

# **GEOS User's Manual**

*For use with  
the Apple IIe, IIc, IIGS  
and the Laser 128*



**2150 Shattuck Avenue  
Berkeley, CA 94704**

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# How to Get Help

We hope that you will find GEOS easy to learn and use, and that this manual provides you with most of the answers to the questions you may have about the operation of GEOS. However, if you do run across a problem that is not answered by the manual, you can contact Customer Service at Berkeley Softworks in one of the following ways:

## ***By Phone***

It is recommended you phone us at (415) 644-3413 between 9 a.m. and 5 p.m. Pacific time.

## ***By Letter***

If the phone lines are busy, you can write us at Berkeley Softworks, Customer Service Division, 2150 Shattuck Avenue, Berkeley, CA 94704. Be sure to include your return address and phone number. Letters will be answered in the order received.

# Welcome to GEOS

Your new Graphic Environment Operating System (GEOS) ushers in a "whole new world" for your Apple IIe, IIc, IIGS, or Laser 128. GEOS brings to you the power and ease of use that directories (i.e., folders), icons, windows, and pop-down menus provide. A simple keyboard command or click of your input device is all it takes to get the job done.

This manual is divided into thirteen chapters:

- 1: **Getting Started** guides you through the initial process of installing GEOS, creating backup copies of your GEOS disks, booting GEOS, and exiting GEOS.
- 2: **The Tutorial** introduces you to the basic techniques necessary to manage GEOS applications and move around the system. A tutorial is provided to give you some hands-on experience; you will find that learning GEOS is fun and easy.
- 3: **Work Disks** describes how you can tailor copies of your GEOS disks to suit your purposes.
- 4: **The GEOS deskTop** describes in detail how you can move around GEOS, manage files, folders, desk accessories, and applications, and use one to four disk devices.
- 5: **geoPaint** is a powerful graphics editing system that enables you to create graphics in a wide variety of ways.
- 6: **geoWrite** is an easy-to-use "what you see is what you get" word processor.
- 7: **Text Grabber** is an application that reads non-GEOS files from word processors for the Apple II and converts them into geoWrite format.
- 8: **geoSpell** is a powerful spell-checking program that enables you to create and alter personal dictionaries.
- 9: **geoMerge** is a mail merge program that enables you to print out customized form letters.
- 10: **geoLaser** is an application that enables you to print geoWrite files on the Apple LaserWriter printer.

- 11: **Desk Accessories** are smaller applications that perform handy functions while on the deskTop or in an application.
- 12: **Drivers** describes how you can use your printer, interface cards, input device, clock, and other special features with GEOS, including screen dump utilities.
- 13: **Appendices** include a glossary, a listing of printer drivers you should use, and information on using a memory expansion device, installing a hard disk drive to GEOS, ProDOS compatibility, a listing of the contents of each disk in your GEOS package, trouble shooting advice, and font samples.

### ***General Things You Ought to Know***

This manual is written assuming you know how to use a mouse or joystick. However, if you are new to using a mouse or joystick, a brief lesson is given in the installation procedure in Chapter 1, "Getting Started."


Keyboard commands are given where possible, and at the end of each chapter is a summary describing them.

The keys used in this manual are from the Apple IIc and the older Apple IIe. If you are using an Apple IIc, IIe, IIGS, or a Laser 128, note the following:

*If the key in the manual is:*      *Press:*




Option for the Apple IIGS and the newer (platinum) Apple IIe.

 for the Apple IIc and older Apple IIe.

 for the Laser 128.



 for the Apple IIc, IIGS, and both versions of the IIe.

 for the Laser 128.

### ***Suggested Order of Reading***

Before you try to use a GEOS application, we suggest you use these chapters in the following order:

- |                               |   |
|-------------------------------|---|
| Chapter 1, "Getting Started"  | to see what equipment you need in order to use GEOS, and to install and make backup copies of the GEOS disks. If you come across any unfamiliar terms, refer to Appendix A: Glossary. |
| Chapter 2, "Tutorial"         | to get an overall picture of what GEOS is all about. Use the tutorial to get some hands-on experience.  |
| Chapter 3, "Work Disks"       | to prepare disks for everyday use.  |
| Chapter 4, "The GEOS deskTop" | to learn more about file and disk management.   |

Once you have completed Chapter 4, "The GEOS deskTop," you will be ready to use the applications described in this manual. Enjoy!





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# 1

## Getting Started

This chapter will guide you step-by-step through the procedures for getting started with GEOS. You will perform the following two procedures only once, when you first open GEOS:

- installing GEOS on your Apple IIe, IIc, IIGS (running in IIe mode), or Laser 128.
- creating backup copies of your GEOS disks.

This chapter also covers how to boot (i.e., start up) your GEOS system every time you plan to use it, and how to exit GEOS when you are finished.

Unfamiliar terms are defined in Appendix A: Glossary.

---

# What You Need to Run GEOS

*You must have the following hardware and software in order to use GEOS:*

- a 128K 80-column Apple IIe, IIc, IIGS (running in IIe mode), or Laser 128.
- one 5 1/4-inch disk drive.
- this GEOS package, which contains the three program diskettes and this manual.
- blank 5 1/4-inch diskettes.
- the Interrupt Manager card, which comes with your GEOS package; it is needed if you are using an Apple IIe and do not have an AppleMouse™ input device.

The following optional equipment is recommended so that you can take full advantage of the power and versatility of GEOS. This equipment is not, however, necessary to the operation of GEOS:

- an input device (an AppleMouse or a joystick).
- a GEOS supported printer that is properly connected to your computer. A list of GEOS supported printers is found in Appendix B: Drivers.
- printer interface cards and clock cards. (The Apple IIGS has a built-in clock.)
- a memory expansion device such as a RamWorks card.
- additional disk drives. You can use up to four disk devices on your Apple II.

---

# Installing GEOS

Installing GEOS means preparing the applications for everyday use. You will have to install the GEOS program only once. To install GEOS, you will:

- 1: Set up your computer according to the directions found in its installation manual.
- 2: Install the Interrupt Manager Card, if you are using an Apple IIe without an AppleMouse.
- 3: Open GEOS and answer some questions regarding ownership of the product so that you can have it keyed to your name.
- 4: Activate your mouse, joystick, or keyboard driver.
- 5: Open each of the applications disks and answer similar questions regarding their ownership so that you can have them keyed to your name.

During the installation process, we ask you to use the keyboard to answer screen commands (e.g., pressing `return` to answer yes to an OK icon or pressing `esc` to select Cancel) because you will not be able to install your input device to GEOS until you have installed GEOS.

Once you are finished installing GEOS, it is very important that you make backup copies of the disks in your GEOS package.

## *Step 1: Set Up Your Computer*

- 1: Set up your computer and disk drive(s) according to the instructions found in your installation manual.
- 2: If you have a printer, install it according to the instructions found in the printer's installation manual.
- 3: If you have special interface cards (e.g., for a memory expansion device such as a RamWorks card), install them in your computer.
- 4: If you are using an AppleMouse or a Joystick input device, connect it to your computer.

---

## ***Step 2: Install the Interrupt Manager card, if Needed.***

If you are using an Apple IIe without an AppleMouse, you will need to insert the Interrupt Manager Card that comes with your GEOS package. If this step doesn't apply to you, go to Step 3.

- 1: Make sure that your computer is turned off.
- 2: Face the keyboard (i.e., do not install the Interrupt Manager card from the rear).
- 3: Open the top of your Apple IIe by lifting the two tabs at the rear of the computer.
- 4: When you have removed the lid and placed it aside, you will need to make sure you have no static electricity on yourself. Touch the power supply case—it's the large box at the left inside the Apple IIe—to discharge any possible electricity.
- 5: Now look for slot 7, which is at the rear towards the right side. Carefully insert the Interrupt Manager card into this slot: its components, the name BERKELEY SOFTWARES, and the instruction "Insert into SLOT 7 ONLY" *must* face to the right as you face the computer.
- 6: Place the lid back onto the top of your Apple IIe.

## ***Step 3: Open GEOS***

- 1: Insert the disk labeled "GEOS BOOT DISK" into the disk drive (or Drive A if you have more than one disk drive). Close the disk drive door.
- 2: Turn on the monitor, disk drives, and keyboard switches. GEOS will boot and the GEOS copyright notice will appear on the screen: "NOTICE: GEOS for the Apple II is copyrighted by Berkeley Softworks and is licensed for use on one computer by one user. If more than one person will be using this software at a time, multiple copies must be purchased." After you have read this notice, press the return key.
- 3: The message "By proceeding beyond this point, you are agreeing to the terms of the entire licensing agreement found in the *GEOS User's*



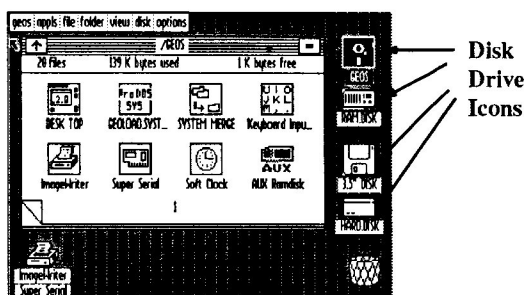
---

*Manual*" will appear. After reading the license agreement at the front of this manual, press  to continue, or remove the disk and turn off the computer to stop at this point.

- 4: The next message will ask "Do you wish to key this boot disk with a previously installed GEOS product so that it will be licensed to the same person or institution? (If this is the only GEOS product you own, select NO.)" If you own other GEOS products, press **Y** and go to Step 5. If this is the only GEOS product for the Apple II or Laser 128 you own, press **N** and go to Step 7.
- 5: A message will instruct you to insert a previously installed GEOS BOOT DISK. Remove the current boot disk from the disk drive and insert a previously installed boot disk.
- 6: The next message will instruct you to insert the new GEOS BOOT DISK. Once you have done so, press  to go to Step 8.
- 7: The next message will ask you to "Please enter your full name or your institution's full name as you wish it to appear when using GEOS for the Apple II." Type in the licensee name and press  to continue. (If needed, press  to return to Step 4. Pressing  selects **Cancel**.)


**NOTE** The name you enter will be permanently displayed in the software.

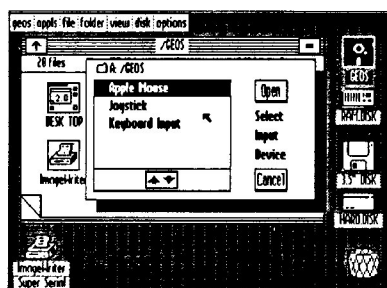
- 8: The next message will ask you "Assign single computer license of GEOS to <your license name here>?" Press  to continue. (If needed, press  to cancel and return to Step 4.)
- 9: Next you will be instructed to insert the BACKUP GEOS BOOT DISK. Press  to continue.
- 10: Next you will be instructed to insert your GEOS BOOT DISK. Press  to continue.
- 11: The GEOS copyright information will appear on the screen with the name you entered in Step 7. Press  The deskTop will be displayed as follows:



#### ***Step 4: Activate Your Mouse, Joystick, or Keyboard Driver***

*To install your AppleMouse, joystick, or keyboard input driver to GEOS:*

- 1: Hook up the mouse or joystick to your computer.
- 2: Hold down the  key and press I. The following dialog box will appear:








- 3: Use the arrow keys to move the pointer so that it is positioned over the name of the input device you plan to use.
- 4: Press `return`. The name of the input device will become highlighted. (In the above example, AppleMouse is highlighted.)
- 5: Now use the arrow keys to move the pointer to **Open**. Press `return` again.

- 
- 6: If you are installing a joystick, you will be instructed to "Let go of the joystick and press any key." Release the joystick handle and press a key.

Note the following:

- If you installed a mouse, you can move the pointer around the screen by moving the mouse in the direction you wish the pointer to go. For example, to move to the right edge of the screen, move the mouse to the right. To select an item (e.g., an **Open** icon), position the pointer over it and press the mouse button. (This is called "clicking.")
- If you installed a joystick, you can move the pointer around the screen by moving the joystick handle in the direction you wish the pointer to go. To select an item (e.g., a filename), position the pointer over it and press the joystick button. (This is called "clicking.")
- If you use installed the Keyboard Input driver you will need to use the following key formation to move the pointer:

U I O  
J K L  
M , .


The eight keys surrounding the **K** indicate the direction in which you move the pointer. Hold down the  key and press the key needed. This will move the pointer. If you wish to move in smaller increments, hold down  and  and press the key you need. For example, to move to the right edge of the screen, hold down  and press **L**. To select an item (e.g., an **Open** icon or a filename), hold down  and press **K**.

### ***Step 5: Next, Install Your GEOS Applications***

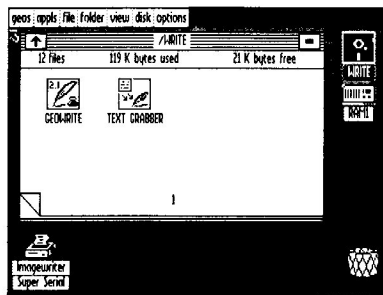
The three applications you need to install are **geoWrite**, **geoPaint**, and **geoSpell**. Now that you have installed your input device, you have the option of using it to install these applications, or you can use the keyboard as you did to install GEOS.



- 1: Insert the disk labeled GEOWRITE DISK into the disk drive.

- 2: You will need to activate the GEOWRITE disk drive by selecting its disk drive. Move the pointer to the disk icon representing the disk drive you inserted the GEOWRITE disk into and click.

Another alternative is to use the keyboard. Each disk drive is represented by a letter from A to D. For example, in the illustration on page 1-6 of the GEOS deskTop, the GEOS BOOT disk is in Drive A and RAM1 is in Drive B. To open the GEOWRITE disk, hold down the  key and press the letter representing its disk drive.

The GEOWRITE disk will become active and a number of icons representing files will appear on the screen:



- 3: The application file you need to install is the icon entitled GEOWRITE at the top left corner. Hold down the  key and press 1. The GEOWRITE icon will appear in reverse video. (You can also move the pointer to the geoWrite icons and press the mouse or joystick button.)
- 4: Now you are ready to install the GEOWRITE application: hold down  and press Z.
- 5: A message will appear on the screen: "NOTICE: geoWrite for the Apple II is copyrighted by Berkeley Softworks and is licensed for use on one computer by one user. If more than one person will be using this software at a time, multiple copies must be purchased." After you have read this notice, press .
- 6: The next message will state "By proceeding beyond this point, you are agreeing to the terms of the entire licensing agreement found in the *GEOS User's Manual*." If you agree to these terms, press

---

(or click **OK**). If not, press  (or click **Cancel**) to return to the deskTop.

- 7: The next message will ask "Assign a single computer license of geoWrite to <your license name here>?" Press  (or click **OK**) to answer yes. If you do not see your license name here, press  (or click **Cancel**) to return to the deskTop without installing the application.
- 8: The next message will tell you "geoWrite 2.1 installed." Press  (or click **OK**).
- 9: A message may ask you to insert a disk containing deskTop V2.0. If so, remove the GEOWRITE disk and insert the GEOS BOOT disk. Press .
- 10: Follow Steps 1-9 to install geoPaint and geoSpell, using the GEOPAINT and GEOSPELL disks. (You do not need to install geoLaser, geoMerge, or Text Grabber.)

### ***Step 6: Install Your Printer***

At this point, you may wish to install your printer driver and interface card. See "Printer Drivers and Interface Cards," page 12-6, and Appendix B: Printer Drivers, page 13-15, for the procedure.

The GEOS BOOT disk defaults to the ImageWriter and Super Serial interface card. If you do not have an ImageWriter, you can find the printer driver you need on the GEOS BACKUP disk. If your printer and interface drivers are not on the GEOS boot disk, you will need to copy them from the GEOS BACKUP disk to the boot disk. Appendix F: Disk Directory, lists the contents of each disk in your GEOS package.

### ***Step 7: Make Backup Copies***

After you have installed GEOS, it is important that you make backup copies of your GEOS disks. See "Making Backup Copies of GEOS Master Disks" on the next page.

---

# Making Backup Copies of GEOS Master Disks

You have already been provided with a backup copy of the GEOS kernel (the invisible portion of the disk that starts GEOS). After installing your applications, you should make copies of all of the files on the GEOS disks, including the files that are on the GEOS BOOT DISK and BACKUP GEOS BOOT DISK. Use 5 1/4-inch disks for backups.

Note that the backups you make of GEOS and GEOS BACKUP are not bootable. You are simply making backups of the non-boot files on those disks, such as printer drivers.

The methods for making backups vary, depending on whether you have one disk drive or more than one disk drive. In the following instructions, the original disk is called the SOURCE disk and the disk to which you are copying is called the DESTINATION disk.


In the following procedures, you will make backups of your GEOS disks and create a TUTORIAL work disk. (This TUTORIAL disk will simply be an additional copy of the GEOPAINT disk. You will use it in Chapter 2 to get some hands-on experience with using GEOS.) Although this backup procedure outlines how to make backups using GEOS, it is recommended that you use a ProDOS disk copy utility program to make disk backups, especially if you have only one 5 1/4 inch disk drive. If you are using ProDOS, change the backup disk names to GEOSBAK, SPELLBAK, BACKUPBAK, DICTBAK, PAINTBAK, and WRITEBAK.

Use the GEOS procedure below to create the TUTORIAL work disk.

## ***Step 1: Format Disks***

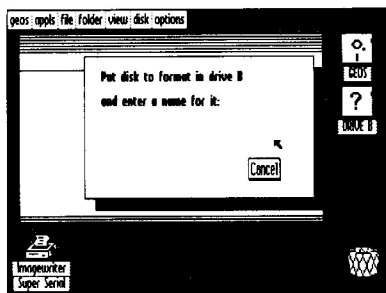
If you are using the GEOS procedure to backup all the disks in your GEOS package, format either four double-sided disks or seven single-sided disks. If you are using ProDOS to backup your GEOS disks, format only one disk, which you will use for the TUTORIAL.

*To format a disk:*

- 1: Make sure the GEOS BOOT disk is open to its deskTop.
- 2: Hold down the  key and press F.
- 3: If you have more than one disk drive, a dialog box will enable you to select a drive to format the disk in. Click on a drive and press

return.

- 4: When you are instructed to do so, insert a blank disk into the disk drive you selected in Step 3:



- 5: Enter the name TUTORIAL and press .
- 6: When you remove TUTORIAL from the disk drive, place a label on it.
- 7: Repeat this procedure to create a SPELLBAK, GEOSBAK, BACKUPBAK, DICTBAK, PAINTBAK, and WRITEBAK.


### ***Step 2: Now Make the Backups***

Now you are ready to make the actual backups. Use the following procedures to copy the GEOPAINT disk onto the TUTORIAL disk. If you are not using the ProDOS disk copy utility program, copy each GEOS disk onto one of the backup disks you just formatted. For example, copy the GEOS BOOT disk onto the disk you labeled GEOSBAK.

*If you have one 5 1/4-inch disk drive:*

- 1: Open the disk you wish to copy (i.e., the SOURCE disk) so that its deskTop is displayed on the screen.

**NOTE** To open a disk, move the pointer to the disk drive icon representing the location of that disk, and press .

- 2: Now select the **disk copy** command by holding down the  key and pressing **L**.

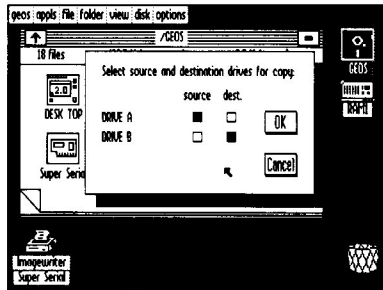
- 
- 3: A dialog box will enable you to select the source (i.e., original GEOS disk) and destination (i.e., formatted backup disk) disk drives. If you are using only one disk drive, click on both boxes representing the 5 1/4 inch disk drive. Click on **OK**.
  - 4: A dialog box will instruct you to "Please insert DESTINATION disk in drive #." Remove the original disk and insert one of the disks you formatted earlier in the 5 1/4 inch disk drive.
  - 5: The next dialog box will instruct you to "Please insert SOURCE disk in drive #." Remove the blank formatted disk and re-insert the original disk in the 5 1/4 inch disk drive. Press  to continue.
  - 6: The next dialog box will ask "Replace the contents of (destination disk name) with the contents of (source disk name)? Press  to continue.
  - 7: Continue to follow the instructions on the screen until the disk is copied.

*If you have more than one 5 1/4-inch disk drive:*

- 1: Insert the original (SOURCE) disk into the first 5 1/4 inch disk drive and open it to its deskTop (e.g., the GEOS BOOT disk is a SOURCE disk).
- 2: Insert a blank formatted (DESTINATION) disk into the second 5 1/4 inch disk drive (e.g., the GEOSBAK disk). Open it to its deskTop.
- 3: Now select the **disk copy** command by holding down the **⌘** key and pressing **L**.
- 4: A dialog box will ask you to "Select source and destination drives for copy." Move the pointer to and select the appropriate boxes, then press  to copy the original disk onto the blank formatted disk.

**NOTE** Be careful to select the correct boxes.





- 5: A dialog box will ask you to insert the source disk in the source drive and the destination disk into the destination drive. Once you have inserted the correct disks, press `return` to continue.
- 6: The next dialog box will ask "Replace the contents of (destination disk name) with the contents of (source disk name)?" Press `return` to continue.

---

# Booting Up or Exiting GEOS

You need to "boot up" (i.e., turn on the computer and open the GEOS BOOT disk) GEOS before you begin to use the applications.


## ***Booting GEOS if the Computer Is Turned Off***

- 1: Make sure your computer and any accompanying equipment (e.g., disk drives, special cards, etc.) are properly set up.
- 2: Insert the GEOS BOOT DISK into the disk drive (or Drive A).
- 3: Turn on the computer, monitor, and disk drives. The message "Booting GEOS" will appear on the screen, and the GEOS deskTop will appear shortly.
- 4: Insert the work disk you need, then open it so that its files are displayed on the screen. You are now ready to begin using GEOS.

## ***Entering a Non-GEOS Application if the Computer Is Already On***

**IMPORTANT** Never boot in the middle of an application data file; you will lose data.

*To enter a non-GEOS application from GEOS:*


- 1: Exit the application you are using and return to the deskTop.
- 2: Close the GEOS disk by holding down  and pressing J.
- 3: Remove the GEOS disk from Drive A and insert the non-GEOS application's startup or boot disk into Drive A.
- 4: Click on the **BOOT** item in the **disk** menu of the GEOS deskTop.

## ***Entering GEOS if the Computer Is Already On***

**IMPORTANT** Never boot in the middle of an application data file; you will lose data.

*To boot if the computer is already on:*


- 1: Exit the current application and return to that application's desktop or main menu.

- 
- 2: Close that application's disk and remove it from the disk drive. Store the disk in a safe place.
  - 3: Insert the GEOS BOOT disk into Drive A.
  - 4: Press control  reset

### ***Exiting GEOS***

Use the following procedure whenever you are finished using GEOS. It is important that you never turn off the computer or reboot from within a document; you will lose data.

#### ***To exit GEOS:***

- 1: Exit the document you are currently using and return to the deskTop.
- 2: Close the currently active disk by holding down the  key and pressing J. That disk's note pad will clear and a question mark will appear over the disk drive icon.
- 3: Remove the disk from the disk drive. Store the disk in a safe place.
- 4: Turn off the computer, monitor, disk drives, and keyboard switches.

# 2

## Tutorial

This chapter will introduce you to GEOS, the Graphic Environment Operating System. GEOS is both easy and fun to use. After reading this chapter, you will have the basic knowledge necessary to use GEOS.

Before you read this chapter, however, make sure that you have installed GEOS according to the instructions in Chapter 1, "Getting Started."

This chapter contains:


- terminology used in GEOS.
- fundamentals of windows, pointing, and clicking.
- fundamentals of disks, files, folders, and commands.
- a tutorial to get you better acquainted with GEOS.

---



# Let's Get Our Terms Straight

This section defines a number of words and phrases used throughout the manual to describe various features of the GEOS system. (Note there is also a glossary provided in Appendix A.) Follow the tutorial on page 2-9 so that you can get better acquainted with how GEOS works.

## *The Pointer and Clicking*

When you boot up, a small arrow called the **pointer** will appear on the screen. The pointer can be moved around the screen by moving the mouse or joystick in different directions. Depending on the application mode you are using, you can sometimes use the arrow keys to move the pointer. If you are using the keyboard driver, you need to press the  key and the following keys on the keyboard:

U I O  
J K L  
M , .

For example, holding down  and pressing the letter **L** will move the pointer towards the right edge of the screen. The pointer is used to select items or simply to move to another part of the screen. It is a decision-making tool which allows you to move around in the GEOS system. To select an item or move the pointer to another location, position the pointer at the new location and press the mouse or joystick button. (If you are using the keyboard input drive, hold down  and press **K**.) This is called **clicking**.

Sometimes you can move the pointer by pressing the arrow keys. If you wish to select an item using the keyboard, position the pointer and press return.

## *The Text Cursor*

Whenever you are working with text, there is a small flashing vertical bar on the screen indicating where the next typed character will appear. This bar is called a **text cursor** or simply a **cursor**. You can move it around with the pointer by simply clicking on the new location or by pressing the arrow keys.

## *Menus*

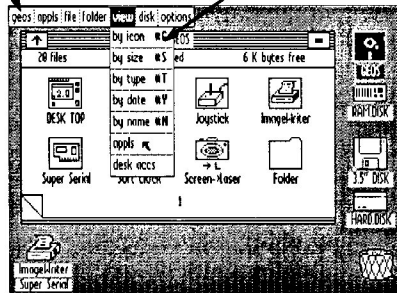
A **menu** is just what you might guess: a list of **items**. A menu is used to list commands, desk accessories, fonts, applications, or any number of

items. For example, the command menu located in the upper left corner on the deskTop screen lists **geos**, **appls**, **file**, **folder**, **view**, **disk**, and **options**. You can select a menu item by moving the pointer to it and clicking, or you can use a keyboard shortcut (which is described below).






Often, selecting a menu item will cause another menu to appear:



Command Menu

Menu Items



### ***Keyboard Shortcuts***

If you do not wish to use your mouse or joystick to select an item, you can use the keyboard keys. **Keyboard shortcuts** apply to most applications and the deskTop as well. Sometimes pressing a key is all you need to carry out a command; at other times you need to press the key in conjunction with the  key. If your computer does not have an  key, such as the platinum IIe's, use the **option** or  key. In this manual, the  key is used to refer to the IIe or IIGS **option** key or the Laser 128  key.

To use the  (or **option** or ) key, hold it down (and continue holding it down!) and press the keyboard shortcut desired. Throughout this manual, keyboard shortcuts are mentioned where possible. There is a summary of all relevant keyboard shortcuts at the end of the chapters that describe them.

---

For example, if you are in the deskTop and you wish to format a disk:

*Hold down:*                      *and press:*            *to tell GEOS to:*

the IIc  key            **F**                      format a disk.


or

the IIGS **option** key

or


the IIe **option** key

or

the Laser 128  key


### ***Dialog Boxes***


**Dialog boxes** are small windows that will appear over whatever else is on the screen. A dialog box may give you special instructions or information. It may also require you to enter special information before you can continue using a feature. You will be asked to enter information, or to make a selection from a list of items with the pointer. Once you enter the information, you can:

- change information by pressing  to backspace over existing text.
- cancel the operation by clicking **Cancel**.
- carry out the dialog box's instructions by clicking **OK**.

Sometimes you can use the keyboard to select items in a dialog box:

*Press:*                      *to:*

the  key            select from a list of items or to select **OK**.

the  key            select **Cancel** (and sometimes return to the previous dialog box).

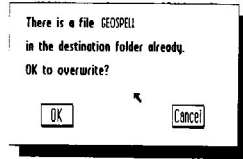
Once you leave a dialog box, you will be returned to what you were working on previously.

## Icons

An **icon** is a picture denoting an operation or option. Icons can appear in most places:



On the  
deskTop



In a  
Dialog Box

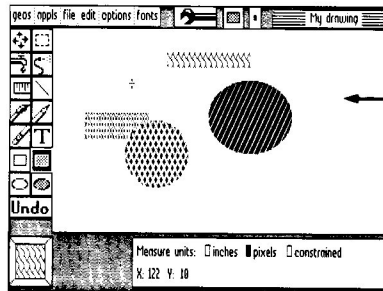


In an  
Application

To select an icon, move the pointer to it and click on it; it will carry out the function it denotes.

## Windows

The framed rectangular regions on the screen are called **windows**. They are typically used to separate different functional areas on the screen. A window is a view port into an area larger than can be displayed on the screen.



← Drawing Window

For example, geoPaint provides a **Drawing Window** into an 8-1/2 by 11 inch document. This window only shows only a portion of the document at a time. You can work with the rest by **scrolling** or **moving** the window to different parts of the document. You can view an entire document page by using a **preview** command, if desired. Similarly, geoWrite provides a **Writing Window**.



---

## ***Fonts, Type Styles, Point Sizes, and Proportional Spacing***

When you are creating text in a geoWrite or geoPaint document, you may eventually want to vary the size, style, and typeface (font) of the text. GEOS offers you a wide range of fonts from which to choose. You can type with the medieval characters of the the **Dwinelle** font or the simple straight lines of the **University** font.

The size of each font is measured in points. There are 72 points to an inch. The actual height of characters printed using GEOS depends on the resolution of your printer.

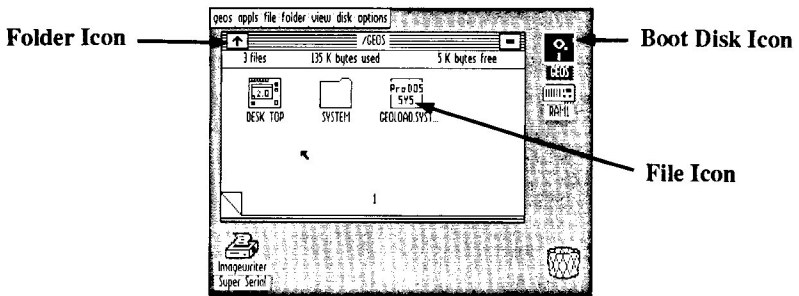
For any given font and point size, you can also change the type style used to print your text. Available styles are plain, **bold**, *italic*, outline, underline, superscript, and subscript.

If you look closely at the spacing between the individual letters printed by most typewriters, you will notice that the letters are printed with a fixed spacing. If you look at a professionally printed page (you are looking at one now) you will notice that the spacing depends on the shape of the letter. For example, **w** is wider than **i**. This is called **proportional spaced printing**, which is what GEOS uses for all text to enable you create professional looking documents.

GEOS offers ten different font files, each with a number of point sizes. Once font files are placed on a work disk, they can be used with applications such as geoWrite and geoPaint.

## ***Files and Folders within GEOS***

When you boot up, the first screen displayed will contain the **deskTop**. Use the deskTop to work with your files and folders, which are represented by icons or text. With the deskTop, you can make decisions regarding the disk and its contents, such as copying, deleting, and renaming files and folders that appear on the deskTop.



The files on the deskTop represent:

- **applications**, which are computer programs that operate in GEOS. geoWrite, geoSpell, geoMerge, Text Grabber, geoLaser, and geoPaint are all applications.
- **application data files (or documents)**, which are data files created by you when you use one of the above mentioned applications.
- **font files**, which determine the typefaces you are using for the text of a data file.
- **scrap files**, which contain either graphics or text you select from data files. Scraps enable you to import graphics or text from one application data file to another.
- **system files**, which are necessary for the operation of GEOS: the Kernel, input drivers, and printer drivers are all system files. Note that you cannot open these files.
- **desk accessories**, which are small utility programs which you can use within an application. Once you select a desk accessory, it will pop up over the screen over what you were working on. When you finish using the desk accessory and click on its close icon, the previous application will become active again.
- **folders**, also called directories, are the same as the file folders in a filing cabinet: after you create a folder, you can use it to organize applications, documents, and any other files on the deskTop.

- 
- **drivers**, which are programs used to control certain parts of your hardware, such as the printer and input device you are using.

### ***Sharing Data Between Applications***

One of the nicest features about GEOS is its flexibility. GEOS enables you to share data between applications. For example, you can use the application's **edit** menu to copy or move an image from a geoPaint drawing to another geoPaint drawing, or even to a geoWrite document. Here is how this works:

- 1: Select the image or text you wish to copy or move.
- 2: Select the application's **edit** menu.
- 3: Select **cut** to move the selected area or **copy** to copy the highlighted area.
- 4: Exit the document.
- 5: Open the destination document.
- 6: Select an insertion point.
- 7: And select **paste** from the **edit** menu. The area you selected in the previous document will appear.

Another handy feature is the way you can use desk accessories at almost any time: you can, for example, use the calculator desk accessory to add up a list of figures you are typing into a geoWrite document, without having to leave geoWrite.


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# GEOS Tutorial

If you are unfamiliar with using a graphic environmental operating system, use the following tutorial to get familiar with using GEOS. Once you have completed this tutorial, you will know how to create a work disk for geoPaint, open a geoPaint document, draw a little, and exit.


The disks you will need for this tutorial are the GEOS BOOT disk and the TUTORIAL disk you created when you were making backups of your GEOS disks.

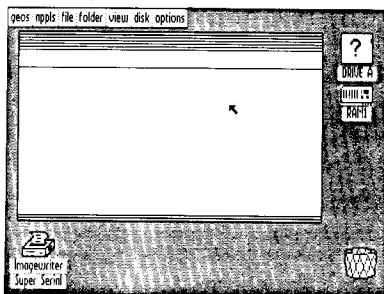
## ***Step 1: Boot GEOS***


- If your computer is turned off, boot GEOS: insert the GEOS BOOT disk into a disk drive and turn on the computer, monitor, and disk drives. The GEOS deskTop will appear on the screen.
- If your computer is turned on but GEOS is not in use, insert the GEOS BOOT disk into a disk drive and press control  reset.

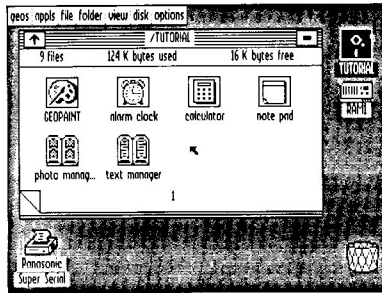
## ***Step 2: Insert the TUTORIAL Disk***

Never use an original application disk to create a data file! Instead, you will use the TUTORIAL disk you created earlier when you were making backup disks.

- 1: Close the GEOS BOOT disk by holding down the  key and pressing J.



- 2: Remove the GEOS BOOT disk from the disk drive and insert the TUTORIAL disk into the disk drive.
- 3: Activate the TUTORIAL disk by holding the  key down and pressing O. The TUTORIAL deskTop will appear on the screen:



### *Step 3: Now Remove Some Files*

You will now make a work disk for geoPaint by using the TUTORIAL disk. Here's how you can create a work disk for GEOPAINT:

- 1: You're not going to need all those files you see on the TUTORIAL disk, so now you can delete some of them from the disk. First you have to find a file to delete. Scroll through the deskTop pages by pressing a number key (1-9).
- 2: You won't need the following files for this tutorial: photo manager, text manager, alarm clock, calculator, Dwinelle, Roma, Cory, GS Clock, NoSlot Clock, TimeMaster, ThunderClock. You're going to delete them from the disk.
- 3: Move the pointer to the photo manager file, and click. The file will become highlighted.
- 4: Wait a moment and click on it again. An outline of the photo manager file will become attached to the pointer. (It's called a "ghost icon.") This is how you can move file icons around the screen.
- 5: You're going to move the photo manager completely off the TUTORIAL disk: move the pointer (which has the photo manager ghost icon attached to it) to the **waste basket** at the lower right corner of the screen.

- 6: Position the photo manager ghost icon right over the waste basket.
- 7: Click again. The photo manager ghost icon will disappear into the waste basket. It will also disappear from the disk note pad. You have just deleted it. This is part of how you create a work disk: you copy the files you need onto another disk. You can delete the ones you don't need and keep the ones you do need.
- 8: Now that you know how to delete files, delete the text manager, alarm clock, calculator, Dwinelle, Roma, Cory, GS Clock, NoSlot Clock, TimeMaster, and ThunderClock files. But don't delete the geoPaint and Note Pad files; you're going to need them later.

You have just created a work disk. The contents of a work disk depend entirely on your needs, disk space, and disk drive set-up.

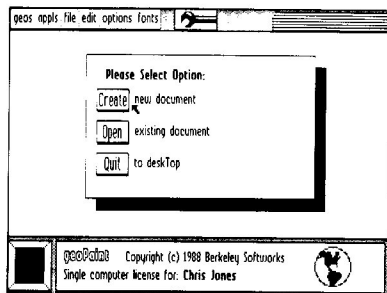
#### ***Step 4: Open geoPaint***

Now you are ready to be introduced to geoPaint, the GEOS graphics program.

- 1: Move the pointer on the screen to the GEOPAINT icon, and click twice in rapid succession. This is called "double-clicking" and is how you can quickly open a file.

**NOTE** There are other ways to select geoPaint. You can click once on its icon, then select **open** from the **file** menu, or you can select **GEOPAINT** from the **appl's** menu. But for now, just double-click on its icon.

- 2: The screen will change to the following:



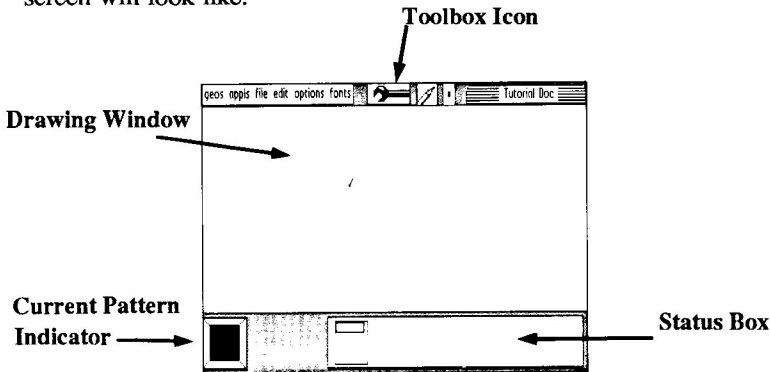
- 3: You are creating a new document, so move the pointer to the **Create new document** option and click.
- 4: Another dialog box will appear. This dialog box will enable you to create a new document on the current disk, in another disk drive, or on a disk not yet inserted in any disk drive. If there are folders on a disk, you will have the option of creating the file inside a folder, if you wish.

For now, you will create the document in the current disk drive, and since there are no folders listed in the dialog box, you will not create the document inside one.

Create a document by typing in a name first, such as TUTORIAL DOC, then press `return`.











