

Olympus CAMEDIA Master 2.0 User Guide



Image Management Software User Manual for Olympus Digital Cameras

Olympus Optical Co., Ltd.

Notices

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1. Welcome

1.1 What is CAMEDIA Master?

Olympus CAMEDIA Master 2.0 is an image editing and image management application for Olympus digital cameras. CAMEDIA Master is a full-featured application offering a complete imaging editing and image management environment to compliment Olympus digital cameras. CAMEDIA Master is an essential component of Olympus digital camera systems. It is required to download images, movies, and sounds from the camera, to index and save images to disk, and to edit images for use with various output devices such as printers and monitors. It also enables the digital photographer to perform a variety of sophisticated image modifications such as changing resolution, changing color space, changing file type, adding text, and changing the appearance of images.

2. How to Use this Manual

2.1 Differences between Microsoft Windows and Macintosh Systems

CAMEDIA Master image editing and image management software can be installed on computers using either Microsoft Windows or on Macintosh operating systems. Most reference and illustrations will be presented as they appear in the Microsoft Windows operating environment. Although both operating systems generally perform the same functions, some operations or menu items may be uniquely different on the Macintosh platform. This manual assumes familiarity with basic operation for the system in use. If this is not the case, consult the appropriate system operation manual before proceeding.

Some of the significant differences are:

- The appearance of control windows
- Mouse operation and Drag-and-Drop functions
- File Open & Save Dialogs
- File Conversion & Format Options
- The appearance and behavior of windows on the desktop
- Command-Key combinations
- Color palettes
- Printer Dialogs
- The Wallpaper feature, Send Mail, and Panorama 360 are not supported on Macintosh

On Microsoft Windows systems, the right mouse button will invoke option menus for the selected feature or function. See Appendix A: *Function Reference Table* for a complete list of supported application features and functions.

2.2 Conventions for Documenting Platform Support

Wherever a feature, function, or operation is presented that is uniquely different when performed on a Macintosh, it will be noted as follows:

Feature Name (Macintosh)

Key differences in the user interface for the “Macintosh Version” will be shown in addition to the Microsoft Windows version.

Features that are only available on Microsoft Windows systems will be noted as follows:

Feature Name (Microsoft Windows)

See Appendix A: *Function Reference Table* for a complete listing of supported features and functions.

2.3 Where to Look for Help

This User Guide contains all of the essential user and help reference information for CAMEDIA Master Software. This document is available to Olympus camera users in the following formats:

- A printable text file or Adobe Portable Document Format (PDF) file for all supported platforms.
- Online Help for Windows is installed with the Microsoft Windows version of CAMEDIA Master. Choosing Help in the main menu bar of the application will activate online Help for Windows.
- Key information on system requirements, installation, and updated user notes are available in the CAMEDIA Master *Readme* file.
- For additional help or technical support, consult the *Technical Support Options* section of this manual.

3. Camera Support

3.1 Supported Camera Functions

CAMEDIA Master is designed to work with Olympus digital cameras. The following models are currently supported:

- | | |
|-------------------------|-------------------------|
| • C-21 | • C-920Zoom / D-450Zoom |
| • C-420L / D-220L | • C-960Zoom / D-460Zoom |
| • C-820L / D-320L | • C-1000L / D-500L |
| • C-830L / D-340R | • C-1400L / D-600L |
| • C-840L / D-340L | • C-1400XL / D-620L |
| • C-860L / D-360L | • C-2000Zoom |
| • C-900Zoom / D-400Zoom | • C-2020Zoom |

- C-2500L
- C-3030Zoom

See the CAMEDIA Master *Readme* file for recent updates and additions. Check the camera documentation for support of special features such as:

- Upload Images
- Special Camera Functions: Panorama, Sound, Template
- QuickTime™ Movie

Appendix B: *Supported Camera Function Table* provides a list of features and functions by camera model as of the current document release.

3.2 Camera Settings

Camera features, controls, and in some cases optional special camera functions can be set from the Options dialog in the Edit menu within CAMEDIA Master. See topics *Changing Camera Settings* in the *Using CAMEDIA Master* section.

4. Getting Started

4.1 Connecting a Camera

- 1) Switch off power to the camera and the computer.
- 2) Insert the matching plug of the enclosed serial cable (RS-232C) or USB cable into the appropriate port on the computer.
- 3) Match the other end of the cable to the appropriate camera port and insert the plug.
- 4) Switch camera power on and then turn the computer on.

Note: For a detailed explanation about how to connect the camera to the computer, see the Digital Camera Instruction supplied with the Olympus digital camera.

4.2 Starting CAMEDIA Master

4.2.1 Starting Applications on Microsoft Windows Systems

To start up CAMEDIA Master:

- 1) Double-click the application icon from the desktop or choose the application name from the Start/Programs Menu in the Task bar.
- 2) Double-click the My Camera icon to establish communications with the camera and open a Camera Index View Window.

Warning: Do not switch the camera off or pull out the connection cable while the software application is starting up or running. These actions can cause malfunctioning of camera and application.

4.2.2 Starting Applications on Macintosh Systems

To start up CAMEDIA Master:

- 1) Double-click the application icon from the desktop or choose Open from the File menu in the Main Menu bar.
- 2) Click to choose the application name from the file list in the Open Dialog, then click Open.
- 3) Double-click the My Camera icon to establish communications with the camera and open a Camera Index View Window.

Warning: Do not switch the camera off or pull out the connection cable while the software application is starting up or running. These actions can cause malfunctioning of camera and application.

5. Using CAMEDIA Master

5.1 Getting to Know CAMEDIA Master

Simplify the process of working with digital images by becoming thoroughly familiar with the application environment of CAMEDIA Master before proceeding. The CAMEDIA Master application environment consists of a main menu bar, a toolbar, three kinds of control windows, and various command, preference, and options dialogs. The behavior of and choices in menus and control windows is dependent upon the current mode of operation.

5.1.1 Modes of Operation

Digital image files are initially located in the camera. They are eventually saved on a magnetic disk or other storage media. Certain operations can only be performed on images stored in the camera and others can only be performed on images stored on disk. These operations are identified as either Camera Mode or Disk Mode.

Camera Mode

When working with images stored in the camera, CAMEDIA Master is said to be working in “Camera Mode” or with “Camera Images”. Only operations specifically supported by the camera model in use can be performed in Camera Mode.

Disk Mode

When working with images stored on a magnetic disk inside or attached to the host computer, CAMEDIA Master is said to be working in “Disk Mode” or with “Disk Images”. With the exception of camera specific operations, all other features and functions of CAMEDIA Master are supported in Disk Mode.

Working with digital images requires easy access to files stored in the camera and on disk. Index Views facilitate navigation of file directories to locate image files. Once they are located, Image Views facilitate the identification and manipulation of selected image files.

Index Mode

When working with groups of image files selected from an image file index CAMEDIA Master is said to be working in Index Mode. Various file management functions and batch processing operations can only be performed when in Index Mode.

Image Mode

When working with individual images, CAMEDIA Master is said to be working in Image Mode. Various image specific operations such as image editing, renaming, or adding text to an image can only be performed when in Image Mode.

Each of these operating modes and the combination of the two main categories will affect the appearance and choices displayed in menus and dialogs. On Microsoft Windows systems, some items may not appear in pull-down menus in different modes of operation. On Macintosh systems, they may appear grayed out. Supported features of the connected camera may also effect the appearance of menus and dialogs.

5.1.2 Main Menu

The Main menu bar is displayed at the top of the main application window. The appearance of the Main menu bar may vary from Microsoft Windows-based systems to Macintosh-based systems. Pull-down submenus under File, Edit, and Help, and system related functions such as file saving, printing, and on-line help may operate differently. To become more familiar with how menus work on the computer in use, consult the system operation manual that came with the host computer.



The CAMEDIA Master Main Application Window (Microsoft Windows)

The Main menu bar displays seven pull-down menu selections.

File Menu

File management operations, recording and playing sounds, sending e-mails, and printing are performed from the File menu.

Edit Menu

Item selection, copy, paste, delete, undo, and other file editing functions are available in the Edit menu. CAMEDIA Master preferences are also located in the Edit menu under Edit/Options.

Image Menu

Create/Play Movie and image manipulation tools are available in the Image menu.

Camera Menu

Download image commands and camera settings are available in the Camera menu.

View Menu

Viewing options, Slide Show, Sort, and Refresh are available in the View menu.

Window Menu

On Microsoft Windows-based systems, the Window menu presents options for selecting the arrangement of windows, as well as a pull-down menu of windows currently available for selection. On Macintosh systems the Window menu presents only the pull-down menu of available windows.

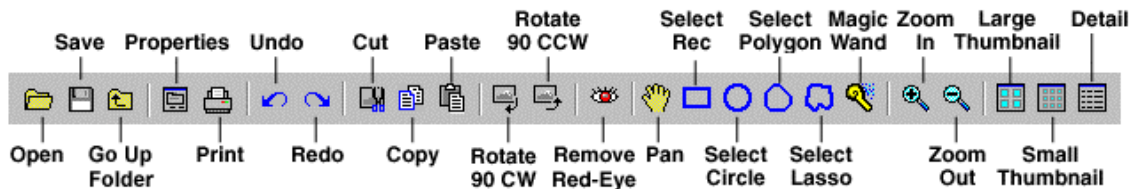
Help menu

(Microsoft Windows)

On Microsoft Windows-based systems, options for accessing Help resources are available in the Help menu.

5.1.3 Toolbar

A Toolbar is displayed below the Main menu bar. The Toolbar is a group of buttons that provide shortcuts for some of the most commonly used menu functions. It also provides direct access to some of the image editing tools available in CAMEDIA Master. Some of the image editing tools do not have counterparts in other menus. Refer to the *Manipulating Images* topic for a complete description of the image editing tools.

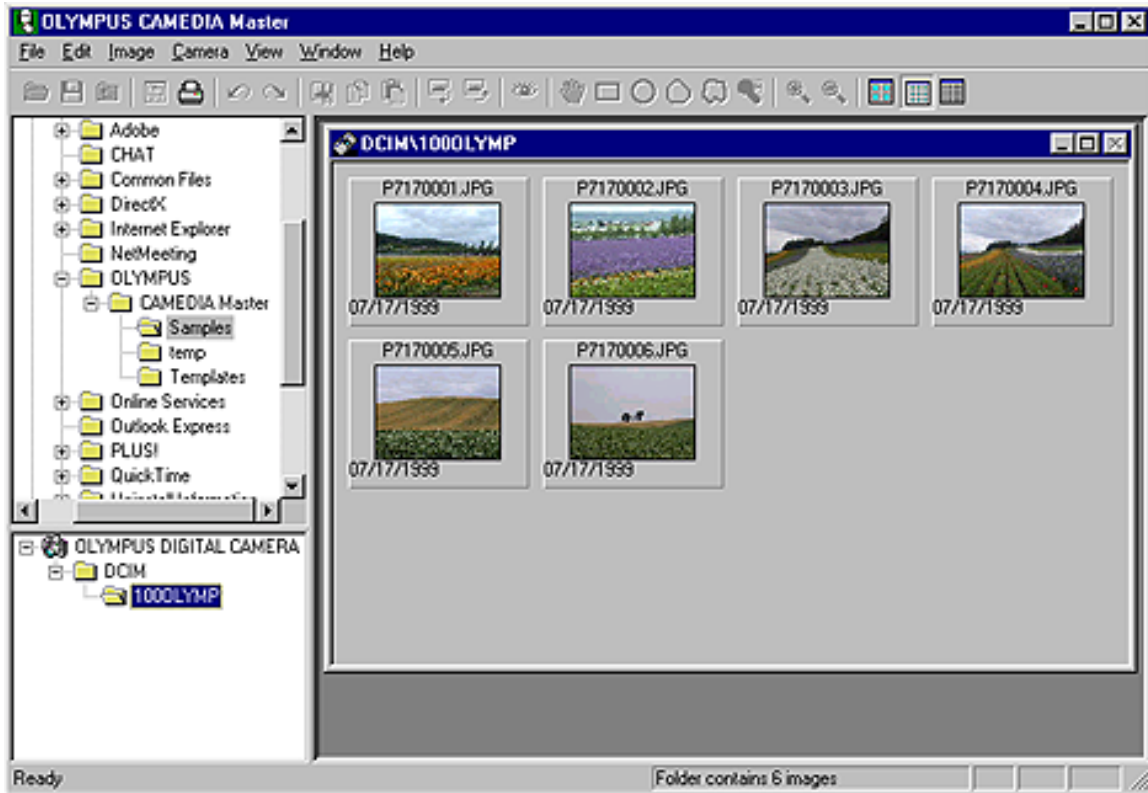


Each button displays an icon giving a cue to its function. See Appendix A: *Function Reference Table* for a complete list of menu and toolbar features and functions. In order of their appearance in the toolbar the buttons are:

- | | |
|-------------------|----------------------------------|
| 1) Open | 13) Remove Red-Eye |
| 2) Save | 14) Pan |
| 3) Go Up Folder | 15) Select Rectangle |
| 4) Properties | 16) Select Circle |
| 5) Print | 17) Select Polygon |
| 6) Undo | 18) Select Lasso |
| 7) Redo | 19) Magic Wand |
| 8) Cut | 20) Zoom-In |
| 9) Copy | 21) Zoom-Out |
| 10) Paste | 22) Large Thumbnail (Index Mode) |
| 11) Rotate CW90° | 23) Small Thumbnail (Index Mode) |
| 12) Rotate CCW90° | 24) Details (Index Mode) |

5.1.4 Control Windows

At the heart of CAMEDIA Master are three types of control windows, 1) the Folder Tree View Window, 2) the Index View Window, and 3) the Image View Window. On Microsoft Windows systems, the Folder Tree and Index View Windows will be joined together in a single composite window. On Macintosh systems, all three types as well as the Toolbar, will appear as separate floating windows.



Control Windows with Camera Index View selected (Microsoft Windows)

Folder Tree View Windows

Folder Tree View Windows appear on the left side of the screen and contain a directory icon map showing the hierarchy of devices and folders available for viewing from the currently selected source. A source may be a disk drive, a disk partition, a removable storage device, a memory card, or the camera itself. There will always be two Folder Tree View Windows, one for disk drives and storage devices connected to the host computer and one for a connected camera and its associated storage media.

Disk Folder Tree View Window

Disk drive icons and folder icons representing data storage locations on the associated drives of the computer system will be represented in the Disk Folder Tree View Window. Select a folder by clicking its icon. If a folder contains compatible image files, the image thumbnails will be displayed in the Index View Window to the right. If a Plus sign is displayed next to the folder icon, clicking the Plus sign will reveal sub-folders. Folders that do not contain images can be opened but the Index Window will remain blank.

Camera Folder Tree View Window

Camera icons, folder icons, or storage card icons representing image file locations in a connected camera will be represented in the Camera Folder Tree View Window. Select a folder by clicking its icon. If a folder contains compatible image files, the image thumbnails will be displayed in the Index View Window to the right. If a Plus sign is displayed next to the folder icon, clicking the Plus sign will reveal sub-folders. Folders that do not contain images can be opened but the Index Window will remain blank.

