

Introduction

Welcome to PowerLock™, Release 3. This manual is accurate for Version 3.1 of PowerLock.

This User Guide is organised into five sections:

Overview	-	what is PowerLock and what does it do
Installation	-	enough information for you to get it going
Reference	-	detailed instructions
Technical	-	technical information plus details on further customising options
Licencing	-	Legal Stuff

If you just want to get it going read the Overview & Installation sections and come back to the others later.

Overview

PowerLock is the "front door" to your Macintosh. It is an easy to use start up application that can be completely configured and customised to suit your own personal needs. PowerLock started out as a start up security application. Now, through AddOn Technology, PowerLock can become much more. However, its prime function remains and that is to prevent unauthorised access to your Macintosh.

Why would you want to use PowerLock? Well, if you're annoyed when you find that your partner has been at *your* Macintosh yet again, and your folders aren't where you left them, or your partner accidentally selects Erase Disk instead of Empty Trash on occasions - PowerLock will help you. (My wife hates it!) If you want to be able to leave your Macintosh for five minutes to get a cup of coffee, and not come back and find your kids playing yet another game of Lemmings™ (and forgetting to save your latest masterpiece) - you need PowerLock. If you're working on commercially sensitive material at your work, then you need PowerLock.

PowerLock comes with a preset configuration that most people should find quite suitable. But true "PowerUser" features are readily available including Add-On Technology™ and SuperSecurity™. All of PowerLock's features are easily customised.

What does PowerLock do? Well, when your Macintosh starts up, PowerLock is automatically run. You are then given up to three attempts at the password. After three unsuccessful attempts, your Macintosh is Shut Down and, if your Macintosh supports it, the power is switched off - thus the name, PowerLock.

Indicators show you if any illegal attempts have been made and a detailed log file records a wide variety of information. PowerLock can also be used when you leave your Macintosh - just launch it from your desktop or use the supplied function key or desk accessory to launch it from anywhere. It will display a MacPaint™ or MacDraw™ picture after 30 seconds inactivity or shut the power off after five minutes inactivity. It also works well with your screen saver.

PowerLock supports many different users of your Macintosh. PowerLock is System 7 *Savvy* - it fully supports the new System Folders, has extensive balloon help for all dialogs, supports core AppleEvents, uses & creates aliases etc. It's also System 6 *Savvy* - some features are specific to System 6 users.

PowerLock incorporates two unique features: Add-On Technology and SuperSecurity. Add-On Technology allows PowerLock to be extended through Add-On files provided by both PowerLock's author and other persons. In effect, you can build your own requirements into PowerLock merely by adding the appropriate AddOns. Included with PowerLock are many AddOns allowing you to customise PowerLock to suit your own needs. With these AddOns, PowerLock becomes much more than a security application.

SuperSecurity incorporates additional high-security features including StartUp Security, automatically locking disks on shut down and prevention of unauthorised attempts to get out of PowerLock through programming tools etc. If some of this sounds confusing, don't worry - you don't need to use it unless you want to.

PowerLock is not foolproof and is not intended to be a full protection system - there are other commercial and shareware products available for that. It is designed to prevent casual access to your files. The beauty of PowerLock is its simplicity.

Installation

Full installation details can be found at Appendix A. System 6 users should go to the appendix now.

System 7 Users should read on...

To install PowerLock, simply open it from the Finder and click on the Auto-Install button.

After PowerLock installs itself it will ask you for a new password. Type one in, and click Change. Type it in again and click Confirm. PowerLock is now installed with your personal password. It will quit to the Finder.



PowerLock 3.0 f

What's Included with PowerLock?

PowerLock f		
Name	Size	Kind
PowerLock	172K	Application
PowerLock Manual	142K	Text Document
Release 3 Announcement	14K	Text Document
PowerLock Read FIRST	9K	Text Document
AddOns f	-	Folder
AddOns Manual	89K	Text Document
AutoLogOn	3K	Text Document
BookTools	4K	Text Document
LastResort	4K	Text Document
LogManager	14K	Text Document
MasterPassword	6K	Text Document
NeverEverShutDown	1K	Text Document
OutToLunch	4K	Text Document
PowerMessages	6K	Text Document
PowerUsers	18K	Text Document
SaferShutDown	3K	Text Document
SuperHelper	15K	Text Document
~Hide	2K	Text Document

PowerLock	The PowerLock Application itself (includes Desk Accessory, Function Key & Extension)
PowerLock Manual	This manual, in Microsoft Word 4.00D format
PowerLock Read FIRST	Brief instructions to get you started & any late-breaking news - in TeachText format
Release 3 Announcement	Details of changes new in Release 3. Also includes a brief version history for those that are interested.
AddOns f	Folder containing the included AddOns. See instructions for info on how to activate them. See the separate file, "AddOns Manual", for details about specific AddOns. See later in this manual for information about the Developers Kit.


Reference

General Information

⌘ ShortCuts

PowerLock supports ShortCut keys in all its dialogs. You use the Command key together with another key to access the short cuts. Usually, the short cut key is the same as the first letter of the button name. To find out what the short cut keys are, simply hold down the Command key for more than about a second and they will be displayed.

Additional FastPath Buttons are available, such as option-clicking the **Change** button to go direct to the Preferences dialog. To find out what FastPath buttons are available, simply hold down the Option key for a second or so. FastPath buttons are indicated separately throughout this manual.

 This symbol indicates an Options menu is available. These menus are provided by various AddOns and can include a wide variety of different commands. To activate a command, simply hold down the mouse button over this symbol and a popup menu will appear.

