Professional™

PRO/SIGHT
User's Guide

digital

Preface

This book explains how to use PRO/SIGHT, an interactive graphics editor for the Professional 300 series.

A glossary at the end of the book explains technical terms used in this book. These terms are in italics at first use.

ASSOCIATED DOCUMENTS

Professional 300 Series User's Guide for Hard Disk System (AA-N603C-TH)— Explains how to use a Professional 350 with a hard disk.

EDT Quick Reference Guide (AA-M477A-TK)— This booklet provides a brief summary of the commands, functions, qualifiers, and specifiers available with the EDT editor.

Professional Prose Plus User's Guide (AA-R755A-TH)—This book tells you how to use Prose Plus, a combination text and graphics editor product.

PRO/DECtouch Software User's Guide (AA-BJ56A-TH)—This manual provides the necessary information to write application programs for positional devices connected to the VRTS1-A monitor (DECtouch).

VRTS1-A Color/Touch Screen Monitor Installation/Owner's Guide (EK-VRTS1-ON-001)—This manual tells you how to install and use the VRTS1-A Color/Touch Screen Monitor.

PRO/GIDIS Manual (AA-Y660A-TK)—This manual is a user guide and reference manual for programmers developing graphics applications for the Professional personal computers.

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Chapter 1

Getting Started with PRO/SIGHT

WHAT IS PRO/SIGHT?

PRO/SIGHT is an easy-to-use *application* that enables you to create pictures and charts on your Professional 300 series computer. You can store these pictures on files and then print them or transfer them to other Professionals. You need no programming experience to use PRO/SIGHT.

PRO/SIGHT allows you to create pictures containing text and highly detailed graphics. You can use either the keyboard or an alternate positional device (such as a mouse or a tablet) to create your pictures and then display them on a color or monochrome monitor.

With PRO/SIGHT you can:

□ Draw geometric shapes or freehand figures

□ Vary the line width to add dimension or boldness to lines

□ Mix colors to create your own color selections

□ Use patterns to fill figures or create special effects

□ Outline figures to create different designs

□ Transfer figures for use in other pictures

□ Insert text of different sizes and types within pictures

□ Change the color, attributes, or placement of objects

HARDWARE AND SOFTWARE REQUIREMENTS

Before installing PRO/SIGHT, make sure your Professional is equipped with the following DIGITAL *hardware* and software:

☐ P/OS version 2.0 or later Professional 350 Hard Disk System or

☐ P/OS version 2.0A or later Professional 380 Hard Disk System

☐ 5 MB or larger disk

RECOMMENDED HARDWARE

Depending on your requirements, you may wish to add some equipment.

To create color pictures, you must have:

☐ Color monitor (Model Number VR 241-A)

☐ Color monitor cable (Model Number BCC03)

☐ Extended Bitmap Option (Model Number VC241A for Professional 350, Model Number VC241B for Professional 380)

To create pictures that display eight gray levels, you must have:

☐ Monochrome monitor (Model Number VR 201)

☐ Extended Bitmap Option (Model Number VC241A for Professional 350, Model Number VC241B for Professional 380)

You can print black and white PRO/SIGHT pictures on either of the following printers:

☐ DIGITAL LA50

☐ DIGITAL LA100

You can also use either a 2-pen or a 6-pen plotter. The following plotters work with your Professional:

☐ DIGITAL's LVP16 (6-pen)

☐ Hewlett-Packard Model 7475A (6-pen)

☐ Hewlett-Packard Model 7470A (2-pen)

Chapter 7 explains how to connect a plotter or printer to your Professional.

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OPTIONAL HARDWARE

The following lists the input devices for the *Communication Port* or Printer Port:

- □ DIGITAL's VS10X-CA Graphics Data Pad or GTCO Digi-Pad 5
- □ Summagraphics MM 961 Digitizing Tablet
- □ Summagraphics MM 1201 Digitizing Tablet
- □ Summagraphics SummaMouse
- □ Summagraphics Bit Pad One
- □ Microsoft Serial Mouse
- □ USI OptoMouse
- □ DIC HiFi Mouse
- □ Seiko DT-3100 Tablet

The DECtouch Monitor (VRTS1-A) is a monitor that can be used as an input device with PRO/SIGHT. You can attach input devices to the DECtouch Monitor to move the *cursor* and draw objects. Following is a list of the input devices for the DECtouch Monitor (VRTS1-A):

- □ DIGITAL's VS10X-CA Graphics Data Pad
- □ Digital LM200 Quadrature Mouse
- □ Atari-compatible joysticks
- □ Touchscreen (part of the DECtouch Monitor)

Appendix A explains how to connect these input devices and where you can get more information about them.

PRO/SIGHT and Polaroid Palette

The Professional 350 supports the Polaroid Palette slide camera, which allows you to create 35-mm color slides of graphics developed with PRO/SIGHT. This Personal Presentation System from Digital and Polaroid lets you create low-cost, quality slides in a matter of minutes.

For ordering information, contact:

Polaroid Corporation
Industrial Marketing Department
575 Technology Square
Cambridge, MA 02139
(800) 225-1618
(617) 547-5177 (in Massachusetts)

INSTALLING THE APPLICATIONS

To install the PRO/SIGHT software, refer to the *Professional 300 Series User's Guide for Hard Disk System* for installation instructions.

PRO/SIGHT comes with the following applications:

- □ PRO/SIGHT. Install this application to use PRO/SIGHT.

- □ Positional Device Startup. Install this application to connect alternate input devices to the Professional. (Do not use it if you have a DECtouch monitor or are using IVIS.)

- □ GIDIS Frame Viewer. Install this application to use the GIDIS Frame Viewer (see Appendix B).

- □ Load PRO/SIGHT Fonts and Patterns. This application must be run before printing PRO/SIGHT files.

2

PRO/SIGHT Concepts

APPLICATION DESIGN SERVICES

*DESIGN CONSULTANCY
*PROGRAMMING SUPPORT
*PROJECT MANAGEMENT

Created Using PRO/SIGHT

Chapter 2

PRO/SIGHT Concepts

This chapter describes the basic concepts of PRO/SIGHT and introduces you to the *menu* structure and the work area of the screen. You should read and understand this chapter before proceeding to the chapters on Attributes and Drawing.

WHAT IS A PICTURE?

A PRO/SIGHT picture is a set of objects. An object can be a line, box, polygon, arc, freehand stroke, circle, or text with some attributes. Chapter 4 tells you how to draw all the basic shapes.

PRO/SIGHT stores your pictures in *GIDIS* files. You can use PRO/SIGHT pictures in PROSE PLUS files to produce text and graphics documents. You can include other GIDIS files not created with PRO/SIGHT in PRO/SIGHT pictures, but you may not edit those files. (See Appendix C for more information about GIDIS files.)

DRAWING PICTURES

Before you start drawing an object, you may want to change one or more PRO/SIGHT attributes. The object takes on the attributes that are active at the time it is drawn. There are seven attributes: pen, pattern, font, rule, outline, fill, and color (or shades of gray). Chapter 3 gives examples of all the attributes and explains how to use them.

You can change attributes for any of the objects you have drawn by selecting the object and choosing a different attribute. Chapter 4 explains how to change attributes and how to move, copy, or delete objects.

TRANSFERRING PRO/SIGHT FILES

You can send your pictures to another Professional over communication lines using PRO/Communications or over a network using *PRO/DECnet*. Do not use any type of electronic mail to transfer a PRO/SIGHT file.

If a Professional is running P/OS Version 2.0 or later, you can print PRO/SIGHT pictures using Print Services without having PRO/SIGHT installed. However, you must install and run the Load PRO/SIGHT Fonts and Patterns application on the target Professional before printing pictures.

PRO/SIGHT MENUS

PRO/SIGHT uses two types of menus. The first is typical of Professional 300 series applications that display a list of options on a full-screen menu.

The second type of menu consists of a row of squares at the bottom of the PRO/SIGHT screen. Choosing items from this type of menu is discussed later in this chapter.

MENU ORGANIZATION

PRO/SIGHT menus are organized in a hierarchy with the Main Menu at the top and submenus below the Main Menu. Figure 2-1 shows the hierarchy of the PRO/SIGHT menus.
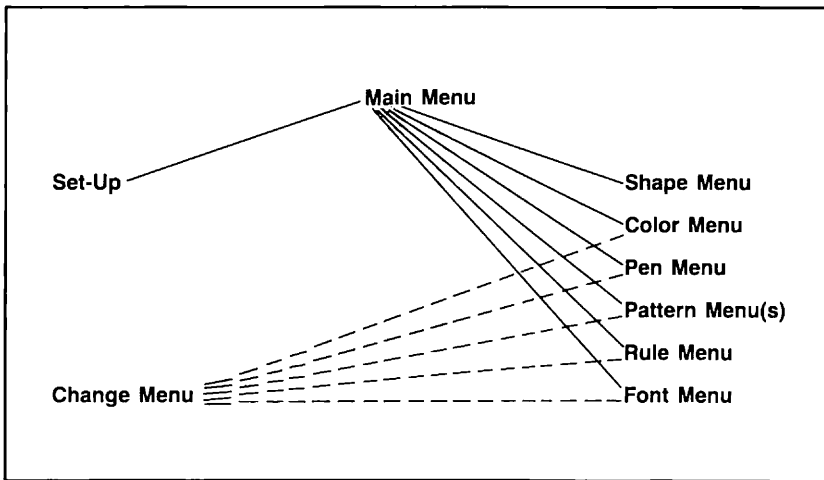
Figure 2-1
PRO/SIGHT Menus

GETTTING STARTED

When you first enter PRO/SIGHT, a startup menu displays three choices for
you: create a new picture, edit an existing one, or display an existing picture.

Figure 2-2 shows the Startup Menu.

```
┌─────────────────── SIGHT Start-up Menu ───────────────────┐
│                                                           │
│                                                           │
│           Press EXIT to leave SIGHT.                      │
│                                                           │
│      ->                                                   │
│           Create a picture                                │
│           Edit an existing picture                        │
│           Display a picture                               │
│                                                           │
│                                                           │
│                                                           │
│                                                           │
│                                                           │
└───────────────────────────────────────────────────────────┘
  Select one and press DO.
```
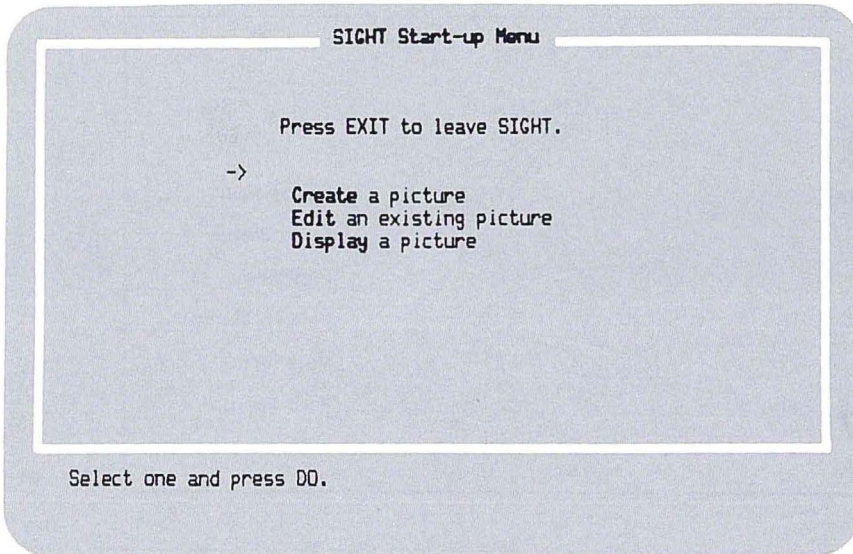
FIGURE 2-2
PRO/SIGHT Startup Menu

Creating a New Picture

When you choose "Create a picture" from the menu, the PRO/SIGHT Main
Menu appears, and you can start drawing right away. Figure 2-3 shows the
Main Menu with the work area.
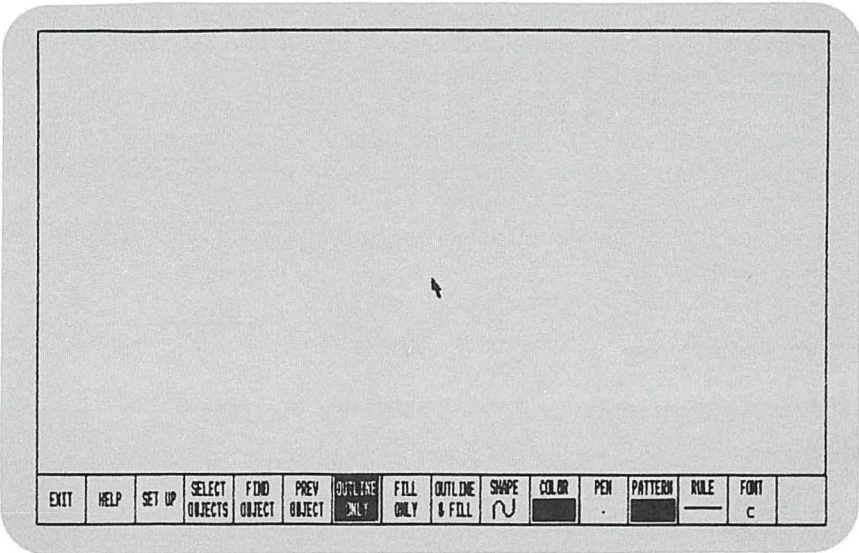
Figure 2-3
Main Menu with Work Area

The PRO/SIGHT screen has a menu area and a work area. The menu area is a row of squares at the bottom of the screen. The remainder of the screen is the work area.

Editing an Existing Picture

If you choose "Edit an existing picture" from the menu, a list of the files with the *GID filetype* in your current volume and *directory* appears. A GID filetype is the default filetype for PRO/SIGHT.

Pressing the NEXT SCREEN key scrolls additional filenames on the list. If the picture you wish to edit is listed, select it and press DO.

