

Instructions on how to upgrade RAM on computers and Laptops

Installing more RAM is the most effective way to speed up your computer. Even if your computer is a new computer, after only a few years of use you will have to install more RAM to ensure better machine speed. Besides new operating systems also require the use of more memory. When a computer does not have enough RAM it will exchange data streams with the hard drive, and that is the reason your system is working slowly.

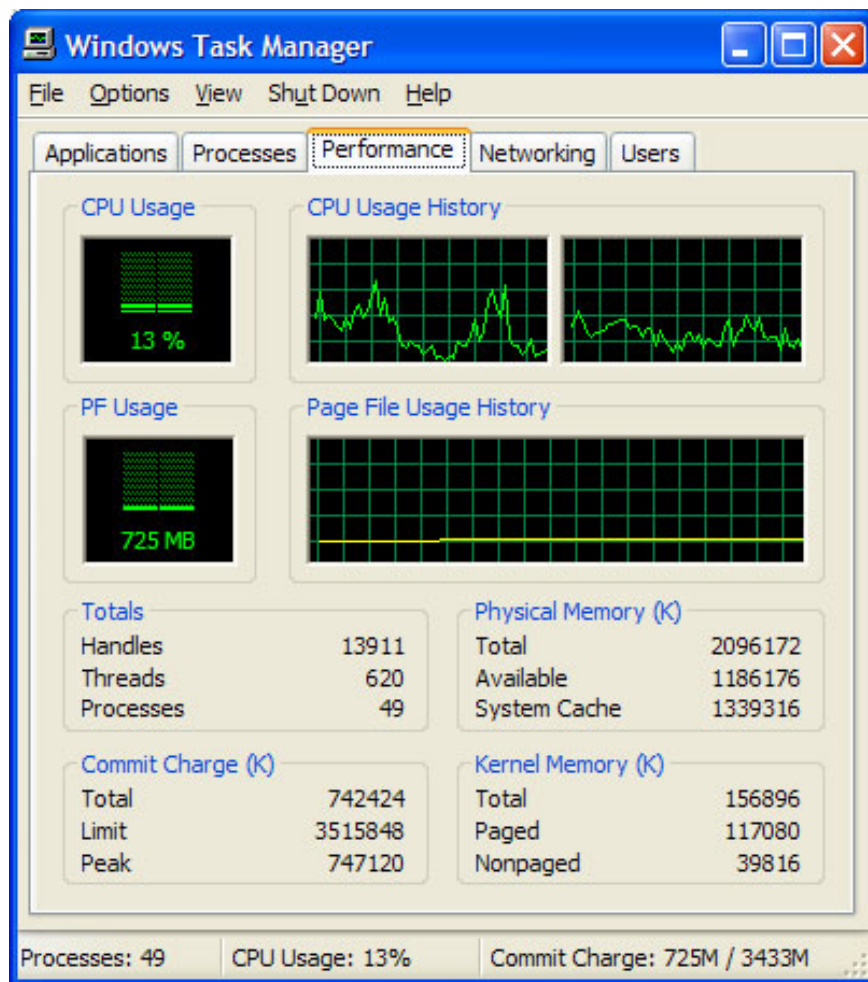
Installing more RAM is the most effective way to speed up your computer. Even if your computer is a new computer, after only a few years of use you will have to install more RAM to ensure better machine speed. Besides new operating systems also require the use of more memory. When a computer does not have enough RAM it will exchange data streams with the hard drive, and that is the reason your system works "slowly".

In the article below, Network Administrator will show you how to diagnose the minimum memory and steps to take to upgrade RAM.



1. How to know how much RAM your computer needs is enough?

The Windows Task Manager will tell you how much RAM your computer needs.



Check the amount of RAM on your computer by opening the Windows Task Manager. Press Ctrl + Alt + Del (for Windows Vista users, click Start Task Manager), then on the Task Manager window, click the Performance tab. If the number next to "Available" (or "Free" on Windows Vista) in "Physical Memory" fluctuates near 0, it means that your computer is very slow and you need to install more RAM.

2. How much RAM is needed?

Often Windows XP users will "be satisfied" with 1GB of RAM. In our test, this computer was used to process the image and use Nero Express to burn the CD, after upgrading from 512KB to 1GB of RAM the computer ran 1 -3 times the old computer. Other users, here we are talking about users at the same time many programs or people who work with digital videos or other large graphic files will expect at least 2GB of RAM. If you are planning to upgrade your computer to Windows Vista, you also need 1GB, but we recommend using 2GB of RAM.

3. Which type of RAM should I choose?

RAM has many types, including DDR, DDR2 and DDR3. New technologies often give better performance but most motherboards only accept one type of RAM. So check your computer to find out what type of RAM module you need and how to install RAM.

See more articles about things to note, learn about RAM in general.

