

IconMaster

Version 1.2B

Icon Editing and Management
for
Windows 3.0 and 3.1

including support for
Norton Desktop for Windows 1.0 and 2.0

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Introduction

Sooner or later, every Windows' user encounters the need to manipulate icons. The need may be just to attach a favorite icon to a program or file, or to keep track of the many fancy icons acquired over time. The need may be to create personalized icons, to edit existing icons, or just to sort and manage multiple icons. Whatever the need, the tools provided with Windows will usually be found to be insufficient or at best inefficient.

Windows includes no icon editor or icon management facilities. The method of installing icons in the Program Manager by typing file names and then clicking sequentially through all of the icons in the file to make a selection is horribly awkward and inefficient.

Because of this lack of icon tools, and because of the wide need to manipulate and edit icons, many independent tools have become available, both shareware and commercial. In attempting to use many of these tools, I have found some very good ones, and some very poor ones. Unfortunately, even the good ones have limitations, or have a usage paradigm that does not appeal to me.

Even Norton Desktop for Windows, which is a great improvement over the File Manager and Program Manager that come with Windows, does not solve the icon management and editing problems. Its icon editor is rather feeble and it has no drag-and-drop icon replacement capability.

I began the development of IconMaster because I could not find an icon editing and management program that I really liked and that had all of the functionality that I was looking for. IconMaster was developed with several goals in mind:

- * Create a single integrated icon editing and management environment.
- * Develop a quality icon graphics editor, including transparent and inverse color attributes.
- * Make it easy to edit and enhance existing icons, including capturing screen images.
- * Make it possible to manage hundreds of icons while seeing both their names and the image of each icon.
- * Make it possible to use all of the icons a user may already have, i.e. read all of the most popular icon file formats.
- * Make it efficient to store, and fast to access large collections of icons.
- * Make it possible to install icons into the Program Manager and Norton Desktop without entering file names or clicking through multi-icon files.
- * Take advantage of Windows' graphical user interface and mouse by minimizing the need to type and by maximizing the use of the drag-and-drop paradigm.

This is the first production release of IconMaster, Version 1.0. There have been several previous beta releases. My thanks to all of the early users who reported bugs, made suggestions for improvements and new features, and especially to those who registered a beta version. This release includes many new features not contained in any prior beta version. Prior users may be interested in the history of changes listed at the end of this document.

IconMaster is neither public domain nor is it free. It is copyrighted software owned by the author. IconMaster is distributed as shareware, meaning that you may use it for a limited period of time without charge and you may make copies and distribute them, without charge, to others. Detailed license terms are at the end of this document. Please read them and abide by them. Detailed information on ordering IconMaster can be found in the file REGFORM.TXT and is also available from the Help-Order Form command. (Isn't it nice not to have to page through license terms at the beginning of the document?)

The shareware version of IconMaster is fully functional, nothing has been crippled. It will, however, occasionally remind you to register the program. The reminders will go away when you enter your registration number.

Features Summary

IconMaster has many features and capabilities, along with a few limitations. Each is covered in detail in this manual. In this section, the major features are listed to give you an idea of the capabilities of the current release.

IconMaster is an integrated multiple window application with two types of windows; the Edit window and the Preview windows. The Edit window provides a fully featured icon editor. No other icon editor provides as rich a set of features. Up to four simultaneous Preview windows allow viewing and managing icons from multiple directories and many types of icon library files.

With IconManager you can:

- * Create and edit icons
- * Read and write many different icon file formats
- * Edit icons within EXE files
- * Extract icons from EXE files
- * Capture screen images into icons
- * Install icons into the Program Manager and Norton Desktop using drag-and-drop
- * Sort icons into various directories using drag-and-drop
- * Enjoy the fastest and smallest icon file formats available

Some of the key features of IconMaster are:

Editor

- * Variable sized edit window
- * Special visual indication of transparent and inverse-transparent attributes
- * Display of actual sized icon, with true transparency, over selectable background color
- * Undo and Revert commands

- * Many useful and unique editing tools:
 - * Three brush sizes
 - * Hollow and filled rectangles and ellipses
 - * Area fill
 - * Recolor flood
 - * Horizontal and vertical mirror
- * Screen capture with magnified edit image for precise choice of image

Previewer/Manager

- * Read icons in .ICA, .ICL, .IL, .NIL, and .IML library formats
- * Write icons in individual .ICO form and in compacted .IML library form
- * Read, write, and extract icons from/to .EXE files
- * Read and write ZIPPed files automatically
- * View over 100 icons in a window at once, depending upon CRT resolution
- * Open up to four Preview windows at a time
- * Displayed icons labeled with their individual names
- * Display over user-selected background color
- * Delete, rename, and select for editing directly from the multi-icon display
- * Drag-and-drop icons between Preview windows and to the Edit window or Program Manager

General Features

- * Totally unique ability to automatically install icons into Program Manager and Norton Desktop groups
- * Remembered window size, position, and colors
- * Full protection from accidental deletion of icons and edits
- * Create Directory button in SaveAs dialogs
- * Command line and double-click on icon file launching

Limitations

- * 32x32 pixel 16-color icons only
- * Maximum of 400 icons per Preview window

Installation

IconMaster consists of four files:

ICONMSTR.EXE	The executable program
ICONMSTR.HLP	The on-line help file
IMZIP.PIF and IMUNZIP.PIF	Launch files for ZIP processing

Installation, or upgrading from a prior version, is as simple as can be:

- 1) Copy the two ICONMSTR files to a directory of your choice.
- 2) If you wish to use IconMaster's ZIP and IMZ compressed file formats:
 - Copy the files two PIF files to your Windows directory.
 - Be sure that you have the shareware programs PKZIP and PKUNZIP somewhere in your PATH.
- 3) If you had a previous version, you may delete the file IMASTER.INI from your windows directory. A new ICONMSTR.INI will automatically be created.

- 4) If you previously registered IconMaster, you will need to re-enter your registration code in the Help-Register command dialog box.

As with other programs, you will probably want to drag ICONMSTR.EXE from the File Manager to a Group in the Program Manager, or the equivalent in Norton Desktop, so that you can execute it by double-clicking it's icon.

Invocation

When invoked by double-clicking the EXE file, or with RUN without a file name argument, IconMaster starts up with an empty Preview window.

IconMaster accepts a single command line argument giving the name of a file, without wildcards, with optional path. If the file name given ends in .ICO, the icon will be opened into theEdit window. If the file name ends in .IML, IMZ, or ZIP, the library will be opened into a Preview window. Any other suffix will cause the argument to be ignored and IconMaster will open an empty Preview window.

If you use Associate in the File Manager or NDW to assign ICONMSTR.EXE as the program for *.ICO files, you can invoke IconMaster to edit an icon file by simply double-clicking on the icon file. You can also Associate IconMaster with *.IML, *.IMZ, and with *.ZIP to double click open libraries. (Although you probably won't want to Associate IconMaster with *.ZIP if you use ZIP files for anything other than icon libraries.)

Users Guide

This section gives a complete overview of IconMaster operation. With this information you should be able to use the program effectively. Other sections give additional background and technical information.

Overview

IconMaster is an extremely flexible program. You can use it in many ways. Hopefully, it is intuitive enough to not need much training or require constant reference to the documentation.

On-line help is available from the HELP menu and supplies a very complete version of the basic information in this document.

