**June 1987**

# 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:

**Yardbird** A musical tribute to jazz legend Charlie Parker.

**Air Rescue** A daring hot-air balloon rescue mission for those lazy summer evenings.

**The Digital Dimension** Use this subroutine to convert numbers easily for your Speech/Sound Cartridge.

**Strummer** An easy-to-use, computerized version of those confusing guitar chord sheets.

**Education Notes** Steve Blyn offers *Mathplay,* a "magic square" math game.

**Music Menu** Pick and choose those *Music+* files.

**Bells and Whistles** Run this feature-packed, four-voice music editor the next time the musical urge hits you.

**Novices Niche** A grab bag of sounds from traditional melodies to sounds of the future.

*Music+***Revisited** Teach *Music+* how to transpose.

**Wishing Well** *Heart,* the second installment in the continuing saga of "Knowing Your Body."

**Piano** Compose and play on your very own grand.

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

**Sound Puzzles** A set of procedures illustrating one use of BASIC09 for educational software.

**KISSable OS-9** At and a t run: More UNIX-like commands for your OS-9 system.

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## 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 six 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 side of the disk is 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.

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 sytem 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.

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Many of these programs require special loading instructions and other information necessary to the proper functioning of the program. The files HYMN, OLD100TH, HOWGREAT and JESU JOY are standard *Music+* files. They can be LOADMed and EXECed or used in conjunction with *Music+* or *Musxmenu* on this disk. To use *Musxmenu*, you will have to carefully read the article in the magazine as the program requires editing before loading and playing music. AXEL F and ENTRTANR are special files for *Bells & Whistles*. They contain the necessary information to be properly played with BW2 or BW2COCO3 on this disk. For complete instructions regarding each of the following files on RAINBOW ON DISK, refer to the June 1987 edition of RAINBOW magazine. (The corresponding page number is noted for your convenience.)

| Front Side | | | Back Side | |
| --- | --- | --- | --- | --- |
| Page | Filename | | **Disk BASIC Files** | |
| JUN | MENU | | Page | Filename |
| 024 | YARDBIRD | | JUN | MENU |
| 027 | POKE1 | | 095 | MUSIC+TR |
| 030 | POKE2 | | 095 | OLD100TH |
| 030 | *BALLOON | | 095 | HOWGREAT |
| 038 | NUMBTEXT | | 095 | JESU JOY |
| 045 | STRUMMER | | 108 | HEART |
| 048 | MATHPLAY | | 118 | PIANO |
| 050 | MUSXMENU | | | |
| 050 | *HYMN | | **OS-9 Files** | |
| 066 | BW2 | | read.me.first | |
| 075 | BW2COCO3 | | **CMDS** | |
| 066 | *AXEL F | | Page | Filename |
| 066 | *ENTRTANR | | 168 | at |
| 076 | FOLKSONG | | 171 | atrun |
| 078 | GAVOTTE | | **SOURCE** | |
| 078 | TEXAS | | 149 | soundpuz |
| 079 | CHIEF | | 168 | at.asm |
| 079 | FOLLOWME | | 171 | atrun.asm |
| 079 | JETPLANE | | | |
| 079 | COUNTRY | | | |
| 080 | METRNOME | | | |
| 081 | SOUNDOFF | | | |