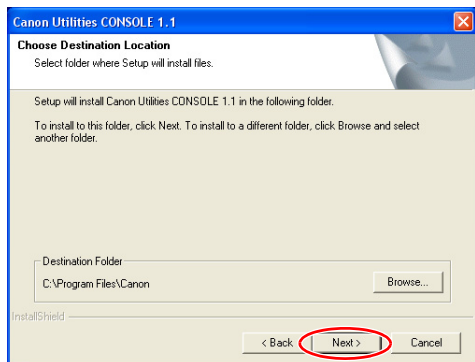


Start the CONSOLE installer and click [Next].

2

Read the license agreement and click [Yes] to accept the terms and to start installation.

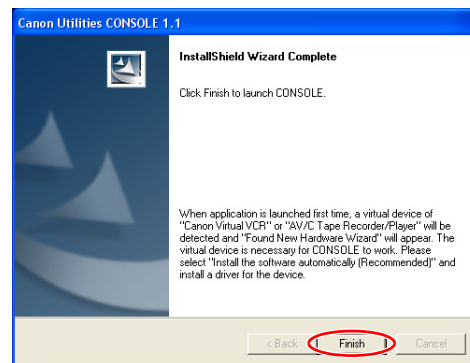
3



Confirm the target folder and click [Next].

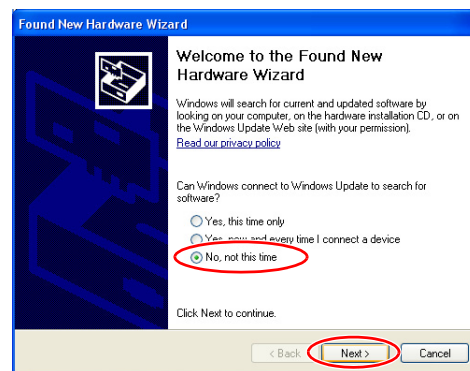
- If a dialog appears asking you whether you wish to create a shortcut for CONSOLE, click [Yes].
- If a warning window concerning the installation is displayed, click [Continue Anyway]. The dedicated driver will be installed automatically.

4



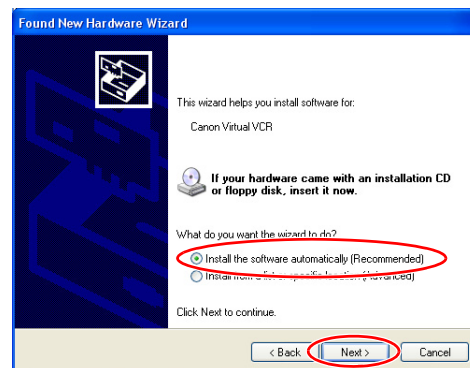
Click [Finish].

5



Select [No, not this time] and click [Next].

6

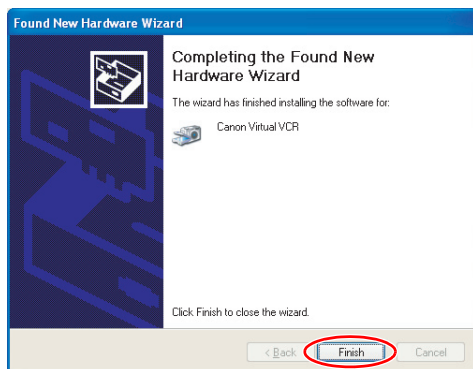


Select [Install the software automatically (Recommended)] and click [Next].

If a warning message regarding the installation appears, click [Continue Anyway].

Preparation (Installation, Connection, Launch, Activation)

7



Click [Finish].

Installing the AV/C Camera Storage Subunit-WIA Driver

The AV/C Camera Storage Subunit-WIA driver is used for downloading and uploading the Custom Preset file (Camcorder settings) from and to the camcorder. When installing the AV/C Camera Storage Subunit-WIA driver, you need to connect the camcorder to the computer. Refer to *Connecting the Camcorder to the Computer* (1-8).



- Without Installing the AV/C Camera Storage Subunit-WIA driver, you cannot adjust the Custom Preset settings.
- This driver will be installed every time you connect a camcorder for the first time. From the second time you connect the camcorder, the driver will not be installed.
- You need to log in as an administrator before installing the software.
- Close all programs that are running before installing CONSOLE.
- Do not turn the camcorder's power off and do not quit the driver's installation before completing the installation of the driver.

1

Turn the camcorder's power on and activate the DV CONTROL function.

2

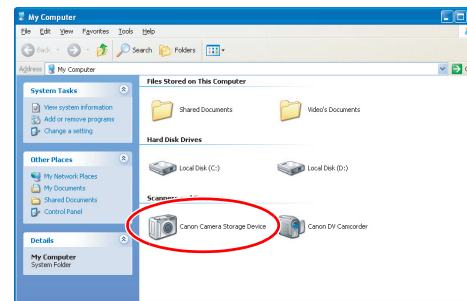
Set the camcorder's recording program to EXT.CONT.

3

Connect the camcorder to the computer using the IEEE1394 (DV) cable. (1-8)

- For details about connecting the camcorder to the computer, refer to *Connecting the Camcorder to the Computer* (1-8).
- When the [Found New Hardware Wizard] window appears, select [No, not this time] and click [Next]. In the next window, select [Install the software automatically (Recommended)] and click [Next].
 - If a warning message regarding the installation appears, click [Continue Anyway].
- Installation of the driver starts automatically.
- Depending on the setting of the computer, an editing software may be launched. If this happens, close the software.
- After completing the installation, [Scanner and Camera Wizard] or a window asking you to choose the software may be displayed. Click [Cancel] and close the window.

4



Check if the driver has been installed correctly.

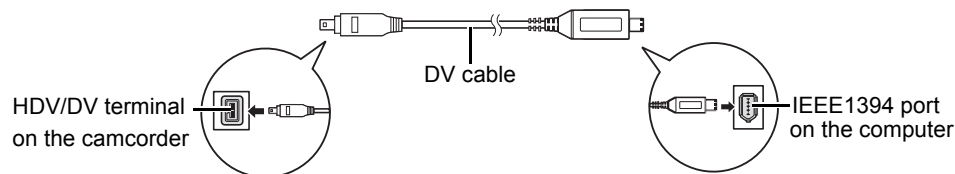
Open [My Computer] and check if the [Canon Camera Storage Device] icon appears. If the icon does not appear, the installation has not been completed properly. Uninstall (7-54) and reinstall the driver.

1 Preparation (Installation, Connection, Launch, Activation)

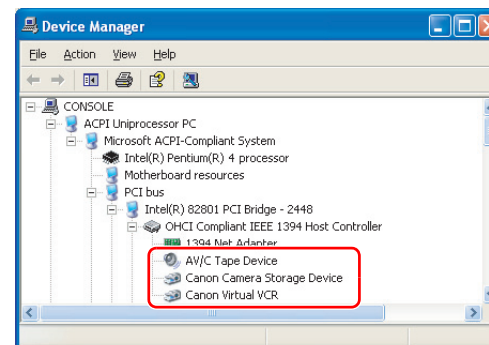
Connecting the Camcorder

Connecting the Camcorder to the Computer

- 1 Turn the camcorder's power on and activate the DV CONTROL function.**
- 2 Set the camcorder's recording program to EXT.CONT. or Camera mode.**
 - When the camcorder is set to EXT.CONT. mode, only the following functions of the camcorder can be used.
 - Camcorder's start/stop button
 - Handle and grip zoom lever
 - ZOOM SPEED switch and dial
 - EJECT switch
 - All audio related adjustments except for AUDIO MONITOR button
- 3 Connect the camcorder to the computer using the IEEE1394 (DV) cable.**
 - You do not need to turn off the computer.
 - Do not deactivate the DV CONTROL function while the camcorder is connected to the computer.
 - Refer to the computer manual for the location of the computer's IEEE1394 (DV) port.



- Follow the procedure below to confirm if the camcorder is properly connected. Your camcorder is correctly connected if you see items described in step 4 in the [Device Manager] window.
 - 1) Set the camcorder to EXT.CONT. and connect to the computer.
 - 2) Open the [Device Manager] window. (7-56)
 - 3) Select [Devices by connection] from the [View] menu.
 - 4) Confirm that the following names are shown under IEEE1394 controller.
 - When connecting to a computer in HD mode: [AV/C Tape Device], [Canon Camera Storage Device] and [Canon Virtual VCR] are shown.
 - When connecting to a computer in SD mode: [Canon DV camcorder], [Canon Camera Storage Device] and [Canon Virtual VCR] are shown.



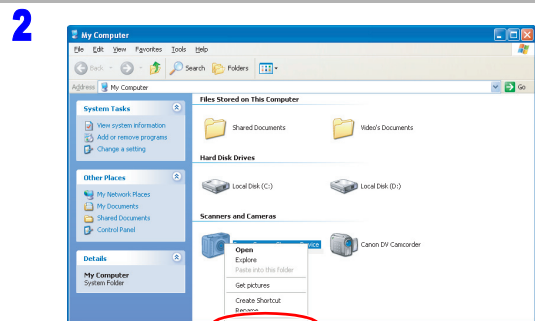
Preparation (Installation, Connection, Launch, Activation)

Launching CONSOLE

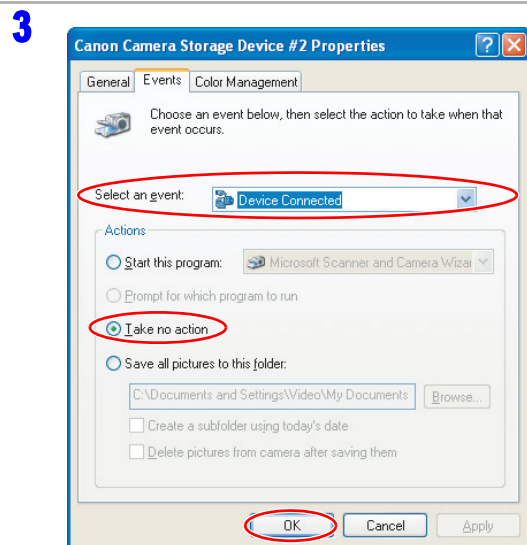
Changing the Software Event Setting

When using CONSOLE, you need to deactivate the Windows program that automatically prompts you to choose an application when you connect the camcorder to the computer (set to "Take no action").

- 1 Set the camcorder's recording program to EXT.CONT. or Camera mode. (1-8)



Right-click on [Canon Camera Storage Device] icon in the [My Computer] window and choose [Properties].



Select [Device Connected] at [Select an event] and select [Take no action] under [Actions] in the [Events] tab and click [OK].

Starting the Application

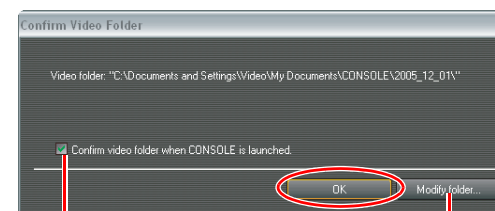


- You need to log in as an administrator before installing the software.
- Do not change the user account while running CONSOLE.
- If you are running software that displays the time at the title bar, the title bar may not display texts properly.
- Do not change the settings in Windows [Display Properties] window while launching CONSOLE.

- 1 Double-click the [CONSOLE 1.1] icon on the desktop.

- When you have not registered the license yet, the remaining trial period and number of times you can start CONSOLE are displayed. Click on [Register] when you proceed to register the license. (1-10)
- When the trial period is expired, or the number of times you can start the CONSOLE is exceeded its limit, a warning window appears. Click on [Register] and proceed to register the license. (1-10)

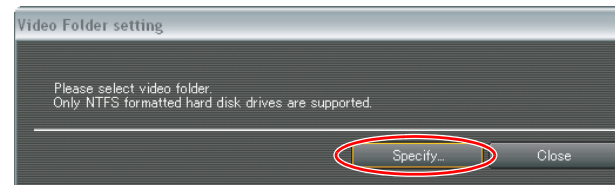
- 2 Confirm the target folder (video folder) and click [OK].



By removing this checkmark, this window will not appear next time you start CONSOLE.

Click [Modify folder] to change the target folder.

The first time you start CONSOLE, the target folder is set as [Windows drive:\Documents and Settings\login user name\My Documents\CONSOLE\date\]. If Windows is not installed on an NTFS formatted hard disk, the following dialog appears. Click [Specify] and select a folder on an NTFS formatted hard disk.



If you set the video folder to an external hard disk, an error message "Delayed Write Failed" may be displayed while recording onto the hard disk, and the recording may be lost.

1 Preparation (Installation, Connection, Launch, Activation)

Activation

You can use all of the functions of this software after registering the license key. During the trial period, you can start CONSOLE 50 times limited to within 14 days.

During the trial period, the following limitations apply to CONSOLE.

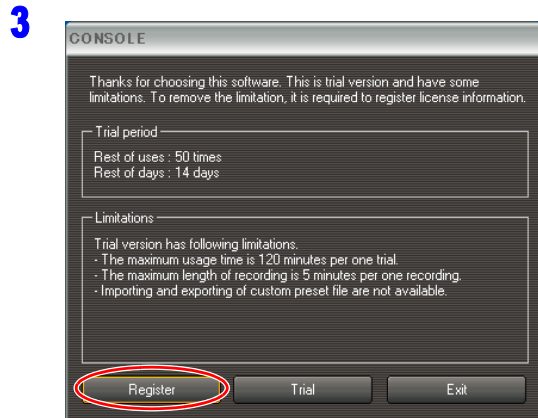
- You can operate CONSOLE for 120 minutes only.
- You can record for 5 minutes only.
- You cannot export or load Custom Preset files.

Purchasing the License Key

- For details about purchasing and receiving the license key, please visit the Canon's download site.
- You can use the same license key you have already purchased for CONSOLE 1.0 if you are installing CONSOLE 1.1 to a computer in which CONSOLE has not been installed previously.
- You do not need to register the license key again if you are installing CONSOLE 1.1 to a computer in which CONSOLE 1.0 had already been run. The license key information will be carried on automatically.

1 Set the camcorder's recording program to EXT.CONT. or Camera mode and connect the camcorder to the computer. (📖 1-8)

2 Start CONSOLE.

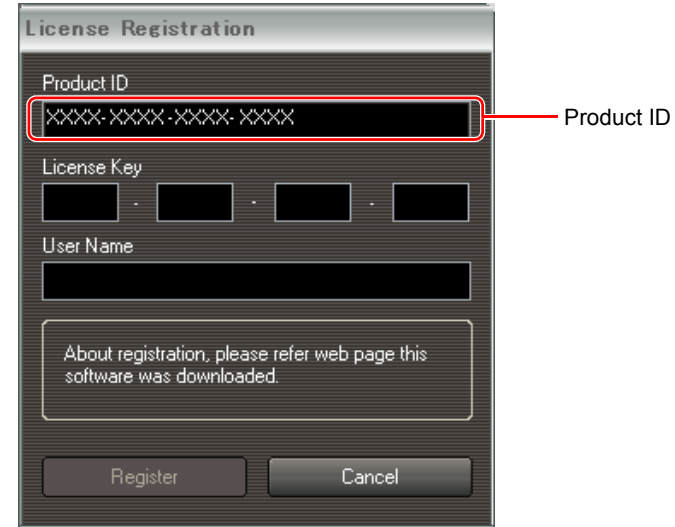


Click [Register] in the trial confirmation window.

If you are already running the software, select [Version] ▶ [About CONSOLE] and click the [Register] button.

4 Confirm and note the product ID.

If an appropriate camcorder is not connected to the computer, the product ID will not be displayed.



5 Visit the Canon's download site where you downloaded the trial version software and follow the instructions on the site to purchase the license key.

You will need the product ID obtained in the step above to purchase the license key.

6 Receive the license key.

Registering the License Key

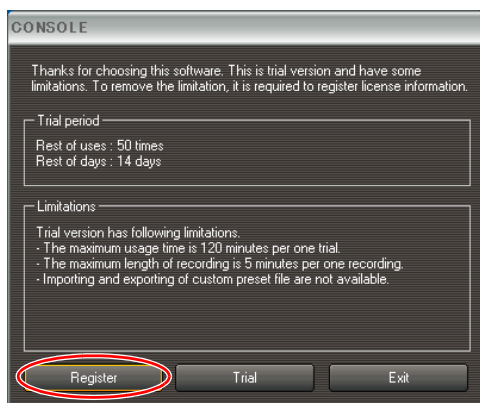
1 Set the camcorder's recording program to EXT.CONT. or Camera mode and connect the camcorder to the computer. (📖 1-8)

Connect the same camcorder as the one used for receiving the license key.

2 Start CONSOLE.

Preparation (Installation, Connection, Launch, Activation)

3



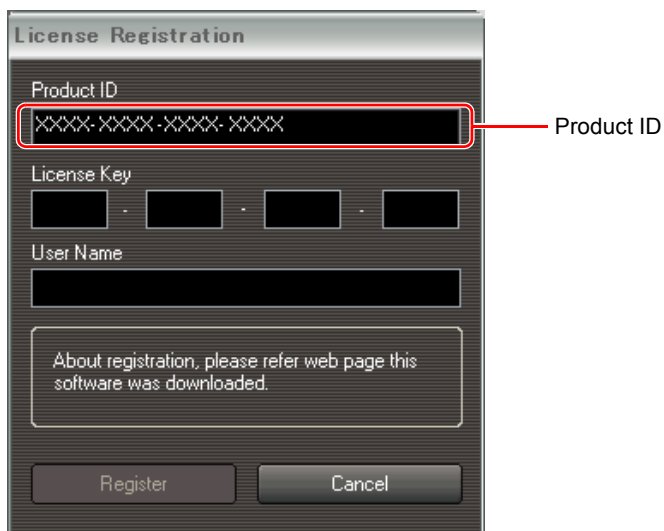
Click [Register] in the trial confirmation window.

If you are already running the software, select [Version] ▶ [About CONSOLE] and click the [Register] button.

4

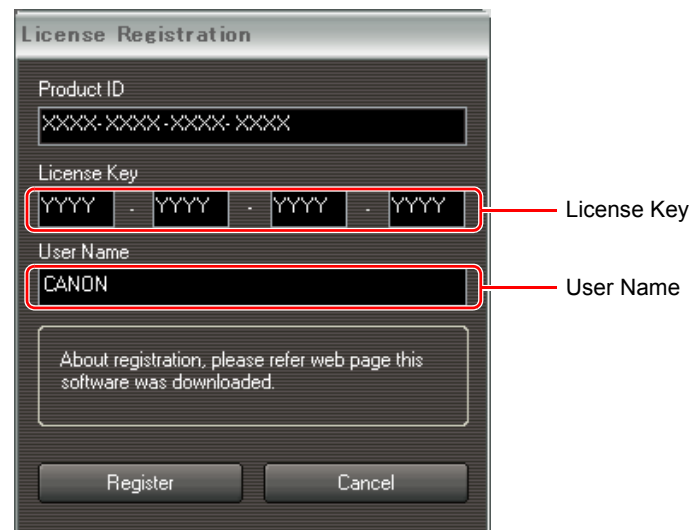
Check the product ID.

If the product ID is not the same as the one for receiving the license key, you cannot register the license.



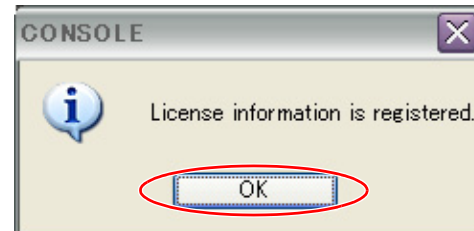
5

Click [Register] after entering the license key and a user name.



6

Click [OK].



