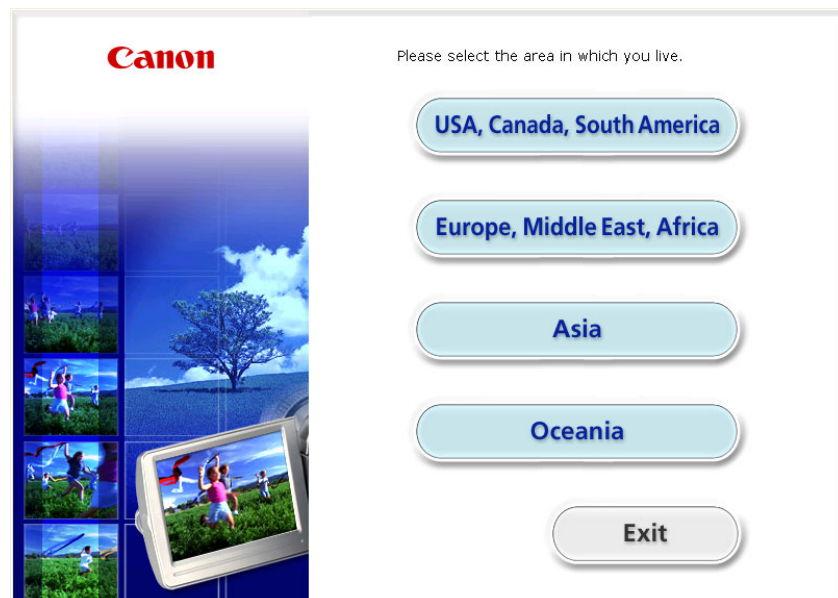




Digital Video Software Windows

Version 28

Instruction Manual



English

Contents

Read This First	4
Checking Supplied Accessories	4
System Requirements	5
What is Digital Video Software?	6
Windows	7
CameraWindow	7
[Acquire Images] Tab	7
[Print] Tab	8
[Set to Camera] Tab	9
Camera Browser Window	10
Main Window	11
[Image Viewer] Window	15
[Red Eye Correction] Window	16
[Auto Adjustment] Window	17
[Color/Brightness Adjustment] Window	17
[Sharpness] Window	18
[Trim Image] Window	18
[Insert Text] Window	19
Installing the Digital Video Software	20
Before Downloading Still Images	25
Connecting the Camcorder to a Computer	25
Downloading Still Images.....	27
When Connecting the Camcorder to a Computer.....	28
Using the Computer to Download Still Images (CameraWindow)	29
Auto-Downloading	29
Auto-Downloading Settings	30
Downloading the Selected Still Images from the CameraWindow	33
Using the Camcorder to Download Still Images (Direct Transfer Function)	36
Setting the Direct Transfer Download Destination Folder	36
Direct Transfer	37
Using a Card Reader/Writer	38
Using the Computer to Download Still Images (ZoomBrowser EX).....	39
Auto-Downloading	39
Auto-Downloading Settings	39
Downloading the Selected Still Images from the ZoomBrowser EX	41
Printing Still Images.....	42
Printing Still Images Recorded on the Memory Card.....	42
Printing Still Images Downloaded to the Computer	47
[Photo Print]	47
[Index Print]	49
Organizing Images	51
Applying Star Ratings and Keywords.....	51
Classifying the Images.....	52
Renaming Multiple Files	54
Searching for Images.....	56
Creating a Movie from the Still Images	59
Editing Movies	59
Playing Back Movies.....	63




Exporting Images	65
Changing the File Type and Saving	65
Exporting Movies	69
Extracting Still Images from Movies (Windows Vista/Windows XP)	72
Saving on CD-R/RW Disks (Windows Vista/Windows XP).....	75
Adding Still Images to the Memory Card	78
Adding Still Images to the Memory Card in the Camcorder	78
Using Various Functions	80
Attaching Still Images to E-mail Messages	80
Running a Slide Show	82
Adding Sound to a Still Image.....	84
Reviewing and Changing the Owner Name of the Camcorder	85
Uninstalling the Software	86
Uninstalling ZoomBrowser EX.....	86
Uninstalling the TWAIN Driver (Windows 2000 only).....	87
Troubleshooting	88

Read This First

■ Disclaimer

- While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for any errors or omissions. Canon reserves the right to change the specifications of the hardware and software described herein at any time without prior notice.
- No part of this guide may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without the prior written permission of Canon.
- Canon makes no warranties for damages resulting from corrupted or lost data due to mistaken operation or malfunction of the camcorder, the software, memory cards (SD, SDHC and miniSD Cards), personal computers, or peripheral devices, or due to use of a memory card not initialized by a Canon camcorder.

■ Trademark Acknowledgments

- QuickTime is a trademark of Apple Inc., registered in the U.S. and other countries.
- Microsoft, Windows, Windows Media and Windows Vista are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.
- ,  and  are trademarks of SD Card Association.
- Other names and products not mentioned above may be registered trademarks or trademarks of their respective companies.

© Canon Inc. 2008 All rights reserved.

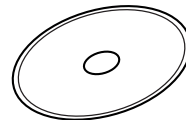
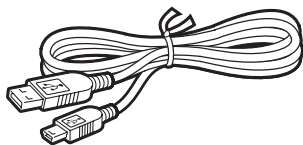
■ Safety Precautions

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 memory card to your computer.

- Supplied USB cable
The cable supplied with your camcorder may be different from the one described in this manual.
- 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

Install the software on a computer meeting the following minimum requirements.

- OS:** Windows Vista
Windows XP (Service Pack 2)
Windows 2000 (Service Pack 4)
* 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:** Windows Vista: Pentium 1.3 GHz or better
Windows XP/Windows 2000: Pentium 500 MHz or better
- RAM:** Windows Vista: 512 MB or more
Windows XP/Windows 2000: 256 MB or more
- Interface:** USB: only preinstalled Windows Vista/Windows XP/
Windows 2000 systems with built-in USB ports
- Free Hard Disk Space:** • Canon Utilities
- ZoomBrowser EX: 200 MB or more
• Canon DV TWAIN 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 Vista:	Windows Vista
Microsoft Windows XP (Service Pack 2):	Windows XP
Microsoft Windows 2000 (Service Pack 4):	Windows 2000

What is Digital Video Software?

Digital Video Software allows you to download still images you recorded with the camcorder to a computer and manage, print, and edit them.

■ ZoomBrowser EX

- Viewing still images as thumbnails
- Managing by shooting date folders with still images
- Categorizing, organizing, and searching large volumes of still images
- Printing still images
- Editing still images
- Changing the data for still images and save them as new files
- Attaching still images to e-mail
- Viewing still images in a slide show
- Adding sound to a still image

■ CameraWindow

- Downloading still images from a memory card to your computer
- Viewing still images recorded on a memory card
- Printing still images recorded on a memory card without downloading the still images to the computer

■ TWAIN Driver (Windows 2000 only)

- Driver software that enables you to download still images from a memory card to a computer.

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.



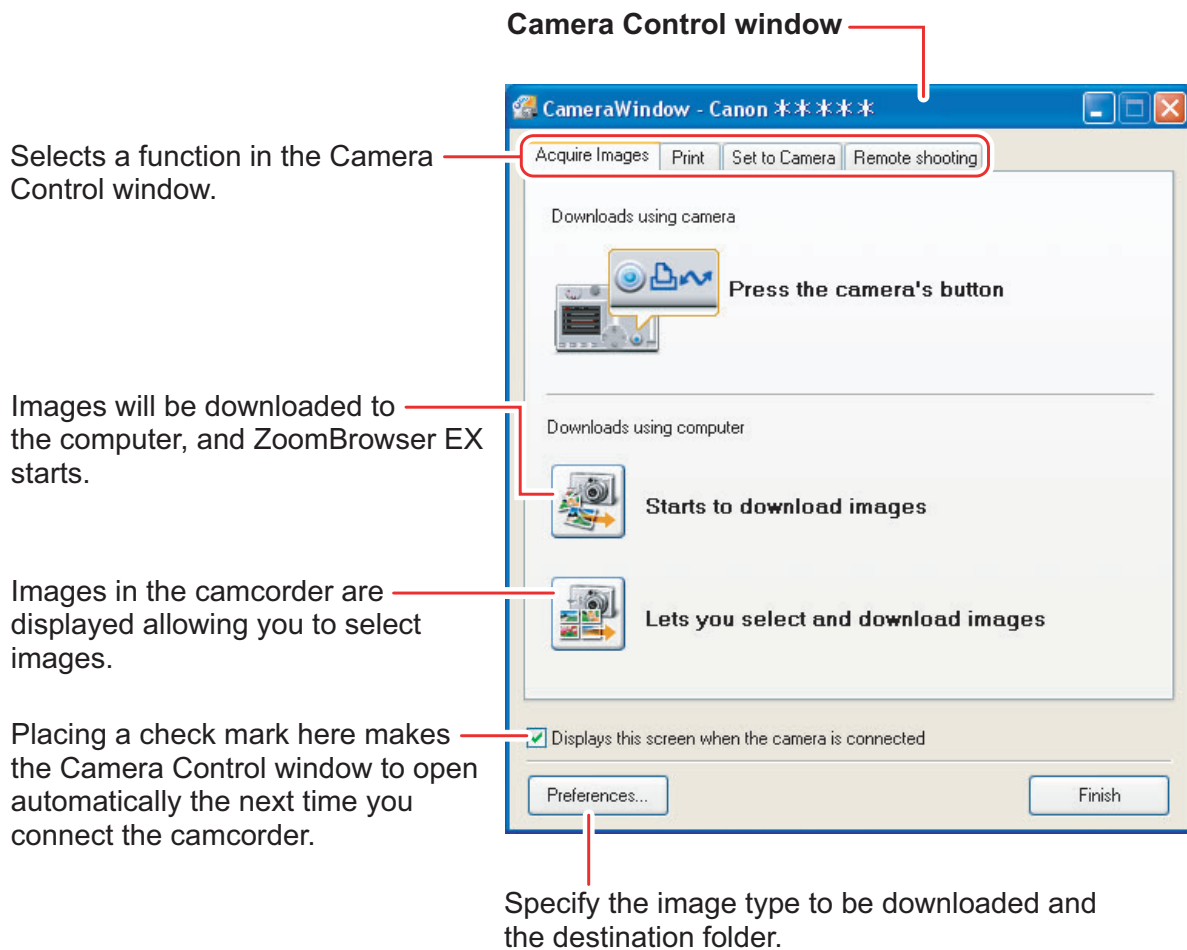
Your camcorder may not support some features of the software.

CameraWindow

After you connect the camcorder to your computer, you can use CameraWindow to download still images on the memory card to the computer. Furthermore, you can print still images recorded on the memory card without having the images downloaded to the computer (42), and you can confirm and change the owner's name of the camcorder you specify (85). Refer to *When Connecting the Camcorder to a Computer* (28) for launching the software. The Remote capture function is not supported by the camcorder.

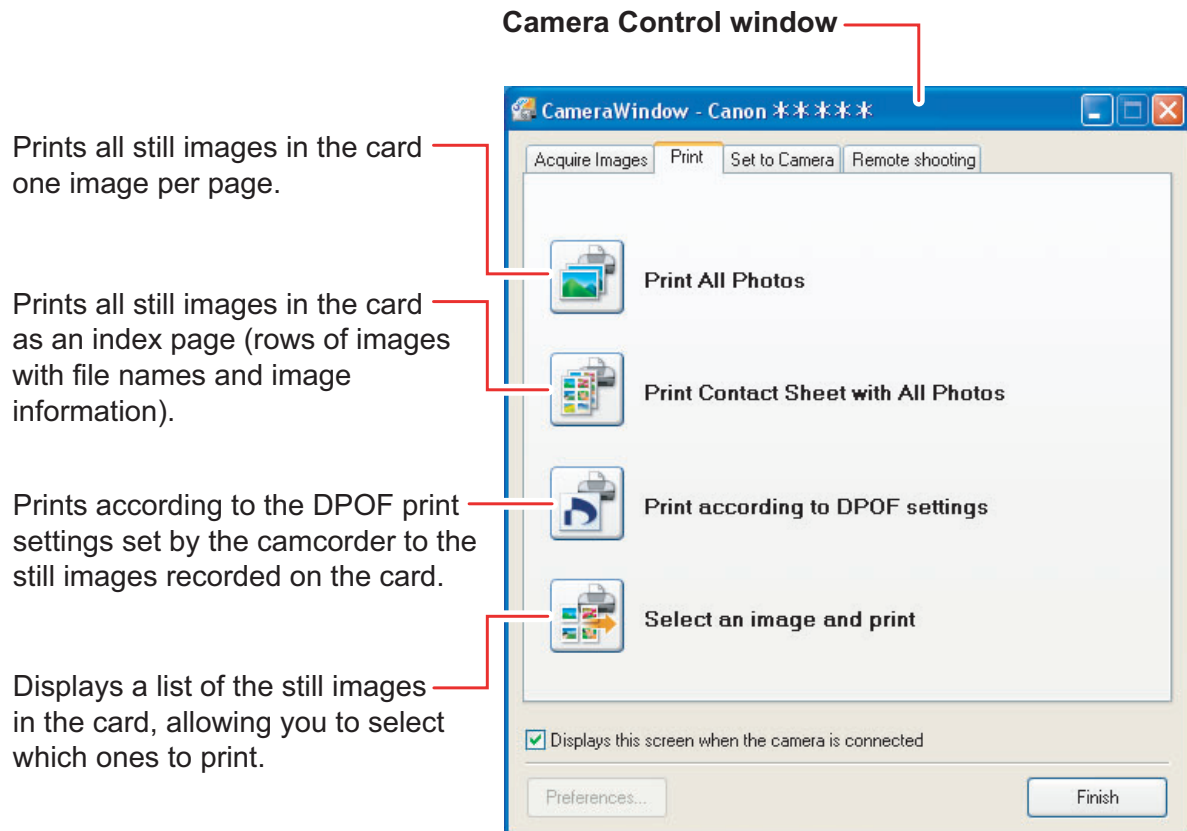
■ [Acquire Images] Tab

After you connect the camcorder to your computer, use this tab to download still images on the memory card to the computer.



■ [Print] Tab

After connecting the camcorder to your computer, use this tab to print still images on the memory card without downloading them to the computer first. The window varies depending on the selected printing type. Refer to *Printing Still Images Recorded on the Memory Card* (📖 42).



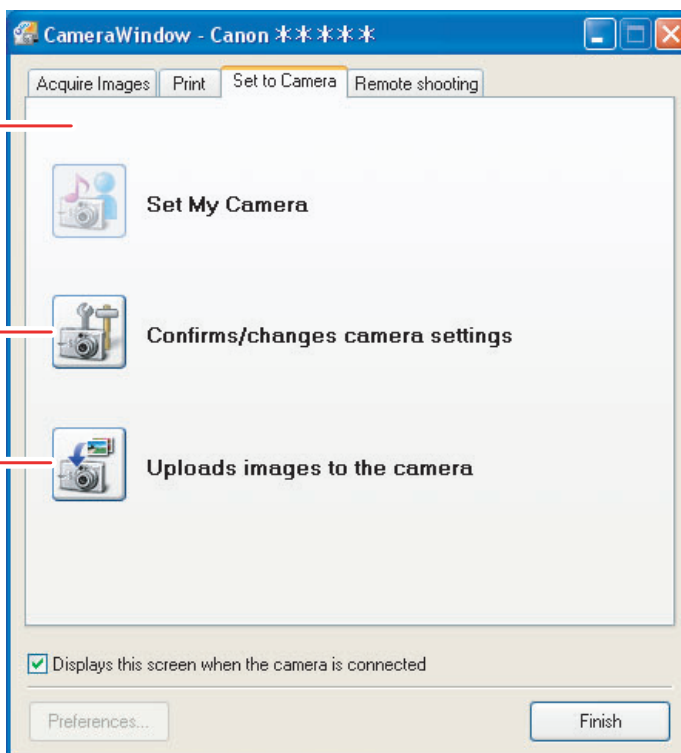
■ [Set to Camera] Tab

This tab is used for confirming and changing the owner's name of the camcorder you can specify (85) and uploading the still images to the card. My Camera function is not supported by the camcorder.

Camera Control window

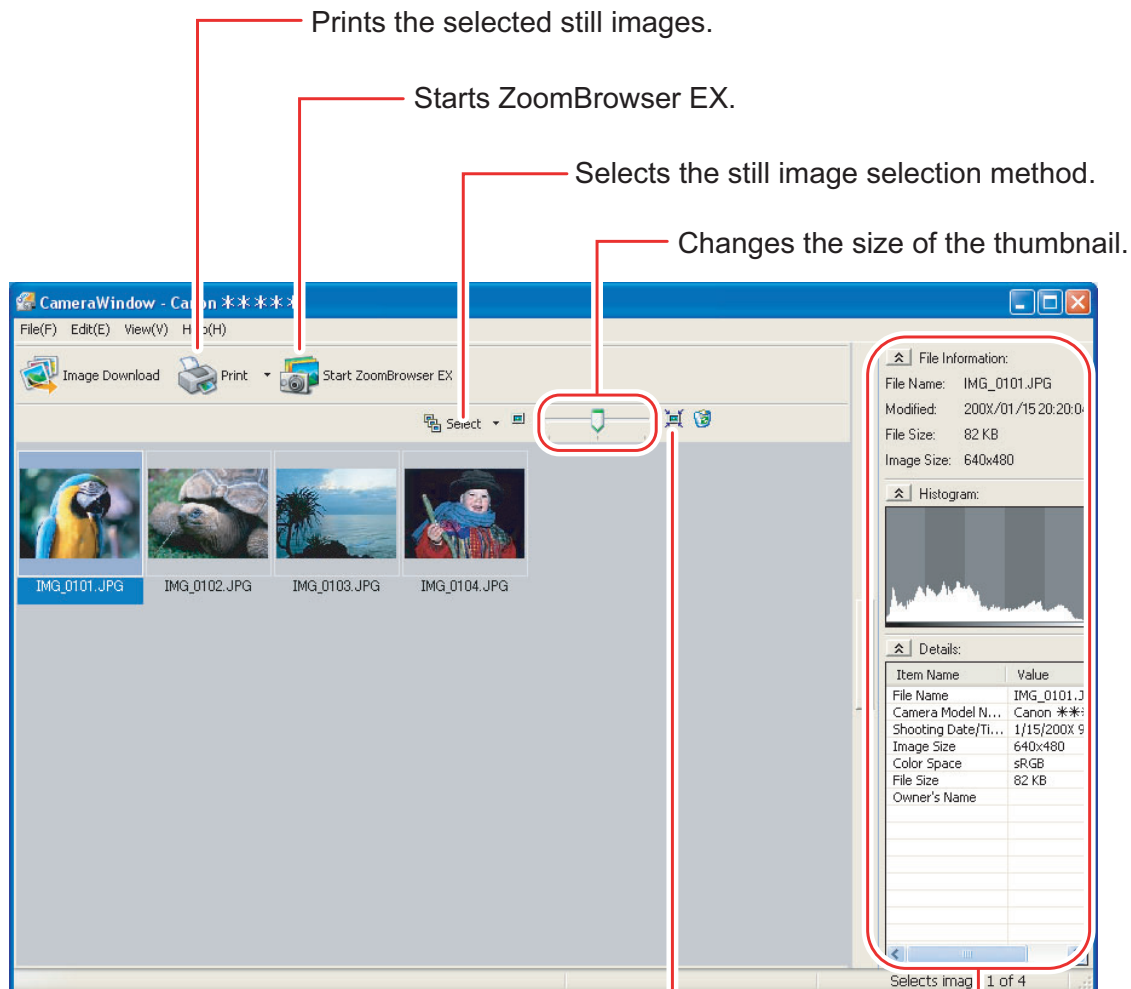
Enter or change the name of the camcorder's owner.

Uploading the images from the computer



Selecting [Manage My Camera] from the [Edit] menu displays the [My Camera] window. If you click [Creating My Camera data] in the [My Camera] window, [My Camera Maker] will be launched. [My Camera Maker] is a program that enables you to create and import My Camera contents (start-up images, start-up sound, shutter sound, operation sound and self timer sound) to camcorders that support this function. Your camcorder does not support the My Camera function.

■ Camera Browser Window

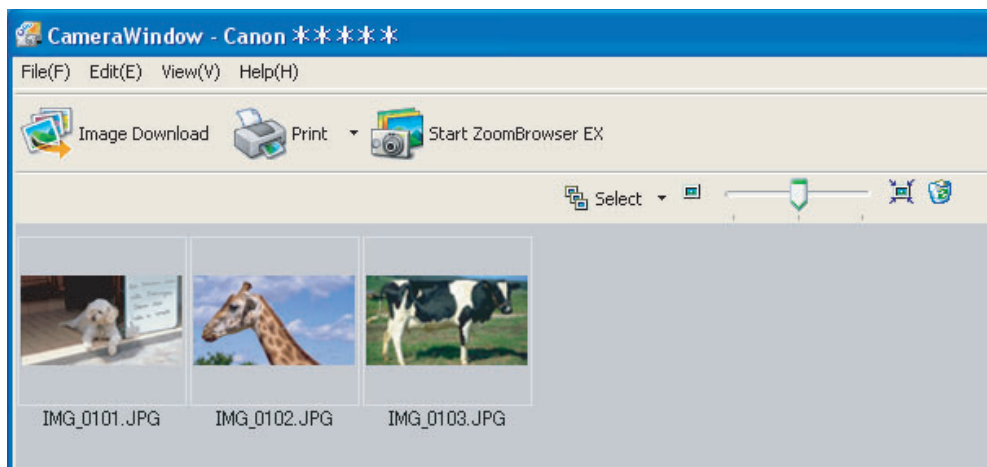


Selects whether to show or hide the image frame and file name.



Still image information and a histogram
(This will not be displayed when using a card reader/writer.)

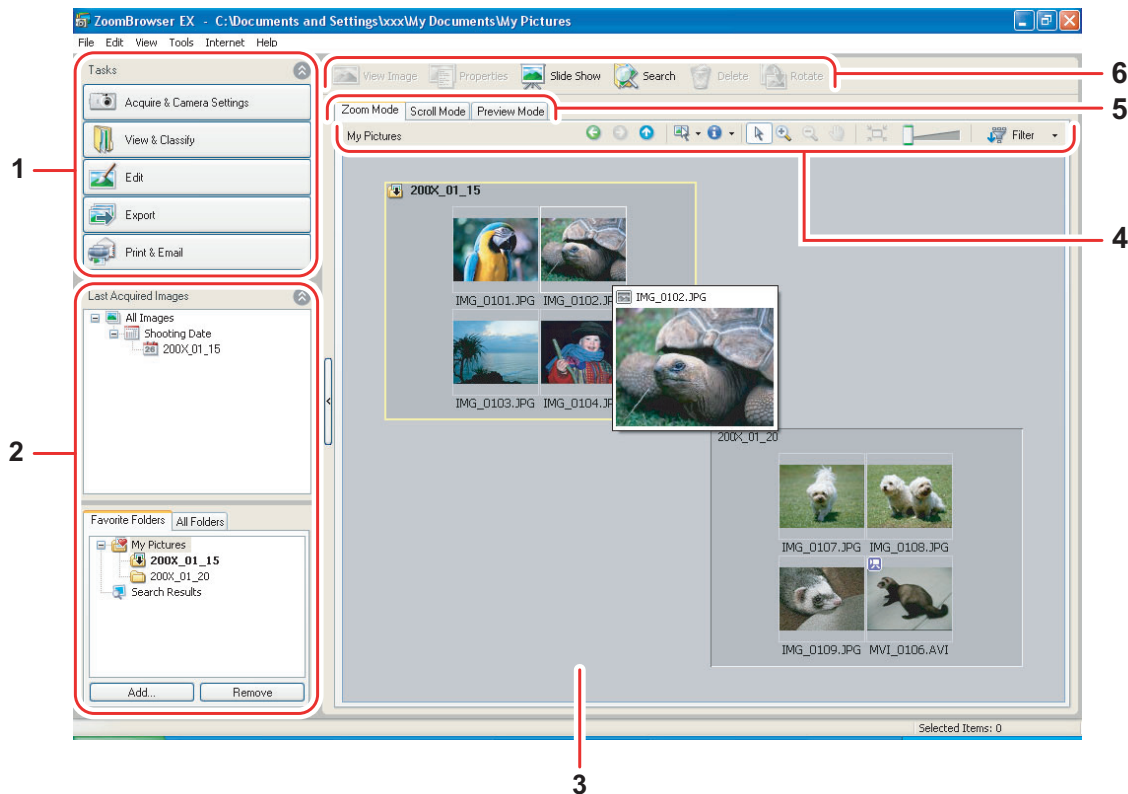


If your camcorder supports wide size still image (16:9 such as 1920 x 1080 pixels) recording, the thumbnails that appear in this window will be also 16:9 images. The sample images used on this instruction manual are normal size still images (4:3).



Main Window

ZoomBrowser EX is a software program used for organizing, printing and editing the downloaded still images. 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.



1 Task Area

[Acquire & Camera Settings]: Use this to display the Camera Control window to download still images, to print still images without having them downloaded to the computer and to 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, extract still images from movies, back up to CD-R/RW (Windows Vista/ Windows XP), or export shooting properties to a text file.

[Print & Email]: After you download still images to a computer, use this to print them or to attach them to e-mail messages.

2 Folders Area

You can select a folder to be displayed in the Browser Area. In the [Last Acquired Images] panel, the newly downloaded still images are placed into virtual folders classified by recording date. In the panel below, the folders where the downloaded still images are actually saved in are displayed. Selecting the [Favorite Folders] tab shows only the folders that are registered as favorites. The [All Folders] tab shows all available folders.  indicates that newly downloaded still images are in the folder. To register folders as Favorites, follow the instructions below.

When the [Favorite Folders] tab is selected:



Click [Add] and select a folder.

When the [All Folders] tab is selected:

Select a folder and click [Add to Favorites].

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

3 Browser Area

This area displays the images contained in the selected folder. If you place the cursor over a thumbnail in the browser area,  will be displayed at the upper right corner. Clicking  skips over folders to zoom in directly on the intended folder.



- 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.

4 Image display control panel

The menu items vary depending on the View Mode.

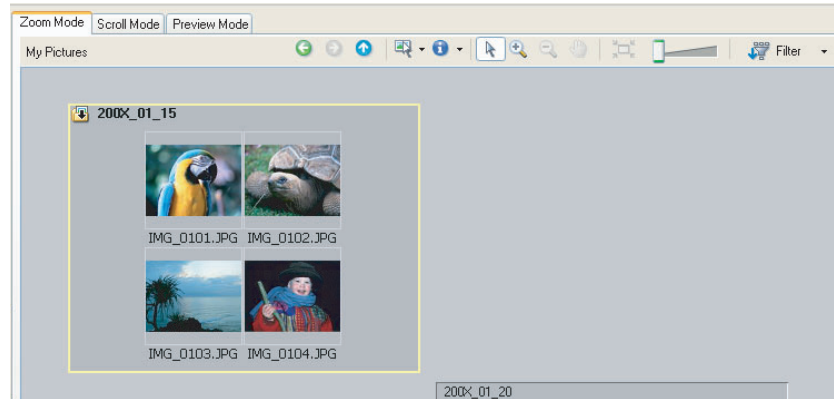


1	Previous/Next	Displays the previous/next image in the current folder.
2	Up	Displays the folder in the upper tiers of the hierarchy.
3	Select	Allows you to select all images and deselects images.
4	Information	Allows you to select the information to be shown. You can also hide the pop-up window by clearing the check box. The pop-up window appears when you move the pointer over a thumbnail.
5	Pan	Changes the area displayed when you zoom in on a folder or image in the Browser Area and drags the thumbnail list.
6	Restore Display Size	Changes the size of the thumbnail list to fit the window.
7	Zoom Slider	Enlarges/Reduces the thumbnails in the Browser Area.
8	Filter	Allows you to select which still images to display according to the star rating. When you download the images, the star rating is set to two stars as a default. To change the star rating, refer to <i>Applying Star Ratings and Keywords</i> (📖 51).

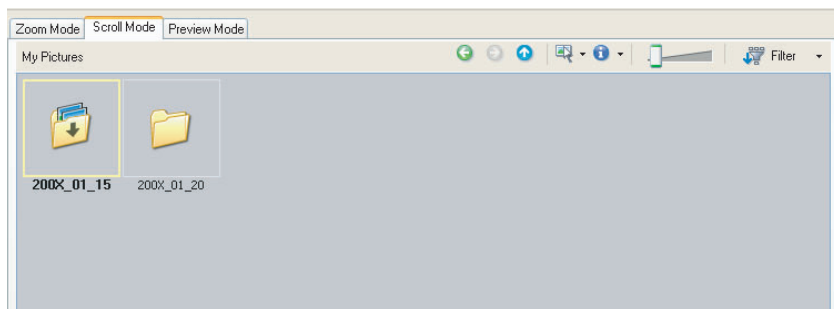
5 View Mode

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

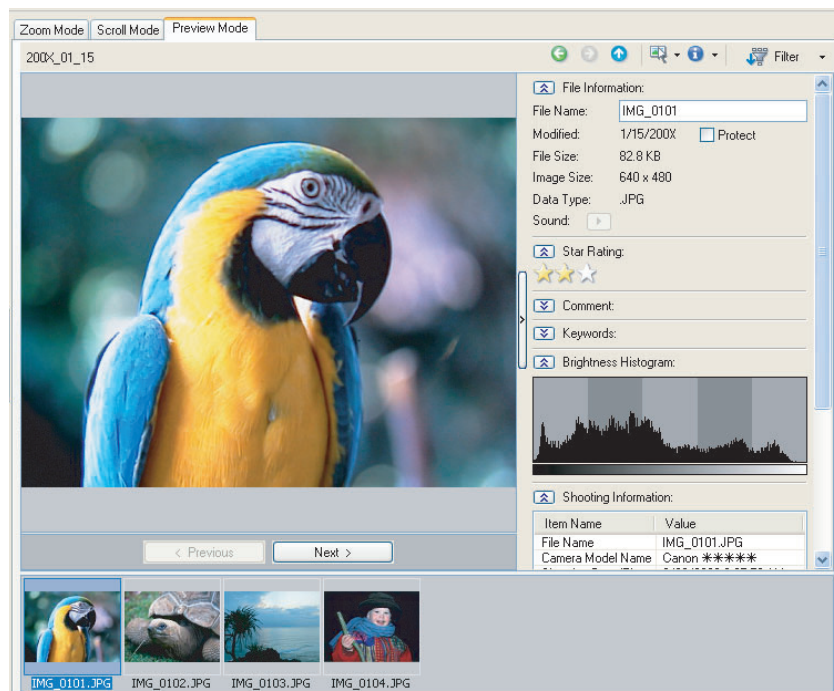
[Zoom Mode]: The images in the selected folder are shown as thumbnails.



