



Using Your Palm® Wi-Fi® Card
with the Treo™ 700w Smartphone

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Using Your Palm® Wi-Fi® Card with the Treo™ 700w Smartphone

[*] NOTE This guide is for users who are using the Palm® Wi-Fi® card with a Treo™ 700w smartphone only. If you are using the Wi-Fi card with a different device such as a Palm OS handheld, refer to the *Getting Started Guide* and the documentation on the CD included with the Wi-Fi card for setup and usage instructions. The CD also contains software necessary to use the Wi-Fi card with other devices. The Treo 700w smartphone has this software built in, so you do not need the CD to use the Wi-Fi card with a Treo 700w smartphone.

Many corporate organizations and public environments, such as coffee shops, airports, and libraries, offer access to a Wi-Fi network. A Wi-Fi network is a wireless local area network (WLAN) based on the 802.11b standard. Some networks based on a different standard, 802.11g, may allow 802.11b-based devices to connect.

You can use the Wi-Fi card with your Treo 700w smartphone's built-in software to set up a Wi-Fi connection and quickly connect to accessible Wi-Fi networks within range.

* Tip

Turning off the Bluetooth® feature may improve your Wi-Fi card performance. To turn the Bluetooth feature off, go to your Today screen, tap the Bluetooth icon, and then uncheck the Turn on Bluetooth box.

» Key Term

Wi-Fi access point
A networking device with an antenna that provides wireless connections to a larger network.

*** Tip**

When the Wi-Fi card is inserted, tap the ? icon in the upper-right corner of any Wi-Fi setup or connection screen for useful tips.

Inserting and removing the Wi-Fi card

Insert the card into your smartphone's expansion card slot with the Palm logo label facing the front of the smartphone. Push the card in until you hear the confirmation tone. The top of the card extends from the slot when the card is fully inserted.

To remove the card, push lightly against the card with your thumb, and then slide the card out of the expansion card slot.

We recommend that you remove the Wi-Fi card from your smartphone in the following situations:

- When you are not using the card.
- When you are on an airplane.
- Before you turn on Flight Mode. If you leave the Wi-Fi card in the expansion card slot, be aware that the Wi-Fi radio automatically turns on and Flight Mode is canceled when you wake up the screen. Similarly, if you insert the Wi-Fi card when your screen is on and Flight Mode is also on, the Wi-Fi radio automatically turns on and cancels Flight Mode.

[*] NOTE See “Regulatory Information” in the Treo 700w smartphone *User Guide* for additional guidance on using the Wi-Fi card with your Treo 700w smartphone.



Setting up a Wi-Fi connection

Some Wi-Fi networks are known as *open networks* because they broadcast their name (SSID) and do not require a password. Other Wi-Fi networks broadcast their name but do require a password. Networks that do not broadcast their name are known as *closed networks*. Follow the instructions for the type of network you want to connect to.

The title bar on your smartphone displays an icon to show Wi-Fi connection status.

Icon	Status
	Wi-Fi card not inserted.
	Wi-Fi card inserted, no network connection
	Wi-Fi card inserted, network connection made. When the arrows in the icon are moving, a network connection is being attempted.

Connecting to a network that broadcasts its name

Wi-Fi networks in public places often broadcast their network name. Your smartphone automatically attempts to detect some network settings, so you can connect to this type of network with minimal configuration.

1. Wake up your smartphone's screen.
2. Insert the Wi-Fi card into the expansion card slot.
3. If the Multiple Networks Detected dialog box appears, select the network you want to connect to.

» Key Term

SSID The name that identifies a Wi-Fi network. If a network does not broadcast its SSID, you must get the SSID from the network administrator in order to connect to the network.

* Tip

See the *User Guide* for your smartphone for instructions on waking up the screen.

+ Did You Know

You can conserve battery power by removing the Wi-Fi card or turning off a Wi-Fi connection when you are not going to use it for an extended time.

4. If the New Network Detected dialog box appears, select the network you want to connect to.
5. If prompted, select whether to use this network to connect to the Internet (or to your work network using a virtual private network—VPN), or to connect to your work network.
6. Press Connect  to connect to the network.
7. If prompted, enter the password provided by the network administrator.

Connecting to a closed network

Because closed networks have additional security features, your smartphone cannot detect the network's settings; you must obtain the settings such as network name and authentication from the system administrator and enter these settings manually. You can also use these steps to manually create a connection with an open network.

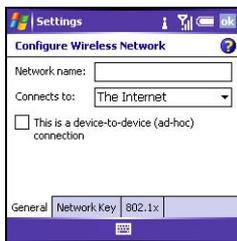
[*] NOTE If you are creating a connection manually, be sure to turn off any unnecessary security or authentication settings on your smartphone. For example, uncheck the Use IEEE 802.1x network access control box on the 802.1x tab if it is checked but your network does not use this feature.

1. Wake up your smartphone's screen, and then insert the Wi-Fi card into the expansion card slot.
2. Tap Wi-Fi  in the title bar.
3. Select the Settings link.
4. Select Network Cards .
5. Select Add New.
6. On the General tab, set the following:

- **Network name:** Specifies the SSID provided by the system administrator.
- **Connects to:** Specifies whether this connection connects to the Internet or to Work. You may need to select Work to access a corporate intranet.
- **This is a device-to-device (ad-hoc) connection:** Indicates whether you're connecting to another device or to an access point (network).

