SUPER SNAPSHOT

OPERATING MANUAL

LMS TECHNOLOGIES

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INTRODUCTION

Congratulations and thank you for your purchase of SUPER SNAPSHOT. Many hours of planning and design have gone into this product trying to ensure that it is as useful as possible to the end user. We have heard from many of our SNAPSHOT64 customers and have taken into consideration all of the comments and suggestions that we have received. The result is SUPER SNAPSHOT.

This cartridge goes far beyond what we accomplished in the past and what is available on the market today. We have strived to make this cartridge not only the best archiver on the market but to also make it an indispensable utility. To this end we have included along with the SNAPSHOT utility, a fast loading utility (TURBO DOS) ,a dos wedge, a screen dump utility, machine language monitor, utility menu and pre-programmed function keys With all of these features, there should be no reason for unplugging your cartridge. And this is only the beginning. That's right, future versions of the cartridge will include other valuable utilities. But where does that leave you since you have bought this version? The answer is....in a great spot. SUPER SNAPSHOT's unique design allows it to be open ended. That means that you will be able to update to the latest version very easily and at a very reasonable cost. More on this later.

For those of you who wish to skip the detailed instructions and whose only wish is to get going with your newest toy, go to page 10 and the section called

STARTING THE SNAPSHOT PROCESS. Once you have got the initial urge out of your system please read this manual thoroughly as it contains important information on the operations and capabilities of this cartridge.

SYSTEM REQUIREMENTS

SUPER SNAPSHOT requires a Commodore 64, SX 64 or Commodore 128 (in the 64 mode) and will use the following drives; 1541, 1571, 1581 or 1541 compatibles such as the FSD, Indus, Commander, MSD, etc.

PACKAGE CONTENTS

The package that your SUPER SNAPSHOT came in should include the following 1) SUPER SNAPSHOT cartridge, 2) instruction manual (if you are reading this, you can assume that the manual is present), 3) a warranty registration form and a SUPER SNAPSHOT parameter disk.

SET UP PROCEDURE

With your computer turned OFF, carefully insert SUPER SNAPSHOT into the cartridge port (with the computer facing you it is the furthest port to the right) with the label side up.

NOTE Inserting the cartridge into the computer with the power turned on can be very hard on your computer and your pocket book, so make sure that your computer is turned off first. With the cartridge in place turn on your computer.

THE OPENING SCREEN

You will immediately notice a distinct difference in the opening screen (or at least you should). Displayed on the screen at this moment should be an options window with our copyright in the background. You will also notice a status line that tells you that TURBO DOS (our custom fast loader) is on. TURBO DOS is always on upon power up since we believe that you will always want to use it whenever possible.

At this point five options are shown to you. F1 is the beginning of the program backup procedure, F3 is reserved for future update modules, F5 will show you the ROM version of your cartridge and how to obtain updates (cheap advertising ploy), F7 will exit to basic leaving all features enabled and F8 will exit to basic with all features turned off.

THE DOS WEDGE

When you have exited to basic you will find that there is now a dos wedge present. We feel that this wedge is one of the best on the market and certainly the easiest to use.

The following is a list of the wedge commands and their equivalency.

$ - gives you a listing of the directory without disturbing any programs that are in memory. (LOAD"$",8 and LIST)

/ - loads a basic program. (LOAD"filename",8)

% - loads a machine language program. (LOAD"filename",8,1)

> or @ - takes the place of the OPEN15,8,15 and CLOSE15 command. For example, if you wanted to initialize your drive you would simply type >I0. > will also report the status of the error channel (handy for those times when a program load stops and the drive light is blinking).

>#(n) - (where n is 8 to 11) changes the device that the computer will access. This means that if, for example, you have two drives (8 & 9) and you wish to work with drive 9 you simply have to send this command, >#9, and all dos wedge commands will be directed to number 9. You can go back to device 8 by typing >#8.

>TD - disables TURBO DOS.

>TE - enables TURBO DOS.

>Q - disables the dos wedge.

