

DIGITAL
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GSX-86 tm
Graphics Extension
Users Guide

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Foreword

INTRODUCTION This GSX-86" Graphics Extension User's Guide explains the features of GSX-86, Graphics System Extension for microcomputer operating systems. GSX-86 lets you use graphic applications and many types of printers, plotters, and graphics cards. GSX-86 supports the following operating systems:

- o CP/M family
- o MS-DOS
- o PC DOS

If you are a new user of GSX-86, this guide helps you install GSX-86 on your microcomputer system so that you can use your graphics applications with the many devices GSX-86 supports.

GSX-86

GSX-86 adds graphic capability and a device-independent operating environment to supported operating systems. After you install GSX-86, your system has the following features:

- o You can use many types of plotters, printers, and other graphic devices.
- o You can use applications that use GSX-86 on many types of microcomputers.
- o You can use graphic applications such as OR Graph" and DR Draw" to create high-quality presentation and creative graphics. DR Graph allows you to graph and plot data by making simple menu selections. DR Draw allows you to draw complex graphic designs with your microcomputer.

v

**HOW THIS GUIDE
IS ORGANIZED** This guide is organized in four sections. Section 1 describes how GSX-86 works. Section 2 tells you how to start GSX-86. Sections 3 and 4 describe and give information on using GINSTALL, the GSX-86 installation program.

CONVENTIONS This guide uses several conventions:

- o For clarity, commands and keystrokes you enter are capitalized and appear in boldface type. However, you do not need to capitalize commands.
- o The CONTROL key is represented by the symbol \wedge . This symbol followed by an alphabetic character means that you must press the CONTROL key and the alphabetic character key simultaneously. For example, $\wedge W$ means that you must press the CONTROL key and the W key simultaneously.
- o Colored type displays information that appears on your monitor.

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Section I Overview

INTRODUCTION This section describes how GSX-86 works with your microcomputer. The concepts in this section provide background information for the procedures described in later sections.

HOW GSX-86 WORKS Most graphic devices such as monitors, printers, and plotters draw lines, fill in areas, and produce text differently. GSX-86 manages the differences among these devices and ensures that graphic applications using GSX-86 can communicate with a variety of devices.

Applications written for GSX-86 use the GSX-86 subroutine library, which provides a standard graphic programming interface. GSX-86 also provides device drivers that translate the calls generated by the application to fit the peculiarities of each device. For more details on programming with GSX-86, refer to the GSX-86 Graphics Extension Programmer's Guide.

Device Drivers Because each graphic device is mechanically and electronically different, each requires a special program to communicate with your computer. This program is called a device driver.

GSX-86 gives you a library of device drivers that allows you to use many devices with your microcomputer.

GINSTALL

GINSTALL, the GSX-86 device driver installation program, tells you what device drivers are in the device driver library. You can use GINSTALL to select devices that match the devices on your microcomputer. After you select devices, GINSTALL creates an assignment file and installs the assignment file and the device drivers on the diskette you specify, which is usually the application diskette.

If you change the devices on your microcomputer, GINSTALL lets you delete and add the appropriate device drivers.

Note: Unless you have a diskette, usually your application diskette, that contains an assignment file and device drivers that match the devices on your computer, you need to use GINSTALL before you use GSX-86. Section 3 contains instructions on how to use GINSTALL.

**STARTING YOUR
SYSTEM**

Set up the monitor, printer, plotter, and any other devices. Refer to your microcomputer and operating system manuals for details on how to install devices and start your system.

Before you use GSX-86, make duplicates of any GSX-86 distribution diskettes. Use the format and copy programs for your operating system. Refer to your operating system manual for instructions on the appropriate procedures and commands.

After you make the duplicates, store the distribution diskettes in a safe place away from heat, magnets, humidity, dust, and extreme temperature changes. Use the duplicates as your GSX-86 work diskettes.

You are now ready to turn to Section 2, "Starting GSX-86."

End of Section 1

1-2

Section 2

Starting GSX-86

INTRODUCTION This section explains how you start GSX-86 and delete GSX-86 from memory. A checklist is included in case you have a problem starting GSX-86.

