

Canon

Digital Video Software

Windows

Version 19

E

Instruction Manual



Contents

Read This First	3
Checking Supplied Accessories	3
System Requirements	4
What is Digital Video Software.....	5
Installing the Digital Video Software	6
Before Downloading Still Images	10
Connecting the Camcorder to a Computer	10
Downloading Still Images (ZoomBrowser EX)	12
Starting CameraWindow	13
Using the Computer to Download Still Images	14
Auto-Downloading	14
Auto-Downloading Settings	14
Downloading the Selected Still Images from the CameraWindow	18
Using a Card Reader/Writer	19
Using the Camcorder to Download Still Images (Direct Transfer Function)	20
Direct Transfer	20
Setting the Direct Transfer Download Destination Folder	21
ZoomBrowser EX Windows	23
Main Window	23
[Image Viewer] Window	27
Organizing Still Images	29
Applying Star Ratings and Keywords.....	29
Classifying the Still Images	30
Renaming Multiple Files	31
Searching for Still Images	33
Exporting Still Images	36
Changing the File Type and Save.....	36
Saving on CD-R/RW Discs (Windows XP Only).....	39
Adding Still Images from Your Computer to the Memory Card	41
Adding Still Images to the Memory Card	41
Adding Sample Images to the Memory Card	43
Using Various Functions	46
Attaching Still Images to E-mail Messages	46
Running a Slide Show	48
Merging Panoramic Images (PhotoStitch)	50
Printing Still Images (PhotoRecord).....	53
Adding Sound to a Still Image.....	56
Applying DPOF Settings	57
Reviewing and Changing the Settings of the Camcorder	60
Uninstalling the Software	62
Uninstalling ZoomBrowser EX	62
Uninstalling the TWAIN Driver/WIA Driver.....	63
Troubleshooting	64

Read This First

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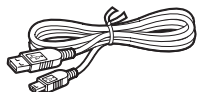
■ Safety Precautions

Do not play the supplied CD-ROM(s) in any CD player that does not support data CD-ROMs. Playing the CD-ROM(s) in an audio CD player (music player) could damage the speakers. It is also possible to suffer from hearing loss from listening with headphones to the loud sounds of a CD-ROM played on a music CD player.

Checking Supplied Accessories

Use the following accessories to download recorded still images from a disc or a memory card to your computer.

- IFC-300PCU USB Cable



- DIGITAL VIDEO SOLUTION DISK



The explanations in this manual use mainly Windows XP screen shots. The steps and windows may vary depending on your computer and the version of software.

System Requirements

Please install the software on a computer meeting the following minimum requirements.

- OS:** Windows 98 (Second Edition)
Windows Me
Windows 2000 (Service Pack 4)
Windows XP Home Edition or Professional (Service Pack 1 or 2)
* Proper operation is not guaranteed on an OS that has been upgraded from a previous version.
- Computer Model:** Computers that come with above OS preinstalled and have built-in USB ports.
- CPU:** Pentium 500 MHz or better
- RAM:** Windows 98/Windows Me: 128 MB or more
Windows 2000/Windows XP: 256 MB or more
- Interface:** USB: only preinstalled Windows 98/Windows Me/Windows 2000/Windows XP systems with built-in USB ports
- Free Hard Disk Space:**
- Canon Utilities
 - ZoomBrowser EX: 250 MB or more (Including the PhotoRecord printing program)
 - PhotoStitch: 40 MB or more
 - Canon DV TWAIN Driver: 25 MB or more
 - Canon DV WIA Driver: 25 MB or more
- Display:** 1024 × 768 pixels or better/High Color (16 bit) or better



- Proper operation is not guaranteed on a dual CPU PC or on a user-built PC.
- Proper operation is not guaranteed on any particular system, even if it meets the requirements outlined above.
- A CD-ROM drive is required to install the software.

In this Instruction Manual, product names are abbreviated as follows:

Microsoft® Windows® 98 Second Edition:	Windows 98
Microsoft® Windows® Millennium Edition:	Windows Me
Microsoft® Windows® 2000 (Service Pack 4):	Windows 2000
Microsoft® Windows® XP Home Edition or Professional (Service Pack 1 or 2):	Windows XP

What is Digital Video Software

The following software will be installed by installing the Digital Video Software.

■ ZoomBrowser EX

- Viewing downloaded still images
- Categorizing, organizing, and searching large volumes of still images
- Editing still images
- Changing the data for still images and save them as new files
- Viewing still images in a slide show
- Adding sound to a still image

■ CameraWindow

- Downloading still images from a disc or a memory card to your computer
- Viewing still images recorded on a disc or a memory card
- Applying DPOF (Digital Print Order Format) settings to the still images recorded on a memory card

■ PhotoStitch

Merging a series of overlapping still images into a single, seamless panorama

■ PhotoRecord

- Printing still images with background, frame, title and comments
- Printing indexes
- Creating still image albums

■ USB Driver

- Driver software that enables you to download still images from a disc or a memory card to a computer. Users of Windows XP do not need to install this driver software. An OS standard driver will be installed automatically.
- Windows 98/Windows 2000: Canon DV TWAIN Driver
- Windows Me: Canon DV WIA Driver

This instruction manual explains how to install the software, what you can do with the main features and how to operate them. For more detailed operational instructions, refer to the Help menu of each software program.

Installing the Digital Video Software



- Be sure to install the Digital Video Software before connecting the camcorder to the computer.
- Users of Windows 2000 or Windows XP must first log in as an Administrator to install programs.



Windows XP Users:

Your digital video camcorder is equipped with the standard Picture Transfer Protocol (PTP). This protocol enables you to download still images by simply connecting the camcorder to a computer with the USB cable (the software such as the [Scanner and Camera Wizard] starts automatically).

However, please note that there are several limitations to downloading still images with this method. To avoid these problems, install ZoomBrowser EX to download still images.

- It may take a few minutes, after connecting the camcorder, until you can download still images.
- Still images protected on the camcorder may lose this setting once they are downloaded to the computer.

1 Check a camcorder is not connected to the computer.

While a camcorder is connected to the computer, the software cannot be installed normally. If a camcorder is connected, detach the USB cable from the computer.

2 Close any programs that are running.

3 Set the DIGITAL VIDEO SOLUTION DISK in the computer's CD-ROM drive.

If the installer panel does not open automatically, use the following procedures to display it.

- Windows 98/Windows Me/Windows 2000:
 - 1) Double-click the [My Computer] icon.
 - 2) Right-click the CD-ROM icon and select [Open] from the displayed menu.
 - 3) Double-click the [SETUP.exe] icon.
- Windows XP:
 - 1) Select [My Computer] from the [start] menu.
 - 2) Right-click the CD-ROM icon and select [Open] from the displayed menu.
 - 3) Double-click the [SETUP.exe] icon.

Depending on the setting of your computer, the file extension ".exe" may not appear.

4 Select your language.

5 Click Digital Video Software [Install].

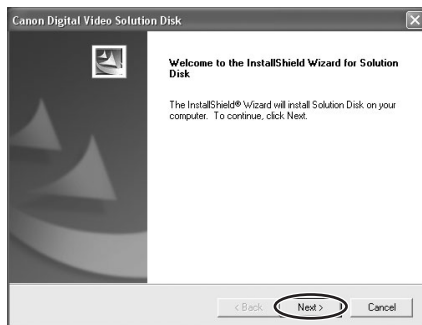
Installer Panel



If the following dialog appears, click [Restart] to restart the computer. After restarting the computer, installation automatically continues.



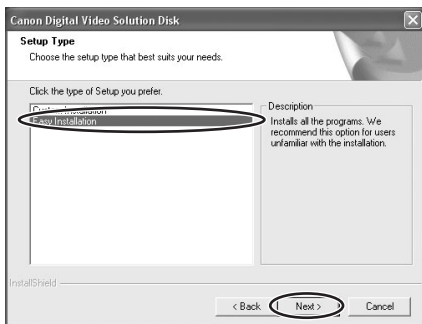
6 Click [Next].



7 Select [Easy Installation] and click [Next].

To install the software individually, select [Custom Installation]. When you select [Custom Installation], select a USB driver. (Windows XP: The USB driver supplied with the Windows operating system is used. You do not need to install a USB driver.)

- Windows 98/Windows 2000: Canon DV TWAIN Driver
- Windows Me: Canon DV WIA Driver

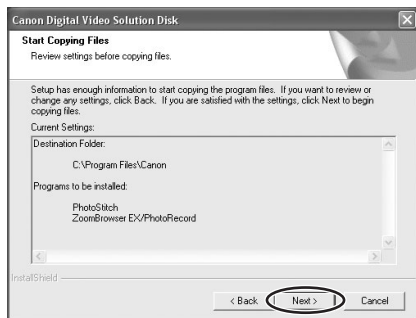


8 Select your country/region and click [Next].

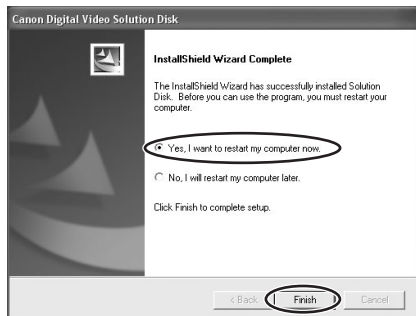
9 Read the license agreement and click [Yes].

10 Review the installation settings and click [Next].

- Installation starts.
- If the "Digital signature not found" message appears, click [Yes].



- 11** When installation is complete, select [Yes, I want to restart my computer now.] and click [Finish].



- 12** When the computer has restarted and the regular desktop screen is displayed, remove the DIGITAL VIDEO SOLUTION DISK from the CD-ROM drive.

When installation is complete, remove the DIGITAL VIDEO SOLUTION DISK before you connect the camcorder to the computer.



Windows 98/Windows Me/Windows 2000: At this point, the files for the TWAIN Driver or WIA Driver have only been copied to your computer. To download still images via USB connection, finish installing the TWAIN Driver or the WIA Driver. For details, see step 5 (10) in *Connecting the Camcorder to a Computer*.


Before Downloading Still Images

Connecting the Camcorder to a Computer



- Be sure to install the Digital Video Software before you connect the camcorder to the computer.
- Make sure the camcorder is being powered using the power adapter before connecting it to a computer.
- Connect the USB cable directly to one of the computer's main USB ports. The interface may not function correctly if the camcorder is connected via a USB hub.
- The connection may not operate correctly if you are using other USB devices, excluding USB mice or keyboards, at the same time. If this occurs, disconnect the other devices from the computer and try reconnecting the camcorder.
- Do not connect two or more camcorders to the computer. The camcorders may not operate normally.
- **Never allow the computer to go into standby (sleep) mode while a camcorder is connected via the USB interface.**



- Refer to your computer manual for the location of the computer's USB ports.
- See your camcorder instruction manual for how to connect the camcorder to the computer and how to change the media setting (MEDIA SEL. ) in the SYSTEM SETUP menu.

