

# ***Photo Icons***

## **The Ultimate Tool To Create/Edit Photo-Realistic Icons**

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## Introduction

*Photo Icons* is a professional icon processing tool that allows you to create and modify Windows icons at any color depths (up to 24-bit or true color). Using high performance imaging toolkit developed by LEAD Technologies, an industry leader in imaging technology, *Photo Icons* allows you to convert any image of any size and any color depth into the standard Windows icon format (32x32) at 16, 256, 65,536, and 16 million colors. A screen capture utility is also provided so you can capture any area of the screen into an icon. *Photo Icons* is the ultimate icon utility you ever need to create/modify photo-realistic icons.

*Photo Icons* also allows you to extract icon(s) embedded inside DLL/EXE files and save them under ICO format.

Images/icons can be printed to any Windows-supported printers. You can even print icons embedded inside DLL/EXE files without having to extract them first.

For added convenience, a TWAIN interface is also available (optional) so you can scan any images directly into icons.

## Features

- Creates/Edits photo-realistic icons.
- Scans and displays thumbnails of all images on your hard drive.
- Captures any area of the screen to create photo realistic icons.
- Imports images from TWAIN-compliant devices into icons.
- Converts between over 40 image file formats including ICO.
- Extracts icons embedded inside DLL/EXE files.
- Prints hardcopy of images/icons to any Windows-supported printers.
- Intuitive user-friendly interface.

## Differences between shareware & registered versions

The shareware version of *Photo Icons* allows you to create/edit 16-color **ICOs**. To create, edit, extract, convert, capture 256, 65,536 and 16 million-color icons and access an array of more than 40 different image file formats (including the most popular ones such as **BMP** (*Microsoft Windows and IBM OS/2*), **JPG** (*JPEG*), **PCD** (*Kodak Photo CD*), **TIFF**, (*Tagged Image File Format*), **PNG** (*the new Compuserve Portable Network Graphics*), **PSD** (*PhotoShop 3.0*), **WPG** (*WordPerfect*), **WMF** (*Windows Metafile*), **PCX**, **CMP** (*LEAD 1BIT*), **ICA** (*IBM IOCA*), **MAC** (*MacPaint*), and **TGA** (*Truevision Targa*), etc..) you must register *Photo Icons* to obtain the latest registered version. The current registration fee is \$29. Please read Supported image file format for a complete list of all image file formats *Photo Icons* supports.

The capability to import images from TWAIN-compliant devices (scanners, digital cameras, frame grabbers, etc.) is also available for an additional \$14.

## Hardware/software requirements

In order to gain the most from *Photo Icons*, it is recommended that you run the software under color modes higher than 256 such as 32K or 64K color depth mode.

### Hardware Requirements

- Windows-based PCs.
- VGA board.
- Mouse or trackball.
- TWAIN-compliant scanner (optional.)
- Printer supported by Windows (optional.)

### Software Requirements

- Microsoft Windows 3.1/95/NT workstation.

*Photo Icons* was designed and tested under Windows 3.1, Windows 95, and Windows NT workstation on the following hardware:

- 1) 150 MHz PCI Pentium-based computer with 32 MB of RAM, and a 2 MB PCI Diamond Stealth VRAM (S3-968.)
- 2) IBM P5-133 with 32 MB of RAM and a 1MB PCI Diamond Stealth DRAM (S3-764).
- 3) AST Bravo LC 4/33s with 8MB of RAM and a 512K ATI video card.

*Photo Icons* has not been tested in other environments because I do not have all the time and resources in this rapidly changing computer world. Therefore, unless you have the above tested hardware and software I cannot guarantee that it will work on your system.

## Image format conversion

Select the image to be converted by single-clicking on its thumbnail, a red frame will appear around that image to indicate that it is selected. Then click on the *Image Format Converter* button on the toolbar and select a format to convert it to.

