

# HEWLETT-PACKARD

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**Using the  
HP22708A  
Hewlett-Packard  
DeskJet  
Soft Font Utility**

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**Printing History** Edition 1 December 1987 Printed in U.S.A. 12/87

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# Using the HP22708A Hewlett-Packard DeskJet Soft Font Utility

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## Introduction

This guide covers the setting up and use of HP DeskJet printer soft fonts and the DeskJet Printer Soft Font Utility (DSU) program. We recommend this program and the soft fonts be used only with HP DeskJet printer. Hewlett-Packard DeskJet printer soft fonts are designed for use with the HP DeskJet printer and allow you the flexibility of printing your reports and documents using many different fonts. Soft fonts must be "downloaded" to the printer before they can be used. Download refers to the process of copying a font from your computer to the printer. Soft fonts are stored in the printer's memory (RAM) cartridge, which must be purchased separately. When using soft fonts it is easy to enhance your text with regular, bold, and italic print in several typefaces and point sizes.

Before you begin, please check to ensure that your computer and the DeskJet printer are working properly and communicating. Refer to the HP DeskJet Printer Owner's Manual for instructions on setting up your DeskJet printer. To help you better understand the terminology in this guide, please turn to the Glossary section (page 23) for a list of terms and their definitions as they are used here.

Described in this guide is a program for downloading your soft fonts to the HP DeskJet printer. Another section "Sample DeskJet Printer Soft Font Utility Sessions" provides you with examples of several ways to use DSU. The "Printing with DeskJet Printer Soft Fonts" section describes ways you can print with your soft fonts. The "Managing Soft Fonts" section points out ways to use your printer more productively because a limited number of fonts can be stored in the RAM (memory) cartridge.

# Installing DeskJet Printer Soft Fonts and the DSU program

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## **Before You Start Important!**

As with any software product, we suggest you make a back-up copy of your soft font discs as soon as you receive them. This will insure you against accidental damage or loss of the master discs. Be sure to read the Software License Agreement that is supplied with your soft fonts regarding copy restrictions.

## **Creating a Work Disc**

The first step of installing the soft fonts and DSU program will be to copy both onto your work disc (hard disc or floppy discs):

## **For Hard Disc Users**

We recommend you create a directory on your hard disc where the DSU program will reside.

1. At the DOS prompt C>, type MD (for MKDIR) followed by a directory name. For example:

```
C>MD DSU
```

2. Next, change to the DSU directory:

```
C>CD DSU
```

You will now copy the DSU program files from the program disc into this directory.

3. With the DSU program disc (Disc #1) in drive A, at the DOS prompt C, type

```
C>COPY A:DSU.*
```

This will copy the DSU program into the directory C:\DSU.

4. Though the DSU program can reside in the root directory of your work disc (if you prefer), it is advisable to copy your soft font "font files" into a separate directory on your work disc. (This may be a sub directory of the root directory or can be a subdirectory of the \DSU directory you just created.)

For example:

5. At the DOS prompt (still in the DSU directory) make a subdirectory called FONTS.

```
C>MD FONTS
```

To copy the soft fonts into this directory:

6. Change to the FONTS directory:

```
C>CD FONTS
```

7. With the DSU program disc (Disc #1) in drive A, at the DOS prompt, type

```
C>COPY A:*.USP C:\DSU\FONTS
```

This will copy your soft fonts into the directory C:\DSU\FONTS.

To copy the remaining soft font discs:

8. Insert each of the remaining soft font discs into Drive A, then type

```
C>COPY A:*.*
```

This will copy your soft fonts into the directory C:\DSU\FONTS. Having all soft fonts in one directory will help speed the download utility program in its search for your soft font files.

### For Floppy Disc Users

With the DOS prompt displayed:

1. Insert the DSU program disc into a flexible disc drive.
2. Insert a formatted work disc into the other drive. If you only have one floppy disc drive you'll need to use the DISKCOPY program included on your DOS disc.



### Note

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If you have formatted the work disc on a 1.2Mb disc drive, you **MUST** insert that work disc into the 1.2Mb disc drive to copy the DSU program files and soft font files.

