USER GUIDE

EZ-IMAGE®

V | 1.0



Redmer Software Company
P.O. Box 99556
Troy, Mi 48099-9556
248-852-2731 (phone)
248-852-2735 (fax)
redmer@redmer.com
http://www.redmer.com
ftp://ftp.redmer.com

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Preface

Welcome to EZ-IMAGE!

The EZ-IMAGE User Guide tells you how the software saves you time and money by providing a more intelligent way of synchronizing subject information with images to produce composite photographs, directories, books, ID Cards, etc.

Structure of the Manual

This manual is organized by function. Operations are presented in order of probable use, but feel free to review the information in whatever manner you desire – even skip sections if the content is familiar.

Chapter 1 introduces the EZ-IMAGE Intelligent Imaging System. It provides an overview of the hardware and software modules that together make one of the finest image processing systems available.

Chapter 2 walks you through the EZ-IMAGE installation process. It provides a step by step walk through for installing your EZ-IMAGE hardware and software as well as connecting EZ-IMAGE to your information.

Chapter 3 shows you how to use the EZ-IMAGE to perform image processing, alignment, layout, and CD-Writing.

Chapter 4 provides a technical reference for troubleshooting and enhancing EZ-IMAGE.

Style and Conventions

In order to make this manual as easy to use as the EZ-IMAGE, we have adopted the following conventions:

Icons

Occasionally, an icon (small picture) will appear in the left margin. Each icon has a specific meaning. The paragraphs that follow identify the icons and their intended use.



Warning!

Warnings contain critical information. Typical warnings include cautions about products, processes, and methods that have proven to be unreliable, unstable, or non-supported. Failure to read a warning could result in serious consequences.



Note:

Notes alert you to information of special interest or provide clarification on a particular EZ-IMAGE feature. Notes supplement standard content and are not required reading.





As you may have guessed, the helpful hints suggest ways to make your life easier. The tips are based on suggestions from other EZ-IMAGE users.

Terminology and Type

- Fields and forms are referenced by their proper names.
- Literal entries (commands you type) appear in monospaced type.
- Important new terms appear in *italics*.
- Optional entries appear in italics in square brackets [option].
- Single keys appear capitalized in brackets, such as [A] and [ENTER].

Questions and Comments

Copies of this manual and related documents can be obtained directly from Redmer Software Company via phone request, mail request, anonymous FTP to ftp://ftp.redmer.com or from our World Wide Web site at http://www.redmer.com. If you can't find an answer to your question in the manuals, check the list of Frequently Asked Questions (FAQ) on our web site.

To provide feedback on this manual or suggest improvements, please send e-mail to redmer@redmer.com.

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Disclaimer

This document is designed to provide information about the RSC EZ-IMAGE hardware, computer program and related applications. Every effort has been made to make sure this document is as complete and accurate as possible, but no warranty or fitness is implied.

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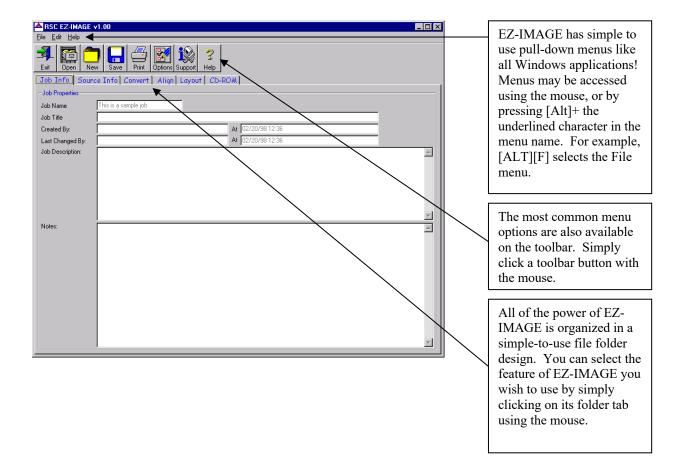
Dedications

This book is dedicated to the select few labs who recognized the vision and potential of the RSC EZ-IMAGE during the 1998 season.

Introducing EZ-IMAGE

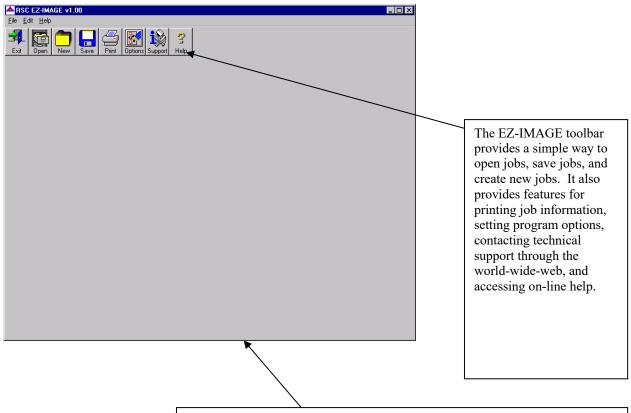
EZ-IMAGE is a powerful new software application that provides advanced image and information processing in a single package. It enables the publisher, photographer, or service bureau to align scanned images with information from virtually any data source, process images in batch, place images and text automatically into publications, and write information to CD-ROM.

EZ-IMAGE is unique in it's ability to automatically create complex layouts including composites, books, directories, and trader cards using the powerful features of Microsoft PowerPoint 97® and Microsoft Access 97®. This enables the graphic artist or publisher to quickly solve complex layout problems while retaining the ease of use and powerful graphic capabilities of the Microsoft applications.



EZ-IMAGE Toolbar

The EZ-IMAGE software provides the ability to store and retrieve image-processing options quickly and easily. The options used to process images from one format to another and place them into layouts are stored together as a "Job." When you first start EZ-IMAGE, only the toolbar displays. You can open an existing job or create a new job by using the menu options, or by simply using the toolbar. The toolbar is a set of buttons that are displayed at the top of the EZ-IMAGE application window.

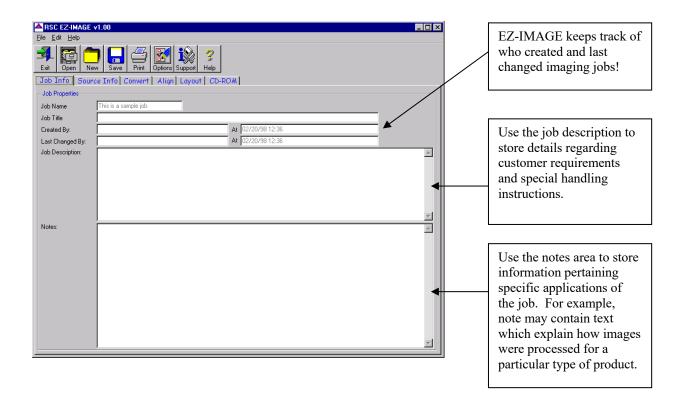


At program startup, the EZ-IMAGE screen displays as shown above. You must choose to either create a new job by either clicking on the New toolbar button or selecting New from the File menu, or open an existing job by clicking on the Open toolbar button or selecting Open from the File menu. All job-related information is stored in a very simple Microsoft Access® database, explained in a later chapter.

