

Insomniac 1.0.2***by******Jeremy Kezer******26 October 1993******Table of Contents***

What is Insomniac?	2
Why an Application?	2
Displays	2
Installing Insomniac	4
Running on startup under System 6.0.x4	
Running on startup under System 7.x4	
Using Insomniac	5
Before Insomniac	5
After Insomniac	5
PowerBooks and Sleep	6
How Insomniac works	6
Insomniac and the PowerBook Control Panel	
.....	6

Registration.....	6
How to register.....	6
Addresses.....	7
Troubleshooting.....	7
Application interference.....	7
INIT/CDEV/Extension interference. .	7
Upgrading System 6 to System 7.....	8
Compatibility.....	8
Technical information and references	8
References.....	8
Development environment.....	8
Version History.....	9
Disclaimer.....	9

What is Insomniac?

Insomniac is a utility program designed specifically for any portable Macintosh that is able to “wake” itself up (currently, the Macintosh Portable, PowerBook 100, or PowerBook Duo models).

Apple provides you, through the “PowerBook” or “Portable” control panel, a way of setting the wakeup time of your PowerBook. This is very handy for automatically sending faxes or electronic mail in the middle of the night, when rates are lower and computer systems are quieter. However, with these control panels, you can only set a single wake up time.

Insomniac allows you to program up to fifty wakeup “events” (registered copies only). Consequently, you can have your PowerBook wake up and send your faxes at 1:00am, fall back to sleep, wake up at 2:00am to send your electronic mail, and so on. Or, you can use Insomniac to program a repetitive wakeup time (like 1:00am every night) for weeks.

Why an Application?

I chose to implement Insomniac as a application for several reasons:

- 1) To prevent control panel conflicts. With so many control panels out there, it's likely that if I had implemented Insomniac as one, it would find some control panel to interfere with.
- 2) Memory flexibility. Memory on PowerBooks is still at a premium, compared to desktop Macs. Don't want Insomniac to consume memory? Just quit from it - no restarting your computer, like you would with a control panel.
- 3) Battery life. If you want to prevent a control panel from

running, you have to remove it from your System folder, and then reboot. This consumes lots of battery juice. If you don't need Insomniac, just quit it.

Displays

Insomniac has two different window displays. The “condensed” display, shown below, is the default display. It's designed to minimize screen clutter, while letting you know that Insomniac is running. You can drag it around the screen, to any spot you find convenient.

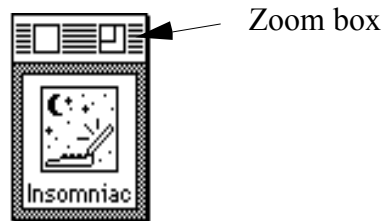


Figure 1. The condensed window lets you know Insomniac is running, while minimizing clutter.

You can toggle from the condensed display to the expanded display by clicking on the “zoom box”, located in the right-hand corner of the window's title bar.

The “expanded” display, which is the main window, shows the current wake up times, as well as buttons for adding, modifying, or deleting wakeup events. You can also enable or disable Insomniac, to prevent it from setting new wakeup times.

