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Macintosh Display Card 8/24GC and Raster Ops Monitors

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Security: Everyone

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TOPIC -----

I have a RasterOps Colorboard 108 plus video card and a RasterOps 19-inch Trinitron monitor. I also have two questions:

- 1) Does the Macintosh Display Card 8/24GC support the RasterOps 19-inch Trinitron monitor?
- 2) If I install the Macintosh Display Card 8/24GC but don't connect a monitor to it, will it accelerate the display on the RasterOps monitor?

DISCUSSION -----

- 1) The Macintosh Display Card 8/24GC supports any display that meets one of the following specifications:

Sense pins	Hor x Vert	Dot	Vert	Horiz
10 7 4	Display	Clock	Refrsh	Refrsh
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0 0 1	Apple Portrait Display	640 x 870	57.2832	75 68.9
0 1 1	Apple Two-Page Monochrome Monitor	1152 x 870	100	75 68.7
1 1 0	12-Inch Apple Monochrome Monitor	640 x 480	30.24	66.7 35.0
1 1 0	13-Inch AppleColor RGB Monitor	640 x 480	30.24	66.7 35.0

0 - Grounded 1 - Not Connected

Note that sense pins 4, 7, and 10 are referred to as SENSE0, SENSE1, and SENSE2 in pinout tables for the video connectors.

None of the RasterOps 19-inch Trinitron displays meets the above

specifications. One of their 19-inch Trinitron displays has a vertical refresh of 75Hz and a horizontal refresh of 60.241KHz. We do not think that this will work properly, but you can try it in the "Apple Two-Page Monochrome Monitor" mode.

Here are the pinouts for the Macintosh Display Card 8/24GC:

Pin	Description
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1	Red Video Ground
2	Red Video
3	Composite Sync
4	SENSE0
5	Green Video
6	Green Video Ground
7	SENSE1
8	Not Connected
9	Blue Video
10	SENSE2
11	Composite Sync and Vertical Sync Ground
12	Vertical Sync
13	Blue Video Ground
14	Horizontal Sync Ground
15	Horizontal Sync
Shell	Chassis Ground

- 2) If no monitor is connected to the Macintosh Display Card 8/24GC, the card will, in effect, turn itself off and not accelerate the RasterOps display system. You can trick the card into thinking that a monitor is attached by grounding pin 4. This will cause the card to accelerate other displays in the system.

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