

Serial Disk Image Server for the Altair FDC+

Installation

This program runs under Windows. No installer is required – simply drag the file “FDC+ Server.exe” onto your desktop from the .zip file.

Baud Rate with FDC+

When used with the FDC+, the serial drive can operate at one of three baud rates: 403.2K, 460.8K, or 230.4K baud. These fast baud rates will most likely require a computer running a USB-to-serial adapter as opposed to a native serial port. The baud rate is chosen from within the program – do not attempt to configure the port’s baud rate using the Device Manager, for example.

The default and first choice for baud rate is 403.2K. Try this rate first even if you don’t think your USB adapter supports it. If selection of this rate within the program gives an error, or if it doesn’t work, a more standard 460.K baud is the second choice. Finally, if neither of these rates is available on the PC, 230.4K baud can be used. At 230.4K baud, disk operation is slightly slower than the actual 8 inch drive. The Altair Minidisk still functions at full speed.

If the baud rate is changed in the server, the corresponding change must also be made on the FDC+. Baud rates are changed in the FDC+ using the monitor.

Baud Rate with 88-2SIO Serial CP/M

When used with the 88-2SIOJP, 76.8K baud is the ideal baud rate. At this speed, performance of CP/M is similar to original Lifeboat or Burcon CP/M used with a disk drive. Unfortunately, 76.8K baud is not supported by all USB to serial adapters. I have found it is supported with the FTDI based adapters. If 76.8K does not work, 38.4K baud will most likely work.

When used with the original 88-2SIO, the max baud rate is 19,200. See “2SIO at 19200” in this same folder.

Saved Parameters

The COM port, baud rate, and window position are automatically saved whenever the program exits. These settings are restored the next time the server is run.

Disk Images

Numerous disk image files of original Altair software are available via links on the FDC+ web page. Images files have a .dsk extension. You can also recognize disk images by their file size. Eight inch disk images are 330K, Minidisk images are 75K. A special 8Mb disk image is also available that only works with this serial server – there is no equivalent real disk drive. It looks like an Altair 8” drive but with 2048 tracks instead of 77 tracks. It has a image size of 8768K.

The server is indifferent to whether an eight inch image or Minidisk image is loaded, however, the image type loaded should match drive type selected on the FDC+.

Note that 88-2SIO serial CP/M only supports standard 8" disk images at this time (330K).

Additional Notes

Because the serial disk protocol uses relatively tight timeouts to ensure realistic disk performance, you may find that performing other activities on your computer (e.g., browsing the internet, playing videos, etc.), while Altair disk I/O is taking place, may cause unexpected errors. The obvious work-around is to avoid other PC activity while serial disk I/O is taking place.