# Dual Boot Simulator Software Load Procedures

**Description**

This feature enables the user to load both a mill and a lathe binary file onto a simulator and switch back and forth between them.  The parameters, settings, programs, etc., for both are stored independently. The dual boot simulator starts by loading the mill and lathe software from the USB drive. If the simulator is equipped with a hard drive (PC-104), it can be used as well.

**Preparation**

<span style="color:red">** This procedure will only work with M1604CE + and L0905BE + or higher, but it does not require 16 MB of Flash.   It will work on any simulator with a 15" monitor.</span>

Use a PC to prepare a USB drive.

Create a folder called "Boot" on the USB drive.

If additional languages are needed, create a folder called "Language" inside the "Boot" folder.

Copy provided mill and/or lathe binaries (.bin files) to the "Boot" folder.

The English language is included by default.

Any additional language files may be added by copying them to the "Language" folder.

 Note that language version must match the version of software being loaded. Verify this by comparing the version number contained in the file name. For example if the mill software is m1605XE.bin, the language file would be m1605frX (fr = French)

For the setup, the GLDR300.Bin file must be copied to the root directory of a USB drive.

**Setup**

To setup your simulator for dual boot use, do the following:

1) Hold down the PRGRM button while turning on the power.

2) Verify that you see the monitor ">" prompt. If the prompt does not display, disconnect RS-232 Devices from the port, and repeat step 1.

3) Enter FC, and press WRITE. Wait for the simulator to finish the routine.

4) Enter M 6000000 6FFFFFF and press WRITE.

5) Wait until the message "Memory Test Passed..." is displayed.

6) Press RESET and wait for the routine to finish.

7) Insert your USB drive containing the binary files.

8) Enter the binary name of the loader program preceded by an "N",  for example, "NGLDR300.BIN (300 is the version) and press WRITE.

9) Enter UF, press WRITE and wait for it to finish. Enter FF for simulators with the E-net option and press Write. Wait for the routine to finish.

10) Cycle the power on the simulator.

**Usage**

On power up a selection screen will be displayed.
Press the left arrow button to load the mill version or the right arrow button to load lathe version.

The dual boot keeps track of previous selection and if no selection occurs within 10 seconds last selected will be loaded.
The simulator will not have the correct configuration as it is first powered up.
To configure enter "DEBUG" followed by WRITE on the alarm screen.

 Enter machine type (such as VF2 for mill or SL20 for lathe) and press WRITE. The simulator will restart and power up with the correct configuration.

If you are booting from the USB stick, you may remove the stick after the software has fully initialized, but it will have to be inserted prior to each start up.

If simulator is equipped with a hard drive (PC104) the "BOOT" folder may be moved to the hard drive. The hard drive has precedence over the USB drive; if the dual boot functions finds valid boot files on the hard drive these will be used.