Preview Window

The primary vehicle for managing icons in IconMaster is the Preview window. A Preview window is analogous to a files window in the File Manager, except that you can see all of the actual icons along with their file names. Up to four separate Preview windows can be open at one time. You can drag-and-drop icons between Preview windows just like you drag files in the File Manager. You can also drag icons into the Program Manager or Norton Desktop (Install) to replace whatever icon was previously used for a program or file. Double-clicking on an icon in a Preview window opens the icon for editing in the Edit window.

There are two types of sources for Preview icons; multiple individual ICO files in a directory, and the multiple icons inside an EXE file or one of the many icon library file types. The File-Open command dialog contains radio buttons to allow you to specify the type of file(s) to be opened. If ICO is selected, the dialog takes a path and a file specification with wildcards. It opens all of the individual ICO files in the directory that match the wildcard specification. If any other format is selected, the dialog takes the name of a single file and opens all of the icons contained in that file.

Once you have opened some icons into several Preview windows all kinds of operations become possible. Sort icons into different directories by dragging them where you want them. Assemble libraries of various related icons. You can even change the icon that a program uses when it minimizes by dragging a new icon from one Preview window onto the old icon in a Preview window of the EXE file.

The File-New Scratch command opens a blank scratch sheet in the Preview Window. This is also the default when a new Preview window is opened. A scratch sheet allows you to drag together icons from several other Preview windows and then to later save them together in ICO, IML, IMZ, or ZIP form.

Edit Window

The Edit window is where all icon creation and changing takes place. If IconMaster is invoked by clicking on an ICO file, it starts up with an Edit window. Double clicking on an icon in a Preview window also invokes the Edit window. The

edit window works on a single ICO file icon or on one icon from within an EXE or library file.

The Edit window Open command can select an ICO file for editing. EXE and library icons can only be selected from a Preview window display since these files often contain multiple icons and you need to see them all to make a selection.

Window Management

Each IconMaster window is independent and can be opened, minimized, and closed separately. Double clicking the System Menu box, or selecting Close from the System Menu, closes only the one window. Each window's File menu has an Exit command that will close all of the open IconMaster windows at once.

Icon Styles

Microsoft defines four different styles of icons, for various displays. The only one widely used, and the only one handled by IconMaster, is the 32 X 32 pixel 16-color variety.

Some icons, both in ICO and EXE files, actually consist of more than one style for the icon. If you attempt to open an ICO file with multiple styles for editing, you will receive a warning and IconMaster will proceed to open just the 32 X 32 16-color style under the name "Untitled". This helps avoid overwriting the original multiple-style file with a single-style from IconMaster.

If an EXE file contains multiple styles for an icon, only the 32 X 32 16-color style icon will be opened. In the preview window, multiple-style ICO icons are shown with upper case names to distinguish them.

File Types

IconMaster supports several different types of files that contain icons. The following sections describe the various formats and their usage. More information can be found in the technical notes at the end of the manual.

Fully supported file types (create, read, and write):

- .ICO** ICoN files
The Microsoft standard file format for a single icon.
- .IML** IconMaster Library file
An IconMaster proprietary multiple-icon file format that includes each icon's name; very small and very fast access.
- .IMZ** IconMaster IML ZIP file
A single IML library file compressed; ultra small but fairly slow to open and close since it must be unZIPped and reZIPped.
- .ZIP** ZIP archives of multiple .ICO files
A very compact way to save many .ICO icons at once, but quite slow to open and close since individual icon files must first be

unZIPped and any that change must be reZIPped.
(Any files other than *.ICO in a ZIP will be left undisturbed by
IconMaster.)

Read - modify supported file types (no file creation):

- .EXE** EXEcutable files
Standard Windows program files.
- .DLL** Dynamic Link Library files
Standard Windows .DLL files, similar to .EXE files.

Read - only supported file types (no creation or writing):

- .ICA** ICon Archive
A proprietary format used by Icon Manager. Similar to .IML
format but without icon names.
- .ICL** ICon Library
A proprietary format used by Icon Manager. Similar to a .EXE file
but without executable code or icon names.
- .IL** Icon Library
A proprietary format used by Icon Designer. Similar to a .EXE file
but without executable code or icon names.
- .NIL** Norton Icon Library
A proprietary format used by Norton Desktop. Similar to a .EXE
file but without executable code or icon names.

File Type Conversion

You can convert icons from one file format to another by using the Preview window's File-SaveAs command and selecting another save format. You can also convert individual icons to an ICO file by using the Preview window's Icon-CopyTo and Icon-MoveTo commands.

If you encounter file formats other than those directly supported, try opening them as either EXE, ICL, or ICA files. In all likelihood they will match one of these.

Icon Usage

There is really only one reason to manipulate icons, to set up your desktop appearance the way you want it to be. That means changing the icons displayed in the Program Manager and Norton Desktop and changing the icons that programs display when they are minimized. To do so you need to understand how icons are used.

The Program Manger and Norton Desktop can only read icons form ICO and EXE files, and from DLL resource files that resemble EXE files. When you install an icon into the Program Manager or Norton Desktop, it makes itself a local copy for speed. However, ***you must keep the readable form around, in the same place it was originally read from.*** The icon will be re-read anytime you

change screen resolutions. And, if it can not be found, your icon assignment will be lost and the icon assignment will revert to the default! The Program Manager also re-reads the icon any time you make a change to *any* entry in the Properties dialog.

Normally, when you want to install an icon into the Program Manager or Norton Desktop you use the Properties and Change Icon dialogs. You must enter the full path name of the file containing the icon you want to use. If the icon resides in an EXE or Resource file, you must also click sequentially through all of the icons in the file to find the one you want. IconManager provides a unique Install command, as well as a Drag-and-Drop capability, for installing icons that eliminates the need to do all of this typing and clicking.

The icon a Windows program uses when it is minimized is contained within its EXE, or a related DLL, file. You can change it by simply loading the EXE file into a Preview window and dragging a new icon onto the old one. CAUTION: changing the icon of a program while it is running is not recommended. It could cause the program to crash!

Note that the icon that an EXE file uses when it is minimized is usually the first icon shown for the file in the Preview window, i.e. upper left corner of the window, but not always. Check the icons displayed against the icon the program actually displays when it is minimized.

Windows 3.0 provides no means to change the icon displayed by minimized DOS programs. You could go into the Windows file and change its DOS icon, but then all DOS programs would still minimize to the same icon. There are, however, several shareware programs, such as NODOS and ICON-FIXER that solve this problem. Windows 3.1 solves this problem and will automatically minimize to the same icon that you assign in Program Manager or in NDW.

File Type Strategies

With the many types of icon files available and supported by IconMaster, the question always arises "Which formats should I use and when?" The answer depends upon the relative priority that you place on ease of use, disk space, file open and close speed, and what you intend to do with your icons.

The simplest way to manage icons is to keep them all as separate ICO files. The ICO format is the *lingua franca* of icons, everyone can read and write them and they can be attached to programs in the Program Manager and Norton Desktop. You can easily sort them into different directories to keep track of them.

The problem with ICO files is that they take up an enormous amount of disk space. Although a single ICO file contains only 766 bytes, disk organization into sectors and clusters means that, depending on disk size, an ICO file will use up from 1K to 4K of disk, plus the space for the directory entries. Those 500 little icons you collected could well use up over two megabytes of disk space!

