

## Enhanced Monitor for the Exidy Sorcerer

An enhanced version of the monitor program for the Exidy Sorcerer computer is now available from Daniel Wong. Called DWMON 2.1, the new monitor is compatible with the Exidy V1.0 version but includes many new features.

The new monitor includes a video terminal mode which allows the Sorcerer to become a stand-alone terminal using the built-in RS-232C port, and a routine to automatically boot up a disk operating system on switch-on or reset.

The Exidy CREAT, OVER, LIST and BATCH commands have been eliminated to make room for the new features. The existing ENTER command now displays the current memory contents in ASCII as well as hexadecimal, as does the memory DUMP command. The MOVE command has been altered to allow memory contents to be moved up or down between blocks of memory even if they overlap, and new FILL and COMPARE commands have been added.

Blocks of memory can be filled with any character, and the contents of two data blocks compared. A SEARCH command allows any string of hexadecimal

or ASCII characters to be found in memory. The monitor will also accept lowercase commands, and an optional beeper is available which will respond to the ASCII BEL character (07H).

The existing pre-defined graphics characters of the Sorcerer have been removed from the monitor EPROMs and are now stored in the previously empty space of the EPROMs in Exidy's Basic ROM Pak. Apart from allowing more space for the monitor enhancements this means that subsequent clearing of the screen will not re-write the standard graphics characters into the programmable character RAM spaces – a benefit that will be appreciated by many Sorcerer users.

The complete enhancement set consists of three EPROMs, two to replace the existing monitor and one for use in the Basic ROM Pak. The third EPROM can be dispensed with if the pre-defined graphics are not required by the user.

The complete kit of three EPROMs costs \$40. If the Basic graphics ROM is not required the price of the monitor is \$32, with the optional solid-state beeper circuitry available for \$30.

For further information contact Daniel Wong, PO Box 32, Westmead, NSW 2145.

# Microcomputer News

## Enhanced monitor for Exidy Sorcerer computer

A new machine language monitor program is now available for the Exidy Sorcerer computer which greatly expands the capabilities of the machine. The monitor is supplied as a pair of EPROMs which replace those already present in the computer. A graphics enhancement EPROM is also available for use with the Basic ROM pack.

Unlike many similar computers the Sorcerer includes a monitor program.

Powerful as this monitor is it does give cause for dissatisfaction. The RS-232 routine does not work correctly in either Mark I or Mark II Sorcerers, as the keyboard scan routine uses the same port and resets the RS232 interface each time it is called. There is also no convenient way to set the RS232 mode or baud rate from the monitor command level.

All of these problems are fixed with the revised monitor from D. K. Wong. The new program, called DWMON 2.2, also adds a considerable number of enhancements to the standard Sorcerer monitor.

Using DWMON the existing memory dump and enter commands will now work with ASCII characters as well as hex. The built-in memory test command has been changed so that it can now be used with a single memory location as well as blocks of memory. The memory move command has also been altered to allow moving a block of memory to any location, even if the new location overlaps the block to be moved.

New commands added by DWMON include CM, to compare a block of memory with another block. The routine returns to the monitor if no differences are found, and otherwise all differences are reported. A Fill Memory (FM) command has been added, allowing a specified block of memory to be filled with any hexadecimal number. Also added is a search command which allows memory to be searched through a specified range for any pattern of bytes, including mixed strings of hex and ASCII characters.

A new command, DK, will automatically boot up a disk operating system. The routine checks to see that a disk drive controller is attached and returns to the monitor if not. Otherwise the command will boot the disk, working with either the Micropolis disk drive or the Exidy FDS system.

Another new command, VT, will

change the Sorcerer to a new Video Terminal mode. Parameters for baud rate (300 or 1200), full or half duplex operation, word length, parity and number of stop bits can be entered, allowing the configuration of the terminal to be altered to suit almost any database server or mainframe computer.

A new graphics EPROM is available separately which places the pre-defined graphics of the Sorcerer in the Basic ROM pack rather than in the monitor ROMs. If this EPROM is installed subsequent clearing of the screen will not rewrite the graphics characters, a reverse video graphics set is available and a special video driver can be used to magnify all characters on the screen by 16, making a 16-column by 7-line display for teaching or demonstration purposes.

An optional solid-state beeper can also be added to the Sorcerer, supported by a routine in the new monitor which produces a 100ms tone in response to the ASCII character BEL (07) or Control-G. The tone is produced by hardware and does not affect programs in any way.

This review cannot provide an exhaustive listing of all of the features of DWMON. The new monitor is compatible with most of the existing software for the Sorcerer, as the addresses of the major monitor routines are unchanged. System 3, the enhanced Basic editor program, works perfectly in Basic but changes I/O vectors which affect the DUMP command of the monitor. These vectors can be easily changed back.

If the new monitor is installed alone the existing Sorcerer graphics set (card suits, line segments, etc) will be lost. Mr Wong advises saving the character set on tape or disk before installing the new DWMON. If the additional Basic EPROM is also installed the graphics set remains available.

The pair of new monitor EPROMs costs \$32 and the graphics EPROM costs \$15. When both sets are ordered together the combined price is \$40. The optional beeper costs \$30, with three EPROMs and the beeper available for \$65. The prices include postage and packing. For further information contact D. K. Wong, PO Box 32, Westmead, NSW 2145.