You can easily convert images from one format to another. *Photo Icons* supports about 40 different image formats including JPEG (**JPG**), Portable Network Graphics (**PNG**), Tagged Image File Format (**TIFF**), Targa (**TGA**), Windows Bitmap (**BMP**), OS/2 Bitmap (**OS/2 BMP**), Windows Metafile (**WMF**), Kodak PhotoCD (**PCD**), WordPerfect (**WPG**), **MPT**, IBM IOCA (**ICA**), **PSD**, **PCX**, **DCX**, PostScript Raster (**Encapsulated PostScript**), **CALS Raster**, MacPaint (**MAC**), Microsoft Paint (**MSP**), SUN Raster (**RAS**), Macintosh Pict (**PCT**), **LEAD CMP**, and **LEAD 1BIT**.

For a brief description of these formats, please read [Supported image file formats](#).

An set of icon processing tools is available in the *Icon Editor* for modifying icons.

### Import images from scanners, digital cameras, etc.

This feature allows you to build your photo-realistic icon library by scanning (24-bit) true color images from any devices which support the TWAIN industry standard for image acquisition.

1. Make sure your scanner is turned on and ready.
2. Click on the *Scanner* button on the toolbar.
3. Your scanners data source menu will appear.
4. Adjust the scan area and click on the *Scan* button.
5. Save the scanned image using your desired image format.

**NOTE:** Scanned images will not be saved without the TWAIN option.

## TWAIN standard

TWAIN is an acronym for **T**oolkit **W**ithout **A**n Interesting **N**ame and defines a standard software protocol and API for communication between software applications and image acquisition devices. Developed by a coalition of industry leaders *Aldus, Caere, Hewlett-Packard Company, Eastman Kodak, and Logitech* in the Spring 1992 and reviewed by 175 hardware vendors and software developers, TWAIN devices can include desktop scanners, hand scanners, digital cameras, frame grabbers, image databases or any other compliant source (as of version 1.5, the standard supports only the raster image data type.) The TWAIN specification allows applications written to it to work with any TWAIN compatible image acquisition device and conversely any compliant scanner, digital camera or video capture card to work with any TWAIN compliant application. Scanner manufacturers are even writing TWAIN software for models that were introduced prior to the standard being published.



## Customer support

If bugs were found and I could reproduce them on my systems, I usually fixed the bugs within the same day and sent the bug-fixed version to the users who took the time to report them first, next to all registered users, and then to other shareware sites later. My goal is to provide software as bug free as possible to my users.

Please let me know if you found any bugs, glitches, or send your comments, feedback to me on the internet at [\*\*doanc@netcom.com\*\*](mailto:doanc@netcom.com) or [\*\*102425.1613@compuserve.com\*\*](mailto:102425.1613@compuserve.com).

## Registration

For your convenience, a registration form is provided on line under *Help* on the menu bar. The registration fee is \$29. The registered version supports over 40 image file formats. A separate TWAIN module is also available for an additional \$14. The TWAIN option adds the image scanning capability to *Photo Icons*. As of this writing, I only accept money orders, cashiers checks, bank checks, or personal checks. Please fill in the registration form and mail it along with your payment to:

Chris Doan  
4891 Clairemont Mesa Blvd., #401  
San Diego, CA 92117

For checks or money orders drawn from a non-US bank, please add \$5.00 for bank service charge.

Please refrain from sending cash. But if you have to send cash, please also include a written order for my bookkeeping purposes.

Registered users will receive a temporary license file through internet e-mail (uuencoded or MIME-encoded). The license file will recognize you as a registered user and allow you full access to all *Photo Icons* features. Your permanent license file registered in your name (or your company name) and the latest version of *Photo Icons* will be in the mail the next business day.

Those of you have access to CompuServe, you can register *Photo Icons* on line directly with CompuServe and receive the registered version within 24 hours (SWREG #7437). The latest version of *Photo Icons* may be downloaded from WinAV forums icon/cursor apps library).