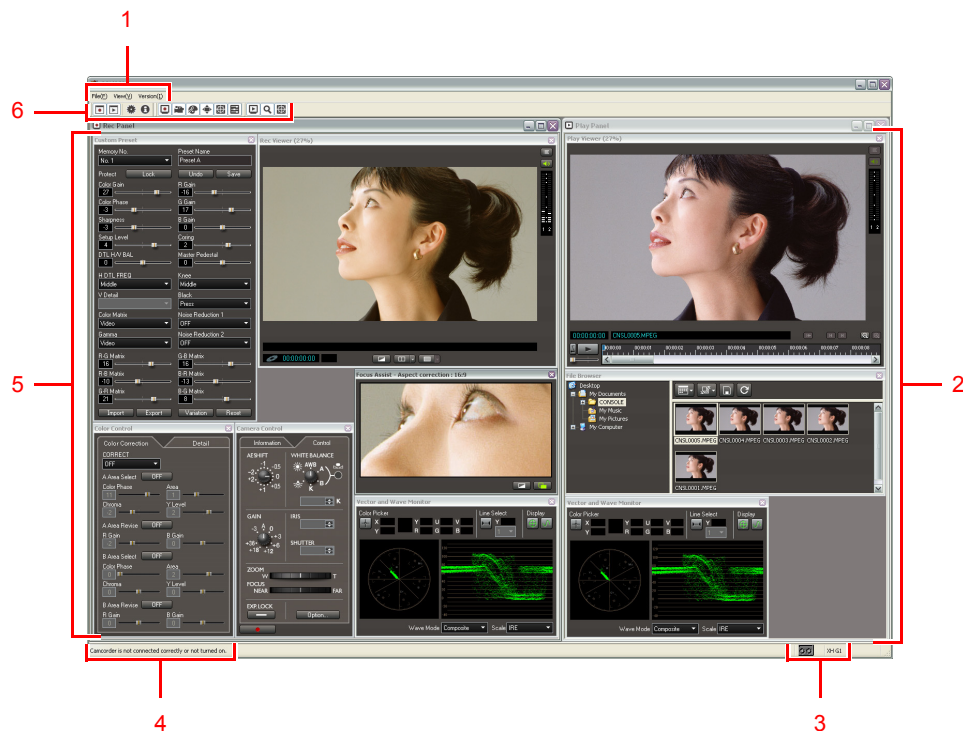
Chapter 2

CONSOLE Windows

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CONSOLE Windows

Main Panel



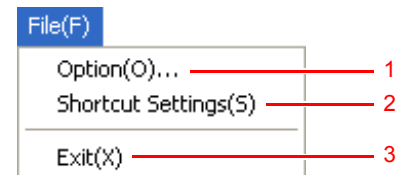
| | | |
|---|-----------------------|---|
| 1 | Menu | For details, refer to <i>Menu Bar</i> (2-13). |
| 2 | [Play Panel] | Displays [Play Viewer] (6-50), [File Browser] (6-52) and a Waveform Vector Monitor (4-32). |
| 3 | Camcorder Information | Shows the camcorder model name and the status of the tape in the camcorder. For details, refer to <i>Camcorder Status</i> (2-14). |
| 4 | Software Status | Displays the status of the software. |
| 5 | [Rec Panel] | Displays [Rec Viewer] (4-23), [Focus Assist] (4-28), [Camera Control] (4-28), a Waveform Vector Monitor (4-32) and [Custom Preset] (4-37). |
| 6 | Toolbar | For details, refer to <i>Toolbar</i> (2-14). |



Select [Exit] from the [File] menu to end the application.

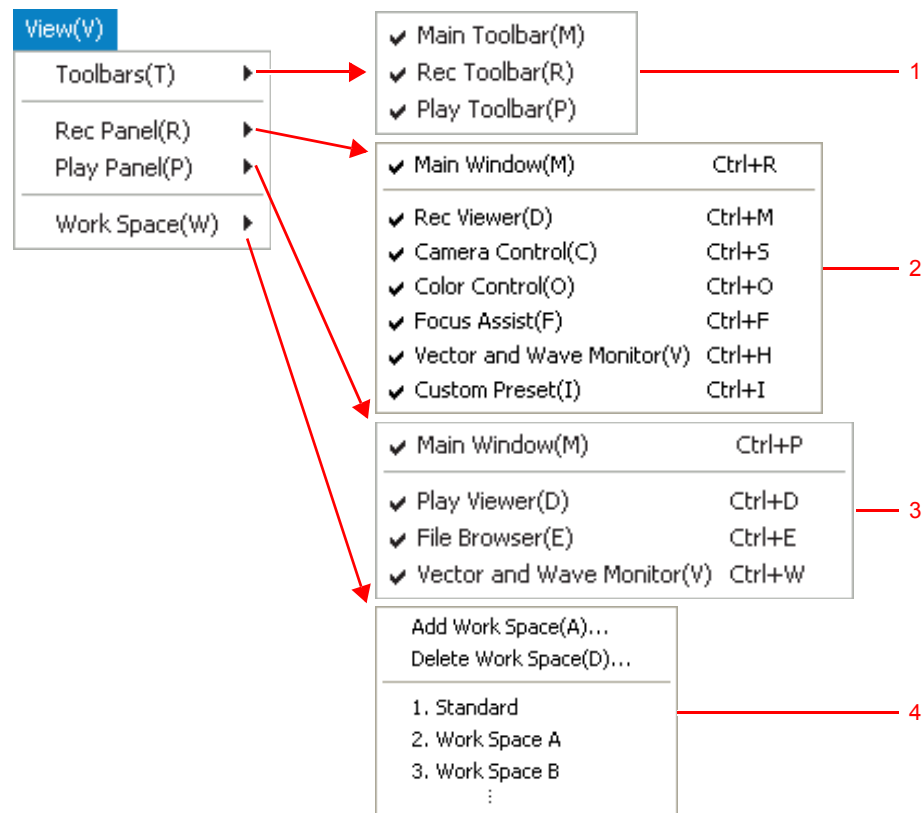
Menu Bar

[File] Menu



- 1 Displays the [Option Settings] window (3-17).
- 2 Changes the default shortcut key settings (Appx-61).
- 3 Closes CONSOLE.

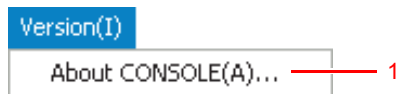
[View] Menu



- 1 Displays/Hides the toolbar (2-14).
- 2 Displays/Hides [Rec Panel] and the recording tools.
- 3 Displays/Hides [Play Panel] and the playback tools.
- 4 Adds/Deletes the work space (2-15).

CONSOLE Windows

■ [Version] Menu



- 1 Displays the version and the license information.

Camcorder Status

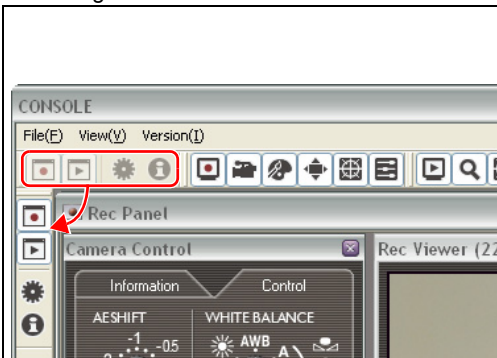
This status shows the name of the camcorder connected and status of the tape.

| Icon | Status of the tape |
|------|--------------------------|
| | No tape in the camcorder |
| | Stop mode |
| | Recording |
| | Tape reached the end |
| | Tape is write-protected. |
| | Tape error |

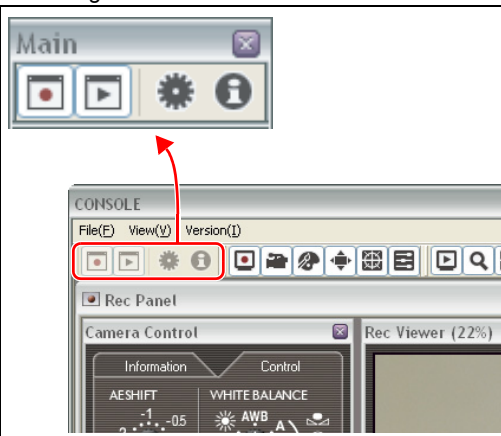
Toolbar

There are "Main Toolbar", "Recording Toolbar" and "Playback Toolbar" in the main panel. Each toolbar can be displayed or hidden, or moved around (docking and floating) with the mouse.

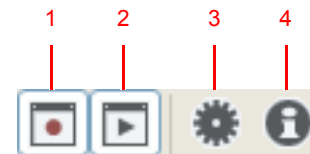
• Docking



• Floating



■ Main Toolbar



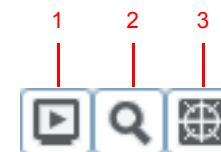
- 1 Displays/Hides [Rec Panel].
- 2 Displays/Hides [Play Panel].
- 3 Displays the [Option Settings] window (3-17).
- 4 Displays the version information.

■ Recording Toolbar



- 1 Displays/Hides the [Rec Viewer] window.
- 2 Displays/Hides the [Camera Control] window.
- 3 Displays/Hides the [Color Control] window.
- 4 Displays/Hides the [Focus Assist] window.
- 5 Displays/Hides the waveform vector monitor.
- 6 Displays/Hides the [Custom Preset] window.

■ Playback Toolbar



- 1 Displays/Hides the [Play Viewer] window.
- 2 Displays/Hides the [File Browser] window.
- 3 Displays/Hides the waveform vector monitor.



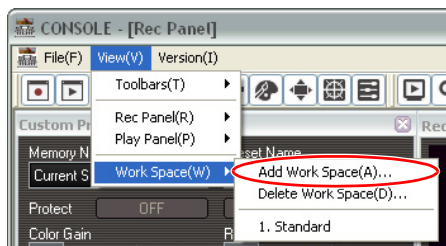
To redisplay the toolbar, select [View] ▶ [Toolbars] and the name of the toolbar you want to redisplay.

2 CONSOLE Windows

Work Space

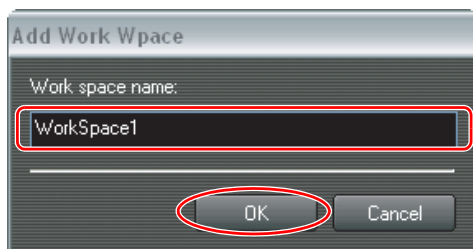
You can register your own panel layouts to suit the purposes of the projects.

1



Select [View] ▶ [Work Space] ▶ [Add Work Space].

2



Input the name of the work space and click [OK].

The positions of the windows are registered, and the name of the work space will be displayed in the menu.

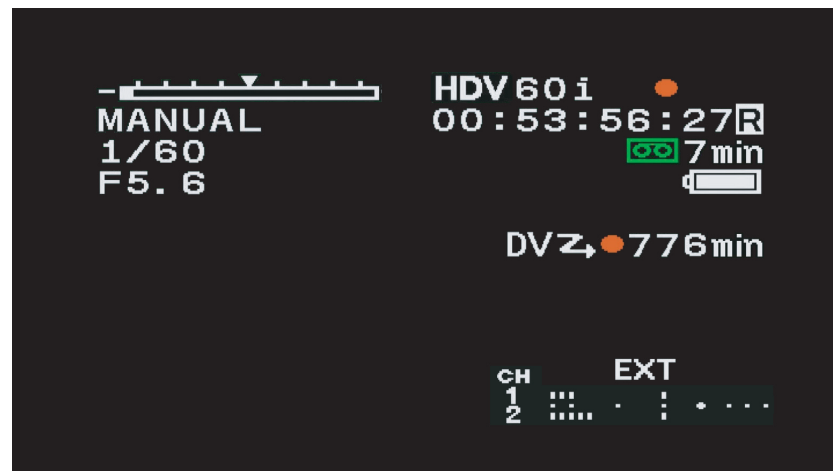
- Up to 10 workspace configurations can be registered. To delete a work space, select [View] ▶ [Work Space] ▶ [Delete Work Space].
- To choose the registered work space, select [View] ▶ [Work Space] and the name of the registered work space. You can also press the [Ctrl] key and the number key (which corresponds to the displayed work space number) simultaneously to switch the work space.

Add Work Space(A)...
Delete Work Space(D)...

1. Standard
2. Work Space A
3. Work Space B

Camcorder Screen

The CONSOLE status and the remaining recording time on the hard disk are displayed on the camcorder screen.



| Icon | CONSOLE Status |
|------|---|
| | Not started |
| | Stop mode |
| | Recording |
| | Data dropping occurred (5-48). |
| | Cannot record (Appx-59). Check the setting of the video folder. |



- If [DVZ] is not displayed, activate the DV CONTROL function of the camcorder.
- When XL2 is connected to the computer and other device is connected using IEEE1394, the status of the camcorder and the remaining recording time will not be displayed on the camcorder's LCD screen.
- When the hard disk does not allow recording (e.g. hard disk space is running out), recording is made only on the tape.

Chapter 3

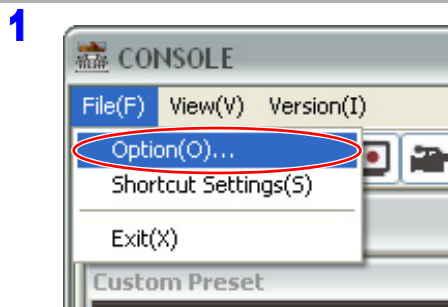
Various Settings and [Performance Check]

| | |
|--|------|
| Video Folder and Recording Settings..... | 3-17 |
| [General] Tab..... | 3-17 |
| [DV Rec] Tab..... | 3-18 |
| [HDV Rec] Tab | 3-18 |
| [Performance Check]..... | 3-19 |
| Changing the Default Shortcut Key Settings | 3-21 |

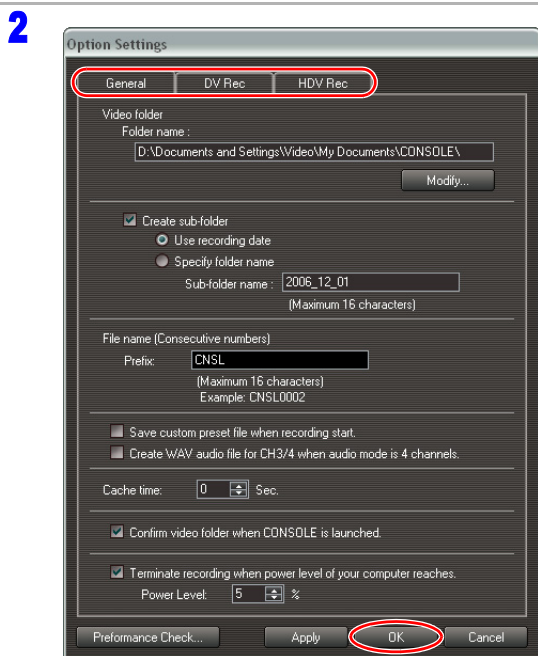
Various Settings and [Performance Check]

Video Folder and Recording Settings

You need to specify the video folder (a target folder), file name and other settings before you start the recording the camcorder pictures onto the hard disk.

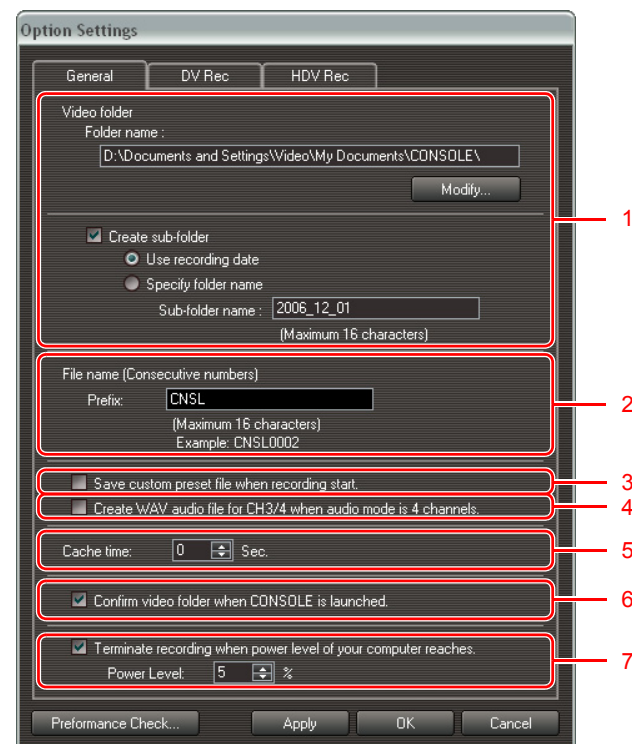


Select [Option] from the [File] menu, or click .



Choose one of the tabs, set the option settings and click [OK].

[General] Tab



- 1 [Folder name] Shows the selected folder.
[Modify] Selects a different folder.
[Create sub-folder] Creates a subfolder within the folder shown under [Folder name]. You can name the folder after the date by selecting [Use recording date] or specify a new folder name under [Specify folder name].
- 2 Specify the file name of the video recording. A sequence number (up to 9999999) will be allocated after the specified prefix (e.g. "CNSL0001.avi").
- 3
 - Place a check mark to record the Custom Preset settings of the camcorder onto the hard disk. CONSOLE only saves the settings of the camcorder when the recording is started. The name of the Custom Preset file will be the recording file name, and the extension is ".cpf".
 - When [Sequence] or [Frame] mode is selected in the [DV Rec] tab of the [Option Settings] window, the Custom Preset file will be recorded only when you started the recording.
- 4 When the camcorder's sound setting is set to 4ch, channel 3 and 4 sounds will be recorded separately from the recording file. For example, when "DVPC0001.avi" is recorded, "DVPC0001_sub.wav" is recorded in video folder.
- 5 Sets the cache recording time (5-46).
- 6 Placing a check mark displays a dialog confirming the video folder each time you start CONSOLE.
- 7 When the remaining battery power goes down below the specified level, the hard disk recording will be automatically terminated.

CONSOLE Windows

Various Settings and [Performance Check]

Camera and Picture Control

Recording onto the Hard Disk

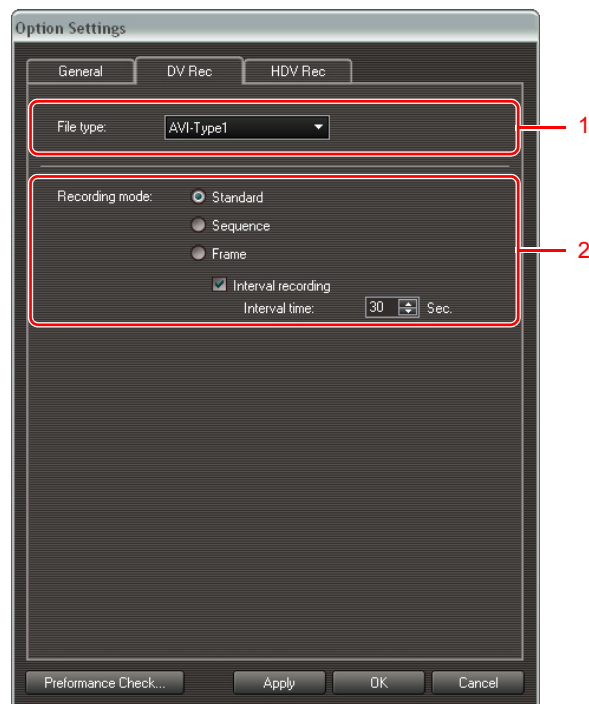
Playback the Recorded Files

3-18

Various Settings and [Performance Check]

[DV Rec] Tab

This tab is for the DV standard recording settings when you record in DV.



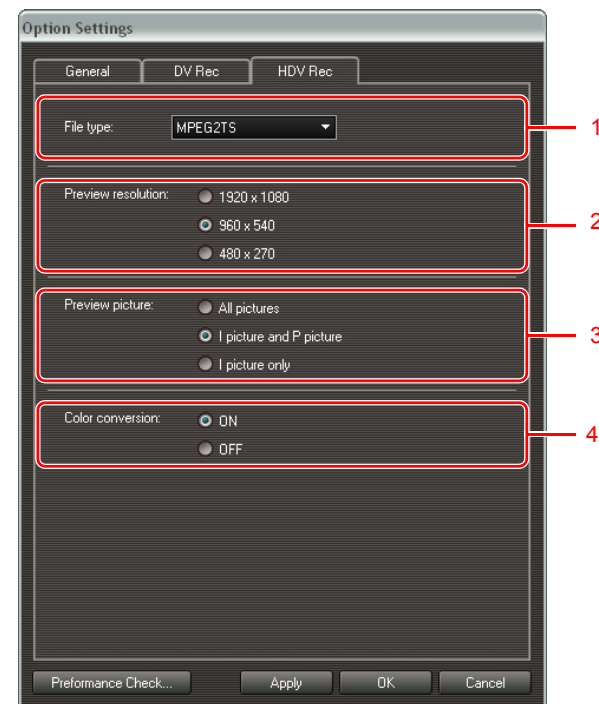
- 1** Select the recording file type.
Select the AVI type that is compatible with your editing software. You can select the file type from [AVI-Type1], [AVI-Type2] or [DV-MXF]. For details, refer to the instruction manual of the software or consult the software manufacturer.
- 2** Select a mode for recording onto the hard disk.
 [Standard] A new file will be created each time you start recording a new scene.
 [Sequence] The new scene will be added to the same file.
 [Frame] 1 frame is recorded and added to the same file each time you press the recording button. (□ 5-47)
 - Placing a check mark at [Interval recording] makes CONSOLE to repeatedly record the frame image at the specified interval time.



