FONTWARE

MicroSoft Windows

MONITERM

FONTWARE
for MicroSoft Windows

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Welcome to Fontware for Microsoft Windows

The Bitstream Fontware Installation Kit lets you create high quality matching display and printer fonts to use with a wide variety of Microsoft Windows applications. You can generate fonts in the styles and sizes you need with the installation kit and typefaces from the Fontware Library. Once they're made, you can begin using the fonts immediately.

'Immediately' means that the Fontware Installation Kit installs your fonts automatically in Microsoft Windows and makes them available in your application's font selection menu.

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What's in this Kit

In addition to this guide your Fontware Installation Kit includes

- Three 5.25 inch disks in MS-DOS· format, containing the program for creating fonts from Fontware typefaces and making those fonts available to your printer and display. The program helps you choose the exact fonts you want for a specific display or printer.

- A *Fontware Impressions* brochure, presenting the current library of available typefaces. The brochure provides suggestions for using typefaces.

- An order form for Fontware typeface packages.

Fontware typefaces are available separately in packages of at least one typeface. Refer to the *Fontware Impressions* brochure for information about the typefaces currently available in the Fontware Library.

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What You Need To Use Fontware

You need the following items to make and install Fontware fonts:

- One or more Fontware typefaces. Each Fontware typeface package, available separately, contains the source designs for at least one typeface – often a family of typefaces in four styles.

- An IBM·· PC AT·· or 100% compatible with at least 512K bytes of memory, a hard (fixed) disk drive with approximately 900K bytes to store the Fontware Installation Kit, a high-density or double-density disk drive, and a monitor. You should also have 500K bytes free for font storage.

- MS-DOS or PC-DOS (version 3.1 or later) installed and running on the hard disk.

- Microsoft Windows (version 1.03 or later, *except* version 2.0) installed on the hard disk.

Getting the Best Performance

You can optimize the performance of Fontware by

- Installing a math coprocessor, a computer chip available from manufacturers such as IBM and Intel··.

- Increasing the conventional memory available on your system to 640K bytes using, for example, Intel's Above·· Board/AT.

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How To Use
this Guide

If you are new to Fontware and impatient to begin, read *Getting Started* which tells you how to install the Fontware Installation Kit on your hard disk. Then follow the instructions that appear on your display. If you need help, refer to Chapter 3, *Making Fonts*, and to the Quick Start Card.

If you want to learn more about Fontware fonts, read *Deciding Which Fonts To Make*. Then follow the instructions in *Getting Started* and *Making Fonts*.

Once you have made Fontware fonts and begin using them with applications, use the rest of this guide as a reference for font questions.

If you have questions about using type in your documents, refer to the *Fontware Impressions* brochure to get an idea of the mood or style created by different typefaces.

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Before You Start

The instructions in this guide assume that you are familiar with basic procedures in the DOS operating environment. If you have questions about DOS commands or the operation of your computer, refer to your system's manual.

Be sure that you know how to select fonts within Microsoft Windows and its applications. If you have questions, consult the *Microsoft Windows User's Guide* or the manual for the application program you are running.

Take time to go through the following steps before using the Fontware Installation Kit.

1. Use the COPY command at the DOS prompt to make backup copies of your installation kit. Be sure to copy all subdirectories and their contents. After you set up the Fontware Installation Kit on your hard disk, store all of your Fontware disks in a safe place.

Chapter 1

Getting Started

This chapter explains

- Setting up

- Adding Fontware typefaces

- Starting a kit that's already set up

- Getting help

- Changing the Fontware Control Panel

- Exiting the kit

Setting Up

Before you set up the Fontware Installation Kit on your system

- Make sure that Microsoft Windows is set up on your hard disk.

- If you have a Read This First insert in your Fontware Installation Kit package, follow its instructions.

- Note the printer port your printer uses. If you are not sure, run the Windows Control Panel (CONTROL.EXE in your Windows directory). Choose *Connections...* in the Setup Option of the Windows Control Panel.

- If you are currently working in Microsoft Windows, return to the DOS prompt by choosing the *End Session* or Close command.

1. With the PC turned on, insert Disk 1 of the Fontware Installation Kit into Drive A. Close the lever on the drive.

2. Type a:fontware **and press** <Enter>.

The copyright notice and Bitstream Fontware banner appear on your display.

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The program asks whether to show menus in more than two colors. Type Y if you have a color monitor. Type N if you have a monochrome monitor.

The Fontware Main Menu, shown in Figure 1-1 appears on your display.

```
┌──────────────── Fontware Main Menu ─────────────────┐
│                                                      │
│  ┌─────────────────────────────────────────────┐    │
│  │                                             │    │
│  │        Set Up Fontware                      │    │
│  │                                             │    │
│  │        View Control Panel                   │    │
│  │                                             │    │
│  │        Add/Delete Fontware Typefaces        │    │
│  │                                             │    │
│  │        Make Fonts                           │    │
│  │                                             │    │
│  │                                             │    │
│  └─────────────────────────────────────────────┘    │
│                                                      │
│  ┌──────────────────────────────────────────────┐   │
│  │ Guides you through first-time setup of your Fontware program. │
│  │                                              │   │
│  │ ↑↓ to point        ◄┘ to choose      Ctrl-Q to quit │
│  └──────────────────────────────────────────────┘   │
```
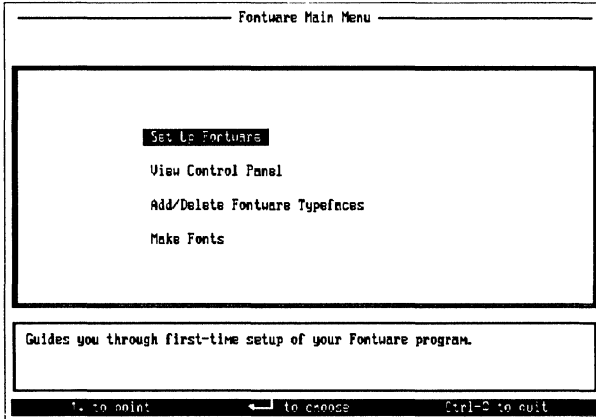
1-1 Fontware Main Menu during setup.

3. Press < Enter > to choose the Set Up Fontware option from the main menu.

You see the Fontware Control Panel.

The message window prompts you for the names of directories needed by Fontware, as well as for information about your display and printer.

If you need to, you can change the information in the control panel any time you use the Fontware Installation Kit.

4. Enter the full pathnames of the directories for:

- The Fontware Installation Kit and Fontware typefaces.

- Windows, which must already exist on your system.

- Your printer fonts.

You can name printer font directories for HP,, LaserJet® printers
and PostScript,, printers. Fonts for all other printers use the Win-
dows directory.

Press < Enter > after each directory name.

5. Type Y to install the Fontware Installation Kit.

The kit begins copying program information into your Fontware
directory. When the kit prompts you, insert each disk of the instal-
lation kit.

When the kit finishes copying, go on to step 6.

Figure 1-2 shows an example of a control panel during setup.

```
───────────────────── Fontware Control Panel ─────────────────────

 ── Directories ────────────────────────────────────────────────
 For Fontware   : C:\FONTWARE
 For MS-Windows: C:\WINDOWS
 For Printer    : C:\FONTS




                              ,·




 Directory for LaserJet or LaserWriter fonts only.  Fontware puts all other
 printer fonts in the Windows directory and ignores this entry.
 Press <Enter> to continue.
 ◄─┘ for next item           Esc to go back           Ctrl-Q to quit
```
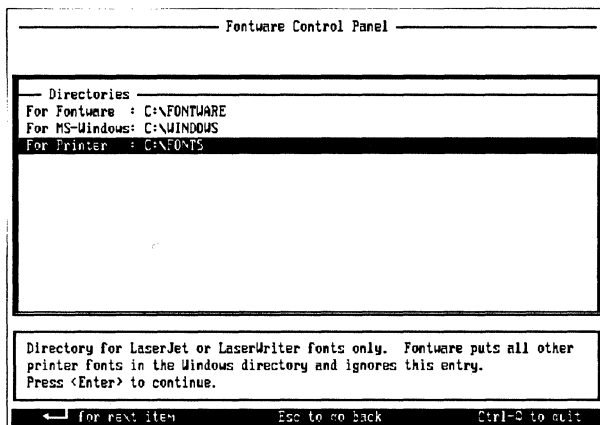
1-2 Sample Fontware Control Panel during setup

6. Point to the display graphics adaptor for your display
fonts and press < Enter >.

We use the term 'display' to mean your screen or monitor.

