

APPLICATION NOTE

marcus b.

RDOS 02.50

Version 02.50 of Cromemco RDOS has been produced for the 16FDC disk controller board. It has several substantial improvements over previous versions. ROMs are available from the Cromemco Customer Service Department, part number 011-0051-1. The following briefly describes the enhancements.

1. RDOS 02.50 allows the system to be booted from any floppy disk drive (in conjunction with the proper versions of CDOS and the Cromix Operating System). This boot may be done manually or your 16FDC may have its switches set to automatically boot from an alternate drive. This facility provides flexibility. For example, a drive other than drive A can be designated the boot and master drive (default command drive) in a CDOS system.

The Cromix versions providing this boot facility are 11.08 and higher and the versions of CDOS providing this facility are 02.45 and higher. Complete documentation of the boot facility follows.

2. The initialization sequence for the 1793 disk controller IC of the 16FDC has been changed in RDOS 02.50 to abort the operation initiated just prior to a system reset. This prevents a runaway program from causing a loss of data upon first disk access as may now happen in rare instances.
3. The **user entry jump table** provided in RDOS as an aid to programmers wishing to use RDOS facilities in a ROM-based real-time application has been modified slightly in RDOS 02.50. Each entry is now a 3-byte Z-80 **jp** instruction. The respective locations of the routines (i.e., their order) remains the same.

023-9042



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RDOS 02.50 Boot Command

The format of this command when given manually is

Bx

followed by a RETURN, where x is an optional disk drive specifier. If x is omitted, RDOS will boot from the drive specified by switches 6, 7, and 8 of the 16FDC disk controller (for settings, see below).

The parameter x should be a floppy disk drive letter (in the range A through D). If this parameter is specified, RDOS will attempt to boot from that drive. For example, the command BC will attempt to boot the system from drive C.

The boot command may also be performed automatically by the system as determined by the switch settings on the 16FDC disk controller. Switch 3 ON tells RDOS to begin the automatic boot sequence. Switch 6 should always be set OFF to tell RDOS to attempt the boot from a floppy disk. Switches 7 and 8 then determine the disk to be used. Refer to the following table.

Switch		<u>Drive</u>
<u>7</u>	<u>8</u>	
OFF	OFF	Floppy disk A
OFF	ON	Floppy disk B
ON	OFF	Floppy disk C
ON	ON	Floppy disk D

Upon receiving the boot command (whether manual or automatic), RDOS will display the message "Preparing to boot, ESC to abort", indicating the boot command has been received. RDOS will then pause for a few seconds while determining the type of disk drive specified (8" or 5") and the type of seek. Once RDOS has read the system boot information from the disk into memory, it will display "Standby", indicating that the boot is proceeding normally.

At this point, you might also receive the message "No boot", indicating that the disk being used does not contain the boot information; or the message "Unable to boot", indicating that RDOS is unable to read the boot information from the disk. Either of these two conditions must be remedied by booting from another disk and then correcting or repairing the original disk.

Between display of the messages "Preparing to boot" and "Standby", the operator may abort the boot (even if it is an automatic sequence) and return control to RDOS by pressing the ESCape key on the keyboard. If the boot is not aborted and proceeds normally, the operating system being used should come up and display its prompt.