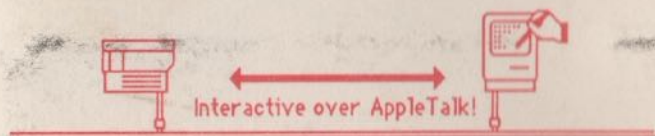


PostScript programming just got easier!

Features of PostHaste

- uploads quickly and easily
- includes an integrated multi-window editor
- captures error messages without leaving the editor
- lets you examine PostScript dictionaries
- connects over AppleTalk without using special cables
- supports large screen displays, such as the Radius FPD
- includes many "cookbook" examples



“With Posthaste, you can select a whole file or a portion of code and upload it to the LaserWriter without leaving the editor.”

Micro Dynamics, Ltd.

8555 16th Street, Suite 802
Silver Spring, MD 20910
(301) 589-6300

This manual was prepared using PostHaste and ReadySetGo on the Macintosh and LaserWriter

PostHaste

the interactive tool for
programming in PostScript
over AppleTalk



Micro Dynamics, Ltd.

Making Future Technologies Practical Today

PostHaste™

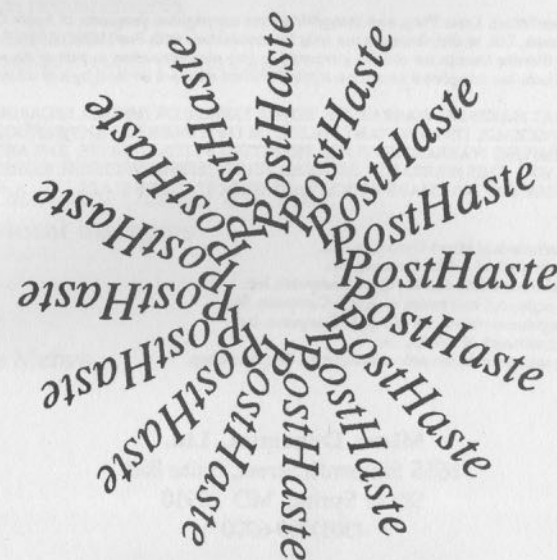
The Interactive PostScript® Utility

Program and design by **Bill Hole**

Architecture by **Jim Lanford**

Editor by **David Sibley**

Documentation by **Joel Wysong**
Audri Lanford
Bill Hole



Micro Dynamics, Ltd

Making Future Technologies Practical Today

8555 Sixteenth Street, Suite 802

Silver Spring, MD 20910

(301) 589-6300

Micro Dynamics, Ltd.

Making Future Technologies Practical Today

8555 Sixteenth Street, Suite 802

Silver Spring, MD 20910

(301) 589- 6300

Dear Customer,

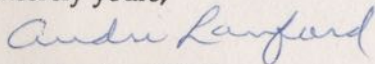
Thank you for your order. We're glad that you bought PostHaste and we're confident that you'll find it useful for your PostScript programming.

To show our appreciation , we have enclosed a free desk accessory, PrintStat™, on your PostHaste disk. PrintStat allows you to see the status of your laser printer while you are in any application. This desk accessory is a \$15.00 value and is offered for a limited time only with all rights reserved.

PrintStat is installed on your master PostHaste disk. It can be installed in any other System by using the Font D/A Mover.

We wish you success with your PostScript programming and hope that you enjoy using PostHaste as much as we enjoyed creating it. We look forward to your comments and suggestions.

Sincerely yours,

A handwritten signature in blue ink that reads "Audri Lanford". The signature is fluid and cursive, with the first name "Audri" and last name "Lanford" clearly visible.

Audri Lanford, Ph.D.

CEO

Warranty

Micro Dynamics, Ltd. warrants that the software will perform substantially as described in the User's Manual. If within 30 days of purchase you give written notification to Micro Dynamics, Ltd. that PostHaste is not performing as specified, you may return all copies of the software and documentation for a full refund of your purchase price.

Micro Dynamics, Ltd. further warrants the disk to be free from defects for 30 days from the purchase date. To obtain the warranty, you must send in the registration card.