1 Insert a disc or a memory card containing images into the camcorder.

2 Connect the power adapter to the camcorder.

3 Turn the power switch to PLAY and move the / switch to .

Wait until the camcorder's access indicator stops flashing.

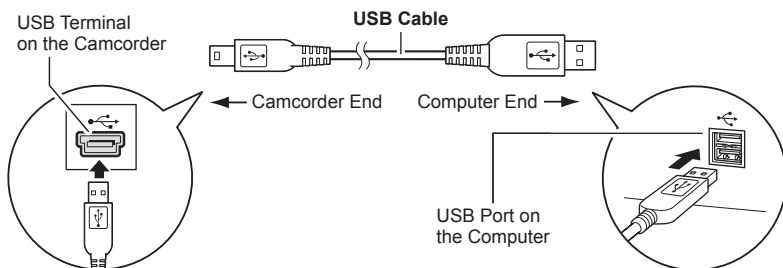
**4 To download still images on the disc, select [DISC] in the SYSTEM SETUP menu.
To download still images on the card, select [CARD] in the SYSTEM SETUP menu.**

5 Attach the supplied USB cable to the computer's USB port and the camcorder's USB Terminal.

- **The first time you connect the camcorder to the computer:**
 - Installation of the DV TWAIN Driver (Windows 98/Windows 2000) or the DV WIA Driver (Windows Me) starts.
 - If the "Digital signature not found" message appears, click [Yes].
 - If you are prompted to restart the computer, restart the computer.

- Windows 98/Windows 2000/Windows XP: A window appears allowing you to select an application program to start.
Windows Me: The Scanners and Cameras Wizard starts. Click [Cancel] to close the Wizard.
- For instructions on how to start ZoomBrowser EX and download still images to the computer, see *Downloading Still Images (ZoomBrowser EX)* (12).

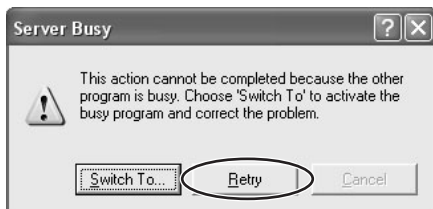
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Downloading Still Images (ZoomBrowser EX)



- Proper operation when connecting to a computer or printer cannot be guaranteed if the disc inserted into the camcorder was recorded or used in a non-Canon digital device.
- Observe the following precautions when the camcorder's access indicator is flashing. Failure to do so may cause disc or memory card data to become corrupted.
 - Do not open the disc or memory card cover, remove the disc or memory card or detach the USB cable.
 - Do not turn off the camcorder or the computer.
 - Do not change the position of the power switch or the / switch.
- Images recorded onto the disc, memory card or downloaded to the hard disk are important original data files. Create a copy of the file first before working on it on your computer.
- **For Windows XP Users:**
 - Do not rotate the image in the [Windows Picture and Fax Viewer] or in the explorer view. The data for the original image will be changed and the image can no longer be displayed in ZoomBrowser EX or on the camcorder.
 - If the Server Busy window appears when you connect the camcorder to the computer, click [Retry].



- You cannot connect the camcorder to a computer if the disc or memory card contains more than 1800 images. For best performance, we recommend keeping the number of images on the disc or memory card below 100 when downloading images to the computer. When using a memory card, please use a card reader to download the still images; for the disc, please use your computer's DVD drive. When using the DVD drive to download the images recorded on the disc, it is necessary to insert a finalized disc.
 - You cannot record any new images on the finalized DVD-R disc or unfinalize it.



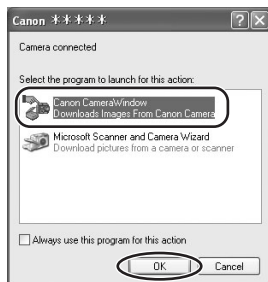
For instructions on how to connect a card reader/writer, see *Using a Card Reader/Writer* (19).

Starting CameraWindow

1 Connect the camcorder to the computer (📖 10).

2 Select [Canon CameraWindow] and click [OK].

- If a camcorder and card reader are connected at the same time, a dialog appears allowing you to select the camcorder model. Confirm that [Canon Camera] or your camcorder model name is displayed and click [OK].



- The Camera Control window opens.
- If the window does not appear or if "PC CONNECT" does not appear on the camcorder screen, click the Windows [start] menu and select [All Programs], [Canon Utilities], [CameraWindow] and [CameraWindow].

Camera Control window

Still images will be downloaded to the computer, and ZoomBrowser EX starts.

Still images in the camcorder are displayed allowing you to select images.

Placing a check mark here makes the Camera Control window to open automatically the next time you connect the camcorder.

Specify the still image type to be downloaded and the destination folder.



- If the camcorder is already connected to the computer, you can start the CameraWindow and display the Camera Control window by clicking [Acquire & Camera Settings] followed by [Acquire Images] in the ZoomBrowser EX Main Window.
- The Remote shooting function is not supported by your camcorder.

Using the Computer to Download Still Images

You can select a downloading method in the Camera Control window.

■ Auto-Downloading

1 Click [Starts to download images] in the Camera Control window.

- For instructions on how to set the Auto-download settings, see *Auto-Downloading Settings* (14).
- Click [Finish] to close the Camera Control window after downloading images.



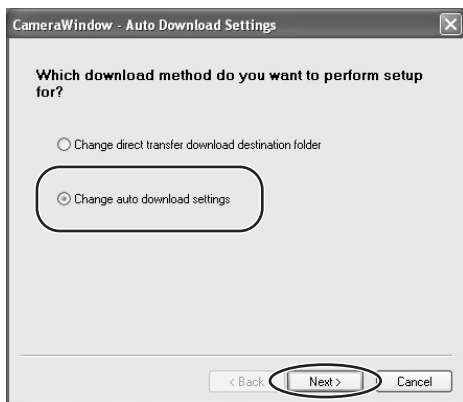
■ Auto-Downloading Settings

Select the setting for downloading images by operating your computer. You can change the image type and the destination folder.

1 In the Camera Control window, click the [Acquire Images] tab and click [Preferences].

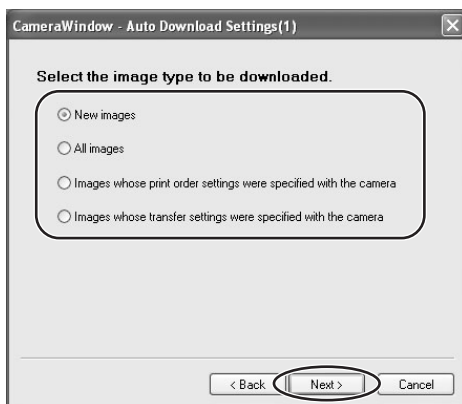


2 Select [Change auto download settings] and click [Next].



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3 Select the image type to be downloaded and click [Next].

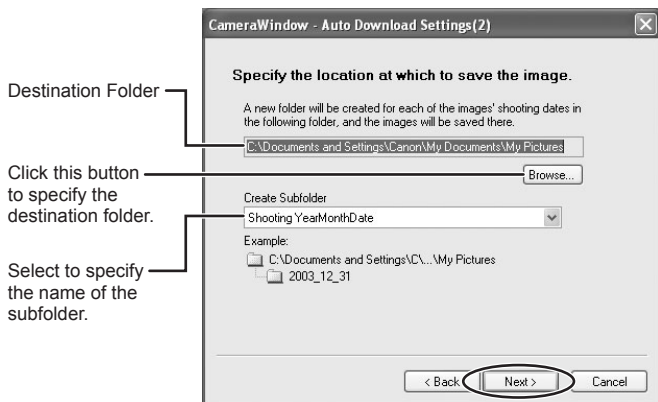


Windows

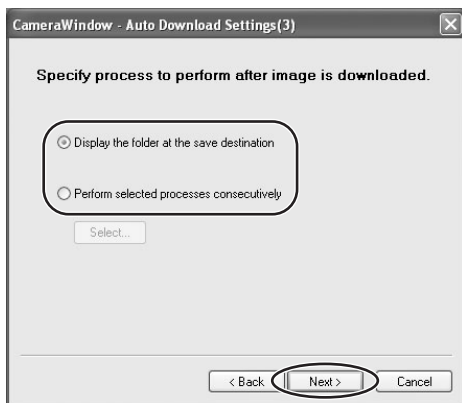


The still images recorded on the disc will not be marked as “already transferred” after downloading.

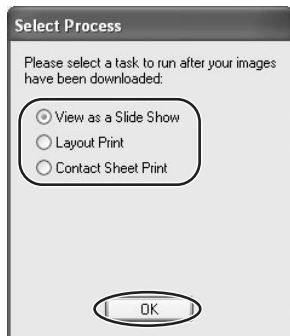
4 Specify the destination folder settings and click [Next].



5 Specify a process to perform after the image is downloaded.

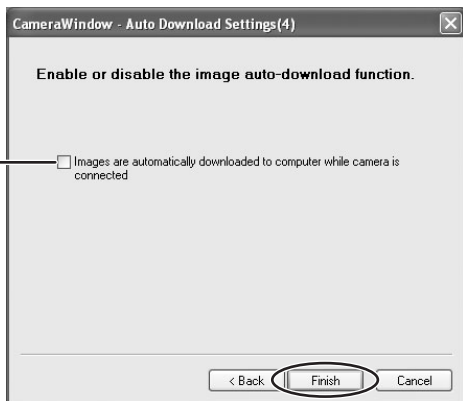


Below window will be displayed when you select [Perform selected processes consecutively] (You can redisplay the window by clicking [Select]). Select a process to perform after the image is downloaded, and click [OK].



6 Click [Finish].

Placing a check mark here makes images in the camcorder to be automatically downloaded when the camcorder is connected.



■ Downloading the Selected Still Images from the CameraWindow

1 Click [Lets you select and download images] in the Camera Control window.


The CameraWindow opens.



2 In the CameraWindow, select the image you wish to download and click [Download pictures].

- Clicking on 2 images while holding down the [Shift] key selects also all images between the 2 images.
- Clicking on different images while holding down the [Ctrl] key selects multiple images.



- If [Night], [SUPER NIGHT], [SPOTLIGHT] or [SUNSET] are chosen as recording programs or if [SOFT SKIN DETAIL] is chosen as an image effect, this information may not be displayed in the Image Information.
- [Delete] from the [Edit] menu and  will not be active when transferring the still images recorded on the disc.

3 Confirm the settings and click [Starts Download].

ZoomBrowser EX starts, and the downloaded images appear in the Main Window.

Specify the file name at which to save the images.