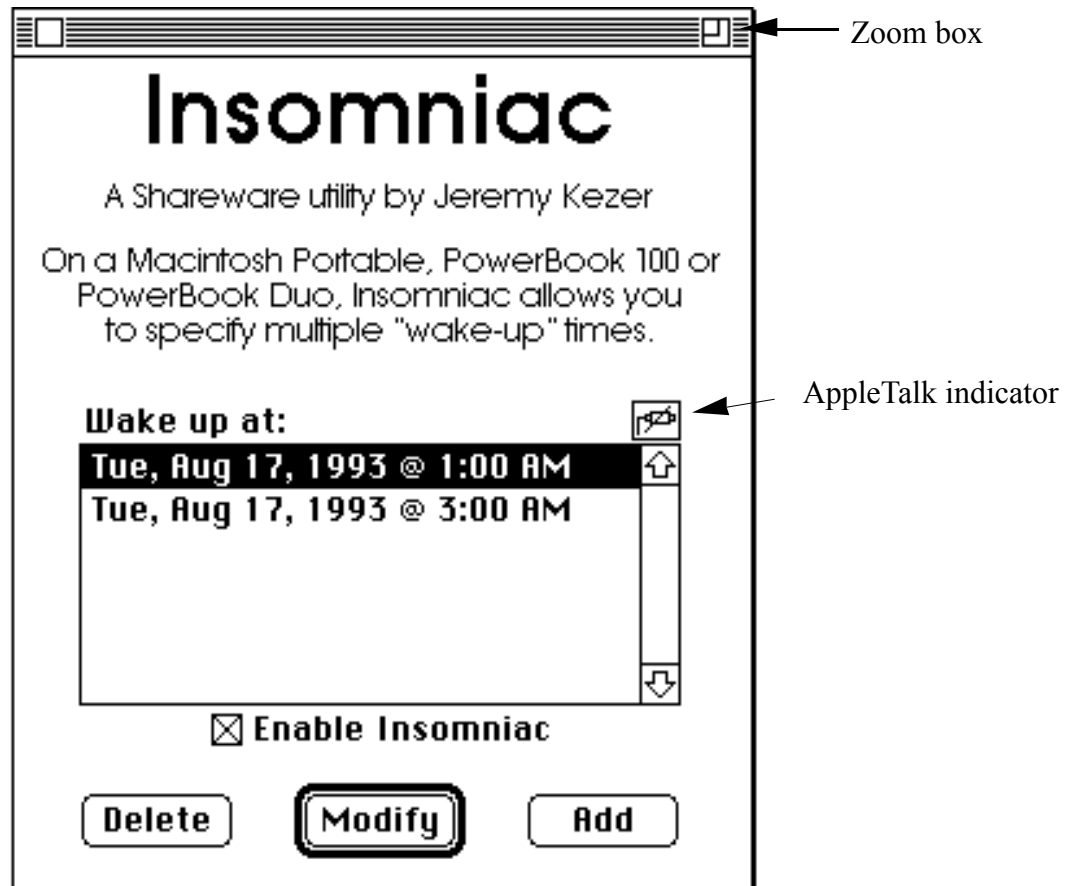


Figure 2. The expanded window shows current wakeup times, plus buttons for manipulating events.

The scrolling window shows the current wakeup events, listed in chronological order (the next event comes first in the list).

The check box enables or disables Insomniac. If Insomniac is disabled, it will not set the wakeup time.

Above the upper right corner of the scroll box, there is a AppleTalk indicator. It is important to know the status of AppleTalk, because if it is active, it will prevent your PowerBook from sleeping. If the AppleTalk indicator has a slanted line through it, AppleTalk is disabled.

At the bottom of the dialog are three buttons, whose purposes are easy to decipher - they allow you to add, delete, or modify wakeup events.

If you press either the add or modify buttons, the dialog shown in Figure 3 will appear. It will allow you to enter the wakeup time and date.

Wakeup Date

Month: 08 Day: 17 Year: 1993

Wakeup Time

Hour: 01 Minute: 00 ☒ AM ☐ PM

OK Cancel

Figure 3. This dialog lets you enter the time and date of the wakeup event.

Please note that the time is entered in 12-hour notation, not military notation (i.e., 11:00pm = 2300 hours).

Installing Insomniac

Insomniac is a stand-alone application, designed to run in the background when you aren't entering wakeup events. If you want MyBattery to enter wakeup events, it must be running.

To install Insomniac, simply copy the application to where you want it - your "Utilities" folder or wherever. The first time you run either program, it will create a "Insomniac Preferences" file in your "System" Folder (or in the "Preferences" folder if you are running System 7).

Running on startup under System 6.0.x

If you want Insomniac to run whenever you turn on or restart your Macintosh, perform the following steps:

- 1) Locate your copy of Insomniac.
- 2) Click on the application icon *once* to select it.
- 3) From the **Special** menu, choose “Set Startup...”.
- 4) Under the sentence that says “Upon startup, automatically open”, click on the radio button for “Insomniac”.
- 5) Restart! Insomniac should start running automatically.