Index View Window

The Index View Window appears to the right of active Folder Tree View Windows. The Index View Window displays image files contained in the currently selected folder of a Folder Tree View Window. Only one Index View Window can be open at a time. The Index View Window can display accessible image files contained in the currently selected folder as a collection of image thumbnails or as a detail list. The images in the Index View Window can be dragged-and-dropped (copy or move) into another folder, and all images in a folder can be dragged-and-dropped (copy or move) into the Index View Window.

View Mode Options

Large Thumbnail View

Displays 160x120 pixel indexed thumbnails with their associated file names.

Small Thumbnail View

Displays 80x60 pixel indexed thumbnails with their associated file names.

Detail View

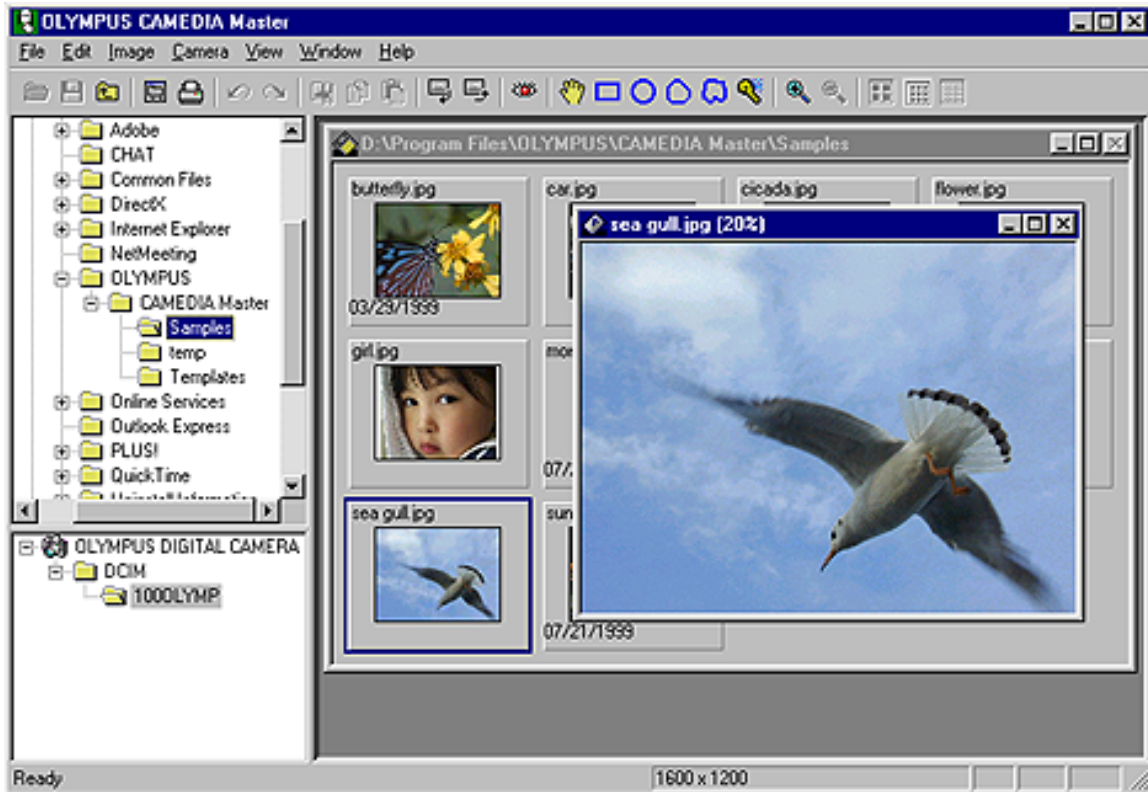
Displays the file names, size, image properties, and description of the selected files in a text list.

Thumbnail Attributes

- File Name
- Created Date
- Panorama Icon
- Panorama Sequence Number
- Continuous Icon
- Continuous Sequence Number
- Movie Icon
- Sound Icon

Image View Window

When an individual image file is selected and opened from the Index View Window, it will be displayed in a separate Image View Window. More than one Image View Window can be open at a time. When an Image View Window is open and selected, image editing and manipulation can be performed on the selected image.



Control Windows in Image Mode (Microsoft Windows)

Macintosh Control Windows

On Macintosh systems, the Control Windows appear on the desktop as separate floating windows. Each window behaves independently according to standard Macintosh operating procedures.



Control Windows in Image Mode (Macintosh)

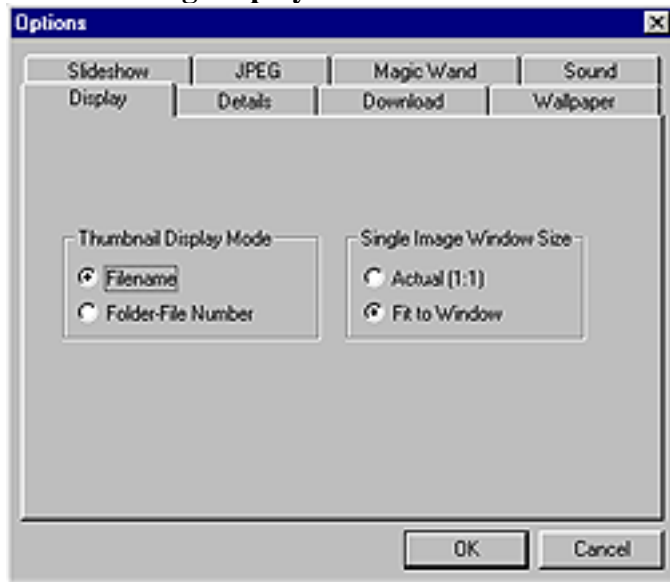
5.1.5 Status Bar

(Microsoft Windows)

The Status Bar appears at the bottom of the application main control window and displays information about the currently selected image including image size in pixels, color depth, and the comment field.

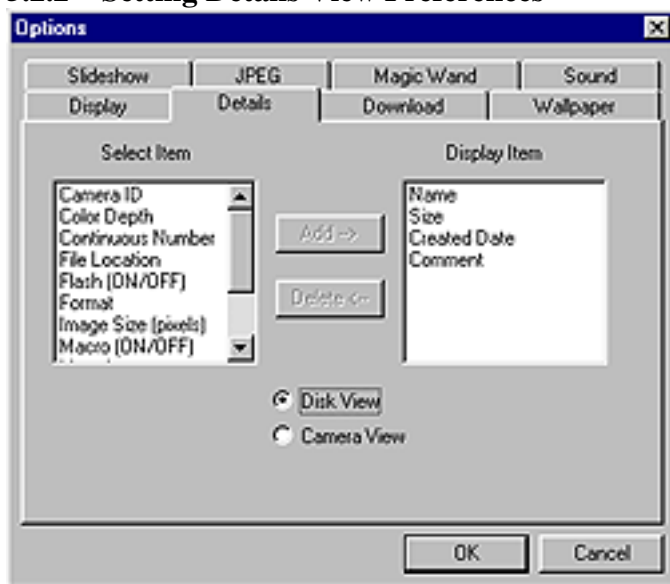
5.2 Setting Up the Application Environment

5.2.1 Setting Display Preferences



- 1) Choose Options in the Edit menu. The Options dialog appears.
- 2) Click on the Display Tab. The Display preferences dialog appears.
- 3) Click the radio buttons to:
 - Set default Thumbnail Display Mode.
 - Set default Image View Window size.
- 4) Click OK to save preferences, Cancel to exit without saving.

5.2.2 Setting Details View Preferences



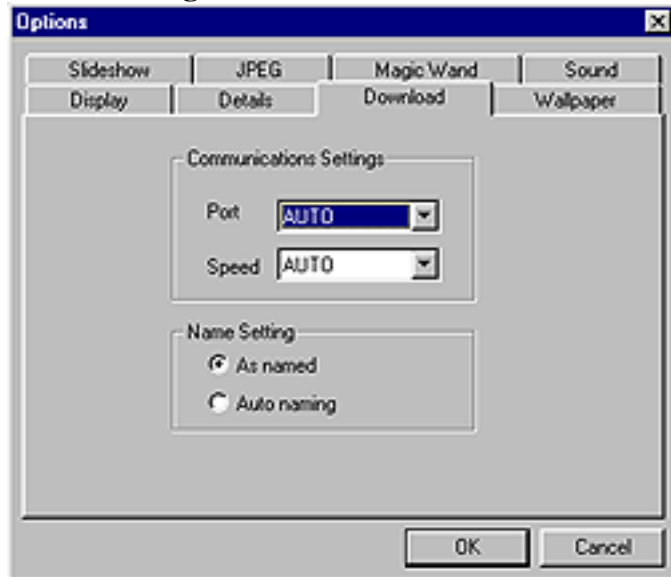
To Add File Attributes to the Index View Window

- 1) Choose Options in the Edit menu. The Options dialog appears.
- 2) Click on the Details Tab. The Details preferences dialog appears.
- 3) Click in the Select Item window to select file attributes to be displayed in the Index View Window.
- 4) Click the Add button to move the selected item to the Display Item window.
- 5) Click OK to save preferences, Cancel to exit without saving.

To Remove File Attributes from the Index View Window

- 1) Click in the Display Item window to select file attributes to be removed from the Index View Window.
- 2) Click the Delete button to remove the selected item from the Display Item window.
- 3) Click OK to save preferences, Cancel to exit without saving.

5.2.3 Setting Communications and Download Preferences

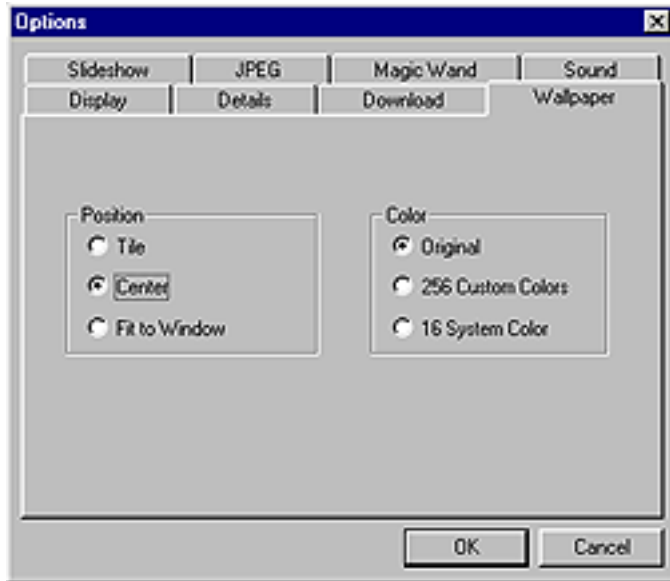


- 1) Choose Options in the Edit menu. The Options dialog appears.
- 2) Click on the Download Tab. The Download preferences dialog appears.
- 3) Use the Serial Port pull-down menu to set the desired port for downloading images. A USB interface must be available and connected to use the USB setting. Use Auto or USB for USB communications. For RS-232C, refer to the host computer operator manual for the correct port designation.
- 4) Use the Serial Speed pull-down menu to set the desired transfer speed. Auto is the default setting. Auto may be used with RS-232C; however, it may take longer to configure each time it communicates with the camera than a numeric setting. For optimum communications speeds that can be used with the RS-232C interface, refer to the *Digital Camera Instructions*. Communication at 230Kbps may require a high-speed communication board. If successful communication does not occur when using a high communication speed, reduce the communication speed.

- 5) Click the radio buttons to:
 - Set the default naming preference.
- 6) Click OK to save preferences, Cancel to exit without saving.

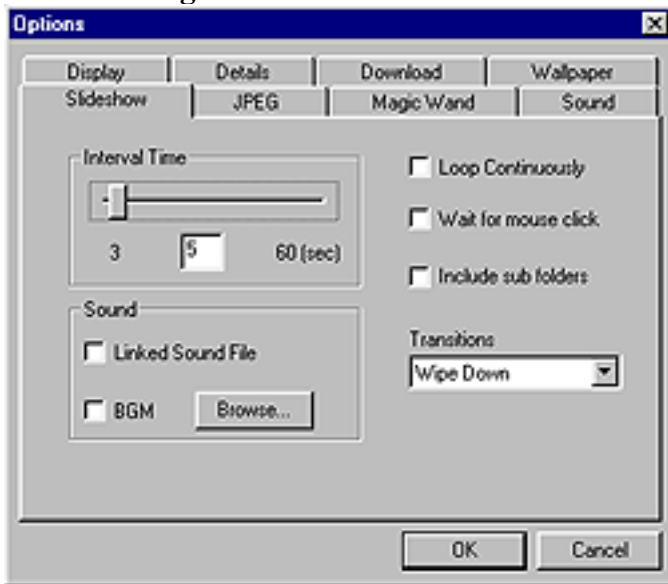
5.2.4 Setting Wallpaper Preferences

(Microsoft Windows)

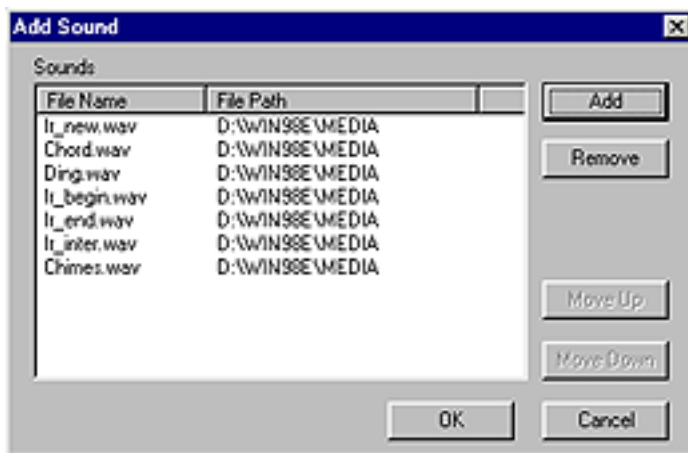


- 1) Choose Options in the Edit menu. The Options dialog appears.
- 2) Click on the Wallpaper Tab. The Wallpaper preferences dialog appears.
- 3) Click the radio buttons to:
 - Set default Position.
 - Set default Color Depth.
- 4) Click OK to save preferences, Cancel to exit without saving.

