



Card Compatibility and Video Output Tables





Configuration Matrix Notes

Use these tables to determine the output expected from each configuration of built-in and NuBus video cards, monitors, and computers.





Macintosh LC Computers

Macintosh	Macintosh 12" Monochrome Display (M0298LL/A)	Macintosh 12" RGB Display (M0297LL/C)	Apple Basic Color Monitor—14" (M9108LL/B)	Apple Color Plus 14" Display (M2346LL/A)
LC/LC II 256K VRAM 512K VRAM	16 grays 256 grays	256 colors 32,768 colors	16 colors 256 colors	16 colors 256 colors
LC III 512K VRAM 768K VRAM	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
LC 475 512K VRAM 1 MB VRAM	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
LC 630	256 grays	32,768 colors	32,768 colors	32,768 colors





Macintosh	Apple Performa Display—14" (M9101LL/D)	Apple Performa Display Plus—14" (M9102LL/D)	13/14/15/17/20" Displays, Multiple Scan 640 x 480 ^a
LC/LC II 256K VRAM 512K VRAM	16 colors 256 colors	16 colors 256 colors	16 colors ^b 256 colors ^b
LC III 512K VRAM 768K VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
LC 475 512K VRAM 1 MB VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
LC 630	32,768 colors	32,768 colors	32,768 colors

a. Includes AppleColor High-Res RGB Monitor—13" (M0401LL/D), Macintosh Color Display—14" (M1198LL/B), Apple AudioVision 14 Display (B1247LL), Multiple Scan 14 (M3935LL), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL), AppleVision 1710AV Display (M3323LL), AppleVision 1710 (M3322LL), Multiple Scan 1705 (M4434LL)

b. Requires a display adapter with Multiple Scan 15 display.

Note: Macintosh LC 550 has a built-in Trinitron display with video output of 256 colors with 512K VRAM and 32,768 colors with 1 MB VRAM.

Note: Macintosh LC 575 has a built-in Trinitron display with video output of 32,768 colors.





Macintosh	Macintosh 16" Color Display, Multiple Scan 15, 17, 20 832 x 624^a	Macintosh Portrait Display—15" (M0404)	Apple 2-Page Monochrome Monitor—21" (M0402)	Multiple Scan 17 and 20 1024 x 768^b
LC/LC II 256K VRAM 512K VRAM	N/A N/A	N/A N/A	N/A N/A	N/A N/A
LC III 512K VRAM 768K VRAM	256 colors ^c 256 colors ^c	16 grays 256 grays	N/A N/A	N/A N/A
LC 475 512K VRAM 1 MB VRAM	256 colors 32,768 colors	16 grays 256 grays	16 grays 256 grays	16 colors 256 colors
LC 630	256 colors	N/A	N/A	N/A

a. Macintosh 16" Color Display (M1044LL/A), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

b. Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

c. Requires Display adapter to use Multiple Scan.





Macintosh	Macintosh 21" Color Display, Multiple Scan 20 1152 x 870^a	AppleVision 1710AV, 1710 1280 x 1024^b
LC/LC II 256K VRAM 512K VRAM	N/A N/A	N/A N/A
LC III 512K VRAM 768K VRAM	N/A N/A	N/A N/A
LC 475 512K VRAM 1 MB VRAM	256 grays 256 colors	N/A N/A
LC 630	256 grays	N/A

a. Macintosh 21" Color Display (M5812LL/A), Multiple Scan 20 Display (M2612LL/A, M2612LL/B)

b. AppleVision 1710AV Display (M3323LL), AppleVision 1710 Display (M3322LL)





Macintosh Performa Computers

Macintosh	Macintosh 12" Monochrome Display (M0298LL/A)	Macintosh 12" RGB Display (M0297LL/C)	Apple Basic Color Monitor—14" (M9108LL/B)	Apple Color Plus 14" Display (M2346LL/A)
Performa 400, 405, 410, 430LC 256K VRAM 512K VRAM	16 grays 256 grays	256 colors 32,768 colors	16 colors 256 colors	16 colors 256 colors
Performa 450 512K VRAM 768K VRAM	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Performa 460, 466, 467 512K VRAM 768K VRAM	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Performa 475, 476 512K VRAM 1 MB VRAM	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Performa 600, 600CD 512K VRAM 1 MB VRAM	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Performa 630	256 grays	32,768 colors	32,768 colors	32,768 colors
Performa 6200	256 grays	32,768 colors	32,768 colors	32,768 colors
Performa 6300	256 grays	32,768 colors	32,768 colors	32,768 colors
Performa 6400	256 grays	32,768 colors	32,768 colors	32,768 colors

Note: Macintosh Performa 550, 560, 575, 577, 578 computers have built-in Trinitron displays with video output of 32,768 colors.

Note: Macintosh TV has a built-in Trinitron display with video output of 256 colors.