INSTALLING GSX-86 Before using a graphic application that requires GSX-86, an assignment file and device drivers that match your devices must be on your application diskette and GSX-86 must be installed.

- o Some applications contain an assignment file and a preconfigured set of device drivers that might match the devices on your microcomputer. Refer to the description of the application to learn whether it comes with device drivers or whether you must use GINSTALL to install device drivers. If the application diskette contains device drivers, ensure that they match the devices on your microcomputer. If you have different devices, you must use GINSTALL before you install GSX-86.
- o Some applications install GSX-86 for you. Refer to the instructions on starting your application to learn whether you must start GSX-86 or whether the application starts it for you.

GSX-86 Command The command you use to install GSX-86 differs depending on the microcomputer operating system you use. Table 2-1 shows the commands for each operating system GSX-86 supports.

2-1

Table 2-1. Commands to Start GSX-86

Operating System	Command
CP/M-86@	GRAPHICS
Concurrent CP/M"	GRAPHICS
PC DOS	GSX
MS-DOS	GSX

After you start your system and the operating system prompt is on your monitor, type the command to start GSX-86 in the following form:

<dl>:COMMAND <d2>

The <dl> symbol represents the drive identifier of the disk drive where GSX-86 is located. COMMAND represents the command you use to start GSX-86 on your operating system. The <d2> symbol represents the drive identifier of the disk drive where the assignment file and the device drivers are located. In most cases, the diskette in <d2> is your application diskette. Examples follow.

1. You are using CP/M-86. GSX-86 is on the diskette in drive A, the default drive. Your application diskette, which contains the assignment file and device drivers, is in drive B. In response to the operating system prompt, you type

GRAJPHICS B:

2. You are using PC DOS or MS-DOS. GSX-86 is on the diskette in drive B. Drive A, the default drive, contains your application diskette, assignment file, and device drivers. In response to the operating system prompt, you type

B:GSX A:

2- 2

3. You are using Concurrent CP/M. GSX-86 is on the diskette in drive A, the default drive.

The diskette in drive A also contains the application, assignment file, and device drivers. In response to the operating system prompt, you type

GRAPHICS

When you start GSX-86, it is loaded into memory. After GSX-86 is loaded, a copyright message appears on your monitor. You are ready to start your application.

DELETING GSX-86

When you are not using GSX-86, you can free the memory space used by GSX-86. To do this, ensure the operating system prompt is on your monitor. Then type the command to delete GSX-86 from memory. Table 2-2 shows the commands.

Table 2-2. Co ds to Delete GSX-86

Operating System	-T	Command
CP/M-86		GRAPHICS N
Concurrent CP/M		GRAPHICS N
PC DOS, version 2.0 and above		GRAPHICS N
MS-DOS, version 2.0 and above		GRAPHICS N

If you are using versions of PC DOS and MS-DOS that precede 2.0, you restart your system to delete GSX-86. To do this, turn the power off on your computer or press and hold the CONTROL, ALTERNATE, and DELETE keys; then release all three keys simultaneously.

Note: Before restarting your system, you should exit the application and save any files you have created.

2-3

When you use a command to delete GSX-86 from memory, a copyright notice appears on your monitor followed by the message

GSX-86 not installed

You can also receive the above message if you cannot install GSX-86.

ERROR MESSAGES When you start GSX-86, you can receive error messages. The format of the messages differs according to your operating system. CP/M-86 echoes what you type followed by a question mark, ?. Concurrent CP/M echoes what you type followed by a question mark, ?, and a brief message. PC DOS and MS-DOS tell you that you entered a bad command or filename.

If you receive any of the above error messages when you start GSX-86, one of the following conditions exists:

- o You typed the command incorrectly.
- o GSX-86 is not on the diskette in the drive you identified in the command.

Either retype the command or insert the diskette that contains GSX-86 in the correct drive.

Refer to Appendix A for a description of error messages and steps you can take to correct the errors.

