

FRACTION FONTS FOR WINDOWS

Fraction Fonts enable you to view and print true fractions that match your Windows 3.1 TrueType fonts. Originally designed in PostScript Type 1 format to reap the benefits of Adobe Type Manager®, TrueType **Fraction Fonts** can be used with any Windows 3.1 application and any printer—without having to purchase font management software.

Fraction Fonts are available in two distinct types—*Baseline* and *Extended*. In *Baseline Fraction Fonts*, the denominator sits on the baseline and the top of the numerator is the height of the lower-case ascender in its companion font. In *Extended Fraction Fonts*, the bottom of the denominator extends below the baseline and the top of the numerator extends above the height of the lower-case ascender.

These are Baseline **Fraction Fonts** — 1/2, #/4, %/8.

These are Extended **Fraction Fonts** — 1/2, #/4, %/8.

Which is better? Neither, really. They have different purposes. Extended **Fraction Fonts** are more legible in text sizes, but tend to look bulky in display sizes. Baseline **Fraction Fonts** may cause a little eyestrain below 12 points, but appear balanced with conventional numerals in titles, headers, or other display applications. Both fraction types are included in FF-WTT.ZIP, so you be the judge.

FRACTION FILE NAMES

It's easy to differentiate between Baseline and Extended **Fraction Fonts** in File Manager or at the DOS level. The seventh and eighth characters in the font file name will be either an FB or an FE. For example, the **Fraction Fonts** that are companions to Times New Roman, Times, and similar serif fonts are named TIR__FB.TTF (and FOT) and TIR__FE.TTF (and FOT). **Fraction Fonts** that are companions to Arial, Helvetica, and other sans serif fonts are HV__FB.TTF (and FOT) and HV__FE.TTF (and FOT).

The fonts are similarly coded internally so you can identify them in the font selection scroll boxes in various Windows applications. The last two characters in the font name will be either "FB" or "FE". The four font families in FF-WTT.ZIP will appear as "TmsFB", "TmsFE", "HelvFB" and "HelvFE"—again, to identify the **Fraction Fonts** as being either *Baseline* or *Extended*.

TYPING FRACTIONS

The **Fraction Font** character set is short, but complete. Adapting to the key assignments should become almost instinctive.

When working with **Fraction Fonts**, don't regard the "!", the "@", and all their neighbors as punctuation marks and symbols. Instead, think of these keys as SHIFT 1, SHIFT 2, etc.

Fraction numerators are generated by typing a SHIFT+NUMERAL combination (the keyboard numbers—*not* the numeric keypad numbers). Fraction denominators are generated by typing the unshifted numerals. And the fraction bar is assigned to the "/". (That's the slash beneath the question mark, not the backslash.)

To create a fraction, just type in the characters, highlight the **Fraction Font** characters with the text-selection cursor, then choose the appropriate **Fraction Font** from the application's font selection scroll box.

OTHER KEYS

There are no alphabetic keys in **Fraction Fonts**. However, a few specific keys have been given special assignments to help integrate the fractions with conventional fonts.

Fraction Fonts exist to make accurate representation of measurements possible. For this reason special inch ("), foot ('), and two special degree (°) signs are included. These three characters are identical to their companion font counterparts with one exception. All three of these marks are *kerned* in relation to denominator numerals for correct positioning when adjacent to a fraction. When typing conventional numbers the conventional counterparts of these signs should be used.

In **Fraction Fonts**, the quote mark is the inch mark; the apostrophe is the foot mark; and the keyboard equals sign generates a degree sign. Actually, *there are two degree signs* due to differences in the way TrueType, ATM, PCL and dot matrix printers, and PostScript printers interpret this character. When printing with TrueType to a PCL or dot matrix printer, you'll find the **Fraction Font equals sign** (=) generates a degree sign to match the degree sign in the companion font.

Note: The second degree sign is relevant only to users of Adobe Type Manager®. ATM's on-screen representation of a typical Type 1 font's degree sign closely matches the degree sign resident in a PCL or dot matrix printer. A PostScript degree sign is about twice the

size of the ATM (screen) or non-PostScript printer's degree sign. When using ATM to print to a non-PostScript printer, the **Fraction Font** plus sign (+) will generate a degree sign to match the degree sign in the PostScript companion font.