### ***Step 5: Create a Drawing***

After you pressed `return` in the last step, here is what the geoPaint screen will look like:



- 1: At the top of the screen is a small icon shaped like a monkey wrench. Move the pointer (you will notice that its shape has changed slightly) to the monkey wrench and click.
- 2: You have just made the Toolbox visible. It appears on the left side. You will use this Toolbox to create a wide variety of drawings, using patterns and a number of other special effects. For this tutorial, you will create a simple drawing, just to get familiar with geoPaint.

- 3: Move the pointer to the Toolbox icon shaped like a grey box. It appears near the lower right corner of the Toolbox, and it's called the **Filled Rectangle** tool.
- 4: Click to select the **Filled Rectangle** tool.
- 5: Now move the pointer to the Drawing Window. You will notice that the pointer has assumed the shape of a cross-hair.
- 6: Select a place, and click.
- 7: Now pull the cross-hair out diagonally in any direction. A large black rectangle is forming on the screen.
- 8: Let's change the pattern of the rectangle. At the lower left corner of the screen is a box called the **Current Pattern Indicator**. On the keyboard, press the J key once. You have just changed the pattern in the rectangle on the screen and in the **Current Pattern Indicator**.
- 9: Press the J key several more times until you find a pattern you like. When you do, stretch out the rectangle on the screen until it appears the way you like.
- 10: Now click. The rectangle and its pattern will become set.
- 11: If you like, experiment with the following Toolbox icons:

Faucet	Air Brush	Line	Eraser	Paint Brush
				
				
Hollow Ellipse	Filled Ellipse	Hollow Rectangle	Filled Rectangle	Pencil

Experiment as much as you like. Create images on top of other images, for example. At the bottom of the screen is the Status Box, which displays options depending on the tool in use. Experiment with various options in the Status Box as you go along. If desired, refer to Chapter 5, "geoPaint."

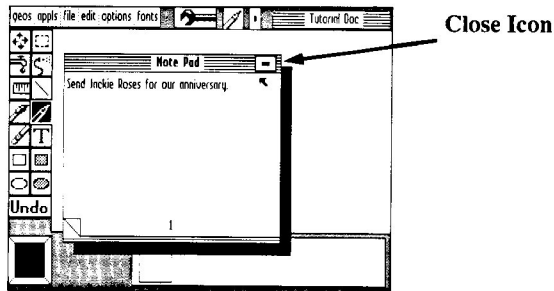


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### ***Step 6: Use a Desk Accessory***

Back when you deleted most of the files from the GEOPAINT TUTORIAL disk, you deleted a number of programs called **desk accessories**. A desk accessory is a small program you can use from within an application such as geoPaint. The desk accessory you are going to use now is the Note Pad.

- 1: Move the pointer up to the **geos** menu and click once to select it. Another menu of commands will appear.
- 2: Look for the **note pad** item and click on it. Notice that once you select a desk accessory, the document will be updated to disk.
- 3: The Note Pad will appear on the screen on top of your geoPaint drawing. You won't be able to use your drawing just now; it will be rendered inactive as long as the Note Pad is on the screen.



- 4: Type a note into the Note Pad: to do so, simply start typing.
- 5: Now exit the Note Pad. Move the pointer to the **Close Icon** and click. The Note Pad will disappear and you will be returned to your drawing.



### ***Step 7: Now Exit geoPaint***

When you leave an application, you have the option of going to the following places:

- you can go to another geoPaint document.

- you can go to another application.
- you can go back to the deskTop.

For the tutorial, you will return to the deskTop.

- 1: Move the pointer to the **file** menu option and click. Another set of menu items will appear.
- 2: Find the **quit** menu option, but don't click on it just yet. You will notice that the close, preview, and quit items are all followed by a  symbol and a keyboard letter. This means that there are two ways to choose that particular command. You can either click on the menu item in the list or, instead of dragging down a menu item, use something called a keyboard shortcut. You have used keyboard shortcuts before: hold down the  key and press the keyboard letter.
- 3: Exit geoPaint. Click on **quit**. Not only will you exit your geoPaint document, but you will save its contents to disk as well.

### ***Step 8: Return to the deskTop***

If your disk does not contain a file called **DESKTOP**, a message will appear on the screen asking you to insert a disk containing this file. The deskTop V2.0 file is found on your GEOS BOOT disk and it tells GEOS to display a disk's deskTop after you exit an application. Usually, when making work disks, it's a good idea to copy this file onto the work disk so that you can exit an application and return to the deskTop without having to insert another disk into a disk drive. However, you do not have a deskTop V2.0 file on your TUTORIAL disk, so you need to do the following:

*If you have a single-drive system:*

- Remove the TUTORIAL disk from the disk drive and insert the GEOS BOOT disk into the disk drive. Press `return`. The GEOS deskTop will appear.

*If you have more than one disk drive:*

- Insert the GEOS BOOT disk into another disk drive and press `return`. The TUTORIAL deskTop will appear.

---

### ***Step 9: Look for the New File Icon***

After you create a document with geoPaint or geoWrite, GEOS will create a document icon for it on the deskTop. After you exited the TUTORIAL DOC file you created, look closely at the TUTORIAL deskTop. You will see a new icon: it's shaped like a small painting and has the name TUTORIAL DOC underneath it. The next time you need to open TUTORIAL DOC, you can do so quickly by double-clicking on this icon. This will open geoPaint directly to the data contained in the file TUTORIAL DOC.

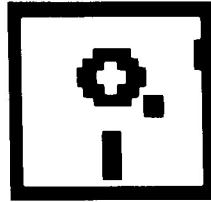
Congratulations! You have just completed the GEOS tutorial. Now you're ready to use GEOS.

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## Never and Always (Do's and Don'ts)

- When you are not using your disks, keep them in their sleeves and away from all electronic or magnetic equipment. Do not lay them on top of your monitor or computer power supply.
- Never install a card inside your computer without first turning off the computer.
- Always close the disk drive door after inserting any disk into the disk drive.
- Never remove a disk from the disk drive while on the deskTop, or while you are using an application, without first closing the disk (unless you are specifically asked to do so by a dialog box).
- Always create and use work disks. Use the GEOS BOOT disk only for booting or to rearrange your default files.
- Never create a document on an original disk (i.e., one that comes with your GEOS package). Copy the applications onto work disks and create your documents from there. If, however, you do inadvertently create a document on an applications disk, follow this procedure:
  - 1: Copy the document to a work disk (if you wish to save it).
  - 2: Remove the document from the applications disk by dragging it to the border, then dragging it to the waste basket to delete it.
- Always make backup disks containing your document files in case one disk becomes damaged.
- Never give two disks the same name; it is too easy for you and your computer to confuse the two. If one disk is to be a backup, vary its name slightly. For example, the backup for a disk called "Limericks" could be named "Limericks 2" or "Limericks Backup".
- Never turn off your computer or reboot it if you are in an application. Go to the deskTop and close the disk before you exit the GEOS system.

# 3



## Work Disks

This chapter covers what you should know about work disks, which are the disks you prepare for everyday usage of applications. The kind of work disk you create depends on the project you are working on, how much space you have on your disks, and the kind of disk drive set-up you are using.

Unfamiliar terms are defined in Appendix A: Glossary.

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# Why You Need Work Disks

The disks that come with the GEOS package are master disks. Aside from booting, they should not be used for everyday use. Instead, you should copy the applications and other files that you need onto other disks called **work disks**. You will find that using work disks is convenient in that you can tailor them to your own needs, depending on the equipment you have and the type of work you plan to do.

In this manual, each chapter covering applications describes how you can create a work disk for the application you are using. For example, if you are using geoPaint, the GEOS graphics program, you may wish to copy the following onto a work disk:

- the geoPaint application.
- geoPaint data files.

The following optional files can be included as well:

- the deskTop.
- the Photo Manager desk accessory.
- the Text Manager desk accessory.
- any photo or text albums.
- any photo or text scraps.
- any font files.

To copy files from one disk to another, refer to "Copying a File or Folder to Another Disk," page 4-18.

**IMPORTANT** Do not attempt to create a work disk until you have made a backup of the original disks that came with your GEOS package.

## ***Work Disks and Disk Drives***

How you prepare a work disk mainly depends on the amount of space you have on a disk and the type of disk drive set-up you use.

*If you have one or two 5 1/4 disk drives:*

- Make a work disk for each application you are using. Each of these disks will contain the files you need for a particular purpose. For example, to use geoPaint, you might make a disk with the deskTop, geoPaint, fonts (if you need them), and geoPaint data files.

- 
- If you have two disk drives you can split these files across two disks, as long as any fonts and desk accessories are on the same disk as the application.

*If you have a 3 1/2 disk drive:*

- A 3 1/2 disk is large enough to hold all of the GEOS files with room left over for your data files. If you place all the GEOS files onto a 3 1/2 disk, you can switch between applications very easily.
- Another way is to copy just the files you need onto a 3 1/2 disk. This will leave a large part of the disk free for your data files.

**NOTE** The most effective way to use multiple GEOS applications on the disk involves the use of the SYSTEM folder, which is explained in the next section, "The SYSTEM Folder."

*If you have a hard disk:*

- Copy all the GEOS files onto the hard disk. Also install the GEOS kernel on the hard disk so that you can boot GEOS from the hard disk. Hard disk installation is explained in Appendix D: Using a Hard Disk with GEOS.

**NOTE** The most effective way to use multiple GEOS applications on a hard disk involves the use of the SYSTEM folder, which is explained in the next section, "The SYSTEM Folder."

*If you have a memory expansion device (e.g., a RamWorks device):*

- Copy all the GEOS files that you need (depending on the room you have on the memory expansion device) to the memory expansion device when you start working. Run your application from the memory expansion device.

**NOTE** If your memory expansion device is large, you will probably want to use a SYSTEM folder, which is described in the next section, "The SYSTEM Folder."

- Keep your data files on either the memory expansion device or another disk. If you keep your data files on the memory expansion device, GEOS will work much faster, but you *must* copy the data files to another disk if you wish to save them.

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### ***The SYSTEM Folder***

When searching for applications, desk accessories, fonts, or scraps, GEOS looks in a special folder you create called the SYSTEM folder. Folders are described in Chapter 4, "The GEOS deskTop." To create a SYSTEM folder, select **create** from the **folder** menu. When you are asked to enter a name, type SYSTEM (in all capital letters), then press `[return]`. The SYSTEM folder must be kept at the top level directory of the work disk (i.e., it should never be placed inside another folder), and you can have no more than one per disk.

On large disk devices, folders are commonly used to group files together. Applications placed in the SYSTEM folder can be easily used with any data file on the disk (either through the **appl** menu or by double-clicking on the data file name). Likewise, any fonts and desk accessories that you place in the SYSTEM folder will be accessible from within any GEOS application you run. Text and photo scraps you create are automatically placed in the SYSTEM folder.

### ***The SYSTEM MERGE Utility***

Creating work disks can be a time consuming task. With this in mind, a SYSTEM folder merge utility has been included with your GEOS package in order to make it easier for you to make work disks. To learn how to use the SYSTEM MERGE Utility, refer to Appendix I: SYSTEM MERGE Utility, page 13-39.



# 4



## The GEOS deskTop

This chapter describes the functions of the GEOS deskTop, in which you will learn how to:

- identify the deskTop, icons, menus, and disk note pad.
- manage files and folders (open, close, duplicate, rename, copy, move, delete, print, and gain access to file information).
- manage disks (open, close, rename, copy, verify, format, erase, boot).
- use more than one disk drive.

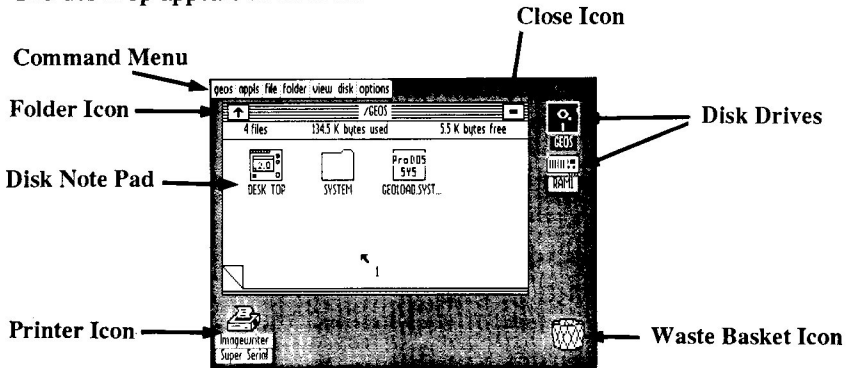
At the end of this chapter is a Quick Reference to all the commands contained in the deskTop menus.

Unfamiliar terms are defined in Appendix A: Glossary.

# The deskTop Screen

The deskTop, which is the first screen you see after you boot GEOS, enables you to gain access to and work with your files. It also allows you to make decisions regarding disks, such as copying or renaming them. This chapter describes how to use the deskTop to manipulate files and disks.

The deskTop appears as follows:



The **command menu** lies along the top of the deskTop. Selecting each item in the command menu will cause another menu of commands to appear. To select a menu or an item, point to it and click. If you do not have a mouse or joystick, use the keyboard to move the pointer to an item and press `return`.

Along the upper right side of the deskTop are the **disk icons**, which indicates the disks that are currently in the disk drives. This icon is black when the disk is open. You can have as many as four disk icons, each representing a disk drive or a memory expansion device, in this corner.

The **disk note pad** is the large white area in the middle of the screen. It contains information about the currently open disk. The disk's name appears in the title bar (in the above example, the name of the disk is *GEOS*). A **close icon** is displayed at the far right; click on it to close the disk. At the far left is the **folder icon**; clicking on it returns you to the folder you were previously using or up one folder level. (You will

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learn more about folders later on in this chapter.) The number of files, how much disk space is used and how much is available are listed below the title bar. The pages of the disk note pad display the icons of the files residing on the currently open disk at the current folder level.

There may be up to eight **file** or **folder icons** on each page of the disk note pad. The icon's appearance indicates the file's type, such as application or document. The name of the file is written below the icon. Once you click on a file or folder, it will become **highlighted** (i.e., it will appear in reverse video). You need to highlight an item before you can move it around, open it, or manipulate it by using the command menu. Use either the pointer or keyboard to highlight the file or folder.

You can have as many pages as you need on the disk note pad, depending on the number of files on the disk. There are three ways to flip through the pages:

- Enter the page number (1-9) from the keyboard.
- Press the → arrow key to move to the next page, or press the ← arrow key to move to the previous page.
- Click on the dog-eared (turned over) corner at the lower left corner of the note pad to move forward; click on the area just below the dog-ear to move to the previous page. If you click backwards while on page 1, you will jump to the last page of the note pad. If you have ten or more pages on your disk note pad, you will need to use the "dog-ear" or the arrow keys to get to any pages after 9.

The area just below the disk note pad is the **border**, which is used to *temporarily* deposit file icons you are moving or copying. (Never leave an icon there permanently.) You can have up to eight file icons in the border area.

The **printer** icon appears in the lower left corner of the deskTop. The printer icon represents the default printer; below the printer icon are the names of the currently selected printer and the printer interface card.

The **waste basket**, whose icon appears in the lower right corner of the deskTop, provides one way for you to delete files and folders from the deskTop.

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### ***The deskTop V2.0 and Master Disks***

Your GEOS BOOT disk and the application disks are valuable disks, which you will not wish to damage. The deskTop V2.0 is designed to prevent accidental damage to your master disk by warning you before each file you delete.

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# File/Folder Management

## File/Folder Categories

There are several types of GEOS files. These categories depend upon the type of information the file contains and how that information is used. Folders are a type of file used to organize various types of individual files into easily managed groups, and are described later on in this section.

The types of GEOS files are as follows:

### *Folders*

- Special files used to hold individual files and other folders.

### *System Files*

- The GEOS deskTop file management application.
- System data files such as the photo scrap and text scrap.

### *Application Files*

- Application programs, such as geoWrite, geoPaint, and geoLaser.
- Desk accessories, such as the Calculator, Note Pad, Photo Manager, and Text Manager.

### *Data Files*

- Documents created by GEOS applications.
- Font files containing bit-mapped image data for text.
- Data files created by non-GEOS programs.

### *Interface Drivers*

- Input drivers to accommodate a mouse or other input device.
- Printer drivers, each for a specific printer.
- Printer interface card drivers.
- Interface drivers to accommodate the clock and other special features.

### *Non-GEOS Files*

- ProDOS programs and data files that have not been converted to GEOS format. The deskTop displays a generic ProDOS file icon for each of these files.

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## Folder Functions

**Folders** (also called "**directories**") are a means of organizing files into easily managed groups. A folder is a special file whose function is to contain other files (e.g., applications). For example, you can place all your geoWrite documents into a "Write Folder." The next time you need to copy these documents onto another disk, you can do so quickly by copying the entire folder instead of each document separately. If you place all your documents into one folder, you can gain access to them quickly simply by selecting that folder.



You can even place folders within folders, creating a series of hierarchical levels. A **home directory** (represented by a /) refers to the directory at the top of a hierarchical level (i.e., it appears on the deskTop when you first open a disk). A **SYSTEM** folder is a special folder to which you can gain access easily. It contains frequently used files, such as applications or fonts, and it is created by you. It must always be at the home directory level. Create it only on work disks, not master disks.

As you work with folders, you will notice that the folder **pathname** is displayed in the deskTop title bar. A pathname is simply the list of folders you opened to arrive at the current folder. Since the title bar can hold a limited number of characters (depending on their width), it is suggested that you give your folders names that are not too long.

If you are not familiar with selecting and moving icons, see "Selecting a File or Folder," page 4-11.

Some folder functions, such as viewing, selecting, opening, closing, renaming, and duplicating folders, are the same as the file functions and are described in the section entitled "File/Folder Functions," later on in this chapter. Others, however, are different and are described below.

### *Creating a Folder*

- 1: Select **create** from the **folder** menu (or press  U).
- 2: A dialog box will ask you to "Please enter folder name." Type in a name and press . A folder icon with the name you entered will appear on the deskTop.

**NOTE** Do not insert a / in the folder name, since the / signifies a folder level. Avoid giving your folder too long a name, since the pathname holds a limited number of characters. If the pathname becomes too long, the pathname will be preceded by an

ellipsis (...) when its name is displayed in a dialog box or title bar.

### ***Creating a SYSTEM Folder***

You can have one SYSTEM folder per disk. Use it to store desk accessories, fonts, or applications. To make it accessible to GEOS (e.g., when you are looking for a desk accessory), you must name it SYSTEM (all capital letters) and store it in the home directory.

*To create a SYSTEM folder:*

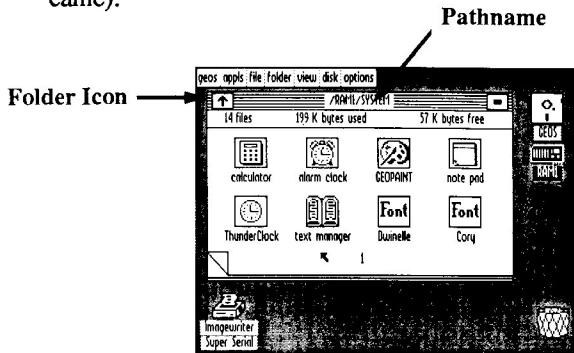
- 1: Select **create** from the **folder** menu (or press **⌘ U**).
- 2: A dialog box will ask you to "Please enter folder name." Type in **SYSTEM** and press **return**.

### ***Exiting a Folder***

You can exit a folder by moving up one level. Another method is to go directly to another folder, which is described in the next section, "Gaining Access to Another Folder."

*To move up one level:*

- Click on the **Folder** icon at the top left corner of the folder's disk note pad or press the **↑** arrow key. You will be returned to the next highest level of folder (usually the folder from which you came).




### ***Gaining Access to Another Folder***

Besides moving up one folder level, you can use other methods to reach another folder. You can return directly to the home directory, for example. If you know the destination folder's name, you can move directly to it (even if it's on another disk in another disk drive).


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Otherwise, you can use the **browse** command to display a list of accessible folders. If needed, you can move to a different level from the current one by using the **goto** command.

*To return to the home directory:*

- Double-click on the **folder** icon.
- Hold down  and press the up arrow key.

*To move up one folder using the goto menu:*


- 1: Select **goto** from the **folder** menu (or press  **/**).
- 2: A dialog box will ask you to "Please enter folder name." Enter .. (i.e., two periods), then press .

**NOTE** .. is a "relative" pathname. It refers to the folder one level above the current folder. This means you can go to a folder at the same level as the one you are currently in, for example, by typing **../Foldername**.

*To move up one folder using the keyboard:*


- Press the up arrow key.

*To find a folder if you know the folder's name:*

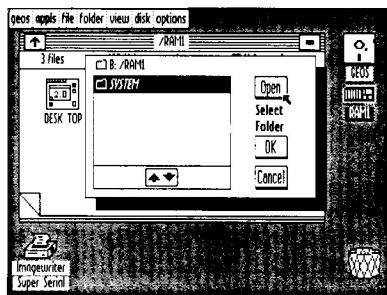
- 1: Select **goto** from the **folder** menu (or press  **/**).
- 2: A dialog box will ask you to "Please enter folder name." Enter the name for the folder, then press .

**NOTE** If the destination is another disk, enter the name of the disk. Suppose the destination folder is inside a folder at the home directory level. You would enter **/Diskname/HomeFoldername/DestinationFoldername**.

*To find a folder by browsing through a list:*

- 1: Select **browse** from the **folder** menu (or press  **\**).
- 2: The Browse dialog box will appear. If necessary, search for the name of the folder by clicking on the scrolling arrows.





Browse Dialog Box

- 3: When you find the folder you need, click on its name so that it is highlighted. Click **OK** to open the folder and exit the Select Folder dialog box. Click **Open** to display the selected folder's contents in the dialog box.

**NOTE** Another method of opening a folder is to double-click on its name. If you wish to return to the previously displayed folder, click on the folder icon located next to the pathname at the top of the dialog box.


### ***Adding a File or Folder to a Folder***

*To add a file or folder to a folder on the currently open disk:*


- 1: Make sure the deskTop is in icon mode (i.e., the files and folders are displayed as icons, not as text descriptions). If necessary, select **by icon** from the view menu (or press **Apple G**).
- 2: Click on the file or folder icon you wish to add so that it is highlighted, then drag its ghost to the destination folder's icon. Click to deposit it inside the folder.

**NOTE** If the destination folder is on another note pad page, drag the file icon to the border, click to deposit it there, then go to the desired note pad page. Drag the file icon up to the destination folder and click to deposit it inside. Avoid having folder depths of more than 18 sub-levels, since this may cause problems if you try to copy, duplicate, or delete the top folder.

*To add a file or folder to a folder on a disk in another disk drive:*

- 1: Make sure the deskTop is in icon mode (i.e., the files and folders are displayed as icons, not as text descriptions). If necessary, select **by icon** from the view menu (or press  G).
- 2: Click on the file or folder you wish to add so that it is highlighted, then drag its ghost to the destination disk drive icon. Click to copy it there.
- 3: A dialog box will ask you to "Select destination for copy of file." Open the folder you need by double-clicking on its name (or highlighting its name and clicking on **Open**).
- 4: When the destination folder is open, click **OK** to copy the item into that folder.

### ***Moving a File or Folder from a Folder***

- 1: Make sure the deskTop is in icon mode (i.e., the files and folders are displayed as icons, not text descriptions). If necessary, select **by icon** from the view menu (or press  G).
- 2: Open the folder containing the items you need.
- 3: Drag the file or folder icon's ghost to the border and click to deposit it there.
- 4: Exit the folder: use one of the methods described in "Exiting a Folder" and "Gaining Access to Another Folder," on page 4-7.
- 5: The destination can be almost anywhere: the same page, another page of that disk, or another disk entirely. Open the destination disk and go to the desired folder. Now drag the file icon from the border to the disk note pad and click to deposit it.

**NOTE** If necessary, refer to the following: "Rearranging File or Folder Icons," page 4-16, or "Copying a File or Folder to Another Disk," page 4-18.

## **File/Folder Functions**

Many of the actions you perform with files and folders, such as viewing, selecting, opening, renaming, duplicating, copying, and deleting, are handled in the same manner. You can either use the mouse or joystick by

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clicking on an item and selecting a command from the command menu, or you can use the keyboard.

### ***Viewing Modes***

You can view the items on the deskTop in either text or icon mode. Either way, you can use the command menu or keyboard shortcuts to make certain decisions once you have selected an item or a group of items.

Note that the **apps** and **desk accs** items are included in the **view** menu. These features are described in "Selecting Applications and Desk Accessories," later on in this chapter.

*To view by icon mode:*

- Select **by icon** from the **view** menu (or press **⌘ G**). The items on the disk note pad will be displayed as icons.

**NOTE** You must use icon mode if you wish to select more than one item at a time (refer to "Selecting a File or Folder," in the next section.

*To view by text mode:*

- Go to the **view** menu and click on one of the following commands:

**by size** (or press **⌘ S**). Sorts items by size, largest item first.

**by type** (or press **⌘ T**). Groups items by file type.

**by date** (or press **⌘ Y**). Sorts by date of last modification, most recent first.

**by name** (or press **⌘ N**). Sorts items alphabetically.

### ***Selecting a File or Folder***

You can select a file or folder in either icon or text mode and use the features in the **file** menu (**print** is restricted to application document files). If you are in icon mode, you have the option of selecting more than one item at a time by using the group select feature.

*To select a file or folder using the mouse or joystick:*

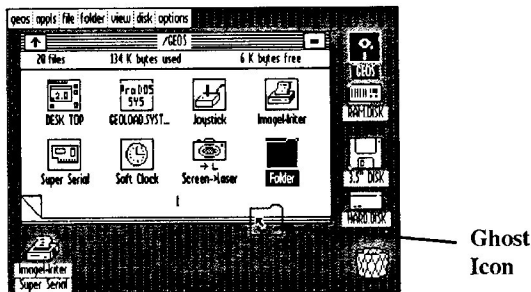
- Simply point to the item and click. It will become highlighted. (You can use either text or icon mode.)

*To select a file or folder icon using the keyboard:*

- Each file on the deskTop has a number assigned to it: for example, the top left file is 1, the file to its right is 2, and so on. To select file icon 1, press **⌘ 1**. That icon will become highlighted.

*To move a file or folder icon:*

- Click on the icon once so that it is highlighted, pause, then click on it again. An outline (called the "ghost icon") will become attached to the pointer. You can move the ghost icon around on the deskTop. To deposit it, move it to a destination and click again.



*To deselect a file or folder icon:*

- Click anywhere outside the icon.
- Hold down **⌘** and click on the icon.
- Hold down **⌘** and press the number of the icon.

*To select more than one file or folder icon:*

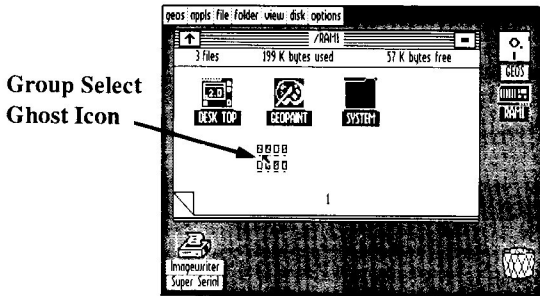
- To use the mouse, hold down the **⌘** key and click on each icon so that it is selected. To use the keyboard, hold down **⌘** and press each icon's number (e.g., **⌘ 1** for the top left file/folder icon).

**NOTE** After selecting as many file icons as you need, you can use the **file** menu or keyboard shortcuts to perform multiple file operations (but you cannot use **print** or **open**).

*To move or copy more than one file or folder icon:*

- 1: Use the above procedure to select the icons you need.

- 2: Point to one of the highlighted icons and click again. The group select ghost icon will appear.



- 3: Click to deposit the group select ghost icon.

*To deselect all selected file icons:*

- Click outside of the selected icons.
- Press **Apple 0** (zero).

### ***Opening a File or Folder***

You can open data files from within an application, or you can use the deskTop to open either files or folders. You can open a file or folder in icon or text mode. There are two methods of opening a file or folder from the deskTop:

- Double-click on the file or folder.
- Click once on the item so that it is highlighted (or use the keyboard), then select **open** from the **file** menu (or press **Apple Z**).

The types of files you can open from the deskTop are application programs, documents (i.e., data files) you have created, or desk accessories. You can also open folders, of course, as well as ProDOS applications. If you attempt to open another file type, a dialog box will inform you that the file cannot be opened from the deskTop.

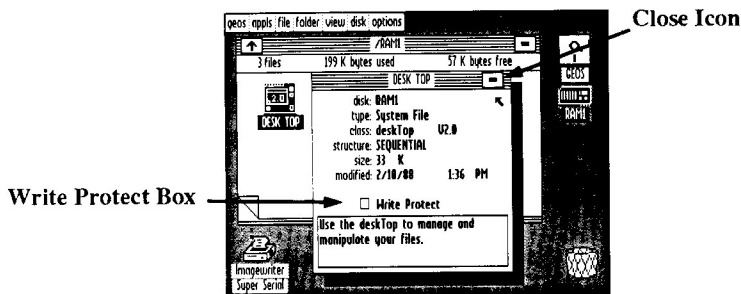
## ***File/Folder Info and Write Protect Status***

The **info** option displays certain information about the selected item(s) on the currently open disk. It also enables you to enter a brief note regarding the purpose of a file (but not a folder) and to determine whether a file or folder can be modified or deleted by changing its write protect status. You can use this command on more than one file or folder at a time.

*To select info:*

- Select the file(s) or folder(s), then select **info** from the **file** menu (or press **⌘ Q**).

A dialog box will display the disk name, type, class, structure, and when modified. It will also let you add a brief note and change the write protect status of the file or folder.



*To add a brief note to a file's info dialog box:*

- Simply start typing. Press **[delete]** to backspace. To move to another location, click anywhere in the text.

*To change the write protect status:*

- Click on the **Write Protect** box once to change the write protect status. If the box is black, the file or folder cannot be modified or deleted. If the box is white, the file or folder can be modified or deleted.

*To close the info dialog box:*

- Click on the **close** icon in the upper right corner of the info dialog box. If you previously selected only one file or folder from the **info**

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
command, you will be returned to the deskTop. If you previously selected a group of files or folders, the **info** dialog box for the next file or folder you selected will be displayed.

### ***Renaming a File or Folder***

You can rename (or alter the current name of) a file or folder by using the **rename** menu item. If you are renaming more than one item, you need to use icon mode.

You cannot rename a file or folder with the same name as an existing item at that folder level, nor can you rename SYSTEM files.

#### *To rename a file or folder:*

- 1: Select the file(s) or folder(s), then select **rename** from the file menu (or press  **M**).
- 2: A dialog box will ask you to "Please enter new filename." Press **delete** to backspace over as much of the old name as needed, enter a new name, and press . Use no more than 15 characters.

**NOTE** Avoid giving a folder too long a name, since the pathname holds no more than 64 characters. If the pathname becomes too long, the excess characters will be replaced with a ... when it is displayed in a dialog box or title bar.

#### *To cancel and leave the name unchanged:*



- Select **Cancel** or press .

### ***Duplicating a File or Folder***

You can duplicate more than one file or folder at a time in icon mode by using the group select feature.

Note that the name of the duplicated item cannot be the same as the original or any other file or folder at the same folder level. You also cannot duplicate SYSTEM files.

#### *To duplicate a file or folder:*

- 1: Select the file(s) or folder(s), then select **duplicate** from the file menu (or press  **H**).
- 2: A dialog box will ask you to "Please enter a new filename." Press **delete** to backspace, enter a new name, then press . The new filename should have no more than 15 characters.

**NOTE** The new file will be the same as the original file, except for the name.


### ***Rearranging File or Folder Icons***

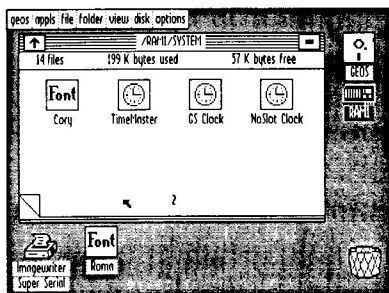
You can easily move file or folder icons from one page to another of the disk note pad, if desired. Use the group select feature to move more than one item at a time. If you have certain files or folders you use frequently, it is easier to have them on the first page of the disk note pad.

Use this method if you wish certain items (such as favorite desk accessories) to appear first in a dialog box or menu.

**IMPORTANT** If you deposit an item on the border, it is important that you do not leave it there permanently, or it may be moved to the last page of the current folder. This can happen if you enter an application, use a desk accessory, select **RESET** from the **options** menu, copy a disk, turn off your computer, enter ProDOS, or when GEOS encounters certain disk errors.

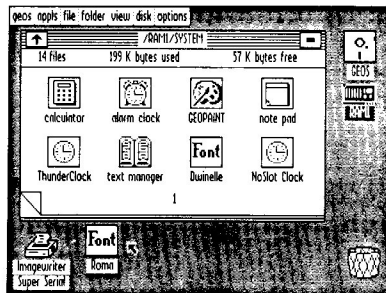
*To move a file or folder icon to another page:*

- 1: Make sure the disk note pad is in icon mode: if necessary, select **by icon** from the **view** menu (or press  **G**).
- 2: Flip through the pages of the note pad (click on the dog-eared corner, type the page number (1–9), or press the left and right arrow keys) until you find the file or folder icon you need.
- 3: Drag the item's ghost icon to the border and click to deposit it there.



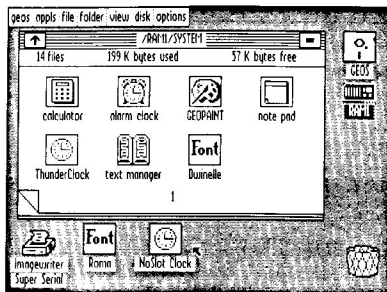


- 4: Flip through the pages of the note pad again to find the place where you would like to place the icon(s) you deposited on the border. Suppose you go to page 1:

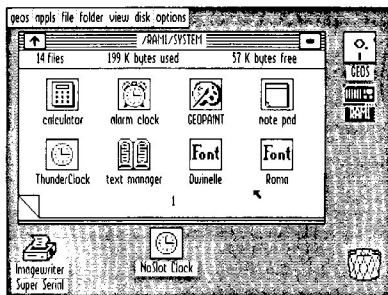


- 5: If there are less than eight file and folder icons on the destination note pad page, go to Step 6.

If there are eight icons, as in the example above, you need to move one or more icons to the border before you can use the procedure in Step 6. Click on an icon and drag its ghost to the border, next to the icon that is already there. Click to deposit it.



- 6: Now move the first icon(s) from the border to the disk note pad.



If there are any remaining icons on the border, it is important to move them back to the disk note pad. Dropping an icon onto a full page of icons will move that icon directly to the first open position.

**NOTE** Dropping an item on top of a folder icon will place the item inside that folder.

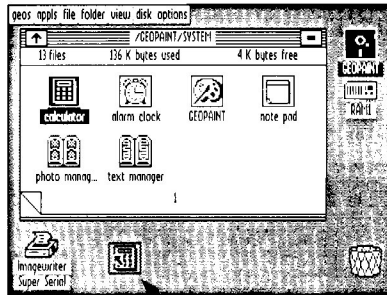
### ***Copying a File or Folder to Another Disk***

The disk from which you wish to copy is called the **source** disk, and the disk onto which you wish to copy the file(s) or folder(s) is called the **destination** disk. You can copy one file or folder, or you can copy a group using the group select feature.

*If you are using one disk drive:*

- 1: Make sure the source disk note pad is in icon mode: if necessary, select **by icon** from the view menu (or press **Apple G**).
- 2: Select each item to be copied.

**NOTE** You can use the group select feature to copy more than one item at a time. If necessary, refer to "To select more than one file or folder icon," (from "Selecting a File or Folder") page 4-12.



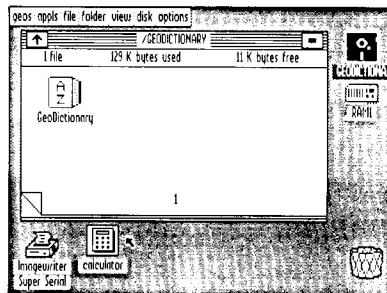
Ghost Icon

- 3: Drag the item's ghost icon (or the group select icon) to the border and click to deposit it.
- 4: Close and remove the source disk.

**NOTE** To close the currently open disk, either click on its close icon, select close from the **disk** menu, or press **Apple J**.

- 5: Insert the destination disk and open it.

**NOTE** To open a disk, either click on its **disk** icon, select **open** from the **disk** menu, or press **Apple O**.




- 
- 6: Drag the file or folder icon you deposited on the border onto the destination disk's note pad. If you wish to place the file in a folder, first go to the folder and click to deposit it inside.

**NOTE** Dropping an item on top of a folder icon will place the item inside that folder.

- 7: When you are asked to, remove the destination disk and insert the source disk. Click **OK** to continue. Follow the directions on the screen until the file or folder has been completely copied.
- 8: Move any file or folder icons back up to the disk note pad where they belong.

*If you are using more than one disk drive:*


- 1: Make sure the source disk note pad is in icon mode: if necessary, select **by icon** from the **view** menu (or press  **G**).
- 2: Select each item to be copied.
- 3: Drag the item's ghost icon (or the group select ghost icon) to the disk icon representing the destination disk and click. The file(s) or folder(s) you selected will be copied onto that disk.

**NOTE** If there are no folders in the destination disk, the file will be copied right away. If there are folders, a dialog box will list all the folders on the destination disk. If you wish to place the item in the home directory, click **OK**. You can move to different folder levels by double-clicking on a folder (or highlighting it and selecting **Open**). Once you have opened the folder you want to place the file in (the contents of that folder will be displayed in the dialog box), click **OK**.

### ***Deleting a File or Folder***

You can delete an item or a group of items by using the waste basket or the command menu.

*To delete using the waste basket:*

- 1: Make sure the disk note pad is in icon mode: if necessary, select **by icon** from the **view** menu (or press  **G**).
- 2: Click on each file or folder to be deleted.

- 3: Drag the item's ghost icon (or the group select ghost icon) to the waste basket and click. The item(s) will be deleted.

**NOTE** If you are deleting a group of items or a folder that contains files or other folders, a dialog box will enable you to continue or cancel. Click **OK** to continue, or **Cancel** to abort. If a folder contains an item that is write protected, you need to change its write protect status. Refer to "File/Folder Info and Write Protect Status," page 4-14.

*If you are deleting items on a boot or master disk:*

- 1: Drag the items to the border and click to deposit them.
- 2: Now drag them to the waste basket and click to deposit them inside.

*To delete using the command menu:*

- 1: Click on the file or folder you wish to delete so that it is highlighted.

**NOTE** If you are deleting only one item, you can use either text or icon mode. If you wish to delete more than one item, you need to use icon mode (select **by icon** from the **view** menu or press **⌘ G**). If necessary, refer to "To select more than one file or folder icon," (from "Selecting a File or Folder"), page 4-12.