EXCEPT FOR THE LIMITED WARRANTY DESCRIBED ABOVE, THERE ARE NO WARRANTIES TO YOU OR ANY OTHER PERSON OR ENTITY FOR THE PRODUCT EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ALL SUCH WARRANTIES ARE EXPRESSLY AND SPECIFICALLY DISCLAIMED. IN NO EVENT SHALL MICRO DYNAMICS, LTD. BE RESPONSIBLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR SIMILAR DAMAGES OR LOST DATA OR PROFITS TO YOU OR ANY OTHER PERSON OR ENTITY REGARDLESS OF THE LEGAL THEORY, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Some states do not allow the exclusion or limitation of implied warranties or limitation on how long they last, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The warranty and remedies set forth are exclusive and in lieu of all others, oral or written, express or implied.

Copyright

This manual and the software described in it are copyrighted with all rights reserved. Under the copyright laws, this manual and the software may not be copied in whole or in part, without the written consent of Micro Dynamics, Ltd., except in the normal use of the software or to make backup copies. This exception does not allow copies to be made for others, whether or not sold, but all of the material purchased (with all backup copies) may be sold, given, or loaned to another person.

The System, Finder, LaserWriter, Laser Prep, and ImageWriter are copyrighted programs of Apple Computer, Inc. licensed to Micro Dynamics, Ltd. to distribute for use only in combination with PostHaste. Apple Software shall not be copied onto another diskette (except for archive purposes) or into memory unless as part of the execution of PostHaste. When PostHaste has completed execution Apple Software shall not be used by any other program.

APPLE COMPUTER, INC. MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, REGARDING THE ENCLOSED SOFTWARE PACKAGE, ITS MERCHANTABILITY, OR ITS FITNESS FOR ANY PARTICULAR PURPOSE. THE EXCLUSION OF IMPLIED WARRANTIES IS NOT PERMITTED BY SOME STATES. THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY PROVIDES YOU WITH SPECIFIC LEGAL RIGHTS. THERE MAY BE OTHER RIGHTS THAT YOU MAY HAVE WHICH VARY FROM STATE TO STATE.

PostHaste is a trademark of Micro Dynamics, Ltd.
PostScript is a trademark of Adobe Systems, Inc.
Macintosh is a trademark licensed to Apple Computer, Inc.
LaserWriter is a registered trademark of Apple Computer, Inc.
AppleTalk is a registered trademark of Apple Computer, Inc.
Radius FPD is a trademark of Radius, Inc.
ReadySetGo is a registered trademark of Manhattan Graphics Corp.

Micro Dynamics, Ltd.
8555 Sixteenth Street, Suite 802
Silver Spring, MD 20910
(301)589-6300

PostHaste™

Table of Contents

For People Who Don't Read Manuals	4
Open Chooser	
Start PostHaste	
Drag select and Enter, Save and Upload, or Upload	
Introduction	5
Welcome	
PostHaste features	
How to use this manual	
Getting Started	7
System requirements	
Disk contents	
Configuring your PostHaste disk	
PostHaste Tutorial	8
The <i>Hello World</i> example in detail	
The <i>Dictionary Dumper</i> example	
Additional examples	
Tips	15
PostHaste Menus	17
Index	23

For People Who Don't Read User's Manuals

1. Open the Chooser (to make sure the proper laser printer is selected).
2. Open PostHaste and the *Dictionary Dumper* example file by double clicking on its icon.
3. Use the editor to upload programs and capture laser messages in one of three ways:
 - A. Drag select what you want to upload and then press the Enter key (not Return). For example, drag select the second paragraph of the *Dictionary Dumper* file and then press Enter. This program results in a PostScript dictionary being sent back from the printer and captured.
 - B. Choose **Save & Upload** from the File Menu to save and upload an entire document. For the *Dictionary Dumper* file, this uploads all four programs and captures the contents of all four dictionaries.
 - C. Choose **Upload** from the File Menu to upload any document whether it is presently open or not. For example, without leaving the *Dictionary Dumper* file, you can upload the *PostHaste Circle* file and the laser printer will print the graphic that appears on the front of this manual.

Introduction

Welcome

Welcome to PostHaste™, the interactive PostScript™ language programming utility for your Macintosh™ computer. We're glad you bought PostHaste and we're confident you'll find it useful.

PostHaste makes it easier for you to use PostScript, thereby extending your ability to create better graphic effects for desktop publishing as well as for stand-alone PostScript programming. Experienced PostScript programmers will find PostHaste saves them time and frustration. Beginners will find it an ideal tool to help them learn PostScript.