If you won't be making fonts for your display, choose none.

7. Point to a character set for the display and press < Enter >.

The Windows ANSI character set is standard for Windows applications. If you're not sure which character set you need, choose Windows ANSI.

The ASCII character set has fewer characters than Windows ANSI. Still, it contains the upper- and lowercase alphabet used in English, plus basic punctuation. It is a good choice if you need large characters to use in headlines.

The Roman 8 character set is included only for printer fonts. *Do not choose it for your display.*

See Appendix A for lists of the characters found in each set.

8. Point to the printer for your printer fonts and press < Enter >.

If your printer (or typesetter) is a PostScript device, choose *Apple LaserWriter or LaserWriter Plus* from the Printer Model menu. Appendix C lists the PostScript devices supported by the PSCRIPT.DRV driver.

9. Point to a character set for the printer and press < Enter >.

The Windows ANSI and ASCII character sets are described in Step 7. For Windows applications, we recommend that you choose the same character set for your printer as you chose for your screen.

For non-Windows applications only, you can make HP Laser-Jet® compatible soft fonts by choosing the Roman 8 character set.

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10. Point to the printer port that connects your printer to your computer and press <Enter>.

If you are making fonts for a printer or typesetter that is not con-
nected to your system, choose *none*.

Your display should resemble the one in Figure 1-3.

```
─────────────────── Fontware Control Panel ───────────────────

  ─ Directories ─────────────────────────────────────────────
  For Fontware   : C:\FONTWARE
  For MS-Windows: C:\WINDOWS
  For Printer    : C:\HPFFONTS

  ─ Display ──────────────────────────────────────────────────
  Model         : Hercules for Monochrome
  Character Set : Windows ANSI

  ─ Printer ──────────────────────────────────────────────────
  Model         : H-P Series II (portrait mode)
  Character Set : Windows ANSI
  Printer Port  : LPT1

  Your Control Panel is now complete.
  To accept these choices, press <F10>.  To change any entry, press <Esc>.

  F10 to accept          Esc to go back          Ctrl-9 to quit
```

1-3 Sample Fontware Control Panel after setup

11. If you are satisfied with your choices, press <F10>. If you want to go back and change an entry, press <Esc>.

Once the control panel is complete, the installation kit takes you
to the Fontware Typefaces menu. (If this is not a first-time setup,
Fontware typefaces may already exist in your Fontware directory.
In this case, the installation kit takes you to the Fontware Make
Fonts menu.)

Adding Fontware Typefaces

To make fonts, you need to add at least one Fontware typeface to your hard disk.

1. Press < F3 > in the Fontware Typefaces menu. (If you don't see the typeface menu currently on your display, choose *Add/Delete Fontware Typefaces* from the Fontware Main Menu.)

2. Insert Disk 1 of a Fontware typeface package into Drive A and press < Enter >. A pop-up menu of the typefaces, similar to the one in Figure 1-4, appears on your display.
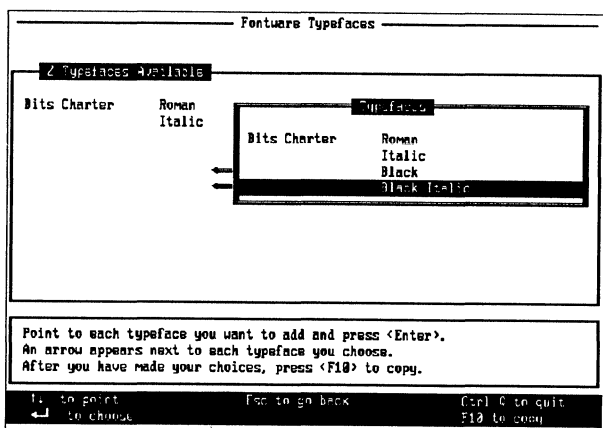
1-4 Sample Fontware typeface pop-up menu

3. Point to a typeface you want and press < Enter >. An arrow appears to the left of the typeface.

4. Repeat step 3 until you have chosen the typefaces you need.

5. Press < F10 >. The kit begins copying the typefaces to your hard disk.

6. If the kit prompts you, insert Disk 2 of the typeface package into Drive A and press < Enter >.

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Starting a Kit That's Already Set Up

If the Fontware Installation Kit is set up already on your hard disk and you are not in a Fontware menu, start the kit by doing the following:

1. If you are working in Windows, return to the DOS prompt by choosing the *End Session* or the *Close* command.

2. Change to the Fontware directory. If you have the Fontware directory on your system path, skip this step.

3. Type fontware and press < Enter >.

Starting the Fontware Installation Kit takes you to the Fontware Main Menu. From there you can choose

- *View Control Panel*, which lists basic information that Fontware needs to make your fonts. You can change any of the settings, except the Fontware directory.

- *Add/Delete Fontware Typefaces*, which lets you add typefaces to your Fontware directory and delete them when you're finished.

- *Make Fonts*, which lets you make fonts from the typefaces you have in your Fontware directory.

Getting Help

The message window in the lower half of each menu tells you about each option and suggests ways to proceed. If you have questions, refer back to this guide, or to the Fontware Quick Start Card. For a list of special keys and their functions, press the < F1 > Help key in the Fontware Make Fonts menu described in Chapter 3.

Changing the Fontware Control Panel

You can check the control panel whenever you use the installation kit. There are several reasons you might change this information. For example, perhaps you added a new printer, or want to make landscape fonts.

To change the Fontware Control Panel:

1.Point to *View Control Panel* in the main menu and press < Enter >.

2.Follow the instructions in the message window near the bottom of your display.

Exiting the Kit

To quit, or exit, the installation kit press the two keys < Ctrl > and Q at the same time. The kit returns you to the DOS prompt without making fonts.

If you need to, you can stop the Fontware Installation Kit while it is generating and installing fonts. Press the two keys < Ctrl > and C at the same time.

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Chapter 2

Deciding Which Fonts To Make

Before making fonts, you can save time and disk space by planning which fonts to make.

This chapter discusses

- What is a font?

- Four elements that define a font

- Things to consider when you make fonts

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What Is a Font?

A Fontware font is a set of characters for a specific model of printer or display device that you make using the installation kit and a Fontware typeface. Each font you make has a typeface design, such as Century Schoolbook Bold, and a set of characters, such as Windows ANSI.

Once you make them, fonts exist as files on your system. The installation kit makes sure that the font files you make can be found by Windows device drivers (software that applications use to show type on your printer and display).

Four Elements that Define a Fontware Font

To decide which fonts to make, consider the following questions:

Which printer and display device will I be using?

- Which set of characters do I need?

- Which typefaces do I need?

- Which type sizes do I need?

- The answers to these questions provide most of the information you need to make fonts. (There are a few other things to consider, too, which we cover in the next section.)

DEVICE

You should know the model names of the printer and display for which you are making fonts. The Fontware Control Panel lists the devices supported by the installation kit. The actual devices don't have to be connected to your system when you run the Fontware Installation Kit. However, once you have made the fonts, connect the printer and display to use the fonts.

Windows device drivers make sure that fonts are printed and displayed correctly on each device. Refer to Appendix C for a list of supported device drivers.

Note: *The name of the display device is not necessarily the same as the name of your monitor. If you are not sure which display device you have, check your hardware documentation or ask the person who installed Microsoft Windows on your system.*

CHARACTER SET

A character set, sometimes called a *layout* or a *symbol set*, is an organized collection of symbols.

