RAINBOW
The Color Computer Monthly Magazine
ON DISK

RAINBOW ON DISK contains the programs featured in the pages of THE RAINBOW, The Color Computer Monthly Magazine. It is intended as a companion to the magazine, not as a separate entity. The articles accompanying the programs in THE RAINBOW may include important information and system requirements necessary to the operation of the programs.

The disk is specially formatted and contains both BASIC and OS-9 operating system programs.

This edition of RAINBOW ON DISK includes:

Seawar Try your hand at sinking the hidden battleships.

It's Your Move *Chess* moves the strategy from the game board to the CoCo's screen.

File Compare Check those disks for duplicates with this file comparison utility.

Bingo An old favorite with some added bells and whistles.

Child's Play Use the luck of the die to assemble your bug before your opponent.

Italics-105 Create an italics font for your Radio Shack DMP-105 printer.

Tut's Tomb Finish the battle with parts 2 and 3 of this fast-paced arcade game.

Novices Niche Here are five quickies to get you going.

Education Notes Learn to add up costs with this newspaper subscriber list.

The "Hit" List Keep track of the body count in role-playing games such as T.A.G.

Wishing Well Learn to recognize opposites with this graphics-based teacher.

ML-Data A routine to convert a machine language program into BASIC data statements.

Little Graphics Library Learn to use programming constructs in machine language graphics routines.

ML Made BASIC Part 2 of this beginner/intermediate machine language series.

Working Together Two programs presented by Don Hutchison help ease tape file transfers from Delphi.

Barden's Buffer Find out which areas of your BASIC programs need help in becoming more efficient. An excellent way to "clean up" your act.

The OS-9 programs on the "flip" side of this month's RAINBOW ON DISK include:

KISSable OS-9 Add *WindInt* functions to BASIC09 with *Gfx3*.

Instructions for Use

This disk is a "flippy," formatted under Disk Extended BASIC on the front side and under the Microware OS-9 operating system on the back. To access the OS-9 programs on the back, you must remove the disk from your drive, boot your OS-9 system, turn the disk over and reinsert it.

This month's RAINBOW ON DISK is formatted in such a way that programs for Disk BASIC are on both sides of the disk. The flip side of the disk has been "partitioned" and does hold 13 Disk BASIC files. You may copy these files to another disk manually or back up the entire flip side of the disk.

Before you run any of the programs on RAINBOW ON DISK, you should first use the Disk BASIC BACKUP command to make a backup of both sides of the disk, giving you a working copy. You *are* able to back up the OS-9 formatted side of the disk under Disk BASIC. For the protection of the RAINBOW ON DISK master, the disk does not have write-protect notches, so you cannot accidentally write to it.

The Disk BASIC portions of the disk are menu-driven. To begin, type RUN"MENU" and press ENTER. A menu of the files appears, from which you may run any of the BASIC programs by pressing its corresponding letter key. The machine language programs, indicated by an asterisk, *will not* run properly from the menu. These machine language files must be loaded and executed with the LOADM and EXEC commands.

When a file is run from the RAINBOW ON DISK menu, part of the menu itself remains in memory. Because of this, you may encounter an OM? Error on some of the programs, indicating that the file is too large for memory. If this occurs, you will have to remove the disk and turn off your CoCo for a few seconds, then LOAD and RUN the program as you normally would from Disk BASIC, bypassing the menu.

How Do I Get to the OS-9 Programs?

The OS-9 side of RAINBOW ON DISK contains two directories: CMDS and SOURCE. It also contains a file, read.me.first, which explains the division of the two directories. The CMDS directory contains executable programs and the SOURCE directory contains the ASCII source code for these programs. BASIC09 programs will only be offered in source form so they will only be found in the SOURCE directory.

Since this month's RAINBOW ON DISK offers BASIC09 programs, the SOURCE directory will be the only one found on the disk. There is no CMDS directory on this month's RAINBOW ON DISK. To use this month's programs, first boot OS-9 and execute BASIC09. Then, use the chd command to make the RAINBOW ON DISK SOURCE directory your current data directory and load the programs into the BASIC09 workspace.

OS-9 is a very powerful operating system. Because of this, it is not easy to learn at first. However, while we can give specific instructions for using the OS-9 programs, you will find that the OS-9 programs will be of little use unless you are familiar with the operating system. For this reason, if you haven't "learned" OS-9 or are not comfortable with it, we suggest you read *The Complete Rainbow Guide to OS-9* by Dale Puckett and Peter Dibble.

The following is not intended as a course in OS-9. It merely states how to get the OS-9 programs from RAINBOW ON DISK to your OS-9 system disk. Use the procedures appropriate for your system. Before doing so, however, boot the OS-9 operating system according to the documentation from Radio Shack.

1) Type load dir list copy and press ENTER.
2) If you have only one disk drive, remove the OS-9 system disk from Drive 0 and replace it with the OS-9 side of RAINBOW ON DISK. Then type chd/d0 and press ENTER. If you have two disk drives, leave the system master in Drive 0 and put the RAINBOW ON DISK in Drive 1. Then type chd/d1 and press ENTER.
3) List the read.me.first file to the screen by typing list read.me.first and pressing ENTER.
4) Entering dir will give you a directory of the OS-9 side of RAINBOW ON DISK. To see what programs are in the CMDS directory, enter dir cmds. Follow a similar method to see what source files are in the SOURCE directory.
5) When you find a program you want to use, copy it to the CMDS directory on your system disk with one of the following commands:

One-drive system: copy /d0/cmds/ filename /d0/cmds/ filename -s
The system will prompt you to alternately place the source disk (RAINBOW ON DISK) or the destination disk (system disk) in Drive 0.

Two-drive system: copy /d1/cmds/ filename /d0/cmds/ filename
Once you have copied the program, you execute it from your system master by placing that disk in Drive 0 and entering the name of the file.

Many of these programs require special loading instructions and other information necessary to the proper functioning of the program. For complete instructions regarding each of the following files on RAINBOW ON DISK, refer to the August 1988 edition of RAINBOW magazine. (The corresponding page number is noted for your convenience.)

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052	ITALICS	140	FINANBAS
060	2PART1	140	*FINANBIN
064	2PART2	159	TAPCNV
068	3PART1	160	BASFIX
073	3PART2	178	PRNTLINE
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076	IMMORTAL	**OS-9 Files**	
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094	OPOSITE1		
101	MLDATA		

* Indicates a machine language program.