One way to combat the space used by lots of individual ICO files is to ZIP them. A ZIP file of ICOs is dramatically smaller than all of the individual files (about one fifth the size). Most icons found on bulletin boards will be ZIPs of individual ICOs.

All other icon programs require you to manually unZIP these files before operating on them. IconMaster is unique in its ability to automatically unZIP and then reZIP these files. This makes it quite painless to keep your icons ZIPped at all times. You do pay two penalties. First, it takes time to unZIP and reZIP. Second, you can not directly install icons into the Program Manager or Norton Desktop from a ZIP, you must first save the icon to be installed as an ICO file (IconManager will, however, do this for you during the install process!).

Various icon programs define their own proprietary icon library formats. They do this primarily to reduce disk space and to increase speed. There are two general classes of icon library formats; Resource files such as ICL, IL, and NIL, and compacted files such as ICA and IML. Resource files are reduced forms of EXE files. They can be used directly by the Program Manager, but they are much larger than compacted files. Compacted files are quite small and very fast, but like ZIP files require that you extract and save the icons you want to use in some other format.

One limitation of virtually all compacted formats, except IconMaster's IML format, is that they do not allow individual icons to carry names. Personally, I find this to be a critical deficiency since I want to name my icons for later reference.

IconMaster's IML format retains the names of all icons and is as small or smaller than any other program's compacted library, and it is very fast. Faster by far than individual ICO files. An IML file will typically be one third the size of individual ICO files and about twice the size of a ZIP file.

Even though IML format is very small, IconMaster goes one step further by including the IMZ format which is a ZIP of an IML library. IMZ is absolutely the smallest icon file format available. But, you will pay a speed penalty to ZIP and unZIP each time you use the file. The IMZ speed penalty, however, is much smaller than the ZIP speed penalty. An IMZ file will typically be less than one tenth the size of individual ICO files and one half the size of a ZIP file.

The Background and Technical Details section at the end of this document gives some actual examples of file sizes.

Recommended Strategies

The "best" strategy for ease of use, speed, and disk space is to maintain all of your icons in either IML or IMZ format; IML for speed, IMZ for absolute minimum disk space. You might want to get the best of both by using IML files while you are actively managing your icons and then save them as IMZ files when you are not apt to use them for a while.

It is recommended that you sort your icons by topic so that no more than a few hundred are in each file. More than that makes it quite hard to find the one you want. You should also make a used icons directory to keep copies of any icons that are currently Installed in the ProgramManager or Norton Desktop.

If you often share icons with others, and do not know what formats they can handle, then you should modify the above strategy and use ICO and ZIP files [and immediately tell them to get IconMaster!]. These are the most widely used formats. Although ICOs are very big, they are reasonably fast. ZIPs are quite

small, but also quite slow.

Preview

The Preview display consists of rows of actual-sized icons on a selectable color background along with the name of each icon. The number of icons shown at once is determined by the size of the window and the resolution of the display. On a 1024 X 768 display you can see upwards of 150 icons at once! If all of the icons won't fit in the window, a scroll bar is shown in the normal fashion. The icon spacing is determined automatically so that icon names will not overlap unless they contain a large number of very wide characters (i.e. WWWWWWWW.ICO will likely overlap adjacent icon names).

Icon files can be opened into a Preview window either by double-clicking on an ICO, IML, or IMZ file in the File Manager or by using the File-Open command in a Preview window. If IconMaster is invoked without a file argument it opens to a file of type Scratch.

The path and name of the open file is displayed in the window header. If the path is too long to fit, it is shortened and begins with ellipses (...). Any file type not fully supported, e.g. ICA, IL, is opened into a Scratch window. Scratch windows prompt for saving before any operation that might lose their contents.

All Preview icon manipulation operations are performed only on the selected icon. The selected icon is indicated by an outline square around the icon and its name. An icon is selected by clicking on it with the left mouse button. Icon menu commands, such as Delete and Rename, apply only to the selected icon.

Double clicking an icon selects it and automatically switches to the Edit window and loads the edit image with the selected icon.

Preview operation differs slightly depending upon the format of the icon file opened. All icons, except EXEs, are shown in alphabetical order. EXE icons are shown in the order in which they appear in the EXE file. This is the order in which they appear when you do NEXT ICON in the Program Manager's Properties - Change Icon dialog.

The names of icons are shown in lower case. Any icon with additional icon styles, beyond the normal 32 X 32 16 color style, is shown with an upper case name to distinguish it. When selected for editing, multiple-style icons will be opened as Untitled so that the original file can not be inadvertently overwritten. Note that IconMaster will not show any icon that does not have a 32 X 32 16-color style.

EXE icons can be edited and copied and changed (over-written), but the nature of an executable file restricts some of the other operations. You can not add icons to an EXE file or delete an icon from an EXE file. The names shown for EXE icons are those names found in the EXE file. Often these names are just integers. You can not rename an icon inside an EXE file.

When you Delete an icon, the display continues to show the deleted icon with the name "~DELETED". At that point you still have the option of recovering the deleted icon by Renaming it or Copying it.. The deleted icon will remain in the

display until you open a new file or save the file (when Refreshing, ~DELETED icons go to the end of the window except for ICO and ZIP in which case the ~DELETED icons are lost).

IML file closing speed is optimized by not actually removing deleted icons from the IML library. An icon deleted from an IML library is simply marked ~DELETED, but it still exists in the library and will show up the next time you open the library. To compact the library and completely remove ~DELETED icon, do File-SaveAs to the same file name.

Dragging and Dropping

Preview windows provide for drag-and-drop similar to the Program Manager and File Manager and Norton Desktop. Thus, you can do Move and Copy between Preview windows using the mouse. You can also Edit an icon by dragging it to the Edit window. You can even Install an icon by dragging it to the Program Manager or Norton Desktop. Most icon manipulations are easier using drag-and-drop than using menu commands.

In any Preview window, if you select an icon with the mouse and move the cursor while holding down the left mouse button the cursor will turn into a moving van. As you move the moving van cursor to different points on the screen, a letter will appear on the side of the van indicating the drop operation (what happens if you release the mouse button) that is allowed at that point:

- | | |
|--------------------|--|
| No Letter | The cursor is in the original window.
Nothing happens if dropped. |
| C - Copy | The cursor is in another Preview window.
Either the Shift or Control Key is depressed, or the source is an EXE in which case Copy is forced.
The selected source icon will be Copied into the target window. |
| E - Edit | The cursor is in the Edit window.
The selected icon will be opened into the Edit window. |
| I - Install | The cursor is in the Program Manager or Norton Desktop.
The selected icon will be Installed and replace the previously installed icon. |
| M - Move | The cursor is in another Preview window.
Neither the Shift or Control Key is depressed and the source is not an EXE.
The selected source icon will be Moved into the target window. |
| X | The cursor is over something else.
Nothing happens and a Beep warning is given. |

Normally, when you drag from one Preview window into another Preview window, the cursor indicator is an M and the selected icon in the original window will be Moved to the Preview window in which you released the mouse button. The

selected icon in the source window will be deleted and its name in the display changed to ~DELETED! However, since EXE icons can not be deleted, a drag *from* an EXE Preview window will always be done as a Copy.

