# GEM Desktop ™

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We'd like to encourage you to fill out the enclosed registration card and return it to us in the mail. In this way you'll be sure to receive information about new features, GEM Desktop updates, and future GEM™ applications.

We're sure you'll find the GEM Desktop easy to learn and use, and that it will increase your productivity. In addition to using GEM applications with the GEM Desktop, you can use existing applications like Wordstar®, Lotus™ 1-2-3™, and dBASE™ III.

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3/85

Thank you for your interest in the GEM Desktop.

Sincerely,

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NOTICE TO USER

From time to time changes are made in the filenames and in the files actually included on the distribution disk. This manual should not be construed as a representation or warranty that such files or facilities exist on the distribution disk or as part of the materials and programs distributed. Most distribution disks include a "README.DOC" file. This file explains variations from the manual which do constitute modification of the manual and items included therewith. Be sure to read this file before using the software.

Notes on the GEM Desktop™

Additional Microsoft™ Mouse

In addition to the Microsoft Mouse described in "Preparing Your System" (Section 2 of "Getting Started with the GEM Desktop"), you can also use a Microsoft Mouse that plugs into one of your computer's serial communication ports.

The first mouse, which plugs into its own interface board, is known as the Bus Version of the Microsoft Mouse. The mouse that plugs into the serial port is known as the Serial Version. The GEMPREP program lets you install the GEM Desktop to work with either kind of mouse.

Restarting the GEM Desktop from DOS

If you quit the GEM Desktop and then want to restart it, you must first type the following command at the DOS prompt (C> or A>):

CD\

This command returns you to the DOS "root directory."

You can then type **GEM** to start the GEM Desktop.

If the GEM Desktop is on floppy disks, make sure you insert the GEM… STARTUP disk into drive A before you type **GEM**.

GEMSETUP: Floppy Disk System and Hard Disk System

The GEMSETUP program is contained on GEM Device Driver Disk #1. If you are running the GEM Desktop from a hard disk, you can still run GEMSETUP from a floppy disk drive. Insert GEM Device Driver Disk #1 into a floppy disk drive, open that drive's floppy disk icon, and then open the GEMSETUP.APP application icon.

If you indicate in GEMSETUP's initial dialog that you are installing for a hard disk system, you must still give <u>both</u> "Drive letters" (Hard Disk and Floppy Disk) in the dialog that appears next.

After typing the Hard Disk Drive letter, you can move the text cursor (|)
to the space for the Floppy Disk Drive letter by pressing the Tab key.

End of Release Note

GEM *Desktop*

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Foreword

INTRODUCTION

Welcome to the GEM Desktop™!

The GEM Desktop from Digital Research® uses specially designed Graphics Environment Manager™ software to turn your computer screen into an electronic desktop. The GEM Desktop offers a way to see and organize work that appeals to both beginning and experienced computer users.

WHO CAN USE THE GEM DESKTOP?

The GEM Desktop is suited equally for business and home use.

In the workplace, the GEM Desktop can help you organize the mass of information that flows through a typical office.

At home, the GEM Desktop is an ideal starting point for a family that plans to make a computer an integral part of the household.

If you have been using a computer for a while and have already acquired several application programs, you can use them with the GEM Desktop. If you are just starting out, you can use application programs specially designed for the GEM Desktop.

WHAT IS DOS?

"DOS" stands for **D**isk **O**perating **S**ystem. To carry out its tasks, the GEM Desktop uses DOS and the underlying GEM™ software.

In this guide, DOS refers to any of the following operating systems:

- PC DOS, version 2.0 or higher
- MS™-DOS, version 2.0 or higher
- Concurrent™ DOS, version 3.3 or higher, in DOS mode

TEXT CONVENTIONS

This manual employs several conventions involving capitalization.

On the GEM Desktop and in the text, icon names (like GEMRUN.BAT) are capitalized. When naming an icon, you do not need to capitalize; the GEM Desktop automatically converts letters to capitals regardless of how you enter them at the keyboard.

In the text GEM Desktop messages appear in colored type. Examples of responses that you type appear in boldface colored type. The names of the GEM Desktop menu commands appear in boldface black type.

Most of the illustrations are pictures of actual GEM Desktop screens which were made while the product was in development. For this reason, they might differ slightly from what you see on your screen.

CONTENTS OF THIS MANUAL

This manual consists of three parts. Part 1, "Getting Started with the GEM Desktop," discusses basic topics, your graphics card and mouse, and how to set up your system with GEMPREP. It teaches you basic GEM Desktop techniques through a tutorial and gives you some tips on advanced techniques.

Part 2, "GEM Setup Guide," shows you how to run GEMSETUP, the program that tells your GEM software what hardware devices and type fonts you want to use.

Part 3, "GEM Output Guide," shows you how to reproduce the charts, graphs, and free-form graphic designs you create with your GEM applications on a screen, printer, or plotter.

Important Note: The table of contents, page numbers, tables, figures, and index all use 2-letter codes to help you locate information more easily. These codes refer to the three "parts" of the <u>GEM Desktop</u> manual as follows:

GS = Part 1: **Getting Started** with the GEM Desktop
SG = Part 2: GEM **Setup Guide**
OG = Part 3: GEM **Output Guide**

For example, if you see page number GS 3-25, that refers to page 3-25 in Part 1, "Getting Started with the GEM Desktop."

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PART 3: GEM OUTPUT GUIDE

1 What is OUTPUT?

2 Using OUTPUT

3 Menu Commands

Contents

Part 1

Getting Started with the GEM Desktop

Basic Concepts

INTRODUCTION

The GEM Desktop combines recognizable symbols and simple menus.
The symbols represent the familiar features of your office or home
work space. The menus contain all the commands you'll need.
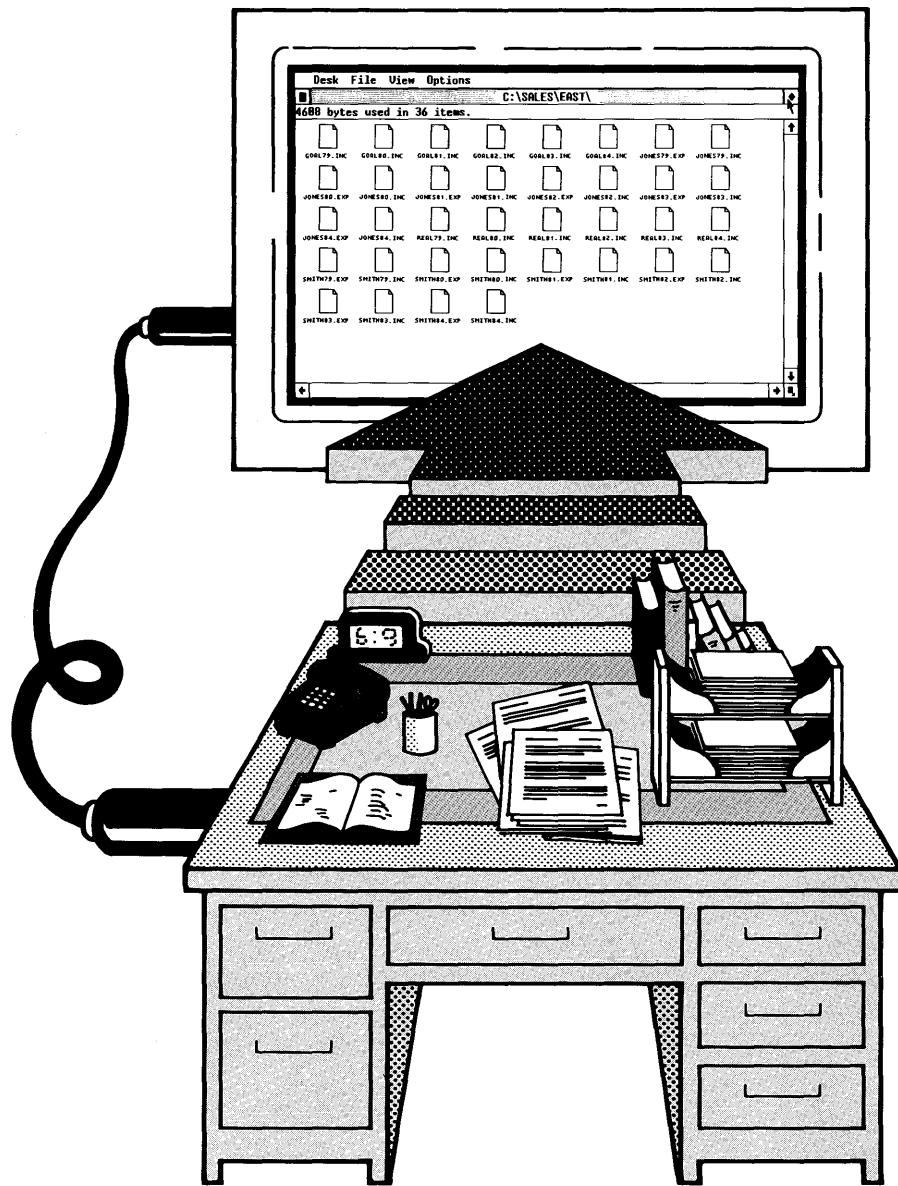
Figure GS 1-1. Traditional Desktop and GEM Desktop

You organize your work and prepare text and graphics all on the electronic GEM Desktop, using the following components:

- GEM Desktop work area and menu bar
- icons
- windows

The basic GEM Desktop concepts are described briefly in the following paragraphs. You'll become more familiar with them as you work through the GEM Desktop tutorial (Section 3).

GEM DESKTOP

The GEM Desktop is where you organize your work and start your application programs. The GEM Desktop has a rectangular work area with a menu bar running across the top.

menu bar   window   work area

Desk File View Options

C:\SAMPLE\

18201 bytes used in 3 items.

EXAMPLE   EXAMPLE.EXE   EXAMPLE.WHO

A
FLOPPY DISK

B
FLOPPY DISK

C
HARD DISK

TRASH

icons   icons
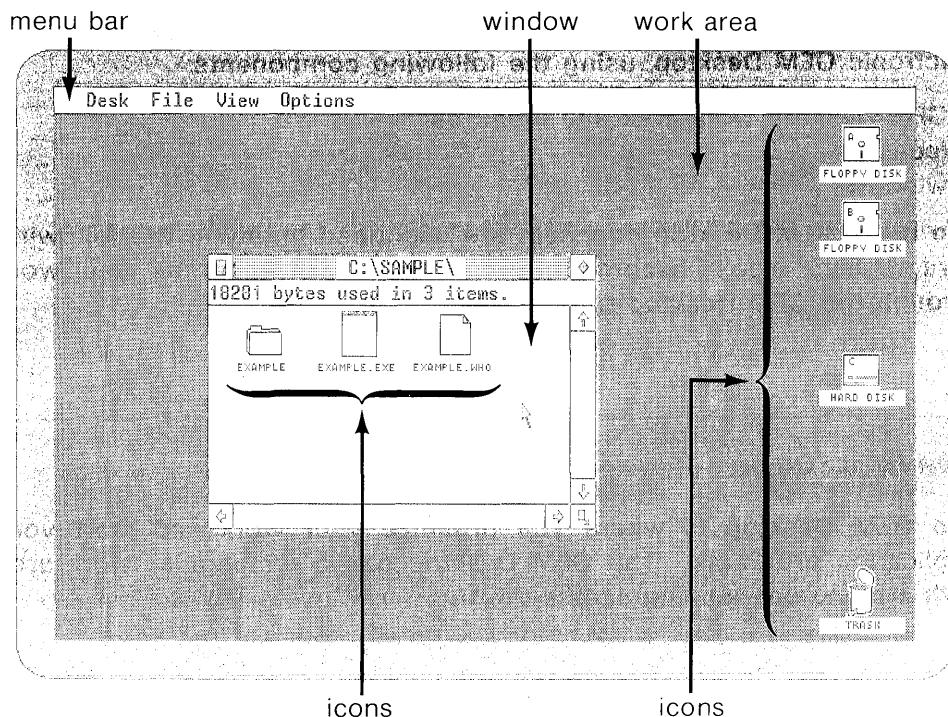
Figure GS 1-2.   GEM Desktop with Icons and Window

WORK AREA

The work area is where the GEM Desktop icons and windows appear. Like a combination desk and file cabinet, it is both a work surface and the place where you organize the pieces of your work.

MENU BAR

Menus are lists of commands you use to instruct the GEM Desktop to take certain actions. Because you use menus, you don't have to memorize or type commands.

The GEM Desktop "drop-down" menus are brief and simple because many actions--such as copying or deleting data--take place directly on the GEM Desktop work area.

ICONS

An icon is a picture of an object. GEM Desktop icons include folders, floppy disks, and even a trash can.

By using icons to represent the materials you work with, the GEM Desktop gives you the feeling that you're working with familiar materials, not electronic abstractions.

WINDOWS

A window shows you what is inside a disk or folder. A window can contain folders, documents, and applications.

Like the GEM Desktop work area, a window is a work space. You can manipulate the window work space in many ways, including moving it on the GEM Desktop and changing its size.

KEYBOARD KEYS

On many keyboards, several keys use symbols on their keycaps to indicate their functions. Figure GS 1-3 identifies the keys and the names used in this text.

Tab   Backspace   Enter

Shift   Shift

Figure GS 1-3.   Keycap Definitions

End of Section 1

Preparing Your System

INTRODUCTION

Before you use the GEM Desktop, you must use a program called
GEMPREP. GEMPREP prepares your hard disk or floppy disks to do the
following:

- start the GEM Desktop
- display GEM graphics on your computer screen
- use the mouse

Before you use GEMPREP, read all of this section.

GEM DISKS

The GEM Desktop comes with several disks, including the following:

- GEM SYSTEM MASTER DISK
- GEM DESKTOP MASTER DISK
- GEM DEVICE DRIVER DISK #1
- GEM DEVICE DRIVER DISK #2

Note: Before you prepare your system, be sure to make backup copies
of these disks. To make backup copies, use the DOS DISKCOPY utility
described in your DOS user's guide.

GRAPHICS CARD AND MOUSE

To use GEM Desktop graphics on your computer screen, you need two pieces of hardware: a graphics card and a mouse.

The GEM Desktop that you received assumes that you already have a graphics card and mouse. If you do not have the assumed graphics card or mouse, GEMPREP lets you modify your software to match the equipment in your system.

If your system matches the assumed system, you must still run GEMPREP to prepare your hard disk or floppy disks.

USING GEMPREP

GEMPREP uses three methods to get and give information:

- query – a question requiring a Yes or No answer
- instruction – a brief message that tells you to do something
- menu – a numbered list from which you make a selection

A query always ends with a prompt of

```
Y/N
```

or

```
(Y/N)?
```

Type Y for Yes or N for No.

A typical instruction is one that tells you to change disks in your floppy disk drive. Most instructions end by telling you to do the following:

```
Strike a key when ready . . .
```

Some instructions tell you specifically to press the Enter key.

In some instances, the "Y/N" or "Strike a key when ready . . ." prompt might take a couple of seconds to appear. Wait until it does before you respond.

Figure GS 2-1 shows a menu. In your version of GEMPREP,

```
<graphics card name>
```
is replaced by the name of a graphics card.

```
   Which graphics card do you have?

   1  <graphics card name>
   2  <graphics card name>
   3  <graphics card name>
   4  <graphics card name>

   Type the number of the graphics card you have.
```

Figure GS 2-1.   GEMPREP Menu

To select from a menu, type a number. Note that the menu numbering begins with 1.

STOPPING GEMPREP

To stop GEMPREP once it has started, press Ctrl (Control) and C at the same time. DOS displays the following query:

```
Terminate batch job?Y/N_
```

When you type Y (Yes), the operating system's A> or C> prompt reappears.

Note: You cannot stop GEMPREP while it is waiting for a response   to a Y/N prompt.   To stop GEMPREP, Type Y or N first, then immediately type Ctrl-C.

STARTING GEMPREP

To start GEMPREP, take the following steps:

1. Start your computer.
2. Insert the GEM SYSTEM MASTER DISK into drive A.
3. Type the following command:

   A>GEMPREP

The words "ECHO OFF" appear briefly on the screen, followed by GEMPREP's first message:

Welcome to GEMPREP!

Do you want to put the GEM Desktop on a hard disk?

Y/N _

If you type Y, GEMPREP places the GEM Desktop on your hard disk.   If you type N, GEMPREP places the GEM Desktop on floppy disks.

GEMPREP's queries, instructions, and menus will lead you from this point to the conclusion of the program.   The remainder of this section describes some of the highlights of GEMPREP.

DIRECT TO THE GEM DESKTOP?

For both hard disk and floppy disk systems, GEMPREP gives you the following option:

```
Do you want to go directly to the GEM Desktop
each time you start your system?

Y/N _
```

If you choose to do so, you can always return to DOS from the GEM Desktop by choosing the **Quit** command from the File Menu.

If you prefer to start each session in DOS, type N. To start the GEM Desktop from the DOS prompt, change to the directory where GEM.BAT is located and type the following command:

A>**GEM**

ASSUMED GRAPHICS CARD AND MOUSE

The GEM Desktop you received is already prepared for a particular graphics card and mouse. One of GEMPREP's queries identifies the graphics card, mouse, and mouse communication port and asks if they match your system.

If you reply that they do, GEMPREP continues preparing your hard disk or floppy disks.

If you reply that they do not, GEMPREP displays a series of menus (like the one in Figure GS 2-1) to let you identify your graphics card and mouse.

GEMPREP assumes your mouse is connected to communication port #1. If you are not sure which port is which, you can do either of the following:

● You can ask your computer dealer or a systems specialist.

● You can say the mouse is connected to port #1. If the mouse does not work when you start the GEM Desktop, restart your system, and run GEMPREP again. This time, say the mouse is connected to port #2.

  When you run GEMPREP the second time, disregard any DOS error messages concerning directories.