5.2.5 Setting Slide Show Preferences



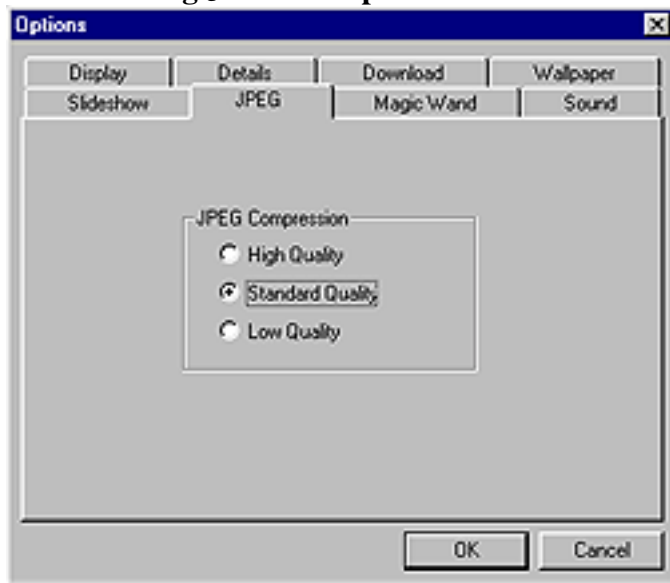
- 1) Choose Options in the Edit menu. The Options dialog appears.
- 2) Click on the Slide Show Tab. The Slide Show preferences dialog appears.
- 3) Click the check boxes to:
 - Set default Play mode.
 - Select Include Sub Folders to include images in folders contained within the selected folder.
- 4) Drag the slider to the number of seconds desired between slide changes for the Loop Continuously setting or enter the number of seconds in the field below.
- 5) Select the desired transition effect from the Transitions pull-down Menu.
- 6) To play sounds linked to individual images click Linked Sound File. To link one or more default background sound files, click BGM (BackGround Music). Then, click Browse to locate compatible sound files. Wave (*.wav), MIDI (*.mid) and MP3 (*.mp3) are supported.



The Add Sound dialog will appear. Click the Add button to open a directory window. Select the desired files from the directory window and click OK to add them to the Sounds play list for the slide show. The list can be edited at any time by clicking Browse in the Slide Show Preferences dialog, then Adding or Removing selected sound files. When the list is complete, click OK. Default sounds will loop continuously until the slide show is ended.

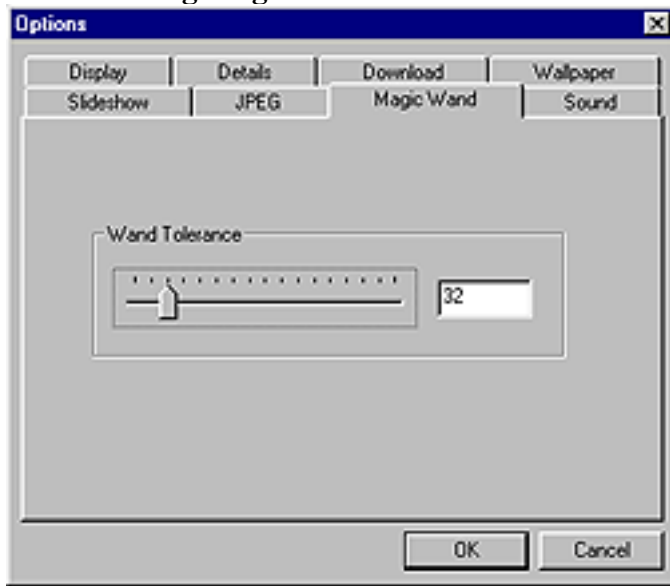
- 7) Click OK to save preferences, Cancel to exit without saving.

5.2.6 Setting JPEG Compression Level



- 1) Choose Options in the Edit menu. The Options dialog appears.
- 2) Click on the JPEG Tab. The JPEG preferences dialog appears.
- 3) Click the radio buttons to:
 - Set default Quality level.
- 4) Click OK to save preferences, Cancel to exit without saving.

5.2.7 Setting Magic Wand Preferences



- 1) Choose Options in the Edit menu. The Options dialog appears.
- 2) Click on the Magic Wand Tab. The Magic Wand preferences dialog appears.
- 3) Click-drag the slider to the desired Tolerance level.
- 4) Click OK to save preferences, Cancel to exit without saving.

5.2.8 Setting Index View Window Preferences

The Index View Window and multiple Image View Windows can be arranged within the main application window (Microsoft Windows) or on the desktop (Macintosh) for ease of viewing and accessing images. On Microsoft Windows systems, multiple windows can be arranged in Cascade or Tile format. On Macintosh systems, choose Arrange Windows. Choose the preferred format in the View menu.

Cascading Windows

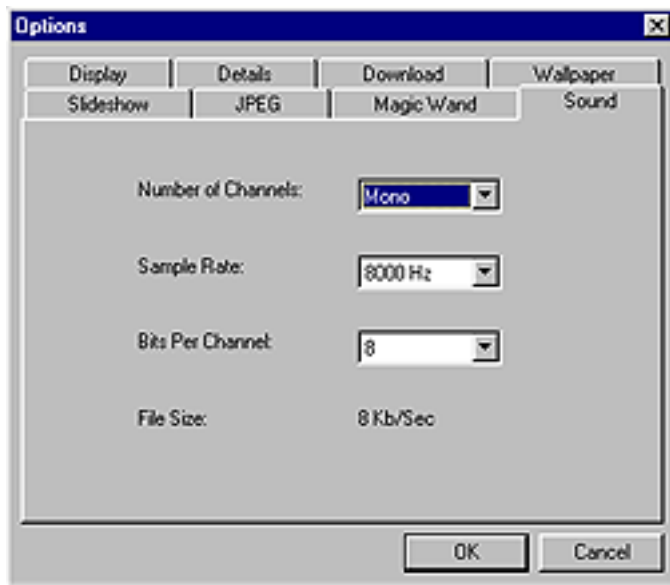
Arranges multiple open image windows in an overlapping offset cascading from top left to lower right like a stack of papers. The first open window appears first. The last open window appears on top.

Tiled Windows

Arranges multiple open image windows in a grid pattern sizing images to fit into the available window boundary.

5.2.9 Setting Sound Preferences

Preferences for recording Sound are set in the Sound Preferences dialog. To set Sound preferences:



- 1) Choose Options in the Edit menu. The Options dialog appears.
- 2) Click on the Sound Tab. The Sound preferences dialog appears.
- 3) Select the desired number of audio channels, mono or stereo, from the Channels pull-down menu. Stereo offers two channel sound but bigger files.
- 4) Select the desired sampling rate, 8, 11, 22, 32, 44 or 48 kHz, from the Sample Rate pull-down menu. Higher sampling rates provide higher sound quality but bigger files.
- 5) Select the desired bit depth, 8 or 16 bits, from the Bits per Channel pull-down menu. Higher bit depths provide higher sound quality but bigger files.
- 6) Click OK to save preferences, Cancel to exit without saving.

5.3 Accessing and Saving Image Files

CAMEDIA Master can access and save images from Olympus digital cameras, and images stored on disk, in a variety of image file formats including JPEG, TIFF, BMP (Microsoft Windows) and, PICT (Macintosh). See Appendix C: *Supported File Formats* for a complete list of supported file types.

Although removable storage cards like SmartMedia can be accessed directly by personal computers equipped with special storage card readers, caution should be used. Special directory structures are used by various camera models to store compatible pictures and perform special camera functions. In order to store pictures correctly, the card must be formatted in the camera. Do not delete or alter the names or structures of directories created on the card while in the computer desktop directory view. If altered, the card may not function correctly and will have to be reformatted.

- Camera Mode operations can only be performed on images stored in the camera.
- Disk Mode and Image Mode operations can only be performed after images have been stored on a disk or storage device accessible to the host computer.
- All images in an Index View Window can be selected by choosing Select All from the Edit menu and released by choosing Select None, by drawing a marquee around them while holding the Shift key, or by clicking on individual images while the Shift key is depressed.
- Save or Save As to preserve changes after editing an image.

5.3.1 Accessing and Saving Images From a Camera

- 1) Make sure that the camera is connected to an appropriate port on the host computer and has power. For detailed instructions, see the *Digital Camera Instructions*.
- 2) Turn the camera ON. For detailed instructions, see the *Digital Camera Instructions*.
- 3) Open CAMEDIA Master by double-clicking its file icon in the appropriate directory or select it from the Program Menu on Microsoft Windows systems.
- 4) When CAMEDIA Master is open. A camera icon titled “My Camera” will appear in the Camera Folder Tree View Window.
- 5) Double-click on the “My Camera” icon. If the camera is detected, the icon title will change to “Olympus Digital Camera” or the optional camera name set in camera memory. If a removable memory card is present in the camera, its directory structure will be displayed in the Camera Folder Tree Window. Click on the folder containing images. Thumbnails representing images stored in the camera or on the memory card will appear in the Index View Window.
- 6) To download all images to disk, select Download All Images from the Camera menu.
- 7) To download selected images, click on the desired thumbnail or image file name in the Index View Window. To select more than one, hold down the Control-Key and click (Microsoft Windows) or the Shift Key and click (Macintosh) while selecting. Then select Download Selected Images from the Camera menu. Selected images may also be dragged-and-dropped onto the desired folder in the Folder Tree View Window.

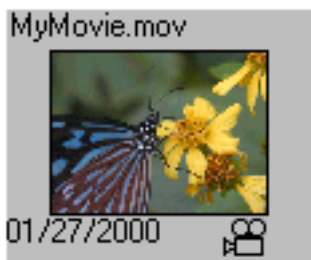
5.3.2 Accessing and Saving Images From Disk

- 1) Open CAMEDIA Master by double-clicking its file icon in the appropriate directory or select it from the Program Menu on Microsoft Windows-based systems. The desktop folder structure of the host computer appears in the Disk Folder Tree View Window.
- 2) Click on the desired folders to find a sub-folder containing images. Image files contained in the selected folder will appear in the Index View Window.
- 3) Double-click on the desired image file. A new Image View Window will be opened.
- 4) Perform edits on the image.
- 5) Choose Save in the File menu to save images that have been changed, or choose Save As to save the image under a new name. Choose Cancel to exit without saving.

5.4 Viewing QuickTime™ Movies

(Disk Mode/Index Mode)

CAMEDIA Master 2.0 supports the viewing and creation of QuickTime 4.0 and VR movie files. Compatible movie files stored on disk can be accessed from the CAMEDIA Master Index View Window. A small movie projector icon in the lower right corner of the movie thumbnail identifies picture files recorded in the movie format. The QuickTime movie thumbnail displays a preview image representing the starting frame of the QuickTime movie.



QuickTime 4.0 is required to view the movie and may be installed during the CAMEDIA Master 2.0 installation process. QuickTime movie files cannot be manipulated using the filters or other image editing tools in CAMEDIA Master.



To view a movie file:

- 1) Double-click a thumbnail with a movie icon or open the file from File/Open in the Main Menu. The Play Movie dialog appears and automatically plays the movie. The elapsed time and total time are displayed. Movie controls are similar to a VCR or tape player.
- 2) Click the Play button to start the movie again.
- 3) Click the Stop button to stop the movie at any point.
- 4) Click the Pause button to halt the movie temporarily. When on Pause, the Export Picture button is activated allowing individual frames to be saved as still images.
- 5) Click the Frame Forward and Frame Back arrows or use the slider to view individual movie frames.
- 6) Click the Export Picture button (Clipboard Icon) to open an individual frame as a single image in the Image View Window. To save the still image to a new file, close the Play Movie dialog and Save or Save As from the File Menu.

New movies can be created from groups of still images and movie files stored on disk. Pre-recorded sounds can be added. See section 5.8.11: Creating a Movie from Still Images and section 5.8.12: Creating a QuickTime VR Movie from Panoramic Still Images.

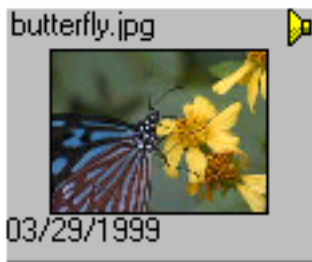
See Appendix B: Supported Camera Features for a list of cameras supporting this feature. Refer to the camera instructions for details on capturing images in the QuickTime movie format.

5.5 Playing Sound

(Disk Mode/Index or Image Mode)

CAMEDIA Master 2.0 supports the playing and creation of still images with sound annotation, movie files with linked background sounds, and default background sounds during slide show presentation. Still images with linked sounds can be accessed from the CAMEDIA Master Index

View Window. A small speaker icon in the upper right corner of the thumbnail identifies files linked to recorded sounds.



To play sounds linked to a still image:

- 1) Click the Speaker icon in the upper right corner of a thumbnail with sound or,

Open the file in Image Mode by double-clicking the thumbnail or selecting Open from the File Menu. When the image is displayed in an Image Window, select Play Sound from the File Menu or from the Right-Mouse Button Menu.

- 2) The sound will play once in background. Press the Escape key to stop playing.

Sounds linked to movie files will play automatically when the movie file is played.

See section 5.4: Viewing QuickTime Movies for more.

Sounds linked to individual images or linked background sounds can be played with slide shows. See Section 5.6: Viewing Images as a Slide Show for details on playing sounds during a slide show.

Sounds can be recorded and linked to still images and existing background sounds can be linked movies, and slide shows.

See section 5.8.13: Recording Sounds with a Still Image for details on recording and linking sounds to individual image files.

See section 5.8.11: Creating a Movie from Still Images for details on adding background sounds to a movie.

See section 5.2.5: Setting Slide Show Preferences for details on linking default background sounds to slide shows.

5.6 Viewing Images as a Slide Show

(Disk Mode/Index Mode)

Groups of images can be viewed sequentially on screen as a slide show. If individual images have linked sounds or a background sound is linked in Slide Show Preferences, the linked sounds will be played during the slide show. See section 5.2.5: Setting Slide Show Preferences for details on setting sound preferences in Slide Show Mode.

To view images as a slide show:

- 1) Click on the desired folder or sub-folder in the Folder Tree View Window. Thumbnails representing images contained in the selected folder will appear in the Index View Window.
- 2) Select a group of images.

- 3) Choose Slide Show in the View menu. The images will appear full-screen with a black surround.
- 4) Click the mouse to advance the slide show. Use the left mouse button on Microsoft Windows systems. The following keys will also advance the slide show: Space bar, Return, Page down, Right Arrow, and Down Arrow.
- 5) To Reverse the slide show, use the right mouse button on Microsoft Windows systems. On Macintosh systems, click the mouse button while holding the Command+Option keys. The following keys will also reverse the slide show: Page Up, Left Arrow, and Up Arrow.
- 6) To end the slide show, double-click the left mouse button on Microsoft Windows systems. On Macintosh systems, double-click the mouse button.

5.7 Creating a Desktop Background

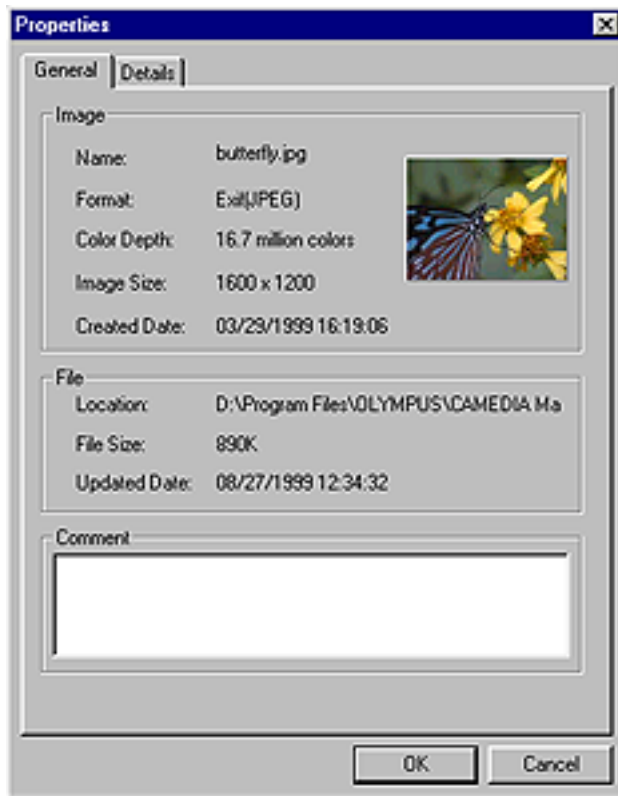
(Microsoft Windows/Disk Mode/Index Mode)

- 1) Click to select the desired thumbnail in the Index View Window.
- 2) Choose Wallpaper from the Image menu. The image will be saved as a wallpaper background file in the Control Panel Display Settings of the Windows operating system. The settings in Wallpaper preferences in the Options dialog in the Edit menu will define the format of the background.