Specify the settings of the folder and subfolder.

Specify File Name
Do not modify

File Prefix
IMG

Assign Sequence No.
Number of Digits: 4
Start: 1

Example: IMG_0001
(by: file extension will be the same as the original file name)

Specify Folder
Save to (Folder Name): C:\Documents and Settings\Canon\My Documents Browse...

A subfolder into which the image will be saved will automatically be created in this folder

☒ Create Subfolder
Shooting Year/Month/Date: 2001_12_31

New Name: IMAGE

Example: C:\Documents and Settings\Canon\My Do...\My Pictur
2001_12_31

Starts Download Cancel

■ Using a Card Reader/Writer

The basic operations of ZoomBrowser EX are the same as when you connect the camcorder to the computer. Follow the procedure below to open the CameraWindow. For instructions on how to connect the card reader/writer, please refer to its manual.



If your card reader/writer does not support miniSD cards, please purchase an appropriate adapter for the card.

1 Insert a memory card containing images recorded with the camcorder into the reader.

2 Windows 98/Windows Me/Windows 2000: Click the Windows [Start] menu, and select [Programs], [Canon Utilities], [CameraWindow] and [CameraWindow].

Windows XP: When a window appears allowing you to select an application program to start, select [View/Download Images using Canon CameraWindow] and click [OK].

The Camera Control window opens.

3 Select a downloading method.

- [Starts to download images]: The progress bar will be displayed and images will be downloaded to the computer, and ZoomBrowser EX starts. For instructions on how to set the Auto-download settings, see *Auto-Downloading Settings* (14).
- [Lets you select and download images]: The CameraWindow opens, displaying the camcorder images as thumbnails (small images).




Using the Camcorder to Download Still Images (Direct Transfer Function)

If your camcorder supports the Direct Transfer Function, you can use the camcorder to download images.

■ Direct Transfer

1 Select a transfer option on the camcorder screen and press the button.

- See your camcorder instruction manual for how to set and operate the camcorder to transfer images.
- For instructions on how to change the destination folder and the folder name, see step 3 (15) in *Auto-Downloading Settings*.
- The  button cannot be used when it is not lighted.
- You can set the action that is carried out for direct transfer. Right-click the [CameraWindow(Launcher)] icon on the taskbar and select an action from the displayed menu.
 - [Show image(s) in fullscreen mode]: Displays downloaded images in full screen mode.
 - [Launch ZoomBrowser EX]: Starts ZoomBrowser EX after downloading the images.
 - [Show Window]: The Camera Control window appears when you connect the camcorder to the computer.

✓ Show image(s) in fullscreen mode

✓ Launch ZoomBrowser EX

✓ Show Window

About CameraWindow(Launcher)...

Exit

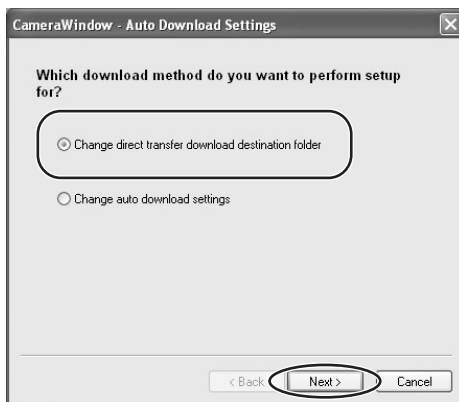
2 Press the button on the camcorder.

■ Setting the Direct Transfer Download Destination Folder

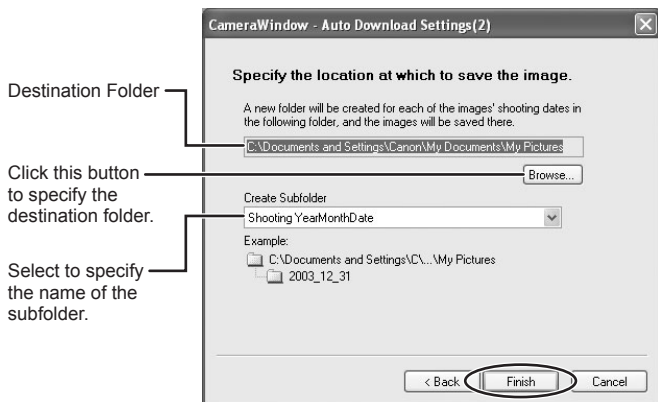
- 1 In the Camera Control window, click the [Acquire Images] tab and click [Preferences].





- 2 Select [Change direct transfer download destination folder] and click [Next].



3 Specify the destination folder settings and click [Finish].

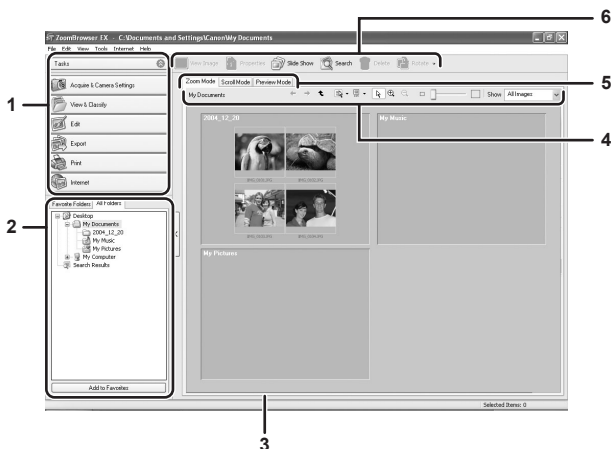


ZoomBrowser EX Windows

This section explains the windows of ZoomBrowser EX. If you wish to start ZoomBrowser EX without connecting the camcorder or card reader/writer, double-click the  on the desktop, or click the Windows [start] menu and select [All Programs] ▶ [Canon Utilities] ▶ [ZoomBrowser EX] and [ZoomBrowser EX]. To exit ZoomBrowser EX, click  or select [Exit] from the [File] menu.

Main Window

ZoomBrowser EX's Main Window features various buttons and a still image display area.



1 Task Area

[Acquire & Camera Settings]: Use this to display the Camera Control window to download still images and configure the camcorder settings.

[View & Classify]: Use this to view and organize still images.

[Edit]: Use this to edit still images.

[Export]: Use this to change the data for still images and save them as new files, back up to CD-R/RW, or export shooting properties to a text file.

[Print]: Use this to print selected still images.

[Internet]: Use this to attach selected still images to E-mail messages.

2 Folders Area

You can select a folder to be displayed in the Browser Area. Selecting the [Favorite Folders] tab shows only the folders that are registered as Favorites. To register folders as Favorites, follow the instructions below.

When the [All Folders] tab is selected:

Select a folder and click [Add to Favorites].

When the [Favorite Folders] tab is selected:

Click [Add] and select a folder.

To remove the registered folder, select the folder, and click [Remove].

3 Browser Area

This area displays the still images contained in the selected folder.



- Clicking on 2 still images while holding down the [Shift] key selects also all images between the 2 images.
- Clicking on different still images while holding down the [Ctrl] key selects multiple images.

4 Browser Area Tool Bar

The menu items vary depending on the View Mode.

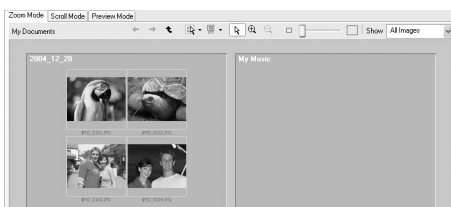


1	Previous/Next	Displays the previous/next still image in the current folder.
2	Up	Displays the folder in the upper tiers of the hierarchy.
3	Select	Allows you to select all still images and deselects still images.
4	Information	Allows you to select the information to be shown.
5	Zoom Slider	Enlarges/Reduces the thumbnails in the Browser Area.
6	Show	Allows you to select displayed still images according to the star rating.

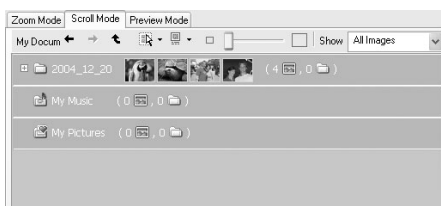
5 View Mode

You can select the view mode of still images in the Browser Area.

[Zoom Mode]: The still images in the selected folder are shown as thumbnails.



[Scroll Mode]: Thumbnails of the still images are displayed next to the folder name. Clicking a folder displays enlarged images. Selecting [Preferences] from the [Tools] menu opens the [Preferences] window, on which you can select the hierarchy of folders.




[Preview Mode]: A large still image is displayed along with detailed information. You can change file name and comments. To display another image, click [Previous]/[Next] or select an image shown at the bottom of the window.



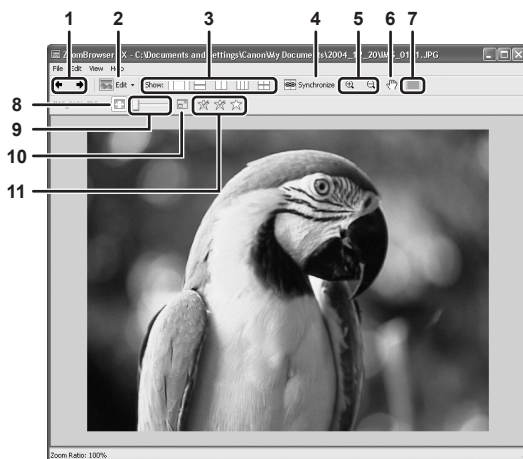
6 Application Tool Bar



1	View Image	Displays a selected still image in the [Image Viewer] window.
2	Properties	<p>Displays properties of the selected still image. When you select a different image while the [Properties] window is open, the information switches to the one of the selected image.</p> <p>The [Properties] window cannot be displayed in [Preview Mode].</p> 
3	Slide Show	Displays still images in a slide show.
4	Search	Allows you to search for still images (📖 33).
5	Delete	Deletes selected still images.
6	Rotate	Rotates selected still images.


[Image Viewer] Window

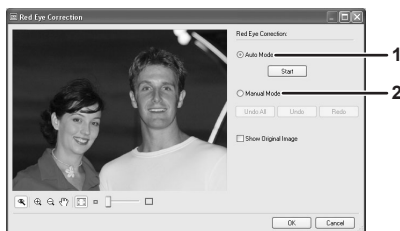
The [Image Viewer] window appears when you select a still image and click [View Image] or double-click an image.



