IconMaster

Beta Release Version 0.5

Icon Editing and Management for Windows 3.0

> © Copyright 1991 All Rights Reserved

Phillip A. Kaufman. 19987 Moran Lane Saratoga CA 95040

Table Of Contents

Introduction

Features Summary

Editor

Previewer/Manager General Features Limitations

Installation and Invocation

Users Guide

USAGE OVERVIEW ICON and EXE FILES

PREVIEW

Dropping and Dragging

Preview Menus Preview Keys Preview Details

Replacing EXE Icons - CAUTION

Install Command

EDIT

Edit Display Edit Menus Editing Tools Edit Keys

Undoing and Reverting Capture Command

Background Information

Editing Tools Icon Styles

Registration and Support

Licensing

Change History

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.

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 without having to click-click through them one at a time.
- * Make it possible to use all of the icons a user may already have, i.e. no special file formats or custom libraries.
- * Make it possible to install icons into the Program Manager 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 fifth beta release of IconMaster, Version 0.5. It is a substantial enhancement of Version 0.1 and 0.2, and has minor improvements and bug fixes over Version 0.3 and 0.4. It is quite stable and it achieves each of the above goals. IconMaster is being released at this time in order to obtain user feedback. Your input regarding both bugs and suggestions for changes and enhancements is greatly appreciated.

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. (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.

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 window. 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 EXE files.

With IconManager you can:

- * Create and edit icons
- * Edit icons within EXE files
- * Extract icons from EXE files, all at once or one at a time
- * Capture screen images into icons
- * Install icons into the Program Manager using drag-and-drop
- * Sort icons into various directories using drag-and-drop

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
- * Magnified edit image during capture for precise choice of image

Previewer/Manager

- * View over 100 icons in a window at once, depending upon CRT resolution
- * Up to four Preview windows at a time
- * View individual icons and icons contained in EXE files
- * Displayed icons labeled with their file 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
- * Fast display refresh with intelligent memory management

General Features

* Totally unique ability to automatically install icons into Program **Manager groups**

- * Automatic window sizing and remembered window size and position
- * Full protection from accidental deletion of icons and edits
- * Automatic file name defaults to .ICO extension, with user override
- * 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 and Invocation

IconMaster consists of a single executable file, ICONMSTR.EXE.

[In the future there will be an additional file for on-line help.]

Installation is as simple as can be:

1) Copy ICONMSTR.EXE to a directory of your choice.

That's it!

If you are upgrading from a prior version, just replace the old ICONMSTR.EXE with the new one.

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

You can also execute IconMaster using the Run command. IconMaster accepts a single command line argument giving the file name, with optional path, of a single icon file to edit upon opening.

If you use Associate in the File Manager 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.

When invoked by double clicking on an ICO file, or using RUN with a file name of an ICO file, IconMaster starts up the Edit window and displays the desired icon.

When invoked by clicking on IconMaster's icon in the Program Manager, or with RUN without a file name, IconMaster starts up with an empty Preview window.

Users Guide

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

USAGE 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 cons

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 (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 possible sources for Preview icons; multiple individual ICO files in a directory, and the icons inside an EXE file. The OPEN ICO FILES 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. The OPEN EXE\DLL command takes the name of a single EXE or DLL 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. 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 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 file. The Edit window OPEN command can select an ICO file for editing. EXE icons can only be selected from a Preview window display since EXE files often contain multiple icons and you need to see them all to make a selection. (Note that the icon that an EXE file uses when it is minimized is always the first icon shown for the file in the Preview window.)

You can convert icons contained in an EXE file into individual ICO files in two ways. Selecting SAVE AS ICONS in a Preview window saves all of the displayed EXE icons as individual ICO files. If you double-click, or drag, an icon from a Preview window into the Edit window, you can use SAVE AS in the edit window to save an individual icon as an ICO file. (Note that if you use SAVE, the edited icon will be saved back into the EXE file.)

Each IconMaster window is independent and can be opened 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 and EXE FILES

IconMaster reads and writes normal .ICO-style single-icon files. It also reads and rewrites icons from EXE, and DLL, files. It does not directly read icons from .RES resource files, or from other programs' proprietary library formats.