COPYING DATA

GEMPREP copies data from the GEM SYSTEM MASTER DISK and GEM DESKTOP MASTER DISK to your hard disk or floppy disks. As it copies the data, GEMPREP reports its progress to you. Figure GS 2-2 shows how your screen might appear as GEMPREP copies data. The lines in boldface type are GEMPREP's progress report.

```
Remove the DOS disk from drive A.
Insert the GEM SYSTEM MASTER DISK into drive A.
Strike a key when ready . . .

        1 File(s) copied
        1 File(s) copied
A:EXAMPLE.SYS
A:ASSIGN.SYS
        2 File(s) copied
```

Figure GS 2-2. Copying Data

GEMPREP AND A FLOPPY DISK SYSTEM

When you use GEMPREP to put the GEM Desktop on floppy disks, there are a couple of extra steps you need to take.

First, check the directory of your DOS disk. (Use your backup copy of the DOS disk, not the original.) To do this, take the following steps:

1. Insert your DOS disk into your computer's A drive, and turn on the computer.

2. When the DOS prompt appears, type the following command:

```
A>DIR
```

3. Look for the following in the DOS disk's directory:

```
COMMAND.COM
FORMAT.COM
DISKCOPY.COM
PRINT.COM
```

All of these must be on the DOS disk for you to be able to use the GEM Desktop fully.

Second, you need two floppy disks on which GEMPREP can put the GEM Desktop. You can use new disks or disks containing data you no longer need. GEMPREP instructs you to give these disks the following names:

● GEM STARTUP
● GEM DESKTOP

GEMPREP copies data from the GEM SYSTEM MASTER DISK and GEM DESKTOP MASTER DISK to these two disks. When GEMPREP terminates, store the two master disks for possible future use. You will use the GEM STARTUP and GEM DESKTOP disks as work disks for all GEM Desktop sessions.

Note: The GEM DESKTOP MASTER DISK and the GEM DESKTOP work disk have very similar names. It is very important that you remember the difference between the names of these two disks and follow GEMPREP's instructions carefully.

IF YOU HAVE A MICROSOFT® MOUSE

If you have a Microsoft Mouse, you must take two additional steps to prepare your system.

First, insert the Microsoft Mouse disk into your computer's drive A. If you are running the GEM Desktop from a hard disk, type the following command:

`A>COPY MOUSE.COM C:/V`

If you are running the GEM Desktop from floppy disks, insert the GEM STARTUP disk into drive B, and type the following command:

`A>COPY MOUSE.COM B:/V`

The second step is required only if you are running the GEM Desktop from a hard disk and if you have the kind of Microsoft Mouse that plugs into its own special interface board inside your computer. If so, turn off your computer, and take the following steps:

1. Remove the Microsoft Mouse interface board from your computer.

2. Look at the bottom center of the board, in the position indicated in Figure GS 2-3. You will find four sets of double gold-colored pins labeled 2, 3, 4, and 5.

3. Look for a black and gold box-like object (called a "jumper") on one of the pins, probably on pin 5. Remove the jumper.

4. Place the jumper on pin 3. If the jumper is already on pin 3, you don't need to move it.

5. Put the interface board back into your computer.

Your system is now fully prepared for use with the Microsoft Mouse.
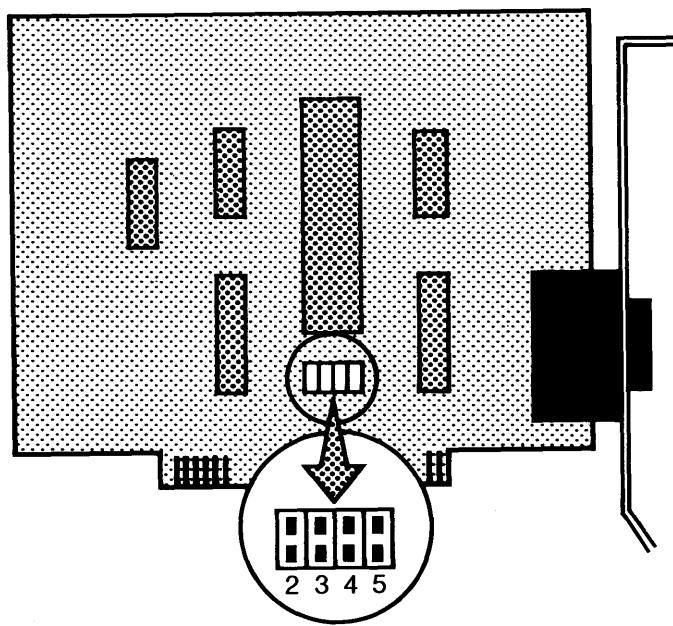
Figure GS 2-3.   Microsoft Mouse Interface Board

AFTER GEMPREP

When you finish GEMPREP, you are ready to begin using the GEM Desktop. To learn the basic techniques of the GEM Desktop, run the GEM Desktop tutorial, which is described in Section 3.

Section 3 also describes how you start the GEM Desktop from a floppy disk or a hard disk.

As soon as you are working on the GEM Desktop, you can add a printer, plotter, or other hardware device to your system. To do so, run GEMSETUP, which is described in Part 2, "GEM Setup Guide."

End of Section 2

GEM Desktop Tutorial

INTRODUCTION

This tutorial provides a basic understanding of GEM Desktop concepts, techniques, and terminology, including the following:

- using the mouse
- selecting and opening icons
- choosing commands from menus
- manipulating directories and windows
- creating folders
- copying data

WHAT YOU NEED

To run the tutorial, you need the following:

- your microcomputer prepared to display graphics

  Section 2 tells you how to prepare your system to display GEM Desktop graphics.

- mouse
- GEM Desktop, ready to run from a hard disk or floppy disk

TUTORIAL

This tutorial takes you step by step through several exercises that introduce you to the GEM Desktop.

The first step tells you how to start the GEM Desktop from a floppy disk. The step after that tells you how to start the GEM Desktop from a hard disk.

All set? Let's begin!

Starting the GEM Desktop from a Floppy Disk

If you told GEMPREP that you want to go straight to the GEM Desktop each time you start your system, insert the GEM STARTUP disk into drive A, and turn on your computer. You see a series of messages on the screen, followed by the screen illustrated in Figure GS 3-1.
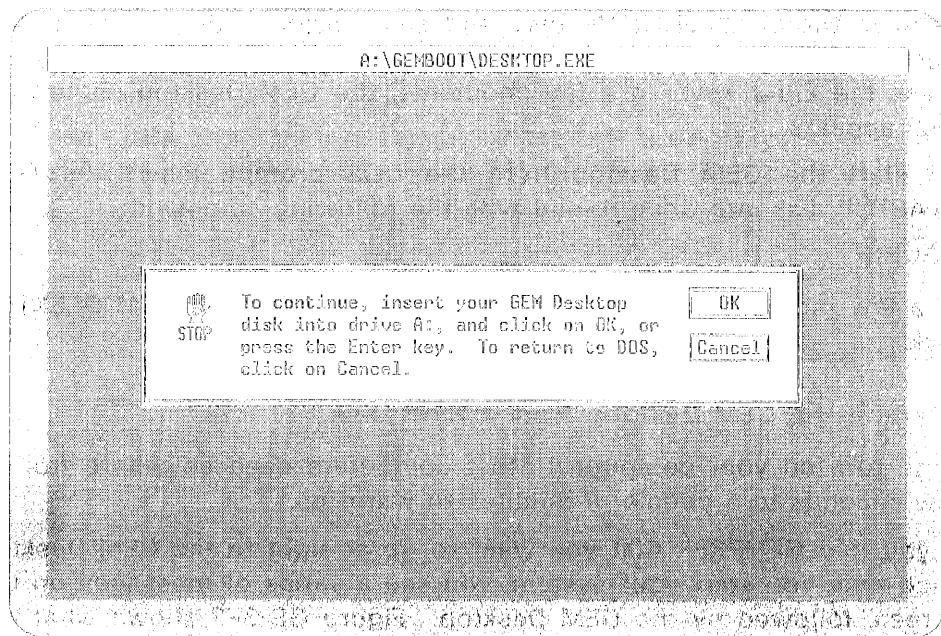
Figure GS 3-1.   Insert GEM DESKTOP Disk Dialog

Remove the GEM STARTUP disk, and set it aside until your next GEM Desktop work session. Insert the GEM DESKTOP disk into drive A, and press the Enter key. In a few moments, the GEM Desktop (Figure GS 3-2) appears.

To start the GEM Desktop from the DOS prompt, insert the GEM STARTUP disk into drive A, and type the following command:

A>GEM

In a few moments you see the instruction to insert the GEM DESKTOP disk.

Starting the GEM Desktop from a Hard Disk

First, turn on your computer. Most computers need anywhere from a few seconds to a couple of minutes to warm up.

If you told GEMPREP that you want to go straight to the GEM Desktop each time you start your system, you see a series of messages on the screen, followed by the GEM Desktop. Figure GS 3-2 shows what the GEM Desktop looks like when you first see it.

To start the GEM Desktop from the DOS prompt, type the following command:

C>GEM

In a few moments the GEM Desktop appears.

Initial GEM Desktop

The GEM Desktop that first appears on your screen consists of a desktop work area and a menu bar. Icons for floppy disks, a hard disk, and trash can appear in the work area. The trash can is where you discard unwanted data.

menu bar   Desktop work area   disk icons

mouse pointer   trash can
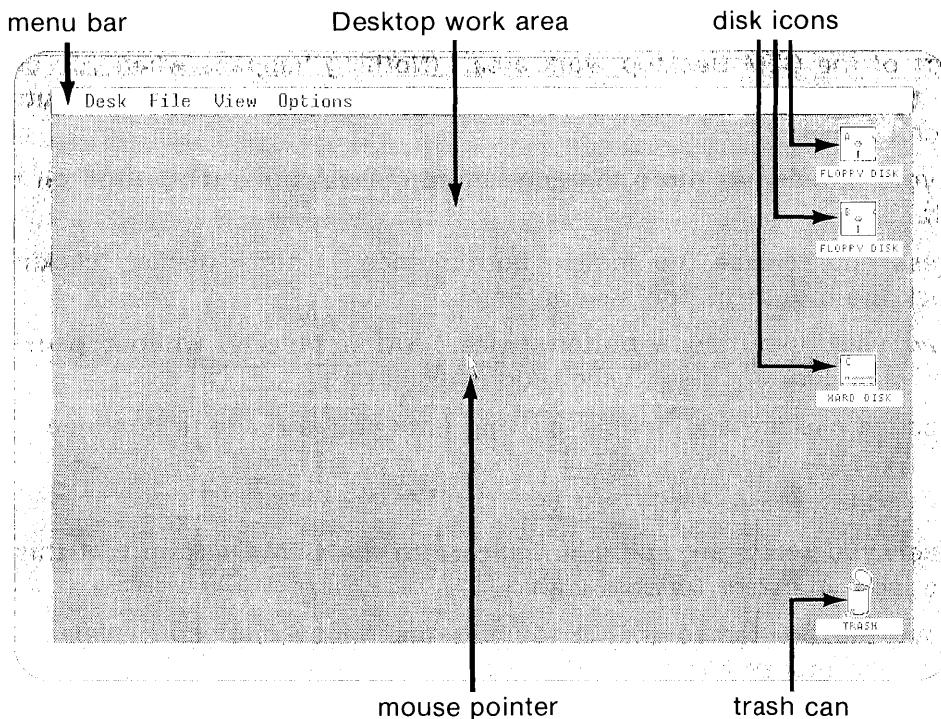
Figure GS 3-2.   Initial GEM Desktop

If, during GEMPREP, you put the GEM Desktop on your hard disk, your intitial GEM Desktop shows one hard disk icon and one floppy disk icon. If you put the GEM Desktop on floppy disks, your initial GEM Desktop shows two floppy disk icons and no hard disk icons. To add or remove a disk icon, see "Installing and Removing a Disk Drive" in Section 4.

Moving the Mouse; Mouse Button Techniques

The mouse pointer (see Figure GS 3-2) moves when you move the mouse. Practice moving the mouse. The pointer's movement echoes the mouse's movement, although you can't move the pointer entirely off the screen.

Now practice using the mouse button. Do your practicing in an open part of the GEM Desktop work area. (Nothing happens when you click in the work area. Right now you're just practicing mouse button techniques.)

If your mouse has more than one button, always use the button on the left.

Press and release the mouse button once. This is called "clicking." Click the mouse button several times.

Now click the mouse button twice. Do it quickly, without pausing between clicks. This is called "double-clicking."

Practice clicking and double-clicking until you're ready to continue.

Selecting an Icon

When you select an icon, you indicate to the GEM Desktop that this is the icon you want to work with.

Move the pointer so that it touches the floppy disk icon labeled "A". Click the mouse button.

The GEM Desktop highlights the icon (reverses its colors) to indicate that the icon has been selected. Figure GS 3-3 shows the selected drive A floppy disk icon.
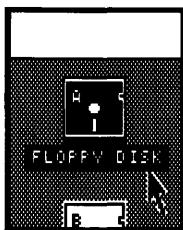
Figure GS 3-3.   Selected Icon

Now move the pointer to the trash can, and click again. Note how the GEM Desktop de-selects the drive A floppy disk icon when you select the trash can.

(You can select more than one icon. We'll get to that later.)

Move the pointer to an open space on the GEM Desktop, and click. The GEM Desktop de-selects the trash can. Now there are no selected icons.

Practice selecting and de-selecting icons until you are ready to continue.

Moving GEM Desktop Icons

You can move GEM Desktop icons (disks and the trash can) to different positions on the GEM Desktop.

Move the pointer to the trash can icon. Press the mouse button, but do not release it. (If the trash can was not already selected, the GEM Desktop now selects it.)

Continue to hold down the mouse button, and move the mouse. A shadowy outline resembling an upside-down T moves with the pointer.
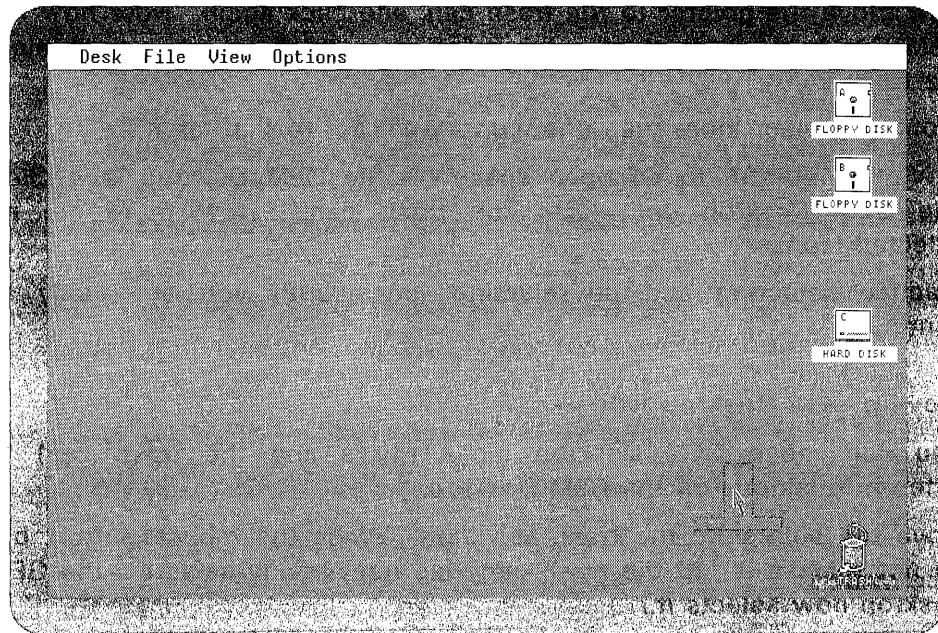
Figure GS 3-4.   Moving the Trash Can

The technique of holding down the mouse button while moving the mouse is called "dragging."

Drag the outline to an open area of the GEM Desktop, and release the mouse button. The trash can moves to the pointer's position.

Practice moving all of the desktop icons. When you're finished, move them back to their original positions, so that they'll be in the same places as those in the tutorial's figures.

Click the mouse in an empty space on the GEM Desktop to de-select the last icon you moved.

Displaying Drop-Down Menus

Move the pointer up to the menu bar at the top of the GEM Desktop. Place the pointer on the word "File". The File Menu appears below the menu bar.

available command   unavailable command

Desk File View Options

Open
Show Info...

New Folder...
Close
Close Window

Format...
To Output
Quit
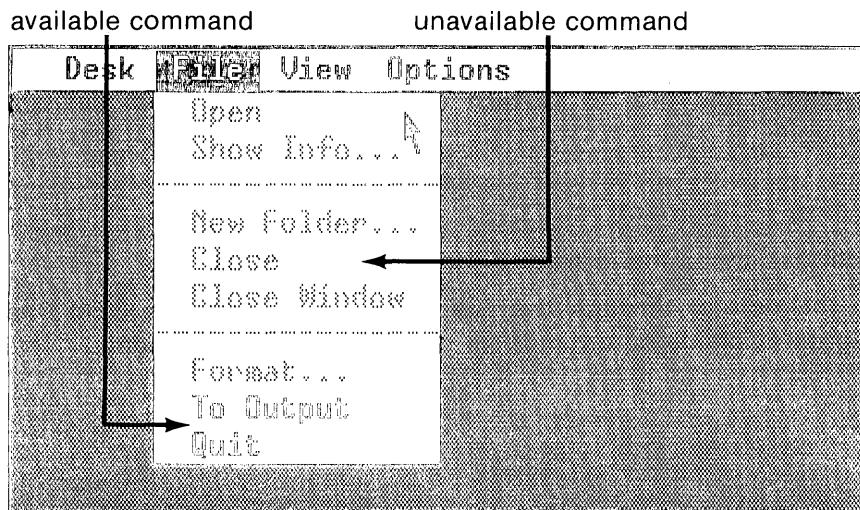
Figure GS 3-5.   File Menu

Each text line in the menu is a command. The bright commands are available; the dimmed commands are unavailable.

You can choose an available command. For example, you can choose **Quit** if you want to leave the GEM Desktop and return to DOS.

You can't choose a dimmed command, because right now it isn't meaningful to the GEM Desktop. For example, you can't choose **Open** if you haven't first selected an icon.

Now move the pointer along the menu bar from "File" to "View". The File Menu disappears, and the View Menu appears.