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**INSTALLATION
CHECKLIST** If you have a problem starting GSX-86, use the checklist below to ensure you have completed all necessary steps.

Are the display monitor, printer, plotter and other devices properly attached to your computer?

Is the operating system prompt on your monitor?

E:1 Is the diskette containing GSX-86 in the disk drive you specified in the command to start GSX-86?

E:1 Did you specify the correct drive identifier of the drive where the assignment file and device drivers are located?

F:1 Did you type the correct command to start GSX-86?

End of Section 2

Section 3

Introduction to GINSTALL

INTRODUCTION

GINSTALL, the GSX-86 device driver installation program, lets you install device drivers for a variety of display monitors, printers, plotters, and specially designed computer output cameras for use with graphic applications that use GSX-86.

GINSTALL provides menus from which you can select drivers for the devices you are using. GINSTALL uses your menu selections to create or update the assignment file, described below.

ASSIGNMENT FILE

The assignment file, named ASSIGN.SYS, lists the device drivers of the devices you select, and communicates this information to GSX-86.

GINSTALL creates or updates the assignment file on the application diskette or, if the application diskette does not have sufficient space for these files, on another diskette.

SYSTEM REQUIREMENTS

To use GINSTALL, your system must contain either:

- o two floppy diskette drives
- o a hard disk drive and one floppy diskette drive

USING GINSTALL MENUS

GINSTALL contains menus that let you do the following:

- o select a device for addition to the assignment file
- o select a device for deletion from the assignment file
- o display the current device selections

3-1

Selecting Options

- o update the assignment file
- o exit GINSTALL and return to the operating system

GINSTALL displays two types of menus: numbered lists and queries.

To select an option from a numbered list, type its number after the prompt

Enter Option Number -

and press the RETURN key.

The query menus require a Yes or No response. Type Y or N, and press the RETURN key.

Correcting Typing Errors

If you mistype a response, use the BACKSPACE key to move the cursor to its original position. The BACKSPACE key does not erase characters. Type the correct response over the error, and press the RETURN key.

Returning to the MAIN MENU

All of the numbered list menus that follow the MAIN MENU let you press the ESCAPE (ESC) key to return to the MAIN MENU. When you do, GINSTALL cancels any selection in process.

GINSTALL on the Default Drive

Before you start GINSTALL, insert the diskette containing GINSTALL in the default drive. If you have copied GINSTALL to a hard disk, set your default drive to the hard disk.

STARTING GINSTALL

To start GINSTALL, type the following command in response to the operating system prompt:

GINSTALL

3- 2

When GINSTALL starts, a copyright message, followed by a brief description of GINSTALL, appears on your monitor. Press the RETURN key to display the first menu.

**SPECIFY DISK
DRIVES MENU**

GINSTALL's first menu, SPECIFY DISK DRIVES, in Figure 3-1, asks you to identify the drives containing the application diskette and the device driver diskette. If the application diskette does not have sufficient space for the assignment file and device driver files, you can use another diskette in place of the application diskette.

SPECIFY DISK DREVES

Enter drive containing your application work disk.

Enter drive containing the device driver disk.

Figure 3-1. SPECIFY DISK DRIVES

Type the drive identifier for the drive containing the diskette on which GINSTALL will create or update the assignment file and device driver files, and press the RETURN key. The drive identifier can be a letter from A to P.

Type the drive identifier for the drive containing the device driver diskette, and press the RETURN key. After a cause the MAIN MENU appears. The MAIN MENU and its functions are described in Section 4.

End of Section 3

Section 4

GINSTALL Functions

INTRODUCTION

This section describes the functions contained in GINSTALL's MAIN MENU. The functions are described in the order in which they appear on the menu.

NAIN MF.NU FUNCTIONS

The MAIN MENU functions let you do the following:

- o add devices to the assignment file
- o delete devices from the assignment file
- 9 display the current selections in the assignment file
- o update the assignment file and copy device driver files to the application diskette
- o exit GINSTALL and return to the operating system

The MAIN MENU is illustrated in Figure 4-1.