>K - displays current setting of function keys

>Kn - (where n is 0 to 8) displays setting of particular key

>KD - disable function keys

>KE - enable function keys

>FN - this is the command for our TURBO-FORMAT. The syntax is FN0:name,id (using number 0 not the letter O)

These wedge commands have been

simplified to the point where they make our wedge more convenient and easier to use then those of our competitors. These refinements include the ability to list a selective directory (ie: $:P* would list only those programs on the disk that start with P). Another refinement is evident when you load from a directory listing. Our wedge reads only what is between quotes. You don't have to erase excess file size numbers. Pressing the space bar during a directory listing will pause the listing, pressing it again will resume the listing. Pressing the RUN/STOP key will terminate the listing.

FUNCTION KEYS

As a measure of convenience, SUPER SNAPSHOT programs the function keys with a number of useful commands. They are:

- COMMODORE-RUN/STOP - absolute load and run of the first program on the disk. This key can also be used to load a specific program. To do so you would simply obtain a directory listing by using F3, cursor up to beside the desired file and then press COMMODORE-RUN/STOP. The load would be the same as typing LOAD"name",8,1.

- F1 - basic load of the first program on the disk. This key can be used much the same as COMMODORE-RUN/STOP except that it loads as LOAD"name",8.

- F2 - displays the current setting of the function keys.

- F3 - lists the directory of the

disk.

- F4 - selective directory. This allows you to obtain a listing of specific files. For example, if you wished to see a listing of only those files that began with P, you would press F4 and then P* and return.

- F5 - RUN the basic program in memory.

- F6 - SAVE to disk drive. To save a program you would press this key and type in the name of the program along with the drive that you wish to save to.

- F7 - LIST the basic program in memory.

- F8 - jump to the monitor (CODE INSPECTOR).

The programmed function keys are meant to serve as a convenience. They represent what we prefer for each key. However, you are not constrained to these settings. You may change them anytime from basic by pressing >K or F2. This will give you a listing of the current settings. To change one (or all) simply cursor up to the desired key and type over the command sequence starting after the colon. The left shift arrow serves as a return symbol. Keep in mind that these keys allow access to the drive only and so cannot be used for sending printer commands.

There are special symbols used when defining the function keys. They are:

<- - carriage return
/ddd - ascii value of decimal ddd
// - single / literal (ascii 47 or $2f)
/<- - ascii "<-" (95 decimal or $5f)

SPECIALTY KEYS

Along with the function keys, several other keys have been assigned new commands. These include the COMMODORE key, CONTROL key, F7 and F8 (during power up). The following is a description of their new purposes.

- COMMODORE key - holding down this key and pressing the button on the cartridge anytime EXCEPT while in the SUPER SNAPSHOT menus or when the computer has crashed, will perform a system reset

- CONTROL key - at any point outside of the SUPER SNAPSHOT menus, you go directly to the monitor by holding down the CONTROL key and pressing the button on the cartridge. This means anytime while in basic or from within a running program.

- F7 - pressing the F7 key during power up will take you directly to basic with all of SUPER SNAPSHOT's features enabled.

- F8 - the same as F7 except all of SUPER SNAPSHOT's features are disabled.

TURBO DOS

TURBO DOS is the name of our program

load enhancement. Load time is speeded up by up to 500%. TURBO DOS is compatible with the vast majority of commercial software on the market today. Extensive testing has shown that it is as fast as any similar utility on the market and that it is more compatible. TURBO DOS will work with any drive that is 1541 compatible. It will NOT work with an MSD and actually checks to see if the drive present is an MSD and if so automatically disables itself.

Occasionally you might find a program that will not load with TURBO DOS present. If this happens, pressing F8 at the opening screen will disable TURBO DOS and thus alleviate the problem. You can also disable TURBO DOS from the wedge by typing >TD (disable TURBO DOS). This way you can leave the wedge active.

CAPABILITIES OF THE SNAPSHOT PROCESS

The archiver portion of SUPER SNAPSHOT is the most effective memory capture utility on the market (domestic or foreign). It will produce a working copy of any program that is entirely memory resident. Even many programs that load in files after the program has begun can be successfully backed up. However there are some programs that cannot be copied 100%. These programs include ones that are dongle (key) protected; do a protection check after the program has loaded and started and programs that use the drive's memory for protection or for alternate communication routines.

The programs that cannot be

successfully backed up can be easily identified. Key protection is self evident. Programs that use the disk drive's memory are easily identified as well. To do so, load in the original program and when it has started turn your drive off and then on again. If the program crashes or locks up when it tries to access the disk (the drive will not come on at ALL) you can safely assume that it uses special routines that were placed in the drive's ram.

