

Macintosh 16-inch Color Display

COLOR ADJUSTMENTS PROCEDURE

Caution: This is an abbreviated version of other materials. Do not attempt this procedure unless you have first reviewed the CRT safety and discharge instructions located in Bulletins/Safety on Apple's Service Source CD, and have successfully performed at least one detailed video adjustment as described in the Macintosh 16-inch Color Display manual in Service Source.

Video/Color Adjustments (30 min. warmup)

Setup

1. Set the monitor in E/W direction and display the gray bars.
2. Set **Brightness** to detent and **Contrast** to max (CW).
3. Preset **Sub-Brightness** and **Sub-Contrast** to midrange.
4. Preset the **Red, Green, and Blue Drive** controls to midrange.
5. Preset the **Red and Blue Background** to minimum (CW).

Cutoff

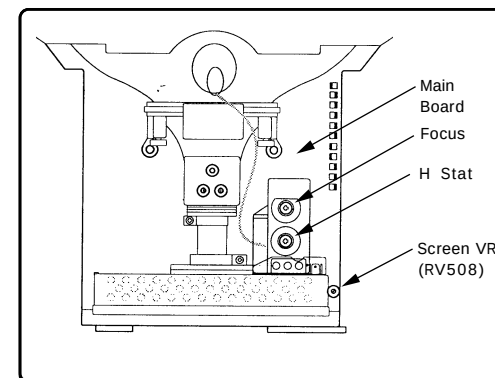
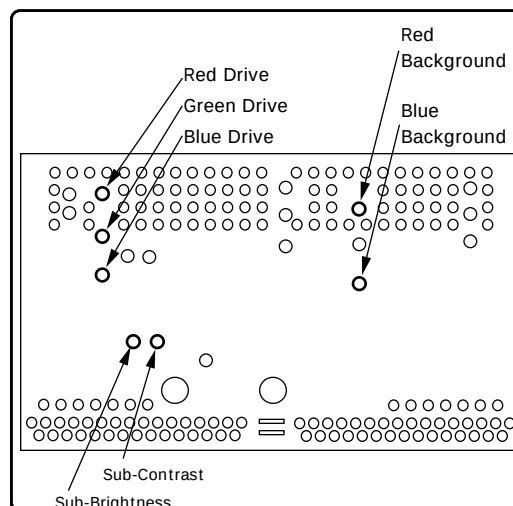
6. Display the gray bars test pattern and adjust **Screen VR** (on main board) until the darkest bar is completely black and the next bar is barely visible.

White Balance

7. Turn up the **Blue Background** until the 6 darkest bars display a blue-green tint (CCW).
8. Turn up the **Red Background** until the 6 darkest bars display different shades of gray (CCW).
9. You may need to alternate between steps 7 and 8 until there is no predominant color in the 6 darkest bars.
10. Display the All-White screen pattern and measure the screen luminance. The measurement should be
 - 24 foot lamberts ($\pm$ 3 ft lamberts)
 - Model L-248: 9 to 10 on the scale
 - Model 246: 19 on the red scale
11. Display the gray bars test pattern and check for these conditions:
 - Luminance is correct
 - No predominant color in any of the gray bars
 - The first (darkest) bar is black

If these 3 conditions are met, the white balance is set correctly. If these conditions are not met, follow the corrective steps in the chart.

Quick Reference



Note:

Rev A main board P/N: 661-1634
Rev B main board P/N: 661-1671
Video cable P/N: 590-0734

Display Condition:

- No predominant color
- Luminance too high
- First bar is not black
- No predominant color
- Luminance is too high
- First bar is black
- No predominant color
- Luminance is too low
- 6 brightest bars have a predominant color

Corrective Step:

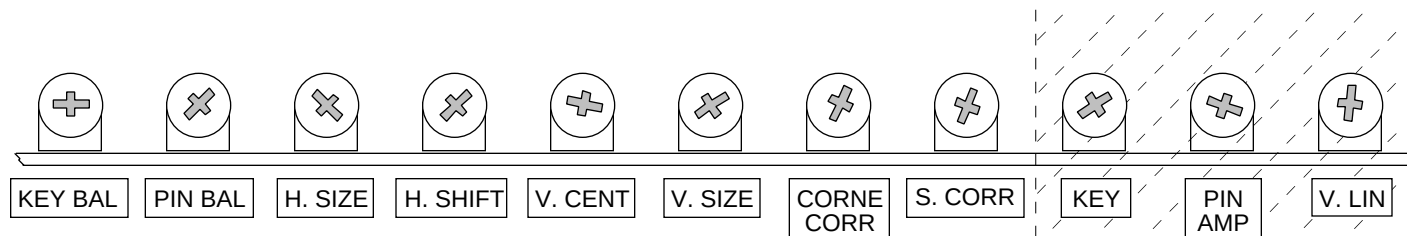
Adjust Sub-Brightness until the first bar is completely black.