If you hold down either Shift or Control while dragging, the cursor indicator will change to a C and the selected icon will be Copied instead of Moved. Dragging to the Edit window, the Program Manager, and Norton Desktop windows is independent of Shift and Control and never deletes the icon in the original window.

When dragging into an ICO or ZIP Preview window, it doesn't matter where in the target window you release the mouse button. That is, a Move or a Copy *adds* the dragged icon to the target window independent of where the mouse is released in the target window.

When dragging into an EXE Preview window, the behavior is somewhat different. Since icons can not be added to EXE files, they can only be *replaced*, the cursor indicates C only when actually on an icon. As you drag across the target window you will see the selected icon in the target window change. If you release the mouse while on top of a target window icon you will *replace* it! If not on top of an icon no action is taken.

When dragging into an IML, IMZ, or Scratch Preview window, the behavior is somewhat more flexible, and complex. You can either *replace* an icon or *append* an icon to the file. As you drag across the target window you will see the selected icon in the target window change. If you release the mouse while on top of a target window icon you will *replace* it! However, a confirmation dialog will be give first so that you can force an append instead. If you are in the target window but not on top of an icon, including in the window caption and menu areas, you will *append* the icon to the window!

Dragging to the Edit window causes the selected icon to be placed into the Edit Image for editing; exactly like the Icon-Edit command.

Dragging to the Program Manager or Norton Desktop causes the selected icon to be Installed, exactly like the Icon-Install command. Note that the selected icon replaces the *last icon selected* in the Program Manager or Norton Desktop before the drag started, or the icon selected during the Install Dialog box, ***not the icon over which you release the mouse button.***

In Program Manager you can use Install to replace icons that represent files and programs in group windows. You can not use Install to replace the common icon that Windows uses in the main window to indicate groups.

In Norton Desktop you can use Install to replace the icons in Quick Access windows that represent groups, files, and programs. You can not use Install to replace button or drive icons.

Note that if both the Program Manager and Norton Desktop are running, the install will take place into Norton Desktop even if you released the drag in a Program Manager window. This means you can only install into the Program Manager if Norton Desktop is not running at all.

If the mouse button is released any place other than in another Preview window or the Edit window or the Program Manager or a Norton Desktop Quick Access Group window, nothing happens except a beep.

Under most circumstances you can drag a ~DELETED icon just as though it had not been deleted. Wherever this is not possible, you will be asked to save the ~DELETED icon first.

Multiple Instances Note: IconManager allows multiple instances to be invoked simultaneously. However, you can only drag between Preview windows of the same instance.

Preview Menus

In Preview mode the following menus appear:

<u>F</u>ile Menu	Commands to select icons to display
<u>N</u>ew Scratch	Make a new, empty, scratch file and display it.
<u>O</u>pen...	Select file(s) to display.
<u>R</u>efresh	Re-read icons from disk.
<u>S</u>ave <u>A</u>s...	Save all icons to a new file name or format.
<u>E</u>xit	Close all windows and Quit IconMaster.
<u>I</u>con Menu	Commands to manipulate the selected icon
<u>R</u>e-Name	Change name of selected icon.
<u>C</u>opy to...	Copy selected icon to a new ICO path and filename.
<u>M</u>ove to...	Move selected icon to a new ICO path and filename.
<u>D</u>elete	Delete selected icon.
<u>E</u>dit	Switch to Edit window and edit the currently selected Preview icon.
<u>I</u>nstall	Automatically replace an icon in a Program Manager or Norton Desktop group.
<u>B</u>kgrnd Menu	Set the color background for the window
Sixteen Color Rectangles	
<u>W</u>indows Menu	Activate a window
<u>C</u>ascade	Cascade all IconMaster windows.

Tile	Tile all IconMaster Windows.
New <u>P</u>review	Open a new Preview window.
<u>E</u>dit Window	Activate the Edit window.
1: <i>name</i>	Activate an already open Preview window.
2: <i>name</i>	(Will not show if not open)
3: <i>name</i>	(Current window is grayed)
4: <i>name</i>	

Help Menu

<u>H</u>elp	On-line help.
About IconMaster...	Revision and copyright notice.
Register...	Registration information. (Does not appear after registration)
Order Form...	Opens the file REGFORM.TXT into the Notepad editor so that orders can be entered and printed.

The CopyTo and MoveTo commands invoke dialog boxes similar to SaveAs in the Edit window. These dialogs include a unique Create Directory button. This means that as you are sorting your icons you can create new directories on the fly without going to the File Manager.

Preview Keys

The following keys are active when in the Preview window:

Delete	Delete selected icon from disk (Same as Icon-Delete command)
Up, Down, Left, Right	Move the icon selection (Will scroll the display if necessary)

When all icons will not fit on the screen at once, a scroll bar appears and the following keys are active:

PageUp, PageDown	Scroll the icon display a full screen
Home, End	Scroll the display to show first (last) icon.

Note that scrolling does not change the selected icon, so the selected icon may be off screen.

Preview Details

The File-Fresh command re-reads the current icons from disk. Any deleted ICO icons will thus disappear. However, ~DELETED icons in other formats will simply be re-alphabetized. Any Renamed icons will be shown in alphabetical order.

Preview can read up to a maximum of 400 icons. If there are more, a warning will be given and the first 400 icons encountered will be shown.

Replacing EXE Icons - CAUTION

When you drag an icon to a Preview window that contains icons from an EXE file, or when you Save an edit of an EXE icon, you are writing into the middle of a program file. While we have never seen a program damaged in this process, with all of the file format variations around it is always possible. Therefore, **ALWAYS** make a **backup** copy of an executable file before you change any of its icons.

Windows plays fast and loose with the file system and file caching. Therefore, **do not change icons in a program file while the program is executing**. This is particularly true for the Program Manager - it will almost certainly **CRASH!** To change Program Manager icons; change the icons in a copy, exit Windows and rename the copy to the original name and then restart Windows.

Install Command

Install is a feature totally unique to IconMaster. It automates the selection of icons for files and programs in Program Manager groups and Norton Desktop. No more typing icon path and file names into the Properties-Select Icon dialog box! No more clicking on Next Icon! Just select Install or drag an icon to the Program Manager window or to a Norton Quick Access Group window. A dialog box reminds you to select the icon to be replaced in the Program Manager or Norton Desktop and then press OK. That's it!

You can either select an icon to be replaced in the Program Manager or Norton Desktop before selecting Install or while the reminder dialog is displayed. Note that when you select an icon in Program Manager or Norton Desktop its name is highlighted, BUT the highlight disappears when the Program Manager is no longer active. This is OK. Program Manager or Norton Desktop still remembers which icon was selected and it will be replaced just fine. In fact, it will be replaced correctly even if Program Manager, but NOT a Norton Group, is minimized during the Install.

During the Install process you will see Program Manager or Norton Desktop become active, the Properties and Icon dialogs open, and the new icon name get filled into the appropriate edit box -- all automatically. IconMaster is selecting the appropriate commands and doing all of the typing for you.

Note that you can replace icons in Program Manager groups, but you can not replace the icon that Program Manager uses to show groups themselves. That icon is inside the PROGMAN.EXE file and is common to all groups.

A word about Norton Icon installation: Norton has several kinds of icons on the "desktop"; group and file icons in Quick Access group windows, programs or files directly on the desktop, tool buttons, and drive icons. Only the icons in Quick Access group windows can be installed directly from IconMaster- these are the

only ones which can be highlighted and then use the Properties command. You can change the icons for programs and files on the desktop by first dragging them into a group window, changing the icon, and then dragging them back out.