MAIN MENU**Options**

- 1 Select device for addition
- 2 Select device for deletion
- 3 Display current device selections

- 8 Update application work disk
- 9 Exit to operating system

=====
Enter Option Number -

Figure 4-1. MAIN MENU

To select a function from the MAIN MENU, type its option number after the Enter Option Number prompt, and press the RETURN key.

ADDITIONAL MENUS

When you select the SELECT DEVICE FOR ADDITION or the SELECT DEVICE FOR DELETION function, GINSTALL displays additional menus. These menus are named and described in the descriptions of the two SELECT functions.

4- 2

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MAIN MENU Functions

SELECTING DEVICE FOR ADDITION

The SELECT DEVICE FOR ADDITION function lets you add devices to the assignment file. However, GINSTALL does not change the assignment file or copy device driver files until you return to the MAIN MENU and choose the UPDATE APPLICATION WORK DISK function.

SELECT DEVICE CATEGORY Menu

The first menu you see when you select option number 1 from the MAIN MENU is the SELECT DEVICE CATEGORY FOR ADL)ION Menu, illustrated in Figure 4-2.

SELECT DEVICE CATEGORY FOR ADDITION

Options

- 1 DISPLAY MONITORS
- 2 PLOTTERS
- 3 PRINTERS
- 4 CAMERAS

=====

Enter Option Number -
Escaper : return to Main Menu

Figure 4-2. SELECT DEVICE CATEGORY FOR ADDITION

To select one of the device categories type its option number. Press the RETURN key. GINSTALL then displays the device menu for the category you selected.

Error Message

You can receive the following error message when selecting a device category. GINSTALL displays the message at the bottom of the SELECT DEVICE CATEGORY FOR ADOfflo,q Menu.

Selected category is full. You must delete a device from the category before adding another.

Press RETURN when ready to proceed

The assignment file has a limit to the number of devices in each device category that it can contain. If you try to select a category that contains its limit, GINSTALL displays the above message.

Press the RETURN key to return to the MAIN MENU. To delete a device, use the SELECT DEVICE FOR DELETION function, MAIN MENU selection number 2.

Device Menus

The device menus for display monitors, plotters, printers, and cameras list the devices for which driver files exist. An option number precedes a brief description of each device. Figures 4-3 through 4-6 are examples of typical device menus.

To select a device from the menu, type its option number after the Enter Option Number prompt, and press the RETURN key.

DISPLAY MONITORS**Options**

- 1 IBM Color Adapter COLOR MODE
- 2 IBM Color Adapter MONOCHROME MODE
- 3 Plantronics PC+ COLORPLUS Adapter
- 4 Hercules Graphics Card
- 5 Artist 2 Graphics Card

^AZ: page down ^AW: page up
^AC: select/info ESC: go to Main Menu

Enter Option Number Mode: SELECT

Figure 4-3. DISPLAY NOINITORS

PLOTTERS

Options

- 1 Hewlett Packard 7470A/7475A Platter
- 2 Houston Instruments Models DMP-29/4X
- 3 Strobe Models 100/200/260 Platter

=====

^AZ: page down ^AW: page up
^AC: select/info ESC: go to Main Menu

=====

Enter Option Number - Mode: SELECT

Figure 4-4. PLOTTERS

PRINTERS**Options**

- 1 IBM/Epson Graphics Printers HI RES
- 2 IBM/Epson Graphics Printers LO RES
- 3 Diablo Model CLSO Color Ink Tet
- 4 Transtar Color Printer
- 5 Okidata MicroLine 82A/83A/84/92/93
- 6 C. Itah Model 8510A
- 7 Anadex Models DP-9001A,9501A,9625A
- 8 Centronics Models 351/3S2/353
- 9 Data South Model 05180
- 10 Digital Equipment Model LAICO
- 11 Digital Equipment Model LASO
- 12 IDS (Monochrome) Prism 80/132/480
- 13 Mannesmann TallS MT160 HI RES MODE

=====
^Z: page down ^W: page up
^C: select/info ESC: go to Main Menu
=====

Enter Option Number Made:

Figure 4-5a- PRINTERS Page I

PRINTERS

Options

14 Philips Model GP 300L HI RES MODE

15 Philips Model GP 300L LO RES MODE

16 Printranix MVP

=====

^AZ: page down ^AW: page up
^AC: select/info ESC: go to Main Menu

=====

Enter Option Number mode : SELECT.