- Avid Xpress® can properly read 60i, 30F, 50i or 25F MSF files recorded by CONSOLE; it cannot read 24F MXF files recorded by CONSOLE.
- When recording an [DV-MXF] picture, WAV sound files with the same file name as the recording file will be saved. The sounds on channel 1 and 2 will be recorded in "File Name.WAV". When the audio mode is set to 4CH, the sounds on channel 3 and 4 will be recorded in "File Name_sub.WAV". When using the editing software, load all the sound files.

[HDV Rec] Tab

This tab is for the HDV standard recording settings when you record in HDV.



- 1** Select the recording file type.
Select the AVI type that is compatible with your editing software. You can select the file type from [MPEG2TS] or [MPEG2ES]. For details, refer to the instruction manual of the software.
- 2** Select the [Preview resolution] of the HDV standard data. The size of the recording picture will not be changed.
- 3** Select the type of MPEG2 for the picture displayed in the preview. The types of the recording picture will not be changed.
- 4** Select whether or not you need to convert the color of the preview image. When the color of the preview image appears odd, select [OFF].



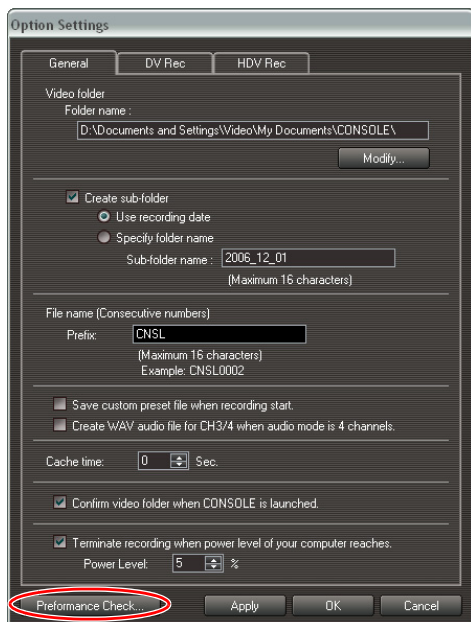
- When recording an [MPEG2ES] picture, WAV sound files with the same file name as the recording file will be saved. The sounds on channel 1 and 2 will be recorded in "File Name.WAV". When the audio mode is set to 4CH, the sounds on channel 3 and 4 will be recorded in "File Name_sub.WAV". When using the editing software, load all the sound files.
- The recorded [MPEG2ES] picture cannot be output to the camcorder.
- When [All pictures] or [I picture and P picture] is selected, data dropping (□ 5-48) may occur.

Various Settings and [Performance Check]

[Performance Check]

You can check whether the selected video folder can be used for saving the recordings before you start recording on the hard disk.

1



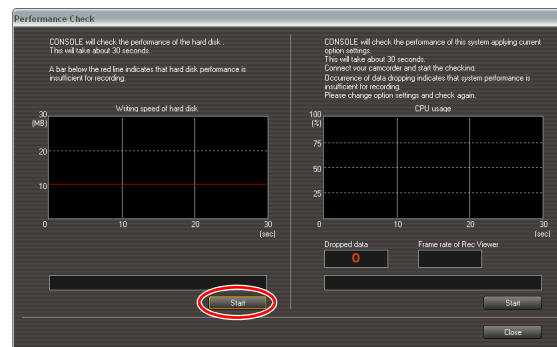
Set the recording settings and click [Performance Check].

When the [Performance Check] button is not being activated, click the [Apply] button.

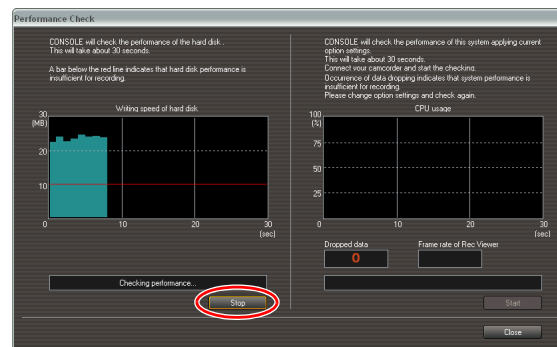
2

Click [Start] on the left side.

The performance check of the hard disk starts.



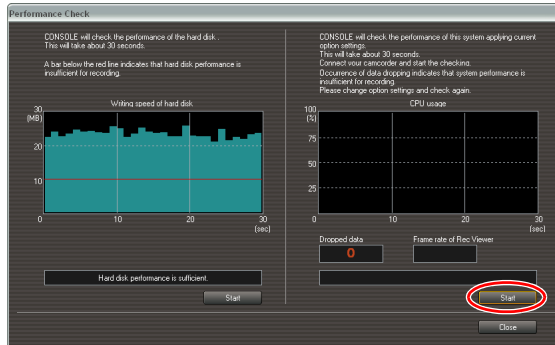
- CONSOLE writes the data to the selected folder to evaluate the performance of the hard disk and graphs out the results every second.
- The performance check takes approximately 30 seconds.
- To cancel the performance check, click [Stop].



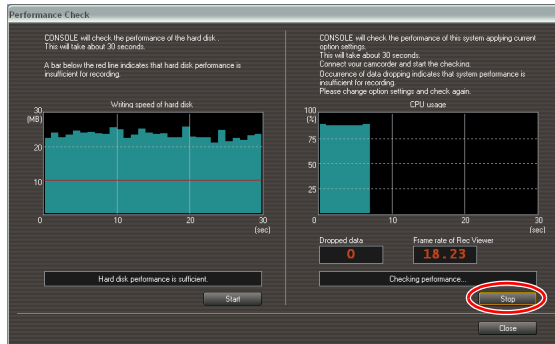
Various Settings and [Performance Check]

3 Click [Start] on the right side.

The performance check of the system starts.



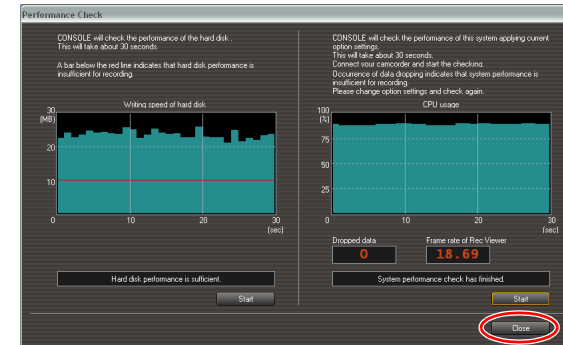
- CONSOLE writes the data to the selected folder to evaluate the CPU usage ratio and graphs out the results every second; furthermore, it evaluates the occurrences of the data dropping and the frame rate of the preview.
- The performance check takes approximately 30 seconds.
- To cancel the performance check, click [Stop].



- When CONSOLE executes the performance check, the recording data type used for writing (DV or HDV) will be according to the recording settings in the [DV Rec] tab.
 - When receiving the DV standard data from the camcorder while [Frame] is selected in the [DV Rec] tab, the writing test of the performance check will not be executed.

⚠ The performance check cannot be executed when CONSOLE cannot access to the hard disk.

4 Review the result and click [Close].



- Even if all bars are above the red line after executing the hard disk performance check or no data dropping has occurred during the system performance check, data may be dropped when a program accessing the hard disk (e.g. anti-virus software) is activated.
- A bar below the red line indicates that data may be dropped during recording (a part of the picture may not be written to the file).
- When recording in HDV standard is selected and data dropping occurs, select a smaller size at [Preview resolution] or [I picture only] at [Preview picture] in the [HDV Rec] tab. (3-18) The recording picture will not be affected even if you change the [Preview resolution] or [Preview picture].

CONSOLE Windows

Various Settings and [Performance Check]

Camera and Motion Control

Recording onto the Hard Disk

Playback the Recorded Files

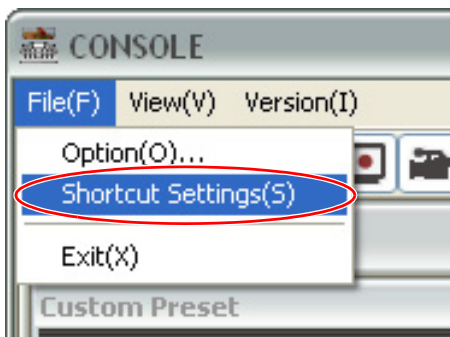
3-21

Various Settings and [Performance Check]

Changing the Default Shortcut Key Settings

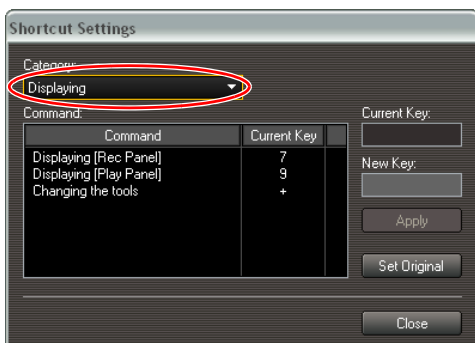
You can change the default shortcut key settings to convenient key settings.

1



Select [Shortcut Settings] from the [File] menu.

2

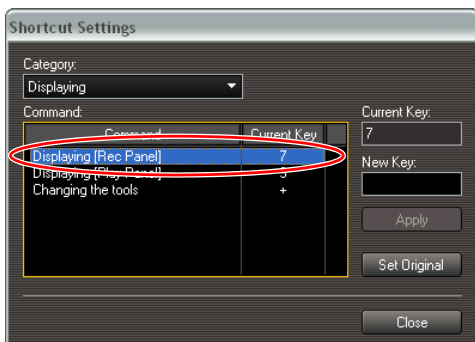


Click ▼ of [Category] and select the category to which the shortcut key that you wish to change belongs.



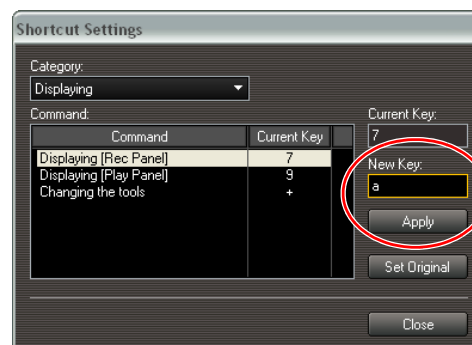
You cannot change the default settings of the [Work Space] shortcut keys.

3



Select the target shortcut key from the [Command] list.

4



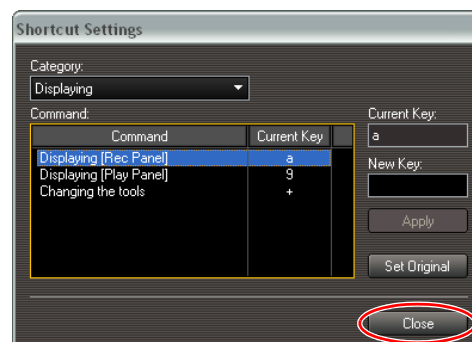
Enter the new key you wish to change to in the [New Key] box and click [Apply].

The new key setting will not be applied unless you click [Apply].



Clicking [Set Original] initializes the shortcut key settings to the default parameters (Appx-61).

5



Click [Close].

Chapter 4

Camera and Picture Control

| | |
|---|------|
| [Rec Viewer] | 4-23 |
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| Overlaying Marker..... | 4-24 |
| Splitting the Preview Image..... | 4-27 |
| Zebra Pattern | 4-27 |
| [Focus Assist] | 4-28 |
| [Camera Control] | 4-28 |
| [Control] Tab..... | 4-29 |
| [Information] Tab | 4-31 |
| Waveform Vector Monitor | 4-32 |
| [Color Control] | 4-34 |
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| [Detail] | 4-35 |
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CONSOLE Windows

Various Settings and [Performance Check]

Camera and Picture Control

Recording onto the Hard Disk

Playback the Recorded Files

4-23

Camera and Picture Control

Using the Recording tool to adjust the picture settings of the camcorder to create a picture in the [Rec Panel].

[Rec Viewer]



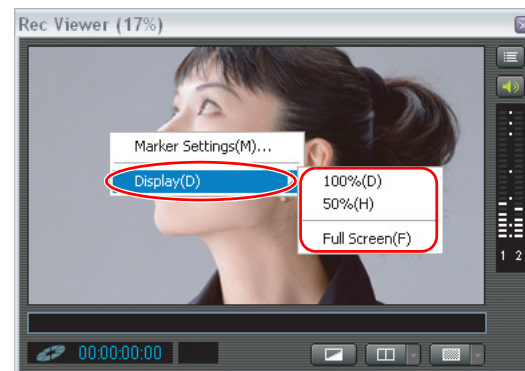
| | | |
|----|------------------------|--|
| 1 | [Rec Viewer] | Displays the camcorder picture. Right-clicking on the picture allows you to select the size of the preview panel (4-23) and display the overlay markers (4-24). |
| 2 | Audio Monitor Settings | Selects the audio channel displayed on the audio level indicator and adjusts the monitor volume. |
| 3 | Audio Monitor | Turns ON/OFF the computer's audio monitor output. |
| 4 | Audio Level Indicator | Displays the audio level output from the camcorder. The sound can be monitored with the computer's sound system. |
| 5 | Zebra Pattern | Displays the zebra pattern (4-27) in the preview. |
| 6 | Split | Splits the preview (4-27). |
| 7 | Color/Monochrome | Switches the preview between color and monochrome display. |
| 8 | Interval Counter | When [Interval recording] (3-18) is selected, the remaining interval time is displayed. |
| 9 | Time Code | Shows the time code of the file. |
| 10 | Recording Indicator | The indicator will turn while recording on the hard disk. |
| 11 | File Name | Displays the file name of the recording file. |



When the connected camcorder's recording mode is set to HD mode, there will be a delay between the image displayed on the camcorder's display and the image displayed on the computer screen.

Adjusting the Preview Size

The size of the [Rec Viewer] window can be adjusted freely by dragging the edge of the frame with the mouse. You can also change the size of the preview window with the size option in the right-click menu.



When the preview is in [Full Screen] mode, click the mouse to return to the previous size.



- The [Rec Viewer] window will be resized according to the specified size or the [Rec Panel] size. When [Rec Panel] cannot resize the [Rec Viewer] window according to the specified size, it will be displayed according to the [Rec Panel] size.
- The preview size on the title bar is displayed as a percentage of the preview resolution.
 - When previewing HDV data, the percentage will be based on 1920 x 1080 resolution.

Camera and Picture Control

Overlaying Marker

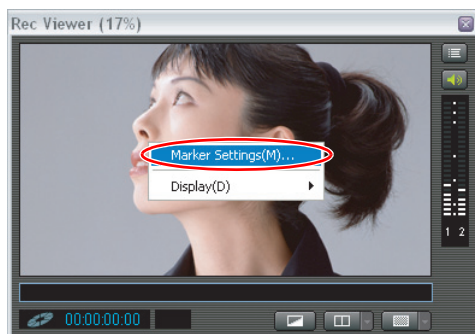
You can display the overlaying marker in the preview. The safety zone (90% and 80% of the preview image size), a center, a level and 8 types of aspect markers are predefined as the default markers.



When splitting the preview image (4-27), the markers are not displayed.

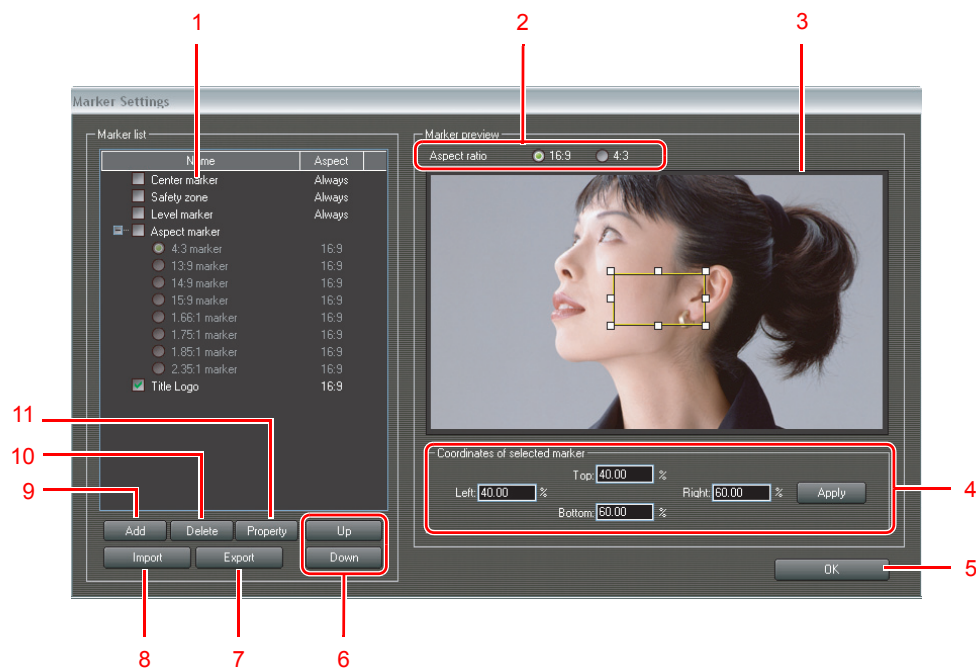
■ Displaying Overlaying Markers and Settings

1



Right click on the preview and select [Marker Settings] from the menu.

Select a marker and click [OK] to display the marker.



| | | |
|----|----------------------------------|--|
| 1 | Marker List | <ul style="list-style-type: none"> Placing a check mark displays the marker on the preview. <input checked="" type="checkbox"/> or <input type="checkbox"/> that appears next to a marker name indicates that the marker is a group marker which contains several markers in it. Select one of the markers in the group. Clicking <input checked="" type="checkbox"/> opens the group marker set and clicking <input type="checkbox"/> closes the displayed marker set, displaying only the group name. You can change the name and group that the marker belongs to. |
| 2 | [Aspect ratio] | Selects the aspect ratio of the marker preview. |
| 3 | [Marker preview] | Displays the marker and allows you to edit it. |
| 4 | [Coordinates of selected marker] | Taking the upper left corner as a base point, the coordinate of the marker is displayed as a percentage. You can directly enter the coordinates. |
| 5 | [OK] | Quits the marker setting, and displays the selected marker in the marker preview. |
| 6 | [Up]/[Down] | Moves the marker name in the marker list. |
| 7 | [Export] | Saves the marker. |
| 8 | [Import] | Adds a new marker in the marker list. |
| 9 | [Add] | Creates a new marker. |
| 10 | [Delete] | Deletes a marker. |
| 11 | [Property] | The property of the selected marker is displayed. You can change the group name and the marker name. |

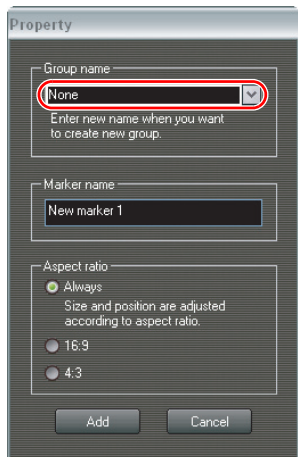
Camera and Picture Control

■ Adding a New Marker

1 Click [Add].



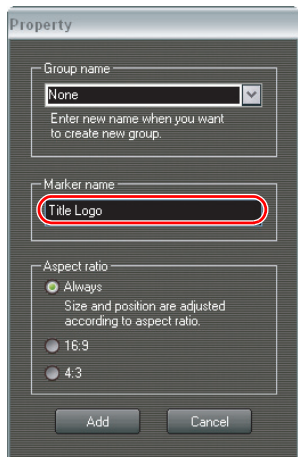
2



Select the marker group.