To choose a file from a different directory or node or a file with a different filetype, press the ADDTNL OPTIONS key.

When the file is displayed on your screen, you can add to or modify the picture.

Displaying a Picture

This feature allows you to preview any picture. To display a picture, choose "Display a picture" from the Startup Menu. A list of the files with the GID filetype in your current volume and directory appears.

Select the picture you want to display and press DO. If you want to display files from another directory or a file other than GID files, press ADDTNL OPTIONS.

If you decide to edit the file being displayed, press DO and PRO/SIGHT will be ready for your editing.

EXITING FROM PRO/SIGHT

After finishing a picture, either press the EXIT key or select "EXIT" from the Main Menu.

When you exit from PRO/SIGHT, the Exit Menu appears:


```
─────────────── SIGHT Exit Menu ───────────────


        Press HELP for an explanation of the exit options.

            ->
                    Save the picture
                    Save the picture as a Transparency
                    Resume editing the picture
                    View the picture
                    Exit




   Select one and press DO.
```
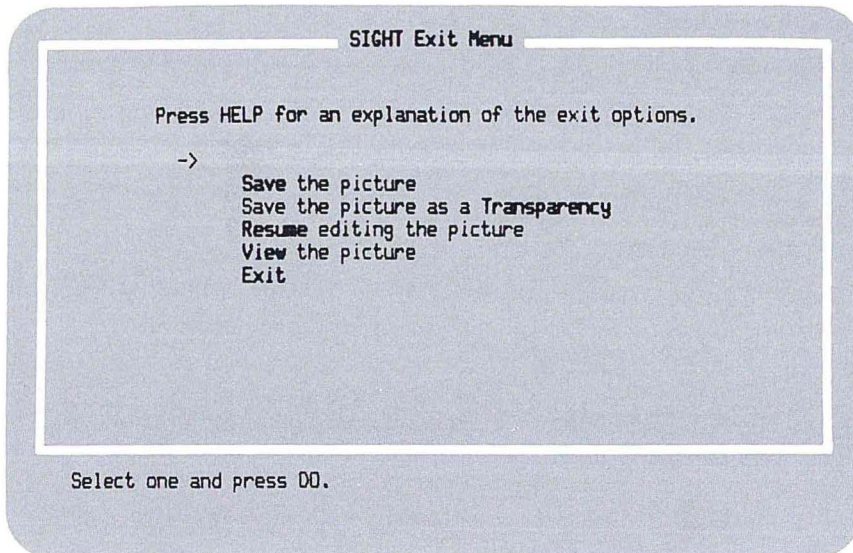
Figure 2-4
Exit Menu
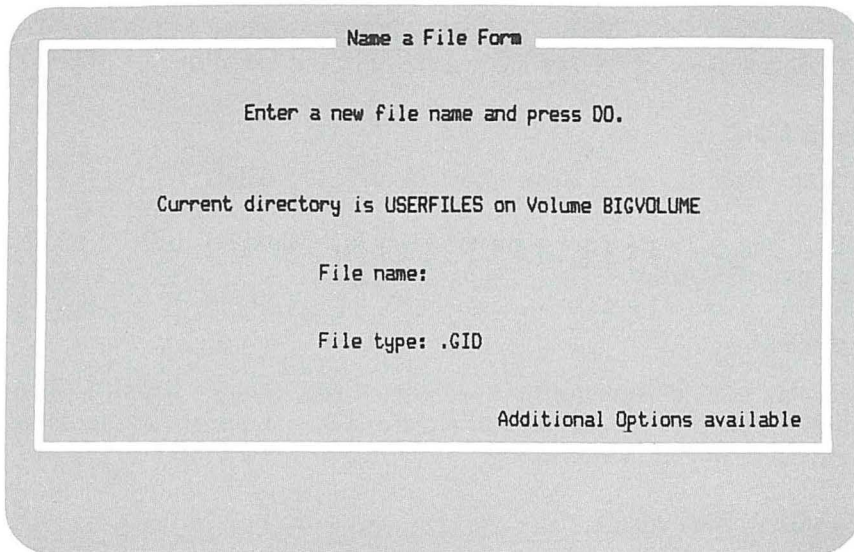
Saving a Picture

The "Save the picture" option allows you to save a picture in a GID file.

To save a picture, do the following:

1. Choose "Save the picture" from the Exit Menu. The Name a File Form will appear.

2. If you were just editing an existing picture, the name of the file you had just finished editing would be automatically typed in the form. If this name is correct, press DO. If you want to change the name use the ⌫ key to erase the name and type in a new name. The picture will be saved under the file specification you type in.

Figure 2-5 shows a picture of the Name a File Form.

```
┌─────────────────── Name a File Form ───────────────────┐
│                                                         │
│                                                         │
│           Enter a new file name and press DO.           │
│                                                         │
│                                                         │
│      Current directory is USERFILES on Volume BIGVOLUME │
│                                                         │
│                                                         │
│              File name:                                 │
│                                                         │
│                                                         │
│              File type: .GID                            │
│                                                         │
│                                                         │
│                          Additional Options available   │
│                                                         │
└─────────────────────────────────────────────────────────┘
```

Figure 2-5
Name a File Form

When you enter the name of your file, the filename can be up to nine characters long (letters A through Z and/or numbers 0 through 9 only).

A file can be saved locally or saved on a remote system using PRO/DECnet. To store your file on a remote system, press the ADDTNL OPTIONS key to change the directory and add the node name.

By *default*, PRO/SIGHT will attach the filetype GID to the filename.

Saving a Picture as a Transparency

An ordinary PRO/SIGHT picture contains instructions to clear the screen and set the colors when it is displayed on the screen. If you want to display the picture without clearing the screen, save it as a *transparency*.

To save your picture as a transparency, do the following:

1. Choose "Save the picture as a Transparency" from the Exit Menu. The Name a File Form will appear.

2. Type the name of the file and press DO. The picture will be saved as a transparency under the file specification you typed in.

Exiting PRO/SIGHT

Choose "Exit" from the Exit Menu to exit from PRO/SIGHT.

Press DO if you want to exit without saving any changes to your picture, otherwise press RESUME.

Resume Editing

If you wish to resume editing after saving a picture, choose "Resume editing the picture" from the Exit Menu. The picture that you were working on will appear and you can continue drawing.

Viewing a Picture After Editing

You can display a picture you have just edited by choosing "View the picture" from the Exit Menu.

Printing a Picture

To print a picture use P/OS Print Services. The filetype must be GID. If you have changed any filetypes, change them back to GID.

Chapter 7 gives you information on how to set up and use printers and plotters.

Refer to the *Professional 300 Series User's Guide for Hard Disk System* for more information on printing picture files.

MOVING THE CURSOR

When you first enter PRO/SIGHT, there is a small arrow in the center of the screen. This arrow is the cursor and shows your location in the work area.

Use the arrow keys on the editing keypad (the gray keys to the right of the main keyboard) to move the cursor around the PRO/SIGHT work area. To move the cursor shorter distances, use the *pixel* keys, the number keys on the numeric keypad. The numeric keypad keys move the cursor one pixel at a time. (A pixel is a dot, the smallest displayed unit on the monitor screen.)

The ENTER MENU (NEXT SCREEN) key moves the cursor into the menu area of the screen. The LEAVE MENU (PREV SCREEN) key moves the cursor into the work area of the screen. When you move the cursor into the menu area of the screen, the cursor appears as a triangle to show the location of the cursor in the menu area.

You can use the . key on the numeric keypad to center the cursor at any time. To center the cursor horizontally, press 0 on the numeric keypad. To center it vertically, press ENTER on the numeric keypad. To find the nearest corner, press , on the numeric keypad.

To relocate a cursor that you have moved off the screen, use the . or the , key.
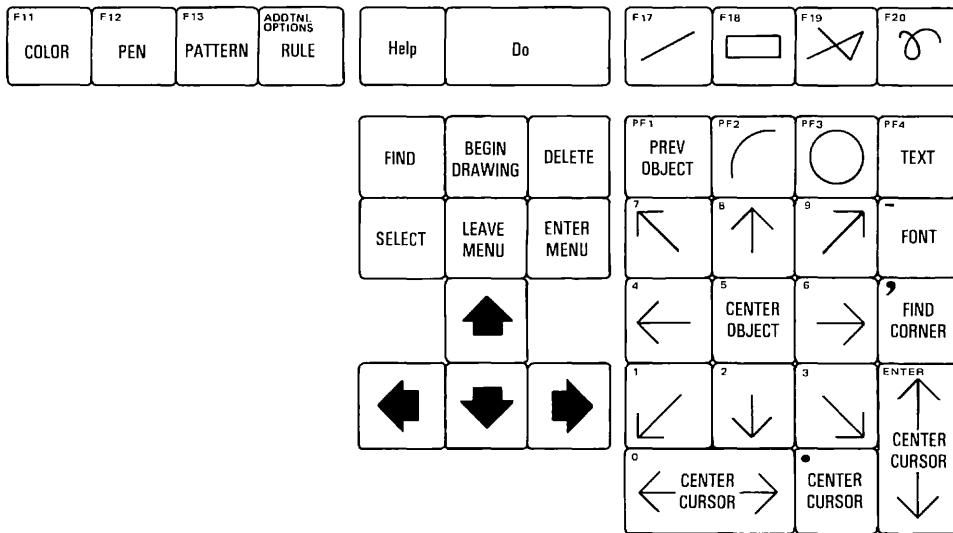
Figure 2-6
PRO/SIGHT Keys

You can use an input device instead of the cursor keys to move the cursor around the work area. More information on alternate input devices is available in Appendix A.

Appendix D lists all the PRO/SIGHT keys and how to use them.

GETTING HELP

When you are not sure how to proceed, press HELP. Information will appear on the screen to aid you. Press RESUME to return to what you were doing before.

When you press the HELP key, a menu appears with a list of HELP topics available.

```
                     PRO/SIGHT Help Menu
    ┌─────────────────────────────────────────────────────┐
    │                                                       │
    │   HELP is available on the topics listed below.       │
    │   If you do not want HELP, press EXIT.                 │
    │                                                       │
    │           ->                                           │
    │                   Overview of HELP                     │
    │                   Function Keys                        │
    │                   Setting Up                           │
    │                   Changing Objects                     │
    │                   Previous Object                      │
    │                   Outline/Fill                         │
    │                   Shapes                               │
    │                   Colors                               │
    │                   Pen Widths                           │
    │                   Fill Patterns                        │
    │                   Rule Styles                          │
    │                   Font Selections                      │
    └─────────────────────────────────────────────────────┘

    Make a choice and press DO:
```
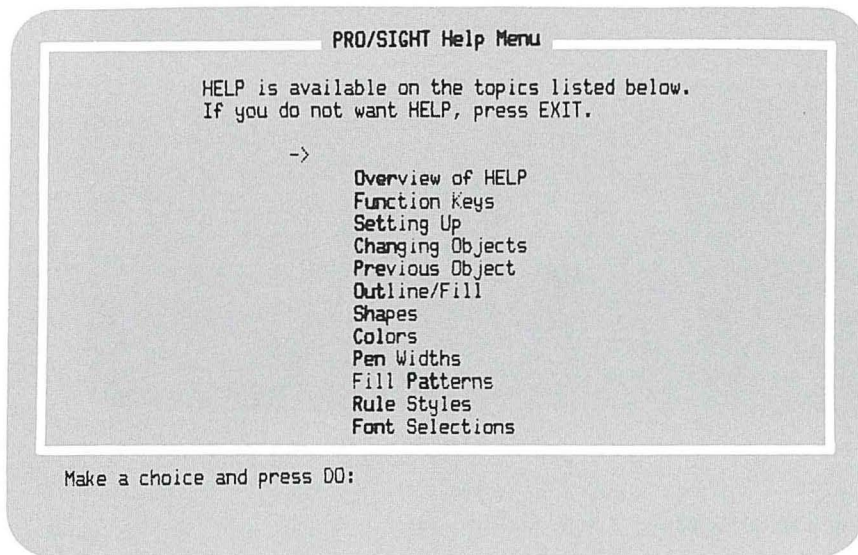
Figure 2-7
HELP Menu

Choose an item from the menu in one of the following ways:

- Move the pointer to your choice in the menu list by pressing the up or down arrow keys. Then press the DO key.

  OR

- Type (in upper- or lowercase) the highlighted letters of the item you want to select. Then press the DO key.

When you choose a topic from the HELP Menu, a HELP screen of information appears.

The following is an example of a HELP screen.
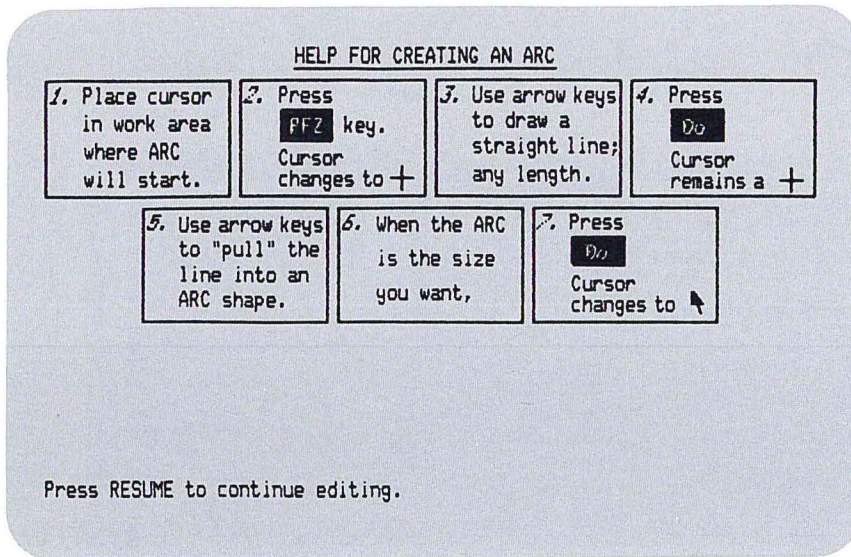
Figure 2-8
Example of a HELP Screen

Wherever possible, HELP explains how to perform PRO/SIGHT functions using function keys instead of menus.