Reminder: Since Program Manager reads its new icons from disk, you need to save any edits before doing Install. A prompt will remind you.

[INSTALL works by faking the proper commands to the Program Manager or Norton Desktop to make it think that you are doing a normal install from the keyboard. The reason that you can not select a specific Program Manager or Norton Desktop item to replace as part of the drag operation is that I haven't figured out how to make either program change its selection and neither documents its drag-and-drop internal protocol. If you want programs that work better and more smoothly together write to Microsoft and to Symantec and tell them to publish their interfaces.]

Edit

The Editor window provides complete icon editing capabilities. It can be invoked in several ways:

Starting IconMaster with the Run command with an ICO file name given as the argument. e.g. IconMaster myicon.ico

Double clicking on an ICO file in the File Manager or Program Manager or Norton Desktop (if *.ICO has been Associated with IconMaster).

Selecting Icon-Edit or double clicking on an icon in a Preview window.

Editing is very simple. Start by either Opening an existing ICO file or begin from scratch with a File-New command. (See the Preview discussion for other ways to get an icon to edit.) Select a color for each mouse button by clicking in the palette. Select a tool from the Tools palette. Draw by clicking or click-dragging either of the mouse buttons in the Edit Image or by using the arrow keys along with Shift or Control. Use the arrow keys for fine control over drawing. Use large brush sizes to quickly draw large areas.

When done, Save the file. If the file was Untitled, or if you use SaveAs, you will be asked for a new file name.

Editor Display

The Edit window consists of five sections. When IconMaster is first started, its windows will be sized for optimal editing. You can resize the Edit window and reposition it as with other Windows windows. IconMaster will remember the window's last size and position and will automatically use it the next time it is started.

Edit Image-

The edit image shows an enlarged 32X32 pixel icon and is used for all editing. The edit image does not have a normal background color. Instead, a blank, i.e. transparent, background is shown as black with a single white dot at the center of each icon pixel. This display helps to distinguish transparent areas, black with white dot, and inverse-transparent areas, white with black dot, from regular colors. It is also helpful in identifying the size of individual icon pixels. The background of the edit image does not change colors; think of transparent and inverse transparent as special "colors".

Sample Image -

A sample of the icon, at normal size, is shown to the right of the edit image. A colored background is shown behind and around the icon sample, The default background color is light gray. The background color can be changed using the Bkgrnd menu. The sample image is not editable directly. Its contents always follow the edits performed in the edit image.

Tools Palette -

Below the sample image is a palette for selecting drawing tools. The selected tool is indicated by appearing to be depressed. The tools are described in a later section.

Color Palette -

A palette of the sixteen standard colors plus the special transparent and inverse-transparent 'colors' is shown below the edit window.

Mouse Colors -

Two colored rectangles below the color palette show the currently selected colors for the left and right mouse buttons. The initial default is black for the left button and white for the right button. Any color can be assigned to either mouse button by simply clicking the button on the desired color in the color palette.

Edit Window Menus

The following menus appear in the Edit window:

<u>F</u>ile Menu	Commands for individual icon files and capturing icons
<u>N</u>ew	Creates a new untitled icon for editing
<u>O</u>pen...	Open an existing ICO file
<u>S</u>ave	Save current edits (ICO or EXE)
<u>S</u>ave<u>A</u>s...	Save current edits with a new file name (as an ICO file)
<u>R</u>evert	Discard changes made and re-Open the previously opened icon

<u>C</u>apture	Capture an icon image from the screen
<u>I</u>nstall	Automatically replace an icon in a Program Manager or Norton Desktop group
<u>E</u>xit	Quit IconMaster
<u>E</u>dit Menu	Commands for altering the icon image being edited
<u>U</u>ndo	Restore the image as it was before the last edit
<u>H</u>oriz Flip	Mirror the icon about the vertical center-line
<u>V</u>ert Flip	Mirror the icon about the horizontal center-line
<u>C</u>lear	Erase the Edit Image to all transparent
<u>B</u>kgrnd Menu	Set the color background for the sample image

Sixteen Color Rectangles

<u>W</u>indows Menu	Activate a window
<u>N</u>ew Preview	Open a new Preview window
1: <i>name</i>	Activate an already open Preview window. (Will not show if not open.)
2: <i>name</i>	
3: <i>name</i>	
4: <i>name</i>	

Help Menu

<u>H</u>elp	On-line help
<u>A</u>bout IconMaster...	Revision and copyright notice
<u>O</u>rders Form...	Brings up the file REGFORM.TXT in the Notepad editor to fill in and print.
<u>R</u>egister...	Registration information (Does not appear after registration)

The Open and SaveAs commands invoke normal file dialog boxes with one special difference. A Create Directory button is present in the SaveAs dialog box. This allows you to make a new directory, on the fly, when you discover that the place you really want to save a file does not yet exist. When you supply Create Directory with a name, the directory is created under the current directory shown in the dialog and it is then made the current directory.

Editing Tools

The tools palette contains ten different tools plus a Capture button. A tool is selected by clicking the left mouse button on it. The selected tool appears depressed. The Small Brush is the default. All editing takes place in the edit image.

When using the tools to draw, either mouse button may be used. The color drawn will be the appropriate one shown in the mouse color rectangles. The last individual draw can always be Undone.

Figures (line, rectangles, and ellipses) are drawn by pressing a mouse button at the desired starting point, dragging the mouse while holding the button down, and then releasing the mouse button at the desired ending point.

During dragging a phantom figure shows where the actual figure will be drawn when the button is released. For lines, the phantom line is shown through the center of all pixels that will be colored. For rectangles and ellipses, the phantom figure is shown as the outside boundary of the figure that will be drawn. When a figure tool is selected, the cursor in the edit window will be a cross.

The ten tools are:

Brushes

The three brush tools are used to draw pixels in the edit image. The sizes are 1X1, 3X3, and 5X5 pixels. Clicking on a pixel in the edit image draws a square the size of the brush. Dragging the mouse while holding down a button draws continuously.

Line

The line tool draws a straight line one pixel wide.

Rectangles

The two rectangle tools draw hollow and filled rectangles. The hollow rectangle is one pixel thick and the inside of the rectangle is not altered. The filled rectangle is completely colored in the color of the mouse button used.

Ellipses

The two ellipse tools draw ellipses, and circles, in a manner similar to the rectangle tools.

Pour (Fill)

The pouring tool, paint can, pours a new color over the contiguous area having the same color as the starting point selected. Other, non-contiguous occurrences of the color are not changed. In other words, the color at the selected point is read and replaced with the appropriate mouse color and all adjacent points having the same original color are similarly painted until any other color is encountered.

Roller (Re-Color)

The paint roller tool re-colors all occurrences of the color at the selection point to the new mouse button color. This is similar to Pour except that *all* occurrences of the color are changed, not just a

contiguous area.

Edit Window Keys

The following editor keys can be used in lieu of mouse and menu actions:

Escape	When using a brush tool, behaves as a third mouse button with Transparent color selected
Space or Enter	Draw with the Left Button color (Same as Left Button)
Space or Enter plus Control	Draw with the Right Button color (Same as Right Button)
Up, Down, Left, Right	Move one pixel
Up, Down, Left, Right plus Shift	Draw with the Left Button color while moving
Up, Down, Left, Right plus Control	Draw with the Right Button color while moving

Undoing and Reverting

All edit operations, including Revert and Flip and Clear, can be Undone; but only one level. Drawing a figure or drag drawing a continuous freehand figure counts as one drawing operation.

