**RAM and LIB Menu generator**

The existing CATALOG function on the WP34S (SHIFT “+” on the DM42 version) lets you scroll through programs stored in RAM, in flash memory (LIB), and in the backup region (BUP). At each point a program can be saved (to flash), loaded (to RAM), deleted, or executed.

I’ve now added a menu-based version of this idea. It generates a menu of up to twelve global labels (such as LBL’DOG’ or LBL’123’, rather than LBL A or LBL 01): pressing each menu key executes the code starting at that label. It doesn’t allow loading, saving, or deletion of programs, but it does make finding and executing a particular program a lot quicker! (After all, most programs are executed far more often than they are loaded, saved, or deleted.)

To get a listing of the global labels in RAM or flash memory, press SHIFT SHIFT 2, followed by RAM (F5) or LIB (F6). The calculator starts at the beginning of the memory region and looks for global labels. Each one that it finds – for example, LBL’A1’ - is used to label a menu key (A1), and binds that key to a command to execute that label (XEQ’A1’). This continues until the end of memory is reached, or twelve labels have been found.

**Things to know**

When one of these menus is displayed, the ▼(down-arrow key) moves to the next twelve labels, if they exist. Pressing ▲goes back to the start of memory and displays the first twelve labels again.

You may not want a particular global label to appear in the menu. For example, the list of commands for a user-defined menu starts with a global label but it wouldn’t make sense to execute it! If the first command following the global label is NOP (no operation – it’s in the P.FCN catalogue) then the label is skipped. (You can insert NOP at the start of a user-defined menu without causing trouble.)

If you go to another menu, you can use SHIFT-hold-uparrow to go back to the RAM or LIB menu in the usual way.

If you want to include RAM or LIB in one of your own programs or as part of a user-defined menu, you can use these commands:

* RAM is the command UMEN’RAM’
* LIB is the command UMEN’LIB’
* down-arrow is the command UMEN’NXT’
* up-arrow is the command UMEN’TOP’.

This does mean that if you currently have a user-defined menu called RAM, LIB, NXT, or TOP, you will need to rename it.