Figure 4-5b. PRINTERS Page 2

CAMERAS

Options
I Polaroid Palette

^Z: page down **^W:** page up
^C: select/info **ESC:** go to Main Menu

Enter Option Number - Mode: SELECT

Figure 4-6. CAMERAS

Special Keystrokes

At the bottom of the device menu screen you see a small informational panel describing several keystrokes you can use. Table 4-1 names the keystrokes and describes their actions.

Table 4-1. DEVICE KEYSSTROKES

	KEYSTROKE	ACTION
	[^] Z	Displays next page of menu. For example, the printer menu (Figure 4-5a and 4-5b) is two pages long. If no next page exists, [^] Z has no effect.
	[^] W	Displays previous page of menu. If no previous page exists, -W has no effect.
	[^] C	Switches between SELECT and INFO modes described below.
	ESC	Cancels current selection and returns to MAIN MENU.
SELECT and INFO Modes		For each device menu, GINSTALL supports two modes, SELECT and INFO. A reverse video rectangle at the bottom of the menu tells you the current mode. When the rectangle says SELECT, you can select a device by typing its option number and then pressing the RETURN key. To change from SELECT to INFO mode, press 'C. In INFO mode, when you type an option number and press the RETURN key, GINSTA-LL displays information describing the device. Figure 4-7 shows an example.

IBM Color Adapter MONOCHROME MODE

Driver File Name: IBMBLMP2.SYS Size:14K

Plot Area: 9 inches X 7 inches
640 pixels X 200 pixels

Comments:

This driver is for the IBM color graphic adapter card. It provides two colors at a resolution of 640H x 200V pixels.

=====

Press RETURN when ready to proceed

Figure 4-7. IBM Color Adapter MONOCHROME MODE

To return to the device menu, press the RETURN key. You remain in INFO mode.

You cannot select a device while you are in INFO mode. To return to SELECT mode, press ^C.

Subsequent Menus The type of device you select determines which menus GINSTALL displays next. For example, if you select a display monitor, you see one or more of the following menus:

SELECT MOUSE OPTION FOR DISPLAY MONITOR

MOUSE COMMUNICATION PORT

o SET PRIMARY DEVICE

If you select a plotter, printer, or camera,
you see one or more of the following menus:

- o PLOTTER, PRINTER, or CAMERA COMMUNICATION PORT
- o SET PRIMARY DEVICE

Each of these menus is described in this section.

**SELECT MOUSE
OPTION Menu**

When you select a display monitor, GINSTALL displays the SELECT MOUSE OPTION FOR DISPLAY MONITOR Menu, in Figure 4-8. In addition to listing several mice, the menu gives you the option of not using a mouse.

SELECT MOUSE OPTION FOR DISPLAY MONITOR

Options

- 1 No Mouse
- 2 Microsoft Mouse (requires MOUSE.COM)
- 3 PC Mouse bg Mouse Sgsteams Corp.
- 4 SummaMouse

Enter Option Number
ESCAPE: return to Main Menu

Figure 4-8. SELECT MOUSE OPTION FOR DISPLAY MONITOR

4-12

If you select the Microsoft(c) Mouse, you must copy the file MOUSE.COM to your application diskette. MOUSE.COM is supplied on a diskette that comes with the Microsoft Mouse.

If you select a mouse that comes with its own interface board and communication port (such as the Microsoft Mouse) or the No Mouse option, GINSTALL does one of the following:

- o Displays the SET PRIMARY DEVICE Menu, if the assignment file already lists a display monitor. The SET PRIMARY DEVICE menu is described later in this section.
- o Completes the selection and returns you to the MAIN MENU, if the assignment file does not already list a display monitor

If you select one of the other mouse options, GINSTALL displays the MOUSE COMMUNICATION PORT Menu, below.

