Power Macintosh 7500/8500: Maximum Color Depths (10/95)

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TOPIC ---

The Power Macintosh 7500 and 8500 series computers come with 2 MB of VRAM, expandable to 4 MB. The 7500 and 8500 have 4 VRAM DIMM slots (2 in use and 2 available). VRAM DIMMs must be installed 2 at a time. A VRAM upgrade can be accomplished via two third party 1 MB VRAM DIMMs.

DISCUSSION ---

The Power Macintosh 7500 and 8500 series computers have a fast 64-bit data path to VRAM. Both can also support display resolutions of up to 1,280 by 1,024 pixels with 24-bit color of up to 1,152 by 870-pixel resolution.

DIMMs must be 32-bit-wide, 112-pin fast-paged mode with 70ns RAM access time or faster. Do not use the 256K or 512K VRAM SIMMs used in older Macintosh computers.

If your Power Macintosh 8500 computer is equipped with 2 MB of VRAM, you can switch between a monitor and a television, but you cannot view the desktop on both at the same time. For more information regarding video out to television, please refer to page 58 of the "Power Macintosh 8500 Series User's Guide".

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 guide that comes with each computer -- "Technical Information: Specifications for Power Macintosh 7500 series computers."

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	2 MB VRAM maximum** colors	4 MB VRAM maximum** colors	Refresh rates Vert (Hz)	Refresh rates Horiz (kHz)
12" RGB	N/A	512x384	millions	millions	60	24.48
12" Monochrome	N/A	640x480	256	256	67	34.971
13" RGB Hi-Res	N/A	640x480	millions	millions	67	34.971
14" RGB Hi-Res	11.5"	640x480	millions	millions	67	34.971
VGA	***	640x480	millions	millions	60	31.505
		800x600	millions	millions	60	39.921
		800x600	millions	millions	72	48.1
		800x600	millions	millions	75	47.933
		1024x768	thousands	millions	60	48.294
		1024x768	thousands	millions	72	58.286
		1024x768	thousands	millions	75	60.093
Full-page Monochrome	N/A	640x870	256	256	75	68.773
Full-page RGB	***	640x870	thousands	millions	75	68.773
14" AudioVision	11.5"	640x480	millions	millions	67	35
16" color	14.8"	832x624	millions	millions	75	49.670
19" color	***	1024x768	thousands	millions	75	60.060
Two-page Monochrome	N/A	1152x870	256	256	75	68.476
Two-page RGB	11.5"	1152x870	thousands	millions	75	68.476
Multiple Scan 15	13.3"	640x480	millions	millions	67	34.971
		832x624	millions	millions	75	49.670
Multiple Scan 17	16.1"	640x480	millions	millions	67	34.971
		832x624	millions	millions	75	49.670
		1024x768	thousands	millions	75	60.060
Multiple Scan 20	19.1"	640x480	millions	millions	67	34.971
		832x624	millions	millions	75	49.670
		1024x768	thousands	millions	75	60.060
		1152x870	thousands	millions	75	68.476
		1280x1024	256	thousands	75	79.964

* 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

Article Change History:
26 Oct 1995 - Added information about connecting a TV and DIMM width.
13 Sep 1995 - Added Horizontal & Vertical headers.
16 Aug 1995 - Updated table with corrected info for Multiple Scan 20 Display.

Support Information Services

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