
Palm Powered™ Desk Reference

Covering Palm Powered™ Devices from



palmOne™ and other Palm OS® licensees

Alan M. Grassia
Grassia Network Solutions

Chapter 1: Working with Your Palm Powered Handheld

Palm OS file types

There are three types of files you can install directly on a Palm OS handheld.

1. prc: Palm OS application files
2. pdb: Palm OS application database/data files
3. pqa: Palm OS web clipping applications

While the first two file types, applications and data files, are still very much in use, the last type, .pqa files are declining in use. Primarily used on wireless devices such as the Palm VIIx and the i705, they could also be made to work on pre-OS 5 modem-equipped devices like the m130. While it is still possible to use .pqa web clipping applications, the majority of the content suppliers are no longer supporting these applications.

Editor's Note: As this book was going to press, palmOne had shutdown the Palm.Net network, including the proxy servers required to run .pqa web clipping applications. The continued use of .pqa applications is now virtually impossible for the general public.

Resetting a Palm OS handheld

The reset tool

Most Palm OS devices include a useful tool called the Reset Tool. The reset tool also goes by another name, one you may be more familiar with: the stylus. The reset tool is usually revealed after unscrewing one end of the stylus from the stylus shaft. Not every Palm OS device has a reset tool. The rule of thumb seems to be that if you have a metal shaft stylus, you have a reset tool. If you have a plastic shaft stylus or the pin breaks, you can also use a straightened paperclip to gently press the internal Reset button found on the back or side of almost all Palm OS devices.

Palm OS device resets

Each Palm OS device can be reset in a number of different ways depending on what you are trying to accomplish. The following is a list of the resets you may encounter as a Palm OS handheld user¹.

Soft reset

A soft reset is similar to rebooting your computer. A soft reset instructs the handheld to stop what it is currently doing, and restart the Palm OS. The soft reset is the solution to a number of common handheld problems. To soft reset the handheld, use the Palm's reset tool or a straightened paperclip to gently press the internal Reset button usually found on the back or side of the device. When you soft reset your device, you will see the Palm logo appear, and the Prefs application will load and display the General preferences screen. A soft reset is a non-destructive reset, meaning that all of your data, applications, and settings will be preserved. If you lose data as a result of a soft reset, there may be something seriously wrong with your handheld, and you should contact your device manufacturer's support center.

¹ Source: http://www.palmone.com/cgi-bin/cso_kbURL.cgi?ID=887

Warm (System) reset

A warm reset is similar to a soft reset with one difference. During a warm reset, the Palm OS will not load any of the system extensions, such as an external keyboard driver. Think of a warm reset like starting your Windows computer in Safe Mode or your Mac OS system without extensions. To perform a warm reset, press and hold the up scroll button and press the Reset button usually found on the back of the device with either the reset tool or a straightened paperclip. When the Palm logo appears, release the up scroll button. You will know that you have correctly performed a warm reset because you will be unable to enable the Beam Receive option in the General page of the Prefs application. To return your device to its normal mode of operation, perform a soft reset. A warm reset, like a soft reset, is a non-destructive reset, and you will not lose data, applications, or your device settings.

In-cradle reset

The in-cradle reset will cause the charging circuitry to be reset. This reset is helpful when your handheld will not recharge or powers off immediately after being turned on. To perform the in-cradle reset, place the handheld into the factory provided cradle or connect it to a charging cable. You should leave the Palm connected to the power source for three to four hours to make sure that the rechargeable battery is fully charged. Then, soft reset the handheld. The in-cradle reset is a non-destructive reset, and no data will be lost. To access the reset hole, you may need to lean your device forward, toward you, in the cradle.

Note: You should use the provided power adapter, and not attempt to trickle charge the Palm from a USB port on your computer.

Hard reset

Warning: The hard reset is a **destructive** reset. When you perform a hard reset, you will lose all the data, programs, and settings you have entered on the device. Always make sure that you HotSync your handheld before you hard reset to backup your data and applications to your computer.

A hard reset will return your device to its factory default settings. In other words, after a hard reset, your device will behave as it did when you first turned it on. To perform a hard reset hold down the power button, and press the Reset button on the back of your device. When the Palm logo appears, release the Power button. A message will appear on the screen prompting you to either press the Up button to erase your data and applications or, if you want to exit out of the hard reset **without** actually erasing the data on your device, press any other button. Once the hard reset has been triggered, the Welcome application will run, prompting you to recalibrate the digitizer. Under normal conditions, the system date and time are preserved.

Note: The contents of an expansion card (SD, MMC, Memory Stick, etc) are not affected by a hard reset. Only the contents of RAM are cleared.

To restore your data, HotSync your handheld to the computer. When prompted by the HotSync Manager, choose the HotSync ID you have been using with the handheld prior to the hard reset.

Power down reset

Warning: The power down reset is a **destructive** reset. When you perform a power down reset, you will lose any data, programs, and settings you have entered on the device. Always make sure that you HotSync your handheld before you perform a power down reset to back up your data and applications.