MOUSE COMMUNICATION PORT Menu

With this menu you identify the communication port to which the mouse is connected. Without this information, GSX-86 does not know where to look for mouse input. Figure 4-9 shows a MOUSE COMMUNICATION PORT menu.

MOUSE COMMUNICATION PORT**Options**

- 1 Communication Port #1
- 2 Communication Port #2

Enter Option Number
ESCAPE: return to Main Menu

Figure 4-9. MOUSE COMMUNICATION PORT

After you select the communication port,
GINSTALL either:

- o Displays the SET PRIMARY DEVICE Menu, if the assignment file already lists a display monitor. The SET PRIMARY DEVICE menu is described later in this section.
- o Completes the selection and returns you to the MAIN MENU, if the assignment file does not already list a display monitor.

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MAIN MENU Functions

PLOTTER, PRINTER, and CAMERA

COMMUNICATION PORT Menus

If you select a plotter, printer, or camera, GINSTALL displays a communication port menu immediately after you select the device. The menu identifies the port to which the plotter, printer, or camera is connected. Without this information, GSX-86 does not know where to send plotter, printer, or camera output.

Type the communication port's option number, and press the RETURN key.

If the assignment file already lists a plotter, printer, or camera, GINSTALL displays the SET PRIMARY DEVICE menu.

However, if the assignment file does not list another plotter, printer, or camera, the selection is complete. GINSTALL returns you to the MAIN MENU.

SET PRIMARY DEVICE Menu

The SET PRIMARY DEVICE Menu lets you name the newly-selected device as the primary device for its category. The primary device is the device that an application uses when the assignment file lists more than one device of any type.

For example, if your system has two display monitors, the application directs all output to the primary display unless:

- o The application permits you to direct output to a secondary device.
- o You explicitly direct the output to the secondary device.

Changing the Primary Device

The SET PRIMARY DEVICE Menu, in Figure 4-10, identifies the device category, the primary device, and the device you just selected. The prompt asks if you want the new device to become the primary device. Type Y (Yes) or N (No), and press the RETURN key.

SET PRIMARY DEVICE

Device category:
DISPLAY MONITORS

If you connect more than one of any device type to your system, the application program uses the **PRIMARY** device unless you specify otherwise.

The current primary device for the category listed above is:

IBM Color Adapter MONOCHROME MODE

Do you want the device you have just selected for addition to the assignment file:

Hercules Graphics Card

to be the primary device? (Y/N)

Figure 4-10. SET PRIMARY DEVICE

If you type Y, the new device becomes the primary device.

If you type N, the current primary device remains the primary device.

After you respond to the SET PRIMARY DEVICE menu, the selection is complete. GINSTALL returns you to the MAIN MENU.

SELECTING DEVICE FOR DELETION The SELECT DEVICE FOR DELETION function lets you delete a device from the assignment file.

However, GINSTALL does not change the assignment file or delete device driver files until you return to the MAIN MENU and choose the UPDATE APPLICATION WORK DISK function.

SELECT DEVICE FOR DELETION Menu

To delete a device, select option number 2 from the MAIN MENU. GINSTALL displays the SELECT DEVICE FOR DELETION menu, which lists the devices currently selected for the assignment file. Figure 4-11 shows an example of the menu.

SELECT DEVICE FOR DELETION**Options**

- 1 IBM/Epson Graphics Printers HI RES
- 2 IBM Color Adapter MONOCHROME MODE
- 3 IBM Color Adapter COLOR MODE
- 4 Hewlett Packard 747OA/7475A Plotter

Enter Option Number
ESCAPE: return to Main Menu

Figure 4-11. SELECT DEVICE FOR DELETION

Type the option number of the device you want to delete, and press the RETURN key. GINSTALL selects the device for deletion and returns you to the MAIN MENU.

DISPLAY DEVICE SELECTIONS

The DISPLAY CURRENT DEVICE SELECTIONS function displays a list of the device drivers currently selected for the assignment file. Figure 4-12 shows a typical display.