- 2: Select **delete** from the **file** menu (or press **⌘ X**). The item(s) will be deleted.

**NOTE** If you are deleting items using the command menu or the keyboard shortcut, a dialog box will enable you to continue or cancel. Click **OK** to continue, or **Cancel** to abort. If a folder contains a file that is write protected, you need to change its write protect status. Refer to "File/Folder Info and Write Protect Status," page 4-14.

## File Functions

Some deskTop functions operate on files only. They cannot be performed with folders.

### Selecting Drivers

The **options** menu lists drivers for the printer, printer interface card, input device, clock, and auxiliary devices. Selecting one of these menu


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items enables you to tell GEOS to use the item you selected. The procedures for selecting these drivers are covered in Chapter 12, "Drivers."

### ***Printing a Document***

Before you print a document, make sure that the printer is correctly connected. (If not, a dialog box will tell you "The printer is inaccessible.") If necessary, refer to "Printer Drivers and Interface Cards" in Chapter 12, "Drivers." Note that you can print only one document at a time; i.e., you cannot use the group select feature to print a string of documents. The application that you used to create the document you wish to print must be in the SYSTEM folder or current folder of any open disk.

There are two ways to print a document from the deskTop:

- Select the file's icon so that it is highlighted, then select **print** from the **file** menu (or press  **P**).
- Drag the file's ghost icon over to the printer icon at the lower left corner of the deskTop and click to deposit it.

After you select one of these methods, a dialog box will enable you to set a variety of parameters regarding the document, depending on the type of application it uses.

The documents created by any application that prints (e.g., geoPaint or geoWrite) can be printed from the deskTop, as well as within the application.

### **Selecting Applications and Desk Accessories**

Applications and desk accessories can be opened from a variety of places on the deskTop, depending on their location and the number of files on a disk.

Note that you also can open a desk accessory or another application from within an application. This is described in the chapters covering applications and Chapter 11, "Desk Accessories."

### ***Opening an Application***

There are four routes you can take to open an application from the deskTop, depending on its location. If you wish to open or print a document in another disk drive from the application, you can do so if the

application you used to create the document is in a SYSTEM folder or current folder of any open drive.

Note that you can use either text or icon mode to select the application.

*If the application is displayed on the current note pad page, use one of the following. Use either text or icon mode:*

- Click once on the application name so that it is highlighted, then select **open** from the **file** menu (or press **⌘ Z**).
- Double-click on the application.

The application will open, and display a dialog box prompting you to create a new document, open an existing document, or quit.

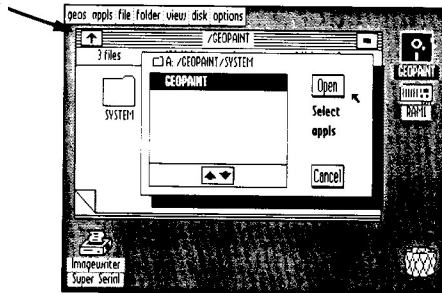
*If the application is one of the first eight files in the current folder and the SYSTEM folder together:*

- Select the desired application from the **apples** menu.

*To scan applications anywhere on a disk:*

- 1: Select **apples** from the **view** menu.
- 2: A dialog box listing all folders as well as applications at the current level will be displayed. Click on the application you need so that it is highlighted, then select **Open**.

Folder Icon



**NOTE** If the application you need is not displayed, click on the scrolling arrows to move through the list. If the application is

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inside a folder, open the folder to gain access to the application. If needed, click on the **folder** icon to return to the previous folder.

*If you have already created a data file with the application:*


- Open the data file. Now you will be in the application.

### ***Opening a Desk Accessory***

There are three routes you can take to open a desk accessory from the deskTop. In addition to opening desk accessories from the deskTop, you can also open them from within an application.

Note that you can use either text or icon mode to select the desk accessory from the deskTop.

*If the desk accessory is displayed on the current note pad page, use one of the following:*

- Click once on the desk accessory name so that it is highlighted, then select **open** from the **file** menu (or press  **Z**).
- Double-click on the desk accessory icon.

*If the desk accessory is one of the first eight files in the current folder and the SYSTEM folder together:*

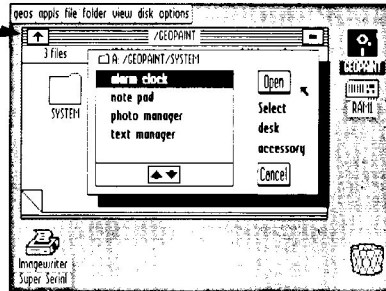
- Select the desk accessory from the **geos** menu.

*To scan desk accessories anywhere on a disk:*

- 1: Select **desk accs** from the **view** menu.
- 2: A dialog box listing all the desk accessories and folders will be displayed. Open the folder that contains the desk accessory you are looking for. Double-click on the desk accessory you need (or click on it so that it is highlighted, then select **Open**).



Folder Icon



**NOTE** If the desk accessory you need is not displayed, click on the scrolling arrows to move through the list. If needed, click on the **folder** icon to return to the previous folder. Return to the home directory by double-clicking on the **folder** icon.


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# Disk Management

The disks you use in GEOS fall into three general categories: boot, application, and work disks. Use the boot disk to start up your system. The application disk contains the programs you use, such as geoWrite and geoPaint. A work disk is reserved for everyday use and its contents are determined by you; it can contain copies of the application, data files, and related files (such as font files).

## *Opening a Disk*


There are two ways to open a disk:

- Select **open** from the **disk** menu (or press  **O**).
- Click on one of the disk icons at the right side of the screen.



**IMPORTANT** When a disk is open, **do not remove it from the disk drive unless a dialog box prompts you.** Otherwise, serious damage to the data on your disk may occur.

## *Closing a Disk*

Before removing a disk from a disk drive, always close it using one of the following methods:

- Select **close** from the **disk** menu (or press  **J**).
- Click on the **close** icon at the upper right corner of the disk note pad.

## *Renaming a Disk*

- 1: Select **rename** from the **disk** menu (or press  **K**).
- 2: A dialog box will ask you to "Please enter new disk name." Backspace over the current name as much as you need, type in a new name, and press .

**NOTE** Do not give disks the same name, since this may cause confusion. Also, do not include a / in a name.

## *Copying a Disk Using One Disk Drive*

The **source disk** is the disk whose contents you wish to copy; the **destination disk** is the disk onto which you wish to copy those contents.

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*To copy a disk using one disk drive:*

- 1: Insert the source disk into the disk drive.
- 2: Open the source disk.
- 3: Select **copy** from the **disk** menu (or press **⌘ L**).
- 4: A dialog box will ask you to "Please insert DESTINATION disk in drive A." Remove the source disk (you needn't close it), insert the destination disk, then click **OK**.

*NOTE* If the destination disk is unformatted, a dialog box will enable you to format it if you wish or cancel the operation. To format the disk, enter a disk name and press **return**. The disk will be formatted and you can continue copying.

- 5: The next dialog box will ask you to "Please insert SOURCE disk in drive A." Remove the destination disk, insert the source disk, then click **OK**.
- 6: The next dialog box will ask "Replace the contents of (destination disk name) with the contents of (source disk name)? Click **OK**."
- 7: Continue to follow the directions on the screen, swapping disks in and out of the disk drive and clicking **OK**, until the disk is copied.

### ***Copying a Disk Using More than One Disk Drive***

The methods for copying a disk on a multi-drive system vary, depending on whether you are using disk drives of the same format or of different formats (e.g., one is a 5 1/4 inch disk and the other is a hard disk).

The **source disk** is the disk whose contents you wish to copy; the **destination disk** is the disk onto which you wish to copy those contents.

*To copy a disk if the disk drive formats are the same:*

- 1: Select **copy** from the **disk** menu.
- 2: A dialog box will ask you to "Select source and destination drives for copy." Click on the appropriate boxes, then click **OK**.

- 3: The next dialog box will ask you to "Please insert SOURCE disk in drive #. Please insert DESTINATION disk in drive #." Click **OK**.
- 4: The next dialog box will ask you "Replace the contents of (destination disk name) with the contents of (source disk name)?" Click **OK**.

*To copy a disk if the disk drive formats are different:*

- 1: Insert the source disk into one disk drive.
- 2: Insert the destination disk into another disk drive.
- 3: On the deskTop, select **copy** from the **disk** menu (or press **⌘ L**).

**NOTE** You can copy a disk from any disk drive. You need not be currently displaying the source or destination disks.

- 4: A dialog box will ask you to "Select source and destination drives for copy." Click on the appropriate boxes, then click **OK**.
- 5: The next dialog box will state "This will copy all files in source disk to a folder in destination disk." Click **OK**.
- 6: GEOS will copy the disk contents into a folder on the destination disk. (This folder will have the same name as the source disk.) If there are folders on the destination disk, you can copy the source disk contents into a specific folder. A dialog box will ask you to "Select destination for copy:" Double-click on the folder you need to open it (or highlight it and click **Open**). To move to the previous folder, click on the **folder** icon next to the pathname.
- 7: When the folder you selected is open, click **OK** to copy the disk contents into that folder.

### ***Verifying a Disk***

Use this command to check for possible errors on the currently open disk. The **verify** command will not repair errors it finds.

*To verify a disk:*

- 1: Select **verify** from the **disk** menu (or press **⌘ V**).
- 2: A dialog box will display the name of the currently open disk. Click **OK** to start. GEOS will read the disk, block by block, and display the number of any bad blocks it may find.

- 
- 3: When finished, click **Quit** to return to the deskTop.

*NOTE* If desired, cancel the verification process after it has started by pressing **⌘**. Afterwards, exit by clicking on **Quit**.

### ***Erasing a Disk***

Use this feature to erase all the files on the currently open disk.

Erasing a disk is much faster than using the **format** command. After erasing a disk, it will still be formatted.

*To erase a disk's contents:*

- 1: Select **erase** from the **disk** menu (or press **⌘ E**).
- 2: A dialog box will warn you that "This will delete all folders on volume (disk name). Click **OK** to continue, or **Cancel** to abort.

### ***Formatting a Disk***

Before a blank disk can be used to store files, it must be formatted. Use the following procedure to format either 3 1/2 or 5 1/4 inch disks, RAM disks, or hard disks. Formatting a disk will automatically erase all its contents. If you only wish to delete the contents of a disk, use the **erase** command instead: it is much quicker than reformatting a disk.

*To format a disk:*

- 1: Select **format** from the **disk** menu (or press **⌘ F**).
- 2: If you have more than one disk drive, a dialog box will enable you to select the drive in which you want to format the disk. Click on the appropriate box.
- 3: A dialog box will ask you to "Put disk to format in drive #: and enter a name for it." Insert the disk to be formatted, enter a name, and press **return**.

### ***Booting a Disk***

Aside from using the regular booting procedure described in Chapter 1, from the deskTop you can boot any drive that can be booted.

*To reboot:*

- 1: Select **BOOT** from the **disk** menu.
- 2: A dialog box will ask you to "Insert disk to boot in Drive #." Insert the disk you wish to boot, then click **OK**.

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### ***Repainting the Screen and Re-reading Disks***

- Select **RESET** from the **option** menu (or press **⌘ R**) to re-read the disks in all disk drives, set the **SYSTEM** folder, and repaint the deskTop screen.

*NOTE* If you have file or folder icons on the border, **RESET** will move them to the last page of the folder from which they came.

*To repaint the screen:*

- Select **RESET** from the **options** menu (or press **⌘ R**).

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# Using More Than One Disk Drive

GEOS supports up to four disk drives. The memory expansion device acts as a disk drive. Once it is enabled, you need to copy the files or folders you need into it. **When you turn off your computer, the memory expansion device contents are lost.**

## *Enabling a New Disk Drive*

- 1: Turn off your computer, monitor, and extra disk drives.
- 2: Hook up the disk drive to your computer.
- 3: Reboot GEOS. When the deskTop appears on the screen, the new disk drive's icon will appear in the upper right corner. You can start to use the new disk drive right away.

## *Enabling a Memory Expansion Device*

The memory expansion devices you can use with GEOS are the RamWorks and Apple II Memory Expansion cards (and their compatibles).

*To enable a memory expansion device:*

- 1: Turn off the computer.
- 2: Install the memory expansion device's card inside the computer.
- 3: Boot GEOS. The memory expansion device will appear on the screen as an icon along with the disk drive icons at the right side of the screen. You can begin to use it right away.

**NOTE** If for some reason the memory expansion icon is not active, you will need to format it. Refer to Appendix C: "Formatting a Memory Expansion Device."

## *Selecting the Current Disk Drive*

The disk note pad displays the contents of one disk drive at a time. Furthermore, the disk menu commands act on the currently selected disk drive.


Selecting a disk drive is the same as activating a disk: you can use either the input device or the keyboard.

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*To use the input device:*

- Position the pointer over the disk drive icon and click. The disk in that disk drive will open to the deskTop, and the disk icon will appear in reverse video.

*To use the keyboard:*

- Each disk drive icon on the deskTop is represented by a letter. For example, the top disk drive is **A**, the one just below it is **B**, and so forth. To select the top disk drive, press  **A**.



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# Quick Reference: deskTop Menus

## geos

**geos info:** displays copyright notice and authors of GEOS.

**deskTop info:** displays copyright notice and authors of deskTop.

**alarm clock:** a desk accessory for setting the time.

**calculator:** a desk accessory for quick calculations.

**note pad:** a desk accessory for creating memos.

**photo manager:** a desk accessory for managing photo albums.


**text manager:** a desk accessory for managing text albums.


**NOTE** The **geos** menu displays the first eight desk accessories in the current and SYSTEM folders.


## appls

gains access to the first eight applications in the current and SYSTEM folders.


## file


**open (  Z):** loads and executes the currently selected file or folder on the deskTop.

**duplicate (  H):** creates a duplicate copy of the selected file or folder.

**rename (  M):** renames the selected files or folders.


**delete (  X):** deletes the selected files or folders.


**info (  Q):** displays information about the selected files or folders.

**print (  P):** prints the selected application file.


## folder


**create (  U):** creates a new folder in the current folder.

**goto (  /):** opens a folder in any disk drive after you enter its name.

**browse (  \):** displays a list of folders which you can open in the currently open disk.

## view

**by icon (  G):** displays files and folders in icon mode. You must be in icon mode to select more than one item at a time.

**by size (  S):** displays files and folders sorted by size, largest item first.

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**by type ( ⌘ T):** displays files and folders grouped by type.  
**by date ( ⌘ Y):** displays files and folders in order of last modification. The most recently updated item is listed first.  
**by name ( ⌘ N):** displays files and folders in alphabetical order.  
**apps:** gains access to all applications on the disk.  
**desk accs:** gains access to all desk accessories on the disk.

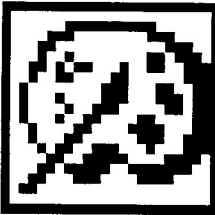
#### **disk**

**open ( ⌘ O):** opens disk in current disk drive, and displays files and folders on disk note pad.  
**close ( ⌘ J):** closes currently open disk.  
**rename ( ⌘ K):** renames currently open disk.  
**copy ( ⌘ L):** copies contents of one disk to another.  
**verify ( ⌘ V):** checks the currently open disk for errors.  
**erase ( ⌘ E):** erases the contents of the currently open disk without reformatting.  
**format ( ⌘ F):** formats disk in any disk drive. Formatting will erase the contents of that disk.  
**BOOT:** Reboots from the current drive.

#### **options**

**select printer:** moves a selected printer driver to the default position.  
**select interface:** moves a selected printer interface driver to the default position.  
**select input ( ⌘ I):** moves a selected input device driver to the default position.  
**select clock:** moves a selected clock driver to the default position.  
**select aux drv:** moves special drivers (e.g., a memory expansion device) to the default position.  
**RESET ( ⌘ R):** Re-reads all the files and folders in all disk drives, and repaints the screen.

# 5



## geoPaint

This chapter covers geoPaint, a powerful graphics editor. geoPaint enables you to create high resolution graphic images on the display screen and print them. Once you have completed this chapter, you will know how to:

- enter geoPaint.
- draw and paint images.
- create images using special measurement and constraining tools.
- use 32 different patterns and brush styles.
- create patterns with an overlaying effect.
- add text to the images you have drawn.
- magnify an area to work in detail.
- issue special geoPaint commands.
- use special features to enhance your graphics.
- move or copy images to and from a geoWrite document.
- print a geoPaint document.
- exit geoPaint.

Unfamiliar terms are defined in Appendix A: Glossary.

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# Before You Try to Use geoPaint

## *Is geoPaint Installed?*

- Make sure you have installed geoPaint as explained in the instructions in "Installing GEOS," in Chapter 1, "Getting Started." Do not attempt to use geoPaint, nor copy it to a work disk, before you install it to your system.

## *geoPaint and Folders*

- Before you enter geoPaint, note that fonts and desk accessories should be placed in the SYSTEM folder.

## *geoPaint and Work Disks*

For a full discussion on work disks, see Chapter 3, "Work Disks."

### *If you have one disk drive:*

- Place geoPaint, your documents, desk accessories, fonts, and text or photo albums and scraps on the same disk. If desired, add the deskTop.

### *If you have more than one disk drive:*

- 1: Place geoPaint, the fonts, desk accessories, text or photo albums and scraps on one disk. If desired, add the deskTop.
- 2: Place your documents on another disk.

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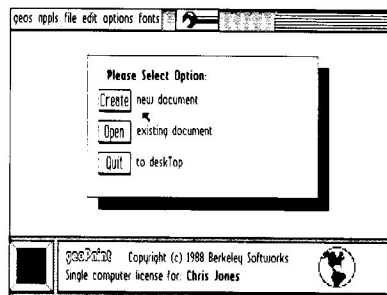
# Entering geoPaint

## *Entering geoPaint from the deskTop*

From the deskTop, there are four ways to enter geoPaint:

- Click on the geoPaint icon once so that it is highlighted, then select **open** from the **file** menu (or press **⌘ Z**).
- Double-click on the geoPaint icon.
- Select **GEOPAINT** from the **apps** menu.
- Select **apps** from the **view** menu. When the dialog box appears, select **GEOPAINT**.

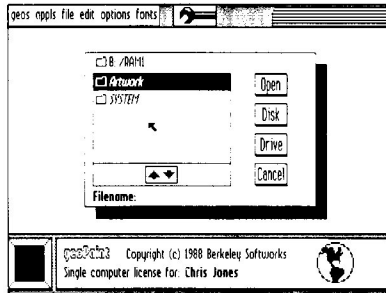
In every case, geoPaint will load and display a dialog box on a blank screen. It will contain three options: **Create new document**, **Open existing document**, and **Quit to deskTop**. Select one.



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## Creating a New Document

Select **Create** to create a new geoPaint document. A second dialog box will display the name of the currently open disk, a list of folders on that disk, and a prompt asking you to enter the filename.



Note that only the first 64 documents and folders in the current folder can be displayed in the dialog box. It is unlikely you will have more than this in a single folder. If you do, you will need to rearrange the geoPaint files and folders on the deskTop to be able to gain access to them. If necessary, refer to "Rearranging File and Folder Icons," page 4-16.

### *To create a new document:*

- After **filename**, type in a document name. Press return to enter the new document.

### *To create a document in another folder:*

- 1: Open the folder you need by double-clicking on its name. (You can also highlight its name and click **Open**.)

**NOTE** To return to the previous folder, click on the **folder** icon next to the pathname. To return to the home directory, double-click on the **folder** icon.

- 2: Type in a new name and press return to enter the new document.

### *To create a document in another disk drive:*

- 1: Click **Drive** to open the destination disk drive.

- 
- 2: When the disk opens on the screen, open the folder you need.
  - 3: Type in a filename, and press return to enter the new document.

*To create a document on another disk in the current disk drive:*

- 1: After you have typed in the filename, click on **Disk**.
- 2: If desired, insert a new disk in the correct disk drive, then click **OK**. (Do not remove the disk containing geoPaint.)
- 3: Open the folder you need, type in a filename, then press return.

### ***Opening an Existing Document***

Select **Open** to enter an existing geoPaint document. A second dialog box will display the name of the currently open disk and a list of folders and filenames in the current folder on that disk.

*To open an existing document:*

- Click on the document you need, then select **Open** (or simply double-click on the document name). The document will open on the screen.

*To open a document in another folder:*

- 1: Click on one of the folder names and select **Open** (or simply double-click on the folder name). The folder will open.

**NOTE** To return to the previous folder, click on the **folder** icon next to the pathname. To return to the home directory, double-click on the **folder** icon.

- 2: Click on the document you need, then select **Open** (or simply double-click on the document name). The document will open on the screen.

*To open a document in another disk drive:*

- 1: Click **Drive** to open the destination disk drive.
- 2: When the disk opens on the screen, enter the document.

*To open a document on another disk in the current disk drive:*


- 1: Click on **Disk**, insert the disk you need, then click **OK**.
- 2: In the dialog box, find the document you need. If it is in a folder, open the folder.

- 
- 3: Enter the document by double-clicking on its name, or highlighting its name and clicking on **Open**.

### ***Quitting to the deskTop***


Select **Quit** to exit geoPaint and return to the deskTop.

### ***Selecting a Different Application***

- 1: Hold down  and select **Quit**. A dialog box will display the applications on your work disk.
- 2: Double-click on the application name, or highlight it and click **Open**.
- 3: Enter the document.

### ***Opening an Existing Document from the deskTop***

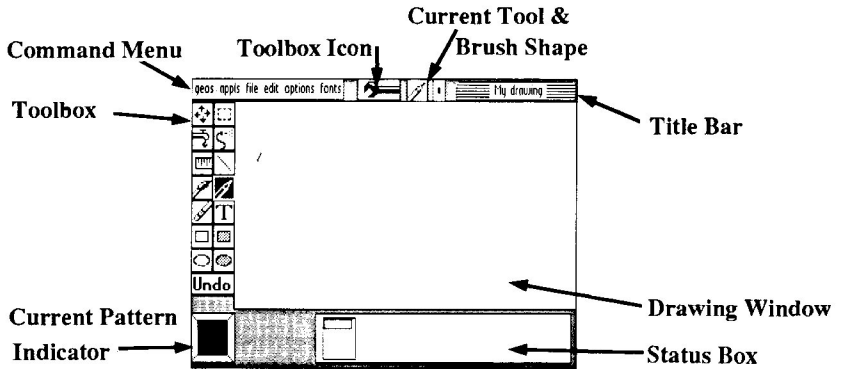
Once you have created a document, its icon will appear on the deskTop. You can open it the same way you open geoPaint or any other application, using one of the following methods:

- Click on the document icon so that it is highlighted, then select **open** from the **file** menu (or press  **Z**).
- Double-click on the document icon.



---

# The geoPaint Screen



As shown above, the **Drawing Window** occupies most of the screen and serves as a window into a portion of the total page. In most cases (the "Normal Edit" mode), the Drawing Window allows you to work with an area up to 7 inches wide and 1.8 inches high (approximately 1/7 of the total document). In the Pixel Edit mode, the Drawing Window actually magnifies a smaller portion of your document, enabling you to work in much greater detail. In either case, you can move the Drawing Window around to view other portions of your document.

Above the Drawing Window is a **command menu**. Clicking on one of the menu names displays another menu with several commands. Simply click on the command you need. Some commands can be selected by using a keyboard shortcut.

Along the left side of the geoPaint screen is the **Graphic Toolbox** (initially not visible). The icons in the toolbox give you access to the many drawing tools described later in this chapter. As with the command menu, some tools can be selected by using a keyboard shortcut.

The name of the document you are currently working on is displayed in the **title bar** in the upper right corner of the screen. To the left of the title bar are icons displaying the Toolbox selection icon and the current tool and brush shape.

---

The **Status Box**, a rectangular box at the bottom of the screen, displays different information and special prompts depending on the tool in use. When you use the **Ruler**, **Line**, **Ellipse**, and **Rectangle** tools, the Status Box displays measurement information. It is also used to display available brush shapes and patterns.

Directly to the left of the Status Box is the **Current Pattern Indicator**, which displays the patterns currently in use by the Paint Brush, Faucet, Air Brush, and Filled Rectangle and Ellipse tools.

The **pointer**, which indicates your location on the screen, is used to select menus, drawing tools, or patterns. When the pointer is in the Drawing Window, it changes shape to indicate the tool you are using.

If you have not already done so, read Chapter 2, "Tutorial," before you continue.

### ***Gimmicks***

As you learn geoPaint, you will discover that most of the tools share a number of special design enhancing features, which are described in other sections of this chapter. These features are cross-referenced under a "Related Gimmicks" section under the applicable tools.

---

# Drawing Tools and Shapes

## *The Toolbox*

When you first open a geoPaint document, the Toolbox is not visible. To use the tools, you will need to click on the Toolbox icon—which resembles a monkey wrench located at the top of the screen, next to the command menu. When the toolbox is not visible, the Drawing Window is wider.

### *To display the Toolbox:*

- Click on the monkey wrench Toolbox icon (or press **⌘ X**).

### *To hide the Toolbox:*

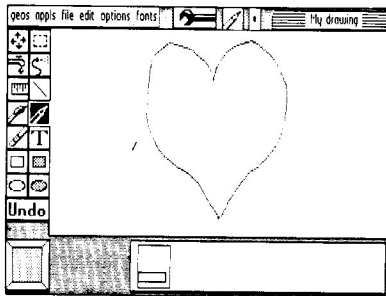
- Click on the monkey wrench Toolbox icon again (or press **⌘ X**).

Now that you have the Toolbox displayed, you can use its many tools. To use a tool, click on its icon in the Toolbox or use a keyboard shortcut. The tool and brush shape you are currently using will be displayed in the icons next to the monkey wrench Toolbox icon.



## *Using the Pencil*

Use the **Pencil** to draw individual points and free hand lines:



*To use the Pencil:*

- 1: Click on the **Pencil** icon in the Toolbox (or press **⌘ P**). The pointer will change to a pencil shape.
- 2: Move the pointer to a desired location and click to begin drawing. To deactivate, click again.

**Related Gimmicks**

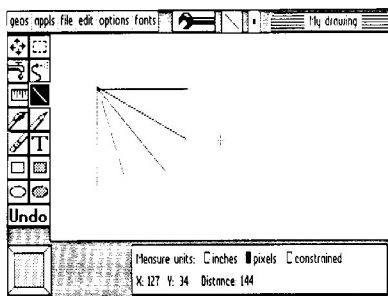
*See page: for:*

- 5-30 "Detailing with Pixel Edit"
- 5-28 "Fine Movement with the Arrow Keys"
- 5-28 "Horizontal and Vertical Movement"



**Drawing Lines**

There are two types of lines you can draw: independent lines or connected lines. To draw a line at a vertical, horizontal, or 45-degree angle, click on the **constrained** option in the Measure units box at the bottom of the screen beforehand.





*To draw an independent line:*

- 1: Click on the **Line** icon (or press **⌘ L**).
- 2: Position the pointer at a location, click, and stretch the line out in any direction. Click again to deactivate.

*To draw a series of connected lines:*

- 1: Click on the **Line** icon (or press **⌘ L**).

- 2: Position the pointer at a location, click, and stretch the line out in any direction.
- 3: When you reach the end of a line, hold down , click, and pull the next line out.
- 4: When finished, click again (but do not hold down ).

### ***Related Gimmicks***

*See page: for:*

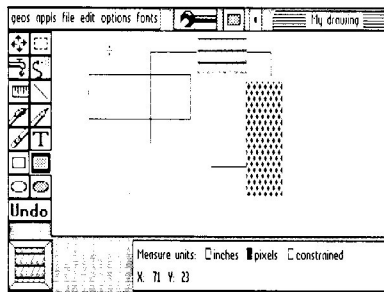
- 5-28 "Fine Movement with the Arrow Keys"
- 5-28 "Measuring Distances"
- 5-28 "Horizontal and Vertical Movement"
- 5-30 "Detailing with Pixel Edit"
- 5-16 "Using the Faucet" (to fill an enclosed shape with the current pattern)





### ***Drawing Squares and Rectangles***

You can draw two types of squares and rectangles: hollow and filled. The filled square or rectangle contains the current pattern. If you are drawing a square (by clicking on the **constrained** option in the Measure units box beforehand), it may appear slightly elongated on the screen. It will, however, print as a perfect square.

Here is what you can create:



*To draw squares or rectangles:*

- 1: Click on the **Hollow** (or press  O) or **Filled Rectangle** (or press  R) icon.
- 2: Position the pointer at the beginning point, click, and pull the shape diagonally in any direction.

**HINT** If you are drawing a filled square or rectangle, experiment with different patterns by pressing the [ and ] keys.

- 3: When finished drawing, click again.

### ***Related Gimmicks***

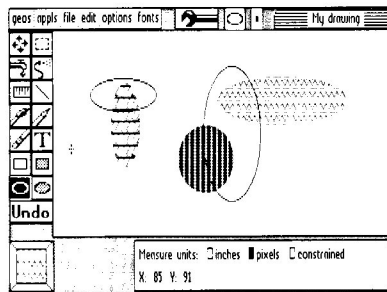
*See page: for:*

- 5-28 "Measuring Distances"
- 5-31 "Changing the Current Pattern"
- 5-16 "Using the Faucet" (to fill a hollow shape with the current pattern)
- 5-30 "Detailing with Pixel Edit"
- 5-28 "Fine Movement with the Arrow Keys"
- 5-28 "Horizontal and Vertical Movement"



### ***Drawing Circles and Ellipses***

geoPaint enables you to draw hollow or filled circles and ellipses as well. If you are drawing a perfectly round circle (by clicking on the **constrained** option in the Measure units box beforehand), it may appear slightly elongated on the screen. However, it will print as a perfect circle.



*To draw a circle or ellipse:*

- 1: Select the **Hollow** (or press **⌘ A**) or **Filled Circle** icon (or press **⌘ D**).
- 2: Position the pointer at a location, click, and pull the circle or ellipse out.

**HINT** If you are drawing a filled circle or rectangle, experiment with different patterns by pressing the [ and ] keys.

- 3: When finished drawing, click again.

### ***Related Gimmicks***

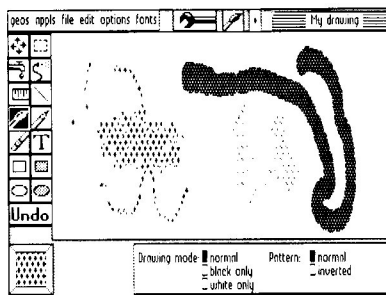
*See page: for:*

- |      |  |
|------|--|
| 5-28 | "Measuring Distances"  |
| 5-31 | "Changing the Current Pattern"                                       |
| 5-16 | "Using the Faucet" (to fill a hollow shape with the current pattern) |
| 5-28 | "Fine Movement with the Arrow Keys"                                  |
| 5-28 | "Horizontal and Vertical Movement"                                   |



### ***Using the Paint Brush***

The **Paint Brush** paints with any of 32 different brushes using the pattern displayed in the **Current Pattern Indicator**. The current brush shape is displayed in an icon to the left of the title bar at the top of the screen.



---

### *To use the Paint Brush:*

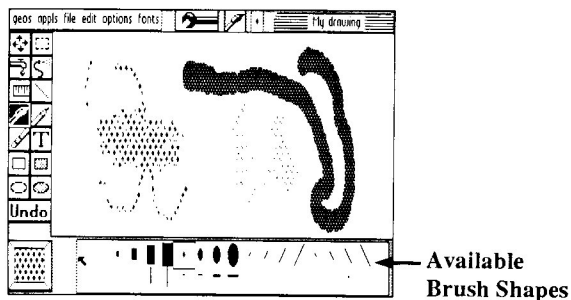
- 1: Click on the **Paint Brush** icon (or press **⌘ B**). The pointer will change to the current brush shape.
- 2: Position the pointer at the desired location and click to begin painting.

**HINT** Experiment with different patterns by pressing the [ and ] keys.

- 3: When finished painting, click again.

### *To select a brush shape from the Status Box:*

- 1: Either select **change brush** from the **options** menu or double-click on the Paint Brush icon. The Status Box will display a box containing the 32 different brush shapes. The current brush shape will have a box around it.



- 2: Click on a desired brush shape. The pointer will assume that brush's shape, and you can begin to use it right away.

### *To select a brush shape using the keyboard:*

- Press the - (hyphen) and = keys to activate the previous and next brush shapes.

### *Related Gimmicks*

See page: for:

- 5-31 "Changing the Current Pattern"
- 5-32 "Altering Drawing Modes and Patterns"



- 5-28 "Fine Movement with the Arrow Keys"  
5-28 "Horizontal and Vertical Movement"

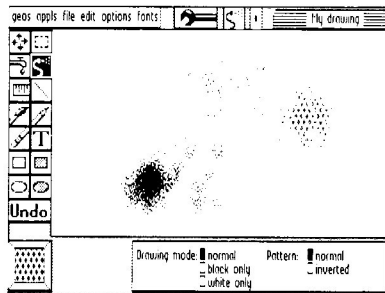


### *Using the Airbrush*

With the **Airbrush**, you can spray paint large areas with the Current Pattern in a variety of intensities. The longer you spray an area, the deeper its density will become.

#### *To use the Airbrush:*

- 1: Click on the **Airbrush** icon (or press **⌘ S**).
- 2: Move the pointer to a desired location and click to begin painting.  
Here is what you can get:



- 3: When finished spraying, click again.

### *Related Gimmicks*

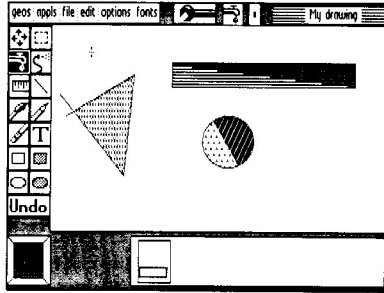
See page: for:

- 5-31 "Changing the Current Pattern"  
5-32 "Altering Drawing Modes and Patterns"  
5-28 "Fine Movement with the Arrow Keys"  
5-28 "Horizontal and Vertical Movement"



### *Using the Faucet*

Use the Faucet to fill in an enclosed image with the Current Pattern, as in the following example:



#### *To use the Faucet:*

- 1: Click on the **Faucet** icon (or press **⌘ F**).
- 2: Point to a position within an enclosed image and click once to fill it.

**NOTE** Make sure the enclosed area is truly enclosed, or else the **Faucet** will leak out all over your document (which you can undo by selecting the **Undo** icon). You can abort a fill by pressing **⌘ .**

#### *Related Gimmicks*

See page: for:

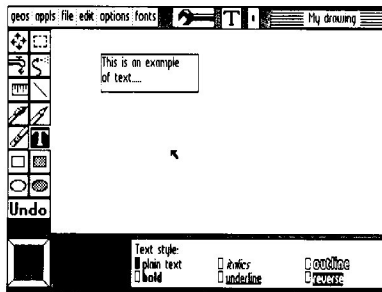
- |      |                                       |
|------|---------------------------------------|
| 5-16 | "Changing the Current Pattern"        |
| 5-32 | "Altering Drawing Modes and Patterns" |
| 5-28 | "Fine Movement with the Arrow Keys"   |

---

# Adding Text

You can vary fonts by copying the desired font file icons to your work disk. Remember that font files must be placed in the SYSTEM folder. If necessary, refer to "Copying a File or Folder to Another Disk," page 4-18.

To add text to your document, you will need to select the **Text** icon, define a Text Region in which to insert the text (the **Text Region**), then type your text.



## *Creating Text*

*To create text:*

- 1: Click on the **Text** icon (or press **⌘ T**).
- 2: Define a text region: click once to select one corner, drag the pointer to the diagonal corner, and click again. Be sure the region is large enough to encompass all of your text.
- 3: When the text cursor (a flashing vertical line) appears, type your text.
- 4: If desired, change the style of the text by clicking on the styles displayed in the Status Box. To undo a style selection, click on its box again.
- 5: When finished, click on the **Text** icon to deactivate it, or select any other tool in the Toolbox.

---

**NOTE** You may type up to 254 characters (including spaces) into the Text Region.

### ***Related Gimmick***

See page: for:

5-28 "Fine Movement with the Arrow Keys" (for opening a Text Region)

### ***Changing Text (While Editing Only)***

- Move the pointer to the desired location in the Text Region and click to reposition the text cursor. You either can type more text or use the delete key to delete text.

### ***Selecting a Font and Style***

- 1: With the text cursor in the current text region, click on the **fonts** menu.
- 2: Click on a font, then select a point size.
- 3: If desired, go to the Status Box and click on a style. To disable a style, click on its box so that the box is hollow.

**NOTE** Any font or style you select affects all the text in the Text Region. You may, however, change to another font or style at any time before leaving the edit mode.

### ***Changing the Position and Layout of the Text***

- 1: With the text cursor in the current text region, position the pointer in a new location outside the Text Region.
- 2: Define a new Text Region: click to set one corner, drag the pointer to its diagonal corner, then click again. All of the existing text will reformat itself to fit in the new Text Region.

### ***Moving or Copying Text by Using the Text Scrap***

- 1: With the text cursor in the current Text Region, select the **edit** menu, then select **cut** (to move) or **copy**.
- 2: Click on the **Text** icon.
- 3: Define a new Text Region: click to set one corner, drag the pointer to its diagonal corner, then click again.

---

4: Select **paste** from the edit menu.

**NOTE** Once the text is pasted into the new Text Region, you can change it any way you wish. To paste a piece of text in several places in your document, repeat Steps 3 and 4.

***Related Gimmick***

*See page: for:*

5-24 "Moving or Copying a Selected Region" (to paste the text into other documents, even if they are created with other applications)

---

# Correcting Your Creations

geoPaint enables you to correct what you have created by using the **Undo**, **recover**, and **Save** commands, or with the **Eraser**.



## *Using the Undo Command*

If you make a mistake, don't panic! To reverse the most recent change you made, select the **Undo** command in one of two ways:

- Click on the **Undo** button at the bottom of the Toolbox.
- If the Toolbox is hidden, press **⌘ U**.

*NOTE* The **Undo** command can be used to "undo" itself.

## *Using Recover to Undo Changes*

- Select **recover** from the **file** menu to reverse all the changes you have made in the current editing session, from the last time the document was saved to disk.

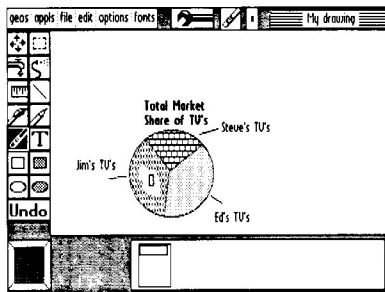
## *Saving Changes*

Any changes you make in the Drawing Window are stored temporarily in memory. They become permanent when they are "saved" onto the disk. Saving occurs when you scroll the Drawing Window, preview the document, open a desk accessory, change programs with the **appl**s menu, or select **update**, **close** (or press **⌘ C**), or **quit** (or press **⌘ Q**) from the **file** menu.