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3. Make sure the drive ID (A or B) in the DOS prompt is for the drive you used in step 1. If it isn't, at the DOS prompt, type the ID of the drive containing the disc, then press the Enter key.
4. At the DOS prompt, type:

```
COPY *.* <drive ID>
```

<drive ID> is the drive containing the work disc. (e.g., A>COPY \*.\* B:)

---

## USING DSU

### Downloading DeskJet Printer Soft Fonts.

To use the following instructions, first determine whether you want to download fonts directly to the printer or use a "set-up" file which can be sent to the printer and will automatically download fonts for you. Downloading fonts directly to the printer is best used when you want to use specific fonts only once.

Downloading fonts via a setup file, or in a batch file, is best used when you will be using the same set of fonts quite often. Before beginning, be sure that the DSU program is installed on your hard disc, or your DSU program work disc is installed in an available disc drive. See the Getting Started section of this guide for instructions on creating a work disc.

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#### Important Note

When a font is downloaded to the printer's memory cartridge, it occupies a certain amount of printer memory, which is only available for downloaded fonts. If you will be downloading several fonts at one time, you need to carefully monitor the amount of memory usage on your printer. The printer can accommodate a maximum of 256K bytes of RAM when two HP 22707A RAM cartridges are installed.

DSU tells you how much printer memory the fonts you select for downloading are estimated to require. By careful management, you can help ensure that your printer does not run out of memory when downloading. See the "Managing Soft Fonts" section of this guide for more information (page 16) and refer to Chapter 7, "Fonts", in your HP DeskJet Printer Owner's Manual.

---

#### To Start The DSU Program:

Type DSU at the DOS prompt of the appropriate drive letter and directory containing the DSU program.

For example:

```
C:\DSU >DSU
```

The DSU Start Up Menu will appear on the screen with the message "Select a font directory or a setup file to display" near the top of the screen. Directly below that message, instructions to proceed are displayed.

### **The DSU Screen.**

Upon entering DSU you will see the Start Up Menu. After selecting either [F1] Get Fonts or [F2] Get Setup and entering the path and directory name of your soft fonts or the name of your setup file, you will see a screen similar to Figure 1:

DESKJET SOFT FONT UTILITY

START UP MENU

A.01.00

Select a font directory or a Setup file to display

1. Press key F1 if you want to work with all of the fonts that appear in a directory.
2. Press key F2 if you want to work with fonts that you have previously saved in a setup file

**Figure 1. The DSU Main Menu Screen**

#### **A. The Message Line**

Whenever DSU needs to communicate with you, it uses this area of the screen. Watch the Message Line for important messages and prompts.

#### **B. The Font Window**

A complete listing of all available soft fonts within the directory you specify will be displayed here. You can move the cursor around this window, selecting fonts, specifying ID numbers and permanent or temporary font status.





For each available font, the following is displayed:

- **ID#:** This field, reserved for font ID numbers, is blank when the fonts are first listed. DSU will assign and fill in ID numbers as you select fonts. See step 8 on page 11 for more information.
- **"P/T"** (permanent or temporary): This column displays either a P (permanent) or a T (temporary) status for the font shown on that line. See step 8 on page 11 for more information.
- **"Font Description":** Under this column will be a descriptive name for each font (such as "Helvetica").
- **"Pitch":** This column shows the pitch of the font on that line. This will either be a number (in characters-per-inch), or the word "PS" (for "proportional").
- **"Pts"** (point size): This refers to the height of the characters within each font. There are 72 points-per-inch.
- **"Char.set"** (character set): This identifies the set of characters associated with this font.  
  
In this field, "All" refers to a combination of a number of character sets. For a list of these character sets, see the Glossary of this guide (page 23).
- **"Filename":** This is the actual filename of the file that contains the font as it is stored in the directory you have specified.
- **"Mem"** (memory): This column shows you approximately how much space each font will require within the RAM cartridge. The number is stated in kilobytes, thus, a 28 means 28 times 1024 bytes of memory usage.