PostHaste Features:

- uploads quickly and easily
- includes an integrated multi-window editor
- captures error messages without leaving the editor
- lets you examine PostScript dictionaries
- connects over AppleTalk™ without using special cables
- supports large screen displays, such as the Radius FPD™
- includes many cookbook examples

How to Use This Manual

This manual provides the information you will need to use PostHaste. It assumes that you are familiar with the operation of the Macintosh computer — for more information, consult your Macintosh owner's manual. It also assumes that you are familiar with the PostScript programming language. Though it is beyond the scope of this manual to teach a beginner to program in Postscript, PostHaste makes working with PostScript so easy that even beginners can start creating their own graphics by simply experimenting with cookbook examples — and we show you how to do this at the end of the *Tutorial*. However, we also

recommend that you purchase the *PostScript Language Tutorial and Cookbook* and the *PostScript Language Reference Manual*, both by Adobe Systems, the developers of PostScript (published by Addison-Wesley).

If you don't plan to read this entire manual, the section entitled *For People Who Don't Read Manuals* is for you. It contains the basic information you need to use PostHaste.

To get the most from this manual (and PostHaste) begin with the *Getting Started* section which describes the system requirements, disk contents, and how to configure your PostHaste disk. The *Tutorial* takes you step by step through one easy PostScript example, briefly describes some other examples, and then shows you how to start experimenting with PostScript on your own. The *Tips* section offers some suggestions which may increase your efficiency and enjoyment in using the program and the *Menus* section systematically explains each menu command. Finally, there is an *Index*.

We sincerely hope that you enjoy using this product as much as we have enjoyed creating it. We look forward to your comments and suggestions. If you find any bugs in the program or errors in the manual, please let us know. If you have interesting examples of Postscript programs that you would like to share, send them to us for inclusion (with your name) in future editions of this manual.

Getting Started

System Requirements

- Macintosh Plus, Macintosh 512 Enhanced, or Macintosh 512 (for best performance, a Macintosh Plus or Macintosh 512 Enhanced is desirable).
- Laser printer
- AppleTalk network connecting your Macintosh and laser printer
- Latest versions of the laser printer drivers (e.g. LaserWriter™ and Laser Prep) in the System Folder of your startup disk.

PostHaste Distribution Disk Contents

The PostHaste distribution disk contains three items:

- PostHaste program
- System Folder
- Examples folder

Configuring Your PostHaste Disk

The first thing you should do is configure PostHaste. This should be done even before you copy PostHaste to your hard disk or make backup copies of the program. To configure, start the program from the original floppy program disk by double clicking on the PostHaste icon (make sure the disk is not write-protected). When the first screen appears, enter your name and press Tab, then enter your company's name and click on OK. The PostHaste menu and an untitled document window will appear. Choose Quit from the File Menu. Now, you may write-protect the disk, make your backup copies and/or copy PostHaste to your hard disk. Put your original PostHaste disk away in a safe place. You are now ready to begin the *Tutorial*.

PostHaste Tutorial

Introduction

The first part of this Tutorial uses an example to lead you through the basic steps of using PostHaste:

- A. Checking the Chooser to be sure your laser printer is selected
- B. Entering your PostScript program
- C. Saving, naming, and uploading your document
- D. Capturing error messages
- E. Using the Find command

The second part leads you through another short exercise and the third provides some additional examples for you to experiment with.

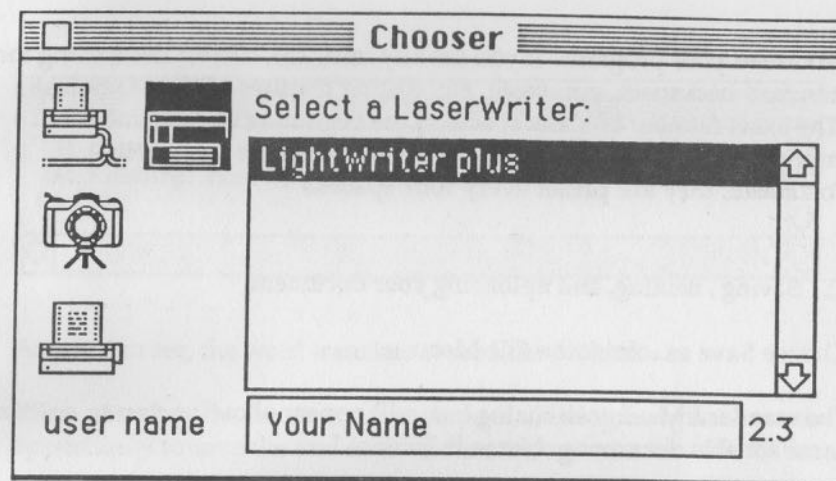
Part One: The Hello World Example in Detail

In this first example, we will create a simple PostScript program that produces a graphic which says Hello World in shaded text.

