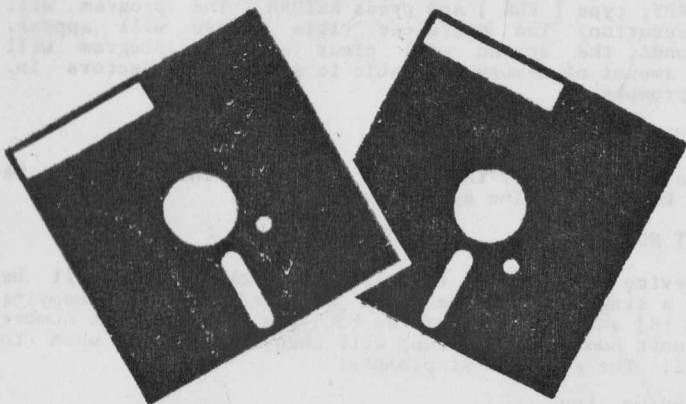# MICROSPEC

USER'S GUIDE

MS-BACKUP

High Speed Backup

for Commodore 64 and 1541

*1982 by MicroSpec

**THIS MANUAL MAY NOT BE REPRODUCED,
IN WHOLE OR IN PART, FOR ANY REASON
WITHOUT PRIOR WRITTEN PERMISSION FROM:**

MS-Backup by MicroSpec is a 100% machine language program that makes it possible to make an exact duplicate of the contents of one disk on another disk. MS-Backup may be used with a single or multiple 1541 disk drives. In addition to MS-Backup's ability to copy data files created by MicroSpec Software, it will copy any disk so long as it does not have a copy protection scheme implemented.

Instructions

Turn on all computer components and then place the MS-Backup program diskette into disk drive device number 8 and type [LOAD "MS-BACKUP",8] and press RETURN. When the computer responds READY, type [RUN] and press RETURN. The program will now begin execution. The MicroSpec title screen will appear. After 5 seconds, the screen will clear and the program will display the amount of memory available to store disk sectors in. The system prompts:

"ORIGINAL UNIT NUMBER"

Enter the device number of the drive in which the disk to be copied will be placed. The system next prompts:

"BACKUP UNIT NUMBER"

Enter the device of the drive in which the backup disk will be placed. If a single 1541 drive is to be used for the copying process, an [8] should be entered as both the original unit number and backup unit number. MS-Backup will then intruct you when to change disks. The system next prompts:

"BACKUP DISKNAME, ID"

Enter the name to appear on the directory of the backup disk. If the diskette to be used as the backup disk has NOT been previously formatted, enter a backup diskname with a two character ID code as formatted in the above prompt. Example:

"G/L BACKUP,GZ"

This will cause the system to format the disk before copying takes place. If the disk has been previously formatted, a backup diskname without the comma and ID code need only be entered. It should be noted regardless of whether the backup disk is preformatted or formatted by the system that the backup diskname and ID code must be different from those of the original disk. The system will next prompt:

"CORRECT YES, NO, QUIT"

Enter [y] if all entries are correct. Enter [n] to start the process over. Enter [q] to end the process without copying. Upon entering [y], the system prompts:

"INSERT BACKUP DISK PRESS ANY KEY"

Insert the backup disk into the device previously specified as the
backup unit and press RETURN. Upon doing this, the system will
either reformat or erase the backup disk depending upon whether an
ID code was specified earlier. Upon completion, the backup disk
ID will be displayed at the top of the screen. The system next
prompts:

"INSERT ORIGINAL DISK PRESS ANY KEY"

Insert the original diskette into the device previously specified
as the original unit and press RETURN. The ID code of the
original disk will be displayed at the top of the screen. The
system will begin reading data from the original disk. The track
and sector currently being read are displayed at the top of the
screen next to the original disk ID code. After filling memory
with data, the system will do one of two things. If two 1541
drives are being used the copy process will go without
interruptions and begin writing information to the backup disk.
If a single 1541 drive is being used, the system will prompt:

"INSERT BACKUP DISK PRESS ANY KEY"

Insert the backup disk into the drive and press any key. As
before, the system will begin writing information to the backup
disk. In either case, the track and sector currenlty being
written to are displayed at the top of the screen by the backup
disk ID code. Thereafter, the system will repeat the above
prompts when it is necessary to change the disks in the drive.

When the process is complete, the screen will clear and the
directory of the backup disk will be displayed.

Error Messages

MS-Backup has built in error recovery capabilities, making it
virtually impossible to break operation due to a disk error. The
following list of errors may arise during use of MS-Backup and are
accompanied by explanations and solutions.
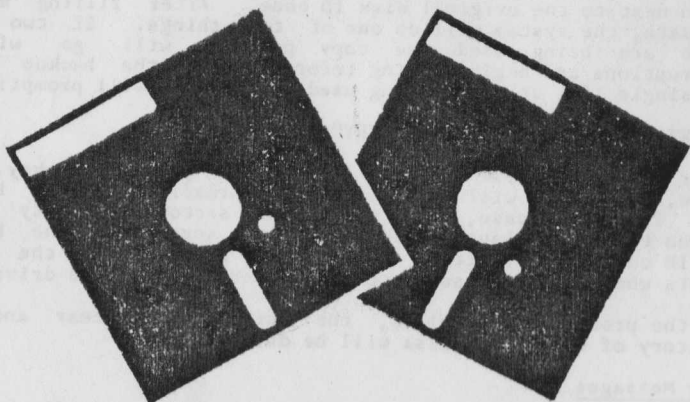
Wrong ID - The disks were not changed when prompted. Change them
          now and press RETURN

Disk error message with RETRY, QUIT, OR SKIP

              The indicated DOS error message was found by the disk
              drive. Press [r] to retry the operation. Make sure
              that the disk is properly seated in the drive before
              proceeding. Press [q] to quit the operation after
              encountering an unrecoverable disk error. Press [s] to
              skip the disk sector which is causing the problem.
              Always do a retry before a skip as data will be lost if
              a sector is skipped.

MICROSPEC

USER'S GUIDE

MS-BACKUP

High Speed Backup
for Commodore 64 and 1541