Adjust the Red, Green, and Blue Drive controls (ccw) to reduce screen luminance yet retain gray in the 6 brightest bars. The Red and Blue Backgrounds may need readjusting.

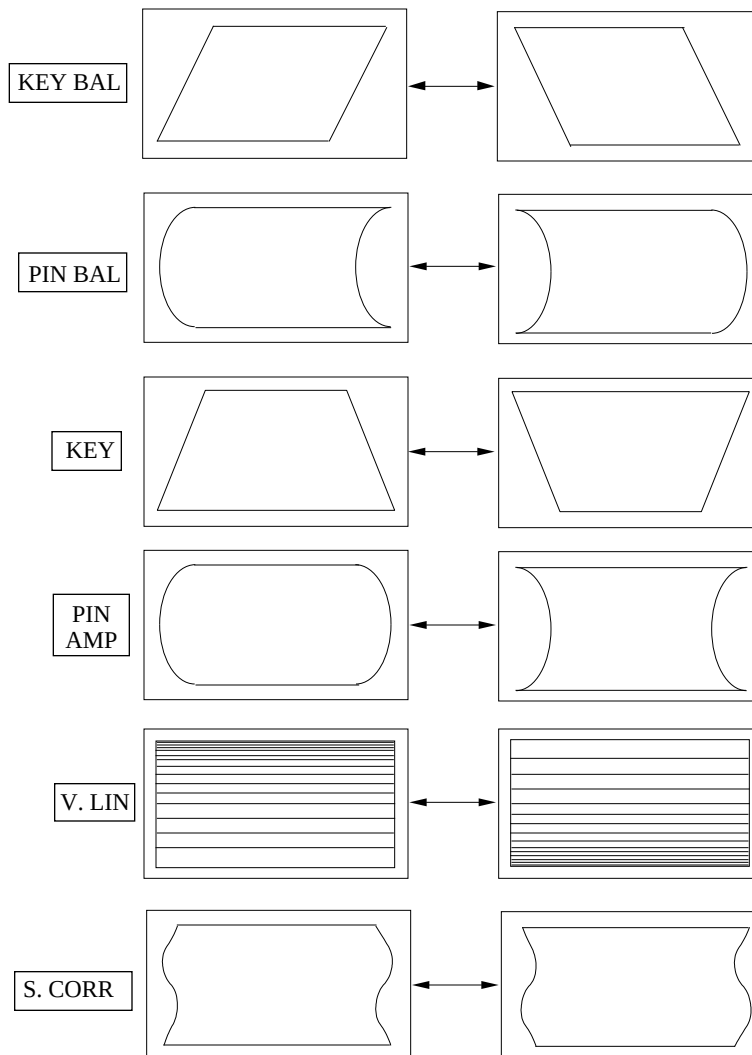
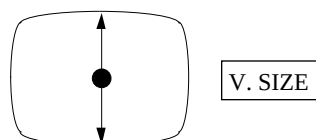
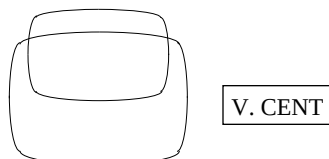
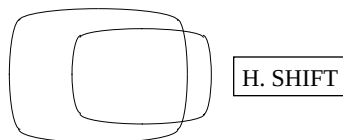
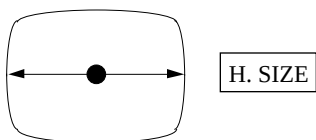
Adjust the Red, Green, and Blue Drive controls (cw) to increase screen luminance yet retain gray in the 6 brightest bars. The Red and Blue Backgrounds may need readjusting.

Adjust the Red, Green, and Blue Drive controls until there is no predominant color. The Red and Blue Backgrounds may need readjusting. Recheck screen luminance.

Macintosh 16-inch Color Display GEOMETRY ADJUSTMENTS PROCEDURE



User-accessible controls



Metal frame

Convergence

Adjust H-Stat on focus module

RASTER SIZE

300 mm x 225 mm

11 7/8" x 8 7/8"