CURRENT DEVICE SELECTIONS**DISPLAY MONITORS**

IBM Color Adapter MONOCHROME MODE
IBM Color Adapter COLOR MODE

PLOTTERS

Hewlett Packard 7470A/7475A Platter

PRINTERS

IBM/Epson Graphics Printers HI RE5

CAMERAS

None

=====

Press RETURN when ready to proceed

Figure 4-12. Initial CURRENT DEVICE SELECTIONS

To return to the MAIN MENU, press the RETURN key.

If you select the DISPLAY function either

- o before you add or delete any devices or
- o immediately after you update the assignment file

you see the assignment file list as it currently exists on your application diskette.

However, if you select the DISPLAY function after adding or deleting devices, you see the assignment file list as it would appear if you updated the assignment file at that moment.

For example, suppose Figure 4-12 shows the devices currently listed in your assignment file. If you delete the IBMT) Color Adapter COLOR MODE display monitor, you see the display shown in Figure 4-13 the next time you select the DISPLAY function.

CURRENT DEVICE SELECTIONS**DISPLAY MONITORS**

IBM Color Adapter MONOCHROME MODE

PLOTTERS

Hewlett Packard 747OA/7475A Plotter

PRINTERS

IBM/Epson Graphics Printers HI RES

CAMERAS

None

Press RETURN when ready to proceed

Figure 4-13. New CURRENT DEVICE SELECTIONS

Although the Color Adapter COLOR MODE monitor no longer appears in the list, GINSTALL does not delete the device until you select the UPDATE function.

**UPDATING YOUR
SELECTIONS**

The UPDATE APPLICATION WORK DISK function deletes and/or adds the devices you selected.

When you select the UPDATE function, GINSTALL follows this sequence:

1. Deletes any device driver files you selected. The name of the device currently being deleted flashes on and off.
2. Adds any device driver files you selected. The name of the device currently being added flashes on and off.
3. Rewrites the assignment file.
Figures 4-14a and 4-14b show you the display you see on the monitor at two points during an update.

UPDATING APPLICATION WORK DISK

DELETING:

IBM Color Adapter COLOR MODE

ADDING:

Hercules Graphics Card
Polaroid Palette

=====

Figure 4-14a. Deleting and Adding Device Driver Files

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UPDATING APPLICATION WORK DISK

DELETING: IBM Color Adapter COLOR MODE

ADDING: Hercules Graphics Card Polaroid Palette

WRITING assignment file

Figure 4-14b. Writing the Assignment File

After deleting or adding device drivers and rewriting the assignment file, GTNSTALL displays the message

Press RETURN when ready to proceed

When you press the RETURN key, GINSTALL returns you to the MAIN MENU.

Changing Device Driver Diskettes During an update, GINSTALL copies driver files from a device driver diskette to a diskette you specified when you started GINSTALL. If the needed driver file is not on the current device driver diskette, GINSTA:,L displays the following message:

MAIN MENU Functions

Current selection not on this device driver library disk.

Please insert other device driver library disk.

Press RETURN when ready to proceed

Remove the driver library diskette, insert the library diskette that contains the driver file, and press the RETURN key.

If you do not change diskettes, or if the diskette you insert does not contain the needed driver file, GINSTALL displays the following message when you press the RETURN key:

ERROR: Current selection not found.
Device driver file: D:NNNNNNNN.SYS
This selection abandoned.
Press RETURN when ready to proceed

D:NNNNNNNN.SYS is the drive identifier and filename for the driver file of the device you selected.

GINSTALL abandons the current selection. When you press the RETURN key, GINSTALL continues the update with the next driver file or writes the new assignment file.

GINSTALL Not In Default Drive

If the diskette containing GINSTALL is not in the default drive when the update is complete, GINSTALL displays the message:

Update complete. Please insert other device driver library disk.

Press RETURN when ready to proceed

Insert the diskette containing GINSTALL, and press the RETURN key. The message disappears and the RETURN key prompt moves below the dashed line. Press the RETURN key again to return to the MAIN MENU.

