VERSION2

TAPE TO DISK

T2P3 T2CU T2P4 T2SD T2SEDFS

USER GUIDE

PLEASE READ THESE INSTRUCTIONS CAREFULLY

- 1. ENSURE THAT THE POWER IS OFF
- 2. The ROM chip may be inserted into any ROM extension unit or $\ensuremath{\mathsf{EPROM}}$ Cartridge.
- 3. Before you can insert the ROM chip you must first ensure the correct orientation as there is only one way that the chip MUST be inserted, but there are two ways that the chip CAN be inserted. One way is correct, the other will destroy the chip.
- 4. Examine the chip. One end has a notch in it. Locate this end and hold the chip by the ends, between finger and thumb, so that the notch is on the end facing away from you.
- 5. With your ROM extension unit (either a ROMBOX or an EPROM cartridge) in front of you, line up the pins on the bottom of the chip with the holes in the bottom of the ROM extension unit. Ensure that the notch of the ROM is inserted adjacent to Pin 1 on the socket which should be clearly marked. Users of the SEDS, CUMANA and AP4 interfaces should insert T2SEDFS, T2CU or T2P4 directly into the disk interface. Once open, a vacant socket in the interface is visible into which the ROM should be inserted with the notch facing in the same direction as the other ROMS in the Interface.
- 6. Push the chip down into the socket with a firm and even pressure, but try not to force the chip in.
- 7. Once you think the chip is in the socket, check all around the chip to make sure that all the pins have entered their corresponding socket, and that none are bent outwards or underneath.
- 8. Finally, check that the notch on the end of the chip is next to Pin
- 1. If this is not so, then lever first one end then the other end of the chip out of the socket with a small screwdriver, turn it around and replace it in the correct way. If the chip is in the correct way, then you can turn the power on.

INTRODUCTION

THE TAPE TO DISK ROM was developed to fill the need for an easy way of running privately owned tape programs from disk, instead of the laborious wait of a program to load from tape, some programs, notably games, taking perhaps as much as 5 minutes to load.

T2DISK will transfer most games onto disk. Due to the nature of protection, and most games have some form of protection programmed into them, some games will just not transfer successfully.

Due to the Copyright laws, the ROM has been written in such a way that transferred programs can be backed up in the normal way but can only be used when the ROM is present on the system.

In writing this manual, T2P3 has been selected as the example. Users of T2P3 should follow the manual as written but to use the other versions, insert the appropriate prefixes as follows

T2SEDFS	Slogger Electron Disk Filing System
T2CU	Cumana Disk Filing System (double density)
T2P4	AP4 and E00 DFS
T2SD	Solidisk Disk System (single density only)
T2C3	Challenger 3 (single density only)

Before using the Tape to Disk for the first time, read thoroughly the following guidelines to assist you in the future.

1. ALWAYS DISABLE THE PLUS 1 OPERATING SYSTEM ROM.

Acorn PLUS 3 ADFS

- 2. Users of T2SD always use Acorn DFS not ADFS.
- 3. When using tape to disk, the default drive is drive 0. Any attempt to alter this will result in failure.
- 4. When using T2CU, USE A NEWLY FORMATTED DISK. DO NOT DELETE FILES FROM THE DIRECTORY as the tape to disk files must be contiguous.
- 5. All files are saved in directory T.

T2P3

6. We cannot stress too highly the need to use Option 2. Without workspace changing approximately 50% of all software would be rendered unuseable.

ENTERING TAPE TO DISK

To commence, insert a blank disk formatted for use on drive 0 and enter \star T2P3 (abbreviated to \star T2.) followed by RETURN. The screen will display the main menu and the catalogue will be read and games programs displayed accordingly, with a clean disk there will be no files of course.

With the main menu displayed the user can select one of several options. He can select the option to transfer programs from tape to disk, he can change the options associated with a transferred program (See "Options" later), he can simply run a game by typing the letter associated with that game (with a blank disk this option is obviously not valid) or he can type in a "STAR" command (please note that "he" could equally be "she"!).

On selection of this option T2P3 will prompt you to enter the name under which the program will be saved onto disk so enter the required filename and press RETURN. You will then be prompted to enter the number of files to be transferred to disk i.e. the number of parts there are in the tape program to be copied.

Once you have entered the appropriate number, start the tape in the normal way and the program will automatically load the required number of files from tape and save them to disk. However, if you do not know how many parts there are to your program, simply press RETURN instead of entering the number of files required. In this instance T2P3 will prompt at the end of the transfer of each part with "Was that the last file Y/N?". Type Y or N accordingly. Should you exceed the number of files required and the cassette continues to run, hit the ESCAPE key to close the file for future use.

Several programs, most notably Acornsoft, have a version number as the last file, e.g. Elite finishes with V 2 as the last filename. These files should not be transferred to disk as they cause the program to crash when loaded from disk.

OPTION 2 Option changing

When loading a transferred program T2P3 requires the use of a certain amount of memory from the Electron. Certain "zero page" location are used (NMI location AO to A7) but more importantly since these are not such a problem, T2P3 requires a 256 byte page of memory which is used as a sector buffer. The default setting of this page is AOO, the cassette buffer, but this value is actually held as part of the transferred file and so can be set up for each and every program. One other piece of information held as an option is whether the program is started by CHAIN or *RUN.

Note that the range of address allows the buffer to be ANYWHERE in the Electrons memory map. It would be silly to set the buffer between 0000 and FFFF i.e. in the range CO to FF if no RAM memory is present there but this is for a "just in case" situation. Sideways RAM, however, is very popular and this is the main reason for extending the address above 8000. If an image of the TAPE TO DISK ROM is loaded into SWR then for 8k of RAM, you could use PAGE 9F and if you have 16k of RAM available, you might use PAGE BF. With this buffer away from the normal RAM of the Electron, the success rate should be improved. Remember that it must be the TAPE TO DISK in RAM which is running, NOT the one in ROM!

The new menu displayed will prompt for the letter assigned to the program to be altered on the main menu. You will then be asked

ENTER C to CHAIN or * to *RUN ?

If the program to be used normally loads using *RUN, then press *. However, the vast majority of programs use CHAIN, so press C.

The next prompt will then appear.

Enter workspace page (&00-&FF) ?

Selecting workspace is case of trial and error as it depends so much on where the author of the program used the Electron memory at the various stages of loading. For guidance, try the following areas

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These will NORMALLY suffice. However, please be patient and try all available locations. Should programs not operate under ANY workspace setting then it is likely that the program carries protection of a type which T2P3 cannot handle.

OPTION A - ZZ RUNNING THE TRANSFERRED PROGRAMS

To run a program merely press the letter that has been assigned to it on the menu. Loading will then commence in very much the same way as loading from cassette except at a somewhat faster speed! The value 'ZZ' will depend on how many files have been transferred.

NOTE that once loading has completed, the cassette filing system is restored and further loading or saving will be to cassette AND NOT DISK.

ENTERING "*" COMMANDS

With the main menu present on the screen, it is possible to enter ANY Operating System "*" command. For example, to exit from T2P3 and return to BASIC, simply type *BASIC.