# Tape Copy Utility for the Color Computer Written by Dana Peters

Description

TapeCopy is a utility used to assist the user in manipulating program files saved on cassette media. Although it can easily handle basic programs, it was designed to enable the user to easily duplicate machine language programs (those loaded with CLOADM.) As well, TapeCopy will defeat most copy protection schemes placed on commercial programs. It was designed to allow the user to examine and change the file's status, placing TapeCopy a notch above other similar commercial programs. TapeCopy requires Color Computer with a minimum of 16K, and Color Basic or Extended Basic. Any disk crive(s) should be disconnected before loading. Any Program to be copied must require less than the maximum memory of your machine minus 4K.

## Loading

Follow these steps to use TapeCopy:

- 1) Powerup Computer and TV, setting volume to medium.
- Put TapeCopy cassette into recorder and rewind if necessary.
- 3) Type: CLOADM:EXEC
- 4) Press <PLAY> on recorder.
- 5) Press (ENTER) and wait for menu to appear.

If you encounter an I/O ERROR then repeat the procedure from step #2. You may need to adjust the recorder's volume or/and tone.

Operation

TapeCopy is designed to be easily operated and is menu-driven. To select an option, press a numeric key which corresponds to the correct option as given by the menu. These options are described individually:

### 1) LOAD BUFFER FROM TAPE

Selecting option <1> from the menu will cause this prompt to be displayed:

LOAD BUFFER FROM TAPE

READY TAPE AND PRESS (ENTER>

If you do not want to load a file, press <BREAK> to return to menu. Otherwise, insert the tape containing the program you wish to copy into the cassette recorder. Position tape on a blank area of tape proceding the program. You can find the correct area by PLAYing the tape (it will be audible from the TV speaker.) Stop the tape when no sound is heard. When correctly positioned, press <PLAY> and <ENTER>. If the program is correctly loading, it's name will be printed at the bottom of the screen, and the upper left corner of the screen will flash. After the program has loaded, you will be returned

to the menu. It have opy encounters a block of tape which it cannot rear, it will print the message:

\*\*\*\*\* LO ERROR \*\*\*\*

PRESS (ENTER) TO RETURN TO MENU

If this occurs, you will have to reposition the tape and try again. It may be necessary to adjust the volume and/or tone to acheive a successful load. It is a good inea to listen to the tape before pressing Kanters. If you near volume or speed fluctuations, the tape may be unloadable. If, however, the program loads correctly with CLOAD or CLOADM, the program may be protected by a special copy protection, and is uncopyable by TapeCopy.

## 2) DISPLAY FILE SPECIFICATIONS

Salecting option <2> from the menu will cause the file's parameters to be displayed. The filename and length in hexidecimal are displayed, as well as the file type (Basic, ML). If the file is in machine language, the program's loading and execution addresses will also be displayed in hexidecimal. To return to the menu, press <ENTER>.

#### 3) EDIT FILE SPECIFICATIONS

Selecting option <3> from the menu will cause the file's specifications to be displayed at the top of the screen, and you will be prompted for new specifications. First, you will be prompted for a new filename. If you do not wish to change the name, press <BREAK>. Otherwise, type the new name, using all of the eight character positions. If the new name is under eight characters long, fill the rest with spaces and press <ENTER>. If the program is in machine language, you will also be prompted for replacement load and execution addresses. If you do not wish to change these, press <BREAK>. Otherwise, type the new address in hex, including all leading zeros and press <ENTER>. You will then be prompted to press <ENTER> to return to menu.

#### 4) SAVE BUFFER TO TAPE

Selecting option <4> from the menu will cause this prompt to be displayed:

SAVE BUFFER TO TAPE READY TAPE AND PRESS (ENTER)

If you do not wish to save the file, press <BREAK> to return to menu. Otherwise, insert the tape you wish to record the program on into the cassette recorder. Position the tape at the spot you want the program to be recorded. There should be a blank area of tape before the program you are about to record. To correctly position the tape, it may be helpful to PLAY the tape to find a suitable location. When the tape is positioned, press <PLAY> on recorder, and <ENTER> to start the recording. When it is finished, you will be returned to the menu.

## 5) RETURN TO BASIC '

Selecting this option from the menu will cause you to be returned to Basic. You cannot reenter TapeCopy from Basic without reloading it.