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MAIN MENU Functions

Warning Messages

When you select the UPDATE APPLICATION WORK DISK function, GINSTALL checks your selections for the number of devices of each type. If the updated assignment file contains:

- o no display monitor
- o more than two display monitors
- o more than one plotter, printer, or camera

GINSTALL then displays the warning messages in Figures 4-15 and 4-16 before updating the application diskette.

WARNING

Category: PRINTERS

Most application programs cannot use more than a maximum number of devices from this category.

The maximum for this category is: 1

You have selected: 2

Do you want to return to the Main Menu to delete selections? (Y/N)

Figure 4-15. Maximum Device Number Warning

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WARNING

Category: DISPLAY MONTTORS

Most application programs require at least a minimum number of devices for this category.

The minimum for this category is: 1

You have selected: 0

Do you want to return to the Main Menu to make selections? (Y/N)

Figure 4-16. Minimum Device Number Warning

The warnings give you the following information:

- o the device category
- o the maximum or minimum number of devices for the category
- o the number of devices you selected

The prompt at the end of the warning asks if you want to return to the MAIN MENU to add or delete selections. Type Y (Yes) or N (No), and press the RETURN key.

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If you type Y, GINSTALL cancels the update request and returns you to the MAIN MENU. To add a device, select option number 1 from the MAIN MENU. To delete a device, select option number 2 from the MAIN MENU.

If you type N (No), GINSTALL updates the assignment file according to your selections.

If you delete all your display monitors or if you have less than the minimum number of devices required in another category, you might encounter one of the following:

- o you cannot install GSX-86
- o you can install GSX-86 but cannot start your application. Instead, you receive the following message:

No graphics input, press RETURN

If either situation occurs, you must return to GINSTALL and add the missing device drivers.

EXIT TO OPERATING SYSTEM

The EXIT TO OPERATING SYSTEM function exits GINSTALL and returns you to the operating system prompt on the current default drive.

Error Message

If you select the EXIT function after you add or delete devices, but before you update the assignment file, GINSTALL displays the message:

DEVICES SELECTED TO ADD OR DELETE.
Abandon selections? (Y/N) N

GINSTALL prompts an N for No. Press the RETURN key, to return to the MAIN MENU. You can then select option number 8 and update the assignment file.

If you type Y for Yes over the N prompt,
GINSTALL abandons the pending selections and
returns you to the operating system.

End of Section 4

Appendix A

GSX-86 Error Messages

ERROR MESSAGES

You can receive an error message when you use GSX-86 for one of the following reasons:

- o The wrong diskette is in the disk drive specified in the error message.
- o The file specified in the error message is damaged and needs to be regenerated.
- o Not enough memory for GSX-86 and device drivers.

The error messages and solutions are discussed below.

D:ASSIGN.SYS not found
d:ffffffffff.SYS not found
d:ffffffffff.SYS close error

All of these error messages tell you that GSX-86 cannot find a file it needs. Generally, the file cannot be found because the diskette in the drive specified does not contain the file specified in the message.

The d represents the disk drive identifier. ASSIGN.SYS is the name of the assignment file GINSTALL creates. The ffffffff.SYS portion of a message represents the filename of a missing file.

To correct the error, insert the diskette that contains the ASSIGN.SYS file and the device driver files and proceed.

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D:ASSIGN.SYS syntax error

d:fffffff.SYS empty

d:fffffff-SYS contains absolute segment

All of these error messages tell you the file specified in the message is empty or damaged.

The d represents the disk drive identifier.

ASSIGN.SYS is the name of the assignment file GINSTALL creates. The ffffffff.SYS portion of a message represents the filename of the empty or damaged file.

To restore the file, use GINSTAIL to update the diskette containing the file. Refer to the instructions on using GINSTAIL in Section 4 of this guide. After you use GINSTAIL, start GSX-86 and your application again.

Not enough memory for GSX-86

This error message tells you your computer does not have enough Random Access Memory.

To use GSX-86 and your applications, you need to add more Random Access Memory. The amount of memory required varies with the computer, operating system, and applications you are using. Consult your computer dealer for more details.

End of Appendix A

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