The Fontware Installation Kit offers the following pre-defined character sets for both your display and your printer.

- ASCII (95 characters)

- Windows ANSI (193 characters)

- HP Roman 8 (190 characters)

You choose character sets for your devices in the Fontware Control Panel.

Lists of the characters found in each set appear in Appendix A at the end of this guide. Note that the HP LaserJet Plus® does not print characters 145 and 146 of the Windows ANSI character set. Microsoft Windows and Windows applications provide instructions for typing characters that do not appear on your keyboard.

Which character set should you choose? For general use in Microsoft Windows applications, choose the Windows ANSI character set. If you want a font of large characters to use in headlines or titles, try the ASCII character set. (Using a small character set, such as ASCII, keeps files of large headline fonts from exceeding the font capacity of your printer.) Choose the HP Roman 8

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character set only to make HP LaserJet Plus-compatible printer fonts for non-Windows applications.

TYPEFACE

You need at least one Fontware typeface. Each typeface package usually contains several typefaces, often a family of typefaces. Bitstream Charter is an example of a typeface family. A family usually includes four related typeface styles. Charter, for example, includes Roman, Italic, Black and Black Italic styles based on the Charter typeface design.

You might decide to use one, several, or all typeface styles from a package. Maybe you'd like to use typefaces from several packages. It's up to you. Refer to the *Fontware Impressions* brochure for samples of the typefaces currently available for Fontware for Microsoft Windows.

SIZES

Most of the Fontware typefaces are *proportional*: the character widths vary from one character to another. Some Fontware typefaces, such as Courier, are *monospace*: the character widths are all the same.

You request type sizes in the Fontware Installation Kit in units of *points*. One point is equal to about 1/72 inch. The text you are reading is 10 points. If you need a 10 pitch monospace font (10 characters to the inch), request it as 12 points. If you need a 12 pitch monospace font (12 characters to the inch), request it as 10 points.

Depending on the printer or display device, the smallest character you can make with Fontware is about 6 points. The largest character you can make for a LaserJet Plus or Series II printer is 72 points. The largest character you can make for a dot matrix printer is 99.9 points. PostScript-compatible printers have no size limit. Check your printer's manual for any size limitations.

For all devices, except PostScript printers, the Fontware Make Fonts menu in the installation kit lets you request point sizes using decimal numbers. You can enter fractions up to two decimal

places. For example, 10, 16.5, and 20.15 points are all valid type sizes.

You do not enter sizes for PostScript fonts. Instead, you request sizes when you run your application program. Your printer then scales the fonts to size during printing.

Zoom Factors for Displays

Several Windows application programs can display documents at their actual size and at reduced and enlarged sizes. The amount of reduction or enlargement, sometimes called a *zoom factor*, is usually expressed in percentages – for example, 50%, 75% or 200% of the actual size. You can make display fonts for each zoom factor.

For instance, if the actual size of the text in your document is 10 point, you might also make 7.5 point (75% of actual size) and 20 point (200%) for your display device. You don't need 5 point (50%), because most application programs don't display sizes below 6 point; they substitute unreadable symbols called *greeking* to hold the place of actual text. Once you have made the appropriate sizes, the application can select the right one for display. Of course, you only need to make the actual size for your printer, 10 point.

For ideas about using type sizes, see the *Fontware Impressions* brochure.

Things to consider when you make fonts

Before making your fonts there are a few other things you should keep in mind.

If your computer system has more than one Windows WIN.INI file, which one will you be using?

WIN.INI, a text file containing settings for many Microsoft Windows features and applications, is very important to Windows and to the Fontware Installation Kit. When you make fonts, the installation kit updates WIN.INI so that your applications can locate the new Fontware font files.

Usually, there is only one WIN.INI file on a system. The default pathname is \WINDOWS\WIN.INI. However, it is possible to have another directory containing Microsoft Windows files including WIN.INI. If your system fits this case, make sure the name of the Windows directory you want appears in the Fontware Control Panel. You can check the control panel when you run the installation kit.

How much disk space do you have for storing fonts?

To give you an idea of how much storage you need ... four files with four sizes – 8, 10, 12, and 18 point – of Swiss Roman in the Windows ANSI character set for the HP LaserJet Plus printer take about 119K bytes. The file with the same characters for display fonts takes another 16K bytes.

If storage on your hard disk is limited, you should make only the fonts you will need for a specific project. When you are finished using them, copy the fonts and the current WIN.INI file to a floppy

disk and remove the fonts from your system to make room for others. Then delete the fonts from the copy of WIN.INI still on your system. For more information, see Chapter 4, *I've Made my Fonts. What's Next?*

Hint: *To find out how much free storage space you have, use the About... option in the Windows System Menu, or the dir or chkdsk command in DOS. The Fontware Installation Kit lets you know if you have enough disk space before it makes your fonts.*

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How long will it take to make the fonts?

After you request fonts, the installation kit makes those fonts and updates files on your system so that your application programs can use the fonts. This process takes some time. For example, to make the four fonts described above for the LaserJet Plus and a screen display takes about 20 minutes on an IBM PC AT with 512 K memory. If your system has more memory and a math coprocessor, the same job will take much less time.

Are you really sure which fonts you need?

If not, experiment. Make a couple of different fonts and try them out within a document. If they look right, make other sizes and styles you need. In other words, feel free to sample fonts, but make just a few at a time until you build the complete set of fonts you need.

Chapter 3

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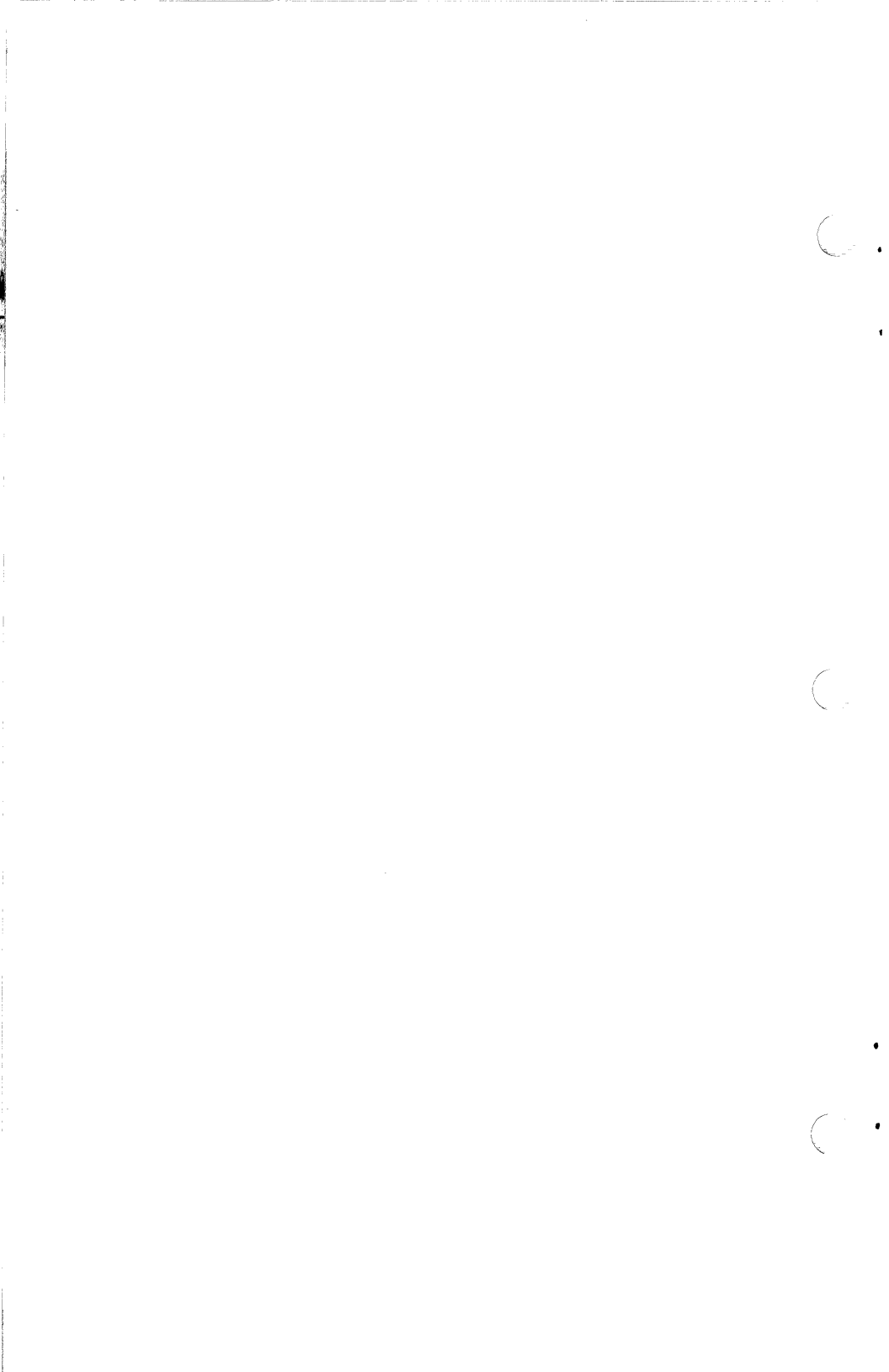
Making Fonts

