

IMSAI SIO-2 with the Altair FDC (and FDC+)

In order to use the Altair FDC with an IMSAI SIO-2, the default base address of the SIO-2 must be changed. The default address is typically 00h which puts the 1st serial port at 02h/03h. However, the SIO-2 responds to all I/O addresses from 00h-0Fh, which in turn, conflicts with the Altair FDC at 08h-0Ah.

This folder contains Lifeboat CP/M 2.2 and utilities updated to use the SIO-2 at a base address of 10h to avoid conflict with the Altair FDC. This puts the first serial port on the SIO-2 at 12h/13h. The file "LIFE-BOAT-IMSAI-CPM22-48K.DSK" is a ready to boot disk image of Lifeboat CP/M 2.2 patched for use with the SIO-2 card at 10h as the console. Use PC2FLOP in this same folder to write the disk.

Patching Lifeboat CP/M 2.2 for the SIO-2 at 10h

With Lifeboat CP/M, the IMSAI SIO-2 option is selected by loading CONFIG.COM under DDT and setting address 120h to 01h. DDT is then exited and the patched CONFIG.COM saved to disk by doing a "SAVE 24 CONFIG.COM". During cold boot, CONFIG.COM generates the required console I/O routines on the fly based on the value specified in 120h. The user can optionally make the I/O code permanent in the boot tracks by using the SAVEUSER command as instructed when CP/M boots.

To make Lifeboat CP/M work with the SIO-2 at 10h instead of 00h, locations 1558h-1573h in the file CONFIG.COM have been patched with the values required for the SIO-2 at 10h instead of the values originally there for the SIO-2 at 00h. The assembly program "PATCH10H.ASM" was used to create a patch that can easily be installed while CONFIG.COM is open under DDT. The patch source can be used to put the SIO-2 base address at any location, including the original location.