Job Information

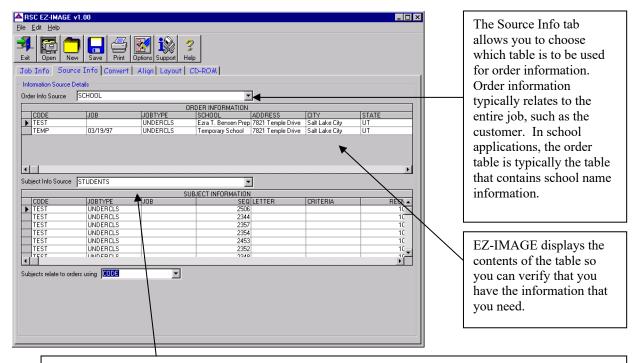
In addition to storing all image-processing settings together as a job, EZ-IMAGE provides the ability to name jobs and store job titles, lengthy descriptions, and notes. Some common uses for the job description are identification of the type of job and customer-related information for production. The notes are typically used to store historical events pertaining to the job. For example, job-specific events such as when digital proofs were created or film-scanning notes.

EZ-IMAGE supports a virtually unlimited number of jobs. A unique job name must identify each job. The job name may be up to 20 characters in length.



Source Information

The EZ-IMAGE software is virtually unlimited in its ability to use information from external sources. This powerful feature enables you to easily retrieve information stored in photographic production systems such as PhotoLynx SPS, Shutterware, StudioOne, PhotoLynx SIS, Hicks CDS, Bremson Accunet, and any other non-proprietary information source. The method for linking information from other sources into EZ-IMAGE is simply to "Link" the information to the EZ-IMAGE information using Microsoft Access®. Once the information is linked, it can be utilized in EZ-IMAGE using the Source Info tab. The EZ-IMAGE provides for linking information at two levels, the order level and detail/subject level. In school photography applications, the order information is usually a school file and the detail/subject information is a student table. In event photography, the order information may link to a file of orders and the detail/subject information may link to a customer file.



The Subject Info Source is used to retrieve information pertaining to each image that will be used in the layout for the job. In school applications, the subjects are Students. The subject table must have at least one column in common with the Order Info Source, this enables EZ-IMAGE to locate all of the subjects for each specific order record. Simple select the common column from the "Subjects relate to Orders using" selection list to link the two tables together.

Image Conversion

EZ-IMAGE is one of the most powerful image conversion utilities available on the market today. Simply locate the folder of images you wish to convert, set image processing options and then choose a destination folder for a high resolution and/or low-resolution copy. EZ-IMAGE will convert the entire folder of images at once with the processing options you set to both the high-resolution and low-resolution folders automatically.

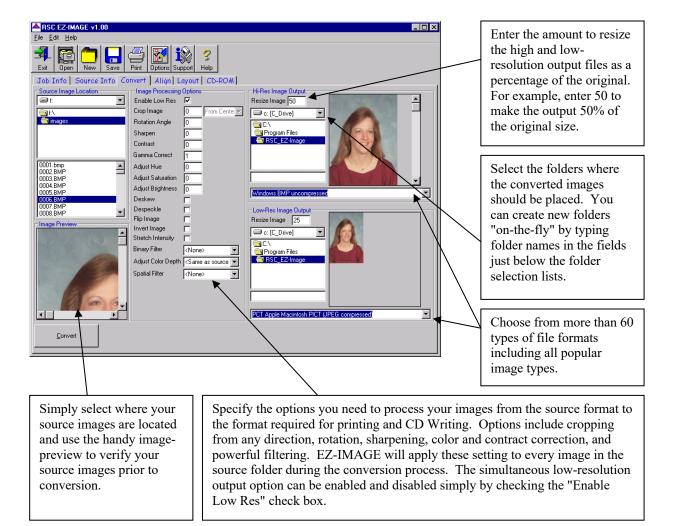
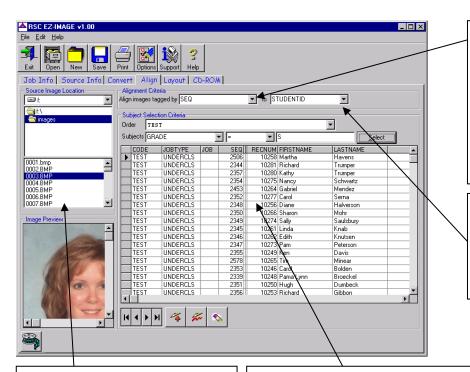


Image Alignment

EZ-IMAGE solves the problem of relating images scanned in sequence to more meaningful information in your data source using the powerful alignment, or "Align" tab. The Align tab provides the ability to select a folder containing sequential images, and set which piece of information in your data source should be used for identification. EZ-IMAGE then renames all of the images in the folder from the sequential number to the name specified in your data source. This feature is ideal for alignment of images scanned from film on a film drive to be used in CD-based application such as Photolynx SIS.



Select the column from your subject table that identifies the images in the folder specified. For example, if you scanned your images using a film scanner, a sequence or frame number may identify the images.

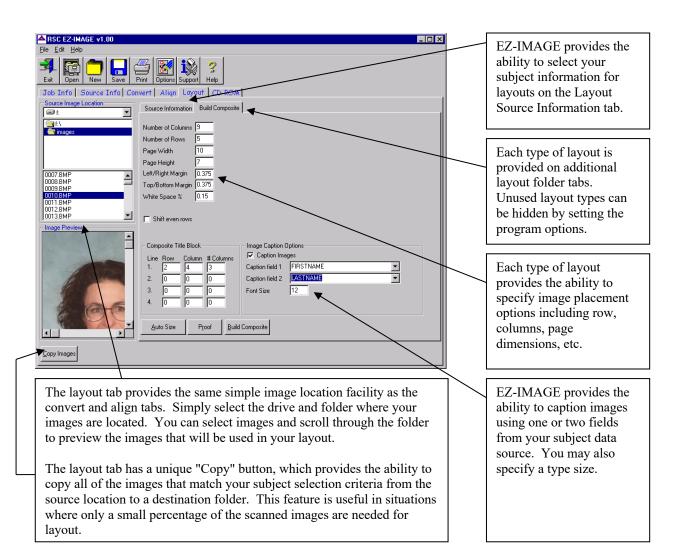
Select a column from your subject table to use for identification. This column may be student id, a customer id, or item code.

Select the folder containing the images to be aligned with your data. Typically, this folder is where the images were originally acquired using a film-scanning or printscanning device. Images are normally scanned in sequential order and numbered 0001 through 9999.

EZ-IMAGE allows you to select information from your subject table based on a combination of the order code and any criteria that you specify. The subject information is displayed in a list so that your can verify the data against the images in the source folder. The process of alignment is simply to rename the images in the source folder with the name you specify from a column in the subject table.

Layout

The Layout tab is used to combine images and text into a composite, publication, directory, ID card, trader card, etc. Simply choose the folder where your images are located, select your information source, then set layout options. EZ-IMAGE automatically creates layouts using the powerful Microsoft PowerPoint 97® and Microsoft Access 97® applications.



Writing CD-ROMs

CD-ROM writing will be available in version 1.50 (coming March 1998).

Technical Support

You can obtain technical support at any time over the world-wide-web using the "Support" button the EZ-IMAGE toolbar. The support button opens a web-browser window right within EZ-IMAGE! Your computer must be connected to the Internet using the Microsoft Windows Dial-Up Networking feature and properly configured to use this feature.

EZ-IMAGE System Requirements

Hardware Requirements

Intel Pentium®, Pentium Pro®, or Pentium II® based computer

RSC EZ-IMAGE® is compiled to favor the Pentium II® for maximum imaging speed but has been tested successfully on older Pentium® processors. RSC recommends the 300mhz or higher Pentium II® processor for maximum performance.

64 MB RAM for small composites (less than 45 images), or 256MB RAM for medium composites (45 to 200 images), or 512MB RAM for large composites (200-1000 images).

100MB available disk drive space for the EZ-IMAGE® program and data files.

500MB available disk drive space for Microsoft Windows® spool files.

Iomega Jazz® or equivalent removable storage device for storing presentations.