Macintosh	Apple Performa Display—14" (M9101LL/D)	Apple Performa Display Plus—14" (M9102LL/D)	13/14" Displays, Multiple Scan 640 x 480^a
Performa 400, 405, 410, 430LC 256K VRAM 512K VRAM	16 colors 256 colors	16 colors 256 colors	16 colors ^b 256 colors ^b
Performa 450 512K VRAM 768K VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Performa 460, 466, 467 512K VRAM 768K VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Performa 475, 476 512K VRAM 1 MB VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Performa 600, 600CD 512K VRAM 1 MB VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Performa 630	32,768 colors	32,768 colors	32,768 colors
Performa 6200	32,768 colors	32,768 colors	32,768 colors
Performa 6300	32,768 colors	32,768 colors	32,768 colors
Performa 6400	32,768 colors	32,768 colors	32,768 colors

a. Includes AppleColor High-Res RGB Monitor—13" (M0401LL/D), Macintosh Color Display—14" (M1198LL/B), Apple AudioVision 14 Display (B1247LL), Multiple Scan 14 (M3935LL), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL), AppleVision 1710AV Display (M3323LL), AppleVision 1710 (M3322LL), Multiple Scan 1705 (M4434LL)

b. Requires a display adapter with Multiple Scan 15 Display.





Macintosh	Macintosh 16" Color Display, Multiple Scan 15, 17, 20 832 x 624^a	Macintosh Portrait Display—15" (M0404)	Apple 2-Page Monochrome Monitor—21" (M0402)	Multiple Scan 17 and 20 1024 x 768^b
Performa 400, 405, 410, 430LC 256K VRAM 512K VRAM	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Performa 450 512K VRAM 768K VRAM	256 colors ^c 256 colors ^c	16 grays 256 grays	N/A N/A	N/A N/A
Performa 460, 466, 467 512K VRAM 768K VRAM	256 colors ^c 256 colors ^c	16 grays 256 grays	N/A N/A	N/A N/A
Performa 475, 476 512K VRAM 1 MB VRAM	256 colors 32,768 colors	16 grays 256 grays	16 grays 256 grays	16 colors 256 colors
Performa 600, 600CD 512K VRAM 1 MB VRAM	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Performa 630 ^d	256 colors	N/A	N/A	N/A
Performa 6200	256 colors	N/A	N/A	N/A
Performa 6300	256 colors	N/A	N/A	N/A
Performa 6400	256 colors	N/A	N/A	N/A

a. Macintosh 16" Color Display (M1044LL/A), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

b. Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

c. Requires display adapter to use Multiple Scan Displays at this resolution.

d. The Macintosh 630 family computers can use larger monitors such as the Multiple Scan 17 and 20. However the maximum resolution on these monitors is 832 x 624, and at this resolution they cannot support the TV/video system.





Macintosh	Macintosh 21" Color Display, Multiple Scan 20 1152 x 870^a	AppleVision 1710AV, 1710 1280 x 1024^b
Performa 400, 405, 410, 430LC 256K VRAM 512K VRAM	N/A N/A	N/A N/A
Performa 450 512K VRAM 768K VRAM	N/A N/A	N/A N/A
Performa 460, 466, 467 512K VRAM 768K VRAM	N/A N/A	N/A N/A
Performa 475, 476 512K VRAM 1 MB VRAM	16 colors 256 colors	N/A N/A
Performa 600, 600CD 512K VRAM 1 MB VRAM	N/A N/A	N/A N/A
Performa 630 ^c	N/A	N/A
Performa 6200	N/A	N/A
Performa 6300	N/A	N/A
Performa 6400	N/A	N/A

a. Macintosh 21" Color Display (M5812LL/A), Multiple Scan 20 Display (M2612LL/A, M2612LL/B)

b. AppleVision 1710AV Display (M3323LL), AppleVision 1710 Display (M3322LL)

c. The Macintosh 630 family computers can use larger monitors such as the Multiple Scan 17 and 20. However the maximum resolution on these monitors is 832 x 624, and at this resolution they cannot support the TV/video system.





Macintosh II Computers

Macintosh	Macintosh 12" Monochrome Display (M0298LL/A)	Macintosh 12" RGB Display (M0297LL/C)	Apple Basic Color Color Monitor—14" (M9108LL/B)	Apple Color Plus 14" Display (M2346LL/A)
IIsi, IIci	256 grays	256 colors	N/A	256 colors
IIvi, IIvx 512K VRAM 1 MB VRAM	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors

Note: Macintosh II, IIx, IIcx, IIfx computers have no built-in video and require a video card.