The Main PowerLock Dialog




Figure 1 PowerLock Main Dialog

This is the dialog box you see when you start PowerLock. You'll normally just type your password here and click Okay to exit. However, you may wish to change some options. Before you can use the Change or Okay buttons, you must first enter a valid password. The following points should also be noted:

1. **Password Field**
As you type your password, you'll see • instead of each character.
2. **Change Button**
Enter your password, then click this button instead of Okay to go to the "Change Password" dialog and also to the Preferences dialog where you can change your preferences, set up user lists and create the DA, FKEY or Extension. Option-click this button to go straight to the Preferences dialog.
3. **PowerLock Icon**
Clicking here does nothing.
4. **Shut Down button**
Shuts down your Macintosh (and switches the power off if possible). This is the only way to exit PowerLock without entering a valid password.
5. **Okay button**
Accepts the password and, if correct, quits PowerLock. If not correct, displays an alert and allows you two more attempts before shutting down.

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6. Registration Field
Usually displays "For private, non-commercial, non-business use only" but can also display your name or your company's name if you have registered PowerLock.
7. Version Field
Usually displays the version of PowerLock but is also used to display various messages. For example, if the Macintosh had previously been shut down by PowerLock you would see "A ShutDown has Occurred" in this field - in which case you have only one attempt at the password available. You will also be reminded to send away your postcard (if you are using an unregistered PowerLock).
8.  Options Menu
This will only appear if an AddOn has placed it there. Commands in this menu with a diamond mark 5 next to them require a password to be entered before selecting the command. Those without a diamond can be used with or without a password.

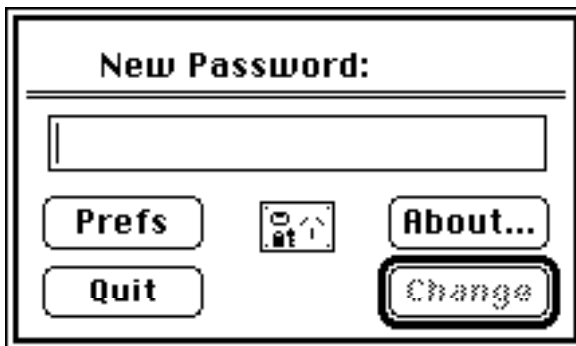


Figure 2 Password Change

Changing the Password

Whenever you wish to change your password, start PowerLock and type in the current password but instead of clicking OK, click **Change**. You'll be asked to enter your new password. Click **Change** and you'll be asked to enter it again to confirm it. Click **Confirm** and the password has been saved (and PowerLock quits). Note that the password is *case-sensitive* and PowerLock imposes no restrictions on the sort of password you can have (except that you cannot have an empty password).

Points to note about the Password Dialog Box:

1. Password Field
Displays • instead of each character. Passwords are case sensitive and can be up to 255 characters long.
2. **Prefs** Button
Takes you to the Preferences Dialog Box. You will then return to the Change Password dialog box from which you can quit or proceed to change your password. Option-Clicking this button is a short cut to the SuperSecurity Preferences dialog.
3. **About...** Button
Displays PowerLock's "About Box". Option-Click this button (or click the PowerLock icon within the About box) to see detailed technical information about PowerLock including what Add-Ons are currently active & their version numbers.
4. PowerLock Icon
Same as clicking the About... button.
5. **Quit** Button
Quits PowerLock *without changing the Password*
6. **Change** Button
The first time you click this (or press return) you'll get the same dialog box back again prompting you to enter your new password again. The button name will change to **Confirm**. If you don't enter it correctly, you'll get a warning and PowerLock will quit. If you get it right, PowerLock will change the password and quit.

Passwords - which one and where is it?

When PowerLock is first run, it is set up for just one user. A password is entered which then becomes the only way of accessing PowerLock. Whenever the **Change** button is clicked, the password being changed is the main, single user password.

If a user list is established, PowerLock can have up to five users with five different passwords (and, with suitable add-ons, this can be extended to almost unlimited users). In this case, when the **Change** button is clicked, it is referring to the password of the current user.

The main password is stored in both the PowerLock application and its Preferences file whereas the multiple users passwords (and user names) are only stored in the Preferences file. Therefore, if you subsequently take PowerLock to another computer without its Preferences file, you will need to use the main password.

(Note that all passwords and usernames are stored in encrypted form)

A warning about Shut Downs

One of the security features of PowerLock is that it will Shut Down your Macintosh after three unsuccessful password attempts, after a specified period of inactivity, or if someone selects the Shut Down button. PowerLock guarantees that your Macintosh will Shut Down. To do so, it has to take control of the Shut Down process. A side effect is that, if you have any open applications that have unsaved changes, the unsaved changes will be lost. If this concerns you, use the SaferShutDown AddOn that is supplied with PowerLock.

