

Reviews of some current disk copying packages

Although The Transactor does not agree with the idea of "copy protection unlockers", we can not ignore their existence either. Had Michael chosen to review a single package we would not have accepted it, however the comparison that follows is in the true Transactor tradition and we hope that any readers who might take offense to the undue publicity will also consider the fact that the information here will help the decided avoid yet another less than satisfactory package. - M.Ed.

One of the biggest rackets facing Commodore 64 owners is an ever-increasing number of "disk copy" programs. Every month's issue of major magazines features large ads for utilities with claims like "Backs up virtually all existing disks for Commodore 64 including Copy Protected Software", "The ultimate bit by bit disk duplicator", "No better disk copier at any price", and "Fastest and most advanced copier you can buy."

In reality, these programs are part of a vicious circle highly reminiscent of Biblical "begats". As soon as one method of breaking copy protection is introduced, a new protection system is quickly developed by the software houses, which brings another generation of pirate programs, and on and on. The last year has seen, in many commercial programs, the demise of the familiar errors which cause the 1541 to perform its unpleasant knock-knock noise as a method of disk protection. In their place have come half-tracking (moving the read head to a space between the extant 35 tracks), writing beyond track 35 (up to track 44), varying the number of sectors in a manner inconsistent with normal DOS functions, and the use of fast-load techniques.

Many of the pirate pack programs try to justify their existence by claiming that a person has a right to back up their software, which I agree with. A person should also be able to modify their software to their own purposes, especially if it doesn't meet their expectations.

However, some of these breaking packages are less than subtle about their real intentions. One of them, The Software Protection Handbook, was originally to be called "The Software Pirate's Handbook II". The Authors try to justify this name by saying that the word "pirate" in the title was "intended as a light-hearted reference to any copying process, and to inspire a certain tendency [sic] of humankind; the attraction to things mysterious or secret."

What follows are reviews of a representative sample of disk-buster type programs. Not surprisingly, several other companies which I contacted refused to send me their products.

DI-SECTOR

Starpoint Software, Star Route, Gazelle, CA 96034. \$39.95

Di-Sector is a slickly designed program which is relatively easy to use. It comes in the form of a master disk from which you are allowed to make three copies. Each of these is encoded with your name and serial number.

It features a 3-minute copy program, a quick format (around 16 seconds), a public domain-style disk doctor and a machine language monitor with typical commands which additionally allows you to transfer code to and from the 1541's memory.

Di-Sector also contains a bit copier, a file copier (which will read the file names from "invisible" directories) and an error maker/checker. There is a Sector Editor, sort of like a Disk Doctor, which I found confusing because some characters in the sector did not appear on the screen. An "Arts Backup" creates unprotect backups of Electronic Arts disks.

About the only negative feature of Di-Sector is that you're not allowed to return to the main menu from half of the program's six sub-sections or exit the program without turning off the computer. The company's ads are also in error when they claim that "None of our copy routines ever make [sic] the drive head 'kick'." Formatting a disk not only kicks the head, but does so several times faster than normal.

Most parts of the program load in very quickly using special DOS techniques, and devices like printers should not be connected to the serial port. (Try disconnecting your printer after booting De-Sector for some unusual and very harmful noises.)

The manual with Di-Sector is not bad, though there are names referring to various parts of the program which do not tally with the names in the main menu.

Di-Sector will not copy itself, nor will it copy recent programs which contain methods of protection other than errors. As such, its uses may be somewhat limited to legitimate purposes like copying and performing various housekeeping tasks on your own disks, which it does extremely well.

MASTER COPY

Digital Wizardry, 3662A South 15th Street, Milwaukee, WI 53221. \$19.95

This is a home-grown kind of production which claims to be "the most effective, yet still the most inexpensive copy utility. . .for. . .the 64." This claim is debatable, since virtually everything available in it is available in a public domain equivalent.

The program is divided into 7 sections. One of these is a Disk Doctor which allows you to copy a block from one disk to another. It also allows you to scan back and forth within tracks — that is, it will jump from sector 1 to 2 to 3 and so on. Another section catalogs a disk, which just means reading the directory. And another copies a disk with a variant on the familiar 4-minute backup program, complete with head knocks at uncalled-for locations. If you want to format a disk, this can be done in 21 seconds. Errors 20, 21, 22, 23, 27, 29 can be located and created.

Probably the least satisfactory part of the program is the one which copies sequential and program files. After you insert the disk you want to copy from, a prompt — "OUTPUT *" — appears on screen. There is nothing to tell you, without looking in the manual, that you are supposed to input either D for Disk or T for Tape (the latter an unusual touch) at this point. You can copy a total of about 110 blocks or 27K at a time (some public domain programs allow up to 51K), and once you have copied certain files, you have to scan through those file names in the directory on your subsequent passes through it before copying new ones. You cannot exit from this part of the program to the main menu.

