

## The QuickCalc BASIC User Interface

### Running programs in the Windows Graphic User Interface (GUI) mode.

The GUI mode is far superior to running in the “CONSOLE” mode. The most-used functions are on buttons, and it is easier to select, edit, and view files. Output is displayed in a scrollable window and there are many debugging functions available. Graphing is only supported in GUI mode.

To start QuickCalc in GUI mode, simply run the program with no parameters or double-click the QuickCalc icon on the desktop.

The “**Working Directory**” box contains the current working directory for your program and data files. Check “**Use Working Dir.**” To apply that path to your program and log files. The working directory must be a valid path and directory, even if “Use Working Dir” is not checked. If it is invalid or blank, it will not be accepted. The Working Directory will be used as the default path for any files that you open, whether or not “Use Working Directory” is checked.

The “**Source Program**” box contains the name of the source program you want to run. It must be supplied, even if you are only running commands from the command line. Clicking on **Edit Source** opens the source program in Notepad so you can edit it. If it doesn't exist, you will be prompted to create it. Don't forget to **save the program** before you run it. You may keep the Notepad edit window open, if you wish, while you run and/or test your program.

**Note:** If the source program is already open in a Notepad window, clicking on **Edit Source** will activate that edit window, and will not open a new edit for the same program.

The “**Log File**” box contains the name of the log file to create (see “The Log File”, below). It cannot be blank. The log file will be created and written only if the “**Create Log File**” button is checked. The log file will always over-write any previous file with the same name.

All three of these boxes may be edited or selected using the **Browse** buttons. If “Use Working Dir” is checked, the filenames displayed will be relative to the current working directory, unless you specify a different path.

When entering paths or filenames into these boxes, terminate the input by pressing “**Enter**”, pressing “**Tab**”, or clicking on another button or edit field. The focus will not change until a valid entry has been made. Pressing the “**up arrow**” key will recall previous entries. If you go past the one you want, press the “**down arrow**”. The “**Esc**” key erases the contents of the window, but you must supply something before proceeding.

When you start QuickCalc BASIC for the first time, the program will try to create a “QuickCalc” folder in your “My Documents” folder for your default working directory. You may, of course, set the working directory anywhere you like. Default program file (“program.txt”) and log file (“logfile.log”) names are supplied, but these files are not created until you use them.

**Note:** The installer places the Sample Programs into this folder.

When you exit QuickCalc, these selections are stored in the registry and recalled the next time you run QuickCalc. Registry settings are different for each user.

The large window in the center of the screen displays your “console” output. This includes all **WRITE** and **PRINT** statements, plus error messages, trace and debugging output, and your responses to input messages. You cannot type into this window, although you can copy data out of it. The window may be scrolled to view earlier output, however the buffer will spill over at about 32K bytes, and old output will be lost. Use the log file if you intend to write a lot of output.

The small (one line) window at the bottom of the screen is for entering commands and data. End each command or data line with the “**ENTER**” key. You can paste into the line from anywhere.

The program remembers the last 20 commands (or lines of data) that you entered. To recall previously entered lines, press the “**UP**” arrow key until the desired line appears. If you go past the desired line, press the “**DOWN**” arrow key. When the desired line appears in the window, you may edit it, if desired, and then press “**ENTER**”.

To erase the contents of the window, press the “**ESC**” key.

The **Run** button loads and runs the BASIC program called out in the “Source Program” box.

**Run/Step** begins running the BASIC program in “Stepping” mode (see “Debugging”).

**Kill Program** terminates any running BASIC program.

**View Log** closes and displays the log file in an edit window.

**Exit** (or the **X** button) terminates any running BASIC program and exits QuickCalc.

### **Helpful Hints When Running in GUI mode.**

It is simplest to choose a working directory for your current “project” or collection of files and BASIC programs. Set that path into the “Working Directory” box and check “Use Working Directory”. Leave it that way and then your program files and log file need only specify the file name and they will be built in or loaded from the current working directory. Any files your program creates (See “Working with Files”) will be created in that directory by default.

If you wish to view, move, delete, or rename a file, clicking on the **Browse** button next to the “Source Program” box opens a small “Explorer” window, from which you may do basic file operations like in Windows Explorer. Be sure to exit this window with the **Cancel**

button if you do not want to change your program selection. Of course, you can also have a real “Explorer” window open to examine your disk and make changes.

**Note:** If you have an icon on the desktop for Quickcalc.exe, you can **drag and drop** a BASIC source program (usually a .txt file) onto it and run it in GUI mode. As soon as QuickCalc starts, the BASIC source program will run immediately (assuming it has no errors).

