

<u>Laptop Battery</u> <u>Frequently Asked Questions</u>

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BATTERY CARE AND USE INSTRUCTIONS

Your new battery comes in a discharged condition and must be charged before use. Upon initial use (or after prolonged storage period) the battery may require two to three charge/discharge cycles before achieving maximum capacity.

If the battery is not going to be used for more than a month, it is recommended that it is removed from the device and stored in a cool, dry, clean place.

It is normal for a battery to become warm during charging and discharging.

A charged battery will eventually lose its charge if unused. It may therefore be necessary to recharge the battery after a storage period.

BATTERY **DONT'S**

Do not short-circuit a battery. A short-circuit may cause damage to the battery.

Do not drop, hit or otherwise abuse the battery as this may result in the exposure of the cell contents, which are corrosive. Do not expose the battery to moisture or rain.

Keep batteries away from fire or other sources of extreme heat. Do not incinerate. Exposure of batteries to extreme heat may result in an explosion.

WHAT IS THE "MEMORY EFFECT"

Ni-Cad batteries suffer from what is called the "memory effect". This means that if a battery is continually only partially discharged before re-charging, the battery "forgets" that is has the capacity to further discharge all the way down. To illustrate: If you, on a regular basis, fully charge your battery and then use only 50% of its capacity before the next—recharge, eventually the battery will become unaware of its extra 50% capacity which has remained unused. Your battery will remain functional, but only at 50% of its original capacity. The way to avoid the dreaded "memory effect" is to fully cycle (fully charge and then fully discharge) your battery at least once every month. Batteries can be discharged by unplugging the device's AC adapter and letting the device run on the battery until it ceases to function. This will ensure your battery remains healthy. Ni-Mh and Li-Ion batteries do not suffer the memory effect.



CAN I UPGRADE MY **DEVICE'S** BATTERY TO A NEWER CHEMISTRY?

NiCad, NiMH and Li-ion are all fundamentally different from one another and cannot be substituted unless the device has been pre-configured from the factory to accept more than one type of rechargeable battery. The difference between the different types stems from the fact, that each type requires a different charging pattern to be properly recharged. Refer to your owner's manual to find out which rechargeable battery types your particular device supports.

MY NEW BATTERY ISN'T CHARGING WHAT'S THE PROBLEM.

New batteries are shipped in a discharged condition and must be charged before use. We generally recommend an overnight charge (approximately twelve hours). Refer to your user's manual for charging instruction. Rechargeable batteries should be cycled – fully charged and then fully discharged – two to four times initially to allow them to reach their full capacity. (Note: It is perfectly normal for a battery to become warm to the touch during charging and discharging).

New batteries are hard for your device to charge; they have never been fully charged and are therefore "unformed". Sometimes your device's charger will stop charging a new battery before it is fully charged. If this happens, simply remove the battery from your device and then re-insert it. The charge cycle should start again. This may happen several times during your first battery charge. Do not worry; it is perfectly normal.

HOW CAN I MAXIMIZE BATTERY PERFORMANCE

Breaking in new batteries - new batteries come in a discharged condition and must be fully charged before use. It is recommended that you fully charge and discharge your new battery two to four times to allow it to reach its maximum rated capacity.

Keep your batteries clean - it is a good idea to clean dirty battery contacts with a cotton swab and alcohol. This helps maintain a good connection between the battery and your laptop.

Exercise Your Battery – Do not leave your battery dormant for long periods. We recommend using the battery at least once every two to three weeks. If a battery has not been used for a long period, perform the new battery break in procedure described above.

Battery storage – If you do not plan to use the battery for a month or more, we recommend storing in a clean, dry, cool place away from heat and metal objects.

HOW ARE BATTERIES RATED?

There are two ratings on every battery: Volts and Milliamp-hour (mAh). The voltage of the new battery should always match the voltage of your original. Some of our batteries will have higher amp-hour ratings that the original battery found in your device. This is indicative of a longer run-time (high capacity) and will not cause any incompatibilities. Remember: in some cases, the voltage will differ from the original battery. This often happens when both a Li-lon battery and a Ni-Mh battery are available for the laptop.



HOW LONG SHOULD MY BATTERY LAST?

The life of a rechargeable battery operating under normal conditions is generally between 500 to 800 charge-discharge cycles. This translates into one and a half to three years of battery life for the average user. As your rechargeable battery begins to die, you will notice a decline in the run time of the battery. When your two-hour battery is only supplying you with an hour's worth of use, it is time for a new battery.

FOR A DEAD BATTERY/NOT CHARGING BATTERY:

Please read the helpful tips below regarding a few troubleshooting steps that can help revive your battery's life. Most new batteries require some first time maintenance before they achieve desired results. After trying out the various steps, if your battery is still not responding, we would be more than happy to set up and exchange with you as your product does come with a One Year Warranty.

- 1. Some batteries do not achieve their maximum capacity until after several deep cycle charges (fully charging, fully discharging, and repeated) sometimes as much as 5 times. These are all brand new battery cells and do not always "wake up" and work to their full capacity until they have been used a bit. Please try to deep cycle your battery at least 4 times to bring your battery to full capacity.
- 2. Remove the battery, and AC power. If you have access to the battery contacts inside of the battery compartment (in some laptops, it is very accessible, others it is almost impossible) try cleaning the connection terminals with rubbing alcohol and a Q-tip. It may not be getting the proper connection necessary to charge, recharge, and report battery information to the laptop.
- 3. Check your laptop manufacturer's website for possible system BIOS software upgrades. Some laptops have been prone to reject third party batteries if they have an old BIOS software version installed on the laptop. BIOS upgrades are designed to fix a wide array of problems including Hard Drive capacity limitations, Battery compatibility and usage, Power management features, and performance modifications after the laptops were made and shipped. It is like getting a tune-up for your automobile.

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