## *Using the Eraser*

Use the **Eraser** to delete portions of the Writing Window's contents.



*To erase an image:*

- 1: Click on the **Eraser** tool (or press **⌘ E**). The pointer will change into a small rectangle.
- 2: Move the pointer over the image you want to erase, and click once to activate the eraser. When finished erasing, click again to deactivate.

## *Related Gimmicks*

*See page: for:*

- |      |                                     |
|------|-------------------------------------|
| 5-28 | "Fine Movement with the Arrow Keys" |
| 5-30 | "Detailing with Pixel Edit"         |
| 5-28 | "Horizontal and Vertical Movement"  |

## *Clearing the Contents of an Editing Region*

If you become disenchanted with an area in the Drawing Window, you can delete its contents with the Edit mode's clear option.

*To clear a region:*

- 1: Select the **Edit Box** and use the pointer to create an editing box around the region.

**NOTE** If necessary, refer to "Selecting an Editing Region," page 5-23.

---

2: Go to the Status Box and click **clear**.

### ***Deleting the Entire Drawing Window Contents***

If you decide to remove the entire contents of the Drawing Window, you can do so easily in one of two ways:

- Press **⌘ N**.
- Double-click on the **Eraser**.

***IMPORTANT*** Deleting the entire Drawing Window contents is not "undoable" when the Toolbox is visible.



# Selecting, Copying, and Moving Regions

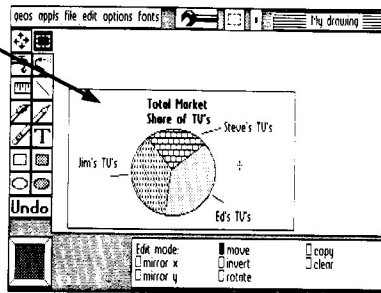
With geoPaint, you can perform several operations on selected rectangular regions of your document. After you select a region, you can copy or move it within the same document or elsewhere. You can also use the options displayed in the Status Box to make some unusual changes (which are covered in the Special Gimmicks section).



## *Selecting an Editing Region*

You can select a portion of the Writing Window, or you can select the entire Writing Window.

Edit Box  
Region



*To open an editing region within the Drawing Window:*

- 1: Select the **Edit Box** tool (or press **⌘ G**). The pointer will assume the shape of a cross-hair.
- 2: Position the cross-hair pointer at one corner of the area you wish to select, and click.
- 3: Move the pointer to a diagonal corner of the area and click again. Be sure to encompass all of the area you want selected.

*To select the entire Drawing Window:*

- Double-click on the **Edit Box** tool, then use the options in the Status Box.

---

**NOTE** You can use the Edit mode options, which are displayed in the Status Box, to alter the region's contents, or you can use the **edit** commands to move or copy the region's contents.

### ***Related Gimmicks***

*See page: for:*

- 5-33 "Mirroring"
- 5-34 "Inverting"
- 5-34 "Rotating"
- 5-24 "Moving or Copying a Selected Region"
- 5-21 "Clearing the Contents of an Editing Region"
- 5-21 "Deleting the Entire Drawing Window Contents"
- 5-28 "Fine Movement with the Arrow Keys" (for editing regions only)

### ***Moving or Copying a Selected Region***

The **photo scrap** is used whenever you copy or move an image. It works the same as the text scrap used in geoWrite: it is a temporary storage file into which you cut or copy selected images. You can paste them into your current geoPaint document, another geoPaint document, or even a geoWrite document.

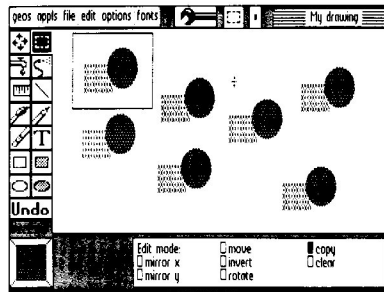
Note that the photo scrap only holds one selected region at a time. Each time you cut or copy a region, you will replace the *current* contents of the Photo Scrap with the new region.

You have the option of moving or copying an image within the Drawing Window, to another Drawing Window in the same document, or to another document entirely.

*To move or copy a region within the Drawing Window:*

- 1: Select the **Edit Box** and use the pointer to create an editing box around the region, or double-click on the **Edit Box** to select the entire Drawing Window.
- 2: Go to the Status Box and select either **move** or **copy**.
- 3: Go to the Drawing Window and click on the region to be moved or copied. It will become attached to the pointer.
- 4: Move the pointer to a new location. Click again to deposit the copied or moved image.

**NOTE** Repeat Steps 3 and 4 for each time you want the image moved or copied. In this manner, you can copy an image endlessly (almost):



*To move or copy a selected region to another Drawing Window in the same document:*

- 1: Select the **Edit Box** and use the pointer to create an editing box around the region, or double-click on the **Edit Box** to select the entire Drawing Window.
- 2: Go to the command menu and select **edit**, then select **cut** (to move) or **copy**.
- 3: Scroll to another location.

**HINT** If you wish to use the Page Map to move to another location, select the **Pencil** tool; it will display the Page Map in the Status Box.

- 4: When you reach the new location, use the **Edit Box** to open a new region.
- 5: Go to the command menu and select **paste** from the **edit** menu.

*To move or copy a selected region to another document:*

- 1: Select the **Edit Box** and use the pointer to create an editing box around the region, or double-click on the **Edit Box** to select the entire Drawing Window.

- 
- 2: Go to the command menu and select **edit**, then select **cut** (to move) or **copy**.
  - 3: If the destination is a geoPaint document, select **close** from the **file** menu. If the destination is a geoWrite document, select **GEOWRITE** from the **appls** menu.
  - 4: A dialog box will ask you to select one of the following options: **Create new document**, **Open existing document**, and **Quit to deskTop**. Click on **Create** or **Open** to open the destination document.
  - 5: When the document appears, select the insertion point for the image if it is a geoWrite document. If it is a geoPaint document, use the **Edit Box** to define the new region.

*To move or copy a region to another disk if the disk contains a different copy of geoPaint or another application:*

- 1: Select the **Edit Box** and use the pointer to create an editing box around the region, or double-click on the **Edit Box** to select the entire Drawing Window.
- 2: Go to the command menu and select **edit**, then select **cut** (to move) or **copy**.
- 3: Select **quit** from the **file** menu (or press **⌘ Q**).
- 4: When the disk note pad appears, open the **SYSTEM** folder (if there is one), and click on photo scrap icon. Copy the photo scrap to the destination disk.
- 5: Open the destination disk.
- 6: Copy the photo scrap into a **SYSTEM** folder on the destination disk.
- 7: Open the destination document (which must contain the application). If it is geoWrite, select an insertion point; if it is geoPaint, use the **Edit Box** to open a region.
- 8: Select **paste** from the **edit** menu.

---

### ***Using the Photo Manager***

You may wish to insert more than one image at a time into a document. You can do so by using the Photo Manager, which will permanently store a number of selected photo scraps in albums of images. See "The Photo Manager" in Chapter 11, "Desk Accessories."

### ***Images in geoWrite***

Once you place an image into a geoWrite document, you cannot copy or move it by using the edit commands. You can, however, change its horizontal placement by moving the margin markers in the ruler. (This is also how you can crop the image.) If you wish to delete an image, you can do so by clicking the far left side of the screen where you inserted the image. Drag the pointer down to highlight it, then press

`delete`.

---

# Special Gimmicks

## *Fine Movement with the Arrow Keys*

When using any of the features described in this chapter, you can move pixel-by-pixel by using the arrow keys at the lower right corner of your keyboard.

*To move pixel-by-pixel:*

- 1: Select one of the **Edit Box, Rectangle, Ellipse, Pencil, Paint Brush, Airbrush, Ruler, Line, and Eraser** tools.
- 2: Move the pointer to the Drawing Window, and use the arrow keys to position the pointer.
- 3: Click to begin the tool's function, and use the arrow keys as needed.

## *Horizontal and Vertical Movement*

At any time you can restrict a tool to horizontal and vertical movement by using the **H** (horizontal) and **V** (vertical) keyboard commands.

*To draw horizontal and vertical lines:*

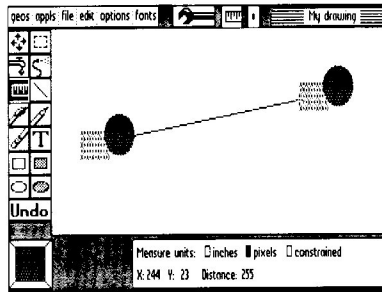
- 1: Select the **Pencil, Line, Airbrush, Paint Brush, Ellipse, Rectangle, or Eraser**.
- 2: Position the pointer and click to begin using the tool.
- 3: Press **H** for horizontal movement or **V** for vertical movement. That tool's movement will be either horizontal or vertical.
- 4: To deselect the horizontal or vertical movement, press the spacebar.

**NOTE** Clicking again (to deselect the tool) will also deselect the horizontal and vertical movement commands.

## *Measuring Distances*

If you select the **Line, Rectangle, Ellipse, and Ruler** tools, the Status Box will display the **Measure units** box, which enables you to measure an area in pixels or inches and displays the measurement in X and Y coordinates. The **constrained** option enables you to create the image horizontally, vertically, or at a 45-degree angle. (The **constrained** option is used to create circles and squares and to draw lines at a vertical, horizontal, or 45-degree angle.)

The **Ruler** tool, which resembles a tape measure, is strictly a measuring device that leaves no permanent image on the screen.



*To measure an area:*

- 1: Select from the **Line**, **Rectangle**, **Ellipse**, and **Ruler** tools. The Status Box will display the Measure units box.
- 2: Go to the Measure units box and select a unit of measure: **inches** or **pixels**. For horizontal, vertical, or 45-degree angles, press **⌘ K** to toggle the **constrained** option.
- 3: Click to create an image or use the **Ruler** to measure an area. As you move the pointer, its X and Y dimensions will be displayed in the Measure units box.

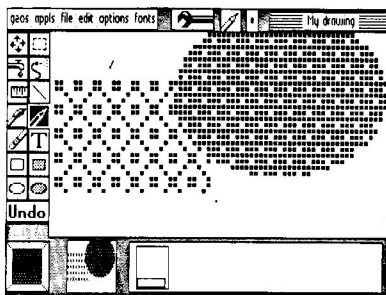
**NOTE** You can toggle the X and Y coordinate measurement display by pressing **⌘ W**.

The pixel measurement is in actual dots on the screen. Inches are based on "printed" inches (not "screen" inches) of 80 dots to the inch. The accuracy of any printed document depends, therefore, on the resolution of your printer. For example, on an 80-dots per inch printer, a 1-inch line created in geoPaint prints out 1 inch long. On a 60-dots per inch printer, that same line would print 1.3 inches long.

---

## ***Detailing with Pixel Edit***

The images in your Writing Window are composed of tiny dots called **pixels**. **Pixel Edit** mode magnifies a selected portion of your document to enable you to add or delete fine detail by clicking on the pixels that compose an image. **Pixel Edit** mode appears as follows:



*To magnify an image:*

1: Enter **Pixel Edit** mode by:

- selecting **pixel edit** from the **options** menu (or pressing **⌘ Z**), or
- double-clicking on the **Pencil** icon.

2: The **Toolbox** will disappear temporarily, and an editing box will appear in the upper left corner of the **Drawing Window**. Position the box over the area you wish to magnify and click once. The **Drawing Window** will "zoom in" on this portion of the image. An actual size representation of the area you selected will be displayed to the left of the **Status Box**.

3: Use the **Pencil**, **Eraser**, **Ruler**, **Line**, **Faucet**, and **Rectangle** tools to alter the image you magnified. To delete pixels, click on them with the **Pencil**.

4: When finished, exit by:

- selecting **normal edit** from the **options** menu (or pressing **⌘ Z**), or



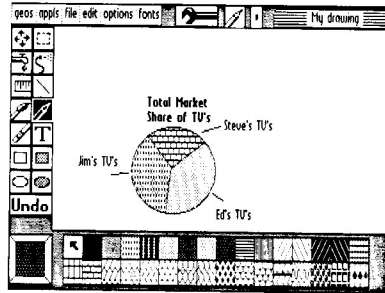
- clicking on the actual size representation box.

*To reselect Pixel Edit to magnify another area:*

- Double-click on the **Scrolling Arrows** icon, then follow Steps 2–4, above.

### ***Changing the Current Drawing Pattern***

geoPaint provides you with 32 different patterns from which to choose.



*To select a pattern from the Pattern Options box:*

- 1: Click on the **Current Pattern Indicator** at the lower left corner of the screen. The Pattern Options will appear in the Status Box.
- 2: Go to the Pattern Options and click on the desired pattern. The new pattern will appear in the **Current Pattern Indicator**.

**NOTE** The Current Pattern will be used when you use the **Paint Brush**, **Airbrush**, **Faucet**, and the filled **Rectangle** and **Ellipse**.

*To change a pattern using the keyboard:*

- Press **]** to display the next pattern in the Current Pattern Indicator.
- Press **[** to display the previous pattern in the Current Pattern Indicator.

**HINT** If you are creating a filled rectangle or circle, you can change its pattern during its creation. Click to set the shape's starting point, pull the shape out, then press the **]** and **[** keys to

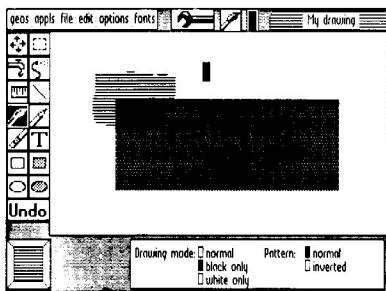
display the various patterns you can use. When you find a pattern you like, click to define the final appearance of the rectangle or circle.

### ***Altering Drawing Modes and Patterns***

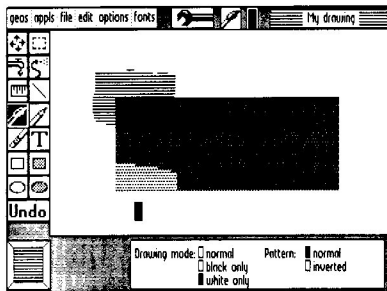
When you are using the **Paint Brush** or the **Airbrush**, you can vary the appearance of the pattern you are using in a variety of interesting ways, such as creating an overlaying effect or reversing the pattern.

*To change the drawing mode and pattern:*

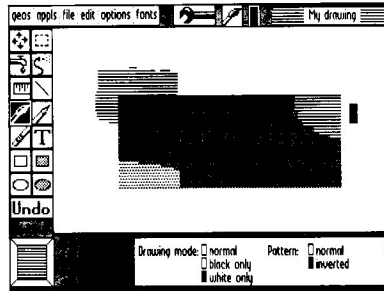
- 1: Select the **Paint Brush** or the **Airbrush** from the Toolbox.
- 2: Go to the Status Box and click on one of the drawing modes. **Normal** draws both black and white pixels of a pattern. **Black only** will draw the black pixels of the pattern, as in the following example:



Selecting **white only** will draw the white pixels, as in the following example:

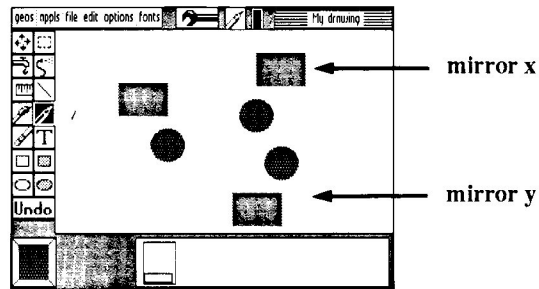


- 3: Now select whether you wish the current pattern to appear **normal** (which is the default setting), or **inverted**. **Inverted** will appear as follows:



### ***Mirroring***

The **mirror** command lets you flip an image either horizontally (**mirror x**) or vertically (**mirror y**):



*To flip an image:*

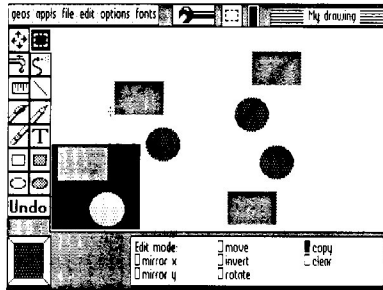
- 1: Select the **Edit Box** and use the pointer to create an editing box around the region, or double-click on the **Edit Box** to select the entire Drawing Window.
- 2: Go to the Status Box and click either **mirror x** for a horizontal flip, or click on **mirror y** for a vertical flip.

---

**NOTE** To flip the image back to its original position, click the **mirror x** or **mirror y** box again.

### ***Inverting***

Use **invert** to reverse the pattern of a selected region, as in the following example:



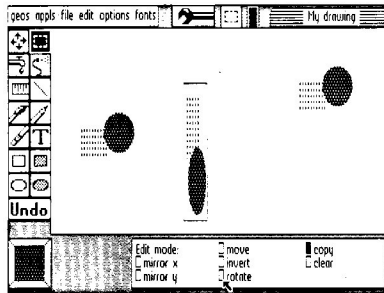
#### ***To invert an image:***

- 1: Select the **Edit Box** and use the pointer to create an editing box around the region, or double-click on the **Edit Box** to select the entire Drawing Window.
- 2: Go to the Status Box and select **invert**.

**NOTE** To reverse the image back to its original appearance, click **invert** again.

### ***Rotating***

**Rotate** will revolve a selected region 90 degrees. Each additional click will rotate it another 90 degrees. Be careful when rotating an image, though: if you cause it to flip off the edge of the Drawing Window, it will be lost.

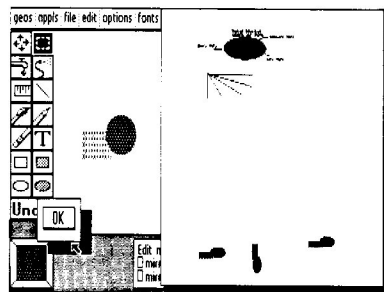


*To rotate an image:*

- 1: Select the **Edit Box** and use the pointer to create an editing box around the region, or double-click on the **Edit Box** to select the entire Drawing Window.
- 2: Go to the Status Box and click **rotate**.

### ***Preview Page***

Use **preview** to view the entire page of your document. Note that while **preview** lacks detail, it enables you to make decisions about the overall placement and proportions of your document.



---

*To preview your document:*

- 1: Select **preview** from the **file** menu (or press **⌘ I**).
- 2: When finished viewing, click **OK** (or press **return** ).

*To preview a lighter screen:*

- 1: Hold down **⌘** and press **I**.
- 2: When finished viewing, click **OK** (or press **return** ).



### ***Moving the Drawing Window***

There are two ways to move the Drawing Window to a different portion of your document: one lets you move precisely; the other lets you move quickly to another, distant part.

*For accurate positioning and fine movement:*

- 1: Click the **Scrolling Arrows** icon in the Toolbox (or press **⌘ M**). The Toolbox will disappear temporarily, and the pointer will assume the shape of the scrolling arrows icon.
- 2: Move the pointer to a new location. As you do so, the Page Map in the Status box will display your position on the page.
- 3: Click again to select the new location of the Drawing Window and to bring the Toolbox back.

**NOTE** The **Scrolling Arrows** enable you to scroll left and right, and to gain access to a full 8-inch document.

### ***Related Gimmick***

*See page: for:*

5-30 "Detailing with Pixel Edit" (to reselect **Pixel Edit**)

*To move quickly from one part of the page to another:*

- 1: Position the pointer on the Page Map in the Status Box and click. The box inside, which represents the Drawing Window's current location, will become attached to the pointer. The Toolbox will disappear temporarily.
- 2: Point to a new location in the Page Map and click.

---

# Printing Your Document

You can print your document from one of two places: from the document itself, or from the deskTop.

*To print from the document:*

- Select **print** from the **file** menu. To cancel, click on the **Cancel** button.

**NOTE** Printing from within the document will update the file to disk.

*To print from the deskTop:*

- Drag the document's icon over to the printer icon at the lower left corner of the deskTop and click once to deposit it.
- Click on the document's icon so that it is highlighted, then select **print** from the **file** menu.

**IMPORTANT** In order to print your document, the Printer Driver and Printer Interface for your printer must be selected. If necessary, refer to "Printer Drivers and Interface Cards" in Chapter 12, "Drivers."

Note that the printed resolution of a geoPaint document is based on 80 dots per inch on an 8-inch wide (640 dots). Printers that support less than this resolution—60 dots per inch (480 total), for example—may produce only a portion of the geoPaint document.

Note also that some printer configurations will require that the printer be turned on before you can turn on the computer.

---

# Managing Documents

## *Updating and Saving Changes to Your Document*

geoPaint saves your recent changes on the disk when you move the Drawing Window, use a desk accessory, print the document, or exit. You may wish to update your file more frequently, however, if you have just made an important change or created something you particularly like.

*To update a document:*

- Select **update** from the **file** menu.

## *Recovering Your Document*

If you need to reverse inadvertent changes since the last time you updated the document, you can do so easily.

*To recover a document:*

- Select **recover** from the **file** menu.

## *Renaming Your Document*

- 1: Select **rename** from the **file** menu.
- 2: A dialog box will ask you to "Input new filename." Type in a new name and press .

**NOTE** Rename does not create a duplicate copy of your document under a new name. It merely changes the name of the current document.



---


# Keyboard Shortcuts

Rather than use your input device, you can use keyboard shortcuts to select frequently needed features directly from the keyboard.


To select an item if you are in Text mode, hold down the **⌘** key while pressing the particular key for the shortcut desired. If you are not in Text mode, simply press the key indicated. To move around the Drawing Window, press the arrow keys located at the lower right corner of the keyboard.

	<i>To use the feature:</i>	<i>Press:</i>
<b><i>Tools</i></b>	Displays/hides toolbox	<b>X</b>
	Airbrush	<b>S</b>
	Edit Box	<b>G</b>
	Ellipse, filled	<b>D</b>
	Ellipse, hollow	<b>A</b>
	Eraser	<b>E</b>
	Faucet	<b>F</b>
	Line	<b>L</b>
	Paint Brush	<b>B</b>
	Pencil	<b>P</b>
	Rectangle, filled	<b>R</b>
	Rectangle, hollow	<b>O</b>
	Scrolling Arrows	<b>M</b>
	Text	<b>T</b>
	Undo	<b>U</b>
<b><i>Special Features</i></b>	Constrained option	<b>K</b>
	Clear Drawing Window	<b>N</b>
	Current brush, next	<b>=</b>
	Current brush, previous	<b>-</b>
	Current pattern, next	<b>]</b>
	Current pattern, previous	<b>[</b>
	Horizontal movement	<b>H</b>
	Pixel Edit (zooms in or out)	<b>Z</b>
	Preview (entire page)	<b>I</b>
	Vertical movement	<b>V</b>
	Window measurement disp.	<b>W</b>

---

The following commands require the use of  at all times:

<b><i>File Management</i></b>	Close document	C
	Quit to deskTop	Q

If you wish to move the pointer in tiny increments, you need not use the  key to use the Arrow keys:


	<i>To move:</i>	<i>Press:</i>
<b><i>Arrow Keys</i></b>	left	←
	right	→
	up	↑
	down	↓

---


## Leaving geoPaint

When you leave a geoPaint document, you have the option of opening another document, or exiting directly to the deskTop. Note that leaving a document automatically saves it to disk.

*To go to another geoPaint document:*

- Select **close** from the **file** menu (or press  C). A dialog box will give you three options: **Create a new document**, **Open an existing document**, and **Quit to deskTop**. Select one.

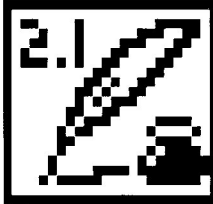
*To enter another application:*

- Select the application from the **appls** menu.
- If the Create/Open/Quit dialog box is displayed (by selecting **close** from the **file** menu), hold down  and click on **Quit** to display the Select Application dialog box.

*To go directly to the deskTop:*

- Select **quit** from the **file** menu (or press  Q).

# 6



## geoWrite

This chapter covers the geoWrite word processing program. Once you have learned about geoWrite, you will know how to:

- format text.
- use center, left, right, and full justification.
- use single, one and a half, and double spacing.
- use decimal tabs.
- move around a document using cursor keys.
- select up to an entire page of text at once.
- double-click to select a word.
- use superscript and subscript.
- print in high, draft, or NLQ mode.
- use headers and footers.
- put the page number, and time and/or date into a header or footer.
- search for and replace text.
- produce documents eight inches wide.

Unfamiliar terms are defined in Appendix A: Glossary.

---

# Before You Try to Use geoWrite

## *Is geoWrite Installed?*

- Make sure you have installed geoWrite as explained in the instructions in "Installing GEOS," in Chapter 1, "Getting Started." Do not attempt to use geoWrite, nor copy it to a work disk, before you install it to your system.

## *geoWrite and Folders*

- Before you enter geoWrite, note that fonts and desk accessories should be placed in the SYSTEM folder.

## *geoWrite and Work Disks*

For a full discussion on work disks, see Chapter 3, "Work Disks."

### *If you have one disk drive:*

- Place geoWrite, your documents, desk accessories, and fonts, and text or photo albums and scraps on the same disk. If desired, add the deskTop.

### *If you have more than one disk drive:*

- 1: Place geoWrite, the fonts, desk accessories, and text or photo albums and scraps on one disk. If desired, add the deskTop.
- 2: Place your documents on another disk.

---

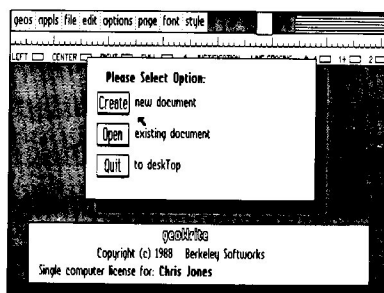
# Entering geoWrite

## *Entering geoWrite from the deskTop*

From the deskTop, there are four ways to enter geoWrite:

- Click on the geoWrite icon once so that it is highlighted, then select **open** from the **file** menu (or press **⌘ Z**).
- Double-click on the geoWrite icon.
- Select **GEOWRITE** from the **appl**s menu.
- Select **appl**s from the **view** menu. When the dialog box appears, select **GEOWRITE**.

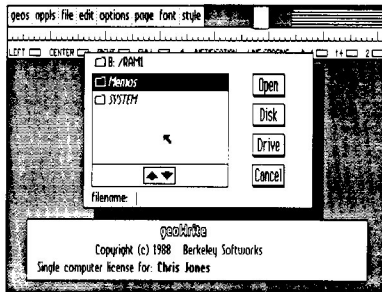
In either case, geoWrite will load and display a dialog box on a blank screen. It will contain three options: **Create new document**, **Open existing document**, and **Quit to deskTop**. Select one.



---

## Creating a New Document

Select **Create** to create a new geoWrite document. A second dialog box will display the name of the currently open disk, a list of folders on that disk, and a prompt asking you to enter the filename.



Note that only the first 64 documents and folders in the current folder can be displayed in the dialog box. It is unlikely you have more than this in a single folder. If you do, you will need to rearrange the geoWrite files and folders on the deskTop to be able to gain access to them. If necessary, refer to "Rearranging Files and Folders," page 4-16.

### *To create a new document:*

- After **filename**, type in a document name. Press return to enter the new document.

### *To create a document in another folder:*

- 1: Open the folder you need by double-clicking on its name. (You can also highlight its name and click **Open**.)

**NOTE** To return to the previous folder, click on the **folder** icon next to the pathname. To return to the home directory, double-click on the **folder** icon.

- 2: Type in a new name and press return to enter the new document.

### *To create a document in another disk drive:*

- 1: Click **Drive** to open the destination disk drive.
- 2: When the disk opens on the screen, open the folder you need.

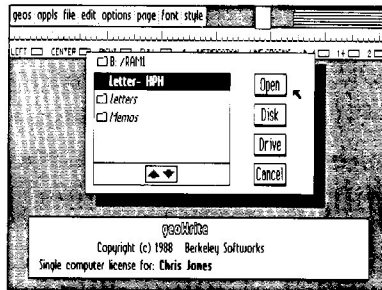
- 
- 3: Type in a filename, and press **return** enter the new document.

*To create a document on another disk in the current disk drive:*

- 1: After you have typed in the filename, click on **Disk**.
- 2: If desired, insert a new disk in the correct disk drive, then click **OK**.
- 3: Open the folder you need, type in a filename, then press **return** .

### ***Opening an Existing Document***

Select **Open** to enter an existing geoWrite document. A second dialog box will display the name of the currently open disk and a list of folders and filenames in the current folder on that disk.



*To open an existing document:*

- Click on the document you need, then select **Open** (or simply double-click on the document name). The document will open on the screen.

*To open a document in another folder:*

- 1: Click on one of the folder names and select **Open** (or simply double-click on the folder name). The folder will open.

**NOTE** To return to the previous folder, click on the **folder** icon next to the pathname. To return to the home directory, double-click on the **folder** icon.

- 2: Click on the document you need, then select **Open** (or simply double-click on the document name). The document will open on the screen.



---

*To open a document in another disk drive:*

- 1: Click **Drive** to open the destination disk drive.
- 2: When the disk opens on the screen, enter the document.


*To open a document on another disk in the current disk drive:*

- 1: Click on **Disk**, insert the disk you need, then click **OK**.
- 2: In the dialog box, find the document you need. If it is in a folder, open the folder.
- 3: Enter the document by double-clicking on its name, or highlighting its name and clicking on **Open**.

### ***Quitting to the deskTop***


Select **Quit** to exit geoWrite and return to the deskTop.

### ***Selecting a Different Application***

- 1: Hold down  and select **Quit**. A dialog box will display the applications on your work disk.
- 2: Double-click on the application name, or highlight it and click **Open**.
- 3: Enter the document.

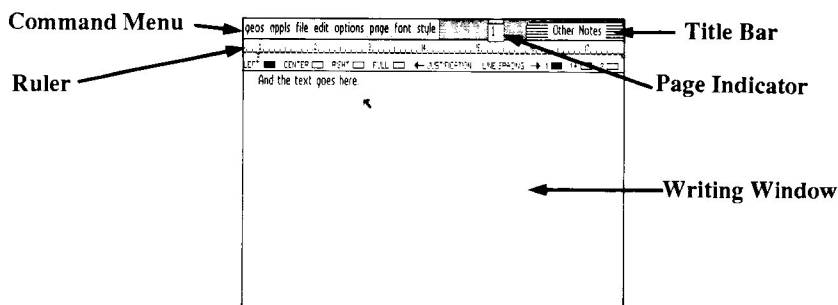
### ***Opening an Existing Document from the deskTop***

Once you have created a document, its icon will appear on the deskTop. You can open it the same way you open geoWrite or any other application, using one of the following methods:

- Click on the document icon so that it is highlighted, then select **open** from the **file** menu (or press  **Z**).
- Double-click on the document icon.

---

# The geoWrite Screen



As shown above, the geoWrite **writing window** occupies most of the screen and serves as a window into each page of your document. The **command menu** lies across the top of the screen. This menu gives you access to some of geoWrite's more specialized commands. The commands are divided into eight groups: **geos**, **appl**, **file**, **edit**, **options**, **page**, **font**, and **style**. Click on one of these menu names to pull down a menu of additional commands. Then simply click on the desired command.

To the right of the command menu you will find the **page indicator**. This box has two uses: it displays the page number of the page visible in the writing window, and it can be used to move the writing window to a different portion of the current page.

The **title bar** in the upper right corner displays the name of the current document.

The **ruler** is located directly below the command menu. It lets you change the format of your document.

Inside the writing window you will notice the **pointer** and **text cursor**. The text cursor indicates where the next typed character will appear. With the pointer, you can move around the entire screen (using your input device—joystick, mouse, etc.), select the commands you want to activate, or move the text cursor to another location.

---

# The Writing Window and Its Dimensions

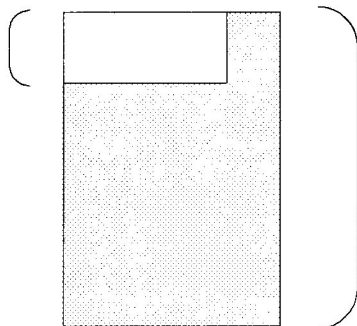
## *Widening Your Document's Dimensions*

The first time you open a new document, you will notice that the document width does not span the entire 8.2 inches of the page. It begins at 0.7 inches and ends at 7.7 inches.

If you wish to widen that span so that the document begins at .2 inches and ends at 8.2 inches, select **make full page wide** from the **options** menu. A dialog box will let you know that geoWrite will convert the file to a 2.1 version (which is the version with this feature). Select **OK** to continue, or **Cancel** to abort.

Once you have widened a document's dimensions, the writing window will not display the entire width of the page. As you move the pointer to the right or left edge of the page, the writing window will flip to that side of the screen. This is called "side flipping."

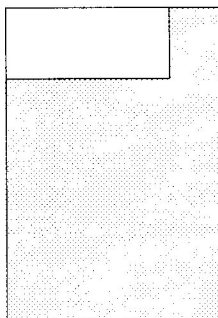
**Writing  
Window**



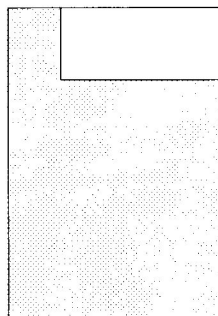
**Full Page**

---

Here the pointer is at the far left:



Now move it to the far right:



Once you have selected **make full page wide** from the **options** menu, you cannot revert the document's dimensions to their original width.

---

# Entering Text

To enter text into your document, simply start typing. What you type will appear in the writing window at the location of the text cursor.

## *Moving the Text Cursor*

There are two ways to move the text cursor on the screen. You can use either the mouse, joystick, or the keyboard.

*To use the mouse or joystick:*

- To change the position of the text cursor, move the pointer to another location and click. The text cursor will be repositioned on that point. If you click the pointer past the last character in a line of text, the cursor will appear right after that character.

*To use the keyboard:*

- Use the arrow keys located at the lower right corner of the keyboard.

## *Deleting Characters*

- If you make a mistake typing, you can delete one or more characters on the line by pressing the `delete` key on the keyboard. This moves the text cursor backwards one character, deleting characters as it goes.

## *Word-Wrap*

If you reach the right margin of the page while typing a word, geoWrite will pick up the entire word and move it to the beginning of the next line and allow you to continue typing. In most word processing using geoWrite, you should let the word-wrap create the new lines within paragraphs, rather than pressing `return`. If you follow this guideline, paragraphs will automatically reformat when you change text.

## *Ending a Paragraph*

- Press `return`. This will move the text cursor to the paragraph margin of the next line.

## *Inserting a Page Break*

geoWrite enables you to insert a page break at any point in your document. The text immediately following a page break will appear at the top of the next page.

*To insert a page break:*

- Position the text cursor where you want the new page to begin, then select **page break** from the **page** menu (or press **⌘ L**).

### ***Deleting a Page Break***

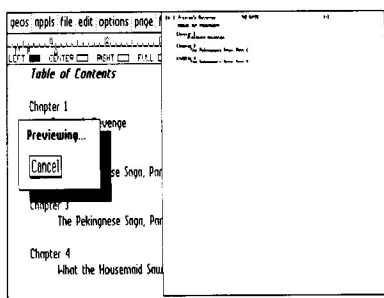
- 1: Position the cursor at the top left corner of the page following the page break, and press **delete**.
- 2: A dialog box will ask "Delete last character of the prev page?" Click **OK** to continue, or **Cancel** to abort.

### ***Viewing the Entire Page at Once***

Since the standard geoWrite writing window only allows you to view a portion of one page at a time, you can use **preview page** to get a full-screen preview of the current page. **Preview** helps you to make decisions about the overall appearance of a page.

*To preview a page:*

- 1: Select **preview** from the **file** menu. A compressed version of the entire page will appear on top of the Writing Window.



- 2: When you are finished previewing the page, click **OK** to return to the Writing Window.

**NOTE** To abort at any time, click **Cancel**.

---

# Moving the Writing Window

"Side flipping" the Writing Window is described in "The Writing Window and Its Dimensions," page 6-8. Other methods of moving the writing window are described below.

## *Scrolling One Line at a Time*

- Move the pointer to the top or bottom of the screen. The writing window will move, line by line.



## *Using the Page Indicator*

The Page Indicator, located at the top of the screen, serves two functions. One is that it displays the current page number. The other function is a way to move the writing window.


*To move to another portion of the page:*

- 1: Click once inside the Page Indicator. The small box within will become attached to the pointer.
- 2: Select a place and click to move the writing window there.

## *Moving Forward or Backward One Page*

- Select **next page** from the **page** menu (or press  =).
- Select **previous page** from the **page** menu (or press  -).

## *Moving to Any Page*

- 1: Select **goto page** from the **page** menu (or press  G).
- 2: A dialog box will ask you to "Enter page to go to." Enter a page number and press  .

---

# Editing the Document

## *Inserting Text*

- Inserting text into your document is similar to entering text: simply point to where you want to add the text and click once to position the text cursor. Now you can begin typing.

## *Inserting Text into a Multi-Page Document*

It is important to realize that when you insert text into a multi-page document, the pages following the text you have inserted may also be affected. When you move to another page, use a desk accessory, or close the document, geoWrite will update the following pages. You can minimize the amount of time needed for additional page reformatting by inserting page breaks at appropriate places, e.g., the end of sections of chapters.

## *Deleting Text*

- Move the text cursor to a point immediately following the characters you wish to delete, then press delete to backspace over the characters.

**NOTE** To remove larger portions of text, you need to use the "select" feature, which is described below.

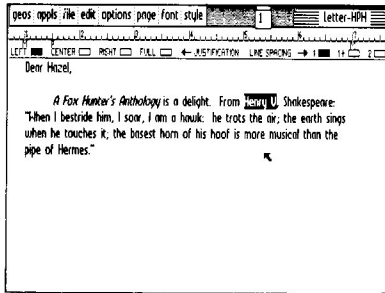
## *Selecting Text to Move, Copy, Delete, or Change Formats*

Before you can change several characters, sentences, or paragraphs at a time, you must first select (i.e., highlight, or put in reverse video) the text.



*To select more than one character:*

- Point to the first character, hold the input device button down, and move the pointer to the last character. Release the input device button. The text will be highlighted as you go along:



*To select a word:*

- Double-click on the word.

*To select the entire page:*

- Choose **select page** from the **options** menu (or press **⌘ V**).

### ***Options Involving Selected Text***

You may perform several operations on a selected block of text.

*To replace selected text:*

- After you have highlighted the text, simply enter the new text on the keyboard. The highlighted text will disappear and the new text will appear in its place.

*To delete selected text:*

- After you have highlighted the text, press **[delete]**.