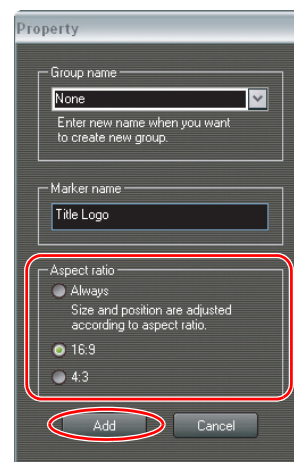
- If the new marker does not belong to any group, select [None].
- If you want to create a new group, enter the new group name.

3

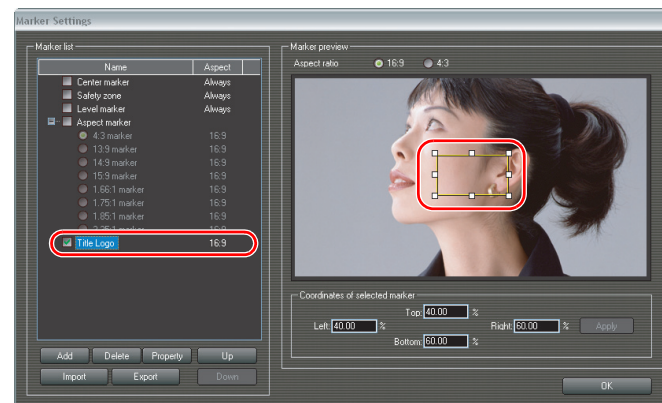


Enter the marker name.

4



Select the [Aspect ratio] and click [Add].



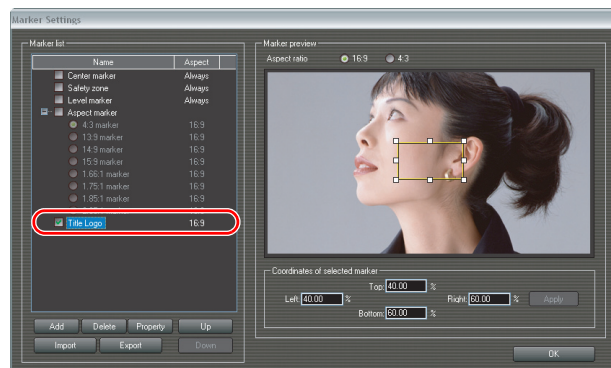
The new marker will be added; it appears as selected and will be displayed in the marker preview.

Camera and Picture Control

■ Editing the Marker

- 1 **Select a marker by placing a check mark and click the selected marker name.**

The marker is displayed in the marker preview.



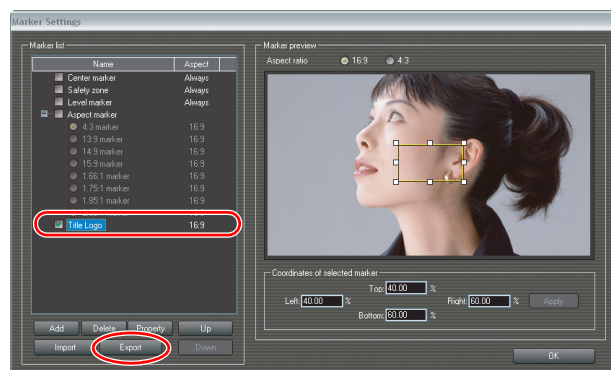
- 2 **Edit the marker by dragging with the mouse and/or entering the coordinates of the marker.**

- Drag the frame of the marker to move the marker.
- Drag one of the square marks on the frame to change the marker size.
- Taking the upper left corner as the base point, you can enter the coordinates of the marker as a percentage. Clicking [Apply] after entering the coordinates displays the marker at the specified coordinates.
- The safety zone, center, level and aspect markers cannot be edited.

■ Exporting the Marker

- 1 **Select a marker you wish to save and click [Export].**

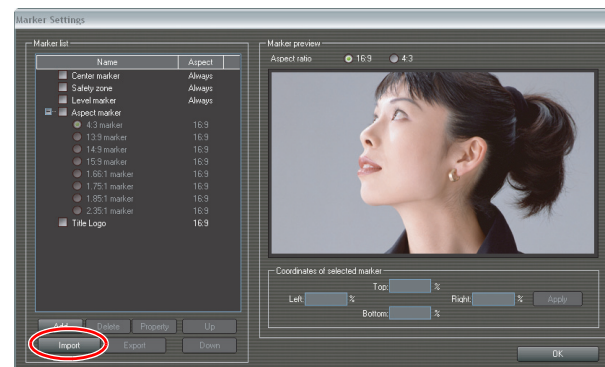
When a window asking the destination folder and the file name is displayed, specify the destination folder and the file name.



■ Importing the Marker

- 1 **Click [Import].**

When a window asking which marker to be imported, specify a marker that you wish to import.



- 2 **Enter the information about the marker and click [Add].**

- [Marker name] and [Aspect ratio] will be automatically entered according to the file.
- Clicking [Add] imports the marker and displays the newly imported marker in the marker list.

■ Deleting the Marker

- 1 **Select a marker or a group you wish to delete.**

- 2 **Click [Delete].**

- Click [Yes] when a confirmation window is displayed.
- When deleting a group, the group and all the markers in the group will also be deleted.
- The safety zone, center, level and aspect markers cannot be deleted.

Camera and Picture Control


Splitting the Preview Image

You can split the preview image vertically or horizontally and compare the camcorder picture with other picture. The splitting function helps you to compare the picture color or brightness with other picture when you want to adjust or change the settings.

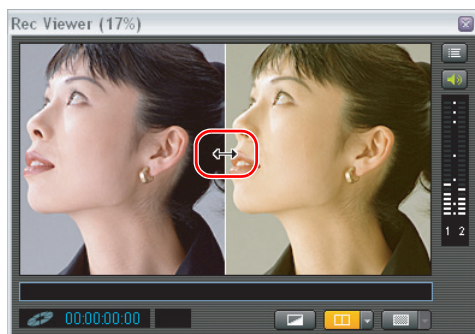
1




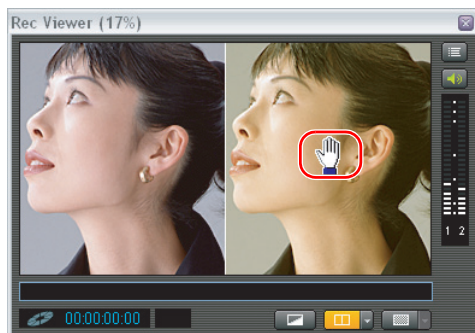
Click .

Clicking  cancels the splitting.


- You can drag the splitting line on the preview with the mouse to move the splitting line.



- The mouse cursor will change to  on the splitting preview image. By clicking on the preview image and dragging the mouse, you can reposition the displayed image.



Changing the Split Settings

You can change the splitting settings by clicking  while splitting the preview.



- Selects the position of the camcorder picture to be displayed. Selecting [Upper] or [Lower] splits the picture horizontally and [Right] or [Left] splits the picture vertically.
- Selects the reference picture to be displayed.
 [Capture camera view]: Displays a still image captured from the camcorder picture.
 [Play viewer]: Displays the picture that appears in the [Play Viewer] (6-50).
 [Still image file]: Displays a selected JPEG image.
- Refreshes the reference image when [Capture camera view] is selected as a reference image.


Zebra Pattern



You can display a zebra pattern on the preview.

1



Click .

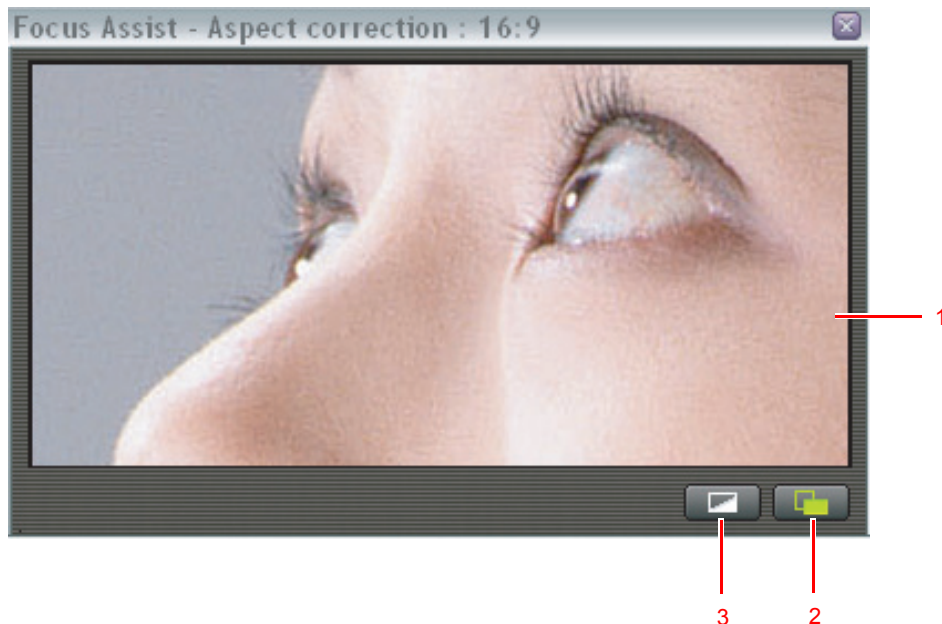
- When the camcorder is set to EXT.CONT. mode, the zebra pattern will be displayed also in the camcorder screen.
- Clicking  cancels the zebra pattern to be displayed.


- Clicking  next to  while displaying the zebra pattern on the preview lets you select the displayed zebra pattern level from the menu.
- The zebra pattern on the preview will not be recorded.

Camera and Picture Control

[Focus Assist]

The [Focus Assist] window displays a part of the camcorder picture as in its original size (100%). You can check the focus of the picture while the reduced size [Rec Viewer] is being used.



| | | |
|---|------------------|---|
| 1 | Focus Preview | Displays a part of the camcorder picture as in its original size. The mouse cursor will change to  on the focus preview image. By clicking on the preview image and dragging the mouse, you can reposition the displayed image. |
| 2 | Aspect Ratio | Changes the aspect ratio correction mode. When the correction is ON, the aspect ratio of the image is adjusted by CONSOLE to fit the aspect ratio of the monitor. The status of the mode will be displayed on the title bar. |
| 3 | Color/Monochrome | Switches over the preview to color and monochrome. |

[Camera Control]

This window enables you to control the hard disk recording and set the camcorder settings.



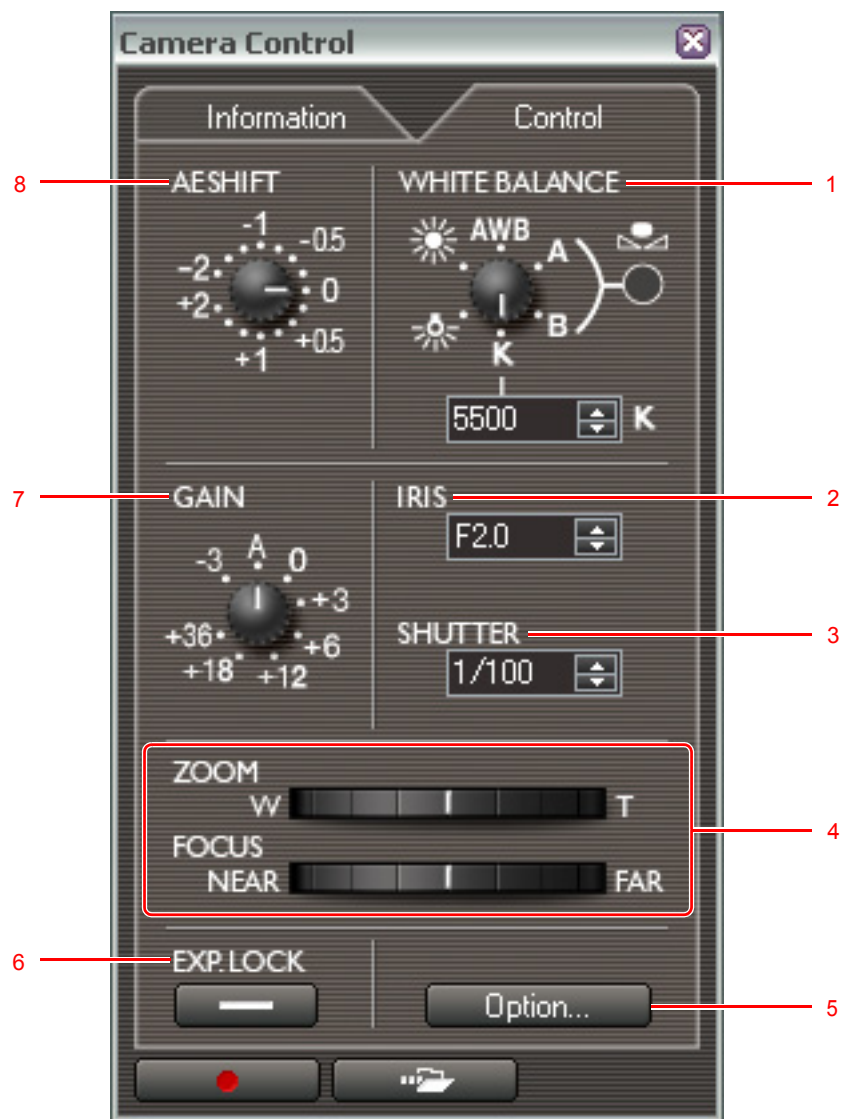
| | | |
|---|----------------------|--|
| 1 | [Information] | Displays the [Information] tab. |
| 2 | [Control] | Displays the [Control] tab. |
| 3 | Finalize | When [Sequence] or [Frame] mode is selected in the [Option Settings] window, you can finalize and save the recording file while recording. |
| 4 | Start/Stop Recording | Starts/Stops recording onto the hard disk. |

Camera and Picture Control

[Control] Tab

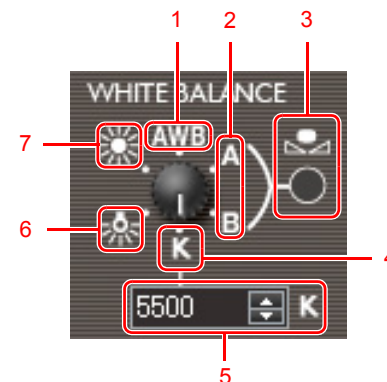


When the camcorder is set to the Camera mode, you cannot control all settings on [Control] tab. Set the camcorder's recording program to EXT.CONT.



1 [WHITE BALANCE]

You can adjust the white balance by clicking the indicated marks. Placing the mouse cursor on the panel and right clicking the mouse turns the pointer to the right; left clicking the mouse turns the pointer to the left. The panel image differs depending on the camcorder you are connecting. The screen shot below will be displayed when connecting the XH G1 or XH A1.



| | | | |
|---|--|----------------------|---|
| 1 | | Auto | Automated adjustment of the white balance. |
| 2 | | Preset A/B | Adjust the white balance to the preset setting. |
| 3 | | Custom White Balance | While one of the presets is being selected, clicking on this button registers the white balance setting. - For details about saving the white balance settings, refer to the camcorder instruction manual. |
| 4 | | Color Temperature | Specifies the color temperature. Clicking or in the Kelvin text box increases and decreases the value by 100K. You can enter a new value by clicking the Kelvin text box with the mouse and pressing the [Enter] key on the keyboard. Click the [Enter] key again to apply the new value. |
| 5 | | Kelvin Text Box | Sets the Kelvin degree of the Color Temperature, indoor or outdoor. |
| 6 | | Indoor (3200K) | Incandescent light. Clicking or in the Kelvin text box increases/decreases the value in 9 levels (1 level: approximately 100K). |
| 7 | | Outdoor (5600K) | Bright sunlight. Clicking or in the Kelvin text box increases/decreases the value in 9 levels (1 level: approximately 100K). |



The Kelvin degree for indoor and outdoor cannot be adjusted when connecting the XL H1 or XL2.

Camera and Picture Control

2 [IRIS]


You can set an aperture value.

3 [SHUTTER]


You can set the shutter speed.

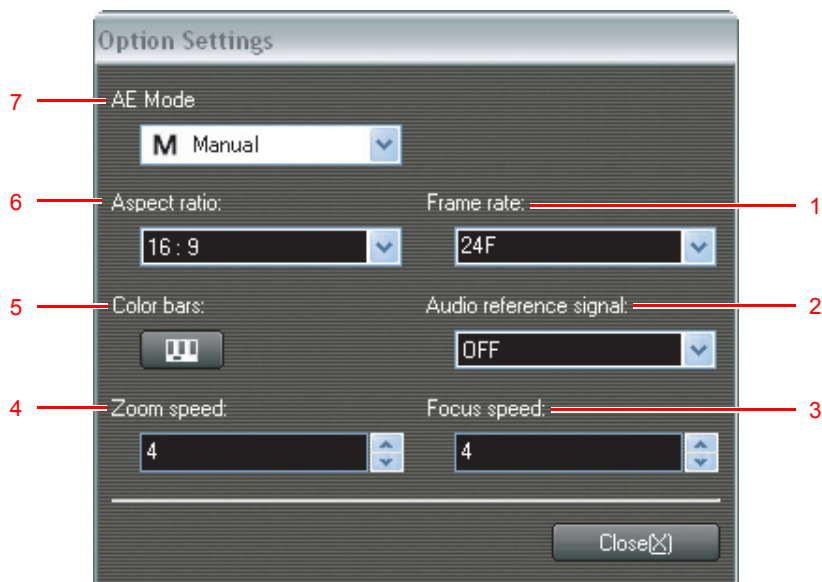
4 [ZOOM]/[FOCUS]

You can control the zooming and focusing functions of the camcorder by moving the slider. The zoom and focus position moves slowly when the slider is close to the center. When you move the slider further from its center, the camcorder zoom and focus position will move faster. You can also adjust the zoom and focus position of the camcorder with the [←] and [→] keys on the keyboard after clicking the slider with mouse.

-  ○ When you are using a manual video lens and selecting [Manual], you cannot control the zoom function from CONSOLE.
- When the focus switch of the lens is set to AF, or when you are using a manual video lens, you cannot adjust the focus function from CONSOLE.

5 [Option Settings]

Clicking  displays the [Option Settings] window.



| | |
|---|---|
| 1 | Selects a frame rate. |
| 2 | Selects a test tone when displaying the color bars. |
| 3 | Selects a focus speed when operating by keyboard. |
| 4 | Selects a zoom speed when operating by keyboard. |
| 5 | Displays/Hides the color bars. |
| 6 | Selects the aspect ratio when recording in DV. |
| 7 | Selects AE mode. |



The AE mode, aspect ratio and frame rate cannot be changed during the recording.

6 [EXP.LOCK]

Click this button to lock the exposure.

7 [GAIN]

You can adjust the gain level by clicking the scale. Placing the mouse cursor on the panel and right clicking the mouse turns the pointer to the right; left clicking the mouse turns the pointer to the left.



- The gain level can be set only when the AE mode is set to auto, Tv, Av or manual mode.
- When you are using XL2 and set the camcorder's frame rate to 24F or 30F (NTSC) or 25F (PAL) the camcorder's gain setting can only go up to +12dB even you set the CONSOLE's gain setting to +18dB.

8 [AE SHIFT]

You can adjust the AE level by clicking the scale. Placing the mouse cursor on the panel and right clicking the mouse turns the pointer to the right; left clicking the mouse turns the pointer to the left.