[Scroll Mode]: Double clicking a folder shows thumbnails of the still images inside.

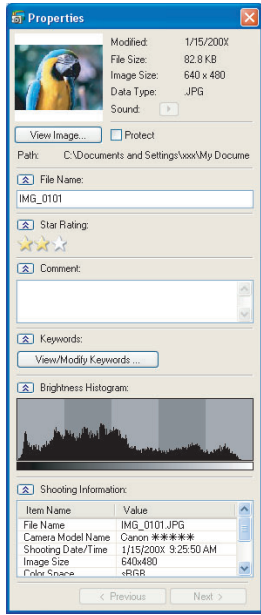


[Preview Mode]: Double clicking the folders at the bottom of the window opens the folder and shows a large still image in the folder along with detailed information. You can change file name and comments. To display another image, click [Previous]/[Next] or select an image shown at the bottom of the window.



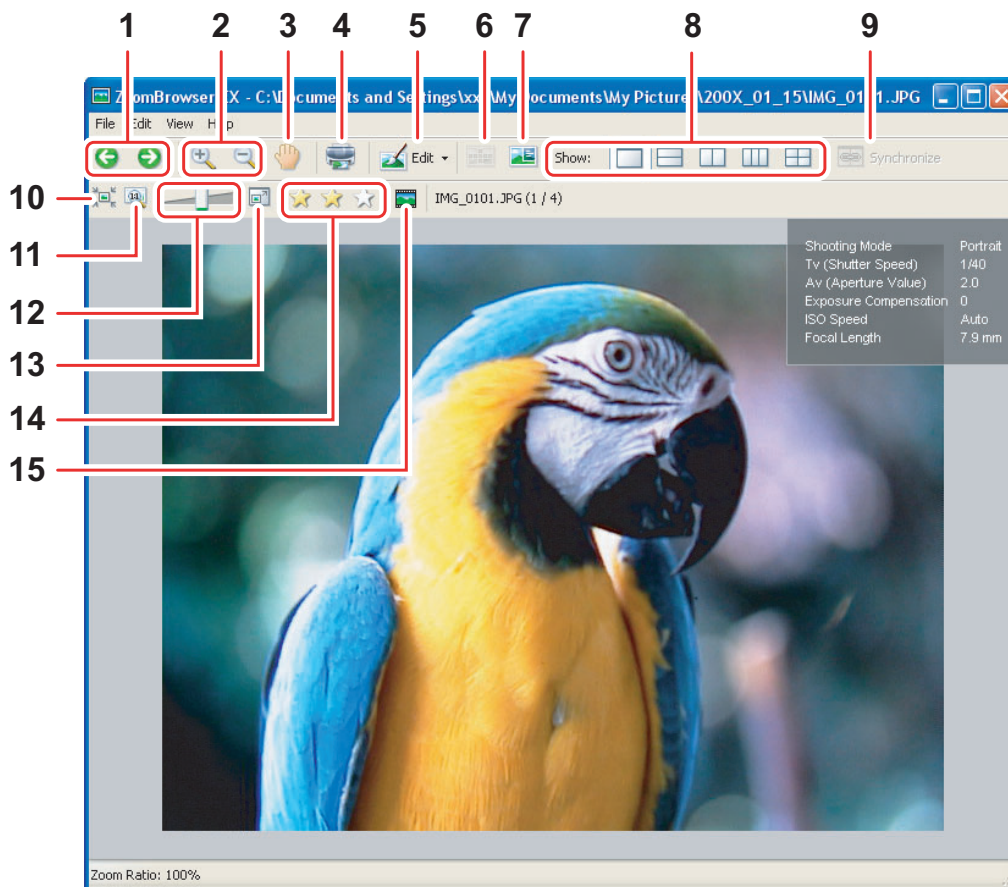
6 Command buttons



1	View Image	Displays a selected 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. 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 images (56).
5	Delete	Deletes selected images.
6	Rotate	Rotates selected still images. A movie cannot be rotated.

[Image Viewer] Window

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




1	Previous/Next	Displays the previous/next image in the current folder.
2	Zoom In/Zoom Out	Enlarges/Reduces a still image.
3	Pan	When the image is larger than the window, you can move the image in the desired direction.
4	Print	Prints the selected still image. Refer to <i>[Photo Print]</i> (47).
5	Edit	Allows you to perform the following operations: red-eye correction, auto correct, color and brightness correction, sharpness adjustment, trimming, inserting text, or registering external image editing applications.
6	Auto Focus Frame	This function cannot be used for the images recorded by the camcorder.
7	Shooting Information	The shooting information of the image will be displayed.
8	Show	Allows you to display multiple images at the same time.
9	Synchronize	Synchronizes the View functions across all displayed images.

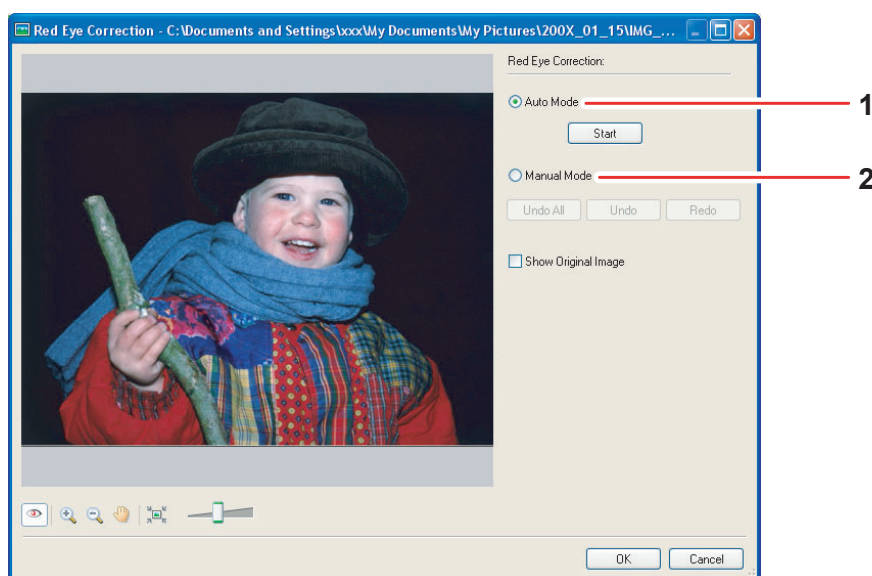
10	Fit to Window	Matches the image size to the size of the Image Viewer Window.
11	Restore	Restores the standard display size.
12	Zoom Slider	Allows you to enlarge/reduce the displayed image.
13	Show Image Full Screen	Displays an image in full screen size.
14	Change the Star Rating	Allows you to change the star rating.
15	Capturing Frames	Extracts still images from movies. (Windows Vista/Windows XP)



Windows Vista: The star rating set using ZoomBrowser EX is not related to the "Rating" setting in Windows Photo Gallery and Windows Explorer.


■ [Red Eye Correction] Window

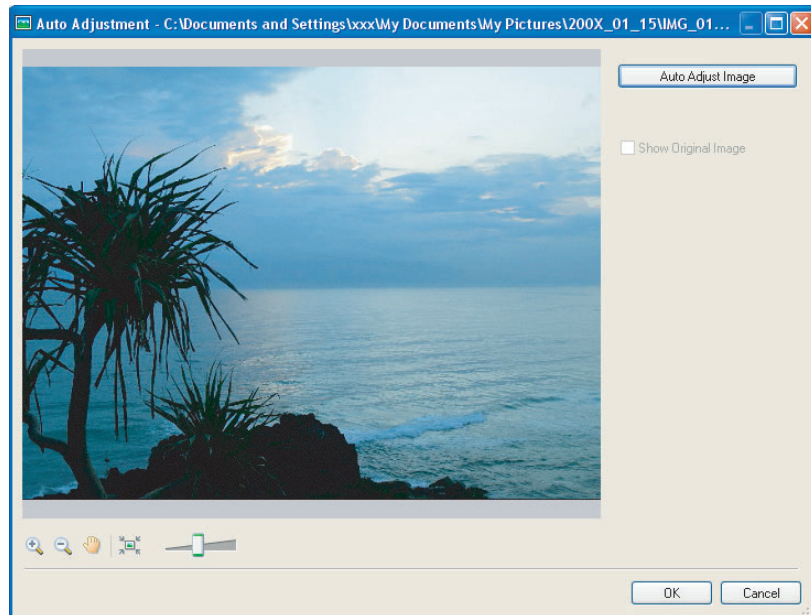
Select [Red Eye Correction] from the [Edit] menu, or click the  icon and select [Red Eye Correction]. Use this to correct still images in which people's eyes appear red.




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 click the mouse button.

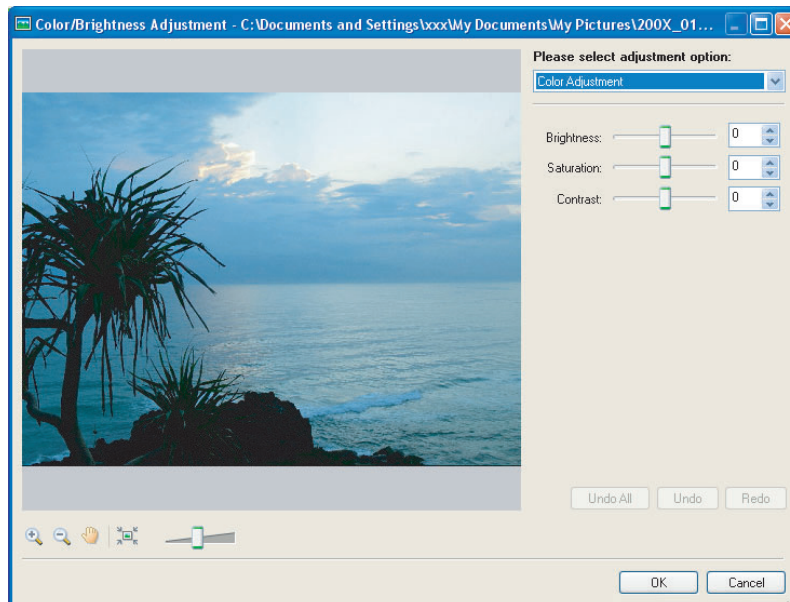
■ [Auto Adjustment] Window

Select [Auto Adjustment] from the [Edit] menu, or click the  Edit ▾ icon and select [Auto Adjustment]. Use this to automatically correct the color balance of the still image.




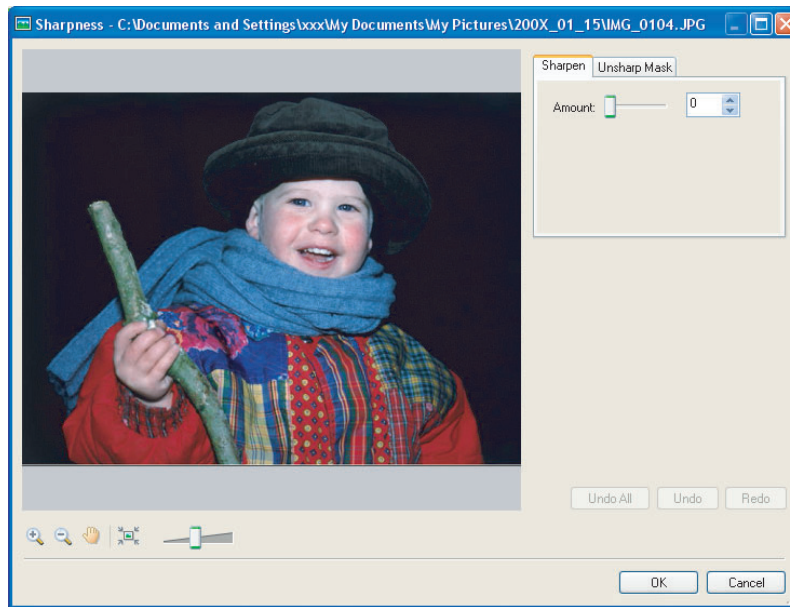
■ [Color/Brightness Adjustment] Window

Select [Color/Brightness Adjustment] from the [Edit] menu, or click the  Edit ▾ icon and select [Color/Brightness Adjustment]. Use this to adjust the brightness, saturation, contrast, intensity levels, tone curve and RGB of the still image.




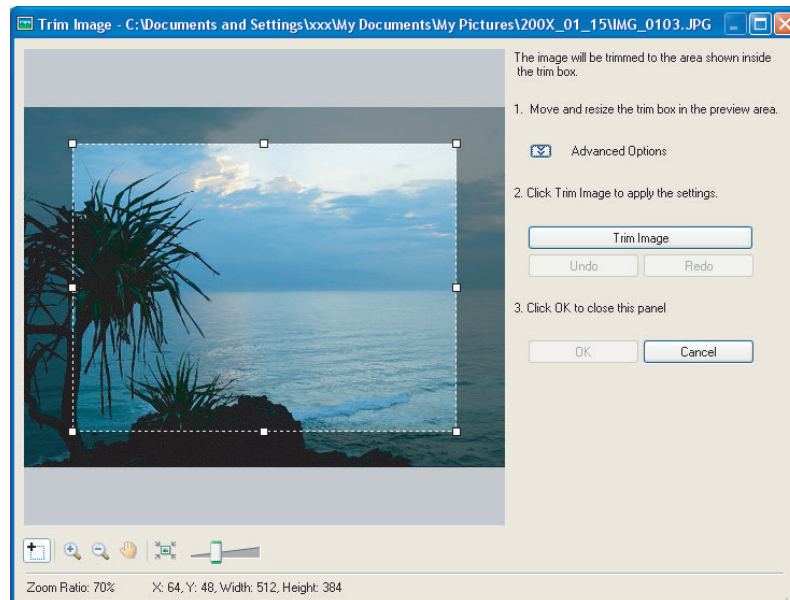
■ [Sharpness] Window

Select [Sharpness] from the [Edit] menu, or click the  icon and select [Sharpness]. Use this to emphasize and clarify the outlines of people and objects.




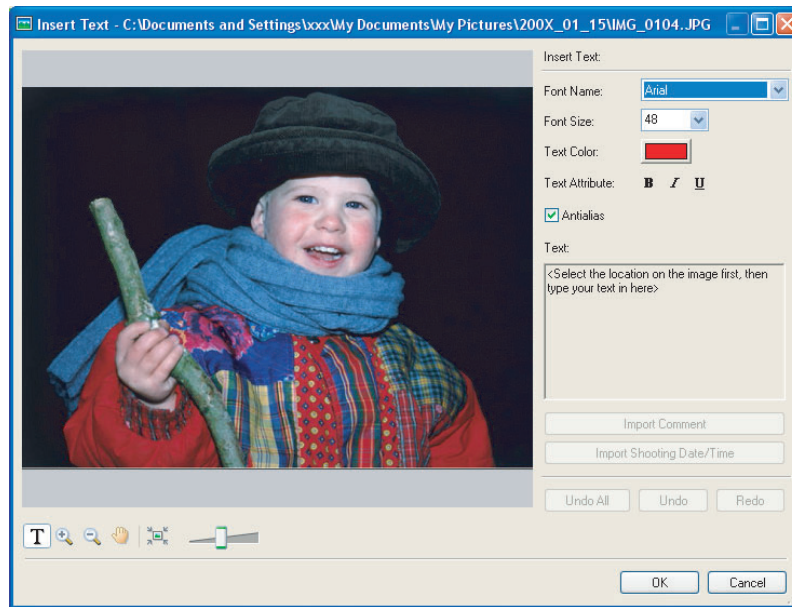
■ [Trim Image] Window

Select [Trim] from the [Edit] menu, or click the  icon and select [Trim]. Specify the area in the still image to crop and click [Trim Image] to trim the image.



■ [Insert Text] Window

Select [Insert Text] from the [Edit] menu, or click the  Edit ▾ icon and select [Insert Text]. Use this to write text on still images.



These image correction tools can be selected by clicking [Edit] ► [Edit Image] in Task Area of the Main Window.

Installing the Digital Video Software



- Be sure to install the Digital Video Software before connecting the camcorder to the computer.
- You must have authorization as a Computer System Administrator to install programs.



Windows Vista/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 (applications such as the [Scanner and Camera Wizard] start automatically).

However, note that there are several limitations to downloading still images with this method. To avoid these, 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 that the 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.

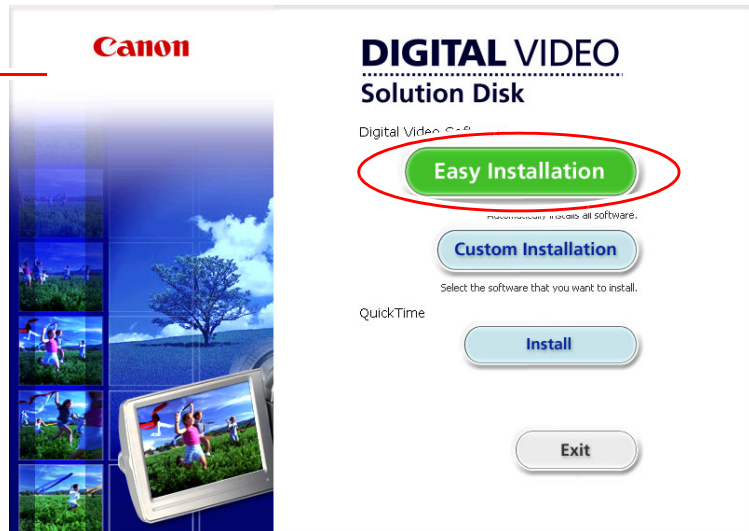
2 Set the DIGITAL VIDEO Solution Disk in the computer's CD-ROM drive.

- Windows Vista: When the [AutoPlay] window appears, click [Run SETUP.EXE]. Follow the instructions in the [User Account Control] window that appears after a brief period.
- Windows XP/Windows 2000: The installer panel appears automatically.
- If the installer panel does not open automatically, use the following procedures to display it.
 - Windows Vista:
 - 1) Select [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.
 - 4) Follow the instructions in the [User Account Control] window that appears.
 - 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.
 - 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.

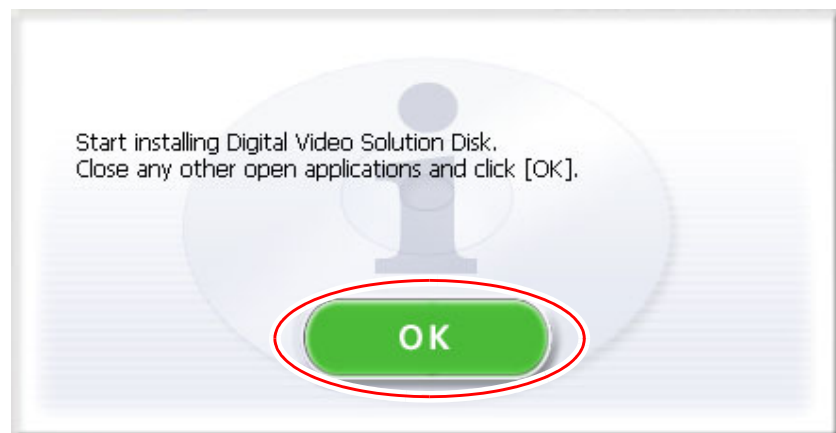
Depending on your computer's settings, the file extension ".EXE" may not appear.

- 3 Select your country or region.**
- 4 Select your language.**
- 5 Click [Easy Installation] under Digital Video Software.**
To install the software individually, click [Custom Installation].

Installer Panel



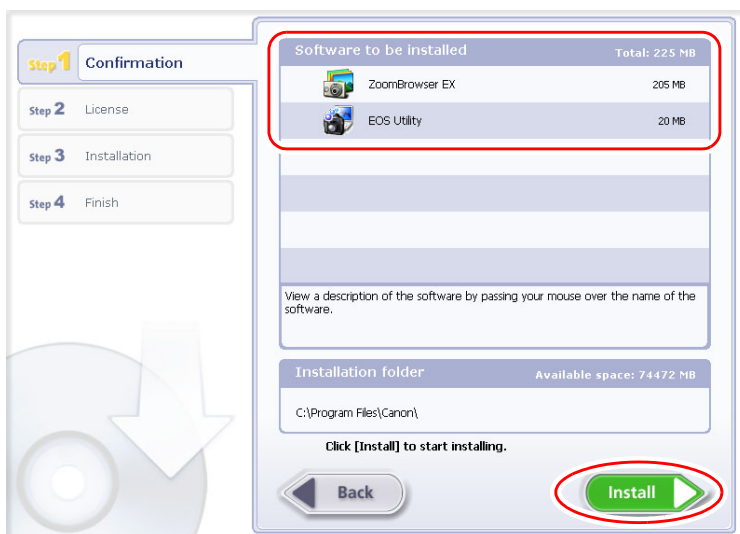
- 6 If other software is running, close all programs and click [OK].**



7

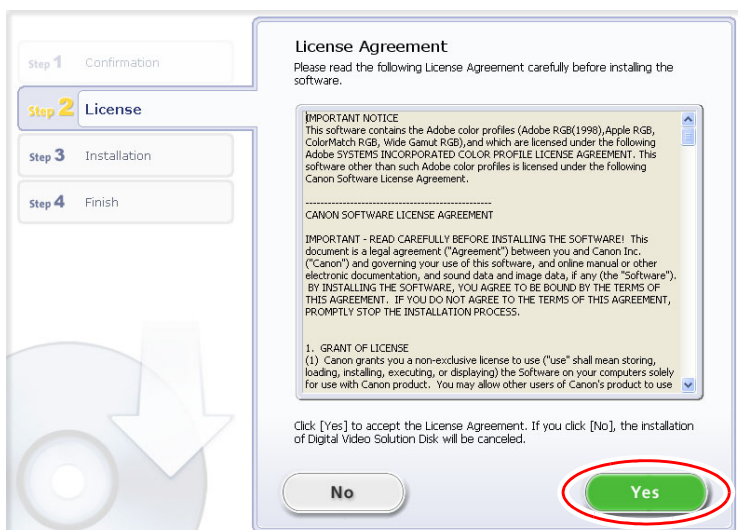
Review the installation settings and click [Install].

If you selected [Custom Installation] and are using Windows 2000, select Canon DV TWAIN Driver (USB driver).

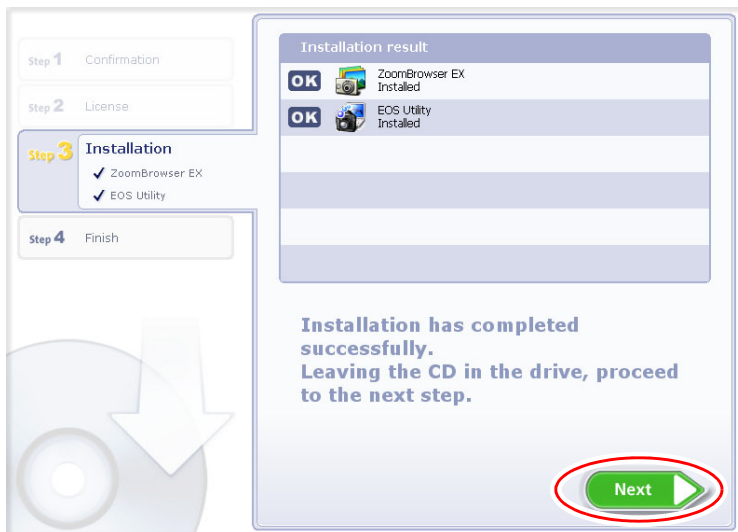


When installing the software on Windows XP or 2000 by selecting [Easy Installation], EOS Utility (software for downloading still images from the Canon EOS Digital SLR Cameras) will be installed. This software is used only for compatible Canon EOS Digital SLR Cameras, and the camcorder does not support this software.

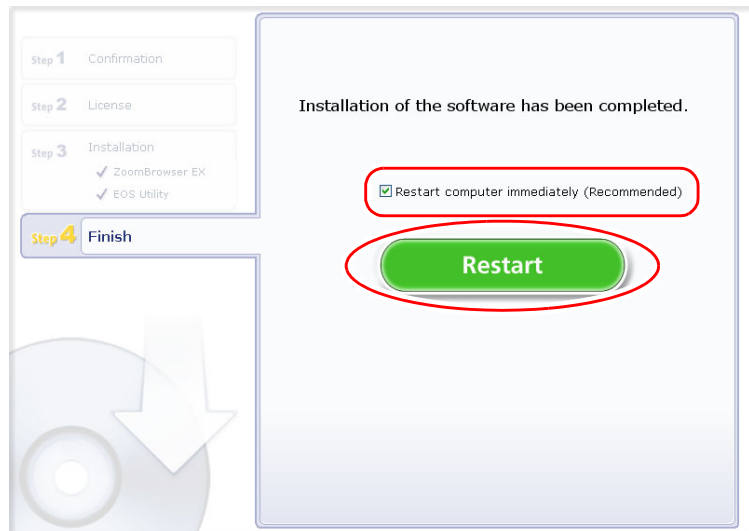
8 Read the license agreement and click [Yes] to accept the terms and to start installation.



9 Click [Next].



- 10** When the installation is complete, make sure [Restart computer immediately (Recommended)] is selected and then click [Restart].



When you do not need to restart the computer, the [Finish] screen will be displayed. Click [Finish]; remove the DIGITAL VIDEO Solution Disk from the CD-ROM drive, and proceed to *Before Downloading Still Images* (25).

- 11** 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 2000: At this point, the files for the TWAIN Driver have only been copied to your computer. To download images via USB connection, finish installing the TWAIN Driver. For details, see step 4 (25) 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 connecting instructions.

1 Insert a memory card containing images into the camcorder.

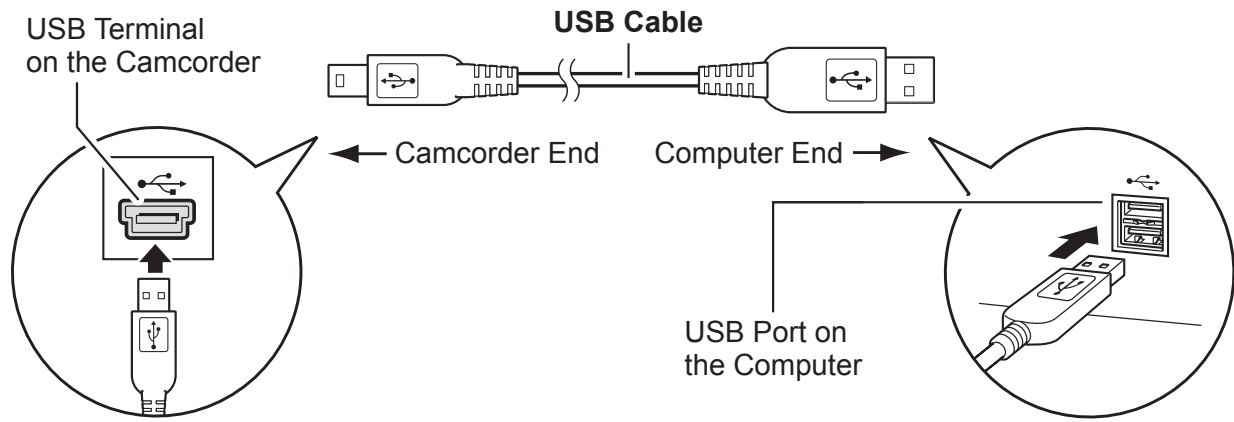
2 Connect the power adapter to the camcorder.

3 Set the camcorder to still image playback mode.
Wait until the card access indicator stops flashing.

4 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:**
 - Windows 2000: Installation of the DV TWAIN Driver starts. If the "Digital signature not found" message appears, click [Yes].
 - If you are prompted to restart the computer, restart the computer.
- A window appears allowing you to select an application program to start.

- For instructions on how to start ZoomBrowser EX and download images to the computer, see *Downloading Still Images* (📖 27).



