# COLOR BASIC Manual

**By Richard Degler - May 3, 2008**

**Version 2.3** completed **- March 14, 2011**

Thanks to Lance F. Squire for BC/FC info.

note: Since this 2-chip cartridge was discovered in the "Robert Fabris collection" along with RAINBOW v.2 and the ADS Monitor V2.0 EPROMs (with the same handwriting on all their labels), along with letters and a printout of the Color Basic Demo programs taped on the Arcadian Promotional Video, we can safely conclude that **Larry Hanson** (P.O.Box 1685, Shreveport, LA 77165) was the author of all three of these (except that Color Basic was a small modification of Bally Basic written by J. Fenton - and was probably NOT the 4-color Basic Jay was working on, which became the Extended Basics).

The cartridge had an error in the Vector to the Light Pen Interrupt routine which made it impossible to load a 300-baud tape program.

Since there are now EIGHT screen interrupts that occur each sixtieth of a second, the default NT has been changed to 30 to roughly match Bally Basic's timing. The keypad debounce timer has also been adjusted back to 0.1 second.

Also the Shift keys were not affecting the Background Color since BC had been repurposed. The corrected ROM image is available here.

**Here it is, the totally unofficial but totally brief:**

**Color BASIC** is based on the original **Bally BASIC**, including the 300 baud interface code, with a couple of exceptions. There are now only EIGHT lines (by 26 characters) of text available on screen. However you can set the Background Color and the Foreground Color - plus two additional colors - for each of these lines separately now! The bottom 5/13ths of the screen (as well as the border) is the same color as the top line - and hides the Basic listing. Although a smaller size is actually usable, the code runs much faster since there is no need to interlace it with (and un-interlace it from) the screen display!!

**BOX** and **LINE** can now draw in any one of the four colors, 0, 1, 2, or 3 (there is no NONE or XOR modes now), where the actual colors displayed will depend on the Character Lines that they lie on.

With a graphics area of 160 by 64, the X coordinate still goes from -80 to 79, but the Y is limited to 31 through -32 (BOX is clipped at -31).

As before, it is much faster to position the starting point of a LINE using the XY pseudo-variable, rather than drawing an blank line to it (which you can't do here anyway).

**There are only two new commands to learn** (and no, CLINE doesn't draw colored lines, sorry):

**COLOR** - sets the colors of one of the eight 4-COLOR palette groups. Defaults are all White except for the first one, which has Black for the foreground text characters.

Usage is WORD-shift then BACKSPACE using a regular Basic overlay to get *COLOR p,a,b,c,d* - where 'p' is the Palette number from 1 to 8, and the others are the regular colors from 0 to 255 for the background, foreground, plus two more un-named colors which can be now be displayed by the regular BOX and LINE routines.

**CLINE** - chooses the palette to be used by each Character LINE of text.  There is a little bit of jitter when the colors change in MESS, which may or may not be present on a real Bally/Astrocade machine.  All CLINEs may have their own palette or they can also share, and default to the first black-on-white color set.

WORD-shift then SPACE for *CLINE n,p* - where 'n' is the line number 1 through 8 from the top, and 'p' corresponds to a 'p' as used in the Color command.  FC now selects the color 0 thru 3 to PRINT with in character lines, while BC sets the background color 0-3 for each new letter.

Programs can now simply ramp the colors in the palettes or shuffle the line colors around for fascinating rainbow effects.  {Submissions accepted}.