

## Errata

### Known Problems and Conflicts

#### Newer NuPowr PowerBook 500 PPC upgrade

Several users have reported crashes when running the PPC version of MyBattery on PowerBook 500's that have been upgraded with the NuPowr PPC upgrade. I have not been able to isolate the problem. However, the 68k version of MyBattery works fine.

#### Registration and disk compactors

Several users have reported that disk compression utilities can prevent proper registration. If you are using an automatic disk compression utility, you should exclude MyBattery from compression until after you have registered it. For example, if you are using AutoDoubler to compress your hard drive, you should expand MyBattery before attempting to register your copy. This problem does not appear with "drive-level" compression utilities, such as TimesTwo and Stacker.

#### CursorBeacon CDEV

Bill Monk's CursorBeacon is a freeware control panel that lets you find your cursor on PowerBook or large displays. Several users have reported that if you activate the CursorBeacon with MyBattery in the foreground, MyBattery will unexpectedly quit.

Apparently, CursorBeacon "steals" free memory from the current application. MyBattery has just enough memory allocated for its own use; this conflict can be easily fixed by allocating more memory to MyBattery.

- 1) Quit MyBattery, if it is currently running.
- 2) Locate your copy of MyBattery.
- 3) Click on the application icon once to select it.
- 4) From the File menu, choose "Get Info".
- 5) Move the cursor to the "Suggested Size" text field, and increase the current number by 10k.
- 6) Close the window.

The next time you run MyBattery, it will consume a little more memory, but the conflict with CursorBeacon will be fixed.

#### Menu bar conflicts

The menu bar is the one constant among all Macintosh applications. Many software programs use it to display additional information. These applications sometimes try to use the same space as MyBattery, which can cause menu bar display conflicts. For example, Apple's AppleShare uses the left side of the menu bar to indicate if information is being transmitted or received by

your PowerBook over the AppleTalk network, which can interfere with MyBattery's left menu display.

There is no simple solution, other than turning off menu bar displays, which isn't much of a solution at all...

### HP PaintWriter Drivers

One MyBattery user has reported a conflict with the Hewlett Packard PaintWriter driver software. He noticed an unusual problem with the MyBattery Preferences dialog. When he upgraded the drivers to a new version, the problem went away. Therefore, if you are noticing a black box being drawn in the lower right corner of the "Preferences" dialog, covering the "OK" and "Cancel" buttons, you should upgrade your PaintWriter drivers to 3.0.7b. Thank you, Mike!

## Troubleshooting

While I have attempted to test MyBattery as thoroughly as possible, there is no way of testing all the possible configurations. If MyBattery is operating erratically, it is always possible that some piece of software is interfering with it.

Occasionally, it is possible that the "MyBattery Data" and "MyBattery Preferences" files can become corrupted, if your Macintosh crashes while these files are open (MyBattery periodically updates these files). If you are getting internal MyBattery errors, try deleting these files from your "System" folder (or "Preferences" folder under System 7). The errors should disappear.

### Application interference

If MyBattery is operating erratically with other applications running, note the other applications that are running. Next, restart your computer and try running MyBattery by itself. If the problem does not appear, try running the same applications, one by one. When you isolate the problem application, drop me a note and let me know what it is!

### INIT/CDEV/Extension interference

If MyBattery continues to operate erratically, an INIT, CDEV or system Extension (collectively known as extensions) may be interfering. First, restart your machine while holding down the SHIFT key. A message will come up stating "Extensions off". Try MyBattery; if the problem doesn't appear, it is most likely an extension causing the problem.

Isolating the offending extension can be tedious, especially if you have lots of extensions loaded. Start out by removing half of your extensions. Restart and try MyBattery. If the problem occurs, remove half of the extensions that were loaded, and try again. If the problem did not occur, swap the extensions you loaded with the ones you didn't, and try again.

Continue this process until you isolate the offending extension. Drop me a line and let me know

what extension was causing the problem.

## Acknowledgments

Not being wealthy, every time Apple introduces new PowerBooks, I must rely on the kindness of others to provide me with the information I need to support the new machines. To all of you who have helped, thanks!

Thanks also to those who have enthusiastically responded with criticisms and suggestions for new features. MyBattery continues to mature, with your guidance.

I'd particularly like to thank Rich Wolfson for providing me with the low voltage tables and other information, Marcus Wallgren of Apple for contributing much knowledge on the Duo power manager, and Joe Vantaggi for providing me with cool telephone icons instead of the icky "typewriter" icons I created. Special thanks to John Fernandez for his cool folder icons!

Special thanks to Ed Voas for his assistance with the PowerPC glue code.

## Technical information and references

### References

The information used to write MyBattery and this manual has been culled from various sources, including:

- Inside Macintosh, Volume VI (Apple, published by Addison Wesley). This volume contains a discussion of the Power Manager software.
- Macintosh PowerBook Family Developer Notes (Apple). Discusses technical side of PowerBook hardware and firmware.
- The PowerBook Companion (Richard Wolfson, Addison Wesley). A great book with loads of tips for PowerBook users (did you know that when Apple prepares your PowerBook hard drive, megabytes of hard drive space are unused? Buy the book and find out how to get it back!).

### Development environment

MyBattery has been developed using:

- Various PowerBook models, including PowerBook 100 8/40, PowerBook 165c 8/80, Duo 210 12/80, and PowerBook 520c 12/320.
- Apple's ResEdit, version 2.1.
- Symantec THINK C 7.0.
- Symantec THINK C Reference.
- Apple's "Inside Macintosh", volumes I-VI.

## Low Battery Warnings

Some of the following values have been compiled from user's measurements and other sources; your voltages may differ.

Model	Typical "fresh" battery	First warning threshold	Second warning threshold	Final warning threshold	Forced shutdown threshold
Macintosh Portable	≈6.20v	5.90v			
5.81v					
5.78v					
5.74v					
PowerBook 100	≈6.20v	5.90v			
5.81v					
5.78v					
5.74v					
PowerBook 140	≈6.70v	5.90v			
5.75v					
5.65v					
5.55v					
PowerBook 145	≈6.70v	5.90v			
5.75v					
5.65v					
5.55v					
PowerBook 145B	≈6.70v	5.90v			
5.75v					
5.65v					
5.55v					
PowerBook 160	≈6.70v	5.90v			
5.75v					
5.65v					
5.55v					
PowerBook 165c	≈6.70v	5.90v			
5.75v					
5.65v					
5.55v					
PowerBook 170	≈6.70v	5.90v			
5.75v					
5.65v					
5.55v					
PowerBook 180	≈6.70v	5.90v			
5.75v					
5.65v					
5.55v					
PowerBook 180c	≈6.70v	5.90v			
5.75v					
5.65v					
5.55v					

Model	Typical "fresh" battery	First warning threshold	Second warning threshold	Final warning threshold	Forced shutdown threshold
Duo 210	≈13.80v	11.80v	11.40v	11.00v	10.60v
Duo 230	≈13.80v	11.80v	11.40v	11.00v	10.60v
Duo 250	≈13.80v	11.80v	11.40v	11.00v	10.60v

Duo 270c

≈13.80v

11.80v

11.40v

11.00v

10.60v

## Disclaimer

While I have attempted to test MyBattery as fully as possible, I cannot guarantee proper operation on other computer systems. I am not liable for any direct or indirect damage caused by MyBattery. The individual using the software bears all risk as to the quality and performance of the software.

If you have registered your copy of MyBattery, and are not satisfied with its operation, your registration fee shall be returned to you. You are then obligated, however, to delete all registered copies.