Downloading Still Images



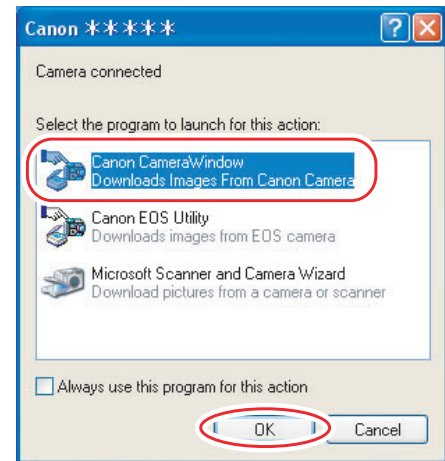
- Observe the following precautions when the camcorder's access indicator is flashing. Failure to do so may cause memory card data to become corrupted.
 - Do not remove the memory card or detach the USB cable.
 - Do not turn off the camcorder or the computer.
 - Do not change the position of the POWER or the TAPE/CARD switches.
- Images recorded onto 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.
- Do not rotate the image using programs other than ZoomBrowser EX. 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 memory card contains 1800 images or more. In this case, use a card reader/writer to download images.
 - For instructions on how to connect a card reader/writer, see *Using a Card Reader/Writer* (📖 38).

When Connecting the Camcorder to a Computer

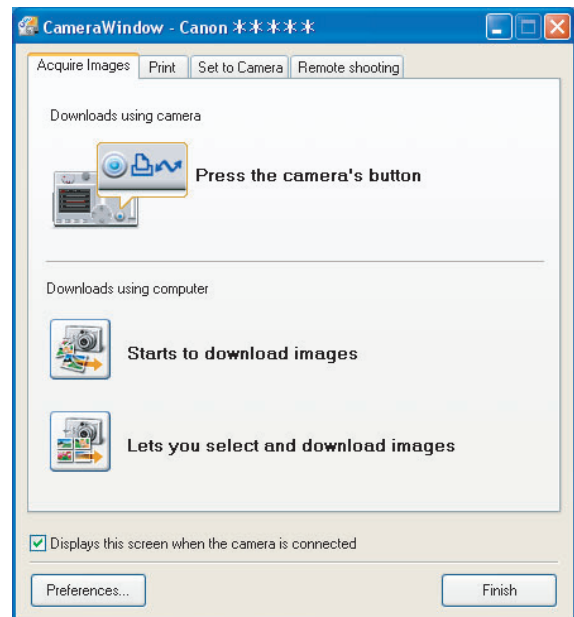
1 Connect the camcorder to the computer (25).

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

- Windows Vista: When the [AutoPlay] window appears, click [Downloads Images From Canon Camera using Canon CameraWindow].
- 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 camcorder is already connected to the computer, you can start the CameraWindow and display the Camera Control window by clicking [Acquire Images & Camera Settings] followed by [Connect to Camera] in the ZoomBrowser EX Main Window.
- The Remote shooting function is not supported by your camcorder.

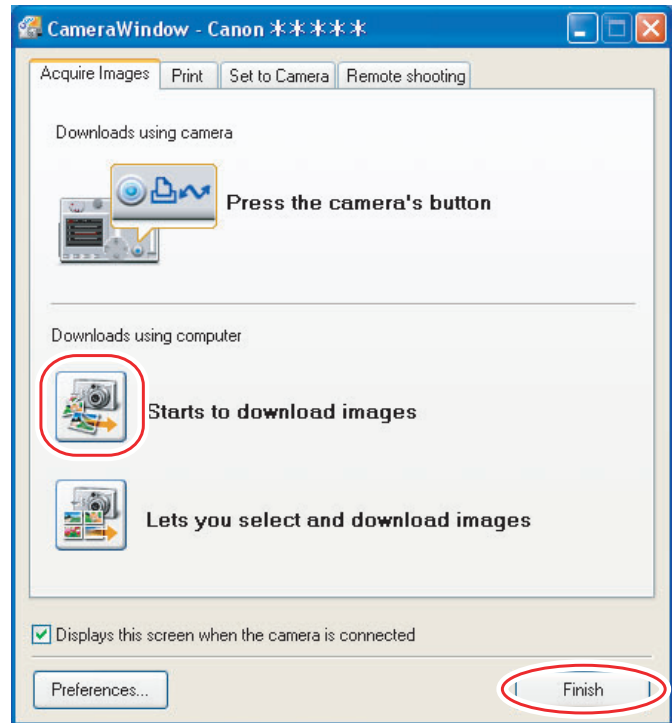
Using the Computer to Download Still Images (CameraWindow)

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

■ Auto-Downloading

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

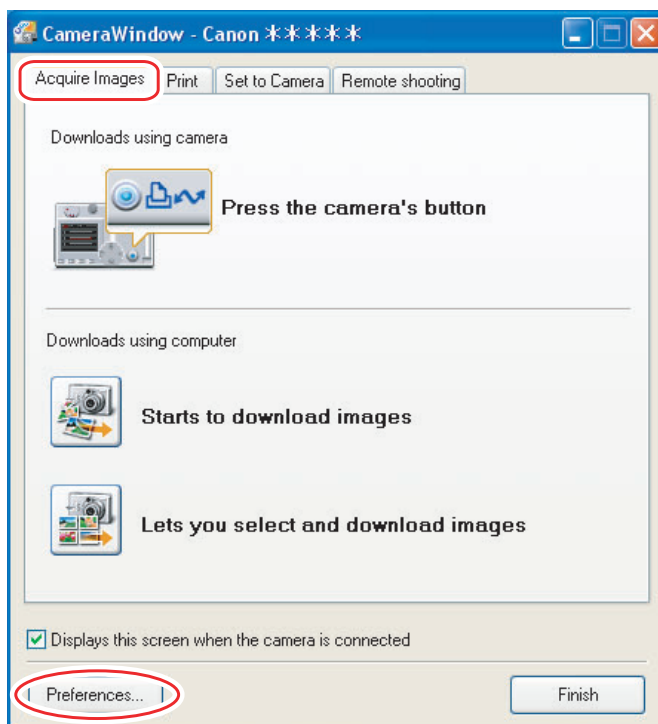
- For instructions on how to set the Auto-download settings, see *Auto-Downloading Settings* (30).
- Click [Finish] to close the Camera Control window after downloading images.



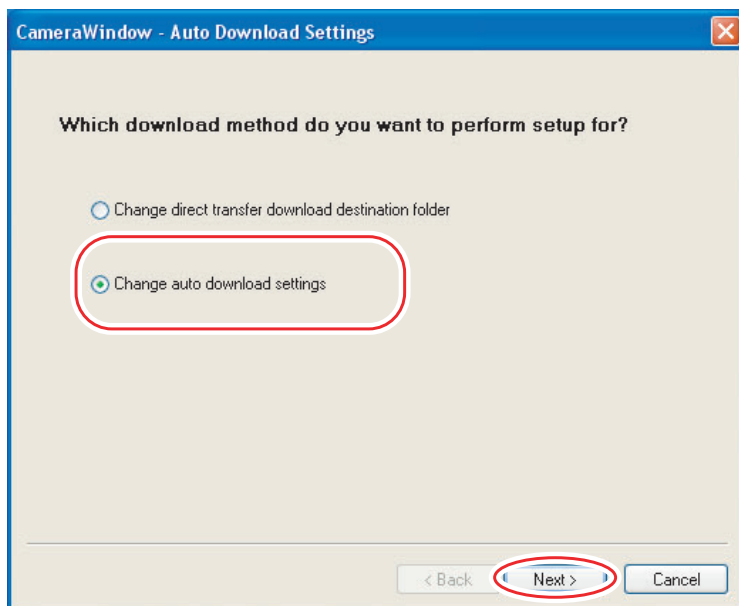
■ Auto-Downloading Settings

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].

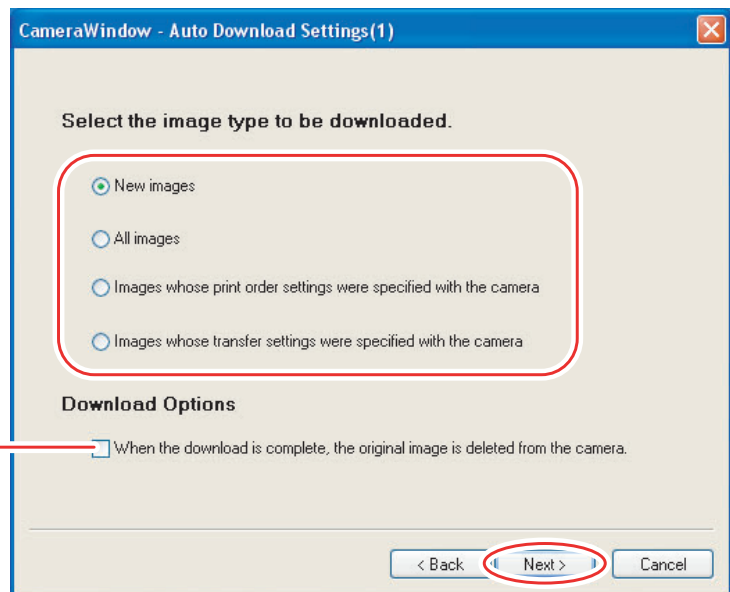


- 2** Select [Change auto download settings] and click [Next].



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

Place a check mark here if you wish the original image in the memory card to be deleted after downloading.

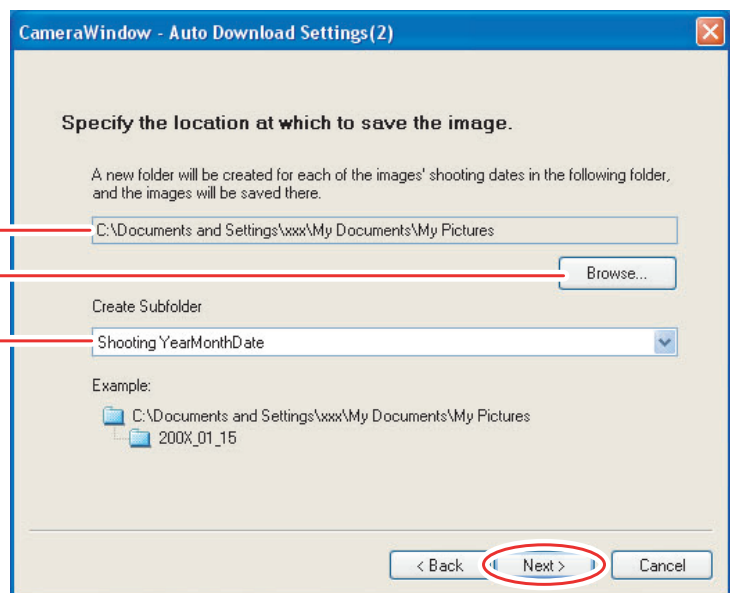


4 Specify the destination folder settings and click [Next].

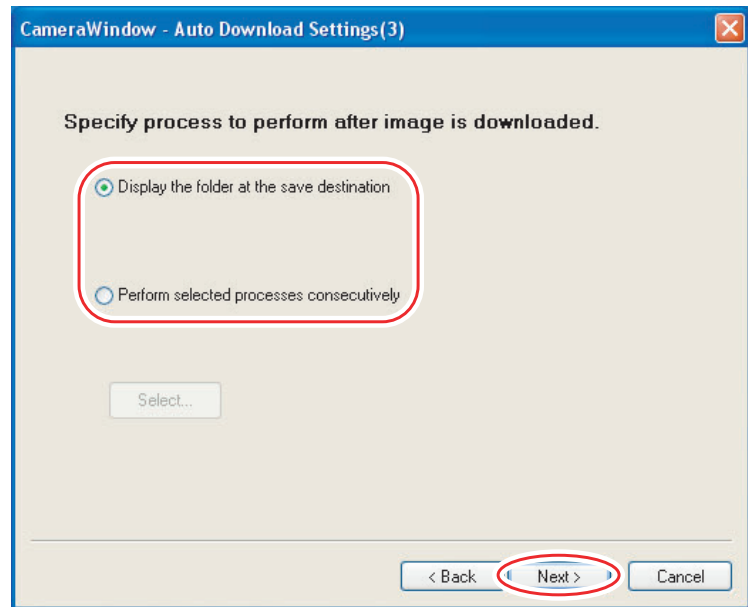
Destination Folder

Click this button to specify the destination folder.

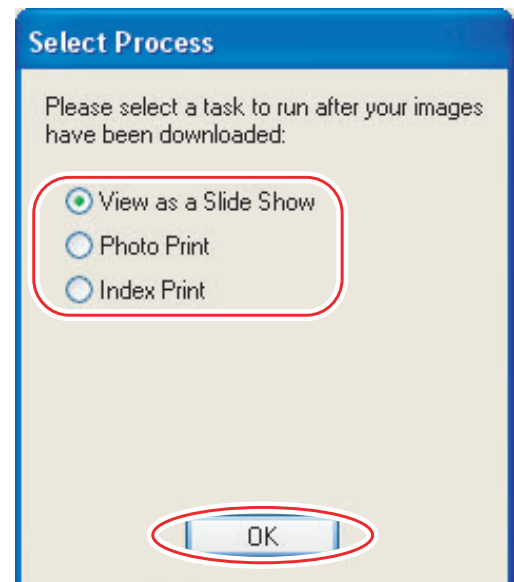
Select to specify the name of the subfolder.



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

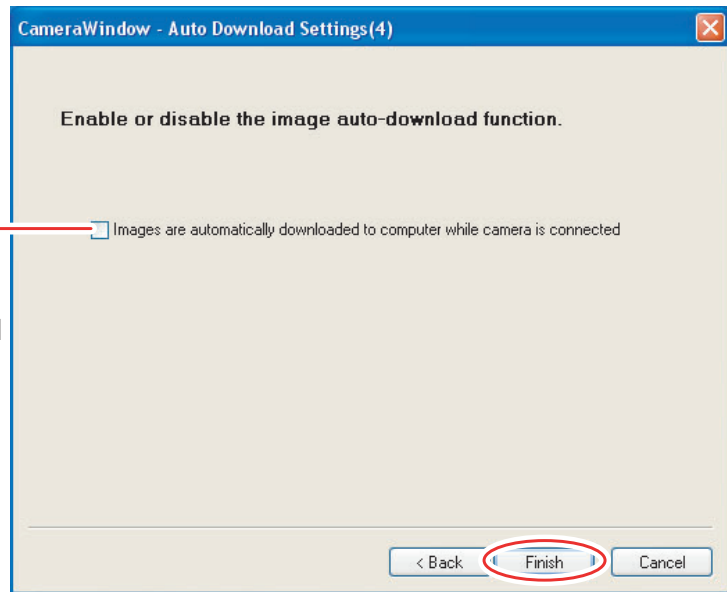


The window below will be displayed when you select [Perform selected processes consecutively] (you can redisplay the window by clicking [Select]). Select a process to perform after the image is downloaded, and click [OK].



6 Click [Finish].

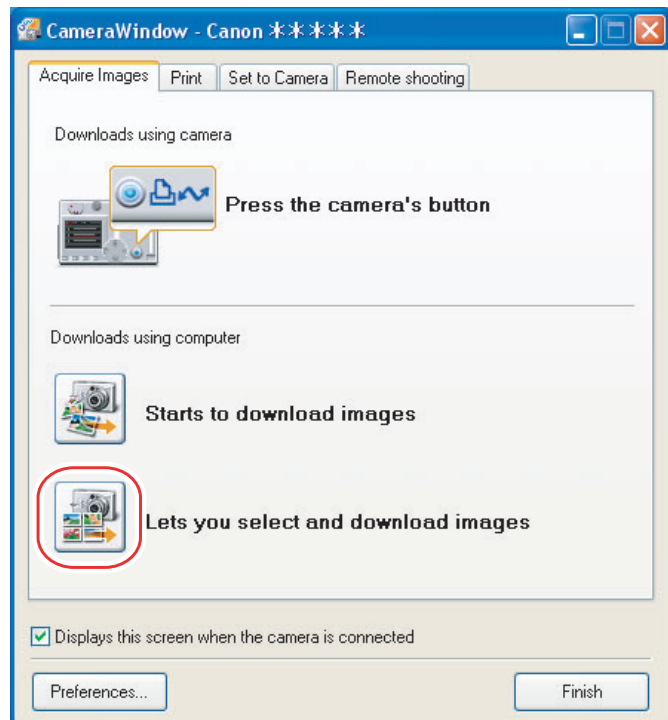
Placing a check mark here makes images in the camcorder to be automatically downloaded when the camcorder is connected.



■ Downloading the Selected Still Images from the CameraWindow

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

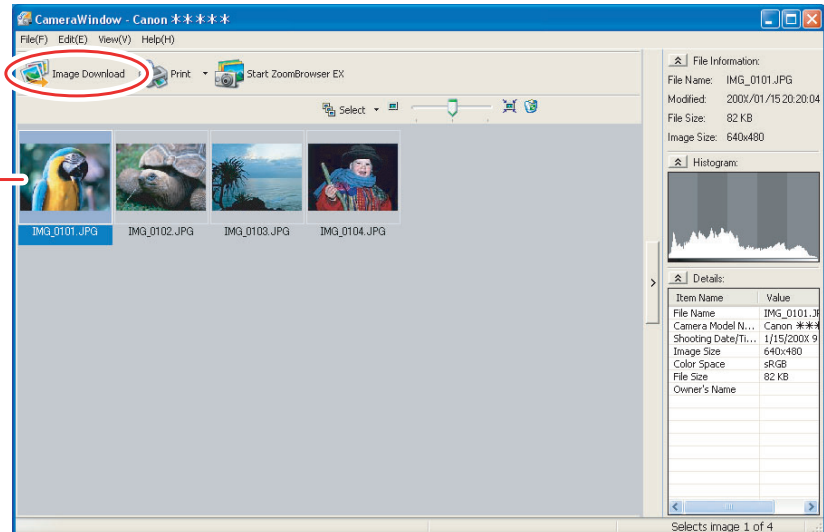
The CameraWindow opens.



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

- 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.

A blue frame appears around the selected image.

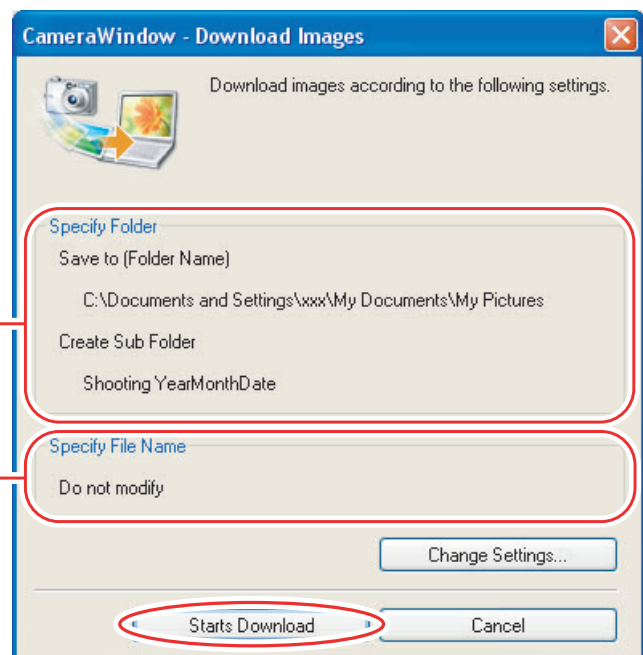


3 Confirm the settings and click [Starts Download].

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

Settings for the folder and the subfolder for downloaded images

Settings for the file prefix and the consecutive numbers



- To make changes, click [Change Settings].

[Specify Folder] Tab

Specify the settings of the folder and subfolder.

The screenshot shows the 'CameraWindow - Change Settings' dialog box with the 'Specify Folder' tab selected. The 'Specify File Name' tab is also visible. The 'Save to (Folder Name)' field contains 'C:\Documents and Settings\xxx\My Documents\My Pictures' with a 'Browse...' button. Below this, a note states: 'A subfolder into which the image will be saved will automatically be created in this folder.' The 'Create Subfolder' checkbox is checked. The 'Shooting YearMonthDate' dropdown menu is set to 'Shooting YearMonthDate'. The 'New Name' field contains 'IMAGE'. An 'Example:' section shows a folder structure: 'C:\Documents and Settings\xxx\My Documents\My Pictures' containing a subfolder '200X_01_15'. At the bottom are 'OK' and 'Cancel' buttons.

[Specify File Name] Tab

Specify the file name with which to save the images.

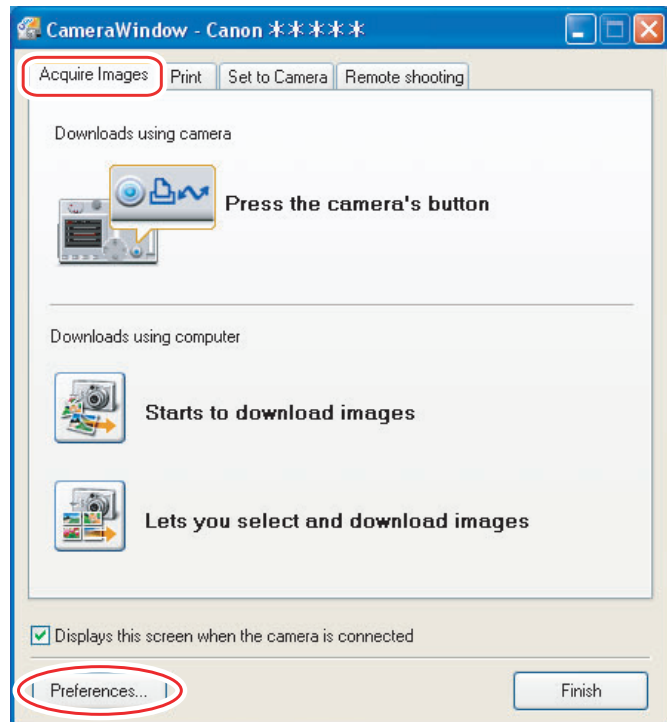
The screenshot shows the 'CameraWindow - Change Settings' dialog box with the 'Specify File Name' tab selected. The 'Specify Folder' tab is also visible. The 'Specify File Name:' dropdown menu is set to 'Do not modify'. The 'File Prefix' field contains 'IMG'. The 'Assign Sequence No.' section has 'Number of Digits' set to 4 (range 1-9) and 'Start' set to 1 (range 0000-9999). An 'Example:' section shows the text: '(xxx: file extension will be the same as the original file name)'. At the bottom are 'OK' and 'Cancel' buttons.

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

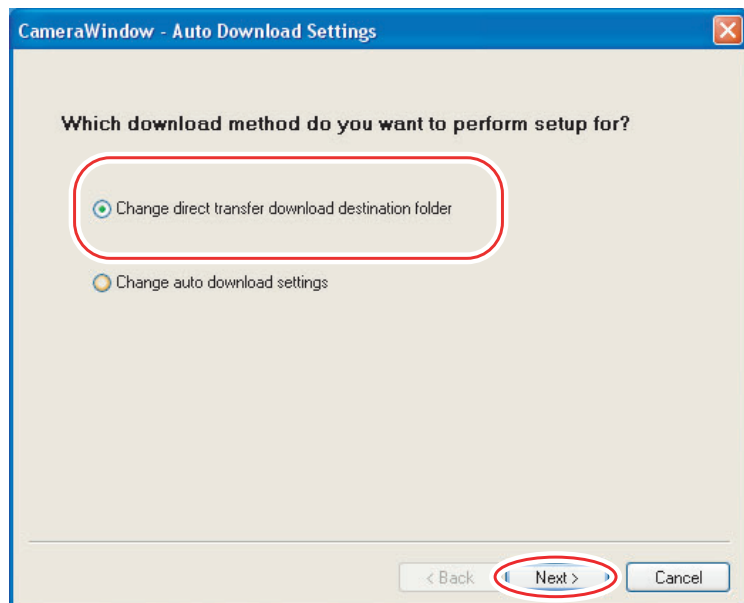
If your camcorder supports the Direct Transfer function, you can use the camcorder to download images.

■ Setting the Direct Transfer Download Destination Folder

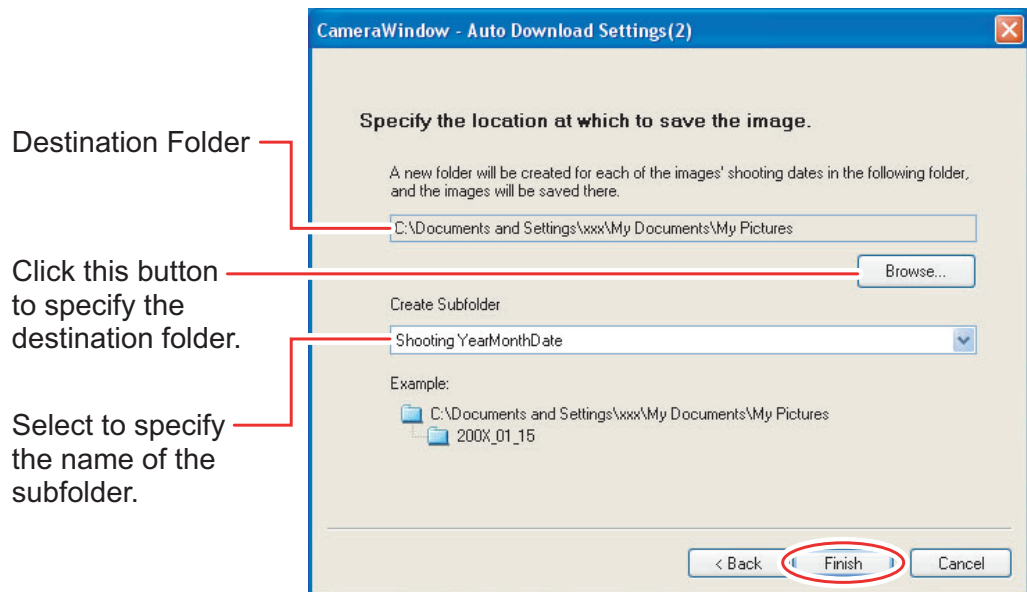
- 1 In the Camera Control window, click the [Acquire Images] tab and click [Preferences].



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




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



■ 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.
- 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

Using a Card Reader/Writer

The basic operations 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, refer to its manual.



If your card reader/writer does not support miniSD cards, please purchase an appropriate adapter for the card. If you are using SDHC cards, you need to use a card reader/writer compatible with SDHC cards.

1 Insert a memory card containing images recorded with the camcorder into the reader and connect it to the computer.

- Windows Vista/Windows XP: When a window appears allowing you to select an application program to start, select [View/Download Images using Canon ZoomBrowser EX] and click [OK].
- Windows 2000: Click the Windows [Start] menu, and select [Programs], [Canon Utilities], [ZoomBrowser EX Memory Card Utility] and [Canon ZoomBrowser EX Memory Card Utility].



Clicking [Acquire & Camera Settings] ▶ [Acquire Images from Memory Card] in the Main Window of ZoomBrowser EX also opens the image download window.

2 Select a downloading method.

- [Download Images]: A 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* (39).
- [Lets you select and download images]: The ZoomBrowser EX opens, displaying the still images on the camcorder's memory card as thumbnails (small images).



Using the Computer to Download Still Images (ZoomBrowser EX)

Select a download method in the image download window.

■ Auto-Downloading

1 Click [Download Images].

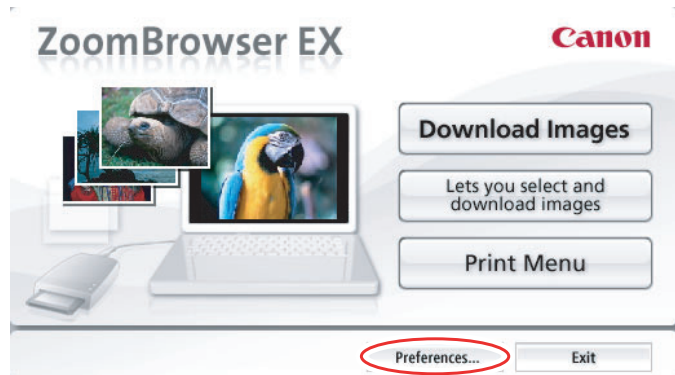
- For instructions on how to set the Auto-download settings, see *Auto-Downloading Settings* (📖 39).
- Click [Exit] to close the window after downloading images.



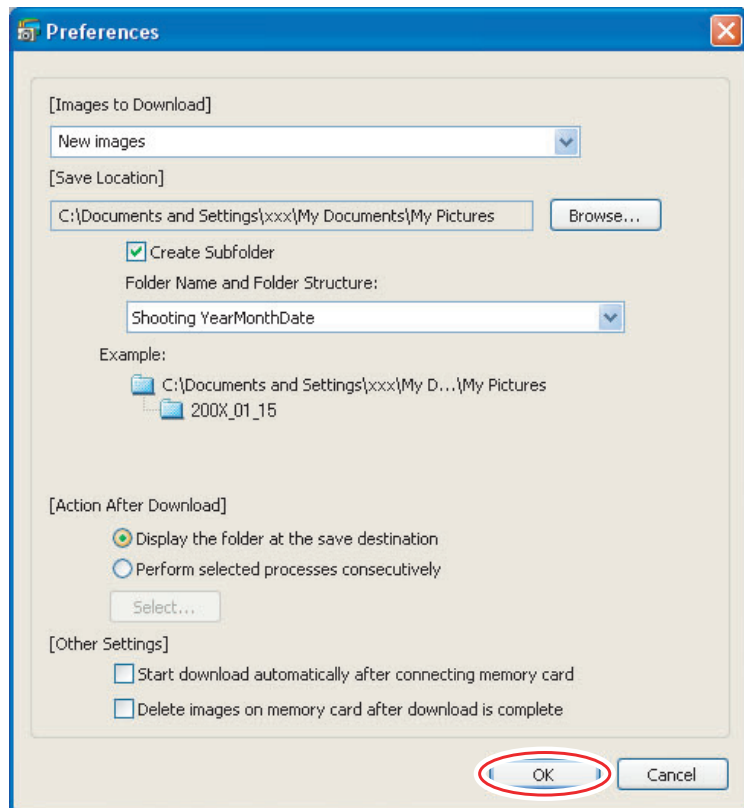
■ Auto-Downloading Settings

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

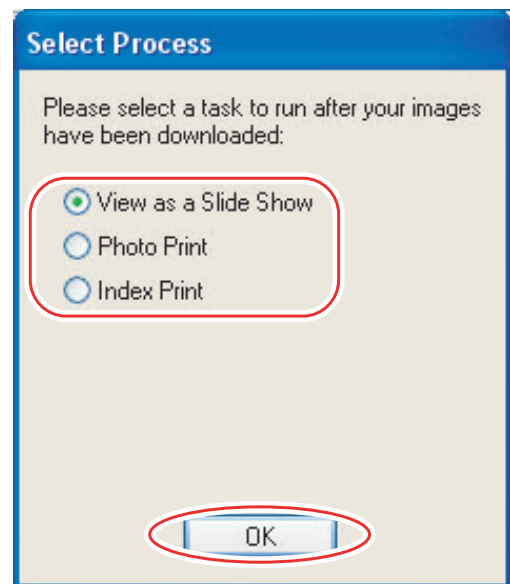
1 Click [Preferences].