### C. The Soft Font Directory Line

When you press Get Fonts [F1], you are prompted to provide a directory name (and path) where DSU is to search for soft font files. The directory for the current session of DSU will be displayed on this line.

#### D. The Destination Line

DSU will ask you where to send the fonts to be downloaded. This is the name and number of the port to which you have your DeskJet printer connected (e.g., LPT1, LPT2, COM1, COM2). Refer to the DeskJet printer Owner's Manual for more information.

#### E. The Memory Required Line

This line displays the amount of printer memory that will be required to store the downloaded fonts that you have currently selected. The value shown is in kilobytes and is updated each time a font is selected or "unselected." It is a good practice to check this line before each download to be certain you will have enough memory available for the fonts you've selected. No indication is made to tell you if the printer's memory "buffer" is full. The DSU program will continue to download anyway. However, when you try to access the font, you will find that it can't be accessed.

Subtracting the total amount of downloaded bytes from the amount of RAM you have available and making note of that number will help you to avoid potential problems when printing with downloaded fonts. (i.e., Of 128k bytes available with 28k bytes of downloaded soft fonts will leave 100k bytes of memory available).

#### F. The Input Line

When you are asked to supply DSU with information, this area will be highlighted and the cursor will be positioned ready for you to type in your response to the DSU request.

#### G. The Softkeys

Much of the control over DSU is carried out through use of the softkeys. These screen keys correspond to the keys on your keyboard labeled F1 through F8.

## “Get Fonts” or “Get Setup”

When you initially begin DSU, you are prompted:

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- The Get Fonts softkey [F1] will cause DSU to ask you for the directory where your soft fonts reside. When DSU finds the soft fonts, it will display them on the screen. You can then begin selecting those you want to download.
- The Get Setup softkey [F2] is used after you have saved a setup file. DSU will read the file you specify here and display the selected fonts on the screen.
- The Help softkey [F7] allows you to access DSU's help screens which provide useful information reminding you how DSU works.
- The Exit DSU softkey [F8] will return you to DOS or the previous menu, depending on where you “exit” the DSU session.

If this is your first DSU session, press Get Fonts [F1] and continue with this guide.

If you have previously saved a DSU setup file, which you now wish to download or view, press Get Setup [F2] and proceed to the section of this guide “Download An Existing Setup File”.

### **Download Fonts Directly to the Printer:**

1. Start the DSU program.
2. At the Start Up Menu, press the Get Fonts [F1] key.
3. Type in the full path name where your soft fonts are stored. (If you make a mistake or change your mind, press CANCEL [F8] or press the ESC (Escape) key to return to the previous menu.)

For example, if you have copied your soft fonts to a directory named FONTS under the DSU directory on the C disc, type:

C:\DSU\FONTS

4. Press the Enter key.

DSU checks all files in the directory you specified and determines if each is a soft font file. As DSU finds each font file, it gathers and displays the information in the "font window" on the screen.

This brings you to the Main Menu of DSU. All the fonts that exist in the currently selected directory should be displayed on the screen. The <Up-Arrow>, <Down-Arrow>, <Left-Arrow>, <Right-Arrow>, <Tab>, <Shift><Tab>, <Home>, <End>, <PgUp>, <PgDn> keys can be used to scroll the screen up and down, to see all of the entries, and position the cursor in the entry fields.

5. Use the arrow keys to position the cursor on the line that contains a font you want to download, and press the Select Font key [F4].
6. The line containing your selected font should now be highlighted. If you have made a mistake and wish to unselect this font, position the cursor on the line you wish to unselect and press the Select Font key (F4) again.
7. Repeat step 5 for all fonts you wish to select for downloading to the DeskJet printer, remembering to note the amount of memory you've used for all downloaded fonts.
8. Changing the ID# and P/T fields are optional, but they must have values. You may elect to choose the default selections.

The ID# refers to an identifier for the downloaded font and is mainly for the printer's use. Some software programs will use this number to identify each font in the printer. You may wish to simply let the DSU program assign a number to each font you select; you may type in a number (between 0 and 32767); or using the Prev Choice / Next Choice keys (F1/F2) select an ID number for the font.