Macintosh	Apple Performa Display—14" (M9101LL/D)	Apple Performa Display Plus—14" (M9102LL/D)	13/14/15/17/20" Displays, Multiple Scan 640 x 480^a
IIsi, IIci	256 colors	256 colors	256 colors ^b
IIvi, IIvx 512K VRAM 1 MB VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors ^c 32,768 colors ^c

a. Includes AppleColor High-Res RGB Monitor—13" (M0401LL/D), Macintosh Color Display—14" (M1198LL/B), Apple AudioVision 14 Display (B1247LL), Multiple Scan 14 (M3935LL), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL), AppleVision 1710AV Display (M3323LL), AppleVision 1710 (M3322LL), Multiple Scan 1705 (M4434LL)

b. The Multiple Scan 15 Display is not compatible with the Macintosh IIsi and IIci

c. Requires a display adapter with Multiple Scan 15 Display.





Macintosh	Macintosh 16" Color Display, Multiple Scan 15, 17, 20 832 x 624^a	Macintosh Portrait Display—15" (M0404)	Apple 2-Page Monochrome Monitor—21" (M0402)	Multiple Scan 17 and 20 1024 x 768^b
IIsi, IIci	N/A	16 grays	N/A	N/A
IIvi, IIvx 512K VRAM 1 MB VRAM	N/A N/A	N/A N/A	N/A N/A	N/A N/A

a. Macintosh 16" Color Display (M1044LL/A), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

b. Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)





Macintosh	Macintosh 21" Color Display, Multiple Scan 20 1152 x 870^a	AppleVision 1710AV, 1710 1280 x 1024^b
IIsi, IIci	N/A	N/A
IIvi, IIvx 512K VRAM 1 MB VRAM	N/A N/A	N/A N/A

a. Macintosh 21" Color Display (M5812LL/A), Multiple Scan 20 Display (M2612LL/A, M2612LL/B)

b. AppleVision 1710AV Display (M3323LL), AppleVision 1710 Display (M3322LL)





Macintosh Centris/Quadra Computers

Macintosh	Macintosh 12" Monochrome Display (M0298LL/A)	Macintosh 12" RGB Display (M0297LL/C)	Apple Basic Color Monitor—14" (M9108LL/B)	Apple Color Plus 14" Display (M2346LL/A)
Quadra 605 512K VRAM 1 MB VRAM	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Centris/ Quadra 610, 650 512K VRAM 1 MB	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Centris/ Quadra 660AV 1 MB VRAM	256 grays	32,768 colors	32,768 colors	32,768 colors
Quadra 630	256 grays	32,768 colors	32,768 colors	32,768 colors
Quadra 700 512K VRAM 1 MB VRAM 2 MB VRAM	256 grays 256 grays 256 grays	256 colors 16.7 million colors 16.7 million colors	256 colors 256 colors 16.7 million colors	256 colors 256 colors 16.7 million colors
Quadra 800 512K VRAM 1 MB VRAM	256 grays 256 grays	32,768 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Quadra 840AV 1 MB VRAM 2 MB VRAM	256 grays 256 grays	32,768 colors 16.7 million colors	32,768 colors 16.7 million colors	32,768 colors 16.7 million colors
Quadra 900 1 MB VRAM 2 MB VRAM	256 grays 256 grays	16.7 million colors 16.7 million colors	256 colors 16.7 million colors	256 colors 16.7 million colors
Quadra 950 1 MB VRAM 2 MB VRAM	256 grays 256 grays	32,768 colors 16.7 million colors	32,768 colors 16.7 million colors	32,768 colors 16.7 million colors

Note: For the AV computers, pixel and viewable color numbers are for computer graphics only. When video is enabled, VRAM is split evenly between graphics and video.





Macintosh	Apple Performa Display—14" (M9101LL/D)	Apple Performa Display Plus—14" (M9102LL/D)	13/14/15/17/20" Displays, Multiple Scan 640 x 480^a
Quadra 605 512K VRAM 1 MB VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Centris/Quadra 610, 650 512K VRAM 1 MB VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Centris/Quadra 660AV 1 MB VRAM	32,768 colors	32,768 colors	32,768 colors
Quadra 630	32,768 colors	32,768 colors	32,768 colors
Quadra 700 512K VRAM 1 MB VRAM 2 MB VRAM	256 colors 256 colors 16.7 million colors	256 colors 256 colors 16.7 million colors	256 colors 256 colors 16.7 million colors
Quadra 800 512K VRAM 1 MB VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
Quadra 840AV 1 MB VRAM 2 MB VRAM	32,768 colors 16.7 million colors	32,768 colors 16.7 million colors	32,768 colors 16.7 million colors
Quadra 900 1 MB VRAM 2 MB VRAM	256 colors 16.7 million colors	256 colors 16.7 million colors	256 colors 16.7 million colors
Quadra 950 1 MB VRAM 2 MB VRAM	256 colors 16.7 million colors	256 colors 16.7 million colors	256 colors 16.7 million colors

a. Includes AppleColor High-Res RGB Monitor—13" (M0401LL/D), Macintosh Color Display—14" (M1198LL/B), Apple AudioVision 14 Display (B1247LL), Multiple Scan 14 (M3935LL), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL), AppleVision 1710AV Display (M3323LL), AppleVision 1710 (M3322LL), Multiple Scan 1705 (M4434LL)