Press the RESUME key to exit from HELP.

GETTING STATUS INFORMATION

The Main Menu shows the current status of all attributes and the active shape. For example, Figure 2-9 shows a picture of the freehand stroke in the "SHAPE" square and the "FONT" square shows the active font style.

EXIT	HELP	SET UP	SELECT OBJECTS	FIND OBJECT	PREV OBJECT	OUTLINE ONLY	FILL ONLY	OUTLINE & FILL	SHAPE ∿	COLOR	PEN	PATTERN	RULE	FONT c
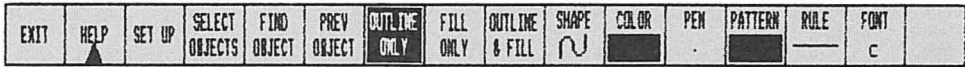
Figure 2-9
Status on the Main Menu

Each attribute menu and the Shape Menu show the active attribute or shape by highlighting that square on the menu. When you select a new attribute or shape, that square is highlighted. Figure 2-10 indicates that the circle has been chosen.

OTHER MENU	LINE \	BOX ☐	POLYGON ✗	STROKE ∿	ARC ⌐	CIRCLE ◉	TEXT T

Figure 2-10
Status on the Shape Menu

PRO/SIGHT DEFAULTS

When you first enter PRO/SIGHT, the Main Menu shows certain attributes and a drawing shape, the freehand stroke, selected. PRO/SIGHT comes with these defaults automatically set.

MENUS AND KEYS

PRO/SIGHT uses function keys or menus to select attributes and drawing shapes for your pictures. If you are using an input device, such as a mouse, use the menus to select drawing shapes or attributes. Otherwise, function keys provide an efficient way to select drawing shapes and attributes. You can use function keys and an input device at the same time.

The next chapter describes PRO/SIGHT attributes in detail and tells how to choose attributes for your drawings.

3

Attributes

Created Using PRO/SIGHT

PRO/SIGHT Color Menu

Chapter 3

Attributes

This Chapter describes all of the attributes for PRO/SIGHT and how to select them. The attributes are:

- ☐ Outline only
- ☐ Fill only
- ☐ Outline and fill
- ☐ Color
- ☐ Pen
- ☐ Pattern
- ☐ Rule
- ☐ Font

OUTLINE AND FILL

When you draw an object, you have several options:

- ☐ Outline only—outline objects, using current pen and rule attribute.
- ☐ Fill only—fill in objects, using current pattern.
- ☐ Outline and fill—outline and fill in objects.

When you enter PRO/SIGHT, the Main Menu shows "OUTLINE ONLY" high-lighted. This is the default. To change the setting, move the cursor to either "FILL ONLY" or "OUTLINE & FILL" and press DO. That square will be highlighted.

The pen, rule, and pattern attributes determine how the figure will appear when outlined or filled. When you choose a pattern, PRO/SIGHT assumes you want to fill objects. When you choose a pen or rule, PRO/SIGHT assumes you want to outline objects. Figure 3-1 shows some examples of outline and fill.
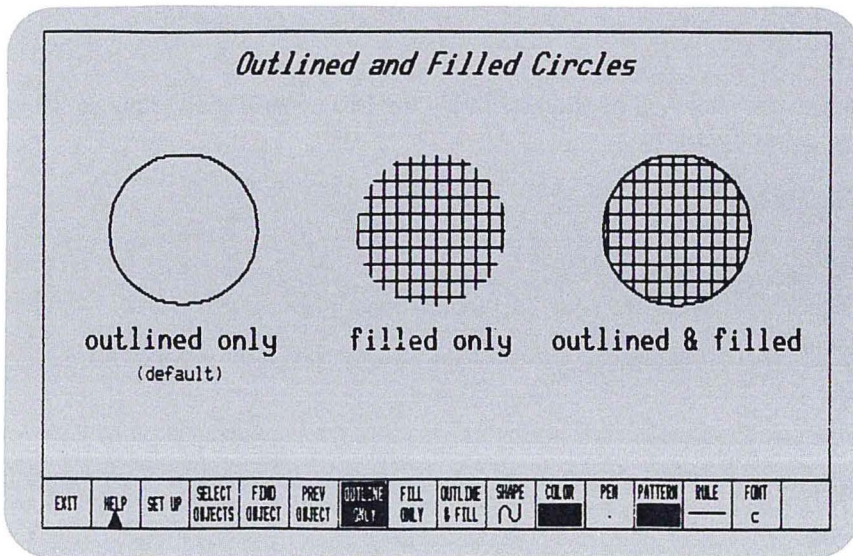
Figure 3-1
Example of Outline and Fill

SELECTING ATTRIBUTES

You can choose attributes for your pictures using either menus or keys. To choose the attribute you want, move the cursor to that square on the Main Menu (the attribute square).

To use a menu to select an attribute, do the following:

1. Press **MAIN SCREEN.**

2. Move the cursor to one of the attribute squares, then press **DO.**
   A menu will appear.

3. Move the cursor to your choice in the menu, then press **DO.** The new attribute is active and appears highlighted.

To use keys to select an attribute for your pictures, do the following:

1. Press one of the following keys,

   COLOR (F11)

   PEN (F12)

   PATTERN (F13)

   RULE (ADDTNL OPTIONS)

   FONT (- key on the numeric keypad)

2. Move the cursor to your choice on the menu and press **DO.**

Pen

PRO/SIGHT provides different pen stroke widths for drawing figures. This attribute applies when drawing lines, boxes, circles, polygons, arcs, or the freehand stroke. Pen does not work with the text shape. When you choose a pen, PRO/SIGHT assumes that you want to outline objects.

Figure 3-2 shows the Pen Menu.
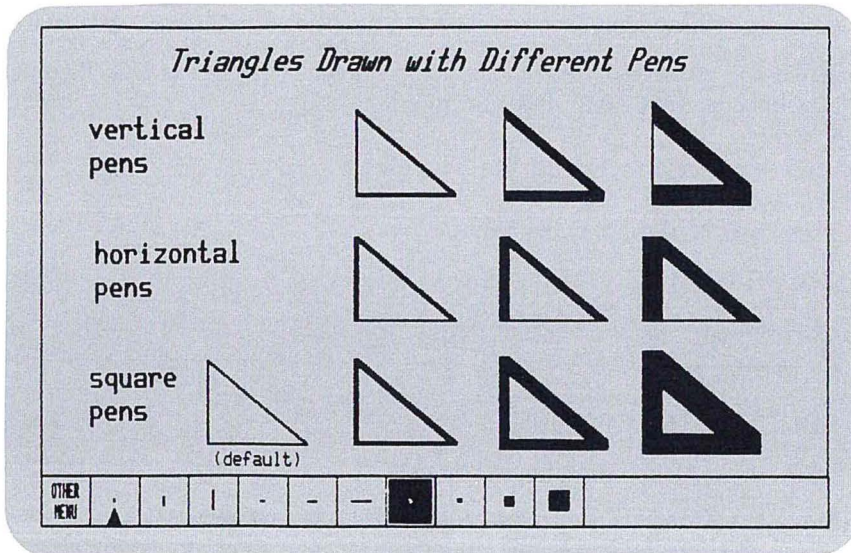
Figure 3-2
Example of Different Pens

Rule

The rule attribute provides a selection of line styles to use when drawing, as shown in Figure 3-3. This attribute applies when drawing lines, boxes, circles, polygons, arcs, or the freehand stroke. Rule does not work with the text shape. When you choose a rule, PRO/SIGHT assumes that you want to outline objects.
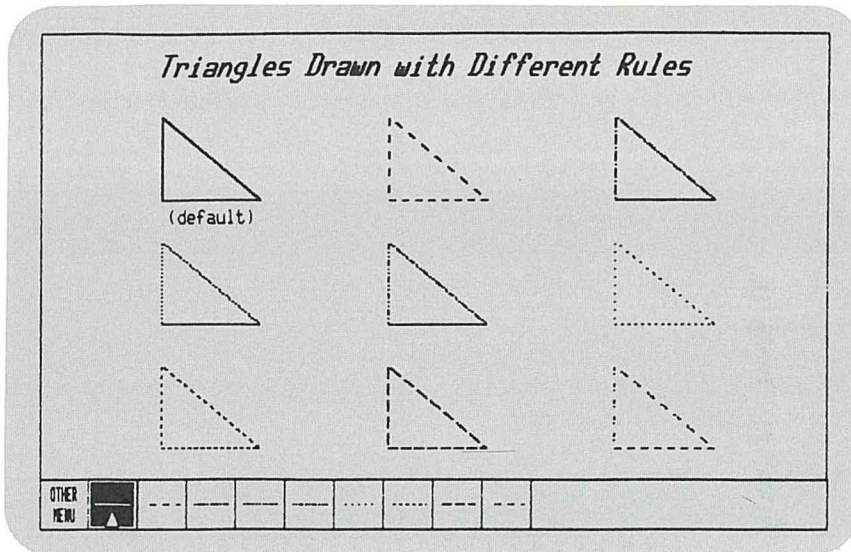
Figure 3-3
Example of Different Rules

> NOTE: Rule patterns will appear different from the menu if you use a wide pen.

Pattern

The pattern attribute lets you specify a pattern used to fill in an object.

There are two sets of patterns to choose from. When you select the Pattern Menu, one set of patterns appears. To display the other available patterns, select "MORE" from the Pattern Menu and press DO or press the PATTERN (F13) key to cycle through the available patterns. There are two sets of available patterns: hatch and halftone.

When you choose a pattern, PRO/SIGHT assumes that you want to fill objects.

Figure 3-4 shows the hatch patterns available which can be printed on the LVP16 plotter.

Figure 3-4
The Hatch Patterns

Figure 3-5 shows the halftone patterns which can be printed on any output device except on the LVP16 plotter.

Figure 3-5
The Halftone Patterns

Font

The font attribute lets you specify how text will appear in your picture. The options include several styles of text in various sizes, with and without italics. The font attribute only affects the appearance of text.

When the cursor is in the Font Menu, you can choose a font by typing the letter of that font square.

Figure 3-6 shows the various fonts available.
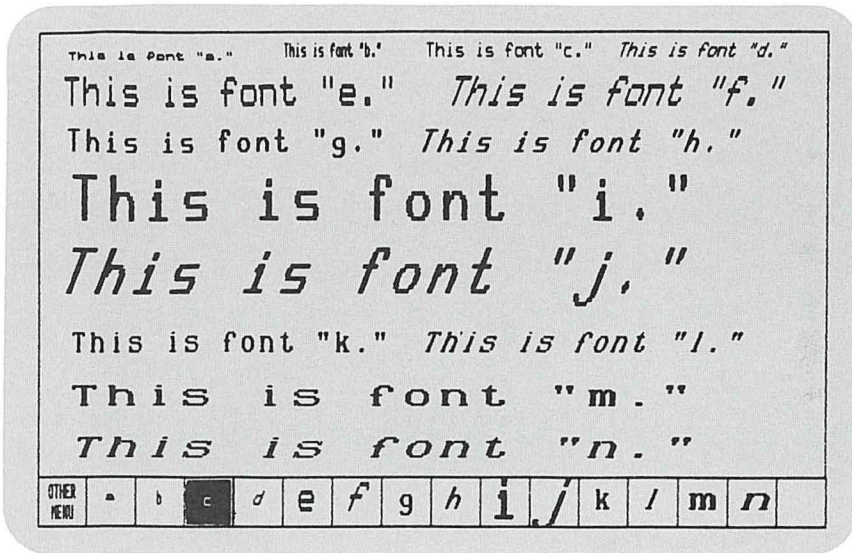
Figure 3-6
Example of Various Fonts

SELECTING A COLOR

You can choose any one of eight colors that appear on the color menu. If you have a monochrome monitor with an Extended Bitmap Option (EBO) (Model number VC241), these colors will appear as shades of gray. If you do not have an EBO board, only black and white will display. Figure 3-7 shows the color menu with the color mixing boxes.
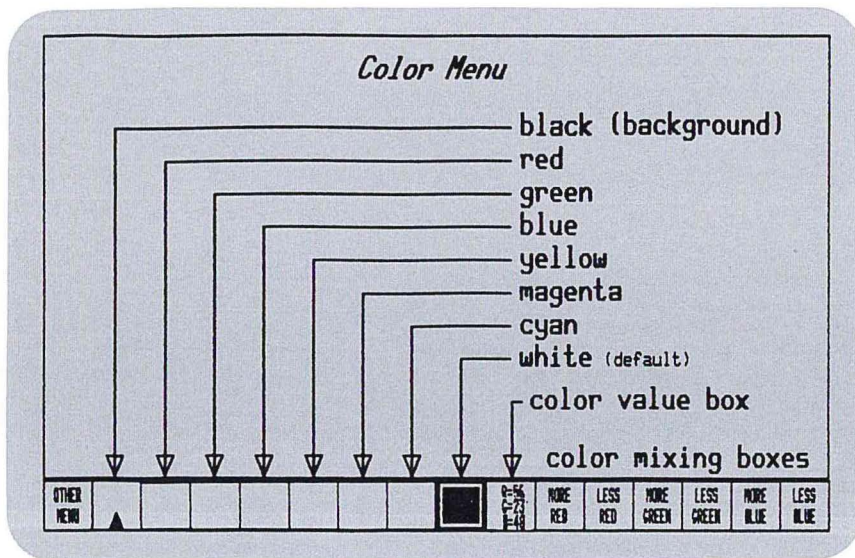
Figure 3-7
Color Menu

MIXING COLORS

PRO/SIGHT allows you to use up to eight colors including the background color. You can vary any of these colors by adding or removing red, green, or blue. PRO/SIGHT allows you to mix up to 256 colors on a Professional 350 or up to 4,096 colors on a Professional 380.

Objects previously drawn with the selected color will change as you vary the color.

If you use the Include feature, the picture you include will take on the colors in your color menu.