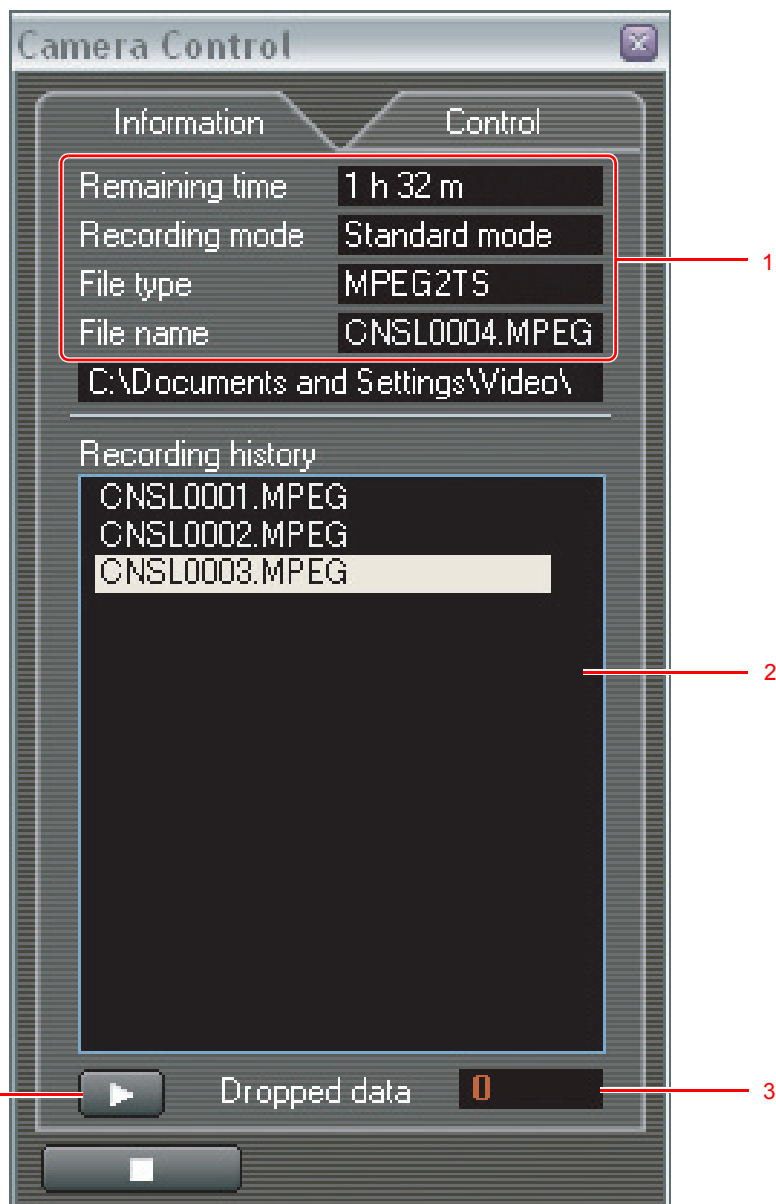


[AE SHIFT] can be adjusted only when AE mode is set to Auto, Tv or Av mode.

Camera and Picture Control

[Information] Tab

This tab shows information of the hard disk recording.

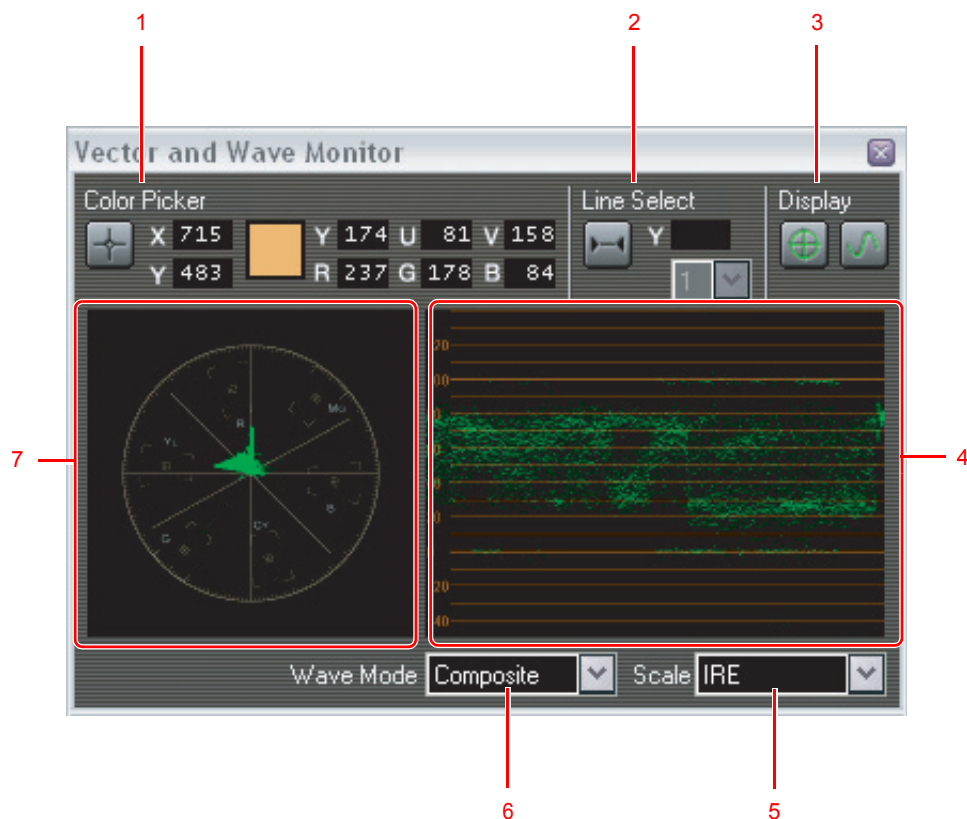


| | |
|---|--|
| 1 | Displays the recording file name, a recording mode, a file type and the video folder specified in the [Option Settings] window (□□3-17). |
| 2 | Displays [Recording history] (□□5-48). |
| 3 | Displays the number of data droppings occurred during recording (□□5-48). |
| 4 | Plays back the file selected in [Recording history] (□□5-48). |

Camera and Picture Control

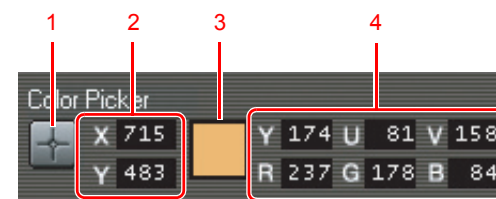
Waveform Vector Monitor

This monitor shows a waveform and color information of the picture displayed in the [Rec Viewer].



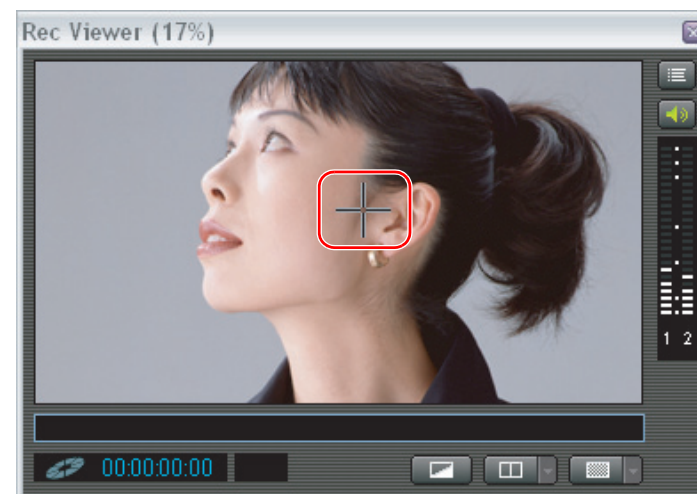
1 [Color Picker]

The values of selected pixel in [Rec Viewer] are displayed.



| | |
|---|---|
| 1 | Displays/Hides the color picker. |
| 2 | Displays the coordinate of the selected pixel. |
| 3 | Displays the color of the selected pixel. |
| 4 | Displays the numeric color value of the selected pixel. |

When the color picker is activated, a marker will be displayed on the preview. You can drag the marker to select a pixel.



Camera and Picture Control

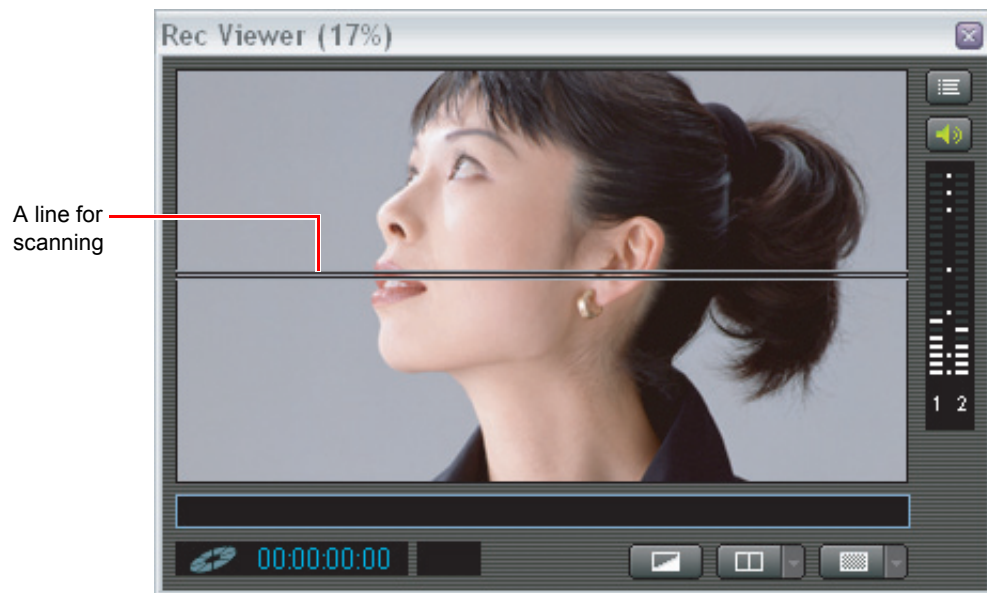
2 [Line Select]

You can select the image-scanning mode of the waveform monitor and the vector scope.



| | |
|---|--|
| 1 | Switches over between the line and full scan mode. |
| 2 | Displays the selected line number. |
| 3 | Selects a number of lines used in the line mode. |

A line on the preview will be displayed in the line mode. You can drag up/down the line with the mouse to select a scan line.



3 [Display]

You can display and hide the waveform monitor and the vector scope.

4 Waveform monitor

A waveform of the preview picture is displayed.

5 Scale

You can select the scale of the waveform monitor.

[IRE]: -40 IRE – +140 IRE

[Voltage 1]: -0.3V – +1.0V

[Voltage 2]: 0V – +1.3V

6 [Wave Mode]

You can select the display mode of the waveform monitor. In the PARADE mode, the waveform monitor will be tri-partitioned.

[Composite]: Displays a luminance and color-difference signal

[Y]: Displays the luminance signal

[YUV]: Displays the luminance signal, the blue differential signal, and the red differential signal in PARADE mode.

[RGB]: Displays RGB signals in the PARADE mode in the R, G, B order.


7 Vector scope

Displays the color information of [Rec Viewer]. Depending on the recording standards, the panel changes automatically.

Camera and Picture Control

[Color Control]

The settings for [Color Correction] and skin and sky details are managed on the [Color Control] window. You can switch over each panel by clicking the tabs.

 When connecting the XL H1 or XL2, this function will not be activated.

[Color Correction]

■ Determining and Adjusting the Color To Be Corrected

The color correction will be set by adjusting the hue, chroma, area and Y level, the corrections will only be applied to the set color.

- [Color Phase]: Select the basic color phase (0-15) of the color to be detected. Use the following values as an approximate reference: 0=purple, 3=red, 6=orange, 9=green, 12=blue.
- [Chroma]: Adjust the color saturation for the color to be detected. The more you adjust to [+], the area detected will extend to include more vivid and richer colors.
- [Area]: Adjust the color range for the color to be detected. Adjusting to [+] detects a wider color range, and to [-] a narrower color range.
- [Y Level]: Adjust the brightness for the color to be detected. Adjusting to [+] detects brighter colors, and to [-] detects darker colors.

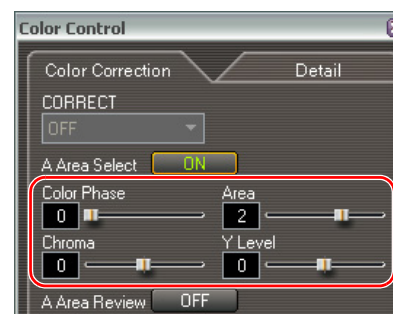
1



Click the [Color Correction] tab and **OFF** of [A Area Select].

- The [Color Phase], [Chroma], [Area] and [Y Level] sliders will be activated.
- To set the B area, click **OFF** of [B Area Select].

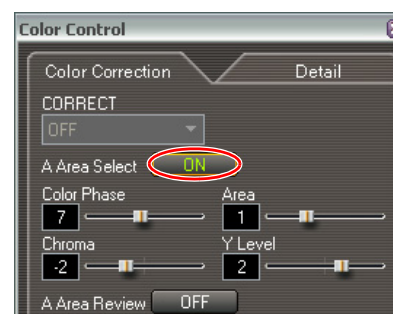
2



Adjust the levels of [Color Phase], [Chroma], [Area] and [Y Level] by moving the sliders.

- For details about each parameter, refer to the camcorder instruction manual.
- The area that will be corrected will appear as a white area alternating with the normal image.

3



Click **ON** of [A Area Select] to finish the setting.

Click **ON** of [B Area Select] to finish the B area settings.

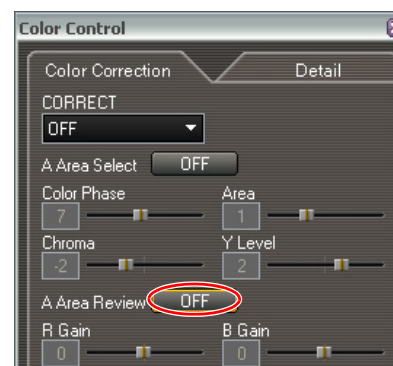


- Clicking the [Detail] tab while configuring the settings ends the setting process leaving the settings as they are.
- The Custom Preset settings cannot be adjusted while configuring the settings.

■ Adjusting the Color Correction

- [R Gain]: Adjust the red gain of the detected area. Adjusting to [+] results in stronger red tones, and to [-] in stronger cyan tones.
- [B Gain]: Adjust the blue gain of the detected area. Adjusting to [+] results in stronger blue tones, and to [-] in stronger yellow tones.

1



Click **OFF** of [A Area Review].

- [R Gain] and [B Gain] sliders will be activated.
- To adjust the B area color, click **OFF** of [B Area Review].

Camera and Picture Control

2



Adjust the levels of [R Gain] and [B Gain] by moving the sliders.

For details about each parameter, refer to the camcorder instruction manual.

3



Click **ON** of [A Area Review] to finish the setting.

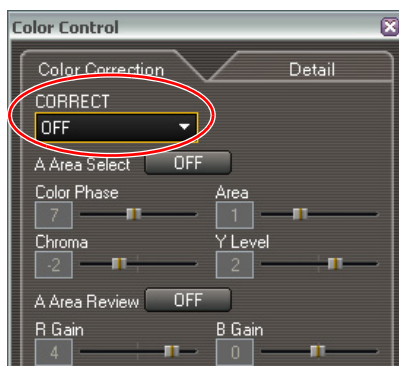
Click **ON** of [B Area Review] to finish the B area settings.



- Clicking the [Detail] tab while configuring the settings ends the setting process leaving the settings as they are.
- The Custom Preset settings cannot be adjusted while configuring the settings.

■ Executing the Color Correction

1



Click **▼** of [CORRECT] and select an area in which the color will be corrected.

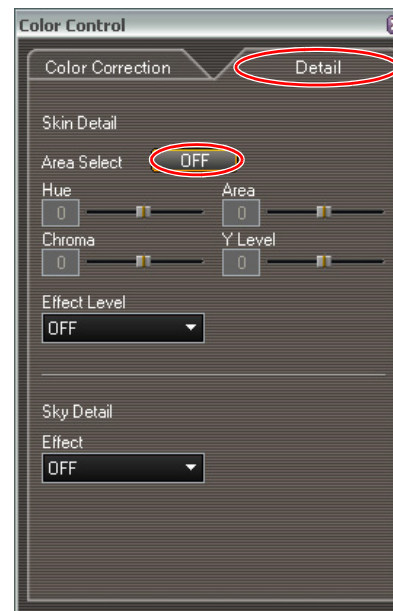
The color will not be corrected if [OFF] is selected.

[Detail]

Skin and sky details settings are managed on the [Detail] window.

■ Setting the Skin Detail Area

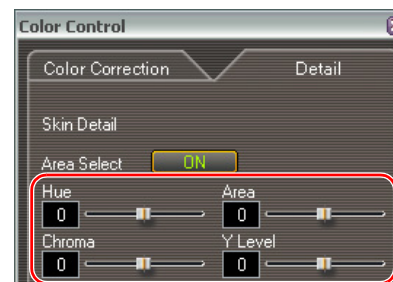
1



Click the [Detail] tab and **OFF** of [Area Select].

The [Hue], [Chroma], [Area] and [Y Level] sliders will be activated.

2

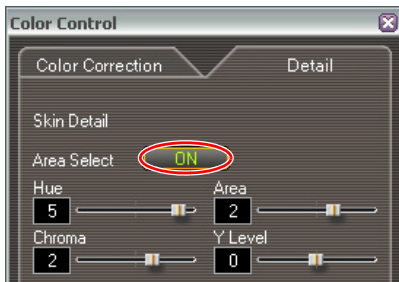


Adjust the levels of [Hue], [Chroma], [Area] and [Y Level] by moving the sliders.

- For details about each of the terms, refer to the [Color Correction] (4-34).
- The area that will be corrected will appear as a white area alternating with the normal image.

Camera and Picture Control

3



Click **ON** of [Area Select] to finish the setting.

4



Click ▼ of [Effect Level] and select [High], [Middle] or [Low].

The skin detail settings will not be effective if [OFF] is selected.



- Clicking the [Color Correction] tab while configuring the settings ends the setting process leaving the settings as they are.
- The Custom Preset settings cannot be adjusted while configuring the settings.

■ Setting the Sky Detail

1



Click ▼ of [Effect] and select [Soft].

- CONSOLE automatically detects the sky area (blue area) and reduces noises.
- The sky detail settings will not be effective if [OFF] is selected.

Camera and Picture Control

[Custom Preset]

You can adjust, load, save and export the Custom Preset settings. For details, refer to the camcorder instruction manual.

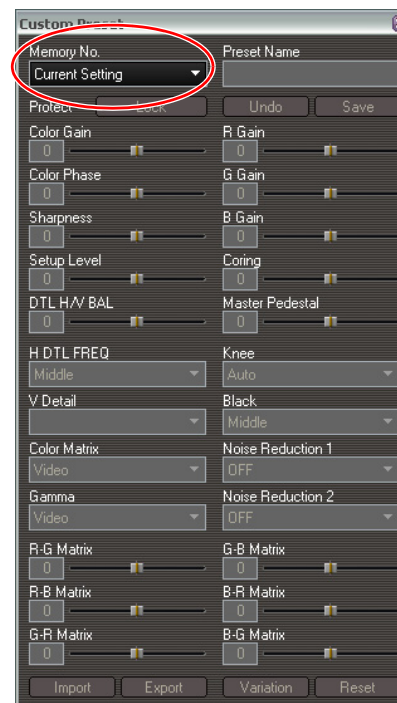


- Depending on the camcorder connected, some parameters differ. For details, refer to the camcorder instruction manual.
- The [Custom Preset] window cannot be used when recording.
- When using XL2, you need to set the camcorder's recording program to EXT.CONT.
- When using XL H1, you need to set the camcorder's recording program to EXT.CONT. to import and export the Custom Preset file saved on the card.
- **After altering the Custom Preset settings, you need to save the new settings. The new settings will not be saved in the following cases.**
 - Changing the camcorder mode from EXT. CONT. to other modes or from Camera mode to other modes
 - Disconnecting the IEEE1394 (DV) cable
 - Changing the position of the TAPE/CARD switch
- You can change the setting using the keyboard.
 - You can select the next item with the [↓] or [Tab] key, and go back to the previous item with the [↑] or [Shift] + [Tab] keys. You can also select items by pressing [2] (down), [4] (left), [6] (right), and [8] (up) keys.
 - The parameters can be changed with the [←] and [→] keys.