Macintosh	Macintosh 16" Color Display, Multiple Scan 15, 17, 20 832 x 624^a	Macintosh Portrait Display—15" (M0404)	Apple 2-Page Monochrome Monitor—21" (M0402)	Multiple Scan 17 and 20 1024 x 768^b
Quadra 605 512K VRAM 1 MB VRAM	256 colors 32,768 colors	16 grays 256 grays	16 grays 256 grays	16 colors 256 colors
Centris/Quadra 610, 650 512K VRAM 1 MB VRAM	256 colors 32,768 colors	16 grays 256 grays	16 grays 256 grays	16 colors 256 colors
Centris/Quadra 660AV 1 MB VRAM	32,768 colors	256 grays	256 grays	256 colors
Quadra 630 ^c	256 colors	N/A	N/A	N/A
Quadra 700 512K VRAM 1 MB VRAM 2 MB VRAM	256 colors 256 colors 16.7 million colors	16 grays 256 grays 256 grays	16 grays 256 grays 256 grays	N/A N/A N/A
Quadra 800 512K VRAM 1 MB VRAM	256 colors 256 colors	16 grays 256 grays	16 grays 256 grays	16 colors 256 colors
Quadra 840AV 1 MB VRAM 2 MB VRAM	32,768 colors 16.7 million colors	256 grays 256 grays	256 grays 256 grays	256 colors 32,768 colors
Quadra 900 1 MB VRAM 2 MB VRAM	256 colors 16.7 million colors	256 grays 256 grays	256 grays 256 grays	N/A N/A
Quadra 950 1 MB VRAM 2 MB VRAM	256 colors 16.7 million colors	256 grays 256 grays	256 grays 256 grays	256 colors 256 colors

a. Macintosh 16" Color Display (M1044LL/A), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

b. Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

c. The Macintosh 630 family computers can use larger monitors such as the Multiple Scan 17 and 20. However the maximum resolution is 832 x 624, and at this resolution they cannot support TV/video.





Macintosh	Macintosh 21" Color Display, Multiple Scan 20 1152 x 870^a	AppleVision 1710AV, 1710 1280 x 1024^b
Quadra 605 512K VRAM 1 MB VRAM	16 colors 256 colors	N/A N/A
Centris/Quadra 610, 650 512K VRAM 1 MB VRAM	16 colors 256 colors	N/A N/A
Centris/Quadra 660AV 1 MB VRAM	256 colors	N/A
Quadra 630 ^c	N/A	N/A
Quadra 700 512K VRAM 1 MB VRAM 2 MB VRAM	16 colors 256 colors 256 colors	N/A N/A N/A
Quadra 800 512K VRAM 1 MB VRAM	16 colors 256 colors	N/A N/A
Quadra 840AV 1 MB VRAM 2 MB VRAM	256 colors 32,768 colors	N/A N/A
Quadra 900 1 MB VRAM 2 MB VRAM	256 colors 256 colors	N/A N/A
Quadra 950 1 MB VRAM 2 MB VRAM	256 colors 32,768 colors	N/A N/A

a. Macintosh 21" Color Display (M5812LL/A), Multiple Scan 20 Display (M2612LL/A, M2612LL/B)

b. AppleVision 1710AV Display (M3323LL), AppleVision 1710 Display (M3322LL)

c. The Macintosh 630 family computers can use larger monitors such as the Multiple Scan 17 and 20. However the maximum resolution is 832 x 624, and at this resolution they cannot support TV/video.





