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TRIPLE TRANSFER UTILITY (C)

TAPE TO DISK - DISK TO TAPE - AUTO RELOCATE

**T-T-U(C) 1983
by COMPUTIZE INC.**

OVERVIEW

T-T-U (Triple Transfer Utility) is a machine language Backup Utility program for the 32K or 64K Color Computer with one or more Disk Drives. It's purpose is to allow the transfer of most Color Computer Machine Language, BASIC, and DATA files from Tape to Disk and Disk to Tape with relocation of most Machine Language programs that interfere with the Disk operating system.

OPERATING INSTRUCTIONS

1. To load T-T-U:
FROM DISK: LOADM*TTU*(ENTER)
2. Type in: EXEC (ENTER)
3. The T-T-U Title Page will appear with the runtime prompts on the screen.

5. T-T-U will only copy those files/programs which can fit into its work area which is approximately 22.5K. This area is more than sufficient to handle almost all Basic and Machine Language programs (we have not found any that it would not), but some large TAPE or DISK data files may not fit. Those files that will not fit, will have to be transferred by you writing a small copy program to do the transfer.

6. When using the Copy All option the following exceptions to the normal execution of T-T-U should be observed. The File Name will be the only prompt that will appear after the Copy All option is selected. If copying tape to disk and a tape error is encountered the program will just by-pass the error and continue looking for the next file. No addresses will be displayed for machine language files. The only way to terminate the Copy All function for tape to disk is by pressing the RESET button.

DISCLAIMER

T-T-U is NOT GUARANTEED or WARRANTED in any way. COMPUTIZE will NOT be liable for any damage resulting from its use.

T-T-U should only be used to make copies of your Software for your personal use.

Programmers have spent many long hours writing the quality programs that you enjoy so much, and are entitled to their royalties and fees.

NOTES

1. T-T-U should be used to copy only those Programs that you have License or Copyright to and are not restricted by License or agreement not to copy.

2. The program addresses are:

```
START &HE00
END   &H1C28
EXEC  &HE00
```

3. Most tape based programs that interfere with the Disk Operating system will have a loader appended to their end by T-T-U to enable them to load and execute from the disk. This loader will cause the start, end and execute addresses to change on those programs that fall into this category. This loader will remain on the program if it is again transferred from the disk back to tape. If you already have tape based software loaded on a disk, but it will not execute, use T-T-U to transfer that software to tape then use T-T-U to transfer it back to the disk. The relocater is only active on Tape to Disk transfers of machine language programs. T-T-U will only append the relocater if it is needed. When executing a program that contains the loader, the loader will load the program to its proper addresses and disable the Disk. After loading a program from disk with the relocater on it DO NOT type in EXEC <ENTER> until the disk has stopped running.

4. T-T-U will copy "SOME" tape based Auto-Start programs to disk and enable them to execute from the disk. It is not the intent of T-T-U to "BREAK" or "CRACK" protected tape based software to Disk.

4. Runtime prompts:

Any Runtime option enclosed within parenthesis is the default value and does not have to be typed in, just press <ENTER> to select that option.

```
DISK DRIVE (0) ==>
```

Select disk drive to be used during the copying. Press 0 thru 3 or Press <ENTER> to select drive 0.

```
DISK TO TAPE ==>1
```

```
TAPE TO DISK ==>2
```

```
END ==>3
```

```
SELECT ==>
```

Press 1 to copy Disk to Tape, Press 2 to copy Tape to Disk, or Press 3 to return to BASIC.

```
COPY Y,A OR (N) ==>
```

To copy the file under FILE NAME Press y, to copy all files from the tape or disk Press A, otherwise Press <ENTER> or N. Before responding to this prompt have the cassette recorder in the proper mode (record or play depending on option selected) and proper cassette in the recorder. Please refer to the note on Copy All in the notes section.

COPIES (1) TO 9 ==>

This prompt will only appear on Disk to Tape copies and will select the number of copies of the file to be transferred from disk to tape. Press 1 or <ENTER> for 1 copy or any number between 1 and 9 to specify the number of copies.

MORE (Y) OR N ==>

The response to this prompt will indicate whether to continue copying more files/programs from the Disk or Tape or to return to the main menu.

INFORMATION/ERROR MESSAGES

FILE NAME

Directly below this prompt will be displayed the file name of the file or program that is being or will be copied.

TAPE ERROR

The input tape does not conform to standard format. The function is terminated.

DISK ERROR

Some type of Disk I/O error has occurred.

TAPE I/O ERROR

The input tape has an I/O error. Try a different volume setting on the cassette player and try copying the file again. This could also indicate a tape with some kind of protection or auto-load that T-T-U can not handle.

MEMORY OVERFLOW

The contents of the tape or disk file exceed the memory capacity of the computer work area.

DISK FULL

The output Diskette is full try another Diskette with more free space.

DISK FORMAT ERROR

The disk file format does not agree with the format specified in the directory.

MULTI-SEG FILE

A multi-segment machine language file is attempting to load to an address that would conflict with the T-T-U work areas. If the addresses are known try saving the program to disk with a SAVEM then try T-T-U on the program again.

S:0000

E:0000

X:0000

This display will appear in the upper right hand portion of the screen when transferring Machine Language programs. They are the Hexidecimal Start (S:), End (E:), and Execute (X:) addresses of the Machine Language program being transferred.

RELOCATE

This message will be displayed directly below the file name of the file T-T-U is copying from tape to disk. It will only be displayed if the machine language program being copied from tape to disk is being relocated (see 3 under NOTES).