7. Select the Network Key tab, and then set the following:

- **Authentication:** Sets the method used to identify devices that connect to the network.
 - **Open:** Indicates the network uses open authentication.
 - **Shared:** Indicates the network uses shared authentication.
 - **WPA:** Indicates the network is a WPA network that uses 802.1x protocols.



- **WPA-PSK:** Indicates the network is a WPA network that requires a preshared key (password).
 - **Data Encryption:** Sets the encryption method. The options in this list vary based on your Authentication setting.
 - **Disabled:** Turns data encryption off.
 - **WEP:** Turns on the wired equivalent privacy encryption method.
 - **TKIP:** Turns on the temporal key integrity protocol encryption method. This method is often used to encrypt WPA and WPA-PSK connections.
 - **The key is automatically provided:** Indicates whether you need to specify the network key and key index provided by your network administrator, or whether the network provides this information. The availability of these options varies based on your Authentication and Data Encryption settings.
8. Select the 802.1x tab, and then set the following if available (the settings vary based on your settings on the other tabs):
- **Use IEEE 802.1x network access controls:** Lets you set these parameters if required by the network.
 - **EAP type:** Specifies the extensible authentication protocol type.
 - **Properties:** Lets you set additional certificate options.
9. Press OK  twice. This returns you to the Settings screen and connects you to the configured network.



Connecting to a previously configured network

After you set up a Wi-Fi connection, it's easy to connect to that network. If you have access to multiple Wi-Fi networks, you can select which network you want to connect to.

1. Wake up your smartphone's screen, and then insert the Wi-Fi card into the expansion card slot.
2. Tap Wi-Fi  in the title bar.
3. Select the Settings link.
4. Select Network Cards .
5. Tap and hold the name of the network you want to connect to.

[*] NOTE To tap and hold an ad-hoc network name, you must select Only computer-to-computer from the Networks to access menu.

6. Select Connect from the menu.



* Tip

Insert the Wi-Fi card in your smartphone to automatically connect to the available Wi-Fi network you most recently connected to.

Synchronizing your smartphone with your Exchange server using the Wi-Fi card

If your company supports synchronizing directly with the corporate Exchange server, you can set up your smartphone to synchronize wirelessly with the server using the Wi-Fi card.

[*] NOTE You cannot use the Wi-Fi card to perform scheduled ActiveSync synchronizations. To synchronize with your Exchange server wirelessly using the Wi-Fi card, you must synchronize manually.

*** Tip**

Some VPN servers require that you install specific VPN software on your smartphone. Go to www.palm.com/vpn for more information.

1. Press Start and select Programs.
2. Select ActiveSync .
3. Select the set up your device to sync with it link.
4. Enter the Exchange server address. Select Next.
5. Enter your Windows login username and password. Enter the domain information provided by your system administrator. Check the Save Password box. Select Next.
6. Select Finish.
7. Select Sync.



Connecting to a VPN

If you want to use your smartphone to access your corporate email account or other files on your corporate server, you may need to set up a VPN. A VPN enables you to log in to your corporate server through the company's firewall (security layer).

You need to set up a VPN to access a corporate server in either of the following two situations:

- Your company's wireless local area network (LAN) is outside the firewall.
- Your company's wireless LAN is inside the firewall, but you are accessing the network from outside the firewall (for example, from a public location or at home).

Check with your company's system administrator to see if a VPN is required to access the corporate network. If you need a VPN, you may need to purchase and install a third-party VPN client.

Before you begin setting up a VPN, ask your network administrator for the following information:

- Your username and password
 - Your server's domain name
 - Your server's TCP/IP settings
 - Your server's host name or IP address
1. Install your third-party VPN client.
 2. Press Start  and select Settings.
 3. Select the Connections tab, and then select Connections .
 4. On the Tasks tab, select Add a new VPN server connection.
 5. Follow the onscreen instructions to enter the settings provided by your corporate system administrator.

*** Tip**

To manually start a data connection on a network, go to ConnectionsSettings, select the Tasks tab, and then select Manage existing connections. Tap and hold the connection you want to start, and then select Connect from the shortcut menu.

*** Tip**

A green LED indicator on the front of the Wi-Fi card glows steadily when a Wi-Fi connection has been established. The LED indicator blinks when the connection is being attempted, and is off when Wi-Fi is turned off.

Turning Wi-Fi on or off

Wi-Fi turns off automatically when you remove the card from the expansion card slot. You can also turn Wi-Fi off manually if you are not using a Wi-Fi connection but want to leave the card in the slot. However, the card will continue to consume some power if it is left in the expansion slot, even when you are not connected to a network and even if Wi-Fi is turned off.

1. Wake up your smartphone's screen.
2. Tap Wi-Fi  in the title bar.
3. Tap Turn on Wi-Fi or Turn off Wi-Fi.



Viewing signal strength

You can monitor the strength of your Wi-Fi signal when you are connected to a network. If the signal is weak, expect the connection to be unreliable.