Power Macintosh Computers

Power Macintosh	Macintosh 12" Monochrome Display (M0298LL/A)	Macintosh 12" RGB Display (M0297LL/C)	Apple Basic Color Monitor—14" (M9108LL/B)	Apple Color Plus 14" Display (M2346LL/A)
4400 1 MB 2 MB 4 MB	N/A N/A N/A	32,768 colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors
5400 1 MB	N/A	N/A	N/A	N/A
6100 HDI-45 ^a	256 grays	32,768 colors	32,768 colors	32,768 colors
6100AV 2 MB	256 grays	16.7 million colors	16.7 million colors	16.7 million colors
6500 1 MB	N/A	N/A	N/A	N/A
7100 HDI-45 ^a 1 MB VRAM 2 MB VRAM	256 grays 256 grays 256 grays	32,768 colors 32,768 colors 16.7 million colors	32,768 colors 32,768 colors 16.7 million colors	32,768 colors 32,768 colors 16.7 million colors
7100AV 2 MB	256 grays	16.7 million colors	16.7 million colors	16.7 million colors
7200 1 MB 2 MB VRAM 4 MB VRAM	32,768 colors 16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors
7300 2 MB 4 MB	N/A N/A	16.7 million colors 16.7 million colors	N/A N/A	N/A N/A
7500 2 MB 4 MB VRAM	256 grays 256 grays	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors
7600 2 MB 4 MB	256 grays 256 grays	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors
8100 HDI-45 ^a 2 MB VRAM 4 MB VRAM	256 grays 256 grays 256 grays	32,768 colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors
8100AV	256 grays	16.7 million colors	16.7 million colors	16.7 million colors
8500 2 MB 4 MB VRAM	256 grays 256 grays	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors
9500/120 2 MB VRAM 4 MB VRAM	256 grays 256 grays	N/A ^b N/A ^b	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors
9600 4 MB	N/A	16.7 million colors	N/A	N/A

a. HDI-45 port makes use of 640K of internal DRAM memory.

b. The Macintosh 12-inch RGB display cannot be used with the Power Macintosh 9500 series. This monitor is incorrectly listed as compatible in the booklet included with each unit titled "Technical Information: Specifications for Power Macintosh 9500 Series Computers."

Note: For G3 systems, see the Tech Info Library article 30250, titled "Power Mac G3 & G3 All-In-One: Video RAM upgrade."

Note: For the AV computers, pixel and viewable color numbers are for computer graphics only. When video is enabled, VRAM is split evenly between graphics and video.





Power Macintosh	Apple Performa Display—14" (M9101LL/D)	Apple Performa Display Plus—14" (M9102LL/D)	13/14/15/17/20" Displays, Multiple Scan 640 x 480^a
4400 1 MB 2 MB 4 MB	N/A N/A N/A	N/A N/A N/A	32,768 colors 16.7 million colors 16.7 million colors
5400 1 MB	N/A	N/A	32,768 colors
6100 HDI-45 ^b	32,768 colors	32,768 colors	32,768 colors
6100AV 2 MB VRAM	16.7 million colors	16.7 million colors	16.7 million colors
6500 2 MB	N/A	N/A	16.7 million colors
7100 HDI-45 ^a 1 MB VRAM 2 MB VRAM	32,768 colors 32,768 colors 16.7 million colors	32,768 colors 32,768 colors 16.7 million colors	32,768 colors 32,768 colors 16.7 million colors
7100AV 2 MB VRAM	16.7 million colors	16.7 million colors	16.7 million colors
7200 1 MB VRAM 2 MB VRAM 4 MB VRAM	32,768 colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors
7300 2 MB 4 MB VRAM	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors
7500 2 MB VRAM 4 MB VRAM	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors
7600 and 8600 2 MB 4 MB	N/A N/A	N/A N/A	16.7 million colors 16.7 million colors
8100 HDI-45 ^a 2 MB VRAM 4 MB VRAM	32,768 colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors	32,768 colors 16.7 million colors 16.7 million colors
8100AV	16.7 million colors	16.7 million colors	16.7 million colors
8500 2 MB VRAM 4 MB VRAM	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors
9500/120 2 MB VRAM 4 MB VRAM	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors	16.7 million colors 16.7 million colors
9600 4 MB	N/A	N/A	16.7 million colors

a. Includes AppleColor High-Res RGB Monitor—13" (M0401LL/D), Macintosh Color Display—14" (M1198LL/B), Apple AudioVision 14 Display (B1247LL), Multiple Scan 14 (M3935LL), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL), AppleVision 1710AV Display (M3323LL), AppleVision 1710 (M3322LL), Multiple Scan 1705 (M4434LL)

b. HDI-45 port makes use of 640K of internal DRAM memory.