True-Color (24 bit) capable video graphics adapter running in 1024x768 mode or higher.

RSC recommends using a Fast/Wide Ultra-SCSI hard disk drive such as the Seagate Barracuda 4mb or 9mb model for best performance.

Software Requirements

Microsoft Windows 95®, Microsoft Windows 98®, or Microsoft Windows NT® version 4.0 or higher operating system.

Microsoft Office 97® Professional Edition (product # 269-056-104)

NOTE: RSC EZ-IMAGE® may require special settings for graphics handling in your Microsoft Windows® registry. These settings may affect the performance of other graphics applications such as Adobe Photoshop® or Corel Draw® depending upon the file type of your images. RSC recommends using TIF or BMP file formats to minimize the risk of impact on other applications.

Supported Image File Formats

EZ-IMAGE supports a wide variety of image file formats. As new formats are introduced, RSC will add support for them in EZ-IMAGE upgrades. The most commonly used formats are # 12, 13, 18, 37, and 41.

#	File Type		
1	LEAD Format		
2	JPEG File Interchange Format with YUV 4:4:4		
3	JPEG File Interchange Format with YUV 4:2:2		
4	JPEG File Interchange Format with YUV 4:1:1		
5	TIF with JPEG compression and YUV 4:4:4		
	TIF with JPEG compression and YUV 4:2:2		
7	TIF with JPEG compression and YUV 4:1:1		
8	CompuServe® GIF		
	TIF with LZW compression and RGB		
	TIF with LZW compression and CMYK		
11	TIF with LZW compression and YcbCr		
	TIF uncompressed with RGB		
	TIF uncompressed with CMYK		
	TIF uncompressed with YcbCr		
	TIF with PACKBITS compression RGB		
	TIF with PACKBITS compression YccbCr		
	TIF with PACKBITS compression CMYK		
	Windows BMP uncompressed		
	Windows BMP with RLE compression		
	OS/2 BMP version 1.x		
	OS/2 BMP version 2.x		
	Windows ICO icon file		
	Windows CUR cursor file		
	Kodak FlashPix® uncompressed		
	Kodak FlashPix® single color compression		
	Kodak FlashPix® compressed with JPEG (med quality)		
	Kodak FlashPix® compressed with JPEG (high quality)		
	Exif file containing TIF uncompressed and RGB		
	Exif file containing TIF uncompressed and YCbCr		
	Exif file containing TIF JPEG compressed		
	DICOM grayscale		
	DICOM color (RGB)		
	PCX Zsoft (Windows Paintbrush)		
	WMF Windows Metafile		
	PSD Adobe PhotoShop 3.x		
	PNG Portable Network Graphics Format		
	TGA Truevision TARGA		
38	EPS Encapsulated Postscript		

39	RAS Sun Microsystems Raster Format			
40	WPG Corel WordPerfect Graphics			
41	PCT Apple Macintosh PICT (JPEG compressed)			
42	TIF compressed using CCITT			
43	TIF compressed using CCITT group 3 1 dimension			
44	TIF compressed using CCITT group 3 2 dimensions			
45	5 TIF compressed using CCITT group 4			
46	Raw FAX compressed using CCITT group 3 1 dimension			
47	Raw FAX compressed using CCITT group 3 2 dimension			
48	Raw FAX compressed using CCITT group 4			
49	Winfax compressed using CCITT group 3 1 dimension			
50	Winfax compressed using CCITT group 3 2 dimensions			
	IOCA compressed using CCITT group 3 1 dimension			
52	IOCA compressed using CCITT group 3 2 dimensions			
53	IOCA compressed using CCITT group 4			
54	IOCA compressed using CCITT group 3 1 dim no-wrap			
55	IOCA compressed using CCITT group 3 2 dim no-wrap			
56	IOCA compressed using CCITT group 4 no-wrap			
57	CALS Raster File			
58	MacPaint			
59	Microsoft Paint			
60	GEM Image			

Supported Information Sources

EZ-IMAGE supports a wide variety of information sources. In fact, EZ-IMAGE uses the powerful Microsoft Access® database to link information for use in the program. Users of Microsoft Access® gain an immediate productivity boost by linking their information with the EZ-IMAGE application database. Through linking your information in Microsoft Access®, you have the ability to directly access the information from EZ-IMAGE as well as create reports and labels.

The most universal data access method on the market today is available through Microsoft's Open Database Connectivity (ODBC) driver, which is included in Microsoft Windows 95/98/NT®. The ODBC driver simply provides the ability to share your program's information with other programs. Most software vendors supply ODBC drivers for their programs and databases. Please check with your software vendor to find out about the availability and use of ODBC drivers.

List of Supported Information Sources

Any data source with supplied ODBC Driver. Borland dBASE II, III, IV, and V Borland InterBase® Borland Paradox® Comma-Delimited Text (ASCII)

Comma-Separated-Value (CSV)

Fixed Position Text (ASCII)

Hypertext Markup Language (HTML)

Ingres SQL Server®

Lotus 1-2-3®

Microsoft Access®

Microsoft Excel®

Microsoft FoxPro®

Microsoft SQL Server®

Oracle SOL Server®

Sybase SQL Server®

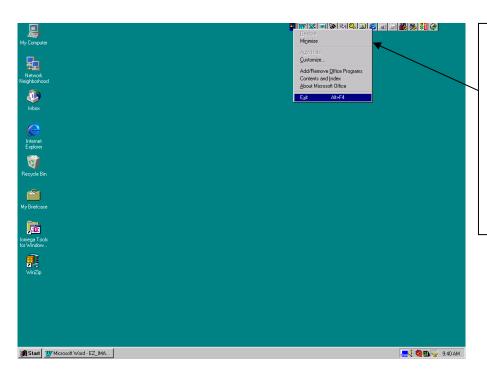
EZ-IMAGE Installation

The EZ-IMAGE software is shipped complete on a single compact disk and the application is very simple to install. Simply follow the step-by-step instructions in this chapter to get up and running!

Running Setup

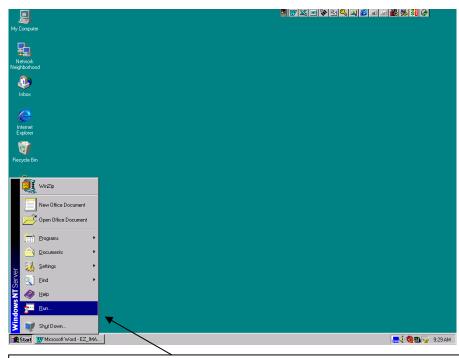
To install the EZ-IMAGE application, simply insert the EZ-IMAGE CD-ROM into your CD-ROM Drive and complete the following steps:

1. Close the Microsoft Office toolbar by right-clicking on the small Office Icon on the left-hand side of the toolbar, and then selecting Exit from the drop-down menu. Also close any other Microsoft applications that may be running, such as PowerPoint®, Excel®, Word®, etc.



Your office toolbar may be located anywhere on the screen. In fact, you can drag-and-drop the toolbar just about anywhere! Please refer to the Microsoft Office documentation for more information about closing the Microsoft Office toolbar.

2. Select "Run" from the Windows Start menu, which is usually located in the lower left-hand corner of the screen



Your computer screen should look something like this when you click on the Start button and point at the Run... command.

The Windows Start button is used to start programs. This document assumes that your are familiar with using the Microsoft Windows 95/98/NT® operating systems.

