



# JackFlash User Guide

Version 3.1

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# Contact Information

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As a company, our passion is for doing things right and pleasing our customers. We are a firm that cares and we want to keep it that way.

If you need to contact us, please use one of the following addresses:

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# Conventions

This guide uses the following text formats:

- Command buttons appear in all capitals. For example, tap OK.
- Menu, Dialog, and Pick List names appear capitalized. For example, the Options menu.
- Menu and Pick List items, and System prompts appear in quotations. For example, choose "Preferences" from the Options menu.
- References to other applications and other sections appear in italics. For example, see *About JackFlash™* on page 4.
- Notes appear in a smaller font. For example:

Note: This is an example of a note.

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# About JackFlash<sup>™</sup>

JackFlash is an efficient and comprehensive approach to solving your Palm<sup>™</sup> handheld memory storage needs. JackFlash provides a simple way for you to take advantage of the extra Flash space in your Palm handheld. Now you can fit up to 40% more data into your handheld.

JackFlash lets you move applications and databases between normal memory and the free Flash space available on most Palm handhelds. JackFlash manages all the complexity of working with Flash and presents a simple interface for moving items to and from Flash. Items moved into Flash will work just like before, only now you will have more memory space available on your Palm handheld.

## Available Flash Space

The amount of Flash available on a device varies widely. The simplest method to determine the available Flash is to run **JackFlash** or the demo version, **JackFlashLight**. Using the latest version of **JackSprat** can significantly increase the amount of flash space beyond what is shown here. For more information about **JackSprat** please visit our website.

# **Compatible Palm Handhelds**

Currently, the following handheld computers all ship with Flash ROM and have enough free space to run **JackFlash**:

Manufacturer	Handheld Computers
Palm	III, IIIc, IIIx, IIIxe, V, Vx, m500, m505, m515, i705, Tungsten TC, Tungsten T, Tungsten T2, Tungsten T3, Tungsten W
Sony	S300, S320, S360, N600, N610, N700, N710, N750, N760, N770, T400, T415, T600, T615, T625, T650, T665, NR70, NR70V, NX60, NX70, NZ90, NX73, NX80 Some SL10, SJ20, SJ30, SJ33
Symbol	SPT 1500, 1550, 1700, 1800
Acer	S10
IBM	c3, 20x, 30x, 50u, 50J
Handera	TRGPro, 330
Handspring	Treo 90, 180, 270, 300
Kyocera	6035, 7135

## **Non-Compatible Environments**

JackFlash does not run in the following environments:

Manufacturer	Handheld Computer	Reason
Palm	Palm™ IIIe, Palm™ m100, m105, m125, m130, Zire	Handhelds do not use Flash ROM
	Palm™ VII, Palm™ VIIx	All Flash ROM area is allocated
Handspring	Visor™	Handheld does not use Flash ROM
IBM	WordPad™ 30J	All Flash ROM area is allocated
Sony	Some SL10, SJ20, SJ30, SJ33. TJ-25, TJ-35, TJ- 27, TJ37, TH55, UX40, UX50.	Some of these devices use Flash ROM and some use Mask ROM. Use JackFlash Light to test.

For more information about software compatibility, see *Flash Compatibility Issues* on page 12.

# Installing JackFlash

The JackFlash directory contains the following .prc files:

JackFlash.prc	This is the main <b>JackFlash</b> application and is necessary for all Flash operations.
JackSafe.prc	This is an optional utility that allows you to see the contents of Flash after a battery failure or a hard reset without using the HotSync <sup>®</sup> function.
	For information on using <b>JackSafe</b> , see <i>Using JackSafe</i> on page 13.
RemoveFP.prc	For information on when to install and run this utility, see <i>FlashPro Detected</i> on page 16.

#### To install JackFlash:

- 1. Use the Install Tool to install the appropriate .prc files on your Palm Desktop.
- 2. Use the HotSync<sup>®</sup> function to make the application(s) available on your Palm handheld.