5.8 Working with Image and Movie Files

5.8.1 File Properties

Various file attributes for a selected file can be viewed or edited in the Properties Dialog. The Properties Dialog contains two tabs:



The General tab contains information about the currently selected picture file. Only the Comment field can be edited.



The Details tab contains specific information about the camera and camera settings in effect when the picture was taken. All cameras may not support all

Viewing File Properties

- 1) Choose Properties in the File menu. The Properties Dialog appears.
- 2) View the General file properties.
- 3) Edit the Comments field.
- 4) If desired, click the Details tab to view the camera and settings.
- 5) Close the dialog.

Adding User Comments to File Properties

Comments can be added to the Properties of a file. Comments are descriptive phrases that may provide future viewers with information about an image such as where it was taken, who is in the picture, and so on. The Comments field can also be used by the Find command to search for image files containing certain words or phrases. To add comments to a file:

- 1) Select a thumbnail in the Index View Window or Open an image in Image Mode.
- 2) Choose Properties in the File menu or click the Properties Tool button in the Toolbar.
- 3) Enter the comment in the Comment field.
- 4) Click OK to save, Cancel to exit without saving.

5.8.2 Refreshing the Index View Window

When changes are made to the contents of an image file folder or when connecting a camera or changing a SmartMedia card, it may be necessary to refresh the Image View Window to properly display the changes. To Refresh the Image View Window:

- 1) Click on the window that is to be Refreshed.
- 2) Choose Refresh in the View menu or push the F5-Key.

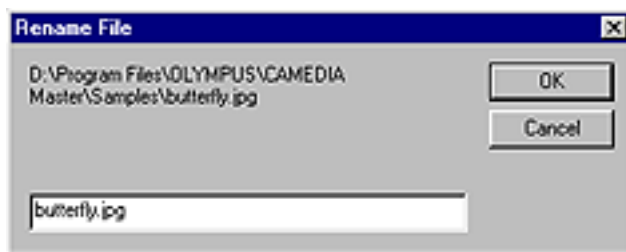
5.8.3 Naming & Renaming Files

(Disk Mode/Index Mode)

Files may be named automatically by the camera when they are created or by another application on disk. Files may be renamed in Index Mode only. Files open in Image Mode can be renamed by using Save As in the File menu. Only files stored on disk may be renamed using the Rename command. Camera files cannot be renamed.

To Rename a File

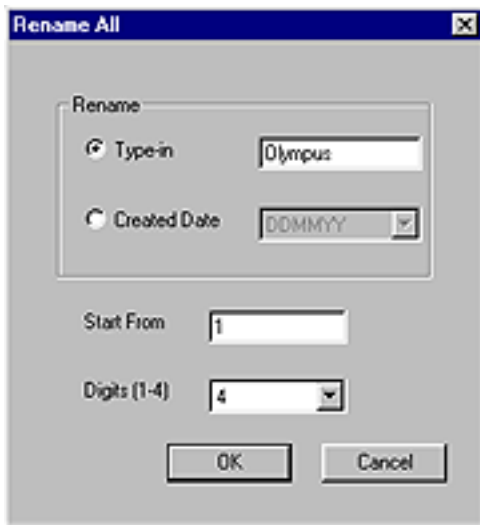
- 1) Select the desired file in the Index View Window.
- 2) Choose Rename in the File menu. The Rename Dialog appears.



- 3) Type the new file name
- 4) Click OK to Rename. Click Cancel to exit without Renaming.

To Rename a Group of Files

- 1) Select the desired files in the Index View Window.
- 2) Choose Rename All in the File menu. The Rename All Dialog appears.



- 3) Type in a brief text description, or select a Created Date.
- 4) Select a starting number for sequential numbering.
- 5) Select the number of digits for sequential numbering. Leading zeros will be used.
- 6) Click OK to Rename All. Click Cancel to exit without renaming.

Files names will be created with the text prefix entered or the creation date and sequential numbering. For example: Pic00001.jpg, Pic00002.jpg,... become Picnic01.jpg, Picnic02.jpg,...

In Microsoft Windows, file type extensions will be automatically appended.

5.8.4 Copying Files

(Disk Mode/Index Mode)

Files can be copied by opening an image in Image Mode and using the Save As command in the File menu or by using system copy commands directly from the desktop. Drag-and-Drop in Index View Mode can also be used for copying image files when the drive of the destination folder is different from the drive of the original folder.

5.8.5 Moving Files

(Disk Mode/Index Mode)

Drag-and-Drop can be used to move files from the Index View Window to a folder in the Disk Folder Tree View Window. Drag-and-Drop can also be used for moving files when the drive of the destination folder is the same as the drive of the original folder.

5.8.6 Sorting Files in Index View

(Index Mode)

The viewing order of thumbnails and file names can be set in the Index View Window. To sort the order of files displayed from the currently selected folder:

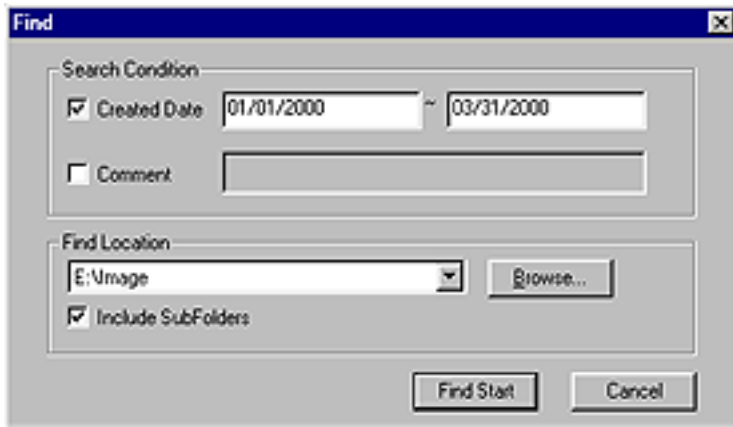
- 1) Choose Sort from the View menu.

- 2) Select the sorting criteria from the list displayed.

5.8.7 Finding Files

(Disk Mode/Index Mode)

Files can be located by creation date or text stored in the comments field of the file. To find a specific image or movie file:



- 1) Select Find in the File menu or click the Find Tool button in the Toolbar. The Find dialog appears.
- 2) Check the box indicating the desired search criteria.
- 3) Enter a Creation Date or range of dates to find or a text string to search in the Comment field.
- 4) Enter a target device or folder to search in the Find Location field or Browse to select.
- 5) Click Find Start. The results of the search will be displayed in the Index View Window and may be viewed as a slide show.

5.8.8 Uploading Files from Disk to Camera - Selected Camera Models

(Camera Mode/Index Mode)

Selected camera models support the Upload Image function (see Appendix B). If the connected camera supports this function, image files may be copied from disk to camera for transportation to another location or viewing remotely on the camera LCD. Only “camera-native” EXIF and JPEG image files containing a “camera type” header that matches the same camera type and the same file type recorded by the connected camera may be uploaded. JPEG files that have been re-saved, with PhotoShop for example, will lose the header information and cannot be uploaded. Movie (*.mov) files cannot be uploaded. To upload image files to a camera:

- 1) Select the desired thumbnails in the Index View Window.
- 2) Choose Upload Images in the Camera menu.

In order to view images on the camera LCD, images can be saved directly to a SmartMedia Card from the host computer using a PC Card Adapter or FlashPath (Floppy Disk Adapter). The image file name or the folder name should refer to the picture name or folder name created (recorded) by the camera when the picture was originally taken.

5.8.9 Using Batch Functions

Some repetitive operations can be performed on groups of image files or “batches” as well as individual image files to save time. Some batch operations may be limited to Index Mode. Following is a list of batch operations and acceptable modes of operation:

- Rename - Index Mode/Disk Mode
- Convert Format - Index Mode/Disk Mode
- Copy - Index Mode/Disk Mode
- Delete - Index Mode/Disk Mode/Camera Mode
- Rotate – Index Mode/Disk Mode

5.8.10 Protecting Camera Files From Deletion

(Index Mode/Camera Mode)

The Protect option in the Camera menu toggles protection on and off. Toggle On prevents images in the camera memory from being deleted. Toggle Off allows images in the camera memory to be deleted.

To Protect Camera Files from Deletion:

- 1) Choose Protect from the Camera menu. A sidebar is display.
- 2) Select On to turn protection on.
- 3) Select Off to turn protection off.

5.8.11 Creating a Movie from Still Images

(Disk Mode/Index Mode)

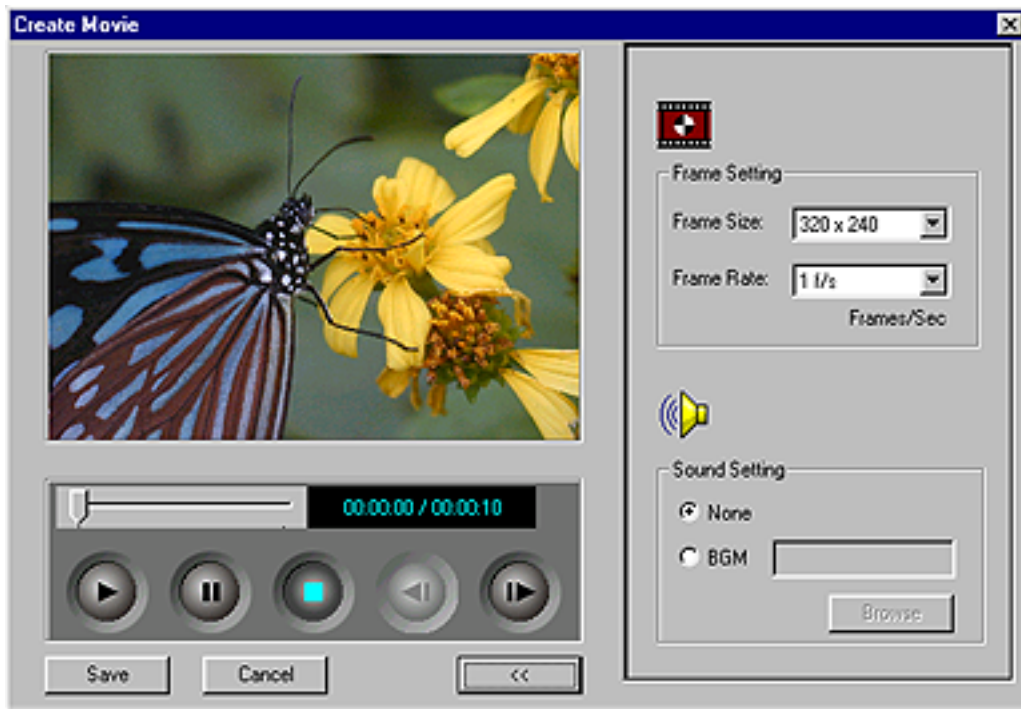
New QuickTime™ movies can be created from groups of still image files stored on disk and visible as thumbnails in the Index View Window. Pre-recorded background sounds can be linked to a movie from existing compatible sound files stored on disk.

To create a movie from still images:

- 1) Click on the desired folder or sub-folder in the Folder Tree View Window. Thumbnails representing images contained in the selected folder will appear in the Index View Window.
- 2) Select a group of images.
- 3) Choose Create Movie from the Image Menu. CAMEDIA Master builds a temporary movie from the selected images. The Create Movie dialog will appear when the movie is complete. The selected images will play automatically based on the current Frame Size and Frame Rate settings and in the order of [their EXIF picture tags]. The elapsed time and total time are displayed. Like a VCR or tape player, the Create Movie player controls are similar to the Play Movie controls.



- 4) Click the Play button to start the movie again.
- 5) Click the Stop button to stop the movie at any point.
- 6) Click the Pause button to halt the movie temporarily.
- 7) Click the Frame Forward and Frame Back arrows or use the slider to view individual movie frames.
- 8) Click the Save button to save the current selection to a new movie (*.mov) file. Cancel to close the Create Movie dialog without saving the current selection. Movie settings can be changed and sounds can be linked to a movie file. To change movie settings or add a linked sound file:



9) Click the More button to display Frame and Sound settings.

- The default Frame Size is 320x240. Change the Frame Size by selecting a new size from the pull-down menu.
- If the Frame Rate is encoded in the file by the camera, the camera Frame Rate will be used. Otherwise, a Frame Rate of 1(one) frame per second will be used. Change the Frame Rate by selecting a new rate from the pull-down menu.
- None is the default Sound setting. To link one or more default background sound files, click BGM (BackGround Music). Then, click Browse to locate compatible sound files. An Open dialog will appear. Wave (*.wav), MIDI (*.mid) and MP3 (*.mp3) are supported.

Locate and click to select the desired sound file from the Open dialog. The selected Sound will loop continuously when the movie is played.

5.8.12 Creating a QuickTime VR Movie from Panoramic Still Images

(Disk Mode/Index Mode)

Three hundred sixty degree panoramic movies can be created in QuickTime VR format and saved as a movie file (*.mov). Several consecutive images (a maximum of 10) representing a 360-degree field of view must be captured by the camera while in Panorama Mode.

To create a QuickTime VR movie:

- 1) Click on the desired folder or sub-folder in the Folder Tree View Window. Thumbnails representing images contained in the selected folder will appear in the Index View Window.

- 2) Select consecutive panoramic images by drawing a marquee around them while holding the Control key (Windows) or the Shift key (Macintosh).
- 3) Choose Panorama 360 from the Image Menu. The Panorama stitching dialog will appear. The selected images can be stitched automatically or manually based on the current Panorama stitch settings. See section 5.10.16: Creating a Panorama for more on creating panoramas.
- 4) Click the Save button to save the current selection to a new movie file. Cancel to close the Create Movie dialog without saving the current selection.

5.8.13 Recording Sound with a Still Image

(Disk Mode/Image Mode)

Sound annotation can be recorded and linked to existing still images. The maximum length of recorded sounds is one minute (60 seconds). The host computer must be equipped with an audio port or microphone and sound card. The sound file format is Wave (*.wav). Sound quality and characteristics may be set in Sound Preferences under Options in the Edit Menu. See section 5.2.9: Setting Sound Preferences for details.