1	Previous/Next	Displays the previous/next still image in the current folder.
2	Edit	Allows you to perform red-eye correction, image correction, trimming or to register external image editing applications. This button cannot be activated when multiple still images are selected.
3	Show	Allows you to display multiple still images at the same time.
4	Synchronize	Synchronizes the View functions across all displayed still images.
5	Zoom In/Zoom Out	Enlarges/decreases a still image.
6	Pan	When the still image is larger than the window, you can move the image in the desired direction.
7	Auto Focus Frame	This function cannot be used for the still images recorded by the camcorder.
8	Fit to Window	Matches the still image size to the size of the Image Viewer Window.
9	Zoom Slider	Allows you to enlarge/decrease the displayed still image.
10	Show Image Full Screen	Displays a still image in full screen size.
11	Change the Star Rating	Allows you to change the star rating.


[Red Eye Correction] Window

Click the  icon located at the top of the [Image Viewer] window and select [Red Eye Correction] to correct the red eye effect on a still image in the [Red Eye Correction] window.




1	Auto Mode	Clicking [Start] corrects the red eye effect automatically.
2	Manual Mode	Point the cursor on a red eye so that the area is highlighted green, and left-click the mouse.

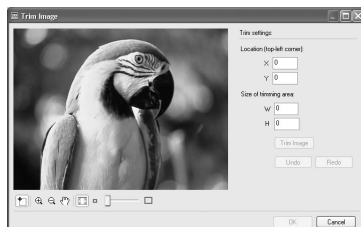
[Image Correction] Window

Click the  icon located at the top of the [Image Viewer] window and select [Image Correction] to change the brightness, saturation, contrast, and RGB of the still image.



[Trim Image] Window

Click the  icon located at the top of the [Image Viewer] window and select [Trim] to crop a still image. Either drag the mouse on the image or specify the cropping area, and click [Trim Image].

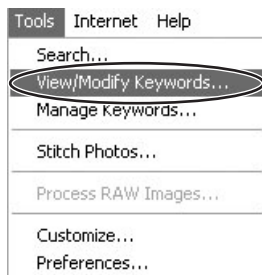


Organizing Still Images

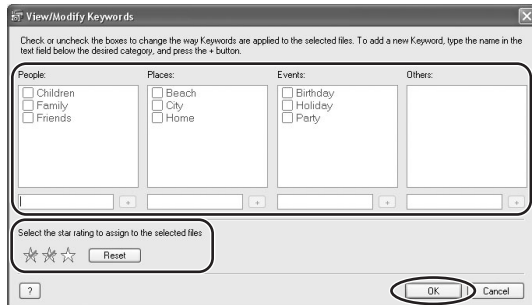
Applying Star Ratings and Keywords

This task allows you to apply ratings to your images from one star to three stars. The Star Rating can be used as one of the search conditions, or for the selection of images to be displayed in the Browser Window. The keyword can be used as one of the search conditions.

- 1 Select the image to which you wish to apply the Star Rating or Keyword, and select [View/Modify Keywords] from the [Tools] menu.**



- 2 Place a check mark next to the keyword you wish to apply, or click on the stars for rating.**



- The default setting of the Star Rating is two stars.
- You can display images according to Star Rating by selecting [Filter by Star Rating] from the [View] menu.
- You can add and delete keywords, or change the keyword list in the [Manage Keywords] window by selecting [Manage Keywords] from the [Tools] menu.

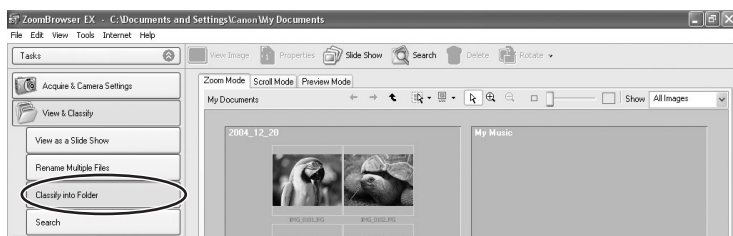
Classifying the Still Images

This task allows you to classify selected images according to the shooting date.

1 Click [View & Classify] in the Main Window.



2 Click [Classify into Folder].

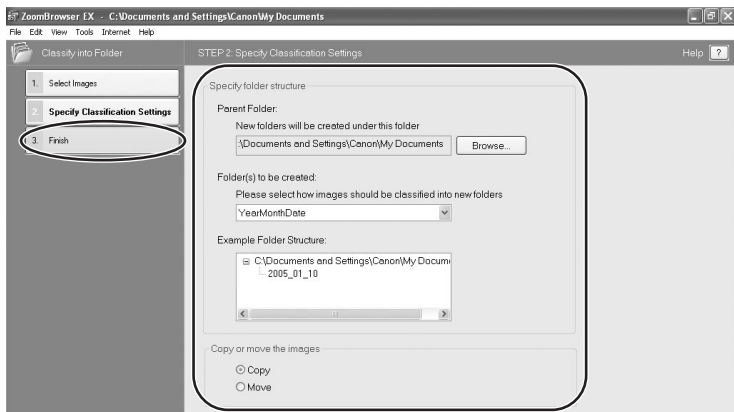


3 Select the images you wish to classify and click [Specify Classification Settings].



4 Specify the settings and click [Finish].

The selected images are classified into the specified folder.



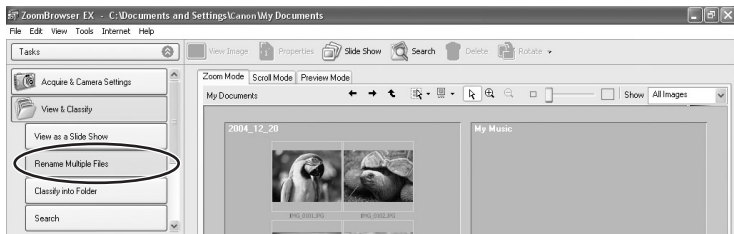
Renaming Multiple Files

This task allows you to rename multiple files at the same time, or to rename and copy multiple files.

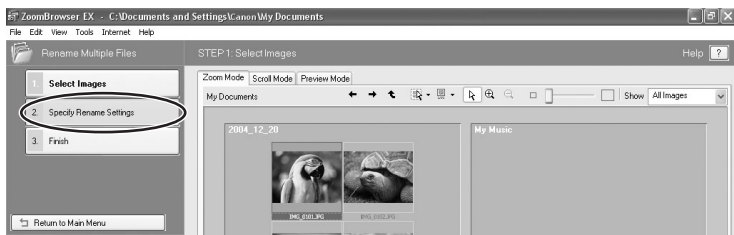
1 Click [View & Classify] in the Main Window.



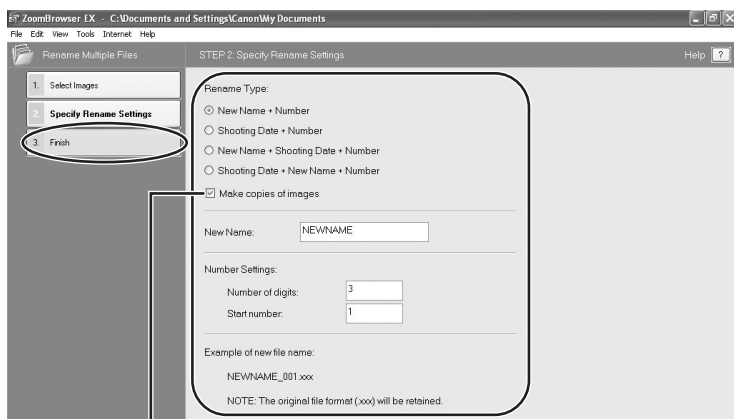
2 Click [Rename Multiple Files].



3 Select the still images you wish to rename and click [Specify Rename Settings].



4 Specify the settings and click [Finish].



Placing a check mark here makes copies of still images with new names. The name of the original images will not be changed.



To rename a folder, select a folder, and open the [Rename Folder] window by selecting [Rename] from the [File] menu. Input the new name, and click [OK].

Searching for Still Images

This task allows you to search for images by Star Rating, Modification Date, Shooting Date, Comment or Keywords.

1 Click [View & Classify] in the Main Window.

You can also search for images by clicking [Search] on Application Tool Bar. Please skip forward to step 3.

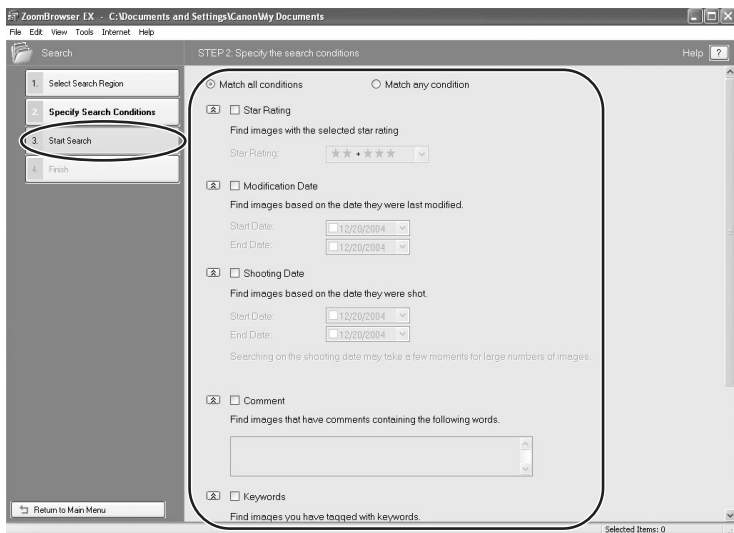


2 Select folders and images from which you wish to search and click [Search].



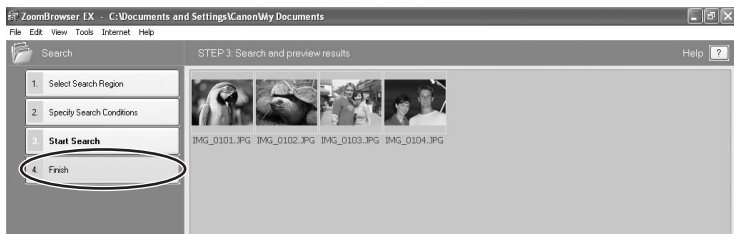
3 Specify the search conditions and click [Start Search].

- The search results are displayed as thumbnails.
- Select at least one search condition.

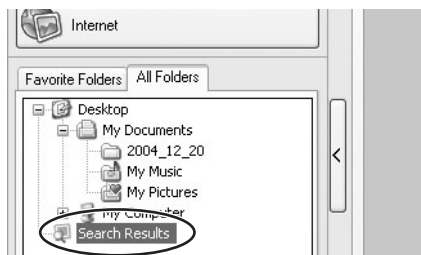


4 Click [Finish].

- To change the search parameters and perform another search, click [Specify Search Conditions] and repeat steps 3-4.



- The images of the search result are displayed in the [Search Results] folder. You can print or copy these images to another folder. The images will remain in this folder until ZoomBrowser EX is closed or another search is performed.