Running on startup under System 7.x

- 1) Locate your copy of Insomniac.
- 2) Click on the application icon *once* to select it.
- 3) From the **File** menu under the Finder, choose “Create Alias”.
- 4) Drag the alias to the “Startup Items” folder, inside your “System Folder”.
- 5) Restart! Insomniac should start running automatically.

Or, if you desire, you can place the Insomniac application itself in your “Startup Items” folder, which will save a little disk space.

Using Insomniac

Most telecommunications-related software has the ability to perform its functions at a programmable time. For example, your fax software may allow you to send a fax at a particular time, or your favorite online service may provide software to download files at a selected time.

Obviously, it is desirable to have your software perform these functions at an off-peak time, to save on your phone and other bills. Unfortunately, the best times for computers don't coincide with the normal hours of a human person, which is where Insomniac comes in.

Before Insomniac

Using the “PowerBook” or “Portable” control panel, the typical scenario is this:

- 1) Through the “PowerBook” or “Portable” control panel, you set your PowerBook's wakeup time to 1:00am.
- 2) You put your PowerBook to sleep.
- 3) At 1:00am, your PowerBook wakes up and sends the faxes.
- 4) Your PowerBook falls back to sleep.

This is great if you only want to perform a single telecommunications chore, but what if you want your fax package to send faxes, and your email package to get your mail? Obviously, you can't schedule them both to run at the same time, because your modem only allows one program to use the modem at a time. Or, you could try scheduling one to run right

after the other, but the timing is tricky - if the first task finishes early or takes longer, the second task might not run. Or, you can leave your PowerBook on all night, but what fun is that?

After Insomniac

With Insomniac running, you could set up the following scenario:

- 1) You program Insomniac to wake up at 1:00am and again at 2:00am.
- 2) You tell your fax software to send faxes at 1:00am.
- 3) You tell your electronic mail to get your mail at 2:00am.
- 4) You put your PowerBook to sleep.
- 5) At 1:00am, your PowerBook wakes up and sends its faxes. In the background, Insomniac deletes the old wakeup event and sets the next one (2:00am).
- 6) Your PowerBook falls back to sleep.
- 7) At 2:00am, your PowerBook wakes up and gets your mail. In the background, Insomniac deletes the old wakeup event.
- 8) Your PowerBook falls back to sleep.

What could be easier?

To ease my mind, I usually set the wakeup time to be a minute before the telecommunications event takes place. For example, if I want to send faxes at 2:00am, I set the wakeup time to be 1:59am. This gives the PowerBook enough time to “wake up”, and ensures that your telecommunications software will note the time in order to perform its task.

PowerBooks and Sleep

If you want your PowerBook to sleep when it has completed its late-night chores, you should ensure that it is configured to sleep when idle. This is done through the “PowerBook” or “Portable” control panel. Also, all of the battery conservation utilities, like PBTools or CPU, allow you to set the system sleep period. Make sure that your system will sleep after a reasonable idle period (I tend to use 3 minutes when running off battery power, and 15 minutes when using the charger - your own needs may require different times).

Also note that if AppleTalk is ON, your PowerBook will not sleep! Make sure that it is turned off via the Chooser desk accessory.

How Insomniac works

The Power Manager is the piece of software provided by Apple to control the battery-specific operations of portable Macintoshes. Through the Power Manager, Insomniac sets the wake up time.

Because the Power Manager supports only a single wakeup time, Insomniac is constantly “refreshing” the wakeup time, with the time of the next event. Once an event has “expired”, and the present time is later than the time of the event, Insomniac will automatically delete the event and begin refreshing the Power Manager with the next wakeup event.

If a wakeup event occurs while your PowerBook is awake, nothing will happen - Insomniac will delete the wakeup event, and begin using the next one.

Insomniac and the PowerBook Control Panel

If Insomniac is running, it's smart enough to determine when you enter a time through the "PowerBook" or "Portable" control panel. It will then add this time to Insomniac's list of wakeup events. Note that if you enter a new time through the control panel that is later than an Insomniac event, Insomniac will override your change. If you want to use the control panel, quit from Insomniac first.