Because Revert is Undoable, you can swap back and forth between the original image and the current edit image any number of times. This is convenient when you want to compare the current edited version to the original.

Whenever you do a Save or SaveAs, the revert image is updated to match the saved version. This means that once you save edits for an existing file the prior version is gone forever.

Capture Command - Camera Button

The Capture command allows you to capture any icon-sized portion of the display and turn it into an icon. When you select Capture, the cursor changes to an outline box exactly the size of an icon. Whatever is inside the cursor box is displayed magnified in the Edit Image. Just move the box cursor over the portion of the screen that you want to capture and then click the left mouse button or hit Space or Enter. In addition to moving the box-cursor with the mouse, you can use the arrow keys to move in one pixel increments to get just the piece of the screen that you want.

Note that the background of a captured icon will not initially be transparent. It will be whatever actual color was captured. You must edit the captured image if you want any part of it to be transparent. This is very simple using either the Pour or Roller tool.

Here is a little trick you can do with capture. If you have an icon that is not well centered in the square, use capture to grab it from the Sample Image. Using the arrow keys you can move the icon around one pixel at a time and center it perfectly. After capturing the image, just clean up the background a little.

Background Information

This section provides additional information that may be helpful in using IconMaster.

IMZ Information - IMPORTANT

An IMZ file is actually a ZIP of an IML that is automatically created by IconMaster. The name of the IMZ matches the name of the IML file that it contains. **YOU SHOULD NEVER RENAME AN IMZ FILE!** If you do, the IMZ name will not match the IML contained in it and IconMaster will not be able to find the icons. If you need to change the name of an IMZ file, Open the IMZ in IconMaster and then SaveAs as an IMZ with a new name, then delete the original IMZ.

If you find that you have inadvertently renamed an IMZ and can not remember its original name to rename it back, all is not lost. Change the extension of the IMZ file to ZIP and unzip it manually using PKUNZIP. The result will be an IML that you can open and then save as an IMZ.

Saved State and Changing Screen Resolutions

IconMaster saves information about its operation in the file ICONMSTR.INI in your windows directory. The saved information is the size and location of each window and the window's background color.

If you change the video driver screen resolution, it is likely that the next time you open IconMaster the windows will be in undesirable positions, or even off the screen. No problem, just do the Windows-Tile command and all open windows will be resized and repositioned to match your new resolution. You can then move them as you like.

Optimizing Performance

IconMaster uses some fairly sophisticated techniques to maximize its performance and to prevent Windows from crashing (as it tends to do quite often if resources are heavily used). Understanding these techniques will help you to optimize IconMaster's performance.

IconMaster attempts to keep as many icons in memory as it safely can. This allows for optimum screen refresh speed. Icons which can not be kept in memory must be re-fetched from their source file whenever the Preview display is redrawn. There are two limitations to keeping all icons in memory at once; the amount of free GDI resources and the amount of free memory.

The GDI resources limitation is usually the more severe limitation. GDI resources is one of the items that goes into making up the Free Resources figure reported by the Program Manager's About box. The total available GDI resources are not a function of how much memory is installed! Each ten icons saved in memory uses

about one percent of GDI resources. IconMaster will not save any more icons in memory if free GDI resources fall below about 35 percent (Windows crashes if free resources falls below about 20 percent!). You can make more GDI resources available by not running a lot of other programs at the same time that you run IconMaster, especially graphic intensive programs.

IconMaster also attempts to keep at least one megabyte of memory free at all times. This minimizes paging, which is quite slow, and allows other programs to run. IconMaster can re-read icons from disk faster than Windows can page! Increasing total installed memory can help, as can closing other programs.

There are several things that you can do to optimize the performance of IconMaster:

First, configure your system optimally;

1. Use a big disk cache!
IconMaster often has to re-read icons from the original disk files when scrolling with many many icons. A big cache will dramatically improve performance. It is far more important to have a big cache than to have huge amounts of free memory.
2. Use a RamDisk
IconMaster needs to have some place to write its Scratch files and to unZip IMZ and ZIP files. Using a RamDisk makes a significant speed improvement. The RamDisk should have at least several hundred Kbytes free.

Next, set up environment variables, before invoking Windows, to use temporary files optimally;

3. Set a TEMP environment variable to a RamDisk.
e.g. SET TEMP=D:\
IconMaster uses the TEMP path, as does Windows, to save all of its intermediate temporary files.
4. Set a PKTMP environment variable to a RamDisk.
e.g. SET PKTMP=D:\
PKZIP uses this variable, not TEMP, to know where to put its working data.

Finally, give IconMaster some room to work;

4. Close other programs that consume a lot of GDI resources.
5. Close enough other programs to free up at least one megabyte of memory.

Disk Space Requirements

The disk that IconMaster uses for scratch files must have enough room to hold all of the icons that result from opening any file type that is not manipulated directly

(i.e. ZIP, IMZ, and all of the read-only file formats). This will be the disk on which Windows exists if a TEMP environment variable is not set, or the disk specified by TEMP.

File Size and Speed versus File Format

There is a truly dramatic difference in the amount of disk space required by the different file types that IconMaster supports. There is also a significant difference in the amount of time it takes to open or write different formats.

As an example, we used the popular icon collection and display program ICONLIB.EXE which contains 330 icons, plus the icon for the program itself. IconMaster was used to extract the 331 icons and save them in different formats. The resulting file sizes (in bytes) and File-Open times (in seconds, for a 386-25 computer) are shown here:

	File Size	Open Time
ICONLIB.EXE (original file)	532,992	13.5
Directory of ICOs (2k sectors)	677,888 (plus directory entries)	9.5
	(actual data 253,546)	
IML library	214,490	5.5
ZIP of the ICOs	107,289	56.0
IMZ library	46,289	6.5

File Handling and Refreshing Details

When writing files from a Preview window, IconMaster generally allows you to append information to an existing file or directory. When saving icons to an IML or IMZ, append means add the icons being saved to the library. Because duplicate names are allowed in an IML and IMZ library there will be no conflict. However, when saving as ICOs or to a ZIP file "append" means replace existing icons with the same name and add the rest of the icons to the file. When saving as ICOs there is no actual append/overwrite query; any name conflicts will just result in an overwrite permission query.

Because a SaveAs might involve an implicit append, IconMaster will normally do a full re-read of the written file(s) immediately after writing so that the display properly shows all of the icons. For example, suppose that you drag a bunch of icons into a Scratch window and then do SaveAs and write out the icons as ICOs to some directory. IconMaster will immediately re-read the directory and display not only the files you just wrote, but any other files that may already have been in the directory.

ZIP and IMZ Processing

IconMaster handles ZIP and IMZ files using the shareware program PKZIP/PKUNZIP. These are DOS programs, not Windows programs. Thus, they are automatically spawned in a DOS window by IconMaster. The files IMZIP.PIF and

IMUNZIP.PIF must be in your windows directory to set up the DOS window properly.

