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.
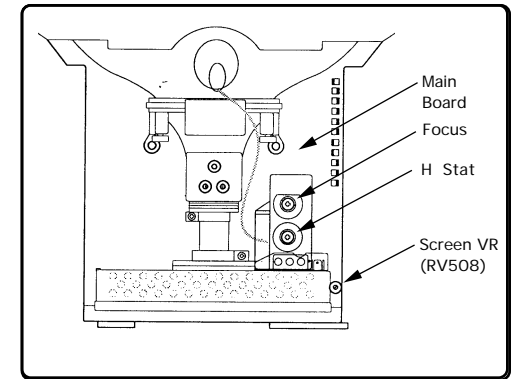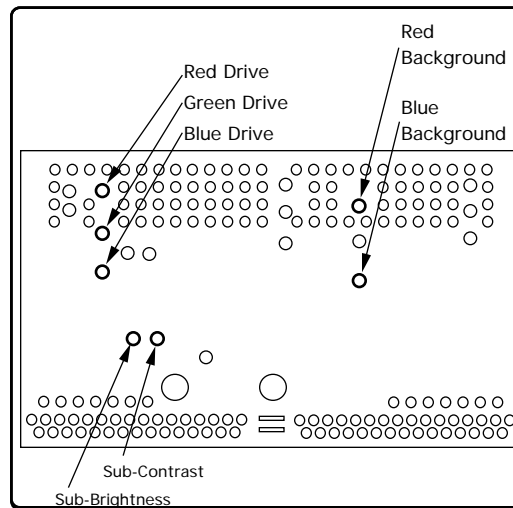5. Preset the **Red** and **Blue Background** to minimum (CW).

Cutoff
6. Display the gray bars test pattern and adjust **Screen VR** (on main board) until the darkest bar is completly 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

Red Drive
Green Drive
Blue Drive
Red Background
Blue Background
Sub-Contrast
Sub-Brightness

Main Board
Focus
H Stat
Screen VR (RV508)

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

Display Condition:	Corrective Step:
• No predominant color • Luminance too high • First bar is not black	Adjust Sub-Brightness until the first bar is completly black.
• No predominant color • Luminance is too high • First bar is 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.
• No predominant color • Luminance is too low	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.
• 6 brightest bars have a predominant color	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.

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GEOMETRY ADJUSTMENTS PROCEDURE

KEY BAL | PIN BAL | H. SIZE | H. SHIFT | V. CENT | V. SIZE | CORNE CORR | S. CORR | KEY | PIN AMP | V. LIN
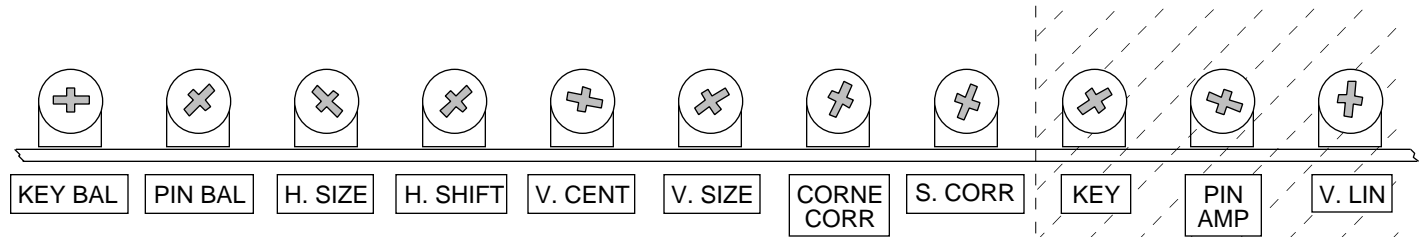
Metal frame

User-accessible controls

H. SIZE

H. SHIFT

V. CENT

V. SIZE

KEY BAL

PIN BAL

KEY

PIN AMP

V. LIN

S. CORR
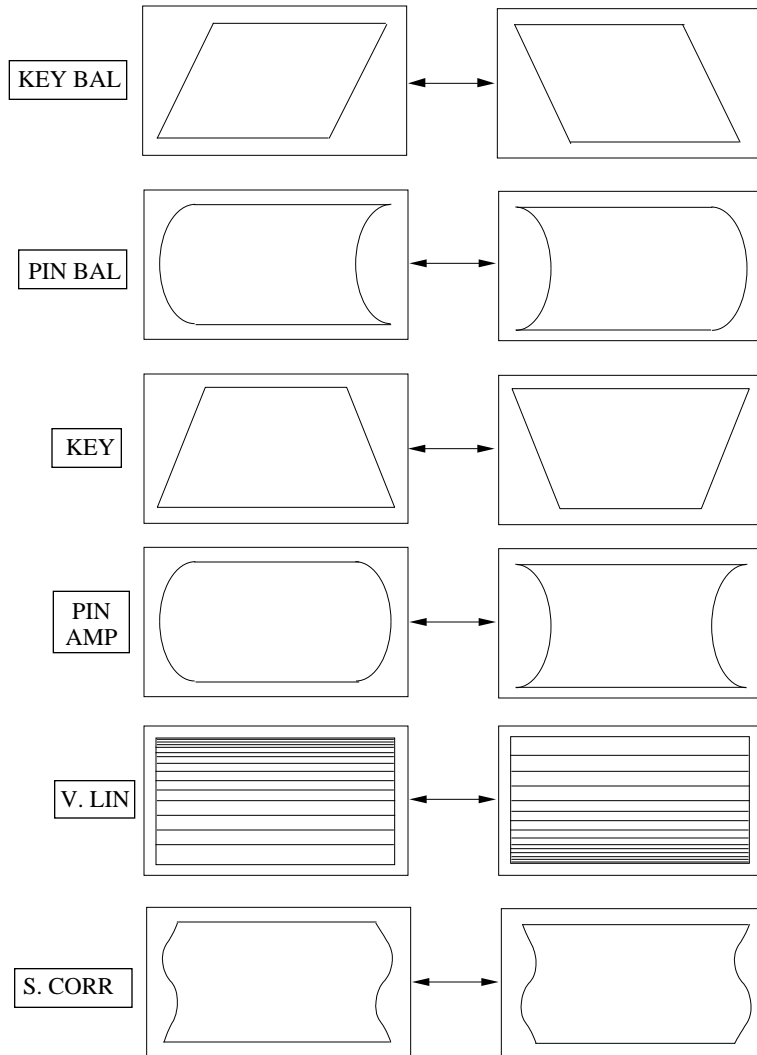
Convergence
Adjust H-Stat on focus module

RASTER SIZE

300 mm x 225 mm

11 7/8" x 8 7/8"