The P/T field refers to the desired status of the font to be downloaded. Permanent or Temporary are the two status choices. If neither is chosen, Permanent is the default status.

A font can be designated as Permanent to prevent it from being deleted during a printer reset. A Temporary soft font is deleted from the printer's memory cartridge during a printer reset sent by the computer (E<sub>c</sub>E), or by pressing the reset key on the printer.



### **Warning**

Turning off the printer will delete all permanent and temporary downloaded fonts.

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### **Note**

Before you download the selected fonts, please note the Printer Memory Required: (number) located at the lower right corner of the menu. This number is the sum of approximate bytes of free memory needed to download your selected fonts to the DeskJet printer RAM cartridge. Please see the section "Managing Soft Fonts" for more information about memory requirements.

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- 9.** When you have selected the font(s) for downloading, press the Download Fonts key (F5).
- 10.** At the bottom of the menu the cursor will be sitting at LPT1 in the Destination Device field. This field refers to the type of printer connection you have for your DeskJet printer. LPT1 (PARALLEL PORT 1) is the default setting. You may need to change this to another setting (i.e., LPT2, COM1 (SERIAL PORT 1), or COM2) depending on the port to which you've connected your printer.
- 11.** When you have selected the appropriate Destination Device (or accepted the default - LPT1), press the Enter key and DSU will begin the download process (sending the soft fonts to the DeskJet printer).
- 12.** The BUSY light on the DeskJet printer will be lit indicating that the soft fonts you selected are being downloaded.

13. You can check to see that all desired soft fonts have been downloaded by running a self test of the printer. (To run the self test, press the FONT and Reset keys at the same time.)

### **Download Soft Fonts Via A Setup File**

Creating a Setup File:

1. Start the DSU program.
2. Press the Get Fonts key (F1). In the space provided, type the name of the directory containing your soft fonts.
3. Press the Enter key.
4. Use the arrow keys to position the cursor on the line that contains a font you want to download, and press the Select Font key (F4).
5. The line containing your selected font should now be highlighted. If you have made a mistake and wish to unselect this font, position the cursor on the line you wish to unselect and press the Select Font key (F4) again.
6. Repeat step 4 for all fonts you wish to select for downloading.
7. Changing the ID# and P/T fields are optional. See page 11, step 8 for more information on these fields.
8. Press the Setup keys key (F6), then Save Setup (F2). Type in a name for your setup file and press the Enter key. If the file name already exists, DSU asks if you want to override the existing file. Be sure you've typed the name of the set-up file correctly. Answer appropriately and press the Enter key.
9. Next, type in the appropriate printer port connection (Destination Device) if different than LPT1 (such as LPT2, COM1, COM2). The DSU default is parallel port 1 (LPT1). DSU will remember the last destination device used. If you agree with the device shown, press the Enter key.
10. This file may now be used to speed up the process of downloading your most commonly used fonts to the Deskjet printer.

11. Follow the next steps of this section to download an existing setup file to the DeskJet printer.

### **Download An Existing Setup File:**

1. Start the DSU program.
2. At the Main Menu select the Get Setup key (F2) and type the name of the setup file you wish to use. Be sure to include the full path name.
3. The fonts you selected for this setup file will be displayed on the menu. If you wish, you may elect to modify this file before downloading it to your printer. To unselect a font, place the cursor on the line of the font you wish to unselect and press the Select Font key (F4). The font will lose most of its highlighting and will not be downloaded with the other fonts.
4. To download the setup file or remaining selected fonts, press the Download Fonts key (F5), type the appropriate printer communication port (LPT1, LPT2, COM1, or COM2) and press the Enter key.
5. The Busy light on the printer will be lit indicating the soft fonts are being downloaded.
6. This file may also be executed from the DOS prompt by typing the name of the setup file after the DSU command.

C>DSU <setup file>

Then press the Enter key.