2 Configure the settings and click [OK].



The window below will be displayed when you select [Perform selected processes consecutively] or [Select] under [Action After Download]. Select a process to perform after the image is downloaded, and click [OK].



■ Downloading the Selected Still Images from the ZoomBrowser EX

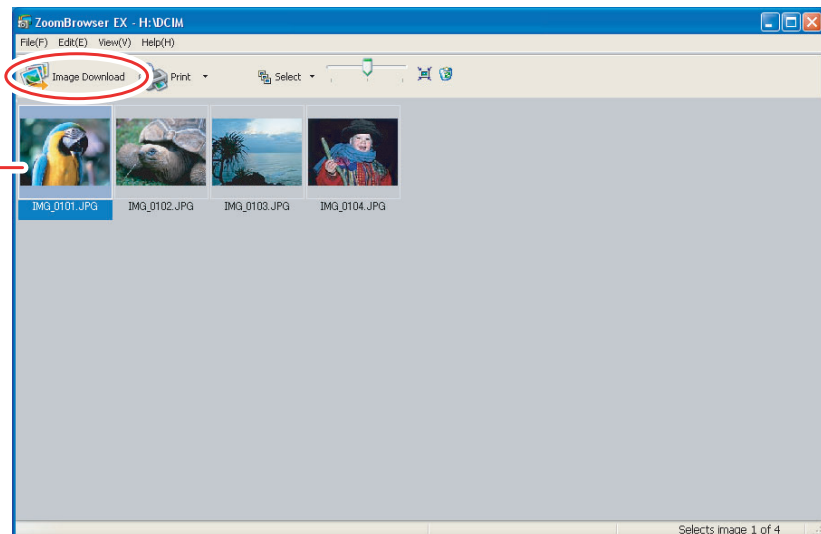
- 1 Click [Lets you select and download images].
The ZoomBrowser EX opens.



- 2 In the ZoomBrowser EX, select the image you wish to download and click [Image Download].

- 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.

A blue frame appears around the selected image.



Printing Still Images

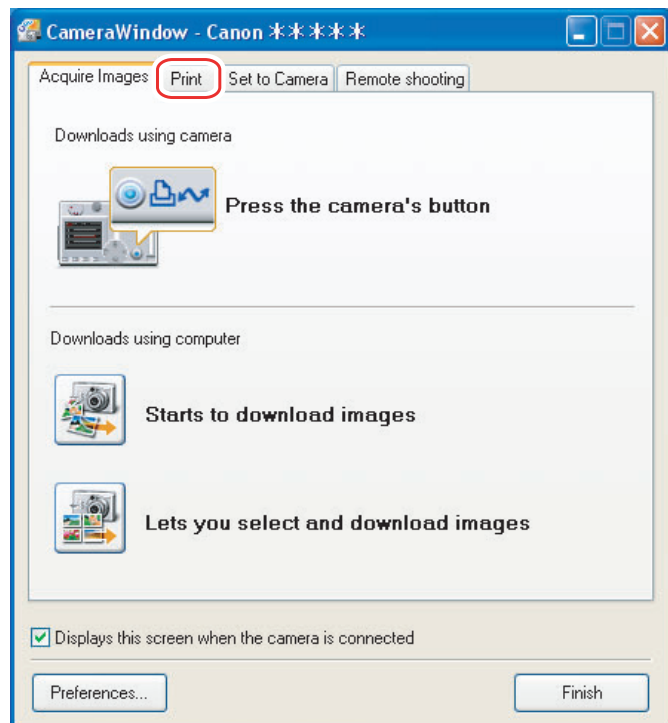
Printing Still Images Recorded on the Memory Card

This section explains how to print still images by connecting the camcorder to the computer. The steps are basically the same when using a card reader/writer. You can select one of the following 4 methods to print still images in the card without downloading images to the computer.

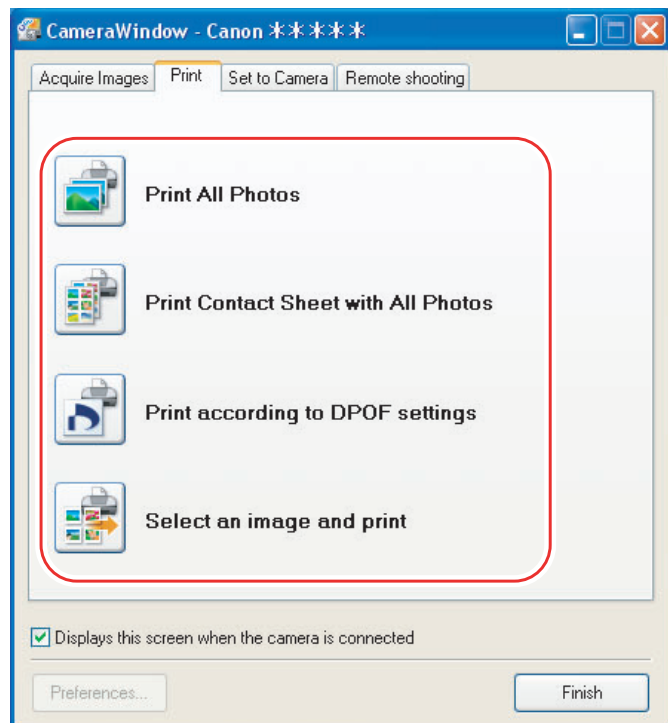
- [Print All Photos]
 - Prints all still images recorded on a memory card in the connected camcorder or in a card reader/writer one image per page.
- [Print Contact Sheet with All Photos]
 - Prints all still images recorded on a memory card in the connected camcorder or in a card reader/writer in an index (rows of images with file names and image information).
- [Print according to DPOF settings]
 - Prints according to the DPOF print settings set by the camcorder.
- [Select an image and print]
 - A list of the still images recorded on a memory card in the connected camcorder or in a card reader/writer will be displayed, and you can select images you wish to print.

1 Connect the camcorder to the computer. (📖 25)

2 Click the [Print] tab in the Camera Control window.



3 Click one of the 4 printing methods.



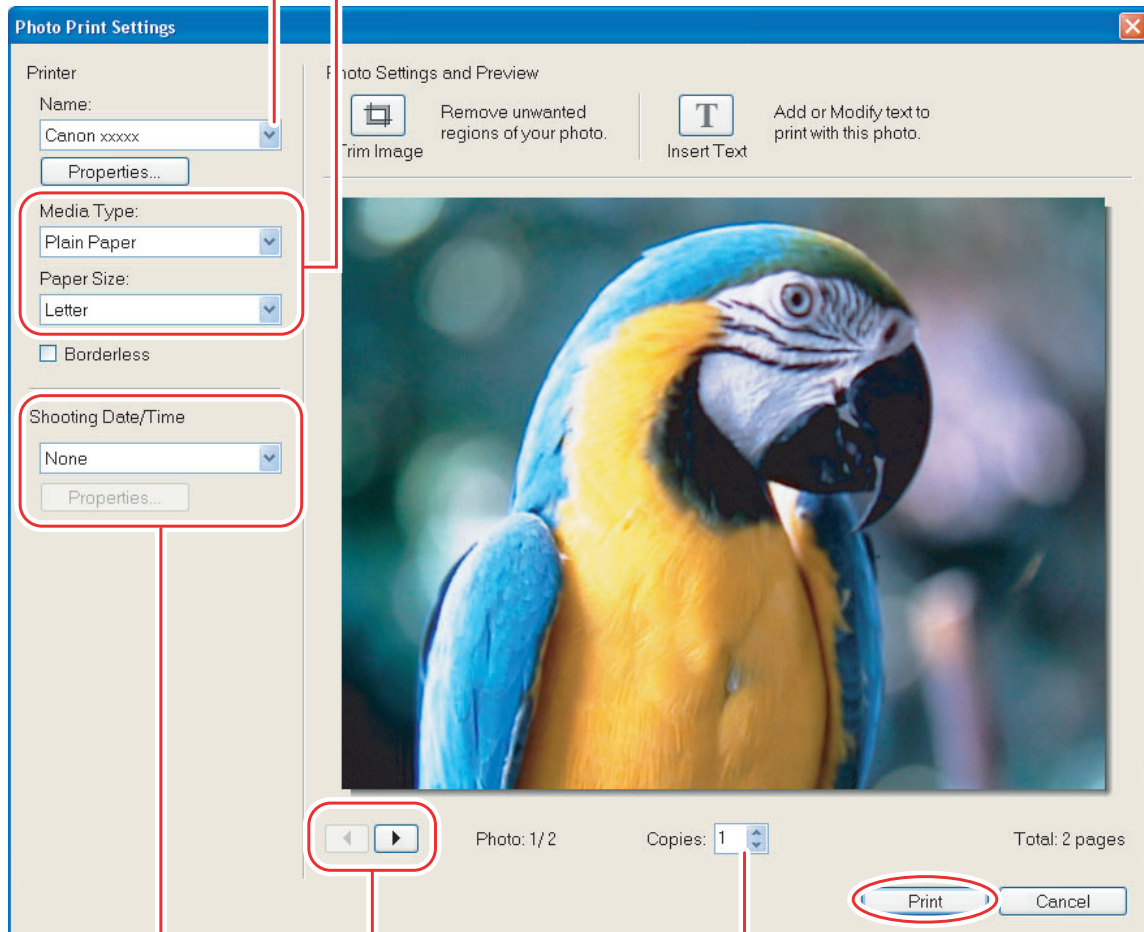
4 Specify the print settings and click [Print].

The window varies depending on the selected printing method in step 3.

When you have selected [Print All Photos]:

Selects the printer.

Sets the paper size and type.



Sets the shooting date/time imprint and color settings.

Sets the number of print copies of the displayed image.

Click this button to switch between still images if multiple images are selected.

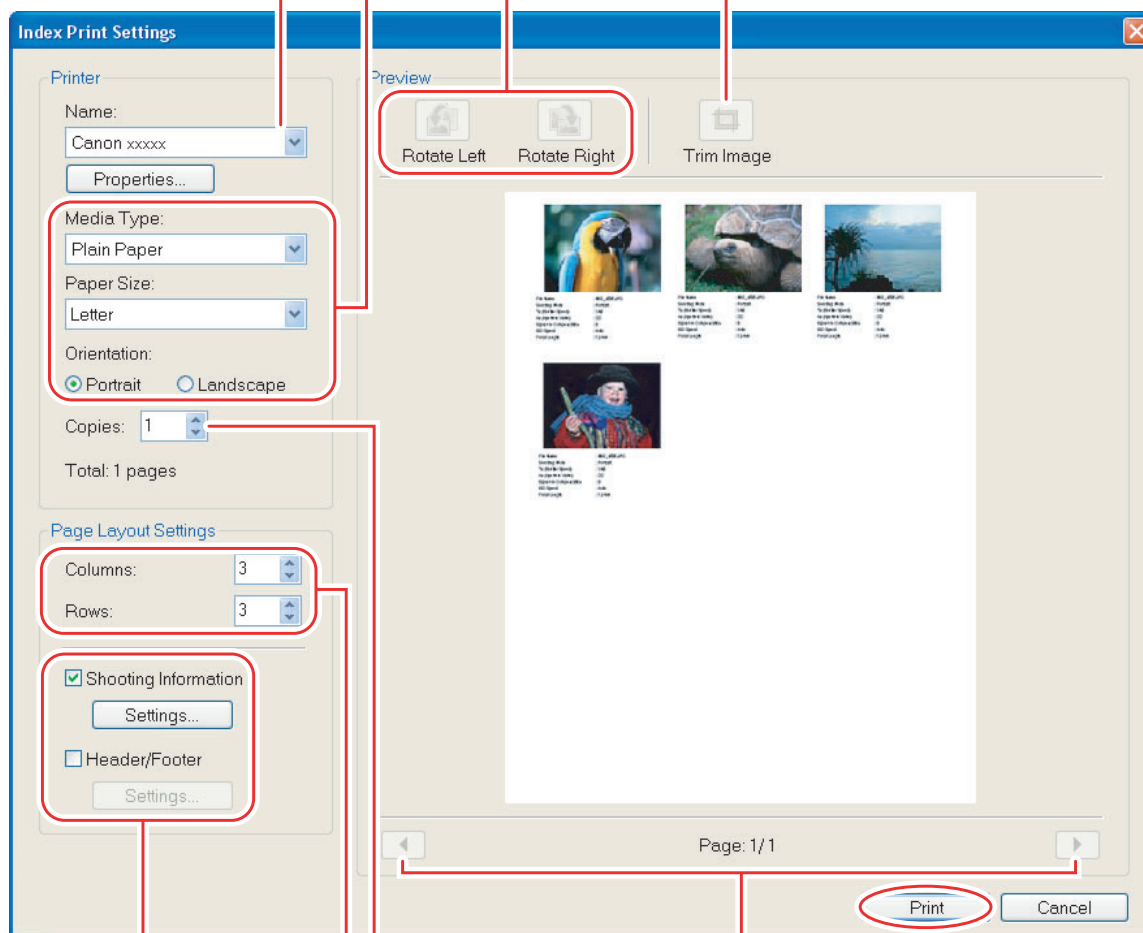
When you have selected [Print Contact Sheet with All Photos]:

Sets the paper size and orientation.

Selects the printer.

Rotates still images.

Click this to use the trimming function (crops a portion of the still image).



Sets the print settings for shooting information, comments, headers, footers and page numbers.

Click these buttons to switch between pages.

Sets the number of print copies of the contact sheets.

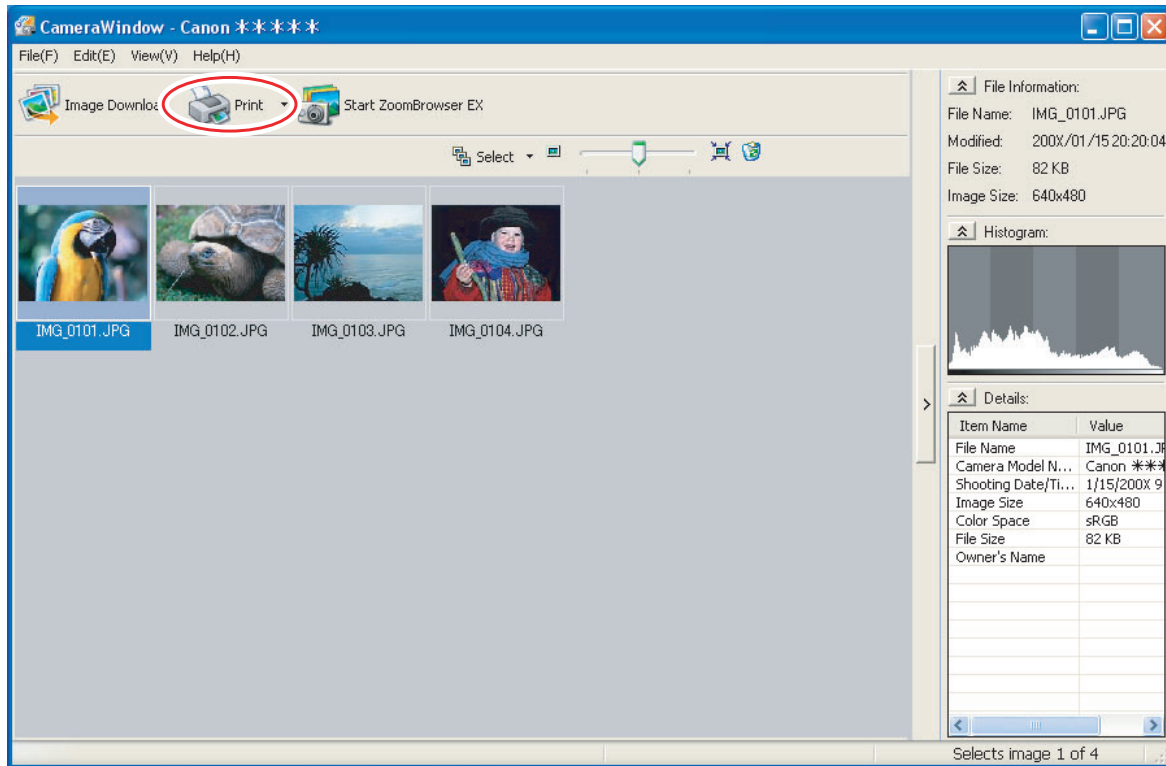
Sets the number of rows and columns.

When you have selected [Print according to DPOF settings]:

- The selected still images will be printed according to the number of copies set with the camcorder. The same window described in the previous section *When you have selected [Print All Photos]:* (44) will be displayed.

When you have selected [Select an image and print]:

- If you selected [Select an image and print], the following window will be displayed. Select still images you wish to print, and click [Print]. If you selected [Contact Sheet Print], the same window described in the previous section *When you have selected [Print Contact Sheet with All Photos]:* (45) will be displayed. If you selected [One Photo Per Page Print], the same window described in the previous section *When you have selected [Print All Photos]:* (44) will be displayed instead. Set the print settings and print the still images.



Printing Still Images Downloaded to the Computer

You can select one of the following 2 methods to print still images downloaded to the computer.

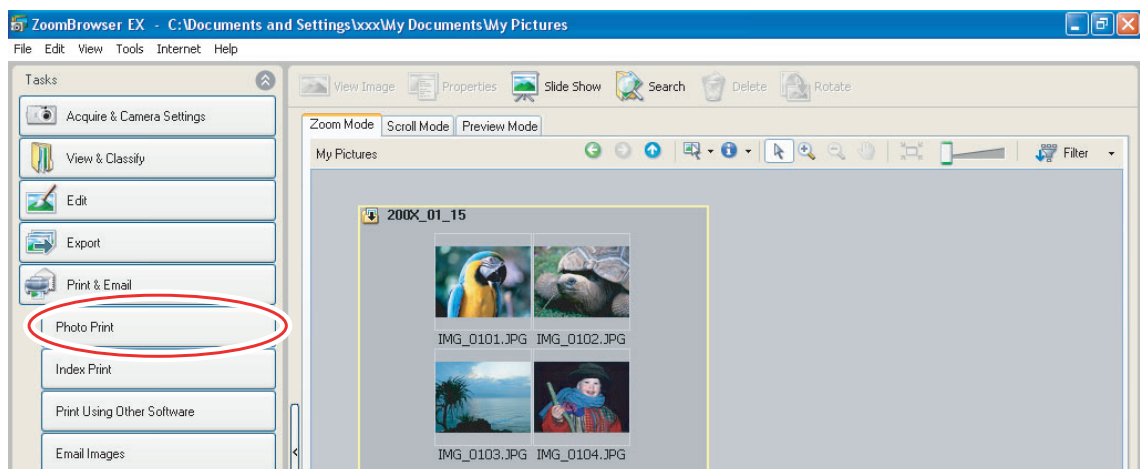
- [Photo Print]
 - Prints one still image per page.
- [Index Print]
 - Prints selected images in rows with file names and image information.



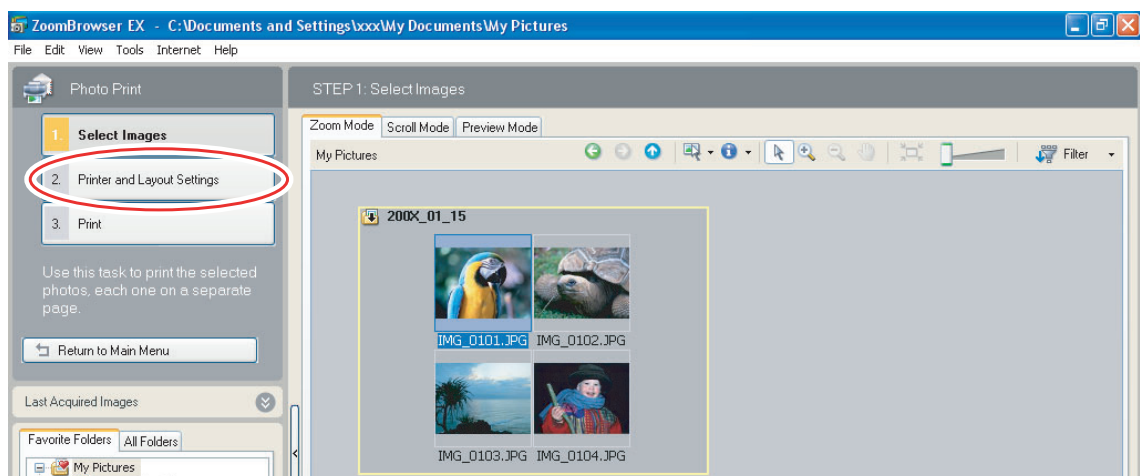
You can select the program to use for printing by clicking [Print & Email] in the Main Window and selecting [Print Using Other Software].

■ [Photo Print]

1 Click [Print & Email] in the Main Window and click [Photo Print].



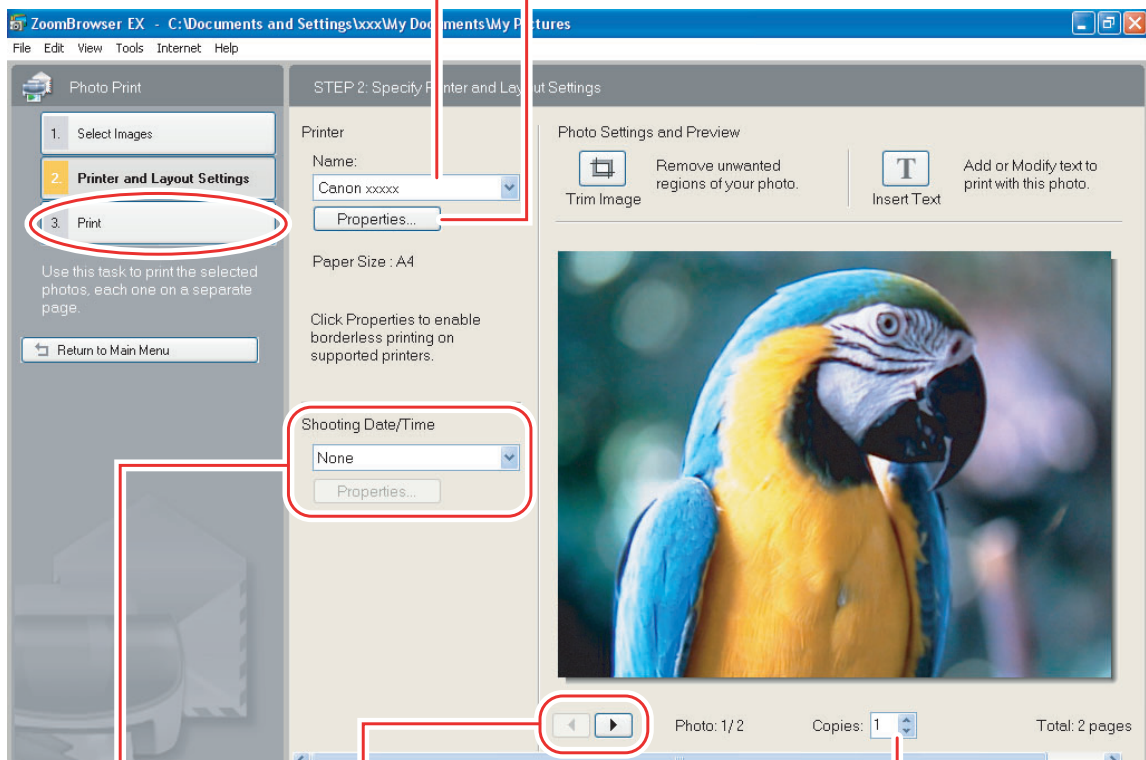
2 Select still images you wish to print and click [Printer and Layout Settings].



3 Specify the print settings and click [Print].

Selects the printer.

Sets the paper size settings.



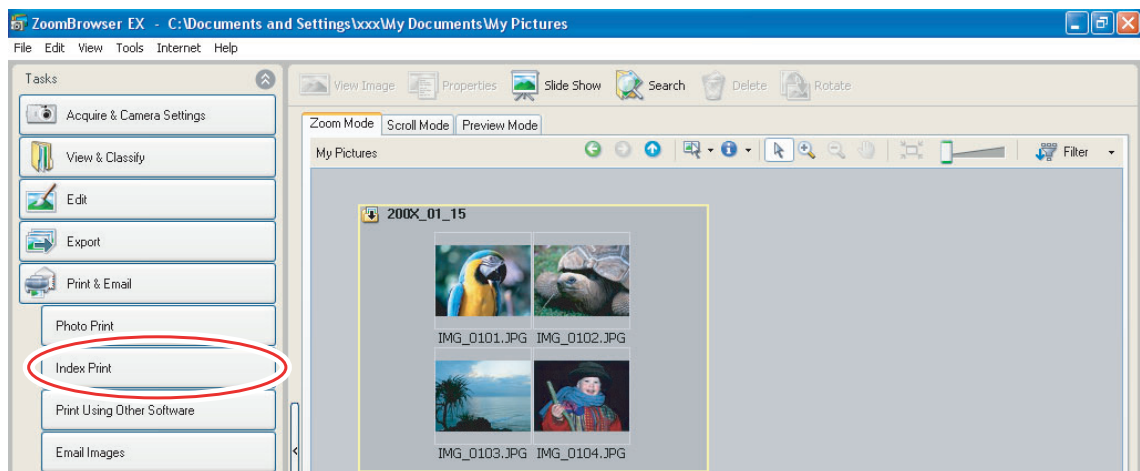
Click this button to switch between still images if multiple images are selected.

Sets the number of print copies of the displayed image.

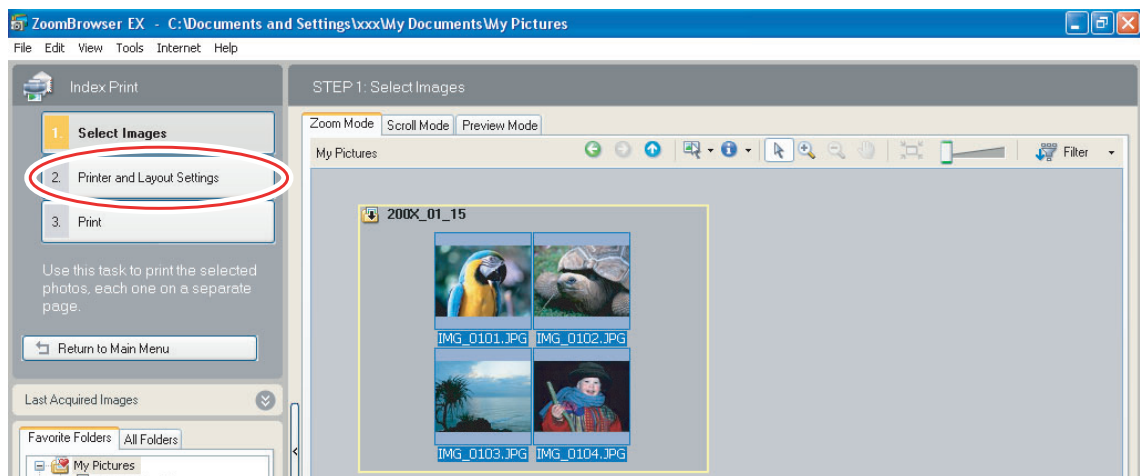
Sets the shooting date/time imprint and color settings.

■ [Index Print]

- 1 Click [Print & Email] in the Main Window and click [Index Print].



- 2 Select the still images you wish to print and click [Printer and Layout Settings].



3 Specify the print settings and click [Print].

Sets the paper size and orientation.

Selects the printer.

Rotates still images.

Click this to use the trimming function (crops a portion of the still image).

Click these buttons to switch between pages.

Sets the print settings for shooting information, comments, headers, footers and page numbers.

Sets the number of rows and columns.

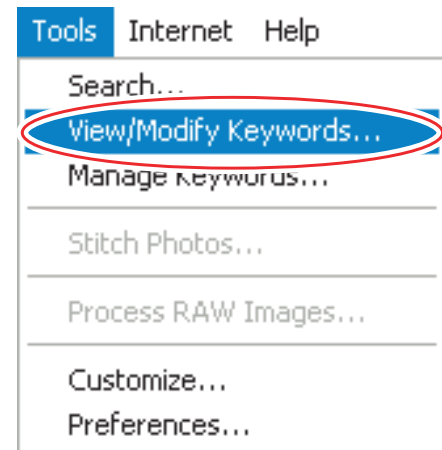
Sets the number of print copies of the contact sheets.

