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## PowerBook: SCSI Bus, Termination, and Termination Power (5/93)

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TOPIC -----

This article provides technical information on the following topics, as they relate to PowerBook (including Duo) systems:

- Termination and Termination Power
- SCSI Bus
- SCSI cables (System and Adapter)

DISCUSSION -----

### PowerBook Termination and SCSI Disk Mode

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Termination on PowerBook computers is supplied by the internal hard drive. PowerBook computers depend on the internal hard drive to supply termination, so that they are properly terminated when placed in SCSI disk mode. In SCSI disk mode, the PowerBook is just another hard drive in the SCSI chain, because all other subsystems have been shut down.

Because the PowerBook is internally terminated by the hard drive, it must always be at the end of the SCSI chain. If you have two PowerBook computers and other devices on the chain, one PowerBook must be the very last device in the SCSI chain (in SCSI disk mode) and the second PowerBook must be at the beginning of the chain. It is not possible to have more than one PowerBook on a single SCSI bus in SCSI disk mode.

### PowerBook Termination Power

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PowerBook computers do not supply termination power -- except for Duo systems, they rely on external devices to provide termination power on the bus. Because termination power is not supplied by the PowerBook computers, Apple advises that you do not have powered-off devices on the bus.

PowerBook Duos do not rely on an external device to provide termination power. The Duo Dock provide termination power to the bus. They are actively terminated, which means they provide termination power and have the best architecture for termination of any other device on the bus.

SCSI System Cable and Adapter

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Apple's SCSI cables are built to tight specifications to minimize electrical noise on the SCSI bus. The wires are laid out to provide minimal signal degradation. Poor quality cable construction may lead to intermittent SCSI operation and potential system crashes.

HDI-30 Adapter SCSI Cable (female) & HDI-30 SCSI Cable (male)

- Material: 30 conductors 26 AWG 90% braid plus foil shield.

For electrical, mechanical, and shielding specifications, search the Tech Info Library using the search string "SCSI: Cable Specifications".  
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