This chapter explains

- Making printer fonts for the HP LaserJet printer family or dot matrix printers

- Making display fonts

- Making printer fonts for PostScript printers

- Making matching display and printer fonts

- Making 'zoomed' fonts for the display

If the Fontware Installation Kit is not already set up in a directory on your hard disk, please follow the instructions in Chapter 1, *Getting Started.* If you are not currently running the kit, follow the instructions for starting the kit in Chapter 1.

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Making Printer Fonts for the HP LaserJet Printer Family or Dot Matrix Printers

Make sure that the Fontware Control Panel lists your printer and choice of character sets by choosing *View Control Panel* from the main menu. Add the Fontware typeface you need by choosing *Add/Delete Fontware Typefaces* from the main menu. When you're ready to make fonts, follow the instructions below.

1. Start from the Fontware Make Fonts menu for the printer. Get there by choosing *Make Fonts* from the main menu, or by pressing < F10 > from either the Fontware Typefaces or Fontware Control Panel menu.

The make fonts menu lists the names of the Fontware typefaces on your hard disk.

2. Point to a typeface and press < Enter >.

The kit highlights a bar in the Point Size Selection menu next to the typeface. A cursor blinks at the beginning of the bar.

The message window tells you the name of the typeface style in Microsoft Windows applications. It also recommends a minimum point size and suggests a way to use the typeface in documents.

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3. Type in the sizes of the fonts you need. You can use either the numbers at the top of the keyboard or the numeric keypad. Press the spacebar to separate each size. For fractional point sizes, type in decimal numbers with up to two decimal places. Figure 3-1 shows an example of point sizes. When you're satisfied with the sizes, press <Enter>.

Change your mind? Choose the typeface again, and edit the list of sizes. The <F1> Help key tells you which editing keys are active.

```
────────────────── Fontware Make Fonts ──────────────────
                         ┌────────┐
                         │Printer │
            ┌─ Typefaces Available ─┐ ┌─── Point Size Selection ───┐
            │ Bits Charter   Roman    7 8 9 10 11 12              │
            │                Italic   7 8 9 10 11 12              │
            │                Black    12 14 16 20.5               │
            │                Black Italic  12                     │
            │                                                     │
            │                                                     │
            │                                                     │
            │                                                     │
            └─────────────────────────────────────────────────────┘
            ┌──────────────────────────┬──────────────────────────┐
            │ MS-Windows Style: Bold Italic │ Enter each size you want, followed by a │
            │ Recommended Size: 6 and up    │ a space.  You may enter fractional sizes │
            │ Recommended Use : Text        │ as decimal values.  Example: 9 10.5 12.25 │
            └──────────────────────────┴──────────────────────────┘
             ◄──┘ to accept sizes    Esc to go back      Ctrl-Q to quit
             F1 help                                     F9 paste
```

3-1 Example of point sizes in the make fonts menu

4. (optional) Press <F6> for an estimate of the time needed to make all of the fonts you have requested so far. The kit also tells you if you have enough storage space.

5. (optional) Repeat steps 2 through 4, choosing a different Fontware typeface. To repeat the list of sizes you entered last, press <F9> Paste, after you choose a typeface.

6. When you're finished specifying all the fonts you need, press <F10>. The kit displays an estimate of the time needed to make the fonts. It also tells you if you have enough disk space. If you don't have enough space, go back to the make fonts menu and delete sizes from the fonts. Then Press <F10> again.

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7. When you're ready, press Y. Fontware begins to generate your fonts.

Making Display Fonts

Make sure that the Fontware Control Panel lists your display and choice of character sets by choosing *View Control Panel* from the main menu. Add the Fontware typefaces you need by choosing *Add/Delete Fontware Typefaces* from the main menu. When you're ready to make display fonts, follow the instructions below.

1. Start from the Fontware Make Fonts menu for the display. Get there by choosing *Make Fonts* from the main menu, or by pressing < F10 > from either the Fontware Typefaces or Fontware Control Panel menu. If you selected a printer in the control panel, the make fonts menu for the printer appears on your screen. Press < F2 >. The make fonts menu for your display appears on the screen.

The menu lists the names of the Fontware typefaces on your hard disk.

2. Point to a typeface and press < Enter >.

The kit highlights a bar in the Point Size Selection menu next to the typeface. A cursor blinks at the beginning of the bar.

3. Type in the sizes of the fonts you need. You can use either the numbers at the top of the keyboard or the numeric keypad. Press the spacebar to separate each size. For fractional point sizes, type in decimal numbers with up to two decimal places. Figure 3-1 shows an example of point sizes. When you're satisfied with the sizes, press < Enter >.

If you change your mind, choose the typeface again, and edit the list of sizes. The < F1 > Help key tells you which editing keys are active.

4. (optional) Press < F6 > for an estimate of the time needed to make all of the fonts you have requested so far. The kit also tells you if you have enough storage space.

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5. (optional) Repeat steps 2 through 4, choosing a different Fontware typeface. To repeat the list of sizes you entered last, press <F9> Paste, after you choose a typeface.

6. When you're finished specifying all the fonts you need, Press <F10>. The kit displays an estimate of the time needed to make the fonts. It also tells you if you have enough disk space. If you don't have enough space, go back to the make fonts menu and delete sizes from the fonts. Then press <F10 > again.

7. When you're ready, press Y. Fontware begins to generate your fonts.

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Making Printer Fonts for PostScript Printers

Make sure that the Fontware Control Panel lists your printer and choice of character sets by choosing *View Control Panel* from the main menu. Add the Fontware typefaces you need by choosing *Add/Delete Fontware Typefaces* from the main menu.

Note: *If you changed to a PostScript printer and you already have Fontware typefaces on your system, you need to add the typefaces again. The reason for this is that PostScript fonts require special files that the kit doesn't add to your hard disk unless necessary.*
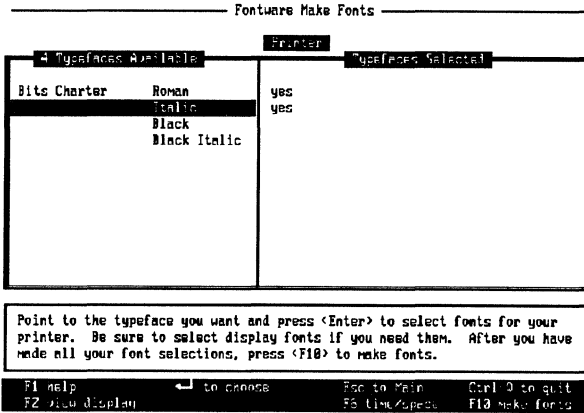
When you are ready, continue with the instructions below.

