



New Features and Important Information About Your Power Macintosh G3

Your Power Macintosh G3 computer has been enhanced with one or more of the following options:

- Ultra Wide SCSI internal hard disk drive
- 10/100Base-T Ethernet card
- 128-bit 2D/3D professional graphics card with 8 megabytes (MB) of its own video memory (VRAM)
- 6 MB of logic board video memory (SGRAM)

Reinstalling system software

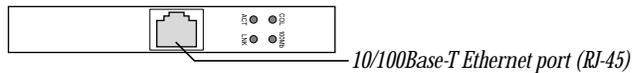
The system software components necessary to support your computer's new options are installed in the System Folder on your computer's hard disk.

If you reinstall system software, you may have to reinstall some of these software components separately. They may not be included in the system software Installer. To reinstall the software components, follow these steps:

- 1** Insert your *Power Macintosh G3* CD.
- 2** Open the folder titled Important Extra System Software.
- 3** Drag the items from the folder onto the System Folder on your hard disk.
Note: If the folder is empty, then all of the necessary software components are included in the system software Installer.
- 4** When you see a message asking if you want to put these items in the Extensions folder, click OK.
- 5** Restart your computer.

10/100Base-T network connection

If your computer came with the 10/100Base-T Ethernet option, a 10/100Base-T Ethernet card is installed in one of your computer's PCI slots. You can connect a cable for a 10/100Base-T Ethernet network to this card.



Note: The type of twisted-pair cable you use depends on whether you connect to 10Base-T or 100Base-T Ethernet. Category 5 twisted-pair cable must be used to connect to 100Base-T if you want to get the maximum speed from this connection.

Checking the status of a 10/100Base-T network connection

If you connect your computer to a network using the 10/100Base-T Ethernet card, you can check the card's LED indicators to monitor network activity. There are four indicators:

- **ACT (Activity):** Blinks when the 10/100Base-T Ethernet card is active
- **COL (Collision):** Glows when a network collision has occurred (a temporary condition that occurs when two computers on a network try to send data simultaneously)
- **LNK (Link):** Glows when a reliable 10 megabit (Mbit) or 100 Mbit network connection has been established
- **100Mb:** Glows when a reliable 100 Mbit link is established

10/100Base-T Ethernet card specifications

- **Open Transport:** Mac OS 7.5.2 or later, AppleShare, AppleTalk, NetWare for Macintosh, TCP/IP
- **Connector:** RJ-45 (for 10Base-T and 100Base-T)
- **Media, 10Base-T:** Cat 3, 4, or 5 UTP on 2 pairs up to 100 meters (m)
- **Media, 100Base-T:** Cat 5 UTP on 2 pairs up to 100 m
- **Bus interface:** PCI revision 2.0 and 2.1, share interrupt A
- **Channel speeds:** IEEE Auto Negotiation of 10Base-T and 100Base-TX
- **Communications:** IEEE 802.3u 100Base-TX; IEEE 802.3i 10Base-T
- **Controllers:** DECchip 21140, 32-bit internal processor per channel
- **Power:** 1.2 amperes (A) @ 5 volts (V) typical

Ultra Wide SCSI hard disk drive and PCI card

If your computer came with an Ultra Wide SCSI hard disk drive, the following additional components are installed in your computer:

- An internal Ultra Wide SCSI hard disk drive (in place of the standard IDE hard disk drive)
- An Ultra Wide SCSI card in one of your computer's PCI slots
- An internal Ultra Wide SCSI-3 chain that supports your internal hard disk and up to two additional internal devices (The Ultra Wide SCSI-3 chain can transfer data at up to 40 MB per second.)

Warning Do not connect any SCSI devices to the external 68-pin SCSI-3 connector or the internal 50-pin SCSI-2 connector on the PCI card that supports the internal hard disk. Connecting even one external SCSI device to the external 68-pin connector extends the overall cable length of the SCSI bus beyond the limit for which error-free operation can be guaranteed; the combined length of the internal cable and the external cable reduces the reliability of all the devices connected to the Ultra Wide SCSI-3 bus. Connecting a device to the internal 50-pin SCSI-2 connector will cause your Ultra Wide SCSI-3 devices to transfer data at the slower, SCSI-2 rate.

About the Ultra Wide SCSI-3 bus

You can connect up to three internal devices (including your internal hard disk) to the Ultra Wide SCSI-3 bus on this card. (You can't connect more than three because there isn't enough space in the computer.)

