## Feet, Inches \& Fraction Calculator

There are two desk accessories included with this file. One is the calculator, while the other is a 'help screen' for it. You may find it useful to have the help screen installed while you learn the keyboard equivalents. When you are comfortable with them you can file away the help screen to recover a DA slot and about 8 K of space.

This calculator is designed to perform addition and subtraction of distances which when expressed in feet and inches will often include fractional inches. A standard calculator, such as Apple's, is not optimally designed for this task. To enter a distance on FractionCalc you use the digits together with the four 'punctuation' keys along the right edge of the calculator. The use of these keys are not very mysterious but it should be mentioned that the ampserand ( $\&$ ) key is used to separate the fractional part from the rest. Besides the keyboard \&, you can use the space bar or period to enter this separator. It is echoed in the display by a dash. The slash (/) is used to separate the numerator from the denominator. You finish an entry with an operation key (,,$+-=$ ) or optionally with the inch key followed by an operation key.

The top display is where entry is echoed while the lower display shows the most recently obtained result. The behaviour of the operation keys is as close to the observed behaviour of Apple's and other standard four function calculators as I could make it. Since there is an entry display as well as a result window you can clear just the current entry with the CE key or both with the C key. Their keyboard equivalents are the 'Backspace' and 'tilde' (upper right corner) keys, respectively. One other feature that may not be obvious is that the Edit command copy, if available in the host application, will copy the current result for easy transfer to another document. If the calculator beeps at you, it is objecting to the syntax of your entry. A design decision was made that if a distance includes feet and a fraction of an inch you must enter ' 0 ' ' $\alpha$ ' before entering the fraction. If an entry is just a fraction or inches and a fraction, you don't have to supply the initial zero feet and/or zero inches.

This calculator represents the first step in providing a rather specialized tool that is probably of interest to people such as architects, draftsmen, and engineers who need calculations that aren't always best done on a 'decimal' calculator. Fractions are done exactly without any use of decimals to cause round off error (they are stored as a pair of LongInts, 32 bit integers). This version is being released as shareware partially to see if there are any people who find some value to this sort of tool. In this way we can get some feedback from users and addresses to keep you informed of our plans for future versions. (Use the '?' key to get the shareware notice). For those who are merely curious but have no practical use for this capability, go ahead and add those two fractions; make my day.

