

## How to Work with Main and Storage Memory



Even though the fx-9860G comes with a huge amount of memory, it's still easy to get memory errors – ie run out of memory – since most applications such as graphing, statistics, spreadsheets or running a program rely on the Main memory that is limited to only 64Kb.

Depending on your model of fx9860G, the total memory available is anywhere upwards of 800Kb. (The SD version is only limited by current SD memory card sizes). This memory is split into Main memory (64Kb) and Storage memory (the rest!).



All applications, except eActivities and add-ins that you choose to install such as Physium, Data-Logging and Geometry, use Main memory when you work with them. The exceptions just mentioned use Storage memory to operate.

In this article we'll look at

- Organizing Storage memory with folders
- Saving spreadsheets, programs, etc into Storage memory
- Restoring items saved in storage back into Main memory

### Organizing Storage memory with folders

We all know that folders are a good way to organize files, etc so that we can easily find them in a few weeks or months when they're next needed.

From the Main Menu select the Memory application.

Next tap F2 (SMEM).

You may already have items in Storage memory – the calculator here does not.

The only option available is F4 (MK.F) - Make a Folder.



Tap F4, enter a name such as SSHEETS for spreadsheets followed by EXE to create a folder. When this folder is highlighted, tapping EXE enters the folder so you can see its contents – nothing at this stage!



Make as many folders as you think may be useful. Suggestions might be at least one folder for each of

- Spreadsheets
- Programs
- eActivities

## ***Saving spreadsheets, programs, etc into Storage memory***

On the calculator in use here, there are a couple of spreadsheets that we will now save.

Again start off in the Memory application and this time choose the Main Memory. Scroll down to the <S\_SHEET> folder.



Once the <S\_SHEET> folder has been highlighted, tap EXE to see what spreadsheets are in it. (The default sheet is simply called SHEET and will always be there.)



For this exercise, we will save two of the spreadsheets together as a file called SSMONEY in our Storage memory folder created earlier – SSHEETS.

First select all files you want to save by highlighting them and tapping the F1 (SEL) key.



Next tap F2 (COPY), scroll down to any of the Storage memory folders shown and tap EXE. (ROOT is the top level folder you first access when you enter Storage memory and will always exist.)



Now enter a filename – in this case SSMONEY – and tap EXE.



All done! Now free up some space by deleting these two files from Main memory.

With them still selected, tap F6 (DEL) and confirm with F1 (Yes).



## ***Restoring items saved in storage back into Main memory***

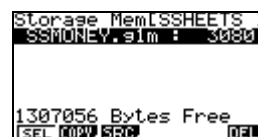
To restore the two spreadsheets back from Storage memory, return to the Memory Manager and enter the Storage memory with F2 (SMEM).



Open the SSHEETS folder by scrolling to it and tapping EXE.



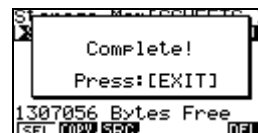
Note that the calculator added the file extension .g1m to our name of SSMONEY. Files with this extension typically contain spreadsheets and programs. The extension .g1e is used by eActivities.



Select SSMONEY.g1m by scrolling to it if necessary and then tapping F1 (SEL). Next tap F2 (COPY).



That's it. The complete contents of the file SSMONEY.g1m have been restored to Main memory. Programs will be in the program folder and spreadsheets will be in the spreadsheet folder – automatically!



**Working smart!** You now have a backup copy of the spreadsheets or programs saved in the file SSMONEY.g1m in Storage memory. You can modify the copies in Main memory as much as you want... and then delete them and replace them with the originals saved using in Storage memory!

Use this process to organize and keep backups of all your favorite programs and spreadsheets – and then you can restore the originals at any time.