Practice moving the pointer sideways along the menu bar. Note how the GEM Desktop's "drop-down" menus appear automatically when the pointer touches their titles in the menu bar.

Now click the mouse anywhere on the GEM Desktop outside the currently displayed menu. The menu disappears.

If you're running this tutorial from a floppy disk, select the drive A floppy disk icon. If you're running this tutorial from a hard disk, select the hard disk icon.

Display the File Menu again. Note how selecting the icon made the **Open, Show Info...,** and **Format...** commands change from unavailable to available, and the **To Output** command change from available to unavailable.

Choosing a Command

You choose a command from a menu by clicking on it.

Move the pointer through the File Menu. Note how the GEM Desktop highlights available commands as the pointer touches them.
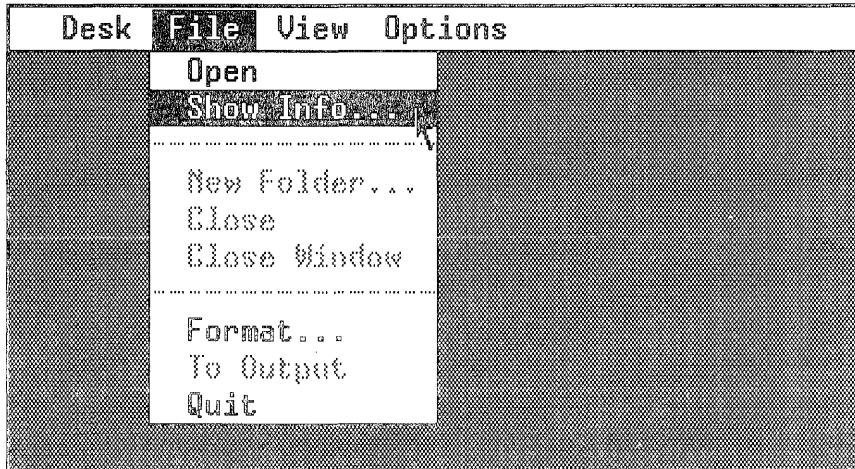
Figure 3-6.   Highlighted Command

Move the pointer to the **Show Info...** command. When the GEM Desktop highlights the command, click the mouse button.

A GEM Desktop message (called a "dialog") appears. The DISK INFORMATION dialog contains information about your floppy or hard disk. When you're ready to continue, click in the rectangle labeled OK.

Opening a Disk Icon

Let's find out what's on the floppy disk or hard disk.

The disk icon should still be selected. If it isn't, select it now.

Display the File Menu. Move the pointer through the menu, and click the mouse button on **Open**.

A window appears on the GEM Desktop. The window contains a "directory," a group of icons that shows you what is on the disk. The directory in Figure GS 3-7 contains icons for folders and applications.
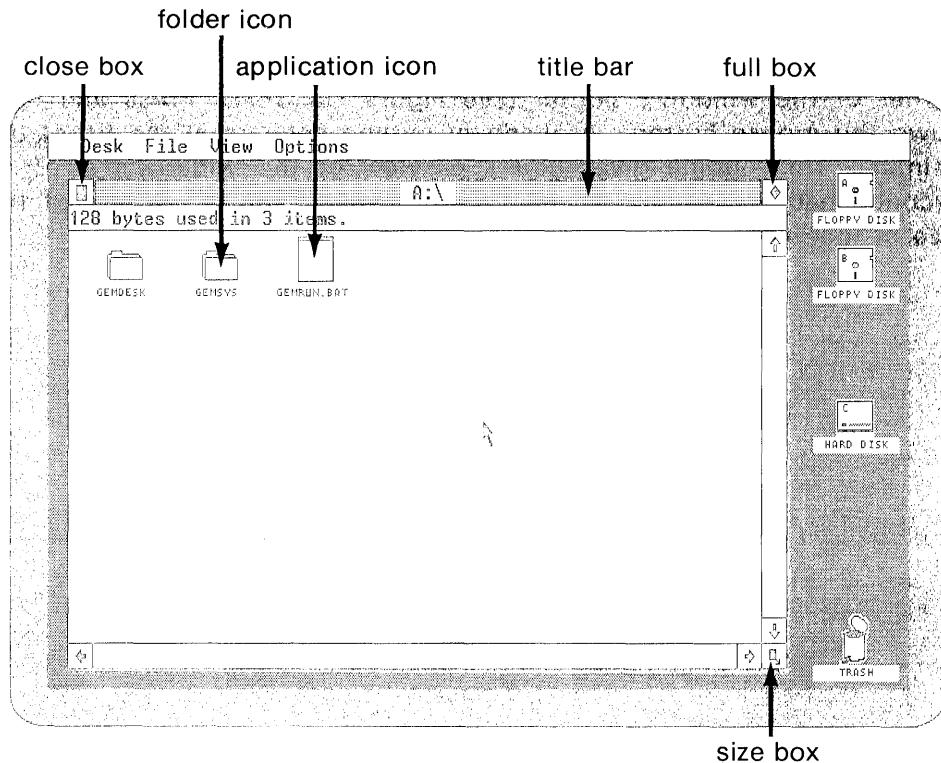
Figure GS 3-7.   Directory

The title bar of the window in Figure GS 3-7 contains the drive identifier A:\. If you're running the GEM Desktop from a hard disk, the drive identifier is C:\.

Sizing a Window

You can change the size of a window for any of the following reasons:

● to reduce the amount of room the window takes up on the GEM Desktop

● to see desktop icons that are hidden by the window

● to change how much of the directory is visible in the window

Move the pointer to the size box, located in the extreme lower right corner of the window's border (see Figure GS 3-7). Press and hold down the mouse button. A shadowy outline appears at the tip of the pointer. This outline gives you a preview of the window's size. A second shadowy outline, inside the first, gives you a preview of the size of the window's work area.
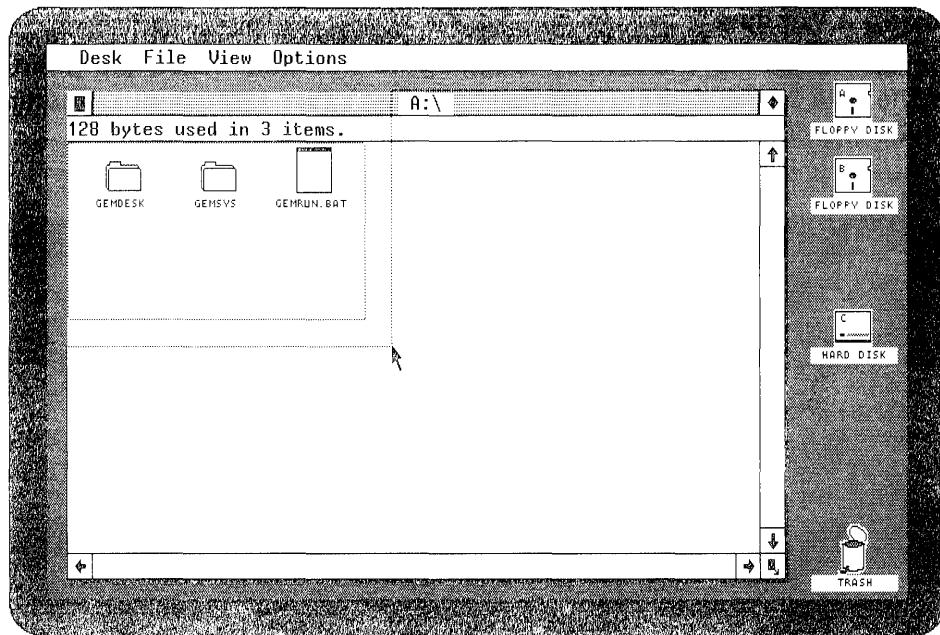
Figure GS 3-8.   Sizing a Window

Drag the shadowy outlines toward the center of the window. When the outlines are in the positions indicated in Figure GS 3-8, release the mouse button. The GEM Desktop redraws the window to the smaller size.

Moving a Window

You can move the window by dragging its title bar. Place the pointer on the title bar, and drag down and to the right. A rectangular outline moves with the pointer.
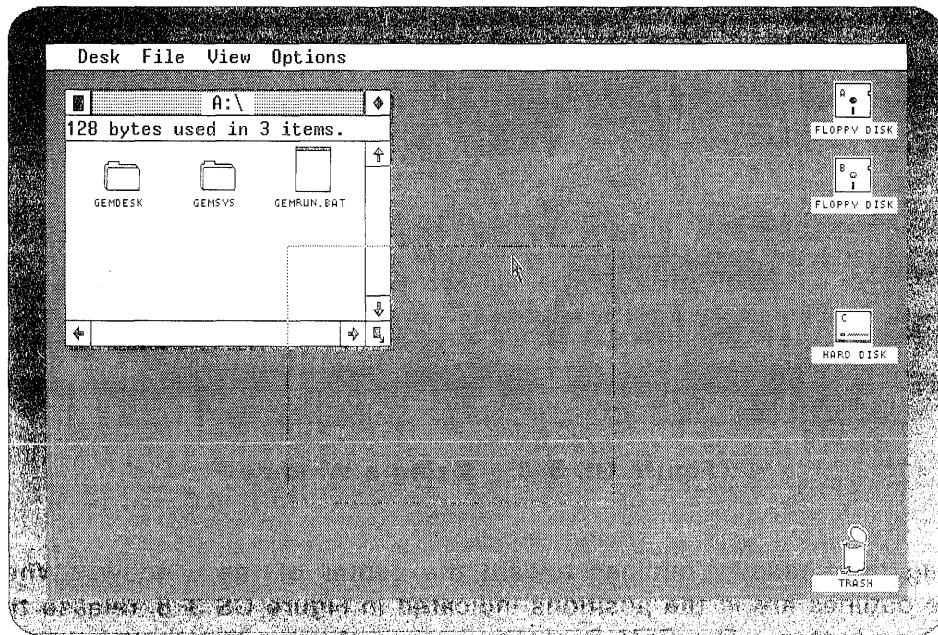
Figure GS 3-9. Moving a Window

Release the mouse button. The window disappears from its old location and reappears at its new one.

Practice moving the window. Note that you can't move the window up into the menu bar or off the left side of the GEM Desktop. You can, however, move the window over the disk icons and the trash can.

When you're ready to go on, leave the disk icons visible; you'll be using them again later.

Opening a Folder

If you're running this tutorial from a floppy disk, the window contains two folders, GEMDESK and GEMSYS. If you're running this tutorial from a hard disk, the window contains the same two folders, plus two others, GEMBOOT and GEMAPPS.

To see what is inside the GEMSYS folder, select the icon, and choose **Open** from the File Menu.

A new directory appears in the window, containing document and application icons. Figure GS 3-10 shows the new directory for a floppy disk. (The hard disk directory should look much the same.)
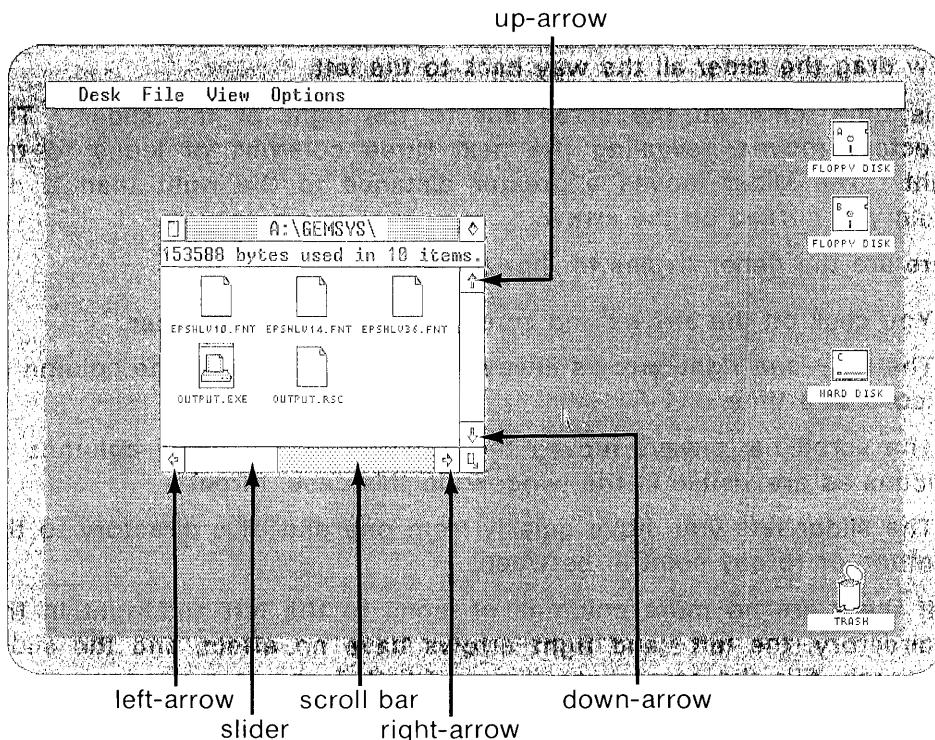
Figure GS 3-10.   New Directory

Scrolling a Directory

You're looking at only part of the directory. You can see the other icons by scrolling the directory.

Use the scrolling points indicated in Figure GS 3-10.

Click on the right-arrow. The directory moves, revealing the next column of icons to the right.

Click on the right-arrow again, and watch the horizontal slider. The slider shifts to the right, indicating that you're moving toward the right side of the directory.

Keep clicking on the arrow until the slider is all the way to the right. Note that each click moves you one column toward the right side of the directory.

Now drag the slider all the way back to the left.

This time, click on the scroll bar to the right of the slider. The directory moves, revealing the next three columns of icons to the right. The slider moves a greater distance to the right than it did when you clicked on the arrow.

Here are the general rules for horizontal scrolling:

- You click on the arrows and scroll bar; you drag the slider.
- The left- and right-arrows always move the directory one column of icons at a time.
- The scroll bar always moves the directory by as many columns of icons as are visible in the window (in this case, three).
- The slider lets you move quickly from one end of a directory to the other, or to any point in between.
- If there are no more columns of icons to the left and right in the directory, the left- and right-arrows have no effect, and the slider entirely fills the scroll bar. (Figure GS 3-7 shows a window whose entire directory is visible.)

The rules for vertical scrolling are similar. If there are no more rows of icons above and below in the directory, the up- and down-arrows have no effect, and the vertical slider entirely fills the vertical scroll bar.

Practice clicking on the left- and right-arrows and the horizontal scroll bar. Practice dragging the slider.

When you're finished scrolling, make sure the horizontal slider is all the way to the left.

Now make the window larger, so that it contains two rows of icons, with six icons in the top row. Use the size box again. Practice until the window is the right size.

Using the Full Box

To enlarge the window instantly to fill the GEM Desktop work area, click on the full box, which is in the upper right corner of the window's border (see Figure GS 3-7).

Click on the full box again. The window returns to its former size and location.

Practice using the full box. When you're ready to continue, leave the window in its full size.

Sorting a Directory and Changing Directory Type

Display the View Menu. The check marks next to **Show as Icons** and **Sort by Name** indicate that the directory contains icons, and that the icons are arranged alphabetically by name. OUTPUT is an example of an icon's name.

Move the pointer though the menu, and choose **Sort by Type** by clicking on it. The icons rearrange themselves in the window so that all icons with the same type (EXE is an example of a type) are grouped together.

Display the View Menu again. The check marks are now next to **Show as Icons** and **Sort by Type**.

Choose **Show as Text** from the menu. The GEM Desktop replaces each icon with a line of text that gives the icon's name, its size in bytes, and the date and time of its creation or last modification. Figure GS 3-11 shows a text directory sorted by type.

types

```
     Desk   File   View   Options
 ▣                                    A:\GEMSYS\                          ◇
153588 bytes used in 10 items.
     OUTPUT    EXE      49664  12-21-84  06:52 pm                         ⇧
     EPSHLV10 FNT        2478  11-17-84  12:28 pm
     EPSHLV14 FNT        4366  11-17-84  12:29 pm
     EPSHLV36 FNT       27062  11-17-84  12:29 pm
     HRCHLV10 FNT        1694  11-17-84  12:26 pm
     HRCHLV14 FNT        2742  11-17-84  12:27 pm
     HRCHLV36 FNT       17908  11-17-84  12:28 pm
     OUTPUT    RSC       7738  12-21-84  10:53 am
     EPSMONHB SYS       33280  12-20-84  07:40 am
     METAFILB SYS        6656  13-00-83  01:45 am              ⬚



                                                                          ⬇
     ⇦                                                               ⇨  ▯
```

Figure GS 3-11.   Text Directory Sorted by Type

Display the View Menu again, and choose **Sort by Name.** The lines of text rearrange themselves alphabetically by name.

To select from a text directory, click anywhere on the text line. Practice selecting in the text directory. To de-select a text line, click in an open part of the window.

When you feel comfortable with text directories, display the View Menu, and choose **Show as Icons.** The directory should now be as it was when you began.

Before continuing, click on the full box to make the window smaller again.

Creating a Folder

A folder is a place for storing and organizing data. You can place any number of folders in a directory, and you can even place folders inside other folders.

To create a folder in your current directory, display the File Menu, and choose the **New Folder...** command.

The GEM Desktop displays the NEW FOLDER dialog. Use your keyboard to type the following name:

FOLDER . TMP

Type the name just as shown. Type the period, and don't type any spaces. If you make a typing error, use the Backspace key to erase the error, and retype.

When you finish typing the name, click on OK. The GEM Desktop places a folder called FOLDER.TMP at the beginning of your directory.

Note: The .TMP is optional. It is included here to demonstrate text entry in a dialog.

Selecting a Group of Icons

The new folder in your directory is empty. Let's put something in it.

You'll start by selecting a group of three icons. Move the pointer to the icon next to the FOLDER.TMP icon. Starting just to the left of this icon (see Figure GS 3-12), press the mouse button, and drag to the right. A rectangle follows the pointer.