You can create a **shortcut** icon that loads QuickCalc and **runs your BASIC program** in one [double-] click. To do this, make a copy of the QuickCalc BASIC icon. Right-click on this icon and select “Properties”. On the “Shortcut” tab, in the “Target” field, you will see the path for quickcalc.exe. Following that, type a space and then the full path to the BASIC program you want to run, *e.g.*, "c:\basic programs\testprogram.txt" (the quotes are necessary if the path contains any blanks). Click “Apply” and then “OK”. You will probably want to rename this shortcut icon, and may select a different icon design if you desire.

You can create your own icons with a variety of free icon editor programs available in the internet. I found a good one, called the “Junior icon editor” at [www.free-icon-editor.com](http://www.free-icon-editor.com).

**Note:** Another way to start BASIC programs by just clicking on them is to give them all a different suffix (other than .TXT). Choose a suffix that is not used by another program on your computer, such as .QCB, and use that for all your BASIC programs. Create a program which has that suffix, save it, and then double-click on it. Windows will say it is unable to open it and ask you to specify which program you want. Click “Select the program from a list”, then “OK”. In the next dialog, click “Browse”. Locate and select quickcalc.exe. Check “Always use this program to open this type of file”. Then click “OK”. Windows should open QuickCalc BASIC and run the selected program. Subsequently, any time you double-click on that type of file, it will run it just as if you had dragged it to the QuickCalc shortcut.

See the “Debugging” document for ways to debug your program using GUI mode.

### **Running from the command line (non-GUI or “CONSOLE” mode):**

CONSOLE mode refers to running the program in a “DOS window”.

The program must have a single parameter: **/c**

From a DOS window, you can type in

**"c:\program files\hendricks video\quickcalc\quickcalc.exe" /c**

or click **START**, then **All Programs**. Select **Hendricks Video** and then **QuickCalc**. Double-click on the icon “**Console QuickCalc BASIC**”. If you are going to do this a lot, you could copy this icon to the desktop.

To run a program, type the command **RUN** *program-file-specification*. The program will be run from the current directory unless a complete path is specified. This should be a string constant. If the string is in quotes, use double-backslash (\) wherever a backslash is required.

If the program cannot be loaded, an error message will be printed and QuickCalc will wait for you to type a command or run a program.

The current working directory will be the path which was in effect when QuickCalc was started. You can change the current working directory from the BASIC command line or within a program with the **CHDIR** statement. If you change the working directory from within the BASIC program, it will be put back when the QuickCalc terminates.

You can copy the console output and paste it wherever you want for printing, etc. When you are finished entering commands, press the **ENTER** key to terminate the program. “Commands” must be entered one at a time. “Statements” can be many on a line. If you simply hit **ENTER** when no program is running, you will terminate QuickCalc.

**Note:** There are many limitations running in CONSOLE mode, and many benefits to running in GUI mode. CONSOLE mode is just provided for people more comfortable working in that environment.

**Note:** Graphing is not supported in CONSOLE mode.

**Note:** Support for CONSOLE mode may not be included in future releases of QuickCalc BASIC.

### **Entering Data:**

In GUI mode, data is entered into the command line window, which is captioned “Data” and colored light pink.

In Console mode, data is typed at the DOS prompt.

Data lines must end with **ENTER**. All characters entered are accepted, regardless of the cursor position at the time you press **ENTER**.

If there is an error in entering data in response to an **INPUT** statement, the message “?Redo from start” is printed, and all data on that line must be re-entered.

If you click the **STEP** button while entering data (GUI mode only) the program will enter stepping mode (see “Debugging”) as soon as the data has been entered.

You can copy data from anywhere and paste it into the data window.

If you click the **KILL PROGRAM** button while entering data, the **INPUT** command is cancelled and the program is terminated. In CONSOLE mode, typing control-c ends the program and the QuickCalc session.

## **The Log File.**

*This feature is available in GUI mode only.*

Check the “**Create Log File**” box and enter the name of a log file in the Log File window.

The log file will be created the first time you type a command or start a program.

All data sent to the “console” window will be echoed to the log file, which, unlike the console window, does not roll older lines off when the buffer fills up.

The log file remains open until the QuickCalc session ends, and may show the results of several BASIC programs. It can be very useful for debugging, as well as later copying output into another document or printing it.

The log file is closed if you click the **View Log** button. This opens the file in Notepad. If you want to save this data, you should save it from Notepad with a different name, as it will get overwritten when you continue running QuickCalc unless you change the log file name.