

Challenger IIP Update.

Your Challenger IIP uses OSI's new 540 Video Board, which is capable of displaying up to 32 lines of 64 characters or 32 lines of 32 characters. The 540 Display Board can accept a conventional ASCII keyboard or a new upper-lower-case polled keyboard. It also has provisions for insulation of our graphics display character generator ROM.

When the Challenger IIP generator is powered up normally, it should be displaying 32x64. If it is turned off and on very quickly, it will come up 32x32. This is not the recommended way of getting the 540 to switch from 64 to 32 characters wide, however. The recommended approach is with the BASIC statement: POKE 56900,0<return>. This programs an internal flag in the 540 board to drop to 32 characters wide. Conversely, it can be switched back to 64 by the statement: POKE 56900,1<return>, which reprograms the board for a 64-character display. The user may want to use a 32-character-wide display in cases where his television monitor does not have adequate resolution for a 64-character width, and/or in video games where it is desirable to have a square character cell size instead of a rectangular cell size for the characters. This is particularly true in the case of 540 Boards equipped with the graphics character generator, which is an extra-cost option.

The 540 video display, of course, is normally used as a conventional CRT terminal, but the display memory is accessible as normal memory in the computer. It is memory within the decimal range of 53248 to 55296. For example, the following BASIC statements:

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10 FOR X=53248 to 55296
20 POKE X, 65
30 NEXT
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when executed, will fill the screen with A's. Thus the user can directly address the display of the computer for advanced programming.

The Challenger IIP utilizes a fan which is necessary primarily for the cooling of the power supply. Be careful never to block the fan input or to jab anything into the fan input port, as this may cause damage to the fan. The air is circulated through ventilation holes in the back and bottom of the case. The two ventilation holes by the serial number label in the back are particularly important for cooling of the power supply and should never be blocked or obstructed.

NEW ACCESSORIES

The Challenger IIP has enjoyed overwhelming acceptance in its first few months of existence. It is so popular that Ohio Scientific is in the process of designing several accessories specifically for use with the Challenger IIP. Because of this, they should be used instead of existing Ohio Scientific accessories, both because of a cost advantage and because they are designed to work well with the Challenger IIP. At the moment, these products are not available for immediate delivery, but as a IIP owner, you will be notified of their availability through Ohio Scientific's S mail Systems Journal.

The first product is a new 16K RAM memory board. We are modifying our standard 520 Memory Board to include a +12V power inverter for use in the IIP. We have decided to do this, because the 16K memory board which we had intended to use in the IIP (viz., the Model 525) is suffering from a very inadequate supply of low-power 2114-type memory chips. At this point it does not seem that there will be enough

memory chips to offer this product until after the first half of 1978. The Model 520 Memory Board will have a very low power consumption, and it should be possible to put 32K of memory in your Challenger IIP with no power supply problems.

The second item we are working on is a new low-cost, full-size eight-inch floppy disk drive. This disk drive will be in a small case with additional power supplies to complement the Challenger IIP.

The third item is an expansion chassis kit for the Challenger IIP for persons who decide they do not have enough slots and/or power supply to expand their system as much as they would like. The expansion chassis is a standard eight-slot Challenger-type case with a five-foot ribbon cable. To expand a system into the expansion chassis, the user removes the two boards in the Challenger IIP and places them in the chassis, running the keyboard ribbon cable from the keyboard in the IIP case to the 540 Board now in the large Challenger case.

Also under development is a full library of low-cost cassette applications programs in BASIC for use on your IIP, and a version of our standard 6502 Assembler/Editor and Extended Monitor for use specifically on the IIP. All these programs and hardware will be announced in Ohio Scientific's Small Systems Journal, which you will be getting for a year as a part of your Challenger IIP purchase.