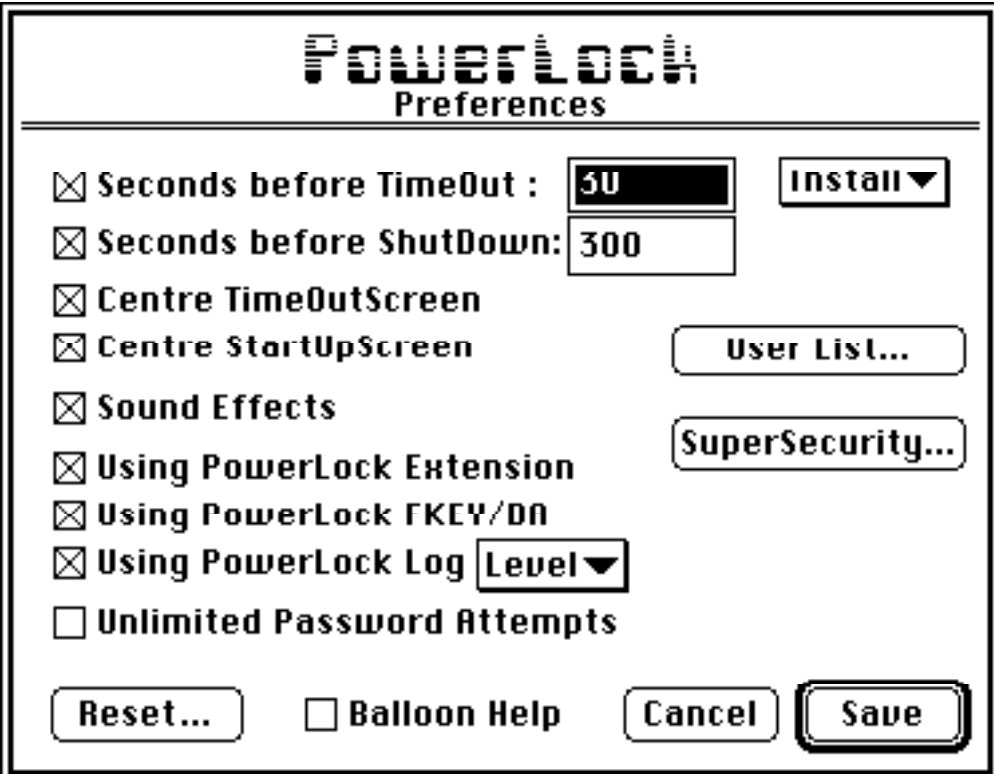


Figure 3 Preferences Dialog

Changing your Preferences

You can change a number of aspects of how PowerLock operates and what options you are using from the Preferences dialog. Figure 3 shows the dialog and includes the default settings that PowerLock uses when a Preferences file does not exist.

1. **Seconds before TimeOut**
Enter the number of seconds waiting for a password/username before the timeout screen is displayed. Default is 30. There must be a MacDraw PICT or MacPaint PNTG file named "PowerLock

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TimeOutScreen" either in the same folder as PowerLock or in the System Folder



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for this option to work. Click the checkbox to the left to enable or disable this feature. Some AddOns (such as OutToLunch) will require that this option is enabled.

2. **Seconds before ShutDown**

Enter the number of seconds of inactivity before PowerLock shuts down the computer. This is only active whilst PowerLock is running and is waiting for a password or username. Default is 300. Click the checkbox to the left to enable or disable this feature.

3. **Centre TimeOutScreen**

Draws your TimeOutScreen in the centre of your monitor (only affects PICT files). If you get a blank screen instead of the picture you were expecting, try activating this option. Default is On.

4. **Centre StartUpScreen**

Same as 3 but affects the startupscreen. Default is On.

5. **Sound Effects**

Switches on or off the PowerLock sound effects. Default is On. You can customise the sound effects and disable only certain effects - see the Technical section for more information.

6. **Using PowerLock Extension**

Ensure this is checked if you are using the PowerLock Extension (described later). Unchecking it will save some time at startup. Default is On.

7. **Using PowerLock FKEY/DA**

Make sure this is checked if you are using either or both the PowerLock FKEY or the PowerLock DA (described later) otherwise they may not work. Unchecking it will save some time when quitting. Default is On.

8. **Using PowerLock Log**

Check this if you want PowerLock to maintain a security log file - PowerLock will then record a wide variety of activities associated with its use. The default is On. Note that Add-Ons can choose to ignore the setting of this switch and write to the log regardless.

9. **Level▼**

The Level button is a popup menu that enables you to set the level of detail to be stored in your log file. There are four different levels available:

Minimal:	Only critical information is stored
Normal:	Default, as per previous versions of PowerLock
Detailed:	Includes records of log ins and other details
Diagnostic:	Includes all possible log information and also tracks some technical information

10. **Unlimited Password Attempts**

Click this button to eliminate the three attempt restriction. This is not recommended as it reduces the effectiveness of PowerLock security. The default is unchecked.

11. **Reset...**

Use this option when you want to give someone a copy of PowerLock. Make sure you do this to a copy of PowerLock, not your original. Also, don't distribute PowerLock with the PowerLock Prefs file. It is important that you distribute PowerLock with at least this manual but preferably all files that came with it. PowerLock automatically creates its own default Preferences file. (**Reset** changes the password to PowerLock, removes your registration details if registered, and deletes the master password if applicable)

12. **Balloon Help**

Only available under System 7. When this option is active, PowerLock displays help balloons for every item in its dialogs. The setting of the Balloon Help button is saved between PowerLock sessions. If you want it active for only one session, option-click the button. (Short-Cut: On extended keyboards, pressing the Help key in any dialog activates/deactivates balloon help - other keyboards can use ⌘H).

13. **Install▼**



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This is a popup menu that enables you install the Function Key, Desk Accessory or Extension.

Install Function Key

The PowerLock Function Key (FKEY) allows you to quickly launch PowerLock from anywhere simply by pressing Command-Shift-9. This option installs the PowerLock FKEY either directly into your System file or into a new file called "PowerLock FKEY" in the same folder as your PowerLock application. Further information can be found later in this manual.

Install Desk Accessory

The PowerLock Desk Accessory enables you to launch PowerLock at any time simply by selecting it from under the Apple menu. Under System 6, a Font/DA Mover file (suitcase) called "PowerLock DA" is created (in the same folder as PowerLock) which you can use with either the Font/DA Mover or Suitcase II/MasterJuggler. System 7 Users will be advised that the Desk Accessory is not necessary and PowerLock will give you the option of creating an alias of itself. This alias will be saved in the PowerLock folder and will be called "PowerLock DA". You can rename it and move it to wherever you like. To make it function like a true desk accessory, you should place it in your Apple Menu Items folder inside your System Folder.

Install Extension

The PowerLock Extension provides additional reporting of unauthorised attempts at access to your Macintosh. This installation options creates the PowerLock Extension either directly into your System folder or into your Extensions folder if using System 7.

Install System 6 Alias

This menu item is only displayed when running under System 6. It allows you to create the equivalent of an alias of PowerLock. The alias file is called the **6/Launcher**, described in more detail later in the manual.