### **Creating a Batch File:**

Using a batch file (see Glossary, page 23, for explanation) to download your soft fonts is a quick and easy method to get you up and running with your DeskJet printer and your preferred soft fonts without needing to run the DSU program each time you want to download soft fonts. Placed in your autoexec.bat file (see your DOS Reference Manual for more information on the autoexec.bat file.), this file will download your soft fonts to the DeskJet printer each time your computer is restarted or turned on. See the Sample DSU Sessions section for more information.

1. Follow the same instructions (in this guide) for Downloading an Existing Setup File (steps 1 - 3), or Creating a Setup File (steps 1 - 7).
2. Press the Write Batch key (F5).
3. Type the name of the new (or existing) batch file (add the extension .BAT) You may wish to name this file similar to your setup file name or a name meaningful to how you will be using the soft fonts. (i.e., For legal applications, name the batch file LEGAL.BAT)



If you wish to place this file in your autoexec.bat file, type AUTOEXEC.BAT here. DSU will automatically add the download batch file command line to the end of your autoexec.bat file.

4. Press the Enter key.
5. You will be prompted for the name of the setup file (the one containing your selected fonts) you wish the batch file to download.
6. Type the name of the desired setup file and press the Enter key. This file may now be executed from the DOS prompt by typing the batch file name (i.e., CLLEGAL, then Enter).

---

## **PRINTING WITH DESKJET SOFT FONTS**

Once you have downloaded the desired soft fonts to the DeskJet printer's RAM cartridge you may use the soft fonts just as you would another DeskJet printer font cartridge with the exception of selecting fonts from the printer keypad. If your software program allows you to select a particular DeskJet font cartridge, you can use the same downloaded soft fonts that correspond to that font cartridge.

For example, if you wish to use the TmsRmn 10 and 12 point font in your document, and your software package supports (lists) the DeskJet printer "D" (TmsRmn 8 & 10 point) and "E" (TmsRmn 12 point) font cartridges, you're in luck! Just download the TmsRmn 10 point and the TmsRmn 12 point soft fonts (don't forget to download the Italic versions of those fonts if you plan on using Italics!). Bolding is done by the printer whenever you select it, so it is not necessary to download a separate "bold" font.



Next, select the "D" font cartridge within your software package when you want 10 point and the "E" font cartridge when you want 12 point print.

Another way to select a downloaded font for printing is to send the font selection escape sequence to the printer. These escape sequences are listed in your DeskJet printer Owner's Manual (page 7-40).

Half-point sizes may also be obtained. They are algorithmically generated by the printer. If you download the 12 point TmsRmn and 10 point TmsRmn fonts, you'll also be able to access 6 point and 5 point TmsRmn as a by-product of those downloaded fonts. See Chapter 7 of your HP DeskJet Owner's Manual (page 7-40) for a complete list and explanation.

Check your application software documentation for support of HP DeskJet printer soft fonts. If it is not listed, or you have an earlier version of the software, contact your software vendor for information on when soft fonts will be supported. The DeskJet printer Owner's Manual contains a list of software vendors and their phone numbers (page 3-10).

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## MANAGING SOFT FONTS

To get the most efficient use from your printer, follow these hints and suggestions when using downloaded fonts.

The printer's memory (RAM) cartridges have a storage capacity limit of 128k bytes of memory (1k equals 1024 bytes) each. Download to the printer only the fonts you need and wait to download any other until you need them. This step saves you unnecessary downloading time and keeps you from exceeding the printer's memory cartridge capacity.

The DSU program will estimate for you the number of bytes of storage each selected font will take.



### Warning

When the printer is turned off all downloaded fonts will be erased!

---

If you use a hard disc drive with your computer system, we suggest you copy the font files from the flexible discs to your hard disc. In addition, we suggest you copy these font files to a separate directory on your disc. Doing so will make the font downloading process faster and easier because it will significantly reduce the number of files it must sort through to find the "font files". To copy the files to hard disc, use the COPY command in DOS. If you are unfamiliar with the COPY command, refer to your DOS Reference Manual for more detailed information.