# What is Flash ROM?

Every Palm handheld contains two types of memory: RAM and ROM. The differences are as follows:

RAM	ROM
Stores most data and applications	Stores the operating system and the basic applications shipped with your Palm handheld (Date Book, Address, Memo Pad, To Do List, etc.)
Needs continuous power in order to retain its contents	Does not need battery power to retain its contents

There are two types of ROM memory used in Palm handhelds: Mask ROM and Flash ROM.

Mask ROM	Flash ROM
Used by Palm™ IIIe, m100, m105, m125, m130, Zire and Handspring™ Visor, and others.	Used by all other Palm handhelds
Programmed at the factory level and cannot be modified	Programmed at the factory level, but with the exception of the Palm <sup>™</sup> VII and Japanese Palm <sup>™</sup> handhelds, the operating system does not use all the Flash, and programs can modify it.
	For detailed information on which handhelds are compatible with JackFlash, see <i>Compatible Palm</i> <i>Handhelds</i> on page 4.

# Using JackFlash

This section describes how to work with JackFlash.

# Opening JackFlash

To open JackFlash:

• Tap the **JackFlash** application icon.

# **Initializing Flash**

The first time you run **JackFlash**, a dialog box appears, prompting you to initialize the Flash. **JackFlash** must initialize the unused Flash area before it can access the Flash.

• Tap OK to initialize the Flash.

# About the JackFlash Interface

When you open **JackFlash**, a screen similar to the following appears:



The **JackFlash** interface contains the following items:

Item	Description
Menu Bar	To display menu options, tap the Menu icon. For more information on menu options, see <i>About the Menu</i> Options on page 8.
Application List	This list displays the applications and databases installed on your Palm handheld.
Location Pick List	<ul> <li>Tap the Location Pick List next to the selected item to do one of the following:</li> <li>Choose RAM to move the item to RAM. For more information, see <i>Moving Applications from Flash to RAM</i> on page 10.</li> <li>Choose Flash to move the item to Flash. For more information, see <i>Moving Applications from RAM to Flash</i> on page 9.</li> <li>Choose Delete to delete the item. For more information, see <i>Deleting Applications from Flash or RAM</i> on page 10.</li> <li>Choose Beam to beam the selected item. For more information, see <i>Beaming Applications to Other Palm Handhelds</i> on page 10.</li> </ul>
Update Button	After you choose an action from the Location Pick List, tap <b>Update</b> to perform the action.

Item	Description
Category Pick List	Tap the Category Pick List to sort the Application List by the following categories:
	<ul> <li>Choose All to view all applications and databases on your Palm handheld.</li> </ul>
	<ul> <li>Choose All Apps to view all applications on your Palm handheld.</li> </ul>
	<ul> <li>Choose Apps in RAM to view only applications currently stored in RAM.</li> </ul>
	<ul> <li>Choose Apps in Flash to view only applications currently stored in Flash.</li> </ul>
	<ul> <li>Choose All DBs to view all databases on your Palm handheld.</li> </ul>
	<ul> <li>Choose DBs in RAM to view only databases currently stored in RAM.</li> </ul>
	<ul> <li>Choose DBs in Flash to view only databases currently stored in Flash</li> </ul>
	<ul> <li>Choose All in RAM to view only applications and databases currently stored in RAM.</li> </ul>
	<ul> <li>Choose All in Flash to view only applications and databases currently stored in Flash.</li> </ul>
Column Header	Tap the Name Column Header to sort the Application List by Name. Tap the Size/Type/Creator Column Header to sort by the current setting.
	By default, the second column displays size. To view type or creator, choose the appropriate item from the Column Pick List.
	The column that is the current sort criterion appears underlined.
	To reverse the sort, Tap the Column Header again.

# About the Menu Options

The Flash menu contains the following options:

Item	Description
Reset Device	Select this option to reset your Palm handheld. For more information, see <i>Resetting the Palm</i> Handheld on page 14.
Release Flash	Select this option to release the Flash space used by <b>JackFlash</b> . For more information, see <i>Removing JackFlash</i> on page 11.

The Options menu contains the following options:

Item	Description
Preferences	Select this option to customize how <b>JackFlash</b> works on your Palm handheld. For more information, see <i>Setting Preferences</i> on page 11.
Help	Select this option to view a help screen.
About JackFlash	Select this option to view which version of <b>JackFlash</b> you have installed on your Palm handheld.