- 14. **User List**
Takes you to the User List Dialog (explained later).
- 15. **SuperSecurity**
Takes you to the SuperSecurity Options dialog. A short cut is to option-click the Prefs button in the Change Password dialog.
- 16. **Save**
Saves the changes you've made to the Preferences. Only affects the main Preferences dialog - the UserList and SuperSecurity dialogs have their own save buttons.
- 17. **Cancel**
Cancels all changes made since you displayed the dialog.

The PowerLock Desktop

PowerLock normally automatically fills the desktop with the current desktop pattern so that files and folders currently on the desktop cannot be seen.

PowerLock can also be made to display a picture file as a backdrop. If a file called PowerLock StartUpScreen can be found, it will automatically be displayed underneath all dialogs and alerts. The only side effect of doing so is that it slows PowerLock down somewhat, particularly if using color.

PowerLock will also display a picture file named "PowerLock TimeOutScreen" after a period of inactivity (which you specify) whilst waiting for a password.

Picture files must be of type PICT or PNTG - if they aren't you will receive an alert. PowerLock supports both PICT and PICT2 format files - an easy way of creating these screens is to use MacDraw II (version 1.1 or later) and choose Save As.... PICT2 files are displayed in color if possible. PowerLock must be able to find the screen files - to ensure this happens, place the screen files in the same folder as PowerLock or directly in the System Folder.

Note that if you see a blank (white) screen, you may need to select or deselect the "Centre Screen" option from the Preferences dialog.

Important: if you intend using color screen files you should increase the memory allocation for PowerLock - a setting of 1Mb should be sufficient. Otherwise you will receive low



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memory warnings. Use the Get Info command from the Finder.



PowerLock Extension

This is an optional extension that can help you determine if people are accessing your Macintosh without going through PowerLock. The PowerLock application will alert you if someone has bypassed PowerLock (provided you have told PowerLock in the Preferences dialog that you are using the Extension). (Note: The INIT code makes no patches and uses no memory so it is safe to leave in your system folder and it should not conflict with any other extensions). The extension is most effective for System 6 users but can also be of benefit to System 7 users.



PowerLock FKEY

Included with PowerLock is a function key that can startup PowerLock. To use it, install it in your system file either with PowerLock itself, or using an FKEY installer, ResEdit or better yet, use Suitcase. The FKEY will find PowerLock wherever it happens to be on your hard disk (and also if it happens to be already running) *provided* you have checked the "Using PowerLock FKEY/DA" option in the Preferences dialog. If there are any problems, you will receive an alert. Note that the default keystroke for the FKEY is Command-Shift-9. Hold down the Caps Lock key to see version information.



PowerLock DA

Included with PowerLock is a desk accessory that can startup PowerLock. It is intended for System 6 users - System 7 users need only place an alias of PowerLock in their Apple Menu Items folder. The same conditions applying to the FKEY also apply to the DA - (actually the DA uses the same source code as the FKEY).

Important: Do not change the name of PowerLock if you are using the FKEY or DA.



6/Launcher

The 6/Launcher is the equivalent of a System 7 alias file but for System 6 users. Simply select Install System 6 Alias, and the 6/Launcher file will be created. You can copy the file as many times as you like and put it wherever you want to be able to quickly launch PowerLock.



PowerLock Log

A file called "PowerLock Log" is created in the Preferences folder (or you can use an alias to redirect it elsewhere - just make sure the alias is called "PowerLock Log" and is in the same folder as the Preferences file). The log stores details of illegal access attempts and modifications made to your PowerLock configuration. The following are just a few of the possible entries:

"27/6/92 08:55:43rohan	91	Illegal Attempt #1"
"28/6/92 14:09:12joe	4	Shut Down"
"29/6/92 08:23:01fred	91	Illegal Attempt #1"
"29/6/92 08:23:33fred	91	Illegal Attempt #2"
"29/6/92 08:24:01charlie	91	Illegal Attempt #3"
"29/6/92 08:24:01charlie	4	Shut Down"
"30/6/92 16:47:51rohan	5	Password Changed"

Each field in the file is separated by a tab. The first two fields are the date and time the log entry was made (the date will be formatted according to your country's use of short dates). The third field is the username entered (or * if single user PowerLock). The number represents the ID of the log message and will be used by a later addOn for statistical purposes. Finally, the description of the event that caused the log entry.

In the example above, the first entry indicates a wrong password has been used on the 1st attempt. You can presume that entry was eventually successful as there are no other illegal attempt messages on that date. The shut down message means that the Shut Down button was pressed by someone who entered a username of Joe. If the shut down message follows an "Illegal Attempt #3" then it means that PowerLock automatically shut down after three unsuccessful attempts.





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The log file is an ordinary text file that can be read by any word processor or text editing application/desktop accessory. In System 7, drop the log file onto your word processor. System 6 users should select the file from their word processors' File/Open... command.

You can delete the log file any time you like - it will be created if it doesn't already exist. When the log file starts to get quite large, PowerLock will warn you.

To obtain more information about Log File entries, and to view the log file from within PowerLock, use the LogManager AddOn.

What happens if I forget my password?

Well, don't call me! Seriously, there are some possibilities. The first thing to do is to confirm that you indeed have forgotten the password. Starting with Release 3 passwords in PowerLock are case-sensitive. You should therefore try combinations of capital letters and lower case letters. If you're absolutely sure you don't know the password, do the following:

- * Registered users could possibly make use of LastResort, an AddOn that quits PowerLock.
- * If you have been using a User List, try entering the main PowerLock password and leaving the user name field blank.
- * Try the default password, "PowerLock"

The following information should help, particularly where SuperSecurity has not been used:

First, boot from a floppy disk and try moving the Preferences file to another folder and starting PowerLock. If that doesn't work, boot from a floppy disk and follow the removal instructions in the Appendix.

Once you get access to your hard disk, PowerLock will be useless to you as it stores its password (in encrypted form) inside the application as well as in the separate Preferences file. You DID take a backup didn't you?