RAM vendors like Crucial and Kingston often have online tools to help you distinguish the right RAM for many computers and motherboards. Most upgraded computers today are using dual-channel memory, so you must install them into pairs for high performance. So adding 2 modules 512MB instead of a 1GB module is better.

It is really important to spend a few extra dollars to buy RAM from trusted manufacturers like Crucial or Kingston.

4. All you need when adding RAM?

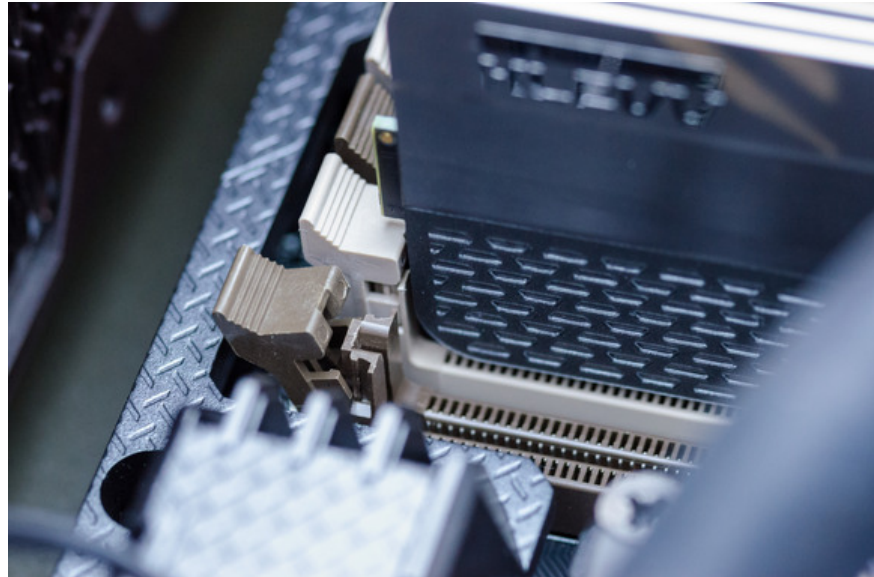
Tools : The internal computer store will have a tool no more than \$ 15 to help you avoid static electricity.

Documentation : Many motherboards require module pairs to be located on specific slots or RAM socket pairs. Please refer to your document before upgrading.

5. Steps to install more RAM

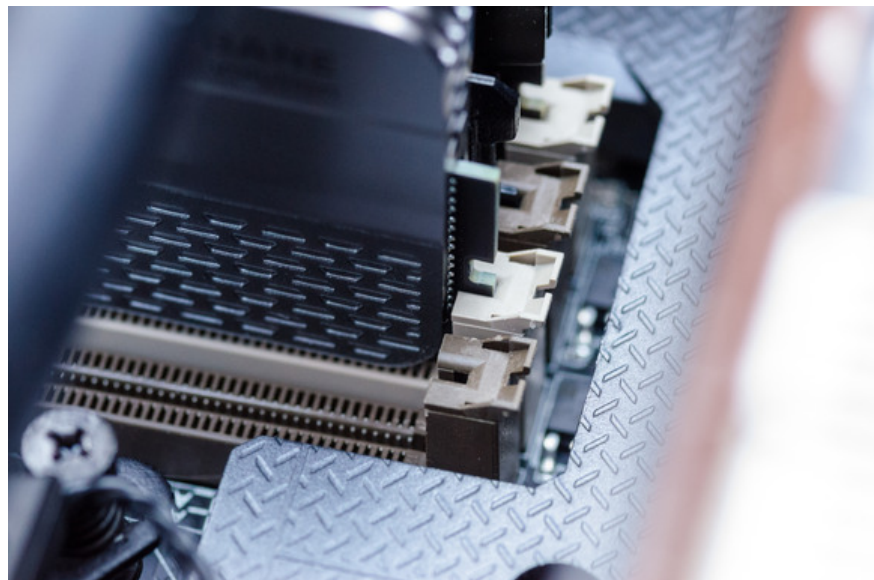
5.1. Installing more RAM on desktop and PC:

- 1.** Remove the computer and open CASE. Put it so that you can feel comfortable to remove things inside CASE. If upgrading RAM for a laptop you should observe the panel on the lower part of the machine protected by one or two screws and carefully remove the panel.
- 2.** Protect delicate small electrical circuits inside the computer from static electricity by grounding. In general, you should wear a pair of sandals to disguise yourself when you touch the CASE or the inner components.
- 3.** Check the computer's documentation to identify the correct RAM sockets to include. Remove any obstructions such as the power cable or radiator fan on the motherboard.
- 4.** If you need to remove an existing RAM on the main, simply push the two clamps on either side of the head. The RAM bar will then pop up and you can easily lift them out.
- 5.** Remove the new RAM sticks from the cover and place them on the cover. One detail when holding the RAM bar is that you should hold it at the edges; Avoid touching chips or circuits on the RAM side.



