

Notebook Battery Tips

Usage Tips

If you find yourself with no electrical adapter or power source and need your battery to operate for as long as possible, here are a few tips you can try when your notebook computer is in battery mode:

1. Use the notebook's power management system

In Microsoft Windows the "Power Options" power management application can be found inside the Control Panel. In the Power Options Properties tab select the "Portable/Laptop" power scheme. Many notebook manufactories also provide their own custom power management applications, which help to optimize power usage and extend battery time.

2. Turn down the display brightness

You can lower the LCD brightness level to use less energy. In fact a lower brightness level also strains the eyes less and causes less fatigue.

3. Close any unused applications

Applications are a burden on the system and require energy to run. Closing any unused applications will reduce that burden and any energy consumption down the line.

4. Remove any unused PC Cards or USB devices from your notebook

These devices require energy even when they sit idle, so removing them can help to extend your notebook's battery time.

5. Disable Wireless LAN or Bluetooth network adapter when not in use

Ditto for the Wireless LAN or Bluetooth network adapters.

6. Increase system memory

Your computer stores data for use by the CPU in system memory or as virtual memory in the hard drive. Increasing system memory helps to reduce the system's reliance on the hard drive, which uses more energy than system memory.

7. Reduce unnecessary optical drive operation/activity

Avoid activities that require your optical drive to operate constantly, such as listening to CDs.

8. Avoid graphics intensive applications

The notebook system will run in a high performance settings when using these applications, causing the battery to run down at a very quick rate.

Maintenance Tips

Almost all notebooks today utilize rechargeable Lithium-ion (Li-Ion) batteries. Lithium Ion provides many benefits over earlier Nickel-Metal Hydride (NiMH) or Nickel Cadmium (NiCd) Batteries, including less mass, better performance, and insusceptibility to the so-called "memory effect". Despite these benefits you can maximize your battery's lifespan by following these maintenance tips:

1. New batteries must be fully charged before use

To put your battery in optimum condition for long-term usage, please fully charge the battery before its first use. Very importantly as well, for the first 3 charge cycles, always fully charge before use and fully discharge before recharging.

2. Calibrate the battery every few months

Almost all notebook batteries are created with an internal microprocessor, which provides an estimate of battery conditions such as number of charges, discharges, full charge capacity and cycle charge count. The full charge capacity will become a little inaccurate after a few months and calibrating it can help restore the battery's performance.

Some notebooks provide calibration tools in the BIOS or a Windows application. If your notebook provides either of them, you can follow these three steps prior to calibration:

1. Plug in your notebook's power adapter and fully charge your battery.
2. When your battery is fully charged, disconnect the power adapter and use your notebook in battery mode. Disable all battery warning operations in Power Options Properties such as Shut down, Stand-by or Hibernation. When the remaining power is 3%, close all running application and allow the notebook to shut itself down.
3. Plug your power adapter in and fully charge your battery. Your battery has been sufficiently drained for calibration.

3. Use your battery in the proper conditions

Generally speaking, batteries work best at around 68°F (20°C), but temperatures between 32° to 95°F (0° to 35°C) will allow a battery to works in good condition too. Allowing your battery to work in conditions that are too hot or cold can lower its performance. It may also have a negative influence on the battery's lifespan as well.

4. Store your battery in the proper conditions when not in use

If you don't plan to use your notebook for a month or more, we recommend the battery be stored separately in a clean, dry and cool place. Please also ensure that the battery has about a 70% charge remaining. During storage the battery will perform a slow self-discharge, so we do not recommend storing it for a very long time (3 months or more), because it can impact the wellbeing of the battery.

Other Information

Higher capacity battery or spare batteries

Some notebooks may be offered with an option on a higher capacity battery, which may also be offered as a separate purchase. You can take advantage of both to extend your notebook's unplugged time.

Replace the battery

A battery that has been cared for properly should provide at least 300 full charge and discharge cycles. You can choose to purchase a replacement battery when your original battery longer is no longer able to serve you properly. The main symptom of this is a much shorter runtime even after calibration.

Battery recycling

Please do not dispose of old notebook batteries in the rubbish bin as they can pollute the environment. Batteries should be recycled or collected for safe disposal through your local municipal or commercial programs.