To determine whether the program is using a late protection check, make an unprotected copy of the original disk (using the fast copier included on the parameter disk). Load in the program using the original disk. When the load is completed and the drive has stopped spinning, replace the original with the copy. If the program crashes or refuses to accept the copy when it next accesses the drive, it indicates that there is a late protection check routine.

Until now, these types of programs could not be handled by a cartridge based copier. Our tests show that SUPER SNAPSHOT can still make backup copies of most of the software on the market today, however for those that it can't we have made provisions for through the SUPER SNAPSHOT parameter disk. The SUPER SNAPSHOT parameter disk is designed to keep you current by providing parameters for those "problem" programs. The disk will be released on a quarterly basis, or as need requires, and will contain parameters for those titles requiring it. The disk is produced by the KRACKER JAX team and is available from COMPUTER MART.

Their address is given elsewhere in this manual.

STARTING THE SNAPSHOT PROCESS

The F1 option on the opening screen is the first step in the SNAPSHOT process. Selecting this option will enable another screen where you will be asked to confirm your selection. Pressing "Y" will preconfigure the computer's memory with a pattern that SUPER SNAPSHOT will recognize. This is done so that SUPER SNAPSHOT will only save that memory which is actually part of the program being backed up and therefore minimize the size of the files that will be saved. This preconfiguration will be used by you 99% of the time. However, it is not necessary to preconfigure memory. If you don't it only means that your files will be larger. Unlike our competitors, we give you the option. This is because we have found software that looks for a pattern in memory as a means of protection. If the program sees a pattern it locks up the computer. So you can see why we offer preconfiguration as an option.

After you have made your selection you will be returned to the main menu where you will choose option F7 or F8 (F7 most of the time) and be exited to basic. Choosing F8 will take you to the standard COMMODORE start up screen with all of SUPER SNAPSHOT's features disabled. In this state the cartridge is COMPLETELY invisible. Even the computer can't see it. Having chosen F7 or F8 you would now

load in the original program.

When the program is finished loading, press the button on the cartridge. The SUB-SYSTEM MENU will now appear and the status of TURBO DOS is given along with the number of the drive being used (upper right hand corner of the menu). If you have two drives and you wish to save the backup to drive 9 simply press SHIFT/3 (which is the # sign). The device number shown will change to 9 and all disk activity will be directed to 9. You can go back to 8 by pressing "#" again. If you are using one drive only, turn the drive off and then on again. If the program is using alternate communication routines and you wish to save to device 9, you MUST first turn drive 8 off and on. Should you rather save the game at another point select option 5 and the program will resume.

Choosing option 2 will take you to the SCREEN-COPY MENU while choosing option 3 will take you to the monitor, both of which are discussed elsewhere in this manual.

** NOTE ** There is an extra feature in the SUB-SYSTEM MENU that is not displayed on the screen. Pressing the letter 'T' will toggle TURBO DOS on or off. The result of pressing the key is shown at the top of the window. This is merely a convenience feature in that it makes it unnecessary to go to the UTILITY MENU if all you wish to do is turn TURBO DOS back on.

If it is necessary to check, or work with, your target disk pressing 4 will

send you to the UTILITY MENU where this can be accomplished. In the UTILITY MENU the amount of space left on the target disk can be checked by choosing option 3. You need a maximum of 271 free blocks to save a snapshotted program. Although we have never seen a program take up that much room, if you allow that much you will never run into a disk full error.

Choosing option 4 in the UTILITY MENU will allow you to send commands to the disk drive. You can do several things such as format the target disk, scratch files from the target disk, etc. The commands are similar to that of the wedge. You are presented with the ">" and only have to type "NO:name,id" to format a disk, for example.

Option 2 of the utility menu allows you to determine the status of TURBO DOS, the function keys and the wedge. At this point you can turn each one off or on individually by simply scrolling the cursor to the desired function and pressing the space bar.

Choosing option 5 in the UTILITY MENU will return you to the SUB-SYSTEM MENU. At this point you should be ready to snapshot the program if you weren't ready before. Press 1 and you will be taken to the snapshot screen and asked for the title of the program that you wish to copy. The title can be up to 32 characters in length. Next you are asked to input 1 to 5 characters that will act as file names. The letters shown are only suggested and can be changed by typing in whatever you want. If you are satisfied with the suggestion just press

RETURN. Next you are asked for the name you wish to call the boot. Again the characters shown are suggestions only and can be changed by typing what you want (up to 16 characters in length) or accepted by hitting RETURN. At this point you are reminded to make sure the DESTINATION disk is in the target drive (the drive you are saving to).