Organizing Images

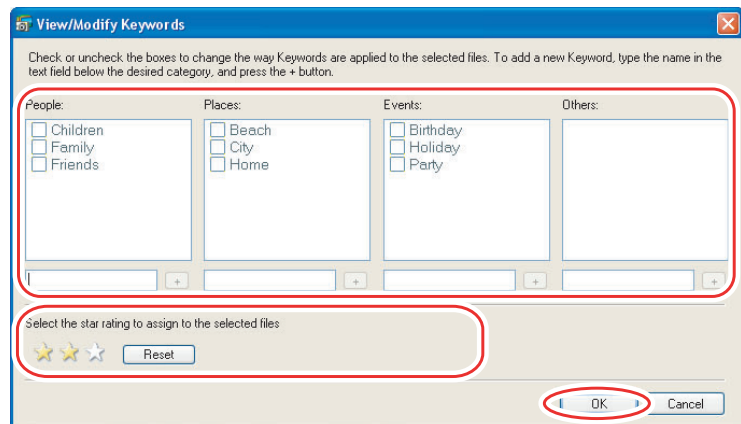
Applying Star Ratings and Keywords

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.**

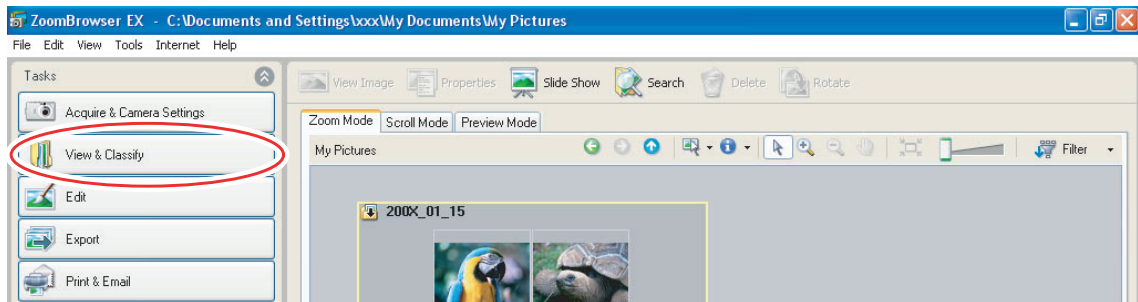


- The default setting of the star rating is two stars.
- You can add and delete keywords, or change the keyword list in the [Manage Keywords] window by selecting [Manage Keywords] from the [Tools] menu.
- Windows Vista: The star rating set using ZoomBrowser EX is not related to the "Rating" setting in Windows Photo Gallery and Windows Explorer.

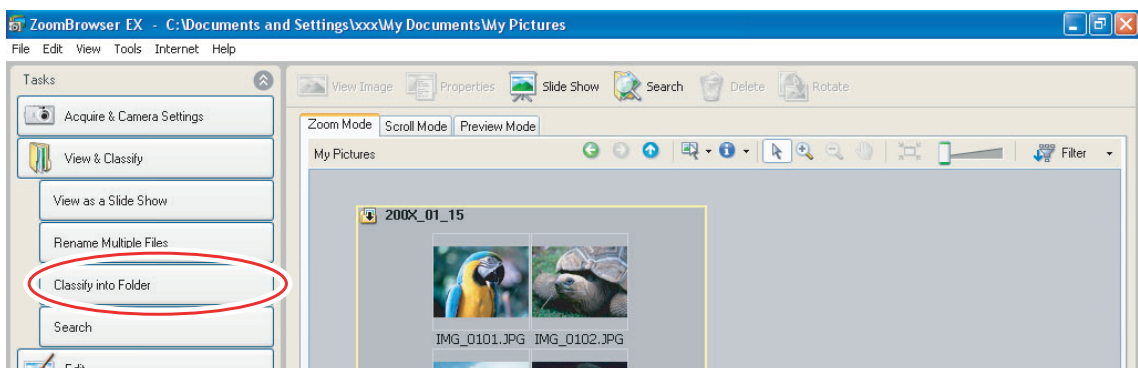
Classifying the Images

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

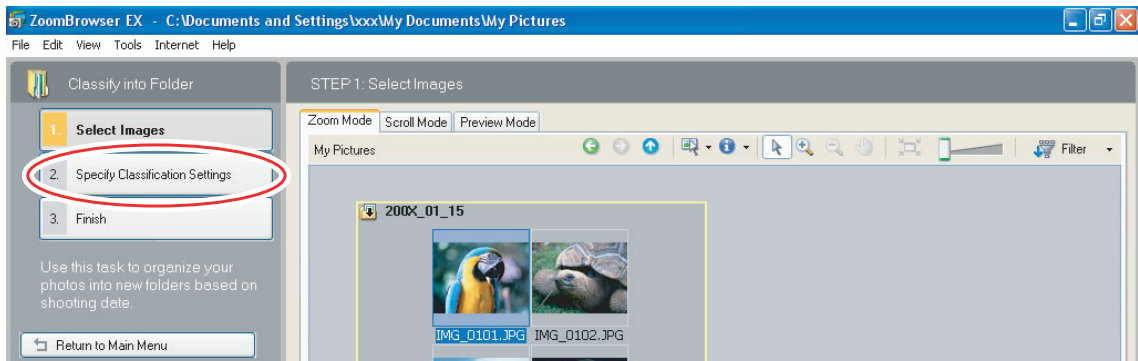
1 Click [View & Classify] in the Main Window.



2 Click [Classify into Folder].

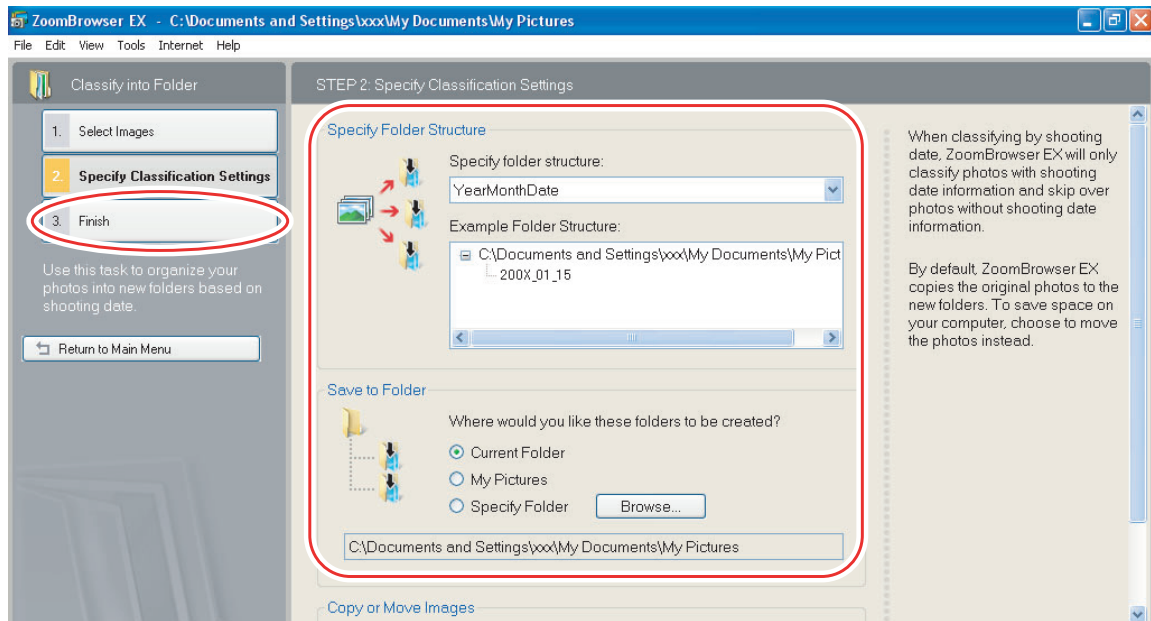


3 Select the images you wish to classify and click [Specify Classification Settings].



4 Specify the folder structure and the saving folder and click [Finish].

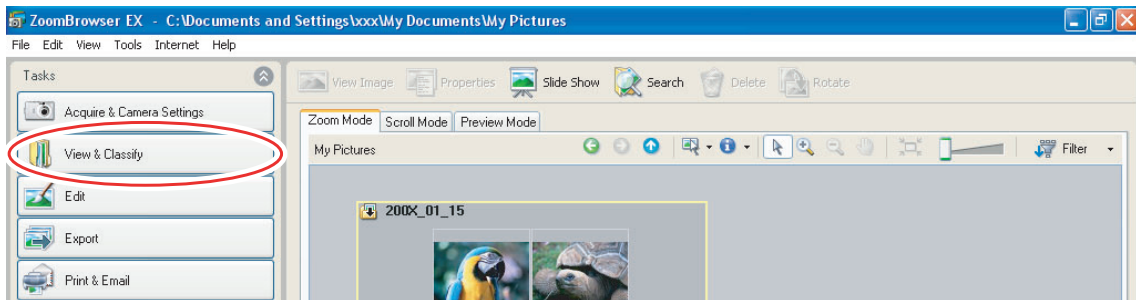
The selected images are classified into the specified folder.



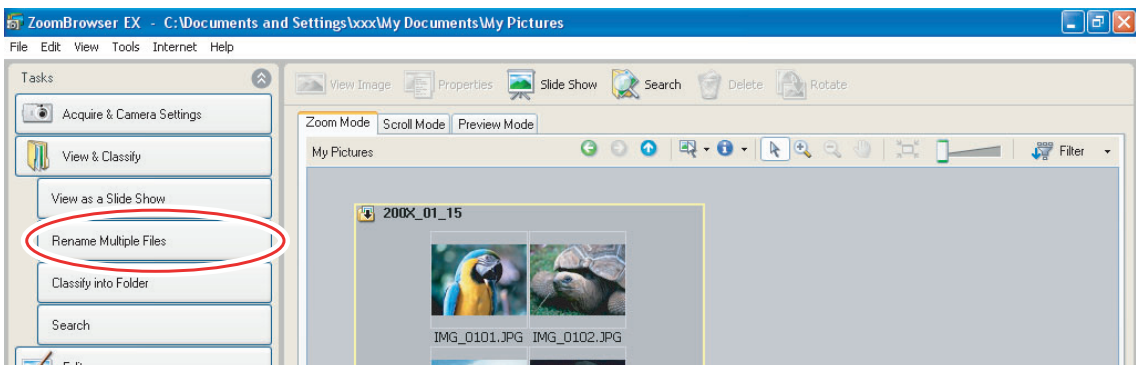
Renaming Multiple Files

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

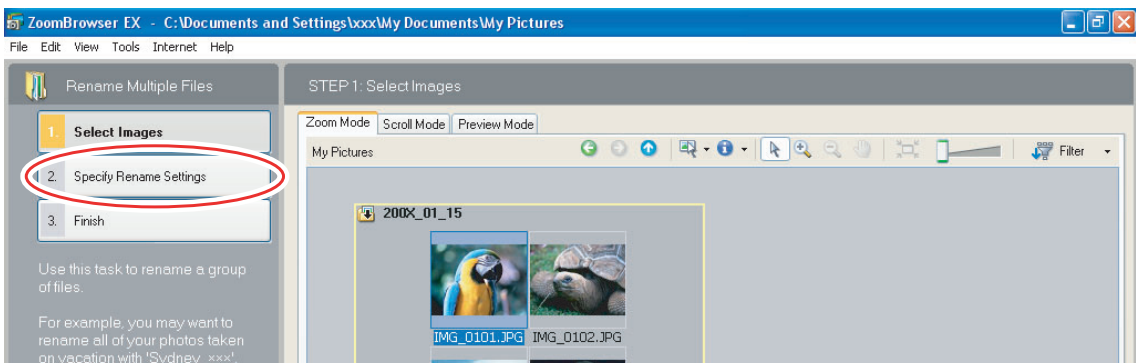
1 Click [View & Classify] in the Main Window.



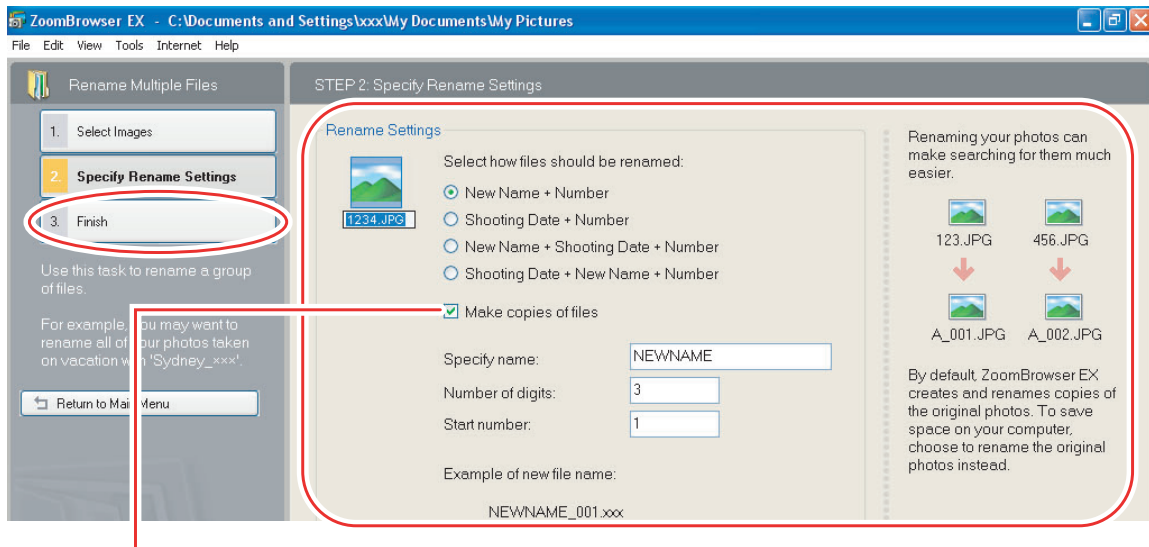
2 Click [Rename Multiple Files].



3 Select the 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 images with new names.
The name of the original images will not be changed.



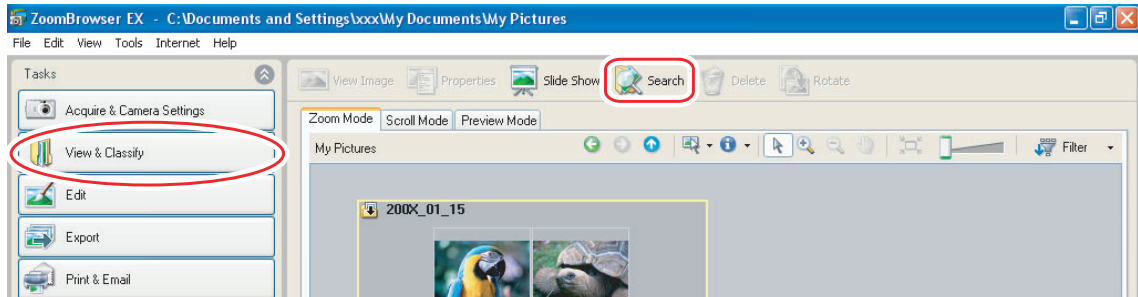
To rename a folder, select a folder, and open the [Rename Folder] window by selecting [Rename] from the [File] menu. Input the new name, and click [OK].

Searching for Images

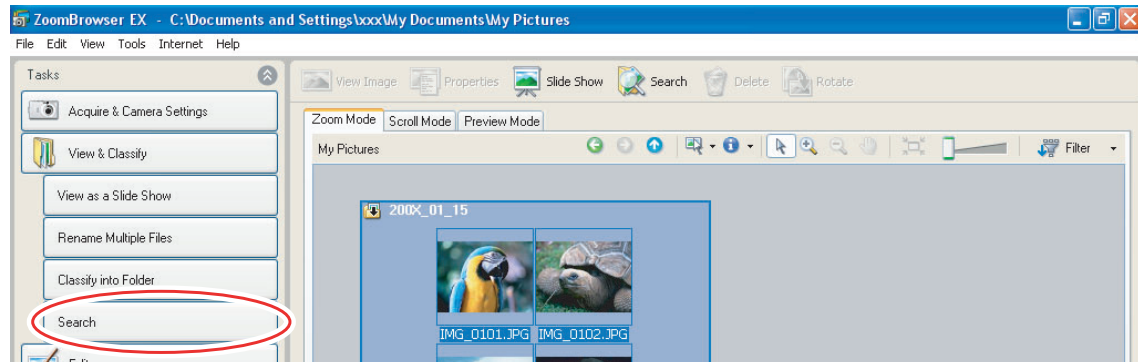
This task allows you to search for images by star rating, modification date, shooting date, comment or keywords.

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

You can also search for images by clicking [Search] on the Application Tool Bar. Skip to step 3.

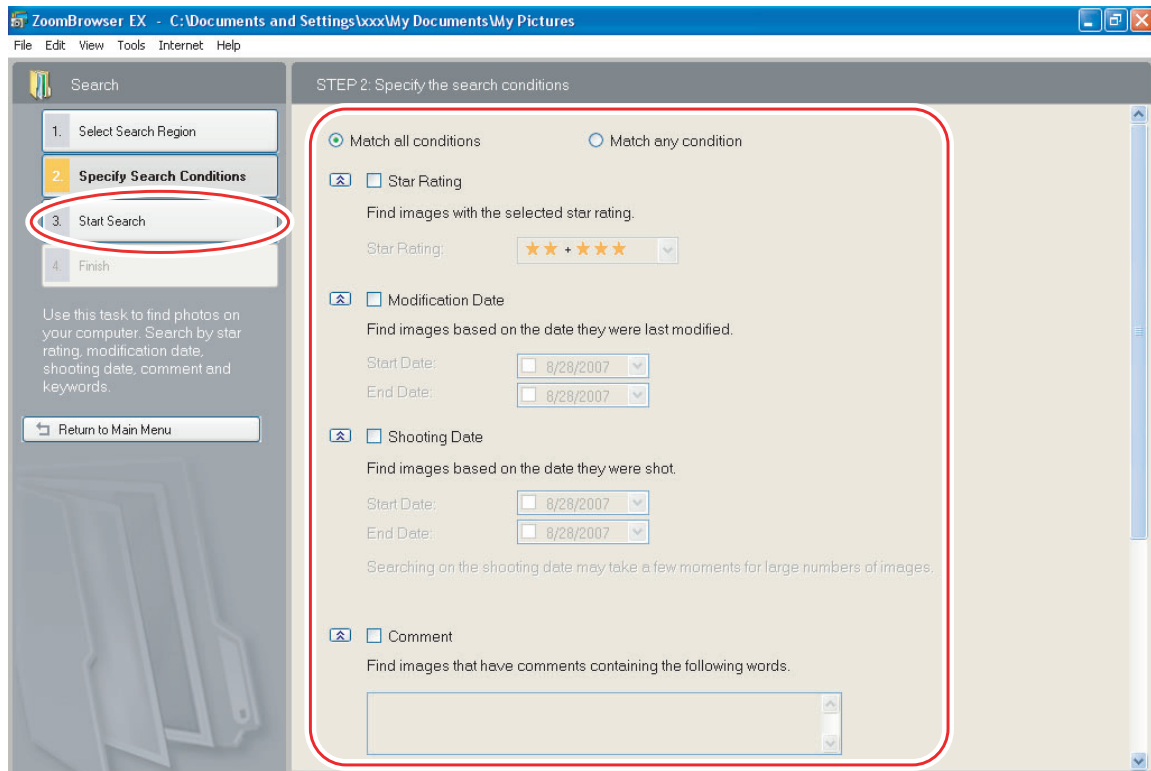


2 Select folders and images from which you wish to search and click [Search].



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

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

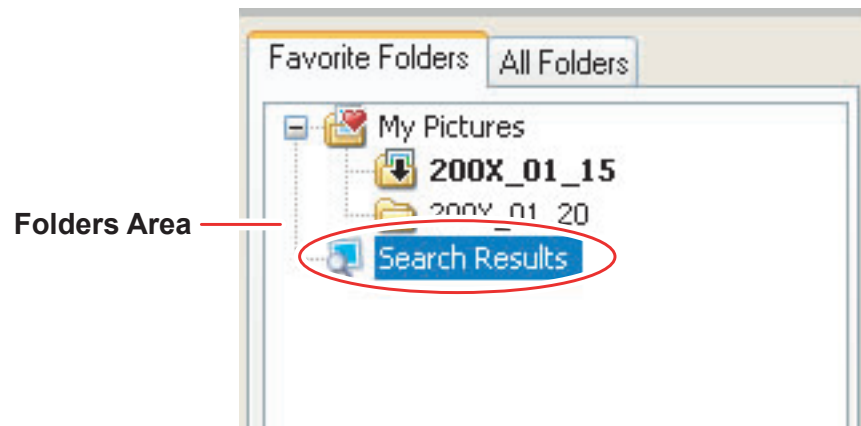


4 Click [Finish].

- 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 searched images will remain in this folder until ZoomBrowser EX is closed or another search is performed, but if you delete an image in this folder, the corresponding original image will be deleted as well.

Creating a Movie from the Still Images

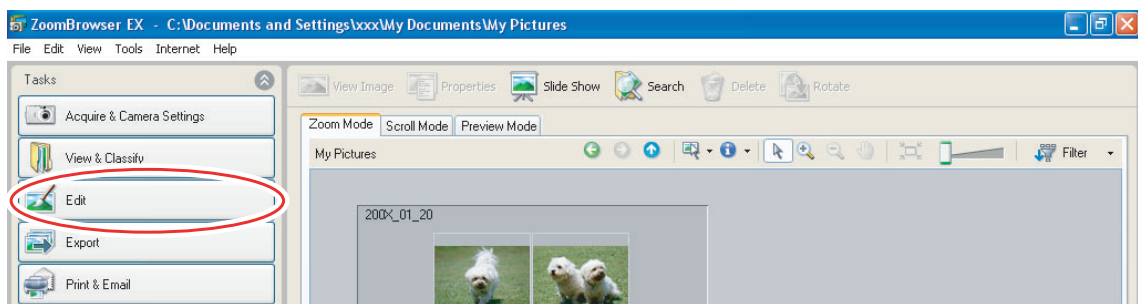
Editing Movies

You can link still images, insert text and background music, and add effects. You can also change the size of selected movies and save them as new files.

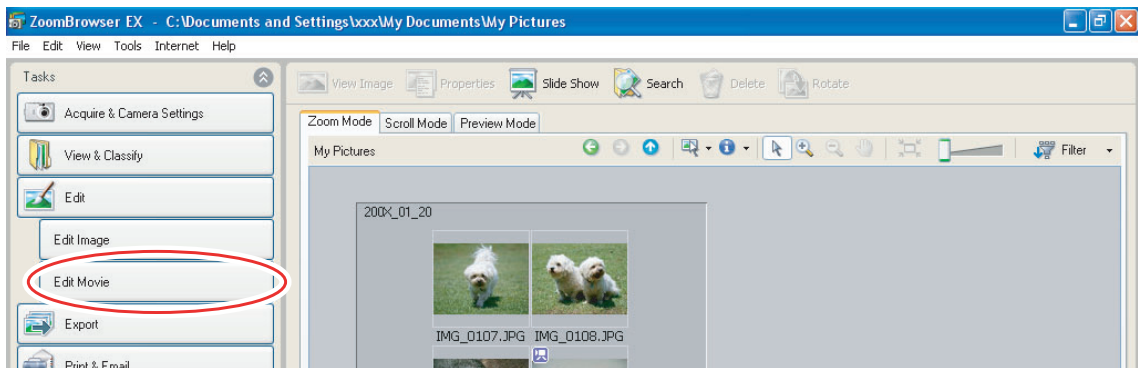


- If you are using Windows 2000, QuickTime is required to edit movies. If it is not already installed on your computer, install it from the DIGITAL VIDEO Solution Disk. Place the disk in the CD-ROM drive and click [Install] under QuickTime in the installer panel.
- If you have an AVI file in your computer, you can use this function to edit the file.

1 Click [Edit] in the Main Window.

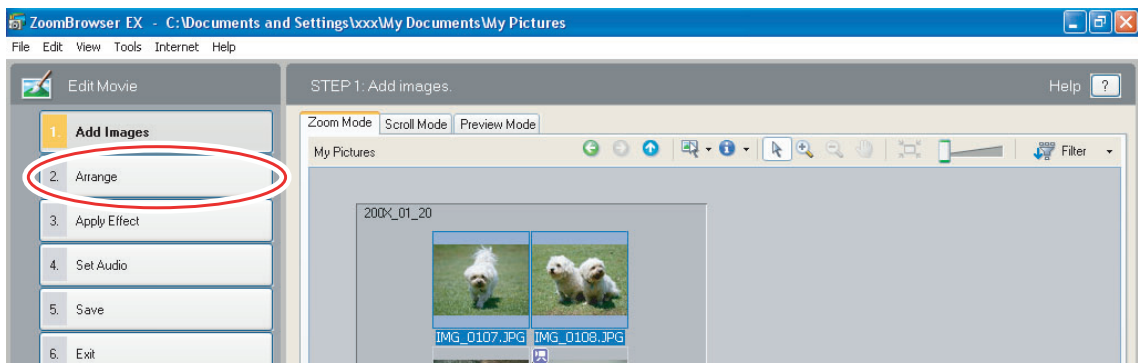


2 Click [Edit Movie].



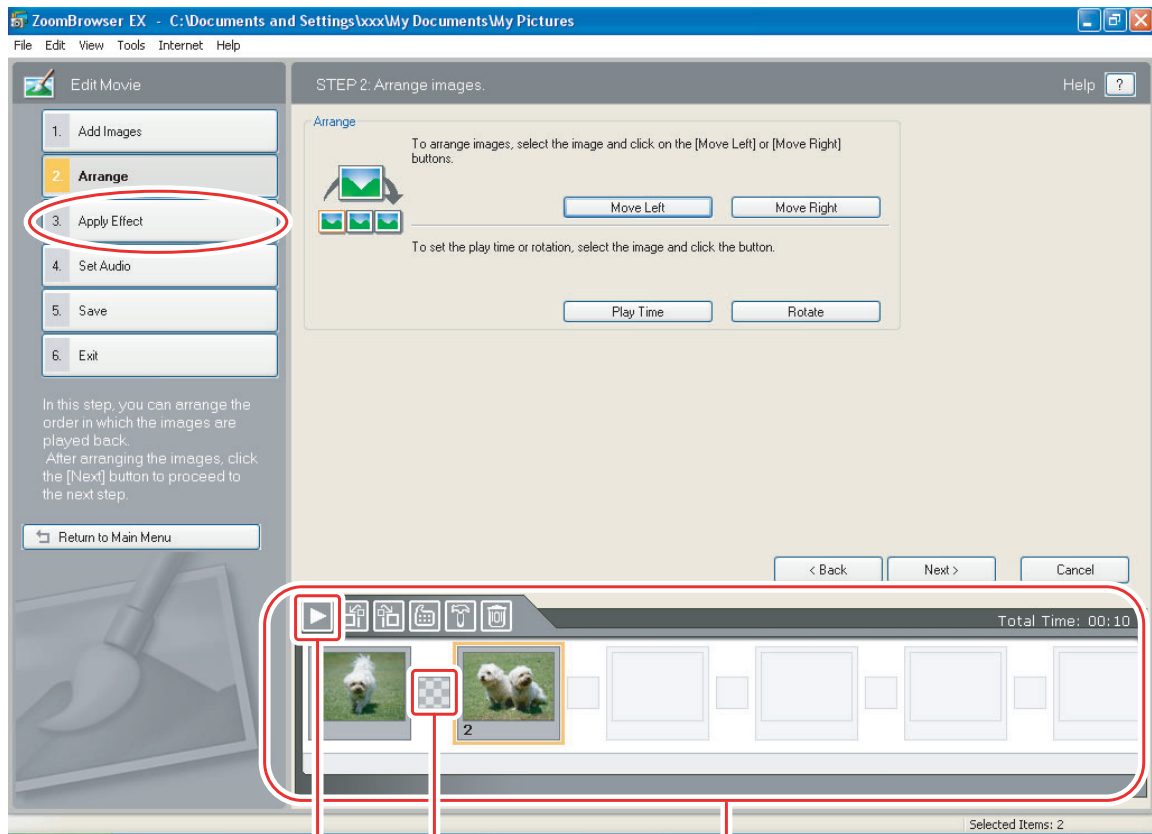
3 Select images and click [Arrange].

You can select multiple images or a folder to include all images in that folder.



4 Arrange images and click [Apply Effect].

To change the order of images, select an image in the Storyboard Area and click [Move Left] or [Move Right].



Plays back the movies being edited.

Transition Box

Displays the symbol of the transition effect between linked images.

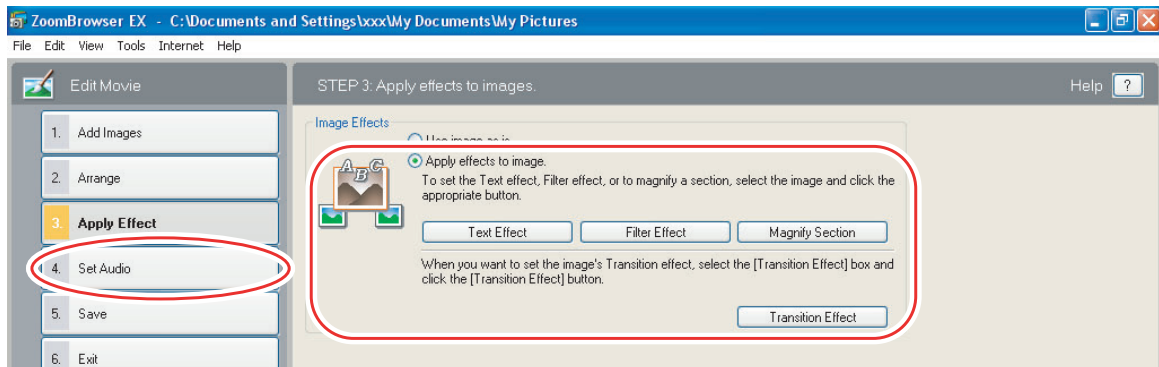
Storyboard Area

Displays thumbnails of the selected images. The images will be linked from left to right.