Power Macintosh	Macintosh 16" Color Display, Multiple Scan 15, 17, 20 832 x 624^a	Macintosh Portrait Display—15" (M0404)	Apple 2-Page Monochrome Monitor—21" (M0402)	Multiple Scan 17 and 20 1024 x 768^b
4400 1 MB 2 MB 4 MB	256 colors 32,768 colors 16.7 million colors	N/A N/A N/A	N/A N/A N/A	256 colors 32,768 colors 16.7 million colors
5400 ^d 1 MB	256 colors	N/A	N/A	N/A
6100 HDI-45 ^c	256 colors	256 grays	N/A	N/A
6100AV 2 MB	16.7 million colors	256 grays	256 grays	32,768 colors
6500 ^{e, f} 2 MB 2 MB 2 MB	16.7 million colors 32,768 colors 16.7 million colors	N/A	N/A	32,768 colors
7100 HDI-45 ^a 1 MB VRAM 2 MB VRAM	256 colors 32,768 colors 16.7 million colors	256 grays 256 grays 256 grays	N/A 256 grays 256 grays	N/A 256 colors 32,768 colors
7100AV 2 MB	16.7 million colors	256 grays	256 grays	32,768 colors
7200 1 MB 2 MB VRAM 4 MB VRAM	32,768 colors 16.7 million colors 16.7 million colors	256 grays 256 grays 256 grays	256 grays 256 grays 256 grays	256 colors 32,768 colors 16.7 million colors
7300 2 MB 4 MB VRAM	16.7 million colors 16.7 million colors	N/A N/A	256 grays 256 grays	32,768 colors 16.7 million colors
7500, 7600, 8600 2 MB 4 MB VRAM	16.7 million colors 16.7 million colors	256 grays 256 grays	256 grays 256 grays	32,768 colors 16.7 million colors
8100 HDI-45 ^a 2 MB VRAM 4 MB VRAM	256 colors 16.7 million colors 16.7 million colors	256 grays 256 grays 256 grays	N/A 256 grays 256 grays	N/A 32,768 colors 16.7 million colors
8100AV 2 MB	16.7 million colors	256 grays	256 grays	32,768 colors
8500 2 MB 4 MB VRAM	16.7 million colors 16.7 million colors	256 grays 256 grays	256 grays 256 grays	32,768 colors 16.7 million colors
9500/120 2 MB VRAM 4 MB VRAM	16.7 million colors 16.7 million colors	256 grays 256 grays	256 grays 256 grays	32,768 colors 16.7 million colors
9600 4 MB	16.7 million colors	256 grays	256 grays	16.7 million colors

a. Macintosh 16" Color Display (M1044LL/A), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

b. Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

c. HDI-45 port makes use of 640K of internal DRAM memory.

d. This is a built-in 15-in display.

e. 16-bit only supported at 1024x768.

f. 16" supported at 832x624 only.





Power Macintosh	Macintosh 21" Color Display, Multiple Scan 20 1152 x 870^a	AppleVision 1710AV, 1710 1280 x 1024^b
4400 1 MB 2 MB 4 MB	256 colors 32,768 colors 32,768 colors	N/A 256 colors 256 colors
5400 1MB	N/A	N/A
6100 HDI-45 ^c	N/A	N/A
6100AV 2 MB	32,768 colors	N/A
6500 1MB	256 colors	N/A
7100 HDI-45 ^a 1 MB VRAM 2 MB VRAM	N/A 256 colors 32,768 colors	N/A N/A N/A
7100AV 2 MB	32,768 colors	N/A
7200 1 MB 2 MB VRAM 4 MB VRAM	256 colors 32,768 colors 32,768 colors	N/A ^d N/A ^d N/A ^d
7300 2 MB 4 MB VRAM	32,768 colors 16.7 million colors	32,768 colors 32,768 colors
7500 2 MB 4 MB VRAM	32,768 colors 16.7 million colors	N/A ^d N/A ^d
7600 2 MB 4 MB VRAM	32,768 colors 16.7 million colors	256 colors 32,768 colors
8100 HDI-45 ^a 2 MB VRAM 4 MB VRAM	N/A 32,768 colors 16.7 million colors	N/A N/A N/A
8100AV 2 MB	32,768 colors	N/A
8500 2 MB 4 MB VRAM	32,768 colors 32,768 colors	N/A ^d N/A ^d
9500/120 2 MB VRAM 4 MB VRAM	32,768 colors 16.7 million colors	N/A ^d N/A ^d
9600 4 MB	16.7 million colors	32,768 colors

a. Macintosh 21" Color Display (M5812LL/A), Multiple Scan 20 Display (M2612LL/A, M2612LL/B)

b. AppleVision 1710AV Display (M3323LL), AppleVision 1710 Display (M3322LL)

c. HDI-45 port makes use of 640K of internal DRAM memory.

d. When the ATI graphics card is used you can get 256 colors with 2 MB of VRAM on the card. You get 32,768 colors with 4 MB of VRAM on the ATI card.





Macintosh PowerBook Computers

Macintosh	Macintosh 12" Monochrome Display (M0298LL/A)	Macintosh 12" RGB Display (M0297LL/C)	Apple Basic Color Monitor—14" (M9108LL/B)	Apple Color Plus 14" Display (M2346LL/A)
PowerBook 160, 165, 165c, 180, 180c	256 grays	256 colors	256 colors	256 colors
PowerBook 500 series	256 grays	256 colors	256 colors	256 colors
PowerBook 3400 series	256 grays	32,768 colors		
PowerBook Duo Dock 512K VRAM 1 MB VRAM	256 grays 256 grays	256 colors 32,768 colors	256 colors 32,768 colors	256 colors 32,768 colors
PowerBook MiniDock 512K VRAM	256 grays	256 colors	256 colors	256 colors
PowerBook Duo Dock II	256 grays	32,768 colors	32,768 colors	32,768 colors
PowerBook G3	256 grays	16.7 million colors	N/A	N/A

3400 Notes:

- a The computer does not provide a display with 2 bits per pixel.
- b An SVGA monitor's display resolution will be 640x480 pixels. The user can switch to a higher resolution by using the Monitors control panel or the control strip. The resolution set by the user will be used the next time the computer is started up.
- c If the external monitor can display 800x600 pixels at 60 Hz, the PowerBook 3400 computer can display simultaneously on both the external monitor and the flat panel display. This mode of display, called the Simulscan, provides the same information on both displays.