To record a sound with a still image:

- 1) Click on the desired folder or sub-folder in the Folder Tree View Window. Thumbnails representing images contained in the selected folder will appear in the Index View Window.
- 2) Double-click the desired thumbnail in the Index View Window or click to select the thumbnail and choose Open from the File Menu. The Image will be displayed in an Image Window.
- 3) Choose Record Sound from the File Menu. The Record Sound dialog will appear.
- 4) Click the Record button to start recording sound from a microphone or other input source. A progress bar and the elapsed time are displayed.
- 5) Click the Stop button to stop recording sound. Recording will stop automatically after 60 seconds.
- 6) Click the Play button to re-play the sound from memory before saving or re-recording.
- 7) Click the Save button to save the recorded sound to a new sound (*.wav) file. Cancel to close the Record Sound dialog without saving the current selection. A button with a speaker icon will be added to thumbnails of still images with linked sounds. Clicking the button will play the linked sound.

See section 5.5: Playing Sounds for more on playing sounds linked to still images.

5.9 Sending an E-Mail with Selected Images Attached

(Disk Mode/Index Mode)

E-mail messages with selected images attached can be initiated from within CAMEDIA Master 2.0. The host computer must be equipped with Internet access and version 4.0 or higher of Microsoft Outlook, Netscape Mail, or Eudora.

To send an e-mail message with selected images attached:

- 1) Click on the desired folder or sub-folder in the Folder Tree View Window. Thumbnails representing images contained in the selected folder will appear in the Index View Window.
- 2) Select a group of images.
- 3) Choose Send Mail from the File Menu. CAMEDIA Master will open a new message window in the default MAPI e-mail application. If the total number of selected image files exceeds 1 MB and alert message will appear warning that the message may exceed size limitations for message servers.

If the message size is acceptable, the selected images will be automatically attached. The Send Mail option is not available until at least one image is selected.

- 4) Select a recipient, add a subject, and complete the message.
- 5) Click Send. If you are on-line, the e-mail will be sent, the mail application will be closed, and CAMEDIA Master will again become the foreground application. If you are not on-line, follow normal e-mail procedures for working off-line or dialing up your access provider.

5.10 Manipulating Images

(Still Images Only)

5.10.1 Enlarging and Reducing the Image View

(Image Mode)

Zoom-In

Use the Zoom-In function to enlarge a selected image in the Image View Window. To use the Zoom-In:

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Click on the Zoom-In Tool in the Toolbar or choose Zoom-In from the View menu. The selected image will be enlarged within the Image View Window.

Zoom-Out

Use the Zoom-Out function to reduce a selected image in the Image View Window. To use the Zoom-Out:

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Click on the Zoom-Out Tool in the Toolbar or choose Zoom-Out from the View menu. The selected image will be reduced within the Image View Window.

5.10.2 Scrolling Enlarged Images

(Image Mode)

The area of view in the Image View Window can be changed using the Pan Tool in the toolbar or choosing Scroll Mode in the View menu. To use the Pan Tool or Scroll Mode:

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Enlarge the area of interest using the Zoom function.
- 3) Click on the Pan Tool (hand) in the Toolbar or select Scroll Mode in the View menu. The cursor will change to the Hand icon when it is located over the selected Image View Window.
- 4) Click-drag the cursor over the selected Image View Window. The image area will move with the cursor.
- 5) Choose another mode in the View menu to release Scroll Mode.

5.10.3 Rotating Images

(Disk Mode/Index Mode/Image Mode)

To Rotate an Image in Index Mode

- 1) Click to select the desired image in the Index View Window. To select a group of images, on Microsoft Windows systems, hold the Shift Key and click to select a group of adjacent images or the Control-Key and click to randomly select a group of images. On Macintosh

systems hold the Shift Key and click to select a group of adjacent images or the Option-Key and click to randomly select additional images.

- 2) Choose Rotate in the Image menu or click the Rotate CW90 Tool button or Rotate CCW90 in the Toolbar. If the Rotate Menu is chosen, a sidebar menu appears. The menu also includes Rotate 180.
- 3) Choose the direction and amount of rotation desired from the sidebar menu. The selected images will be rotated.

To Rotate an Image in Image Mode

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Choose Rotate in the Image menu or click the Rotate CW90 Tool button or Rotate CCW90 in the Toolbar. If the Rotate Menu is chosen, a sidebar menu appears. The menu also includes Rotate 180 and Free Rotate. The Free Rotate option is only available in Image Mode.
- 3) Choose the direction and amount of rotation desired in the sidebar menu or select Free Rotate. If Free Rotate is chosen, a flashing marquee and “handles” will appear on the selected image. The cursor will become a Rotation Icon when placed over the image area.
- 4) Click-drag one of the handles to the desired angle.
- 5) Double-click inside the image area to apply rotation to the image. The image will be rotated and clipped to its original size.

5.10.4 Flipping Images

(Disk Mode/Image Mode)

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Choose Flip in the Image menu. A sidebar menu appears.
- 3) Choose Vertical to flip the selected image top to bottom. Choose Horizontal to Flip the selected image left to right.

5.10.5 Enhancing Image Quality

(Disk Mode/Image Mode)

Images that appear too light, too dark, or too flat may be fixed using the Instant Fix Command. To use the Instant Fix Command:

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Choose Instant Fix in the Image menu.
- 3) The darkest point in the image will be adjusted to black and the lightest point in the image will be adjusted to white. Instant Fix may not produce desirable results in all images.

5.10.6 Selecting Areas in an Image

(Image Mode)

Selective changes can be made to images using the Selection Tools, Rectangle, Circle, Polygon, and Lasso. Drawing a selection marquee around the desired area can isolate selected parts of an image. Once selected, the area of interest can be Cut and Pasted, Moved, Saved to another file, or an image Filter can be used to change its appearance. To use the Selection Tools:

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Choose the desired tool by clicking its icon button in the Toolbar.
- 3) Click-drag the cursor in the selected image area to draw a Rectangular or Circular selection. Click the desired corner points to draw a Polygon selection. Click-drag freehand to draw a selection with the Lasso Tool. A flashing marquee appears to indicate the area selected.
- 4) Hold the cursor over the selected area. The cursor becomes a Hand (Pan) Tool.
- 5) Click-drag the center of the selection area to Cut and Move it.
- 6) Hold the Control-Key (Microsoft Windows) and click-drag or Option-Key and click-drag (Macintosh) the center of the selection area to Copy and Move it.
- 7) To perform other operations such as applying filters or saving the selection, choose the appropriate menu selection.

5.10.7 Cropping an Image

(Image Mode)

Unwanted borders can be eliminated from an image by Cropping. To Crop an image:

- 1) Click the thumbnail to open an the selected image in the Image View Window.
- 2) Select the area to be saved using the Rectangular Selection tool in the Toolbar.
- 3) Choose Crop from the Edit Menu in then Main Menu bar. The image will be trimmed to the selection rectangle.
- 4) Click OK to save, Cancel or Undo to exit without saving.

5.10.8 Selecting Color Regions in an Image

(Image Mode)

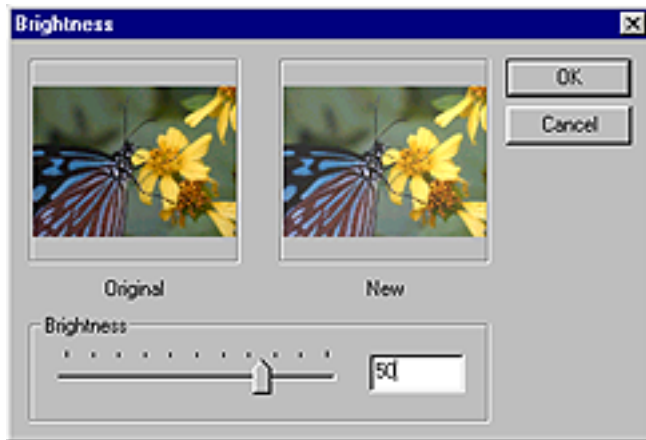
Use the Magic Wand Tool to select specific color ranges or gray levels in an image for adjustment. The tolerance of the Magic Wand Tool can be set in the Magic Wand preferences in the Options dialog in the Edit menu. To use the Magic Wand Tool:

- 1) Click on the Magic Wand Button. The cursor becomes a Magic Wand Icon.
- 2) Position the cursor so that it is about in the middle of the range of colors to be selected.
- 3) Click the Magic Wand cursor over the selected image area. A flashing marquee indicates the selected color.
- 4) Edit the color of the selected area with the Color Balance Filter in the side bar Filter Menu in the Image menu.

5.10.9 Using Filters

(Image Mode)

Image Filters can be used to change the color balance, sharpness or bluriness, edge definition, brightness or darkness, and contrast of selected images or selected areas of images. Filters cannot be applied to QuickTime Movies.



Brightness

Increases or decreases the overall lightness or darkness of the selected image.

Contrast

Adjusts the difference in contrast between the lightest area and the darkest area of the selected image.

Color Balance

Increases or decreases the balance of primary colors (Red, Green, and Blue) in the selected image.

Gamma

Shifts the tonality of the image from shadows to high lights.

Blur

Decreases the sharpness of the selected image.

Sharpen

Increases the sharpness of edges in the selected image.

Edge

Accentuates edges along contrasting boundaries.

Distortion Correction

Provides tools for adjusting image perspective and optical distortion. See *Correcting Distortion in an Image* for a detailed explanation.

Emboss

Accentuates high-contrast edges in an image and flattens low-contrast areas producing the effect of a raised surface or relief.

Sepia

Converts the image to monochromatic sepia (dark-brown) tones. Simulates aged or antique photographs.

How to Use Filters

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Use Selection Tools to select the area of the image upon which the filter will be applied. If no area is selected, the filter will be applied to the entire image.
- 3) Choose Filters from the Image menu. A sidebar menu appears.
- 4) Choose the desired Filter from the sidebar. In some cases, the filter is instantly applied. In most cases a Filter Dialog appears.
- 5) Adjust the sliders or enter the desired settings in the filter dialog.
- 6) Click OK to save, Cancel or Undo to exit without saving.

5.10.10 Using Recent Filters

(Image Mode)

Recent Filters in the Image menu displays a selectable menu list containing the four most recently used Image Filter selections. Choosing a recently used filter will reapply the filter directly to the currently selected image. Additional filtering is added to the effect of previously applied filters.

5.10.11 Removing “Red-Eye” from Flash Pictures



CAMEDIA Master 2.0 features a Remove Red-Eye tool in the Toolbar. The Remove Red-Eye Tool removes the color red from any selected area in an image. For precise control, the tool should be used in conjunction with a selection tool such as the Rectangle, Polygon, Circle, or Lasso selection tools. Do not select areas containing red that are adjacent to the area to be corrected. When used without the prior selection of a target area, the tool is applied to a 100 x 100 pixel rectangular selection centered on the cursor.

To Correct for Red-Eye:

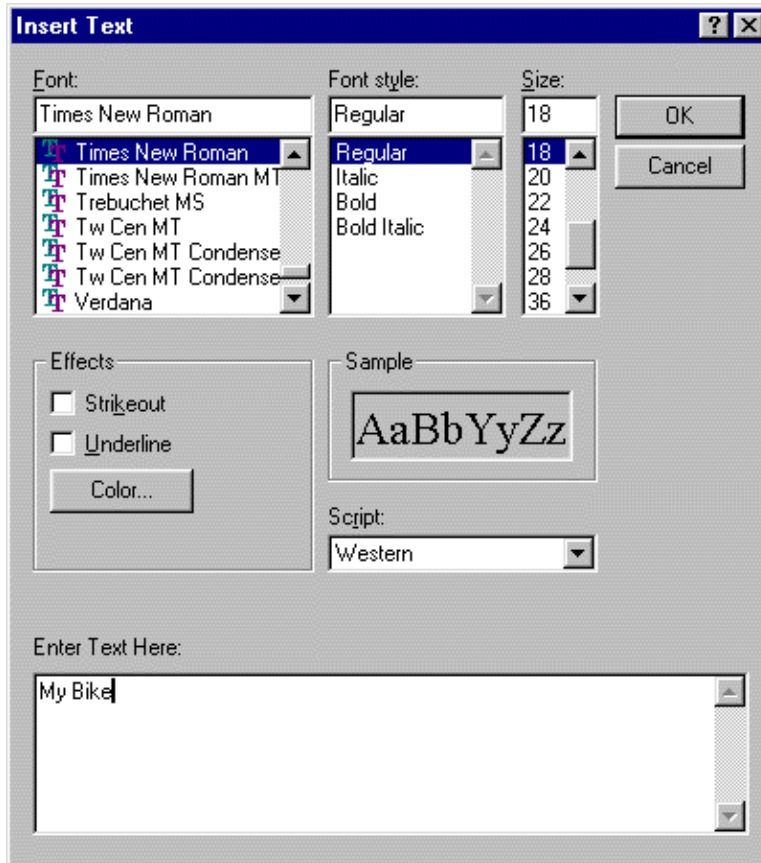
- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Click the Zoom-In Tool button in the Toolbar to enlarge the selected image to a convenient size.
- 3) Use the Pan Tool to position the area to be corrected in the Image View Window.
- 4) Click the desired Area Selection Tool button (Rectangle, Polygon, Circle, or Lasso) in the Toolbar.
- 5) Click-and-Drag the selected tool cursor to enclose the area to be corrected. Be careful not include adjacent areas of the image that may also contain red.
- 6) Click the Remove Red-Eye Tool button in the Toolbar.

- 7) Click the Remove Red-Eye Tool cursor inside the marquee of the selected area. The red is removed.

5.10.12 Adding Text to an Image

(Disk Mode/Image Mode)

Text can be added to an image. To add text to a selected image:

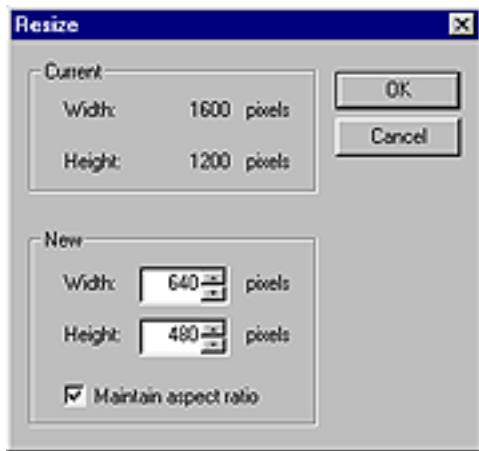


- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Choose Insert Text in the Image menu. The Insert Text Dialog appears.
- 3) Click on the font of the desired typeface in the scrollable Font Window.
- 4) Click on the style of the desired typeface in the scrollable Font Style Window.
- 5) Click on the size of the desired typeface in the scrollable Size Window.
- 6) Click on the Color Button to display the current Color Palette.
- 7) Click on the desired type color in the Color Palette or select a custom color from the Color Picker.
- 8) A type sample of the current selection is displayed in the Sample Window.
- 9) Enter the desired text in the Enter Text Here Window.
- 10) Click OK to apply the text to the selected image. Click Cancel to exit without applying.

- 11) The desired text will appear as a floating selection on the selected image window.
- 12) Click-drag to position the text.
- 13) Double-click the cursor to permanently paste the text into the image.