Color Values

Each color that you mix has a numerical value assigned to it. The value square on the Color Menu displays the numerical values of the selected color. "R" is the numerical value assigned to red. "G" is the numerical value assigned to green. "B" is the numerical value assigned to blue. To recreate the color, adjust red, blue, and green to the same value as the color you want.

> **NOTE:** Mixing the first color (black by default) will change the background of your picture. Changing the value of the first and last colors will change the appearance of the PRO/SIGHT menus and could make these unreadable. Caution is advised when mixing these colors.

To mix a new color, do the following:

1. Press the **COLOR** key. The Color Menu will appear.

2. The active color is highlighted and the values for the active color appear in the value box on the menu.

3. Move the cursor to the color you want to mix and press DO.

4. Move the cursor to one of the color mixing squares: "MORE RED," "LESS RED," "MORE GREEN," "LESS GREEN," "MORE BLUE," or "LESS BLUE."

5. Press **DO** to adjust the amount of red, blue, or green in the outlined color. Repeat the previous two steps until you get the color you want.

> **NOTE:** PRO/SIGHT allows 16 intensity values for each of the three primary colors. You may not be able to differentiate all color values on your screen. However, these values may become important when the picture is reproduced on a slide. You can use the color values to remix a previous color or to compare colors.

4
Drawing with PRO/SIGHT
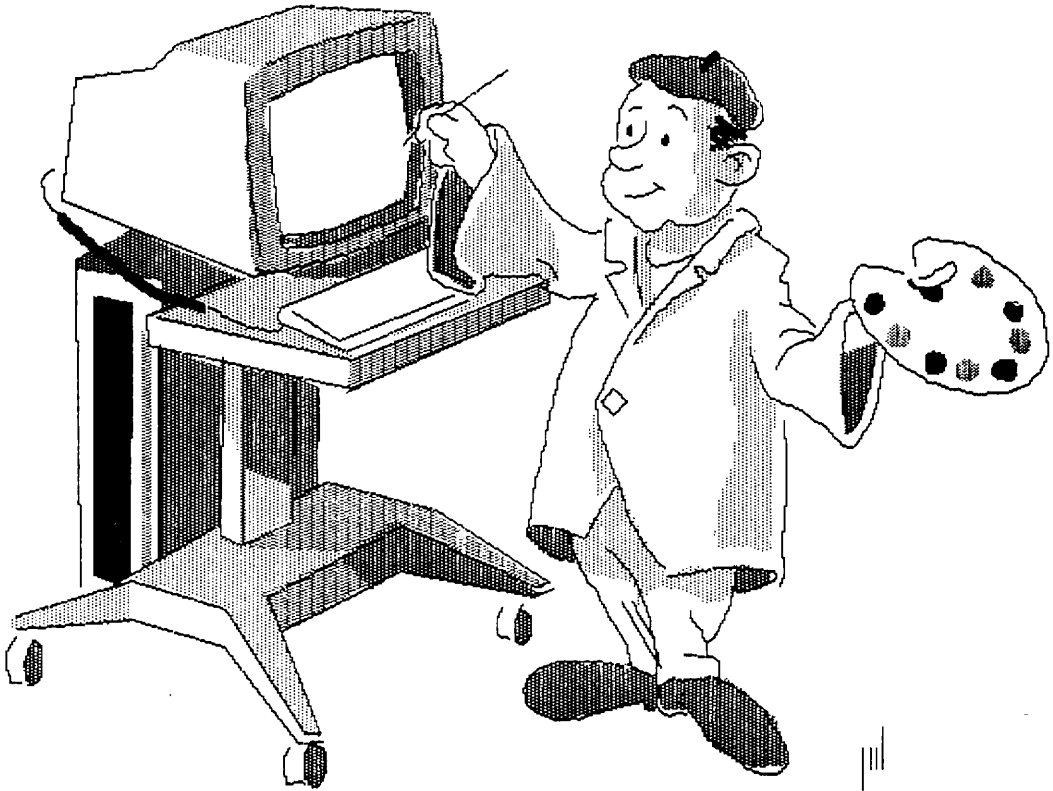
Created Using PRO/SIGHT

Chapter 4

Drawing with PRO/SIGHT

This chapter describes:

- Drawing objects
- Inserting text
- Reverse video
- Clearing the screen
- Include picture

DRAWING OBJECTS

In this section you will learn how to draw several objects. Before you draw an object, check the Main Menu to see which attributes are active. Choose the attributes that you need to draw your picture using function keys or menus.

CHOOSING A SHAPE

There are two ways to choose a shape:

□   Using drawing keys

□   Using the Shape Menu

With the cursor in the work area, the following keys let you select a drawing shape and start drawing right away.

□   LINE (F17) —activates the line drawing shape

□   BOX (F18) —activates the box drawing shape

□   POLYGON (F19) —activates the polygon or multisided drawing shape

□   STROKE (F20) —activates the freehand stroke

□   ARC (PF2) —activates the arc drawing shape

□   CIRCLE (PF3) —activates the circle drawing shape

□   TEXT (PF4) —activates the text drawing shape

To select a shape from the Shape Menu, do the following:

1.   Press MAIN SCREEN.

2.   To select a drawing shape, move the cursor to the "SHAPE" square on the Main Menu, then press DO. A menu will appear.

3.   Move the cursor to your choice in the menu, then press DO. The new shape will become active and it will appear highlighted.

The following directions use keys rather than menus to select a drawing shape.

Lines

Straight lines are easiest to draw. To draw a line, do the following:

1. Move the cursor to locate one endpoint of the line.
2. Press the LINE (F17) key. You are now ready to draw.
3. Use the arrow keys to draw the line.
4. When you are satisfied with the line, press DO.

Boxes

To draw a box, do the following:

1. Move the cursor to place one corner of the box.
2. Press the BOX (F18) key.
3. Move the cursor to locate the opposite corner and form the box.
4. Press DO when you have finished drawing.

Polygons

The Polygon feature enables you to draw multisided closed or open figures. Polygons can have a maximum of 256 sides.

To draw a polygon, do the following:

1. Move the cursor to the starting point.
2. Press the POLYGON (F19) key.
3. Use the arrow keys to draw a line, one side of the polygon.
4. Press DO.
5. Draw another line, another side of the polygon.
6. Press DO.
7. Draw as many sides as you wish, pressing DO after each side.
8. If you make a mistake, use the ⌫ key to delete the last point.
9. Press DO twice when you have finished drawing.

Freehand Stroke

The Stroke feature lets you draw freehand. This feature works best with a mouse, pen-and-tablet input device or the DECtouch monitor. These are described in Appendix A. However, you can use the keyboard arrow keys or the pixel keys if you wish.

To draw with the freehand stroke, do the following:

1. Move the cursor to the starting point of the drawing.

2. Press the STROKE (F20) key.

3. Move the cursor along the path of the stroke.

4. If you make a mistake, use the ⟨☒ key to back up and correct the mistake.

5. Press DO when you have finished drawing.

    NOTE: Strokes have a certain maximum length. The stroke will automatically end when it reaches its maximum length.

Arcs

To draw an arc, do the following:

1. Move the cursor to the arc's starting point.

2. Press the ARC (PF2) key.

3. Move the cursor to position the other endpoint of the arc and press DO.

4. Move the cursor to vary the arc, then press DO.

Circles

To draw a circle, do the following:

1. Move the cursor to where you want to start the circle.

2. Press the CIRCLE (PF3) key.

3. As you move the cursor away from the starting point, the circle expands.

4. Press DO when the circle is the size you want.

The following figure shows an example of each of the shapes:

Figure 4-1
Example of PRO/SIGHT Shapes

INSERTING TEXT

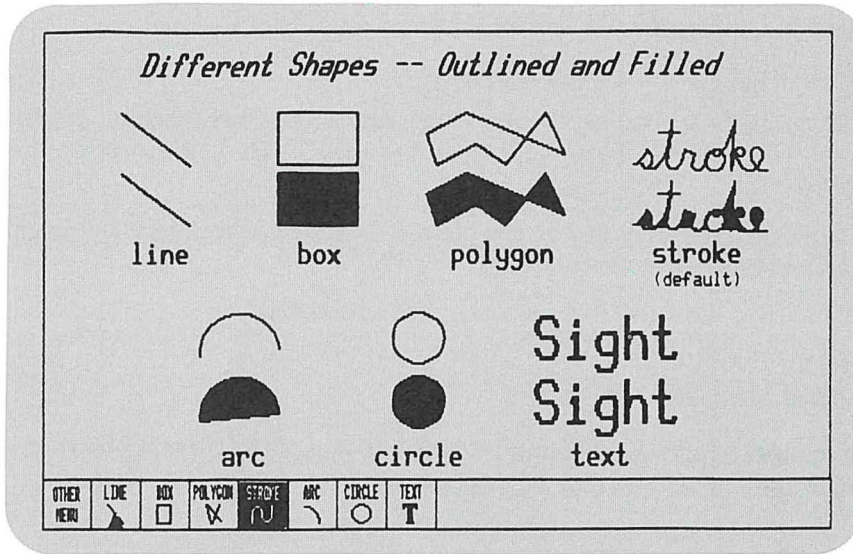Before you insert text in your drawings, choose the font that you want for titles
and labels in your pictures.

Fonts come in several sizes and styles, plain or italicized. Choose these options
from the Font Menu.

To insert text, do the following:

1. Check the Main Menu to be sure that you have the font that you
    want before inserting text.

2. Move the cursor to the place on the screen where you want to start. The cursor is ready to draw the upper left corner of the first character.

3. Press the TEXT (PF4) key. The cursor becomes a block on the screen. This is the text cursor.

4. Enter text from the main keyboard.

5. If you make a mistake, use the ⊠ key to delete characters. If you wish to delete the entire line, hold down the CTRL key and press the U key.

6. Press the RETURN key to complete the current text object and begin a new one on the next line.

7. When you have finished inserting text, press DO.

CANCELING A DRAWING OPERATION

If you have already started drawing and want to delete the current object, use the CANCEL key. The CANCEL key cancels any current drawing operation.

> **NOTE:** Cancel will not work if you have already pressed the DO key to complete the object.

REVERSE VIDEO

When you first start using PRO/SIGHT, the screen is set to normal screen mode. You have the option to reset the PRO/SIGHT drawing screen for normal screen mode or reverse video mode. In normal screen mode, the background for the drawing area is dark; in reverse video mode, the background is light.

To use the Reverse Video feature, do the following:

1. Press SET-UP. The Set-Up Menu will appear (see Figure 4-2).

2. Move the cursor to the "REVERSE VIDEO" square and press DO.

3. The screen changes to reverse video. To change back to normal screen mode, select "REVERSE VIDEO" again and press DO.

OTHER MENU	REVERSE VIDEO	CLEAR PICTURE	INCLUDE PICTURE	
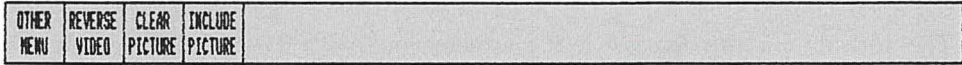
Figure 4-2
Set-Up Menu

CLEARING THE SCREEN

The Clear Picture feature clears the work area without exiting from PRO/SIGHT.

To clear the screen, do the following:

1. Press SET-UP. The Set-Up Menu will appear.

2. Move the cursor to the "CLEAR PICTURE" square, then press DO.

3. A question appears on the screen. "Do you really want to clear the picture?" Answer "Y" for yes or "N" for no and press DO.

INCLUDE PICTURE

The Include Picture feature lets you copy another PRO/SIGHT file into the picture you are currently drawing. This feature can save you from redrawing frequently used symbols or figures. (Because you are only using copies of these files, the originals remain unchanged.)

You can also include other GIDIS files not created with PRO/SIGHT and edit over them.

The picture will take on the colors of your present color menu.

To use the Include Picture function, do the following:

1. Press SET-UP. The Set-Up Menu will appear.

2. Move the cursor to the "INCLUDE PICTURE" square, then press DO. A list of the files with the GID filetype in your current volume and directory appears.

3. Pressing the NEXT SCREEN key scrolls additional filenames on the list.

4. If the picture you wish to edit is listed, select it and press DO.

5. To choose a file from a different directory or node or a file with a different filetype, press the ADDTNL OPTIONS key.

5

Modifying Objects
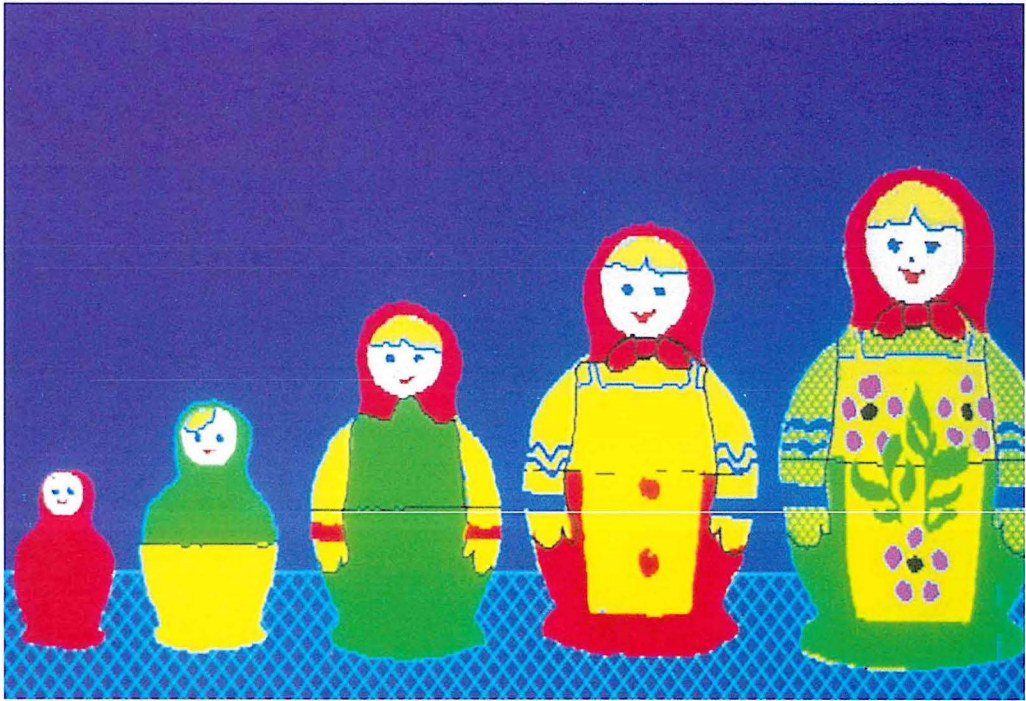
Created Using PRO/SIGHT

Chapter 5

Modifying Objects

This chapter describes:

- Selecting objects
- Reordering objects
- Changing attributes
- Using outline only, fill only, or outline and fill
- Moving objects
- Copying objects
- Enlarging, reducing, or stretching objects
- Deleting objects

SELECTING OBJECTS

Before you modify, move, copy, or delete an object, you must select it from the work area. The Previous Object, Find Object, and Select Objects features give you three ways to do this.

