

5 Practical Tips for Maximizing the Life of Your SSD



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A compact alternative to other data storage devices, the solid-state drive (SSD) saves your data on flash memory chips that are of better build and faster speed compared to the chips contained in flash drives. The user has the option to permanently install it on a desktop or laptop, or use an ejectable one that is designed to fit in certain slots in a desktop or laptop.

The SSD began as a means of storage for a few netbooks that were released around 2000. Its lightweight properties made it a suitable storage substitute for users looking for a more easy-to-carry laptop setup. Eventually, it developed and evolved into the SSD products we see and use today.

But just like any device, an SSD is not exempt from the wear and tear that comes with regular use—particularly if you are someone who requires [effective data management and storage](#) for hundreds of extremely large files (such as photographers and videographers).

Luckily, there are preventive measures you can observe to prolong the life of your SSD. Here are some tips to try:

Keep SSD Firmware Up-to-Date

The control center of your SSD is referred to as the SSD firmware. It also serves as the interface between your disk drive and your computer's hardware, ensuring that every action is executed properly. To ensure that the SSD firmware is performing at its best, update it regularly. These updates, though they may look negligible, actually prevent bugs and any problems that may hamper your SSD's performance and compatibility with your computer.

If you're [building your own computer](#) and are installing your own SSD, it's important to make sure that its firmware is up-to-date before installing. To do this, plug in your SSD to your laptop or desktop using a connecting cable, load its accompanying manufacturer software, and conduct a firmware update.

Enable SSD TRIM

TRIM is a command that enables the operating system of your computer to identify the blocks of stored data files that are no longer in use and communicate this information to your SSD, which will enable the latter to wipe these blocks.

Why is this necessary? Aside from ensuring that the drive works more efficiently, this promotes optimum performance and helps lengthen the lifespan of your SSD.

On a Windows computer, you can find out whether your SSD supports TRIM by plugging it onto your computer and running CrystalDiskInfo or any other similar applications.

To check if your Windows 10 computer has TRIM enabled, perform the following steps:

1. Go to the Power User menu by pressing the Windows key and the letter "X"
2. Choose Command Prompt (Admin)
3. Key in "fsutil behavior query DisableDeleteNotify"
4. Press Enter

If zero (0) turns up on your screen, it means that the TRIM command is enabled. If on the other hand, you get a one (1), it means the TRIM command is disabled.

For Mac computers with pre-installed SSD, TRIM is usually enabled. But if you plan to install it yourself, it's important [to do it properly](#) to ensure a longer life for your SSD.

Disable Superfetch

Although intended to improve the speed of your [Windows computer's memory](#), [there is no proof that using SuperFetch enhances your RAM's operation](#). In some cases, it can even be hard on your SSD and slow down its operation in the long run.

If your computer has this feature and you want to disable this application, run Windows Powershell and type in "services.msc." Once you see the Services window, double-click on Superfetch. Go to the Startup menu, and click Disabled.

Disable Hibernation

Preserving the integrity of your SSD is essential in lengthening its life. And one thing that unnecessarily adds to its wear is hibernating your laptop or PC. When your computer hibernates, data is automatically copied from the system memory to the computer's internal

storage (your SSD). Due to the size of these data backups, this will mean constant writing and deleting of huge amounts of data on your SSD, which can cause a considerable amount of strain.

To avoid this, disable hibernation on your computer by running Windows Powershell and answering "Yes" to the User Account Control security prompt. Then, type in "powercfg -h off" and press Enter.

Refrain from Defragmenting Your SSD

The SSD runs on electrical pulses instead of mechanical spinning parts to read or write data. This feature allows the disk to easily save and retrieve information as blocks even without the need for defragmentation or compiling data for better performance and efficiency.

Ensure that you won't unknowingly defragment your SSD by disabling update, or uninstalling the software altogether.

So there you go—five simple ways to prolong the life of your SSD. By practicing these five tips, you get to maximize your SSD for as long as possible while also promoting optimum performance.