5.10.13 Changing the Size of Images

(Disk Mode/Image Mode)



- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Choose Resize in the Image menu. The Resize dialog appears. The Current image size is displayed.
- 3) Click the Maintain Aspect Ratio check box to maintain the height to width ratio of the image. Only one dimension is required when the Maintain Aspect Ratio checkbox is checked.
- 4) Enter the desired dimension(s) for the new size.
- 5) Click OK to Resize or Cancel to exit without Resizing.

5.10.14 Changing the Color Depth of Images

(Disk Mode/Image Mode)

To change the Color Depth of the selected image:

- 1) Choose Change Color Depth in the Image menu. A sidebar menu appears.
- 2) Choose the desired color depth. The selected image will be converted to the new color space.

5.10.15 Changing the Image File Type

(Disk Mode/Index Mode)

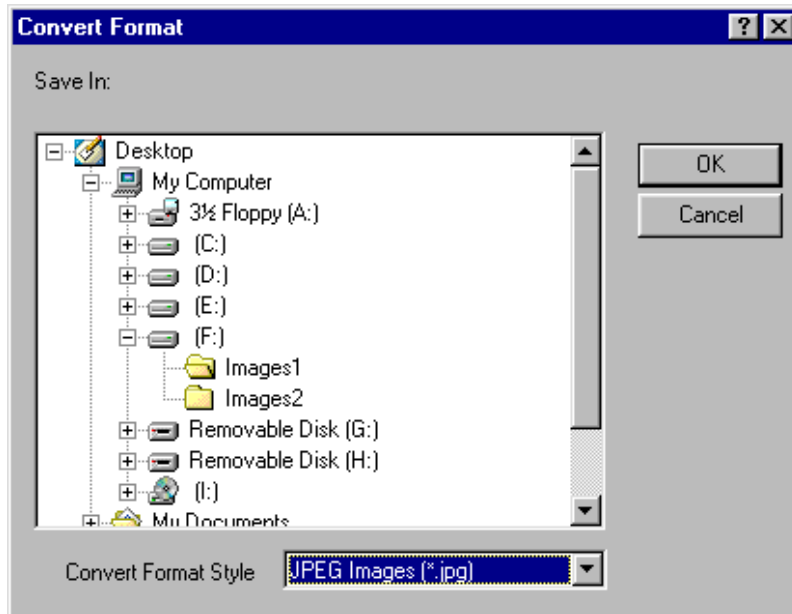
To Change the File Type or “convert” images to a different file type:

Using Save As to Save a Copy of a Single Image to a New File (Image Mode/Disk Mode):

- 1) Click to select an open Image View Window or double-click a thumbnail in the Index View Window to open an Image View Window.
- 2) Choose Save As in the File menu.

- 3) Enter or select the desired file type from the pull-down menu in the Save As Type Window. The new file extension will be automatically applied.
- 4) Change the filename if desired in the File Name Window. For a list of image file types supported, see Appendix C: Supported File Formats.

Using Convert Format to Change the File Type of One or More Images
(Index Mode/Disk Mode)



- 1) To select a group of images, on Microsoft Windows systems, hold the Shift Key and click to select a group of adjacent images or the Control-Key and click to randomly select a group of images. On Macintosh systems hold the Shift Key and click to select a group of adjacent images or the Option-Key and click to randomly select additional images.
- 2) Choose Convert Format in the Image menu. The Convert Format dialog appears. A directory of available storage devices will appear in the Save-In box of the dialog.
- 3) Click to select the target folder in which the files are to be saved.
- 4) Choose the desired file type from the File Format pull-down menu. For Microsoft Windows systems, a file extension will be automatically added to the file names. On Macintosh systems, no extension will be added.
- 5) Click OK to convert, Cancel to exit without saving.

5.10.16 Using Image Templates
(Image Mode)

Images or graphics can be used to create template files containing borders, frames, and composite images that can be added to or superimposed on other images. There are two types of template files used with Olympus camera images: 1) Disk-Based Templates, and 2) Camera-based Templates.

Disk-Based Templates

Preformatted Disk-Based Template files are installed along with the CAMEDIA Master application. Templates can also be created using a paint program and stored on disk. Colored

areas in the image will become a mask and can be superimposed over the another selected image. Black areas in the image will become transparent. The selected image upon which the template file is superimposed will appear in place of the black areas in the template. The Template Superimpose command in the Image menu is used to apply templates to Disk Images.

Camera-Based Templates

Camera-Based Template files are stored in a special Template Card in some camera models. They can be superimposed on images automatically in the camera. Camera-Based Template files are special JPEG image files. They can be created in CAMEDIA Master by using Save As to "Template" format. Camera-Based Templates can be uploaded to a camera in which there is a Template Card, or saved into a Template Card directly from the host computer by using a PC Card Adapter or FlashPath.

As with Disk-Based Templates, the image must contain a black area that will become a transparent window when superimposed.

To Create a Template File

- 1) Open an existing image to be modified as a bit-mapped RGB graphics file in CAMEDIA Master or a paint program.
- 2) Create a black area (Red=0, Green=0, Blue=0 in the color picker) large enough for other images to show through. The black area can be created in CAMEDIA Master by selecting the desired area with a selection tool and choosing Cut. The image must be saved in VGA format at 640 x 480 pixels to be used as a template.
- 3) Save the bit-mapped image file to a disk location where Template files are stored.

To Superimpose a Disk-Based Template on a Disk File in CAMEDIA Master



- 1) Double-click to open the image upon which the template will be superimposed in an Image View Window.
- 2) Choose Template Superimpose from the Image menu. The Template Superimpose dialog appears. The selected image will appear in the Preview box of the dialog.
- 3) Click the Browse button to choose a directory containing Disk-Based Template files. Available templates will appear in a scrollable preview window.
- 4) Click to select a template file from the template preview window and click the Apply button, or double-click to apply it to the selected image. The selected template will be superimposed on the selected image in the Result Preview window. The Preview image can be Zoomed-In, Zoomed-Out, and Panned using the buttons provided.
- 5) Click OK to save the new composite image. Click Cancel to exit without saving.

To apply Camera-Based Template to Camera Images

- 1) In CAMEDIA Master, select the desired Disk-Based Template file and save it as "Template" format using Save As in the File menu.
- 2) Upload the Template file to a camera that has a Template Card, or save it to the Template Card directly from the host computer by using a PC Card Adapter or FlashPath.
- 3) Consult the *Template Card Instructions* for detailed instructions on applying Camera-Based Templates to images in the camera and to images as they are captured.

5.10.17 Creating Panoramic Images

(Disk Mode/Index Mode)

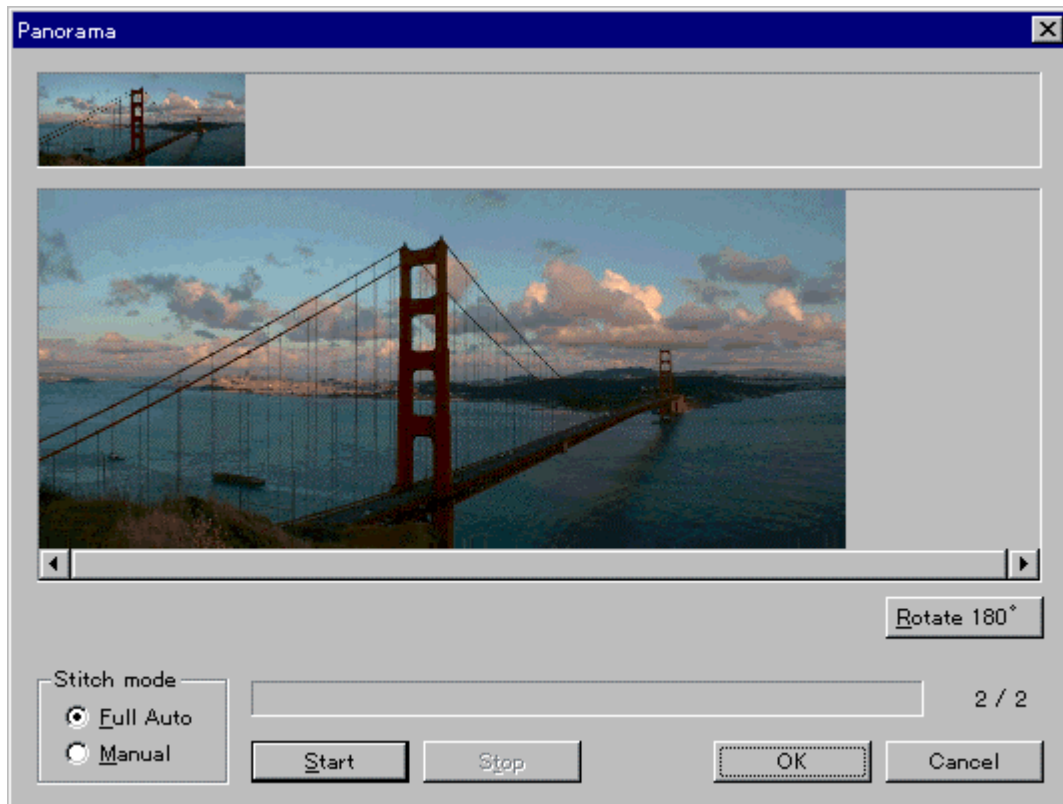
Two or more consecutive single frame still images can be stitched together to create a continuous panoramic image. The camera used must support Panorama Mode, the selected images must be recorded in Panorama Mode by the camera, the Disk Index View Window must be open, and all images to be included in the desired panorama must be selected. The Panorama Icon and sequence numbers are displayed in the Index View Window.

The camera used must support Panorama Mode, the selected images must be recorded in Panorama Mode by the camera, the Disk Index View Window must be open, and all images to be included in the desired panorama must be selected. The Panorama Icon and sequence numbers are displayed in the Index View Window.

For best results in creating panoramic images, use a tripod and let part of each picture overlap with part of the previous picture. The overlapping part should cover about 20% of the image area. If you use a camera that displays guide lines in the viewfinder, use them for alignment. If the overlapping part is too large or too small, the pictures might not fit together well. Because of image content, some pictures may not be suitable for producing panoramic images.

To Create a Panorama Using Automatic Stitch:

- 1) Select two or more images with a Panorama Icon and sequence numbers in the Index View Window.
- 2) Choose Panorama in the Image menu.



Panorama Stitch Dialog (Auto Mode)

- 3) The Panorama Stitch dialog appears in Full Auto Stitch Mode. The dialog displays a preview of the panoramic image after stitching all of the selected images together.

Full Auto: Stitches all images automatically.

Manual: Stitches images manually.

Start: Starts stitching in Manual Mode.

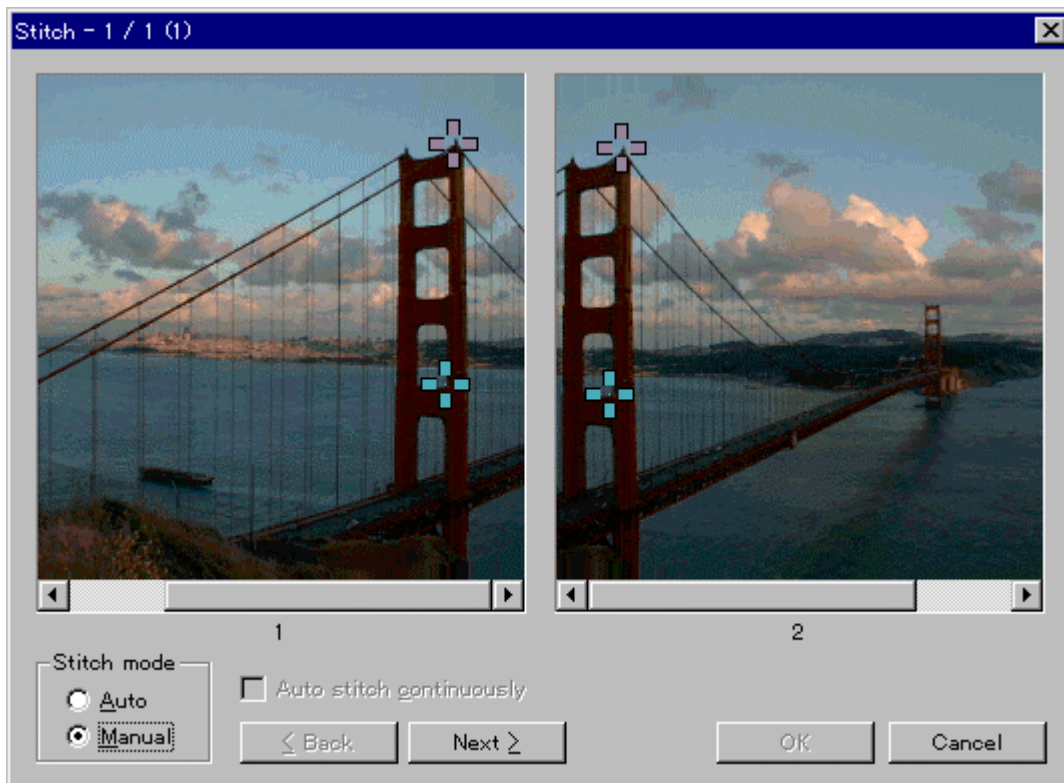
Stop: Stops stitching in Manual Mode.

Rotate 180: Rotates the image 180 degrees.

- 4) To stitch the selected images together, click OK. The more images in the panorama, the longer it will take to stitch. The completed panoramic image is displayed in a new Image View Window.

To Create a Panorama Using Manual Stitch

- 1) Select two or more images with a Panorama Icon and sequence numbers in the Index View Window.
- 2) Choose Panorama under the Image menu and select Manual Stitch Mode.
- 3) Click Start. The Stitching Alignment Indicator appears.



Stitching Alignment Indicator Dialog (Manual Mode)

- 4) Click on each image to select two matching reference points in each image that can be used to align the images.
- 5) Click Auto or Manual Stitch Mode in the Stitching Alignment Indicator Dialog.

Auto: Stitches the displayed images together automatically.

Manual: Displays two alignment indicators in each image in the Stitching alignment indicator dialog. Move the alignment indicators in both images to the position where you want the stitched images to align.

- 6) Click Next to add more images or Back to adjust the last image.

Next: Aligns the two displayed images together and proceeds to the next image.