When listing the DeskJet printer soft fonts from which you will make your download selection, you may notice in addition to "ASCII", "Roman8", etc. the name "All". This additional character set is exclusively for use with the DeskJet printer only and combines a variety of character sets, or allows the user the ability to choose characters from those character sets (See glossary page 23 for a full list). All character sets listed there are included in the "All" character set. Currently Line Draw, Math, PI Font, and PI Font are not supported. Refer to the HP DeskJet printer Owner's Manual Appendix for a listing of supported character sets and their table of characters.

## **SAMPLE DSU SESSIONS**

This section of the guide will "walk you through" a few likely examples of ways you might want to use the DSU utility. For the sake of clarity in the steps, we will make a few assumptions, which are explained at the start of each sample session.

### **Sample 1: Creating a "New Setup"**

#### **Assumptions - Sample 1:**

- You have copied your DSU program to a DOS directory on your hard disc, and you are currently in that directory. (If you are loading DSU from a flexible disc, you can tailor step 1 to fit.)
- You have copied your HP DeskJet printer soft font files to a directory on the C drive which you have named FONTS. (If your soft font files are stored elsewhere, alter the path name shown in step 3.)

- Your HP DeskJet printer is properly set up, powered-on, on-line, and configured to our computer with a device file name of LPT1. (If your printer device name is not LPT1, type the correct name in step 4.)

If your actual situation differs in some other way from that described, you can substitute the correct information as you work through the example. (You can refer to the DSU HELP screens, or to the appropriate instructions in the "Using DSU" section of this guide if you need assistance.)

Steps - Sample 1:

1. Type DSU to start the program.
2. Press \*F1\* Get Fonts.
3. Type C:\FONTS to tell DSU to look in that directory for your font files. DSU displays the available fonts in the "Font Window."

Now you can begin selecting fonts. For this example, let's assume you want the font ID numbers to start at 100 and increment automatically from there. We will also assume that you want all fonts to be downloaded in a "permanent" status.

4. Move the cursor to the line of the first font you wish to select, inside the ID# column.
5. Type 100 and press the Enter key.
6. Before continuing, press Select Font [F4], to highlight your font selection.
7. Move the cursor to the next font you want to select and simply press Select Font [F4] and DSU will automatically assign the next consecutive ID number to your selection.
8. Continue with step 7 until all the fonts you want to download have been selected.
9. Check the "Printer Memory Required" line below the lower right hand corner of the font window to be sure you are not exceeding the RAM cartridge's capacity.

10. Verify that your printer is on-line and ready to receive the new font download. At this point, you're ready to download the fonts you have selected and/or create the "setup file" to download the same fonts at a later time. The order in which you do this is unimportant.

Downloading the selected fonts:

11. Press the Download Fonts key [F5].
12. Press the Enter key to accept LPT1 as the default device name. (If your DeskJet printer device name is other than LPT1, type the correct name here.)
13. When all the fonts you have selected are downloaded, DSU returns control to you. At this point, you can quit the session, or go on to create a setup file containing all the necessary information to download your font selections as many times as you wish.

For detailed instructions on creating a setup file, see "Creating a Setup file" on page 13.

14. Press the Exit DSU key [F8] if you want to leave this DSU session.

#### Sample 2: Creating a Batch File

Assumptions - Sample 2:

All the assumptions for Sample 1 (on page 17) apply to this sample also, PLUS...

- For this example, we will assume you have already created a setup file for general, every day use which you have named GENERAL.SET and saved in the root directory of disc drive C.
- Since most of your printed work will be done using the fonts downloaded by GENERAL.SET, you've decided to create a batch file to simplify downloading. This file will then be placed in your AUTOEXEC.BAT file. Your selected soft fonts will then be automatically downloaded each time your computer system is turned on or reset.

## Steps - Sample 2:

1. Type DSU to start the program.
2. Press Get Fonts [F2].
3. Type GENERAL.SET. Press the Enter key. DSU will display the selected fonts for your setup file. Notice an added information line below the font window "DISPLAYED SETUP FILE: GENERAL.SET".
4. Press Setup Keys [F6] then Write Batch [F5].
5. Type C:\AUTOEXEC.BAT. DSU will add the download batch file to the end of your root directory, autoexec.bat file automatically. Press the Enter key.
6. Type GENERAL.SET. Press the Enter key.  
DSU will create the batch file and return control of the screen to you.
7. Press Main Keys [F8] then Exit [F8] and Yes [F1].