The power down reset can only be performed on devices which use AAA batteries. A power down reset will have the same effects as a hard reset as well as clear some additional settings which survive a hard reset such as date and time. To perform the power down reset, remove the AAA batteries from the handheld. Set the device aside for 30 – 60 minutes to allow the capacitor to discharge. Then press the Reset button on the back of the device 5 – 8 times in succession. When a power down reset has been performed correctly, after installing new batteries, your device will turn on automatically, and you will need to reset the system date and time.

Battery disconnect reset (Treo 600 series)

The battery disconnect reset should be used as a last resort option to erase the contents of the device, cut the power, or reset the wireless radio. All of your preferences and settings will be returned to their default factory values. The battery disconnect reset is like physically disconnecting the battery from the device.

Warning: The battery disconnect reset is a **destructive** reset. When you perform a battery disconnect reset, you will lose any data, programs, and settings you have entered on the device. Always make sure that you HotSync your handheld device before you perform a battery disconnect reset to back up your data and applications.

The battery disconnect reset can only be performed on a Treo 600 handheld. To perform a battery disconnect reset, disconnect the Treo 600 from an external power source like the charging cable. Press the Reset button on the back of the handheld while holding down the 'K' and 'Backspace' keys on the built-in keyboard. While you continue to hold the 'K' and 'Backspace' keys, the display will change to white, then black. When the display goes black, you can release the keys.

To reactive your Treo 600 after performing a battery disconnect reset, you will need to 'spark' the device (no actual sparks will be emitted from the device) by reconnecting it to the handheld's AC adaptor. After an initial period which may last a minute or two, the screen will turn on and the status LED will light up as solid red to indicate that the battery is now charging. Since you need access to the AC adaptor to wake the Treo 600 up from a battery disconnect reset, you should only perform a battery disconnect reset when you have access to a charger.

Zero out reset (Tungsten T5 only)

With the introduction of the palmOne Tungsten T5 and its new Flash memory, a new type of hard reset was implemented. You can zero out reset a Tungsten T5 two different ways which are explained below.

Warning: The zero out reset is a **destructive** reset. When you perform a zero out reset, you will lose any data, programs, and settings you have entered on the device. Always make sure that you HotSync your handheld device before you perform a zero out reset to back up your data and applications.

Zero out reset option 1:

1. Launch the Prefs application.
2. If no password has been assigned to the Tungsten T5, assign one.
3. Perform a standard hard reset on the handheld.
4. After a delay and the appearance of the palmOne and Tungsten logos, the internal memory will be reformatted.
5. The Tungsten T5 screen will go black and the device will power down.
6. Perform a standard soft reset to wake up the handheld.
7. HotSync the handheld to restore your data and applications.

Note: During step 4 it may appear that the handheld has crashed. According to the palmOne documentation, this is normal.

Zero out reset option 2:

1. Connect the Tungsten T5 to a HotSync cradle or cable.
2. Hold down the Power button, and then press up on the 5-way navigation pad.
3. While holding the Power and Up buttons, press and hold the internal reset button on the back of the handheld.
4. Still holding the Power, Up, and Reset buttons, press the HotSync button on the cradle or cable. (A HotSync will not be triggered.)
5. Release the 4 buttons in the order of: Power, Up, Reset, and HotSync.
6. The Tungsten T5 screen will go black and the device will power down.
7. Perform a standard soft reset to wake up the handheld.
8. HotSync the handheld to restore your data and applications.

Quick erase reset (LifeDrive Mobile Manager Only)

Warning: The quick erase reset is a **destructive** reset. When you perform a quick erase reset, you will lose any data, programs, and settings you have entered on the device. Always make sure that you HotSync your handheld device before you perform a quick erase reset to back up your data and applications.

The LifeDrive Mobile Manager is the first palmOne handheld to feature an internal hard disk drive. The quick erase reset and the secure erase reset (see below) are both types of hard resets that will delete the user's data including and applications installed by that user. Because data on the hard disk drive is being erased, hard resets on the LifeDrive Mobile Manager will take considerably longer than a hard reset on an older Palm OS device.

Quick erase hard reset:

1. Hold the Power switch in the 'On' position.
2. Use the stylus to press the 'Reset' button on the bottom of the device.
3. When the 'Palm Powered' screen is displayed, release the 'Power' switch.
4. Press up on the directional pad when the reset screen appears to start the quick erase hard reset. The quick erase may take as long as 5 minutes or longer to complete depending on how much data is stored on the internal hard disk drive.

During the quick reset cycle, the words "Quick Reset" will be displayed on the screen along with a progress indicator.

If the LifeDrive Mobile Manager does not wake up after a soft reset, use the quick erase reset to wake up the device.

Secure erase reset (LifeDrive Mobile Manager Only)

Warning: The secure erase reset is a **destructive** reset. When you perform a secure reset, you will lose any data, programs, and settings you have entered on the device. Always make sure that you HotSync your handheld device before you perform a secure erase reset to back up your data and applications.

The LifeDrive Mobile Manager is the first palmOne handheld to feature an internal hard disk drive. The quick erase reset (see above) and the secure erase reset are both types of hard resets that will delete the user's data including and applications installed by that user. Because data on the hard disk drive is being erased, hard resets on the LifeDrive Mobile Manager will take considerably longer than a hard reset on an older Palm OS device.