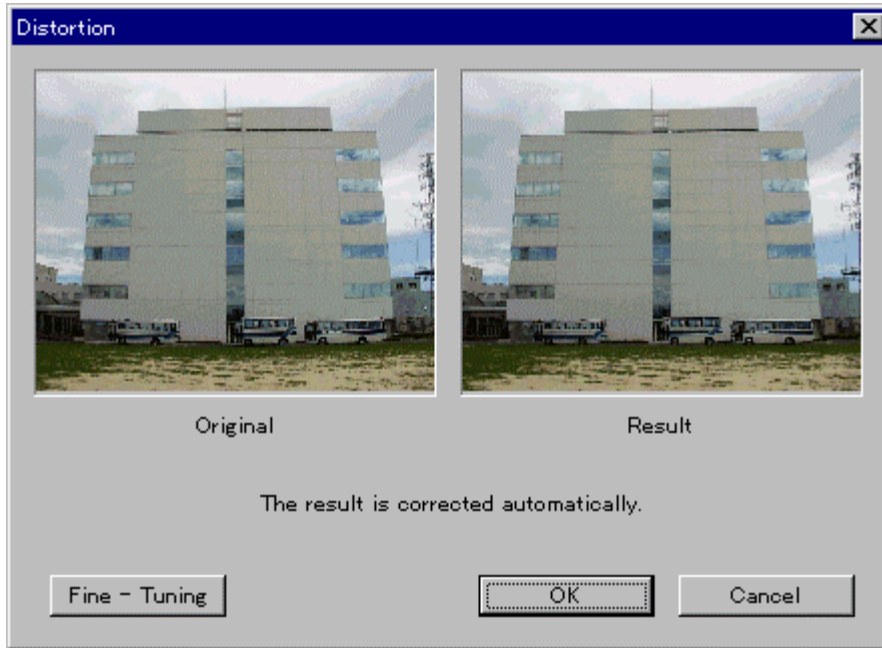
Back: Returns to the last pair of images, which were displayed before the two current images were stitched together. Only one previous alignment can be adjusted before proceeding.

- 7) A preview of the panoramic image is displayed.
- 8) Check Auto Stitch Continuously to automatically stitch all selected images.
- 9) After the second panoramic image is aligned, the panorama moves to the left side of the dialog, while the next image is displayed on the right.
- 10) Repeat steps 3 through 8 until all images in the panorama have been selected.
- 11) Click OK after the last image is added to complete the stitching operation.
- 12) The Panorama Stitch Dialog appears. The dialog displays a preview for the panorama after stitching all selected images together.
- 13) Click OK to create the completed panoramic image file.
- 14) The new panoramic image is displayed in a new Image View Window.

5.10.18 Correcting Distortion in an Image

(Disk Mode/Image Mode)

Distorted images can be corrected with the Distortion Correction command. Distorted images can be corrected automatically with the distortion data from the file header information, or manually without distortion data.



Distortion Dialog (Auto Correction)

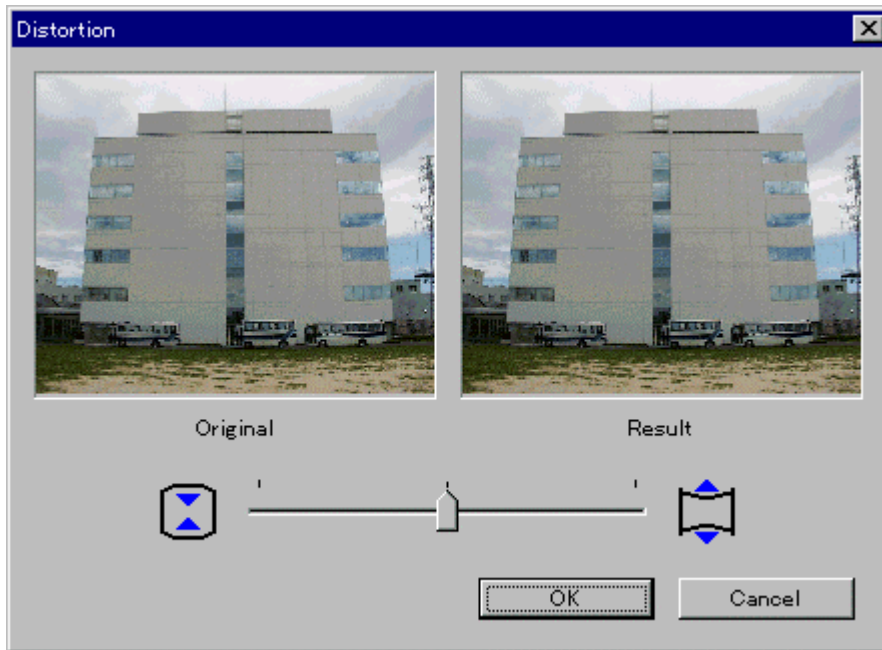
Automatic Distortion Correction

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Choose Distortion Correction from Filters sidebar menu in the Image menu. The Distortion Correction dialog appears.
- 3) The original image is displayed in the Original preview. The corrected image is displayed in the Result preview.
- 4) To make additional adjustments manually, click the Fine-Tuning button. A slider appears.
- 5) Click-dragging the slider adjusts the amount of correction displayed in the Result preview window.
- 6) Click OK to save the changes.

Manual Distortion Correction

- 1) Select an open Image View Window or double-click a Thumbnail to open an Image View Window.
- 2) Choose Distortion Correction from Filters sidebar menu in the Image menu. The Distortion Correction dialog appears.
- 3) The original image is displayed in the Original preview. The corrected image is displayed in the Result preview.

- 4) Click-drag the slider until the desired amount of correction is displayed in the Result preview.
- 5) Click OK to save the change.

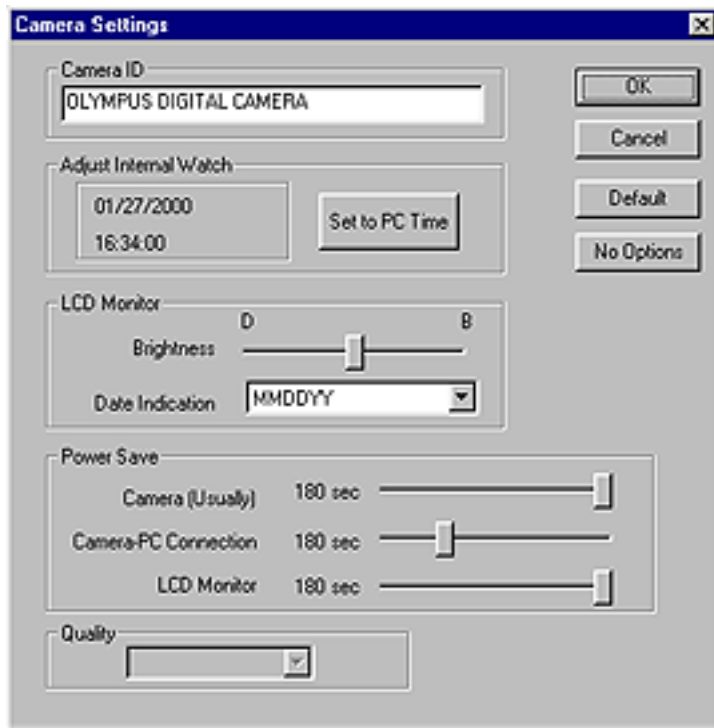


Distortion Dialog (Manual)

5.11 Changing Camera Settings

(Camera Mode)

An operational camera must be connected to the host computer. The camera must be turned on and communicating with the host in order to perform the following functions.



5.11.1 Setting Camera ID & Internal Watch

- 1) Choose Camera Settings in the Camera menu. The Camera Settings Dialog is displayed.
- 2) The default Camera ID is "Olympus Digital Camera". Create a new camera name and enter it in the Camera ID window if desired.
- 3) If necessary, change the camera clock setting in the Adjust Internal Watch window or click on the "Set To PC Time" button to set the camera clock to match the host computer.

5.11.2 Setting LCD Display Preferences

- 1) Choose Camera Settings in the Camera menu. The Camera Settings dialog is displayed.
- 2) Click the Options button. The Camera Settings dialog expands to display camera options.
- 3) Click-drag the Brightness slider to set the default brightness level of the camera LCD monitor.
- 4) Click on the Date Indicator pull-down menu to select the desired format for the camera date indicator in the LCD display.

5.11.3 Setting Power Save Preferences

- 1) Choose Camera Settings in the Camera menu. The Camera Settings dialog is displayed.
- 2) Click the Options button. The Camera Settings dialog expands to display camera options.

- 3) Click-drag the Camera (Usually) slider to set the automatic Power-Off time for the camera when not connected to the host computer.
- 4) Click-drag the Camera – PC Connection slider to set the automatic Power-Off time for the camera when connected to the host computer.
- 5) Click-drag the LCD Monitor slider to set the automatic Power-Off time for the LCD monitor.

5.11.4 Setting Camera Image Quality - Selected Camera Models

- 1) Choose Camera Settings in the Camera menu. The Camera Settings dialog is displayed.
- 2) Click the Options button. The Camera Settings dialog expands to display camera options.
- 3) Click on the Quality pull-down menu to select the desired image quality for the camera.

See Appendix B: *Supported Camera Function Table* and refer to the *Digital Camera Instructions*.

5.12 Using Images in Other Applications

Image files may be used in a variety of other applications that support high-resolution image output such as desktop publishing, presentations, or web graphics. Files intended for use in other applications may require file type conversion to a file type supported by the target application.

If CAMEDIA Master does not support the file type required, it may be necessary to use another intermediate application such as an image editing application to make the necessary conversions.

Some applications, such as Microsoft Word, support Drag-and-Drop functions from other applications. For applications supporting this feature, images can be Drag-Dropped from the Index View Windows of CAMEDIA Master directly onto a page in the other application.

5.13 Printing Images and Layouts

Images, groups of images, and indexes can be printed directly from CAMEDIA Master. A connected printer capable of printing high-resolution continuous tone color images is recommended.

5.13.1 Printing Options

CAMEDIA Master 2.0 offers three different print modes, Single Image, Layout, and Pre-cut Media. Each mode possesses a unique combination of print options as well as a Preview Window. The effect of the current print options can be previewed for selected images by clicking the scroll arrows under the preview window. Headers and Footers can be printed on each sheet.

Print Single Image

(Disk Mode / Image Mode / Index Mode)

Prints each image at the specified size on a single sheet.

Print Layout

(Disk Mode / Index Mode)

Prints selected images in specified column and row format.

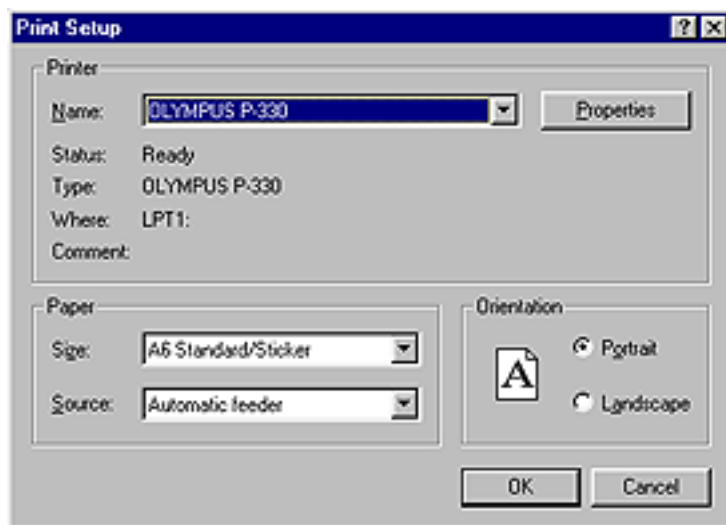
Print Pre-cut Media

(Disk Mode / Index Mode / Index Mode)

Prints the same image or different images in each cell on special media such as label or sticker paper.

5.13.2 Setting Print Setup

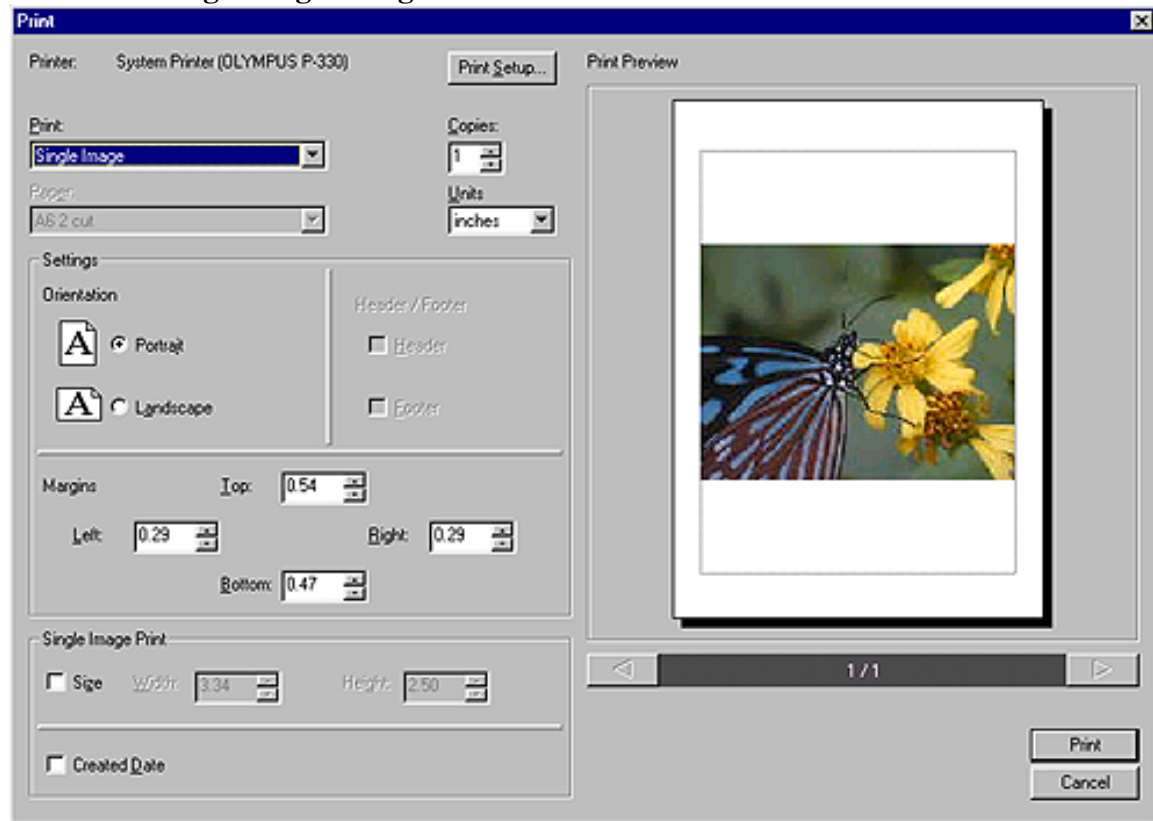
Before printing check the print settings in Page Setup.



- 1) Choose Print Setup in the File menu. The Print Setup dialog appears.
- 2) Select the target printing device from the Name pull-down menu.
- 3) Set the desired page parameters.
- 4) Click Properties to set options supported by the printer.

