

WHEATCROFT HARD'S LTD

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U N D E R
C D O S A N D C R O M I X
O P E R A T I O N S M A N U A L

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SIM22 OPERATIONS MANUAL

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I. INTRODUCTION

The program described in this manual addresses itself to one of the main drawbacks to using manufacturers own system software, that of compatibility. The CDOS operating system produced by Cromemco was designed to be compatible with CP/M in its early days but since the advent of CP/M 2.x and CDOS 2.x the development of the two systems have followed different paths. This poses a problem when on the one hand the user wants Cromemco hardware but on the other also wants to run some of the great wealth of good commercial software produced for CP/M. The SIM22 program has been designed to simulate the CP/M 2.x environment under CDOS or CROMIX by providing a transparent call interface between the application and the operating system.

SIM22 functions under both the CDOS and CROMIX operating systems using less than 1K of storage to perform its simulation. The program maintains upward compatibility under changing memory conditions by self-relocating itself in the upper part of memory. This means that if another version of CDOS or CROMIX is produced that requires more memory the program will always relocate itself into the correct place in memory.

Summary -

1. Simulation of the CP/M 2.x environment.
2. Self-relocation under changing memory conditions.
3. Transparent to the application program.
4. Maintains upward compatibility with future versions of CDOS and CROMIX.

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II. OPERATION OF SIM22

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To run an application under CP/M simulation all that is necessary is to precede the normal command line with 'SIM22'.

e.g. To run a Microsoft interpreted program

SIM22 MBASIC LEDGER (ret)

e.g. To run a Microsoft compiled program

SIM22 LEDGER (ret)

To the application program it will appear as if 'SIM22' had never been typed because SIM22 sets up the application environment including the default fcb's at 005C and 006C hex and manipulating the command line at 0080 hex. The only indication that SIM22 is running is the loss of 1K of storage at the top of memory, a very small cost to pay.

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III. TECHNICAL INFORMATION
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The SIM22 program relocates itself to the top of available memory just below the operating system area. In a CDOS environment this is below CDOS itself, and in a CROMIX environment below the CDOS simulator.

The calls simulated are :-

- 6. Direct console I/O
- 12. Return version number (returns version 2.2)
- 33. Read random record
- 34. Write random record
- 35. Compute file size
- 36. Set random record

Calls intercepted and handled differently are :-

- 15. Open disk file
- 16. Close disk file
- 19. Delete file
- 22. Make file
- 23. Rename file

Other calls handled as null functions are:-

- 28. Write protect disk
- 29. Get read/only vector
- 30. Set file attributes
- 31. Get address disk parms
- 32. Set/get user code