A. Checking the Chooser

First, select Chooser from the Apple Menu. A window will open that looks like the illustration on the next page. The LaserWriter icon should be highlighted. If it's not, click on it to select it. The name of the laser printer that you wish to use should also be highlighted (LightWriter plus is the name of the LaserWriter in the illustration). If it's not, select it by clicking on its name. If no laser printer is listed, make sure the printer is on and check your AppleTalk connections. PostHaste cannot upload without a selected laser printer.

Close the Chooser window by clicking in its close box.



B. Entering a PostScript program

First, open PostHaste by finding the PostHaste icon and double clicking on it.

PostHaste starts up and an untitled document window opens. (The small black square marks the beginning of a new page.)

Carefully type in the following text:

```
/Times-Italic findfont 30 scalefont
setfont
/printRSG
    {0 0 moveto (Hello World) show}
def
320 400 translate
.95 -.05 0
    {setgray printRSG -1 .5 translate} for
1 setgray printRSG
showpage
```

PostHaste Manual

Proofread your program. If you see any mistakes, correct them using the standard backspace, cut, paste, etc. editing features of the Macintosh. (The exact number of blank spaces at the beginning of each line is not important — just use the Tab key. You can't change the tabs in PostHaste, they are preset every four spaces.)

C. Saving, naming, and uploading your document

Choose **Save as...** from the File Menu.

The standard Macintosh dialog box will appear allowing you to enter a name for this document. Name it *Tutorial 1*.

Now, choose **Save & Upload** from the File Menu (whenever you want to upload the file currently on the screen to the printer, use **Save and Upload** — the Upload command is for locating and sending some other file to the printer). The document will be saved and then sent to the printer as an executable file.

Various status messages will be displayed on the screen as the upload command is being executed. **Busy** means the printer is processing the document (not that someone else is using the printer).

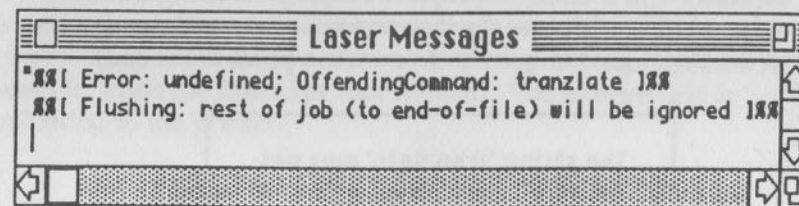
If you have made no mistakes, the printer will print:

Hello World

D. Capturing error messages

If you have made an error, the error message sent by the laser printer will be displayed on your screen. Let's take a look at how PostHaste catches and displays error messages. Go back to the text you entered for the Hello World program. Change the "s" in the word translate to "z." (Editing in PostHaste is similar to other Macintosh programs.) Choose **Save & Upload** again from the File Menu. This time, the program can't be executed because of the error. PostHaste displays the error in a

window that looks like this:



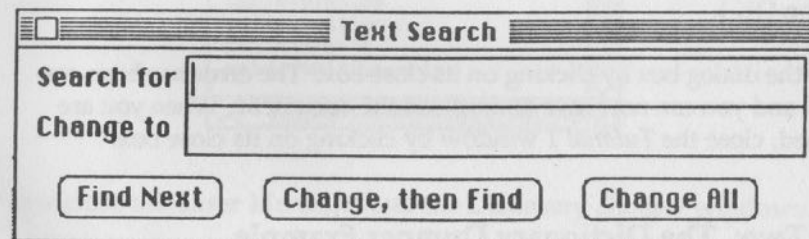
As you can see, the word *tranzlate* caused the problem.

When you close the error message window, a dialog box gives you the opportunity to save the text of the error message as a file. Click **No**.

Since this is a short document, it would be easy to locate the error in the text and correct it. But just for the fun of it, let's use PostHaste's **Find** command.