When the rectangle touches three icons, release the mouse button. The GEM Desktop selects all three icons.

start here
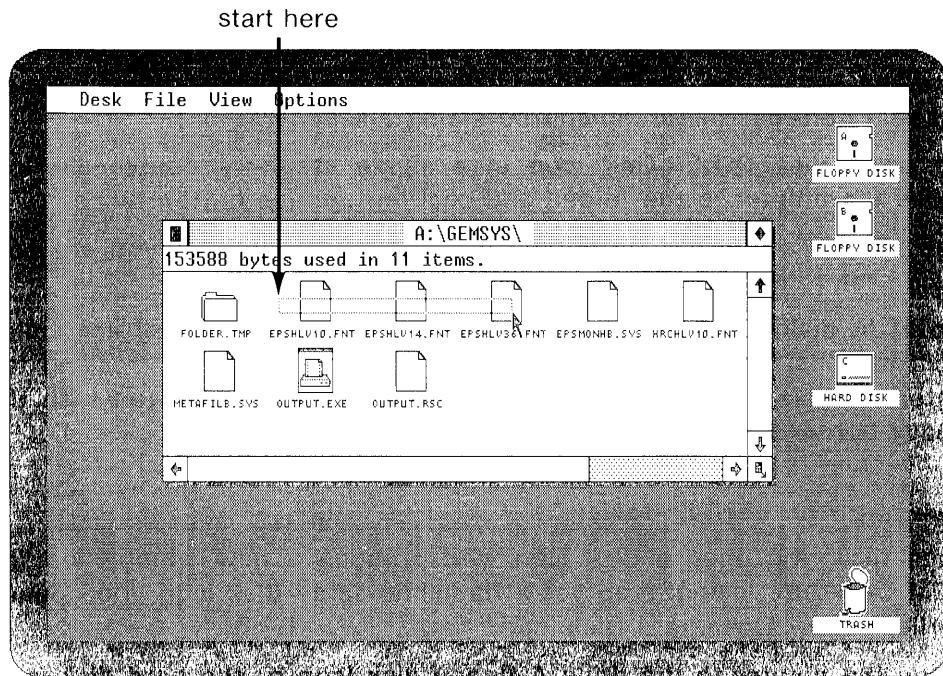
Figure GS 3-12.   Dragging a Rectangle to Select a Group of Icons

The rectangle in Figure GS 3-12 is large enough; it does not have to
surround the icons entirely. If you accidentally select more than three
icons, de-select the group by clicking in an open space in the window,
and try again.

Copying Data

To copy the icons you just selected to the folder, place the pointer on
one of the icons in the group. Press the mouse button, and drag the
upside-down T outlines of the icons to the folder. When the pointer is
directly over the folder, the GEM Desktop highlights the folder.
Release the mouse button.

The GEM Desktop displays the COPY FOLDERS / ITEMS dialog. Click on OK or press the Enter key. As the GEM Desktop copies your data into the folder, the dialog counts down the number of items. When the last item has been copied, the dialog disappears.

To open the FOLDER.TMP icon in a single step, try double-clicking. Move the pointer to the folder, and click the mouse button twice.

The window's title bar and directory change to show that you are now inside the folder.

Note: In dialogs, the boxes with labels like OK and Cancel are called "exit buttons." One of them usually has a heavy border. Pressing the Enter key has the same effect as clicking on the exit button with the heavy border.

Opening Another Window

Each time you open a disk icon, you produce a new window on the GEM Desktop. In this step you'll open the same disk icon you opened earlier under "Opening a Disk Icon."

Move the pointer to the drive A floppy disk icon or the hard disk icon. Double-click to open the icon. A new window appears on the GEM Desktop. The new window's initial size is smaller than the first window's initial size.

Open the GEMDESK icon in the new window by selecting the icon and choosing **Open** from the File Menu.

Figure GS 3-13 shows the two windows on the GEM Desktop. If necessary, move the new window so that it is not entirely inside the old one.
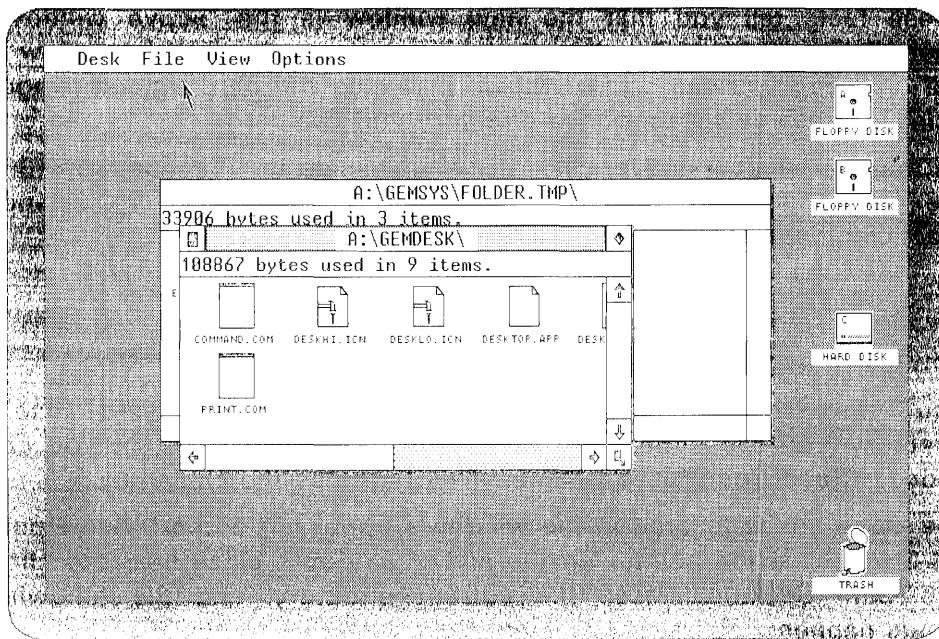
Figure GS 3–13. Two Windows

The new window is different from the old window in the following ways:

- The new window is on top of the old window.
- The new window's title bar is highlighted.
- The new window is the only one whose full box, size box, and scrolling points are visible.

These facts tell you that the new window is the "active window." There can only be one active window at a time. The active window is the only one you can size or move; it is also the only window whose icons you can select or whose directory you can scroll.

To make a window active, click anywhere inside it. Practice activating the old window and then the new window. When you're finished practicing, leave the old window active.

Closing Directories and Windows; Deleting Data

Now you'll begin to clear the two windows off the GEM Desktop.

You'll start by closing the directory in the active window. To close a directory, you can either click on the window's close box, or you can choose **Close** from the File Menu. This time use the close box.

The close box is located in the window's upper left corner. See Figure GS 3-7. Place the pointer on the active window's close box, and click. The GEM Desktop closes the current directory, and the following things happen:

● The previous directory, which contains the FOLDER.TMP icon, appears in the window.

● The window's title bar changes to reflect the change in directories.

The GEM Desktop should now look like the one in Figure GS 3-14.
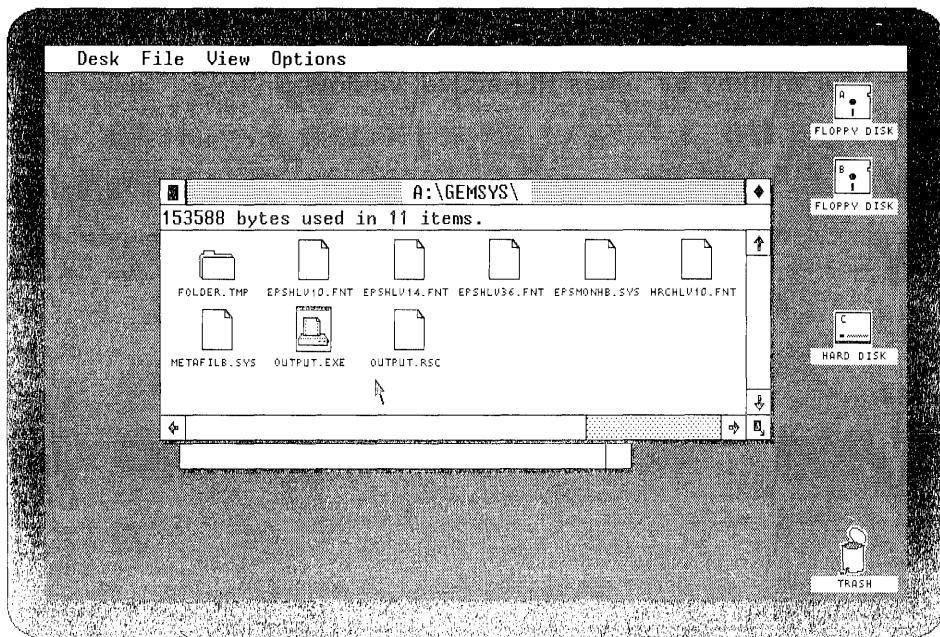
Figure GS 3-14.   Previous Directory

Before you go further, delete the FOLDER.TMP icon. You don't need it any more, and it's taking up space in your directory.

Drag the folder icon to the trash can. When the GEM Desktop highlights the trash can, release the mouse button.

Before deleting the folder, the GEM Desktop displays the DELETE FOLDERS / ITEMS dialog. Click on OK. As the GEM Desktop deletes the data, the dialog counts down the number of items (3) and folders (1).

When FOLDER.TMP has been deleted, the dialog disappears, and the GEM Desktop redraws the directory without the folder icon.

To close this window in a single step, display the File Menu, and click
the mouse button when the pointer is on **Close Window**. The window
disappears back into the disk icon from which it came.

There is now only one window on the GEM Desktop. See Figure GS
3-15. This window becomes the active window.
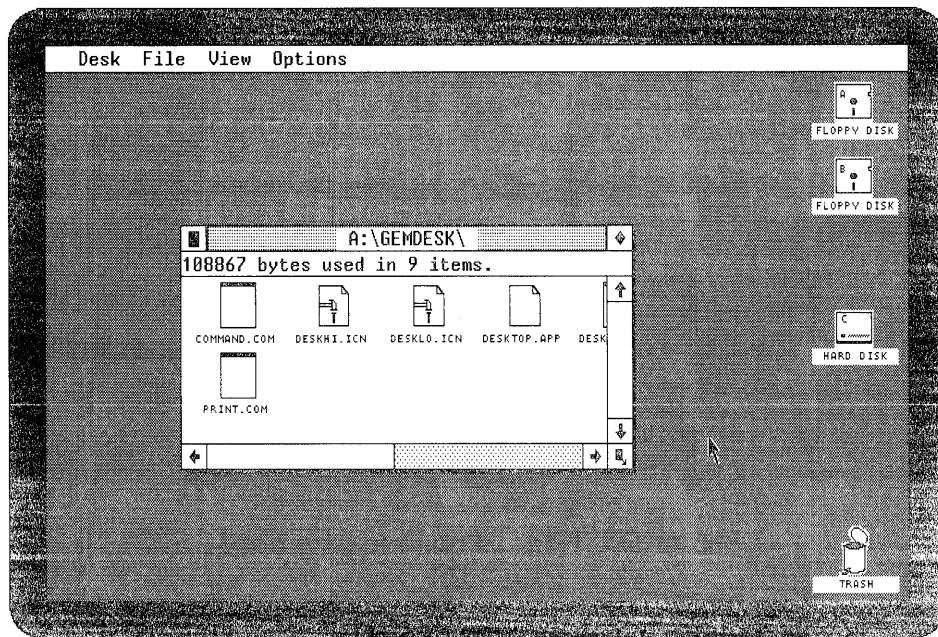
Figure GS 3-15.   GEM Desktop with One Window Closed

To close the remaining window in a single step, again display the File
Menu, and click the mouse button when the pointer is on **Close
Window**. The last window disappears back into the disk icon from
which it came.

The GEM Desktop should now be exactly as it was when you started
the tutorial.

Putting a GEM Application on Floppy Disks

To run a GEM application from floppy disks, you must make a backup copy of the application disk. To do so, follow these steps:

1. Insert a new disk (or a disk containing data that you no longer need) into drive B.

2. Select the drive B floppy disk icon.

3. Display the File Menu and choose the **Format...** command.

4. Insert your application disk into drive A.

5. Drag the drive A floppy disk icon to the drive B floppy disk icon. Click on OK in the COPY FOLDERS / ITEMS dialog.

6. Insert your GEM DESKTOP disk into drive A. Open the drive A floppy disk icon by double-clicking or by choosing **Open** from the File Menu.

7. Drag the GEMSYS folder from the A:\ window to the drive B floppy disk icon. Click on OK in the COPY FOLDERS / ITEMS dialog.

8. Drag the COMMAND.COM icon from the A:\ window to the drive B floppy disk icon. Click on OK in the COPY FOLDERS / ITEMS dialog.

Your application work disk is now ready to use.

To start the application, insert the disk into drive A and open the drive A floppy disk icon. The initial directory contains two folders, GEMSYS and GEMAPPS.

Open the GEMAPPS folder. You'll find the application icon inside.

Putting a GEM Application on a Hard Disk

To run a GEM application from a hard disk, you must copy the application data to your hard disk. To do so, follow these steps:

1. Open your hard disk icon. The initial directory contains a folder called GEMAPPS.

2. Insert your application disk into drive A and open the drive A floppy disk icon. Its initial directory also contains a folder called GEMAPPS.

3. Open the GEMAPPS folder in the A:\ window.

4. Select all the icons in the A:\ directory and drag them to the GEMAPPS folder in the hard disk (C:\) window. Click on OK in the COPY FOLDERS / ITEMS dialog.

Your hard disk is now ready to run a GEM application.

To start the application, open the hard disk icon and then open the GEMAPPS folder. You'll find the application icon inside.

What's Next?

The GEM Desktop tutorial has provided you with the basic techniques you'll need for working on the GEM Desktop. Section 4 tells you about some advanced GEM Desktop techniques.

If you want to return to DOS, display the File Menu, and choose **Quit.**

If you want to take a break, you can return to DOS and then turn off your computer's power. If you are using floppy disks, store them in a safe place.

<div align="center">End of Section 3</div>

More About GEM Desktop

INTRODUCTION

This section provides additional information on the GEM Desktop. It begins with descriptions of the commands in the Options Menu:

- **Install Disk Drive...**
- **Install Application...**
- **Set Preferences...**
- **Save Desktop**
- **Enter DOS Commands...**

INSTALLING AND REMOVING A DISK DRIVE

If you add a disk drive to your computer system, you can add (install) a disk drive icon on the GEM Desktop. Similarly, if you remove a disk drive from your system, you can remove its icon from the GEM Desktop.

To install a disk drive, follow these steps:

1. Select any disk icon currently on the GEM Desktop.

2. Display the Options Menu and choose the **Install Disk Drive...** command. The GEM Desktop displays the INSTALL DISK DRIVE dialog.

3. Type a drive identifier letter and icon label in the text fields. Because the icon label identifies the disk drive (not the contents of the disk currently in the drive), a general label like FLOPPY DISK is preferable.

4. To place a floppy disk icon on the GEM Desktop, click on the button labeled "Floppy"; for a hard disk icon, click on the button labeled "Hard".

5. Click on the Install button.

To remove a disk icon from the GEM Desktop, follow these steps:

1. Select the icon.

2. Display the Options Menu and choose the **Install Disk Drive...** command.

3. Click on the Remove button in the INSTALL DISK DRIVE dialog.

Note: There must always be at least one disk icon on the GEM Desktop; you can't remove them all.

INSTALLING AN APPLICATION

When you install an application, you do the following:

● You select a specially designed application icon.

● You make it possible to start the application by opening a document you created with the application.

To install an application, take the following steps:

1. Select the application's icon. This icon must have the type APP, BAT, COM, or EXE. DRAW.APP is an example of an application icon's name and type.

2. Choose **Install Application...** from the Options Menu, and complete the INSTALL APPLICATION dialog.

3. Move the cursor to the Document Type field. If the application automatically assigns a type to its documents, enter that type here. For example, GEM Paint™ produces documents that have the type IMG. The application's manual should identify the assigned type.

If the application does not automatically assign a type, enter one of your own choosing. Make sure that you always give this type to any documents you create with this application.

4. Move the cursor to the Application Type field. If you are installing a GEM application, click on GEM. If you are installing a DOS application, click on DOS.

   If you are installing a DOS application that lets you name a document or supply other information when you start the application, click on "DOS-takes parameters". The application's manual should tell you if the application accepts parameters.

5. Move the cursor to the buttons labeled "Icon Type". These buttons let you choose the application icon that appears on the GEM Desktop.

   Click on the button that describes the application. If the other selection buttons do not accurately describe the application, click on Generic.

Saving an Application Installation

When you install an application, the installation remains in effect for the rest of the current session. To make the installation permanent, choose **Save Desktop** from the Options Menu. **Save Desktop** is described later in this section, under "Saving the Desktop."

SETTING PREFERENCES

If you prefer that the GEM Desktop delete or copy data without displaying the DELETE FOLDERS / ITEMS or COPY FOLDERS / ITEMS dialogs, display the Options Menu, and choose the **Set Preferences...** command. When the SET PREFERENCES dialog appears, set "Confirm Deletes" or "Confirm Copies" to No.

This dialog also lets you determine how fast you have to press the mouse button when you double-click.

SAVING THE DESKTOP

The **Save Desktop** command saves the following aspects of the GEM Desktop environment:

- current settings in the SET PREFERENCES dialog
- current directory type and directory sorting
- current placement of desktop icons
- current size and location of windows
- installation of any applications in the current session

When you choose **Save Desktop**, you determine how the GEM Desktop appears and functions at the beginning of future GEM Desktop sessions. You can change any of the saved aspects during a session, but unless you save the GEM Desktop again, the changes only last until the end of that session.

Note: If you are running the GEM Desktop from floppy disks, the GEM DESKTOP disk must be in drive A when you choose the **Save Desktop** command.

ENTERING DOS COMMANDS

When you choose **Enter DOS Commands...** and click on the OK button in the resulting dialog, you leave the GEM Desktop and go to the DOS prompt. (If you are running the GEM Desktop from floppy disks, insert your DOS disk into drive A when you see the message asking for the COMMAND.COM disk.)

