



Tech Info Library

Macintosh: How to Reset PRAM and NVRAM (1/97)

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TOPIC -----

This article explains the steps required when resetting the Parameter RAM (PRAM) or Non-volatile RAM (NVRAM) on Macintosh computers.

DISCUSSION -----

Resetting PRAM on non-PCI Power Macintosh computers
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System 6.x

Step 1

While opening up the Control Panel, hold down these keys: Command, Option, Shift.

Step 2

A dialog appears asking if you want to clear parameter RAM; select Yes. A few seconds later, the Control Panel opens.

Step 3

Close the control panel

Step 4

Restart your computer.

Parameter RAM is reset, however the clock is not reset. Restarting is necessary to complete this operation. After restarting your computer, you can reset your options through the control panel.

System 7.x

IMPORTANT:

These steps do not apply to the PowerBook 5300, PowerBook 190, PowerBook 1400, or PCI-based Power Macintosh computers. See sections below for applicable steps for these computers.

Step 1

Locate the following keys on your keyboard - Command, Option, "P", and "R". You will need to hold these keys down simultaneously in step 2.

Step 2

Restart your Macintosh and hold down the Command-Option-"P"-"R" key combination. You must press this key combination before the "Welcome to Macintosh" screen appears.

Step 3

Hold the keys down until the Macintosh restarts itself twice.

Step 4

Release the keys after the Macintosh restarts twice.

Your parameter RAM in your Macintosh is reset to the default values. The clock setting are not changed.

For more information on parameter RAM, search the Tech Info Library under "PRAM".

PowerBook 5300,190 and 1400 Resetting the PRAM

Resetting ("Zapping") the Parameter RAM (PRAM) when the computer is shutdown also resets the power manager.

Step 1

Shutdown the PowerBook, not restart.

Step 2

Turn the PowerBook on and hold down the all of the following keys at the same time: Command-Option-P-R keys.

Step 3

There will be only a single chime, then the screen will go dark and the green sleep light will be on solid.

NOTE:

The chimes may reoccur once or they may reoccur then screen goes dark.

Step 4

Press the Reset button one more time and the PowerBook starts after a brief pause.

NOTE:

If the PowerBook powers off and the sleep display light stays a solid green - no blinking, press the reset button once.

Step 5

If the PowerBook does not turn on from the Reset button, turn the PowerBook on by pressing the Power-On key in the upper right corner of the keyboard.

Resetting PRAM and NVRAM on PCI Power Macintosh computers

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Background

In Macintosh computers that have expansion cards based on NuBus technology, holding down the Command-Option-P-R keys simultaneously at startup erases the Parameter RAM (commonly called Zapping the PRAM). This resets the machine to its default configuration settings.

One of the things resetting the PRAM does is to force the display to startup in its default configuration, all the way through the startup process. The Display Manager in NuBus-based Macintosh computers recognizes that the PRAM has been cleared, therefore, it would not try to restore the display to its previous resolution.

However, in Macintosh computers that have expansion cards based on PCI technology, the display information is not kept in PRAM. It is stored in Non-volatile RAM (NVRAM).

NVRAM can be cleared by holding down the Command-Option-P-R keys simultaneously as soon as possible after hitting the power-on key. It happens BEFORE you see the gray screen. Once the gray screen appears, the PRAM is cleared at the same point as it was in previous machines.

One very important difference is that NVRAM is not cleared during a warm or soft restart (by selecting Restart from the Special menu), whereas PRAM is cleared in that case.

default video settings for Macintosh computers which have expansion cards based on Peripheral Component Interconnect (PCI) technology instead of Nubus technology.

Article Change History:

28 Jan 1997 - Added PowerBook 1400 discussion.

29 Oct 1996 - Combined with another article.

21 Aug 1996 - Added information about PowerBook 5300 and 190 computers.

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