E. Using the Find command

Choose **Find** from the Search Menu. A dialog box appears:

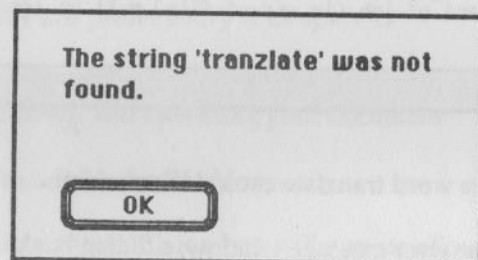


Enter *tranzlate* on the first line.

Press the Tab key to move the insertion point to the second line.

Enter *translate* on the second line of the dialog box.

Click on Find Next. An alert box appears saying the string `tranzlate` was not found (this is because the insertion point was at the end of the text and the search goes only from the insertion point to the end):



Click on OK in the alert box and then click on Find Next again in the Search dialog box (this time the search will start at the beginning of the document). The word `tranzlate` is selected and highlighted in the text of the document.

Click on Change, then Find. The alert box appears again saying the string wasn't found (since there is no other occurrence of it).

Click OK (the previously highlighted selection isn't changed until you click on OK).

Close the dialog box by clicking on its close box. The error has been corrected and you can now save and upload the document. When you are finished, close the *Tutorial 1* window by clicking on its close box.

Part Two: The Dictionary Dumper Example

This example demonstrates how PostHaste's message capturing ability can be used to examine the contents of PostScript dictionaries.

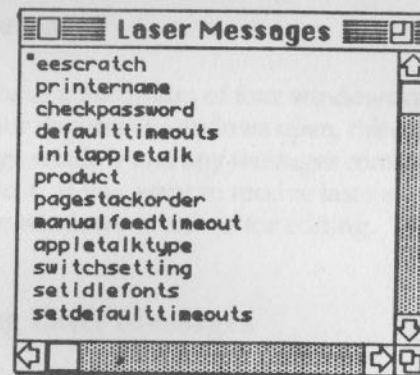
First, choose Open... from the File Menu.

Next, find the file named *Dictionary Dumper* (included in the *Examples* folder on the PostHaste disk) and double click on it to

open the document. There are four short programs in this document with many comment lines (comments begin with % and are not executed). Drag select the text of the second program (shown below) to select it. Press the Enter key (not Return). The selected text is uploaded to the printer.

```
statusdict { pop 30 string cvs print (
) print } forall
```

The contents of this dictionary are sent back and captured by PostHaste as a Laser Message (the illustration shows only the first part of the dictionary):



Now close the Laser Messages and the *Dictionary Dumper* windows.

You don't need to save changes to either file.

Part Three: A Cookbook of Additional Examples

Your PostHaste disk comes with a number of other examples. Try uploading each of these programs to your laser printer to see the results.

To discover how easy it is to create new PostScript graphics with PostHaste, try changing certain elements in the programs and then uploading. For example, substitute another word for PostHaste in the *PostHaste Circle* program (you only have to do this in the one place where PostHaste appears in the executable portion of the text).

Sometimes very slight changes in a program can have surprising effects. Try substituting different numbers for 179 after the word *angle* in the *Spiral* example. See what it looks like with 179 and then try values of 120, 200, and 217.

The *PostScript Language Tutorial and Cookbook* mentioned in the *Introduction* has many more examples for you to experiment with.

Tips

These tips get progressively more technical — so don't panic if you get over your head — just go on to the next section.

Upload vs. Save & Upload

If you want to upload what is currently on the screen, use the **Save & Upload** command. If you want to locate and upload some other file, use the **Upload** command. (If you upload the file currently open without first saving your changes, PostHaste will upload the last saved version of your file.)

What, no message?

The editor can have a maximum of four windows open at a time. If you already have four document windows open, the editor will be unable to open the message window and any messages coming back from the printer will be lost. If you want to receive laser messages, don't use more than three windows at a time for editing.

Accumulating Laser Messages

If you want to maintain a record of everything that's sent to you by the laser during a session, simply leave the Laser Messages window open (as one of your four windows). Each new message will be added to the end of the file. If you would rather start each upload with a clean slate, just close the Laser Messages window. This will clear any text currently stored there. Remember to give the messages file a name and save it with **Save as...** first if you want to look at it later.

