

## **adjusting your color display**

Fuzzy display? Washed-out color? It could be a hardware problem, but it's more likely that the display is simply out of adjustment. Color display quality can often be greatly improved by simply adjusting brightness and contrast controls. The controls allow you to compensate for the decrease in the brightness of the display as the cathode-ray tube (CRT) ages. This allows you to maintain a given brightness level over the life of the display. Don't leave the controls at maximum when the display is new. Here is some information on adjusting these controls for optimal display performance and user satisfaction.

### **improper adjustment characteristics**

Some typical symptoms of improper display adjustment are

- Menus in the corners are difficult to read.
- Colors seem washed out or pale.
- Background raster (area outside the user interface) is illuminated.

Improper setting of the black level is also a common problem. If the black level is set too low, a loss of fidelity will occur in the very dim shades. For example,

a very dark gray will be black, not dark gray. This may give the impression of improved contrast.

If the black level is set too high, the overall brightness of the screen will increase. Since spot size is proportional to brightness and focus is related to spot size, the apparent focus of the display will be worse, especially in the corners of the display. What should be black will be lighter than black, which makes black text displayed on a white background appear out of focus and colors look washed out.

### **description of controls**

- Display brightness control-Contrary to what the name implies, this control sets the displayed black level. Correctly adjusted, the displayed black is truly black.
- Display contrast control-This control adjusts the contrast ratio between white and black. Increasing the contrast ratio makes white brighter.
- Keyboard brightness control-This control functions identically to the display contrast control.

### **to properly adjust your display**

1. Set the display brightness and contrast controls to maximum.
2. Press and hold down the keyboard brightness control for several seconds to reach its maximum setting.
3. Look at the lower-left corner of the screen and use your hand to shade the area being viewed to prevent ambient light from reflecting. Adjust the display brightness control so that the background raster is black. This should require about a half turn of the control.
4. Turn the display contrast control down about one-eighth of a turn. The display controls should now be adjusted to their proper positions. If you would like to reduce the brightness of the display, use the keyboard brightness control. Experiment with various display contrast control settings while looking at the menu title in the upper-left corner of the display.

When set correctly, the display will have good focus, even at the corners, and rich, bright colors. As the CRT ages, slightly increase the display contrast control to compensate for the gradual dimming of the display over time. This should be necessary only after many hours of use.