As a last resort, I can provide you with an access code that will enable you to gain access to PowerLock on a particular date at a particular hour. For security reasons, I will only provide this for registered users who must include their licence information when writing to me. Please also include three preferred dates and times you want access to PowerLock (and allow sufficient time for the mail)

PowerLock User List

PowerLock can support up to five different users each with different passwords. The default is a single user version of PowerLock but you can easily add user names.



Figure 4 User List Dialog

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To enter user names, just type each person's name in the fields. Passwords will be automatically set to their username but remember that they are case sensitive so that, in the above example, Luisa must enter her password as "Luisa". Make sure you put an entry in for yourself! **Important:** The first username (with the • next to it) is known as the SuperUser and is the only one that can access the Preferences dialog box.

To delete all user names, tab into each field and press backspace, then click Save.

When usernames have been set, the opening dialog changes slightly as follows:



Each person types in their name in the Username field, and their own password in the password field. Everyone then has access to the Change Password dialog, but only the first listed user (the SuperUser) can access the Preferences dialog. Whenever your password is the same as your username, PowerLock takes you to the Change Password dialog.


When multiple users exist, and the log level is set to Detailed or higher, PowerLock makes an entry in the log file each time a person logs in.

The PowerUsers AddOn provides a simpler method of adding and changing users. It also provides additional security capabilities. For registered PowerLock users, it removes the five user limit allowing you to have up to 99 users.



Add-On Technology

To use add-on files with PowerLock, you place them in the same folder as PowerLock.

Whenever you see a button that looks like , it represents a popup menu that has been put there by an Add-On. These menus can appear on almost all PowerLock dialogs. Simply select the command from the menu that you want. Note that the menu on the main dialog is a little different - if a 5 appears next to the command, it means you MUST first enter a valid password (without clicking OK) before choosing the command.

To get information about which AddOns are currently in use, option-click the About button.

To disable all AddOns, hold down the Shift key as you start PowerLock.

Add-Ons are described in more detail in the 'AddOns Manual' file.

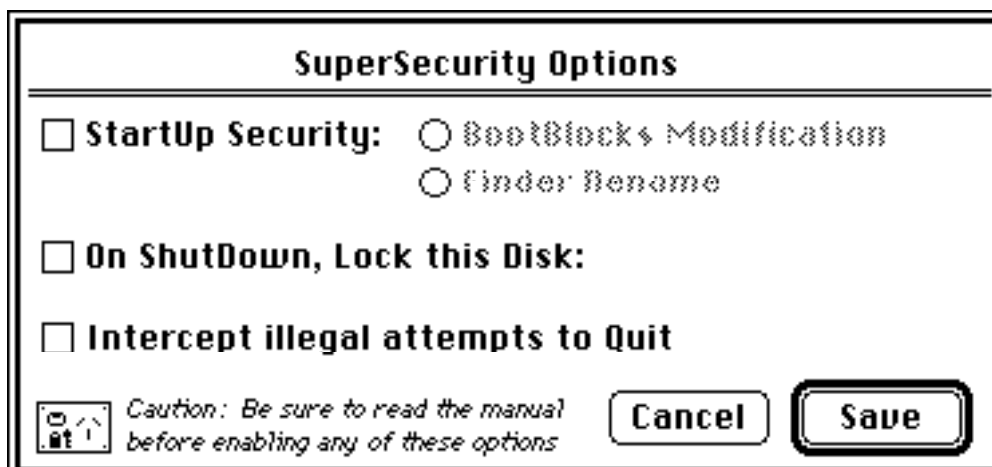


Figure 5 SuperSecurity Options

SuperSecurity

One of the problems the first version (1.0.x) of PowerLock had was that it was easily defeated. System 7 has made it easier to defeat system extensions and startup documents. All PowerLock versions, including the current one (as supplied), can be defeated simply by starting up from a floppy disk.

However, for those who require more security, PowerLock offers SuperSecurity™. SuperSecurity covers three options- startup security, automatic disk locking and trapping illegal Quit commands. You should take great care with all SuperSecurity options as it is possible you might find yourself locked out of your hard disk forever! Only use these options if you are comfortable with them and be sure to follow the instructions. Try them out on a floppy disk first.

StartUp Security

PowerLock incorporates two different options that *guarantee* that if the hard disk is booted then PowerLock will run. Bootblocks Modification is the most reliable method, but also the most complex and only works under System 6.0.x. Finder Rename is reasonably straightforward and easily reversed - you should try it first.

- a) BootBlocks Modification *(only available to System 6 users)*
 1. Place PowerLock in your System Folder. It must be the System folder and not in a folder within the System folder.
 2. Make sure you have told PowerLock that you are using the Boot Blocks Modification.
 3. Use a utility that enables you to read and change the disk boot blocks. Norton Utilities is but one example of such a program.
 4. Alter the Finder Name from "Finder" to "PowerLock". If you are using a utility that doesn't specifically give you a method of altering the boot blocks, then read in Sector 0, go to offset 27 (decimal) and type in "PowerLock". Go to offset 26 and press tab or enter 09 in the hex display. Note that you do not need to alter the Bootup program name.

