

PC2Flop and Flop2PC (for iCOM FD3812/FD3712 with Altair)

PC2Flop writes a soft-sectored 8" floppy disk with a disk image transmitted from a PC. Flop2PC saves an image of a 8" disk to a PC. The disk image is transferred through either serial port on a 2SIO board or through an 88-SIO port at I/O address zero. The XMODEM checksum or CRC protocol is used for the transfer. When run on an FD3812, the program supports both single and double density disks. When run on an FD3712, only single density is supported.

These programs run standalone at 0x100 or under CP/M. Any type of disk (e.g., MITS/PCC BASIC, CP/M, FDOS, etc.) can be read or written even if running under CP/M. Several disk images are available in the FD3712, FDC+3712 and FD3812 folders: https://deramp.com/downloads/altair/software/icom_floppy/

Standalone operation may be required to create a bootable disk when no other bootable disk is available. There are a couple of ways to load PC2FLOP into a cold machine:

- 1) Use the front panel or Turnkey monitor to enter the octal bytes of the program listed in LOADER.PRN. Execute the loader by running from zero (no feedback is given), then send the file PC2FLOP.COM through the first 2SIO port. After transmission is complete, reset the computer and run PC2Flop at address 100h.
- 2) If you have an Intel hex file loader in PROM, load the file PC2FLOP.HEX and then run from 100h. A stand alone Intel hex loader that can be run from PROM is available at http://deramp.com/downloads/altair/software/roms/custom_roms/

Since this is a soft sectored controller, PC2Flop requires the destination disk to have been formatted at some point. To allow PC2Flop to create a new disk for a "cold" machine and blank disk, the program offers a format disk option when run with an FD3812 drive cabinet or with an Altair FDC+ as the controller. The FD3712 cannot format a disk and requires pre-formatted media.

When copying a disk image to the PC (Flop2PC), the program attempts several retries including a restore and re-seek of the current track. If the read still fails, the error is noted and the copy process continues so that the remainder of the disk can still be recovered.

When using the Altair FDC+, a 5.25" HD floppy drive (1.2Mb drive like the Teac 55-GFR series) can be used in place of an 8" floppy drive without any changes to the FDC+ or software.