International users may transfer \$US 29 directly to my Bank of America account. There will be an additional processing fee of \$10 because thats how much BoA charges my account for Money Transfer Service. You will have to contact me by e-mail to obtain my account number for this type of payment.

A site license is required by a corporation, company, educational institution, or governmental agency for use of *Photo Icons* software on the total number of computers that will use the software.

Thank you for your interest in *Photo Icons*.

Chris Doan  
doanc@netcom.com  
102425.1613@compuserve.com  
San Diego, California  
June 1996

## Warranty/Refunds

1. The registered version of *Photo Icons* is guaranteed to deliver all the features listed in the Features section, if any of these features did not work as stated under the system hardware/software configurations mentioned in the Hardware & software requirements section, you may be entitled to a refund.
2. No refund will be given other than the condition stated in section 1.
3. Absolutely refund will be issued after 3 days from the date of purchase.

## Disclaimer

I, CHRISTOPHER C. DOAN, MAKE NO GUARANTEE THAT THIS SOFTWARE WILL FUNCTION FLAWLESSLY NOR WILL I TAKE ANY RESPONSIBILITY FOR DAMAGES INCURRED BY THE USER EITHER ACCIDENTALLY OR INTENTIONALLY THROUGH THE USE OF THIS SOFTWARE. THE SOFTWARE IS PROVIDED AS IS. IT IS SHAREWARE AND YOU MAY DISTRIBUTE IT AS SUCH PROVIDING YOU KEEP THE HELP FILE, THE PROGRAM FILE AND THE INTRODUCTORY TEXT FILE IN ORIGINAL INTACT CONDITION. THE PROGRAM MAY BE DISTRIBUTED IN SHAREWARE\FREWARE PACKAGES IN WHICH FEES COVER DUPLICATION/MEDIA COSTS. THIS PROGRAM MAY NOT BE SOLD COMMERCIALY OR PRIVATELY WITHOUT MY PERMISSION.

Use of this product for any period of time constitutes your acceptance of this agreement and subjects you to its contents.

## Printing images

If you are in full screen viewing mode.

1. Click *print* on the menu bar.
2. The image will be displayed in the preview window.
3. Set the left, top, width, height of the image (or use the default parameters).
4. Click on the ***Print*** button on the toolbar.

If you are in Image Browser mode:

1. Click on the ***Print*** button on the toolbar will send all the thumbnail images (32x32) in the current directory to the printer.

## Photo Icons supported image file formats

*Photo Icons* was developed using LEAD Technologies *LEADTOOLS VBX Professional*. Below is the list of image file formats which *Photo Icons* supports:

**ICO.** Microsoft Windows icon.

**LEAD.** This is the LEAD CMP compressed format for grayscale and color images.

**JFIF.** This is a JPEG File Interchange Format with full color spacing (YUV 4:4:4).

**LEAD1JFIF.** This is a JPEG File Interchange Format with YUV 4:1:1 color spacing, to produce a smaller JFIF file.

**LEAD2JFIF.** This is a JPEG File Interchange Format with YUV 4:2:2 color spacing, to produce the smallest JFIF file.

**JTIF.** This is a JPEG Tagged Interchange Format with full color spacing (YUV 4:4:4).

**LEAD1JTIF.** This is a JPEG Tagged Interchange Format with YUV 4:1:1 color spacing, to produce a smaller JTIF file.

**LEAD2JTIF.** This is a JPEG Tagged Interchange Format with YUV 4:2:2 color spacing, to produce the smallest JTIF file.

**TIFF.** This is a tag-based file format designed to promote universal interchanges of digital image data. Because TIFF files do not have a single way to store image data, there are many versions of TIFF. LEADTOOLS supports the most common TIFF formats.

**MPT.** This is a multi-page TIFF format that enables a file to contain more than one image. It is handled the same as a regular TIFF file, except for the multi-page feature.