At the DOS prompt you can enter commands like **TYPE**, **PRINT**, or **FORMAT**. You can also use DOS commands to start applications, change DOS directories, or change the default disk drive assignment.

To return to the GEM Desktop from any DOS directory or disk drive, type **EXIT** at the DOS prompt.

Note: While you are entering DOS commands, the GEM software is still loaded into your computer's memory. For this reason, do <u>not</u> try to return to the GEM Desktop by typing **GEM** at the DOS prompt.

USING THE KEYBOARD TO MOVE THE POINTER

You can use your computer's up-, down-, left-, and right-arrow keys to move the pointer on the GEM Desktop. (If the arrow keys do not move the pointer, press the Ctrl or Num Lock key.)

If you hold down an arrow key, the pointer moves continuously and fairly rapidly across the GEM Desktop. If you hold down the Shift key at the same time, the pointer moves more slowly.

The following techniques are the keyboard equivalents of GEM Desktop mouse button techniques:

- To click, press and immediately release the Home key.
- To double-click, press and immediately release the Home key twice in rapid succession.
- To drag, take the following steps:

  1. Press and release the Shift and Home keys simultaneously. This has the same effect as pressing the mouse button.

  2. Use the arrow keys to move the pointer.

  3. Press the Home key. This has the same effect as releasing the mouse button.

ENTERING AND EDITING TEXT IN DIALOGS

Several dialogs contain "editable text fields," which are places where you can type text. The text cursor (|) shows where your typed characters will appear.

To move the cursor to an editable field text, click the mouse anywhere in the field or use one of the keystrokes described in Table GS 4-1.

Table GS 4-1 shows the key or key combinations you use to move the text cursor and delete characters in an editable text field.

Table GS 4-1.   Text Editing Keys

Key(s) You Press	Effect
left-arrow	Moves the text cursor one character to the left without deleting characters.
	Holding down the key moves the cursor continuously until it reaches the beginning of the field.
right-arrow	Moves the text cursor one character to the right without deleting characters.
	Holding down the key moves the cursor continuously until it reaches the end of the text.
Tab or down-arrow	Moves the cursor to the next editable field.
Shift/Tab or up-arrow	Moves the cursor to the previous editable field.
Delete	Deletes the character to the right of the cursor.
	Holding down the key deletes continuously until all characters to the right of the cursor have been deleted.

Table GS 4-1. (continued)

Key(s) You Press	Effect
Backspace	Deletes the character to the left of the cursor and moves the trailing text one space to the left.
	Holding down the key deletes continuously until the cursor reaches the beginning of the field.
Escape	Moves the text cursor to the beginning of the current field and erases all characters in the field.

Some editable text fields contain periods, slashes (/), or other special characters. Typing the character causes the text cursor to jump to the first space following the character. You saw this in the tutorial when you created the folder called FOLDER.TMP.

SHIFT-CLICKING TO SELECT GROUPS

You can select icons that are not next to each other by Shift-clicking as follows:

1. Select the first icon by clicking on it.

2. Press and hold down the Shift key on your keyboard.

3. Click on the rest of the icons you want to select. The GEM Desktop highlights each icon as you click on it.

4. Release the Shift key.

The corresponding keyboard technique for Shift-clicking is as follows:

1. Press the Home key to select the first icon.

2. Use the arrow keys to move the pointer to another icon.

3. Press the Shift and Home keys simultaneously to select the icon.

4. Without moving the pointer, press the Home key again. (If you don't, the GEM Desktop thinks you're dragging the icons. Of course, if you only want to select two icons and then drag them, that's OK.)

5. Repeat steps 2-4 for any additional icons.

RENAMING A DOCUMENT

To rename a document, select the document icon, and choose **Show Info...** from the File Menu.

The GEM Desktop displays the ITEM INFORMATION dialog. Type the new name in the Name field.

ASSIGNING DATE AND TIME TO YOUR DATA

The GEM Desktop includes a clock that assigns a date and time to all your new folders, documents, and applications.

To see the clock, display the Desk Menu, and choose the **Clock** command.

The clock has two modes: time mode and alarm mode. When you see a clock symbol, the clock is in time mode; when you see a bell symbol, the clock is in alarm mode. The clock must be in time mode for you to read or set the time. To change from one mode to the other, click on the symbol.

To set the time, move the pointer to the hour or minutes and click. When the GEM Desktop highlights the numbers, use the keyboard's standard number keys (not the numeric keypad) to type the correct number. Use 12-hour clock settings.

Always type two digits. For single-digit settings, type a zero before the number--08, for example. When you type the second digit, the GEM Desktop instantly changes the setting.

To change from AM to PM (or from PM to AM), click on the "am" or "pm" following the time.

To be sure of assigning a correct date and time, reset the clock at the beginning of each GEM Desktop session.

If you do not want to reset the clock so frequently, you can purchase a battery-powered system clock that keeps running when your computer's power is turned off.

End of Section 4

Part 2

GEM Setup Guide

Foreword

Welcome to Graphics Environment Manager (GEM) software from Digital Research! Applications based on this software, such as the GEM Desktop and GEM Draw™, can run on a variety of computers with a large selection of graphics devices and type fonts.

You use GEMSETUP to tell your GEM software which of the following you have in your system:

● hardware devices
● type fonts
● communications ports

WHEN DO I NEED TO RUN GEMSETUP?

You must run GEMSETUP to do the following:

● add or change a device connected to your system, such as a printer or graphics card

● reconnect a device to another communications port (a plug in the back of your computer)

You should run GEMSETUP when you remove a device from your system. When you remove a device, you no longer need its "device driver." A device driver is a program your computer uses to translate information into a format it can display on your screen, or reproduce with a printer or plotter. Device drivers use valuable disk and memory space. When you no longer need a device driver, you should run GEMSETUP to eliminate it.

Finally, you can use GEMSETUP whenever you want to change the type fonts for the characters your screen, printer, or plotter produces.

HOW SHOULD I USE THIS GUIDE?

This guide is both a step-by-step explanation of how to set up your GEM system, and a reference to GEMSETUP commands.

To find out how to start GEMSETUP and learn about its components, see Section 1.

To create your own system setup, see Section 2.

To modify the list of available choices, see Section 3.

To see a summary of GEMSETUP menu commands, see Section 4.

This guide assumes you can use the following:

- menu bar
- windows
- dialog boxes
- mouse

It also assumes you have two disk drives in your system: either two floppy disk drives, or a hard disk drive and a floppy disk drive.

What is GEMSETUP?

This section tells you how to start GEMSETUP and acquaints you with its icon, windows, and menu bar.

STARTING GEMSETUP

To start GEMSETUP from the GEM Desktop, open the icon labeled GEMSETUP.APP. You can either double-click on the icon, or select the icon and choose the **Open** command from the File Menu.

Figure SG 1-1 shows the dialog box that appears when you start GEMSETUP.
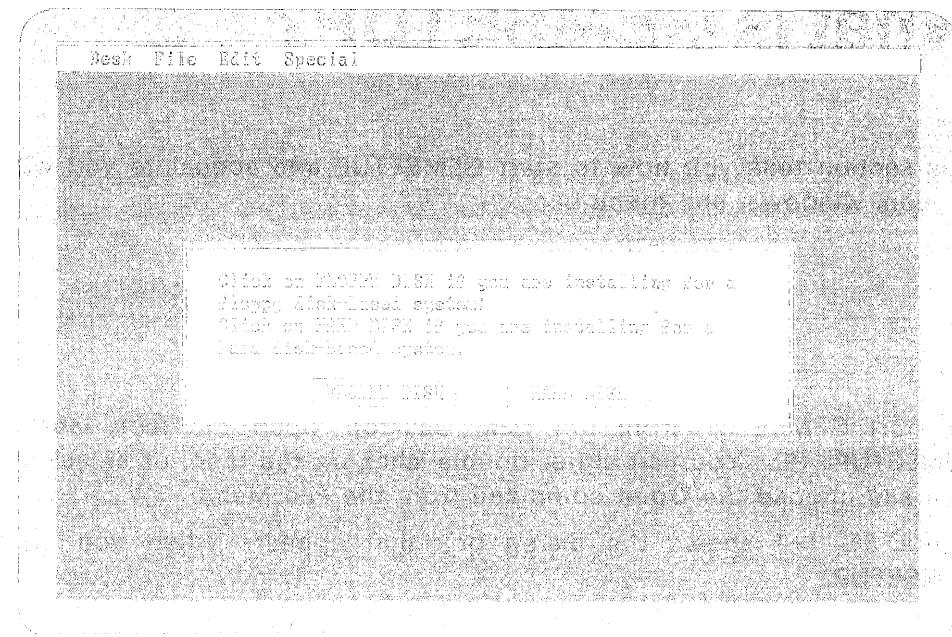
Figure SG 1-1.   System Drive Identification Dialog

Click on FLOPPY DISK if your system has only floppy disk drives.

Click on HARD DISK if your GEM system is on a hard disk.

Note: Choose FLOPPY DISK if you have a hard disk but start your system from a floppy disk.

When you click on HARD DISK, a dialog box appears that asks you for the letter identifier of two disk drives.
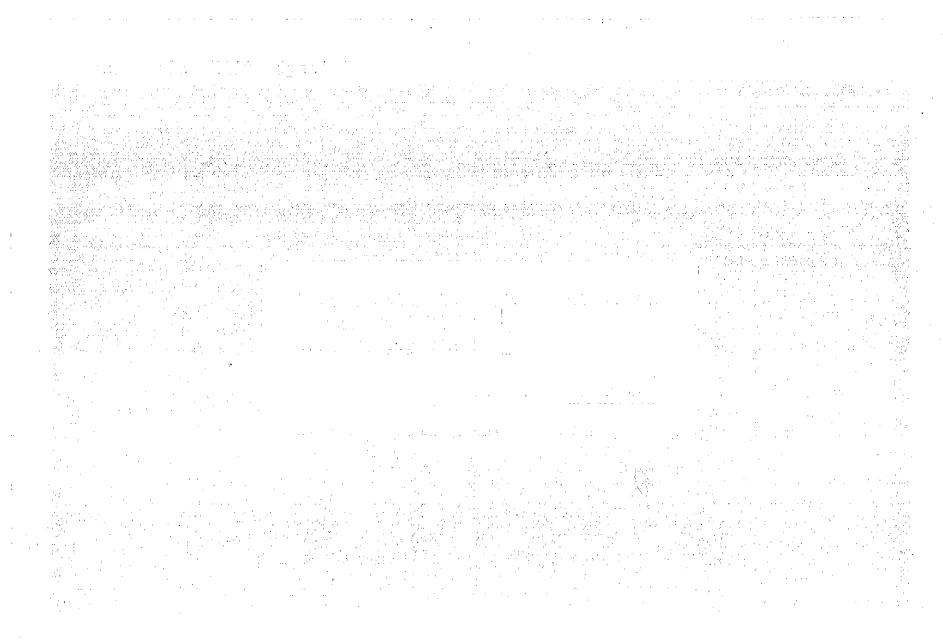
Figure SG 1-2.   Drive Identification Dialog

Specify the letter identifier of the hard disk where your GEM system resides and the letter identifier of the floppy disk drive from which GEMSETUP reads the new setup information.   For example, the hard disk may be drive C and the floppy disk may be drive A. Follow these instructions to give GEMSETUP the drive identifiers:

1. Type the letter C.

2. Click on the Floppy Disk entry location and type the letter A.

3. Click on OK to communicate this drive information to GEMSETUP.

    Click on Cancel to return to the GEM Desktop.

Once GEMSETUP knows where your GEM system resides, it displays
the main GEMSETUP screen, shown in Figure SG 1-3.

```
  Desk  File  Edit  Special
┌─────────────┬────────────────────────────────────────────┐
│  Categories │           Chosen Graphics Cards             │
│Graphics Cards│ Hercules Graphics Card_____ │
│ Screen Fonts │ _____ │
│ Mouse        │ _____ │
│ Mouse Ports  │ _____ │
│ Plotters     │ _____ │
│ Plotter Fonts│ _____ │
│ Plotter Ports│ _____ │
│ Printers     ├────────────────────────────────────────────┤
│ Printer Fonts│          Available Graphics Cards          │
│ Printer Ports│ IBM Color Adapter MONOCHROME MODE_____ │
│ Metafiles    │ Hercules Graphics Card_____ │
│ Metafile Fonts│ Tandy 2000 Color Adapter_____ │
│ Tablets      │ AT&T 6300 MONOCHROME MODE_____ │
│ Tablet Ports │ Texas Instruments Professional MONOCHROME MODE___ │
│ Miscellaneous│ Corona Data Systems PC MONOCHROME MODE___ │
│              │ _____ │
│              │ _____ │
│              │ _____ │
│              │ _____ │
│              │ _____ │
└─────────────┴────────────────────────────────────────────┘
```

Figure SG 1-3.   Initial GEMSETUP Screen

GEMSETUP WINDOWS

The initial GEMSETUP screen has three windows entitled Categories,
Chosen, and Available. Table SG 1-1 describes these windows.

Table SG 1-1.   GEMSETUP Windows

Window Title	Description
Categories	Displays the categories of hardware devices, type fonts, and communication ports you can use with GEM software. When you first start GEMSETUP, the Graphics Cards category is highlighted. This means it's the "current" category. When you select a category, GEMSETUP highlights it.
Chosen	Lists the items already selected from the current category.
Available	Lists the items you can select from the current category. When you select a category in the Categories window, GEMSETUP lists all the items in the Available window that you can add to your system's setup. For example, if Graphics Cards is the current category, then the Available window lists all the different graphics cards you can choose.

GEMSETUP MENU BAR

The GEMSETUP menu bar has four menus labeled Desk, File, Edit, and Special. They are described in Table SG 1-2.

Table SG 1–2.   GEMSETUP Menu Bar

Menu Title	What Menu Contains
Desk	Commands to see information about GEMSETUP and start your desk accessories.
File	Commands to save the new setup or exit GEMSETUP.
Edit	Commands to see the summary of what will go into the new setup, learn information about the choices, and clear either one or all choices.
Special	Commands to add, modify, or delete items that appear in the Available window.

Section 4, "Menu Commands," lists and explains the commands you see in the menus.

End of Section 1

Creating Your Setup

This section gives you a quick overview of GEMSETUP, then shows you how to add graphics devices and type fonts you might have to your system setup, how to delete them, and finally how to save and use the new setup.

A QUICK LOOK AT GEMSETUP

A typical session with GEMSETUP involves the following:

1. Getting Information About Your Setup

   a. Choose **Show Summary** from the Edit Menu to see what is in your current setup. **Note:** You only need to use GEMSETUP if your system setup differs from what appears in the summary when you first start GEMSETUP.

   b. Choose **Show Info...** from the Edit Menu to learn more about an available item.

2. Adding a New Device or Type Font

   a. Select a category (for example, Printers).

   b. Click on an available item, such as IBM®/Epson® Graphics Printers HI RES, and drag it up to the Chosen window.

3. Saving the New Setup

   a. Choose **Save Summary** from the File Menu to create the new setup.

   b. Insert the correct disks as GEMSETUP creates your new setup.

4. Activating Your New Setup

   a. Choose **Quit** from the File Menu to return to the GEM Desktop.

   b. Restart your computer.

The following sections give you more details on these four steps.

GETTING INFORMATION ABOUT YOUR SETUP

This section describes two ways to get information about your setup using the Edit Menu commands:

● Use the **Show Summary** command to see what will go into your new setup the next time you update your system disk.

● Use the **Show Info...** command to see an available choice's description.

Seeing the Summary

To see the summary, do the folllowing:

1. Choose **Show Summary** from the Edit Menu. Figure SG 2-1 shows the Summary window.

   When you first start GEMSETUP, the summary contains only the items from your current setup.

2. To return to the main GEMSETUP screen, click on the close box in the upper left corner of the Summary window.

Note: You can choose **Save Summary** or **Quit** from the File Menu while the summary is on display. If you are satisfied with the summary of choices, you can save your new setup without returning to the main GEMSETUP screen by choosing **Save Summary**. Or, you can abandon the changes you have made by choosing **Quit** and then restarting GEMSETUP.
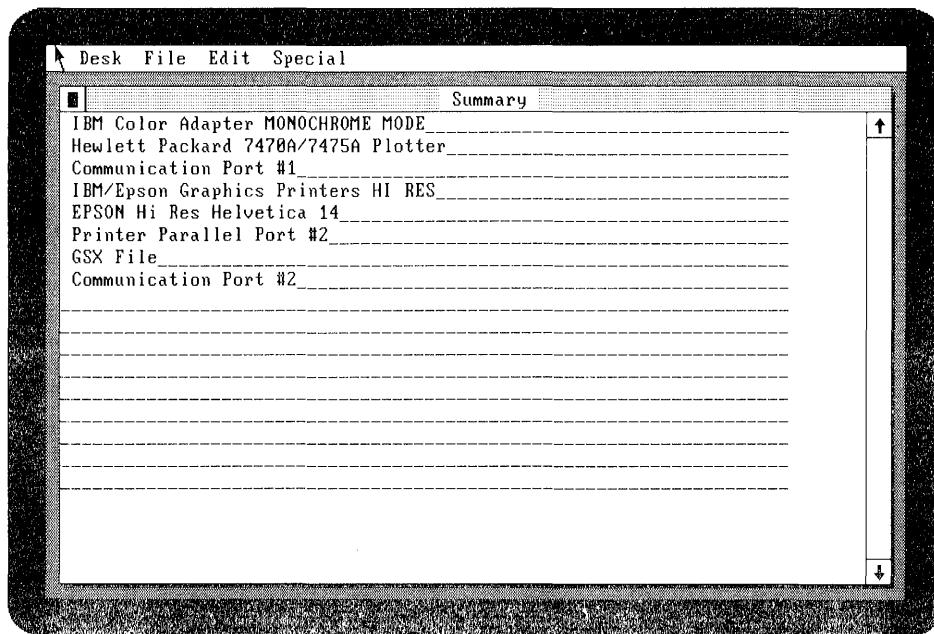
Figure SG 2-1. Summary Window

Getting Information on an Item

To learn more about an available item, you can display its description as follows:

1. Click on a category name, such as Printers.

2. Click on the Available window to activate it. (You can't show information on an item in the Chosen window; you also can't show information on a category.)