*To change the font (typeface) or style of selected text:*

- After you have highlighted the text, select the desired font and point size from the **font** menu. If you wish to change the style, highlight the text and select a style from the **style** menu.

**NOTE** See "Using Different Fonts and Styles," page 6-23, for details.

---

*To change the formatting of selected text:*

- After you have highlighted the text, use the ruler to change the formatting.

**NOTE** See "Formatting," page 6-17, for details.

*To cut or copy selected text:*

- After you have highlighted the text, use the **edit** commands to move or copy it to a new location. See the paragraph below for details.

***Moving or Copying Text***

You can move or copy text within the same document or to another document by using the **cut** (to move) and **copy** commands in the **edit** menu. When you select text and use the **edit** commands to move or copy it, it is placed into a special file called a **text scrap**. Using the **paste** command copies the text from the text scrap to the new location. Since the text scrap contents remain as is until you move or copy other text, you can use **paste** to insert a piece of text as often as you need.

In addition to moving and copying text, you can also move and copy graphics in much the same manner. See "To move or copy a selected region to another document," page 5-25. See also "Using Graphics from geoPaint," later in this chapter.

*To move text:*

- 1: Highlight the text to be moved.
- 2: Select **cut** from the **edit** menu (or press **⌘ X**). The text will be removed from the document and placed into a text scrap in the **SYSTEM** folder of the disk containing the geoWrite application.
- 3: Position the cursor at the new location.

**NOTE** "The new location" can be another document, if desired (including a geoPaint document). Close the current document and enter the destination document. If the destination document is on another disk and if that disk contains a different copy of geoWrite, or another different application altogether, copy the text scrap to the **SYSTEM** folder of that disk.

- 4: When you have the cursor positioned at the new location, select **paste** from the **edit** menu (or press **⌘ T**). If you did not use

---

the keyboard command, and clicked on **paste**, a second menu will appear; select **text**.

*To copy text:*

- 1: Highlight the text to be copied.
- 2: Select **copy** from the **edit** menu (or press **⌘ C**). The text will be copied into a text scrap.
- 3: Position the cursor at the new location.

**NOTE** "The new location" can be another document, if desired (including a geoPaint document). Close the current document and enter the destination document. If the destination document is on another disk that contains a different copy of geoWrite, or another application altogether, copy the text scrap to the SYSTEM folder of that disk.

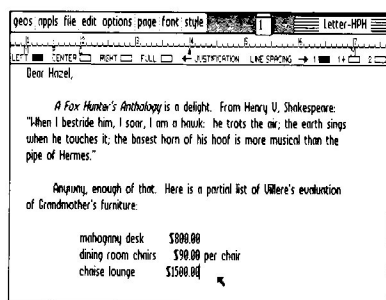
- 4: When you have the cursor positioned at the new location, select **paste** from the **edit** menu (or press **⌘ T**). If you clicked on the **edit** menu item and clicked on **paste**, a second menu will appear; select **text**.

# Formatting

To change the formatting of existing text, you must first select (highlight) it. If necessary, refer to "Selecting Text to Move, Copy, Delete, or Change Formats," page 6-13.

## *Using the Ruler*

The ruler enables you to change the margins, tab positions, justification, and line spacing for the text you are about to enter, or text you have selected. It also enables you to shift an image to the right or left sides of the screen and to crop the image if you wish. As shown below, the ruler appears across the top of the screen:



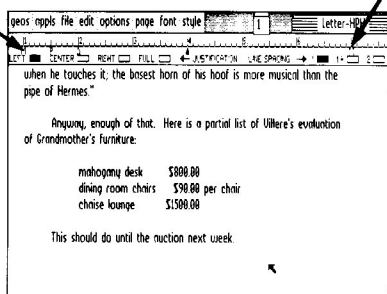
There are several indicators displayed on the ruler. If any two of them (such as the tab, paragraph, or margin markers) are located on the same spot, one will cover the other. This can sometimes be confusing. If you are having trouble finding a particular marker, it may be overlapped by another.

## Setting Right and Left Margins

On the left and right sides of the ruler, you will find two margin markers which resemble the letter M. These two markers define the left and right margins for your text.

Left Margin Marker

Right Margin Marker



### To set margins:

- Click on an M marker once, drag it along the ruler, then click again to drop it.

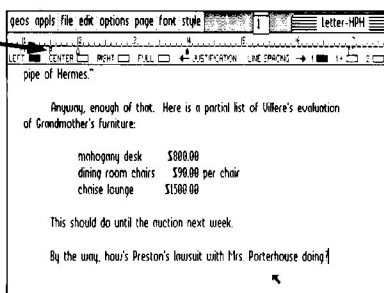
**HINT 1** If you widened your document's dimensions earlier, you may wish to adjust the margin markers so that you can view the entire width of your document at once, instead of using side-flipping. When you are ready to print your document, move the markers back to their original positions.

**HINT 2** You can change the horizontal position of a selected image by moving the margin markers. Depending on where you place the M markers, you can crop the image, if desired.

## Setting the Paragraph Margin

On the left side of the ruler you will find a paragraph margin marker, which resembles the letter **P**. This marker sets where the first line of each paragraph begins.

Paragraph Marker



*To set a paragraph marker:*

- Click on the **P** marker once, drag it along the ruler, then click again to drop it.

## Formatting with the Margin Markers

You can use the margin and paragraph markers in a variety of ways. For example, setting the **P** marker to the right of the left **M** marker has just indented this paragraph.

If you move the **P** marker to the left of the left **M** marker, you will create a hanging indent, as in this paragraph. This method is also handy for creating indented lists of numbered items, as in the example below:

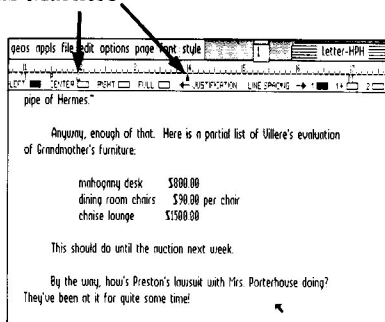
- 1: Move the left **M** to a point to the right of the **P**. For example, move the **P** to inch mark 1, then move the **M** to inch mark 1.5.
- 2: Click on the ruler to create a tab marker, and place the tab marker at inch mark 1.5, on top of the **M**. (If necessary, see "Setting Tab Stops" on the next page.)
- 3: Go back to the text, click to position the cursor at inch mark 1, and begin to enter your numbered list: type 1, press tab, then

type the text for item 1. As you type the text, it will format to align with position 1.5, as in this example. When you press `return`, the formatting will stop for that paragraph, and the cursor will go to position 1 on the next line so that you can enter item 2 on your list.

## Setting Tab Stops

geoWrite allows you to set up to eight separate tab stop positions on each page. For each tab stop position there is a corresponding tab marker on the ruler.

### Tab Markers



### To set a tab:

- Point to a spot on the ruler and click once.

### To move to the next tab stop:

- In the text, press `tab`.

### To move a tab:

- Click on the tab once, drag it along the ruler, and click again to drop it.

### To delete a tab:

- Click on the tab once, drag it up to the top half of the ruler, and click.

---

## ***Setting Decimal Tabs***

Use **decimal tabs** to align the decimal points of a column of numbers, as in the following example:

1300.40  
23.80  
2.75

Decimal tabs look like regular tabs, except that they are filled in.

*To create a decimal tab:*

- 1: Create a normal tab by clicking on the ruler once.
- 2: Click on the tab as if you were picking it up.
- 3: Press the spacebar. The tab will become a decimal tab.
- 4: Click again to deposit the decimal tab.

Moving or deleting decimal tabs is the same as moving or deleting regular tabs.

## ***Setting Justification***

**Justification** refers to the layout of each line. geoWrite gives you four justification options: **left**, **center**, **right**, and **full**. **Left justification** causes the text to line up on the left side, as in this paragraph. **Right justification** causes each line to line up on the right side, and **center justification** centers the text on the page. **Full justification** causes each line to line up on both left and right sides.

*To set justification:*

- 1: Place the cursor in the paragraph whose justification you wish to change. If you wish to change the justification of more than one paragraph, highlight the paragraphs you wish to change.
- 2: Click on one of the justification buttons on the ruler.

## ***Setting Line Spacing***

geoWrite gives you three options for line spacing: **single spacing** (1), **one and a half spacing** (1+), and **double spacing** (2).



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*To set line spacing:*

- 1: Place the cursor in the paragraph whose line spacing you wish to change. If you wish to change the line spacing of more than one paragraph, highlight the paragraphs you wish to change.
- 2: Click on one of the line spacing boxes on the ruler: **1**, **1+**, or **2**.

---

# Using Different Fonts and Styles

To change the font and style of existing text, you must first select (highlight) it. If necessary, refer to "Selecting Text to Move, Copy, Delete, or Change Formats," page 6-13. A **font** refers to a typeface (this typeface is Times Roman). A style refers to the font's appearance, such as plain, *italic*, **bold**, outline, underline, <sup>superscript</sup>, and <sub>subscript</sub>. You can combine styles, if desired.

Refer to Appendix H: Font Samples if you wish to see available fonts.


## *Choosing a Font*


- Select the **font** menu and click on one of the fonts displayed.


**NOTE** If you have additional fonts on your work disk, and wish to use a font not displayed in the **font** menu, return to the deskTop of the folder containing the font icons and rearrange the font files so that the desired font is displayed among the first eight font files on that disk. If necessary, refer to "Rearranging File and Folder Icons," page 4-16.


## *Choosing a Style*


- Use the keyboard shortcuts, or go to the **style** menu and click on one of the following styles:


plain text (or press  P).


bold (or press  B).

italic (or press  I).

outline (or press  O).

underline (or press  U).

superscript (or press  >).

subscript (or press  <).

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# Using Headers and Footers

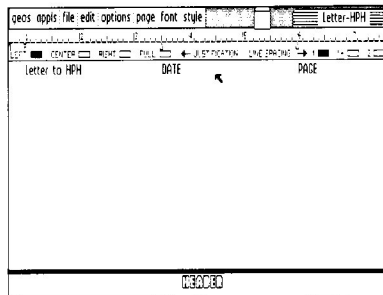
geoWrite enables you to create a section of text (and/or graphics) to be placed at the top of each page (a **header**) or at the bottom of each page (a **footer**).

## *When to Create a Header or Footer*

Create the header or footer as soon as you can, since adding it will reformat your entire document. The larger your document is, the longer this reformatting will take.

## *Creating a Header*

- 1: Select **open header** from the **options** menu (or press **⌘ H**).
- 2: A new screen will appear, with **HEADER** at the bottom of the screen. Type in the text for the header. You can use fonts, styles, the ruler, and pictures just as in the rest of your document.



- 3: When finished, select **close header** from the **options** menu (or press **⌘ H** again).

**NOTE** When you return to the main body of your document, the header will not appear on the screen.

## *Creating a Footer*

- 1: Select **open footer** from the **options** menu (or press **⌘ F**).

- 
- 2: A new screen will appear, with **FOOTER** at the bottom of the screen. Type in the text for the header. You can use fonts, styles, the ruler, and pictures just as in the rest of your document.
  - 3: When finished, select **close footer** from the **options** menu (or press **⌘ F** again ).

*NOTE* When you return to the main body of your document, the footer will not appear on the screen.

### ***Changing or Deleting a Header or Footer***

- 1: Select **open header** ( **⌘ H**) or **open footer** ( **⌘ F**) from the **options** menu.
- 2: Make the changes as needed. To delete a header or footer, simply delete its contents.
- 3: Select **close header** ( **⌘ H**) or **close footer** ( **⌘ F**) from the **options** menu to return to your document.

### ***Removing a Header or Footer from the First Page***

It is often useful not to have a header or footer appear on the first page (i.e., the **title page**) of a document.

*To create a title page:*

- Select **title page** from the **page** menu.

*NOTE* An \* will appear next to the **title page** menu item indicating that the first page of the document is a title page.

*To remove a title page:*

- Select \* **title page** from the **page** menu.

*NOTE* The \* indicating the first page is a title page will disappear.

### ***Putting the Date into a Header or Footer***

- Type the word **DATE** (all capital letters) into the header or footer. When the document is printed, the word **DATE** will be replaced with the current date as set by the clock driver.

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**NOTE** Changing the style of the word **DATE** will change the style of the printed date. If no date is set in the clock driver, the words **NO DATE** will appear in the printed document.

### ***Putting the Time into a Header or Footer***

- Type the word **TIME** (all capital letters) into the header or footer. When the document is printed, the word **TIME** will be replaced with the current time as set by the clock driver.

**NOTE** Changing the style of the word **TIME** will change the style of the printed time. If no time is set in the clock driver, the words **NO TIME** will appear in the printed document.

### ***Putting the Page Number into a Header or Footer***

- Type the word **PAGE** (all capital letters) into the header or footer. When the document is printed, the word **PAGE** will be replaced with the current page number.

### ***Setting the First Page Number for a Document***

This feature is handy when you have to break up a very large project, such as the novel you are writing, into several smaller files, each containing, for example, one chapter.

*To set the first page number:*


- 1: Select **set first page** from the **page** menu.
- 2: A dialog box will ask you for a page number. Enter a number from **0 to 999**, then press **return** . When you return to the document, the page indicator will reflect the change.

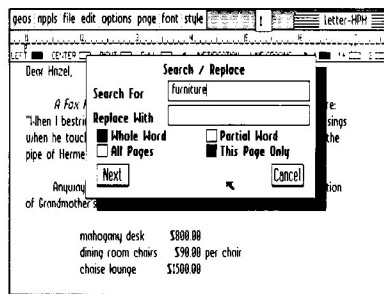
# Searching for and Replacing Text

geoWrite enables you to search for words or phrases and replace these with other words or phrases. When you select this feature, geoWrite will begin the search and replace operation at the current location of the text cursor.

## *Searching for a Word or Phrase*


*To search for a word or phrase:*

- 1: Select search from the options menu (or press  S).
- 2: A dialog box will appear. After Search For, type the word or phrase you need to find.



- 3: Click on **Whole Word** to search for complete words, or **Partial Word** to search for any match, regardless of word boundaries. For example, clicking on **Whole Word** would display each instance of the word **the** and ignore words containing **the**, such as **Lethe**.
- 4: Click on **All Pages** to perform the search on the entire document, or click on **This Page Only**.

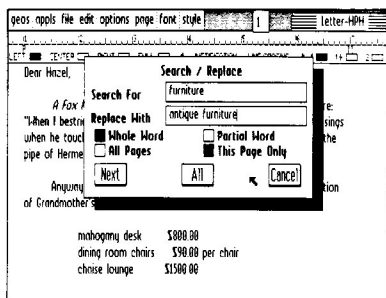
**NOTE** Since geoWrite must load each page from the disk, **This Page Only** avoids slow searches if the document is large.

- 5: Press  or select **Next**. The dialog box will disappear, and the word you are searching for will be highlighted.

- 6: To find the next occurrence of the word or phrase, select **find next** from the options menu (or press **⌘ N**).

### ***Replacing One Word or Phrase with Another***

- 1: Select **search** from the options menu (or press **⌘ S**).
- 2: A dialog box will appear. After **Search For**, type the word or phrase you need to find.
- 3: Move to **Replace With** by clicking on its entry field, then type the new word or phrase.





- 4: Click on **Whole Word** to search for complete words, or **Partial Word** to search for any match, regardless of word boundaries. For example, clicking on **Whole Word** would display each instance of the word **the** and ignore words containing **the**, such as **Lethe**.
- 5: Click on **All Pages** to perform the operation on the entire document, or click on **This Page Only**.

**NOTE** Since geoWrite must load each page from the disk, **This Page Only** avoids slow searches if the document is large.

- 6: Select **Next** to decide on each change individually, or select **All** to make the replacements all at once. You will be returned to the document.

---

**NOTE** If you selected **Next**, select **change**, then **find** from the **options** menu (  **Y**) to change the current instance and move to the next. To skip the current instance, select **find next** (  **N**).



---

# Editing Tips

## *Using Word-Wrap*

Be sure to allow the word-wrap to occur for all new lines, and only press `return` at the end of each paragraph. This will make formatting much easier since geoWrite will fill out paragraphs to match the margin boundaries.

## *Using Page Breaks in Large Documents*

A geoWrite document can grow to 62 pages, assuming enough disk space is available. In large documents, you should insert page breaks wherever appropriate. This will maximize the performance of geoWrite. If, however, you have a large document with no page breaks and you insert a character on the first page, it might push the last character on the first page down to the second page, and so on, causing a ripple down effect that may involve every subsequent page of your document. This can be time consuming. By inserting a page break, the software only has to ripple the changes down to the next page break.

## *Preventing Disasters*

- Select **update** from the **file** menu. This will write (save) your current changes to the disk and protect against losing data. Use update at regular intervals, or after making important changes.
- Make backups of your file on other disks.

## *Repairing Disasters*

- Select **recover** from the **file** menu. Use **recover** if you have accidentally deleted text or wish to undo all of your recent editing changes. This will "recover" the last saved version of your document. (Note that your document is "saved" whenever you go to another page, open a desk accessory, or exit a document.)

**IMPORTANT** You cannot use **recover** after inserting or deleting graphics.

---

## ***Renaming the Document***

You can rename the document on which you are working at any time.

*To rename the document:*

- 1: Select **rename** from the **file** menu.
- 2: A dialog box will ask you to "Please enter new filename." Type in a name and press return .

---

# Using Graphics from geoPaint

geoWrite enables you to mix geoPaint images with your text.

## *Using the Photo Manager*

When you paste a picture into a document, the current contents of the photo scrap are pasted into the document. If you have several pictures you wish to create in geoPaint and later paste into geoWrite documents, you can use the **Photo Manager** desk accessory. The Photo Manager gives you access to any of the graphic images stored in the **photo albums** on the disk. Photo albums are used to contain several photo scraps. You can also name them and have more than one per disk. To use a photo album, copy one of its pages into a photo scrap, then paste the photo scrap into the document. If geoWrite is NOT on the same disk as the copy of geoPaint that you used to create your photo scrap, copy the photo scrap file from the disk that contains geoPaint to the **SYSTEM** folder of the disk with geoWrite. If there is no **SYSTEM** folder on this disk, put it in the home directory.

Once you have a picture in a photo album, you can place it into a geoWrite (or another geoPaint) document. For how to use the Photo Manager, see "The Photo Manager" in Chapter 11, "Desk Accessories."

## *Repositioning or Cropping a Picture*

After you select an image, you can reposition its horizontal position or crop it by adjusting the right and left margins. If necessary, refer to "Setting Right and Left Margins," page 6-18.

## *Showing and Hiding Pictures*

Whenever geoWrite displays a page containing a picture, the pixel-by-pixel image data for the picture must be loaded from the disk. Since this will slow geoWrite slightly, you may want to "hide" the picture temporarily, replacing the image with a gray box. If you print a document with the pictures "hidden," the pictures will still be printed. The pictures are just "hidden" on the screen.

*To hide the pictures in a document:*

- Select **hide pictures** from the options menu.

*To bring them back again:*

- Select **show pictures** from the options menu.

---

# Using Text from Other Documents

You can move or copy text from one document to another, even if the documents are on separate disks. If the document you wish to move or copy the text onto is on another disk, you may need to copy the text scrap onto that disk.

Text scraps are stored in the SYSTEM folder of the disk containing geoWrite or in the home directory if no SYSTEM folder exists. There can only be one text scrap on a disk at a time.

## *Using the Text Manager*

Like the photo scrap, the text scrap holds only one section of text at a time. If you have several text sections that you wish to copy from one application to another, you can use the **Text Manager** desk accessory. The Text Manager will let you collect several text scraps into a **text album**. A text album can be opened, using the text manager desk accessory, while you are working on a geoWrite document, allowing you to cut or copy text from the text albums into a geoWrite or geoPaint document. To use a text album, copy one of its pages into a text scrap, then paste the text scrap into the document. If geoWrite is not on the same disk as the program that created the text scrap, copy the text scrap to the SYSTEM folder of the destination disk. If there is no SYSTEM folder on the destination disk, put the text scrap in the home directory.

Note that any text scrap that you create is located in the SYSTEM folder of the disk with geoWrite or the home directory if there is no SYSTEM folder.

To learn how to use the text manager, see "The Text Manager" in Chapter 11, "Desk Accessories."

---

# Printing Your Document

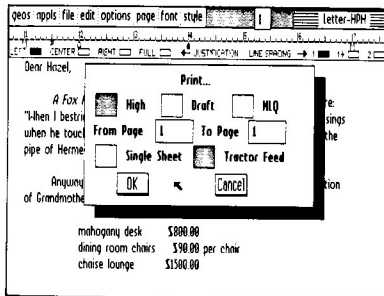
In order for your document to be printed, the correct printer driver and interface driver card must first be selected. If you have not already done so, return to the deskTop and select the correct printer driver and interface card. If necessary, refer to "Printer Drivers and Interface Cards" in Chapter 12, "Drivers."

## *Printing a Document*

Aside from printing a document from the deskTop, you can print the document from within the application.

*To print a document:*

- 1: Select **print** from the **file** menu.
- 2: A dialog box will appear, asking for several options:



- 3: Select one of the following printing modes:
- **High** quality mode produces all of the fonts and styles shown in the same format as they appear on the screen. This is the default and recommended mode for printing.
  - **Draft** quality mode does not produce different fonts and styles, nor the same formatting as that which appears on the screen. It will print much faster than **High** quality mode, and is good for quick, rough drafts of a document.

- 
- **NLQ** mode does not produce different fonts, but does produce the same formatting that appears on the screen. **NLQ** produces several styles, depending on the printer you are using. Bold, italic, and underline are usually available; superscript and subscript are sometimes available. **NLQ** uses the printer in its near letter quality mode. To use this mode, all text *must* be in the **NLQ 10** font. Graphics cannot be printed in this mode. If your text is not in the **NLQ 10** font, choose **select page** from the **options** menu, then select the **NLQ** font. Be sure to perform this operation on each page, including headers and footers.

A few printers have different page lengths for **NLQ** printing than for graphics (high quality) printing. Select **NLQ** spacing from the **page** menu to cause **NLQ** page length to be used. You should always select **NLQ** spacing so that geoWrite can display the correct number of lines on the screen.

- 4: Select a page range: click on the **From Page** and **To Page** buttons and enter the page numbers you wish to print.
- 5: Click on **Single Sheet** to print each page individually (a separate dialog box will let you know when to insert the next sheet of paper), or click on **Tractor Feed** for continuous (i.e., computer) paper.


**NOTE** Printers vary as to the amount of the printed page on which they can clearly print. For this reason, geoWrite will produce slightly longer pages on some printers than on others. When geoWrite opens a file that was created on a printer with a different page length, geoWrite reformats the file. This reformatting can take a considerable amount of time.


- 6: After you have selected the above options, click on **OK** to print or **Cancel** to abort. (You can also press **[esc]** to stop printing once printing has started.)

---

# Keyboard Shortcuts


Rather than use your mouse or joystick, you can use keyboard shortcuts to select frequently needed menu and ruler items directly from the keyboard, and to move around the writing window.





To select menu and ruler items, hold down the  key while pressing the particular key for the shortcut desired. To move around the Writing Window, press the arrows keys located at the lower right corner of the keyboard.

	<i>To use the feature:</i>	<i>Press  and:</i>
<b><i>Edit Menu</i></b>	cut	X
	copy	C
	paste text	T
	paste picture	W
<b><i>Options Menu</i></b>	search	S
	find next	N
	change, then find	Y
	open (or close) header	H
	open (or close) footer	F
	select page	V
<b><i>Page Menu</i></b>	previous page	- or _
	next page	= or +
	goto page	G
	page break	L
<b><i>Style Menu</i></b>	plain text	P
	bold	B
	italic	I
	outline	O
	underline	U
	superscript	>
	subscript	<
<b><i>Ruler</i></b>	left	A
	center	E
	right	R
	full	J

---

single space (1)	<b>K</b>
one and a half spacing (1+)	<b>M</b>
double spacing (2)	<b>D</b>

If you wish to move the text cursor, you needn't use the  key:

<b><i>Moving Cursor</i></b>	right one character	
	left one character	
	down one line	
	up one line	



---


# Leaving geoWrite

When you leave geoWrite, you have the option of moving to another document or directly to the deskTop. Note that leaving a document automatically saves the file to disk.

*To go to another geoWrite document:*

- Select **close** from the **file** menu. A dialog box give you three options: **Create new document**, **Open existing document**, or **Quit to deskTop**. Select one.

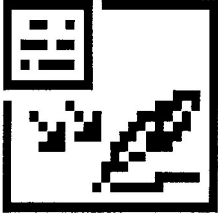
*To go to another application:*

- Select the application from the **appls** menu.
- If the Create/Open/Quit document dialog box is displayed (by selecting **close** from the **file** menu), hold down  and click on **Quit** to display the Select Application dialog box.

*To go directly to the deskTop:*

- Select **quit** from the **file** menu.

# 7



## Text Grabber

The GEOS Text Grabber utility application expands the usefulness of geoWrite. With it, you can take a file that was created with any of the supported Apple word processors and convert it to a new geoWrite data file version. The original document will remain unchanged. Most formatting directions from the original word processor will be preserved when converting to a geoWrite format (i.e., margins, justification, etc.). If you own a ProDOS word processor that is not supported, the file can still be converted to a geoWrite document, but the formatting information will be lost.

Unfamiliar terms are defined in Appendix A: Glossary.

---

# Before You Try to Use Text Grabber

## *Text Grabber and Folders*

- Place the Text Grabber and word processor format files in the SYSTEM folder. The word processing filenames begin with TG: (e.g., TG:AppleWorks).

## *Text Grabber and Work Disks*

- The files you need on a work disk are Text Grabber, the word processor format file(s) and the documents you wish to convert. (You can, if needed, use different disks on a one-drive system.) If you have a multi-disk drive system, you can switch between drives to select the needed files while you are using Text Grabber.

For a full discussion of work disks, see Chapter 3, "Work Disks."

---

# Using Text Grabber

## *Converting a ProDOS Document*

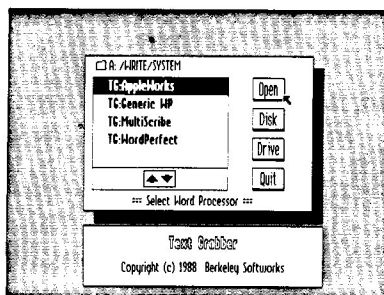
The files you will convert are ProDOS files. If the word processor you need is not listed, you will need to use the TG:Generic WP word processor file. This will simply read in all characters from the file, ignoring non-printable characters. You can then reformat the document in geoWrite.

## *Entering Text Grabber*

Suppose you have an AppleWorks document entitled LIMERICKS. Here is how you would create a geoWrite version:

*To use Text Grabber:*

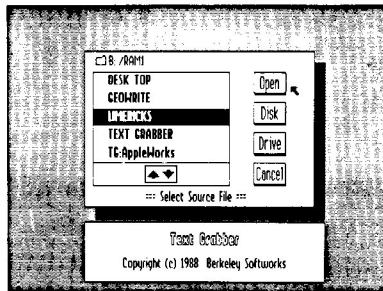
- 1: Open Text Grabber by using one of the following methods:
  - Select **TEXT GRABBER** from the **appls** menu.
  - Select Text Grabber from a dialog box after selecting **appls** from the **view** menu.
  - Double-click on the Text Grabber icon, or highlight it and select **open** from the **file** menu (or press **⌘ Z**).
- 2: Once you open Text Grabber, the Select Word Processor dialog box will appear:



Find and open the folder that contains TG:AppleWorks. When TG:AppleWorks is displayed, select it by double-clicking on its name. (You can also highlight its name and click **Open**.)

**NOTE** If TG:AppleWorks is on a disk in another disk drive, click on **Drive**. If TG:AppleWorks is on another disk not in any drive, insert the disk containing it and click **Disk**.

- 3: The Select Source File dialog box will appear next:



Find and open the folder that contains LIMERICKS. When LIMERICKS is displayed, select it by double-clicking on its name. (You can also highlight its name and click **Open**.)

**NOTE** If LIMERICKS is on a disk in another disk drive, click on **Drive**. If LIMERICKS is on another disk not in any drive, insert the disk containing it and click **Disk**.

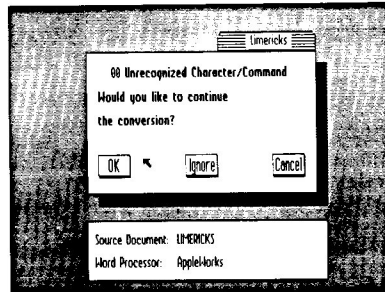
- 4: Text Grabber is now ready to create a geoWrite version of LIMERICKS. Select a folder where you wish to create the geoWrite file, type in a new name (which can be "Limericks," if you wish), and press **return**.

**NOTE** As with Steps 2 and 3, you can create the new Limericks file in another disk drive by clicking on **Drive** *before* you press **return**. To create it on another disk entirely, insert the disk into a disk drive, and click **Disk** before you press **return**.

- 5: Would you like to have the converted text previewed on the screen? Click either **YES**, **NO**, or **Cancel**.

**HINT** If the name you entered in Step 4 is incorrect, click on **Cancel** to return to that step. Enter a new name and press **return**. Otherwise, select **YES** or **NO** to continue.

**NOTE** If Text Grabber encounters any characters or commands that are unknown to geoWrite, the following dialog box will appear:



If you click **OK**, Text Grabber will continue to convert LIMERICKS, but will insert a ? in the place of each unrecognized character or command in the text. (The above dialog box will appear for each unrecognized item it finds.) When this dialog box appears, check the information box in the lower portion of the screen to make sure that the correct word processor is being used. If Text Grabber encounters too many unrecognized items, you can click **Cancel**, which will return you to Step 3. If necessary, select **Cancel** again to return to Step 2, where you can use the TG:Generic WP file. If you wish the conversion process to continue without your having to answer a dialog box for each unrecognized item, select **Ignore**.

**NOTE** If Text Grabber cannot find the disk it needs, it will prompt you. Insert the proper one so that the conversion can continue.

**NOTE** In the event a "Disk Error" message appears, note the error so that you can repair the error if possible (e.g., formatting a new disk if necessary). The conversion will be cancelled and you will be returned to Step 3. If necessary, exit Text Grabber to fix the problem.

- 
- 6: Text Grabber will let you know when it has converted LIMERICKS and will display the number of unknown characters it may have encountered. Click **OK**. You will be returned to the Select Source File dialog box.
  - 7: If you wish to convert another AppleWorks document, go back to Step 3. If you wish to convert a non-AppleWorks document, select **Cancel** and see Step 2. If you are finished converting files entirely, click **Cancel** (to return to Step 2), then click **Quit** to return to the deskTop.

---

## Leaving Text Grabber

To exit Text Grabber during the text conversion process, simply select **Cancel** from the current dialog box until you return to the Select Word Processor dialog box. Once this dialog box is displayed, click on **Quit** to return to the deskTop.

Holding **⌘** while clicking on **Quit** will display the Select Application dialog box. From there, you can open any application on the current work disk.



# 8

## geoSpell

This chapter covers geoSpell, a powerful spell-checking program whose features enable you to accomplish the following:

- Check for misspelled words in geoWrite.
- Search for words in a dictionary.
- Create and alter personal dictionaries.
- Use a personal dictionary alongside the geoDictionary.
- Switch dictionaries at any time.
- Use the personal dictionary during the spell-check process to add, delete, change, and search for words.

Unfamiliar terms are defined in Appendix A: Glossary.

---

# Before You Try to Use geoSpell

## *Is geoSpell Installed?*

- Make sure you have installed geoSpell as explained in the instructions in "Installing GEOS" in Chapter 1, "Getting Started." Do not attempt to use geoSpell, nor copy it to a work disk, before you install it to your system.

## *geoSpell and Folders*

- Place the geoDictionary in the SYSTEM folder.

## *geoSpell and Work Disks*

For a full discussion of work disks, see Chapter 3, "Work Disks."

### *If you have one disk drive:*

- 1: Copy geoSpell to one disk.
- 2: Copy the geoDictionary, personal dictionary, and geoWrite document to another disk.

### *If you have more than one disk drive:*

- 1: Copy geoSpell to one disk.
- 2: Copy the geoDictionary to a disk.
- 3: Copy the geoWrite document to either of the above disks.
- 4: Copy the personal dictionary to either the geoDictionary disk or the document disk.

---

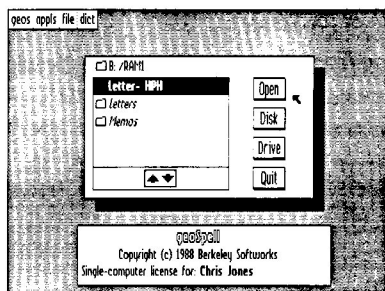
# Using geoSpell

## *Documents You Can Spell-Check*

You can spell-check documents produced with the geoWrite application.

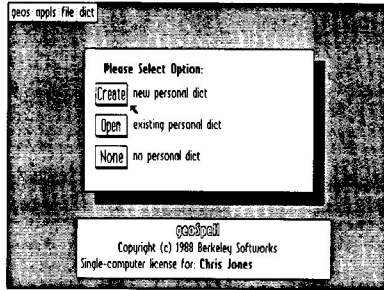
## *Entering geoSpell*

- 1: Open the disk containing geoSpell so that the deskTop is displayed.
- 2: When the geoSpell deskTop appears, double-click the geoSpell icon. (You also can click on it once, then select **open** from the **file** menu (or press **⌘ Z**). (You may be asked to insert the dictionary disk.) A dialog box will appear, listing all the geoWrite documents on the current disk.



- 3: In the dialog box, find the document you wish to have spell-checked, either by scrolling the list or opening the folder that contains it.
- 4: Select the document by double-clicking on it. (You can also highlight it and click on **Open**.)
- 5: Another dialog box will appear, asking you to "Check Page Range." If necessary, change the displayed page numbers by clicking on the box, backspacing over the current number, and typing a new page number. When finished, click **OK** (or press **return** ).

- 6: The next dialog box will ask if you wish to use a personal dictionary, so select either **Create a new personal dictionary**, **Open existing dictionary**, or **None**.



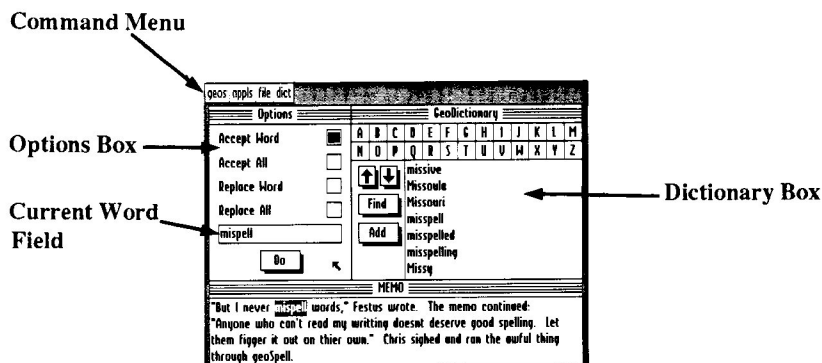
- **Create new personal dict** Enter a new name and press **return**. If you have a second disk drive, you can click **Drive** to store the personal dictionary on a disk in the other disk drive.
- **Open existing personal dict** Click on a name in the dialog box, then click **Open**. If you have a second disk drive, you can click **Drive** to open a dictionary stored on a disk in the second disk drive.
- **None no personal dict** Click on this option to bypass the use of a personal dictionary, and to begin spell-checking the document you selected in Step 4.

**NOTE** If you decide to use a personal dictionary, that dictionary will be used alongside the geoDictionary once you enter the geoSpell application. If you decide to use a different personal dictionary, you will need to close the file you are spell-checking and begin again.

- 8: The geoSpell screen will appear, and geoSpell will immediately begin to check your document for misspelled words.

**NOTE** If there are no misspelled words, geoSpell will display a message telling you so. Click **OK**. You will be returned to Step 3, where you can select another document to spell-check or exit the program.

# The geoSpell Screen



As shown above, the geoSpell screen is divided into three sections: the **Options** box, the **Dictionary** box, and the **Document** box.

Once your document has been spell-checked, sections containing misspelled words are displayed in the document box. The name of the document is located in the title bar at the top of the box.

Once geoSpell finds a misspelled word, it displays it in the **Current Word field**, in the Options box. You can enter a new spelling, or use the Dictionaries to find the correct word. From there you have the option of using **Accept Word** to bypass the word, **Accept All** to bypass all instances of that word, **Replace Word** to replace it with the word in the current word field, or **Replace All** to replace all instances of the word. Once you are ready to move on to the next word, select **Do**.

The Dictionary box contains either your personal dictionary or the geoDictionary. Use the alphabet keys to search for any word that may be listed in the current dictionary. Another way to search for a word is to type it in the current word field in the Options box, then click **Find**. The words geoSpell finds are highlighted and displayed to the right of the **Find** command. Use the **scrolling arrows** above **Find** to scroll

---

the list of displayed words in the current dictionary. **Add** and **Cut** allow you to add a word to — and any variations of that word — or delete a word from the personal dictionary.

The **command menu**, which lies at the top of the screen, enables you to switch dictionaries by using the **dict** menu, and to exit by using the **file** menu. Simply click on a menu item to pull down a menu of additional commands. Then click on the desired command.

---

# Once Your Document Has Been Spell-Checked

Once the checking process is complete and if geoSpell has found misspelled words, the text in which the misspelled words appear is displayed in the document box. The first misspelled word will be highlighted and in the Current Word field. At this point, you can alter the spelling or add the word to your personal dictionary.

After geoSpell has checked your document, it will display the first misspelled word in the Current Word field in the **Options** box. From there you can perform a number of operations:

## *Correcting Misspellings*

There are a variety of operations you can perform to correct misspelled words in your document.

*To switch dictionaries:*

- Select **switch** from the **dict** menu.

*To bypass a current word:*

- Go to the **Options** box. Make sure **Accept Word** is select, then click **Do**.

*To bypass all instances of the current word throughout the document:*

- Go to the **Options** box, click **Accept All**, then click **Do**.

*To replace the current word, using one of the following methods:*

- In the current word field, retype the new word. Click **Replace Word**, then click **Do**.
- Go to the Dictionary box and click **Find**. geoSpell will display all similar spellings of the word in the current dictionary. Click on a suitable replacement word so that it is highlighted. The new word will appear in the Current Word field. Go to the **Options** box (where geoSpell has selected **Replace Word** for you) and click **Do**.

*To replace all instances of the current word throughout the document, using one of the following methods:*

- In the Current Word field, retype the new word. Click **Replace All**, then click **Do**.

- 
- Go to the Dictionary box and click **Find**. geoSpell will display all similar spellings of the word in the current dictionary. Click on a suitable replacement word so that it is highlighted. Go to the Options box, click **Replace All**, then click **Do**.