Keeping Frequently Used Commands Handy

If you have a number of short PostScript commands that you use often,

put them all in one file. You can keep this file open (as one of your four) and then use drag select and Enter to send any of these commands to the printer as desired. We use this technique with our *Dictionary Dumper* file whenever we want to check the contents of a dictionary.

Be Polite

If you are sharing a laser printer with others, use the PostScript "jobname" facility to let each other know who is using the laser. This is done by including the following at the beginning of your file:

```
statusdict /jobname (PostHaste; document: name of doc) put
```

This redefines the jobname entry in statusdict to the string in parentheses. You can see how it's done by looking at the programs in the *Examples* folder on the PostHaste disk.

Debugging PostScript

After the laser printer completes each job, the user memory is cleared in preparation for the next job. This means that you have to send debugging commands and the relevant parts of the file to the printer together. For example, if you want to add the string Hello World to the stack and, at the same time, verify that it has been added, include the following code in your program for uploading.

```
(Hello World)      % puts string on stack
dup==              % duplicates it and sends it back
```

The second line duplicates the top item on the stack, then removes the duplicate and sends it back to the Laser Messages window. If you were to put the item on the stack using the drag select and Enter technique, and then send a separate command to examine the stack, you would find that the stack and the rest of user memory had been cleared.

PostHaste Menus

The File Menu

File	Edit	Search	TextSize	Special
New			%N	
Open...			%O	
Close				
Save			%S	
Save & Upload			%K	
Save As...				
Revert				
No next window				
Print Text...				
Upload...			%I	
Quit			%Q	

New

Opens a new untitled document.

Open...

Opens a specified document on the disk after you select it from the standard file dialog box.

Close

Closes a currently open document. If windows into other documents are open, the next frontmost window then becomes active.

Save

Saves the contents of the current document to disk.

Save & Upload

Saves the contents of the current document to disk and then sends it to the printer as an executable file. If you only want to send part of a document to the printer, save the file with **Save**, drag select the part you want, and then press the **Enter** key (not **Return**).

Save as...

Saves the contents of the current document to disk after giving you the opportunity to name (or rename) it.

Revert

Abandons all changes made since the last time the document was saved.

No next window

If another document has been opened, this command is replaced by **Edit** followed by the name of that document (allowing you to switch to editing that document). If more than one other document have been opened, **No next window** is replaced by **Edit** followed by the name of the next document in the series (allowing you to switch to editing the next document in the series, then the next, etc.).

Print Text...

Allows you to select any PostHaste document and print its text.

Upload...

Allows you to select any PostHaste document and send it to the printer as an executable file. If you only want to send part of a document to the printer, open the file with **Open**, drag select the part you want, and then press the **Enter** key (not **Return**).

Quit

Lets you leave PostHaste and return to the Finder. If you've made changes to any documents since last saving, you're given the opportunity to save the changes before quitting.

The Edit Menu

🍏 **File** **Edit** **Search** **TextSize** **Special**

Undo	
Cut	⌘H
Copy	⌘C
Paste	⌘V
Clear	

Undo

Cancels the effect of a **Clear** action or of hitting the **Backspace** key while text is selected.

Cut

Removes the selection and places it on the Clipboard, replacing the previous contents of the Clipboard if any.

Copy

Places a copy of the selection on the Clipboard, replacing the previous contents of the Clipboard if any.

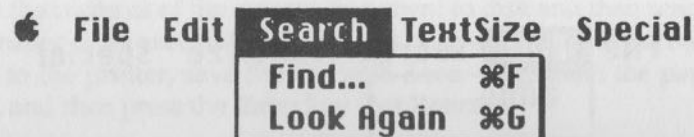
Paste

Puts a copy of the contents of the Clipboard at the insertion point. You can continue to paste copies until you cut or copy a new selection, which then replaces the old contents of the Clipboard.

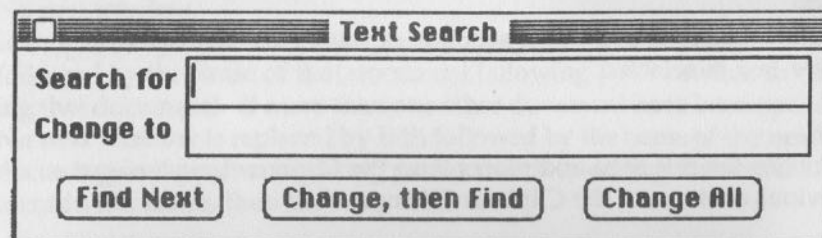
Clear

Removes the selection, without placing it on the Clipboard.