1. Start from the Fontware Make Fonts menu for the printer. Get there by choosing *Make Fonts* from the main menu, or by pressing <F10 > from either the Fontware Typefaces or Fontware Control Panel menu.

The make fonts menu lists the names of the Fontware typefaces on your hard disk.

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2. Point to a typeface and press < Enter >.

The word *yes* appears next to the typeface, which indicates you
have selected it. To de-select a typeface, point to it again and
press < Enter >. Figure 3-2 shows an example of the font selec-
tion menu for a PostScript printer.

———————————— Fontware Make Fonts ————————————

┌─ 4 Typefaces Available ──┐   ┌── Printer ──┐   ┌─ Typefaces Selected ─┐

Bits Charter   Roman   yes
                  Italic   yes
                  Black
                  Black Italic

Point to the typeface you want and press <Enter> to select fonts for your
printer. Be sure to select display fonts if you need them. After you have
made all your font selections, press <F10> to make fonts.

F1 Help   ↵ to choose   Esc to Main   Ctrl Q to quit
F2 view display   F6 time/space   F10 make fonts

3-2 Sample make fonts menu for a Postscript printer

3. (optional) Press < F6 > for an estimate of how long it will take
to make all of the fonts you have requested so far. The kit also
tells you if you have enough storage space.

4. Repeat steps 2 and 3 until you have selected all the typefaces
you need.

5. When you're finished specifying all the fonts you need, press
< F10 >. The kit displays an estimate of the time needed to make
the fonts. It also tells if you have enough disk space. If you don't
have enough space, go back to the make fonts menu and delete
fonts. Then press < F10 > again.

6. When you're ready, press Y. Fontware begins to generate your
fonts.

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Making Matching Printer and Display Fonts

There are two procedures for making matching fonts. The one you use depends on your printer.

Make sure that the Fontware Control Panel is correct. Then add any typefaces you need. When you are ready, follow the instructions below.

Procedure 1: Matching Fonts for Displays and the HP LaserJet Printer Family or Dot Matrix Printers

1. Start from the Fontware Make Fonts menu for the printer. Get there by choosing *Make Fonts* from the main menu, or by pressing < F10 > from either the Fontware Typefaces or Fontware Control Panel menu.

2. Point to a typeface and press < Enter >.

3. Type in one or more point sizes and press < Enter >. To edit the sizes, choose the typeface again.

4. Press < F4 > to copy your font requests to the display fonts menu.

5. (optional) Repeat steps 2 through 4, choosing a different Fontware typeface. To repeat the list of sizes you entered last, press < F9 > Paste, after you choose a typeface.

6. (optional) Press < F6 > for an estimate of the time needed to make all of the fonts you have requested so far. The kit also tells you if you have enough storage space.

7. When you're finished specifying all the fonts you need, press < F10 >. If you don't have enough space, go back to the make fonts menu and delete sizes from both the printer and display fonts. Then press < F10 > again.

8. When you're ready, press Y. Fontware begins to generate your fonts.

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Procedure 2: Matching Fonts for Displays and Post-Script Printers

Making matching fonts for PostScript devices is much the same as for other devices. However, you do not specify sizes for PostScript fonts.

1. Start from the Fontware Make Fonts menu for the printer.

2. Point to a typeface you want for PostScript fonts and press < Enter >.

The word *yes* appears next to the typeface, which indicates you have selected it.

3. Repeat step 2 until you have selected all the typefaces you need.

4. Press < F2 > to go to the make fonts menu for your display.

5. Point to a typeface you have chosen for your PostScript printer and press < Enter >.

6. Type in one or more point sizes for the display and press < Enter >. To edit the sizes, choose the typeface again.

7. (optional) Press < F6 > for an estimate of how long it will take to make all of the fonts you have requested so far. The kit also tells you if you have enough storage space.

8. (optional) Repeat steps 5 through 7, choosing a different Fontware typeface.

9. When you're finished specifying all the fonts you need, press < F10 >. If you don't have enough space, go back to the make fonts menu and delete fonts. Then press < F10 > again.

10. When you're ready, press Y. Fontware begins to generate your fonts.

Making 'Zoomed' Fonts for the Display

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To make display fonts that match printer fonts at enlarged and reduced views:

1. Follow the instructions above for making matching printer and display fonts.

2. Before generating the fonts, go to the make fonts menu for the display.

3. Choose each typeface again, and enter the additional sizes you want. Figure the additional sizes based on the percentage of enlargement and reduction. For example, if the actual size of a printer font is 12 points, then you might make three fonts for the display: 12 point (100% of the actual size), 8 point (75%), and 24 point (200%).

4. When you're ready, press < F10 > and follow the instructions on your display.

Chapter 4

I've Made My Fonts. What's Next?

After the Fontware Installation Kit has made your fonts, you can begin using them immediately according to the instructions provided with your Windows application. If you are accustomed to making font width tables or to downloading fonts to your printer, you don't need to with your Fontware Windows fonts. It's all been done for you.

This chapter discusses

- Identifying font files

- Storing fonts on diskettes

- Storing Fontware typefaces on diskettes

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Identifying Font Files

Because the Fontware Installation Kit updates your WIN.INI file so that your applications can automatically find the fonts, you usually don't need to know anything more about your fonts. However, if you want to copy or delete fonts from your hard disk, you'll need to recognize and interpret the font names.

Font Directories

The Fontware Installation Kit stores the fonts in the directories you selected during setup.

Font Names

When it assigns names to the fonts it generates, the Fontware In-stallation Kit uses the eleven character positions available in a DOS filename. (The eleven positions include the three-character exten-sion.) For example, the following are valid Fontware font names:

ak000wbp.fon

ag080ahp.hpf

Windows device drivers locate each font you request by check-ing the WIN.INI file for the name of the directory that contains the font, and interpreting information encoded in the font file.

Hewlett-Packard LaserJet Fonts

Fonts for the Hewlett-Packard LaserJet series of printers have the *.hpf* file name extension. The Windows device driver for HP LaserJet printers uses additional information stored in files with the *.pfm* extension.

Hewlett-Packard font file names have the format described below.

*ttpppcdo.*hpf

    where

tt	is the typeface identifier
ppp	is a three-digit point size description
c	is a character set identifier
d	is a device class identifier
o	indicates the orientation (portrait or landscape)

For keys to the character set, typeface, and device identifiers, see the appendixes.

Hewlett-Packard fonts contain three integers in their file names that indicate point size. For example,

    ag080ahp.hpf contains 8 point Century Schoolbook bold;

    af188bwp.hpf contains 18.8 point Century Schoolbook italic.

If you requested a fractional point size such as 18.75, the installation kit rounds the fraction to the nearest tenth. For example, it rounds 18.75 to 18.8, and the file name indicates 18.8 as 188.

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Figure 4-1 shows an example of an entry for HP LaserJet fonts made by the Fontware Installation Kit in a Windows WIN.INI file.

4-1 Sample HP fonts section in Windows WIN.INI

PostScript Fonts

Fonts for PostScript printers have the *.pso* file name extension. (The Windows device driver for PostScript uses additional information stored in files with the *.pfm* extension.)

PostScript font file names have the format described below.

*ttcd.*pso

> where
>
> *tt*   is the typeface identifier
>
> *c*   is a character set identifier
>
> *d*   is a device class identifier

For keys to the character set, typeface, and device identifiers, see the appendixes.