Macintosh	Apple Performa Display—14" (M9101LL/D)	Apple Performa Display Plus—14" (M9102LL/D)	13/14/15/17/20" Displays, Multiple Scan 640 x 480^a
PowerBook 160, 165, 165c, 180, 180c	256 colors	256 colors	256 colors
PowerBook 190 series	256 colors	256 colors	256 colors
PowerBook 500 series	256 colors	256 colors	256 colors
PowerBook 1400 series	256 colors	256 colors	256 colors
PowerBook 3400 series			32,768 color
PowerBook 5300 series	256 colors	256 colors	256 colors
PowerBook Duo Dock 512K VRAM 1 MB VRAM	256 colors 32,768 colors	256 colors 32,768 colors	256 colors ^b 32,768 colors ^b
PowerBook MiniDock 512K VRAM	256 colors	256 colors	256 colors
PowerBook Duo Dock II	32,768 colors	32,768 colors	32,768 colors
PowerBook G3			16.7 million colors

a. Includes AppleColor High-Res RGB Monitor—13" (M0401LL/D), Macintosh Color Display—14" (M1198LL/B), Apple AudioVision 14 Display (B1247LL), Multiple Scan 14 (M3935LL), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL), AppleVision 1710AV Display (M3323LL), AppleVision 1710 (M3322LL), Multiple Scan 1705 (M4434LL)

b. Requires display adapter to display additional resolutions, unless System 7.5 is installed.





Macintosh	Macintosh 16" Color Display, Multiple Scan 15, 17, 20 832 x 624^a	Macintosh Portrait Display—15" (M0404)	Apple 2-Page Monochrome Monitor—21" (M0402)	Multiple Scan 17 and 20 1024 x 768^b
PowerBook 160, 165, 165c, 180, 180c	256 colors ^c	256 grays	N/A	N/A
PowerBook 190 series	256 colors	256 grays	N/A	N/A
PowerBook 500 series	256 colors	256 grays	N/A	N/A
PowerBook 1400 series	256 colors	256 grays	N/A	N/A
PowerBook 3400 series	256 colors	N/A	N/A	256 grays
PowerBook 5300 series	256 colors	256 grays	N/A	N/A
PowerBook Duo Dock 512K VRAM 1 MB VRAM	256 colors 32,768 colors ^d	256 grays 256 grays	N/A N/A	N/A N/A
PowerBook MiniDock 512K VRAM	256 colors	256 grays	N/A	N/A
PowerBook Duo Dock II	32,768 colors	256 grays	256 grays	256 colors
PowerBook G3	16.7 million colors	N/A	N/A	32,768 colors

a. Macintosh 16" Color Display (M1044LL/A), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

b. Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

c. Requires display adapter to use Multiple Scan Displays at this resolution.

d. The Duo Dock requires a video adapter to change resolutions unless System 7.5 is installed.





Macintosh	Macintosh 21" Color Display, Multiple Scan 20 1152 x 870^a	AppleVision 1710AV, 1710 1280 x 1024^b
PowerBook 160, 165, 165c, 180, 180c	N/A	N/A
PowerBook 500 series	N/A	N/A
PowerBook 3400 series	N/A	N/A
PowerBook Duo Dock 512K VRAM 1 MB VRAM	N/A N/A	N/A N/A
PowerBook MiniDock 512K VRAM	N/A	N/A
PowerBook Duo Dock II	256 colors	N/A
PowerBook G3	N/A	N/A

a. Macintosh 21" Color Display (M5812LL/A), Multiple Scan 20 Display (M2612LL/A, M2612LL/B)

b. AppleVision 1710AV Display (M3323LL), AppleVision 1710 Display (M3322LL)