### Moving Applications from RAM to Flash

To move an application into Flash:

1. Tap the Location Pick List next to the application's name and choose "Flash".

If the item can be moved safely, the name appears bold and the Location Pick List displays "Flash". If the item is not compatible with Flash, a warning dialog box appears and you have the option to cancel.

*Note:* If JackFlash does not have specific information about an application or a database, it assumes that applications are safe to move and that databases are not so they should be left in RAM. For further information, see Storing Applications in Flash on page 12.

**JackFlash** displays the amount of free space left in both RAM and Flash. As you select each item, the amount of space available updates.

- 2. Select other items to move into Flash. If you cannot find an item, it might not be visible because it is not Flash compatible.
  - *Note:* By default, JackFlash hides items that cannot be moved to Flash. For information on how to change this setting, see Setting Preferences on page 11.
- 3. When you finish selecting items to move, tap UPDATE. A progress dialog appears indicating that **JackFlash** is moving your applications into Flash. When **JackFlash** finishes moving the items, this dialog closes and the bolded text appears normal.
  - *Note:* If you have selected a Category Pick List option that displays items in RAM, the items you moved into Flash no longer appear on the screen. To reveal these items, change the Category Pick List option to one that displays items in Flash.

# Moving Applications from Flash to RAM

To move application back to RAM:

• Repeat the steps in the previous procedure and select "RAM" in place of "Flash" in step 1.

# Deleting Applications from Flash or RAM

Use **JackFlash** to delete applications and databases. **JackFlash** offers the following advantages over the System Delete dialog:

- You can delete items currently stored in Flash. You do not need to move items from Flash to RAM before deleting them.
- You can delete individual databases instead of deleting an entire application and all of its associated databases.

To delete an application:

- 1. Tap the Location Pick List next to the application's name and choose "Delete".
- 2. Tap UPDATE.

If the application you chose does not have associated databases, **JackFlash** deletes the application.

If the application you chose has databases associated with it, the following prompt appears: "Do you wish to delete databases associated with [application name]?"

- Tap YES to delete associated databases. You should always delete associated databases unless you are very confident of the result.
- Tap NO to delete only the application.

# Beaming Applications to Other Palm Handhelds

**JackFlash** allows you to beam individual databases and applications to other Palm handheld users. **JackFlash** offers the following advantages over the System Beam dialog:

- You can beam items in Flash.
- You can beam items such as hacks and databases. The System Dialog does not support this feature.

*Note:* By default, JackFlash asks to delete associated databases. For information on how to change this setting, see Setting Preferences on page 11.

To beam an application:

- 1. Tap the Location Pick List next to the application's name and choose "Beam..." A confirmation dialog appears.
- 2. Tap OK. **JackFlash** attempts to beam the item to a receiving Palm handheld.

## Removing JackFlash

You should keep **JackFlash** on your handheld when you have used it to store items in Flash.

#### To remove JackFlash:

- 1. Free up the Flash area by deleting or moving to RAM all the items currently in Flash.
  - *Note:* JackFlash ensures that the Palm handheld will be correctly configured whenever it undergoes a normal reset. If you delete JackFlash when a Flash area is allocated, you may experience problems when using applications that are stored in Flash.
- 2. Once the Flash area is empty, tap the Menu icon and then choose "Release Flash" from the Flash menu.
- 3. You can now safely delete JackFlash from your Palm handheld.

### **Setting Preferences**

You can customize the way in which **JackFlash** operates by setting preferences.

To set preferences:

- 1. Tap the Menu icon.
- 2. Choose "Preferences" from the Options menu to open the Preferences dialog.
- 3. Choose the appropriate pick list item to select whether you want **JackFlash** to always delete, never delete, or ask to delete associated databases.
- 4. Tap the appropriate checkboxes to choose whether you want **JackFlash** to:
  - warn you before moving a database to Flash.
  - mark items in Flash as Read-Only.
  - show items that cannot be moved into Flash.