Note: *You can delete any file in your PostScript font directory containing the extension .afm.*

Figure 4-2 shows an example of an entry for PostScript fonts made by the Fontware Installation Kit in a Windows WIN.INI file.

```
Notepad - WIN.INI
File  Edit  Search

[PostScript,com1]
device=Apple LaserWriter Plus
resolution=300
papersource=1
paper0=US Letter
paper1=US Letter
paper2=US Letter

softfonts=4
softfont1=C:\PSFONTS\cqwq.pfm,C:\PSFONTS\cqwq.psc
softfont2=C:\PSFONTS\crwq.pfm,C:\PSFONTS\crwq.psc
softfont3=C:\PSFONTS\cswq.pfm,C:\PSFONTS\cswq.psc
softfont4=C:\PSFONTS\ctwq.pfm,C:\PSFONTS\ctwq.psc
```

4-2 Sample PostScript fonts section in Win.INI

All Other Windows-Compatible Fonts

Fonts for Windows-compatible devices, including displays and printers, have the *.fon* file name extension. The exceptions, Hewlett-Packard LaserJet and PostScript fonts, are discussed above.

The Windows font file names have the format described below.

ttnnncdo.fon

where

tt	is the typeface identifier
nnn	is a three-digit version identifier
c	is a character set identifier
d	is a device class identifier
o	indicates the orientation (portrait or landscape)

For keys to the character set, typeface, and device identifiers, see the appendixes.

Because these font files can contain more than one point size, the three integers in *.fon* file names do not indicate size. Instead, the integers indicate different versions of a font.

Figure 4-3 shows an example of an entry for Windows- compatible fonts made by the Fontware Installation Kit in a WIN.INI file.

4-3 Sample Windows fonts section in WIN.INI

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Storing Fonts on Diskettes

If you don't need the fonts right away, you can copy them from the font directories on your hard disk to a diskette. Then delete the fonts from the hard disk to make room for other files. Remember to use the *Remove Fonts* option in the Windows Control Panel (CONTROL.EXE in the Windows directory) to delete the fonts from the WIN.INI file.

If you back up a document that uses Fontware fonts to a diskette, back up the fonts and the WIN.INI file as well. Then, if you need to, you can delete the document and the fonts from your system, and delete the fonts from WIN.INI. Later you can restore the document, the fonts, and the WIN.INI file to your system and print your document again. Just keep in mind that you should save the WIN.INI file under some other filename, such as AUG8WIN.INI. That way, you won't confuse it with the WIN.INI currently on your system. Refer to the *Microsoft Windows User's Guide* for more information about WIN.INI.

Removing Fontware Typefaces

You can use the *Add/Delete Typefaces* option in Fontware to remove typefaces when you're done with them. If you want to remove the typefaces from your system and still see a list of your typefaces in the Fontware menus, do the following:

1. In DOS or Windows, change to the BCO subdirectory of your Fontware directory.

2. Delete files with the file name extension *.bco*

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3.If you have a PostScript printer, change to the BEZ subdirec-
tory of the Fontware directory and delete files with the file name ex-
tension *.bez*.

The next time you use the Fontware Installation Kit, you will see
your typefaces listed as before in the Fontware Make Fonts menu.
When you choose a typeface, the kit prompts you to go to
Add/Delete Fontware Typefaces and add the typeface again to
your Fontware directory. You should add all the typefaces you
need before you begin entering point sizes.

Chapter 5

Troubleshooting

This chapter suggests ways to correct problems you might encounter working with fonts.

Problem

The Fontware make fonts menu for the printer or display does not appear on my screen.

What You Should Do

Choose *View Control Panel* from the Fontware Main Menu. The device probably is set to *none*. Change the device to the correct printer or display. Then return to the make fonts menu.

Problem

The font menu in my application indicates more than one copy of the same font size.

What You Should Do

The application's device driver may not recognize the difference between fonts that have similar point sizes, such as 16, 16.5, and 16.12. Remake the set of fonts for the device using 16, 16.5, or 16.12 point but not all three. (The device driver probably displays fractional point sizes such as 16.5 as 16 point.)

The application device driver may not tell the difference between similar fonts that have different character sets. For example, 12 point Charter Black with the Windows ANSI character set and 12 point Charter Black with the ASCII character set may both appear in the type menu under the same name. Use just one of the fonts, and delete the other.

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Problem

The fonts I made don't appear in the list of available fonts in my application.

What You Should Do

Check your application program to see that you correctly selected the printer you intend to use. You should also make sure that the printer is connected to the right port.

Problem

A message from the printer appears indicating that the printer font limit has been reached.

What You Should Do

This indicates a restriction imposed by your application's printer driver. Consult the application program's manual for more information about print handling.

Problem

Characters above a certain point size appear clipped or oddly shaped.

What You Should Do

Some devices limit the space that a given character can occupy. Fontware takes the limit into account when it creates the character image, and provides the best image possible in the allotted space.

Some device drivers try to display larger fonts by multiplying the size of smaller fonts, even though you have actually made the larger font. Request an updated version of the device driver for your application program.

MONITERM

Problem

Some italic characters appear clipped or squeezed on my display (or printer).

What You Should Do

Several devices don't allow characters to extend outside a predefined area. Therefore, some characters such as lower case italics that would naturally extend outside this boundary appear clipped or distorted. These characters can appear normal when printed.

Problem

My headline font won't print.

What You Should Do

The headline font file could be too large for your printer's memory to handle. If the character set you used was Windows ANSI, delete the font. Then remake the same font with the ASCII character set.

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Character Sets and the Character Set Key

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The Fontware Installation Kit allows you to generate fonts containing the following character sets:

- ASCII

- Windows ANSI

- Hewlett-Packard Roman 8

The tables on the following pages in this appendix list the characters found in each set along with their decimal ASCII values. (Note that the HP LaserJet Plus does not print characters 145 and 146 of the Windows ANSI character set.)

The character set key below presents the predefined Fontware character sets and the one-character codes that represent them in font file names. The character set code appears as the sixth character in a font file name: ttpppcdo.xxx.

Code	Character set
a	ASCII
r	Roman 8
w	Windows ANSI

FONTWARE

Deci-mal	ASCII	Windows ANSI	Roman 8
0-31	not used	not used	not used
32	Space	Space	Space
33	!	!	!
34	"	"	"
35	#	#	#
36	$	$	$
37	%	%	%
38	&	&	&
39	,	'	,
40	(	(	(
41	)	)	)
42	*	*	*
43	+	+	+
44	,	,	,
45	-	-	-
46	.	.	.
47	/	/	/
48	0	0	0
49	1	1	1
50	2	2	2
51	3	3	3
52	4	4	4
53	5	5	5
54	6	6	6
55	7	7	7
56	8	8	8
57	9	9	9
58	:	:	:

Deci-mal	ASCII	Windows ANSI	Roman 8
59	;	;	;
60	<	<	<
61	=	=	=
62	>	>	>
63	?	?	?
64	@	@	@
65	A	A	A
66	B	B	B
67	C	C	C
68	D	D	D
69	E	E	E
70	F	F	F
71	G	G	G
72	H	H	H
73	I	I	I
74	J	J	J
75	K	K	K
76	L	L	L
77	M	M	M
78	N	N	N
79	O	O	O
80	P	P	P
81	Q	Q	Q
82	R	R	R
83	S	S	S
84	T	T	T
85	U	U	U
86	V	V	V

F
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R
E

Deci-mal	ASCII	Windows ANSI	Roman 8
87	W	W	W
88	X	X	X
89	Y	Y	Y
90	Z	Z	Z
91	[	[	[
92	\	\	\
93	]	]	]
94	^	^	^
95	_	_	_
96	`	`	`
97	a	a	a
98	b	b	b
99	c	c	c
100	d	d	d
101	e	e	e
102	f	f	f
103	g	g	g
104	h	h	h
105	i	i	i
106	j	j	j
107	k	k	k
108	l	l	l
109	m	m	m
110	n	n	n
111	o	o	o
112	p	p	p
113	q	q	q
114	r	r	r

