PEQUM 1.0
Personal Equation Manager

PEQUM is a program for the 49 series calculator. It should run without problems on the 48gII,49g, and 49g+. However, I cannot guarantee that it will not cause problems on your calculator. Don't get mad at me if you loose some data as a result of using this program. I doubt this will happen, but you should always back up your data.

This program makes it easy to create, organize and solve equations on your 49series calculator. This is done through the use of a custom filer. It is written in 100% system RPL and is much smaller than any other formula manager available. While all the functionality of this program can be done using built in tools, it is packaged so that all the needed tools are in one place.

Installation:

The PEQUM library, L263, is here shown selected in the SD card.

Installation of the PEQUM library is similar to the process for any other library. First, download the program file into the calculator. This can be done using conn4x, or by the use of an SD card reader. Once you have the program in the calculator, move it into a port. I recommend using port 2 since this is the most secure. Once installed, perform a warmstart. This is done by pushing ON-C.

Alternatively, recall the library to the stack and push `2` `STO►` *to store the library.*

Once installed, you can verify that the library is installed by pushing `►` `NUM.SLV` . This will bring up the NUM.SLV menu. PEQUM should appear on the list. If not, the installation was not completed correctly.

Push COPY to show the filer tree. Select 2:FLASH to place the library into port 2 memory.

Program Access:

There are four ways to access this program. It can be run through the `APPS` menu, the N.SLV menu, from its own library menu or by typing PEQUM. Once finished running the program, it will attempt you will be returned to your previous menu.

Upon running the program, a directory named EQUATION will be created in your home directory. PEQUM is a custom file manager interface that allows you to run and store equations easily. Only two types of objects will be seen in the filer--folders and symbolics (equations).

Filer Navigation:

Most users do already know how to navigate the filer. Use the arrow keys to move up and down to select objects. If you are selected on a folder, pushing the right arrow key will dive into that folder. Pushing the left arrow will move up one directory. To select multiple objects, push `+/-` to toggle selection.

This is the main PEQUM screen. You are looking at the EQUATION folder on this calculator.

Using PEQUM:

Most of the functions in this program are the same as the regular filer accessed by pushing `←` `FILES` . There are three pages of menu options. Access them by pushing `NXT`. There are also several shortcut keys. I will describe in detail the functions that are specific to the PEQUM library. For details on all others, please refer to the manual that came with your calculator.

NEWEQ - create a new equation in you current directory. First, you will be prompted for a name. The name may have spaces or any symbol you choose. Then you will be moved into the EQW to supply an equation. The equation needs to have an = sign or it will not continue. If you push CANCEL at any time, the equation creation will exit.

CRDIR - create an empty directory in your current directory.

VIEW - view the object using the built in viewer.

EDIT - edit the object with the best editor.

CLEAN - a prompt will ask if you want to clean the whole EQUATION directory, or just the current directory. Cleaning will delete any variable in the directory that is NOT an equation or a directory. This is useful for cleaning up the directory after solving for variables. The calculator automatically creates variables to store values when solving. While you are in PEQUM, you will not see these variables even if they exist. I suggest using the clean all function before archiving the EQUATION folder to save memory.

You can clean the whole EQUATION folder, or just the current directory.

SOLVE - this will solve a single equation. If only one equation is selected, it will open the EQW so you can modify the equation if desired before launching the equation solver. Please look in your calculator manual for instructions on using the NUM.SLVR. When done solving, push CANCEL. A window will ask if you want to save stack values. Push CANCEL again or select NO if you don't need the values on the stack for further calculations.

If a directory is selected, the program will recursively search and recall EVERY equation in the folder and its sub-folders. PEQUM will then exit and a multiple equation solver will activate. Information on using the MES can be found in your calculator manual. After using the MSOLVER, you will need to restart PEQUM to continue solving more equations. If you manually select more than one equation using `+/-`, the MES will activate as well. You can also select a mix of folders and equations. I suggest using CLEAN after to get rid of any variables created during solving if they are not needed.

Keep in mind that PEQUM saves your current menu before entering the program. So if you ran the MES, and then run the CLEAN program, the information for the MES will be deleted out of your folder and the calculator will error when exiting the program. This is normal.

COPY - copy variables.

MOVE - move variables.

PURGE - delete variables.

RENAM - rename variables.

LIST - changes details on the side to show more space.

ORDER - order variables. Use +/- to select variables in the desired order.

SORT - sort variables. This will NOT save the order. To do so, SORT and then use ORDER.

The next three commands deal with transferring equations or folders between calculators. Make sure that the settings on both calculators match before attempting to transfer or it may fail.

TRANS- opens the transfer screen from the APPS box. This box will allow you to easily send objects. It is also useful for changing your transfer settings. Change the settings to match, and push OK to save the transfer settings. Refer to the calculator manual for more info on transferring files.

SEND - transfer files.

RECV - receive files.

RCL – recall the current varialbe to the stack. This will let you leave an equation on the stack.

HELP - displays a help screen.

There are also several key shortcuts for important functions. See the HELP screen (or push H) to view these shortcuts.

To backup and restore your EQUATION folder to an SD card or port memory, simply use COPY and copy it to the desired location. Have fun using this program. I hope it will be useful. Please report back any suggestions, changes, improvements, etc. I will always respond.

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Thanks go to those individuals that helped test this program and provided invaluable