5 Apply effects to the images and click [Set Audio].

When you select [Apply effects to image.], you can use the following functions.

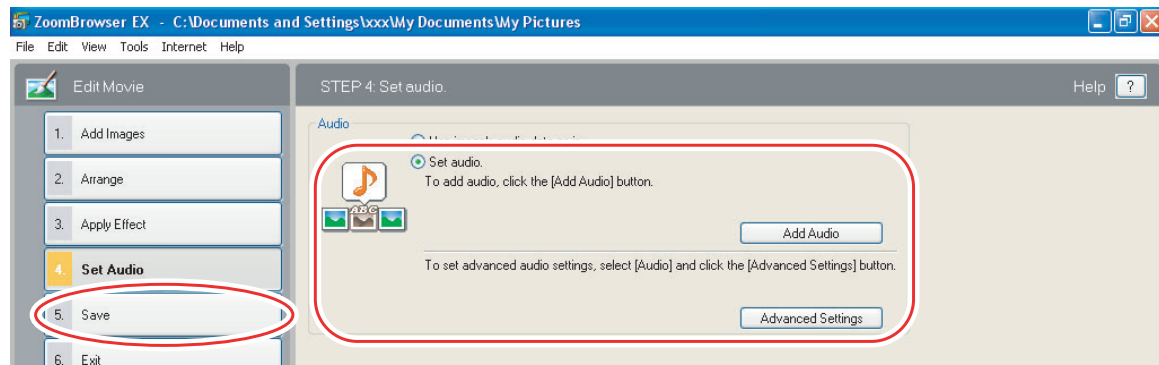
- [Text Effect]: Opens the [Text Effect Settings] window. You can enter text, change the font and preview the effect.
- [Filter Effect]: Opens the [Filter Effect Settings] window. You can set the filter effect type, the start and end point, and preview the effect.
- [Magnify Section]: Allows you to view a part of the image in enlarged size.
- [Transition Effect]: Opens the [Transition Effect Settings] window. You can set the transition effect type and display time, and preview the effect. To set a transition effect, you need to select a transition box in the Storyboard Area.



6 Set the audio and click [Save].

When you select [Set audio.], you can use the following functions.

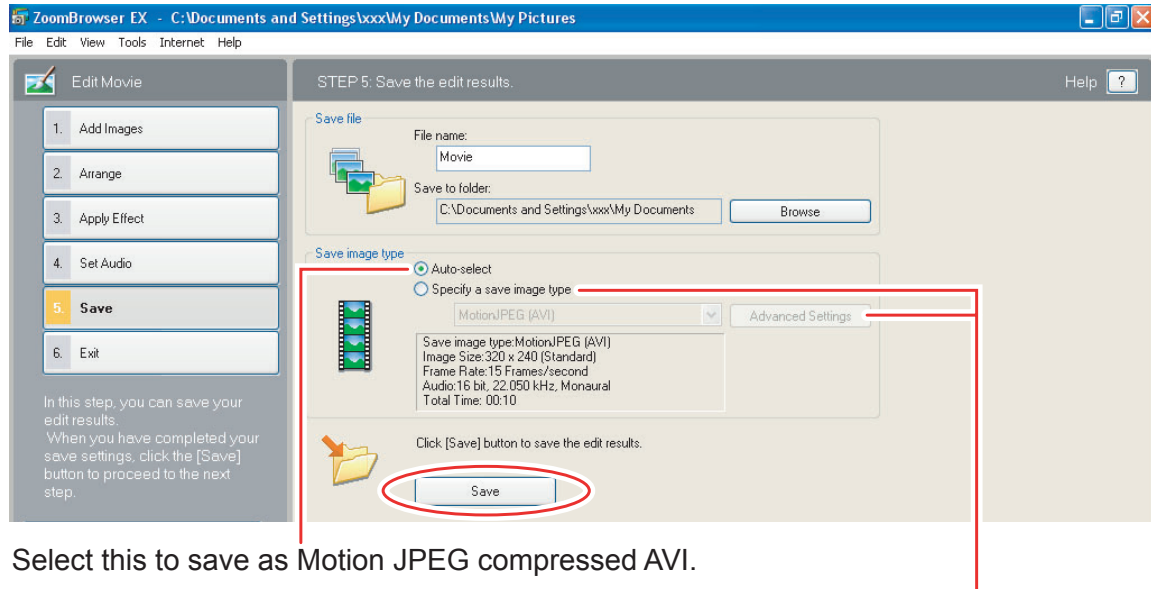
- [Add Audio]: Opens the [Add Audio] window. You can add an MP3 or a WAV file as background music.
- [Advanced Settings]: Opens the [Advanced Audio Settings] window. You can adjust the audio level of a movie or an audio file and apply audio faders. To set the advanced audio settings, you need to select a movie or an audio file which you added.



7

Click [Save].

Movies are saved in DCF type files with Motion JPEG/AVI compression.

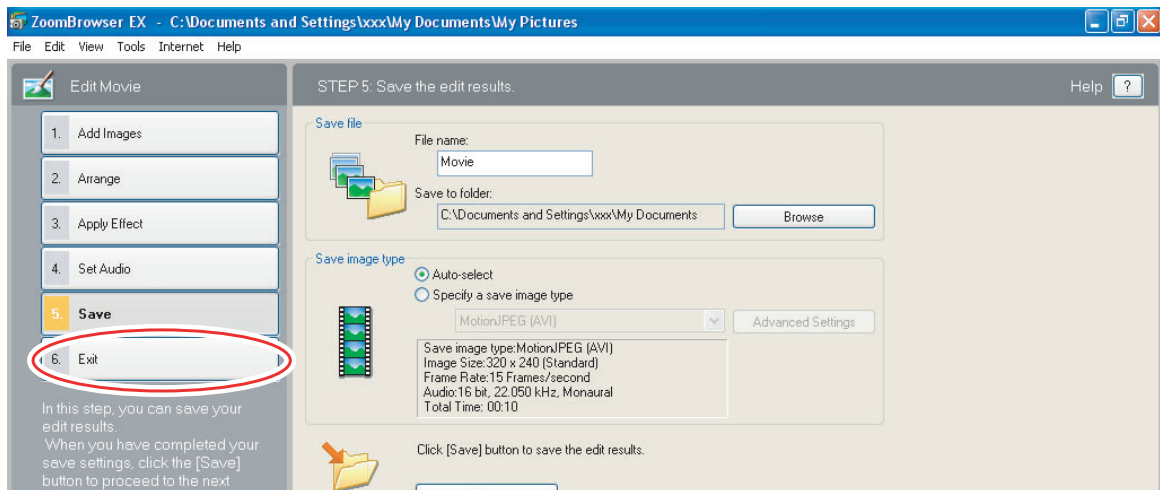


Select this to save as Motion JPEG compressed AVI.


Selecting [Specify a save image type] and clicking [Advanced Settings] allows you to set [Image Size], [Frame Rate] or [Audio] settings of the movie.

8

Click [Exit].



Playing Back Movies

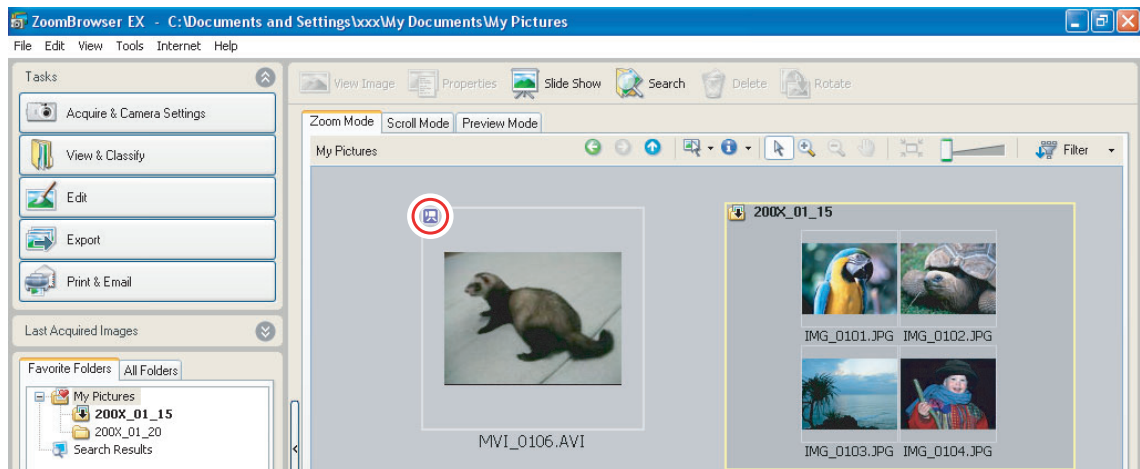
In the CameraWindow and Main Window, movies are displayed with the first scene as a still image with a  (movie) icon.



- If you are using Windows 2000, QuickTime is required to play movies. If it is not already installed on your computer, install it from the DIGITAL VIDEO Solution Disk. Place the disk in the CD-ROM drive and click [Install] under QuickTime in the installer panel.
- Do not double-click a movie file (.AVI extension) in Windows Explorer. That will start Windows Media Player, which may not support this file type. To play back movies, double-click the thumbnail with a movie icon in the Main Window's Browser Area.

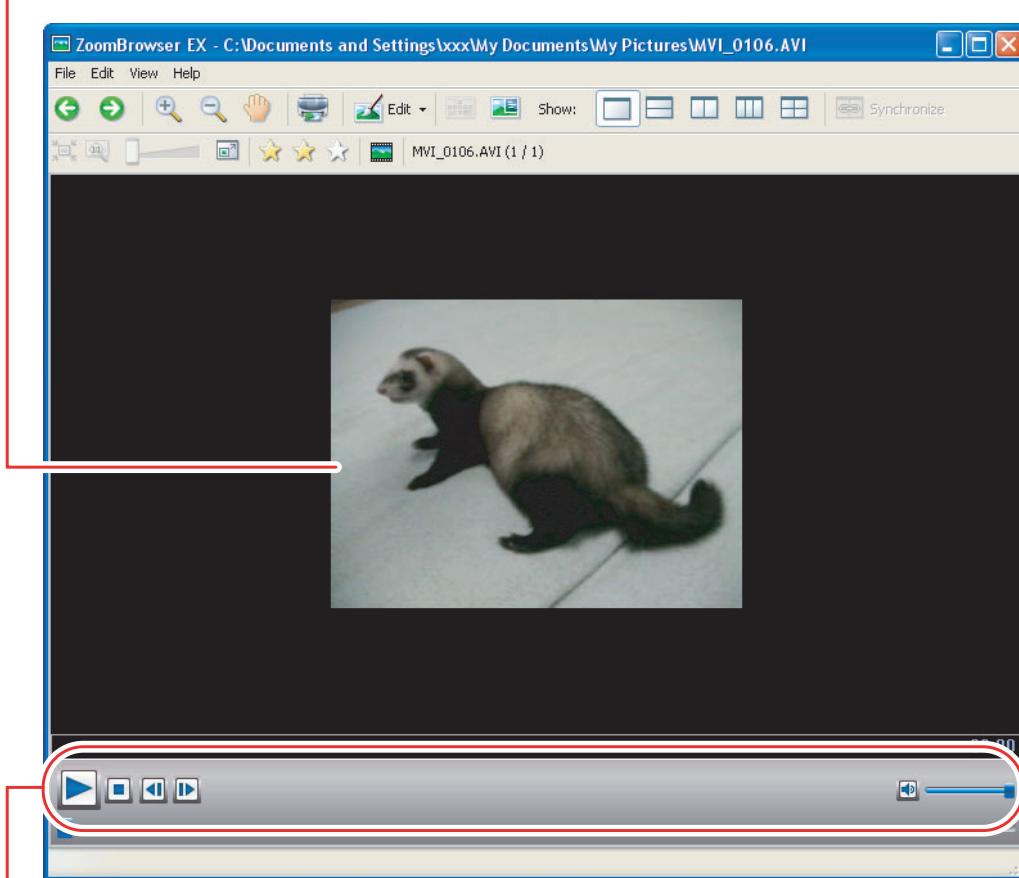
1 In the Main Window, double-click a thumbnail with a (movie) icon.

[Image Viewer] window appears.



- The [Image Viewer] window is displayed, and the movie will be played back. You can control (play back/stop/fast forward/rewind) the movie being played back with the buttons shown at the bottom left of the window.
- Windows Vista/Windows XP: You can extract still images from movies and save them as image files. For details, refer to *Extracting Still Images from Movies (Windows Vista/Windows XP)* (📖 72).

You can save the displayed scene as a still image.



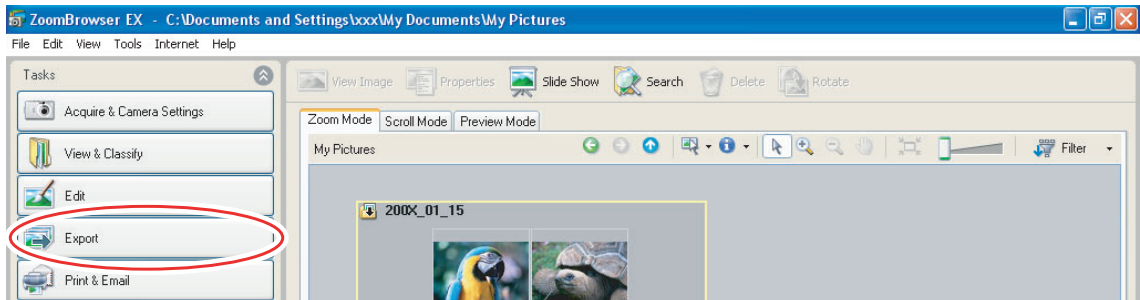
You can play movies and control the sound volume.

Exporting Images

You can change the data type for selected still images and movies and save them as new files. You can also export selected movies and still image properties to a text file or copy and rename movies and still images. Furthermore, you can export still images for use as a screen saver or a wallpaper.

Changing the File Type and Saving

1 Click [Export] in the Main Window.



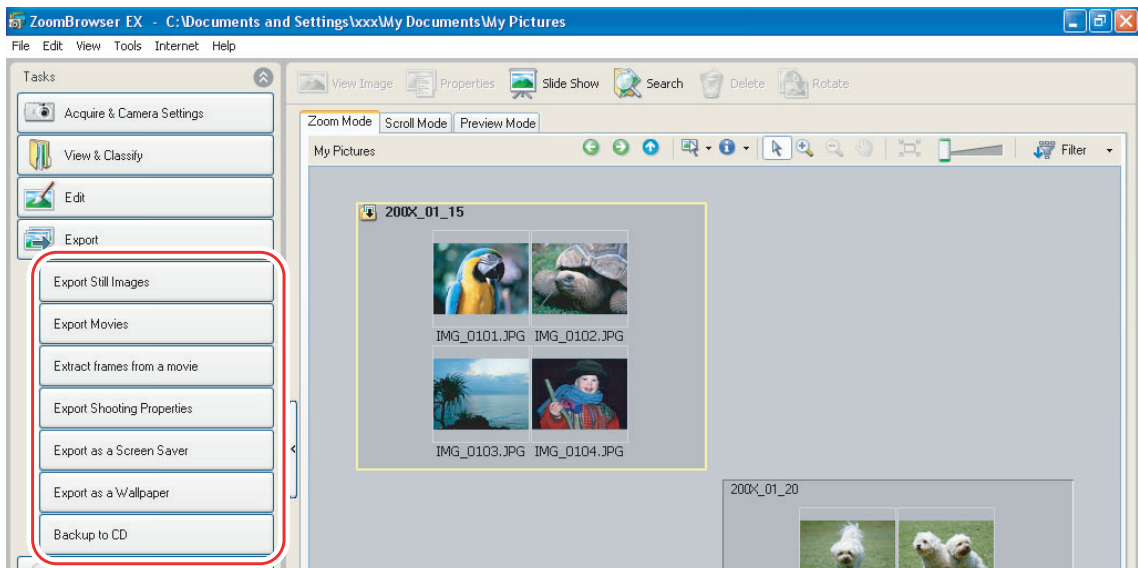
2 Select the export type.

If you selected [Export Movies], [Extract frames from a movie] or [Backup to CD], refer to the pages listed below.

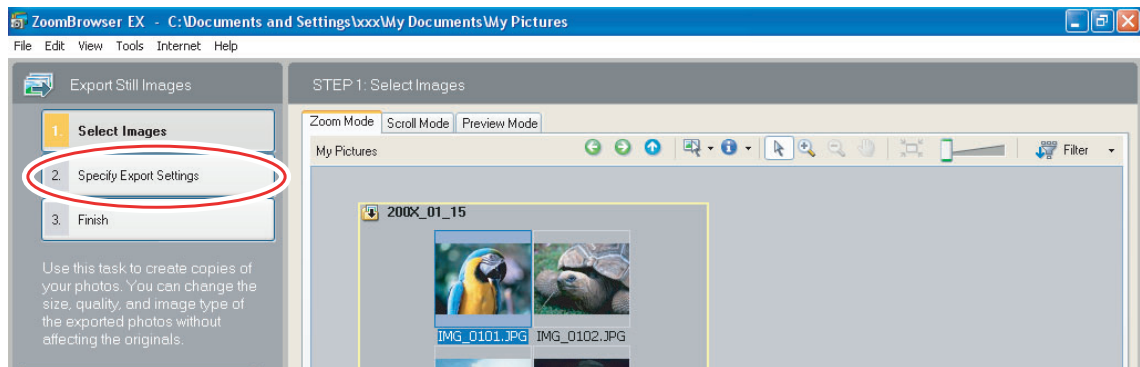
[Export Movies]: *Exporting Movies* (📖 69)

[Extract frames from a movie]: *Extracting Still Images from Movies (Windows Vista/Windows XP)* (📖 72)

[Backup to CD]: *Saving on CD-R/RW Disks (Windows Vista/Windows XP)* (📖 75)



3 Select images and click [Specify Export Settings].



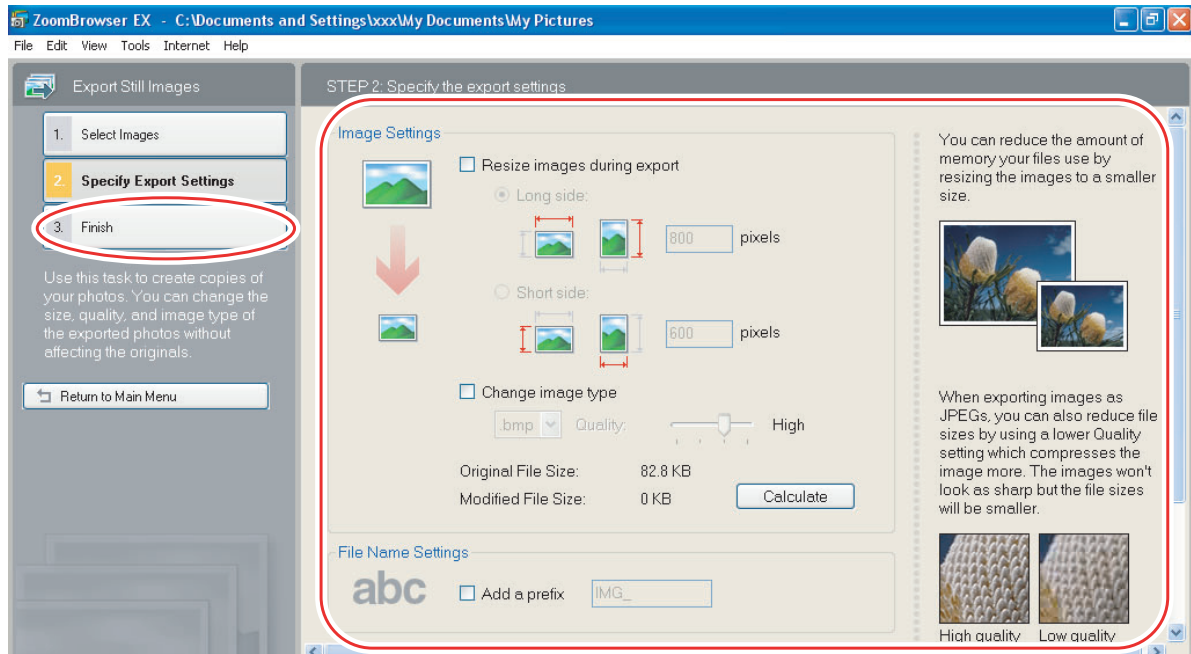
4 Specify the export settings and click [Finish].

The window varies depending on the selected export type in step 2.

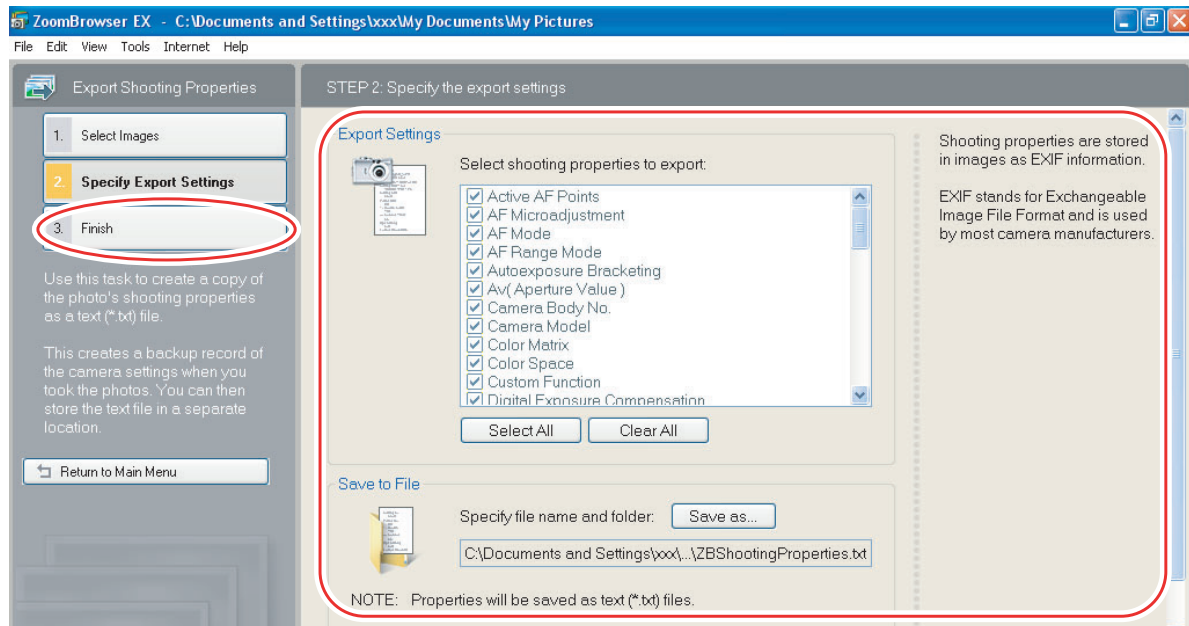
When you have selected [Export Still Images]:

You can convert still images to another file type, resize and save them as new files.

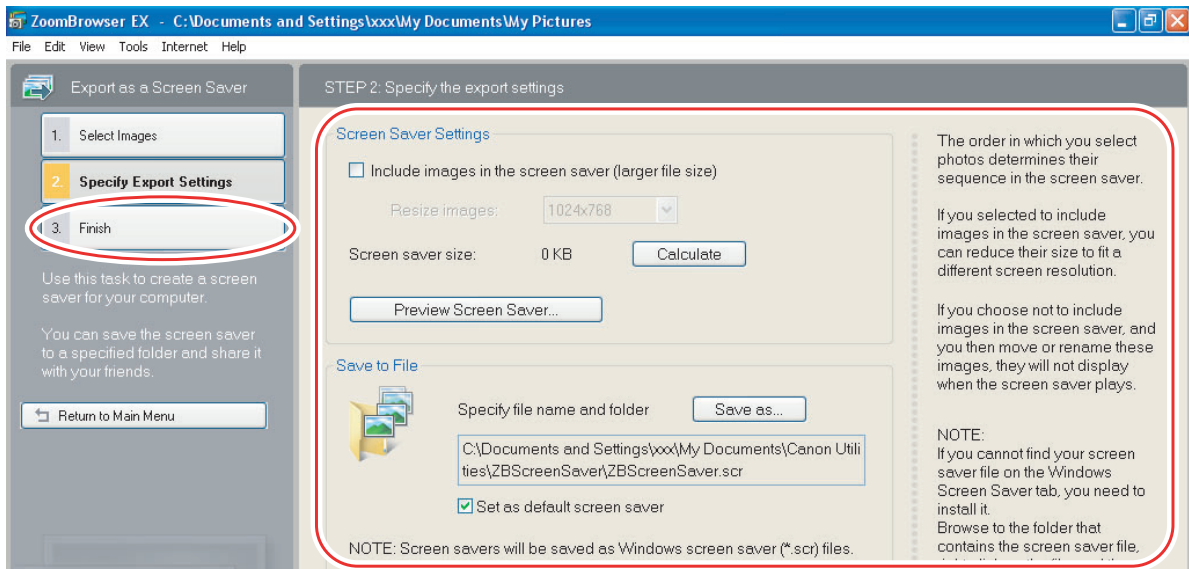
You can select the file type from BMP, JPEG and TIFF. You can also specify a prefix to be added to the exported still images.



When you have selected [Export Shooting Properties]:
You can select the information you wish to export and save as a text file.

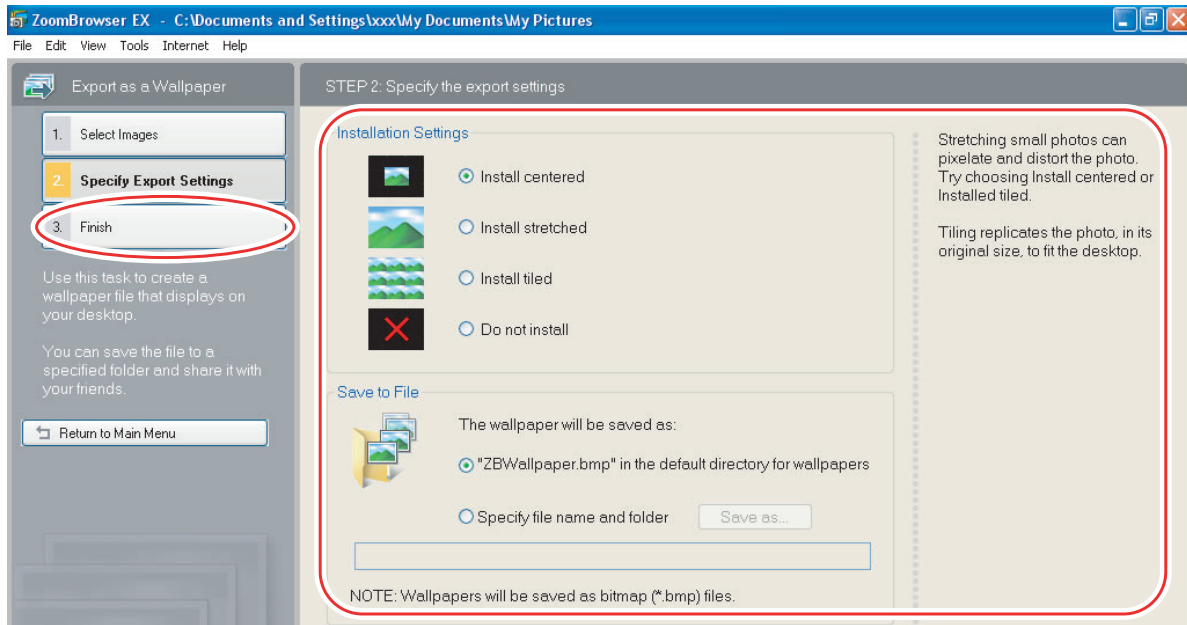


When you have selected [Export as a Screen Saver]:
You can export and save the image as a screen saver.



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.



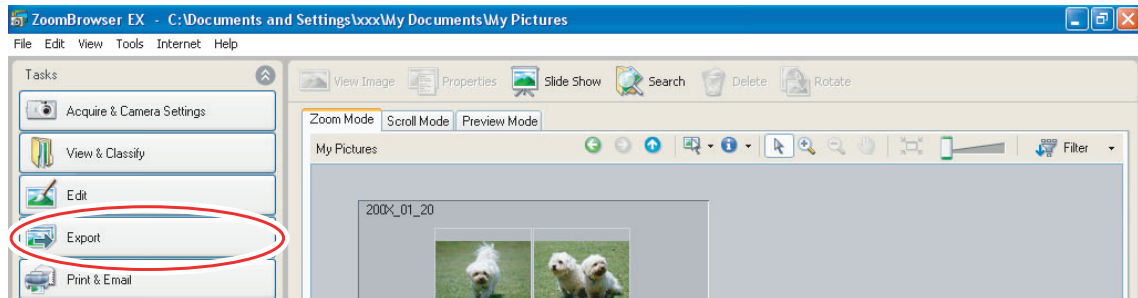
Exporting Movies

You can change the size or file type for selected movies and save them as new files.