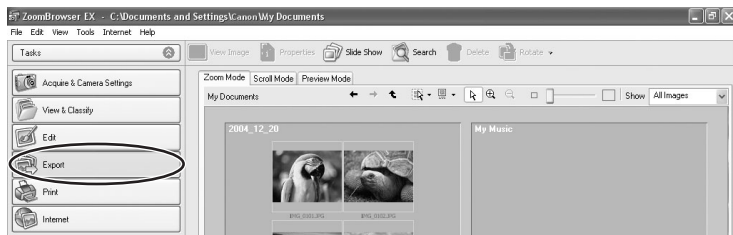
**E**

Exporting Still Images

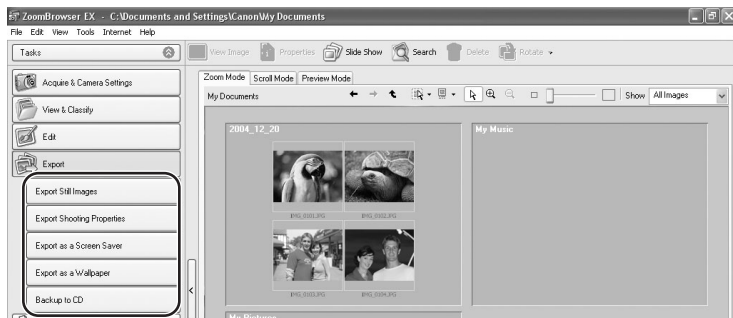
This task allows you to change the size, resolution or data for of selected still images and save them as new files and allows saving the shooting properties of the still image to a text file or copying the still images with new names. Furthermore, you can export still images for use as a screen saver or a wallpaper.

Changing the File Type and Save

1 Click [Export] in the Main Window.

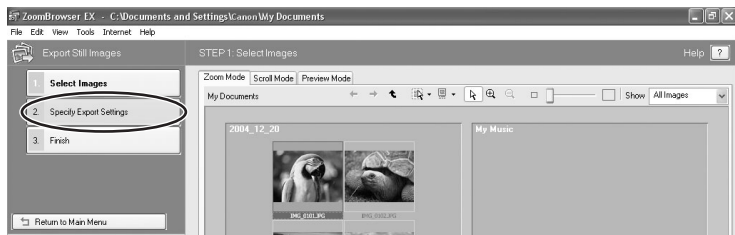


2 Select the export type.



When you have selected [Backup to CD], see *Saving on CD-R/RW Discs (Windows XP Only)* (39).

3 Select images and click [Specify Export Settings].

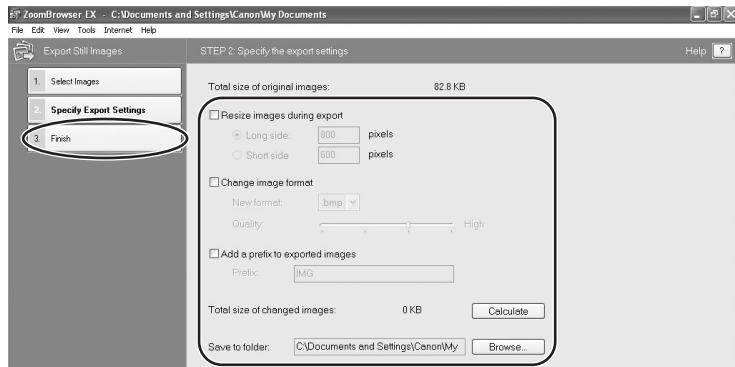


4 Specify the export settings and click [Finish].

The window varies depending on the selected export type in step2.

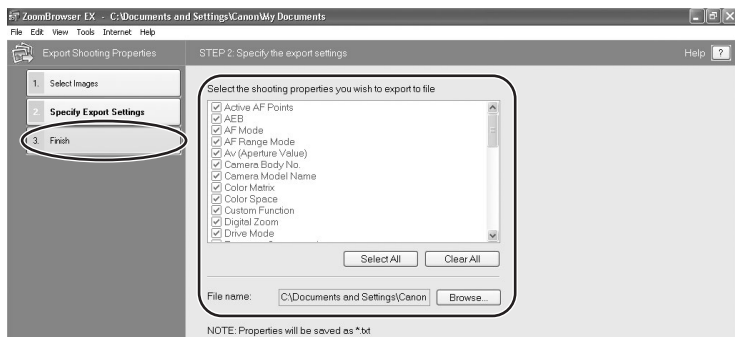
When you have selected [Export Still Images]:

You can convert still images to another file type, resize and save them as new files. You can select the file type from BMP, JPEG and TIFF. You can also specify a prefix to be added to the exported still images.



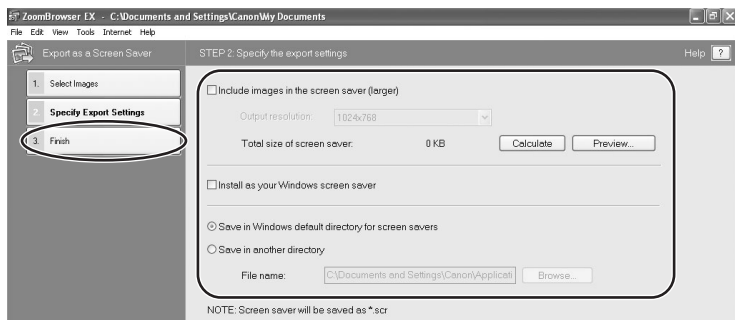
When you have selected [Export Shooting Properties]:

You can select the information you wish to export and save as a text file.



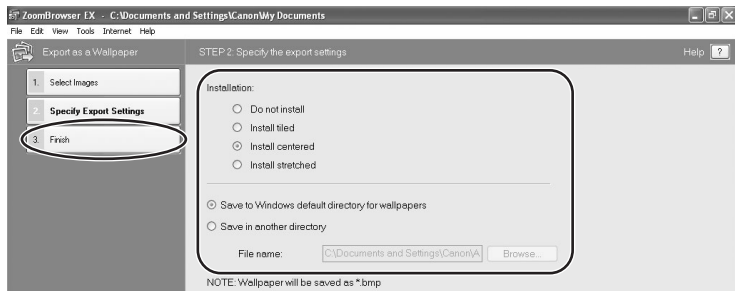
When you have selected [Export as a Screen Saver]:

You can export and save the image as a screen saver.



When you have selected [Export as a Wallpaper]:

You can export and save the image as Windows wallpaper. This task cannot be performed if you have selected multiple images.



Saving on CD-R/RW Discs (Windows XP Only)

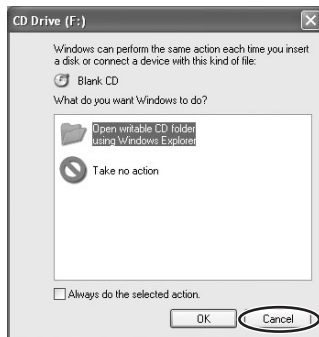
You can copy and save still images to CD-R and CD-RW discs. The shooting information is copied along with the images.



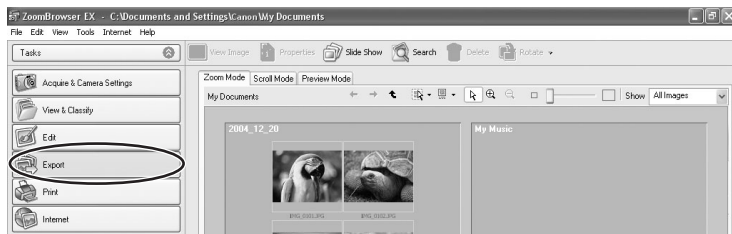
This function can only be used on a computer that came with a CD-R/RW drive as standard equipment.

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- 1 Place a CD-R/RW disc in the computer's CD-ROM drive.**
- 2 If the following window appears, click [Cancel].**

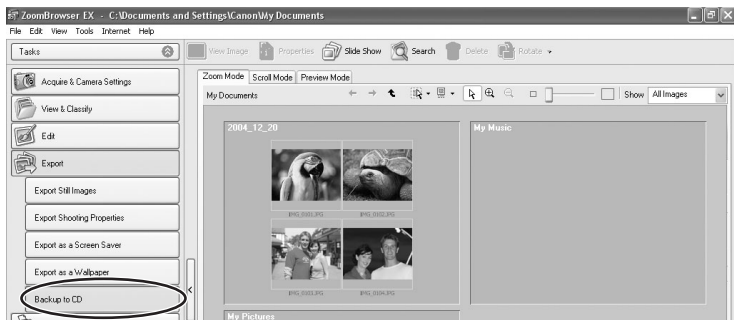


- 3 Click [Export] in the Main Window.**



Windows

4 Click [Backup to CD].

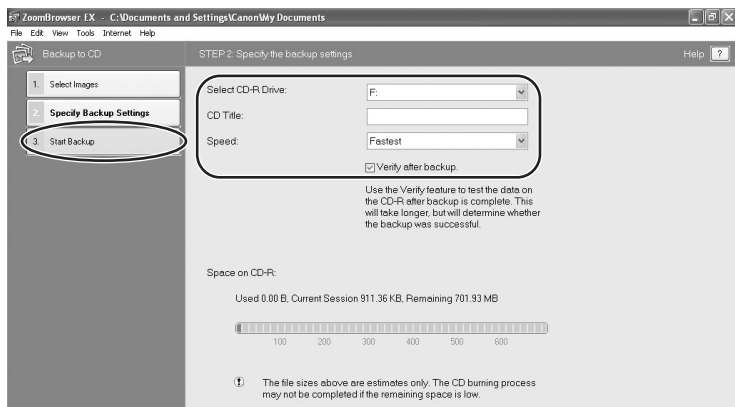


5 Select the folders or still images you wish to save and click [Specify Backup Settings].



6 Set the backup settings and click [Start Backup].

The disc will be ejected from the drive when copying is complete.



You can add still images to a CD-R/RW disc that already contains images.

Adding Still Images from Your Computer to the Memory Card

You can save still images (JPEG) from the computer to a memory card of the camcorder and a card reader/writer. You can also save sample images for card mix from the DIGITAL VIDEO SOLUTION DISK.

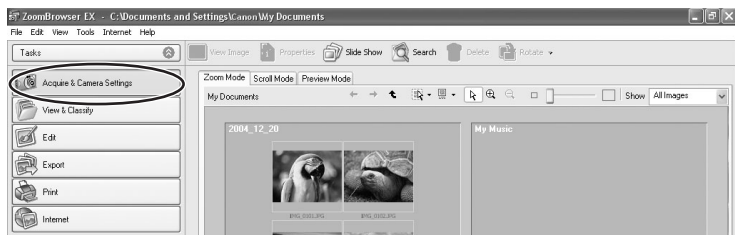


Unable to upload the still images to the disc.

