Section 7

HP PCL Font Management and Soft Font Downloading

The IntelliBar has eight internal fonts.[*] You can add more fonts by downloading soft fonts. Font management provides mechanisms for downloading and using soft fonts while providing the means for controlling which soft fonts are saved in user memory (RAM) or deleted. You can download and print up to 32 fonts per page. Each time you download a font, user memory is decreased.

Soft fonts are usually packaged on a diskette. In order to use your soft fonts you need to copy them from the diskette to your printer. This is termed downloading. Some applications download fonts for you, so refer to your application documentation. If not, follow the instructions (for MS-DOS systems) in this section.

DOWNLOADING SOFT FONTS

The process of transferring soft fonts from a host computer to the printer's user memory (RAM) is called downloading. You must designate a unique identification (ID) number prior to downloading the font. This number is then associated with the soft font. This number is assigned using the font ID command described later in this section. Subsequent manipulation of the soft font is accomplished using the font's ID number. If a font is already associated with this ID number in the printer, the existing font is deleted during the download..

Several commands are required to define a font before downloading it to the printer. These commands are described in Section 8. HP font files include the necessary commands that define the symbols of a font, including the typeface, style/weight, point size, orientation, and symbol set. Assigning a font ID number and then copying the font file to the printer downloads the font. Scalable fonts and typefaces may be prepared by font management software. Once prepared, scalable fonts are downloaded in much the same way as bit map fonts.

Once downloaded, the soft font occupies a portion of user memory (RAM). The number of soft fonts that can be stored in user memory is limited by the amount of available RAM.

■ Make sure there is sufficient space in the printer memory before downloading fonts. Because you cannot determine exactly how much memory is free, you should initialize the printer to clear memory whenever possible before downloading soft fonts.

■ Always remain within the same directory when working with fonts.

■ Do not alter the font file names in any way.

TEMPORARY/ PERMANENT FONTS

The printer automatically designates a font as a temporary font after downloading. The font is deleted from memory during a printer reset. The font can be designated as a permanent font so it will remain after a printer reset. The status of the font is determined by the font control escape sequence and the font ID value..

> **NOTE:** Temporary and permanent fonts do not remain in the user memory whenever printer power is turned off.

FONT CONTROL

Font control provides several ways for you to use fonts..

ESC *c#F
Decimal: 027 042 099 ### 070
Hex: 1B 2A 63 3# 46

# (ESC)   0 = Delete all soft fonts
             1 = Delete all temporary soft fonts
             2 = Delete soft font (last ID and character code specified)
             3 = Delete character code (last ID and char acter code specified)
             4 = Make soft font temporary (last ID speci fied)
             5 = Make soft font permanent (last ID specified)
             6 = Copy/assign the currently invoked font as temporary

> **NOTE:** If you delete a primary or secondary font, a new primary or secondary font is automatically selected from the remaining fonts.

For example, to remove all soft fonts from the user memory, send

ESC*c0F

To remove temporary soft fonts, send

ESC*c1F

To delete a soft font with an ID of 1, send

ESC*c1d2F

You can select soft fonts by using their ID numbers (see "Font Selection by ID).

If the designated font is available, it is selected as the primary/secondary font and all primary/secondary font characteristics are set to match the selected font. If the selected font is proportionally spaced, the pitch characteristic is not changed.

FONT SELECTION BY ID

ESC(# X designates the soft font # as primary
Decimal: 7 040 # 088
Hex: 28 # 58.

ESC)# X designates the soft font # as secondary
Decimal: 7 041 # 088
Hex: 29 # 58

For example, to select a font with an ID number of 7 as the primary font, send

ESC (7X

To select a font with an ID number of 5 as the secondary font, send

ESC)5X

The current font remains in use if designated font is unavailable.

> **NOTE:** In shared or networked operations, soft fonts should be selected by characteristics rather than the font ID number.

---

* "This information is subject to change without notice. This information is provided "as is" without either express or implied warranty. IntelliTech International, Inc. disclaims any and all warranties with regard to this information. IntelliTech shall not be liable in any event for any special, indirect or consequential damages or any damages whatsoever resulting from loss of data, profits or use, for any reason or in any action, arising out of or in connection with the use or performance of this information. "