*To find a similar spelling of the current word:*

- If needed, use the **dict** menu to switch dictionaries. Go to the Dictionary box and click **Find**. geoSpell will display all similar spellings of that word in the Dictionary box.

*To find a word not in the current word field:*

- If needed, use the **dict** menu to switch dictionaries. Go to the current word field in the Options box and type the needed word. (If necessary, use the **delete** key to delete the current word.) Then go to the Dictionary box and click **Find**.

*To delete a word in the current word field:*

- Press the **delete**.

*To move the cursor in a word in the current word field:*

- Use the arrow keys below the **return** key on the keyboard. To select a place in the word, point and click.

## ***Using Your Personal Dictionary***

When geoSpell finds a word not in the geoDictionary, such as the name "Festus," it will count it as misspelled and display it in the Current Word field. However, you may wish to include Festus in your personal dictionary so that it will be automatically bypassed every time you spell-check a document. In order to do this, you need to add it to your personal dictionary (you cannot add words to the geoDictionary). You can add variations of Festus if you wish, such as "Festusnik" or "Festusable." Later on, if you become disenchanted with Festus, you can delete it from the personal dictionary.

The maximum number of words you can add to a personal dictionary is approximately 10,000.

### ***Capitalization of Words Added***

When you add words to a personal dictionary, the capitalization you use will affect how geoSpell searches for words when you do a spell-check later on:



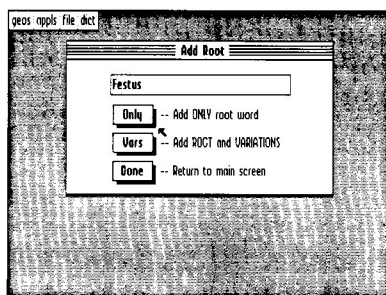
- **ALL LETTERS CAPITALIZED** geoSpell will recognize only the fully capitalized version of the word you entered in a personal dictionary. It will not recognize the same word if it is lowercase or has the first letter capitalized.
- **First Letter Capitalized** geoSpell will recognize the word if it is both fully capitalized or has the first letter capitalized.
- **all letters lower case** geoSpell will recognize all cases of capitalization, whether the word is lower case, has the first letter capitalized, or has all letters capitalized.

*To search for a word in either dictionary, using one of two methods:*

- Go to the alphabet displayed at the top of the Dictionary box. Click on the first three letters of the word you wish to find. geoSpell will search for all words beginning with the three letters you clicked, and display as many as can fit in the dictionary area. If needed, use the scrolling arrows to move through the displayed list.
- Go to the Current Word field and type in the word. Then click **Find** in the Dictionary box.

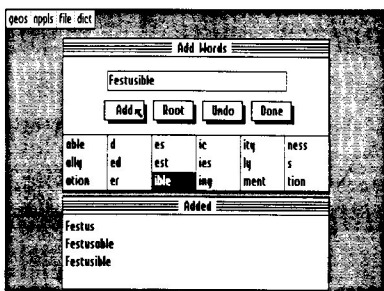
*To add a word to your personal dictionary:*

- 1: If the word is already displayed in the Current Word field, go to the Dictionary box and click **Add**. If the word is not displayed, backspace over the current word, retype the desired word into the Current Word field, then click **Add**.



- 2: The Add Root dialog box will appear on the screen, listing three options. Select one:
- **Only -- Add ONLY root word** If desired, you can alter the spelling of the word as it is displayed in the Add Root dialog box. Backspace over it and retype a new variation. After you select this option, geoSpell will add the new word to your personal dictionary, even if the current dictionary is the geoDictionary. Afterwards, when you return to the geoSpell screen, your personal dictionary will be displayed.
  - **Vars -- Add ROOT and VARIATIONS** When you select this feature, another dialog box will display possible variations of the word. You can alter the spelling of the word in two ways:

To use one of the displayed suffixes, simply click on the suffix you need, then click **Add**. The new word will be displayed in the Added Words window.



To use your own variation, backspace over as much of the word as you need, retype it, then click **Add**. It will be displayed in the Added Words window.

To revert the displayed word back to its root, click **Root**.

To undo the most recent addition, click **Undo**.

---

When finished, click **Done**. You will be returned to the geoSpell screen, and whatever word variations you created will be added to the personal dictionary.

- **Done -- Return to main screen** Select this option if you have selected the **Add** feature by mistake, and wish to return to the geoSpell screen.

*To delete a word from the personal dictionary:*

- 1: Make sure the personal dictionary is displayed. If necessary, select **switch** from the **dict** menu.
- 2: Select one of the following methods:
  - If the word is displayed in the Current Word field, go to the Dictionary box and click **Cut**.
  - If the word is not displayed in the current word field, backspace over the current word, retype the word you want deleted, then click on **Cut**.
  - If the word is listed in your personal dictionary, click on it once so that it is highlighted, then click **Cut**. (If necessary, use the **Find** feature or the scrolling arrows to display the word.)

---

# Leaving geoSpell

Once your document has been spell-checked, you can exit at any time while you are correcting spellings.


**IMPORTANT** Do not exit the document if you have used the **Replace All** feature and if you are not finished going through your document. If you do, the words which you selected to be replaced with a **Replace All** word will not be changed in the remainder of the document.

There are three ways to exit geoSpell:

*To spell-check another document:*

- Select **close** from the **file** menu. If necessary, refer to Steps 3–6, of "Opening geoSpell," earlier in this chapter.

*To enter another application:*

- Select the application from the **appls** menu.
- If the Create/Open/Quit dialog box is displayed (by selecting **close** from the **file** menu), hold down  and click on **Quit** to display the Select Application dialog box.

*To exit directly to the deskTop:*

- Select **quit** from the **file** menu.

---

## When You Are Finished

When you reach the end of your document and all the spelling has been corrected, geoSpell will display the number of words it checked in your document. It will also give you the option of spell-checking another document — and using a different personal dictionary — or returning to the deskTop.

# 9

## geoMerge

This chapter describes geoMerge, a GEOS based application that lets you produce multiple copies of a document, where each document can have unique names, addresses, or other data that you define. You can either type in the data yourself, or bring it in from geoWrite.

This chapter contains a tutorial on geoMerge. In addition, you will learn how to:

- Create a merge form document.
- Use <<IF...>> and <<IF...>>...<<ELSE>> statements in your Merge Forms.
- Create a merge data file with geoWrite.
- Use a merge data file with a merge form document file.
- Print your geoMerge documents.

Unfamiliar terms are defined in Appendix A: Glossary.

---

# Before You Try to Use geoMerge

## ***geoMerge and Folders***

- Make sure font files are in the SYSTEM folder.

## ***geoMerge and Work Disks***

For a full discussion on work disks, see Chapter 3, "Work Disks."

*If you have one disk drive:*

- Place geoMerge, the data files, and fonts on the same disk. If desired, add geoWrite (for editing documents) and the deskTop.

*If you have two disk drives:*

- Place geoMerge and the fonts on one disk. If desired, add geoWrite (for editing documents) and the deskTop.
- Place the data files on another disk.

---

# How geoMerge Works

Essentially, you will use two geoWrite documents: a **merge form document** and a **merge data file**. The merge form document contains the text of the document you wish to duplicate; in the places where you wish to have unique information (such as names) you will insert special commands which you will learn about in the following tutorial. The merge data file contains a listing of all the unique information you need, such as names, addresses, or special pieces of text.

Once you have created the merge form document and the merge data file, use geoMerge to feed the unique information you listed in the merge data file into the places in the merge form document where you instructed it to go. geoMerge will create multiple copies of the merge form document, each with individualized data.

geoMerge provides you with the option of using both the merge form document and the merge data file to create your individualized documents, or you can use the merge form document only, and enter the data manually. In the following tutorial, you will enter the data manually.



---

# Using geoMerge: a Quick Tutorial

This tutorial is designed to help you quickly learn the basics of the geoMerge application program. Later sections in this chapter will explain and generalize the procedures outlined in the tutorial.

For now, follow the steps in the tutorial exactly; type in all characters as they appear when directed to do so. Soon you will be creating your own customized merge forms.

## *Step 1: Create a Merge Form Document*

To enter and practice with geoMerge, you must first create a merge form document. To do this:

- 1: Open the geoWrite application from the deskTop by double-clicking on its icon.
- 2: Create a document called **test memo**.
- 3: Type the following data into it:

<<firstName>>, meet me at 2PM in the stairwell. Mike.

**NOTE** The << >> symbols serve to identify **firstName** as a **label** in this merge form document.

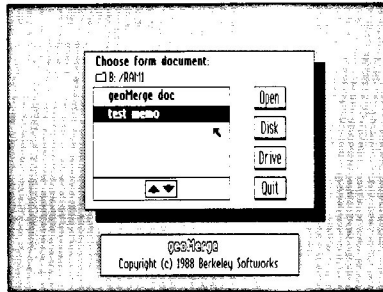
After typing in the form above, check it for accuracy. Then:

- 4: Exit geoWrite by selecting **quit** from the **file** menu.

---

## ***Step 2: Open geoMerge and Select a Merge Form Document***

- 1: Open geoMerge from the deskTop by double-clicking on its icon. A dialog box will appear asking you to choose a form document.

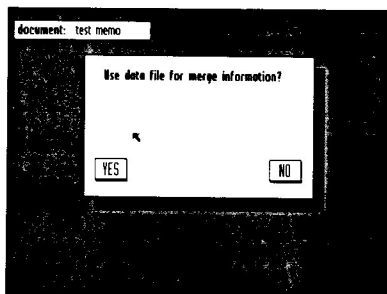


**NOTE** If desired, you may select a form document from another disk. geoMerge will let you switch disks as long as the disk currently in the disk drive is not being used for the form document file.

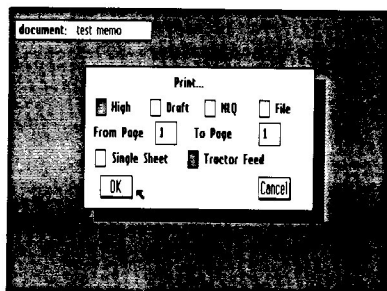
- 2: Click on **test memo**.
- 3: Now click on the **OPEN** icon to select this file as your merge form document. (Clicking on the **Quit** icon returns you to the deskTop.)

### ***Step 3: Type in Merge Data Manually***

Once **test memo** has been selected, the program will ask you if the merge data will come from a geoWrite file (i.e., a merge data file).

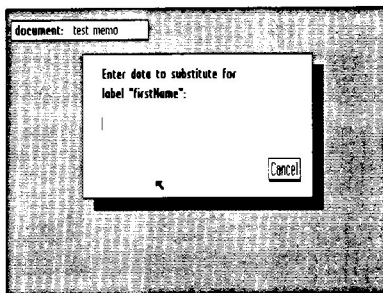


- 1: Click on the **NO** icon (you will be entering data manually). Another dialog box will appear asking you to choose print options:



- 2: Click on the **OK** icon. (An explanation of Print Options for use with geoMerge can be found in "geoMerge Printing Options," later on in this chapter.)

Since you are typing in the merge data manually, the program will now start asking you to supply data each time it encounters a label in the merge form document. In this example, when geoMerge encounters <<firstName>> the following dialog box will appear:



- 3: Type in the name that will be substituted for the label <<firstName>>. You can type in any name. For this example, type in the name Nancy.
- 4: Press .

#### ***Step 4: Print Your Document***

Once geoMerge has asked for, and you have typed in all of the proper replacements, your printout will be of the form document **test memo** with all of the substitutions made for the labels, provided that:

- your printer is turned on,
- it is hooked up correctly, and
- you have the correct printer driver selected.

While geoMerge prints, you will see a Cancel icon on the screen. Click on this icon if you wish to stop printing for any reason.

If you have gone through all of the above steps correctly your printout should look like this:

Nancy, meet me at 2PM in the stairwell.  
Mike.

#### ***Step 5: Do Another Merge***

When geoMerge has printed the document (or you have canceled the printing process), you will be asked if you wish to do another merge.

---

If you click on the **YES** icon, the program will again ask you to supply a substitution for the label "firstName". You can then type in a different name and geoMerge will print another document with the new name in place of the <<firstName>> label. Try this with the merge form document that you have created in this tutorial. Type in a different "firstName", press  and see what is now printed out.

When you have made as many stairwell invitations as you wish to make, go on to the next paragraph.

### ***Step 6: Quit***

If you click on the **NO** icon, you will return to the initial file dialog box, where you can:

- load and print a different merge form, or
- exit the geoMerge program and return to the deskTop.

**NOTE** If you are using a multi-disk drive system you may click on the **Drive** icon to look at a list of the files and folders that are on the diskette in the other disk drive. If the file or folder you want is on a different diskette than the one that is currently in the other disk drive, click on the **Disk** icon. (The **Disk** icon appears after you have clicked on the **Drive** icon.) Now put the correct diskette into the disk drive when you are asked to do so by the dialog box that appears.

---

# Merge Form Documents

This section will explain how you can make merge form documents using geoWrite.

## *Labels*

Any geoWrite document can be used as a merge form document. Wherever you want a word, or group of words to vary from printing to printing, add a label with a suitable name. The format for a label is as follows:

<<labelName>>

The <<...>> symbols indicate to the program that this is a label, and "labelName" represents any name that you choose to be the name for that particular label.

The label name cannot contain more than 30 characters, and there cannot be any formatting, such as font changes, within the label name itself. However, you can set the *whole* label, including the brackets, in boldface (or any other style), if you wish the data to appear bold.

In addition, you may not use spaces within a label name. In other words, you may not use **last name** as a label name. Use **lastname** instead.

Any one label name can be repeated as often as you wish throughout the merge form document; geoMerge will ask you only once to supply the data to be substituted for the label in your printout, and will then use that data each time that the label appears in your merge form document.

## **<<IF...>> ...<<ENDIF>> Statements**

In addition to replacing labels with data, you may wish to have words or groups of words included, or not included, depending on some "key text" contained in a label. For example, if you are writing cover letters to prospective employers, you may want to include a specific portion of text if you have previously spoken with them before, and exclude the text if you have not. This can be done with an <<IF...>>...<<ENDIF>> statement.

---

The format for an IF statement is as follows:

```
<<IF labelName = "key text">>text<<ENDIF>>
```

What this means is, "If the data typed in for labelName is exactly equal to *key text*, then leave *text* in the printout; otherwise leave *text* out of the printout.

**NOTE** The quote marks ("...") in the example above are a necessary part of the <<IF...>> statement. They indicate that what is contained inside of them is *key text*. Note also that **IF** and **ENDIF** are *always* capitalized. Furthermore, the key text cannot be longer than 200 characters.

**IMPORTANT** Let's say that you want geoMerge to search for a key text that has quote marks in it such as:

Joe said "hello" to me.

You will need to enter an ! exclamation mark before each inside quote when you type your <<IF...>> statement. In the example above you would type:

```
<<IF greeting = "Joe said, !"hello!" to me.">>"Hi Joe!"<<ENDIF>>
```

in order to search for data in the label **greeting** which is equal to:

Joe said "hello" to me.

and then to print the statement:

"Hi Joe!"

If you wish the text to contain <<>>, you can do so easily by inserting an ! mark before the first set of brackets. For example, entering:

```
!<<Ha ha to you, Joe.>>
```

will print as:

```
<<Ha ha to you, Joe.>>
```

---

**NOTE** The <<ENDIF>> label tells the program that this is the end of this particular <<IF...>> statement. After an <<ENDIF>> label you could start a new <<IF...>> statement if you want.

**Example:**

If you have the following merge form document:

Dear <<interviewer>>:

<<IF talkedAlready = "true">> I enjoyed speaking with you on  
<<date>>.

<<ENDIF>> I look forward to interviewing with your company in  
the future.

And when asked to supply data, you type in:

Mr. Tibbs for <<interviewer>>  
false for <<talkedAlready>>  
June 9th for <<date>>

geoMerge will print the following:

Dear Mr. Tibbs:

I look forward to interviewing with your  
company in the future.

If you type in *true* instead of *false* when you are asked to supply data for the label <<talkedAlready>>, your printout will look like this:

Dear Mr. Tibbs:

I enjoyed speaking with you on June 9th. I  
look forward to interviewing with your company  
in the future.

**<<IF...>>...<<ELSE>> Statements**

You may also want to print one portion of text if a label is the same as the key text, and a different portion if it is not. This can be accomplished with an <<IF...>>...<<ELSE>> statement.



---

The <<IF...>>...<<ELSE>> statement has the following format:

```
<<IF labelName = "key text">>text1<<ELSE>>text2<<ENDIF>>
```

What this means is, "If the data that you type in for labelName is exactly the same as the key text, then print the text (text 1) that immediately follows the <<IF... "key text">> statement. If it does not exactly equal the key text, then print the text (text 2) that follows the <<ELSE>> statement.

Note that IF and ELSE are always capitalized.

**NOTE** Again, the <<ENDIF>> statement indicates the end of the <<IF...>> statement, or in this case the <<IF...>><<ELSE>> statement.

**Example:**

If your form contains:

Dear <<interviewer>>:

```
<<IF talkedAlready = "true">> I enjoyed speaking with you <<date>>.
<<ELSE>> I have heard great things about the salaries you offer.
<<ENDIF>> I look forward to interviewing with your company in the
future.
```

And when you are asked to supply the data to be used you type in:

```
Mr. Tibbs   for <<interviewer>>
false       for <<talkedAlready>>
June 9th    for <<date>>
```

geoMerge will print the following:

Dear Mr. Tibbs:

I have heard great things about the salaries you offer. I look forward to interviewing with your company in the future.

---

If you type in *true* instead of *false* when you are asked to supply data for the label <<talkedAlready>>, your printout will look like this:

Dear Mr. Tibbs:

I enjoyed speaking with you on June 9th. I look forward to interviewing with your company in the future.

**NOTE** An <<IF...>> or <<IF...>>...<<ELSE>> statement cannot start on one page of a geoWrite document and end on a following page. Also, these statements cannot be "nested"; that is, an <<IF...>> or <<IF...>>...<<ELSE>> statement could not have appeared in either text 1 or text 2 in the previous examples. However, labels could appear within text 1 or 2.

---

# Merge Data Files

Manually typing in the data to be substituted for each label is not the only way to merge data with a merge form document. The data can also come from a "merge data file," which is created with a geoWrite file.

## *Creating a Merge Data File with geoWrite*

A merge data file is composed of one **label record** followed by one or more **data records**.

### *Label Records*

A merge data file begins with the **label record**. This is a list of all of the labels to be "substituted for" in the merge form document. Each label must appear on a line by itself. For example, the label record for a form letter might be:

```
firstName
lastName
address
city
state
zipCode
talkedAlready
*
```

The asterisk at the end of the label list indicates the end of the label record. The program will also automatically insert a page break after this first asterisk.

**IMPORTANT** There is only one label record in a merge data file, and it must always be the first record.

### *Data Records*

The next line after the asterisk is the first line of the first **data record**, which lists the actual data you want substituted for the labels in your merge form document. Each data entry in the data record is separated by a return . A data record might be:

---

Molly  
Thrush  
2424 Mockingbird Lane  
Birdville  
VA  
22203  
true  
\*

**NOTE** A data entry may be up to 200 characters long, and may include several lines of text, *so long as* the `return` key is not pressed within the data entry. For long data entries let the word-wrap create new lines.

**IMPORTANT** Each data record must have corresponding data entries, or blank lines, for every line in the label record. In other words, each record following the first must have the same number of lines in it as has the first record.

Whatever characters appear in the first **data** entry in your data file will be substituted for the first **label** in the label record wherever that label appears in your merge form when you make a printout. The second **data** entry, which follows immediately after the first entry in your data file, is substituted for the second **label** entry in the label record wherever that label appears in your merge form, and so on, in a similar fashion for all of the labels in the label record.

A blank line (a `return` on a line by itself) in the data record tells the merge program to substitute a blank for the corresponding label in the label record wherever that label appears in your merge form. In other words, *each data record must have corresponding data entries, or blank lines, for every line in the label record.*

An asterisk on a line by itself indicates the end of the data record. The line following the asterisk is the first line of the *next* data record in your data file.

Your data file may contain as many data records as you like. If desired, you can insert page breaks after an asterisk instead of a `return` , but avoid using them elsewhere.

---

**IMPORTANT** The last data record in your merge data file *must* be followed by an asterisk *and* a `return` before you close and save the merge data file (a geoWrite document) on your diskette.

Labels in geoMerge may be up to 30 characters in length. Labels can contain alphanumeric characters only (letters and numbers), and *no* spaces.

Data entries may be up to 200 characters in length. Data entries may contain any type of character (alphanumeric and non-alphanumeric), and may also contain spaces. geoMerge enables you to create up to 60 unique labels in a single form document.

---

# Sample geoMerge Documents

The following sample files and the printout examples demonstrate using a merge data file with a merge form document file.

## *Form Letter for Use with geoMerge*

### *Merge Form Document:*

```
<<firstName>> <<lastName>>  
<<address>>  
<<city>>, <<state>> <<zipCode>>
```

Dear <<firstName>>,

<<IF metThurs = "true">>It was a pleasure meeting with you last Thursday.

<<ENDIF>>Thanks for the check.

### *Merge Data File:*

```
firstName  
lastName  
address  
city  
state  
zipCode  
metThurs  
*  
John  
Smith  
1234 Main Street  
Any Town  
PA  
19152  
true  
*  
Carl  
Greenskeeper  
141 Country Club Drive  
Chicago  
IL  
60610  
false  
*
```

---

## ***Printouts***

### ***First Document:***

John Smith  
1234 Main Street  
Any Town, PA 19152

Dear John,

It was a pleasure meeting with you last  
Thursday.

Thanks for the check.

### ***Second Document:***

Carl Greenskeeper  
141 Country Club Drive  
Chicago, IL 60610

Dear Carl,

Thanks for the check.

---

# geoMerge Printing Options

Select either **high**, **draft**, or **NLQ** printing mode depending on the format that you want to use. A fourth mode, **File Output Mode**, allows you to direct your document to a geoWrite document first for further editing or for use with geoLaser.

## ***High Quality Mode***

Click on the **high** button to choose the High Quality mode.

This is the "default" and recommended mode for geoWrite (geoMerge) output. High Quality mode produces all of the fonts and styles in the same format as they appear to you on the screen.

## ***Draft Quality Mode***

Click on the **Draft** button to choose Draft Quality mode.

This mode does *not* produce different fonts and styles and will *not* produce the same formatting as that which appears on the screen. The draft quality will, however, print much faster than the high quality mode. Use this mode to get quick, rough drafts of your document. Pictures or graphics *cannot* be printed in this mode.

## ***NLQ Mode***

Click on the **NLQ** button to choose Near Letter Quality mode.

This mode can be used with letter quality printers. This mode does *not* produce different fonts and styles but it *will* produce the same formatting that appears on the screen. Pictures or graphics *cannot* be printed in this mode. If your printer driver supports style changes, they will appear in the NLQ output.

To use this mode, all text *must* be in the NLQ 10 font, which is supplied on your GEOWRITE diskette.

A few printers have different page lengths for NLQ printing than for high quality printing. In geoWrite, selecting the **NLQ spacing** menu item from the **page** menu causes the NLQ page length to be used. The *only* time that you should use NLQ spacing is when you print in the NLQ mode.



---

## ***File Output Mode***

Click on the **File** button to select **File Output Mode**.

Use this feature to have geoMerge send its output to a geoWrite file rather than directly to a printer. This feature allows you to add final touches to a merge file document, or use geoLaser to print your merge file document.

After you select this option, geoMerge will ask you for a filename. Enter the new filename, select a destination folder if desired, and press

. When creating multiple output files, geoMerge will assign a number to the name of the document (e.g., "DocumentName1," "DocumentName2," etc.)

**NOTE** Before you use this feature, be sure you have enough room on the disk on which you plan to store the output files.

As with the merge form document and merge data files if you have a multi-drive system, you may want to switch disks in the other drive when you are choosing where to save the output file(s). geoMerge will allow you to change disks so long as the disk currently in the other drive is not being used for either the merge form document or merge data files.

The **From Page** and **To Page** boxes allow you to print a part of the file. Normally the entire file is printed. To change the pages that are printed out, click inside either of the boxes and enter a new value.

The **Single Sheet** and **Tractor Feed** buttons allow you to print with regular continuous printer paper, or with single sheets fed in one at a time. geoMerge will stop after printing each page if **Single Sheet** is selected so that you can insert a new sheet. Click on the **OK** icon in the dialog box that appears when you are ready to print the next sheet.

---

# Merging Your Documents

*Use the following steps to merge your form document with a data file:*

- 1: Create a merge form document.
- 2: Create a merge data file.
- 3: Go to the deskTop and double-click the **geoMerge** icon.
- 4: A dialog box will appear telling you to select a form document. Click on the desired form document and then click **Open** to select it.
- 5: Another dialog box will ask you "Use geoWrite file for merge information?" Click **YES**.
- 6: The next dialog box will ask you to "Choose merge data file." Click on the desired file and select **Open**.
- 7: The print options dialog box will appear. Make the necessary choices and click **OK** when finished. **geoMerge** will merge your selected documents, and in a moment your merged documents will be printed.
- 8: After your documents are printed, you will be returned to the "Choose form document" dialog box (see Step 4). Either do another merge, or select **Quit** to return to the deskTop.

# 10

## geoLaser

This chapter describes geoLaser, a powerful tool for producing near typeset quality output of geoWrite files using the Apple LaserWriter printer.

Unfamiliar terms are defined in Appendix A: Glossary.

---

# Before You Try to Use geoLaser

## *Connecting Your Apple to a LaserWriter*

- Before you attempt to use geoLaser, make sure that the correct serial interface driver is selected from the **select interface** item from the **options** menu on the deskTop.

## *geoLaser and Folders*

- Place geoLaser and all fonts you plan to use in the printed document in the **SYSTEM** folder.

## *geoLaser and Work Disks*

For a full discussion of work disks, see Chapter 3, "Work Disks."

*If you have one disk drive:*

- Copy geoLaser, the font files, and the data file(s) to one disk.

*If you have more than one disk drive:*

- Copy geoLaser and the font files to one disk and the data file(s) to another disk.

---

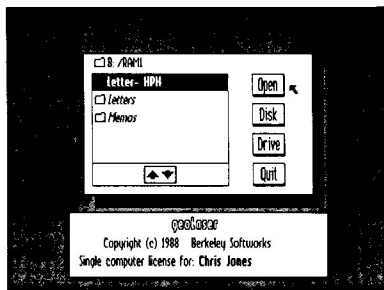
# Using geoLaser

## *Entering geoLaser*

Once you have set up the LaserWriter to your Apple and prepared work disks, you are ready to print a file using geoLaser.

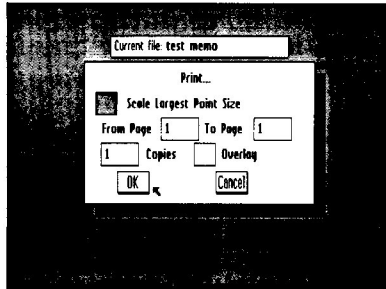
*To print a file using geoLaser:*

- 1: Open geoLaser by using one of the following methods:
  - Double-click on its icon.
  - Click once on its icon so that it is highlighted, then select **open** from the **file** menu (or press **⌘ Z**).
  - Select **GEOLASER** from the **appls** menu.
  - Select **appls** from the **view** menu, then select **GEOLASER** from the dialog box.
- 2: A dialog box displaying files and folders will appear. Find the file you wish to print either by scrolling through the list with the **scrolling arrows** or opening the folder that contains it.



**NOTE** If you are using a multi-drive system and wish to print a file in another drive, click **Drive**. If you wish to replace a disk with another, click **Disk** and insert the disk you need. (Do not remove the disk containing geoLaser and the fonts.)

- 3: Once the file you wish to print is displayed in the dialog box, double-click on its name to select it. (You can also highlight its name and click **Open**.)
- 4: The Print Options dialog box will appear:



Select from the following, depending on your printing needs:

**Scale Largest Point Size** controls the printing of non-LaserWriter fonts. This is explained in the "Non-Resident Fonts" section later in this chapter.

**From Page** and **To Page** allow you to print just a part of the file. Normally the entire file is printed. To change the pages printed, click on either of the boxes and enter a new value.

**Copies** allows you to print multiple copies of the file. Normally a single copy is printed. To change the number of copies, click on the box and enter a new value. (Note that it's much faster for geoLaser to make multiple copies of a document than for you to print each copy separately.)

**Overlay** allows you to combine or "overlay" separate pages of the file onto one page. For example, a three column page could be created by putting each column in a separate page of the file selected. Each column (or portion of text, or graphic) must be positioned in the place where it will appear on the printed page. This can be done by careful use of the **Ruler**, **page indicator**, **preview page**, and by counting lines on the file's pages. You can produce striking results with this feature. Note that geoLaser starts with the overlay option turned off.

- 
- 5: Once you have completed Step 4, click **OK** to print your data file.
  - 6: After the file has been printed, you can select another file to print, if desired. If so, return to Step 2. If not, click on **Quit** to return to the deskTop.

---

# How Files Are Printed

The LaserWriter is a very high resolution (300 dots per inch) printer. Working with this printer, geoLaser can print all geoWrite files. Both text and graphics can be printed.

## *Page Length*

geoWrite files have varying page lengths depending on the printer driver used. This is due to the inherent mechanical differences between printers. The LaserWriter has one of the longest page lengths (840 pixels) of all the printers supported by GEOS. When geoLaser prints a document created with a shorter page, the extra space is divided evenly between the top and bottom margins. The LaserWriter printer driver has the correct LaserWriter page length so that files can use the entire LaserWriter page.

## *Resident Fonts*

The LaserWriter contains several internal fonts that can be printed with a high resolution. These fonts are: Times Roman, Helvetica, Symbol, and Courier, as well as the bold, italic, and bold-italic versions of these (except for Symbol). It is these internal LaserWriter fonts (referred to as resident fonts) that produce the best printed output. geoLaser instructs the LaserWriter to use these internal fonts in place of certain GEOS fonts. The following table summarizes this substitution:

<i>LaserWriter™ Fonts:</i>		<i>GEOS Fonts:</i>
Times Roman:	substituted for	LW_Roma (also Roma)
Helvetica:	substituted for	LW_Cal (also California)
Symbol:	substituted for	LW_Greek
Courier:	substituted for	LW_Barrows

**NOTE** Roma and California (used for Times Roman and Helvetica) do not produce as fine results as the other fonts above (including LW\_Roma and LW\_Cal).

If you are using a LaserWriter Plus, you can order six additional fonts from Berkeley Softworks' Customer Service Division. The phone number and address are found in the How to Get Help section at the front of this manual.



---

### ***Non-resident Fonts***

geoLaser prints text in non-resident fonts (fonts not supported by the LaserWriter) by sending the LaserWriter a pixel-by-pixel picture of each character. Since GEOS's resolution is 80 dots per inch, non-resident fonts appear jagged and broken compared to resident fonts. Non-resident fonts can also take considerably longer to print than resident fonts.

geoLaser improves the appearance of non-resident fonts by substituting a larger version of the font if one is available. For example, geoLaser will send University 24 point in place of University 10 point (or any other smaller size of University) to the LaserWriter. The LaserWriter then reduces this larger font to the correct size. This font substitution can only happen if the font file contains a larger point size than the one being printed. To turn off this automatic substitution, click on (make the button appear blank), the "Scale Largest Point Size" button in the **Print** dialog box so that it is deselected.

# 11

## Desk Accessories

This chapter covers GEOS desk accessories—helpful and convenient tools available anywhere in GEOS:

- Alarm Clock.
- Calculator.
- Note Pad.
- Photo Manager.
- Text Manager.

Unfamiliar terms are defined in Appendix A: Glossary.

---

# Before You Try to Use the Desk Accessories

## *Desk Accessories and Folders*

- Place all the desk accessories on your work disk into the SYSTEM folder.

## *Desk Accessories and Work Disks*

For a full discussion of work disks, see Chapter 3, "Work Disks."

- Copy the desk accessories you need into the SYSTEM folder on your work disk. Since all desk accessories are treated as independent files by GEOS, you may add or delete them to tailor a disk to your individual requirements without affecting any of the other files on the work disk.

You may also want to rearrange desk accessory icons on the deskTop so that they will appear in a certain order when you select them from the **geos** menu or a dialog box. If necessary, refer to "Rearranging File or Folder Icons," page 4-16.

---

## Using the Desk Accessories

Your GEOS package comes with a number of useful programs called **desk accessories**. These programs are different from regular GEOS applications programs because they can be used *while running* any GEOS application. Simply select a desk accessory from those listed in the **geos** menu, or select **desk accs** from the **view** menu. The desk accessory will "pop up" in an application (or the deskTop) ready for use. For example, the Calculator can be used while running the geoWrite program, without your having to exit geoWrite.

**NOTE** The program you are working in when you select the desk accessory is "swapped" out and temporarily stored in another section of your disk's memory. Though the program remains on the screen, it is rendered inactive until you exit the desk accessory.

Some desk accessories, because of their size or complexity, require up to 15K bytes free on the disk in order to run. If you select a desk accessory and there is not enough space on the disk for the swap file, GEOS will automatically return you to the application. If you still wish to use the accessory, you will need to move or delete files or folders from the disk (see "File/Folder Management" in Chapter 4, "The GEOS deskTop").

### *Opening a Desk Accessory*

You can find and open desk accessories from a number of places:

- If you are in an application or the deskTop, select the desk accessory from the **geos** menu.
- If you are in the deskTop, select the desk accessory from a dialog box after selecting **desk accs** from the **view** menu.
- If you are in the deskTop, and if the desk accessory is displayed, open it as you would any file or application.

---

# The Alarm Clock

The **Alarm Clock** may be called up to display the current time (if it has already been set), set the correct time, or set an alarm time. Once set, the clock and alarm are active no matter where you are working in GEOS. Setting the alarm will cause a tone to sound at the specified time.

For each of the three buttons used, there is a corresponding key: **M** for **Mode**, **return** for **SET**, and **shift Q** for **close**.

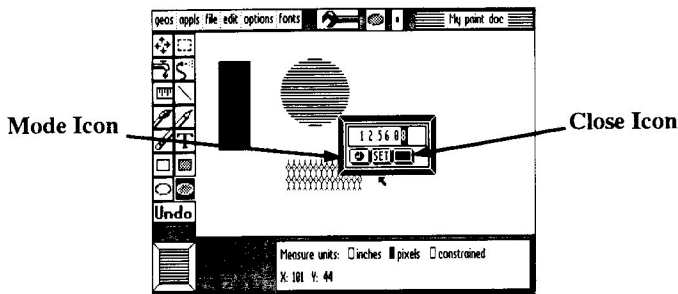
## Selecting the Alarm Clock

*From an application:*

- Select **alarm clock** from the **geos** menu.

*From the deskTop:*

- Select the **Alarm Clock** from the **geos** menu, from **desk accs** in the **view** menu, or by clicking on its name or icon.



## Setting the Clock Time

- 1: Switch to **Clock Mode**: press **M** or click on the **Mode** icon until a clock face appears.
- 2: Click the pointer at a time digit. The digit will be highlighted and the clock will freeze.

- 
- 3: Type the new time. (The cursor will skip the colons.) Press the spacebar to bypass correct entries. Press  or click on **SET** when finished.

### ***Setting the Alarm***

- 1: Switch to **Alarm Mode**: press **M** or click on the **Mode** icon until a bell appears.
- 2: Enter the alarm time (the cursor will skip the colons). Press the space bar to bypass correct entries. Press  or click on **SET** when finished. The new bell displayed next to the close button signifies that you have set the alarm.

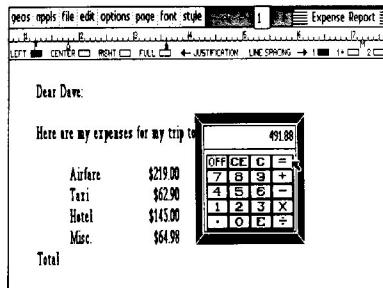
### ***Exiting the Alarm Clock***

- Click on the close icon. You will be return to the previous application or the deskTop.

---

# The Calculator

The **Calculator** gives you the capability to do quick arithmetic while running any GEOS application. It operates in the same fashion as a typical four-function calculator.



## Selecting the Calculator

*From an application:*

- Select **calculator** from the **geos** menu.

*From the deskTop:*

- Select the Calculator from the **geos** menu, from **desk** accs in the view menu, or by clicking on its name or icon.

## Entering Values

To enter values and execute functions, either use the pointer and click on the Calculator keys, or use the keyboard (either the top row of numbers or the numeric keypad). Keys you need to use are as follows:

	<i>Calculator Key</i>	<i>Keyboard Key</i>
Add:	+	+
Subtract:	-	-
Divide:	÷	/
Multiply:	X	*
Exponential:	E	E

---

Equal	=	=
Clear:	C	C
Clear entry:	CE	delete
Exit:	OFF	shift Q


### ***Numbers in Scientific Notation***

In addition to supporting basic arithmetic functions, the calculator also handles numbers in scientific notation. To enter very large (or very small) numbers, use scientific notation. Type the mantissa, then E, then the power of 10. For example, to calculate the equation  $3.2 \times 10^{11} \times 2.1 \times 10^{-5}$ , you would input the following:


- 1: Type: 3.2E11
- 2: Click on the Multiply Key (\*)
- 3: Type: 2.1E-5
4. Click on the Equal Sign (=)

The correct result, 6720000 (i.e.,  $6.72 \times 10^6$ ), is displayed in the calculation window. Note that the maximum exponent that may be displayed or used in a calculation is  $10^{-37}$  or  $10^{37}$  (E-37 or E37).

### ***Copying Values to Documents***

To copy the value displayed into the text scrap, press  C. You can then paste the value into a document. If you are pasting the value into a geoPaint document, you must first select the **Text** icon and then open a text region in which to insert the value.

### ***Exiting the Calculator***

- Click on the OFF icon or press  Q. You will be returned to the previous application or the deskTop.



# The Note Pad

With the **Note Pad** desk accessory you can jot down short notes while you are using any GEOS application. Your notes automatically will be saved to a Notes file in the SYSTEM folder on the disk. Any text that was saved in the Notes file will be displayed each time you use the Note Pad. You can store up to 250 pages of notes, with approximately 250 characters on each page.

## Selecting the Note Pad

*From an application:*

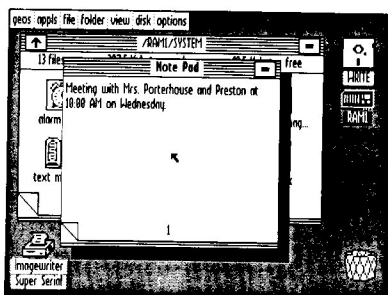
- Select **note pad** from the **geos** menu.