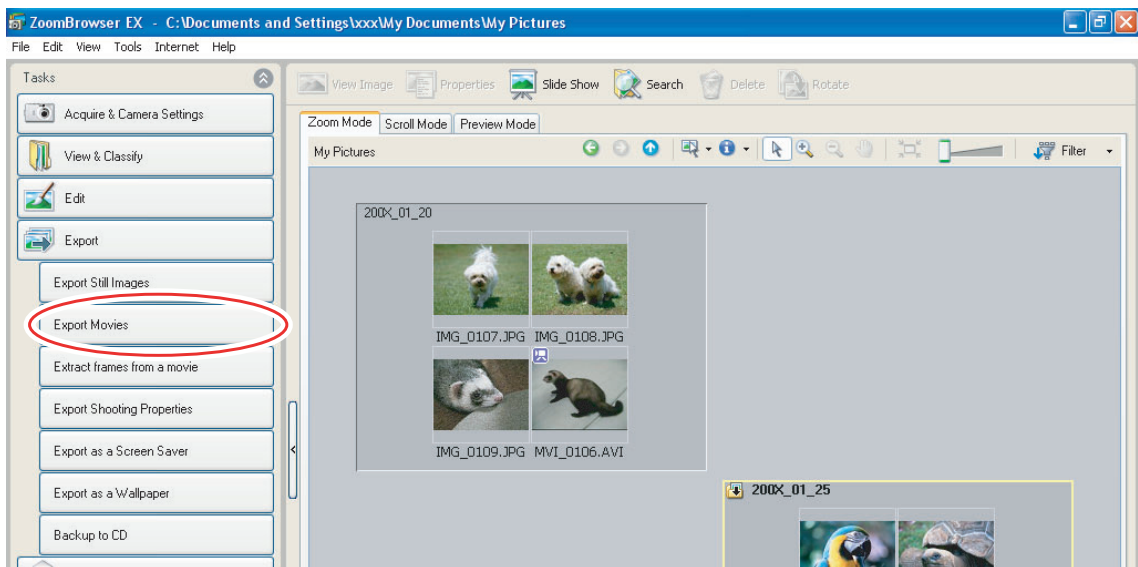


If you are using Windows 2000, QuickTime is required to export movies. If it is not already installed on your computer, install it from the DIGITAL VIDEO Solution Disk. Place the disk in the CD-ROM drive and click [Install] under QuickTime in the installer panel.

1 Click [Export] in the Main Window.

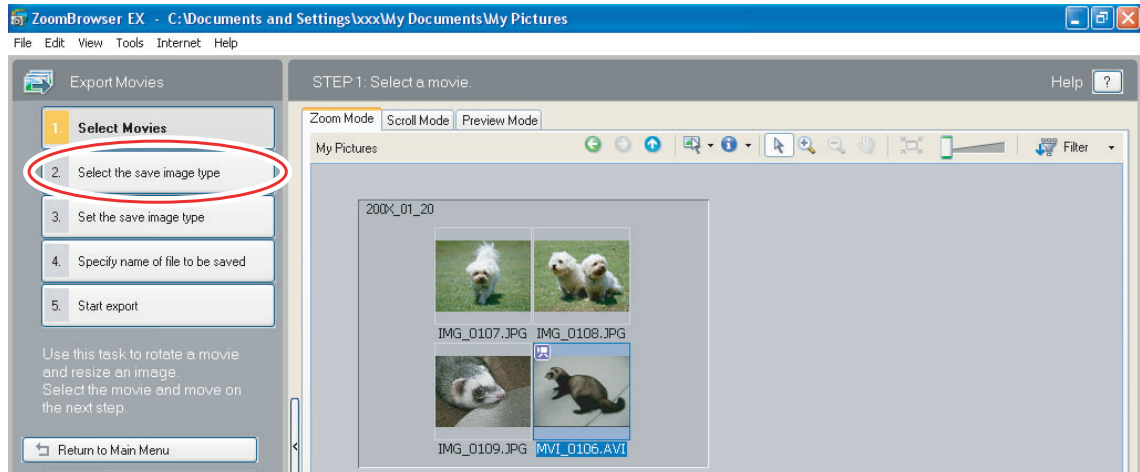


2 Click [Export Movies].

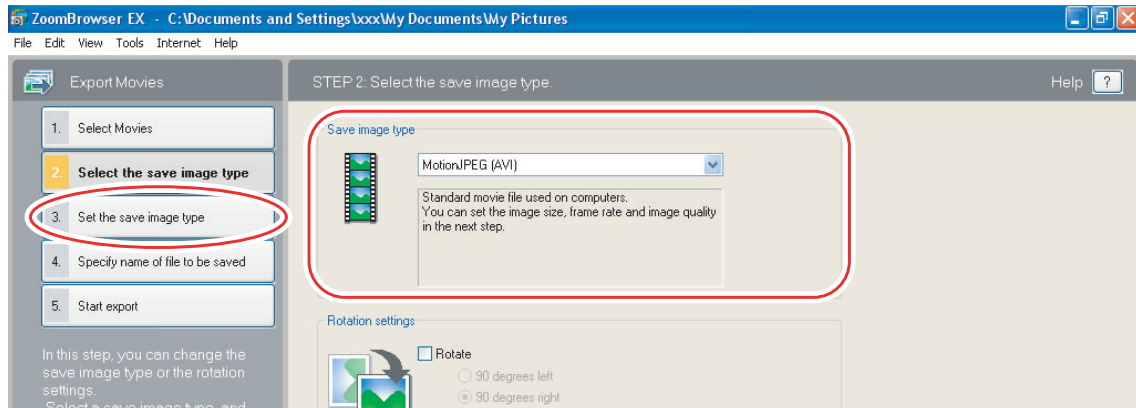


3 Select a movie and click [Select the save image type].

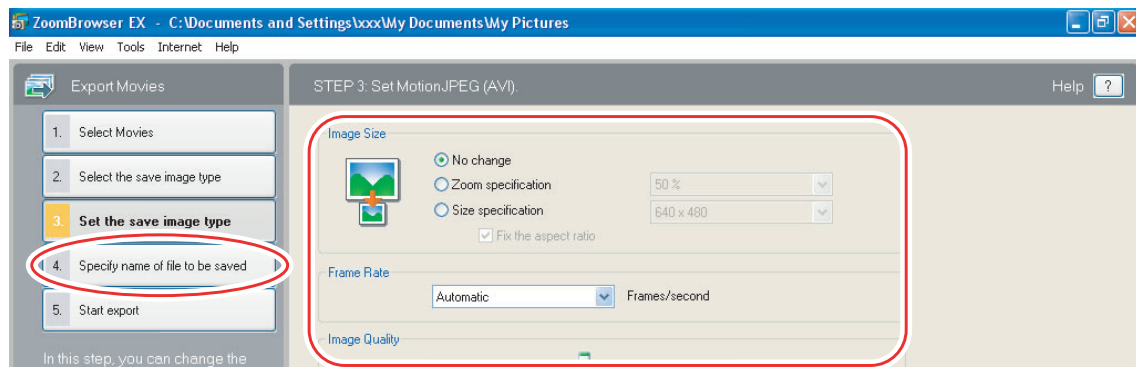
You can select multiple images or a folder to include all images in that folder. Still images cannot be selected. For instructions on how to export still images, see *Exporting Images* (📖 65).



4 Select a file type and click [Set the save image type].

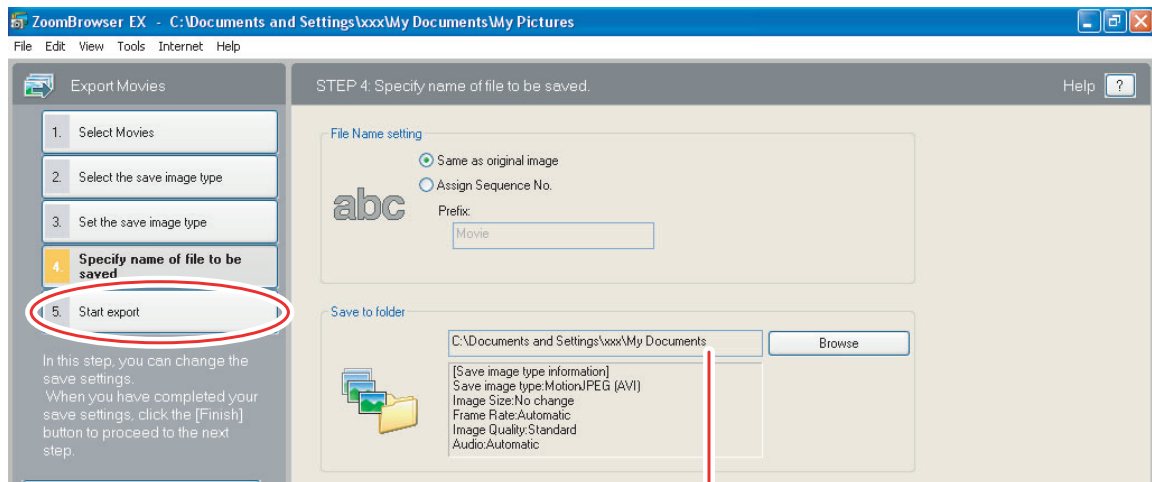


5 Specify the export settings and click [Specify name of file to be saved].



6 Specify the file name and click [Start export].

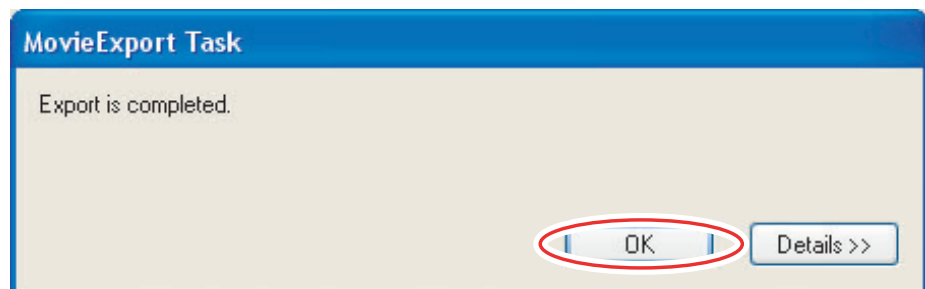
In each case, specify the destination folder and file name of the movie to be exported.



Destination Folder

7 Click [OK].

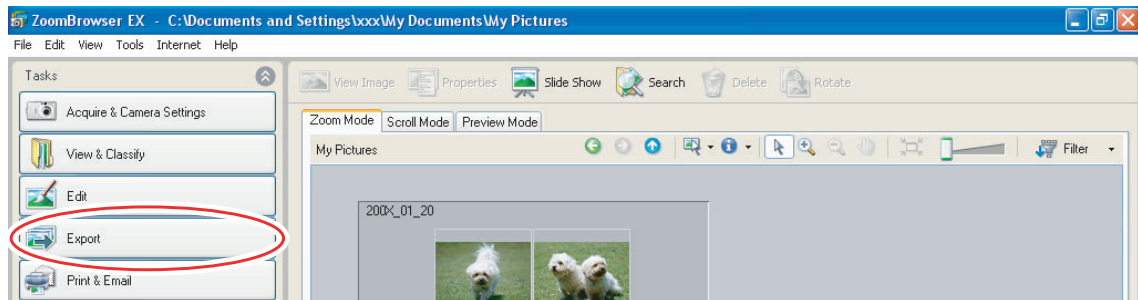
The Main Window appears.



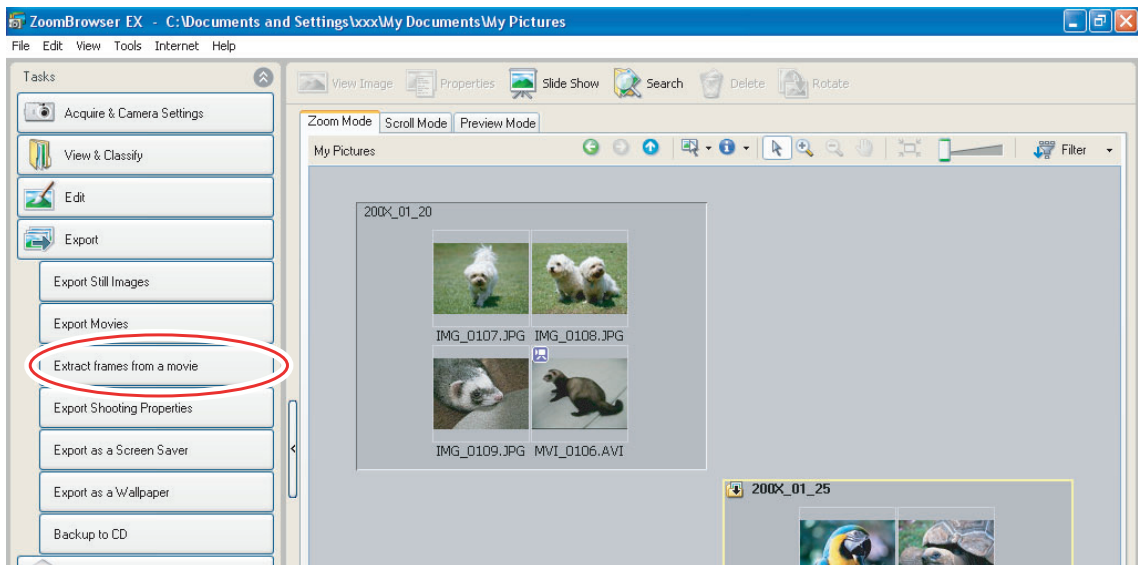
Extracting Still Images from Movies (Windows Vista/Windows XP)

You can extract still images from movies and save them as image files.

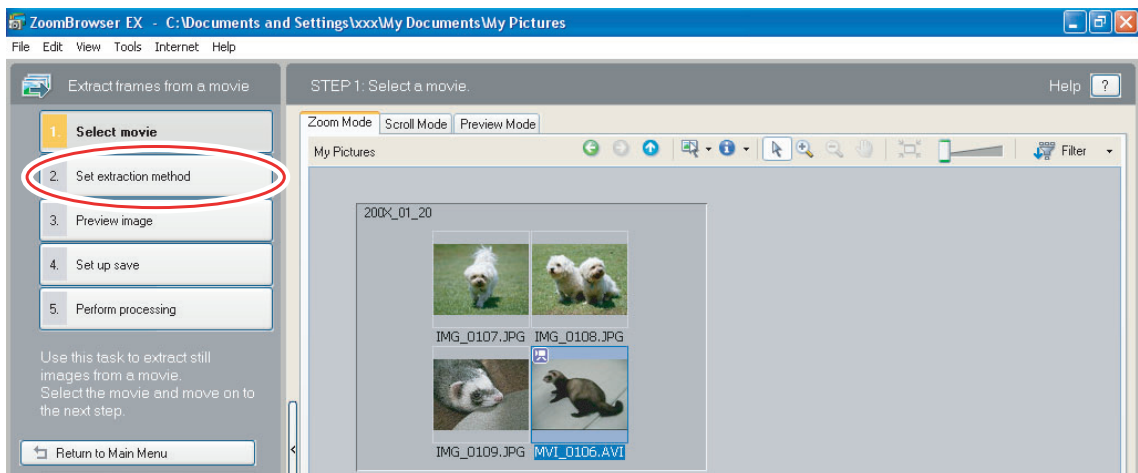
1 Click [Export] in the Main Window.



2 Click [Extract frames from a movie].

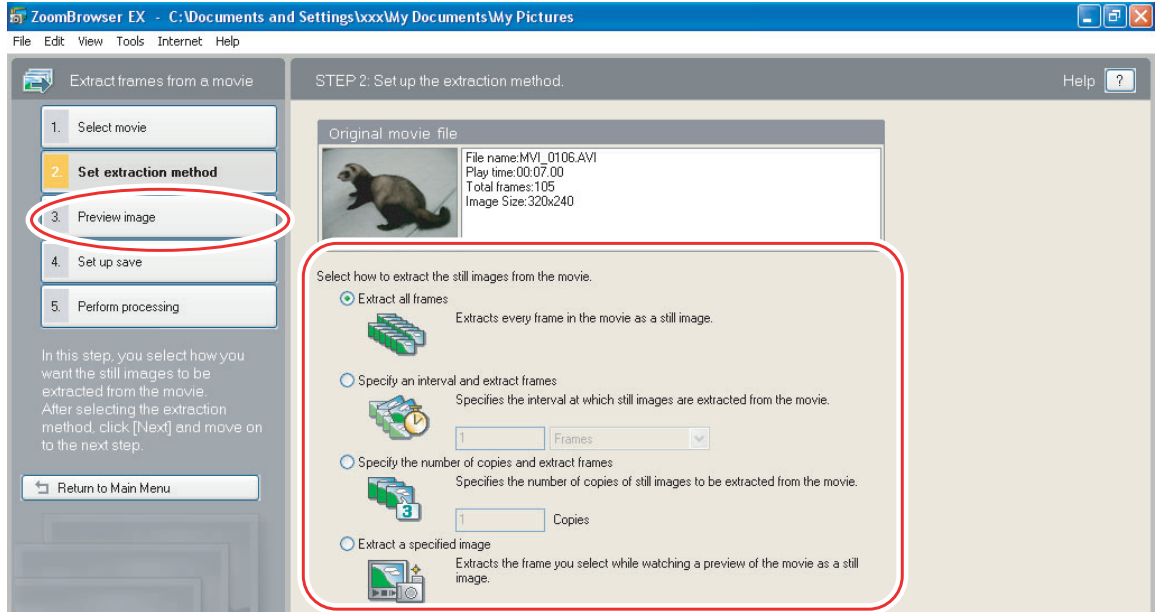


3 Select the movie from which you wish to extract still images and click [Set extraction method].



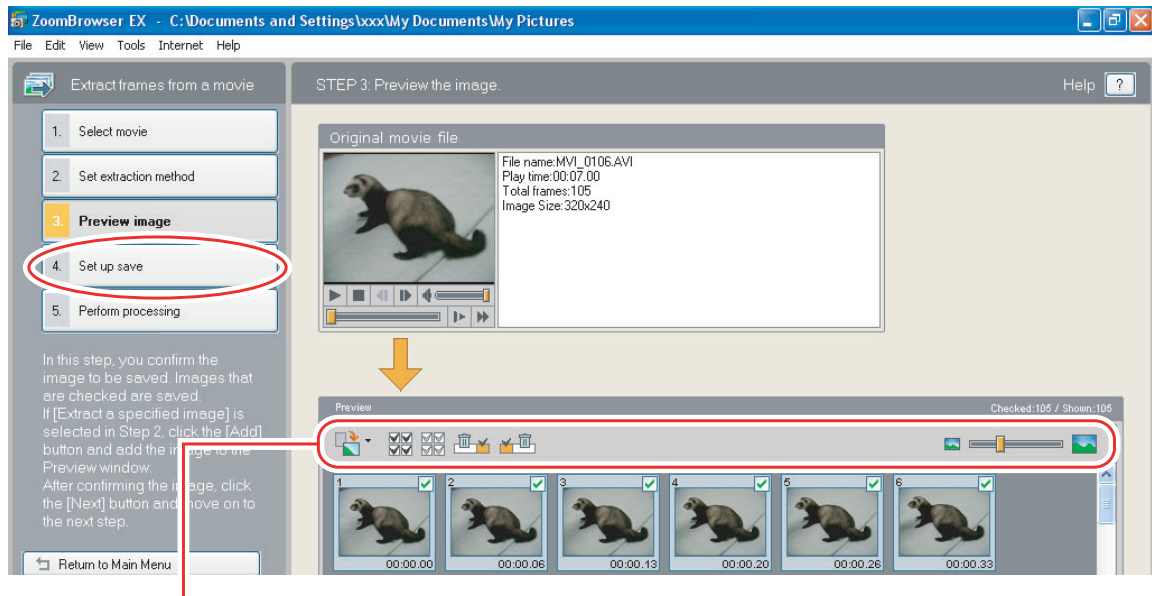
4 Select the still images extraction method and click [Preview image].


- [Extract all frames]: Extracts all frames in the movie as still images.
- [Specify an interval and extract frames]: Extracts frames as still images from a specified frame range or time interval.
- [Specify the number of copies and extract frames]: Extracts a specified number of still images from the entire movie. The extraction interval is calculated based on an equal distribution of the specified number of still images.
- [Extract a specified image]: Extracts still images from scenes that catch your attention.





5 Confirm the still images which will be extracted (images with check marks) and click [Set up save].


If you selected [Extract a specified image] in the previous window, the movie will be displayed in the upper part of the window. Display the images you want and click [Add].



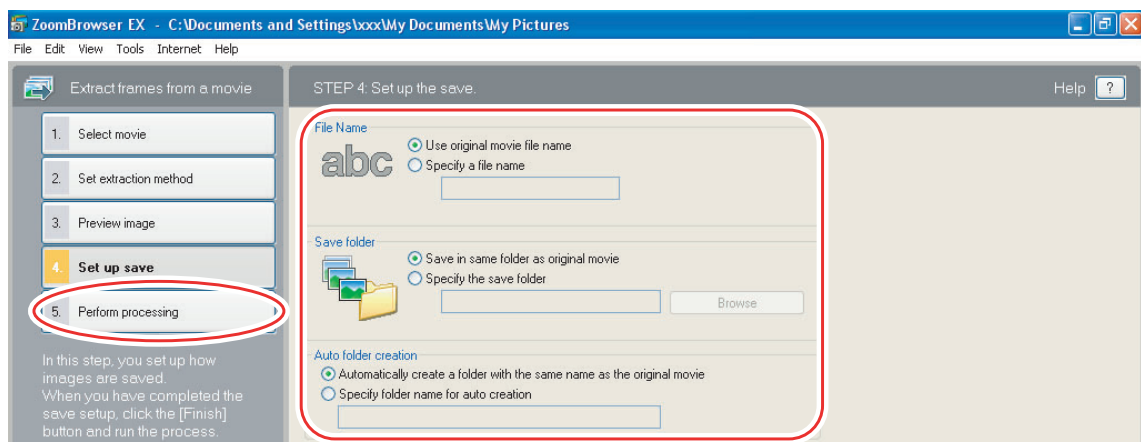
 : Rotates all still images.

 : Clears or adds check marks to all still images at once.

 : Clears the check marks of all the still images before/after the selected still images.

 : Changes the thumbnail size.

6 Specify the file name and the folder where you wish to save it and click [Perform processing].



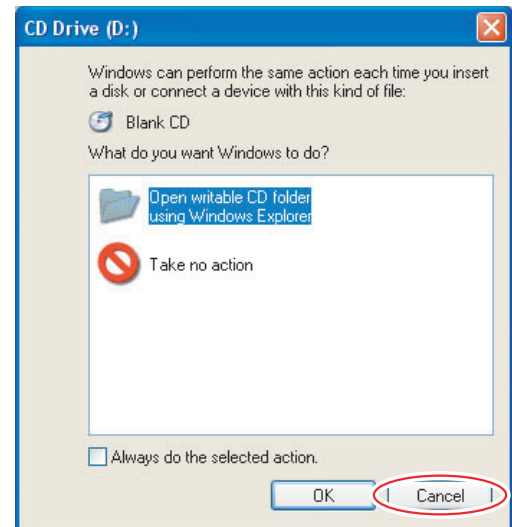
Saving on CD-R/RW Disks (Windows Vista/Windows XP)

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

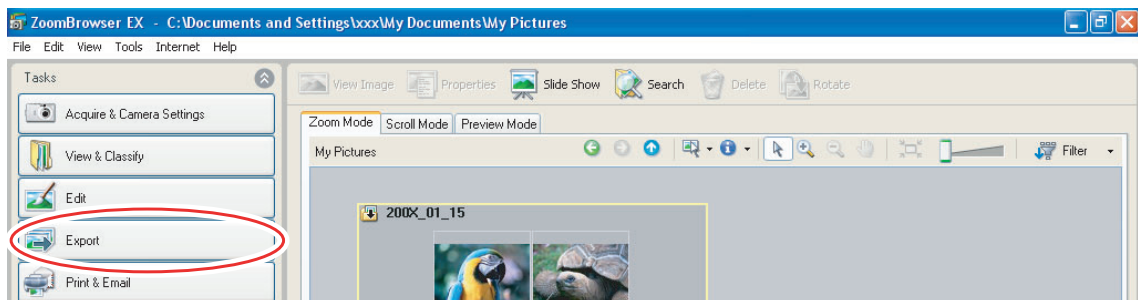


This function can only be used on a computer that came with a CD-R/RW drive as standard equipment.

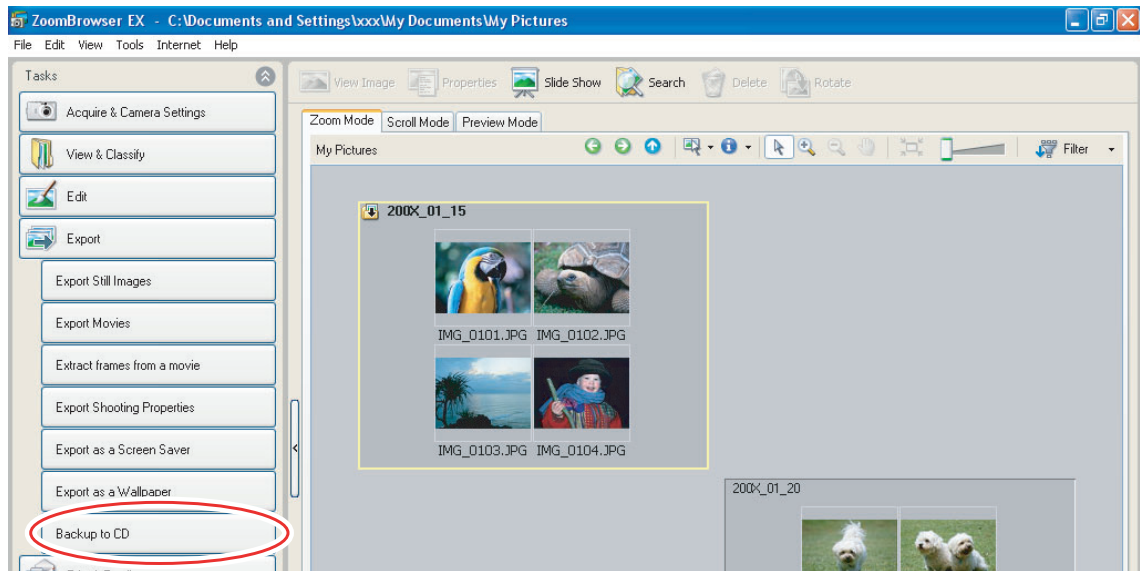
- 1 Place a CD-R/RW disk in the computer's CD-R/RW drive.**
- 2 If the following window appears, click [Cancel].**



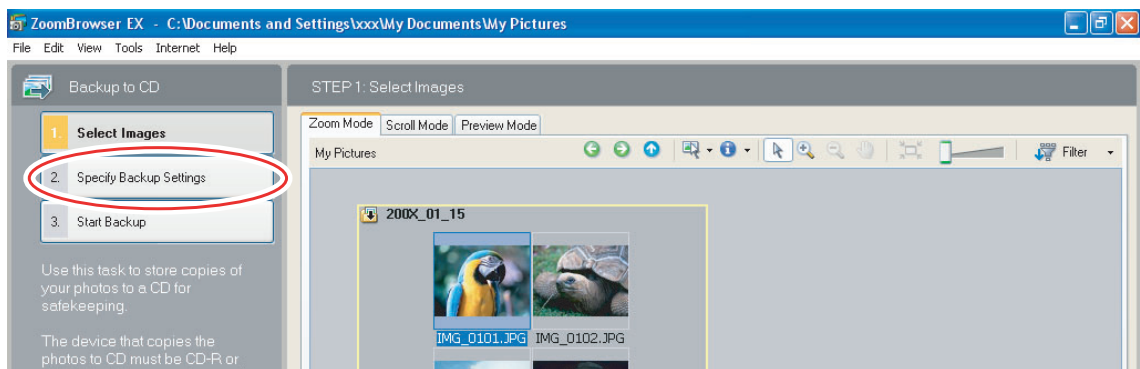
- 3 Click [Export] in the Main Window.**



4 Click [Backup to CD].

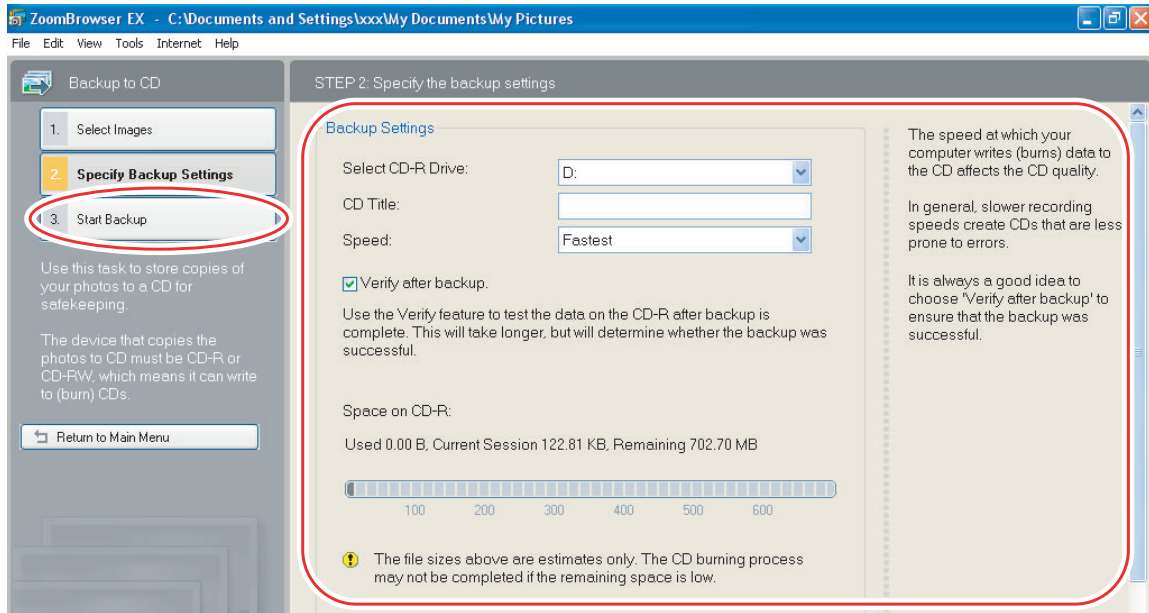


5 Select the folders or images you wish to save and click [Specify Backup Settings].



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

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



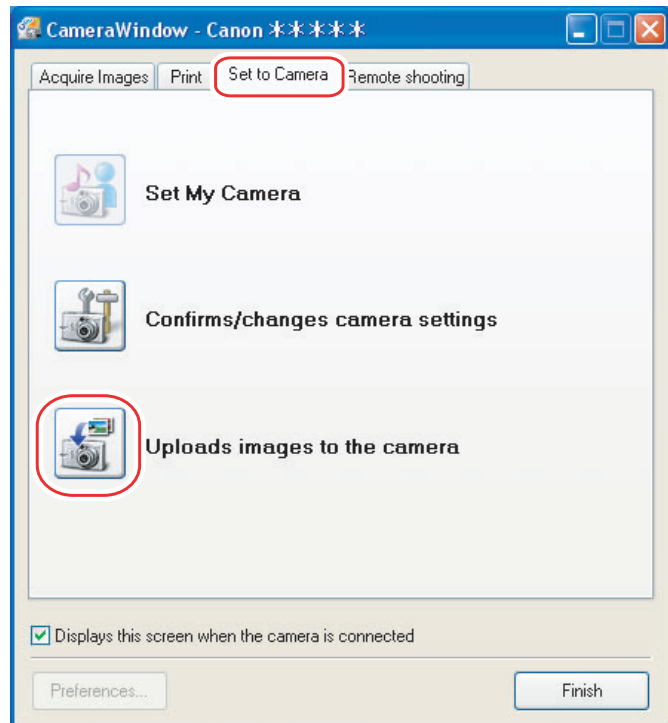
You can add images to a CD-R/RW disk that already contains images.