3. Click on an item in the Available window, such as IBM/Epson Graphics Printers HI RES.

4. Choose **Show Info...** from the Edit Menu. Figure SG 2-2 shows the
    dialog box which tells you:

    ● name of the device driver or type font program
    ● name written on its disk's label
    ● short description of it
    ● detailed description of it

5. To close the dialog box and return to the main GEMSETUP screen,
    click on OK or press the Enter key.

```
Desk  File  EDIT  Special

  INFORMATION

     Filename:  EPSMONHB.SYS
    Disk Label:  GEM DEVICE DRIVER DISK #2_____
   Description:   IBM/Epson Graphics Printers HI RES_____

     Details:
  This driver is for the IBM Graphics printer, the Epson FX 80/100 and____
  the Epson MX 80/100. The printers are driven in the 120 x 144 dots per__
  inch mode._____
  _____
  _____
  _____
  _____
  _____
  _____

                                                    [   OK   ]
```
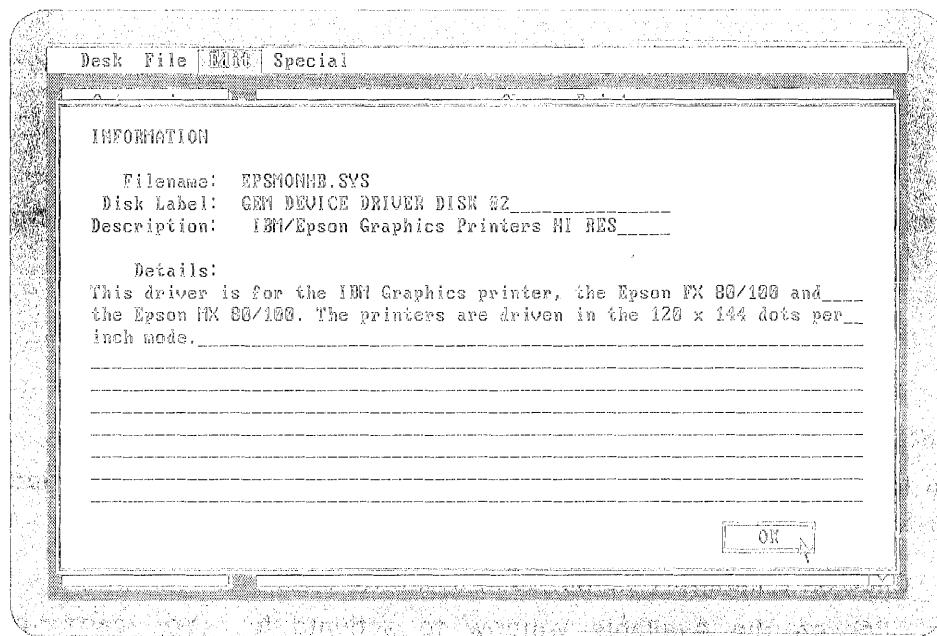
Figure SG 2-2.   Show Info... Dialog

ADDING A NEW DEVICE OR FONT TO YOUR SETUP

Once you know what's in the summary and you're sure you're adding the correct device driver or type font to your system, you are ready to add it to the summary.

To select an item do the following:

1. Click on the Categories window and click on a category. (The Chosen window displays any items already in the summary for this category.)

2. Click on the Available window and click on the item you wish to add to the new setup.

3. Drag the item up to the Chosen window. When you release the mouse button, the choice usually replaces the previous selection. **Note:** You can select only one item from each hardware device category, that is, one printer, one mouse, or one monitor, etc. But, you may select more than one type font for a device. Therefore, when you choose a device, it replaces the previous selection; when you choose a font, it's added to the list.

4. Choose **Show Summary** from the Edit Menu to verify that the items you have chosen are ready to go into the new setup.

DELETING A DEVICE OR FONT FROM YOUR SETUP

You can remove either one or all choices from the setup summary using the **Clear Choice** and the **Clear Summary** commands from the Edit Menu.

Clearing a Choice

To clear a choice from the summary, do the following:

1. Click on the Categories window and click on a category.

2. Click on the Chosen window and click on the item you wish to exclude from the new setup.

3. Choose **Clear Choice** from the Edit Menu. GEMSETUP erases the selection from the Chosen window and the summary.

4. Check the summary again to verify that it is no longer on the list.

Note: Clear Choice differs from **Remove Item** from the Special Menu. **Clear Choice** erases the selected item from the Chosen window and the summary. **Remove Item** erases the selected item from the Available window permanently.

Clearing the Summary

To clear all the selected items from the summary, do the following:

1. Choose **Show Summary** from the Edit Menu.

2. Choose **Clear Summary** from the Edit Menu. Figure SG 2-3 shows the Clear Summary dialog box.

3. To clear the summary and return to the main GEMSETUP screen, click on OK.

    To return to the main GEMSETUP screen without clearing the summary, click on Cancel or press the Enter key.

Desk File **Edit** Special

Summary
Hercules Graphics Card_____
PC Mouse by Mouse Systems Corp._____
IBM/Epson Graphics Printers HI RES_____
Printer Parallel Port #1_____

WARNING!

Click on OK to erase ALL entries in the
Summary. NOTE: The Summary shows you what
will be included in the ASSIGN.SYS file
next time you choose to save it.

OK   Cancel
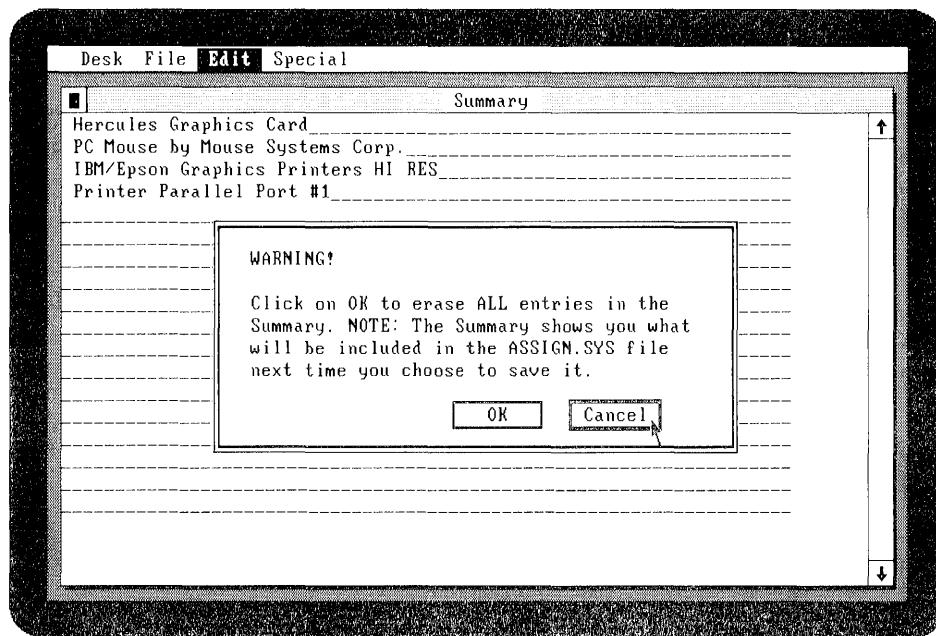
Figure SG 2-3. Clear Summary Dialog

Note: Choosing **Clear Summary** does not affect your current setup
but does clear the summary. Remember that the summary shows you
exactly what will go into your new setup the next time you update
your system disk. If you save an empty summary, you will not be able
to use your GEM system the next time you start your computer. (See
"Correcting Mistakes" below).

SAVING THE NEW SETUP

Once you are satisfied with the summary, you are ready to save it. When you choose **Save Summary** from the File Menu, GEMSETUP displays the dialog shown in Figure SG 2-4. If you click on OK, GEMSETUP prompts you for the correct disks to insert as it creates your new setup.

You must have the appropriate software on driver disks. If you do not have the device driver or type font programs you have requested, you see a dialog box requesting that you provide the software or cancel the save procedure.

Note: Follow the directions **exactly**! The new setup overwrites and destroys the old setup. You might not be able to start your system next time if you save an incorrect setup. (See "Correcting Mistakes" below.)
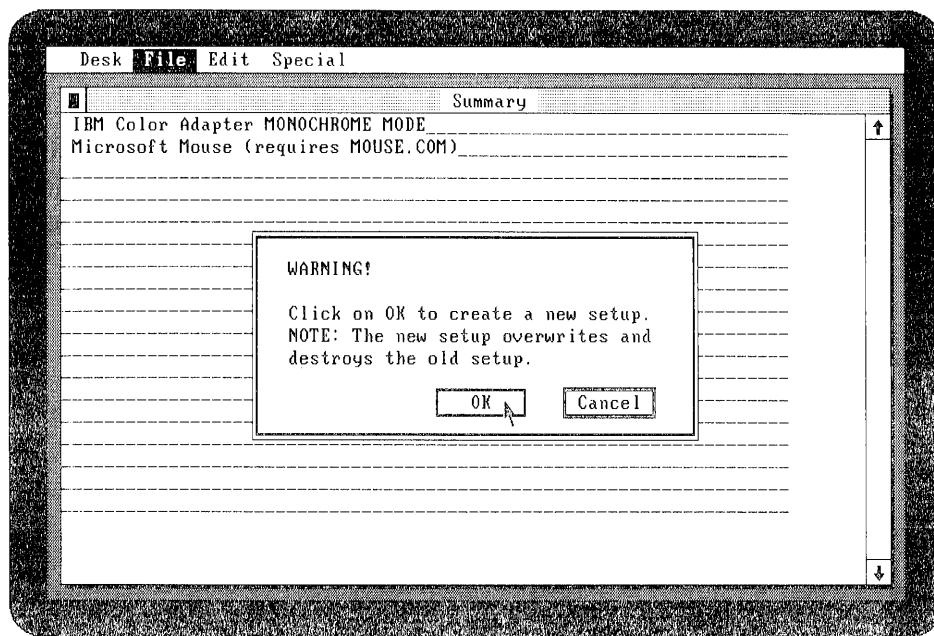
Figure SG 2-4.   Save Summary Dialog

ACTIVATING THE NEW SETUP

If you just added a new device or font to your setup, you cannot use it until the next time you start your system.

To activate your new setup, choose **Quit** from the File Menu, return to your operating system's prompt and restart your computer.

Note: Quit does not save your new setup.   You must use the **Save Summary** command from the File Menu to save your new setup.   If you choose **Quit** before you choose **Save Summary**, you abandon your changes.

CORRECTING MISTAKES

If you add the wrong type font or device type to your system, you can usually restart GEMSETUP and create another setup. However, if you add the wrong graphics card or mouse, you will have to use the GEMPREP program as described in Part 1, "Getting Started with the GEM Desktop," Section 2, "Preparing Your System."

End of Section 2

Customizing the Choices

Although your GEM system comes with a large variety of graphics devices and type fonts you can choose from, the list of available items may not be just right for you. You may feel that the descriptions are not informative enough. Or, perhaps you have acquired a new type font that did not come with your GEM system. The GEM system is not limited to the graphics devices and type fonts that we make available to you in GEMSETUP.

This section shows you how to customize the GEMSETUP list of available items.

A QUICK LOOK AT CUSTOMIZING

GEMSETUP keeps all the information about each of the available items in a document on your system disk called GEMSETUP.TXT. Each time you pick a category, GEMSETUP reads this document and lists the appropriate items in the Available window. GEMSETUP also looks in this document each time you choose **Show Info...** to display the selected item's description.

You use the Special Menu commands to:

- add a new item to the Available window
- change the information about a current item
- remove an item from the Available window
- update the text file that contains all the information about the available items

Note: If you want to add a new choice to the Available window, you must have the device driver or type font program. Even if you add a new entry to the list of choices with the **Update Text File** command, you cannot update your system using the **Save Summary** command from the File Menu if you do not have the appropriate device driver software on the driver disk. (See "Saving the New Setup" in Section 2.)

ADDING NEW ITEMS

To add a new item to the Available window, do the following:

1. Click on the Categories window and click on a category.
2. Click on the Available window to make it active.
3. Choose **Add New Item** from the Special Menu. You see the Add / Change Item dialog box shown in Figure SG 3-1.
4. Click on each text field, and enter the new item's description, as follows:

    Filename: Type the name of the device driver or type font program.

    Disk Label: Type the name of its disk. GEMSETUP prompts you for this disk when you choose **Save Summary** from the File Menu.

    Description: Enter a short description. This text line appears in the Available, Chosen, and Summary windows.

Patch Bytes: If this device driver needs to know which communication port you are using, click on Port and type the number of the port in the back of your computer. See your hardware specification manual for the identification number of the port.

If this device driver needs to know which mouse you are using, click on Type and enter the identification of your mouse. The mouse number corresponds to where it is listed in the Available window: no mouse is 0, PC Mouse is 1, and so on. If you are adding a new mouse, use the next available number.

Details: Type a short description of this device driver's or font's purpose. This is for your information; it's like a scratch pad where you keep notes to yourself.

4. To return to the main GEMSETUP screen without creating a new entry, click on **Cancel.**

To create a new entry for the Available window, click on OK or press the Enter key.

5. Choose **Update Text File** from the Special Menu to revise the document that contains the information about the available items. Once you update the text document, the new item is available to choose.

6. Choose **Show Info...** from the Edit Menu to verify your entry.

```
 Desk  File  Edit  Special

  ADD / CHANGE ITEM

     Filename:   EPSMONHB.|___
  Disk Label:   GEM DEVICE DRIVER DISK #2_____
 Description:    IBM/Epson Graphics Printers HI RES_____
 Patch Bytes: Port:  __   Type:  __

     Details:
 This driver is for the IBM Graphics printer, the Epson FX 80/100 and____
 the Epson MX 80/100. The printers are driven in the 120 x 144 dots per__
 inch mode._____
 _____
 _____
 _____
 _____
 _____
 _____
 _____

                                         [   OK   ]  [ Cancel ]
```
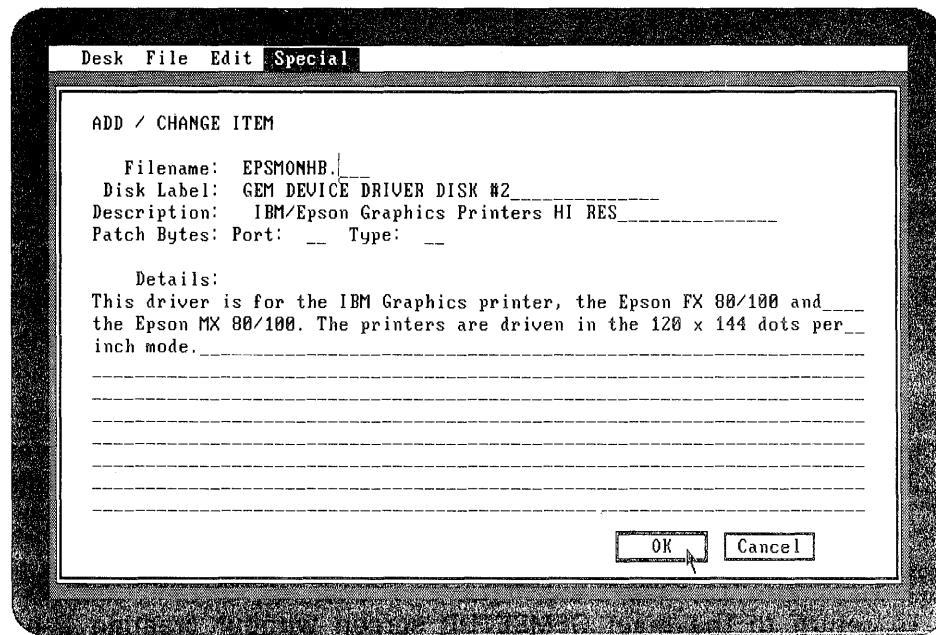
Figure SG 3-1.   Add / Change Item Dialog

CHANGING CURRENT ITEMS

To modify an item's description, do the following:

1. Click on the Categories window and click on a category.

2. Click on the Available window and click on an available item.

3. Choose **Change Item** from the Special Menu.   Figure SG 3-1 shows the Add / Change Item dialog box.

4. Modify the item's description.   Refer to the descriptions above. Use caution when you change the patch bytes because your system needs the correct port and mouse identification where applicable.

5. To close the Add / Change Item dialog box and return to the main GEMSETUP screen without modifying the item's description, click on Cancel.

   To mark the item for modification, click on OK or press the Enter key.

6. Choose **Update Text File** from the Special Menu to modify this device driver's description in the text document.

7. Choose **Show Info...** from the Edit Menu to verify the changes you just made.

REMOVING OLD ITEMS

To remove an item from the Available window, do the following:

1. Click on the Categories window and click on a category.

2. Click on the Available window and click on an available item.

3. Choose **Remove Item** from the Special Menu.   GEMSETUP marks the item for deletion from the Available window.

   Note: Remove Item differs from **Clear Choice** from the Edit Menu. **Remove Item** erases the selected item from the Available window permanently.   **Clear Choice** erases the selected item from the Chosen window and the summary.

4. Choose **Update Text File** from the Special Menu to erase this item's description from the text document.

Note: Never erase an item's device driver from the driver disk. You might want to restore the item later.

End of Section 3

Menu Commands

This section describes the commands in the Desk, File, Edit, and Special menus.

Desk	File	Edit	Special
GEMSETUP Info...	Save Summary	Show Summary	Add New Item
	Quit	Show Info...	Change Item
		Clear Choice	Remove Item
		Clear Summary	Update Text File
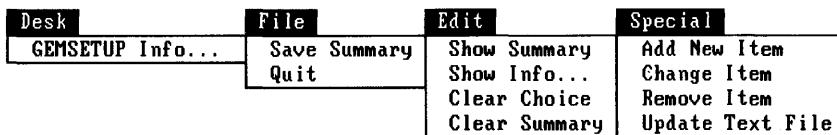
Figure SG 4-1.   GEMSETUP Menus

DESK MENU

The Desk Menu is divided into two sections by a dashed line. The top section always has the **GEMSETUP Info...** command which gives you a dialog that introduces you to GEMSETUP. The bottom section, however, varies depending on what desk accessories you have available on your system.