Video Cards

Display Card	Macintosh 12" Monochrome Display (M0298LL/A)	Macintosh 12" RGB Display (M0297LL/C)	Apple Basic Color Monitor—14" (M9108LL/B)	Apple Color Plus 14" Display (M2346LL/A)
Macintosh II	256 grays	N/A	N/A	16 colors
2-Page Mono	N/A	N/A	N/A	N/A
Portrait	N/A	N/A	N/A	N/A
Mono	2 grays	N/A	N/A	N/A
High-Res ^a	16 grays	N/A	16 colors	16 colors
Ext High-Res	256 grays	N/A	N/A	256 colors
4•8 ^b	256 grays	N/A	256 colors	256 colors
8•24	256 grays	16.7 million colors	N/A	16.7 million colors
8•24GC	256 grays	16.7 million colors	N/A	16.7 million colors
Display Card 24 AC	256 grays	16.7 million colors	N/A	16.7 million colors

a. Can be upgraded with 8 Macintosh II Video Expansion RAM chips (Service PN 334-002) for 256 grays/colors.

b. The 4•8 can be upgraded to 8•24 by adding two VRAM SIMMs (Service PN 661-0609).





Display Card	Apple Performa Display—14" (M9101LL/D)	Apple Performa Display Plus—14" (M9102LL/D)	13/14/15/17/20" Displays, Multiple Scan 640 x 480^a
Macintosh II	N/A	N/A	N/A
2-Page Mono	N/A	N/A	N/A
Portrait	N/A	N/A	N/A
Mono	N/A	N/A	N/A
High-Res ^b	16 colors	16 colors	16 colors
Ext High-Res	256 colors	256 colors	256 colors
4•8 ^c	256 colors	256 colors	256 colors
8•24	16.7 million colors	16.7 million colors	16.7 million colors
8•24GC	16.7 million colors	16.7 million colors	16.7 million colors
Display Card 24 AC	16.7 million colors	16.7 million colors	16.7 million colors

a. Includes AppleColor High-Res RGB Monitor—13" (M0401LL/D), Macintosh Color Display—14" (M1198LL/B), Apple AudioVision 14 Display (B1247LL), Multiple Scan 14 (M3935LL), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL), AppleVision 1710AV Display (M3323LL), AppleVision 1710 (M3322LL), Multiple Scan 1705 (M4434LL)

b. Can be upgraded with 8 Macintosh II Video Expansion RAM chips (Service PN 334-002) for 256 grays/colors.

c. The 4•8 can be upgraded to 8•24 by adding two VRAM SIMMs (Service PN 661-0609).





Display Card	Macintosh 16" Color Display, Multiple Scan 15, 17, 20 832 x 624^a	Macintosh Portrait Display—15" (M0404)	Apple 2-Page Monochrome Monitor—21" (M0402)	Multiple Scan 17 and 20 1024 x 768^b
Macintosh II	N/A	N/A	N/A	N/A
2-Page Mono	N/A	N/A	4 grays	N/A
Portrait	N/A	4 grays	N/A	N/A
Mono	N/A	N/A	N/A	N/A
High-Res ^c	N/A	N/A	N/A	N/A
Ext High-Res	N/A	N/A	N/A	N/A
4•8 ^d	256 colors ^{e f}	16 grays	16 grays	N/A
8•24	256 colors ^{e g}	256 grays	256 grays	N/A
8•24GC	32,768 colors ^{e g}	256 grays	256 grays	N/A
Display Card 24 AC	16.7 million colors	256 grays	256 grays	16.7 million colors

a. Macintosh 16" Color Display (M1044LL/A), Multiple Scan 15 (M3089LL), Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

b. Multiple Scan 17 (M2611LL), Multiple Scan 20 (M2612LL)

c. Can be upgraded with 8 Macintosh II Video Expansion RAM chips (Service PN 334-002) for 256 grays/colors.

d. The 4•8 can be upgraded to 8•24 by adding two VRAM SIMMs (Service PN 661-0609).

e. Requires display adapter to use Multiple Scan Displays at this resolution.

f. Available with rev. B ROM.

g. Available with rev. B card.





Display Card	Macintosh 21" Color Display, Multiple Scan 20 1152 x 870^a	AppleVision 1710AV, 1710 1280 x 1024^b
Macintosh II	N/A	N/A
2-Page Mono	N/A	N/A
Portrait	N/A	N/A
Mono	N/A	N/A
High-Res ^c	N/A	N/A
Ext High-Res	N/A	N/A
4•8 ^d	16 colors ^e	N/A
8•24	256 colors ^e	N/A
8•24GC	256 colors ^e	N/A
Display Card 24 AC	16.7 million colors	N/A

a. Macintosh 21" Color Display (M5812LL/A), Multiple Scan 20 Display (M2612LL/A, M2612LL/B)

b. AppleVision 1710AV Display (M3323LL), AppleVision 1710 Display (M3322LL)

c. Can be upgraded with 8 Macintosh II Video Expansion RAM chips (Service PN 334-002) for 256 grays/colors.

d. The 4•8 can be upgraded to 8•24 by adding two VRAM SIMMs (Service PN 661-0609).

e. Requires display adapter to use Multiple Scan Displays at this resolution.

