

Performance Peripherals 512k CoCo 3 Memory Test

This disk contains a memory test and a memory test demo for the Performance Peripherals 512k memory board. To run the memory test, type

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LOADM "MEMTEST":EXEC
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To run the memory test demo, type

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LOADM "MEMTDEMO":EXEC
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This memory test checks ALL of memory, not just the first 448k like some other memory testers (it does this by relocating itself). This memory test is a set of 12 sub-tests that check retention (refresh), multiplexer errors, stuck bits and more. A graphic representation of the memory array shows the progress of each of the 12 tests. If an error is detected, a graphic representation of the memory board is shown blinking the chip and U-number of the bad chip to replace.

Testing continues indefinitely or until reset is pressed. This allows overnight testing without having to restart the program for each pass (as with some other memory testers).

After each complete pass, the memory test is relocated so that the area occupied by the memory test can be checked. After the program is moved, a CRC check is performed on the program to ensure that it has not been corrupted. This CRC check is also performed before each of the 12 sub-tests is run. If an error is detected, a "CRC ERROR" message is displayed on the bottom of the screen and the program halts.

The memory test demo explains all of the important features of the memory test. Error detection is disabled while running the demo.

If you have questions or problems, please call 714/681/3007 eves until 11pm PST (in California) or weekends.

ColorVenture RAMDISK
The finest Ramdisk Driver for the 512k CoCo 3
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Introduction

Congratulations on your purchase of the ColorVenture RAMDISK! This is the finest RAMDISK driver on the market for the CoCo 3. It was designed by ColorVenture and programmed by Chris Babcock to allow you to make maximum use of the 512k in your CoCo 3.

With a Ramdisk, you have the equivalent of two disk drives right inside your computer. Accessing information from them takes only a fraction of a second - and you can use all the standard disk commands. (Just don't forget that when you turn the computer off, whatever you had in the RAMDISK is erased, so save important items to a real disk, first.)

The ColorVenture RAMDISK offers all these features:

- Puts two 40 track drives in upper memory. You can access 35 tracks using RSDOS, or 40 tracks using software that supports that. (OS-9 Level II will not work with this program.)
- Lightning fast access to all data!
- Supports all disk commands.
- Reset protected. Hitting reset will not wipe it out of memory.
- Works with ColorVenture's Printer Lightning print spooler to get two ramdisks PLUS a print spooler all in memory at once - without using a drop of BASIC's memory!
- You can reconfigure all your drives, and use drive numbers 0-5. So the RAMDISKS could be drives 0 and 1 as far as any software program is concerned, and your physical drive 0 could be drive 3 or 4. Any combination is possible!
- Save your default setup to disk to allow for quick one-touch installation of the ColorVenture Ramdisk.
- You can reconfigure your drives even when the Ramdisks have data on them, without losing information.
- Gives your system up to 6 "drives" at once.
- Easy recovery from a crash or cold start.

Installing the RAMDISK

You should always place the ColorVenture RAMDISK in physical drive 0. (By "physical" we mean a real disk drive connected to your computer. This is opposed to a "software" drive.) To install it, simply type LOADM"RAMDISK":EXEC <enter>.

Keep the disk in the drive for now. You will be asked if you wish to "Use the default setting?". This is the setting stored in the file DEFAULT.RAM. If it is your first time running the RAMDISK, you do not have this file yet, so answer No.

You will then be asked for the drive numbers you wish to assign to the two RAMDISKS and to your physical drives. You must assign

all drives (even if you don't have them), and no two drives can have the same number. If you call the RAMDISKs drives 0 and 1, for instance, and called physical drive 0 drive 2, typing DIR 0 would take a directory of your first RAMDISK. Typing BACKUP 2 TO 0 would place a copy of the disk in your physical drive 0 (now known to all software as drive 2) into your first RAMDISK. A drive may have any number from 0 to 5. If you already have 4 drives, now you can have 6 drives online at once!

If you make a mistake, simply press the <BREAK> key to start over. When you are done assigning all the drives numbers, you are asked if you wish to save this as the default. If so, it will create a file called DEFAULT.RAM on physical drive 0. From now on, you can simply answer "Y" when asked if you wish to use the default and there's no need to go through all those questions again.

After setting up the drives, the ColorVenture RAMDISK asks if you wish to DSKINI the RAMDISKs. This will clear out anything that was there before. It is a good idea to answer Yes if you are just installing the RAMDISKs. Note that you can EXECute the program again and switch all the drive numbers without erasing the contents of the RAMDISK if you answer No to this question.