*From the deskTop:*

- Select the Note Pad from the **geos** menu, from **desk accs** in the **view** menu, or by clicking on its name or icon.



## Adding Notes

When the Note Pad appears, begin to type a note. Insert characters by clicking the pointer at the desired insertion point; delete characters by pressing the **delete** key or the left arrow key.





## Moving to Another Page

- To go to the next page, click on the dog-ear corner at the lower left corner of the note pad, or hold down **⌘** and press the down or right arrow.

- 
- To go to the previous page, click the part of the page just below the dog-eared corner, or hold down  and press the up or left arrow.
  - To go to pages 1 through 9, press  and the page number.

### ***Moving or Copying the Note to the Text Scrap***

- 1: Select the desired note pad page.
- 2: Press  X (to cut or move) or  C (to copy). Close the Note Pad by clicking on its close icon. The note's contents will be placed in a text scrap in the SYSTEM folder.
- 3: Open the destination document, select the note's insertion point, then select **paste** from the **edit** menu. If you are pasting into a geoPaint document, first select the **Text** icon and define a text region in which to move or copy the note.

### ***Deleting the Note Pad Contents***

- Delete the Notes file from the deskTop. This will remove the existing notes and give you a fresh note pad with which to work.

### ***Exiting the Note Pad***

- Click on close icon at the upper right corner of the notepad.

---

# The Photo Manager

The **Photo Manager** manages graphic images stored in multiple **photo albums** on the disk. Each photo album may contain up to 127 pages of graphic images collected from your geoPaint documents. For example, one photo album may contain charts and graphs for a business proposal; another album may contain illustrations for your upcoming novel.

The Photo Manager enables you to select graphics from any of the photo albums and insert them in other GEOS applications, such as geoWrite.

## *Photo Scraps and Photo Albums*

There is a distinct relationship between the "photo files." Whenever you cut or copy a picture (graphic image), it is placed into a photo scrap file, which is a temporary storage file. Photo albums are a means of saving the image you placed in the photo scrap and turning it into a permanent file (i.e., a photo album). The photo manager allows you to move images to and from a photo album. A photo album may contain many separate pages. When you need to place an image from a photo album into a document, copy the photo album contents into a photo scrap.

Remember that the photo scrap is a temporary file; each time you copy an image into it, that image replaces the current contents of the photo scrap.

## *The Photo Album Screen*

Once inside the photo album, use the two items in the command menu, **file** and **edit** (located at the top of the album screen) to work with your images. To exit quickly to the previous application, click on the **close** icon at the top right of the album screen.

At the lower left corner of the album screen is the **window indicator**, which consists of two black rectangles: the large rectangle represents the entire size of the image; the smaller rectangle represents the photo album screen. To view another part of an image that is too large to fit in the window, click where you would like its top left corner to lie.

## *Creating a Photo Album or Opening an Existing One*

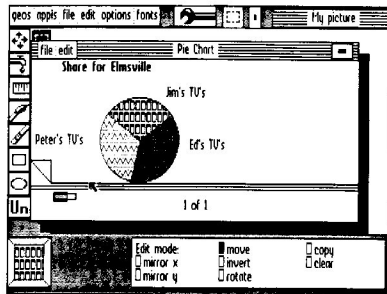
1: Open the Photo Manager by using one of the following methods:

- Select **photo manager** from the **geos** menu.

- 
- Select **photo manager** from the **geos** menu.
  - From the deskTop, select the Photo Manager from the **geos** menu, from **desk accs** in the **view** menu, or by clicking on its name or icon.
- 2: When the dialog box appears, select **Create new photo album**, **Open existing photo album**, or **Quit**.
  - 3: To create a new album, enter a name, select a folder if desired, and press `return`. To open an existing album, double-click on its name or highlight it, then click **Open**. If there are more than five names on the list, click on the **scrolling arrows** at the bottom of the dialog box until you find the album or album folder you want.

### ***Placing an Image into a Photo Album***

- 1: In geoPaint, select the **Edit Box** icon and define the region that contains the image to be placed in the photo album.
- 2: Select **cut** (to move) or **copy** from the **edit** menu. The image will be placed in a photo scrap.
- 3: Select **photo manager** from the **geos** menu. (You need not be in the document in which you originally created the photo scrap.)
- 4: Select an option: **Create new photo album**, **Open existing photo album**, or **Quit**.
- 5: Find and open the folder you need. Enter a name for a new photo album and press `return`, or select an existing album and click **Open**.
- 6: When the album appears, note that it has its own command menu: **file** and **edit**. Select **edit**, then select **paste**. The image that you placed in the photo scrap will be copied into the album.



**NOTE** You can use the above commands to move or copy images in the existing photo album to another photo album. For example, create a photo album, insert an image into it, cut or copy it, then select **close** to exit that album. Next, create or open another album, and insert the cut or copied image of the first photo album into it.

Remember that only a *copy* of the photo scrap has been pasted into the album. If you wish, you may use the same scrap in another album.

### ***If the Image is Too Big for the Photo Album Screen***

- Scroll the image by clicking on the window indicator below the album's dog-ear corner.

### ***Exiting a Photo Album***

- Select **close** from the **file** menu if you wish to open another album or create a new one. Select **quit** or click on the **close** icon to return to the previous application, or to the deskTop.

---

# The Text Manager

As the Photo Manager manages graphic images, the **Text Manager** manages blocks of text stored in multiple text albums on the disk. Each text album may contain up to 127 pages of text collected from your geoPaint or geoWrite documents. Typically, text albums are organized by the type of text they contain. For example, you may have one text album that contains headers and footers for a business proposal; another album may contain poetry samples for an English term paper.

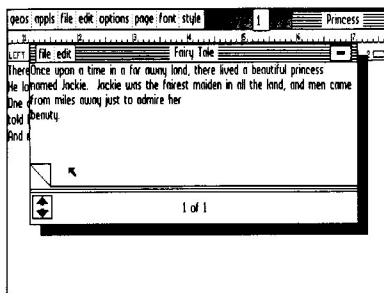
The Text Manager enables you to select text from any of the text albums and use them in other GEOS applications.

## *Text Scraps and Text Albums*

There is a distinct relationship between the "text files." Whenever you cut or copy text, it is placed into a text scrap file, which is a temporary storage file. Text albums are a means of saving the text you placed in the text scrap and turning it into a permanent file (i.e., a text album). The Text Manager enables you to move scraps to and from a text album. The Text Manager works much like the glossary feature found in other word processing programs. When you need to place text from a text album into a document, copy the text album contents into a text scrap.

## *The Text Album Screen*

Once inside the text album, use the two items in the command menu, **file** and **edit** (located at the top of the album screen), to work with your text. To exit quickly to the previous application, click on the close box at the top right of the screen album.



---

If the text is larger than the text album window, use the scrolling arrows at the bottom of the screen to view another area of the text. To move to the next page, click on the dog-eared corner at the lower left of the page; to move to the previous page, click on the page area just below the dog-eared corner.

### ***Creating a Text Album or Opening an Existing One***

1: Open the text manager by using one of the following methods:

- Select **text manager** from the **geos** menu.
- From the **deskTop**, select the **Text Manager** from the **geos** menu, from **desk accs** in the **view** menu, or by clicking on its name or icon.

2: When the dialog box appears, select **Create new text album**, **Open existing text album**, or **Quit**.

3: To create a new album, enter a name, select a folder if desired, and press . To open an existing album, double-click on its name or highlight it, then click **Open**. If there are more than five names on the list, click on the **scrolling arrows** at the bottom of the dialog box until you find the album or album folder you want.

### ***Placing Text into a Text Album***

1: First you must create a text scrap:

- In **geoPaint**, select the **Edit Box** icon and define the region that contains the text to be placed in the text album.
- In **geoWrite**, highlight the text.

2: Select **cut** (to move) or **copy** from the **edit** menu.

3: Select **text manager** from the **geos** menu. (You need not be in the document in which you originally created the text scrap.)

4: Select an option: **Create new text album**, **Open existing text album**, or **Quit**.

5: Find and open the folder you need. Type a name for a new text album and press , or select an existing album and click **Open**.

- 
- 6: When the album appears, note that it has its own command menu containing the items **file** and **edit**. Select **edit**, then select **paste**. The text you placed in the text scrap will be copied into the album.

**NOTE** You can use the above commands to move or copy text in the existing text album to another text album. For example, create a text album, insert an image into it, cut or copy the image, then select **close** to exit that album. Next, create or open another new album, and insert the cut or copied image of the first text album into it.

Remember that only a *copy* of the text scrap has been pasted into the album. If you wish, you may use the same scrap in another album.

### ***If the Text is Too Long for the Text Album Screen***

- Scroll the text by clicking on the **scrolling arrows** below the dog-ear.

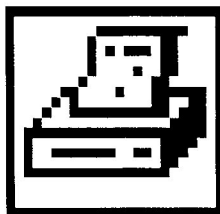
### ***Exiting a Text Album***

Select **close** from the **file** menu if you wish to open another album or create a new one. Select **quit** to return to the previous application or to the deskTop.



# 12

## Drivers



Use this chapter to install and use the drivers listed in the **options** menu. A **driver** is a special file that tells your computer components how to interact with GEOS. Whenever you boot GEOS, one of each type of driver is loaded into GEOS. These drivers are called the default drivers. Each default driver appears first in its category on the disk note pad. If you cannot find the driver you wish to use on the boot or backup boot disk, see Appendix F: Disk Directory to locate the disk that contains the file you need. (The default drivers are italicized in the Disk Directory appendix.) Copy the driver file you need onto the appropriate boot disk. Then select the driver using the **options** menu in the deskTop to both use the driver immediately and make it the default driver for its category the next time you boot GEOS.

The driver categories are:

- Input device drivers.
- Printer drivers.
- Interface card drivers.
- Clock drivers.
- Auxiliary drivers.

Unfamiliar terms are defined in Appendix A: Glossary.


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# Input Device Drivers

An **input device** enables you to move the pointer around on the screen and make decisions regarding the program you are using. An input driver controls GEOS via the AppleMouse, joystick, or keyboard. Before you can use one of these, you will need to select (i.e., install) its driver.

## *Installing the AppleMouse Driver*

*If your input device is an AppleMouse:*

- 1: Make sure the AppleMouse card is installed correctly in your Apple and hook up the mouse.
- 2: Open GEOS to the deskTop.
- 3: Hold down  and press **I** to choose **select input** from the **options** menu.
- 4: The Select Input Device dialog box will appear. Use the arrow keys to move the pointer so that it is positioned over the AppleMouse driver, then press `return` to highlight its name. Then move the pointer to **Open** and press return to select it. (You can also press `return` twice in rapid succession; this is the same as highlighting the input device name and clicking on **Open**.) The AppleMouse driver will be installed.

**NOTE** If the AppleMouse file is in a folder, open the folder as you would a file. When the AppleMouse file is displayed, select it.

## *Installing the Joystick Driver*

Note that the joystick will not work on the Apple IIGS in fast mode. It also may not work with some accelerator devices installed.

*If your input device is a joystick:*

- 1: Hook up the joystick to your computer.

**NOTE** If you are using an Apple IIe, make sure the Interrupt Manager card (which comes with your GEOS package) is correctly installed in your computer. It should be in slot 7, with its components facing right.

- 2: Open GEOS to the deskTop.

- 
- 3: Hold down **⌘** and press **I** to choose **select input** from the **options** menu.
  - 4: The Select Input Device dialog box will appear. Use the arrow keys to move the pointer so that it is positioned over the Joystick driver, then press **return** to highlight it. Then move the pointer to **Open** and press **return** again.

**NOTE** If the Joystick file is in a folder, open that folder as you would a file. When the Joystick file is displayed, select it.

- 5: A dialog box will ask you to "Let go of the joystick and press any key." This will "center" the joystick handle so that it will stand straight up. After you press a key, the joystick will be installed.

### ***The Keyboard Input Driver***

If you have neither a mouse nor a joystick, you will need to select the Keyboard Input driver. If you are using an Apple IIe, make sure the Interrupt Manager card is correctly installed in your computer. It should be in slot 7, with its components facing right.


*To select the keyboard input driver:*

- 1: Open GEOS to the deskTop.
- 2: Hold down **⌘** and press **I** to choose **select input** from the **options** menu.
- 3: The Select Input Device dialog box will appear. Use the arrow keys to move the pointer so that it is positioned over the Keyboard Input driver, then press **return** to highlight it. Then move the pointer over **Open** and press **return** to select it. The Keyboard Input driver will be selected.

**NOTE** If the Keyboard Input driver file is in a folder, open that folder first, then select the Keyboard Input driver.

### ***Using the Keyboard after Installing the Keyboard Input Device***





Once you have installed the Keyboard Input driver, you can use the keyboard to perform a number of operations. Throughout this manual, the keyboard commands (called "**keyboard shortcuts**") have been included as well as the regular mouse and joystick oriented methods for selecting commands and moving around the GEOS system.


The following special commands concern moving around the screen with directional keys, selecting icons, and using geoWrite. Whenever you use any of these methods, you must always hold the  key down.


***Moving Around the Screen***

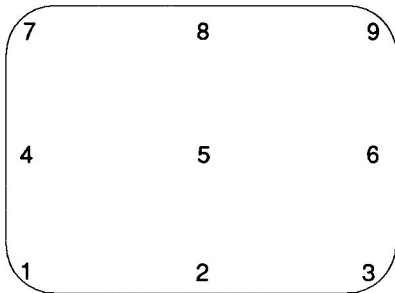
On the keyboard, look for the following key formation:

U I O  
J K L  
M , .

To use these keys to move around the screen, hold down  and press the key needed. Pressing the outer keys (U, I, O, J, L, M, ,, and .) will move the pointer in the direction away from the K in the middle. For example, pressing  and I will move the pointer north. You can also use the arrow keys by holding down  and pressing the arrow key you need. To select an item, position the pointer over it, hold down  and press K.

If you wish to move these directional keys in small increments (e.g, for fine tuning), you can do so easily: simply hold down the **shift** and  keys while pressing the directional key you need.


If you have a ten-key pad, you can jump the pointer around the screen for regional movements. To do so, hold down  and press a key to move to the following location on your screen:



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### ***Selecting Items***

You can select menu items and icons in the following manner:


- 1: Use the directional keys to position the pointer over the item you need.
- 2: Hold down  and press either K or return. The item will be selected.

**NOTE** This is the same as pressing the button on your mouse or joystick and then releasing it.


### ***Moving to the Edges of the Screen***

If you find that you cannot move the pointer all the way to the edge of the screen, use the "fine tuning" keys (shift , and a directional key).

### ***Selecting an Area in geoWrite***

- 1: Use the directional keys to position the pointer to the beginning of the text or image you wish to select. *Keep the  key depressed throughout the selection procedure.*
- 2: Press the left bracket key ([) to select the beginning of the area.

**NOTE** This is the same as pressing the button on your mouse or joystick and holding it down.

- 3: Use the directional keys to move the pointer and highlight the rest of the area.
- 4: When the area you want is completely highlighted, press the right bracket key (]) and release the  key. The entire area will become selected, and you can either format, move, copy, or delete it as you wish.

**NOTE** This is the same as releasing the button on your mouse or joystick.

---

# Printer Drivers and Interface Cards

A **printer driver** and an **interface card** act as a go-between with your printer and computer. GEOS enables you to use a variety of printer cards with your computer. Before you use the following procedures to install your printer and interface drivers, refer to Appendix B: "Printer Drivers" to find which drivers you need, depending on the printer and interface card you are using.

*To select a printer and printer interface:*

- 1: Make sure the printer is hooked up correctly to your computer.
- 2: Make sure the interface card is installed correctly in one of the slots inside your computer. (Remember the number of this slot.)
- 3: Open GEOS to the deskTop.
- 4: Choose **select printer** from the **options** menu. A dialog box will appear.
- 5: Find the name of the printer you need. If it is not displayed, click on the **scrolling arrows** to move through the list. When the name of the printer is displayed, click on it so that it is highlighted, then click on **Open**. The printer you selected will be installed on your GEOS system, and its name will appear below the printer icon on the deskTop.

**NOTE** If the printer is in a folder, open that folder as you would a file.

- 6: Now select a printer interface driver by choosing **select interface** from the **options** menu. A dialog box will appear.
- 7: Find the name of the printer interface card you need. If it is not displayed, click on the **scrolling arrows** to move through the list. When the name of the interface is displayed, click on it so that it is highlighted, then click on **Open**. The interface you selected will appear below the name of the printer on the deskTop.

**NOTE** If the printer interface is in a folder, open that folder as you would a file.

- 
- 8: The next dialog box will ask you to "Please select a slot for this device." Find the slot you inserted the interface card in, and click on it so that it is highlighted. Click **OK**.

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# Clocks

GEOS enables you to use a variety of **clocks**, which enable you to time and date stamp your documents, set an alarm, or simply be able to find out the current date and time when you need. Most clocks are cards; some are microchips. You also can set the time through the Alarm Clock desk accessory, though not the date.

*To install a clock and set the time and date:*

- 1: Make sure the clock card or chip is installed correctly in your computer.
- 2: Open GEOS to the deskTop.
- 3: Select **clock** from the **options** menu. A dialog box will appear.
- 4: Find the name of the clock you need. If it is not displayed, click on the **scrolling arrows** to move through the list. When the name of the clock is displayed, click on it so that it is highlighted, then click on **Open**.

**NOTE** If the clock is in a folder, open that folder as you would a file.

- 5: The next dialog box will enable you to set the time and date. Click on one of the **Set time** and **Set date** boxes to select it. Enter new digits as needed, and press the spacebar to bypass correct entries. (GEOS will skip colons, slashes, and the **M** in **AM** and **PM**.)
- 6: If you are using the software clock and if you wish to set the time and date each time you boot GEOS, click on the **Set time to boot** box so that it is shadowed. If not, click on it so that it is hollow.
- 7: When you are satisfied with the entries you made, click **OK**. The clock will be installed in GEOS, and the current date and time will be set.

**NOTE** The software clock may give a slightly inaccurate time. Hardware clocks will not ask you to set the time and date when you boot GEOS. The time and date can be set by choosing them from the **select clock** item in the **options** menu.



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## Auxiliary Drivers

The **select aux drv** menu item is designed for a wide range of special feature drivers planned for the future. As of now, it is reserved for the RamWorks memory expansion file (and its compatibles). (The RamWorks card is listed as Aux Ramdisk in the **select aux drv** dialog box.) It is also reserved for two "screen dump" drivers, Screen->Laser and Screen->Printer, which enable you to print the contents of your monitor screen.

### ***The Screen->Laser Driver***

This driver enables you to send screen dumps to a LaserWriter or LaserWriter Plus printer. The LaserWriter output has the same aspect ratio as the screen.

*To use the Screen->Laser driver:*


- 1: Choose **select aux drv** from the **options** menu. The Select Auxiliary Device dialog box will appear.
- 2: Select Screen->Laser by double-clicking on its name. (You can also highlight its name and click on **Open**.)
- 3: Make sure that a serial interface driver is selected and connected to a LaserWriter or LaserWriter Plus set for 9600 baud.
- 4: Set up the screen as needed.
- 5: When the screen is ready, hold down   and press 1. The screen will freeze temporarily and in about 30–45 seconds one copy of the screen dump will be printed.

### ***The Screen->Printer Driver***

This driver enables you to send screen dumps to the currently selected printer.

*To use the Screen->Printer driver:*

- 1: Choose **select aux drv** from the **options** menu. The Select Auxiliary Device dialog box will appear.
- 2: Select Screen->Printer by double-clicking on its name. (You can also highlight its name and click on **Open**.)

- 
- 3: Make sure that the proper printer driver and interface driver for your printer are selected.
  - 4: Set up the screen as needed.
  - 5: When the screen is ready, hold down  **shift** and press 1. The screen will freeze temporarily and in a moment one copy of the screen dump will be printed.

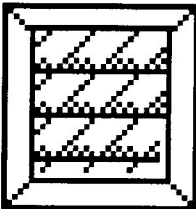
### ***Note to RamWorks Users***

If you are using a RamWorks (or compatible) driver, you cannot use it at the same time you use one of the screen dump drivers, since you can only use one auxiliary driver at a time.

*If you have a RamWorks (or compatible) driver:*

- 1: Move the files whose screens you wish to print onto a disk in a separate disk drive from the Ramdisk drive.
- 2: Use the procedures under "The Screen->Laser Driver" or "The Screen->Printer Driver," above, to select the screen dump driver you need.
- 3: When finished using the screen dump driver, reselect the Ramdisk (or compatible) driver from the Select Auxiliary Device dialog box.

# 13



## Appendices

This chapter contains the following appendices:

- A: Glossary
- B: Printer Drivers
- C: Formatting a Memory Expansion Device
- D: Installing a Hard Disk to GEOS
- E: ProDOS Compatibility
- F: Disk Directory
- G: Troubleshooting
- H: Font Samples
- I: SYSTEM MERGE Utility


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# Appendix A

## Glossary

Terms in *italics* are defined elsewhere in this glossary.



In the older (beige) Apple IIe and the Apple IIc, a special key used in conjunction with another key to perform an action on the screen. To use the  key, hold it down, and while keeping it down, press the key you need to perform the action. See also *keyboard shortcuts*.



In the newer (platinum) Apple IIe, a special key used by the keyboard input driver in conjunction with a directional key to move the pointer around the screen. This key applies to computers that do not have an Apple mouse or a joystick.

/

Character representing the *home directory*. To gain access to the home directory, select **goto** from the **folder** menu. Enter / into the *dialog box* that appears, then press return.

..

Characters representing the next highest level of folder. To reach this level, select **goto** from the **folder** menu. Enter .. into the *dialog box* that appears, then press return. This can also be used within a pathname (e.g., *.../Homework*).

**Airbrush tool**

In *geoPaint*, the tool that simulates a spray can effect using the *current pattern*.

**Alarm Clock**

A *desk accessory* that enables you to set the time and an alarm.

**AppleMouse**

See *input device*.

---

<b>application</b>	A program that operates in GEOS. <i>geoWrite</i> , <i>geoPaint</i> , <i>geoSpell</i> , <i>geoMerge</i> , and <i>Text Grabber</i> are all applications.
<b>appls menu</b>	Menu item listing the first eight <i>applications</i> which are accessible from the current application.
<b>auxiliary driver</b>	An extra or special <i>driver</i> enabling you to use special features, such as a RamWorks memory expansion card. Auxiliary drivers are selected by using the <b>select aux drv</b> item in the <b>options</b> menu.
<b>backup copy</b>	A copy of an <i>application</i> or work disk. You can create a backup by using the <b>copy</b> command in the <b>disk</b> menu of the <i>deskTop</i> .
<b>black only option</b>	In <i>geoPaint</i> , an overlaying option that displays the black <i>pixels</i> of the <i>current pattern</i> .
<b>boot</b>	Turning on the computer and opening GEOS.
<b>BOOT DISK</b>	The <i>master disk</i> that enables you to start up GEOS.
<b>browse command</b>	A command in the <i>deskTop</i> that enables you to easily move around the folder structure on the currently selected disk.
<b>Calculator</b>	A <i>desk accessory</i> that enables you to perform quick mathematical calculations.
<b>clicking</b>	Pressing the <i>input device</i> button to cause the <i>pointer</i> on the screen to move to or select a <i>menu</i> item or <i>icon</i> . See also <i>double-clicking</i> .
<b>close</b>	To de-activate or exit a <i>file</i> or disk.

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<b>command menu</b>	The horizontal list of <i>options</i> that appears across the top left portion of the screen. <i>geos</i> , <i>appls</i> , <i>file</i> , etc. are all part of the command menu.
<b>constrained option</b>	In <i>geoPaint</i> , the command that enables you to draw perfect squares and rectangles. It is also used to create horizontal, vertical, or 45-degree angle lines.
<b>current pattern</b>	In <i>geoPaint</i> , the composition of <i>pixels</i> used to create an array of designs on the screen. The current pattern is available from the <i>Faucet</i> , <i>Airbrush</i> , <i>Paint Brush</i> , and the filled <i>Rectangle</i> and <i>Ellipse</i> tools. You have 32 patterns from which to choose.
<b>current pattern indicator</b>	In <i>geoPaint</i> , the <i>icon</i> displaying the <i>current pattern</i> . <i>Clicking</i> on this icon will enable you to select a different pattern from the <i>status box</i> .
<b>current word field</b>	In <i>geoSpell</i> , the field in the <i>Options Box</i> that displays the current misspelled or unfamiliar word. Once the word is displayed, you can alter (or not alter) it as you wish.
<b>cursor</b>	A blinking vertical line indicating the position of the next typed character. It also determines the placement of copied or moved text or graphics.
<b>data file</b>	See <i>document</i> .
<b>data record</b>	In a <i>geoMerge</i> , the unique information you have inserted into the document you plan to duplicate. A data record can contain names, addresses, or other special information.
<b>default driver</b>	A <i>file</i> driver that is automatically selected by GEOS. If necessary, you can change a file's default status.

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<b>desk accessory</b>	A small utility program you can use from within an <i>application</i> .
<b>deskTop</b>	The first screen you see after you <i>boot</i> GEOS, or the screen in the current <i>folder</i> level displaying <i>files</i> and folders. It enables you to work with the GEOS system. Use the deskTop to manipulate your files, folders, and disks.
<b>dialog box</b>	A special box that pops up on the screen to convey information or query the user.
<b>Dictionary Box</b>	In <i>geoSpell</i> , the window that enables you to use the dictionaries.
<b>directory</b>	See <i>folder</i> . See also <i>home directory</i> .
<b>disk menu</b>	Menu item listing options for disk management; it appears in the <i>deskTop command menu</i> .
<b>disk icon</b>	<i>Icon</i> on the <i>deskTop</i> which represents the disk drive. The current open disk appears in reverse video.
<b>disk note pad</b>	On the <i>deskTop</i> , the large rectangular area containing the files and folders of the currently open disk.
<b>document</b>	A <i>file</i> created by you by way of the geoPaint and geoWrite <i>applications</i> . A document is also referred to as a <i>data file</i> .
<b>Document Box</b>	In <i>geoSpell</i> , a window that contains the current portion of the <i>document</i> you are spell-checking. Suspect words appear in reverse video.
<b>double-clicking</b>	Pressing the <i>input device</i> button twice in rapid succession, usually to <i>open</i> a <i>document</i> or <i>folder</i> . Double-clicking is the same as selecting an item, then selecting the <b>Open</b> or <b>OK</b> command.

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<b>Drawing Window</b>	In <i>geoPaint</i> , the large rectangular region containing a portion of the <i>document</i> you are using.
<b>Edit Box</b>	In <i>geoPaint</i> , the tool that enables you to select a rectangular area of the <i>Drawing Window</i> to alter, move, or copy.
<b>Ellipse tool</b>	In <i>geoPaint</i> , the tool that enables you to create circles and ellipses, either hollow or filled with the <i>current pattern</i> .
<b>Eraser tool</b>	In <i>geoPaint</i> , the tool that enables you to delete portions of the <i>Drawing Window</i> contents.
<b>Faucet tool</b>	In <i>geoPaint</i> , the tool that enables you to fill a region with the <i>current pattern</i> .
<b>file</b>	A collection of information on disk, including <i>applications</i> , <i>documents</i> , and <i>folders</i> holding several documents.
<b>file menu</b>	Menu item listing options for <i>file</i> management.
<b>folder</b>	A special <i>file</i> used to contain other files. Folders (sometimes called "directories") enable you to place files in organized groups.
<b>folder menu</b>	Menu item in the deskTop listing options for folder management.
<b>font</b>	Typeface used when you create text. (The text on this page is Times Roman.)
<b>font file</b>	A special <i>file</i> containing the typeface you are using for the text of a <i>document</i> in a variety of sizes.
<b>footer</b>	In <i>geoWrite</i> , a collection of text and/or graphics which is printed at the bottom of each page of the document. It can be used to note the current page number, date, and time.



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<b>formatting</b>	In <i>geoWrite</i> , the ability to adjust left, right, and paragraph margins, set tabs, and determine <i>justification</i> and <i>line spacing</i> .
<b>geoDictionary</b>	The dictionary <i>file</i> that comes with <i>geoSpell</i> .
<b>geoLaser</b>	A GEOS <i>application</i> that enables you to print your <i>data files</i> on the Apple LaserWriter™ printer.
<b>geoMerge</b>	A GEOS <i>application</i> that enables you to produce multiple copies of a document in which each copy can contain unique names, addresses, and other data.
<b>geoPaint</b>	A GEOS <i>application</i> that enables you to create graphic images.
<b>geoSpell</b>	A GEOS <i>application</i> that enables you to search for and correct misspelled words in a <i>geoWrite</i> document.
<b>geoWrite</b>	A GEOS <i>application</i> that enables you to create word processing <i>documents</i> .
<b>geos</b>	Menu item listing <i>desk accessories</i> on the currently active disk and copyright information on the current <i>application</i> .
<b>ghost icon</b>	On the <i>deskTop</i> , the outline of an <i>icon</i> that appears after you <i>click</i> on it once, then click again (but not <i>double-click</i> ) to move a <i>file</i> or <i>folder</i> to another place.
<b>goto command</b>	Option in the folder menu that enables you to gain access to a folder. See also / and ...
<b>graphic toolbox</b>	See <i>toolbox</i> .
<b>group select ghost icon</b>	On the <i>deskTop</i> , the outline representing a group of <i>file</i> or <i>folder icons</i> you have <i>highlighted</i> . It appears after you have

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	<p><i>clicked</i> again on one of the highlighted icons. It enables you to perform multiple file operations, rather than upon each item separately. See also <i>ghost icon</i>.</p>
<b>header</b>	<p>In <i>geoWrite</i>, a collection of text and/or graphics which is printed at the top of each page in the <i>document</i>. It can be used to note the current page number, date, and time.</p>
<b>highlight</b>	<p>To select a <i>file</i>, <i>folder</i>, or section of text by <i>clicking</i> on it. Once you have done so, it will appear in reverse video.</p>
<b>home directory</b>	<p>The <i>folder</i> or directory level that appears when you first <i>open</i> a disk.</p>
<b>icon</b>	<p>A picture representing an operation or option. Icons appear on the <i>deskTop</i>, in <i>dialog boxes</i>, and in <i>applications</i>. <i>Clicking</i> on an icon will instruct GEOS to perform some action.</p>
<b>icon mode</b>	<p>On the <i>deskTop</i>, the viewing mode that displays files and <i>folders</i> as pictures. In this mode, you can select more than one item at a time. See also <i>group select ghost icon</i>.</p>
<b>input device</b>	<p>The device that lets you move a <i>pointer</i> on the screen. To use it, move the device in the direction you wish the pointer to go and press the input device button when needed. (See also <i>clicking</i> and <i>double-clicking</i>) If you do not own an input device supported by GEOS, you may use the keyboard input driver to control the pointer.</p>
<b>interface driver</b>	<p>A special program that acts as a go-between with GEOS and the hardware that accompanies your computer (e.g., a printer).</p>
<b>inverted option</b>	<p>In <i>geoPaint</i>, the option that enables you to cause a selected region to appear in reverse video.</p>

<b>joystick</b>	<i>See input device.</i>
<b>justification</b>	In <i>geoWrite</i> , the appearance of the left and right sides of a block of text. Justification can be flush left (as in this manual), flush right (in which the left side is uneven), centered, or full (in which both sides are even).
<b>keyboard shortcut</b>	Using the keyboard to perform an action on the screen without using an <i>input device</i> .
<b>label</b>	In <i>geoMerge</i> , a command you insert into the document you are duplicating. A label tells <i>geoMerge</i> where to place special information, such as names or addresses. <i>See also merge form document.</i>
<b>label record</b>	In <i>geoMerge</i> , the list of <i>labels</i> you inserted into the document you wish to duplicate. <i>See also merge document.</i>
<b>line spacing</b>	In <i>geoWrite</i> , the ability to control the amount of space between each line of text. This amount of space is equal to a printed line of text, depending on the size of the <i>font</i> you are using. Line spacing can be single-space (as in this paragraph), double-spaced, or one-celled spaced.
<b>Line tool</b>	In <i>geoPaint</i> , the tool that enables you to draw vertical, horizontal, diagonal, and connected lines on the screen.
<b>master disks</b>	The three disks that come with your GEOS package.
<b>Measure units box</b>	In <i>geoPaint</i> , the box that displays measurement options and the <i>constrained</i> option. It appears when you select the <i>Line</i> , <i>Rectangle</i> , <i>Ellipse</i> , and <i>Ruler</i> tools.

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**memory expansion device**

A special card that adds extra memory to your computer. When it is installed, it acts much like an extra disk drive (an *icon* for it will appear with the disk icons on the deskTop), except that you cannot insert a disk into it. Instead, you copy the contents of a disk to it. When you turn off the computer, the contents of the memory expansion device are lost. The RamWorks card and Apple II Memory Expansion card (and any compatibles) are memory expansion devices.

**merge data file**

In *geoMerge*, the *document* you create to list all the unique information you wish to have inserted into the document you wish to duplicate, such as a *file* containing an address list.

**merge form document**

In *geoMerge*, the document that you wish to duplicate, such as a thank you letter to a group of people. See also *label* and *merge data file*.

**mirroring option**

In *geoPaint*, the option that enables you to invert a selected region horizontally or vertically.

**mouse**

See *input device*.


**Note Pad**

A *desk accessory* that enables you to write memos to yourself.

**open**

To activate a *document* or disk. See also *clicking* and *double-clicking*.

**Option key**

In the Apple IIGS or platinum IIe, a special key used in conjunction with another key to perform an action on the screen. To use the Option key, hold it down, and while keeping it down, press the key you need. In this manual, the  key is used to refer to the Option key for users of the platinum Apple IIe or IIGS. See also *keyboard shortcut*.

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<b>options menu</b>	The <i>deskTop</i> menu item that enables you to select drivers on the currently active disk.
<b>Page Map/Indicator</b>	In <i>geoPaint</i> and <i>geoWrite</i> , the <i>icon</i> that represents the entire page of the document. The smaller box within represents the current portion of the document displayed on the screen. <i>Clicking</i> on the smaller box will let you move to another part of the page.
<b>Paint Brush tool</b>	In <i>geoPaint</i> , the tool that enables you to paint with one of 32 different brushes using the <i>current pattern</i> .
<b>Pencil tool</b>	In <i>geoPaint</i> , the tool that enables you to draw free hand.
<b>personal dictionary</b>	In <i>geoSpell</i> , a <i>file</i> you can create to contain words not found in the <i>geoDictionary</i> (such as your last name). You can add or delete words to a personal dictionary as you wish.
<b>photo album</b>	A <i>file</i> containing a number of images you import from <i>geoPaint</i> . Unlike a <i>photo scrap</i> , a photo album is permanent and has its own name. You can use it to store a collection of photo scraps. See also <i>Photo Manager</i> .
<b>Photo Manager</b>	A <i>desk accessory</i> that enables you to manage <i>photo scraps</i> and <i>albums</i> .
<b>photo scrap</b>	A temporary <i>file</i> containing an image you import from <i>geoPaint</i> . You can place the photo scrap contents into either a <i>geoPaint</i> or <i>geoWrite document</i> .
<b>Pixel Edit</b>	In <i>geoPaint</i> , a feature that magnifies (or "zooms into") a selected region. Pixel Edit enables you to work in detail. See also <i>pixels</i> .

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<b>pixels</b>	The small dots that compose the images you create.
<b>pointer</b>	The small arrow that indicates your position on the screen. It is used to select menu items, and <i>icons</i> , select, move, and resize regions, and determine the placement of a <i>cursor</i> .
<b>preview</b>	In <i>geoPaint</i> and <i>geoWrite</i> , the command that enables you to view an entire page of your <i>document</i> at once. While you cannot make changes in this mode, you can use it to make decisions regarding the file's appearance.
<b>printer icon</b>	On the <i>deskTop</i> , the <i>icon</i> shaped like a small printer at the lower left corner of the screen. It represents the current printer and interface and is used to print files from the <i>deskTop</i> .
<b>point size</b>	A measurement unit for type. One point equals 1/72 of an inch.
<b>RAM card or disk</b>	See <i>memory expansion device</i> .
<b>recover</b>	In <i>geoPaint</i> and <i>geoWrite</i> , the <i>file</i> command that reverses all the changes you made to a <i>document</i> since the last time you <i>updated</i> that document.
<b>Rectangle tool</b>	In <i>geoPaint</i> , the tool that enables you to create rectangles and squares, either hollow or filled with the current pattern.
<b>rotate option</b>	In <i>geoPaint</i> , the option that enables you to revolve a selected region 90 degrees.
<b>Ruler tool</b>	In <i>geoPaint</i> , the tool that enables you to measure distances, in either <i>pixels</i> or inches.
<b>save</b>	See <i>update</i> .
<b>scrap</b>	A <i>file</i> containing either graphics or text taken from a <i>geoWrite</i> or <i>geoPaint</i> document.

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	Scraps are used to transport text or graphics from one document to another.
<b>scrolling</b>	The ability to move through a list of names in a <i>dialog box</i> , or to move the <i>Drawing</i> or <i>Writing Window</i> to another position. See also <i>scrolling arrows</i> .
<b>scrolling arrows</b>	The arrow <i>icons</i> that appear at the bottom of a <i>dialog box</i> . <i>Clicking</i> on them enables you to move through a list of names in the dialog box.
<b>Scrolling Arrows tool</b>	In <i>geoPaint</i> , the tool that enables you to move the <i>Drawing Window</i> in small increments.
<b>Status Box</b>	In <i>geoPaint</i> , the large box at the bottom of the screen. It displays information and options relating to the tool in use.
<b>system file</b>	Special files necessary for the operation of GEOS. The deskTop 2.0 is a <i>system file</i> , for example.
<b>SYSTEM folder</b>	A special <i>folder</i> reserved for <i>desk accessories</i> , <i>fonts</i> , and <i>applications</i> . It is designed to enable you to gain access to a <i>file</i> easily.
<b>text album</b>	A small <i>file</i> containing text you import from <i>geoWrite</i> . Unlike a <i>text scrap</i> , a text album is permanent and has its own name. You can use it to store several <i>text scraps</i> at a time.
<b>text cursor</b>	See <i>cursor</i> .
<b>Text Grabber</b>	A GEOS <i>application</i> that enables you to create a <i>geoWrite</i> version of a non-GEOS (and ProDOS) <i>document</i> created with any of the supported word processors for the Apple II.