You can return to any previous requester (clear back to the SUB-SYSTEM MENU) by erasing the suggested characters and pressing return.

Pressing any key will start the saving process. This process takes approximately 3 minutes and a message will appear to inform you when it is finished. When it is finished pressing any key will take you back to the SUB-SYSTEM MENU where you can resume the program or access any other of the cartridge's features.

CODE INSPECTOR V2

Your new SUPER SNAPSHOT cartridge contains a very powerful machine language monitor which is accessed through the SUB-SYSTEM MENU. Its capabilities are a hacker's dream come true. Did you ever wish that you could find out what was going on inside a program as it was running? Well now you can! By pressing the button on the cartridge and going to the SUB-SYSTEM MENU (or alternatively holding down the CONTROL key and pressing the cartridge button), you can enter into the monitor. There you will find the status of all the registers at the

point when you pressed the cartridge button. You can tell what exactly was going on when you interrupted. And all this can be done without corrupting memory! That's right, you can take a look at what is going on, make a few changes and then resume the program with the only changes being the ones that you made. Now you can begin to see the potential of this utility!

We cannot attempt here to teach machine language and such is not our intent. Although the monitor is easy to use, a certain amount of machine language knowledge on the part of the user is necessary.

The following is a list of the commands supported by the monitor and their conventions.

A - assemble
A 1111 mmm 000000

BR - set break vector
BR

C - compare
C 1111 2222 3333

D - disassemble
D [1111 [2222]]
D alone will display 20 bytes past the last line disassembled.

F - fill memory
F 1111 2222 33 44 55 .....

G - go
G [1111]

H - hunt
H 1111 2222 33 44 55 .....

I - interpret
I 1111 [2222]

IO - display IO registers
IO

L - load a file
L[S] "name" 11 2222
The optional S signifies a slow load. This is used for loading directly into the snapshot image under any ROM configuration.

M - memory display
M 1111 [2222]

O - output to device
O[11 [22]]
Output can be to screen, printer or disk. The default is 3,7 (screen). To output to a printer the command would be O4.

R - register display
R

S - save a file
S "name" 11 2222 3333

T - transfer memory
T 1111 2222 3333

X - exit the way you entered
X

XB - exit to basic
XB

XM - exit to SUB-SYSTEM MENU
XM

: - memory modify
: 1111 22 33 99

; - register modify
; 1111 22 33 44 55 66

, - disassembly modify
, 1111 22 33

- convert hexadecimal to decimal

#+ - convert decimal to hexadecimal

+ - used when entering locations in decimal. ie. D +49152 is the same as D C000

*** NOTE *** The square brackets used in the monitor conventions denotes optional parameters.

There have been several special features, not seen in other monitors, built into CODE INSPECTOR V2. One that you will appreciate is the ability to omit leading zeroes. This means that if, for example, you wanted to display memory at 005F you need only type M 5F instead of M005F.

Another is the ability to enter POKES into memory through the monitor. For example if you wanted to POKE 53281,0 the equivalent monitor command would be :+53281 0. The colon is the memory modify command and the + converts the following decimal figures into hex.

The F (fill memory) and H (hunt for specified value) commands will default to BB (our memory pattern) if you do not specify a value.

The monitor can also be accessed by your machine language program by first entering the monitor through the SUB-SYSTEM MENU (or F8). Once in the monitor enter the set break vector command (BR). The message -DONE- will appear. Now you can exit back to BASIC by typing XB. From now on you can enter the monitor from within your machine language program through the BRK instruction.

There are many potential and varied uses for this utility. For example, in England it is very popular to make custom changes in programs to give indefinite lives, unlimited fire power, etc.

SCREEN-COPY

SCREEN-COPY is the name given to our screen dump utility because what you get with this option is just that! You can get a screen dump of virtually anything (graphic or text). This dump will work with the Commodore 1525, 1525 compatibles, Epson, Epson compatibles, Commodore 801, Commodore 802 or Commodore 1526.