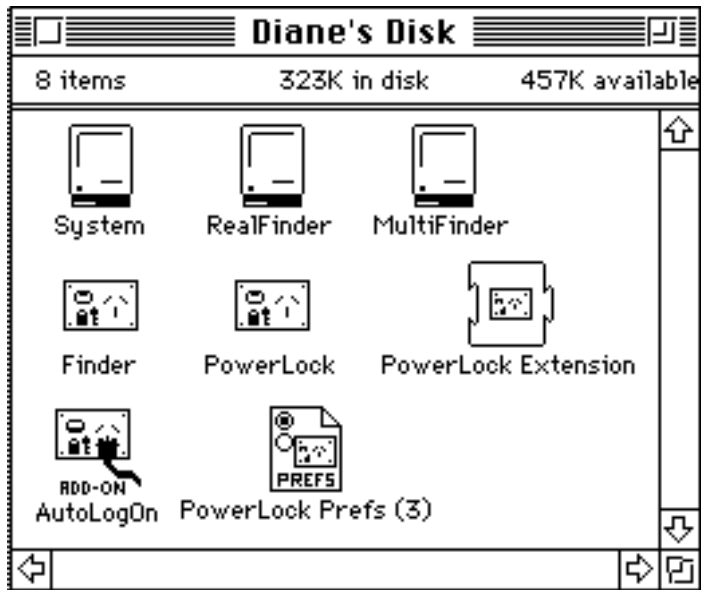


Figure 6 Finder Rename

b) Finder Rename

1. Boot from a floppy disk.
2. Put a copy of PowerLock (not an alias) in the System Folder.
3. Rename the Finder to "RealFinder" (one word)
4. Rename PowerLock to "Finder"
5. Launch PowerLock (now named Finder) and enable the Finder Rename option.
6. If you want to use the FKEY or DA, you'll need to put another copy of PowerLock (with the name "PowerLock" in the System Folder.

From now on when you boot your hard disk, PowerLock will be launched. PowerLock then changes the Finder reference (in RAM only) to point to the real Finder.

System 7 Notes:

You may have trouble renaming the Finder to RealFinder. Use ResEdit to change the System or Name Lock bit. You will also need to change the File Type and File Creator of PowerLock (Finder) to type of 'FNDR' and Creator of 'MACS'

Side Effect: Under System 7, items in the StartUp Items folder will not execute if you use Finder Rename.

The AddOn, SuperHelper, can be used to overcome these problems.

ShutDown Disk Locking

Caution: The Macintosh cannot boot from a locked disk. Therefore you should not name your main hard disk as the disk to be locked unless you want to use an Access Disk (described later).

PowerLock can automatically apply a software volume lock to any disk you specify whenever your Macintosh is shut down or restarted. This is how it works:

1. When PowerLock is run, and a correct password is entered, it checks to see if the volume named in the SuperSecurity dialog is online. If so, it unlocks the volume if it is currently locked.
2. When PowerLock quits, it installs a ShutDown procedure.
3. When you shut down or restart your Macintosh, the ShutDown procedure is run prior to any volumes being unmounted. The procedure gets the volume name from the Prefs file and sees if it is currently online. If so, it locks the volume. (NOTE: If you are using multiple Prefs files, remember that the ShutDown procedure looks only in the Prefs file in the Preferences/System folder.)

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The impact of locking a disk

You cannot boot from a locked hard disk. You cannot make any changes at all to a locked disk. Some applications will not work with locked disks. A System File on a locked disk may become "unblessed" (usually fixed by opening its folder under System 7).

How to unlock a locked disk

Insert/mount the locked disk. Start PowerLock and go to the SuperSecurity options. Enter the name of the locked disk in the SuperSecurity dialog and press OK. Quit PowerLock. The locked disk will now be unlocked. The AddOn, SuperHelper, provides a more convenient means of achieving this.

Creating an Access Disk

The best security you can get with PowerLock comes if you use an Access Disk. Follow this procedure:

1. Create a minimum System Disk (preferably System 6.0.x). For System 7 Users, it's recommended that you take a copy of the 'Disk Tools' disk that came with System 7.
2. Put a copy of PowerLock on this disk.
3. Use **Set Startup** to automatically start PowerLock.
4. In the SuperSecurity Options, enter the name of your hard disk as the disk to be locked on shutdown.
5. Reboot from the floppy and then shut down.

From now on, the only way you will be able to change anything on your hard disk is if you boot from the Access Disk and enter the correct password.

Intercept Illegal Attempts to Quit

This option has been provided as a means of preventing people accessing your Macintosh through programmers tools known as Debuggers. The Macintosh has a rudimentary debugger built in which can be accessed with the Programmers Switch. Apple also supplies MacsBug, a more sophisticated debugger. Normally it is possible to quit any active application and jump back to the Finder by issuing the right debugger commands. System 7 also provides an additional means of quitting active applications. By enabling this SuperSecurity option, it will not be possible to jump to the Finder without using the correct password.

If someone does try to quit to the Finder and this option is active, the Macintosh will halt with a system error.

Technical Information

Compatibility

PowerLock has been tested on a variety of different models and configurations of Macintoshes. It is unlikely to cause any compatibility problems. It uses less than 300k RAM and only at startup - it is not an INIT. It can be configured to use as little as 120k. PowerLock works with, and takes advantage of, System 7. It is also fully compatible with System 6. The PowerLock INIT only executes at startup and makes no patches - it is removed from RAM once it has executed. The SuperSecurity Lock Disk feature installs a shut down procedure into the system heap that occupies some 2k of RAM. The FKEY and DA use the Launch/Sublaunch methods for starting up PowerLock under System 6 and work properly only with MultiFinder (main side effect in Finder is that PowerLock is launched twice). They both use the new Process Manager when run under System 7.

Known Problems

As PowerLock is only a startup application, it can be defeated. The simplest way to defeat it is to boot from a floppy disk - sorry but it can't help this. Don't leave a system disk lying near your Macintosh. If this worries you, take advantage of the SuperSecurity features. For the ultimate security, put a physical lock on your floppy disk drives (you can buy these commercially and they often come with security software - not as good as PowerLock though!) Also, if you leave documents or application it may be possible to open them prior to PowerLock launching, provided you are quick - PowerLock will however cover up the documents once it is launched.

Think of using PowerLock as like fitting a deadlock - it may stop or deter the casual thief but cannot stop a "professional" burglar.



