Apple Two-Page Monochrome Monitor: Image Tilt

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Security: Everyone

Apple Two-Page Monochrome Monitor: Image "Tilt"

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Magnetic fields can cause the image to "tilt" on the Apple Two-Page Monochrome Monitor.

Occasionally, the monitors exhibit a tilt in the screen image, either to the right or left. The tilt is only noticeable, if you look at the edges of the screen and notice the amount of black space around the image. Sometimes the amount of black space is greater or less than the amount on the opposite end of the screen. Image quality is not affected. Larger monitors, like the Apple Two-Page Monochrome Monitor, are more likely to show the effect than small monitors.

If a monitor exhibits this effect, say a tilt down to the right, rotating the monitor around on its swivel base by 180 degrees will cause the image to tilt up to the right. What this means is that by rotating the monitor about 90 degrees in either direction, causes the effect to disappear with no tilt present. It also occurs in varying degrees, depending on location. This does not occur with every monitor.

Technical Reason For The Tilt

This effect is caused by differences in the magnetic fields in different places, usually where there is a strong magnetic field being caused by power generators or wiring. A monitor, when set up in one place, may exhibit no tilt, but, when placed somewhere else, may show the above effect. To remove all possible outside influence, Apple tests for true image distortion within large magnetic coils that are designed to simulate normal magnetic fields (when such fields are present). Thus, when shipped, monitors are perfectly aligned, and any distortion is related to the environment into which the monitor is placed.

Why does this occur on the Two-Page display and not on other monitors or on televisions? There are two reasons for this. First, to improve image

quality and lessen eye strain, Apple attempts to make its displays as flat as possible. Thus the picture tube is physically flatter than most every tube on the market today. This presents less image distortion (like bowing of straight lines) and makes the screen image look more like a single sheet of paper. However, the tilt effect tends to be more noticeable on large flat tubes. Competitive, large-screen monitors also show this effect.

The reason televisions do not exhibit this characteristic is that they "overscan" the screen, using all of the picture tube, thus no black space is visible on the edges of the screen. Thus, any tilt to the image is hidden from view. The tilt is there, it just cannot be seen. Macintosh computer displays cannot use this technique, because all information on the screen is critical and cannot flow off the screen (like the menu bar).

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