## T/S/ 1016 RAM Pack-Instructions for use

This RAM Pack will expand the memory capacity of your Timex Sinclair Personal Computer to 16K bytes (1K byte = 1024 units of storage, i.e. 1024 characters). All you have to do is plug it onto the expansion edge connector at the back of your computer. It will take its power from the existing power supply.

IMPORTANT - Make sure the computer is switched off before plugging or unplugging the memory. Otherwise you may damage the RAM pack or the computer. Any program that was in the computer will certainly be lost; so if you think a particular program may need a lot of memory, it is wise to plug on the RAM pack before entering it. As a guide, the computer's internal memory can handle 60-120 lines of program, but large arrays or a lot of data can reduce this considerably.

A little mental arithmetic should show that the computer can theoretically handle up to 960 program lines when fitted with the expansion pack in practice, no program is likely to need this much (no prizes for trying!) except programs with a lot of data. In fact, the only evidence the user sees of the RAM pack's operation, apart from almost never running out of memory, is that the inverse 'K' takes a little longer to appear after switching on. This is because the computer tests the memory after switch on to see how much there is. The results of the test aren't directly available, but a simple machine code program can be used to reassure the operator that he or she really has got the memory available.

## MEMORY TEST PROGRAM

1 POKE 18000, 33

2 POKE 18001, 11

3 POKE 18002, 0 4 POKE 18003, 57

5 POKE 18004, 68 6 POKE 18005, 77

7 POKE 18006, 201

8 PRINT (USR (18000) - 16373) / 1024; "K"

If the test is run on your computer without the RAM pack the answer will be 2K - the amount of memory present in the sysiem. With the 16K RAM pack, however, the answer will be 16K. Note that this program does not say how many bytes are free for a program, only how many are available to the computer, which will use some of them for the display file stack. etc.

This equipment generates and uses radio frequency energy and if not installed and used properly - that is, in strict accordance with the manufacturer's instructions - may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna.
Relocate the computer with respect to the receiver.
Move the computer away from the receiver.
Plug the computer into a different outlet so that

computer & receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet, prepared by the Federal Communications Commission, helpful: "How to Identify & Resolve Radio-TV Interference Problems"

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

## LIMITED WARRANTY

Basic Coverage: This Timex Sinclair RAM Module is warranted to the owner for a period of 90 days from date of original purchase against defects in manufacture. This limited warranty is given by Timex Computer Corporation - not by the dealer from whom it was purchased.

What Timex Will Do: If a defect in manufacture of the RAM Module is discovered within 90 days from date of original purchase, Timex Computer Corporation will, at its option, repair or replace the defective unit.

What You Must Do: You must return the RAM Module, indicating date of purchase, to Timex Product Service Center with a written explanation of the reason for the return.

Return your unit, postage pre-paid to: Timex Product Service Center P.O. Box 2740 7000 Murray Street Little Rock, AR 72203

To protect against in-transit loss, we recommend you insure your RAM Module.

## Limitations:

\_THE "ABOVE REMEDY IS EXCLUSIVE. TIMEX COMPUTER CORPORATION LIMITS THE DURATION OF ANY WARRANTY IMPLIED BY STATE LAW, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, TO 90 DAYS FROM THE DATE OF ORIGINAL PURCHASE. TIMEX COMPUTER CORPORATION IS NOT LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations of exclusions may not apply to you.

This warranty is void if the RAM Module has been tampered with or ill-treated or if the defect is related to servicing not performed by us.