

BaseCalc Demo

Thank you for downloading the demo version of BaseCalc, an application from the HandiWerks™ Tools Group of W. R. Elliot & Associates, Ltd. The demo version is limited to eight or ten bit numbers to allow you to test out all of the functions. Once you are satisfied that the program will be a valuable tool on your handheld, you can obtain the full version from www.palmgear.com or www.handiwerks.com.

This programmer's and Computer Science student's tool is very easy to use and provides an instant view of calculated integer values in the most common computer number bases. It requires Palm OS® software version 2.0 or above. What follows is the standard manual for the full version of BaseCalc. Enjoy!

Install the BaseCalc demo application using the install tool of the desktop software and then perform a HotSync® function. Tap on the BaseCalc icon from the launcher and you are ready to go!

BaseCalc uses a standard calculator keypad and also includes keys for entering hexadecimal digits A – F. The standard four functions (add, subtract, multiply and divide) are available as well as the special functions AND, OR, «, » (left and right shift) and '1's~' (ones complement). The current function is displayed at the top of the screen to the left of the bit select push buttons. A 'C' appears if the last operation caused an over or underflow for the selected bit size.



The active number base is the one with the bold frame around it (in the screen shot above, hexadecimal is the active number base). Simply tap in a base window to make it the active number base. Any value entered will be entered in the active base and simultaneously displayed in the other bases on the screen.

The pushbuttons at the top of the screen allow you to control the maximum bit size for the calculated and displayed values. Simply push the button for the bit size you want. The number of characters or digits you can enter is controlled by the selected bit size. For example, if '8' is selected, one character, two hexadecimal or three octal digits may be entered. If '16' is selected two characters, four hexadecimal or six octal digits may be entered. If '24' is selected three characters, six hexadecimal or eight octal digits may be entered.

The 'S' pushbutton to the left of the decimal display field indicates whether you want the decimal display to represent the signed value or the unsigned value. Be aware that if the 'S' pushbutton is selected, the decimal display may suddenly switch to a negative number as you enter decimal digits. This will happen whenever the most significant bit (the "sign" bit) of the entered value becomes '1'.

If you have entered an incorrect value during a calculation the backspace (left arrow) key will remove one digit at a time. The 'ce/c' key will remove the entire entered value. If there is no pending function the 'ce/c' key will clear the display and internal registers.

The '-1' and '+1' buttons decrement or increment the displayed value. The hard scroll buttons (page up and page down) can also be used to decrement or increment the displayed value.

The 'AND' and 'OR' buttons perform bitwise operations on the entered values. (Example: 0xE2 OR 0x10 will equal 0xF2).

'«' and '»' perform a single bit shift to the left or right. Zeroes are used to fill the empty bit position.

'1's ~' is a ones complement of the displayed value, that is, any bit that is a '0' will become a '1' and any bit that is a '1' will become a '0'.

The '+/-' button performs a twos complement on the displayed value (toggling between positive and negative decimal values). Note that you will have to have the 'S' pushbutton pressed if you want the decimal display to show negative values.

You can use Graffiti[®] strokes to enter values and perform functions. If the character window is the active window, Graffiti characters will be entered using their font value. If the character window is not active, you can use Graffiti characters 0-9 and A-F to enter digits into an appropriate base window. +, -, *, /, & and | allow you to perform addition, subtraction, multiplication (all of these will work: *, x, X), division, logical AND and logical OR respectively. The 'Return' stroke acts like the equal button. A 'backspace' stroke will function like the bold left arrow button. The 'left arrow' and 'right arrow' strokes will perform left and right bit shifts.

Updates and maintenance releases are free within major revisions.

We hope you enjoy using BaseCalc!

The HandiWerks Tools Group

To check for updates to BaseCalc or to see other HandiWerks tools, visit www.handiwerks.com. If you have a suggestion or comment, send E-mail to feedback@handiwerks.com.

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