**TIFF LZW.** These files use the Tagged Image File Format with LZW compression.

**TIFF CCITT.** These are compressed TIFF files that are commonly used for FAX transmission and document imaging.

**TIFF CCITT Group 3.** These are TIFF CCITT files in a format that is more advanced and more compressed than TIFF CCITT. LEADTOOLS supports both 1-dimension and 2-dimension variations of this format.

**TIFF CCITT Group 4.** These are TIFF CCITT files in a format that is more advanced and more compressed than TIFF CCITT Group 3.

**IOCA (ICA).** This is the Image Object Content Architecture developed by IBM. LEADTOOLS supports these files in an MO:DCA wrapper with embedded 1-bit CCITT Group 3 or Group 4 images.

**WinFAX Group 3.** This is a FAX format created by Delrina for Group 3 support.

**WinFAX Group 4.** This is a FAX format created by Delrina for Group 4 support.

**FAX Group 3.** This is a raw FAX format (without a header) for Group 3 support. LEADTOOLS supports both 1-dimension and 2-dimension variations of this format.

**FAX Group 4.** This is a raw FAX format (without a header) for Group 4 support.

**Truevision TGA (TARGA).** This is a file format created by Truevision Inc. LEADTOOLS supports all uncompressed and RLE compressed TGA file formats.

**PNG (Portable Network Graphics).** This is a replacement for the GIF format. It is a full-featured (non-LZW) compressed format intended for widespread use without legal restraints.

**PhotoShop 3.0 (PSD).** This is the format produced by the Adobe PhotoShop graphics editor.

**Windows Bitmap (BMP).** This is a file format created by Microsoft. Some BMP images are compressed with an RLE type compression.

**Windows Metafile (WMF).** These files are not bitmap based images. A Windows metafile consists of a collection of device independent functions that represents an image. When a program loads a metafile, these functions are executed to obtain the image.

**PCX.** This is a file format created by ZSoft. This format compresses its image data with the RLE type compression.

**DCX.** This is a multi-page PCX format that enables a file to contain more than one image. It is handled the same as a regular PCX file, except for the multi-page feature.

**PostScript Raster (Encapsulated PostScript).** These files are used primarily on PostScript printers. These printers usually offer more variety of fonts and higher resolution than standard laser printers. EPS files will work on any PostScript compatible printer and any end user application that supports placement of EPS files in its work space.

**OS/2 Bitmap (OS/2 BMP).** These are files created on an OS/2 operating system. LEADTOOLS supports both 1.x and 2.x formats.

**CALS Raster.** These are 1-bit CCITT Group 4 CALS raster files. CALS is a United States government standard.

**MacPaint (MAC).** These Macintosh Paint files are commonly used for monochrome clip art.

**GEM Image (IMG).** These files are native to the Graphical Environment Manager developed by Digital Research.

**Microsoft Paint (MSP).** These files from early versions of Windows are used for black-and-white drawings and clip art.

**WordPerfect (WPG).** These are WordPerfect raster files.

**SUN Raster (RAS).** These files are native to Sun UNIX platforms.

**Macintosh Pict (PCT).** These files, produced using Macintosh QuickDraw, are used in desktop publishing and imaging applications.

**LEAD 1BIT.** These are 1-bit LEAD compressed files.

**PCD.** These are Kodak PhotoCD files. These read-only files can contain multiple resolutions. You can specify which of the resolutions to read.

## Image format terminology

The terminology for image formats can be confusing because there are often several ways of describing the same format.

If an image is 24 bits per pixel, it is also called a 24-bit image, a true color image, or a 16M color image. Sixteen million is roughly the number of different colors that can be represented by 24 bits, where there are 8 bits for each of the red, green, and blue values. (A 32-bit image is a specialized true-color image used for an Alpha channel or CMYK color spacing.)