Insomniac and Battery Consumption

In the process of developing Insomniac, I have attempted to minimize accesses to the hard drive, to save battery consumption. However, Insomniac will access the hard drive whenever...

- 1) You manually add, modify or delete an event.
- 2) You quit from Insomniac - it writes some preference information (window positions and other stuff) to the hard drive.

Registration

When you receive Insomniac, it comes unregistered. You can tell if your copy is registered by bringing up the "About Insomniac..." screen - in the lower left corner, next to the version number, it will let you know.

What does registering your copy do? Unregistered copies only allow you to enter two wakeup "events", while a registered copy allows fifty. Also, you will be notified by email of future upgrades.

If you want, you can also pay a “bundle” fee to register MyBattery - my shareware battery monitoring utility. The bundle price is much cheaper than registering them individually.

How to register

Included in the Insomniac package is a TeachText registration form. Print out the form, fill it in, and send it in with your registration fee. If you are sending a check or money order, it must be in U.S. dollars, and drawn on a U.S. bank (foreign postal money orders are fine). Also, please make it payable to Jeremy Kezer.

Once your registration fee has been received, I will send you a letter with the registration password, and directions on how to use the password to register your copy. Once you are registered, you are registered for life! The password will work on all future copies of Insomniac. Please give me your electronic mail address, so I can send you notices of future upgrades.

Due to the vagaries of the U.S. Post Office and my schedule (I occasionally travel for work), it may take a week or two for you to receive your registration letter.

Addresses

If the registration form isn't present, please send the check to the following:

Jeremy Kezer
143 Songbird Lane
Farmington, CT 06032-3433
USA

I can also be reached through various EMail systems:

America Online: JBKezer
Internet: jbkezer@aol.com

Troubleshooting

With the help of some dedicated beta testers, I have attempted to test Insomniac as thoroughly as possible. However, there is no way of testing all the possible configurations. If Insomniac is operating erratically, it's possible that some piece of software is interfering with it.

Application interference

If Insomniac is operating erratically with other applications running, note the other applications that are running. Next, restart your computer and try running Insomniac 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 Insomniac 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 Insomniac ; 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 Insomniac . 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.

Upgrading System 6 to System 7

When Insomniac is running under System 6.0.x, it creates a “Insomniac preferences” file in your “System” folder. If you upgrade to System 7 and want to preserve your preferences and estimation data, copy these files to the “Preferences” folder in your “System” folder. Otherwise, Insomniac will create new files in your “Preferences” folder using default values.

Compatibility

Insomniac requires System 6.0.8 or later. It is fully compatible with System 7.0.x and System 7.1.

Insomniac has been tested on all current flavors of PowerBooks. It should

work on any portable Macintosh that supports the Power Manager (part of Apple's Macintosh system software).

Insomniac was designed as a stand-alone application for two reasons - to minimize the possibility of conflicts with other programs (with CDEV's or INIT's, there's always a risk), and to allow you maximum flexibility with free RAM. If you need more memory, simply quit Insomniac (with a CDEV or INIT, you'll have to reboot, wasting time and battery power).

Technical information and references

References

The information used to write Insomniac 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

Insomniac has been developed using:

- Apple PowerBook 100 and PowerBook 165c.
- Apple's ResEdit, version 2.1.
- Symantec THINK C.6.0. This is one of the best C development environments I've seen - I only wish they wrote a Unix version!
- Symantec THINK C Reference. I use this so much my printed copies of "Inside Macintosh" are getting dusty. A truly useful tool if you're doing any sort of Macintosh programming - the code examples alone are worth the price!
- Apple's "Inside Macintosh", volumes I-VI.

Version History

1.0.2 26 October 1993	Added support for Duo 250 and 270c.
1.0.1 5 September 1993	Fixed potential problem when attempting to add more than 50 events.
1.0.0 17 August 1993	<ul style="list-style-type: none">• The first release.

Disclaimer

While I have attempted to test Insomniac 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 Insomniac . The individual using the software bears all risk as to the quality and performance of the software.

If you have registered your copy of Insomniac , 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.