Microsoft defines four different styles of icons, for various displays. The only one widely used, and the only one handled by IconMaster, is the 32X32 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 32X32 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 32X32 16-color style icon will be opened. In the preview window, multiple-style ICO icons are shown with upper case names to distinguish them.

Microsoft's default file extension for individual icons is .ICO. This is also IconMaster's default. You can always leave off the dot and the extension when entering file names, and IconMaster will assume .ICO. If you ever enter an extension other than .ICO, IconMaster will take that extension as a new default until you change it again, or reload the program.

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.

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 commands, such as DELETED 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 for ICO files and EXE files. ICO icons are shown in alphabetical order. The names of normal 32X32 16 color icons are shown in lower case. Any ICO file with additional icon styles in it 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.

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 dialog. EXE icons can be edited and copied, 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 ICO icon, the file on disk is erased, after a query to be sure that is what you wanted. The display, however, continues to show the deleted icon with the name "DELETED!". At that point you still have the option of recovering the deleted icon by using COPY, or by selecting it for editing (It will be placed in the Edit window with the name "Untitled".) You can not directly RENAME a deleted file since the file itself no longer exists.

IconMaster uses intelligent memory management for previewing. If you have enough memory, all of the icons will be held in memory and scrolling is very fast. If there is not enough memory, icons will be re-read from disk when you scroll or resize a window. IconMaster is very considerate. It will never use the last 500K bytes or so of memory just for icons,

Dragging and Dropping

Preview windows provide for drag-and-drop similar to the Program Manager and File Manager. 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. Most icon manipulations are easier using drag-and-drop than using the equivalent 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.		
С	The cursor is in another Preview window. Either the Shift or Control Key is being held down or the source is an EXE Preview.		
	The selected source icon will be COPYd into the target window if the target is an ICO, or		
	The selected source icon will replace the selected target icon if the target is an EXE Preview.		
E	The cursor is in the Edit window.		
	The selected icon will be edited.		
I	The cursor is in the Program Manager.		
	The selected icon will be INSTALLed.		
М	The cursor is in another Preview window.		
	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, it doesn't matter where in the target window you release the mouse button. That is, a MOVE or a COPY is done *into a window*, independent of where the mouse is released in the target window. An exception is dragging into an EXE Preview window since icons can not be added to EXE files, they can only be *replaced*. In this case, the cursor indicates C only when actually on an icon, the selected icon in the target window changes as the cursor moves, and the target window selected icon is *replaced*.

If you drag from an ICO Preview window into another Preview window, the selected icon in the original window will be MOVEd to the Preview window in which you released the mouse button. The icon will be deleted from the source window, i.e. the file is deleted and the icon name in the display is changed to DELETED!.

If you hold down either Shift or Control while dragging, the selected icon will be COPYd instead of MOVEd. Since EXE icons can not be deleted, a drag *from* an EXE Preview window will always be done as a COPY.

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 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 before the drag started, or the icon selected during the Install Dialog box, *not the icon over which you release the mouse button*.

Dragging to the Edit window and the Program Manager is independent of Shift and Control and never deletes the icon in the original window.

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

You can Drag a DELETED! icon to the Edit window, but not to another Preview window or to the Program Manager. (To recover a DELETED! icon, double click or drag it to EDIT it and then use SAVEAS to make a new icon file.)

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:

File Menu	Commands to select icons to display
i ile Mellu	Communication to select icoms to display

Open <u>ICO</u> Files... Select a directory and filespec for ICO icons to

display

Open EXE/DLL... Select an EXE or DLL file for icons to display

Refresh Re-read icons from disk

Save As Icons... Save all icons from EXE file as individual ICO files

(Applies only if source was an EXE)

Exit Close all windows and Ouit

IconMaster

Icon Menu Commands to manipulate individual icons

Re-Name Change name of selected icon (rename file

on disk)

(ICO files only)

Copy to... Copy selected icon to a new path and filename

Move to... Move selected icon to a new path and filename

(The icon file is deleted but the icon stays on the

display with the name "DELETED!")