Adjusting the Custom Preset Settings

1



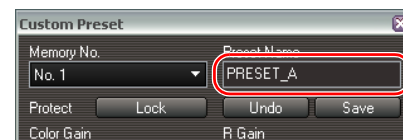
Click ▼ of [Memory No.] and choose a Custom Preset number that you wish to adjust.

- The selected Custom Preset settings are applied to the camcorder.
- The Custom Preset settings will not be applied if [OFF] is selected.
- When the camcorder is connected, the current settings applied to the camcorder will be displayed and [Current Setting] will be displayed in the [Memory No.] box.

2

Enter a Custom Preset name.

To enter a new name, click on the [Preset Name] box with the mouse and press the [Enter] key. Enter a new name and press the [Enter] key again to apply the new name.



Camera and Picture Control

3



Adjust each slider to obtain the image you want.

Clicking **Undo** resets the settings to the recently registered settings applied to the memory number.

4



Click **Save** to save the new settings.



If new memory is selected before clicking **Save**, a window asking you whether or not you wish to save the new settings will be displayed. Clicking [No] discards the new settings and displays the new selected memory number settings.

5

Click [Yes] to overwrite the new settings.

Importing the Custom Preset

CONSOLE imports the Custom Preset file in the camcorder or the hard disk and applies to the camcorder.



When importing the custom preset file from the card, you need to have installed the AV/C Camera Storage Subunit-WIA driver with a camcorder that is set to the EXT.CONT. mode connected to the computer.






1

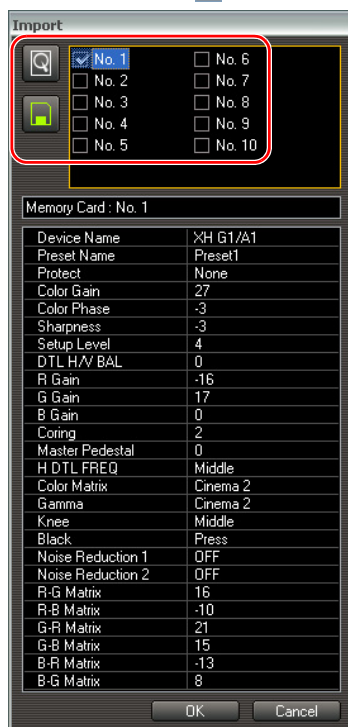


Click **Import**.

Camera and Picture Control

2 Select a Custom Preset file.

- When importing a Custom Preset file from the card, select .
 - When selecting , you cannot import Custom Preset files that were recorded separately when recording on a tape. To import such Custom Preset files, first copy them to the hard disk and import the file from the hard disk. (6-52)
- When importing a Custom Preset file from the hard disk, select .
 - Selecting  displays a list of the recently imported and saved files. You can select a file from the list. Click  to select a file that is not in the list.



The information of the selected Custom Preset setting is displayed, and the settings are applied to the camcorder only to preview the picture. The camcorder settings have not been set yet.

3 Check the camcorder picture and the settings, and click [OK].

Clicking [Cancel] stops importing the file and returns the camcorder setting to the previous setting.

Exporting the Custom Preset

You can save the current camcorder setting as a Custom Preset file.



When exporting the custom preset file from the card, you need to have installed the AV/C Camera Storage Subunit-WIA driver with a camcorder that is set to the EXT.CONT. mode connected to the computer.

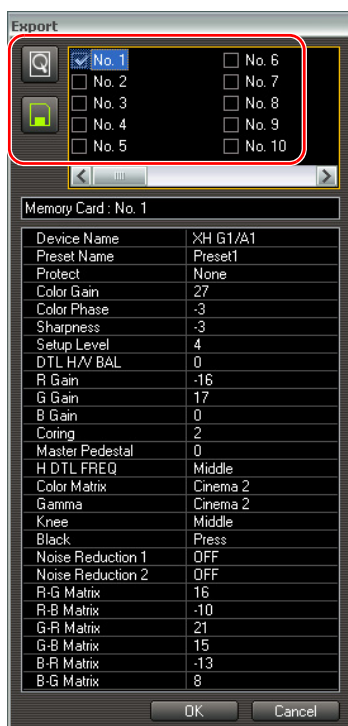
1



Click .




Camera and Picture Control

2



Select a destination to export the file.

The information of the selected Custom Preset setting is displayed and the settings are applied to the camcorder only to preview the picture. The camcorder settings have not been set yet.

- Select the preset number you wish to export when selecting .
- When selecting , specify a file name to be saved.
 - Select a file from a list of the recently exported and saved files. If you wish to export a file that is not in the list, click  and select a file.

3

Check the camcorder picture and the settings, and click [OK].

4

Input a preset name, specify the protect mode and click [OK].

- When a confirmation window appears, click [Yes].
- The Custom Preset file will be saved, and the camcorder settings will be returned to the previously selected Custom Preset file setting.

Practical Usages of the Custom Preset Files

Use of the Disconnected Camcorder After Adjusting the Custom Preset Files

This is how to apply the new Custom Preset settings to the camcorder that is disconnected from the computer, after adjusting the Custom Preset files by the computer.



After disconnecting the camcorder from the computer, you will lose the new Custom Preset settings adjusted from the computer if you do not save the file to the camcorder. When the camcorder's recording mode is set to Camera mode, the camcorder does not retain the new settings but returns to the Custom Preset settings active on the camcorder before connecting to the computer.

1

Adjust the Custom Preset settings. (📖4-37)

2

Save the new Custom Preset file to the camcorder.

3

Disconnect the DV cable from the camcorder.

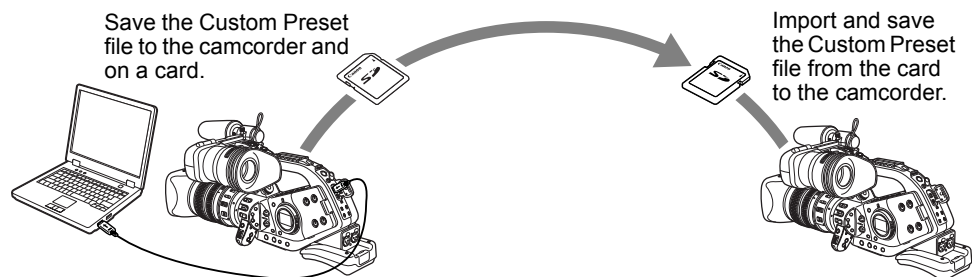
4

Apply the saved file created in step 2 to the camcorder by operating the CUSTOM PRESET SELECT and CUSTOM PRESET ON/OFF buttons on the camcorder.

Camera and Picture Control

Passing Down the Custom Preset Setting to the Other Camcorders

This is how to transfer the Custom Preset file to other camcorders using a card to make clone camcorders.



! The Custom Preset files created by XL2 and XL H1 are mutually compatible and the files created by XH G1 and XH A1 are mutually compatible as well. However, files created by XL2/ XL H1 are not compatible to XH G1/XH A1 and vice versa.

[Preparations]

Insert the card to the camcorder that is set to the EXT.CONT. mode. Connect the camcorder to the computer and install the AV/C Camera Storage Subunit-WIA driver (4-17). If you already installed the driver, you do not need to re-install it.

! For details about the steps 3 to 6, refer to "Inserting/Removing a Memory Card" and "Using the Custom Preset" on the camcorder instruction manual.

1 Adjust the Custom Preset settings.

2 Export (save) the adjusted Custom Preset file to both the card and the camcorder. (4-39)

- !** If you disconnect the cable before exporting the Custom Preset file and change the mode, the camcorder settings will be adjusted to the previous settings.
- When you cannot save on the card, export the Custom Preset file to the hard disk, change the connected camcorder to the next one, import the exported file to the second camcorder, and save the file on the camcorder. Installation of the AV/C Camera Storage Subunit-WIA driver may be needed for the second camcorder.

3 Insert the card with the exported file to the second camcorder.

You need to set the camcorder to the Camera mode.

4 Import the file saved on the card (previously exported) to the camcorder.

5 Save the imported file on the camcorder.

6 Apply the saved file to the camcorder by operating the CUSTOM PRESET SELECT and CUSTOM PRESET ON/OFF buttons on the camcorder.

If you intend to create multiple clone camcorders, repeat steps 3 to 6.

Creating a New Custom Preset File Using an Existing File as a Base

This is how to create a new Custom Preset file using another Custom Preset file as a base. Follow the procedure below to create new file without overwriting the existing file.

1 Select the existing Custom Preset number.

2 Export the selected Custom Preset file to the computer's hard disc. (4-39)

3 Select a different Custom Preset number.

4 Import the Custom Preset file (4-38) saved on the hard disc in step 2.

5 Adjust the Custom Preset file. (4-37)

Camera and Picture Control

Preset Variation

Clicking on **[Variation]** displays the [Variation] window. The [Variation] window shows still images captured from the camcorder picture with different parameters in order to contrast the current settings with alternative settings.



| | | |
|----|---------------------|---|
| 1 | [Display Mode] | <p>Selects the display mode of the current and candidate images.</p> <p>[Fit]: Resizes the still image so the whole image will be displayed in a frame.</p> <p>[Clip]: Displays the still image without adjusting its size. To specify which part in the image to be displayed, click [Position], and specify an area to be displayed in the [Position Select] window.</p> |
| 2 | [Level] | Specifies the variation level. Clicking [Apply] redisplay the images in the specified level. |
| 3 | [Reference] setting | <p>Specifies the reference image to be displayed.</p> <p>[Original]: Applies the same settings as the current image.</p> <p>[Image File]: Displays a selected still image file.</p> <p>[Play Viewer]: Displays a captured still image of the displayed picture in the [Play Viewer] window (□ 6-50).</p> |
| 4 | [Settings] | Displays the current Custom Preset setting. Placing the mouse cursor on the candidate image highlights the corresponding setting. You can close the window by clicking the button again. |
| 5 | Candidates | Still images with the different Custom Preset settings. Clicking one of the images makes CONSOLE to apply the settings of the selected image to the camcorder, and refreshes the window. |
| 6 | [Current] | A still image captured with the current Custom Preset settings. |
| 7 | [Cancel] | Closes the [Variation] window. The setting of the camcorder returns to original settings. |
| 8 | [OK] | Closes the [Variation] window. |
| 9 | [Reference] | A still reference image. |
| 10 | Category | Tabs of different categories of the Custom Preset settings. |



- When displaying the [Variation] window for the first time in HD and SD modes, the color bars will be displayed on the camcorder screen.
- The images used for the candidate are not the same images. Each of the images is captured separately by the camcorder. When using the [Variation] window, it is recommended to shoot a still object.

Resetting the Custom Preset

Clicking **[Reset]** resets the current settings.

Chapter 5

Recording onto the Hard Disk

| | |
|-----------------------------------|------|
| Recording a Movie File..... | 5-45 |
| By Operating the Camcorder | 5-45 |
| By Operating CONSOLE..... | 5-45 |
| Cache Recording..... | 5-46 |
| Setting the Cache Time..... | 5-46 |
| Cache Recording | 5-46 |
| Frame Recording..... | 5-47 |
| Setting the Frame Recording | 5-47 |
| Frame Recording | 5-47 |
| Data Dropping | 5-48 |
| Recording History..... | 5-48 |

Recording onto the Hard Disk

You can record video and audio from a connected camcorder on the hard disk of the computer by operating the camcorder or the recording panel of CONSOLE.



Before you start recording:

- If you set the video folder to an external hard disk, an error message "Delayed Write Failed" may be displayed while recording onto the hard disk, and the recording may be lost.
- Make a performance check (3-19) to make sure that the recording can be saved to the selected video folder.
- Make sure that [DV] is displayed on the camcorder screen. If [DV] or [DV] is displayed, you cannot record on the hard disk. In such case, check the setting of the video folder (Appx-59).
- When magnifying the viewfinder image by pressing the EVF MAGNIFYING button, the beginning of the recorded file may be magnified as well. When you are using the frame recording function, the recorded frame-by-frame image will be magnified when enlarging the viewfinder image. Deactivate the magnifying viewfinder before you start the recording.
- We recommend defragmenting the drive on which the video folder is located.
- Deactivate all programs that access the hard disk on a regular basis (e.g. as anti-virus software). Data may be dropped when such programs access the hard disk during recording.
- If you wish to edit using the time code, make sure to record simultaneously on a tape. The time code information will only be written to the hard disk when recording on a tape. The time code will not be written in the cache recording part (5-46).
- **In the following cases, recordings cannot be saved on a hard disk:**
 - During option settings or performance check.
 - When the sequence number of the file exceeds the maximum value (e.g. "CNSL9999999.avi").
 - When CONSOLE is started while using the camcorder with another software.
- **Observe the followings during recording:**
 - Do not activate any other software. When another software is running, data droppings may occur. Also, when software that accesses the camcorder (e.g. editing software) is started, CONSOLE may not operate correctly.
 - Do not change the settings in Windows [Display Properties] window.
 - Do not lock Windows by pressing the Windows key and [L] key on the keyboard.
 - When the computer shuts down or enters stand-by mode due to the running out of the battery, the recording file may be corrupted and/or may not be played back.
- Depending on the status of the camcorder or computer, a delay in recording start/stop may occur when you record on both the hard disk and tape.
- When you start recording simultaneously on the tape and the hard disk, the recording on the hard disk will start approximately one second later.

- The time limits for recording to a single file depends on the settings of the camcorder and CONSOLE. When the recording reaches the time limit recording pauses and then starts again automatically in a new file. However, there will be some scenes that are not recorded during the interval when recording stops and then restarts in the new file.

| Standard | File Type | Creating WAV audio file for CH3/4 when audio mode is 4 channels | Camcorder's Audio Settings | |
|----------|------------------------|---|----------------------------|-----------------------|
| | | | 2CH | 4CH |
| DV | AVI-Type1 AVI-Type2 | Checked | Not Limited | 4 hours 30 minutes |
| | | Unchecked | Not Limited | Not Limited |
| | MXF | Checked | 3 hours | 3 hours |
| | | Unchecked | 3 hours | 3 hours |
| HDV | MPEG2TS | Checked | Not Limited | 3 hours |
| | | Unchecked | Not Limited | Not Limited |
| | MPEG2ES | Checked | 3 hours | 3 hours |
| | | Unchecked | 3 hours | 3 hours |

Recording onto the Hard Disk

Recording a Movie File

By Operating the Camcorder

1 Press the start/stop button on the camcorder.


- Recording starts on both the tape in the camcorder and the hard disk.
- When XL2 is connected to the computer and other IEEE1394 device is also connected at the same time, the hard disc recording will not be started even if you press the camcorder's start/stop button.
- When [Save custom preset file when recording start.] is selected in the [General] tab setting, the Custom Preset file will be saved in the same folder as the video folder. The name of the Custom Preset file is the same as the recording file name.
- [DV2] appears on the camcorder screen.
- When no tape is inserted, or the tape is write-protected, recording is saved only on the hard disk.
- Even when the tape reaches the end, recording onto the hard disk continues.
- To stop recording, press the start/stop button on the camcorder again.





By Operating CONSOLE

1



Click  in the [Camera Control] window.

To stop recording, click .

- Recording starts on both the tape in the camcorder and the hard disk.
 - When [Save custom preset file when recording start.] is selected in the [General] tab setting, the Custom Preset file will be saved in the same folder as the video folder. The name of the Custom Preset file is the same as the recording file name.
 -  changes to , and the recording indicator in the [Rec Viewer] window starts rotating.
 - When no tape is inserted, or the tape is write-protected, recording is saved only on the hard disk.
 - Even when the tape reaches the end, recording onto the hard disk continues. When you restart the recording by pressing the camcorder's start/stop button after changing the tape, the camcorder will start to record on the tape, and CONSOLE will keep recording onto the hard disk.
 - **When recording in HDV standard on the tape and hard disk, a new file will be created after changing the tape when you restart the recording by pressing the camcorder's Start/Stop button. The computer stops the recording and restarts recording onto the new file.**
 - To record the next scene as another file in [Sequence] or [Frame] mode, finalize the file by clicking  while recording or when recording is stopped.
-  ○ When the frame rate was changed during recording, recording stops, and a new file will be created when recording is resumed.
- When using a laptop computer, the recording will not stop even if the display is closed.

Recording onto the Hard Disk

Cache Recording

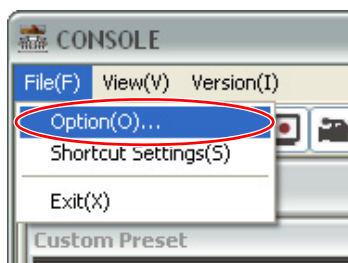
You can set CONSOLE to store the camcorder picture before recording. When you start recording, the last 10 seconds previous to the recording start are also recorded in the file. By using the cache recording, you can reduce the chances of missing the beginning of important scenes.



When you start a simultaneous recording while receiving the HDV standard signal, the cache recording cannot be performed.

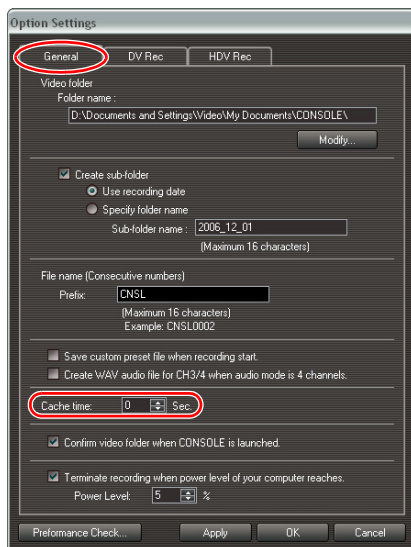
Setting the Cache Time

1



Select [Option] from the [File] menu or click .

2



Select [General] tab, and set the cache time.

- You can select from “0 Sec.” to “10 Sec.”.
- Selecting “0 Sec.” disables the cache recording function.

3

Click [OK].



- When recording in DV and [Recording mode] is set to [Frame], the cache recording function is disabled.
- When recording in HDV, the cache recording time is actually longer than the time set.
- The cache recording data is cleared in the following cases:
 - When the frame rate is changed.
 - When the sound recording mode is changed.
 - When the recording mode is switched from ^{EXT.}CONT. to one of the other modes or from any other mode to ^{EXT.}CONT.
 - When the recording standard is changed.
 - When IEEE1394 (DV) is disconnected or reconnected.

Cache Recording

1

Set the cache time. ( 5-46)

If you close CONSOLE after setting the cache time, the cache recording will begin automatically the next time you start the software.

2

Start the recording. ( 5-45)

- CONSOLE records the cached picture and the camcorder picture onto the hard disk.
- The cached picture will not be recorded on the tape.
- When the recording is stopped, CONSOLE starts the cache recording again.

Recording onto the Hard Disk

Frame Recording

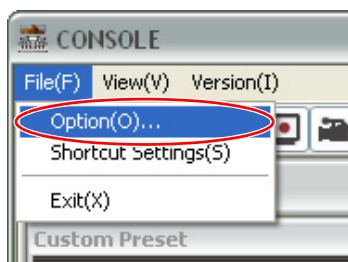
You can record frame by frame in the same file. This function enables you to easily create a stop motion animation movie.



- When recording in HDV or setting the frame rate to 24F, the frame recording function cannot be used.
- [DV 24p] will be displayed in the camcorder screen; however, the frame recording cannot be controlled from the camcorder.

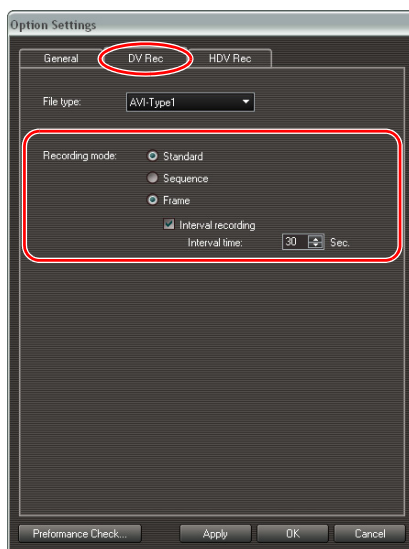
Setting the Frame Recording

1



Select [Option] from the [File] menu or click .

2



Select [DV Rec] tab and select [Frame] as the recording mode.