Preferences File



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PowerLock automatically creates a file, "PowerLock Prefs", which contains your preferences together with encrypted passwords and usernames. The Preferences file is automatically saved in the Preferences folder in your System Folder under System 7. System 6 users can create a folder called "Preferences" and PowerLock will save there - otherwise the Preferences file is saved directly in your System Folder. The main password (for a single user) is written to both the Preferences file and to the PowerLock application itself, for added security.



PowerLock FKEY & DA

The FKEY and DA rely on the Preferences file containing the location of the PowerLock application. Thus you cannot use the FKEY or DA without first running PowerLock. Provided you have set "Using PowerLock FKEY/DA", PowerLock updates its location in the Preferences file each time it is run. This ensures the FKEY or DA will find it even if you move it. However, you may occasionally get a message telling you that the application can't be found. Simply find the application and run it once to update the location. (It is unlikely that System 7 users will ever experience this situation as PowerLock automatically creates an alias resource when it first creates the Preferences file and uses this to resolve PowerLock's location in the FKEY).

Please note that to ensure compatibility with AddOns, the desk accessory should not be called "PowerLock".

Note: Previous versions of PowerLock ignored the 'Using PowerLock FKEY/DA setting'. The latest version now requires this setting.

Sound Effects

PowerLock incorporates eight different sound effects which can be changed if desired. Each sound has a unique name which is used to retrieve it. By replacing the sounds in the PowerLock application with ones of your own, you can change the sound effects.

The eight sounds are:

PowerLock Beep -	played for all general alert messages
Wrong Password -	played when you type an incorrect password - repeated for the number of attempts
ShutDown	- played whenever PowerLock shuts down the Mac
Break In	- played if wrong password entered maximum # of times
Welcome	- played the first time PowerLock is used
MouseDown	- played when the mouse is pressed in a dialog
MouseUp	- played when the mouse is released in a dialog
Key Press	- played on each keypress in any password field. By using a loud sound here, such as the sound that is included with PowerLock, you might even <u>hear</u> when someone's trying to use your Mac while you're away from it.

You can safely delete any sound effect and it won't affect PowerLock. The MouseDown and MouseUp sounds can become annoying so you might like to remove them completely.

PowerLock Desktop

You can change the 'wallpaper' that PowerLock uses to paint the desktop. A later addOn will enable you to do this quite simply. However, in the meantime, you can do it yourself if you know how to use ResEdit. Place the appropriate 'ppat' resource with an ID of 16 into the PowerLock application. These resources are used by many wallpaper applications (such as Before Dark™).

PowerLock Log

When the log file reaches about 25k, PowerLock will warn you that the log is getting quite large. You can configure PowerLock to produce this warning for a specific file size. As an example, if you want to remove this warning simply change the default warning size to a very large number. Use ResEdit to change the STR# "GeneralStrings" index 17.

You can also change the creator of the Log file. Use ResEdit to change the STR# "GeneralStrings" index 24 to whatever creator you require (e.g. Microsoft Word™ is MSWD)



Licence & Registration Information

Distribution

You are welcome to distribute PowerLock to other individuals, bulletin boards, user group libraries etc. provided you do not charge any money for it, other than a reasonable charge for media & transport costs. You may not sell PowerLock (on its own or with other products) without permission of the author.

You should distribute the original PowerLock archive or at least reset the password to "PowerLock". Don't distribute your Preferences file with PowerLock. To reset PowerLock, go into the Preferences dialog and click "Reset..." - this ensures the password is changed back to "PowerLock", any licence information is removed, and ensures the person receiving PowerLock must first read the instructions.

Conditions of Use

PowerLock is being distributed as *ComboWare*, a combination of PostCardWare and ShareWare. PostCardWare applies only when it is used privately at an individuals home. Only one unlicensed copy of PowerLock can be used by any individual, and only at their place of residence - this applies whether you have sent a postcard or not. This may sound tough, but after all it only costs you a postcard! If you want to use it on any other premises, business or otherwise, you must purchase a licence.

Warranty & Disclaimer

PowerLock is supplied as is. The author (Rohan Cook) hereby disclaims all warranties relating to this software, whether express or implied, including without limitation any implied warranties of merchantability or fitness for a particular purpose. The author will not be liable for any special, incidental, consequential, indirect or similar damages due to loss of data or any other reason, even if the author has been advised of the possibility of such damages. In no event shall the authors' liability for any damages ever exceed the price paid for the license to use the software, regardless of the form of the claim. The person or corporation using the software bears all risk as to the quality and performance of the software.

Fees

Individuals may licence PowerLock for use at their place of work for a fee of \$25 (Australian). Employees and students of educational institutions can register for the reduced cost of \$20 (Australian) - please indicate **Educational Registration** when you apply.

Businesses and Corporations may licence multiple copies of PowerLock for significantly reduced rates. This is known as the PowerLock PlusPack which includes the ability to set a single master password for added safety, and also includes a licence for all current PowerLock AddOns. Please write for further details.

For those outside Australia, the simplest way of sending your payment is by sending cash (US\$). This saves *you* the expense of an overseas draft or money order and saves *me* the conversion costs. It is very reliable provided you take simple precautions such as ensuring you cannot see the cash through the envelope. If you prefer to send a cheque (check), please use one that is drawn on an Australian bank and in Australian dollars. If this isn't possible, please include an additional amount (say \$5) to cover conversion costs.

Send your postcards and/or payments, including details of where you obtained PowerLock and its version number, plus any suggested improvements to:

Rohan Cook
P O Box 317
Mornington Vic 3931
Australia

I won't normally reply to postcards, but I do keep your name listed and I do appreciate them. People who send postcards may receive notification of special offers, discounts etc. If you are registering, I will forward details on how to include your registration information in PowerLock, plus information on new AddOns, an up to date bug list (if any!) etc. It will take no more than one week for me to process your registration (usually next day) but I cannot vouch for international mail. I will return the registration details via air mail.