Also, EXECuting the ColorVenture RAMDISK will not erase a BASIC program you have in memory, provided that you have at least a PCLEAR 4 (the default). If you have set the PCLEAR to a lower value, you must raise it to 4, or save your program on a disk first, to prevent its being erased.

Once the RAMDISK is installed (the OK prompt returns), you may remove the disk from the drive.

Using the RAMDISK

Using a RAMDISK gives you the equivalent of having two disks worth of programs and data all in memory at once. You can access any of this instantly. Any disk command will work on the RAMDISK. This includes: BACKUP, DSKINI, COPY, SAVE, LOAD, SAVEM, LOADM, OPEN, CLOSE, DSKI\$, DSKO\$, KILL, RENAME, VERIFY ON or OFF, FIELD, LOF, EOF, DIR, DRIVE, and others.

You can now switch programs in and out of BASIC with no delay for disk access, or run commercial software much faster. It will work with all programs written in BASIC, and many assembly language programs as well. There is no guarantee that it will work with any assembly language program, though, so test it out before saving any valuable data to the RAMDISK! Often, the RAMDISK will work fine with software, but upon exiting the software produces a "cold start". If you ever have a cold start, or the program crashes, the ColorVenture RAMDISK can usually recover what was on your RAMDISKs.

To recover your RAMDISKs after a crash, first hit the key

combination CTRL+ALT+RESET, then hit RESET again. This will cold start your computer. From a cold start, simply reload the ColorVenture RAMDISK. Answer all the questions, but when it comes to the question "DSKINI the RAMDISKS?", answer "N". Your RAMDISKS should contain whatever they held before the crash. Note that turning the power off, however, will always cause you to lose the contents of the RAMDISK - there is no way to recover them.

When using the RAMDISK, remember which number you called each drive. If you have your RAMDISK set as drive 0, anything saved to drive 0 will go to the RAMDISK, not your physical drive 0.

Disclaimer

There is no guarantee that the data stored on a RAMDISK is safe. ColorVenture takes no responsibility for any lost data or other problems that result because of use of this product. While every attempt has been made to make this program the finest quality RAMDISK, the user should be aware that RAM is never as safe as a real disk drive. Important information should be stored on physical media. This program is sold on an "as-is" basis with no warranties express or implied.

The dealer who sold this program to you is responsible for customer support. Please see him if you have a problem.

An Invitation

If you have a CoCo 3 program (RSDOS Assembly Language or OS-9 Level II only please) you would like to get out on the market, we're interested in helping you. Please tell us a little about the program and yourself by writing to: ColorVenture, 11 Prospect Drive South, Huntington Station, NY 11746.

PRINTER LIGHTNING
A Print Spooler for the Color Computer 3
Copyright 1987 ColorVenture

Introduction

Let's face it - printing can be a drag. Your computer is tied up while your printer slowly churns out a program listing, graphics dump, or anything else. Wouldn't it be nice if you could work on your computer while it printed?

Introducing PRINTER LIGHTNING from ColorVenture. Printer Lightning is the fastest, most reliable print spooler for the Color Computer. It uses the extra memory in your CoCo 3 to store items sent to the printer, then prints them out while freeing your CoCo 3 for other purposes. It will also work with the ColorVenture RAMDISK if you have 512k, allowing you to have two disk drives in memory in addition to the print spooler!

Unlike many other print spoolers, Printer Lightning is fast. You'll hardly notice a slowdown in your computer when you use it, and it never misses a character. Plus, you'll have over 44K to use as a buffer in a 128K machine, or over 437K with a 512K CoCo 3. This means you could submit roughly 200 pages of text to be printed - and still use your computer for serious work!

Loading the program

With your CoCo 3 and disk drive turned on, put the program disk in drive 0. Type: LOADM"PRINTER":EXEC and then press <Enter>. Once printer lightning is installed, you can take the disk out of the drive. It will remain installed in memory unless you turn off the computer, reset the computer, or load in a program which conflicts with the memory used by Printer Lightning (for example, Color Max 3 or BASIC Freedom).

Next, Printer Lightning will ask you if you wish to "Use Hi-Res Memory." Answering "Y" will give you a bigger buffer, but means that you cannot use the CoCo 3's graphic screens. Answering "N" lets you use all CoCo 3 graphics, but gives a smaller buffer.