When you select an object using "PREVIOUS OBJECT," "FIND OBJECT," or "SELECT OBJECTS," the Change Menu appears.

The Change Menu, in Figure 5-1, displays the options you have for changing an object or group of objects.

NO MORE CHANGES	MOVE	COPY	ZOOM	STRETCH	PUT IN FRONT	PUT BEHIND	OUTLINE ONLY	FILL ONLY	OUTLINE & FILL	CHANGE COLOR	CHANGE PEN	CHANGE PATTERN	CHANGE RULE	CHANGE FONT	DELETE

Figure 5-1
Change Menu

> **NOTE:** You can only select objects that were created with PRO/SIGHT.

Previous Object

The Previous Object feature locates the last object drawn or modified or the last group of objects modified. This is very useful when you have just finished drawing an object and decide to change the color, pattern, or any other attribute. You can also use this feature to change an object you have just modified.

To use the Previous Object feature, do the following:

1. Choose "PREVIOUS OBJECT" from the Main Menu and press **DO** or press the **PREV OBJECT** (PF1) key.

2. The area around the previous object appears in a *highlighted box*. The Change Menu will appear (see Figure 5-1).

3. Now you can change attributes and copy, delete, or move objects and text.

If there is no previous object, the terminal will beep.

If you decide that the object you highlighted is not the one you want, press the **CANCEL** key.

Find Object

Use the Find feature if you want to modify just one object and that object is not a previous object. This feature locates the object nearest the cursor key.

You can use either the FIND key or the Main Menu.

To use the FIND key, do the following:

1. Move the cursor to the object you want to modify.

2. Press the FIND key. A highlighted box will appear around the object. The Change Menu will appear (see Figure 5-1).

To use the menu, do the following:

1. Select "FIND OBJECT" from the Main Menu and press DO.

2. Move the cursor to the object you want to modify and press DO. A highlighted box will appear around the object. The Change Menu will appear (see Figure 5-1).

If the object you highlighted was not the one you wanted, press the FIND key again. This will highlight each object until you locate the one you want to change.

Press the CANCEL key to cancel any highlighted object.

Now you can change attributes and copy, delete, or move objects and text.

The terminal will beep if you are not close enough to an object to highlight it.

Select Objects

If you have several objects you wish to modify, use the Select Objects feature.

To use the Select Objects feature, do the following:

1. Move the cursor to the center of the object or group of objects you want to change.

2. Press the **SELECT** key or choose "SELECT OBJECTS" from the Main Menu and press **DO**.

3. Move the cursor to draw a box around the object or objects you want to select.

4. When the box encloses the object(s), press **DO**. The area around the selected object will appear highlighted. (Only objects that are completely enclosed will appear highlighted.) The Change Menu will appear (see Figure 5-1).

If you decide that the object you highlighted is not the one you want, press the **CANCEL** key.

If nothing is selected, the terminal will beep.

> **NOTE:** Any change you make will affect *all* selected objects.

REORDERING OBJECTS

The Reordering feature lets you position an object in the foreground or background of a picture to control the final appearance of the picture and determine the sequence in which objects will appear on the screen.

To reorder objects, do the following:

1. Use "PREVIOUS OBJECT," "FIND OBJECT," or "SELECT OBJECTS" to highlight the object you want to move. The Change Menu will appear.

2. Move the cursor to the "PUT IN FRONT" or "PUT BEHIND" square on the Change Menu and press DO. The square on the menu will be highlighted. If you make a mistake, press DO again to cancel reordering.

3. When you have finished, remove the highlighted box by pressing the RESUME key, or select "NO MORE CHANGES" from the Change Menu and press DO.

You can use this feature when changing attributes, moving objects, or copying an object or you can use it by itself.

CHANGING ATTRIBUTES

To modify one or more attributes of an existing object, highlight the object(s) using the Previous Object, Find Object, or Select Objects feature.

The attributes you can change are:

□   Color

□   Pen

□   Pattern

□   Rule

□   Font

Select the attribute you want to change using attribute keys or menus.

To use keys, do the following:

1. Press the COLOR (F11) key, PEN (F12) key, PATTERN (F13) key, RULE (F14) key, or FONT (the - key on the numeric keypad). An Attribute Menu for the attribute you chose will appear.

2. Select the desired value from the Attribute Menu, and press DO.

3. To remove the highlighted box, press the RESUME key, or select "NO MORE CHANGES" from the Change Menu and press DO.

To use menus, do the following:

1. Select the attribute you want to change from the Change Menu and press DO. If you choose "CHANGE COLOR," "CHANGE PEN," "CHANGE PATTERN," "CHANGE RULE," or "CHANGE FONT," an Attribute Menu for the attribute you chose will appear.

2. Select the desired value from the Attribute Menu, and press DO.

3. To remove the highlighted box, press the RESUME key, or select "NO MORE CHANGES" from the Change Menu and press DO.

Using Outline Only, Fill Only, or Outline and Fill

To change the Outline Only, Fill Only, or Outline and Fill feature, select the one you want from the Change Menu and press DO.

MOVING OBJECTS

To move objects, highlight them using the Previous Object, Find Object, or Select Objects feature, and then do the following:

1. Select "MOVE" from the Change Menu and press DO. The "MOVE" square appears in reverse video.

2. Move the cursor to the highlighted box and press BEGIN DRAWING (INSERT HERE) key or DO. Move the cursor to reposition the selected object or objects. As the cursor moves, a rectangle on the screen shows where the objects will go.

3. When you finish moving the objects, press DO. The objects will appear in a new location, still highlighted by the reverse video box.

4. To remove the highlighted box, press the RESUME key, or select "NO MORE CHANGES" from the Change Menu and press DO.

You can repeat this procedure as long as the objects are highlighted.

Aligning Objects

To align an object, place the cursor in the object in a position that will help you to align it. For example, if you wish to align an edge of an object with another edge, place the cursor on the edge of the object you are moving.

COPYING OBJECTS

To copy objects, highlight them using the Previous Object, Find Object, or Select Objects feature, and then do the following:

1. Move the cursor to the "COPY" square on the Change Menu and press DO. "COPY" appears in reverse video.

2. Move the cursor to the highlighted box and press the BEGIN DRAWING (INSERT HERE) key or DO.

3. Move the cursor to reposition the copied object or objects. As the cursor moves, a rectangle on the screen shows where the copy will go.

4. When the copy is in the right position, press DO.

To make additional copies, do the following:

1. With the original still highlighted, press the BEGIN DRAWING (INSERT HERE) key to make another copy of the same object(s).

2. Position the copy as before, and press DO. Repeat these two steps to make as many copies as you need.

When you finish copying the objects, press the RESUME key, or select "NO MORE CHANGES" from the Change Menu and press DO.

ENLARGING, REDUCING, OR STRETCHING OBJECTS

PRO/SIGHT allows you to enlarge or reduce selected objects, or to stretch them to change their appearance.

To use these functions, do the following:

1. Select the objects you wish to modify using the Previous Object, Find Object, or Select Objects feature. The Change Menu will appear.

2. If you wish to enlarge or reduce objects, without changing their shape, choose the "ZOOM" option in the menu.

3. If you wish to change the shapes of the selected objects by stretching them, choose the "STRETCH" option in the menu.

4. Move the cursor to a point in the highlighted rectangle and press the BEGIN DRAWING (INSERT HERE) key.

5. Continue moving the cursor to expand, contract, or stretch the rectangle.

6. Press DO when you are satisfied with the size and shape of the rectangle. The objects will be redrawn, scaled to fit the new rectangle.

7. To remove the highlighted rectangle from the screen, press the RESUME key, or choose the "NO MORE CHANGES" option from the menu.

   NOTE: Scaling text may distort the spacing of the text, as well as the size and shape of the letters.

DELETING OBJECTS

To delete objects, highlight the object(s) using the Previous Object, Find Object, or Select Objects feature, and then do the following:

1. Press the REMOVE key or choose "DELETE" from the Change Menu.

2. Press DO. The object or objects are removed from the work area, and the Main Menu appears.

6

Advanced Techniques with PRO/SIGHT

Created Using PRO/SIGHT

Chapter 6

Advanced Techniques with PRO/SIGHT

This chapter gives tips on how to create complex graphic effects using the features of PRO/SIGHT. It is assumed that the reader is familiar with the material in previous chapters.

CENTERING OBJECTS

To center objects on the screen, do the following:

1. Choose the objects you wish to center using the Previous Object, Find Object, or Select Objects feature. The Change Menu will appear.

2. Choose "MOVE" from the menu.

3. Press the **CENTER OBJECTS** key (5 on the numeric keypad) to move the cursor to the center of the object or objects you've selected.

4. Press the **DO** key to pick up the objects.

5. Use the **CENTER HORIZONTAL** (0 on the numeric keypad), **CENTER VERTICAL** (**ENTER** on the numeric keypad), or **CENTER** (. on the numeric keypad) keys to reposition the object(s).

6. Press **DO** to move the objects to the new location.

7. To remove the highlighted rectangle from the screen, press the **RESUME** key, or choose the "NO MORE CHANGES" option from the menu.

DROP-SHADOWED OBJECTS

To create a drop-shadow effect, do the following:

1. Choose the object(s) using the Previous Object, Find Object, or Select Objects feature. The Change Menu will appear.

2. Copy the objects, offsetting the copy slightly from the original.

3. Change the color of the objects to the desired color for the shadow.

4. Choose "PUT BEHIND" from the menu to insure that the shadow appears behind the objects.

5. Press RESUME to complete the operation.

OUTLINED TEXT

To create this effect, do the following:

1. Choose the text object(s) using the Previous Object, Find Object, or Select Objects feature. The Change Menu will appear.

2. Select "COPY" from the menu and move the cursor back into the work area.

3. Press BEGIN DRAWING (INSERT HERE) to pick up the object(s).

4. Press the 1 key on the numeric keypad to move the object(s) one pixel down and to the left. Press BEGIN DRAWING (INSERT HERE) to end this copy and start another. Repeat this step for the 2, 3, 4, 6, 7, 8, and 9 keys on the numeric keypad. Thus you create eight copies of the object(s), each offset from the original by one pixel in a different direction.

5. Press DO to complete the last copy.

6. Change the color of the selected objects, which will become the interior of the outlined text.

7. Choose "PUT IN FRONT" from the menu.

8. Press RESUME to complete the operation.

OUTLINING WITH DIFFERENT COLORS

An object in PRO/SIGHT has only one color. However, you can create the effect of having an object that is filled with one color, and outlined with another.

To create the effect, do the following:

1. Choose the object using the Previous Object, Find Object, or Select Objects feature. The Change Menu will appear.

2. Set the object to "FILL ONLY," and set the color and pattern for the interior.

3. Make a copy of the object in the same position as the original. Do this by choosing "COPY" from the menu, moving the cursor into the work area, and pressing DO twice.

4. Change the object to "OUTLINE ONLY," and choose the outline color, pen, and rule.

5. Choose "PUT IN FRONT" to insure that the outline appears in front of the filled area.

6. Press RESUME to complete the operation.

DITHERING

PRO/SIGHT pictures can use up to eight colors. If more colors are needed, the effect can be obtained by *dithering* two colors together. Dithering is putting dots of different colors so close together that they appear to be a different color. To create the dithering effect, do the following:

1. Draw the object, using one of the colors you wish to dither and using the solid pattern (the one on the far left in both pattern menus).

2. Choose the solid pattern, using the PREVIOUS OBJECT (PF1) key.

3. Make a copy in the same location, by selecting "COPY" from the menu, moving the cursor into the work area, and pressing DO twice.

4. Change the pattern to the dither pattern (the one on the far right of the halftone pattern menu).

5. Change the color.

6. Choose "PUT IN FRONT" to insure that the dither pattern appears in front of the solid color.

7. Press RESUME to complete the operation.

COLOR SEPARATION

Use the color mixing function to do color separation, which is useful when color graphic work is to be sent to a commercial printer.

1. Draw the picture using only the background color and the six intermediate colors. Do not use the last color (white or black).

2. Press the COLOR key. The Color Menu will appear.

3. Set all but the red color mask areas to black. Save this in a file.

4. Repeat for yellow and blue. (Note that the primary colors of ink are red, yellow, and blue, while the primary colors for video display are red, green, and blue.)

7

Printing PRO/SIGHT Files

Created Using PRO/SIGHT and Printed with DIGITAL's LVP16 (6-Pen) Plotter

Chapter 7

Printing PRO/SIGHT Files

This Chapter describes how to set up and use printers and plotters with PRO/SIGHT.

Before you begin printing files for the first time, use "Set printer characteristics" from P/OS Print Services to set your printer type and location, as well as the proper characteristics for your printer and paper.

Choose the printer type that you will be using. If you are using an LVP16 or compatible plotter (for example, an HP 7470 or 7475) choose "LVP16." Refer to *Professional 300 Series User's Guide for Hard Disk System* for more information.