I can also be contacted on the AUSOM BBS in Melbourne via Internet address:
rgc%ausom.oz@sol.cc.deakin.oz.au

I would appreciate a postcard even if you don't use or like PowerLock - bad feedback is better than no feedback!

Note: A Registration Form is included at Appendix B

Benefits of Registering

PowerLock can be used by individuals at home for the small fee of one postcard. By registering (at a cost of \$25) you receive a PowerLock licence which entitles you to use as many copies of PowerLock as you personally require regardless of whether at home or at work, provided each copy incorporates your registration information. Your name will be placed on my mailing list - after a while I will be distributing details of add-ons available from myself and other persons. Many add-ons will only operate with registered copies of PowerLock. Registered PowerLock users will receive special offers on new add-ons and other applications. Registered PowerLock users can usually upgrade for free (Registered Release 2 users receive a Release 3 licence free of charge). Registered PowerLock users have the advantage of knowing that if they forget their password, they can obtain an access key. And, above all, registered PowerLock users can rest easy knowing that they are supporting the ShareWare concept.

PowerLock Developers Kit

The PowerLock Developers Kit is a separate set of files which allow developers to write PowerLock AddOns. The kit consists of a THINK Pascal interface file, sample source code and a development manual which documents the interface. The Developers Kit is available from the same source as PowerLock and does not require registration. If you cannot obtain the Developers Kit please send \$15 to the author. The latest Kit Disk will be returned to you, which will also include alpha and beta releases of new AddOns. You will also become a registered developer, ensuring you are kept informed of improvements to the Application Programming Interface as well as having the opportunity to influence its development.

PowerLock™ is © Copyright Rohan Cook 1991-1993. PowerLock, Add-On Technology and SuperSecurity are trademarks of Rohan Cook. PowerLock was developed with THINK Pascal therefore portions are © Copyright Symantec Corporation. PowerLock is distributed in a Compact Pro archive and utilises the AutoExtractor which is licenced from and © Copyright Cyclos (Bill Goodman). All other product names mentioned in this manual are either trademarks or registered trademarks of their respective holder.

Appendix A Detailed Installation Instructions

System 6 Users

You can't run PowerLock without first following these instructions in the order indicated:

1. Make a copy of PowerLock before doing anything.
2. Put PowerLock into a folder on your hard disk - it's recommended you use a separate folder for PowerLock.
3. Start PowerLock by double-clicking, *making sure to hold the option key down* until you see an alert. This lets PowerLock know that you've read the instructions and also sets the default password to 'PowerLock'.
4. You'll see a message explaining what to do next. Take note of the message, then click OK. PowerLock will now quit. Here are the details of what to do next:
5. Select the PowerLock icon by single-clicking.
6. Choose "Set Startup..." from the Special menu.
7. Make sure the button labelled "PowerLock" is selected.
8. Click OK.
9. Restart your Macintosh.
10. Enter the default PowerLock password - "PowerLock". You'll be taken to the "Change Password" dialog, even if you don't click Change. Follow the prompts to change the password to your preferred password.

System 7 Users

If you prefer to manually install PowerLock, please follow these instructions:

1. Make a copy of PowerLock before doing anything.
2. Put PowerLock into a folder on your hard disk - it's recommended you use a separate folder for PowerLock.
3. Start PowerLock by double-clicking, *making sure to hold the option key down* until you see an alert. This lets PowerLock know that you've read the instructions and also sets the default password to 'PowerLock'.
4. You'll see a message explaining what to do next. Take note of the message, then click OK. PowerLock will now quit. Here are the details of what to do next:
5. Select the PowerLock icon by single-clicking.
6. Choose "Make Alias" from the File Menu.
7. Place the alias into the StartUp Items folder inside your System Folder. Rename it if you like.
8. Optionally, create another alias and place it in your Apple Menu Items folder inside the System Folder.
9. Restart your Macintosh.
10. Enter the default PowerLock password - "PowerLock". You'll be taken to the "Change Password" dialog, even if you don't click Change. Follow the prompts to change the password to your preferred password.

PowerLock also includes a Function Key (FKEY), a system extension (INIT) and a Desk Accessory (DA) - installation instructions for these can be found elsewhere in the manual.

Auto-Install

Auto-Install is only available for System 7 Users. The first time PowerLock is run (after you receive it or after someone has chosen the Reset option) you will see a welcoming message and an option to Auto-Install. Auto-Install does the following:

- creates an alias to PowerLock and saves it in the StartUp Items folder
- creates another alias and saves it in the Apple Menu Items folder
- automatically types in the default password
- takes you directly to the New Password dialog

Removal Instructions

System 7 Users:

1. Throw the PowerLock alias files from the Apple Menu Items & Startup Items folders into the Trash.
2. You can also remove the PowerLock application and folder if you wish.

System 6 Users:

1. Choose "Set Startup..." from the Special menu.



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2. Click on "MultiFinder Only" (or "Finder Only").
3. Click OK.



POWERLOCK™ REGISTRATION

ROHAN COOK • P O BOX 317 • MORNINGTON • VIC • 3931 • AUSTRALIA

• Your Name

(this will appear on the main PowerLock dialog - maximum 25 characters)

• Your Mailing Address

• PowerLock Details

Version:

Using Developer Kit? ☐ Yes ☐ NoPowerLock obtained from:

• Please supply

☐ PowerLock Registrations @ \$25.00☐ PowerLock on Disk @ \$30.00
*includes Registration, the latest version, and all the latest AddOns.
\$25 with Education Discount.*☐ Educational Registrations @ \$20.00
*I certify that I am either a current student of an educational institution or that I am employed by a
non-profit educational institution.*☐ PowerLock Developers Kits @ \$15.00☐ More information on PowerLock PlusPack
Discounts start after the first 18 copies

• Mail with your payment to:



POWERLOCK MANUAL

Rohan Cook
PO Box 317
Mornington 3931
Australia

