



I'm not robot



[Continue](#)

## Dell battery calibration software

By Justin Obrien One of the biggest challenges laptop owners have is to extend the life of their portable batteries. The batteries in Dell notebooks are generally long-lasting, but battery life also depends on how a person uses their computer. An effective way to improve the condition of portable batteries is recalibration. This is a must especially when the duration of your battery life has become shorter after a few months or years of use. It is recommended that you recalibrate the battery of your Dell notebook every two months to maintain its good performance. Connect the power adapter to your laptop (with the battery attached) then connect the other end to the power outlet. Make sure it is charging properly. Fully charge the battery. Monitor the battery indicator, which is usually found to the lower part of your computer screen, to check if the battery is already fully charged. Unplug the power adapter and use the laptop until the battery is completely drained. To drain your battery faster, run multiple applications at once and keep the contrast on your screen to its highest levels. Turn off all power management functions as well. To make sure your battery is completely drained, wait for your laptop to shut down or go into sleep automatically due to very low battery charge. Reconnect the power adapter and fully charge the battery. Once this is done, reset the power management features and adjust the contract settings on your screen to normal. The issue I've come across lately seems to be mostly with Dell's XPS line of laptops, though it can certainly affect others: My new XPS 13 9370, XPS 15 9575, and XPS 15 9570 showed 8, 14.5, and 10% battery rip out-of-the-box, respectively (a battery wear of 10% means the battery is only able to charge to about 90% of its rated capacity). Normally, batteries will only show so much wear after a year of heavy use, and that's not something you should accept in a new laptop. I realized something was up when every single XPS 15 I checked out new ones had around 10% battery wear reported though. Warning: Lithium-ion batteries should generally not be discharged completely as this causes actual wear on the battery. Thus, if calibration is only carried out sparingly when you suspect a problem with how the battery reports its capacity. Battery calibration hasn't been much of a necessity since lithium-ion batteries became so much smarter in recent years. Thus, even as someone who considers themselves to know quite a bit about laptops, properly calibrating the battery in my new XPS laptops (showing incorrect wear percentage out of the box) was something I had to do a bit of reading up on combined with some trial and error to get it right, and so I figured I'd write a short guide on how to do it right the first time. After this protocol, I was able to reduce the reported wear levels significantly to the low single digits and recover an entire Liv. Check the reported wear of the battery Before bothering with a calibration, it is necessary to check the reported health of your battery. If your battery is new and shows less than 95% of its original capacity then it's probably worth recalibrating. Go to the Start menu and search cmd to view the command prompt (PowerShell will do well too). Right-click the search results to run your app selection as an administrator. Copy and paste the following line into the command line: `powercfg /batteryreport` The battery health report will be output to the `Windows\system32` folder by default. Copy the directory path and paste it into your favorite browser to view it. Once opened, you can roll down a little and you should see battery health as a function of design capacity (rated capacity) and full charging capacity (actual amount of battery reports it can hold). After calibration. Prior to calibration, the full charging capacity was only 87,000 mWh, or less than 90% of the advertised. By doing some quick math you should be able to see how healthy your battery currently is. Technically, it's not good to fully charge and discharge a Li-Ion battery frequently (which is what calibration requires), so if your battery isn't new and the wear percentage seems reasonable, it may be best to leave it. If you see only 90% of the capacity of a new laptop, however, then this guide will definitely help. Step 1 procedure: First, you need to let your laptop load to its full capacity. OEMs like Dell and Lenovo allow the user to set the charge thresholds on the battery to preserve battery health (this is a very good practice that I encourage all OEMs to follow). To fully charge your laptop, you'll need to find that setting and set your charge threshold temporarily to 100%. On XPS machines, this is done via Dell Power Manager or BIOS. You must set the charging behavior to Standard or manually change the slider to 100% to complete the first step. Once this is done, make sure your laptop is plugged in and let it charge completely. Step 2: Next, you need to let the battery completely discharge until forced shutdown (not just hibernation). There are a few ways to do this, but my favorite method is the simplest: Restart the laptop in BIOS mode, then get out of the house for the day. With this method, you don't have to worry about your laptop going to sleep or hibernate because these features aren't enabled when you view the BIOS. Also, power saving mode is not enabled for cpu when in the BIOS either, which means that the laptop will run down significantly faster than it would in Windows during normal use. You could also use the laptop normally and let it run down until it automatically hibernate, then leave it in bios as described above as well. requires your turn off all sleep and hibernation timers in the Power Options control panel first, however. Step 3: WAIT. Do not charge immediately the