6. To install a RAM, open two pins on either side of each socket by gently pressing them down. Then you plug your RAM stick in the correct slot, when you plug in, the two external clamps now lift and grip and hold the RAM stick firmly.

Laptop users should turn to the bottom of the memory socket, taking care of the notch on the RAM with its socket. Then push the RAM stick carefully until the keepers have positioned it safely.



7. Reassemble the computer, turn on the power and remember to look on the screen during the boot process to confirm that your system has recognized the new RAM. If it doesn't, restart your computer, go to the CMOS program and check if your computer recognizes the new memory. (To do this, press the Del or F1 key during the reboot.) If the new memory has not yet been received, you should exit the setup program, turn off the computer and open the CASE, plug in the memory sticks accomplished.

5.2. Install more RAM on laptop

1. First turn off the laptop power, then remove the battery from the laptop.

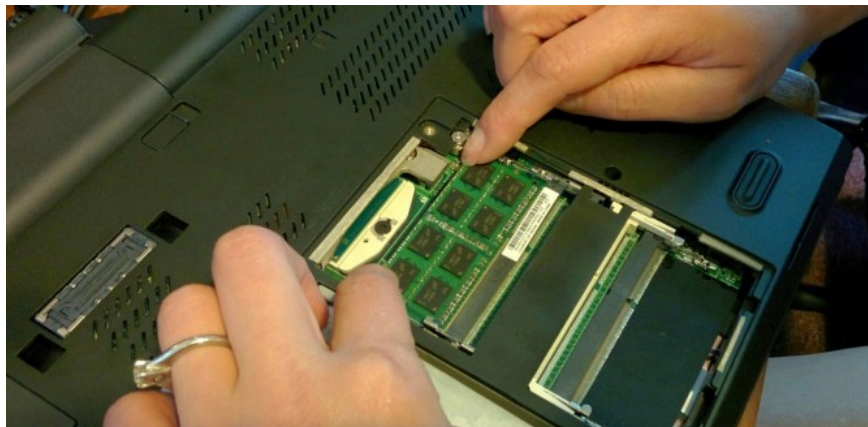
Open the panel at the bottom of the machine protected by one or two screws and carefully remove the panel.

2. Before touching any component on the laptop, try touching the surface of any metal part (such as the back of the hard drive, etc.) to prevent static electricity from affecting the your body.

3. Laptop RAM is arranged in overlapping style. So before installing new RAM, you must remove the old RAM and put it in another location to add new RAM.



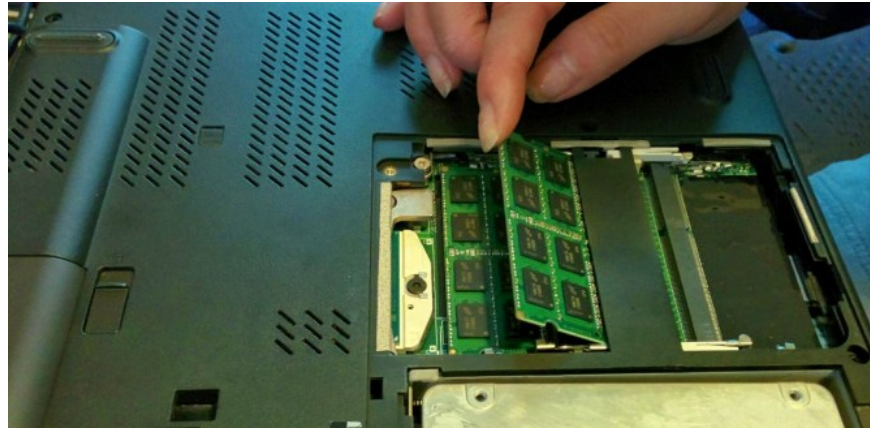
To do this, simply push the two clamps on either side of the head. The RAM bar will then pop up and you can easily lift them out.



4. To install an old RAM stick at the bottom, you open two latches on either side of each socket by facing the bottom of the memory socket, taking care of the notch on the RAM bar with its socket.

Then push the RAM stick carefully until the keepers have positioned it safely.

5. Do the same to add new RAM to the top.



Finally, insert the battery, open your laptop and check the information on the Task Manager window or the System Information window to confirm whether the new RAM has been installed.

Refer to the following articles:

1. 8 easy ways to free RAM make the machine run faster
1. Summary of tips to fix computer errors Windows 10/8 / 8.1 / 7 and Windows XP running slowly
1. How to use CCleaner software effectively

Good luck!

You finished reading the article "**Instructions on how to upgrade RAM on computers and Laptops**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.