■ Adding Still Images to the Memory Card

1 Connect the camcorder to the computer (10).

2 Click [Acquire & Camera Settings] in the Main Window.



3 Click [Set to Camera].



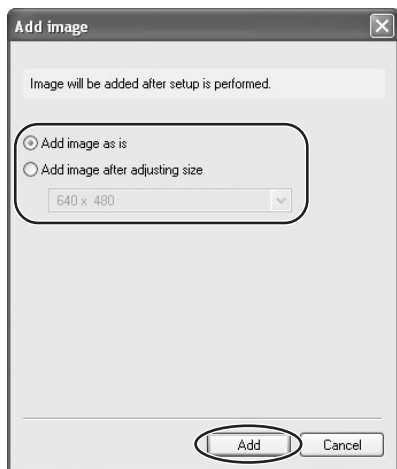
4 Click [Uploads images to the camera].



5 Select the still images you wish to save and click [Open].



6 Select the image size and click [Add].



When you upload images edited with another application, image properties may be lost.

■ Adding Sample Images to the Memory Card

You can save sample images for card mix to the memory card of the camcorder and a card reader/writer. CARD CHROMA, CARD ANIMATION, CARD LUMINANCE and CAMERA CHROMA are provided on the DIGITAL VIDEO SOLUTION DISK.



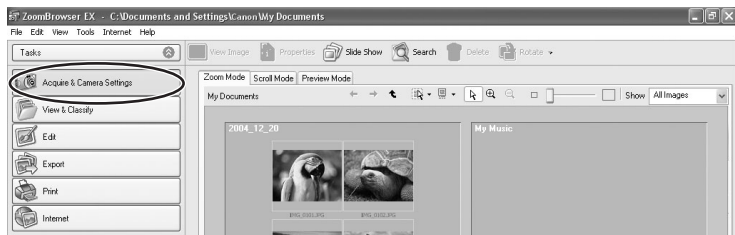
- The sample images provided on the supplied DIGITAL VIDEO SOLUTION DISK are intended only for personal use with this camcorder. Do not use these sample images for other purposes.
- Unable to upload the sample images to the disc.

1 Connect the camcorder to the computer (10).

2 Insert the DIGITAL VIDEO SOLUTION DISK to the computer's CD-ROM drive.

If the installer panel opens, click [Exit] to close it.

3 Click [Acquire & Camera Settings].



4 Click [Set to Camera].

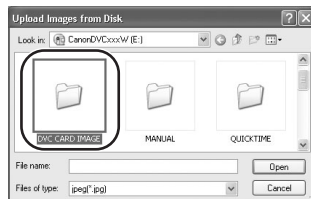


5 Click [Uploads images to the camera].

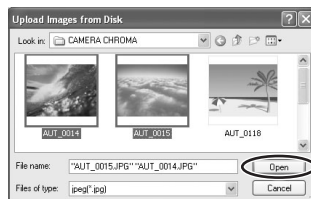


6 In [Look in:], select the CD-ROM icon, and double-click [DVC CARD IMAGE].

Sample images or folders for CAMERA CHROMA, CARD ANIMATION, CARD CHROMA and CARD LUMINANCE appear.



7 Select the sample images you wish to save and click [Open].



8 In the Add image window, click [Add].

The sample images are saved in the memory card.



Using Various Functions

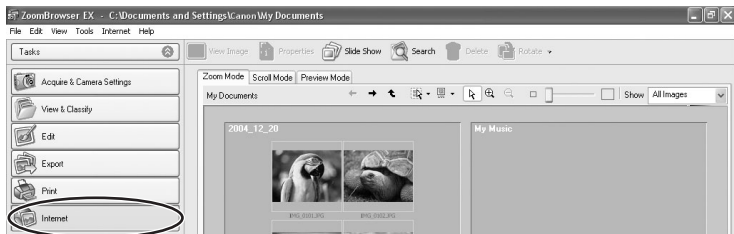
Attaching Still Images to E-mail Messages

You can attach selected still images to an E-mail message.



To use this function, the e-mail software must be enabled as MAPI client. For details, refer to the instruction manual of the e-mail software.

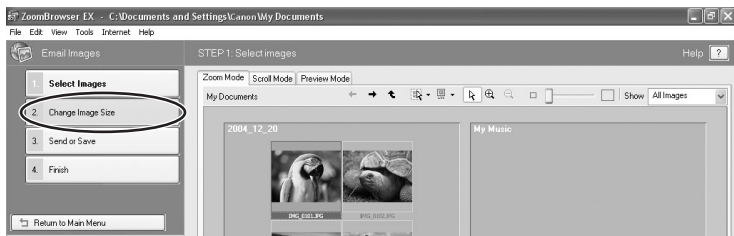
1 Click [Internet] in the Main Window.



2 Click [Email Images].



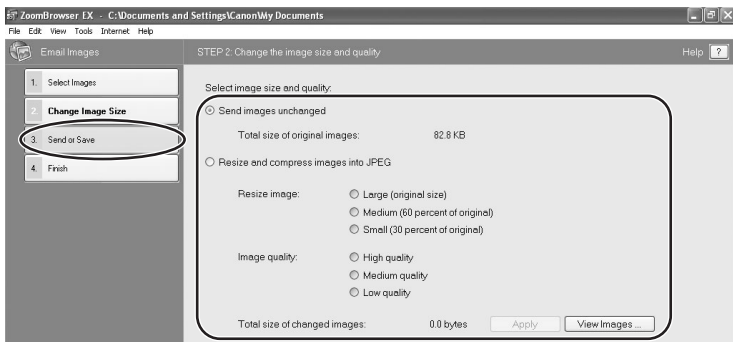
3 Select the still images you wish to send and click [Change Image Size].



4 Select image size and quality, and click [Send or Save].

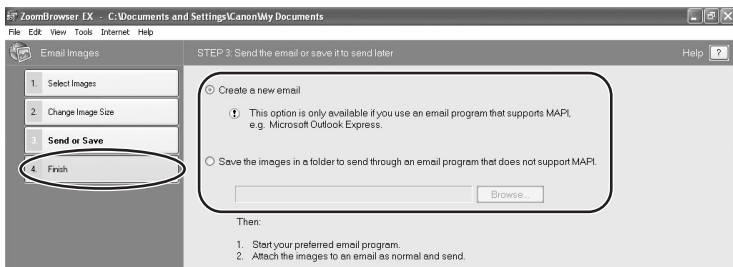
If you wish to send the still image without changes, select [Send images unchanged]. Normally select [Resize and compress images into JPEG].

- [Resize image]: Select the reduction ratio to the original still image.
- [Image quality]: The lower the quality, the coarser becomes the still image and smaller the file size.
- Pressing [Apply] displays the file size after the compression as [Total size of changed images].
- You can check the compressed still image by pressing [View Images].



5 Select to send still images by e-mail or to save the still images in a folder and click [Finish].

- If you selected [Create a new email], your e-mail software starts and the selected still images appear as an attachment in the message window. Input address, subject and your comments and send the message. E-mail software not supporting MAPI does not start automatically. In this case, select [Save the images in a folder...].
- If you select [Save the images in a folder...], click [Browse] and select the destination folder. Start your e-mail software and attach the saved still image to a message.



Running a Slide Show

You can view selected still images in a slide show.

1 Click [View & Classify] in the Main Window.

You can also view a slide show by clicking [Slide Show] on Application Tool Bar. Please skip forward to step 4.



2 Click [View as a Slide Show].

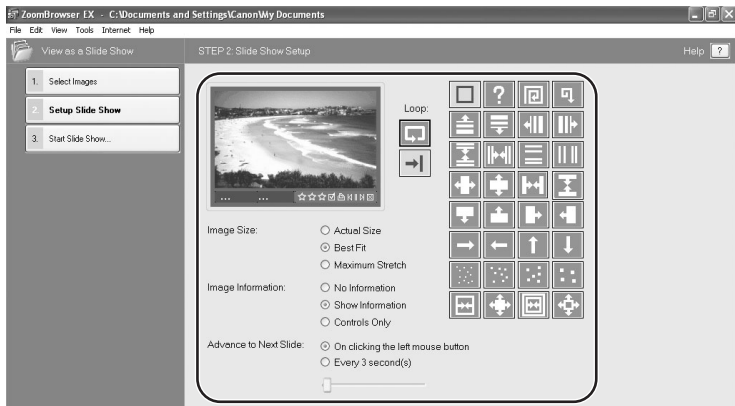


3 Select the still images and click [Setup Slide Show].




4 Select the slide show settings.

- [Image Size]: Select the size of the still images.
- [Image Information]: Select to show still image information such as file name or title.
- [Advance to Next Slide]: Select to advance manually or automatically. When you select "Every 3 seconds", you can select the interval in the control below (from 1 to 120 seconds).
- [Loop]: Select to stop the slide show after the last still image or to continuously run it in a loop.
- [Effect]: Select the transition effect to be used when moving from one slide to another. When you click an effect, you can check the effect in the preview window.



5 Click [Start Slide Show].

Click  in the lower right corner to end the slide show.

Merging Panoramic Images (PhotoStitch)

You can merge a series of overlapping still images into a single, seamless panorama. PhotoStitch automatically arranges still images recorded with the camcorder's Stitch Assist mode in their correct order and orientation, making it easy to merge them. Please refer to the Camcorder Instruction Manual to learn how to record in Stitch Assist mode.

The following instruction explains how to merge still images recorded in Stitch Assist mode with the camcorder.



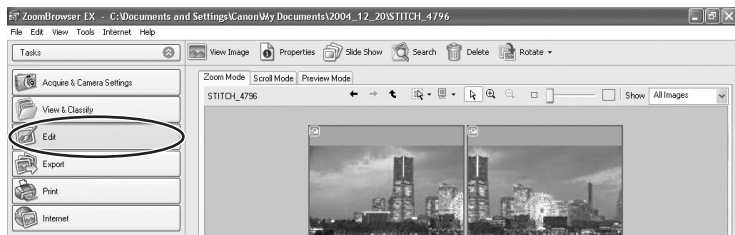
Still images recorded in Stitch Assist mode with Wide-converter or Tele-converter attached cannot be merged correctly.

1 Select still images shot in Stitch Assist mode.

To use PhotoStitch, images need to be shot in Stitch Assist mode. To download images, please refer to *Downloading Still Images (ZoomBrowser EX)* (p. 12).



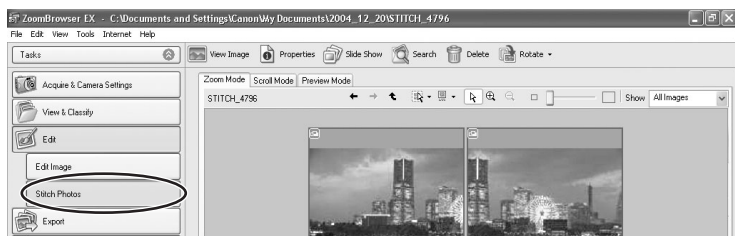
2 Click [Edit].