By default, **JackFlash** marks items moved into Flash as read-only to provide the highest level of compatibility with programs. However, some HotSync programs on Unix and Macintosh do not correctly handle items marked read-only. If you experience difficulties using the HotSync function on one of these platforms, try turning this preference off.

*Note:* If you change this preference, you must move everything out of Flash for this preference to take effect.

5. Tap OK to accept the new preferences.

# Flash Compatibility Issues

This section provides information on how to work with applications in Flash.

# Storing Applications in Flash

In most circumstances, applications will work in Flash. Applications store preferences and data in databases, and do not directly modify themselves. This characteristic allows them to work in the Flash area, since the Palm handheld will never attempt to directly modify the application.

However, some applications DO expect to be able to directly modify themselves. These applications will not work correctly in Flash.

Applications that need to be "Enabled" may not work correctly with **JackFlash**. Please avoid placing these programs into Flash.

Launchers such as *Launch'em* and *Handscape* are safe to put into Flash.

### Storing Databases in Flash

In most circumstances, databases will not work in Flash. Most databases are designed to store modifiable information. This characteristic requires that you store them in RAM because applications assume that they can always modify a database.

While most databases do not work in Flash, some databases such as dictionaries, maps, or readable documents will. These databases tend to be used for reference only and are safe to move into Flash.

# Using Applications and Databases that Do Not Work in Flash

If you move an application or database that does not work in Flash into the Flash area, you will probably experience a "Fatal Exception"

the next time you use the application. For more information, see *Fatal Exceptions* on page 14.

# Using the HotSync Function on Applications and Databases Stored in Flash

Using the HotSync function will not replace or update applications or databases that are stored in Flash. To replace or update an item stored in Flash:

• Delete the item or move it to RAM before use the HotSync function.

# Using JackSafe

**JackSafe** is an optional utility that allows you to access applications and databases stored in Flash after a battery failure or a hard reset without using the HotSync function. This capability is very useful if you have critical applications stored in Flash that need to be available immediately after a battery loss.

**JackFlash** works well without **JackSafe**, it just means that the contents of Flash will not be visible after a battery failure until you use the HotSync function again. You only need to use this utility once.

You do not need to remove **JackFlash** from your Palm handheld before installing **JackSafe**.

#### To use JackSafe:

- 1. Use the Install Tool to install JackSafe.prc on the Palm Desktop.
- 2. Use the HotSync function to make the application available on your Palm handheld.
- 3. Tap the **JackSafe** application icon to launch the program.
- 4. Tap INSTALL JACKSAFE. A confirmation dialog appears.
- 5. Tap OK to install **JackSafe**. The process takes approximately one minute.
- 6. Once the installation is complete, tap OK to reset your Palm handheld.
- 7. Delete **JackSafe** from your Palm handheld.

*Note:* To remove *JackSafe*, follow the above procedure and tap REMOVE JACKSAFE in step 4.

In rare cases, a program moved into Flash may prevent the Palm handheld from resetting correctly. If you encounter this problem, refer to *Palm Handheld Does Not Reset Correctly* on page 15.

# Possible Errors and System Messages

## **Fatal Exceptions**

A "Fatal Exception" error may occur if you attempt to run an application or database that does not work in Flash. Although a Fatal Exception sounds and looks bad, it will not damage your handheld and is simple to fix. When you encounter a Fatal Exception dialog, a RESET button appears at the bottom of the screen.

#### Resetting the Palm Handheld

To fix a Fatal Exception error:

1. Tap RESET to reset your handheld.

If the handheld does not reset, insert a pin into the reset hole in the back of the handheld to perform a manual reset.

2. Open **JackFlash** and move the application or database that does not work in Flash back to RAM.

In rare cases, you may encounter an application that performs tasks each time the handheld is reset. If this application does not work in Flash, it may cause a Fatal Exception each time you reset the handheld.

In order to fix this:

- 1. Press the scroll up button while manually resetting the handheld.
- 2. Once the handheld has recovered, immediately open **JackFlash** and move the application back to RAM.

#### Performing a Hard Reset

In very rare cases, you may find that you are unable to reset the handheld. If such a situation occurs, you must perform a hard reset. A hard reset erases all the contents of RAM, including **JackFlash**. A hard reset causes the contents of the Flash area to be invisible until you reload **JackFlash** onto the handheld, unless you have installed **JackSafe**.