(ICO files only)

Delete Delete selected icon (erase its file from

disk)

(The icon stays on the display with the name

"DELETED!")
(ICO files only)

Edit Switch to Edit window and edit the

currently selected Preview icon

Install Automatically replace an icon in a Program

Manager group

Bkgrnd Menu Set the color background for the window

Sixteen Color Rectangles

Windows Menu Activate a window

Cascade all IconMaster windows

Tile Tile all IconMaster Windows

New Preview Open a new Preview window

Edit Window Activate the Edit window

1: *name* Activate an already open Preview window.

2: *name* (Will not show if not open.)

3: name

4: name

Help Menu

Help On-line help [Not yet implemented]

About IconMaster... Revision and copyright notice

Register... Registration information

(Does not appear after registration)

The COPY TO and MOVE TO commands invoke dialog boxes similar to SAVE AS 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 REFRESH command re-reads the current icon files from disk. Any deleted icons will thus disappear and any RENAMED files will be shown in alphabetical order.

Reminder: When you edit an icon, changes will not show up in the Preview display unless you do FILE REFRESH.

Preview can read up to a maximum of 400 icons. (You really wouldn't put more than that in one directory would you?) 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. No more typing icon path and file names into the Program Item PROPERTIES- SELECT ICON dialog box! No more clicking on NEXT ICON! Just select INSTALL or drag an icon to the Program Manager window. A dialog box reminds you to select the icon to be replaced in the Program Manager and press OK. That's it!

You can either select an icon to be replaced in Program Manager before selecting Install or while the reminder dialog is displayed. Note that when you select an icon in Program Manager its name is highlighted, BUT the highlight disappears when the Program Manager is no longer active. This is OK. Program Manager still remembers which icon was selected and it will be replaced just fine. In fact, it will be replaced correctly even if Program Manager is minimized during the Install.

During the Install process you will see Program Manager become active, the Properties and Icon dialogs open, and the new icon name get filled into the appropriate edit box -- all automatically.

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 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 item to replace as part of the drag operation is that I haven't figured out how to make Program Manager change its selection yet.]

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 (if *.ICO has been Associated with IconMaster).

Selecting 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 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 SAVE AS, you will be asked for a new file name.

Editor Display

The Edit window consists of five sections as shown in Figure 1. When IconMaster is first started, its window will be sized for optimal editing. You can resize the 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.

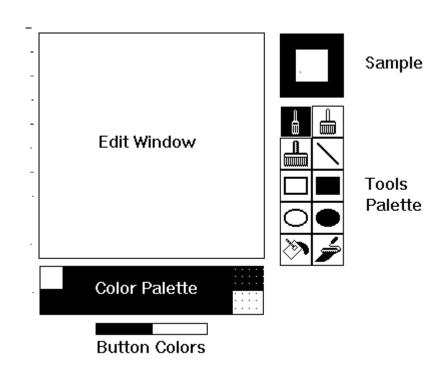


Figure 1
Edit Window Display

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.

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 reverse colors. 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.

Display Sizing -

The five sections of the edit window display are automatically sized depending upon the size of the overall window. The edit image is made as large as possible. The sample image is always a fixed size, but the extra swatch of background color that surrounds the actual icon sample is removed in small windows. The color palette and mouse color displays size to match the width of the edit window. The tools palette shrinks if a full sized palette will not fit.

Edit Window Menus

Edit Menu

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)	
Save <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 group	
E <u>x</u> it		Quit IconMaster	

<u>U</u> ndo	the last edit	Restore the image as it was before
<u>H</u> oriz Flip	Mirror the ico	n about the vertical center-line
Vert Flip	Mirror the ico	n about the horizontal center-line

Commands for altering the icon image being edited

Clear Erase the Edit Image to all transparent

Bkgrnd Menu Set the color background for the sample image

Sixteen Color Rectangles

Windows Menu Activate a window

New Preview Open a new Preview window

1: *name* Activate an already open Preview window.

2: *name* (Will not show if not open.)

3: name 4: name

Help Menu

Help On-line help [Not yet implemented]

About IconMaster... Revision and copyright notice

Register... Registration information

(Does not appear after registration)

The OPEN and SAVE AS commands invoke normal file dialog boxes with one special difference. A CREATE DIRECTORY button is present in the SAVE AS 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 as shown in Figure 2. A tool is selected by clicking the left mouse button on it. The selected tool is shown in reverse colors. The Small Brush is the default and is shown selected in the figure. 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 thru 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.