### Note

Placing this download batch file in your AUTOEXEC.BAT file will cause those selected fonts to be downloaded automatically each and every time your computer system is turned on or reset (CTRL + Alt + DEL).

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To change this, simply delete the download command line in the AUTOEXEC.BAT file (C:\DSU\DSU.EXE GENERAL).

For additional information, refer to "Creating a Batch File" section of this guide (Page 14).

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## HINTS

The following hints fall in no particular category, but are good to know:

Whenever you have a choice of selecting the CANCEL [F8] key, the [ESC] Escape key will also work.

Documentation on the escape sequences used to select fonts is in the HP DeskJet Printer Owner's Manual (page 7-40) for your printer.

Running a self test of the printer (press the FONT key and the Reset key at the same time) will show you what soft fonts were successfully downloaded.

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## IN CASE OF DIFFICULTY

Press the Help soft key at any time for assistance.

If you run into a problem using DSU, use the troubleshooting checklist to help you find the cause.

### Troubleshooting Checklist

To use this checklist, start at question 1 and step your way through, making sure you can answer "NO" to each question before proceeding to the next.

**1.** Are you having difficulty loading DSU?

NO - go to question 2.

YES - review "To Start the DSU Program" page 6, and check the following:

- Make sure that you are typing the correct path name.
- Make sure that your computer's operating system is DOS version 2.0 or later.
- Make sure that your computer has at least 256 Kbytes of RAM (memory).

2. Does the DSU program seem "hung" (stuck at some point)?

NO - go to question 3.

YES - check the following:

- Make sure your "destination device" name is correct.
- Check your printer to be sure it is accessible (power ON, on-line light on, interface cables securely connected)
- Have you entered an illegal DOS file name? (refer to your DOS manual for more information).

3. Is there a DOS error message (such as "Abort, Retry, Ignore?") displayed on the DSU screen?

This has most likely occurred because of the wrong disc drive being entered, the floppy drive door is open or the disc not inserted.

NO - If you are experiencing a problem not described here, see "Calling for Help," below.

YES - do the following:

Type I (for Ignore) and DSU will pause and try to tell you what went wrong. Press Continue.

If Ignore does not bring you back to the program, type A to abort the program.

## Calling for Help

If you try all the suggestions given here, and you still are in need of assistance, you can call the authorized HP dealer where you purchased your HP DeskJet Printer Soft Font Utility.

The Hewlett-Packard DeskJet Customer Support number is (206) 253-3099.

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## **GLOSSARY OF TERMS**

### **All**

This term, featured on the screen showing the available soft fonts, is found under the heading "Char.set". This character set combines all of the following character sets:

- Roman8
- PC8
- PC8 (Danish/Norwegian)
- ASCII (06)\*1
- ISO United Kingdom (04)\*
- ISO Germany (21)\*
- ISO France (69)\*
- ISO Italy (15)\*
- ISO Norway (60)\*
- ISO Sweden (11)\*
- ISO Spain (17)\*
- ISO Portugal (16)\*
- JIS ASCII (14)\*
- ECMA-94 Latin1
- Legal

### **Batch File**

This refers to a file (with the extension .BAT) that will execute one or more DOS commands in sequence and with greater speed than executing each command separately.

### **Character Set**

Character sets are unique sub-groupings of all the available characters in a font. Each symbol set is designed with a different set of applications in mind. Character sets include standard ASCII symbols, ROMAN8 (ASCII and European characters), Legal symbols, Line Draw symbols, Bar Code symbols, Math symbols, PI symbols, or PLa symbols.

### **Downloading**

This refers to the process of transferring from the computer to the printer's memory cartridge(s) fonts stored on discs. These transferred fonts can be stored in the printer's RAM cartridge until the printer is turned off.

\*(ISO Registry Number)



### **Escape Character**

The escape character, EC, is a special character used to initiate a command for the printer. This character is usually not a printable character. Instead it is used as a command code for the printer.