You should note the following points when using plotters and printers:

□ Fonts will not appear the same when using a plotter; they may appear distorted.

□ Halftone patterns cannot be printed on the LVP16 plotter. Only hatch patterns will print correctly on the LVP16 plotter. See Figures 3-4 and Figure 3-5 for examples.

□ When two objects overlap each other, the LA50, LA100, or other printers will draw the object in front. When using a plotter, both objects will be drawn by the plotter and give a raised effect.

□ Be sure that you set up the pens in the plotter to correspond to the screen.

LOADING THE FONTS AND PATTERNS

Before printing any file, you must run the following application by selecting it from the application group you installed it in: Load PRO/SIGHT Fonts and Patterns.

> **NOTE:** If your patterns and fonts do not print out correctly, check to be sure that you have loaded them.

Refer to the documentation that comes with the plotter for general installation instructions.

To connect a plotter or a plotter and a printer to the Professional, do the following:

▫ Use the DIGITAL cable (Part Number BCC 24-05) to connect both a plotter and a printer to your Professional. You also need the Digital printer cable supplied with your system unit.

▫ Use the DIGITAL plotter cable (Part Number BCC20-10) to connect the plotter directly to your computer.

To print a file on the LA50, you must set the aspect ratio switch or else pictures will not print correctly. To set the switch, do the following:

1. Take the cover off the printer.

2. Move the print head to the left.

3. There are two banks of switches located in the middle right-hand side of the printer. Lift the plastic cover with "SW-1" and "SW-2" on it. The switch you need to set is on the SW-1 bank. Use a pencil or your finger to move switch number five away from the word "open." This turns the switch off.

4. Turn the printer off and on again before printing a PRO/SIGHT file.

To use the plotter with your Professional, you must set the plotter's rocker switches as follows:

1. Set switches B1 and B4 to ON. (Move the switches so they point to B1 and B4.) Switches B2 and B3 should remain OFF.

2. The next two switches on the LVP16 plotter, and the next switch on the LVP16 plotter, control paper size. Set these switches according to the instructions in the plotter documentation.

3. If you are connecting both a printer and a plotter, move the Y/D switch to the Y setting. If you are connecting only a plotter, move the Y/D switch to the D setting.

4. Set the S1 and S2 switches to the OFF position.

5. Turn the power off on your Professional, wait a few seconds, and then turn the power on.

   NOTE: When designing pictures, remember that halftones and text may appear slightly different on the plotter than on the screen.

USING THE PRINTER AND PLOTTER

If your Professional is connected to both a printer and a plotter, make sure that both the printer and the plotter are plugged in, turned on, and on-line before you print or plot a picture. To resume using the plotter or printer after you have turned either one off, turn both the printer and the plotter on again. (If the printer or plotter is already turned on, you will have to turn it off and then turn it on again.)

   CAUTION: Wait until PRO/SIGHT finishes printing or plotting your picture before you shut off either the printer or the plotter. Otherwise, your picture will not finish printing.

If the plotter will not draw your picture:

□ Make sure the cables are connected.

□ Check both the plotter and the printer to see if the power is on.

□ Make sure the rocker switches are set as described above.

□ Refer to the plotter user documentation.

Appendix A

Appendix A

Alternate Input Devices

This Appendix describes the alternate input devices that can be used with PRO/SIGHT and explains how to install them.

> **NOTE:** This appendix describes several positional devices manufactured and distributed by independent vendors. These descriptions (in some cases including installation instructions) are provided for the reader's information and convenience only. They are based upon information provided by the vendors.
>
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POSITIONAL DEVICE STARTUP

The Positional Device Startup is an application that comes with PRO/SIGHT. You need this software to use an input device connected to the Printer Port or the Communication Port on the Professional. Connect the input device to the Professional before installing and running the Positional Device Startup application.

CONNECTING INPUT DEVICES

There are several *ports* through which you can connect a positional device to the Professional computer:

☐   The Communication Port

☐   The Printer Port

☐   Ports provided by the DECtouch (VRTS1-A) color/touch screen monitor

The Communication and Printer Ports can support a number of serial input devices. Both ports function identically, with the exception of the cable needed for each. A cable for the Printer Port requires a 9-pin female connector, while a cable for the the Communication Port requires a standard 25-pin female RS-232 type connector.

When not being used for positional device input, both of these ports may be used for their standard functions.

By connecting a DECtouch monitor to your Professional, you provide two additional serial ports as well as two parallel ports. We describe DECtouch later in this appendix.

IVIS Systems using PRO/SIGHT can use the DECtouch monitor as an input device or use other input devices connected directly to the DECtouch monitor. The Printer or Communication Ports cannot be used while using IVIS.

The following sections describe each of the available devices. For specifications, installation instructions, and other detailed information about a particular device, refer to the documentation provided with that device.

Note that, as described in this appendix, some devices require modification to the initial switch settings to work properly with the Positional Device Startup application.

SUMMAGRAPHICS MM 961 AND MM 1201 DIGITIZERS

The Summagraphics Corporation digitizers are tablet-type positional devices. A tablet is a surface that has a specified active area for digitizing. The Summagraphics tablet has a narrow groove etched on its plastic surface that defines the active area.

Summagraphics provides a mouselike *cursor* and a pencillike *stylus* that you can move over the tablet. This movement locates points defined within the active area, and sends the coordinates as digital information to the computer.

The MM 961 is a 6″ × 9″ tablet. The MM 1201 is a 12″ × 12″ version of the MM 961.

Both digitizers require a startup sequence after powerup, which the positional device driver automatically sends. To receive this data, the tablet must be connected to the desired port *before* running an application that uses the Positional Device Startup application.

The MM 961 and MM 1201 require a power supply and null modem cable for correct operation. However, no modifications to the standard jumper settings are necessary.

For ordering information, contact:

Summagraphics Corporation
35 Brentwood Avenue
P.O. Box 781
Fairfield, Connecticut 06430
(203) 384-1344

OPTOMOUSE 2000 AND 4000 SERIES

The USI Corporation's OptoMouse is a small, hand-held input device that you move across a special 9″ × 11″ grid. The grid consists of thin reflective lines set on a black background.

As the OptoMouse passes over the grid, its built-in optical system detects the reflective lines. An on-board microprocessor converts the optical data to a serial data stream containing the current x and y coordinates of the OptoMouse.

The OptoMouse requires a startup sequence after powerup, which the positional device driver automatically sends. To receive this data, the device must be connected to the desired port *before* running an application that uses the Positional Device Startup application.

The OptoMouse also requires a power supply and null modem cable for correct operation. However, no modifications to the standard jumper settings are necessary.

For ordering information, contact:

USI Computer Products
71 Park Lane
Brisbane, California 94005
(415) 468-4900

VS10X-CA GRAPHICS DATA PAD OR GTCO DIGI-PAD 5

The VS10X-CA Graphics Data Pad is DIGITAL's version of the GTCO Digi-Pad 5, a tablet-type positional device. Its active area is an 11″ × 11″ unmarked square area on the tablet.

This positional device uses a plastic tablet containing an array of conducting wires, through which a pulsing direct current travels. The current produces an electromagnetic field, which induces a signal in a coil contained in the cursor or stylus as it moves over the tablet.

> **NOTE:** Connect the RS-232 cable to Port B on the device. The port is labeled 71D4J6.

When connected to the Communication Port of the Professional, the device requires the switch settings shown in Table A-1 for correct operation. Note that when you connect this device to a DECtouch serial port instead, different settings are required, as described in Table A-2.

Table A-1
VS10X-CA or Digi-Pad 5 Switch Settings, when Connected to Communication or Printer Port

	Switch Pack 1	*Switch Pack 2*	*Switch Pack 3*
Switch 1	off	on	off
Switch 2	off	off	off
Switch 3	on	off	on
Switch 4	on	off	on
Switch 5	on	off	off
Switch 6	on	off	off
Switch 7	on	on	on
Switch 8	off	off	off

To use the DIGITAL Graphics Data Pad VS10X-CA or GTCO Digi-Pad 5 with the DECtouch color monitor, you must set the tablet switches as shown in Table A-2. Note that these settings are *not* the same as those required when you connect the tablet directly to the Professional's Communication Port. Note that these settings are *not* the same as the settings in the PRO/DECtouch Software User's Guide.

Table A-2
VS10X-CA or Digi-Pad 5 Switch Settings, when Connected to DECtouch Port

	Switch Pack 1	Switch Pack 2	Switch Pack 3
Switch 1	on	on	off
Switch 2	on	off	off
Switch 3	off	off	on
Switch 4	on	off	on
Switch 5	off	off	off
Switch 6	off	off	off
Switch 7	off	off	on
Switch 8	on	off	off

NOTE: Connect the RS-232 cable to Port B on the device. The port is labeled 71D4J6.

For ordering information, contact either your local DIGITAL sales representative (for the VS10X-CA), or (for the Digi-Pad 5):

GTCO Corporation
1055 First Street
Rockville, Maryland 20850
(301)279-9550

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GTCO MICRO DIGI-PAD

The Micro Digi-Pad is a compact electromagnetic positional device. Like the GTCO Digi-Pad 5, the Micro Digi-Pad uses a plastic tablet containing an array of conducting wires, through which a pulsing direct current travels. The current produces an electromagnetic field, which induces a signal in a coil contained in the cursor or stylus as it moves over the tablet.

The tablet has an active area consisting of a 6″ × 6″ unmarked square area on the tablet surface.

The Micro Digi-Pad needs no modification of the standard jumper settings. You should order the device to operate at 9600 baud (baud rate jumper IN). Also, the Micro Digi-Pad requires a power supply and null modem cable.

For ordering information, contact:

GTCO Corporation
1055 First Street
Rockville, Maryland 20850
(301)279-9550

SUMMAGRAPHICS SUMMAMOUSE

The Summagraphics SummaMouse is a mouse that reads optical information as it moves across a Mouse Pad. On the surface of the Mouse Pad run two sets of perpendicular stripes; these stripes absorb different wavelengths of light. The SummaMouse uses this optical information to translate movement over the stripes to digital data suitable for input to the computer.

The Summagraphics mouse needs no modification of the standard settings. You must order the SummaMouse in the standard "MM" data format, set with the standard automatic baud rate feature.

For ordering information, contact:

Summagraphics Corporation
35 Brentwood Avenue
P.O. Box 781
Fairfield, Connecticut 06430
(203) 384-1344

MICROSOFT MOUSE

The Microsoft Serial Mouse is a mechanical positional device that detects a change in position by the movement of a metal ball over a hard surface. The mouse enclosure contains sensors that read the motion of the ball, and send this information to an on-board processor that digitizes the information. Once digitized, the information passes to the host computer.

The Microsoft Serial Mouse needs no modifications; it connects directly to the Professional's Communication Port. Note, however, that to connect the mouse to the Professional's Printer Port, you must connect pins 4 and 20 of the mouse to pin 5 (DTR) of the Printer Port.

You can ignore the instructions that Microsoft provides for using their mouse with the MS-DOS and PC-DOS operating systems.

For ordering information, contact:

<div align="center">

Microsoft Corporation
10700 Northup Way
P.O. Box 97200
Bellevue, Washington 98009
(800)426-9400

</div>

DIC HIFI MOUSE

The HiFi Mouse, manufactured by the Display Interface Corporation, operates by detecting tiny sounds and shear strains that result from moving the mouse over a smooth surface. The sounds and strains are produced by suede cloth covering the device's base, whose filaments bend and straighten when moved. Gauges inside the mouse read the input and pass it to an on-board microprocessor for digitizing.

The HiFi mouse needs no modifications and requires a null modem cable for correct operation.

For ordering information, contact:

<div align="center">

Display Interface Corporation
1770 Post Road
C.S. 3240
Milford, Connecticut 06460
(203)877-7661

</div>

DECTouch (VRTS1-A)

The DECtouch (VRTS1-A) color monitor is a positional device whose main feature is a touch-sensitive screen. The screen uses resistive membrane technology, which provides extremely high resolution for individual touch points.

In addition to the touch screen, DECtouch also provides two parallel ports and two RS232 serial ports. To the parallel ports, you can connect either Atari-compatible joysticks the DIGITAL LM200 Quadrature Mouse. To the two serial ports you can connect the DIGITAL VS10X-CA Graphics Data Pad, the GTCO Digi-Pad 5, or the OptoMouse 4002

The DECtouch monitor comes with its own software that you should install on the target machine. The instructions in the *VRTS1-A Color Touch Screen Monitor Installation/Owner's Guide* shows you how to do this. The software used on the DECtouch monitor has a driver for any appropriate input device that you may want to connect to the DECtouch monitor.

> **NOTE:** Connect input devices directly into the ports on the DECtouch color monitor. Do not connect any input device to the Communication or Printer ports if you use the DECtouch driver. Do not use the Positional Device Startup application that comes with PRO/SIGHT if you use the DECtouch driver for input devices.

If several input devices are connected to a DECtouch color monitor, you must press the button on the device to switch to that device.

The joystick and Quadrature Mouse require no modification.