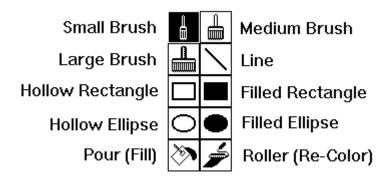


Figure 2 Editing Tools

Brushes

The brush tools are used to draw pixels in the edit image. The sizes are 1X1, 3X3, and 5X5 pixels. 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 once. Be especially careful when drawing with a brush since it is easy to draw many times and each spot counts as one time, and only the last one can be undone.

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 SAVE AS, 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

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.

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 Recolor 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

As mentioned earlier, Microsoft actually 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.

Registration and Support

The registration fee for IconMaster is \$20.00 (\$25.00 outside the US). For this fee you receive the right to use IconMaster on a single computer. When you register, you will receive a copy of the latest release along with a personalized registration code to make those annoying registration reminders go away. Please specify the disk format you desire (3.5" or 5.25" low density). If not specified, 5.25 inch low density will be sent.

Mail the registration with a check or money order in US dollars to:

Phillip A. Kaufman 19987 Moran Lane Saratoga CA USA 95070

We appreciate and encourage all comments, suggestions, and bug reports. However, we can only guarantee to respond to registered users.

Both your registration and your comments will help to improve IconMaster and keep it on the leading edge.

When you receive your registration, you will get a registration code number. Open the Register command dialog in the Help menu and enter this number. When entered correctly, IconMaster will never again bother you with a reminder to register.

Licensing

IconMaster is a copyrighted software product. The code and display screens, as well as all documentation, are Copyright 1991. 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 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 do not charge for the copy in any way. Under no circumstances may you sell or rent IconMaster, or distribute it for any fee whatsoever, without the explicit written permission of the author. No one, other than the author, is authorized to accept a fee for registration.

This product is provided on an as-is basis. The author makes no warranty whatsoever regarding this product and specifically disclaims any implied warranty or liability of any kind (insert all appropriate legalese here, but know full well that we mean

NO WARRANTY OF ANY KIND,
FOR ANY USE,
BY ANYONE,
AT ANY TIME,
FOR ANY REASON).

Change History (All new features added are documented in the manual.)

0.1 3/10/91 First Beta Release

0.2 5/12/91 Second Beta Release

New Features and Changes

Restructured for multiple simultaneous windows.

Added INSTALL command to automatically install new icons into Program Manager. A totally unique and fantastically powerful and useful capability based upon a very tricky and perfectly safe technique!

Added command line argument and double click launch capability.

Added drag and drop.

Bug Fixes

Added special handling of multi-style icon files in Preview mode. Previously, it was possible for a multi-style icon to be selected for editing from Preview and then saved destroying the other styles. Now, multi-style icons in Preview show in upper case and become Untitled for editing.

0.3 5/28/90 Third Beta Release

New Features and Changes

Added windows Cascaded and Tile commands.

Shortened windows captions.

Bug Fixes

Fixed problem where new Preview window got name of old icon rather than Empty..

Fixed problem where dragged icon occasionally displayed an old image rather than the proper new image.

0.3 5/28/90 Third Beta Release

New Features and Changes

Added windows Cascaded and Tile commands.

Shortened windows captions.

Bug Fixes

Fixed problem where new Preview window got name of old icon rather than Empty..

Fixed problem where dragged icon occasionally displayed an old image rather than the proper new image.

0.4 5/20/90 Fourth Beta Release

New Features and Changes

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

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

Bug Fixes

Fixed handling of minimized windows for CASCADE, TILE, and EDIT SELECTED.

Fixed crash that crept in for CAPTURE movement using arrow keys.

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

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

0.5 6/7/90 Fifth Beta Release

New Features and Changes

Added default ICO extension assumption for FILE OPEN in Edit window.

Bug Fixes

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

Fixed to get proper icon name for icons over 255 in EXE files.

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