### **Escape Sequence**

This is a series of commands (instructions), preceded by the escape character, sent to the printer to request a change in character set, pitch, orientation, typeface or other print enhancement. (See page 7-40 in the HP DeskJet Printer Owner's Manual for a list of escape sequences available for downloaded fonts.)

### **Fonts**

A font is comprised of a collection of individual characters with a consistent size and style. These groupings of characters usually contain all the normal alphabetic characters as well as punctuation marks, special symbols and figures.

Fonts can be grouped into a larger classification, called families of type. An example of this is the Courier font family, consisting of Light, Medium, Bold and Italic type styles. Many of the HP Font Cartridges contain several type styles of the same type family. Other font cartridges contain specialized fonts for printing math symbols, international letters, and line drawing characters.

### **Font Cartridge**

A font cartridge consists of a portable plug-in unit, about the size of a cassette tape cartridge, which contains electronic circuitry. The memory chips are the "brains" of the cartridge, housing all the data needed to re-create entire sets of characters on your printer. Font cartridges are often referred to as "hard" fonts, since the data necessary to print with the font is stored (even when the printer's power is off) inside the physical cartridge, or "hardware".

Each cartridge contains a group of fonts. These are general purpose cartridges designed to be used with general text and data processing, and specialized cartridges to fit needs of people in legal, accounting and other professions.

### **Font ID #**

The number to be assigned to a font when it is downloaded. Must be between 0 and 32767.

### **Orientation (Portrait, Landscape)**

This refers to the direction of print on the page. Some fonts print in portrait (P) orientation with text printed across the width of the page; other fonts print in landscape (L) orientation with text printed along the length of the page.

### **Pitch**

This indicates the number of characters printed per horizontal inch. Pitch only applies to fixed-spaced fonts since the number of characters per inch varies for proportionally-spaced fonts.

### **Point Size**

This identifies the height of a character. There are 72 points per inch. For example, a 10 point character is  $10/72$ " high.

### **Permanent Font**

Any font downloaded to the printer in the Permanent setting will remain in the printer until deleted or until the printer is powered off. (Permanent fonts must be re-selected as primary or secondary if the printer is RESET.

### **RAM Cartridge**

RAM (an acronym for Random Access Memory) refers to a storage technique for information which may be "written" from the PC or host. These cartridges provide information storage space exclusively used for Deskjet printer soft fonts and be inserted in the cartridge slot(s) for downloading to take place.

### **Soft Font**

These are fonts stored on floppy discs. They can be transferred to the printer's memory cartridge and be used in the same manner as cartridge or resident fonts. A soft font set contains a group of fonts (just like a cartridge), but the data necessary to recreate the fonts is located in a "font file". They can be easily copied to a hard disc, providing more convenient access.

### **Temporary Font**

Any font downloaded to the printer in the Temporary setting will be deleted when the printer is RESET.



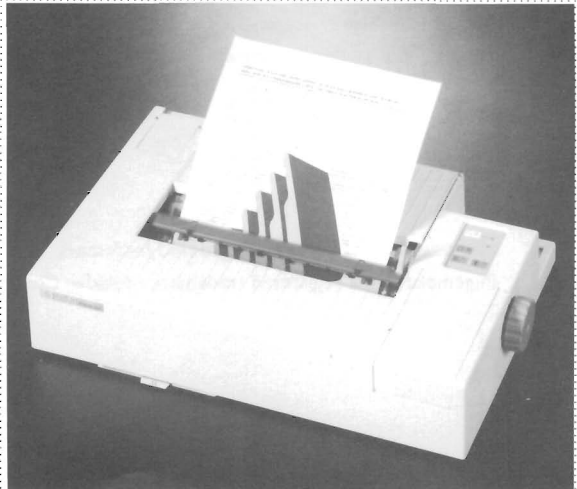
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PACKARD**

Printed in U.S.A. 12/87  
22708-90001

*PaintJet*

*JetSeries* P R I N T E R S

**HP PaintJet Soft Fonts  
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User's Guide**



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