

## Hints for Misosys C setup (thanks to Michael McCarrick)

To make a build system for the Model 4, download:

Misosys C for the Model 4 (<https://www.tim-mann.org/trs80/Mc6.zip>)

Note: do not install the Model I/III libraries. The libraries are already in the Model 4 download.

The compiler doesn't generate machine code directly. It generates an assembly language version, uses MRASM to generate an object file, and lastly uses a linker to create the final executable. Thus you will also need the following:

Misosys MRASM (<https://www.tim-mann.org/trs80/Mras6.zip>)

The documentation for Misosys C is at <https://www.tim-mann.org/trs80/doc/promcw97.pdf>

In my build I have a hard drive as drive 0. The boot disk is at drive 4 (after a drive swap operation).

There are a couple key points that are not apparent (at least they were not to me) in the manual.

1. The MC/JCL batch file used to build a program uses drive 1 as the working drive. If that drive is not present or does not have enough free space, it will fail. To use a different drive as the working drive edit MC/JCL.
2. The UNARC/CCC program (used to extract individual header files from HEADERS/H) uses drive 3 to place the extracted header files. If you don't have a drive 3 then edit UNARC/CCC to use a different drive. Alternatively you can do this manually.

With MC you can link libraries created in assembly language to your C code. This way you can get the best of both worlds. Speed when you need it (with ASM) and ease of program creation (with C).

One other thing that got me was I missed the part about adding library inclusion directives, like the following:

```
#option MATHLIB  
#option INLIB
```

They instruct the linker to look there for dependencies.

The Misosys C manual indicates which library is needed for a given function.

In closing it is sure a blast from the past (at least my past) to operate without the modern C language structures.

Good luck and have fun.