Power Macintosh 7200: Maximum Color Depths (1/96)

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Security: Everyone

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TOPIC ----------

The Power Macintosh 7200 series computers come with 1 MB of VRAM on the logic board, expandable to 2 MB or 4 MB. The 7200 has 3 VRAM DIMM slots. The article below describes the number of colors available based on the amount of VRAM installed.

DISCUSSION ----------

The Power Macintosh 7200 series computers comes with 1 MB of VRAM on the main logic board. You can increase VRAM to 2 MB by installing one 1 MB DIMM in the first VRAM slot, or to 4 MB by filling all three VRAM slots with 1 MB DIMMS. A VRAM upgrade can be accomplished with third party 1 MB VRAM DIMMs.

The Power Macintosh 7200 has a 64-bit data path to VRAM (with 2 MB or 4 MB of VRAM). It will support display resolutions of up to 1280x1024 pixels and 24-bit color (millions of colors) of up to 1024x768 pixel resolution.

IMPORTANT:
The VRAM DIMMs must be 112-pin fast-paged mode, with 70ns RAM access time or faster. Do not use 256K VRAM SIMMs.

The following table defines the maximum color depths available for a given resolution and memory size. Lower color depths are supported down to 8 bit or 256 colors. This is the same information that is reproduced in the technical specification guide that comes with the computer.

NOTE:
The maximum visible number of colors is millions. In the past, Apple has also labeled millions as 24 bit color. On AV and Power Macintosh computers, 24 bit or 32 bit can be used interchangeably to mean support for millions of colors. In some literature, you may see 32 bit shown in place of 24 bit or millions. Think of this as 24 plus 8: 24 bit for displaying millions of colors plus 8 bit for

special uses, such as alpha channel support (transparency, masking, opaque and tranlucent information) and chroma key support.

Begin_Table

Monitor	VIS*	Resolution	Maximum Color**/VRAM 1 MB	2 MB	4 MB	Refresh rates (Hz)	(kHz)
12" RGB	N/A	512x384	mil	mil	mil	60	24.48
12" Mono-chrome	N/A	640x480	thous	mil	mil	67	34.971
13" RGB Hi-Res	N/A	640x480	thous	mil	mil	67	34.971
14" RGB Hi-Res	11.5"	640x480	thous	mil	mil	67	34.971
VESA Standard	***	640x480	thous	mil	mil	60	31.505
		800x600	thous	mil	mil	60	37.921
		800x600	thous	mil	mil	72	48.1
		800x600	thous	mil	mil	75	46.9
		1024x768	256	thous	mil	60	48.4
		1024x768	256	thous	mil	72	60.0
		1024x768	256	thous	mil	75	80.0
		1280x1024	NA	256	thous	75	79.976
Full-page Monochrome	N/A	640x870	256	256	256	75	68.9
Full-page RGB	***	640x870	thous	thous	mil	75	68.9
14" Audio-Vision	11.5"	640x480	thous	mil	mil	67	35
16" color	14.8"	832x624	thous	mil	mil	75	49.670
19" color	***	1024x768	256	thous	mil	75	60.060
Two-page Monochrome	N/A	1152x870	256	256	256	75	68.476
Two-page RGB	11.5"	1152x870	256	thous	thous	75	68.476
Multiple Scan 15	13.3"	640x480	thous	mil	mil	67	34.971
		832x624	thous	mil	mil	75	49.670
Multiple	16.1"	640x480	thous	mil	mil	67	34.971

Scan 17		832x624	thous	mil	mil	75	49.670
		1024x768	256	thous	mil	75	60.060
Multiple Scan 20	19.1"	640x480	thous	mil	mil	67	34.971
		832x624	thous	mil	mil	75	49.670
		1024x768	256	thous	mil	75	60.060
		1152x870	256	thous	thous	75	68.476
		1280x1024	N/A	256	thous	75	79.964
21" Color	***	1152x870	256	thous	thous	75	68.7
NTSC (underscan)		512x384	thous	mil	mil	60	15.7
NTSC (overscan)		640x480	thous	mil	mil	60	15.7
PAL (underscan)		640x480	thous	mil	mil	50	15.625
NTSC (overscan)		768x576	thous	mil	mil	50	15.625

* Viewable Image Size
** 256=image depth of 8 bits (bpp), thousands=image depth of 16 bits (bpp), millions=image depth of 32 bits (bpp).
*** Refer to the manual that came with your monitor to determine VIS.
N/A not available

End_Table

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