Macintosh 21-inch Display: Image Shaking (11/93)

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TOPIC ---

I have a Macintosh 21-inch Display near some florescent lights and it
causes the image on my monitor to shake and jump. I cannot move the
monitor any further away from the lights. Is there any magnetic shield
or anything else that can be used to prevent the image from shaking so
violently?

DISCUSSION --

There is no practical method of shielding the monitor from this type
of external interference. However, since you have localized the
problem to fluorescent lighting fixtures, a solution to your problem
should not be difficult.

A fluorescent fixture that is functioning correctly should not
interfere with a monitor's operation. It is not uncommon for these
lamps to arc internally. In many cases this action is readily
apparent because the lamps have a discernible flicker. In most cases,
the internal arcing does not affect the light output of the lamp. The
best way to isolate a defective lamp is by disconnecting one lamp at a
time until the symptom disappears or becomes less severe. When
following this procedure be aware that the problem may involve more
than one lamp. If the lamps check good but the symptom persists, the
problem is associated with one of the ballasts that drives the lamps.
The defective ballast should be replaced.

The reason that fluorescent fixtures interfere with monitor
performance is due to the monitor's refresh rate. Because the lamps
tend to arc at a 60 hz rate (because they are driven from a 60 hz
power source--the wall outlet), they transmit noise at this rate.
Therefore, if the monitor does not operate at the identical 60 hz
refresh rate (our monitors usually operate at a higher rate), it
interprets these pulses as synchronizing signals which causes the
display to jitter.

Keywords: <None>

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