laptop; computer; sure that the laptop has been sitting cool and pulled out for 3-5 hours before the next step. Not performing this step can result in making your reported battery wear worse. Step 4: Plug in the laptop and let it charge to the maximum uninterrupted. You should be able to use the laptop in Windows at this point, but I let it load in the BIOS of superstition. When you generate your battery report again, you should (hopefully) see a much higher rated capacity for your new battery. Conclusion That's it! Using this method, I was able to reduce my 9575 reporting 14% wear down to 4%, my 9570 reporting 10% down to 3.8%, and my 9370 reporting 8% torn down to 4%, and I hope that fixes the problem for you simply too. As always, try to practice good battery care to prolong their lives: Keep them cool, don't run them dry, and don't charge them to the max often. If you are interested in reading more about the safety and care of Li-Ion batteries, you can check out this guide for further reading. Did you also get an XPS laptop with double-digit battery wear? Please share your results in the comments. Your laptop turns off without warning, it's annoying. Dell notebooks sometimes have battery calibration issues. This is a problem that you don't actually know how much charging your battery has left. It can show 100% and the next minute your laptop shuts down makes you lose what you worked. But this is an issue that can be easily addressed by calibrating you Dell laptop battery so that it measures its capacity accurately. Fortunately battery calibration is an easy task you don't need a computer scientist, you can do it yourself. Basically how you do it is, you drain the battery completely then charge it to its full capacity which allows the sensors to measure more accurately how long the battery actually lasts. Calibrating dell laptop battery First you need to change your power plan settings so it allows the battery to drain without interruption, to do this Right click on the battery icon in the system tray. Select Power Options. Then click change plan settings. Set turn off display to Never and Put your computer to sleep setting also to Never. Save changes. Set your computer's sleep mode Advanced settings Change windows battery settings to critical to sleep and critical level Next, click Change Advanced Power Settings. On the list of devices select Battery, it's the last option on my Dell latitude E7480. Click the + Sign menu to expand. Set critical battery action to Hibernate. Then set the critical battery level to 5% or as low as you can set. Now click on apply then okay. Now you can let the battery drain, you can use the laptop while the battery is drained. If you're not using the laptop make sure its not set on sleeping after a certain amount of time as this can mess up with the right battery metering. When the laptop winters battery is too low allow the battery to cool down. Give it at least an hour or 2 before plugging it in to charge. Now load your laptop computer its full capacity. Your laptop should have a more accurate battery reading now. Does battery calibration damage the battery Laptop battery level in windows Laptop batteries gradually wear out with normal use. Often calibrating your laptop increase battery wear and is not necessary on most modern laptops. Ideally, you should calibrate your battery when you feel its really no longer measuring its capacity correctly. How often should I perform battery calibration on Dell laptop. You may be wondering how frequent is too much, when it comes to calibrating your laptop battery. This is due to a number of things. For example, the frequency of use, battery age, type of battery, heat etc As a rule of thumb, you should not calibrate the battery more than once in atleast months as this increases battery wear. As I said above most modern laptops don't need battery calibration as much as the older ones. If your battery continues to cause problems, the battery may be dead or dying. You can run a diagnostic test as described in this Dell Diagnostics article. If you get an error code look up the error code described in the article I linked to above. If you need a replacement, you can get a new battery its cheap here I'll calibrate new laptop battery there's no need to calibrate the battery on a new laptop. But it's on the assumption that a new laptop means a new battery. It is only necessary to calibrate when you think your laptop is not measuring battery capacity correctly. Otherwise, there is no need. Calibrating Laptop in BIOS Some laptops come with built-in calibration software. If so, you will see the option in the BIOS menu that shows in the image below. BIOS Battery Calibration Program To calibrate your laptop using firmware. Turning off the laptop Press power button to turn it back on Immediately press the F2 key to enter the BIOS Navigate to the PowerSelect Start Battery Calibration tab. Follow the prompts to calibrate your laptop battery. Power CFG Another important thing you can do is check your battery health. This will help you see if the battery needs a replacement or not. It also shows how much wear the battery has. You can do this by generating a windows battery report To generate a battery report in windows Press the windows key and type Run without quotes Right click the Run program and select run as administrator Click yes if it requests permission. On the Windows terminal, type opens the `powercfg /batteryreport` command Now press Windows +R and type the following path on the input box that appears: `C:\WINDOWS\system32\battery-report.html` It should open the report on the default browser such as chrome Windows Powercfg report on a Dell laptop dying battery Hope this information was helpful in making your laptop use more productive. If you have any question or need hesitate to leave a comment below and we will respond as soon as we can