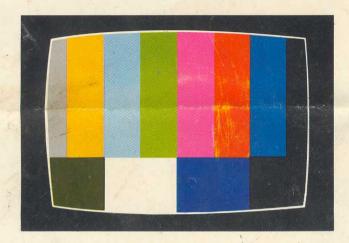
## COLOR BAR AND TV TEST PATTERN CARTRIDGE FOR ATARI 2600

#### **USER'S GUIDE**



### VIDEO SOFT

P.O. Box 4242 Santa Clara CA 95054 (408) 980-9211

The VIDEO SOFT Color Bar cartridge is designed to operate with the Atari 2600 VCS console and all machines with Atari adapters.

Ine test pattern cartridge contains 15 displays that can be used to check or align most adjustments for a black and white or color television. One pattern is also included to check the alignment of the color generation circuitry on the Atari VCS (tm) console circuit board. A 1kHz and 3kHz tone can be selected with the DIFFICULTY SWITCHES, and the patterns can be selected by scrolling forward or backwards through the list via the GAME SELECT or GAME RESET console switches.

The VIDEO SOFT Color Bar Generator cartridge is to be used for verification of proper operation of your TV set, and for adjusting color convergence on big screen projection sets.

In most cases the corrections can be made by minor adjustments on visible controls with easy accessibility. Any adjustment of the secondary controls or any in depth interior adjustments must be referred to qualified service personnel.

Title page and VCS color adjustment pattern Green screen Red screen Blue screen White screen Window pattern Wide vertical bars

Circle pattern
Center cross
Horizontal lines
Vertical lines
Dot pattern
Cross hatch pattern
Grey scale pattern
Color bar pattern

**TITLE PAGE** — contains the copyright notice "copyright (c) 1983 Video Soft", indicating that this program is protected under Title 17 United States Code. This screen also contains the color adjustment pattern for the Atari VCS (tm) color generation

circuits. The VCS generates audio and video signals using digital electronics. The color phase angles are generated by delaying the color signal until the desired phase angle is selected. An adjustment potentiometer is placed on the VCS console circuit board to adjust the 360 degree delay so that it is the same as 0 degrees. Although we do not recommend that you void any warranty on your game console, the potentiometer (the only one) can be adjusted so that the top half of the colored box is as close to the same color as the bottom half. The color generation circuits can then correctly produce colors from 0 to 360 degrees.

The basic function of this pattern is to check if the Atari 2600 VCS phase angles are being properly generated. If the Atari unit is not working right the test patterns will not be properly displayed on your TV screen. If this occurs, we recommend that you consult qualified Atari service personnel.

**COLOR BAR PATTERN** — gives a close approximation to the NTSC standard color bar. The top colors are grey, yellow, cyan, green, magenta, red, blue, and black. The bottom colors are a very dark green, white, blue, and black.

**GREY SCALE PATTERN** — produces eight shades across the screen going from white to black. This pattern can be used to check that the television can reproduce uniform changes in the luminance amplitude. The brightness and contrast can be adjusted so that all bars are showing across the screen. NOTE: it is not possible to turn off the color burst signal on the game console, even with the COLOR/BLACK-WHITE switch. Some color may creep into pictures which should have only a black and white display.

CROSS HATCH PATTERN, DOT PATTERN, VERTICAL LINES, HORIZONTAL LINES, and CENTER CROSS — are very useful for checking vertical and horizontal linearity on any television, and are also useful for checking and aligning convergence on a color television.

**CIRCLE PATTERN** — is used to adjust the vertical size and linearity. If the vertical size and/or linearity are out of adjustment, the circle could appear as an egg instead of being round.

**WIDE VERTICAL BARS** — can be used to test for smearing or fading of the video signal. The bars should appear as completely white and black bars.

**WINDOW PATTERN** — should appear as a white window in a completely black background. If the black background changes between black and grey at the top or bottom of the window, the DC coupling or DC restoration between the video amplifier and the picture tube is not functioning correctly.

**WHITE SCREEN** — is used to adjust the color circuits to produce a white screen on a color television.

**RED SCREEN** — is most useful in adjusting color purity. If the screen is not completely red, (such as other colors around the edges), the television should be degaussed. If degaussing does not cure the probem, the color purity magnets will probably need adjustment. This adjustment must be done by a qualified TV repair person.

**BLUE SCREEN, GREEN SCREEN** — displays blue or green screens.

# COLOR BAR GENERATORS



## FEW FUNCTIONS \$1200-\$2000



15 FUNCTIONS UNDER \$30

The VIDEO SOFT test pattern Cartridge contains 15 displays that can be used to check or align most adjustments for a black and white or color television — including a circle pattern. It fits any Atari 2000 vcs and all machines with Atari adapters. Most professional pattern generators cost about \$1200-\$2000. The VIDEO SOFT Color Bar Generator sells for \$29.95 plus \$1.70 postage and handling. About 2% the cost.

## THE TEST PATTERNS INCLUDED ARE:

- 1. Title Adjust
- 6. Window
- 2. Green screen
- Red screen

- 7. Wide vertical bars
- 8. Circle
- 9. Cross hairs
- 5. White screen 10. Horizontal lines
- 11. Vertical lines
- 12. Dots
- 13. Cross hatch
- 14. Grey scale
- 15. Color bars



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VIDEO SOFT P.O. BOX 4242, Santa Clara, CA 95054

Please send Color Bar Generators at \$29.95 plus \$1.70 each postage and handling (allow 4-6 weeks for delivery). 

My check or money order is enclosed.

weeks for delivery). 

My check of moltonia Residents add 6.5% sales taxi

Charge to my 

VISA 

Master Card (California Residents add 6.5% sales tax)

Expiration Date

Account No.\_\_\_\_\_ Name\_\_\_\_

Address \_\_\_\_\_

City\_\_\_\_ Signature\_\_\_\_\_ \_State\_\_

Zip \_