3. Start the EZ-IMAGE Setup program typing the following command into the Run window:

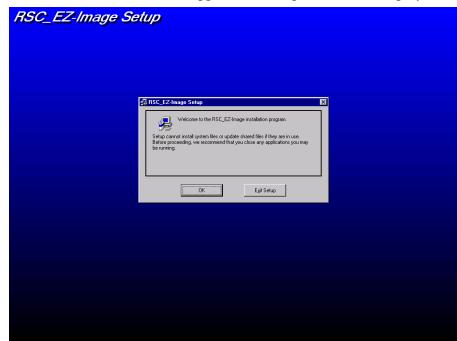
D:\EZ IMAGE\SETUP.EXE [ENTER]

Replace the drive letter D with the drive letter assigned to your CD-ROM Drive.



If you are not sure which drive letter your CD-ROM is assigned to, then you may click on the "Browse" button to use the Windows Open File feature. The Open File feature provides a menu of disk drive selections along with a folder selection list. Please refer to the Microsoft Windows 95/98/NT documentation for more information on running programs.

The EZ-IMAGE application setup screen will display.



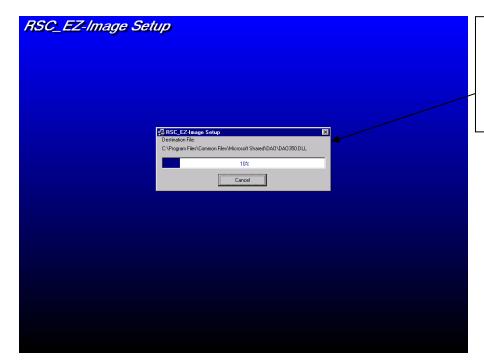
The EZ-IMAGE Setup screen displays a message warning you to exit out of all other applications prior to starting the setup. Simply click on OK or press [Enter] to continue.

4. Simply click OK, or press [Enter]. The EZ-IMAGE directory selection screen will display. RSC recommends installing the software in the location specified.



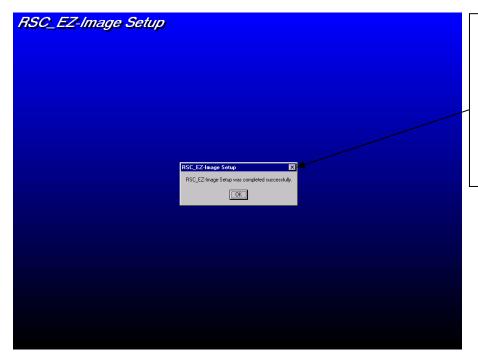
The EZ-IMAGE directory selection screen provides the ability to install the software in any location on your computer. The standard setting is to install the software in the "Program Files" directory on your startup disk drive (Drive C). RSC recommends using these settings. Simply click the button with the setup icon on it to continue.

5. Simply click on the button to begin installation. Messages will display indicating the progress of the installation.



The Setup application indicates its progress using a meter that shows the percentage complete and the current file being installed.

6. When the installation process completes, the application will display the message "RSC_EZ-Image Setup was completed successfully". Simply click on the OK button to quit the program.



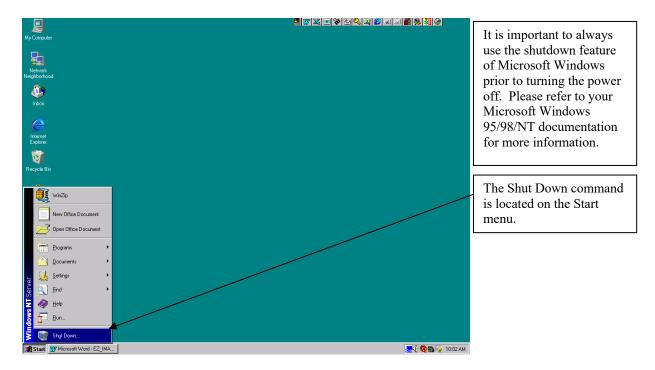
Simply click OK to quit the Setup program! After setup, please be sure to restart your computer PRIOR to starting EZ-IMAGE. Failing to restart your computer may cause EZ-IMAGE to malfunction and require re-installation.

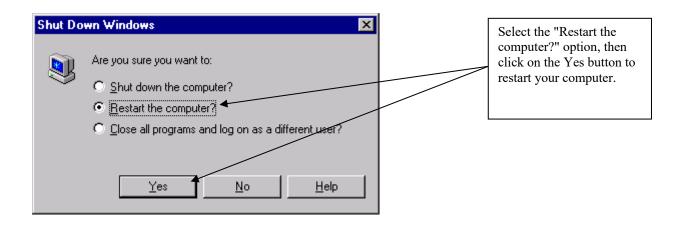
7. Restart the computer to make sure all changes made during installation are completed prior to running the EZ-IMAGE application.

Restarting Your Computer

This task is so important that we decided to emphasize it again! The EZ-IMAGE Setup application copies important system files to your Windows folder. These files only get loaded when Windows loads on machine startup. Therefore, it is absolutely critical to restart your computer prior to starting EZ-IMAGE.

To restart your computer, select the "Shut Down" command on the Start menu, then select 'Restart the computer?" from the "Shut Down Windows" window.





3

Using EZ-IMAGE

This chapter explains how to use the EZ-IMAGE application. It covers everything from starting the program using the Windows Start menu to creating, saving and retrieving jobs, using technical support, help, and linking information from your own programs. Please read this entire chapter thoroughly prior to using the EZ-IMAGE software.

Things You Should Already Be Familiar With

This chapter assumes that you already familiar with using Microsoft Windows 95®, Microsoft Windows 98®, or Microsoft Windows NT® version 4.0 or higher. This includes starting applications, basic window features such as maximize, minimize, and close, as well as use of the mouse. This chapter also assumes that you are familiar with Microsoft Access® and Microsoft PowerPoint®. You should have a basic understanding of how to create and maintain databases using Microsoft Access® and you should also have a basic understanding of how to create and maintain presentations using Microsoft PowerPoint®. RSC recommends that you receive training in both Access and PowerPoint to realize the full capabilities of EZ-IMAGE.

This manual is not intended to provide a reference or tutorial for the Microsoft Windows or Office products. For more information on those products, please refer to the Microsoft user documentation and the Microsoft World-Wide-Web site (http://www.microsoft.com). Training on all Microsoft Windows and Office products is available world-wide through Microsoft Solution Providers and Microsoft Education Partners. Please contact Microsoft for more information on the vast array of training options available.

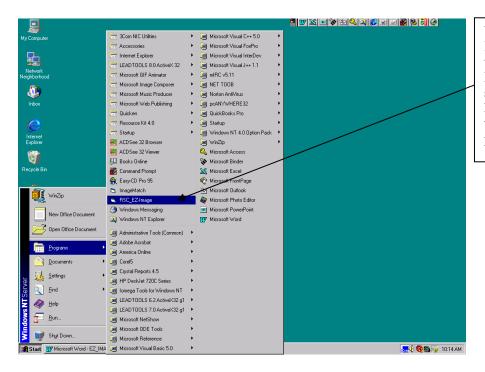


Note:

Microsoft also provides training and training certification programs over the world-wide-web. These programs have proven successful for many RSC customers using the EZ-IMAGE product. Please contact Microsoft for more information.

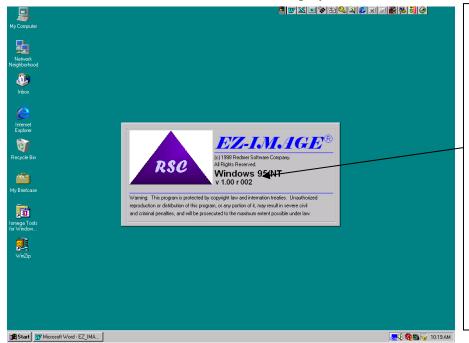
Starting EZ-IMAGE

To start the EZ-IMAGE application, select the program name from the Programs menu, which is located under the Start menu.