If you have 512k, Printer Lightning will ask you if you are using the ColorVenture RAMDISK. If so, it will leave room for two RAMDISKs. You'll get a smaller buffer, but can also use two RAMDISKs at the same time you have a print spooler.

Printer Lightning then asks what baud rate you would like to use. The baud rate is the speed at which the computer transmits information to the printer. The faster the baud rate, then, the more efficiently your printer and Printer Lightning can talk, and the better. You may need to set a switch on your printer or printer interface, or try different ones. We recommend using the highest baud possible. If your printer prints "garbage", it means your baud rate is set incorrectly. Try a different one.

Finally, Printer Lightning asks if you wish to have linefeeds sent to the printer after a carriage return. In most cases, the answer will be No. Some printers, however, need linefeeds or they will print lines over each other. Answer Yes if this is the case, or if you wish to have your printer double space the output. Always answer No if you are printing graphics.

When the OK prompt returns, Printer Lightning is installed, and you may use the computer normally.

If you wish to change any of the settings, or if you wish to clear out the print buffer without printing everything you've sent to it, EXECute the program again. This will get rid of anything lined up for the printer and let you reconfigure Printer Lightning.

Using Printer Lightning

Printer Lightning takes none of BASIC's memory. All data which is sent to the printer through the standard print vector (i.e. the PRINT#-2 command, LLIST command, or Assembly Language equivalent) will be sent to Printer Lightning. Depending on the amount of information, this may take a couple of seconds. When the OK prompt returns (or the program you are using says it is done printing), you may continue to use your computer for something else, while Printer Lightning prints your information.

Note that since high speed disrupts the baud rate, Printer Lightning automatically changes your computer back to normal speed when it has anything to print. This insures that the data is printed reliably.

Also, since Printer Lightning uses interrupts, it is not recommended that you use it while using another program that also uses interrupts, as the two may disrupt each other. (For example, CoCo Max 2 and the ColorVenture Hi-Res Driver are two programs that use interrupts - they may cause characters to become garbled when run at the same time that Printer Lightning is printing.)

Compatability

Printer Lightning will work with anything that uses the standard print vector. Many graphic/screen dump programs use this, as do other utilities. Printer art, long LLISTings of BASIC programs, and many others will work with Printer Lightning, saving you a tremendous amount of time. What formerly tied up your computer for 15 minutes now ties it up for only a few seconds. With a 512K CoCo 3, you can also send many items to be printed in succession, then continue working (or playing) while they are printed.

A little trick for most printers: if you wish to send multiple items to be printed at once, you might try typing (from BASIC): PRINT#-2,CHR\$(12) <enter> between each item. This tells many printers to go to the top of the page, and can be used to space

out your items. Note that to the printer, the top of the page is the position when you turned it on.

All BASIC programs should be compatible with Printer Lightning, as should many machine language programs. However, those programs that use the 64K mode and rewrite BASIC's print vector, or use their own, such as many 64K word processors, probably will not be compatible.

We suggest you try Printer Lightning with your favorite programs. If anything gets hung, simply hit reset, or hold down CTRL+ALT+RESET, then hit reset for a cold start.

A quick note to game addicts - you can play your favorite adventures, including Infocom's, while Printer Lightning prints! (Just don't use the SCRIPT command.) Printer Lightning is compatible with many more games, too. So, instead of waiting while your computer prints, you can send a large volume of material to it, then have some fun! (Be careful of games that use interrupts, though, as they may cause some characters to be garbled.)

Disclaimer

ColorVenture licenses Printer Lightning on an "as-is" basis, with no warranties implied or explicit. There is no guarantee that it will work with any specific program, and it is up to the user to determine the suitability of Printer Lightning for his particular task. ColorVenture shall not be liable for any loss of information or problems of any sort that result from the use of this program.

Your Printer Lightning diskette is provided by the dealer that sold it to you. Different dealers may have different terms for replacement and/or help. If you have a problem with printer Lightning, please contact the dealer who sold it to you for assistance.

An Invitation

ColorVenture, the fastest growing CoCo 3 software development company has great opportunities for Assembly Language programmers and artists. Or, we can market your program for you! If you have a program, or are interested in programming opportunities, please write to us at: ColorVenture, 11 Prospect Drive South, Huntington Station, NY 11746.