If an image is 16 bits per pixel, it is also called a 16-bit image, a hi-color image, or a 32K color image. Thirty-two thousand is roughly the number of different colors that can be represented by 16 bits, where there are 5 bits for each of the red, green, and blue values. (Devices that specify 64K color support are also referring to 16-bit images, but they are counting the left-over bit.) If an image is 8 bits per pixel, it is also called an 8-bit image or a 256-color image. Two hundred fifty-six is the number of different colors that can be achieved by using the image data as 8-bit indexes to an array of colors called a palette.

If an image is 4 bits per pixel, it is also called a 4-bit image or a 16-color image. Sixteen is the number of different colors that can be achieved by using the image data as 4-bit indexes to a palette. If an image is 1 bit per pixel, it is also called a 1-bit image, a black and white image, a 2-color image, or a bitonal image. Two is the number of different colors that can be achieved by using the image data as 1-bit indexes to a palette. The palette can contain colors other than black and white, although black and white are most common.

The same terminology is applied to video cards. For example, an 8-bit card is one that is capable of displaying 256 color.



## Extracting icons inside DLL/EXE files

1. Select *Show DLL/EXE only* under *Options*.
  2. Select a DLL or EXE file in the list box appearing in the lower left corner of the window
  3. Double-click on an icon
- or
- single click on an icon then click on the *Icon Extractor* button on the toolbar to extract only that icon

To extract all icons embedded inside that DLL or EXE file, select *Extract All Icons* under *Files*

## Screen capture

1. Click on the *Camera* button, a capture window will appear in the upper left or lower right corner of the screen (depending on its last position).
2. Click anywhere in the capture window **AND** hold down the left mouse button, then drag the tracking square over the target area to be captured.
3. Release the mouse button and press ENTER to capture the image and save it under the desired format.

### **Editing icons**

Single click on an icon ( a red frame will appear around that icon to indicate that its currently selected), then click on the *Icon Editor* button on the toolbar button or double-click on an icon to enter icon editing mode. Note that you can only edit icon, not any other format. *Photo Icons* was designed to edit icons only. To do image processing/enhancement on other formats, you need to use *Images Control*, a cousin of *Photo Icons*, which is available as a separate product. If you click on a thumbnail of an image other than icon, you will enlarge that image instead of going into the icon editing mode.

### Viewing images in full size

Simply double-click on any thumbnail of images other than icon will enlarge the image into its original size.

## Creating new icon

Simply click on the *New Icon* on the toolbar button to enter the icon editing mode.

## Problems

### **SYMPTOM**

Images loading really slow.

### **SOLUTION**

The current directory has many large image files which Photo Icons must load and display one after another. Depending on how fast your hard drive is, it takes a while to load and display multiple images. You may want to limit your image display to a specific files pattern such as \*.ICO or \*.BMP, this will significantly speed up the display. Simply select Show Only... under Options on the menu bar.

Note that some image formats (such as JPEG) require lots of CPU power to decompress the image. If this is the case, the only way to speed up display time is to upgrade to a faster CPU.

### **SYMPTOM**

Images dont have the right color or Windows background flashing on every image load.

### **SOLUTION**

Youre currently running in a low color depth mode (possibly 256 or less), please switch your video board to at least 32K color and try again (you may have to lower your resolution to gain a higher color depth if your dont have sufficient video RAM).

### **SYMPTOM**

Clicking on certain icons doesnt bring up that icon but another icon.

### **SOLUTION**

You may try to load a hi-color icon (such as 64K-color icon) while the system is in a lesser color depth mode (such as 256). Please switch to a higher color depth mode and try again.

### **SYMPTOM**

Nothing displays on the album.

### **SOLUTION**

There are 2 possibilities:

1. The current directory has no image files.
2. No file in the current directory matches the Files Pattern setting under Options.

Please change to a known directory with image files using the Change Directory button on the toolbar or select another files pattern.

### **SYMPTOM**

Out of memory error message and Photo Icons terminates.

### **SOLUTION**

This is a bogus Windows error message due to some incompatible Windows DLLs. I came across this message even on systems with 32K of RAM. As of this writing, I dont know what cause this so there is no solution at this time.