FILE MENU

You use the File Menu commands to save a new setup or exit GEMSETUP.

Table SG 4-1 describes the File Menu commands.

Table SG 4-1.   File Menu

Command	Description
Save Summary	Creates a new setup on the floppy disk in the default drive, overwriting the old setup.
Quit	Stops GEMSETUP and returns you to the GEM Desktop.

EDIT MENU

You use the Edit Menu commands to see the summary of what will go into the new setup, get information about the choices, and clear either one or all choices from the summary.

Table SG 4-2 describes the Edit Menu commands.

Table SG 4-2.   Edit Menu

Command	Description
Show Summary	Lists the items that will go into the new setup the next time you choose **Save Summary** from the File Menu. The list includes all hardware devices and type fonts not deleted from the current setup, plus all assignments added during this session of GEMSETUP.
Show Info...	Displays the description of a selected item from the Available window.
Clear Choice	Deletes a selected entry from the Chosen window and summary.
Clear Summary	Deletes all entries from the summary.

SPECIAL MENU

You use the Special Menu commands to modify the list of available items in the current category.

Table SG 4-3 describes the Special Menu commands.

Table SG 4-3.   Special Menu

Command	Description
Add New Item	Makes another item available in the selected category.
Change Item	Marks the selected item from the Available window for a description modification.
Remove Item	Marks the selected item for permanent deletion from the Available window.
Update Text File	Revises the document that contains information describing the available choices. This command adds the data collected in **Add New Item**, modifies the entries indicated in **Change Item**, and erases the items marked for deletion in **Remove Item**. You do not actually make any permanent revision to the GEMSETUP.TXT document until you choose this command.

End of Section 4

Part 3

GEM Output Guide

Foreword

This guide explains how to reproduce the charts, graphs, and free-form graphic designs you create with GEM applications like GEM Draw™ and GEM Paint.

WHEN DO I RUN OUTPUT?

You use OUTPUT to send pictures to your:

- screen
- printer
- plotter

HOW SHOULD I USE THIS BOOK?

This guide is both a step-by-step explanation of how to reproduce pictures, and a reference to OUTPUT commands.

To start OUTPUT and become acquainted with its components, see Section 1.

To learn to use OUTPUT, see Section 2.

To see a summary of OUTPUT menu commands, see Section 3.

This guide assumes you can use:

- mouse
- menu bar and menus
- windows
- dialog boxes
- ITEM SELECTOR

What is OUTPUT?

This section tells you how to start OUTPUT and acquaints you with its window and menu bar.

BEFORE YOU START

You can select the pictures you wish to reproduce <u>before</u> you start OUTPUT. Click on the appropriate names in a directory window, then follow the instructions for starting OUTPUT below.

You can pre-select either the individual names of the graphs, charts, or designs you plan to send to your output device, or the name of an "output list" (defined on page OG 1-3). Then, when you start OUTPUT, the names of the pictures you wish to reproduce will be ready to send to your output device immediately.

Section 2, "Using Output," explains how you can also select the names <u>after</u> you have started OUTPUT. You can learn how to select individual picture names under "Adding a Name" in Section 2; you can learn how to select an output list name under "Opening an Output List," also in Section 2.

STARTING OUTPUT

To start OUTPUT from the GEM Desktop or a GEM application, choose **To Output** from the File Menu.

Figure OG 1-1 shows an untitled output list.
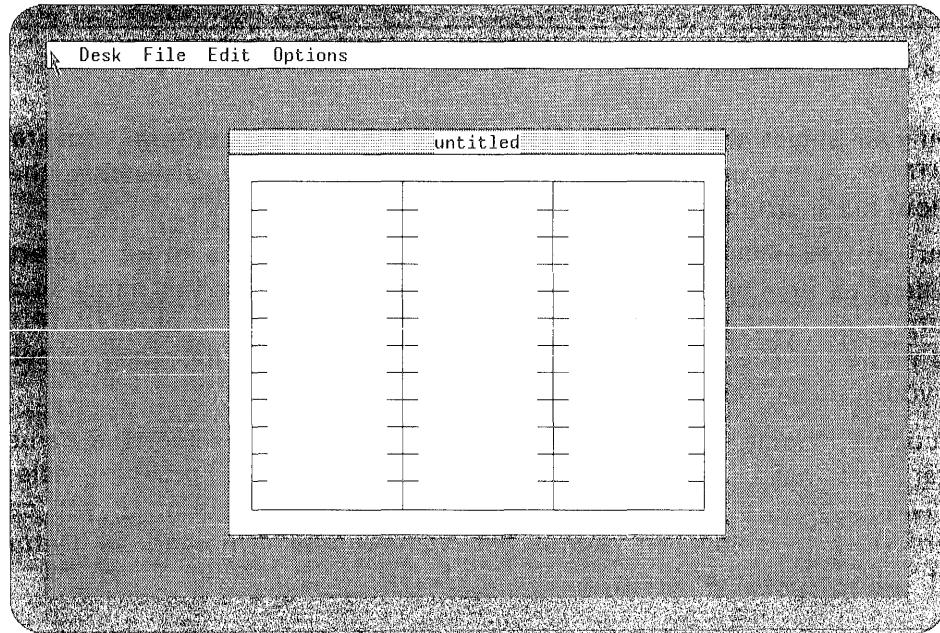
Figure OG 1-1.   Untitled Output List

OUTPUT LIST

If you did not pre-select picture names, OUTPUT displays an empty output list on your screen. You arrange the names of the tables, charts, graphs, and pictures that you wish to reproduce on your output device in the output list. Like a roll of film that has 36 exposures, the output list can accommodate up to 36 names. It remains "untitled" until you save it and give it a name.

If you did pre-select picture names, OUTPUT displays their names in an untitled output list. The names appear in the output list in the order they appear in the directory, not in the order you selected them. You can change the order of the names in the directory with commands from the GEM Desktop View Menu, or you can change the order of the names in the output list. (See "Moving a Name" in Section 2.)

Note: OUTPUT permits you to pre-select up to 128 characters, including the directory path names, backslashes (\), and periods (.) contained in the names. So, if you pre-select many names, you might not see all the names you expect in the initial output list.

If you pre-select an output list name, OUTPUT displays the names contained in that list and writes the output list's title in the title bar.

When you choose **To Output** from one of the GEM applications, such as GEM Draw, OUTPUT assumes you have pre-selected the current picture in that application. For example, say you are working in GEM Draw on a picture named BARGRAPH. When you are ready to send it to your printer, you choose **To Output** from the GEM Draw File Menu. OUTPUT automatically displays BARGRAPH in the output list when it starts.

OUTPUT MENU BAR

OUTPUT's menu bar has four menus labeled Desk, File, Edit, and Options. They are described in Table OG 1-1.

Table OG 1-1.   OUTPUT Menu Bar

Menu Title	What Menu Contains
Desk	Commands to see information about OUTPUT and start your desk accessories.
File	Commands to open and close existing output lists, create and save new output lists, plus get and save options for your output devices.
Edit	Commands to arrange the names in the output list.
Options	Commands to select options for your output devices and make the current options the default settings.

Section 3, "Menu Commands," lists and explains the commands you see in the menus.

End of Section 1

Using OUTPUT

This section gives you a quick overview of the OUTPUT procedures. It also gives step-by-step instructions on how to create and save the output list, set options for your output devices, and reproduce the pictures named in the output list on your screen, printer, or plotter.

A QUICK LOOK AT OUTPUT

There are 4 steps to producing output:

1. Arrange the picture names sequentially in the output list.
2. Choose **Save As...** from the File Menu if you desire to save the output list for later use.
3. Check the assigned options for your screen, printer, and plotter and, if necessary, change them using the Option Menu commands.
4. Choose **Start Output...** from the File Menu when you are ready to reproduce the pictures named in the output list. OUTPUT asks if you want to send them to the screen, printer, or plotter.

The following sections give you more details about these four steps.

CREATING AN OUTPUT LIST

You must put the names of the charts, graphs, or designs you wish to reproduce into an output list before you can send them to an output device. There are two ways to create a new output list as follows:

- Start OUTPUT.
- Choose the **New** command from OUTPUT's File Menu.

Starting OUTPUT

If you have not pre-selected any picture or output list names, start OUTPUT. OUTPUT displays an empty, untitled output list. If you want to add picture names to it, see "Adding a Name" below.

Choosing the New Command

If an output list is currently on display and you want to clear the screen and display an empty, untitled list, choose **New** from the File Menu.

The **New** command causes one of two things to happen depending on whether the current output list is new or old:

- If you have not made any changes to an old list, OUTPUT clears the output list without saving it and displays an empty, untitled list.

- If the current list is new or if you have made changes to a pre-existing list, OUTPUT displays a dialog box that reminds you to save the list.

To clear the list without saving it, click on Continue.

To return to the output list without clearing it, click on Cancel or press the Enter key. After you save it, choose **New** to create a new output list.

_____

ARRANGING OUTPUT LIST NAMES

This section explains how to add, duplicate, move, or delete names in
an output list.

Adding a Name

To add a name to an output list do the following:

1. Choose **Add Name...** from the Edit Menu. OUTPUT displays the
    ITEM SELECTOR dialog box.

2. Click on the desired name in the directory window or type the
    name in the Selection line.

    Note: All the documents you enter in the output list must be in
    the same directory.

3. To add the name to the output list, click on OK or press the Enter
    key.

To return to the output list without adding a new name, click on
Cancel.

To change the directory path on your current disk, do the following:

1. Click on the directory window's close box. If need be, do it again,
    until the window contains a list of folder names (they're preceded
    by diamonds and have no type following the period).

2. To change to the new directory path, click on the folder name you
    want. OUTPUT displays a list of document names from that folder
    with the type specified on the Directory line.

To change to a directory path on another disk, do the following:

1. Click anywhere on the Directory line.

2. Press the Escape (Esc) key to erase the entire path name.

3. Type the desired disk drive identifier, followed by an asterisk

(called a "wildcard" character), a period, and the document type you want. The correct form is A:*.GEM.

4. Click in the directory window to see the list of folders on the new disk.

If you already know the name of the folder you want, you can specify it in the Directory line. In that case you would type A:\DRAW*.GEM.

Note: The directory window is not automatically updated when you specify a new directory path. You must click in the window to update it.

OUTPUT provides the following shortcuts with the ITEM SELECTOR:

● If you only want to put a single document on the output list, you can double-click on the document name in the directory window. This has the same effect as clicking on the name and then clicking on OK.

● If you want to put all the documents from the current directory window on the output list (up to a maximum of 36), leave the Selection line blank and click on OK.

After you have added all the names you desire, you can save the list for future use (see "Saving an Output List" below), or choose **Start Output...** from the File Menu.

Duplicating a Name

To reproduce a picture more than once, duplicate its name in the output list as follows:

1. Click on the names you want to duplicate. OUTPUT highlights each name when you select it.

    You can select multiple names two ways. If the names are <u>not</u> next to each other, use the Shift-click mouse technique. If the names are next to each other, you can drag to select them as you did in the tutorial on page GS 3-20. Drag selecting is also called the "rubber-rectangle" method.

2. Choose **Duplicate Name** from the Edit Menu. OUTPUT adds the selected names under the original names.

Note: If you try to choose more names to duplicate than the output list has spaces for, OUTPUT dims the **Duplicate Name** command so you cannot choose it.

Moving a Name

To move a name to another location in the list, select the name and drag it to the desired location. When you release the mouse button, OUTPUT rearranges the list. You can move only one name at a time.

Deleting a Name

To delete a name from the output list, do the following:

1. Click on the name you want to delete. You can delete multiple names using the Shift-click and rubber-rectangle mouse techniques.

2. Choose **Delete Name** from the Edit Menu. OUTPUT erases the name you selected from the list.

Selecting Text Document Names

Although OUTPUT is specially designed to send pictures to output devices, it can also send text documents to either a screen or printer. It does, however, have certain limitations.

When you output a text document, OUTPUT does not use page breaks. Instead, it sends the document to your output device in a continual stream. Therefore, when you display the document on your screen, for example, you must use the Ctrl-S and Ctrl-Q keystrokes to control the scrolling. Press the Control key and the letter S simultaneously to stop the scrolling; press the Control key and Q to restart it.

Note: When you print a text document on your printer, be sure to use continuous-form paper.

SAVING AN OUTPUT LIST

Once you have all the entries you want in the output list, you can save the list and give it a name. Later you can open it, modify its contents (if you wish), and reproduce the pictures named in it.

To save a new output list, or save a list under a different name, do the following:

1. Choose **Save As...** from the File Menu. Figure OG 2-2 shows the SAVE LIST dialog box. **Note:** OUTPUT displays a similar dialog box when you choose the **Save Options...** command.

2. Type the name you wish to give the output list. OUTPUT adds .LIS to the list's name to indicate it is an output list and stores the new list in the directory.
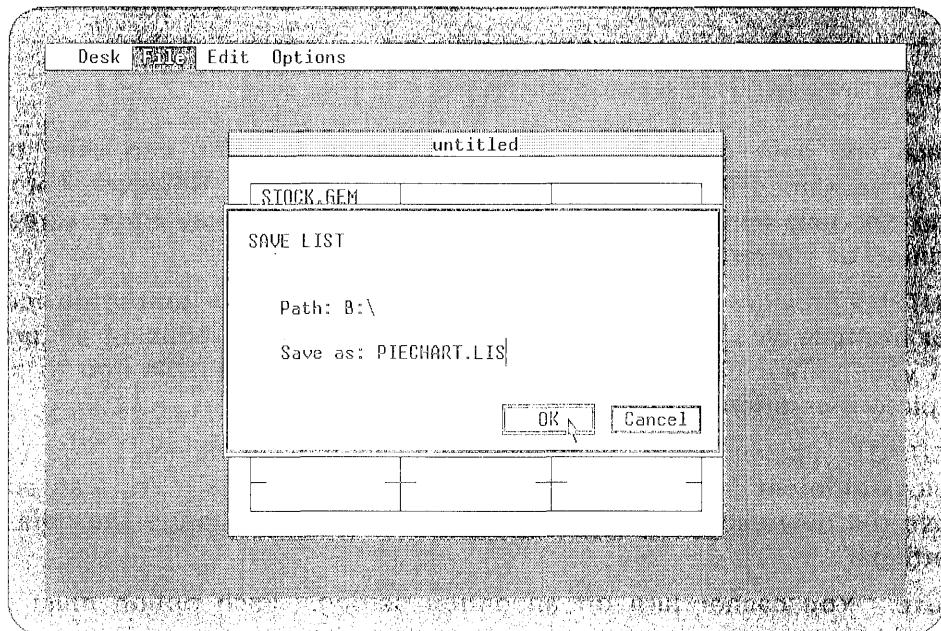
Figure OG 2-1.   SAVE LIST Dialog

To save an output list with its previous name, choose **Save** from the File Menu. OUTPUT stores it on the disk in its original directory path.

In either save procedure, your current output list remains on your screen so you can continue working with it.

If you have just saved an output list and are ready to create another one, choose **New** from the File Menu. OUTPUT clears the current output list and displays an empty, untitled list you can add names to.

CHANGING OUTPUT DEVICE OPTIONS

Once you have created and saved an output list, you can send the pictures named in it directly to your output device. However, before you do, you might want to check or change the way your screen, printer, or plotter reproduces your pictures.

OUTPUT provides a variety of settings for each of your output devices. For example, you can set the print justification for reproducing pictures on your printer or plotter. The justification settings enable you to put a picture in different positions on the page.

OUTPUT supplies a set of default options for each device. You can select different options, changing the current settings. You can also save the new settings for later use. You can even change the default settings.

Note: You cannot turn off an option setting. Each option must be set.

One way to know if you need to change the output device options is by trial and error. For example, you won't know if you need to change the justification until you see how your picture looks after you output it.

This section explains your output device options.

Screen Options

Figure OG 2-2 shows the SCREEN OPTIONS dialog box that OUTPUT displays when you choose **Screen...** from the Options Menu.
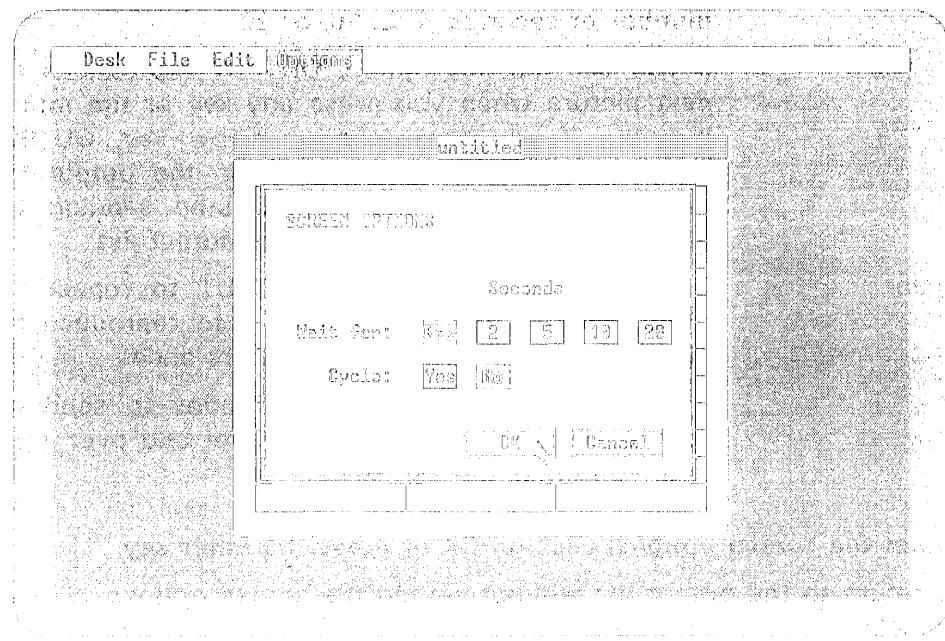
Figure OG 2-2.   SCREEN OPTIONS Dialog

Click on the desired settings as follows:

Wait for: Click on Key if you want OUTPUT to wait for you to strike a key before it reproduces the next picture in the output list.   Otherwise, click on the desired number of seconds: 2, 5, 10, or 20.