F
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Deci-mal	ASCII	Windows ANSI	Roman 8
115	s	s	s
116	t	t	t
117	u	u	u
118	v	v	v
119	w	w	w
120	x	x	x
121	y	y	y
122	z	z	z
123	{	{	{
124						
125	}	}	}
126	~	~	~
127	end of set	not used	▨
128		not used	not used
129		not used	not used
130		not used	not used
131		not used	not used
132		not used	not used
133		not used	not used
134		not used	not used
135		not used	not used
136		not used	not used
137		not used	not used
138		not used	not used
139		not used	not used
140		not used	not used
141		not used	not used
142		not used	not used

Deci-mal	ASCII	Windows ANSI	Roman 8
143		not used	not used
144		not used	not used
145		'	not used
146		'	not used
147		not used	not used
148		not used	not used
149		not used	not used
150		not used	not used
151		not used	not used
152		not used	not used
153		not used	not used
154		not used	not used
155		not used	not used
156		not used	not used
157		not used	not used
158		not used	not used
159		not used	not used
160		Space	not used
161		¡	À
162		¢	Â
163		£	È
164		¤	Ê
165		¥	Ë
166		¦	Î
167		§	Ï
168		¨	´
169		©	`
170		ª	^

Deci-mal	ASCII	Windows ANSI	Roman 8
171		«	¨
172		¬	~
173		–	Ù
174		®	Û
175		‾	£
176		°	—
177		±	Ý
178		2	ý
179		3	°
180		´	Ç
181		µ	ç
182		¶	Ñ
183		·	ñ
184		،	¡
185		1	¿
186		o	¤
187		»	£
188		¼	¥
189		½	§
190		¾	ƒ
191		¿	¢
192		À	â
193		Á	ê
194		Â	ô
195		Ã	û
196		Ä	á
197		Å	é
198		Æ	ó

F
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FONTWARE

Decimal	ASCII	Windows ANSI	Roman 8
199		Ç	ú
200		È	à
201		É	è
202		Ê	ò
203		Ë	ù
204		Ì	ä
205		Í	ë
206		Î	ö
207		Ï	ü
208		Ð	Å
209		Ñ	î
210		Ò	Ø
211		Ó	Æ
212		Ô	å
213		Õ	í
214		Ö	ø
215		—	æ
216		Ø	Ä
217		Ù	ì
218		Ú	Ö
219		Û	Ü
220		Ü	É
221		Ý	ï
222		Þ	ß
223		ß	Ô
224		à	Á
225		á	Ã
226		â	ã

Deci-mal	ASCII	Windows ANSI	Roman 8
227		ã	Ð
228		ä	ð
229		å	Í
230		æ	Ì
231		ç	Ó
232		è	Ò
233		é	Õ
234		ê	õ
235		ë	Š
236		ì	š
237		í	Ú
238		î	Ÿ
239		ï	ÿ
240		ð	Þ
241		ñ	þ
242		ò	•
243		ó	μ
244		ô	¶
245		õ	¾
246		ö	—
247		•	¼
248		ø	½
249		ù	a
250		ú	o
251		û	«
252		ü	■
253		ý	»
254		þ	±
255		ÿ	not used

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Typeface Key

The following list presents Fontware typefaces, styles, and the two-character codes that represent them in font file names. The typeface code appears as the first two characters in a font file name: *tt*pppcdo.xxx.

Code	Typeface	Code	Typeface
aa	Swiss Roman	ay	Swiss Condensed Roman
ab	Swiss Italic	az	Swiss Condensed Italic
ac	Swiss Bold	ba	Swiss Condensed Bold
ad	Swiss Bold Italic	bb	Swiss Condensed Black
ae	Century Schoolbook Roman	bc	Futura Book
af	Century Schoolbook Italic	bd	Futura Book Italic
ag	Century Schoolbook Bold	be	Futura Heavy
ah	Century Schoolbook Bold Italic	bf	Futura Heavy Italic
ai	Dutch Roman	bg	Futura Medium
aj	Dutch Italic	bh	Futura Medium Italic
ak	Dutch Bold	bi	Futura Bold
al	Dutch Bold Italic	bj	Futura Bold Italic
am	Zapf Calligraphic Roman	bk	Courier 10 Roman
an	Zapf Calligraphic Italic	bl	Courier 10 Italic
ao	Zapf Calligraphic Bold	bm	Courier 10 Bold
ap	Zapf Calligraphic Bold Italic	bn	Courier 10 Bold Italic
aq	Futura Light	bo	Letter Gothic 12 Roman
ar	Futura Light Italic	bp	Letter Gothic 12 Italic
as	Futura Condensed Medium	bq	Letter Gothic 12 Bold
at	Futura Extra Black	br	Letter Gothic 12 Bold Italic
au	Swiss Light	bs	Prestige 12 Roman
av	Swiss Light Italic	bt	Prestige 12 Italic
aw	Swiss Black	bu	Prestige 12 Bold
ax	Swiss Black Italic	bv	Prestige 12 Bold Italic

FONTWARE

Code	Typeface	Code	Typeface
bw	ITC Avant Garde Gothic Book	cm	ITC Korinna Regular
bx	ITC Avant Garde Gothic Medium	cn	ITC Korinna Kursiv Regular
by	ITC Avant Garde Gothic Demi	co	ITC Korinna Extra Bold
bz	ITC Avant Garde Gothic Bold	cp	ITC Korinna Kursiv Extra Bold
ca	Zapf Humanist Roman	cq	Bitstream Charter Roman
cb	Zapf Humanist Italic	cr	Bitstream Charter Italic
cc	Zapf Humanist Bold	cs	Bitstream Charter Black
cd	Zapf Humanist Bold Italic	ct	Bitstream Charter Black Italic
ce	Bitstream Cooper Black	cu	ITC Galliard Roman
cf	University Roman	cv	ITC Galliard Italic
cg	Cloister Black	cw	ITC Galliard Bold
ch	Broadway Roman	cx	ITC Galliard Bold Italic
ci	ITC Souvenir Light	cy	ITC Garamond Book
cj	ITC Souvenir Light Italic	cz	ITC Garamond Book Italic
ck	ITC Souvenir Demi	da	ITC Garamond Bold
cl	ITC Souvenir Demi Italic	db	ITC Garamond Bold Italic

Device Key

Each single-character device code in a font file name represents a group of device drivers that handle output to printers and screens for Windows applications programs. The device code appears as the seventh character in a font file name: ttpppc**d**o.xxx.

The *resolution* of the devices is the main characteristic in common among the drivers in each group. Resolution is the number of dots the device prints or displays in a square inch. It is indicated by both the horizontal dots per inch (the *hdpi*) and vertical dots per inch (the *vdpi*).

Code	Resolution (*hdpi*, *vdpi*)	Driver	Device
a	96,48	egalores.drv	EGA™ card for low resolution screens with enhanced color display
b	96,72	cga.drv	IBM (or compatible) CGA™ card or COMPAQ® PC
		citoh.drv	C-Itoh™ 8510 printer
		egahibw.drv	EGA card for high resolution screens with enhanced color display (black and white)
		egahires.drv	EGA card for high resolution screens with enhanced color display and more than 64K
		egamono.drv	EGA card for monochrome PC display
		hercules.drv	Hercules™ graphics card (or compatible) with monochrome display

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Code	Resolution (hdpi, vdpi)	Driver	Device
c	120,72	epsonmx.drv	Epson® MX-80 and FX-80™ Graftrax® printers
		ibmgrx.drv	IBM Graphics printer and IBM Proprinter
		sg10.drv	Star® SG-10 printer
		ti850.drv	Texas Instruments® TI850 and TI855 printers
d	120,60	lq1500.drv	Epson LQ-1500 printer
		necp2.drv	NEC P2 and P3 printers
e	60,72	oki92.drv	Okidata® printers models 92, 93, 192, 193
f	192,96	thinkjet.drv	Hewlett-Packard ThinkJet® printer
g	180,60	tosh.drv	Toshiba® P1351 printer
h	300,300	hppcl.drv	Hewlett-Packard LaserJet Plus and LaserJet series II printers
i	100,100	viking.drv	Moniterm Viking 1™ graphics monitor
		vga.drv	VGA™ graphics adaptor
q		pscript.drv	Apple LaserWriter® and LaserWriter Plus®printers; DEC® PrintServer 40 printer; Linotronic™ 100, 300, and 500 typesetters; TI OmniLaser™ 2108 and 2115 printers

Fontware Installation Kit Messages

This appendix lists the messages that can appear on your
display while you are running the installation kit.