To perform a hard reset:

1. Hold down the power button while manually resetting the handheld. The Palm handheld prompts "Erase all data?"

2. Tap YES.

- 3. Use the HotSync function to restore the contents of RAM.
- 4. Immediately after the HotSync function is complete, run **JackFlash** and move the items that were placed into Flash back into RAM.

Your Palm handheld should now work correctly.

## Palm Handheld Does Not Reset Correctly

In rare cases, an application moved into Flash may prevent the Palm handheld from resetting correctly. Symptoms of this problem include:

- The Palm Computing splash screen remains on the screen or flashes
- The handheld is "frozen" or "hung" and will not respond

If you encounter this situation, do the following to hide the contents of Flash from the handheld:

#### PalmOS 4.1 or Earlier

- 1. Hold down the Memo Pad button immediately AFTER performing a manual reset. If you have done this correctly, the alarm will sound.
- 2. Once the alarm sounds, release the Memo Pad button. This should allow the Palm handheld to reset correctly, but the contents of Flash will not be visible until you run **JackFlash** or perform a hard reset.
  - *Note:* This procedure does not remove any data from Flash; it hides the contents of Flash from the handheld. You can still use JackFlash to access any valuable data.
- 3. Run **JackFlash** and then move the items that were placed into Flash back into RAM.

#### PalmOS 5.0 or later

- 1. Reset the device and listen for a System click sound.
- 2. Immediately reset the device again. Repeat this process three times. After the third reset, an Alarm should sound after the System click.
- 3. This should allow the Palm handheld to reset correctly, but the contents of Flash will not be visible until you run **JackFlash** or perform a hard reset.

- *Note:* This procedure does not remove any data from Flash; it hides the contents of Flash from the handheld. You can still use JackFlash to access any valuable data.
- 4. Run **JackFlash** and then move the items that were placed into Flash back into RAM.

## Compacting Flash

You will occasionally see a dialog box that says "Compacting Flash". This dialog simply informs you that **JackFlash** is cleaning and tuning the Flash area for optimum performance. No action is required on your part.

# Flash Repair

While it is unlikely to occur, the Flash area can become corrupted. This only will occur if, during the compaction process, you deliberately reset the Palm handheld or you remove the batteries.

*Note: JackFlash* will not start modifying the Flash if the batteries are too low.

**JackFlash** attempts to repair the Flash area and a dialog appears showing that repair is required.

• If you wish to repair damaged areas, tap OK.

Should it be necessary, repairing the Flash will make **JackFlash** usable again, but may result in the loss of some data stored in the Flash area.

# FlashPro Detected

**JackFlash** is not compatible with files that have been stored in Flash by FlashPro or InstallPro. Several companies use InstallPro to move their software into Flash during installation. These include: OmniSky, BackupBuddy Software, and Palm handhelds purchased with Hebrew support preinstalled.

If you receive a "FlashPro Detected" message, you must run the RemoveFP utility to move these files to RAM and reconfigure the handheld so that **JackFlash** has full access to the Flash. It will only be necessary to use this utility once.

RemoveFP.prc is in the RemoveFP sub directory of the **JackFlash** folder.

To use RemoveFP:

1. Use the Install Tool to install RemoveFP.prc on your Palm Desktop.

- 2. Use the HotSync function to make the application available on your handheld.
- 3. Tap the RemoveFP application icon. RemoveFP displays the procedure it will follow to restore your handheld.
- 4. Tap REMOVE FLASHPRO. RemoveFP confirms that you have FlashPro installed.
- 5. RemoveFP examines the Flash area of your Palm handheld:
  - If you have files stored in Flash, RemoveFP displays these files in a list. Tap PROCEED to copy these files to RAM.

OR

- RemoveFP indicates that you do not have files stored in Flash. Tap REMOVE FLASHPRO to remove FlashPro support.
- 6. Tap RESET to reset your handheld.
- 7. Tap START HOTSYNC to backup the files that used to be in Flash.
- 8. Delete RemoveFP from your handheld.