Your Programs menu may look quite different than this one! However, the RSC_EZ-IMAGE icon should appear as it does here. Simply click on it with the mouse to start the program.

The EZ-IMAGE "Splash" window will display while the program loads. The windows will disappear automatically when the program has finished loading, and the EZ-IMAGE main window will display.

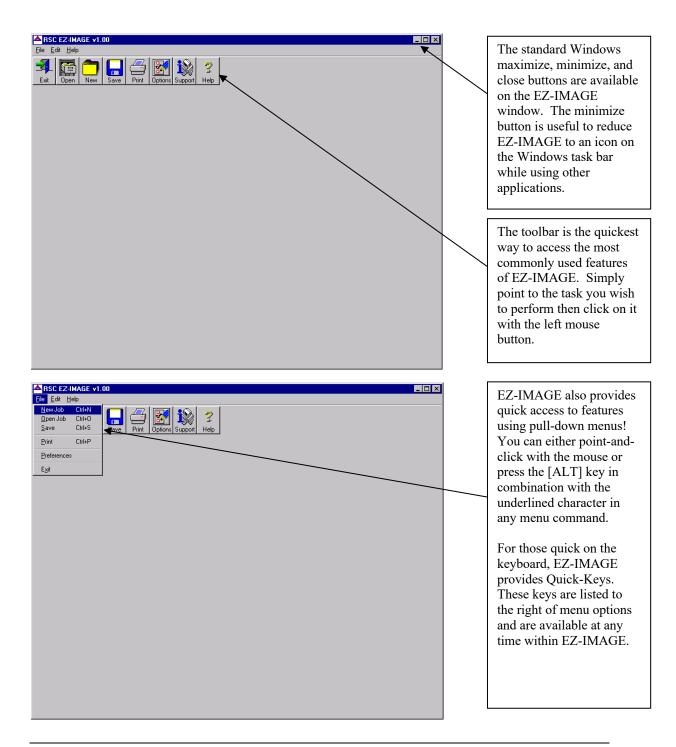


The EZ-IMAGE "Splash" window displays the application copyright warning, version, and platform information.

The version shown in this splash screen is 1.00, the first version shipped. Next to the version number is the release number. The release number specifies a specific "bug fix" level of the software. Release 002 indicates that two known problems, or bugs as they are sometimes referred to have been corrected since version 1.00 first shipped.

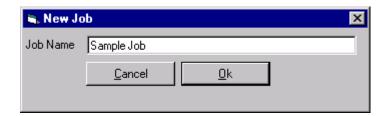
Finding Your Way Around

When you start EZ-IMAGE, the application window will display empty, indicating there is not currently a job open. At this point, you must choose to open a job or create a new job. There are three ways to perform tasks in EZ-IMAGE: Clicking the task on the toolbar, using the menus, or using the assigned Quick-keys.

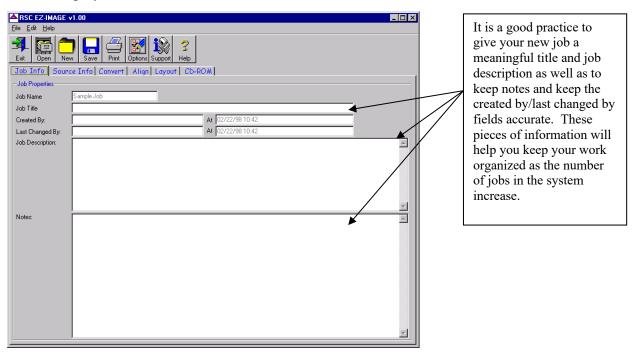


Creating A New Job

To get started using EZ-IMAGE, create a new job by clicking on the New toolbar button. The New Job window will display allowing you to give your new job a name. Enter a name for the job, up to 20 characters, then click on the OK button.



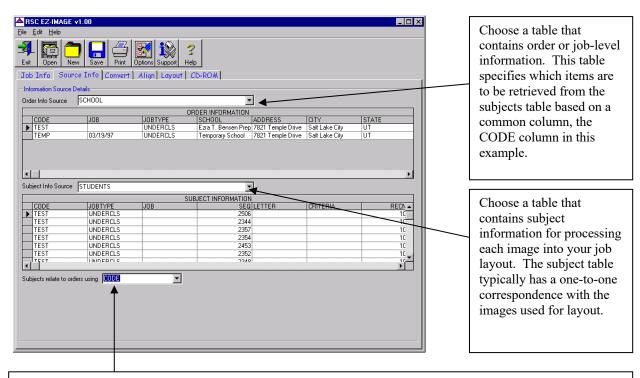
The new job will be added to the EZ-IMAGE application database with the name you specify. If the job name already exists in the database, EZ-IMAGE will ask you to enter a new one. Once the job is added, the EZ-IMAGE Job Info tab will display.



Next, you must specify the information source to use for retrieving order and subject information for your new job. The EZ-IMAGE application ships with a number of sample tables that you can use to maintain information for various types of jobs including school photography, directory publishing, and product catalogs. NOTE: EZ-IMAGE allows you to link you own information to the Source Info tab. However, you must first link your information using Microsoft Access®. The process of linking your own information to EZ-IMAGE is explained in detail later in this chapter.

Choosing An Information Source

The Source Info tab is designed to allow you to choose which tables from the EZ-IMAGE application database are used for the job. EZ-IMAGE provides the ability to use two tables, one for order information and the other for subject information. The order table must contain one record that specifies information for the entire job. The subject table must contain one or more records that specify information for each image, or subject in the job. A common column must relate the two tables. For example, in school photography the school code typically relates the subject (in this case students) to the orders table (in this case schools). The school code field must be in both tables so that EZ-IMAGE can locate all of the students in the school. For more information on relating tables in this manner, please refer to the Microsoft Access® user manual section "Relating Tables."



Choose a column that is common to both tables to relate the subject table to the order table. This column is commonly referred to as the "Primary Key" in database terms. Please refer to the appendixes in this manual for specific instructions on how to link information from your program. RSC will attempt to document and support linking from most common publishing, graphic arts, photographic, and manufacturing applications. If your application is not listed or included in the appendixes, please contact RSC Technical Support.

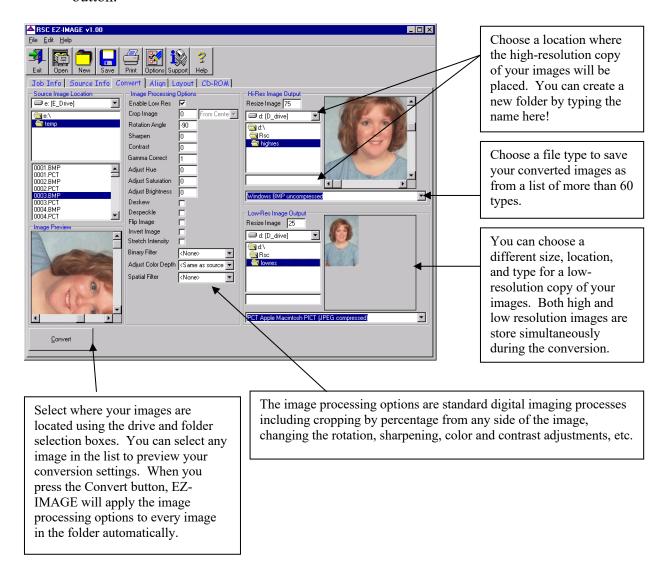
Hint:



EZ-IMAGE dynamically changes the selection lists throughout your job based on the Information Source that you select. It is a good practice to set the Information Source once, and then not change it again for the current job. If you need to use multiple information sources with the same set of images, you should create a new job.