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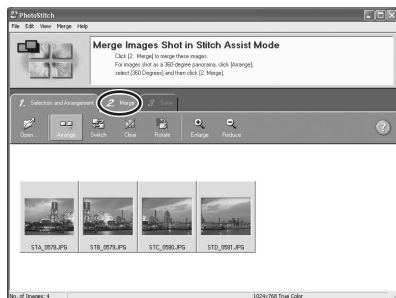
3 Click [Stitch Photos].

PhotoStitch starts.



4 Arrange the order of the still images and click [2. Merge].

Operational instructions are displayed in the upper section of the window.



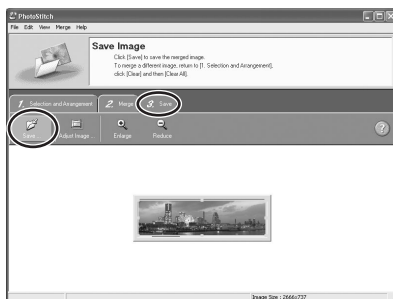
Windows

5 Click [Start].



6 Select [3. Save] and then click [Save].

- Select the destination folder, input the file name and click [Save].
- In the View the Saved Image? window, click [Yes]. The Viewer window opens and displays the merged image.
- To exit PhotoStitch, from the [File] menu, select [Exit].



- You can record the surroundings in 360 degrees, and stitch them together later to form a 360-degrees cylinder. (In [1. Selection and Arrangement], select [Arrange] and [360 Degrees].) By saving this stitched image in QuickTime VR type, you can then get a virtual view of the surroundings by manipulating the mouse. For this, you need to have QuickTime installed on your computer. If it is not already installed, install it from the DIGITAL VIDEO SOLUTION DISK. Place the disc in the CD-ROM drive and click QuickTime [Install] in the installer panel.
- Please refer to the PhotoStitch Help menu for more details.

Printing Still Images (PhotoRecord)

PhotoRecord is a printing program. You can use this program to lay out the still images for printing. You can also create original albums and save them to your computer. Movies cannot be printed.



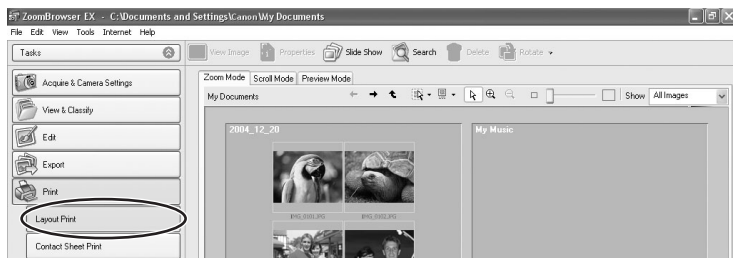
- Do not open the memory card cover, remove the memory card, detach the USB cable or turn off the camcorder while data is being transferred to the printer (when the camcorder's access indicator is flashing). Doing so may cause memory card data to become corrupted.
- If you are using a network printer and the printer name (including the network path) exceeds 31 characters, it may not be possible to print from PhotoRecord. If this happens, click the [Printers and Other Hardware] followed by [Printers and Faxes] from the Windows [Control Panel] and change the name of the printer, limiting its length to within 31 characters.

1 Click [Print] in the Main Window.



2 Click [Layout Print].


When you wish to print an index, select [Contact Sheet Print].

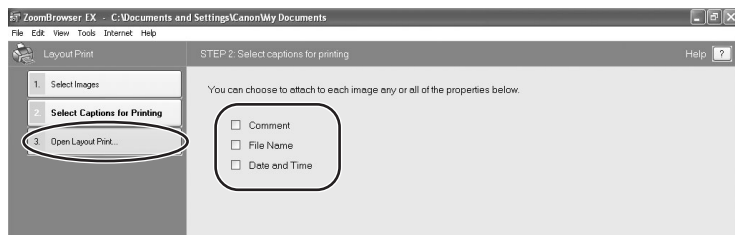


3 Select the still image you wish to print and click [Select Captions for Printing].

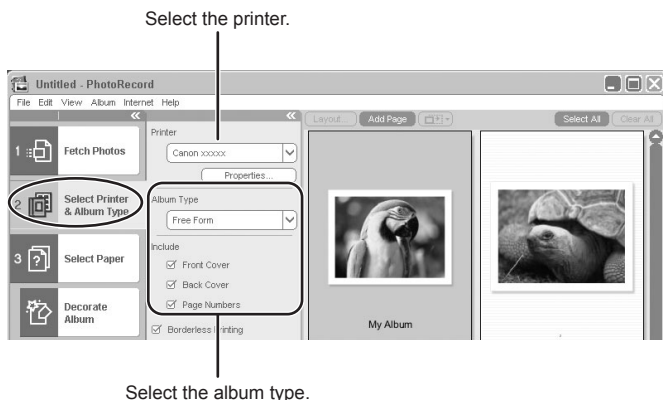


4 Select the image information you wish to include in the print and click [Open Layout Print].

- Place a check mark beside the items you wish include in the print.
- If you wish to add a comment, select a still image and enter a comment in the Properties window by clicking  Properties (Properties).



5 Click [2 Select Printer & Album Type] and select a printer and album type.



6 Click [3 Select Paper] and select the media type, paper size and page orientation.

- If you click [Decorate Album], you can change the theme (a consistent design for background, photo frames and text frames), or set the design elements individually. When you set the design elements individually, make sure to select the target page.
- If you click [Add Titles & Captions], you can add titles and text, and change font, font size, justification and color. Make sure to select the target page when performing these changes.



Set the paper type and orientation.

7 Click [4 Print], confirm the number of copies and other print settings, and click [Print].

Printing starts.



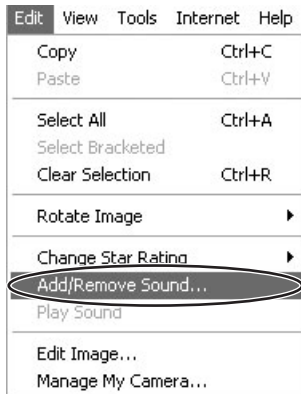
PhotoRecord automatically performs image correction for still images shot with Exif 2.2 compatible camcorders and even other images, yielding high-quality prints.

Adding Sound to a Still Image

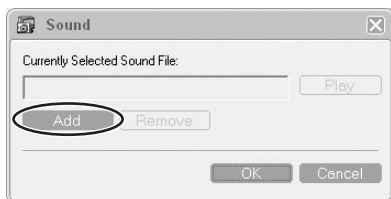
You can add a sound to an image. The sound file needs to be in WAVE format (extension “.wav”) or in MIDI format (extension “.mid” or “.midi”).

The sound cannot be played back on the camcorder.

- 1 In the Main Window, select an image and select [Add/Remove Sound] from the [Edit] menu.**



- 2 Click [Add].**



- 3 Select the sound file and click [Open].**

- 4 Click [OK].**

- The sound file will be copied to the same folder as the image.
- To play back the sound, select an image with a sound icon and select [Play Sound] from the [Edit] menu.



- To remove sound from an image, select [Remove] on the Sound window in step 2. The sound icon disappears and the copied sound file will be deleted.
- The [Play Sound] window appears and plays back the sound.

Applying DPOF Settings

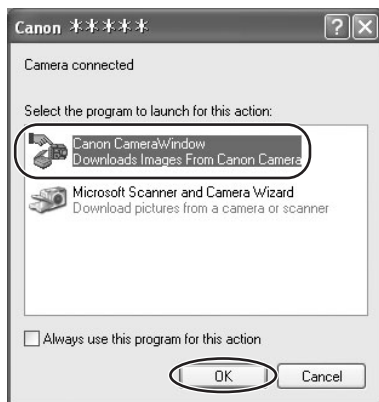
You can select still images and the number of prints for automatic printing on a DPOF (Digital Print Order Format)-compliant printer. You can set the DPOF print settings for the still images on the card also on the camcorder.



- DPOF print settings cannot be applied to still images recorded on the disc.
- The [Edit Slide/DPOF] window allows print settings on up to 998 still images. With some camcorders, DPOF print settings are limited to a maximum of 200 still images. In that case, all DPOF print settings on the 201st still image and onward will be erased.
- If 999 or more still images are recorded on a memory card, the [Edit Slide/DPOF] window may not operate properly. To set the number of prints, reduce the number of images on a memory card to 998 or less.

1 Connect the camcorder to the computer (10).

2 Select [Canon CameraWindow] and click [OK].



3

Click the [Set to Camera] tab and click [Set Slide Show/DPOF].

- When connecting a card reader/writer, click the [Set to Memory Card] tab and click [Set Slide Show/DPOF].
- The slide show function of the camcorder cannot be used.



4

Click [Print Order(DPOF)] and select a print type from the drop-down list.

- [Standard Print]: Prints selected still images in the specified number of copies. Use the arrows next to the boxes to select the number of copies.
- [Index Print], [Both (Standard/Index)] and the option [Titles] of the [Edit] menu (printing of date and file number) are not supported by the camcorder.



- 5** Select the still images you wish to print and the number of copies.



- 6** Click [Save to Camera].
The DPOF print settings will be saved to the memory card.

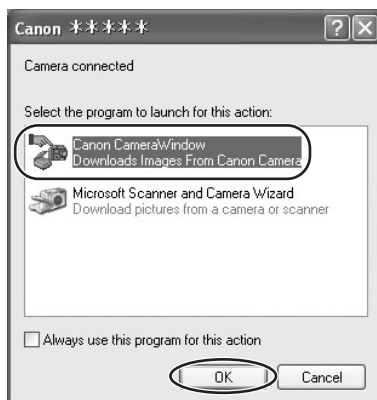


Reviewing and Changing the Settings of the Camcorder

You can adjust the date, time and owner settings of the camcorder. You can also check the remaining memory card capacity or format the memory card.

1 Connect the camcorder to the computer (10).

2 Select [Canon CameraWindow] and click [OK].



3 Click the [Set to Camera] tab and click [Confirms/changes camera settings].



4 Change the settings of the camcorder and click [OK].

Input a camcorder owner name here (up to 31 characters).

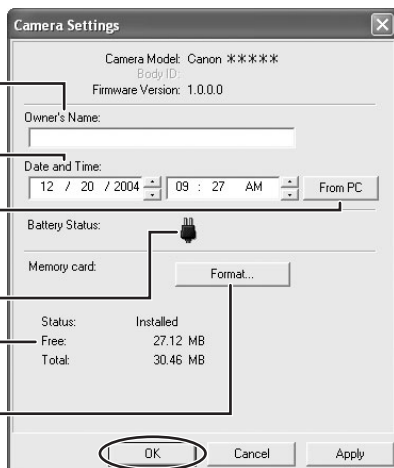
Set the date and time here.