If you use the Key option, OUTPUT reproduces the next picture when you press any key or the mouse button.   If you press the up-arrow key, OUTPUT reproduces the previous picture in the output list. You can press the Esc key to stop sending the pictures and return to the current output list.

Cycle: Click on Yes if you want OUTPUT to repeat the cycle; click on No if you want it to reproduce the pictures listed in the output list only once.

If you select Yes, OUTPUT continues to send the pictures listed in the output list over and over again until you press the Esc key.

To set the screen options, click on OK or press the Enter key.

To return to the output list without setting the screen options, click on Cancel.

Printer or Plotter Options

Figure OG 2-3 shows the PRINTER OPTIONS dialog box that OUTPUT displays when you choose **Printer...** from the Options Menu.

Note: The plotter options are identical to the printer options.
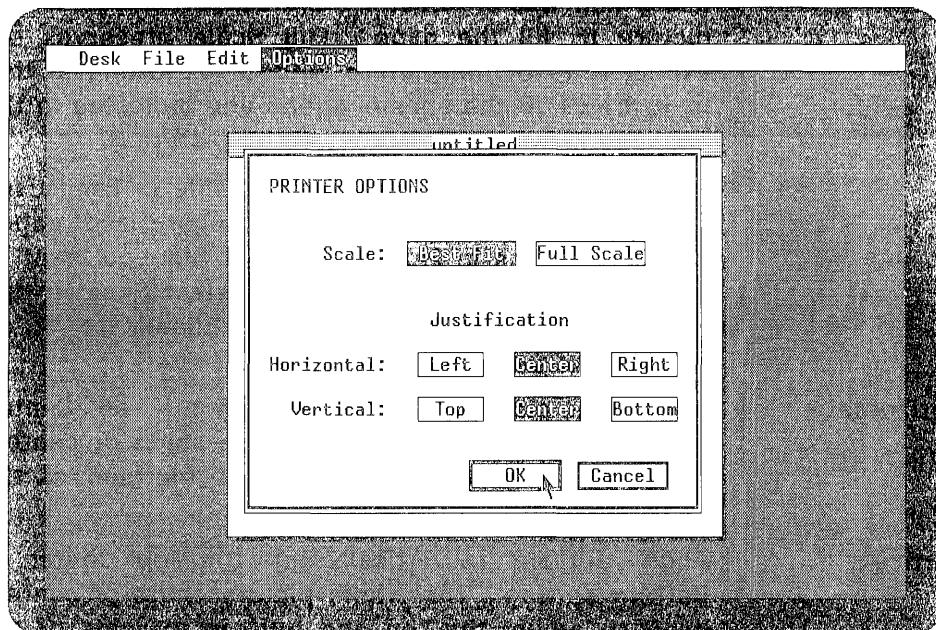
Figure OG 2-3.   PRINTER OPTIONS Dialog

Click on the desired settings as follows:

Scale: Click on Best Fit if you want OUTPUT to do its best
                to fit the picture on one page of paper; click on Full
                Scale if you want it to break the page at the end of
                the paper and continue the output on the next page
                using Full Scale. Best Fit shrinks or stretches the
                picture to fill the page. Full Scale preserves the
                aspect ratio of the picture without distorting it; that
                is, it draws to the specifications you indicated in the
                application where you created the picture.

                For example, say you designed a table in Landscape
                layout that fits horizontally on legal-sized paper,
                8-1/2" x 14" as in **Figure OG 2-4**. But you want to
                print it on 8-1/2" x 11" paper. Select Best Fit and
                let OUTPUT scale it down proportionally to fit on
                the smaller page.

Horizontal: Align your picture horizontally with the Left, Center,
                or Right setting. The whole picture shifts or centers
                itself to adjust the left and right margins of the
                page. (See Figure OG 2-4).

Vertical: Align your picture vertically with the Top, Center, or
                Bottom setting. The whole picture shifts or centers
                itself to adjust the top and bottom margins of the
                page.

To set the options, click on OK or press the Enter key.

To return to the output list without setting the options, click on
Cancel.

Landscape layout,
center justified

Portrait layout,
right justified
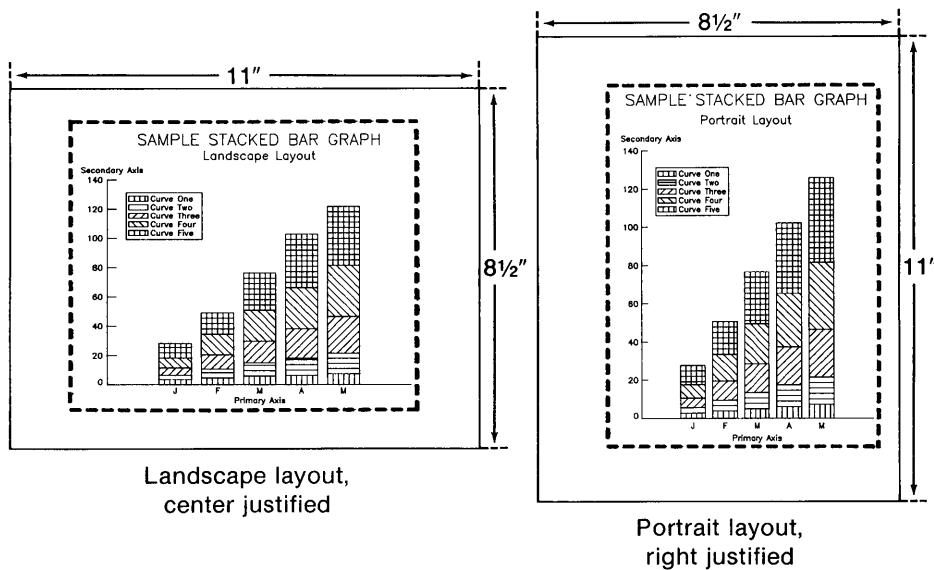
Figure OG 2-4. Layout and Justification

SAVING OUTPUT DEVICE OPTIONS

You can save the current option settings for your output devices with the **Save Options...** command. You can restore those settings with the **Get Options...** command next time you want to use them.

Save Options... creates a document containing options for all the output devices connected to your system. **Get Options...** reads that document and resets the current options to match those in the saved option document.

This is handy if you have special option settings you want to use only occasionally. Save them using a unique name, then restore them at the appropriate time. Meanwhile, you can use the default settings.

Note: These commands do not change OUTPUT's default options (those OUTPUT starts up with). If you want to change OUTPUT's initial options, you must use **Make Default** from the Options Menu as explained in "Setting Output Device Default Options" later in this section.

To save the current options for later use, do the following:

1. Choose **Save Options...** from the File Menu. Figure OG 2-1 shows the SAVE LIST dialog box, which is similar to the SAVE OPTIONS dialog box.

2. Type the name you wish to give the option document. Output adds .OPT to the name to indicate it is an option document and stores it in the directory that contains OUTPUT.

3. To save the new option document, click on OK or press the Enter key.

    To return to the output list without saving a new option document, click on Cancel.

GETTING OUTPUT DEVICE OPTIONS

When you want to use a set of options saved in the above procedure, do the following:

1. Choose **Get Options...** from the File Menu. OUTPUT displays the ITEM SELECTOR with the names of the option documents (document names that end in .OPT) in the directory that contains OUTPUT.

2. Click on the desired option document's name in the directory window or type the name followed by .OPT in the Selection line.

3. To reset the current options for all output devices to those in the selected option document, click on OK or press the Enter key.

   To return to the output list without resetting the options, click on Cancel.

Note: See "Adding a Name" above or your GEM application documentation for more information about how to use the ITEM SELECTOR.

You can choose **Get Options...** again and specify DEFAULT.OPT to restore OUTPUT's default options after you are finished with the special options.

SETTING OUTPUT DEVICE DEFAULT OPTIONS

When you first start OUTPUT, it indicates certain option settings. These are the "default settings." You can change OUTPUT's initial option settings to the settings you most frequently use with **Make Default** from the Options Menu. Use the following procedure:

1. Set the desired option settings using the Options Menu commands.

2. Choose **Make Default** from the Options Menu. OUTPUT updates DEFAULT.OPT, which it uses to set the initial options for all of your system's output devices each time you start OUTPUT.

STARTING THE OUTPUT

After you create your output list and set the options for your output device, you are ready to reproduce the pictures named in the list.

If the current list is not the one you want to output, you must first open the output list you wish to send to your output device.

Opening an Output List

To open an output list, do the following:

1. Choose **Open...** from the File Menu. OUTPUT displays the ITEM SELECTOR with the names of the output lists (document names that end in .LIS) in your default disk's directory.

2. Click on the desired output list's name in the directory window or type the name followed by .LIS in the Selection entry area.

    If you do not see the name you want in the directory window, even by scrolling it, you can specify a different disk and directory path. Be sure to type *.LIS after the directory name to indicate that you want to see all the output list names in that directory.

Note: See "Adding a Name" above or your GEM application documentation for more information about the use of the ITEM SELECTOR.

Choosing Start Output...

If the current output list is the one you want, and the options are set correctly for your output device, you are ready to go.

Choose **Start Output...** from the File Menu to display the START OUTPUT dialog box shown in Figure OG 2-5.
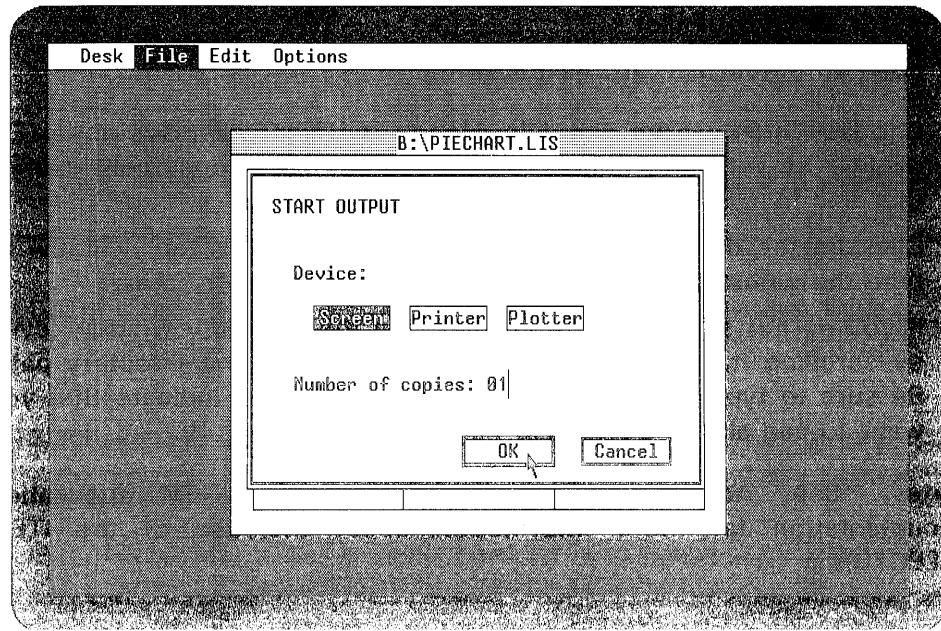
Figure OG 2-5.   START OUTPUT Dialog

To send the pictures named in the output list to your output device, do the following:

1. Click on the output device you wish to use.
2. Type the number of copies you want to reproduce, if it differs from the current number.
3. To start the output, click on OK or press the Enter key.

    To return to the output list without reproducing the pictures named in it, click on Cancel.

Note: To stop sending pictures to the output device, press the Esc key. OUTPUT stops only after it finishes sending the current picture to the output device.

If you have just reproduced the pictures named in an output list and want to reproduce the pictures listed in another one, you need to close the current output list and open the next one you wish to reproduce. Then choose **Start Output...** from the File Menu again.

CLOSING AN OUTPUT LIST

To close the current output list and clear it from the screen, choose **Close** from the File Menu.

If you did not save the current output list before choosing **Close**, OUTPUT does one of the following:

● If the current list is new or if you have made changes to a pre-existing list, OUTPUT displays the SAVE LIST dialog box and asks you to supply a name, as if you had chosen **Save As...** from the File Menu.

● If you have not made changes to a pre-existing output list, OUTPUT saves it under its previous name, as if you had chosen **Save** from the File Menu.

QUITTING OUTPUT

When you are finished with a session of OUTPUT and wish to return to the GEM Desktop or a GEM application, choose **Quit** from the File Menu.

End of Section 2

Menu Commands

This section describes the commands in the Desk, File, Edit, and Options Menus.

Desk	File	Edit	Options
Output Info...	New	Add Name...	Screen...
	Open...	Duplicate Name	Printer...
Calculator	Close	Delete Name	Plotter...
Clock	Save	*Change Name?*	
	Save As...		Make Default
	Get Options...		
	Save Options...		
	Start Output...		
	Quit		
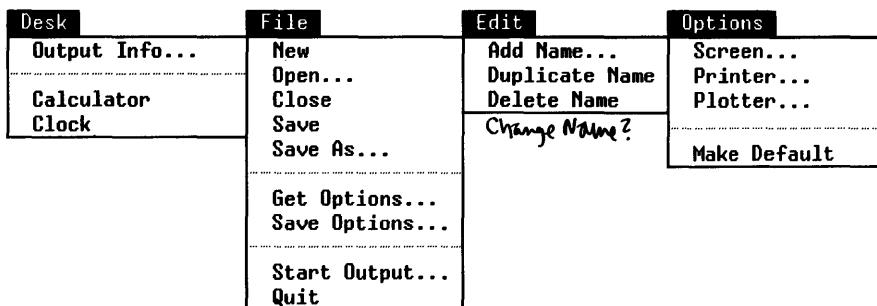
Figure OG 3-1.   OUTPUT Menus

DESK MENU

The Desk Menu is divided into two sections by a dashed line. The top section always shows the **Output Info...** command which gives you a dialog introducing you to OUTPUT. The bottom section, however, varies depending on what desk accessories you have available on your system. You can choose any desk accessory that's listed.

FILE MENU

You use the File Menu commands to open and close existing output lists, create and save new output lists, plus get and save options for your output devices.

Table OG 3-1 describes the File Menu commands.

Table OG 3-1.   File Menu

Command	Description
New	Clears the current output list without saving it and displays an empty, untitled list ready for you to add names to.
Open...	Displays the output list you specify on your screen.
Close	Closes the current output list, removing it from your screen.
Save	Saves the current output list under its previous name, leaving it on your screen.
Save As...	Saves the current output list, but under a different name you specify. OUTPUT automatically adds .LIS to an output list's name. Always use the **Save As...** command to save a new list.

Table OG 3-1. (continued)

Command	Description
Get Options...	Resets the current options for all output devices to match those in the option document that you select (document names that end in .OPT). You create an option document using the **Save Options...** command.
	To restore the default options during a session of OUTPUT, choose the **Get Options...** command and select the DEFAULT.OPT document.
Save Options...	Saves the current options for all devices in an option document. OUTPUT automatically adds OPT to an option document's name. You can restore these options using the **Get Options...** command.
Start Output...	Sends the pictures named in the current output list to the specified output device.
Quit	Stops OUTPUT and returns you to either the GEM Desktop or a GEM application.

EDIT MENU

You use the Edit Menu commands to arrange names in the output list. Table OG 3-2 describes the Edit Menu commands.

Table OG 3-2.   Edit Menu

Command	Description
Add Name...	Adds a name to the output list.
Duplicate Name	Repeats selected name(s) in the output list.
Delete Name	Removes selected name(s) from the output list.

OPTIONS MENU

You use the Options Menu commands to select options for your output devices and make the current options the default settings.

Table 3-3 describes the Options Menu commands.

Table OG 3-3.   Options Menu

Command	Description
Screen...	Sets options for your screen.
Printer...	Sets options for your printer.
Plotter...	Sets options for your plotter.
Make Default	Makes the current options OUTPUT's initial settings for your screen, printer, and plotter. The **Make Default** command updates DEFAULT.OPT, which OUTPUT uses to set the initial options for all of your system's output devices each time you start it. You can also choose **Get Options...** and specify DEFAULT.OPT to restore the default option settings during a session of OUTPUT.

End of Section 3

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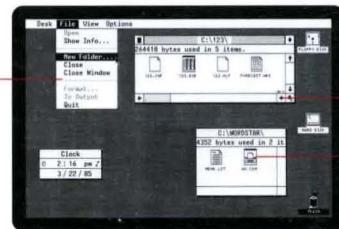
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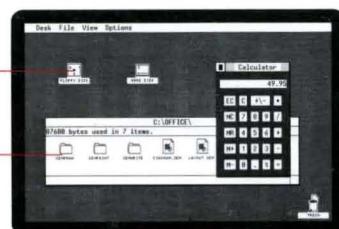
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Use scroll bars to view the off-screen contents of any window, quickly and easily.

Use icons to perform a wide variety of commands. Pick up and open file folders. Switch disk drives. Or do calculations with the GEM Desktop built-in calculator.

Open any of your applications (such as spreadsheets, word processors, data bases, etc.) directly from GEM Desktop. Just point and push a button.

Copy or move information simply by moving icons (such as file folders) from one window to another. Or delete information simply by dragging the appropriate file to the waste basket icon.

System Requirements:

Computers: IBM PC Family and 100% compatibles.

Graphics Requirements: Must have IBM Color Graphics Adaptor, IBM Enhanced Color Graphics Adaptor, Hercules Graphics Card, or compatibles.

Pointers: Mouse Systems PC Mouse,™ Microsoft Mouse,™ Summagraphics* 12″ Tablet, or compatibles.

Minimum Memory: 256K RAM for PC DOS 2.X, 320K for PC DOS 3.X.

```
PRODUCT NAME    : GEM™ Desktop
IMPLEMENTATION  : PC DOS
VERSION NUMBER  : 1.0
SERIAL NUMBER   : 5054-0000-004181
```