Converting Your Images

EZ-IMAGE makes image conversion a snap! In fact, EZ-IMAGE does not require that an information source be set to process images. Simply point EZ-IMAGE to a folder containing images, set image processing options, choose a place to store a high resolution and low resolution copy, then click the Convert button.



Hint:



When you press the Convert button, EZ-IMAGE will display a progress bar indicating the percentage of files completed. To the right of the progress bar is a Cancel button. You may press the Cancel button at any time during image processing to abort the conversion. Note that it may take a few seconds before EZ-IMAGE responds to the Cancel because the current image in process must complete processing.

Image Processing Options

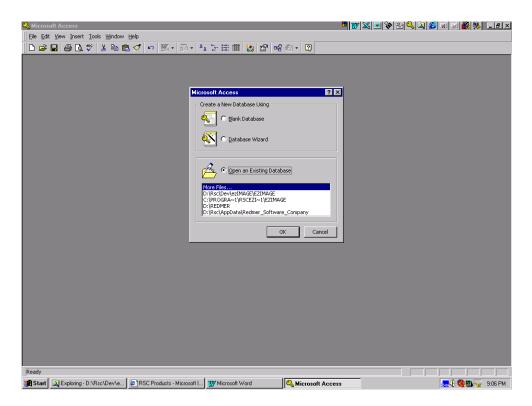
Option	Description
Enable Low Res	Enables/Disables the low resolution output. When unchecked, the low-resolution output information does not display. The default setting is enabled.
Crop Images	Cropping images involves removing a portion of the images to make the images smaller. EZ-IMAGE supports cropping from center, left, right, top, and bottom. Thus, if your images have unneeded excess area around the edge, you can trim it off using the crop settings.
Rotation Angle	The Rotation Angle specifies the orientation of the images and is commonly used to rotate the images +/-90 degrees from the orientation that the images were scanned in. Valid rotation angles are 0 through 360 degrees.
Sharpen	Image sharpening is the process of applying a filter to make the image appear clearer with higher contrast. Increases or decreases the sharpness of the image in the bitmap. Negative values decrease the sharpness of the image. Specify -1000 for minimum sharpness. Positive values increase the sharpness. Specify +1000 for maximum sharpness.
Contrast	Increases or decreases the contrast of the image.
Gamma	Adjusts the intensity of colors in the bitmap by changing the gamma constant that is used to map the intensity values. Intensity values ideally follow a logarithmic progression, because the eye perceives changes in intensity as being equal when the ratio of change is equal. For example, we would see a change from 0.1 to 0.2 as being equal to a change from 0.2 to 0.4. Gamma is a standard constant that is used to calculate the progression. For most CRTs the gamma constant is in the range of 2.2 to 2.5.
Hue	Changes the hue of colors in the bitmap by rotating the color wheel. This method can rotate the color wheel in either direction. A 180-degree rotation in either direction changes each color to its complement. Positive rotation takes red toward green, green toward blue, and blue toward red. Negative rotation has the opposite effect.
Saturation	Increases or decreases the saturation of colors in the bitmap. Negative values decrease the saturation of colors. Specify -1000 to change the colors to grayscale. Positive values increase the saturation. Specify +1000 to make the colors as bold as they can be.
Deskew	Rotates the bitmap to straighten it. This method typically is used to automatically straighten scanned images. The calculated rotation is limited to 10 degrees in either direction. This method is intended for images, such as scanned documents, that are mainly horizontal lines of text. The results are unpredictable with other types of images.

Dagmaalrla	Domovos speciales from the hitman Typically, this weether is your
Despeckle	Removes speckles from the bitmap. Typically, this method is used
	to clean up scanned images (such as FAX images). This method
	removes 1-pixel speckles, and shrinks some larger speckles.
	Therefore, in some cases, larger speckles can be completely
	removed by running it more than once.
Flip Image	Flips the bitmap from top to bottom.
Invert Image	Inverts the colors in the bitmap, making it like a photographic
	negative. This method can also be used to invert the color of a 1-bit
	bitmap, making the black white and the white black.
Stretch Intensity	Increases the contrast in an bitmap by centering, maximizing, and
	proportioning the range of intensity values. Unlike the Contrast
	method, this method always retains the original number of different
	intensity values. (Ordinary contrast adjustments can lose values at
	the high and low ends of the scale.)
Binary Filter	Imposes one of the predefined binary filters for erosion or dilation
	of black objects.
Spatial Filter	Imposes a spatial filter on the bitmap. Spatial filters are used for
	operations such as sharpening an image or detecting edges within
	the image. This method works best with 24-bit, 16-bit, or grayscale
	bitmaps. If a bitmap uses a color palette, this method matches the
	new brightness value of each pixel to the nearest color in the
	existing palette.
Adjust Color	Converts the color depth, sometimes referred to color resolution of
Depth	the source images to/from 1-bit to 24-bit.
Image Size	Resizes the bitmap to a new width and height. This changes the
	storage requirements of the bitmap, and it is not the same as scaling
	the display (zooming out or zooming in).

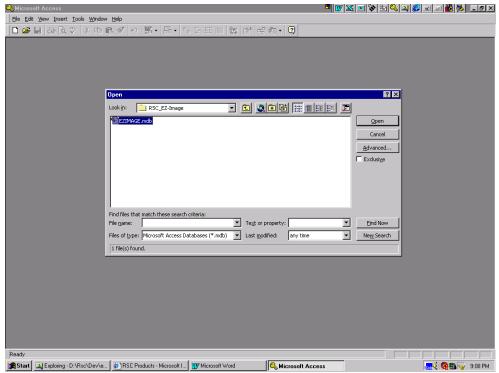
Linking EZ-IMAGE To Your Data

EZ-IMAGE enables you to use information from a wide variety of sources. In fact, EZ-IMAGE uses the powerful Microsoft Access® data base to handle all of its information processing needs. To link EZ-IMAGE to your data, perform the following steps:

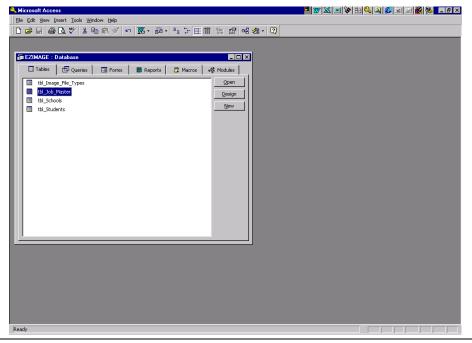
1. Start Microsoft Access® by selecting its icon from the Office toolbar, or by selecting it from your Programs menu. The Microsoft Access® startup dialog will display.



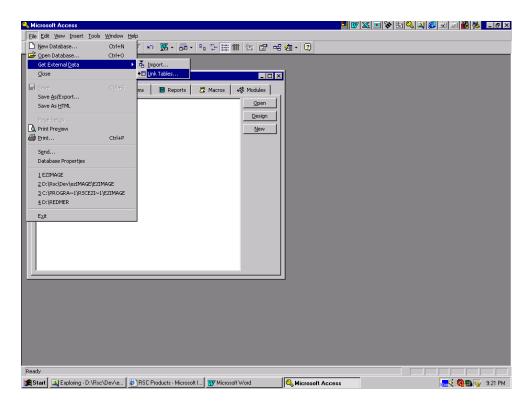
2. Select the "Open an Existing Database" option, highlight "More Files...", then click OK. The open file dialog will display. Navigate to the RSC_EZ-IMAGE folder, located in "C:\Program Files". Then double-click the EZIMAGE.MDB database file. This is the application database and is used by EZ-IMAGE to store, locate, and retrieve your information.