When [Interval recording] is checked, CONSOLE repeatedly records the frame image at the specified interval time.

3

Click [OK].








Frame Recording

1 Specify the frame recording settings. (5-47)

2

Click  in the [Camera Control] window.



- CONSOLE records onto the hard disk only. You cannot record on the tape when you are recording frame by frame.
- When [Interval recording] is selected in the [Option Settings] window,  changes to , and clicking  pauses the recording.
- When [Interval recording] is selected, the remaining time will be displayed in [Rec Viewer].
- If you want to record the next scene to a different file, click  to finalize the file.
- While  is appearing, clicking  stops the interval recording. To restart the interval recording, click .

Recording onto the Hard Disk

Data Dropping

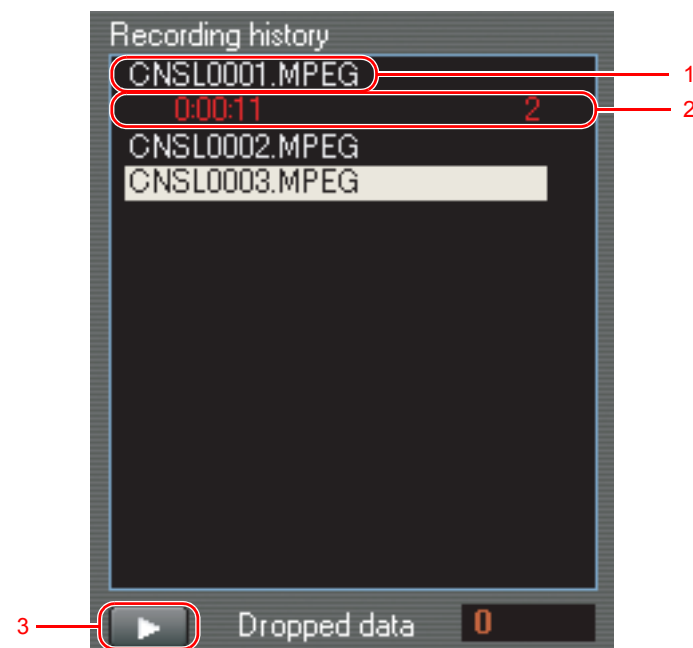
- If the hard disk is accessed while recording, a part of the data input from the camcorder may not be written to the file (data dropping). This may happen also when the processing capacity of the computer is insufficient.
- When the data dropping occurs, the number of data droppings occurred in a file will be displayed in the [Information] tab of the [Camera Control] window. When recording in DV, a number of dropped frames and when recording in HDV, a number of dropped blocks are displayed. Dropping one block in HDV recording corresponds to dropping from a few frames to up to 20 frames in DV recording.
- When the data dropping occurs, [DVZ●] changes to [DVZ○] for a few seconds.
- When the file is created on the hard disk after recording, you can check the scenes where data dropping occurred under [Recording history].
- If the [CPU usage] displayed in the [Performance Check] window (3-19) shows 100%, change the software settings using one or more of followings to reduce the rate. (90% or less is recommended.)
 - When recording in HDV standard, select [File] ▶ [Option] and click on the [HDV Rec] tab. Select a smaller size in [Preview resolution] and/or select [I picture and P picture] or [I picture only] in [Preview picture].
 - Hide or reduce the window size of the [Rec Viewer] window.
 - Hide or reduce the window size of the [Vector and Wave Monitor] window.



Recording History

When you stop recording the picture in [Standard] mode, or when a file is created after finalizing in [Sequence] or [Frame] mode, the created file information will be displayed under [Recording history] in the [Camera Control] window.



The recording history will disappear when you close CONSOLE. When you wish to review the history after you have closed CONSOLE, open the "CONSOLE.LOG" file in the video folder with a text editor. You can check the file name, recording date, file size, length, file type, and the information about dropped data.



| | | |
|---|-----------------------------|---|
| 1 | File name | Shows the file name recorded with CONSOLE. The file information appears when you leave the mouse pointer on the file name for a moment. |
| 2 | Information on dropped data | If data dropping occurred, the position and number of dropped data are shown here. |
| 3 | Playback | When a file name is selected: Clicking  starts the playback panel and the file is played back from the beginning. When information on dropped data is selected: Clicking  plays back the file in the [Play Viewer] window from the point where the data dropping occurred. |

Chapter 6

Playback the Recorded Files

| | |
|------------------------------------|------|
| [Play Viewer] | 6-50 |
| Output to the Camcorder..... | 6-51 |
| Time Slider | 6-51 |
| Waveform Vector Monitor | 6-52 |
| File Browser | 6-52 |
| Copying from the Memory Card | 6-52 |

Playback the Recorded Files

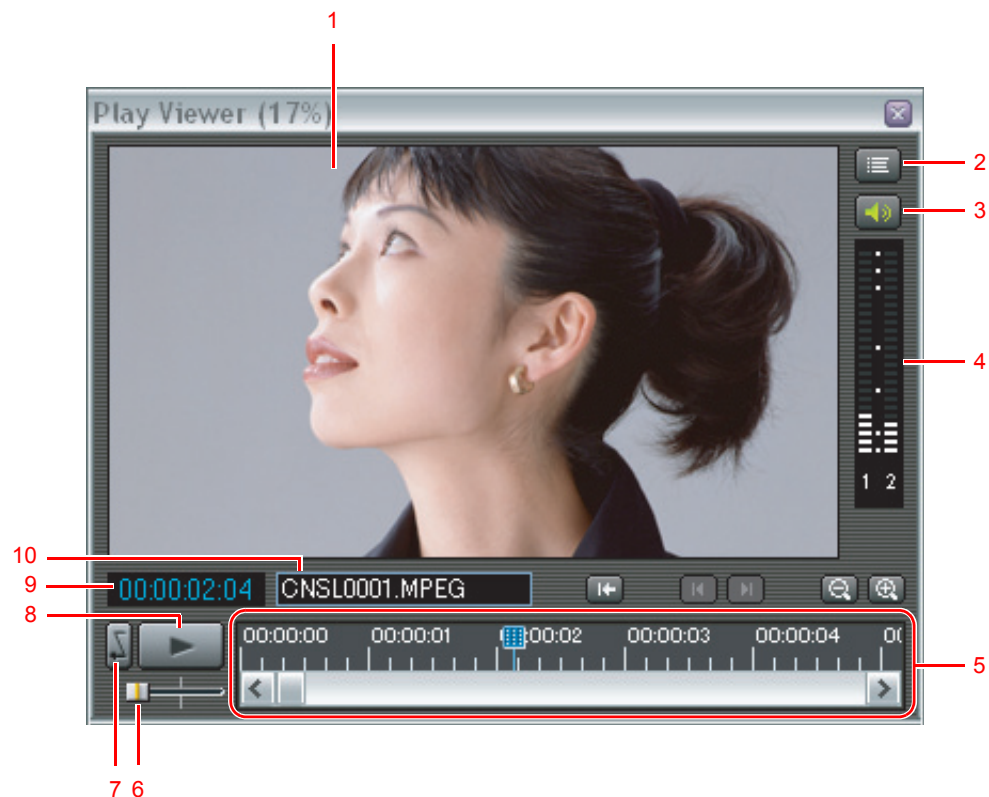
You can playback or view the recorded pictures using playback tools in [Play Panel].

[Play Viewer]

You can playback and preview the recorded files.



When the preview image is not smoothly played back, the playing back condition of the image may be improved by hiding the [Rec Panel] or [Rec Viewer], not displaying the camcorder picture.



| | | |
|----|------------------------|--|
| 1 | Playback Preview | Displays the played back pictures selected in the [File Browser] window (6-52). Right clicking on the preview window allows you to select the size of the preview panel (4-23) and to display the overlay markers (4-24). |
| 2 | Audio Monitor Settings | Selects which audio channel to be displayed on the audio level indicator and adjusts the monitor volume. |
| 3 | Audio Monitor | Turns ON/OFF the computer's audio monitor output. |
| 4 | Audio Level Indicator | Displays the audio level of the playback file. The sound can be monitored with the computer's sound system. |
| 5 | Time Slider | Allows you to change the playback position. (6-51) |
| 6 | Special Playback Modes | Specifies the playback speed (Special Playback Modes). There is no sound during special playback. The special playback modes can be applied to fast-forwarding only. DV/HDV: 1/3, 1/2.5, 1/2, 1x, 2x, 4x |
| 7 | Output | Displays the playback images on the camcorder screen. (6-51) |
| 8 | | Plays/Pauses the playback file. When you pause the file, click to restart the playback. |
| 9 | Time Code | Shows the playback position of the file. |
| 10 | File Name | Displays the playback file name. |

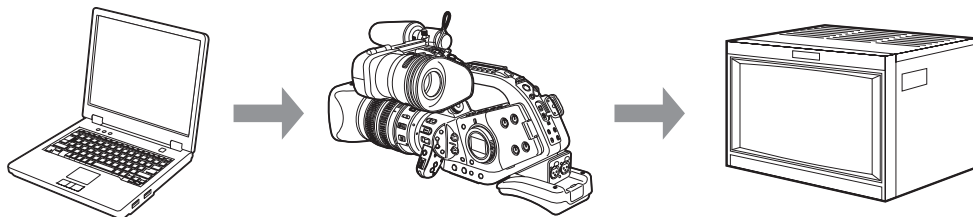


You cannot monitor the sound on channel 3 and 4 when playing back a MPEG2ES recorded in HDV.

Playback the Recorded Files

Output to the Camcorder

By connecting the camcorder to the monitor, you can output the recorded pictures from the computer to the monitor.






- To output the playback pictures to the camcorder, you need to set the camcorder's recording program to **EXT.CONT.**
- When using XL H1:
 - If you select the HD mode, only video in HDV standard video is displayed on the monitor; if you select the SD mode, only video in DV standard video is displayed on the monitor.
- When using XL2:
 - Only video in DV standard is displayed on the monitor.
- When the camcorder is set to HD mode and the [HD DOWN-CONV] menu under [SIGNAL SETUP] in the [VCR/PLAY] menu is set to [ON], the playback picture will not be output to the camcorder.
- When [HD DOWN-CONV] is set to [ON] and you are unable to output the playback picture to the camcorder, do not change the POWER dial from EXT.CONT. to any of the recording programs. To do so, causes the error message "Another application is accessing the camcorder." to be displayed in the software status (□ 2-13). In this case, disconnect and reconnect the DV cable.
- The camcorder's SDI terminal cannot be used for outputting pictures from CONSOLE.
- When setting the camcorder to EXT.CONT. the following limitations apply to CONSOLE.
 - Unable to use the special playback modes.
 - The sound cannot be monitored with the computer's sound system.
 - When pausing the playback, no image is displayed on the monitor.
 - Unable to playback MPEG2ES picture.
 - Unable to record pictures.

1 Click in the [Play Viewer] window.

- CONSOLE changes its mode to the output mode, and the camcorder will be set to the receiving mode.
- While the camcorder is set to the receiving mode, recording cannot be performed.

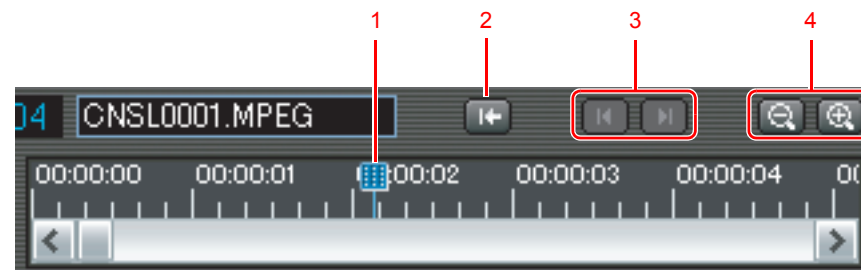
2 Select a file in [File Browser] (□ 6-52).

3 Click or double-click the selected file in [File Browser].



- The playback file is displayed in [Play Viewer] and the camcorder.
- Clicking  pauses the playback. Clicking  restarts the playback.
- A few frames will not be displayed when you pause and restart the HDV standard file.
- Clicking  returns the camcorder mode to the recording mode.

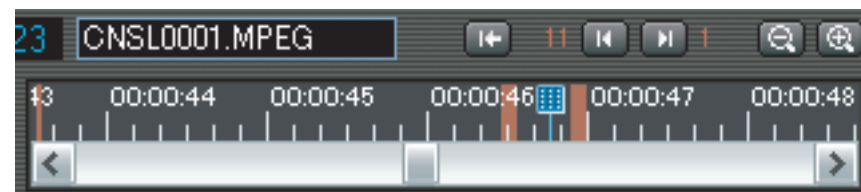
Time Slider

- You can change the playback position by dragging the slider with the mouse.



- | | |
|---|---|
| 1 | Slider |
| 2 | The slider returns to the starting point. |
| 3 | The slider moves to the data dropping point after the current position. |
| 4 | Change the time slider scale. |

- Data droppings that occurred during recording are indicated in red.
 - By clicking , the slider moves to the next data dropping point after the current position. By clicking , the slider moves to the previous data dropping point before the current position.



- While pausing the playback picture, pressing the [←] or [→] key on the keyboard after moving the slider with the mouse allows you to finely adjust the position of the slider.
 - When adjusting the position of the playback picture of an HDV recording with the [←] or [→] key, you cannot adjust the picture frame by frame.

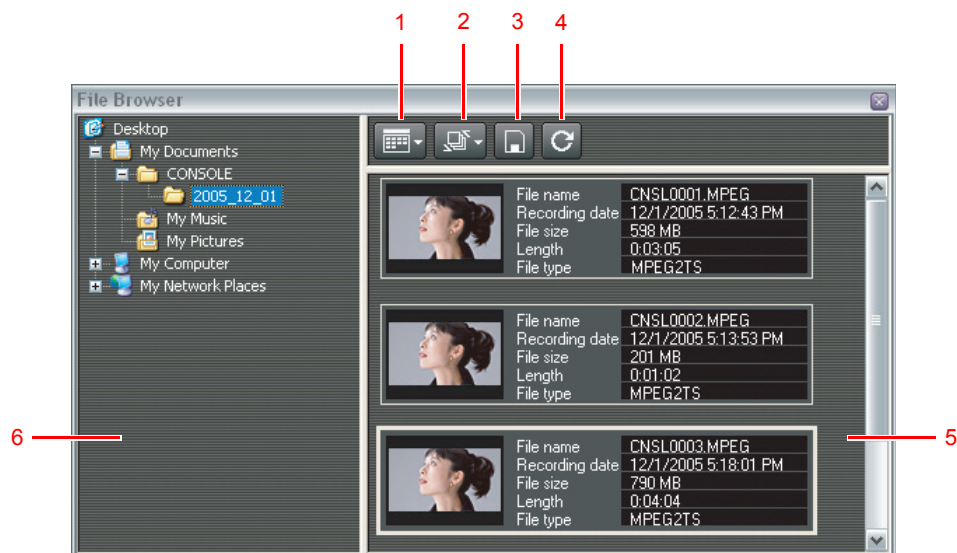
Playback the Recorded Files

Waveform Vector Monitor

A waveform of the playback picture and the color information are displayed. The functions are the same as the waveform vector monitor (4-32) of [Rec Panel].

File Browser

In the file browser, the files stored in the hard disk are displayed.



- 1 Selects the display pattern. You can select to display only the thumbnails or the thumbnails with the file information.
- 2 Selects the display order of the files.
- 3 Copies from the memory card (6-52).
- 4 Refreshes the files displayed in the window.
- 5 Displays the files in the selected folder. Double-clicking a file, the selected file will be played back in [Play Viewer].
- 6 Displays the explorer view.



- Placing the cursor over a file for a few seconds will display the file information.
- Files recorded in 24F mode are marked with (NTSC only).
- To delete a file, right-click the thumbnail and select [Delete] from the displayed menu.
- will be attached to the thumbnails of all Custom Preset files. By right clicking on the thumbnail, you can check the settings of the Custom Preset and can load the Custom Preset file to the camcorder.

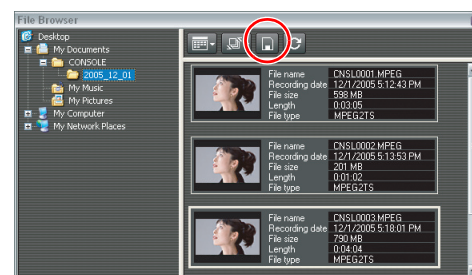
Copying from the Memory Card

You can copy the still image and the Custom Preset files from the memory card to the hard disk.



- If the total number of files recorded on the memory card is more than 1500 (XL H1) or 2000 (XH G1/XH A1), the file browser cannot display the files correctly. In this case, please copy the files to the hard disk using a card reader/writer, and then check the files in the file browser.
- When using XL2, you cannot use a memory card.
- You need to set the camcorder's recording program to EXT.CONT.
- Proper operation cannot be guaranteed if you are not using Canon camcorders to create the image files.

1



Click .

The thumbnails of still image files and the Custom Preset files are displayed.

2



Select a file you wish to copy.

- is attached to the thumbnails of the still image files that have the corresponding Custom Preset files that were recorded in the separate file at the same time when the images were recorded.
 - When selecting a still image with , the still image and its Custom Preset file also are copied.
- By clicking [Select All] selects all files in the card.
- By clicking [Show custom preset files only.] displays the Custom Preset files only.

3

Click [OK].

4

Select a folder for storing the copied file and click [OK].

To cancel the copying, click [Cancel].

Chapter 7

Uninstall

| | |
|--|------|
| Uninstalling the Software..... | 7-54 |
| Uninstalling the AV/C Camera Storage Subunit-WIA Driver..... | 7-54 |
| Uninstalling of the Drivers | 7-55 |

Uninstall

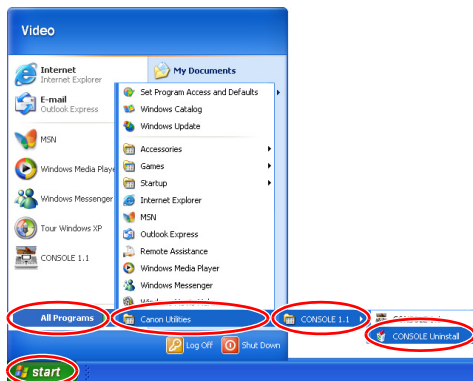
Uninstalling the Software

Uninstall the software if it has not been installed correctly, or if it is not required anymore.

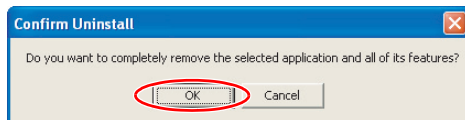


- Close any programs that are running, and disconnect the IEEE1394 (DV) cable from the camcorder and the computer before uninstalling the software.
- You need to log in as an administrator before uninstalling the software

- 1 From the [start] menu, select [All Programs] followed by [Canon Utilities], [CONSOLE 1.1] and [CONSOLE Uninstall].

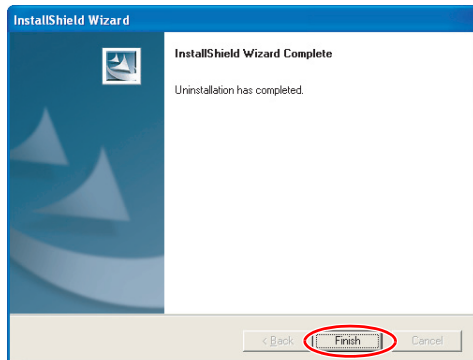


2



On the confirmation dialog, click [OK].

3



On the confirmation dialog, click [Finish].

Uninstalling the AV/C Camera Storage Subunit-WIA Driver

Uninstall the AV/C Camera Storage Subunit-WIA driver if it has not been installed correctly or if it is not required anymore.



- Close all programs that are running before uninstalling the driver.
- You need to log in as an administrator before uninstalling the driver.

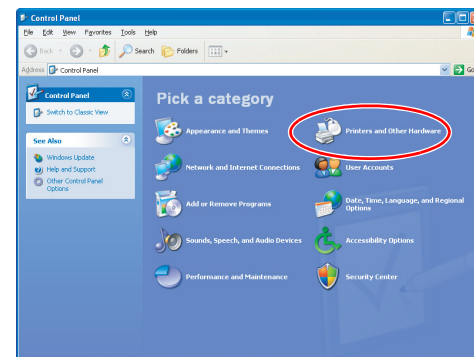
- 1 Turn the camcorder power on and set the camcorder's recording program to EXT.CONT.