Windows handling of DOS tasks is not as smooth as for true Windows programs. If you are running in Enhanced Mode, the (Un)Zip window will be spawned as an icon and IconMaster progress messages will be shown in the Preview window. In any other Windows mode, the (Un)Zip process must be full screen to run so you will see the progress of that program while it runs.

Zippping and Unzipping can take a long time for big files. In Enhanced Mode you can click on the (Un)Zip icon to open the zipper and watch its progress.

Note that during (Un)Zip processing any attempt to use a Preview window menu command will produce a Beep.

Duplicate Icon Names

Since ICO and ZIP icons exist as individual files in a directory, they can not have duplicate names. IML and IMZ files, however, can contain duplicate icon names.. If you attempt to save an IML or IMZ that contains duplicate names as an ICO or ZIP you will receive a Write dialog box requesting permission to overwrite. This means that some duplicate named icon is going to be lost. To avoid loosing an icon you should note the name of the duplicate(s), go back to the original IML or IMZ, rename duplicates, and save again.

EXE/DLL Icon Names

The names used for icons extracted from EXE and DLL files are the names found in these files, shortened to eight characters. Not all such icons have text names. Some have integer names. Some have nothing and are simply named by their ordinal position in the file.

Window Interactions

When an icon from a Preview window is being edited (as a result of the EDIT command or double clicking the icon), the same icon appears in both a Preview Window and in the Edit window. This raises the possibility of some strange results. For example, what happens if the Preview version is renamed, deleted, or replaced by a Drag from another Preview window and then an Edited version is saved? What happens to the Preview display if you edit and save the icon. There are many such possible situations. To avoid such problems the Edit and Preview windows are linked. Any change to a Preview window which currently has an icon being Edited which could possibly result in a problem will result in unlinking the Edit icon: you will be given a chance to first save any edits and the Edit window icon will be changed to Untitled. Any saving of an edited icon will cause the linked Preview window to refresh.

A similar situation could arise if the same file is simultaneously displayed in two or more Preview windows. What happens if you alter one of them and save it? Because there are some legitimate reasons why you might want to see the same

file in multiple Preview windows, Preview windows are NOT linked with each other. This means you should exercise great care when displaying the same file in multiple Preview windows. In general, to be safe do not alter or save from more than one of the windows. If you do, you are likely to end up with a strange combination of the work done in each window. Further more, it is possible for a window to generate an error if it tries to display an icon which has been deleted since the window was opened.

Editing Tools

You will find that the Pour and Re-color tools behave somewhat differently from those incorporated in some other icon editors. They behave more like those tools found in high-end paint programs. Together, they allow you to easily accomplish just about any color changing task you might have. For instance, suppose you have a bunch of icons that don't have a transparent background. Instead they are on a white background. How do you change the background color? Simple. Just use the Re-color Roller and you are done in one click. Be careful though. If your icon also has some white in the middle of it, it will also become transparent. If you don't want this, then use the Pour, Paint Can, tool to do each patch of white individually.

Icon Styles

Microsoft defines four different styles of icons that can all appear in one .ICO file at once. These styles are:

16 Color 32 X 32 Pixels	for EGA, VGA, and 8414 color
2 Color 32 X 32 Pixels	for EGA, VGA, and 8414 monochrome
8 Color 32 X 32 Pixels	for cheap color that no one ever built
2 Color 32 X 16 Pixels	for CGA monochrome displays

The only widely used format is the first one. While we elected to read the 16 Color 32X32 icon style from files that contain multiple styles, we didn't think it was worth while to add complexity to edit and save other styles. If you want to optimize for monochrome, just don't use any colors other than white and black. The effect will be the same as if you had used the monochrome format at the cost of a few extra bits in the .ICO file. If you are using a CGA display, run right out and get something better.

There are some icon authors who are creating 64x64 icons. Why? Good question. There is no known use for a 64x64 icon. No existing display will use them. Windows will accomodate them by shrinking them to 32x32. In the process, carefully crafted 64x64 icons will become quite ugly as windows deletes three quarters of the bits to shrink them. As a result, authors of 64x64 icons actually craft them so that they look right when shrunk, not at full resolution.

Because 64x64 icons take up four times as much disk space and have no know use, we have decided not to support them in IconMaster at this time.

Problem Icons

There are some programs which display icons when minimized for which IconMaster can not extract an icon from the EXE file. The usual cause is that the executable file does not contain a 32 X 32 16-color icon, which is the only kind that IconMaster can use.

Another cause is that the EXE file does not conform to Microsoft format standards. An example is Word for Windows, WINWORD.EXE. (You didn't expect Microsoft to be consistent did you?) It seems to contain a monochrome icon only, but actually fails the test as a legal Windows file -- even though Windows itself can find the icon. Every icon editor we have tried has failed to find the icon. Even the Whitewater Resource Editor considers it not to be a legal Windows 3 EXE file.

IconMaster Library

We have assembled a library of over 2500 icons in IconMaster's IMZ library format. This library is available for a measly \$10.00 at the time you register IconMaster or order an upgrade package. See the registration information below for details.

Registration

The following information also appears in the file REGFORM.TXT. Print out REGFORM.TXT to order IconMaster, or use the Help-Order Form command.

For European registration in Europe, see the file EUROREG.TXT.

IconMaster is not free. It is copyright 1991, 1992 and is distributed as shareware. You may use it to evaluate its suitability to your needs. If you continue to use IconMaster beyond a reasonable evaluation period, you must register it.

PLEASE PRINT CLEARLY:

Name: _____
Address: _____

City, State _____
ZIP Code _____
Country _____

INDICATE ITEMS AND QUANTITY ORDERED:

	QUANTITY	TOTAL
IconMaster Single User Registration \$20.00 for US mailing addresses \$25.00 outside the USA You will receive a copy of the latest version plus a registration code that will disable registration reminders.	____	_____
IconMaster Icon Library \$10.00 Available only with registration. Over 2500 icons in IconMaster IMZ library format.	____	_____
IconMaster Upgrade \$15.00 for US mailing addresses \$20.00 outside the USA Available only to registered users of any prior version. You will receive both a copy of the latest version and the IconMaster Icon Library.	____	_____

Site Licenses, Volume Discounts (over 10 copies),

Distribution Rights, etc.

Please write to the address below stating
your needs and we will supply a custom quote.

Total =====

DISK FORMAT:

IconMaster can be supplied in either 3.5" or 5.25" low
density format. Please indicate your preference:

3.5" _____ 5.25" _____

PAYMENT:

Please enclose your payment in full and mail to:

Phillip A. Kaufman
19987 Moran Lane
Saratoga CA 95070
USA

We can accept checks drawn on US banks in US currency. We can
also accept US dollar denominated money orders. We can not
accept credit cards or checks drawn on foreign banks. (Sorry for the
inconvenience but the cost to handle these is prohibitive at these
prices.) Purchase orders from corporations with a D&B rating are
accepted for orders totaling over \$100.00.

COMMENTS:

Your suggestions, occasional praise, and even bug reports, are appreciated and
will help to improve future releases.

Licensing

The following is a summary of the license terms for IconMaster. The actual license follows the summary.

IconMaster is a copyrighted software product. The code and display screens, as well as all documentation, are Copyright 1991, 1992. All worldwide rights are reserved. Usage is subject to license in all cases.