The Search Menu

**Find...**

Locates and selects the next occurrence of specified text. Opens the Text Search window, where you enter the text you want to search for and, if you wish, replacement text. The Tab key moves the insertion point from the Search for line to the beginning of the Change to line. The text in the window can be edited just as in any other window.



Clicking the Find Next button begins the search. The search starts at the insertion point and goes to the end of the file. Move the insertion point to the desired place in the document before beginning the search.

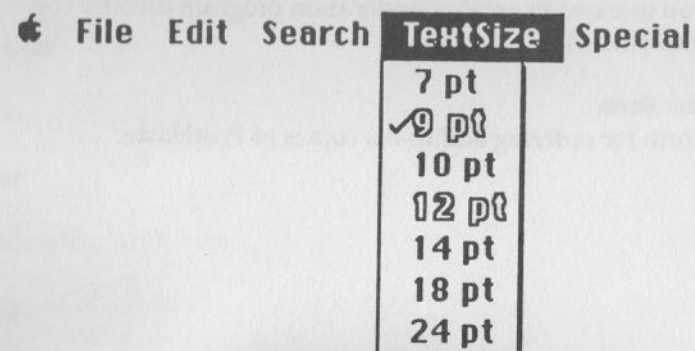
When the specified text has been found, clicking the Change, then Find button replaces it with the specified Change to text and searches for the next occurrence.

Clicking the Change All button replaces all occurrences of the specified text.

Look Again

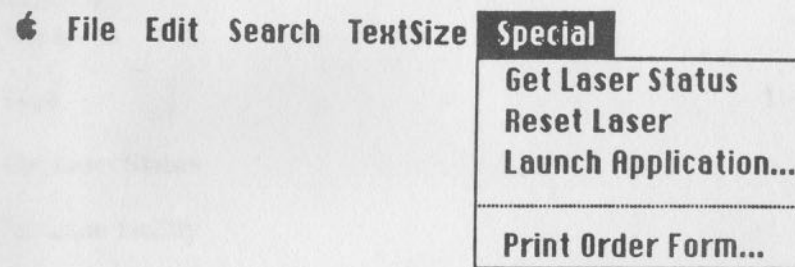
Locates and selects the next occurrence of previously specified text without opening the Text Search window.

The Text Size Menu



The Text Size Menu allows you to select from seven type sizes. Existing fonts are outlined. The other sizes are scaled from the existing fonts. (Changing the text size only effects what is displayed on the screen, it has no effect on a graphic resulting from an upload.)

The Special Menu

**Get Laser Status**

Opens a window which tells you the current status of your laser printer.

Reset Laser

Allows you to reset your laser printer by software control.

PostHaste Manual

Launch Application...

Allows you to move to another application program directly (bypassing the Finder).

Print Order Form

Prints a form for ordering additional copies of PostHaste.

Index

Adobe Systems	6
Chooser	4, 8-9
Clear	19
Close	17
Configuring PostHaste	7
Copy	19
Cut	19
Debugging PostScript	16
Editing	10, 19
Edit Menu	19
Features, PostHaste	5
File Menu	17-18
Find	11-12, 20
Get Laser Status	21
Jobname facility	16
Laser/error messages	10-11, 13, 15-16
Launch Application	22
Look Again	20
Open...	17

Index (continued)

Paste	19
Print Order Form	22
Print Text	18
PostScript	5-6, 9, 12, 14
Quit	18
Menus	17-22
New	17
No Next Window	18
Reset Laser	21
Revert	18
Save	17
Save As...	10, 15, 18
Save & Upload	4, 10, 15, 18
Search Menu	20
Special Menu	21-22
System requirements	7
Text Size Menu	21
Undo	19
Upload	4, 10, 15, 18

PostHaste Warranty Registration Card

Complete and return within 10 days of purchase to validate warranty and become eligible for software updates.

Name _____

Address _____

Purchase date _____

Dealer name _____

How did you hear about this product? _____

This product will be used at ☐ home ☐ office ☐ school

Comments _____

Micro Dynamics, Ltd.
8555 Sixteenth Street, Suite 802
Silver Spring, MD 20910