SCREEN-COPY is accessed through the SUB-SYSTEM MENU. To use it, load in your program and when the screen that you wish to SCREEN-COPY appears press the button on the cartridge. When the SUB-SYSTEM MENU appears press option 2 and you enter

the SCREEN-COPY system.

Although you can interrupt at virtually any point it is best to do so when there is no drive activity. If the drive is busy when you interrupt, you will get a SCREEN-COPY but the program will likely crash when you resume. Also, if the program happens to be using alternate communication routines, you will have to turn the drive off and on in order to free up the serial bus.

Upon entering SCREEN-COPY you will see that the type of screen being displayed has been identified as being one of five different types. They are 1) standard bit mapped, 2) standard character, 3) multi-color bit mapped, 4) multi-color character or 5) text. You will also be told how many sprites have been enabled. Version 2 cannot print sprites (no one else can either) but we intend to include this feature on a future ROM release.

Next you are presented with four different save options plus the option to return to the SUB-SYSTEM MENU. ** NOTE ** Options that are shaded are not available because of the screen type being utilized. That means that if the screen that you wish to copy is standard bit-mapped or standard character (hi-res), you cannot save it to the disk drive as a KOALA PAINT file because KOALA PAINT uses multi-color screens.

Options 3 and 4 are disk drive dumps in KOALA PAINT and DOODLE format. The files that are saved can be loaded in using the appropriate drawing program.

SUPER SNAPSHOT will automatically save the files in the proper format so that these drawing programs can load them in for you to play with.

Should you wish to dump the current screen to a printer by selecting option 2, you should first set the defaults which appear at the bottom of the SCREEN-COPY menu. The following is a brief description of the defaults:

- F1 - allows you to choose the appropriate printer type. The choices include 1525, 1526 and Epson. If you have a 1525 or compatible (such as the Gemini II) you should choose the 1525 setting. If, on the other hand, you are using an Epson or Epson compatible (such as a Panasonic 1092) you would choose the Epson setting. Commodore 1526 or 802 users would select the 1526 setting.

- F3 - will print the screen with the colors being opposite to what they appear. Sometimes this option will produce a more desirable screen dump.

- F5 - toggles between the three screen sizes available. Small is approximately 4.5 x 3.25; medium is 6.75 x 6.75 and large is 8.75 x 7.5 (which is the exact screen size). Dimensions given are those produced when using an Epson or Epson compatible printer.

- F7 - is an option for 128 users only. If you have a 128 you can kick it into 2 megahertz mode (for printing) and significantly decrease the print time. Using this option will blank the screen during printing.

There are several other features built into SCREEN-COPY. Pressing any key during printing will cause the printer to stop at the end of the next line. You will be asked if you wish to abort and you will answer (Y)es or (N)o. If you are a 1526 or 802 user, SUPER SNAPSHOT will calculate the length of the print time and ask you if you wish to proceed. Some screen dumps can take up to 35 minutes because of the speed (or lack thereof) of this printer. We thought it only fair to warn you what you are in for. Finally, with some interfaces, there occasionally is a problem accessing the printer. If this happens SUPER SNAPSHOT will inform you of the problem and ask you if you wish to (A)bort or (R)etry.

SUPER SNAPSHOT PARAMETER DISK

There is no copier of any type that is 100% effective (despite some claims to the contrary). We have recognized that there are always going to be some programs that cannot be completely copied by the snapshot method. It is to this end that we have included a parameter disk along with the SUPER SNAPSHOT cartridge. On the disk you will find 40 parameters that will bring you up to date in the archival process.

"What is a parameter?" you may ask. A parameter is a short routine that will make a minor adjustment to a disk so as to remove any protection routines. We have examined the market and in our opinion the KRACKER JAX parameter disks are the best of their type. For this

reason we have made an arrangement with the KRACKER JAX people whereby they will offer a special parameter disk on a quarterly basis, or as needed, that will include parameters for only those programs that SUPER SNAPSHOT cannot completely copy.