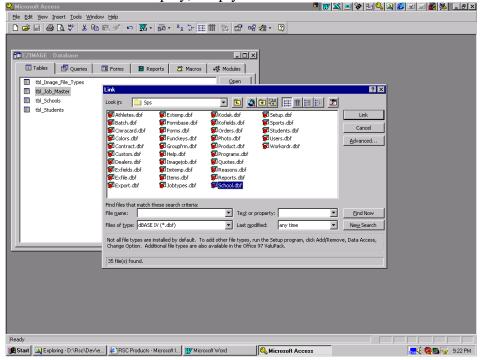
The EZ-IMAGE database contains four tables. The "tbl_Image_File_Types" enables you to choose which types of image files are supported by EZ-IMAGE. This table should never be modified. The "tbl_Job_Master" table is where EZ-IMAGE stores your job information. If you are an experienced user of Microsoft Access®, you may wish to maintain this table and construct your own reports from it right within Microsoft Access®. The "tbl_Schools" and "tbl_Students" tables are simply two sample tables for maintaining order and subject information in the school photography market.



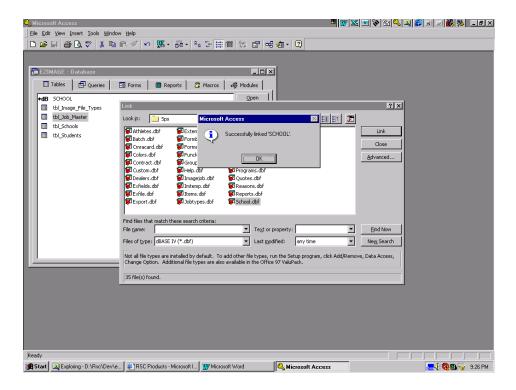
3. To link your data to EZ-IMAGE, select the "Link" option from the "Get External Data" submenu on the "File" Menu. The Link window will display.



4. Select the type of file to link from the "Files of Type" pick list, then navigate to the file you wish to link, then click on the Link button. The "Select Index Files" window will display, simply click the cancel button on this window.



5. Click on the OK button to confirm the file has been linked. Note the new table in EZ-IMAGE database. The small arrow next to the table indicates that it is linked to a source that is external to Microsoft Access®. However, you can view the information in the table and design forms, report, and mailing labels directly from the table within Microsoft Access®.



Exporting To EZ-IMAGE From PhotoLynx SPS

If you are using the PhotoLynx School Pictures Software, SPS, you have the ability to export information directly to EZ-IMAGE®. The process is very simple.

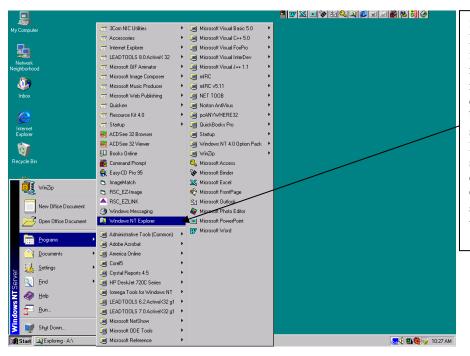
Exporting from SPS

- 1. Start PhotoLynx SPS, and select the UTILITIES menu.
- 2. Select EXPORT from the UTILITIES menu.
- 3. Select RSC EZ-IMAGE from the EXPORT menu.
- 4. Select the job you wish to export from the JOB list.
- 5. Insert a blank formatted disk into drive A:.
- 6. Select drive A: for EZIMAGE.DBF storage location.

You will now have a file called EZIMAGE.DBF on the diskette. Take this diskette to the computer running RSC EZ-IMAGE® and place it into drive A.

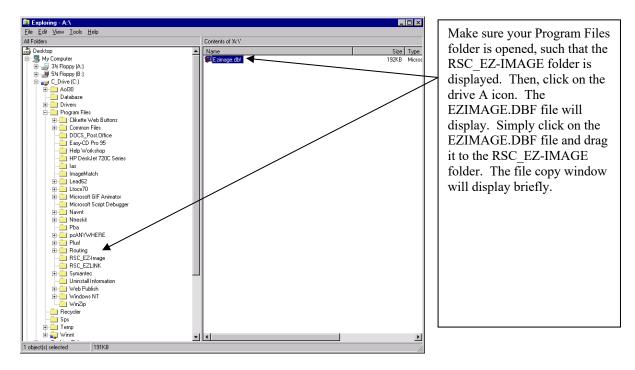
Copying the EZ-IMAGE.DBF file to Drive C

To copy the EZ-IMAGE.DBF file from drive A to drive C, simply start the Microsoft Windows Explorer® by selecting Explorer from the Windows Start\Programs menu.



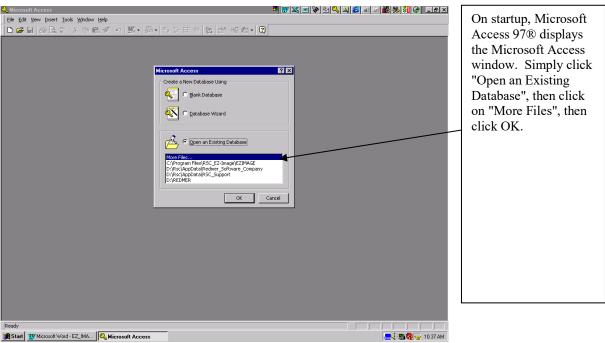
Start the Windows
Explorer by selecting it
from the Start\Programs
menu. Your programs
menu may look slightly
different than this one,
but the Explorer option
should be located here.
If it is not, you can also
start explorer by rightclicking on "My
Computer", then
selecting Explore from
the popup menu.

Next, select drive A from the Explorer window and drag the EZIMAGE.DBF file to the C:\Program Files\RSC EZ-IMAGE folder.

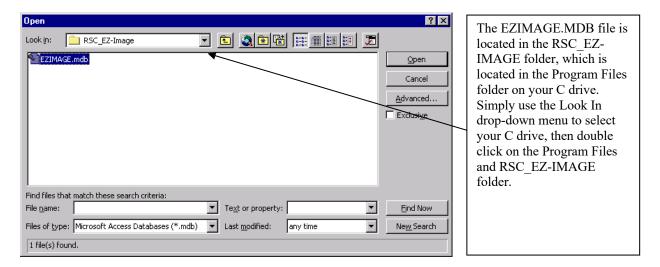


Linking the EZIMAGE.DBF File To EZ-IMAGE®

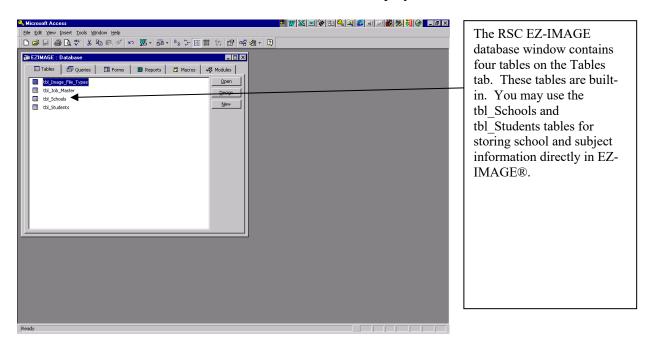
To make your information available in EZ-IMAGE®, you must first link it using Access. Simply start Microsoft Access using the Microsoft Office toolbar. Next, open the RSC EZ-IMAGE database.