Quick erase hard reset:

1. Hold the Power switch in the 'On' position.
2. Use the stylus to press the 'Reset' button on the bottom of the device.
3. When the 'Palm Powered' screen is displayed, release the 'Power' switch.
4. Press up on the directional pad when the reset screen appears to start the quick erase hard reset. The quick erase may take as long as 30 minutes or longer to complete depending on how much data is stored on the internal hard disk drive.

During the secure reset cycle, the words "Secure Reset" will be displayed on the screen along with a progress indicator.

Debug (Programmer's) reset

The debug reset will reset the handheld and will leave the serial port (HotSync port) open for communication with your computer. This kind of reset is usually used in conjunction with Palm OS upgrades. Unless you are trying to recover from a failed Palm OS upgrade, you will never have to use this type of reset.

To perform a debug reset, disconnect the handheld from its cradle or cable, and then hold the down scroll button. While pressing the down scroll button, use the reset tool or a straightened paperclip to press the Reset button on the back of the device. Continue to hold the down scroll button for several seconds after the Reset button has been pressed. When you release the down scroll button, a small blinking square will appear in the top left corner of the display. If you are trying to recover from a failed Palm OS upgrade, place the device in the cradle and follow the upgrade directions as found in the upgrade documentation.

Double soft reset²

A double soft reset is just what it sounds like. If you have performed a soft reset and the device fails to restart, you can perform a double soft reset by pressing the Reset button on the back of the device twice in rapid succession. The double soft reset is a non-destructive reset.

Extended hard reset²

Warning: The extended hard reset is a **destructive** reset. When you perform an extended hard reset, you will lose any data, programs, and settings you have entered on the device. Always make sure that you HotSync your handheld device before you perform an extended hard reset to back up your data and applications.

An extended hard reset will erase all of the data on your device in the same manner as a hard reset, with the exception that none of the default databases will be re-created. This includes the default databases for the Date Book and Address Book applications. An extended hard reset will also prevent the creation of the special MIDI files for the Date Book alarms.

To perform an extended hard reset, hold down the Power button and use the reset tool or a straightened paperclip to press the Reset button on the back of the handheld. When the Palm logo appears, release the Power button. Next, press and hold the up scroll button. While still holding the up scroll button, press the hardware buttons on the front of the handheld in any order. If you fail to press all of the hardware PIM buttons on the front of the handheld, a standard, non-destructive soft reset will be performed. If you simply press the up scroll button when reset warning page is being displayed, a standard hard reset is performed.

To rebuild the databases for the standard built-in applications, such as Address Book, launch that application. To recover from an extended hard reset and have

² Source: <http://www.cheappalm.com/ca/support.htm>

all of the default databases and other files re-created on the handheld, perform a standard hard reset.

Reset and digitizer calibration loops

Some Palm handheld users have reported that after a crash and reset, the only thing displayed on the screen is a flickering Palm logo. This problem has become known as a reset loop because the Palm is stuck in a soft reset loop. This problem can be the result of a software conflict between the Palm OS and a system extension such as the keyboard driver. Unfortunately, the only ways to break out of the reset loop are either to hard reset the device (see Palm OS Resets in the previous section) or allow the battery to fully deplete. In either case, the results are the same: the data on the handheld (user-installed applications and data) is lost. To recover from a reset loop, do the following:

1. Hard reset the Palm OS handheld.
2. When the Palm restarts, complete the Welcome application wizard.
3. HotSync the device with your computer.
4. When prompted, choose the HotSync ID you had assigned to the Palm.
5. The HotSync Manager will restore the user-installed applications and data that were on the device at the time of the last HotSync.

A secondary issue involves a digitizer calibration loop. This issue sometimes manifests itself after the device has been reset, and you are unable to complete the digitizer calibration because the device keeps asking you to tap on the three targets. Usually, this is a software issue which can be corrected with either a soft or hard reset. However, if a soft or hard reset fails to correct the problem, the digitizer loop could be a sign that the digitizer is no longer functioning properly or has failed completely. If this is the situation you find yourself in, you should contact the manufacturer's support center to have your device evaluated and perhaps repaired.

How do I find my HotSync ID?

When you HotSync your Palm to a computer for the first time, you will end up assigning a HotSync ID, sometimes referred to as a HotSync Profile, to your handheld. The HotSync ID is used to uniquely identify your Palm to your computer for the purpose of data synchronization and application installation. You should never assign the same HotSync ID to multiple Palm OS handhelds as this can lead to data corruption. You can, however, HotSync multiple Palm OS handhelds to one computer, provided that they all have unique HotSync IDs.

To determine the currently-assigned HotSync ID:

1. Tap the Home icon or button.
2. Find the HotSync icon in the application launcher and tap it.
3. When the HotSync application loads, the currently-assigned HotSync ID will appear in the top right corner of the screen. If there is no listed HotSync ID, the handheld has either never been synchronized with a computer, or the first HotSync operation has failed, and the HotSync ID was not written to the unit.