Figure A-1 illustrates the ports provided by the DECtouch monitor.
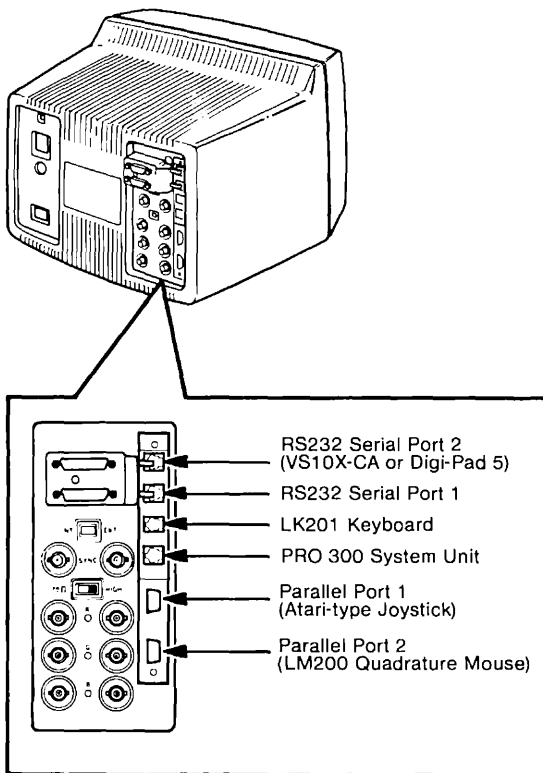
RS232 Serial Port 2
(VS10X-CA or Digi-Pad 5)

RS232 Serial Port 1

LK201 Keyboard

PRO 300 System Unit

Parallel Port 1
(Atari-type Joystick)

Parallel Port 2
(LM200 Quadrature Mouse)

Figure A-1
DECtouch Color/Touch Screen Monitor Ports

For ordering information, contact your local DIGITAL sales office or sales representative. For detailed information on using, installing, or programming with the DECtouch monitor, refer to the following manuals:

☐ *PRO/DECtouch Software User's Guide* (AA-BJ56A-TH)

☐ *VRTS1-A Color/Touch Screen Monitor Installation/Owner's Guide* (EK-VRTS1-ON-001)

SEIKO DT-3100 TABLET

The Seiko Tablet DT-3100 is a very high resolution tablet. Due to this high resolution capability, the device is ideal for use with Oriental character sets.

Figure A-2 shows how to connect the Seiko tablet to the Communication or Printer ports.

```
   Communication                                    Seiko Tablet
   or Printer Port

Ground          (AA)   1 ————————————————— 1   Ground

Send data       (BA)   2 ————————————————— 3   Receive Data

Receive data    (BB)   3 ————————————————— 2   Send Data

                                        ┌——— 4   Request to Send
                                        └——— 5   Clear to Send

Signal ground   (AB)   7 ————————————————— 7   Signal Ground

                                        ┌——— 6   Data Set Ready
                                        └——— 20  Data Terminal Ready
```
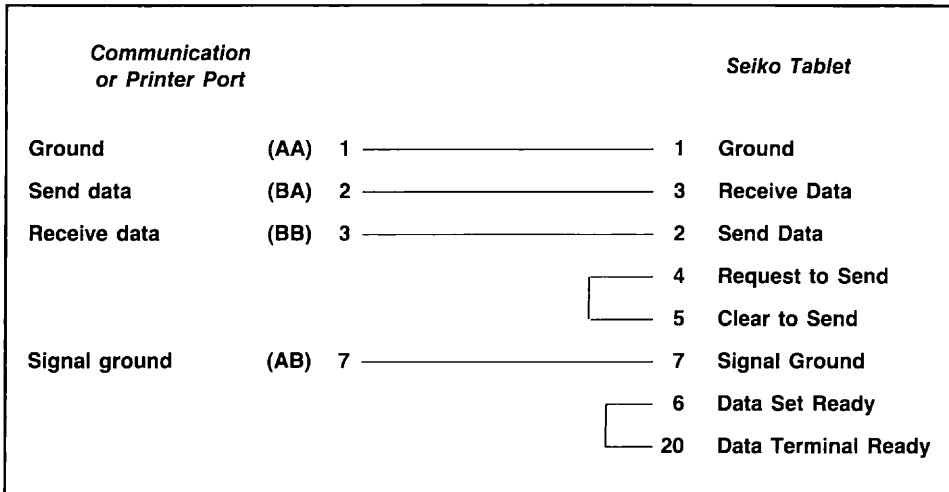
Figure A-2
Wiring for the Seiko Tablet

The connecting cable must be male to female. The male end connects to the Seiko Tablet. The female end connects to the Professional.

For ordering information, contact:

<div align="center">

Seiko Instruments (USA), Inc.
19 Crosby Drive
Bedford, MA 01730
(617) 275-4092

</div>

SUMMAGRAPHICS BIT PAD ONE

The Bit Pad One is a tablet that works on the magnetostrictive principle. Below the surface of the tablet are special wires that deform in a known manner when current is pulsed nearby. A send wire in the tablet carries the current past these magnetostrictive wires, and the resulting deformation is received as strain waves in the coils of the Bit Pad One's cursor or stylus. A microprocessor formats the data and translates it into x and y coordinates.

The Bit Pad One requires a startup sequence after power up, which the positional device driver automatically sends. To receive this data, the device must be connected to the desired port *before* running an application that uses the Positional Device Startup application.

To connect the Bit Pad One to the Professional, you must open the tablet by removing the metal bottom to gain access to the circuit board. Following is a description of the procedures to be used in setting the various kinds of connections, called straps:

- Pluggable Program Strap BA (Baud Rate)

  This item consists of three pins located on the circuit board, with a blue plug (Pluggable Strap) placed over two of the pins. The letters *A* and *B* are on the board on each side of the plug. The plug must be set so that it covers the center pin and the pin next to the letter *B*.

- POE Strap (Parity)

  This item consists of two points on the circuit board labeled POE. There should be no soldered connection (POE Strap) between these two points. If there is a connection, remove it. The factory setting omits the connection.

- HCB Strap (Stop Bits)

  This item consists of two points on the circuit board labeled HCB. There should be no soldered connection (HCB Strap) between these two points. If there is a connection, remove it. The factory setting omits the connection.

In addition to the strap settings, you must set the switches in the three switch packs that are on the circuit board. These are labeled on the circuit board as SW 1, SW 2, and SW 7.

Table A-3 shows the settings to be used when you are connecting the Bit Pad One to the Communication Port or the Printer Port. Table A-4 shows the settings to be used when you are connecting the Bit Pad One to a DECtouch serial port. An asterisk in a table indicates that you must not alter the factory setting for the corresponding switch. A hyphen in a table indicates that the indicated switch pack does not have the corresponding switch.

Table A-3
Bit Pad One Switch Settings, when Connected to Communication Port or Printer Port

	Switch Pack 1	Switch Pack 2	Switch Pack 7
Switch 1	*	off	off
Switch 2	*	off	on
Switch 3	*	off	off
Switch 4	*	off	off
Switch 5	*	off	off
Switch 6	off	off	off
Switch 7	on	-	off
Switch 8	off	-	off
Switch 9	on	-	off
Switch 10	-	-	off

Table A-4
Bit Pad One Switch Settings, when Connected to DECtouch Port

	Switch Pack 1	Switch Pack 2	Switch Pack 7
Switch 1	*	on	off
Switch 2	*	off	off
Switch 3	*	on	on
Switch 4	*	on	off
Switch 5	*	on	off
Switch 6	off	off	off
Switch 7	on	-	off
Switch 8	off	-	off
Switch 9	on	-	off
Switch 10	-	-	off

For ordering information, contact:

<div align="center">

Summagraphics Corporation
35 Brentwood Avenue
P.O. Box 781
Fairfield, Connecticut 06430
(203) 384-1344

</div>

INSTALLING THE POSITIONAL DEVICE STARTUP APPLICATION

Install the Positional Device Startup software on the hard disk by following the installation procedures in your *Professional 300 Series User's Guide for Hard Disk System*.

Before you use an input device on the Communication Port or the Printer Port, the Positional Device Startup application should be run once when the system is first turned on.

SETTING THE PORTS

The first time you start the Positional Device Startup application, the following menu appears:

```
                  Positional Device Startup


          @ 1984 by Digital Equipment Corporation
          For help, press HELP

             ->
                     Start Communication Port
                     Start Printer Port








  Select port and press DO
```
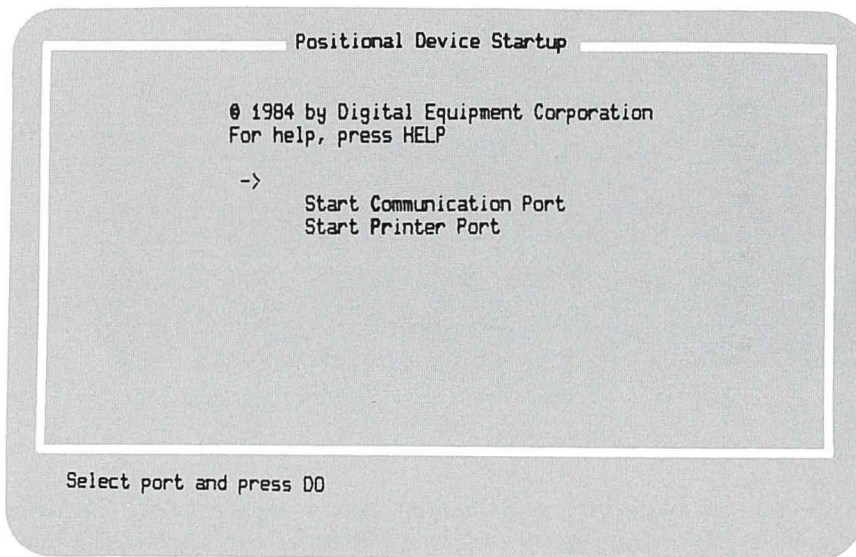
Figure A-3
Positional Device Startup Menu

To use a port, simply select the interface you wish to use from the menu and press DO. You can only select ONE of these two choices during a session. To start a different interface, you must restart your system. These drivers use nonrecoverable system resources that prevent more than one driver to be active at a time. Powering the Professional on and off lets you select a different interface.

Setting the Input Device for the Communication and Printer Ports

If you selected the Communication or Printer ports, a menu appears to let you choose the specific device you want to connect.

If you want to change the graphics device you are using, or if this is your first time using this application, you must set the device type. Figure A-4 shows the Device Type Menu.

```
┌──────────────── Device Type Selection ────────────────┐
│                                                        │
│   Select the Device Type by pointing to it and pressing DO.
│   For help in setting the type press HELP.
│   Press EXIT or MAIN SCREEN to return to previous menu.
│
│        ->      Type 01 DIGITAL VS10X-CA
│                Type 02 GTCO Digi-Pad 5
│                Type 03 GTCO Micro Digi-Pad
│                Type 04 Summagraphics MM 961
│                Type 05 Summagraphics MM 1201
│                Type 06 Summagraphics SummaMouse
│                Type 07 Microsoft Mouse
│                Type 08 USI OptoMouse 2000/4000
│                Type 09 DIC HiFi Mouse
│                Type 10 Seiko DT-3100
│                Type 11 Summagraphics Bit Pad One
│
│ Make a selection and press DO
│
│ The Communications Port was successfully started
│ No device type set
```

Figure A-4
Device Type Menu

To set the device type, point to one of the type choices and press DO. The menu will confirm your choice by printing it at the bottom of the screen. This only sets the device type for the current session. You have to reset the device type every time you turn on your Professional.

HELP FOR THE POSITIONAL DEVICE STARTUP APPLICATION

HELP is available for the Positional Device Startup application. Just press the HELP key.

Appendix B

Appendix B

GIDIS Frame Viewer

This Appendix describes how to use the GIDIS Frame Viewer.

GIDIS FRAME VIEWER

The GIDIS Frame Viewer allows you to display pictures created by PRO/SIGHT. You can display files by selecting them individually or you can display them using a script file. To use the GIDIS Frame Viewer install it using Disk Services and select it from the application group you installed it in.

The Main Menu of the GIDIS Frame Viewer looks like this:

```
┌──────────────────── GIDIS Frame Viewer Main Menu ────────────────────┐
│                                                                       │
│                                                                       │
│         Press EXIT to leave the GIDIS Frame Viewer.                   │
│                                                                       │
│            ->                                                         │
│                    View frames using a script                        │
│                    View individual frame(s)                          │
│                                                                       │
│                                                                       │
│                                                                       │
└───────────────────────────────────────────────────────────────────────┘

  Select one and press DO.
```
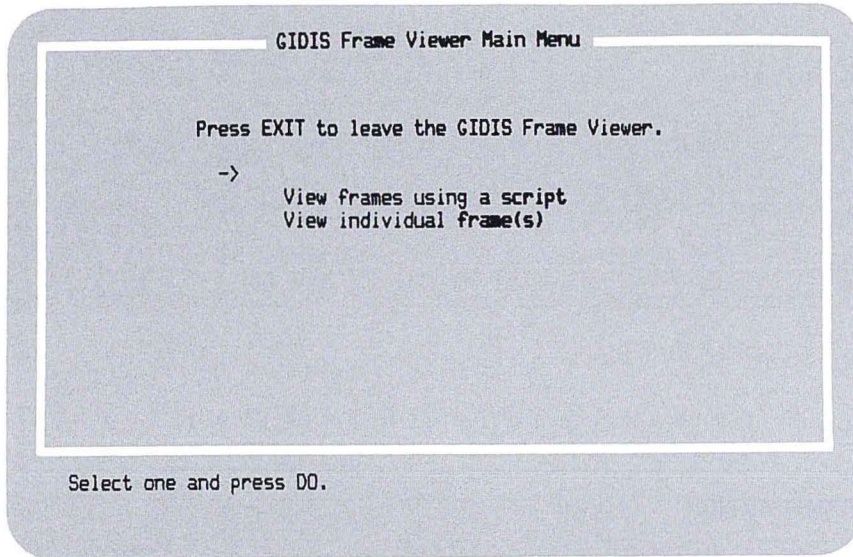
Figure B-1
Main Menu of GIDIS Frame Viewer

USING A SCRIPT FILE TO VIEW FRAMES

A script file specifies the GIDIS frame files you want displayed, the order in which they are displayed, and the time delay between frames. Each script file and its associated frame files can be thought of as a slide tray. Typically a separate directory is created for each such tray.

How to Create a Script File

1. Copy the script file template GIDISSHOW.SCP to a directory on the hard disk or a diskette. The template can be found in the directory [GIDISSHOW] on the diskette containing the GIDIS Frame Viewer. (See the sample script file in Figure B-2.)

2. Using EDT or PROSE PLUS, edit the copy of the script file and set the time interval. You can select from 0 to 9 seconds as the time interval between frames. Alternatively you can stop after each frame is displayed by selecting a hyphen, "-," as the interval. In this case you must press RETURN to display the next frame.