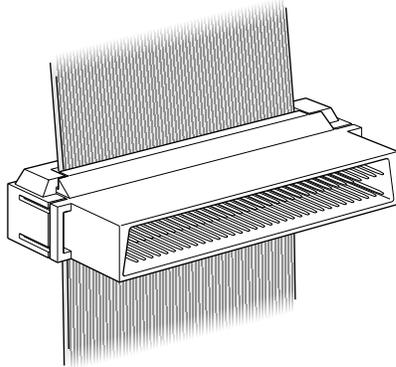
All devices on the same SCSI bus must have unique ID numbers, but devices on different SCSI buses may use the same SCSI ID number. (For example, you could have a removable media drive with ID number 3 connected to the Narrow SCSI-1 bus and a hard disk with ID number 3 connected to the Ultra Wide SCSI-3 bus.)

The hard disk that was installed in your computer at the factory, as well as the SCSI card itself, have already reserved certain SCSI ID numbers on the Ultra Wide SCSI-3 bus. Other ID numbers are available for assignment to SCSI devices that are added later, as described in the following table.

Ultra Wide SCSI ID number	Device
0	Factory-installed hard disk drive (terminated)
1 through 6	Available
7	SCSI PCI card (terminated)
8 through 15	Available

Important The factory-installed internal hard disk and the SCSI card are both terminated. Other SCSI devices that you install and connect to the Ultra Wide SCSI-3 bus must not be terminated. If you attach a terminated device to the internal SCSI interface, the computer will malfunction.

You use the internal ribbon cable with the 68-pin connector to connect an internal SCSI device to the Ultra Wide SCSI bus.



68-pin connector

Ultra Wide SCSI card specifications

- Automatic termination
- Advanced Data Streaming Technology (ADS)
- RAID ready
- Embedded RISC I/P processor
- Ultra SCSI connector: Fine pitch 68-pin "P"
- Flash ROM BIOS
- PCI 2.1 compliant
- Large command FIFO
- Supports disconnect/reconnect
- Asynchronous I/O support
- Multiple initiator support
- SCSI-3 tagged command queuing
- SCSI Manager 4.3 compatible

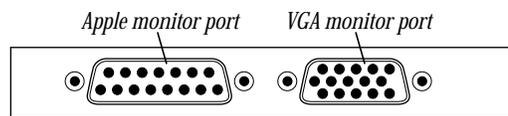
128-bit 2D/3D professional graphics card

If your computer came with an additional graphics card, you have the following options for connecting an external monitor to your computer:

- Connect an external monitor to the built-in monitor port (shown in the manual that came with your computer).

- Connect an external monitor to the graphics card installed in one of the PCI slots.

There are two ports on the optional graphics card. One is the type found on the back of most Macintosh computers; the other is a VGA port so you don't need an adapter for a VGA monitor. (**Note:** You cannot use both ports on the optional graphics card at the same time.)



- Connect two external monitors to your computer.

You can connect one monitor to the built-in monitor port and the other monitor to one of the ports on the graphics card installed in one of the PCI slots.

Display modes and color depths

Resolution	Color depths	Vertical refresh rate
512 x 384	256, thousands, millions	60 hertz (Hz)
640 x 480	256, thousands, millions	60 Hz, 67 Hz, 75 Hz, 85 Hz, 120 Hz
640 x 870	256, thousands, millions	75 Hz
800 x 600	256, thousands, millions	60 Hz, 72 Hz, 75 Hz, 85 Hz
832 x 624	256, thousands, millions	75 Hz
1024 x 768	256, thousands, millions	60 Hz, 70 Hz, 75 Hz, 85 Hz
1152 x 870	256, thousands, millions	75 Hz
1280 x 960	256, thousands, millions	60 Hz, 75 Hz, 85 Hz
1280 x 1024	256, thousands, millions	60 Hz, 75 Hz, 85 Hz
1600 x 1024	256, thousands, millions	76 Hz
1600 x 1200	256, thousands, millions	60 Hz, 65 Hz, 70 Hz, 75 Hz, 85 Hz
1920 x 1080	256, thousands, millions	60 Hz, 72 Hz
1920 x 1200	256, thousands	76 Hz

Graphics card specifications

- 260 MB per second sustained image scroll rate
- 4.2 gigabytes (GB) per second sustained color fill rate
- Up to 1.2 million Gouraud shaded polygons per second
- 240 megahertz (MHz) RAM digital-to-analog converter (RAMDAC)
- 8 MB VRAM (**Note:** Additional VRAM cannot be added.)
- Supports QuickDraw 3D
- QuickTime video playback (video scaling and color space conversion handled in software)

Video memory (SGRAM)

The manual *Setting Up Your Power Macintosh* and the *Technical Information* booklet state that your computer only has 2 MB of video memory built into the computer's main logic board and that you can add video memory by installing a Small Outline (SO) Dual Inline Memory Module (DIMM) in a slot on the logic board. However, if your computer came with 6 MB of video memory, a 4 MB SO-DIMM has already been installed in the expansion slot on the logic board. You cannot add any more video memory.