Click this button to synchronize the camcorder to the computer's date and time settings.

Check the power status here.

Check the remaining disc or memory card capacity here.

Click this button to format the memory card in the camcorder.



The disc in the camcorder cannot be formatted.

Uninstalling the Software

Uninstall the software when you wish to delete it from your computer or when reinstallation is required to fix corrupted files.

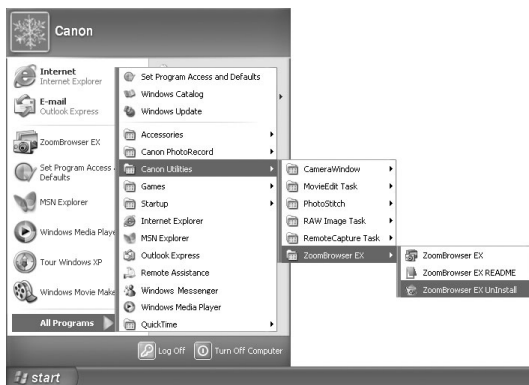


Users of Windows 2000 and Windows XP must first log in as an Administrator to uninstall the driver and other programs.

Uninstalling ZoomBrowser EX

1 Click the Windows [start] menu and select [All Programs] ▶ [Canon Utilities] ▶ [ZoomBrowser EX] and [ZoomBrowser EX Uninstall].

The uninstall utility starts and removes ZoomBrowser EX.



- Uninstall all programs in [Canon Utilities] when you have uninstalled ZoomBrowser EX.
- When uninstalling CameraWindow, please uninstall it in the following order:
 - 1) [CameraWindow] in the [EOS Digital] folder
 - 2) [CameraWindow DC_DV x] in the [PowerShot xxxxx] folder
 - 3) [CameraWindow MC x] in the [CameraWindow] folder
- PhotoRecord and PhotoStitch can be removed with the same procedure.
- RemoteCapture Task and RAW Image Task are used with Canon digital cameras. The camcorder does not support these programs.

Uninstalling the TWAIN Driver/WIA Driver

Users of Windows XP do not need to uninstall the driver.

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- 1** Connect the camcorder to the computer (📖 10).
- 2** If a window for selecting an application program or the **Scanners and Cameras Wizard** appears, click [Cancel]. If **ZoomBrowser EX** started, close it.
- 3** Click the Windows [Start] menu and select [Settings] and [Control Panel].
- 4** Double-click the [Scanners and Cameras] icon.
If you cannot find the [Scanners and Cameras] icon, see *TWAIN Driver/WIA Driver Uninstallation* (📖 65).

- 5** **Windows 98/Windows 2000:**
 1. Delete [Canon Camera] from the [Scanners and Cameras Properties] list.
 2. Click [OK] to close the window.
 3. Turn the camcorder power switch to OFF and remove the USB cable from the computer.
 4. Click the Windows [Start] menu and select [Programs], [Canon Utilities], [DV TWAIN Driver x.x] and [TWAIN Driver Uninstall].
A version number appears in place of "x.x".

Windows Me:

1. Delete the camcorder icon from the [Scanners and Cameras] folder.
2. Click [OK] to close the window.
3. Click the Windows [Start] menu and select [Programs], [Canon Utilities], [DV WIA Driver x.x] and [WIA Driver Uninstall].
A version number appears in place of "x.x".

- 6** **When the Confirm Uninstall window appears, click [OK].**
The uninstall process starts.
- 7** **When the Maintenance Complete window appears, click [Finish].**

Windows

Troubleshooting

Connection

? Camcorder is not recognized when connected to the computer.

➔ Computer does not support the USB interface.




The USB interface is not supported for computer not in compliance with the following requirements. Acquire the necessary system to use the USB interface.

Requirements: Built-in USB port on a system pre-installed with Windows 98, Windows Me, Windows 2000, or Windows XP.

➔ There is no disc or memory card in the camcorder.

Insert a disc or a memory card into the camcorder.

➔ The camcorder is not set to the correct mode.

Turn the power switch to PLAY and move the  /  switch to . Next, select [DISC] or [CARD] in the SYSTEM SETUP menu.

➔ Camcorder is not correctly connected to the computer.

Read *Connecting the Camcorder to a Computer* (□ 10) and check the connection.

Ensure that you are using the correct cable and that its connectors are in good shape.

➔ If you are experiencing operational problems, detach the USB cable from the camcorder and computer and terminate the connection. Restart the computer and the camcorder, and then reconnect the camcorder.




➔ TWAIN Driver or WIA Driver is not installed properly.

First uninstall the TWAIN/WIA Driver, then reinstall the driver from the DIGITAL VIDEO SOLUTION DISK (remove the check marks from the other programs when prompted to select the programs to be installed).

ZoomBrowser EX Operation

? Cannot download still images

➔ The camcorder is not set to the correct mode.

Turn the power switch to PLAY and move the  /  switch to . Next, select [DISC] or [CARD] in the SYSTEM SETUP menu.

? Still image files or folders do not appear in ZoomBrowser EX.

➔ Still images of folders shown in ZoomBrowser EX and the actual file contents may be different when an image file has been moved or copied using Windows functions or edited with a separate program.

Click the [View] menu and select [Refresh Current Folder].

Driver Installation

? Cannot install the TWAIN Driver/WIA Driver correctly.

➔ Does the system have a built-in USB port and did it come with Windows 98/Windows Me/Windows 2000 preinstalled?

➔ Camcorder is not correctly connected to the computer.

Read *Connecting the Camcorder to a Computer* (□ 10) and check the connection.

Ensure that you are using the correct cable and that its connectors are in good shape.

- Are you using the power adapter to power the camcorder?
→ If the problem is not mentioned above, the TWAIN Driver/WIA Driver may not have been recognized by Windows.
Uninstall and reinstall the driver.

TWAIN Driver/WIA Driver Uninstallation

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



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.



Use the procedures below for the following circumstances too.

- If you do not find [Scanners and Cameras] in the [Control Panel] or [Printers and Other Hardware].
- If [Canon Camera] or your camcorder model name does not appear in the [Scanners and Cameras Properties] or [Scanners and Cameras].
- If you connected the camcorder to the computer via the USB cable before installing the Digital Video Software.

Windows 98/Windows Me

Leave the camcorder connected to the computer.

- 1 Click the Windows [Start] menu and select [Settings] and [Control Panel].**
- 2 Double-click the [System] icon.**
The [System Properties] dialog appears.
- 3 Click the [Device Manager] tab.**
- 4 If [Canon Camera] appears under the [Other Devices] and/or [Imaging Devices] categories, use the following procedures to delete it.**
 1. Select [Canon Camera] and click [Remove].
 2. In the confirmation dialog, click [OK].
 3. Click [OK] to close the [System Properties] dialog.
- 5 Double-click the [My Computer] icon on the desktop followed by the [C:] drive and the [Windows] and [Inf] folders.**
If the [Inf] Folder Is Not Visible in the [Windows] Folder
 1. Windows 98: Click the [View] menu and select [Folder Options].
Windows Me: Click the [Tools] menu and select [Folder Options].
 2. Click the [View] tab.

3. Windows 98: Set the [Hidden files] section to [Show all files].
Windows Me: Set the [Hidden files and folders] section to [Show hidden files and folders].
4. Click [OK].
This makes the [Inf] folder and files in the [Inf] folder visible.

6 Find and delete the [Drvdata.bin] and [Drvidx.bin] files.

7 In the [Inf] folder, double-click [Other] folder to open it.

8 Find and delete the [Canon.IncCAPxxx.inf] and [Canon.IncCDVxxx.inf] file.

- The xxx represents numerals.
- If the above file is not contained in the [Other] folder, you do not need to delete anything.

Windows 2000

Leave the camcorder connected to the computer.

1 Click the Windows [Start] menu and select [Settings] and [Control Panel].

2 Double-click the [System] icon.

3 Click the [Hardware] tab.

4 Click the [Device Manager] button.

5 If [Canon Camera] or your camcorder model name appears under the [Other Devices] and/or [Imaging Devices] categories, use the following procedures to delete it.

1. Select [Canon Camera] or the name of the camcorder model, right-click the mouse button and select [Delete].
2. In the confirmation dialog, click [OK].
3. Click [OK] to close the [System Properties] dialog.
Remove all copies of [Canon Camera] or your camcorder model name that appear in the [Other Devices] or [Imaging Devices] categories, or that appear more than once in one category.

6 Double-click the [My Computer] icon on the desktop, followed by the [C:] drive, and the [Winnt] and [Inf] folders. If the [Inf] Folder Is Not Visible in the [Winnt] 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 setting] 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.
4. Click [OK] to close the dialog.
This makes the [Inf] folder and the files in the [Inf] folders visible.

7 Look for the file for Canon digital camcorders starting with [Oem*].

- A number such as "0" or "1" will appear 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".
- If you double-click an [Oem*.inf] file, the Windows Notepad program will start and show the file contents. Click each [Oem*.inf] file until you find one that contains "**** Canon Camera Driver Setup File****" in its first line. When you find the correct file, note down its name and close the Notepad window.

8 Delete the [Oem*] file set.

Delete all [Oem*.inf] and [Oem*.pnf] files, taking great care to delete the correct files.

If You Were Using ZoomBrowser EX Version 2 or 3 (This manual explains version 5.x)

? Titles and comments added using a prior version than ZoomBrowser EX version 4 do not appear in ZoomBrowser EX 4 or higher.

➔ **Titles and comments added using a prior version of ZoomBrowser EX will not be displayed. Use the following procedure to display them.**

1. In Windows Explorer, open the [Program] folder under the folder in which you installed ZoomBrowser EX 4 or higher (C:\Program Files\Canon\ZoomBrowser EX\Program).
2. Double-click [dbconverter.exe].
3. Select the database you were using until now (C:\Program Files\Canon\ZoomBrowser EX\Program) and click the [Start] button.
Please note that with ZoomBrowser EX 4 or higher, both titles and comments appear in the comment list.

? Cannot find the still image folders saved with a prior version than ZoomBrowser EX 5.x.

➔ **Still image folders saved under the [Program Files] folder (such as [Image Library One]) cannot be displayed in the Main Window's Folder Area of ZoomBrowser EX 4 or higher. Use the following procedure to display them.**

1. In Windows Explorer, open the [Program Files] folder under the folder in which you installed ZoomBrowser EX 4 or higher (C:\Program Files\Canon\ZoomBrowser EX\Program\Image Library One).
2. Select the still image folder you wish to display and copy the folder to a different destination.



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