

# Tech Info Library

## Power Macintosh 5200/75 LC: Video In/Out Options (1/96)

Revised: 1/8/96 Security: Everyone

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TOPIC -----

This article documents video in and out options for the Power Macintosh 5200/75 LC and Performa 5200 series computers.

DISCUSSION -----

#### Built-in Monitor

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The Power Macintosh 5200 uses a built-in 15-inch multi scan monitor as its output display device. The monitor supports three pixel display sizes: 640x480, 800x600, and 824x632. The initial power-on display size is 640x480. The monitor's resolution is switchable on the fly from the Control Panel menu.

#### Optional Video Mirror

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Video on the Power Macintosh 5200/75 LC includes an optional feature called video display mirror output. This feature makes the video information concurrently available to the built-in display and to the external display port. Connection for the video mirroring is made possible by installing the Apple External Video Connector (P/N M4099LL/A) to the logic board using a 22-pin connector. This connector adds a standard DB-15 video port to the back of the Power Macintosh 5200 for connecting an external monitor or LCD panel.

When using video mirroring, the image on the second monitor is the same as that on the built-in monitor. This mode is a very useful tool for presentations, so the presenter and audience see the same thing.

The video mirroring port supports several external monitor sizes: 640x480 14-inch color, 800x600 15-inch multi scan, 640x480 VGA, and 800x600 SVGA.

NOTE:

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The Apple 12-inch RGB color monitor (512x384) is not supported on the Apple External Video Connector.

## Optional Video Input

The Apple Video In System (p/n M2894LL/C) accepts video from an external source and displays it in a window on the computer's internal display. This is the same card used in the Quadra 630 and LC 630 computers. The card installs in a dedicated slot in the Power Macintosh 5200 LC and adds composite video in, S-video in, and stereo audio in ports to the back of the cpu.

The card accepts the following video formats: NTSC, PAL, and SECAM. The card's AV features are functionally the same as the Macintosh Quadra 660 AV with one exception: the video input card digitizes color video using a digital YUV format, not the 16-bit RGB format used by the Macintosh Quadra 660 AV.

This digitizing technique provides a cleaner picture because it leverages the strength of the transmission signal, the chrominance channel. The standard television signal carries more signal information in the chrominance channel than it carries in the luminance channel.

The Apple Video In System accepts input from external sources, such as a VCR or camcorder, or it can accept input from the optional internal TV tuner.

The default window size used to display the video input picture is 320x240; it can be resized up to 640x480 - full screen on a 14" monitor. Pixel-doubling is used on the large screen to enhance the  $320 \times 240$  pixel image.

Note: The Power Macintosh 5200/75 LC can not display live video from the video input module on monitors larger than 800x600 pixels.

Note: The video input card does not work with all monitors.

The optional Apple Video In System has a separate input connector named the DAV (digital audio/video) connector. The DAV connector makes the digitized data available to a card in the expansion slot — a card such as a video compressor or some other type of video processor card.

Note: The DAV connector on the Video-In card only provides limited functionality. It is not compatible with the Power Macintosh and Quadra AV DAV connector.

### Optional TV Tuner

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The optional TV tuner is a plug-in module that enables the computer, in conjunction with the video input module, to function as a television receiver with a remote control. The software associated with the TV tuner provides customized channel selection, password protection for disabled channels, frame capture, and video recording as a QuickTime movie. The TV Tuner requires the Video In card to work. The Apple Video/TV System (p/n M2896LL/C) includes both the Video in card (p/n M2894LL/C) and the TV tuner module.

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These are the same modules used in the Macintosh Quadra 630 and LC 630 computers. The tuner is available in NTSC, PAL, and SECAM versions.

#### Features include:

- 181 channel tuner (US version)
- Coaxial antenna connector (F-type for U.S. and Japan, ICE-type for Europe)
- TV picture in a resizable and movable window
- YUV format for improved clarity
- Support for closed caption and teletext
- Software password protection
- Automatic and manual channel programming
- Single remote control for TV and audio CD

Part numbers mentioned in this article are accurate as of this writing. Before ordering, verify that they are still correct as they are subject to change.

Article Change History:

08 Jan 1996 - Added information on 12-inch RGB monitor.

13 Nov 1995 - Reviewed for technical accuracy.

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