Adding Still Images to the Memory Card

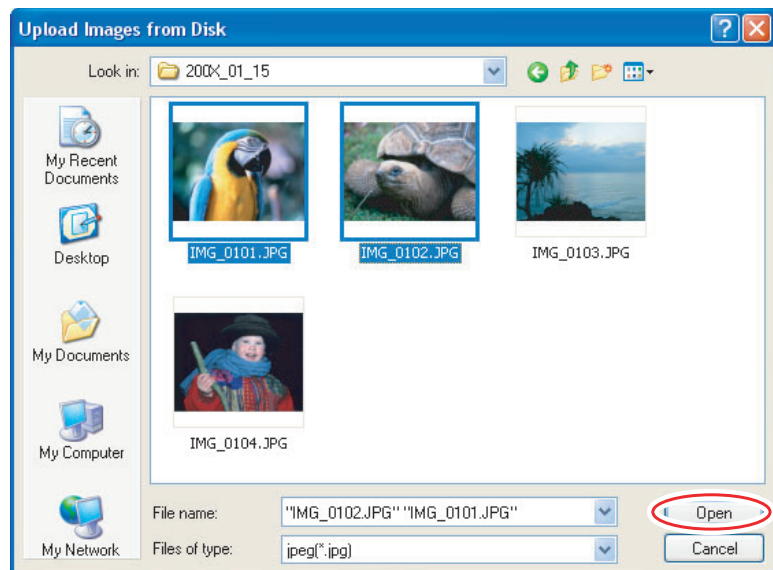
You can add still images (JPEG) from the computer to a memory card in the camcorder or card reader/writer.

■ Adding Still Images to the Memory Card in the Camcorder

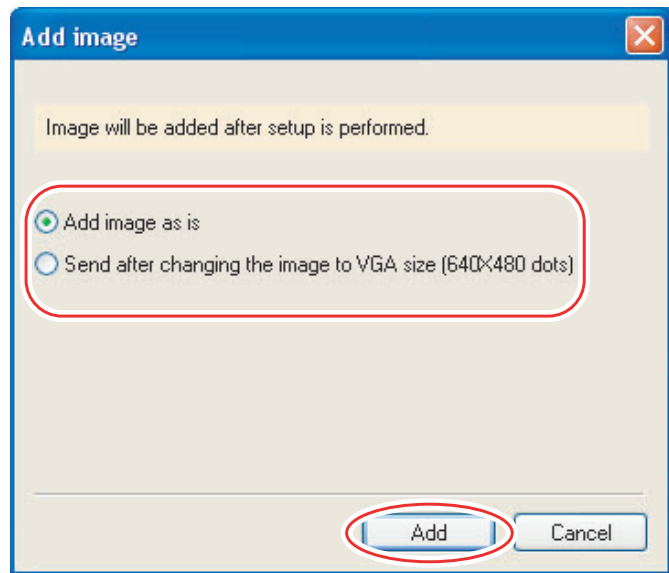
- 1 Connect the camcorder to the computer (📖 25).
- 2 Click the [Set to Camera] tab and click [Uploads images to the camera].



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



4 Select the image size and click [Add].



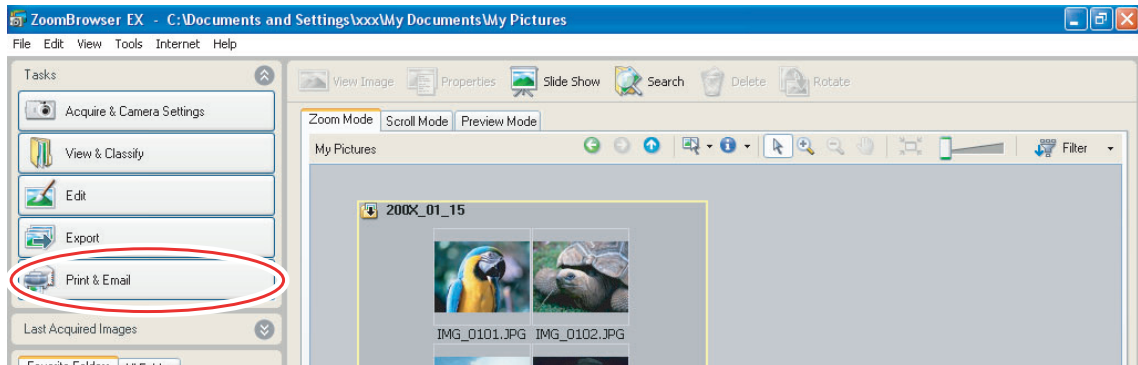
When you upload images edited with another application, image properties may be lost.

Using Various Functions

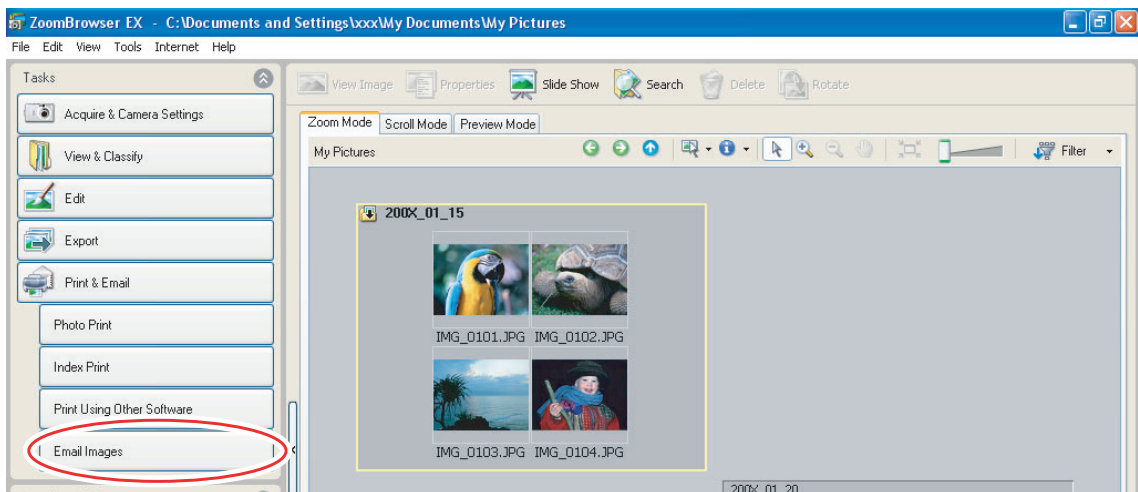
Attaching Still Images to E-mail Messages

You can attach selected still images to an e-mail message. If necessary, you can make the image file size smaller.

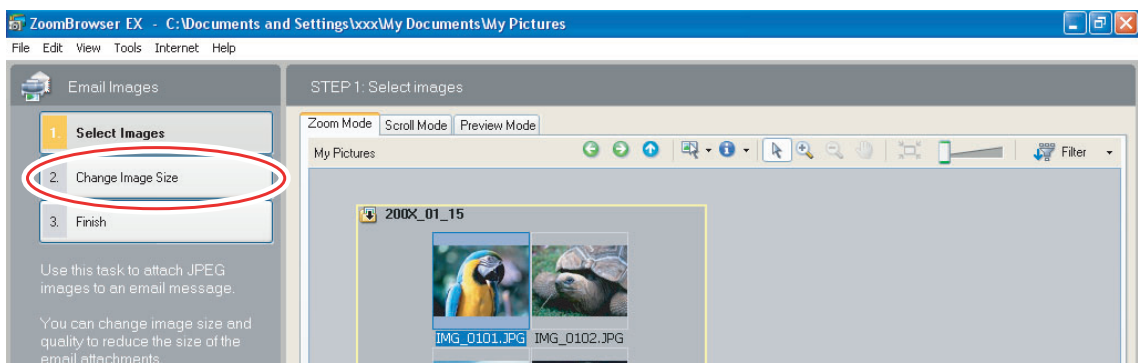
1 Click [Print & Email] in the Main Window.



2 Click [Email Images].

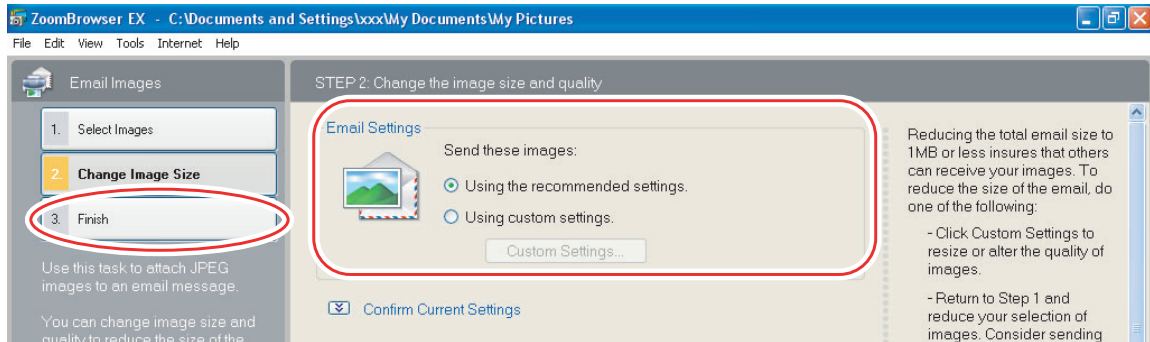


3 Select the still images you wish to send and click [Change Image Size].

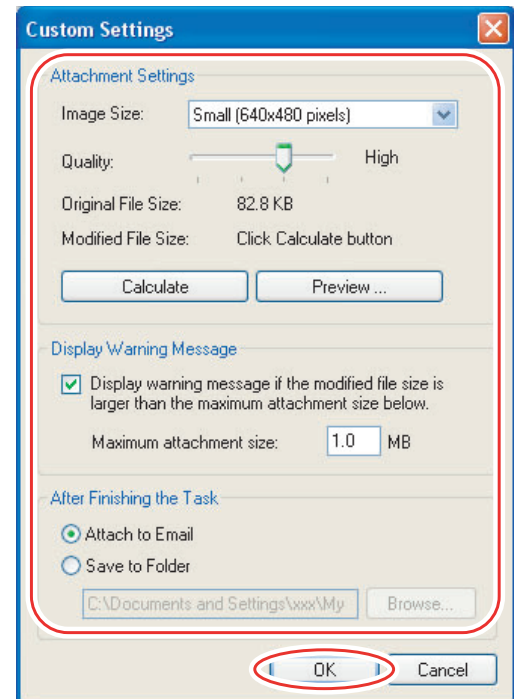


4 Select image size and quality, and click [Finish].

- If you selected [Using the recommended settings.], 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 to Folder] in the [Custom Settings] screen and select a destination folder for the still images.



- If you select [Using custom settings.], change the settings in [Custom Settings] and click [OK].



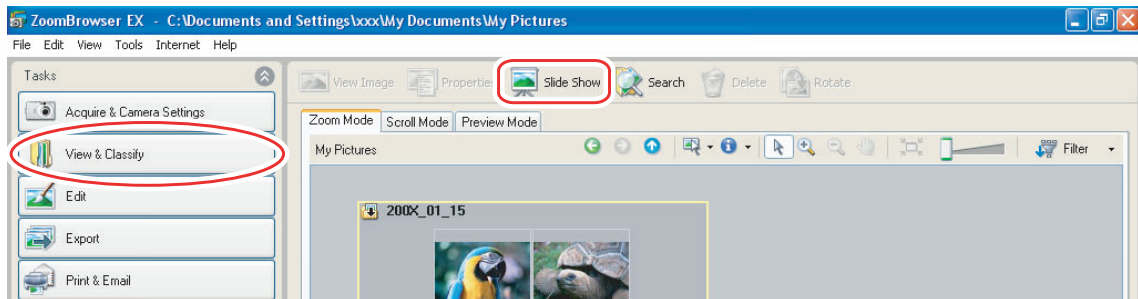
- To use this function, the e-mail software must be enabled as MAPI client. For details, refer to the instruction manual of the e-mail software.
- This function uses the e-mail software configured in [Internet Options]. To change the software, first exit ZoomBrowser EX. Next, in Internet Explorer, select [Tools], [Internet Options] and the [Programs] tab. Set the desired software in [E-mail] and click [OK]. (This procedure may change depending on your Web browser.)

Running a Slide Show

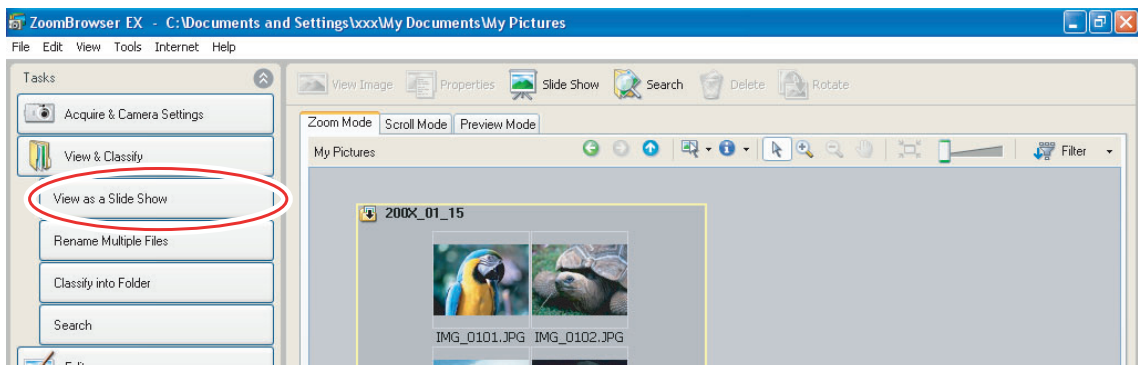
You can view selected still images in a slide show.

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

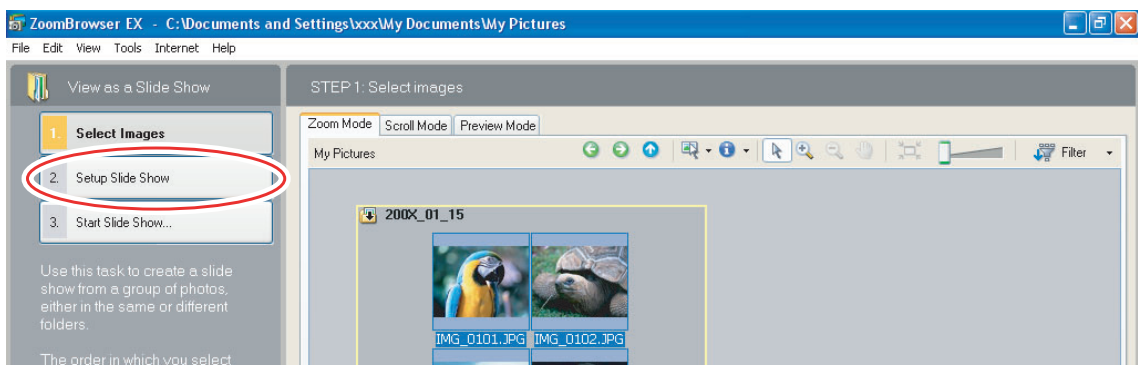
You can also view a slide show by clicking [Slide Show] on the Application Tool Bar. Skip to step 4.



2 Click [View as a Slide Show].

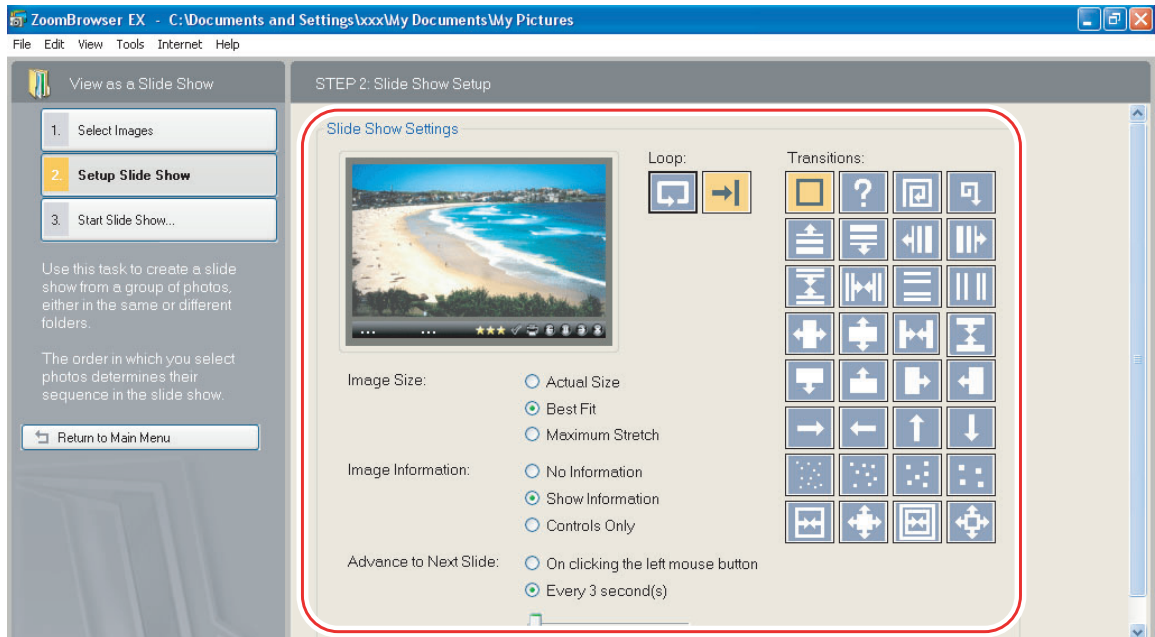


3 Select the images and click [Setup Slide Show].



4 Select the slide show settings.

- [Image Size]: Select the size of the still images.
- [Image Information]: Select to show image information such as file name or title.
- [Advance to Next Slide]: Select to advance manually or automatically. When you select “Every 3 second(s)”, you can select the interval in the control below (from 1 to 120 seconds).
- [Loop]: Select to stop the slide show after the last image or to continuously run it in a loop.
- [Transitions]: 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.



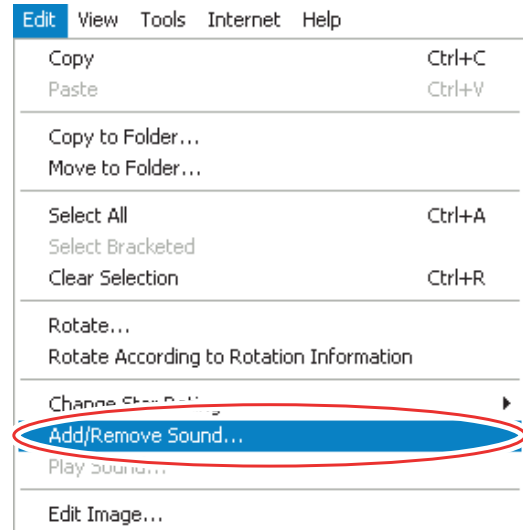
5 Click [Start Slide Show].

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

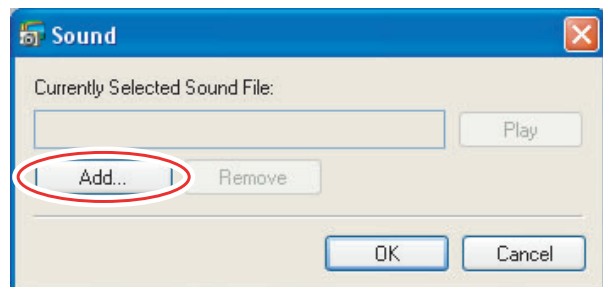
Adding Sound to a Still Image

- You can add a sound to an image. The sound file that can be added to the image must be WAVE type (extension “.wav”).
- 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.

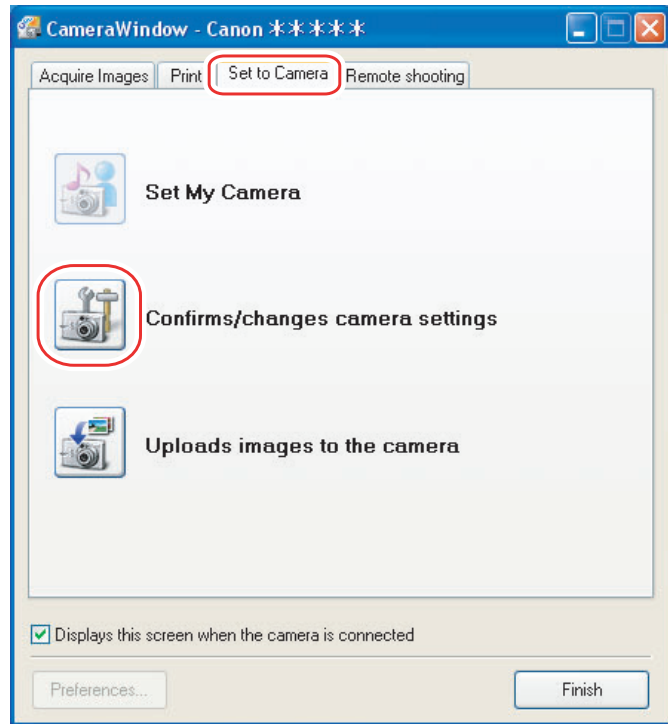


- To remove sound from an image, select [Remove] on the Sound window in step 2.  disappears and the copied sound file will be deleted.
- The [Play Sound] window appears and plays back the sound.

Reviewing and Changing the Owner Name of the Camcorder

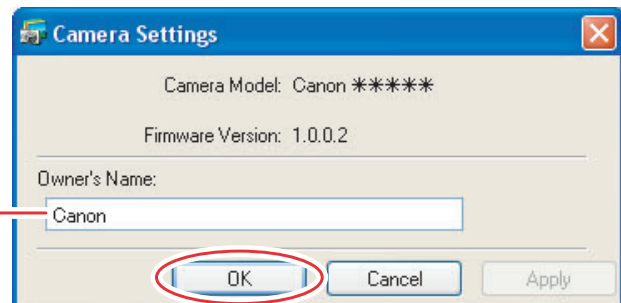
You can change and confirm the owner's name of the camcorder.

- 1** Connect the camcorder to the computer (25).
- 2** Click the [Set to Camera] tab and click [Confirms/changes camera settings].



- 3** Enter the camcorder's owner's name and click [OK].

Input the camcorder's owner's name here (up to 31 characters).



Uninstalling the Software

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

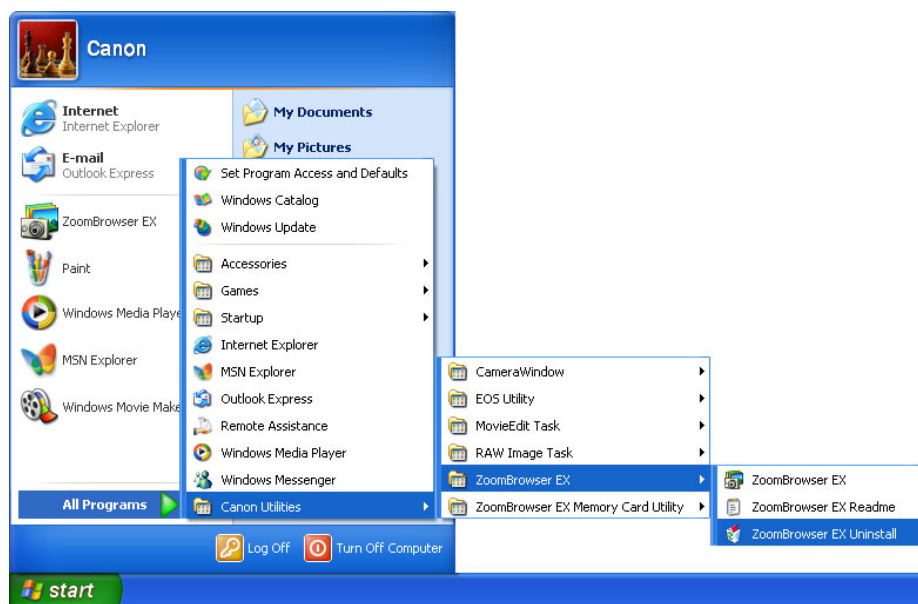


You must have authorization as a Computer System Administrator to uninstall programs.

Uninstalling ZoomBrowser EX

Other programs in the [Canon Utilities] folder can also be uninstalled in the same way.

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



- Uninstall all programs in [Canon Utilities] when you have uninstalled ZoomBrowser EX.
- RAW Image Task is used with Canon digital camera. The camcorder does not support the program, but you can uninstall the program in the same way as uninstalling the ZoomBrowser EX.

Uninstalling the TWAIN Driver (Windows 2000 only)

- 1** Connect the camcorder to the computer (📖 25).
- 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 Uninstallation* (📖 89).
- 5** Delete **[Canon Camera]** from the **[Scanners and Cameras Properties]** list.
- 6** Click **[OK]** to close the window.
- 7** Turn the camcorder **POWER** switch to **OFF** and remove the USB cable from the computer.
- 8** 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”.
- 9** When the **Confirm Uninstall** window appears, click **[OK]**.
The uninstall process starts.
- 10** When the **Maintenance Complete** window appears, click **[Finish]**.

Troubleshooting

Connection

- ? Camcorder is not recognized when connected to the computer.**
 - ➔ **Computer does not support the USB interface.**
Refer to *System Requirements* (📖 5).
 - ➔ **There is no memory card in the camcorder.**
Insert a memory card into the camcorder.
 - ➔ **The camcorder is not set to the correct mode.**
Set the camcorder to still image playback mode.
 - ➔ **Camcorder is not correctly connected to the computer.**
Read *Connecting the Camcorder to a Computer* (📖 25) 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 then reconnect the camcorder.**
 - ➔ **TWAIN Driver is not installed properly.**
First uninstall the TWAIN 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.**
Set the camcorder to still image playback mode.
- ? Image files or folders do not appear in ZoomBrowser EX.**
 - ➔ **Images or 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].

TWAIN Driver Installation Windows 2000

- ? Cannot install the TWAIN Driver correctly.**
 - ➔ **Does the system have a built-in USB port and did it come with Windows 2000 preinstalled? Refer to *System Requirements* (📖 5).**
 - ➔ **Camcorder is not correctly connected to the computer.**
Read *Connecting the Camcorder to a Computer* (📖 25) 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 may not have been recognized by Windows.**
Uninstall and reinstall the driver.

If you have problems when uninstalling the driver, use the following procedure to remove it. Leave the camcorder connected to 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.



Use the procedure 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.

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 procedure 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 procedure 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 6.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.
Note that with ZoomBrowser EX 4 or higher, both titles and comments appear in the comment list.

? Cannot find the image folders saved with a prior version than ZoomBrowser EX 6.x.

→ 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 image folder you wish to display and copy the folder to a different destination.



CANON INC.

U.S.A. ————— Canon U.S.A., Inc.

Canon Customer Care Center

Tel (US): 1-800-828-4040

(Mon.-Fri., 9 AM to 8 PM Eastern Time)

CANADA ————— Canon CANADA Inc.

Tel (Canada): 1-800-OK-CANON (1-800-652-2666)

ASIA ————— Canon Hongkong Co., Ltd.

19/F., The Metropolis Tower, 10 Metropolis Drive,

Hunghom, Kowloon, Hong Kong

Phone: 852-2170-2828

Fax: 852-2723-9684

The information in this manual is verified as of 1 January 2008.