- 2 Connect the camcorder to the computer using the IEEE1394 (DV) cable. (1-8)

If Scanner and Camera Wizard or Explorer is displayed, close the windows.

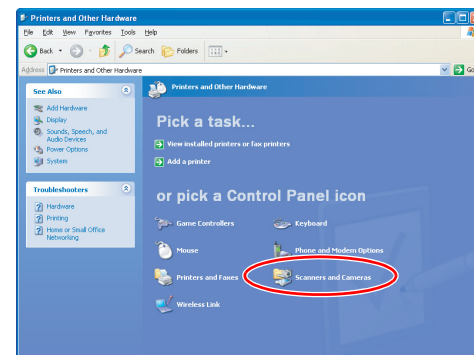
- 3 From the [start] menu, select [Control Panel].

4



Click [Printers and Other Hardware].

5

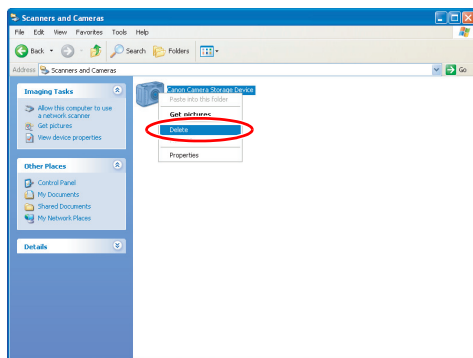


Click [Scanners and Cameras].

If you cannot find the [Scanners and Cameras] icon, see *Uninstalling of the Drivers* (7-55).

Uninstall

6



Right-click the [Canon Camera Storage Device] icon and select [Delete].

When the icon does not appear, see *Uninstalling of the Drivers* (□ 7-55).

7

In the confirmation dialog, click [Yes].

- [#(number)] may appear after [Canon Camera Storage Device], but that would not affect the uninstall process.
- The uninstall process is complete.

Uninstalling of the Drivers

If you had problems uninstalling the driver, use the following procedures to remove it.

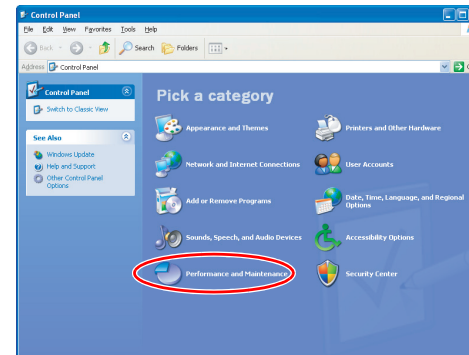


- Use the procedures below for the following circumstances too.
 - If you do not find the [Scanners and Cameras] icon in the [Printers and Other Hardware].
 - If the Camera icon does not appear in the [Scanners and Cameras] folder.

1

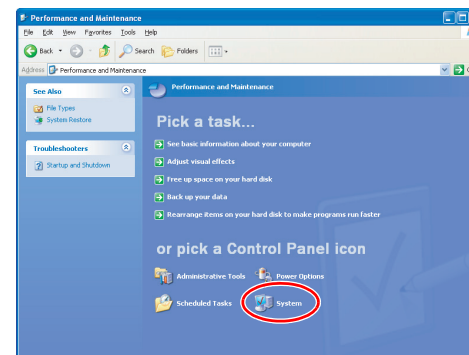
From the [start] menu, select [Control Panel].

2



Click [Performance and Maintenance].

3



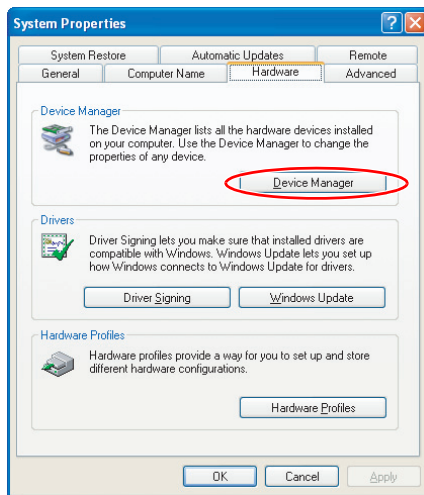
Click [System].

4

Click the [Hardware] tab on the [System Properties].

Uninstall

5

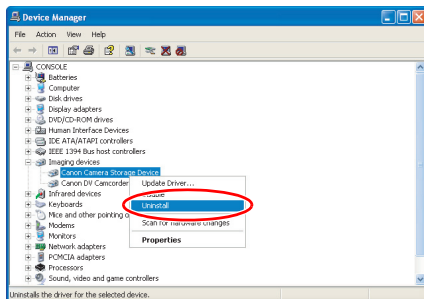


Click the [Device Manager] button.

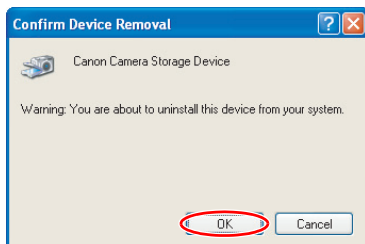
6

If [Canon Camera Storage Device] appears under the [Imaging devices] and/or [Other devices] categories, use the following procedures to delete it.

- 1) Right click on [Canon Camera Storage Device] and select [Uninstall] from the menu.



- 2) In the confirmation dialog, click [OK] and close [System Properties] and [Device Manager]. Remove all copies of the [Canon Camera Storage Device] icon that appear in the [Other devices] or [Imaging devices] categories, or that appear more than once in one category.

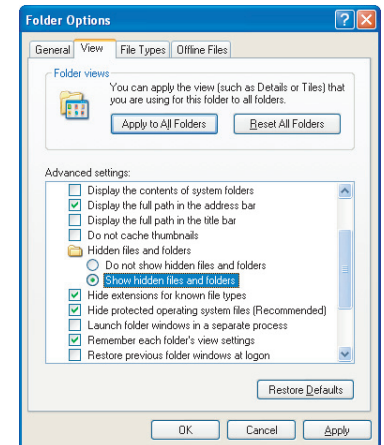
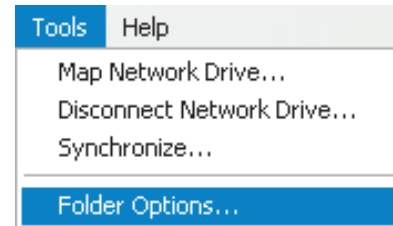


7

From the [start] menu, select [My Computer] and double-click the [C:] (local disk), [WINDOWS] and [INF] folders in succession.



- If the [INF] folder is not visible in the [WINDOWS] folder, use the following procedures to show all files and folders.
 - 1) Click the [Tools] menu and select [Folder Options].
 - 2) Click the [View] tab.
 - 3) In the [Advanced settings] section, set the [Hidden files and folders] category to the [Show hidden files and folders] option.

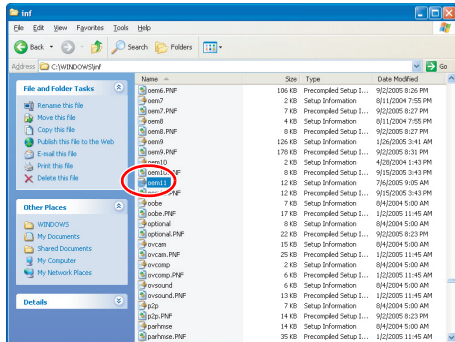


- If [Hide extensions for known file types] is selected, remove its check mark.

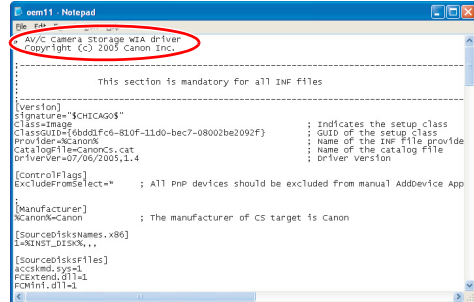
Uninstall

8 Double-click the [oem*.INF] file.

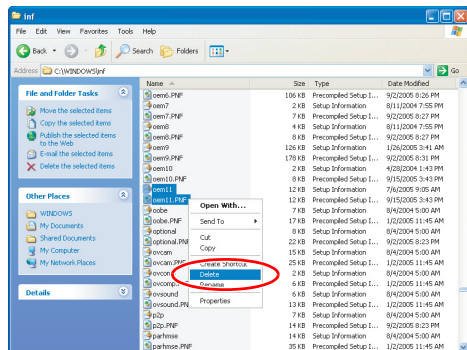
- A number such as "0" or "1" appears in place of the asterisk (*) above. You will also find another file called [oem*.PNF], which will have the same number as the [oem*.INF] file. The two constitute one set. There may be many file sets starting with "oem".



- The Windows Notepad program will start and show the file contents.
- When uninstalling the AV/C Camera Storage Subunit-WIA Driver, click each [oem*] file until you find the one that contains [; AV/C Camera Storage WIA driver] in its first line. When you have found the correct file, delete the file set.



- Close the Notepad window.
- Right-click the mouse button and select [Delete].



9 Close all windows and restart the computer.



The [INF] folder contains numerous files that are critical to the computer's operation. Be extremely careful not to delete the wrong files. If you delete the wrong file, you may be unable to restart Windows.

Appendix

| | |
|--|---------|
| Troubleshooting..... | Appx-59 |
| Shortcut Keys (Default Settings) | Appx-61 |

Appendix

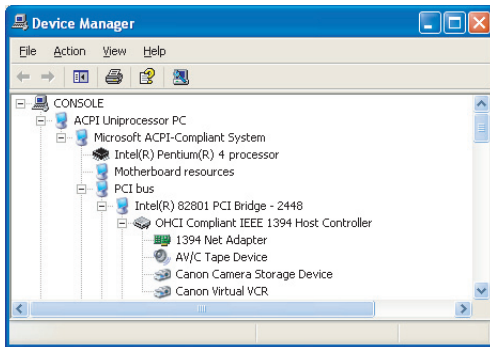
Troubleshooting

❗ Cannot launch CONSOLE.

- [Hardware acceleration] of your computer is not set to [Full].
 - 1) Open the [Control Panel] window and display the [Display Properties] window by clicking the [Appearance and Themes] icon followed by the [Display] icon.
 - 2) Click the [Settings] tab and the [Advanced] button.
 - 3) Click the [Troubleshoot] tab and adjust the [Hardware acceleration] slider to [Full]. Then click [OK].
- CONSOLE may not be launched if movie playback software or video editing software is already running. You need to close the software and try to launch CONSOLE.

❗ Camcorder will not be recognized or controlled.

- A camcorder not supported by CONSOLE is connected. Check if your camcorder is supported by CONSOLE (3).
 - The DV CONTROL function of the camcorder is set to [OFF]. Set the DV CONTROL function to [ON]. For details, refer to the instruction manual of your camcorder.
 - More than one camcorder is connected to the computer's IEEE1394 (DV) terminal. Connect only one camcorder to the computer's IEEE1394 (DV) terminal.
 - If your computer has an IEEE1394 (DV) board/card in addition to the standard IEEE1394 (DV) board/card, or if you have more than 2 IEEE1394 (DV) boards/cards added to the computer, the computer may not recognize the camcorder properly. You need to plug the IEEE1394 (DV) cable to a different board's/card's terminal.
- To check if the cable is properly connected, follow the instructions below.
- 1) Set the camcorder to EXT.CONT. and connect to the computer.
 - 2) Open the [Device Manager] window. (7-56)
 - 3) Select [Devices by connection] from the [View] menu.
 - 4) Look for the IEEE1394 controller with [Canon Virtual VCR].
 - 5) Confirm that [AV/C Tape Device] or [Canon DV Camcorder] is connected.



❗ Even though the dedicated driver (Canon Virtual VCR or AV/C Tape Recorder/Player) is installed already, the [Found New Hardware Wizard] window appears when starting CONSOLE.

- When you change the computer's IEEE1394 (DV) card and start CONSOLE, Canon Virtual VCR or AV/C Tape Recorder/Player will be detected as new hardware. Select [Install the software automatically (Recommended)] and click [Next] to install the driver.

❗ Cannot select a video folder.

- Only folders on a NTFS formatted hard disks can be selected as a video folder. You cannot select a folder on FAT32 or FAT16 hard disks.
- Removable disks or network drives cannot be selected as a video folder.

❗ Recording will not start even when pressing the start/stop button on the camcorder.

- The start/stop button on the camcorder is locked. Unlock the button.
- When using XH G1, XH A1 or XL H1: If you connect 4 or more devices by IEEE1394 (including the connected computer and the camcorder itself) or if 2 or more other video devices are connected to the computer by IEEE1394, recording onto the hard disk cannot be started.
- When using XL2: If the XL2 and 1 or more other devices are connected to the computer by IEEE1394, recording onto the hard disk cannot be started by pressing the camcorder's start/stop button.

❗ [DV] appears on the camcorder screen and recordings cannot be made.

- Available hard disk space on the drive where the video folder is saved is less than 0.5 GB. Change the drive or delete some files to free more disk space.
- The [Option Settings] window is open, or performance check is being carried out. Close the window.
- The sequence number of the file exceeds the maximum value (e.g. "DVPC99999999.avi"). Change the video folder or the file name.
- The camcorder is in use with another software. Close the software.
- The camcorder does not recognize CONSOLE. Close CONSOLE and restart it.

❗ Recording on the hard disk stops in the middle of the recording.

- The hard disk capacity is insufficient. Delete files to make space available, or select a video folder on a hard disk with sufficient capacity.

Appendix

❗ The recorded picture is lacking.

- The recording speed of the hard disk is insufficient. Make a performance check (📖 3-19). We recommend defragmenting the drive before you start recording.
- A program other than CONSOLE is started. Close all programs other than CONSOLE before recording. If an anti-virus software is activated, deactivate it.
- Due to the computer's processing capacity being lowered, the CPU usage may reach to its maximum limit. If the usage continuously goes over the 100% for a long time, data dropping may occur on the recording file. In such case, change the software settings using one or more of the followings to reduce the usage, and perform *[Performance Check]* (📖 3-19) to confirm the rate. (90% or less is recommended.)
 - When recording in HDV standard, select [File] ▶ [Option], and click on the [HDV Rec] tab. Select a smaller size in [Preview resolution], and/or select [I picture and P picture] or [I picture only] in [Preview picture].
 - Hide or reduce the window size of the [Rec Viewer] window.
 - Hide or reduce the window size of the [Vector and Wave Monitor] window.

❗ The preview image is not played back smoothly.

- Depending on the laptop PC's power scheme settings that control the CPU operations, the preview image may not be played back smoothly. Follow the procedure below to change the power scheme settings.
 - 1) Open [Control Panel] and click [Performance and Maintenance].
 - 2) Click [Power Options] and the [Power Options Properties] window will be displayed.
 - 3) Select the [Power Schemes] tab and select [Always On] in [Power schemes].

Appendix

Shortcut Keys (Default Settings)

The shortcut key settings written in red can be changed (3-21), but the keys written in black cannot be changed.

■ [Option Settings]

Switching the setting item
 Next: [Tab]
 Previous: [Shift] + [Tab]
 Tab Selection: [←], [→]
 To execute: [Space], [Enter]
 To change a numeric value
 One value up: [↑]
 One value down: [↓]
 To select a value in a list
 One value up: [↑], [←]
 One value down: [↓], [→]
 To select a radio button
 To select one above: [↑], [←]
 To select one below: [↓], [→]
 To check the selected radio button:
 [Space], [Enter]

■ [Displaying [Rec Panel]: [7], [Ctrl] + [R]

Changing the tools in [Rec Panel]: [⊕]

■ [Displaying [Play Panel]: [9], [Ctrl] + [P]

Changing the tools in [Play Panel]: [⊕]

■ [Rec Viewer]

Displaying/Hiding: [Ctrl] + [M]
 To select a button
 Next: [Tab]
 Previous: [Shift] + [Tab]
 Up: [↑]
 Down: [↓]
 Right: [→]
 Left: [←]
 To execute: [Space], [Enter]

■ [Focus Assist]

Displaying/Hiding: [Ctrl] + [F]
 To select a button
 Next: [Tab]
 Previous: [Shift] + [Tab]
 Right: [→]
 Left: [←]
 To execute: [Space], [Enter]

■ [Camera Control]

Displaying/Hiding: [Ctrl] + [S]
 Start/Stop recording: [0]
 Finalize: [.]
 Displaying the [Control] tab: [*]
 Displaying the [Information] tab: [V]
 Switching the setting item
 Next: [↓], [Tab]
 Previous: [↑], [Shift] + [Tab]
 Up: [8]
 Down: [2]
 Right: [6]
 Left: [4]
 Tab Selection: [4], [6], [←], [→]
 Setting the level: [←], [→]
 Zooming: [←], [→]
 Focusing: [←], [→]
 To execute: [Space], [Enter]

■ [Option Settings] in the [Camera Control] window

Switching the setting item
 Next: [Tab]
 Previous: [Shift] + [Tab]
 To execute: [Space], [Enter]
 To change a numeric value
 One value up: [↑]
 One value down: [↓]
 To select a value in a list
 One value up: [↑], [←]
 One value down: [↓], [→]

■ [Waveform Vector Monitor]

Displaying/Hiding (in [Rec Panel]): [Ctrl] + [H]
 Displaying/Hiding (in [Play Panel]): [Ctrl] + [W]
 Switching the setting item
 Next: [Tab]
 Previous: [Shift] + [Tab]
 To switch a button in [Display]: [←], [→]
 (These keys can be used only when the buttons are selected.)
 To execute: [Space], [Enter]

To select a value in a list
 One value up: [↑], [←]
 One value down: [↓], [→]
 To change a numeric value
 One value up: [↑], [←]
 One value down: [↓], [→]

■ [Custom Preset]

Displaying/Hiding: [Ctrl] + [I]
 Switching the setting item
 Next: [↓], [Tab]
 Previous: [↑], [Shift] + [Tab]
 Up: [8]
 Down: [2]
 Right: [6]
 Left: [4]
 Moving the slider
 Increase: [→]
 Decrease: [←]
 Changing items in the pull down menu
 Up: [↑]
 Down: [↓]

■ [Preset Variation]

Switching the setting item
 Next: [Tab]
 Previous: [Shift] + [Tab]
 Tab Selection: [←], [→]
 To execute: [Space], [Enter]
 To change a numeric value
 One value up: [↑]
 One value down: [↓]
 To select a radio button
 To select one above: [↑], [←]
 To select one below: [↓], [→]

■ [Color Control]

Displaying/Hiding: [Ctrl] + [O]
 Displaying the [Color Correction] tab: [V]
 Displaying the [Detail] tab: [*]
 Switching the setting item
 Next: [↓], [Tab]
 Previous: [↑], [Shift] + [Tab]
 Up: [8]
 Down: [2]
 Right: [6]
 Left: [4]
 Tab Selection: [4], [6], [←], [→]

To move a slider
 Toward [+]: [→]
 Toward [-]: [←]
 To execute: [Space], [Enter]
 To select a value in a list
 One value up: [←]
 One value down: [→]

■ [Play Viewer]

Displaying/Hiding: [Ctrl] + [D]
 Start/Stop Playback: [0]
 Switching the setting item
 Next: [Tab]
 Previous: [Shift] + [Tab]
 To execute: [Space], [Enter]
 Time Slider (These keys can be used only when the time slider is active.)
 To move the slider to the left: [←]
 To move the slider to the right: [→]
 To change a scale: [↑], [↓]

■ [File Browser]

Displaying/Hiding: [Ctrl] + [E]
 Switching the setting item
 Next: [Tab]
 Previous: [Shift] + [Tab]
 To select a button
 Next: [↓], [→]
 Previous: [↑], [←]
 To select a folder in the folder tree
 Up: [↑]
 Down: [↓]
 To open a folder: [→]
 To close a folder: [←]
 To select a file among thumbnails
 Up: [↑]
 Down: [↓]
 Right: [→]
 Left: [←]
 To playback a selected file: [Enter]

■ [Full Screen: [F12]