45° uses the font's own degree sign (ALT + 0176)

22 !/2= uses the **Fraction Font** equals (=) sign

22 !/2+ uses the **Fraction Font** plus (+) sign

CHARACTER WIDTH, OFFSET, AND KERNING

A word about character width and kerning (specific intercharacter spatial relationships) is appropriate here. The numeral set in all fonts is monospaced. In other words, the space allocated to a 1 is the same width as the space allocated to a 3 or a 5, even though the character widths vary. This is to allow the numerals to align in columns. For example . . .

1234567890
0987654321
9151813114

Fractions are different. For the best appearance, the numeral pairs used in both the numerator and the denominator are regarded as units — almost as though they were ligatures. So, the relationships of the 1 and 3 and the 6 and 4 in !#/64 or !#/64 are considerably different from their relationships when used as conventional numerals.

Fraction Font font box width and character offset often are compromises. The *primary spatial relationship* is between the numerator or denominator and the fraction bar. In other words, the numerator 7 has a font box narrower than the glyph itself so it can slide over the fraction bar. The denominator 4 has negative offset on the left so it can tuck under the fraction bar. This makes fractions like &/16 and !/4 pleasing to look at.

The *secondary spatial relationship* is between two adjacent numerals. In the fraction !/64, the numerator 1 is kerned so that a pair of 1s gives a balanced appearance. The denominator numerals 6 and 4 present a different case. Because the 4 has negative offset on the left to slide under the fraction bar, the 6 has positive kerning on the right when

positioned next to the 4 so the numerals won't touch or overprint.

FONT IDENTIFICATION CHARACTER

When working with Windows applications that offer a Font Preview window (Ami, Excel, WordStar, and CorelDRAW! for example) a special character in the selected fraction font will be shown. In the case of TmsFB or TmsFE, it will look like this:

A_{or}A

FRACTION FONT COMPANION SETS

Fraction Fonts are available in a complete set to work with the TrueType equivalents of the basic Adobe PostScript Type 1 fonts or their counterparts from other foundries. The names assigned to individual **Fraction Fonts** are intended to position these fonts with their brand-name PostScript Type 1 counterparts in font selection list boxes. However, there is no intent to imply any relationship with Adobe or any other foundry, nor to infringe upon registered trademarks or copyrights.

Fraction Font Set (Baseline and Extended) consists of 66 fonts and includes:

<u><i>Fraction Font</i></u>	<u><i>Font Styles</i></u>	<u><i>TrueType Companion</i></u>
AvGard	(N,O,B,BO)	Century Gothic
BMan	(N,I,B,BI)	Bookman Old Style
Courier	(N,O,B,BO)	Courier New
Helv	(N,O,B,BO)	Arial
HelvNar	(N,O,B,BO)	Arial Narrow
NewCent	(N,I,B,BI)	Century Schoolbook
Pal	(N,I,B,BI)	Book Antiqua
Tms	(N,I,B,BI)	Times New Roman
ZChan	(I)	Monotype Corsiva

The complete set of **Fraction Fonts** costs just \$25⁰⁰ (see attached order form). The TMS and HELV **Fraction Fonts** you've downloaded are ShareWare. I'd appreciate \$10⁰⁰ as a token of your own appreciation for the opportunity to use them. If you pass them on to a friend, please be kind enough to share the documentation and order form that accompany the fonts.

NOTE: **Fraction Fonts** also are available in PostScript Type 1 format for those Windows 3.1 users who have a PostScript printer and/or use ATM®. These PostScript Type 1 **Fraction Fonts** have kerning controls built into the font itself and feature more extensive hinting. If you have ATM®, these Type 1 fonts will produce somewhat higher quality output than TrueType **Fraction Fonts**.

And, for Macintosh users, ***Fraction Fonts*** also are available in both PostScript Type 1 and TrueType formats.