

# FAST COPY ROM INSTRUCTIONS

## INSTALLATION INSTRUCTIONS

Follow the instructions on page 3 of the Mass Duplicator manual on checking the chip and opening your drive. Locate the FE ROM as shown in figure 2 of the manual; it will be labeled U5 on the printed circuit board. Figure 3 also shows the position of the FE ROM. It is to the right of the Mass Duplicator chip and is labeled 'V2.3'. Carefully remove the ROM from the U5 socket, use a small flatheaded screwdriver or a chip removal tool. Place the Fast Copy chip into the socket making sure the notch is pointing up. Check that the pins line up with the holes in the socket then press the chip into place. Your Fast Copy ROM is now installed. Before closing up the drive, reconnect it to the computer and the power cable. Turn it on and make sure it is functioning correctly. If anything seems different than usual turn the drive off and check your installation. If the installation seems correct the chip may be defective, return it to us with an explanation of the problem (it may be worthwhile to call first).

## USING THE FAST COPY COMMANDS

Now that your MSD SD-2 is equipped with the new ROM you can invoke the new copy commands from any computer hooked up to the drive, whether serial or IEEE-488.

The first command is "FASTC" this will perform a 15 second backup from one drive to the other. To copy from drive zero to drive one the syntax is as follows:

```
OPEN15,0,15,"FASTC1=0":CLOSE15
```

Don't be confused by the '1=0'; this is Commodore's way of saying that the disk, in drive one, will equal the disk in drive zero when the backup is complete.

The second command is "FASTV" and it will perform a 22 second backup of a disk. The data written to the destination disk will be verified to make sure it matches what has been read from the source disk.

Both commands can be abbreviated, "FC" for "FASTC" and "FV" for "FASTV". Remember the syntax is DESTINATION=SOURCE (Fx1=0 or Fx0=1)!

If a disk error is encountered during a backup, the process will stop and a drive light will flash, this light will signify a source or destination error. Reading the error channel will always return a '20, READ ERROR, TT, SS' whether it was a read or write error. The track number (TT) will be the track the error occurred on.

## COMING SOON: MSD AUTO COPY ROM

Due to many customer requests, we will be creating a third product for the MSD. It will allow you to use your SD-2 as a dedicated copying drive (no computer needed). Release date: Sept. '87, cost: \$10.00!

The Fast-Copy ROM & Mass Duplicator are © 1986,87 by Chip Level Designs.