To use the parameter disk, first ensure that all peripherals are disconnected. This includes modems and printers (but not SUPER SNAPSHOT). Next take the SUPER SNAPSHOT parameter disk, insert it in the drive and press COMMODORE-RUN/STOP (%:* and RETURN when using the wedge). When the menu appears select option C for C-64 Fast Copier. Using the C-64 Fast Copier, copy the original disk. When the "Backup Complete" prompt appears remove the copy from the drive, insert the SUPER SNAPSHOT parameter disk and select LOAD PARAMETER MENU. When the menu appears, use the RETURN key to flip through the list until you find the desired parameter. Press the appropriate function key to load the parameter. When the parameter is loaded, remove the SUPER SNAPSHOT parameter disk, insert the copy that you just made and press RETURN. When the FINISHED message appears, remove your copy from the drive and turn your computer off and then on. You may now test your backup. That's it, you're done!!

ROM UPDATES

As was mentioned at the beginning of this manual, SUPER SNAPSHOT is designed to be an open ended system. What this means is that as changes and additions

are made to the program, previous buyers will be able to update to the latest version at a very reasonable cost. These updates will be in the form of a new ROM. At this point it is not possible to set a fixed price on these updates. We anticipate that the price will be in the $15 (U.S.) range. Information on price and availability will be available from both COMPUTER MART and MARSHVIEW SOFTWARE. Call or write to:

In the US..

COMPUTER MART, Dept. G
2700 NE Andresen Road
Vancouver, WA 98661
1-206-695-1005

In Canada..

MARSHVIEW SOFTWARE
P.O. Box 1212
Sackville, New Brunswick
CANADA EOH 1NO
1-506-536-1809

When returning your SUPER SNAPSHOT for an update, we would suggest that you use a PADDED envelope. It provides adequate protection at a reasonable cost.

WHAT'S NEXT?

Although we think that you will agree when we say that there has been a lot put into this cartridge, it is only the beginning! We have a number of modules under development and in the future you can expect to see updates that will

include some if not all of the following: an enhanced SCREEN-COPY that will do screen dumps with the sprites included, support for more types of printers; a copy utility menu (now you know what F3 on the opening screen is for) that will include a file copier, disk copier and perhaps even a nibbler; further additions to the CODE INSPECTOR, a TURBO SAVE and other useful utilities.

Also planned for future updates is a TURBO DOS that supports the COMMODORE 1581 disk drive. For those of you who haven't heard of this unit it is the high capacity 3.5" drive that works with the 64 or 128. We think that this is going to be a terrific hit with COMMODORE users. We have a couple of these units here at LMS TECHNOLOGIES and they are great!! We highly recommend them. This new drive coupled with the 1750 or 1764 RAM expander should open up whole new horizons for our favorite computers.

If you have any suggestions for additions or improvements to our product please contact us, it would be greatly appreciated. Send your comments to:

LMS TECHNOLOGIES
P.O. Box 3022; Sta. "B"
Fredericton, New Brunswick
CANADA E3A 5G8

COPYRIGHT NOTICE

Thanks to my friend Calvin Martini for all the help in beta testing the various modules.

And to Andrew (Boogman) Gamble for working all those late hours.

A special thanks to the folks at Kracker Jax for the development of the SUPER SNAPSHOT parameter disk and for their continued input and support.

LIMITED WARRANTY

Neither the authors nor the distributors of this product shall be liable for any damages which may be caused by any errors or omissions in this product. Should the product be defective, the distributor shall replace it upon return of the defective product, postage paid within ninety days of the date of delivery. There are no other warranties implied or expressed, including but not limited to, any implied warranties of merchantability or fitness for a particular use.

The warranty registration card must be on file for repair or replacement under warranty. It is assumed that any

SUPER SNAPSHOT package that is returned without proof of purchase is void of warranty. This warranty shall be void if, in the opinion of the authors or their representatives, this product has been misused, improperly installed, modified or otherwise tampered with.

Your SUPER SNAPSHOT package should be sent to either COMPUTER MART (in the US) or to MARSHVIEW SOFTWARE (in Canada).

Please make sure that your SUPER SNAPSHOT package is protectively wrapped as damage due to to shipping is not covered by warranty. We would suggest that you insure your SUPER SNAPSHOT package.

DISCLAIMER

The copier portion of this product is meant expressly for the archival backup of your legitimate software.

Neither the authors nor the distributors of SUPER SNAPSHOT condone the use of this product to assist in software piracy.

Under the Federal Copyright Act, the owner of a computer program is allowed to make an archival backup.

State laws may differ in this regard. You may or may not be entitled to make and/or modify a backup.

If in doubt, check your local copyright laws.