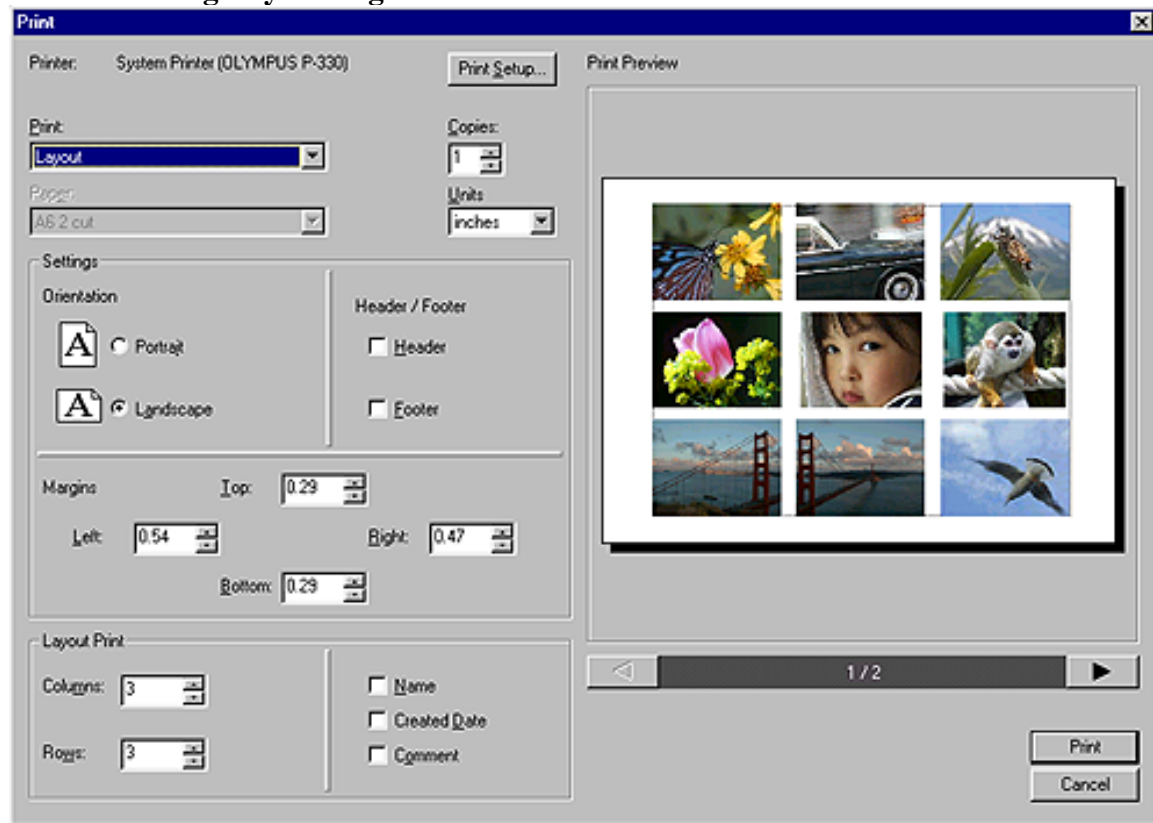
- 5) Click OK to apply settings, Cancel to Exit without changing.

5.13.3 Printing a Single Image



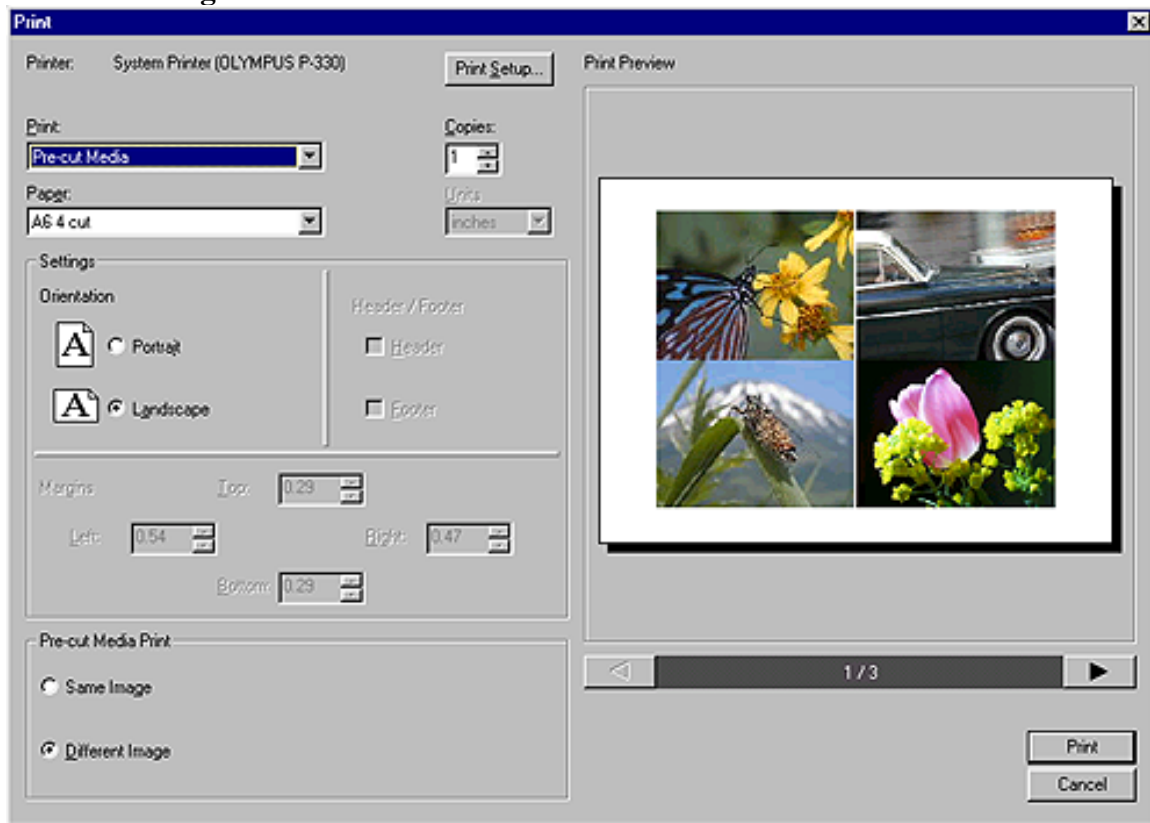
- 1) Click to select a thumbnail from the Index View Window or double-click the thumbnail to print from an open image window in Image Mode.
- 2) Select Print in the File menu. The Print dialog appears.
- 3) Select Single Image from the Print mode pull-down menu.
- 4) Enter the number of copies desired, the default unit of measure, and paper orientation.
- 5) Select Header and/or Footer as needed.
- 6) Set desired minimum margins.
- 7) Check Size to specify the image area. Enter the desired dimensions of the image area. If Size is unchecked the image will be printed as large as possible within the maximum printable area.
- 8) Check Created Date to include the date that the image was first recorded.
- 9) Click the right and left arrows below the Preview Window to view each selected image before printing.
- 10) Click OK to Print. Cancel to exit without printing.

5.13.4 Printing Layout Pages



- 1) Click on the desired folder or sub-folder in the Folder Tree View Window. Thumbnails representing images contained in the selected folder will appear in the Index View Window.
- 2) Select a group of images.
- 3) Select Print in the File menu. The Print dialog appears.
- 4) Select Layout from the Print mode pull-down menu.
- 5) Enter the number of copies desired, the default unit of measure, and paper orientation.
- 6) Select Header and/or Footer as needed.
- 7) Set desired minimum margins.
- 8) Enter or scroll to the desired number for Columns and Rows.
- 9) Check Name, Created Date, and/or Comment to include the file name, date that the image was first recorded, or comments field for each image.
- 10) Click the right and left arrows below the Preview Window to view each selected image before printing.
- 11) Click OK to Print. Cancel to exit without printing

5.13.5 Printing on Pre-Cut Media



- 1) Click on the desired folder or sub-folder in the Folder Tree View Window. Thumbnails representing images contained in the selected folder will appear in the Index View Window.
- 2) Select a group of images.
- 3) Select Print in the File menu. The Print dialog appears.
- 4) Select Pre-cut Media from the Print mode pull-down menu.
- 5) Select the pre-cut paper setting that matches the stock to be printed.
- 6) Enter the number of copies desired, the default unit of measure, and paper orientation.
- 7) Set desired minimum margins.
- 8) Click the Same Image radio button to print the same image in each cell on the pre-cut sheet. Click the Different Images radio button to print a different image from the current selection in each cell on the pre-cut sheet.
- 9) Click the right and left arrows below the Preview Window to view each selected image before printing.
- 10) Click OK to Print. Cancel to exit without printing

6. Technical Support Options

6.1 Olympus Support for Japan

OLYMPUS OPTICAL CO., LTD.
Customer Support Center
2951 Ishikawacho hachioujishi
Tokyo 192-7499 Japan
Tel: 0426-42-7499 Fax: 0426-42-7486
<http://www.olympus.co.jp/>

6.2 Olympus Support for the United States

Olympus America Inc.
Two Corporate Center Drive
Melville, NY 11747-3157
1-888-55DIGITAL
1- 888-553-4448
DISTEC@olympus.com
<http://www.olympus.com/>

6.3 Olympus Support for Canada

Carsen Group
Olympus Digital Camera
1-800-387-0437

6.4 Olympus Support for Europe

support@olympus-europa.com

7. Appendix A: Function Reference Table

The table below indicates feature and function differences between the Microsoft windows and Macintosh operating systems:

Menu	Function	Option	Toolbar	Windows	Macintosh
File	Close	-	-	X	X
File	Delete	-	-	X	X
File	Exit	-	-	X	X
File	Find	-	-	X	X
File	Open	-	X	X	X
File	Play Sound	-	-	X	X
File	Print	Single Image	X	X	X
File	-	Layouts	X	X	X
File	-	Pre-cut Media	X	X	X
File	Print Setup	-	-	X	X
File	Properties	-	X	X	X
File	Record Sound	-	-	X	X
File	Rename	-	-	X	X
File	Rename All	Created Date	-	X	X
File	-	Type-in	-	X	X
File	Save	-	X	X	X
File	Save As	-	-	X	X
File	Send Mail	-	-	X	-
Edit	Copy	-	-	X	X
Edit	Crop	-	-	X	X
Edit	Cut	-	X	X	X
Edit	Options	Details	-	X	X
Edit	-	Display	-	X	X
Edit	-	Download	-	X	X
Edit	-	JPEG	-	X	X
Edit	-	Magic Wand	-	X	X
Edit	-	Slide Show	-	X	X
Edit	-	Wallpaper	-	X	-
Edit	-	Sound	-	X	X
Edit	Paste	-	X	X	X
Edit	Redo	-	X	X	X
Edit	Select All	-	-	X	X
Edit	Select None	-	-	X	X
Edit	Undo	-	X	X	X
Image	Change Color Depth	-	-	X	X
Image	Convert Format	-	-	X	X
Image	Create Movie	-	-	X	X
Image	Filter	Brightness	-	X	X
Image	-	Contrast	-	X	X
Image	-	Color Balance	-	X	X
Image	-	Gamma	-	X	X
Image	-	Blur	-	X	X
Image	-	Sharpen	-	X	X
Image	-	Edge	-	X	X
Image	-	Distortion	-	X	X
Image	-	Emboss	-	X	X
Image	-	Sepia	-	X	X
Image	Flip	Horizontal	-	X	X
Image	-	Vertical	-	X	X
Image	Insert Text	-	-	X	X
Image	Instant Fix	-	-	X	X
Image	Panorama	-	-	X	X
Image	Panorama 360	-	-	X	-
Image	Recent Filters	-	-	X	X
Image	Resize	-	-	X	X
Image	Rotate	180	-	X	X
Image	-	CCW90	X	X	X

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Image	-	CW90	X	X	X
Image	-	Free Rotate	-	X	X
Image	Template Superimpose	-	-	X	X
Image	Wallpaper	-	-	X	-
Camera	Camera Settings	-	-	X	X
Camera	Download All Images	-	-	X	X
Camera	Download Selected Images	-	-	X	X
Camera	Protect	Off	-	X	X
Camera	-	On	-	X	X
Camera	Upload Selected Images	-	-	X	X
View	Detail View	-	X	X	X
View	Large Thumbnails	-	X	X	X
View	Refresh	-	-	X	X
View	Scroll Mode	-	-	X	X
View	Select Mode	-	-	X	X
View	Slide Show	-	-	X	X
View	Small Thumbnails	-	X	X	X
View	Sort	Date	-	X	X
View	-	Name	-	X	X
View	-	Size	-	X	X
View	-	Type	-	X	X
View	Status Bar	-	-	X	X
View	Toolbar	-	-	X	X
View	Zoom-In	-	X	X	X
View	Zoom-Out	-	X	X	X
Window	Cascade	-	-	X	X
Window	Tile	-	-	X	X
Help	About	-	-	X	X
Help	Index	-	-	X	-
-	Go Up - Folders	-	X	X	X
-	Magic Wand	-	X	X	X
-	Pan	-	X	X	X
-	Play Movie	-	-	X	X
-	Remove Red-Eye	-	X	X	X
-	Select Circle	-	X	X	X
-	Select Lasso	-	X	X	X
-	Select Polygon	-	X	X	X
-	Select Rectangle	-	X	X	X

8. Appendix B: Supported Camera Function Tables

Appendix B1 – Special Features and Functions

Camera	USB	Movie	Special Function		
			Upload	Panorama	Template
C-21			X	X	X
C-420L / D-220L			X	X	X
C-820L / D-320L			X	X	X
C-830L / D-340R			X	X	X
C-840L / D-340L			X	X	X
C-860L / D-360L			X	X	X
C-900Zoom / D-400Zoom			X	X	X
C-920Zoom / D-450Zoom			X	X	X
C-960Zoom / D-460Zoom			X	X	X
C-1000L / D-500L					
C-1400L / D-600L					
C-1400XL / D-620L					
C-2000Zoom			X	X	X
C-2020Zoom		X	X	X	X
C-2500L					
C-3030Zoom	X	X	X	X	X

Appendix B2 – Camera Settings

Camera	Camera ID	Internal Watch	LCD Brightness	Date Indication	Power Save	Quality (HQ1/2)
C-21	X	X	X	X	X	
C-420L / D-220L	X	X	X	X	X	X
C-820L / D-320L	X	X	X	X	X	X
C-830L / D-340R	X	X	X	X	X	
C-840L / D-340L	X	X	X	X	X	
C-860L / D-360L	X	X	X	X	X	
C-900Zoom / D-400Zoom	X	X	X	X	X	
C-920Zoom / D-450Zoom	X	X	X	X	X	
C-960Zoom / D-460Zoom	X	X	X	X	X	
C-1000L / D-500L		X				
C-1400L / D-600L		X				
C-1400XL / D-620L		X				
C-2000Zoom	X	X	X	X	X	
C-2020Zoom	X	X	X	X	X	
C-2500L	X	X	X			
C-3030Zoom	X	X	X	X	X	

9. Appendix C: Supported File Formats

The following file formats are supported.

Image (Read/Write):

- BMP [*.BMP](Microsoft Windows version only)
- Exif 2.1 - JPEG [*.JPG] (Compression rate by selection - Option)
- Exif 2.1 – TIFF [*.TIF] (No compression)
- JFIF – JPEG [*.JPG] (Compression rate by selection - Option)
- PICT (Macintosh version only)
- Templates [*.JPG] (Range compression, JFIF - JPEG)
- TIFF [*.TIF]

Movie: (Record/Play)

- MOV [*.MOV] QuickTime Movie

Sound:

- Wave [*.wav] (Record/Play)
- MIDI [*.mid] (Play only)
- MP3 [*.mp3] (Play only)

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