

Configuration Information

This copy of MS-DOS 2.0 includes disk drivers for the Seattle Computer Products DISK MASTER floppy disk controller with two 8-inch double-sided disk drives. Console I/O uses the serial port of the CPU Support Card, and printer output goes to channel 1 of the Multiport Serial card at 9600 baud. Auxiliary input/output uses channel 2 of the Multiport Serial card at 9600 baud. These baud rates may be changed to any standard value by setting the PRNBAUD and AUXBAUD equates in the MS-DOS I/O System source file IODEF.ASM. Refer to the sheet "How to change the I/O System and FORMAT."

This system disk also includes a dynamically installed Winchester disk driver for the Morrow Designs HDC-DMA hard disk controller with a MiniScribe 4020 15 megabyte drive. This hard disk driver is in the file HDISK.DEV, and is installed as drive C at system boot time by the directive "DEVICE = HDISK.DEV" in the CONFIG.SYS file. If you do not have a hard disk, you should prevent this disk driver from loading by simply deleting the CONFIG.SYS file from your working copy of the master disk.

The DISK MASTER controller is set up as follows:

```
PORT ADDRESS = E0 hex (A3 & A4 on, A5 - A7 off)
WAIT = ON
INTERRUPT = VI1
AUTO MOT/SM AUTO/ON = SM AUTO
PRECOMP = PROG (with Mitsubishi drives)
PRECOMP = AUTO (with Qume drives)
FAST SEEK = OFF
```

Except for the HEAD LOAD jumper, the positions of the other switches and jumpers don't matter. The HEAD LOAD jumper must be set to agree with the configuration of the disk drives themselves. All systems that were originally shipped with MS-DOS 1.25 will need this jumper in the HL position. However, changing the drive configuration will allow taking advantage of some special features. These new features are: 1) Because the index holes of single- and double-sided disks are in a different place, it is possible to distinguish which type is in the drive. The I/O System will automatically adapt to the type of disk presently inserted in the drive, allowing easy interchange of double-density disks between single- and double-sided systems. 2) The drive can inform the I/O System when a disk might have been changed by noting when the drive door is opened. This allows MS-DOS to make some potentially significant optimizations in buffer handling since it can be certain when a disk has not been changed.

To take advantage of these new features, the drives must be re-configured with the included jumper kit. The kit for each drive includes a 16-pin shunt block and two blue 2-pin shunts. Installation of the kit is quite simple, once the disk drive circuit board has been exposed. The blue shunts are placed on the pins labeled "2S" and "DC" near the 50-pin card-edge connector. The 16-pin shunt block replaces the present socketed shunt block: the old block has several shunt positions broken, while the new one does not. On Qume drives only, the "C" and "Y" jumpers must also be removed. After these changes have been made to both drives, the HEAD LOAD jumper on the DISK MASTER must be in the DS position. Operation under MS-DOS 1.25 will not be affected if all changes are made correctly.

As shipped, the I/O System does not require or use these changes. Once the changes have been made to the drives and the DISK MASTER, you must edit the I/O System source file IODEF.ASM to set the DISKCHG and TWOSIDE equates to 1, then make a new I/O System according to instructions on the page called "How to change the I/O System and FORMAT".

The CPU Support Card is set for normal Monitor operation, with all switches of S1 on. Switch 1 of S2 is turned ON to automatically boot the MS-DOS operating system without entering the Monitor after power-on or reset. Note that you must type several Carriage Returns before the operating system boots as described in the 8086 Monitor manual. If you wish to enter the Monitor after power-on or reset, turn switch 1 of S2 OFF.