IconMaster is distributed using the shareware concept. This means that you are automatically licensed (see the Evaluation License below) without charge to use IconMaster for the purpose of evaluating its usefulness to you for a period of 30 days from the date of receipt by you. If you desire to continue to use IconMaster beyond the 30 day evaluation period, you must register it and pay the registration fee. If you do not do so you are in violation of the law.

You are also licensed to duplicate IconMaster and provide copies to others, including posting on public bulletin boards, provided that you distribute it exactly in the form received and that you do not charge for the copy in any way. Under no circumstances may you sell or rent IconMaster, or bundle it with another product, or distribute it for any fee whatsoever, without the explicit written permission of the author. No one is authorized to accept a fee for registration except the author and those distributors, if any, listed at the end of this document.

The above is a summary of the Evaluation and Single User License for IconMaster. The following is the detailed legal agreement:

The following constitutes a legal agreement between you (either an individual or an entity), the "User", and the "Author", Phillip A. Kaufman. If you do not agree to the terms of this Agreement, promptly destroy all copies of the software and its documentation in any and all forms.

1. **GRANT OF LICENSE.** The Author grants you, the User, a non-transferable right to make a copy of the program IconMaster, including the program object code and related files and the program documentation, collectively the "Software", solely for use by you on one computer at a time, and solely for the purpose of evaluation. The period of evaluation shall not exceed thirty (30) days from the date of the receipt by you of the Software. The Software shall not be copied or used for any other purpose except as provided in Paragraph 2. You agree to cease using the Software in any way upon the expiration of the thirty (30) day evaluation period unless you have paid the Registration Fee as described in Paragraph 3.
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3. **Registration.** Upon receipt by the Author from you, the User, of the current registration fee and upon receipt by you of your personal registration code number, the limitation of 30 day evaluation in the license granted in Paragraph 1 shall be removed. You shall then have a personal, perpetual, non-transferable license to use the Software on no more than one computer at a time. You agree not to divulge your personal registration code number to anyone else and to use it only with your personal copy of the Software.
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Change History

(All changes and new features added are documented in the above manual.)

0.1 3/10/91 First Beta Release

0.2 4/12/91 Second Beta Release

New Features and Changes

Restructured for multiple simultaneous windows.

Install command to automatically install new icons into Program Manager.

Command line argument and double click launch capability.

Drag and drop.

Bug Fixes

Special handling of multi-style icon files in Preview mode.

0.3 4/28/91 Third Beta Release

New Features and Changes

Cascaded and Tile commands.

Shortened windows captions.

Bug Fixes

New Preview window got name of old icon rather than Empty.

Dragged icon occasionally displayed an old image rather than the proper new image.

0.4 5/20/91 Fourth Beta Release

New Features and Changes

Cleaned up window captions for "*.ICO" case to show a path part.

Bug Fixes

Handling of minimized windows for CASCADE, TILE, and EDIT SELECTED.

Crash that crept in for CAPTURE movement using arrow keys.

Failure of EDIT window to query for saving when it alone is closing.

COPY and drags from preview windows with EXE files, they weren't getting ICO suffix or going to the selected directory.

0.5 6/7/91 Fifth Beta Release

New Features and Changes

Default ICO extension assumption for FILE OPEN in Edit window.

Bug Fixes

Occasional writing of wrong icon in SAVE AS ICONS and crash for EXE files with many many icons.

Proper icon name for icons over 255 in EXE files.

SAVE AS to properly save an edited EXE icon as an ICO file.

1.0 1/15/92 First Complete Release

New Features and Changes

IML compacted icon library format.

IMZ and ZIP compressed formats.

Several other read-only formats for compatibility.

Full support for Norton Desktop for Windows.

Changed INI file name from IMASTER.INI to ICONMSTR.INI to match the executable name.

Made memory management far more intelligent and able to work around Windows bug that causes crashes when Resources are low.

Saved state now includes background color per window.

Norton Desktop support.

Bug Fixes

Gray shades reversals solved by special coding to get around inconsistent color assignments of 16-color and 256-color video cards.

Incorrect writing of ICO if created or captured icon before ever reading one.

Improper saving of window positions if one of the windows was iconic at exit time.

SAVE AS ICONS and COPY TO bug that showed up only in the debugging version of Windows.

Rejecting file, or crashing, for EXE and DLL files with non-sequential icon resources.

INSTALL not being able to find Program Manager in foreign language versions.

INSTALL crashing if Program Manager was not running.

Dozens of minor things pointed out by various Beta testers.
Thanks!

1.1 3/15/92 Windows 3.1 Update

New Features and Changes

Windows 3.1 Compatibility:

Added special code so that Install and automatic resource utilization limitations that prevent crashes would work.
(Tested with Windows 3.1 version "Release Candidate 1")

Added some additional explanatory material to manual and Help.

Bug Fixes

Edit of an IMZ file icon from a preview window didn't mark the hidden IML file as changed so the edit appeared in the window but did not get saved in the IMZ.

Default file save name in dialog box for Preview Edit-Copy and Edit-Move were blank.

Icon Library file ICONS_J.IMZ was actually a copy of the I icons.

Cleaned up Preview window captions.

Could not Create Directory in the root (i.e. Create c:\foo).

Read icon names from EXE wrong when EXE did not contain an IconDirectory resource.

Could not Open some EXE/DLL files that Windows could open.
(Relaxed file type checking so "almost compliant" files would open.)

Edit of a preview icon didn't update preview window when edit window closed, only updated on save.

Preview update was causing an active edit to change its name to Untitled.

Exiting when more than one changed ZIP or IMZ file was open

confused PKZIP processing and could result in loss of data.

1.1a 3/18/92 Distribution File Fix

Bug Fixes

ICONMSTR.EXE was mistakenly named IM_WORK.EXE in the distribution ZIP file.

1.1b 4/4/92 Minor Update

New Features and Changes

Expanded ability to read DLL files.

(There are a number of DLL files of icons that can not be read by most icon editors, although Program Manager can read them. The reason is that they are improperly formed without an ending resource marker. Finally figured out the problem and put in special code to handle it.)

Bug Fixes

SaveAs from Edit Window when icon came from a Preview window library, EXE or DLL file improperly wrote using the preview file name rather than the individual entered icon name. Could overwrite original file if write was to same directory.

Lengthened Zip/UnZip timer for slow machines.

Removed excessive Preview window refreshes caused by changes in Edit window even though edit icon was no longer related to Preview file.

1.2 4/13/92 Norton Desktop 2.0 Release

New Features and Changes

Updated Install code to work with new Norton Desktop version 2.0. (Because NDW now pretends to be Program Manager, if both NDW and PM are running the install is forced to be to NDW.)

Bug Fixes

On fast computers, post-Zip cleanup could happen before the Zip even got started. The result was that an IMZ save could lose the data.

1.2A 4/29/92 Bug Fix Release

Bug Fixes

Append to an IMZ failed and destroyed the target file.

Append and Overwrite to IML were reversed.

Append of a single Scratch icon failed.

Rename in a ZIP and Append ZIP to ZIP failed.

Lots of Drag copy/moves could use excess resources.

SaveAs didn't offer to save pending changes in a ZIP or IMZ prior to actually doing the SaveAs in the new format.

Resources utilization too high when opening very large files.

Double-click edit always got icon zero if a changed icon was in the Edit window.

1.2B 5/6/92 Bug Fix Release

Bug Fixes

Couldn't read some or all of icons in EXE and DLL files due to a bug that crept in in 1.0.