3. Enter the list of GIDIS frames to be displayed. These can be files created by PRO/SIGHT or other applications that produce GIDIS files, like PROSE PLUS. List the files in the order you want them to be displayed. The default filetype is "GID." If you want to display frames which are transparencies, append /NORESET to the end of a file specification. This prevents clearing the screen or resetting the colors. /NORESET must be all upper case.

    NOTE: All frames that are to be displayed should be in the same directory as their script file and the file specifications for the frames should not include a device or directory specification. This makes it easy to transport a script file and all its GIDIS frames to another Professional which has the GIDIS Frame Viewer application installed.

Figure B-2 shows an example of how to set up a script file.

```
!++ This file is a sample script file for the GIDIS Frame Viewer.
!    It contains operational information and also specifies
!    the frame files to be displayed. Lines in the script file may
!    contain comments, that are ignored. A comment is any text that
!    follows an exclamation point (!). Spaces and/or tabs before the
!    exclamation point are also ignored. Lines that contain
!    nothing but a comment are totally ignored.
!
!    The first noncomment line of the script file specifies the
!    number of seconds to wait between frames. The value may be
!    between zero (0) and nine (9). In addition, the user may press
!    (RETURN) to proceed prior to the expiration of the specified
!    interval. If a hyphen (-) is specified as the interval, it
!    means that the wait between frames is infinite, and the only
!    way to proceed is for the user to press (RETURN).
!
!    Subsequent noncomment lines of the script file specify frames
!    to be displayed. A file specification of GID is applied
!    as a default to the explicit specifications.
!
!--


!
!    The next noncomment line is the interval (in seconds) to wait
!    between frames.
!
5
!
! File specifications of GIDIS frames to be displayed.
!
! The file specification should not include references to a device
! or a directory. The defaults are as explained above.
!
GRAPH01
! Using /NORESET prevents clearing the screen or resetting the
! colors.
GRAPH02/NORESET
GRAPH03
GRAPH04
GRAPH05
FY1CHART
FY2CHART
FY3CHART
```

Figure B-2
Example Script File

Running the Viewer

When you choose "View frames using a script" from the menu, a list of files in the current directory of type "SCP" will display. These are the script files you have created. Choose one of the script files from the menu or press ADDTNL OPTIONS if you wish to select files from a different directory or with a type other than "SCP."

You can specify a script file on a diskette if you wish to display frames directly from the diskette without having to copy them to the hard disk first.

After you select a script file, the corresponding frames will be displayed continuously in the order they are listed in the script file. When you want to stop viewing frames, press EXIT.

Displaying a Frame

When you choose "View individual frame(s)" from the menu, a list of files in the current directory of type "GID" will be displayed. Select the ones you want to view or press ADDTNL OPTIONS if you wish to select files from a different directory or with a type other than "GID."

After a frame is displayed you may either press RETURN to display the next selected frame, or you may press EXIT to return to the GIDIS Frame Viewer Main Menu.

The files will be displayed in the same order as seen in the File Selection Menu, which may not correspond to the order in which you selected them. After the last frame is displayed, you will return to the GIDIS Frame Viewer Main Menu.

Creating a Viewing Application

The GIDIS Frame Viewer does not include any frames and expects you to specify, directly or through the use of a script file, where to find them. If you want to display your frames on another Professional, you could install the GIDIS Frame Viewer on the other Professional (if it is not already installed), and then view the frames from a diskette that has a copy of your "slide tray." You could also copy your frames from the diskette to the hard disk and view them from there.

Under some circumstances you may want to have a self-contained application that includes the viewer and selected frames. This application does not require you to specify a script or frame file.

You can use this type of application, for example, to give a predeveloped demonstration on any Professional. You can create and then use this application by performing the following steps:

1. Initialize a diskette and create the directories [GIDISSHOW] and [ZZDLM] using Disk Services.

2. Using File Services, copy the following files from the directory [GIDISSHOW] on the diskette containing the GIDIS Frame Viewer into [GIDISSHOW] on the initialized diskette:

    GIDISSHOW.TSK

    GIDISSHOW.INS

    GIDISSHOW.SCP

3. Using File Services, copy the following files from the directory [ZZDLM] on the diskette containing the GIDIS Frame Viewer into [ZZDLM] on the initialized diskette:

    FONT08.TSK

    FONT09.TSK

    FONT10.TSK

4. Copy all the GIDIS Frames you want to display into [GIDISSHOW] on the initialized diskette.

5. Using EDT, PROSE, or PROSE PLUS, edit GIDISSHOW.INS on the initialized diskette and make the following changes. (See the sample installation file in Figure B-3.)

    □ Change the "name" line to a new name for the application. The name cannot be more than 40 characters in length, including spaces. Try to use a name that is fairly specific, perhaps even including a date, in order to reduce the possibility of confusing it with another viewer application.

    □ Change the value of "GIDISSHOW_MODE" from "SEPARATE" to "INCLUDED."

    □ Add names of the files you want to be displayed using the following format:

      FILE filename.GID/DELETE

    □ Using EDT, PROSE, or PROSE PLUS, edit GIDISSHOW.SCP on the initialized diskette. Set the time interval and list all the GIDIS frames. For more information refer to "How to Create a Script File."

□ Install the application you created using Disk Services and select it from the application group you installed it in. Because the frames are included in the application, you will not be asked to specify which files you want to display. The corresponding frames will be displayed continuously in the order they are listed in the script file. When you want to stop viewing frames, press EXIT.

Figure B-3 shows an example of how to set up an installation file.

```
NAME "Fiscal Report 1984"
!
! The Viewer task
!
FILE GIDISSHOW.TSK/DELETE
!
! SIGHT Fonts
!
FILE [ZZDLM]FONT08.TSK/DELETE
FILE [ZZDLM]FONT09.TSK/DELETE
FILE [ZZDLM]FONT10.TSK/DELETE
!
! The following files will display when the application
! is run. All files must be present in the [GIDISSHOW]
! directory
! on the application diskette prior to installation.
FILE GRAPH01.GID/DELETE
FILE GRAPH02.GID/DELETE
FILE GRAPH03.GID/DELETE
FILE GRAPH04.GID/DELETE
FILE GRAPH05.GID/DELETE
FILE FY1CHART.GID/DELETE
FILE FY2CHART.GID/DELETE
FILE FY3CHART.GID/DELETE
!
!
! Install the SIGHT Fonts
!
INSTALL [ZZDLM]FONT08.TSK/TASK
INSTALL [ZZDLM]FONT09.TSK/TASK
INSTALL [ZZDLM]FONT10.TSK/TASK
!
! Install the viewer
!
INSTALL GIDISSHOW.TSK/TASK
```

```
! Specify operational mode. Choices are:
!
!   SEPARATE       The script file and frame files are NOT
!                  included as part of the application. Give
!                  the user the option to specify a script
!                  file or individual frames.
!
!   INCLUDED       The script file and frame files ARE
!                  included as part of the application.
!                  Use the script file specified by
!                  GIDISSHOW_SCRIPT to find the frame files
!                  in the directory specified by GIDISSHOW_DIR.
!
ASSIGN LOGICAL GIDISSHOW_MODE "INCLUDED"
!
ASSIGN LOGICAL GIDISSHOW_SCRIPT "GIDISSHOW"
!
ASSIGN LOGICAL GIDISSHOW_DIR "APPL$DIR"
!
! Make menu and help assignments. When GIDISSHOW_MODE is
! equal to "INCLUDED." The menu and help assignments are
! unnecessary.
!
ASSIGN MENU GIDISSHOW.MNU
!
ASSIGN HELP GIDISSHOW.HLP MAINHELP
!
!
! Run the viewer
!
RUN GDSSHW
```

Figure B-3
Example Installation File

Appendix C

Appendix C

PRO/SIGHT Frame Files

PRO/SIGHT stores pictures in disk files using a device-independent protocol known as GIDIS. GIDIS is a stream-oriented protocol of 16-bit words. Some of the words specify commands and the remaining words specify the corresponding operands. The frame files produced by PRO/SIGHT are sequential files containing variable-length records. Each record specifies one or more GIDIS commands and its associated operands. PRO/SIGHT stores additional information in the GIDIS data stream by encoding it as operands for the NOP command. Such additional information should only be interpreted by PRO/SIGHT, as its existence and meaning may change in a future release. For more information on GIDIS, refer to the *PRO/GIDIS Manual*.

Appendix D

Appendix D

PRO/SIGHT Function Keys

USING FUNCTION KEYS

The function keys let you quickly access some of the most commonly used PRO/SIGHT characteristics.

General Function Keys

KEY	FUNCTION
HELP	Displays on-line help for menu items and function keys.
RESUME	Displays the Main Menu after modifying, moving, copying, or deleting an object. Displays the Main Menu from HELP.
CANCEL	Cancels the current drawing operation, Select Objects, Previous Object, or Find Object.
EXIT	Exits from PRO/SIGHT.
PRINT SCREEN	Prints current screen, including menu.

Cursor Keys

KEY	FUNCTION
↑	Moves the cursor up the screen.
↓	Moves the cursor down the screen.
→	Moves the cursor to the right.
←	Moves the cursor to the left.
LEAVE MENU (PREV SCREEN)	Moves the cursor to the work area.
ENTER SCREEN (NEXT SCREEN)	Moves the cursor into the menu area.

Cursor Keys on the Numeric Keypad

KEY	FUNCTION
1	Moves the cursor down one pixel and toward the left corner.
2	Moves the cursor down one pixel.
3	Moves the cursor down one pixel and toward the right corner.
4	Moves the cursor one pixel to the left.
5	Moves cursor to center of highlighted objects. If no objects are selected, this key does nothing.
6	Moves the cursor one pixel to the right.
7	Moves the cursor up one pixel and toward the left corner.
8	Moves the cursor up one pixel.
9	Moves the cursor up one pixel and to the right corner.
0	Centers the cursor horizontally on the screen.
.	Moves the cursor to the center of the screen.
ENTER	Centers the cursor vertically on the screen.
,	Finds the nearest corner of the work area.

Execute Keys

KEY	FUNCTION
DO	Makes menu selections. Begins drawing operations. Ends drawing operations. Chooses endpoints for polygons and arcs.
BEGIN DRAWING (INSERT HERE)	Begins a drawing operation and can terminate the current operation.
PREV OBJECT (PF1)	Locates the last object created or modified, or group of objects modified.
FIND	Locates an object when you place the cursor near an object or touch the object with the cursor. Pressing the FIND key again locates the next object on the screen.
SELECT	Selects an object or group of objects.
REMOVE	Deletes highlighted object(s) from the screen.
RETURN	Ends the current line of text and begins a new line, left justified.
⊲x̄	Removes text or the last point from a polygon or freehand stroke.

Menu Keys

KEY	FUNCTION
MAIN SCREEN	Displays the Main Menu or the Change Menu.
SET-UP	Displays the Set-up Menu.
COLOR (F11)	Displays the Color Menu.
PEN (F12)	Displays the Pen Menu.
PATTERN (F13)	Displays the Pattern Menus and cycles through the available patterns.
RULE (ADDTNL OPTIONS)	Displays the Rule Menu.
FONT (The - key on the numeric keypad)	Displays the Font Menu.

Drawing Keys

KEY	FUNCTION
LINE (F17)	Activates the line drawing shape.
BOX (F18)	Activates the box drawing shape.
POLYGON (F19)	Activates the multisided figure drawing shape.
STROKE (F20)	Activates the freehand stroke.
ARC (PF2)	Activates the arc drawing shape.
CIRCLE (PF3)	Activates the circle drawing shape.
TEXT (PF4)	Activates the text drawing shape.

Appendix E

Appendix E

PRO/SIGHT Error Messages

The following are error messages and an explanation of possible causes or corrections for the error messages:

- Input file error — the input file cannot be read. Press the **RESUME** key to continue and choose another file from the menu.

- Output file error — incorrect file specification.
  Type in new file specification.

- Output file error — output file too large. Exit the file without saving it or edit the file and delete some objects. If you do not want to delete any objects, write the file to another device, to a diskette, for example, that has sufficient room.

- Out of memory for picture — display list is full. You cannot create any additional objects. Save picture. If additional objects are needed, create a transparency and display it over the original picture.

Glossary

Glossary

application (or application program)
>A computer program that meets some specific user need. For example, an application program can do an inventory or monitor a manufacturing process. Applications for the Professional are available from DIGITAL and other companies.

Communication Port
>The opening on the back of the system unit that links the Professional with a host computer, modem, communications devices or an input device, such as a mouse.

cursor
>There are several cursors which show location and work mode. The arrow cursor shows your location in the work area. The triangle cursor shows your location in the menu. A blinking crosshair indicates you are currently drawing. A rectangle or parallelogram indicates you can enter text.

PRO/DECnet
>An application for the Professional that allows programs running under the same or different DIGITAL operating systems to communicate with each other.

default
>An assumed value supplied by PRO/SIGHT unless or until you specifically indicate another choice.

directory
>A group of files stored on a volume (a disk or diskette).

dithering

> Putting dots of different colors so close together that they appear to be a different color.

filetype

> The part of a file specification that describes the nature or class of a file. The filetype follows a period after the filename and consists of from one to three characters. The default filetype for a PRO/SIGHT file is GID.

GID

> The default filetype for PRO/SIGHT and all GIDIS graphics files.

GIDIS

> DIGITAL's General Image Display Instruction Set, a graphics application.

hardware

> The physical equipment that makes up a computer system.

highlighted box

> A gray rectangle drawn behind one or more objects to indicate that they have been selected to be modified, deleted, or copied.

menu

> A list of available services or functions appearing on the Professional screen.

pixel

> The smallest displayable unit, or picture element, on a video display screen.

port

> An opening on the back panel of the Professional's system unit that provides the means for physically linking the Professional with a modem, another computer, a printer, or other equipment. (See Communication Port).

transparency

> Allows you to display a picture, as an overlay, without clearing the screen.

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