Virtually all these utilities are available for nothing from user group libraries. About the only thing I found interesting about Master Copy was its method of protection which involved numerous errors and "secret passwords". As you might have guessed, you can't copy the disk with itself.

PROGRAM PROTECTION MANUAL FOR THE C-64
C.S.M. Software, P.O. Box 563, Crown Point, IN 46307.
\$29.95 plus \$2 shipping.

I like this book, because it seems, unlike most computer literature, to be written by an intelligent person. This is not to say that it's free of grammatical errors or published in a slick format. It outlines methods of defeating various methods of protection and also tackles the ever-changing area of software law (U.S. variety, of course).

The book is written in a clear, concise and easy-to-follow manner. I had little trouble employing some of its methods to change several older commercial programs so their errors would not be detected.

The book comes with a disk of "public domain" software, including the Disk Doctor written by Canadian Don Lekei. The book's author, one T.N. Simstad, gets himself so entangled in various statements of liability that he describes this disk as "copyrighted". The disk, by the way, contains various features such as an invisible directory and other little challenges, all of which can be explored with methods described in the book.

Among these public domain programs are an early version of the 4-minute copy program (that sure gets around, does't it?) and another to determine if there are any errors on disks, both of which cause the 1541 to do its knock-knock routine, a major cause of drive failure. Is it no coincidence that C.S.M. Software also sells a 1541 disk alignment program for \$39.95?

C.S.M. also sells expansion boards to aid in cracking cartridges and publishes a monthly Program Protection Newsletter for \$35.00 a year, which details in each issue how to break 4 or 5 programs.

Unfortunately, the kind of approach exemplified by this company is all too susceptible to the "vicious circle". Much of its information is already obsolete, though it may be of interest to people planning to protect their own programs. Or perhaps it will just discourage them from even bothering to write any.

SUPER CLONE, also known as THE CLONE MACHINE
Micro-W Distributing Inc., P.O. Box 113,
Pompton Plains, N.J. 07444. \$49.95

This program, issued in a revised version in September 1984, was one of the earliest copy utilities. It consists of three major sections.

One of these is a further variant on the 4-minute backup without the head-knocking at the beginning of a transfer. Another is something called Tough Nuts Utility, which allows you to break complicated new methods of protection like those varying the number of sectors per track in a manner inconsistent with DOS. In order to find out about Tough Nuts, however, you have to subscribe to a newsletter from Micro-W devoted to these methods, at an additional cost.

The major part of the program consists of Super Clone and the original Clone Machine, the latter being a slower version of the former. Super Clone does have one good feature — a bit copier which, like most, takes an eternity, but it copies most normally-created disks, warts (errors) and all.

Parts of the program leave a lot to be desired. The file copier, for example, lets you choose several files and then proceeds to copy them — one at a time! Although the program is supposed to be "self-documenting," there are sections which utilize the function keys for various purposes. There are no prompts for these on screen — you have to look them up in the manual.

The manual itself is not bad, but suffers from a certain kind of disorganization caused by the complexity of the programs themselves. The back of the manual contains several pages devoted to errors which may occur!

The Software Protection Handbook
PSIDAC, 7326 N. Atlantic, Portland, Oregon 97217. \$19.95
disk of programs \$16.95, or both for \$29.95

According to its ads, this book will help you "blow the locks off protected software!". At the same time, it claims it "does not condone piracy." Sure, sure. . . On its second last page is an ad for "Software Pirates' T-shirt White Skull and Crossbones on jet-black Shirt."

Co-authored by David Thom and Vic Numbers (yes, that's correct), the book, for the most part, lives up to the first claim above. Methods on how to break into disk, tape and cartridge programs are all covered. The last two can be done with the help of hardware which PSIDAC will be glad to sell you at additional cost. There are numerous programs listed throughout the book for examining disks, checking for and creating errors, duplicating disks and individual files, creating auto-boots, and so forth. All these programs can be purchased on disk from PSIDAC, again for more money. (I was not supplied with the disk).

Probably the most interesting part of the book is its first chapter, which examines the legal aspects of copying software, and in doing so, gives new dimensions to the phrase "rambling discourse." It does have a few points which I agree with, such as the fact that most software is grossly overpriced. However, what is one to think of opinions like this when placed in the context of fuzzy thinking like the following passage: "Copying for sale, distribution or other non-personal uses is Piracy. . . . Loaning your original to another person for temporary use is not piracy. . . . However, copying an original you do not own is unethical."

The book gives the appearance of being well-made with a plastic spiral-type binding and glossy cover. The typography inside leaves a great deal to be desired, however, using an IBM style of typewriter and listings from what seems to be a Commodore printer. The book is full of unbearable illiteracies on practically every page, ranging from three-letter words like "its" on up.