Message	What It Means
Cannot change to Fontware Directory.	During setup. The kit is unable to change to the Fontware directory you typed. Check to make sure that you typed a valid directory name.
Cannot change to Fontware Drive.	During setup. The kit is unable to change to the drive you indicated for the Fontware directory. Check to make sure that you typed a valid drive letter before the directory name.
Check disk in Drive A: and close drive lever.	There is no disk in Drive A. If you are installing the kit, put the appropriate disk into the drive and close the drive lever. If you are adding typefaces, put a typeface disk into the drive and close the lever.
	A disk is in Drive A but the drive lever has not been closed. Be sure to close the drive lever.
Check disk. Files may be corrupted.	The kit is unable to read the disk you are trying to copy from. If you are using a backup of an original Bitstream Fontware disk, exit the kit, make a new backup and try again. If the disk is an original Fontware disk, call Bitstream Technical Support.

Message	What It Means
Choose Set Up Fontware before attempting to add typefaces.	You have tried to choose *Add/Delete Fontware Typefaces* from the main menu before completing setup.
Choose Set Up Fontware before attempting to make fonts.	You have tried to choose Make Fonts from the main menu before completing setup.
Choose Set Up Fontware before attempting to view the Control Panel.	You have tried to choose *View Control Panel* from the main menu before completing setup.
Display Sizes to Printer Sizes. Not Allowed:	During <F4> Copy Sizes. You have tried to copy a font size that is allowed for your display but is *not* allowed for your printer. Depending on your application, you may not be able to select the display font.
Fontware installation failed.	During setup. This usually indicates that you do not have enough space on your system for all the Fontware Installation Kit files. Make some room on your hard disk and try *Set Up Fontware* again.
General Internal Error. Call Bitstream Technical Support.	The kit is unable to allocate memory on your system to perform certain tasks.
Insert a Fontware Typeface disk into Drive A:	During add typefaces. You have put a disk into the drive that the kit does not recognize as a typeface disk. Remove the disk from the drive, insert a typeface disk and press <Enter>.

Message	What It Means
Insert Fontware Typeface disk # 1 into Drive A:	During add typefaces. You have put a disk into Drive A that the kit does not recognize as a typeface disk. Check that the correct disk is in the drive.
Internal Error ##. Call Bitstream Technical Support.	This general class of errors indicates a problem specific to one of the Fontware Installation Kit menus.
No character set available.	An information file for the character set you have chosen may be damaged. You should set up the installation kit again.
No display devices available.	An information file for the display device you have chosen in the control panel may be damaged. You should set up the installation kit again.
No printer port available.	An information file for the printer port you have chosen in the control panel may be damaged. You should set up the installation kit again.
No sizes to copy for this typeface.	During make fonts — edit sizes session. You have pointed to a typeface that has no size selections and pressed the <F4> key. If you want to copy sizes, first choose the typeface, then enter point sizes.
No typefaces on the system. Choose Add/Delete Fontware Typefaces.	From main menu. You have tried to choose make fonts before adding typefaces to your system.

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Message	What It Means
Not enough disk space to install Fontware.	During set up. The Fontware Installation Kit needs about 900K bytes of space on your system for setup. You should make some room on your hard disk and run setup again.
Please put Installation Kit disk # 1 in Drive A:	During setup. You have put a Fontware Installation Kit disk into the drive that is not the first disk. Check the labels of your kit disks and put disk #1 into the drive, then close the lever.
Printer Sizes to Display Sizes. Not Allowed:	During <F4> Copy Sizes. You have tried to copy a font size that is allowed for your printer but is *not* allowed for your display. This may be because the display font size would be too large for Windows.
The display typeface already has sizes selected. Do you want to overwrite them?	During make fonts. You have pointed to a typeface and pressed <F4> to copy sizes from printer to display but you have already entered display sizes for that face. If you want to overwrite the display sizes, press Y. You can press N and then press <F2> to check the display sizes first.
The printer typeface already has sizes selected. Do you want to overwrite them?	During make fonts. You have pointed to a typeface and pressed <F4> to copy sizes from display to printer but you have already entered printer sizes for that face. If you want to overwrite the printer sizes, press Y. You can press N and then press <F2> to check the printer sizes first.

Message	What It Means
The size at left has too many decimal digits. Maximum is 2.	You have entered a fractional point size with more than two decimal places. Move the cursor to the point size indicated and delete the extra places.
The size at left is repeated. Delete duplicates.	You have entered the indicated point size more than one time. Move the cursor to all duplicates and delete the repeated sizes. **Note:** Printers and displays with very low resolution may not permit some integer sizes that are very close together. If you get this message and do not see exact duplicates in the point size selection, try deleting a size that is very close to the indicated size.
The size at left is too large. Maximum is *xx* points.	You have entered a point size that is too large for your printer or display. This message indicates the largest size permitted for the current device.
The size at left is too small. Minimum is *xx* points.	You have entered a point size that is too small for your printer or display. This message indicates the smallest size permitted for the current device.
This directory does not exist. Please exit Fontware and install Windows.	During setup. The kit is unable to find the directory you indicated for Microsoft Windows. If Windows is installed, check to make sure you typed the correct directory name before you exit the kit.

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Message	What It Means
Time and Space Estimates. Not enough disk space available.	During make fonts. The kit has checked your available disk space against its space estimates and determined that there is not enough room on your disk. Press <F1> to see space estimates and space available. You should delete some font requests and check the estimates again by pressing <F6>.
Typeface not found. Go to Add/Delete Fontware Typefaces.	During make fonts. You have chosen a typeface that the kit does not find on your system, even though the name is listed in the make fonts window. This may happen if you have both a PostScript and a non-PostScript printer and you added the typeface when the Fontware Control Panel was set to the non-PostScript printer. Check the control panel to make sure that you have chosen a PostScript printer, then go to Add/Delete Typefaces and add the typeface.
Typeface will be removed from your system. Do you want to delete?	During delete typeface. All references to the chosen typeface will be erased from your hard disk. If you delete the face and later want to make fonts using the deleted typeface, you must first add it back to your system.
Unable to copy all required files.	During add typefaces. One or more files on the disk in Drive A may not be readable. If the disk is a backup, exit the kit and make a new backup. If the disk is an original, call Bitstream Technical Support.
Unable to make directory *directory name*.	During setup. The Fontware Installation Kit cannot create a directory it needs to set up. This may indicate a hardware problem.

Message	What It Means
Unable to make FONTWARE.BAT.	During setup. The kit cannot create a batch file that it requires. This usually means that the Fontware initialization file is damaged. You should set up the Fontware Installation Kit again.
Unable to make the Fonts directory.	During setup. You have entered a directory name that the kit cannot create on your hard disk. Press <Esc> and enter a different directory name. This may indicate a general problem with writing to your hard disk.
Unable to make the Fontware directory.	During setup. You have entered a directory name that the kit cannot create on your hard disk. Press <Esc> and enter a different directory name. This may indicate a general problem with writing to your hard disk.
Unable to read *xxx* directory.	The kit cannot read files in one of the Fontware subdirectories: BCO, BEZ, CSD, DDF, TDF, TMP. You should set up the Fontware Installation Kit again.
Unable to read FONTWARE.INI.	You have started the kit, but it cannot read the initialization file called FONTWARE.INI. You should set up the kit again.
WIN.INI does not exist. Please exit Fontware and install Windows.	During setup or at the beginning of a Fontware Installation Kit session. The directory you indicated for Microsoft Windows exists, but the kit cannot read the Windows initialization file. If Windows has been installed, this may indicate a hardware problem.

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