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<b>Text Manager</b>	A <i>desk accessory</i> that enables you to manage <i>text scraps</i> and <i>albums</i> .
<b>text mode</b>	On the <i>deskTop</i> , the viewing mode that displays files and <i>folders</i> in the <i>disk note pad</i> in text form. While you cannot move items around or select more than one at a time, you can open an item or use any of the other <i>file</i> menu items.
<b>text scrap</b>	A temporary <i>file</i> containing text you import from <i>geoWrite</i> . There is only one text scrap on a disk at time. You can place the text scrap contents in either a <i>geoWrite</i> or <i>geoPaint</i> <i>document</i> .
<b>Text tool</b>	In <i>geoPaint</i> , the tool that enables you to create text in the <i>Drawing Window</i> .
<b>title bar</b>	The area displaying the name of a <i>file</i> or <i>folder</i> .
<b>title page</b>	In <i>geoWrite</i> , the option that enables you to remove a <i>header</i> or <i>footer</i> from the first page of the <i>document</i> .
<b>toolbox</b>	In <i>geoPaint</i> , the set of <i>icons</i> that represent the graphic tools and related features you use to create images in the <i>Drawing Window</i> .
<b>Undo</b>	In <i>geoPaint</i> , the tool that reverses the most recent change you made. <b>Undo</b> can be used to "undo" itself.
<b>update</b>	In <i>geoPaint</i> and <i>geoWrite</i> , the <i>file</i> command that saves all the changes you have made to the <i>document</i> to disk. Sometimes GEOS updates a document for you when you print, move the <i>Window</i> , or exit. It is recommended that you update after making an important change to your document. Updating prevents accidental loss of data, which can occur during a power outage.



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**verify command**

*deskTop* command that searches for possible bad sections on the currently active disk.

**view**

*deskTop* menu item that lists viewing modes for the *disk note pad* of the currently active disk. View also enables you to gain access to *desk accessories* and *applications*.

**waste basket**

On the *deskTop*, the *icon* shaped like a waste basket at the lower right corner of the screen. It is used to delete a *file* or *folder*.

**window**

In a document, any rectangular region that contains information. Windows are used to divide sections of the screen into easily distinguishable areas. See also *Drawing Window* and *Writing Window*.

**work disk**

A disk you copy files and *folders* onto for your own needs. Work disks are for everyday use.

**write protection**

The condition determining whether a *file* or *folder* can be modified or deleted. You can change an item's write protect status by using the **info** option in the *file* menu.

**Writing Window**

In *geoWrite*, the rectangular region containing a portion of the *document* you are using.

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## Appendix B

### Printer Drivers

A number of printer and printer cards are currently supported by GEOS for use on the Apple II and compatibles. This number will increase in the future. If you send your GEOS registration card to Berkeley Softworks, we will notify you of any updates in the future.

The following printers and printer cards are currently available with your GEOS package:

*If your printer is:*

Apple LaserWriter  
Apple LaserWriter Plus  
Apple ImageWriter I  
Apple ImageWriter II  
C. Itoh 1550  
Citizen 120D  
Daisy wheel printers  
Epson MX-80

Epson MX-100  
Epson FX-80  
Epson FX-100  
Epson LX-80  
Epson LX-86  
Epson LX-100  
Epson RX-80 FT  
NEC 8023  
Okidata 92  
Okidata 93  
Panasonic KXP1090  
Panasonic KXP1091  
Panasonic KXP1092  
Panasonic KXP1091i  
Panasonic KXP1080AP  
Star NX-10

*Select the following driver:*

LaserWriter (graphics printing only)  
LaserWriter (graphics printing only)  
ImageWriter  
ImageWriter  
C. Itoh 8510A  
Epson FX-80  
ASCII Parallel or ASCII Serial  
Epson MX-80 (must be Epson MX-80 with Graphtrax)  
Epson MX-80  
Epson FX-80  
Epson FX-80  
Star NX-10  
Star NX-10  
Star NX-10  
Epson FX-80  
C. Itoh 8510A  
Okidata 92  
Okidata 92  
Panasonic  
Panasonic  
Panasonic  
Panasonic  
ImageWriter  
Star NX-10

*To select a printer driver:*

- 1: Go to the deskTop and choose **select printer** from the **options** menu. The Select Printer dialog box will appear.
- 2: Scroll through the list until you find the name of the printer you plan to use. (Refer to the above chart.)
- 3: Double-click on the printer to select it. (Another way is to highlight the printer's name and click **Open**.)
- 4: The printer's name will appear below the printer icon in the lower left corner of the deskTop.

### ***If Your Printer Is Not Listed***

Due to the sheer number of different printers available to you, other printers may prove to be compatible with the named drivers. For instance, some of the other Star brand printers might work with the Star NX-10, while some of the Okidata printers can imitate an ImageWriter or an Epson printer. In addition, many printers are advertised as "compatible" with the printers listed here and in most cases will work. If your printer is not listed here, try some different printer drivers to see if they would work with your printer. If nothing else works, you can use the ASCII Parallel and ASCII Serial to print out text in the printer's normal draft mode. ASCII drivers cannot print graphics or NLQ with special features.

Printer drivers are located on the GEOS and GEOSBACKUP disks. If necessary, refer to Appendix F: Disk directory. Copy the printer driver you need onto the GEOS boot disk, then perform the above steps on your boot disk to select this printer driver and make it the default the next time you boot.

### ***Printer Interface Cards***

*If the your printer interface card is: Select the following driver:*

A.E. Serial Pro	Super Serial
Apple Super Serial	Super Serial
Apple IIc Built in	IIc Serial
Apple IIGS Built in	IIGS Serial
Apricorn Graphics Printer Int.	8 Bit Parallel
Apricorn PrinterPro Printer Int.	8 Bit Parallel
Epson APL	7 Pin Parallel
Micromax Printmax	8 Bit Parallel

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Orange Micro Grappler + (parallel)	Grappler P
Orange Micro Pro Grappler	Grappler P
Orange Micro Pro Grappler Serial	Super Serial
Orange Micro HotLink	HotLink
SMT Envoy	Super Serial
SMT PrintTech	8 Bit Parallel
Tymac Tackler	8 Bit Parallel
Videx Uniprint	Uniprint
Videx PS10 (parallel)	Uniprint
Videx PS10 (serial)	Super Serial

*To select a printer interface card driver:*

- 1: Install the printer interface card into one of the slots in your computer according to the directions found in the card's installation manual. Remember the slot number.
- 2: Boot GEOS.
- 3: Go to the deskTop and choose **select interface** from the **options** menu. The Select Interface dialog box will appear.
- 4: Scroll through the list until you find the name of the printer interface you need. (Refer to the above chart.)
- 5: Double-click on the printer interface to select it. (Another way is to highlight the printer interface's name and click **Open**.)
- 6: The printer interface's name will appear below the printer icon in the lower left corner of the deskTop.
- 7: A dialog box will enable you to select a slot for the device. Click on the appropriate slot and select **Open**.

### ***If Your Card Is Not Listed***

Once again, due to the large number of different printer interface cards, it is not possible at this time to list all cards and which drivers with which they would be compatible. If your card is not listed here, try experimenting with other drivers to see which other driver might work with your printer interface card.

If the interface card you need is not listed in the GEOS boot disk, refer to Appendix F: Disk Directory. Copy it to the boot disk, then use the above steps to select it and make it the default interface card the next time you boot.

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## ***Super Serial Card DIP Switches***

When you use the Super Serial Card to printer, make sure the card is set to "Printer" mode. This involves switching two DIP switches on the interface card for the Apple Super Serial Card. Other brands might require other methods for allowing connection. Check your serial card manual for more information. If you own an Apple Super Serial Card: to select "Printer" mode, set the DIP Switch 1-5 OFF and switch 1-6 ON in the left bank of switches. If you are using a LaserWriter, set the baud rate at 9600.

## ***Solutions to Some Printing Problems***

*If the printout is crossed by horizontal white lines:*

- If the lines only occur for a small part of the page (at the top and bottom only), your problem may be that the paper isn't feeding smoothly and the printer has to pull harder at one part of the page than another. Solve this problem by making sure the paper is feeding through the printer smoothly. You can do so by selecting the friction feed button on your printer.
- If the lines appear down the entire page, you could be printing using the wrong driver. Using the 8 Bit Parallel card driver (which lets the printer print eight dots per line) with a printer that handles only seven dots per line means that one row of dots will get lost every time the printer prints a line. If you have one of the Apple IIc serial to parallel cables such as the HotLink, the cable might have a switch on the box that plugs into the IIc; this switch determines whether it is sending text data or graphics data. This switch should be set to the graphics position.

*If the printer refuses to print, prints garbage, or if an application locks when you are trying to print:*

- Check the obvious problems: make sure the printer is on, that the printer is ON LINE (usually controlled by a switch on the front panel of the printer), that the printer is connected to the printer interface card, that the correct drivers have been selected (look at the printer icon on the deskTop), and that the correct slot was chosen during from the select interface feature of the options menu. If all these items are correct, turn the printer off and on, then try to print again. **Remember that a printer that is not ready to print (printer off line or turned off) will cause a GEOS application to lock.** Try turning the printer off and on again if it stays locked after you have corrected one of the above problems. If it doesn't start printing, you may need to

reboot GEOS. Always make sure the printer is ready to print before printing from a GEOS application.

### ***Printer Features in NLQ Mode***

Many printers have the ability to put text in boldface, italics, subscripts, superscripts, and many other styles found in the geoWrite styles menu. However, not all printers can print all the styles. Few (if any) printers will handle outlined characters, for example. The chart below shows which features are handled by currently supported printers:

<i>Printer</i>	<i>Driver</i>	<i>Bold</i>	<i>Italics</i>	<i>Subs/ Sup</i>	<i>Under- lining</i>
C. Itoh 1550	C. Itoh 8510A	Y	N	N	Y
Citizen 120D	Epson FX-80	Y	Y	Y	Y
Daisy wheel printers	ASCII Parallel or ASCII Serial	N	N	N	N
Epson MX-80	Epson MX-80	Y	N	N	N
Epson MX-100	Epson MX-80	Y	N	N	N
Epson FX-80	Epson FX-80	Y	N	Y	Y
Epson FX-100	Epson FX-80	Y	N	Y	Y
Epson LX-80	Star NX-10	Y	Y	N	Y
Epson LX-86	Star NX-10	Y	Y	N	Y
Epson LX-100	Star NX-10	Y	Y	N	Y
Epson LX-80	Epson FX-80	Y	Y	Y	Y
Epson LX-86	Epson FX-80	Y	Y	Y	Y
Epson LX-100	Epson FX-80	Y	N	Y	Y
Epson RX-80 FT	Epson FX-80	Y	N	Y	Y
NEC 8023	C. Itoh 8510A	Y	N	N	Y
Okidata 92	Okidata 92	N	N	N	Y
Okidata 93	Okidata 92	N	N	N	Y
Panasonic KXP1090	Panasonic	Y	Y	N	Y
Panasonic KXP1091	Panasonic	Y	Y	N	Y
Panasonic KXP1092	Panasonic	Y	Y	N	Y
Panasonic KXP1091i	Panasonic	Y	Y	N	Y
Panasonic KXP1080AP	ImageWriter	Y	N	Y	Y
Star NX-10	Star NX-10	Y	Y	N	Y

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## Appendix C

# Formatting a Memory Expansion Device




If you have installed a memory expansion device, such as an Apple Memory Expansion card, a RamWorks expansion card, or one of their compatibles, GEOS will use it as a RAM disk device, that is, to GEOS your memory expansion device will look like an additional disk drive. There may be occasions when you will need to format the memory expansion card yourself.

Note that the RAM disk is a temporary disk, i.e., all files on the RAM disk are lost when you turn off the computer. Any files you wish to keep should be copied to a disk for more permanent storage.

### *The Apple Memory Expansion Card (or Compatible)*

Upon booting, GEOS should recognize this memory expansion card and format the device automatically. However, should you ever wish (or need) to format the device yourself, follow these steps.

*To format an Apple Memory Expansion card (or compatible):*

- 1: Make sure the card is properly installed in your Apple II.
- 2: Open GEOS to the deskTop.
- 3: Look for the icon at the right side of the screen. It may show up as a RAM disk or inactive drive (i.e., a disk icon with a question mark inside). It will represent the memory expansion drive.
- 4: Now you need to format the disk drive: select **format** from the **disk** menu, or hold down  and press F.
- 5: A dialog box will ask you to "Select drive for format:" Click on the box next to the drive representing the memory expansion drive, then click **OK** (or press ).
- 6: The next dialog box will ask you to "Put disk to format in drive # (A, B, C, or D) and enter a name for it:" Just type in a name (e.g., RAM) and press . You will be returned to the

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deskTop and the Apple II Memory Expansion (or compatible) card will be ready for use.

**NOTE** If you don't wish to format this disk drive, choose **Cancel**.

If you now select/open your memory expansion drive, you will notice it looks exactly like blank formatted disk. You are now ready to use your memory expansion device with GEOS.

### ***The RamWorks Card (or Compatible)***

*To format a RamWorks card (or compatible):*

- 1: Make sure the card is properly installed in your computer.
- 2: Open GEOS to the deskTop.
- 3: When the deskTop appears, choose **select aux drv** from the **options** menu.
- 4: Locate the driver called AUX Ramdisk. Then move the pointer to **Open** and click (or press return) again. You will be returned to the deskTop and the RamWorks (or compatible) drive will be ready for use.

**IMPORTANT** You only need to perform Steps 3 and 4 once, since this makes the RamWorks (or compatible) card the default auxiliary driver. If you ever use another auxiliary driver (such as Screen->Printer) you should reselect the RamWorks driver when finished. Note that you cannot use the RamWorks and Screen->Printer or Screen->Laser at the same time, since GEOS only allows one auxiliary driver to be used at a time.

GEOS will note that a RamWorks(or compatible) card is being used as a disk device. It should format it automatically. You might need to format the RamWorks device before you can use it. The procedure for formatting a RamWorks disk drive is the same as the procedure for formatting an Apple Memory Expansion card. If necessary, see Steps 4-6 under "The Apple Memory Expansion Card (or Compatible)" on the previous page.



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## Appendix D

# Using a Hard Disk with GEOS

If you have installed a hard disk to your computer, you will need to format it if you plan to boot GEOS from the hard disk. You can still use a hard disk with GEOS without using the procedures described in this appendix. However, the hard disk would then function as a huge work disk.

If your hard disk is less than five megabytes, you cannot format it to GEOS for booting. It will be treated as a memory expansion device (except that you can still store files on it permanently).

Use the following procedures to create a bootable copy of GEOS on the hard disk and to remove GEOS from the hard disk. You should do the latter before running any hard disk utility programs.

### *Installing a Hard Disk to GEOS*

The GEOS BOOT disk keeps an internal count of the number of hard disk installations that have been performed. It allows only one hard disk installation per boot disk. The Hard Drive Options dialog box will display how many installations are left on a given boot disk. This number will decrease by one each time an installation is performed. The installation procedure requires at least 60K free on the hard disk.

Once you have installed a hard disk to GEOS, a ProDOS SYSTEM file called GEOS will be created; it can be run from ProDOS to run GEOS. A "hidden" file will be created on the hard disk to hold the GEOS kernel (the file that enables you to boot GEOS). A hidden file exists on the disk but does not show up on the disk catalog (i.e., it won't appear on the deskTop). The GEOS loader file can be copied and run anywhere on the hard disk, but it will not run if it is copied to other disks. Because the hidden file is not visible to ProDOS, it can only be deleted by using GEOS to uninstall it.

**IMPORTANT** Do not delete the GEOS file; you will not be able to remove the hard installation from GEOS should you ever need to do so.

#### *To install a hard disk to GEOS:*

- 1: Hook up your hard disk card according to the instructions in its installation manual. Install it in the highest numbered available slot if you wish to boot GEOS from the hard disk when powering your computer.

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- 2: Place your GEOS BOOT disk into a disk drive and boot it.
  - 3: While the message "BOOTING GEOS..." is displayed on the screen, press the letter **H**.
  - 4: The Hard Disk Options dialog box will appear. You will be given three choices: **I** Install on hard disk in drive #, **U** Uninstall from hard disk in drive #, and **[esc]** Cancel. Pressing **[esc]** will exit from the hard drive options and will continue loading GEOS.

Press **I** to select the installation feature.

- 5: The next dialog box will ask you "Install on hard drive in slot X?"

**NOTE** GEOS will allow you to install on the first hard disk card it finds in your system. If this slot is not the slot you inserted your hard disk card in, you may need to select **Cancel**, exit GEOS, turn off the computer, and move the hard disk card into a higher slot so that GEOS will be able to install on it.

- 6: Press **[return]** to begin the installation process or **[esc]** to return to the Hard Drive Options dialog box.

**IMPORTANT** There are certain hard disk utilities that can be run on the hard disk to free up disk space and reduce fragmentation. These can inadvertently damage the hidden kernel file saved on the hard disk drive. Therefore, before running any such utility, you should first uninstall the GEOS kernel from your hard disk. After you have finished using the utility, the GEOS kernel can be reinstalled by following the above procedure.

- 7: If you pressed **[return]** in the last step, a message saying "Hard disk installation complete" will appear when the process is over. Press **[return]** (or click **OK**) to return to the GEOS deskTop. The hard disk will appear as a disk drive icon.
- 8: Copy the file GEOLOAD.SYSTEM from the GEOS BOOT disk onto the hard disk. Make sure it is the first ProDOS system file on the disk. This will be used to load GEOS and to launch ProDOS SYSTEM files.

### ***Removing a Hard Disk Installation from GEOS***

The uninstall option is the only way (other than reformatting the drive) to remove the GEOS kernel from the hard disk. This procedure causes

GEOS to look for the loader file called GEOS in the home directory of that drive. If it cannot find the GEOS file, it will be unable to uninstall and will inform you so with a dialog box. If it finds the file, it will delete it and the hidden kernal file from the hard disk. After the uninstall process is complete, the program will add one to the number of installations allowed on the boot disk.

*To remove a hard disk installation from GEOS:*

- 1: Place your GEOS BOOT disk into a disk drive and boot it.
- 2: While the message "BOOTING GEOS..." is displayed on the screen, press the letter **H**.
- 3: The Hard Disk Options dialog box will appear. You will be given three choices: **I** Install on hard disk in drive #, **U** Uninstall from hard disk in drive #, and **Esc** Cancel. Pressing **[esc]** will exit from the hard drive options and will continue loading GEOS.

Press **U** to select the uninstall feature.

- 4: The next dialog box will ask you "Uninstall GEOS from hard drive in slot X?"

**NOTE** GEOS will allow you to uninstall from the first hard drive it finds in your system. If this slot is not the slot containing the hard drive card you wish to uninstall, you may need to select **Cancel**, exit GEOS, turn off the computer, and move the hard disk card into a higher slot before you can uninstall.

Press **[return]** to begin the uninstallation process or select **Cancel** to return to the Hard Drive Options dialog box.

**IMPORTANT** An error message warning you that a checksum error has occurred may appear. This means that the GEOS kernal file has somehow been altered (possibly by a ProDOS utility program); GEOS will not be able to uninstall itself from the hard disk. If you wish to recover the space used by the hidden file, you will have to reformat the drive.

- 5: After you have removed the hard disk installation from GEOS, you may wish to remove the hard disk card from your computer. If necessary, refer to the installation manual for the card.

---

# Appendix E

## ProDOS Compatibility

### *In General*

Although GEOS is another operating system that works differently from ProDOS, GEOS is compatible with ProDOS. However, in order to offer you the greatest power and flexibility within GEOS, it was necessary to modify the ProDOS file structure slightly. Thus GEOS is not completely compatible with ProDOS. In other words, this means that GEOS can read ProDOS files, but ProDOS cannot read all GEOS files. Therefore, it is strongly recommended that you never use ProDOS utilities to perform copies, deletions, or validations on GEOS files and disks. The GEOS deskTop should be used to perform all these operations. (An exception is that you can use ProDOS utilities to perform full disk copies.)

However, GEOS does give you the ability to interact with ProDOS files in various ways. The GEOLOAD.SYSTEM file allows you to launch ProDOS applications from GEOS simply by double-clicking on their icons. Text Grabber enables you to import documents created by ProDOS word processors, such as AppleWorks, Word Perfect™, and MultiScribe™, while retaining most of the original formatting information. It also enables you to import text from other unsupported ProDOS word processors by simply reading the text (without formatting information) into a geoWrite document.

### *Differences*

Some major differences between GEOS and ProDOS are as follows:

- ProDOS file names can only consist of upper case alphanumeric characters and the period. GEOS allows the use of any printable character, which includes punctuations, numbers, and upper and lower case characters.
- The root directory/folder of a ProDOS disk can only hold up to 51 files, whereas GEOS has no such limitation.
- ProDOS pathnames can only contain up to 128 characters. GEOS has no such limitation.
- GEOS cannot completely copy a folder with more than 18 levels of folders below it. Anything below the 18th level will not be copied.


---

GEOS cannot completely delete a folder with more than 30 levels of folders below it, either. Anything below the 30th level will not be properly deleted.

- GEOS file entries (the portion of the disk catalog which contains file information such as the file name, size, and creation date) are like ProDOS file entries, except that GEOS uses the version number field and auxiliary type field for GEOS specific information.

### ***Using GEOLOAD.SYSTEM with GEOS***

GEOLOAD.SYSTEM is a ProDOS system file that can be used to enhance your ability to use ProDOS programs while in the GEOS environment. If you place a copy of GEOLOAD.SYSTEM as the first ".SYSTEM" file on a ProDOS disk, you will be able to run any ProDOS SYSTEM file on that disk from the GEOS deskTop by simply double-clicking on the file. GEOLOAD.SYSTEM will not affect normal operation of the disk, i.e., the disk would still boot in the same manner as it did before GEOLOAD.SYSTEM was placed on it.

GEOLOAD.SYSTEM has one more use. If you place it as the first ".SYSTEM" file on a ProDOS formatted hard disk, and if you have installed GEOS on that hard disk, GEOS will automatically be loaded when you boot ProDOS on that hard disk. If you wish GEOS not to be loaded, but instead load the next ".SYSTEM" file after GEOLOAD.SYSTEM, hold down the  key while booting. GEOS will not be loaded.

### ***Note to Apple IIGS Owners***

GEOLOAD.SYSTEM only works correctly if it has been copied to a disk that contains ProDOS8. If the disk contains ProDOS16, it will not work as described above. Instead, the Apple IIGS Program Launcher should appear on the screen.

---

# Appendix F

## Disk Directory

The disks in your GEOS package should contain the following files. The original default drivers are italicized.)

### *Disk 1*

#### *Side 1: GEOS BOOT DISK*

**System Files:** *deskTop, Keyboard Input, Joystick, AppleMouse, ImageWriter, Super Serial, Ilc Serial, IIGS Serial, 7 Bit Parallel, 8 Bit Parallel, Grappler P, HotLink, Uniprint, Soft Clock, AUX Ramdisk, Screen->Laser, Screen->Printer, GEOLOAD.SYSTEM, SYSTEM MERGE.*

#### *Side 2: GEOWRITE*

**Applications:** *geoWrite, Text Grabber.*

**System File:** *Text Grabber format files (e.g., TG:Appleworks).*

**Font Files:** *California, Cory, Dwinelle, Roma, Univerisity, NLQ.*

### *Disk 2*

#### *Side 1: GEOS BACKUP*

**System Files:** *deskTop, LaserWriter,C. Itoh 8510A, Epson FX-80, Epson MX-80, Okidata 92, Panasonic, ASCII Serial, ASCII Parallel, Star NX-10, and other printers and interface drivers, AppleMouse, Joystick, GEOLOAD.SYSTEM.*

#### *Side 2: GEOPAINT*

**Application:** *geoPaint*

**Desk Accessories:** *Photo Manager, Text Manager, Note Pad, Alarm Clock, Calculator.*

**System Files:** *GS Clock, NoSlot Clock, ThunderClock, TimeMaster.*

### *Disk 3*

#### *Side 1: GEODICTIONARY*

**System File:** *geoDictionary*

#### *Side 2: GEOSPELL*

**Applications:** *geoSpell, geoLaser, geoMerge.*

**Font Files:** *LW\_Barrows, LW\_Cal, LW\_Greek, LW\_Roma.*

---

## Appendix G

### Troubleshooting

If you haven't already read Chapters 1 through 4, please read them now! Many problems can be avoided if you read the proper section of this manual before attempting to use GEOS. Even if a feature appears obvious how you use it, you should still refer to this manual to be safe. You should also refer to "Never and Always (Do's and Don'ts)" on page 2-17.

#### *Booting*

*I get a message that says, "No interrupt source found..."*

- If you don't own an AppleMouse, you should make sure the Interrupt Manager Card, which comes with your GEOS package, is properly installed in your Apple IIe according to the instructions found on page 1-4. You can still run GEOS without the Interrupt Manager Card, but it may appear to perform less efficiently. For example, in geoWrite, you may lose characters that are typed.

*When I try to boot GEOS, I just get a message that says "Insert GEOS BOOT disk."*

- You may have changed the name of your GEOS BOOT disk or your GEOS BACKUP disk. GEOS is programmed to look for the names GEOS or GEOS.BACKUP when you attempt to boot using these disks. Simply change the name back to the original and GEOS should boot them properly.

*I've made a backup of my boot disk, but it won't boot GEOS.*

- When you made a backup of your original boot disk, you made a copy of the drivers and files that are contained on that disk. You are *not* creating a bootable backup disk. That is why we include a backup boot disk for you in the package.

**IMPORTANT** For the same reasons a bank needs a vault, we need to copy-protect our software. We have tried to make the GEOS copy protection as easy as possible for you. With this in mind, only the GEOS boot files are actually copy-protected. While you must use one of the original system disks to boot GEOS, you can make as many copies of the applications as you need. Thus, once you have booted GEOS, you can set the original

---

disk aside and use copies of the applications to create your documents.

*I boot up GEOS, but it doesn't load any of my default drivers.*

- If you created a folder called SYSTEM on the boot disk, GEOS will look in it for all your drivers. Either remove the SYSTEM folder from your boot disk (if the SYSTEM folder is empty), or move all your drivers down into the SYSTEM folder. You shouldn't need to create a SYSTEM folder on the boot disk, since if there is no SYSTEM folder GEOS will treat the home directory (i.e., the top level) as one.

*I have a hard disk, but it shows up with a RAM icon.*

*I have a RAM disk, but it shows up with a hard disk icon.*

- GEOS differentiates between a hard disk and a RAM disk by their size only. If your hard disk is under three megabytes in size, GEOS will display its icon as a RAM disk icon. If your RAM disk is over five megabytes in size, GEOS will display its icon as a hard disk icon. Both will still perform properly; they will only have the wrong icon. However, *do not* try to install GEOS on a RAM disk, even if its disk drive icon looks like a hard disk. You only get one installation per boot disk, and you will lose the installation once you turn off the computer and the information on the RAM disk is lost.

## ***The deskTop***

*I had a file located in the border of the deskTop and now I can't find it. Why do my files sometimes disappear from their original locations and then later reappear on another page in my folder?*

- When you move a file or folder to the deskTop border, it really moves it to the end of the current directory temporarily. Thus, when you close a disk or start an application program while a file is on the border, you do not really lose the file; it has simply been moved to another location in your folder.

*When I choose **select input** from the **options** menu, I can't use my mouse or joystick to move the pointer.*

- Only the arrow keys, `[return]`, and `[esc]` are active when you select an input driver. This allows you to always be able to change input drivers, even your input device is not working properly.



---

*I tried to select a menu option and nothing happens.*

- Check the drive icons on the right side of the deskTop. If the current drive is closed or inactive, GEOS will not allow you to perform any disk operation, except for verifying or formatting a disk or using the **goto folder** option. For instance, you cannot create a folder on a disk drive after you close it.

*Why does a **disk verify** always work on an inactive drive?*

- This allows you to verify a non-ProDOS disk, such as disks created under DOS 3.3.

*Why does a **disk format** work on an inactive drive?*

- This allows you to format uninitialized RAM disks. These may initially show up as an inactive drive and thus need formatting.

*Why does a **goto folder** work on an inactive drive?*

- This allows you to specify a full pathname (including the disk name) and will scan every drive until it finds the folder you wish to move to. GEOS checks for the requested folder on every drive, even if it is currently inactive.

*I tried to perform a disk copy and nothing happened.*

- As with the above, check the disk icons. If either the source or destination disk drive is closed, GEOS will not allow you to perform a disk copy.

*When deleting a file or folder, I don't always get a warning message.*

- GEOS asks you to confirm a file or folder deletion when you use the file delete menu option or when you use its keyboard shortcut. Most of the time when you use the waste basket to delete, there will be no warning message. There is one exception, however; if you are deleting a file from the original GEOS master disks, a warning message will always appear.

*Why does **RESET** change the current folder on every disk?*

- Normally, GEOS keeps track of the current folder open on each drive. However, sometimes you may use **RESET** just to read the name of a disk that you have just inserted into a drive, without having to actually open the drive that you have changed. **RESET** also changes the current folder on each drive back to the home directory (i.e., the top level).

---

*Why does moving a file from the deskTop border back to the note pad area sometimes perform a file copy and sometimes do nothing?*

- If you move a file or folder back onto the disk where it originally came from (and back to the original folder), GEOS simply replaces the file to the folder it originally came from. If you move a file or folder back to the disk note pad when it is displaying another folder or disk, it will represent a file copy.

*GEOS just prompted me for a file name and then did nothing when I pressed `return`.*

- When the deskTop prompts you to enter a name, and if you enter nothing and press `return` only, you have, in effect, selected the **Cancel** option.

*When I'm selecting a printer interface card and GEOS is prompting me for a slot number, why can't I double-click on the slot?*

- This dialog box is using a special function in GEOS that doesn't currently allow double-clicking on the name. Simply click once on the slot number, then click **Open** to select it.

*Why can't I load ProDOS files from the disk sometimes?*

- It may not be a ProDOS SYSTEM file.
- More than one ProDOS SYSTEM file is on the disk. You need to move GEOLoad.SYSTEM from the GEOS BOOT disk to the disk with the ProDOS SYSTEM files. It must be the first ProDOS SYSTEM file on the disk. Once you have moved it, you can now click on any ProDOS SYSTEM file to run it.

*Why can't I run ProDOS after double-clicking on it?*

- It is not in the root directory.

*I just selected a driver. Why wasn't it made the default?*

- The driver must be in the home directory or the SYSTEM folder in order for it to be made a default driver. If you select a driver that is not in either of these directories, it will become active only until the next time you boot if you select another driver.

---

## **geoMerge**

*I get the message "Label not found in merge data file."*

- One of the labels in the document does not match any of the labels in the merge data file. Check to make sure that there are not spaces or extraneous characters in the label in either file. The labels must match exactly.

## **geoPaint**

*I was filling a shape with a pattern and it stopped before it was finished.*

- You may have inadvertently pressed the **⌘** key. This will cancel the remainder of the pattern fill operation. Another possibility is that geoPaint sometimes stops before it should when it is filling a very complex region. This is because it has run out of memory. The operation can be completed manually by clicking on each region that the fill function had not filled.

*While creating a rectangle, ellipse, or line, the shape doesn't exactly follow the position of the pointer on the screen.*

- Sometimes while stretching out a rectangle, line, or ellipse, the shape will not follow the pointer all the way as it moves. This is because the **constrained** mode is turned on, which forces the shape to be a square, circle, or 45-degree angle or horizontal or vertical line. This mode can be shut off by clicking on the **constrained** box in the Status Box at the bottom of the screen so that it is hollow (i.e., not filled in). To unconstrain while opening a box or line, press the **K** key. This will toggle the **constrained** box off or on.

*My pointer only moves left/right but not up/down (or vice versa).*

- You have probably inadvertently pressed the **H** or **V** key, which will constrain its movement to just the horizontal or vertical direction. Press the spacebar to move the pointer freely once again.

## **geoSpell**

*I get the message "Can't search for that word" or "Can't add that word to the dictionary."*

- Check to make sure that the first two characters in the word are letters.

---

*I get the message "The Replace All buffer is full."*

- The limit is 100 words per document.

*I get the message "Page # is too big to read in" or "Page # has become too big."*

- Do a page break.

## **geoWrite**

*Why does NO TIME or NO DATE get printed in my header or footer?*

- This happens if no date or time has been set in the clock.

*Why does my printout have horizontal lines through it?*

- It could be that the paper is getting pulled or isn't feeding in correctly. Try switching from tractor feed to friction feed to avoid problems with paper feed.
- You may have the wrong printer or printer driver selected, so that the card or printer can only handle seven dots per line rather than eight. Make sure you are using the correct printer and card drivers.

*When I open an existing file, why doesn't some of my text appear in the font that I originally set it?*

- If a font chosen in a document isn't on the current disk or isn't one of the first eight fonts on the disk, then the text will default to BSW 9 point. This is the system font that GEOS uses internally.

*I can't see the paragraph margin in geoWrite. What happened to it?*

- The left and paragraph margin markers are probably overlapping. This will probably happen in any paragraph that isn't indented or outdented. Although they may be overlapping, only one marker shows up when two might actually be at that position. Also, picking up a margin might actually pick up the one below it; depending on what margin or tabs are at one location. If you pick up the wrong one, put it down at a different location, pick up the margin marker that was below it, move that to the correct location, then return the original tab margin/tab to the correct place.

*I'm trying to print out a file, but nothing happens.*

- Make sure the printer is on, its cables are properly connected, that it's not out of paper, and that you have the correct printer and printer driver selected. In some cases, you may have to reboot your system before you can print.

---

*I get the error message "No printer card."*

- This means that the printer slot was never set properly. This happens if a card isn't found when GEOS searches the computer during booting and if the printer slot wasn't selected when you selected a driver.

*I get the error message "Printer and card incompatible."*

- This usually means that the printer and card cannot be used together. The printer might be parallel and the card serial.

*Why don't my tabs work?*

- Tabs only work in geoWrite when the line is left justified.

## ***Text Grabber***

*It doesn't look like my word processor is directly supported by Text Grabber. What should I do?*

- If your word processor stores its data in ProDOS format, select the TG:Generic WP file to convert the text to geoWrite format. This will simply use the printable characters in your file. Any formatting commands will be ignored. You may then enter geoWrite and format the document properly.

*I converted a document using the TG:Generic WP, and it has a lot of extra characters embedded in it. What happened?*

- The generic word processor format file simply looks for all printable characters in your original document. It may see some formatting information as printable characters and convert that also. After using the TG:Generic WP, it is always a good idea to enter geoWrite and edit the converted file to retain only those portions of the original document that you really want.

## ***Calculator Desk Accessory***

*The Calculator does not have a change sign.*

- This can cause problems, for example:  $6 + 3 = 9$ , but if you try to find  $-5 + 4$  before clicking on clear, the Calculator will assume you are trying to subtract 5 from 9. The other problem is that it only takes the first function you select: if you type  $6 * +5$  the answer will be 54. Because of a round off error, you can sometimes get errors when working with very large and very small numbers, for example  $2 / 3E16 * 3E16 = 1.9999....$

---

## Appendix H: Font Samples

The following fonts are available with your GEOS package. Their files are located on your GEOWRITE disk. Note that the BSW font is a built-in font and not listed on your GEOWRITE disk.

**BSW:** 9 point  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%^&\*()-= +[]{};:'",./<>?`~|

**California:** 10, 12, 14, 18 point  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%^&\*()-= \_+[]{};:'",./<>?`~|

**Cory:** 12, 24 point  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%^&\*()-= \_+[]{};:'",./<>?`~|

**Dwinelle:** 18 point  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%^&\*()-= \_+[]{};:'",./<>?`~|

**LW\_Barrows:** 9, 10, 12, 14, 18, 24 point  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%^&\*()-=\_+[]{};':",./<>?`~|

**LW\_Cat:** 9, 10, 12, 14, 18, 24 point  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%^&\*()-=\_+[]{};':",./<>?`~|

**LW\_Greek:** 9, 10, 12, 14, 18, 24 point  
ΑΒΧΔΕΦΓΗΙΘΚΛΜΝΟΠΡΣΤΥΖΩΞΨΖ  
αβγδεφγηηθκλμνοπρστυωξψζ  
1234567890  
!≡#∃%⊥&\*()-=\_+[]{};∃:∀,./<>? ∴.-|

**LW\_Roma:** 9, 10, 12, 14, 18, 24 point  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%&\*()-=\_+[]{};':",./<>?`~|

**NLQ:** 10 point  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%^&\*()-=\_+[]{};':",./<>?`~|

**Roma:**           **9, 12, 18, 24 point**  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%^&\*()-=\_+[]{};':"./<>?`~|

**University:**   **6, 10, 12, 14, 18, 24 point**  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
1234567890  
!@#\$%^&\*()-=\_+[]{};':"./<>?`~|



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## Appendix I: SYSTEM MERGE Utility

Creating work disks can be a time consuming task. With this in mind, a SYSTEM folder merge utility has been included with your GEOS package in order to make it easier for you to make work disks.

The SYSTEM MERGE utility should be used for creating 3 1/2 inch, RAM, and/or hard disk work disks. Basically, it copies the files from the SYSTEM folder on the source disk to the SYSTEM folder on the destination disk. If there is no SYSTEM folder on the source disk, the files will be read from the home directory (or top level). For instance, the GEOS Master disks do not (and should not) have a SYSTEM folder. If there is no SYSTEM folder on the destination disk, then the merge utility will create one for you. This is useful for creating a work disk on your RAM disk each time you boot GEOS. If you wish to create a 3 1/2 inch or hard work disk, you only need to use this procedure once. You can also use this utility to merge the SYSTEM folders on two work disks together.

### *Using the SYSTEM MERGE Utility*

*To use the SYSTEM MERGE Utility:*

- 1: Open the GEOS BOOT disk so that its deskTop is displayed.
- 2: Open the SYSTEM MERGE Utility by double-clicking on its icon or highlighting its icon and selecting **open** from the **file** menu.
- 3: A dialog box containing instructions will appear in the lower part of the screen. Another dialog box above it will prompt you to specify the source and destination disks. Click on the appropriate boxes.
- 4: After you have clicked on the appropriate boxes, click **OK**. The program will read the names of the disks in the drives and inform you on the screen. It will then copy the files in the SYSTEM folder on the source disk to the SYSTEM folder on the destination disk on a file by file basis. The name of each file being copied will be displayed on the screen.

---

**NOTE** If you wish to cancel the operation, click **Cancel**. The merge utility will stop after copying the current file.

Once the files have been merged, the directions dialog box will return. If you wish to merge another SYSTEM folder, choose the appropriate source and destination drives (or leave the settings alone if they are correct) and then click on **OK** to perform another merge. You can repeat these steps to merge as many SYSTEM folders as you wish or as many as will fit on the destination disk.

- 5: When finished using the SYSTEM MERGE Utility, click on the **Close** icon in the upper right corner of the dialog box.

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## NOTES

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**GEOS**  
for the  
Apple IIe, IIc, IIGS  
and Laser 128

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**GEOS Notes**