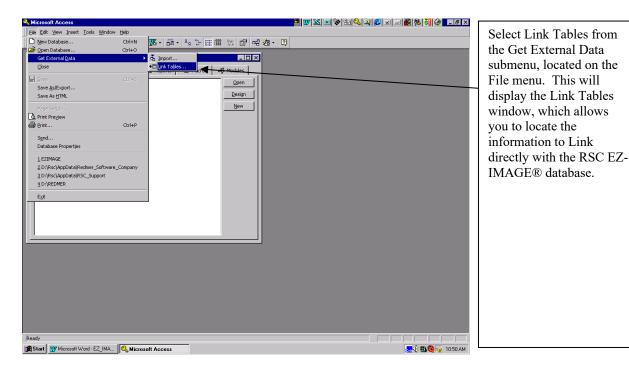
To open the EZ-IMAGE database file, navigate to C:\Program Files\RSC_EZ-IMAGE folder. Select the EZIMAGE.MDB file, then click Open.



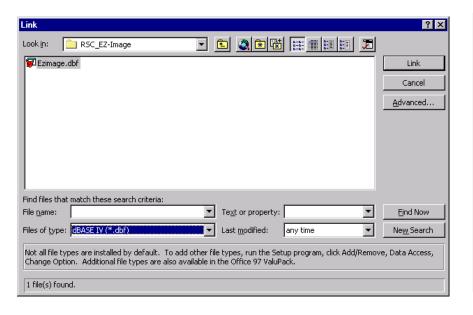
The RSC EZ-IMAGE® database window will display.



To Link your SPS EZIMAGE.DBF information to the RSC EZ-IMAGE® database, simply select Link Tables from the File\Get External Data menu



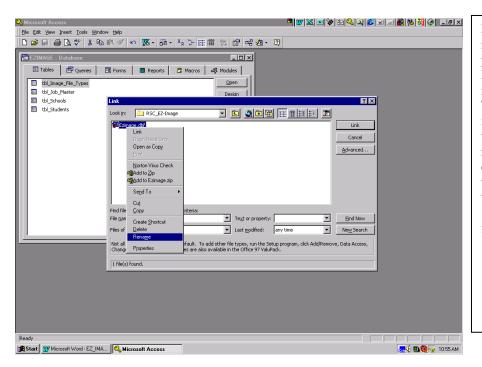
Next, select "dBASE IV (*.dbf) from the Files of Type selection list.



Select "dBASE IV" from the Files of Type selection list. The EZIMAGE.DBF file will display.

IMPORTANT STEP: RENAME THE FILE

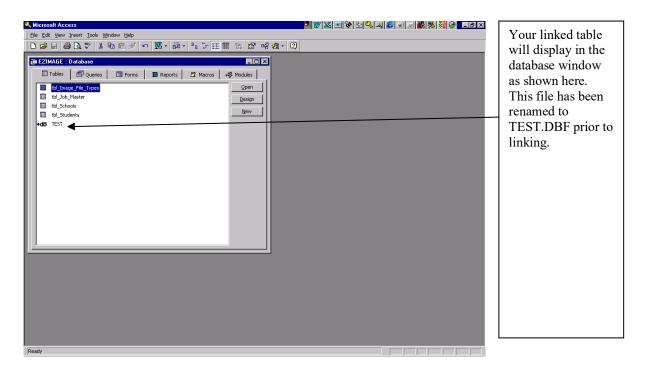
Prior to linking the EZIMAGE.DBF file, it is important to rename the file so that you can re-use the EZIMAGE.DBF name again in the future without overwriting your current information. To rename the file, right-click on the EZIMAGE.DBF file and select RENAME from the popup menu. Type the new name for your file, making sure to leave the ".DBF" in tact at the end of the file name.



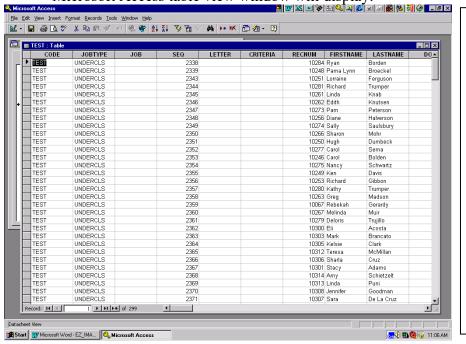
Right-click on the file name to display the popup menu. Select Rename, then type the new name for the file. The name should identify the content of the file such as an order number or a school code. Be sure to leave the ".DBF" at the end of the file name, then press [ENTER] when you are finished naming.

Click on the Link button to link the file. The "Select Index Files" window will display, simply click CANCEL. The Linked File Successfully window will display, click OK, then click CLOSE on the Link Database Window.

The RSC EZ-IMAGE® database window will now contain an entry for the file just linked. A small arrow next to the name indicates that the file is linked. The DB icon indicates that the file is a dBASE type data file.



To view the information in your linked file, simply double click on it. The Microsoft Access table view window will display.

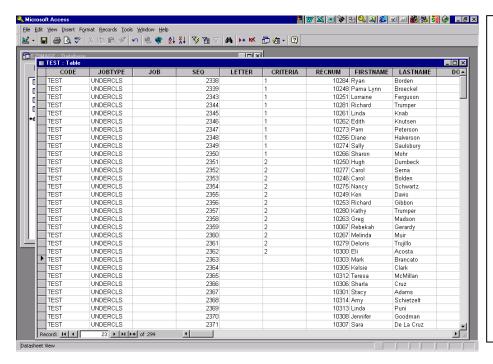


The table view window is a powerful feature of Microsoft Access. The information in your file is displayed in row and column format. You can change information simply by typing over it in this window. You can use the arrow keys and the page up/page down keys navigate through your information.

*Make note of the CODE for your order. The code in the window shown above is TEST. Your code should be an order or job number that identifies the subjects in the window.

Creating a Composite Selection Criteria

While viewing the information in your linked table, it is important to enter a composite selection criteria for each student. Do this by simply typing a number in the criteria column for each subject on each composite. For example, to place students together on a composite, place a 1 in the criteria field for each of them. To place the teacher or other staff on the same composite, place a 1 in the criteria for each of them.



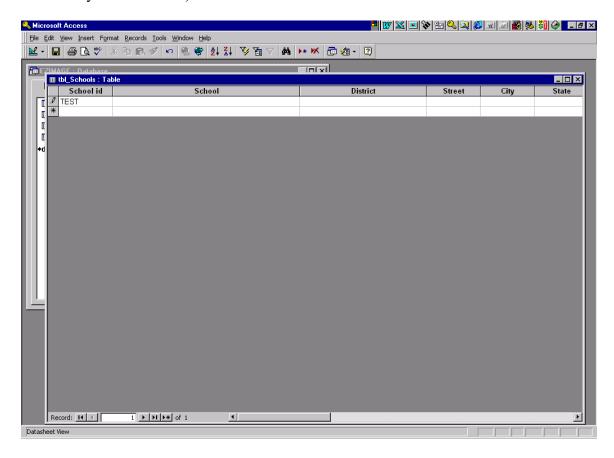
The CRITERIA column allows you to group students and staff together for a composite. Simply number your composites for the school and key that number next to each student and staff for the composite.

*NOTE: Some staff may be required on more than one composite. The only way to handle this scenario currently is to number the staff record for each composite in sequence. For example, number the principal with 1, then create the composite for 1 using EZ-IMAGE. Renumber the principal to 2 prior to running composite 2 in EZ-IMAGE.

When you are finished changing student information, simply click on the close box in the upper right-hand corner of the window.

Adding the School record to the tbl_Schools Table

To enable EZ-IMAGE to find your information, you must enter a record for each school or order in the tbl_schools table. Do this by double-clicking on the tbl_Schools table in the database window and by typing your school or order code into the table view (This is the same code that is displayed in the CODE column of your linked file).



When you are finished typing the code, close the tbl Schools window.

You have now successfully linked your information to EZ-IMAGE and are ready to begin producing composites.