

The Bullet Chart Quick Reference Series Created 12/3/92; Revised 5/15/96

Macintosh 12 RGB Display

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 adjustments as described in the Macintosh 12 RGB Display manual in Service Source.

Adjust the screen control only when you have replaced the main deflection board, replaced the CRT, or misadjusted the control.

Screen Adjustment

- 1. Allow the monitor to warm up for 10 minutes.
- 2. Set Brightness to detent and Contrast to maximum.
- 3. Select full black screen pattern.
- 4. Set Sub-Brightness to minimum (full CCW).
- 5. Connect high voltage probe to meter (com and V/Ohms). Attach probe ground clip to the chassis. Set meter to 2 VDC scale.
- 6. Set screen control so that
 - CRT AT12A9SLB measures 0.5 VDC (\pm 0.005V)
 - CRT M29JMN097X13 measures 0.4VDC (± 0.005V)
- 7. Select gray bars pattern (adjust Sub-Brightness until raster is visible but dim).
- 8. Adjust Sub-Brightness so the leftmost bar is black.
- 9. Select all-white screen. Luminance should measure
 - Photometer: 30 foot lamberts (± 3 ft lamberts)
 - Light Meter Model L-248: top of the 10 scale
 - Light Meter Model 246: 23 on the red scale
- 10. If luminance reading is out of the range, repeat steps or adjust white balance.

White Balance Adjustment

- 1. Allow the monitor to warm up for 10 minutes.
- 2. Select full black screen pattern.
- 3. Set Brightness and Contrast to maximum.
- 4. Set R, G, and B Cutoffs to minimum (full CCW).
- 5. Set R and B Drives to midrange position.
- 6. Set Sub-Contrast to midrange position.
- 7. Adjust Sub-Brightness so raster is just visible.
- 8. Adjust G. Cutoff until raster is mostly green but still dark (if screen is already green, go to next step.)
- 9. Select gray bars pattern and set the Brightness control to its detent position.
- 10. Alternately adjust the R and B Cutoffs until there is no predominant color in left 3 bars.
- 11. Adjust Sub-Brightness so that the leftmost bar is black.
- 12. If raster is neutral, proceed. Otherwise adjust R and B drives for neutral color in rightmost 3 bars.
- 13. If raster is still not neutral, go back to step 10.
- 14. Select all-white display.
- 15. Adjust Sub-Contrast so that screen luminance measures as shown.

Resolution: 512x38	34 64 dpi
Raster Dimensions:	205x153 mm
	8 1/32 x 6 in



Top view of rear chassis



Parts	
076-0384	Domestic CRT
661-0616	Main PCB
661-0617	Main PCB Intl
661-0618	CRT PCB
941-5222	3.15A 125V Slow Blow
661-5223	3.15A 240V Normal Blow
076-0392	HV Probe