1. Wake up your smartphone's screen.
2. Tap Wi-Fi  in the title bar.
3. Green signal-strength bars show the signal strength for the selected network. More bars mean a stronger signal.

Editing Wi-Fi network settings

You can modify your wireless network settings at any time. For example, you can add or edit authentication or network key settings.

1. Wake up your smartphone's screen, and then insert the Wi-Fi card into the expansion card slot.
2. Tap Wi-Fi  in the title bar.
3. Select the Settings link.
4. Select the Connections tab, and then select Network Cards .
5. Select the name of the network you want to edit.
6. Select the tabs at the bottom of the screen, and then follow the steps in **Connecting to a closed network** to edit the settings you want.
7. When finished editing settings, press OK .



Common Questions

If you have a problem with your Palm® Wi-Fi card, review the questions in this section.

If you are still having problems, contact Technical Support by going to www.palm.com/support.

Why can't I make a wireless connection?

- Your Wi-Fi card is designed to connect to a wireless access point. Consult your wireless access point manual and the manufacturer website for troubleshooting information regarding your wireless access point.
- Most corporate networks have security policies that require special setup procedures. Contact your IT administrator for information.

Why can't I make a wireless connection when traveling internationally?

Your Wi-Fi card operates in the Industry Scientific and Medical (ISM) band and supports channels 1 through 11. In countries where channels 12 through 14 are also used, you may encounter access points using only these channels and be unable to make a wireless connection. For information on which channels are supported in other countries, see the documentation on the CD included with the Wi-Fi card.

Why can't I synchronize my smartphone wirelessly using the Wi-Fi card?

Check the signal status bars to make sure you are connected to your wireless network. See [Viewing signal strength](#).

What do I do if my smartphone does not recognize the Wi-Fi card when I insert it?

If the connection title bar icon does not change when you insert the Wi-Fi card—indicating that your smartphone is not recognizing the card—first remove the card, then reinsert it. If your smartphone still does not recognize the card, remove the card, do a soft reset on your smartphone, and then reinsert the card.

What do I do if the Wi-Fi card seems to stop working?

If you have made a Wi-Fi network connection but it now does not seem to be working, first remove the Wi-Fi card, then reinsert it. If you still cannot make a successful network connection, remove the card, do a soft reset on your smartphone, and then reinsert the card.

Why does my battery seem to drain more quickly since I've started using my Wi-Fi card?

The Wi-Fi card can use a small amount of your smartphone's battery charge even when the Wi-Fi setting is turned off. We recommend that you remove the Wi-Fi card from the expansion card slot whenever you are not using the card.

Contacting Technical Support

If you cannot solve your problem, go to www.palm.com/support or send an email message to your regional Technical Support office.

Before requesting support, experiment a bit to reproduce and isolate the problem. When you do contact support, please be ready to provide the following information:

- The name and version of the operating system you are using
- The actual error message or state you are experiencing
- The steps you take to reproduce the problem
- The version of smartphone software you are using and available memory

To find your smartphone version, go to the Settings screen, select About on the System tab, and then select the Version tab.

To find your smartphone memory information, go to the Settings screen, select the System tab, and then select Memory.

Product Regulatory Information

FCC Statement This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The use of shielded I/O cables is required when connecting this equipment to any and all optional peripheral or host devices. Failure to do so may violate FCC rules.

IMPORTANT: Changes or modifications not covered in this manual must be approved in writing by the manufacturer's Regulatory Engineering Department. Changes or modifications made without written approval may void the user's authority to operate this equipment.

Responsible Party:

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United States of America
(408) 617-7000

Palm® Wi-Fi card



Tested to Comply
With FCC Standards

FOR HOME OR OFFICE USE

Static Electricity, ESD, and Your Palm® Wi-Fi Card

Electrostatic discharge (ESD) can cause damage to electronic devices if discharged into the device, so you should take steps to avoid such an occurrence.

Description of ESD Static electricity is an electrical charge caused by the buildup of excess electrons on the surface of a material. To most people, static electricity and ESD are nothing more than annoyances. For example, after walking over a carpet while scuffing your feet, building up electrons on your body, you may get a shock—the discharge event—when you touch a metal doorknob. This little shock discharges the built-up static electricity.

ESD-susceptible equipment Even a small amount of ESD can harm circuitry, so when working with electronic devices, take measures to help protect your electronic devices, including your Palm Wi-Fi card, from ESD harm. Although Palm has built protections against ESD into its products, ESD unfortunately exists and, unless neutralized, could build up to levels that could harm your equipment. Any electronic device that contains an external entry point for plugging in anything from cables to docking stations is susceptible to entry of ESD. Devices that you carry with you, such as your smartphone, build up ESD in a unique way because the static electricity that may have built up on your body is automatically passed to the device. Then, when the device is connected to another device such as a docking station, a discharge event can occur.

Precautions against ESD Make sure to discharge any built-up static electricity from yourself and your electronic devices *before* touching an electronic device or connecting one device to another. The recommendation from Palm is that you take this precaution before connecting your smartphone to your computer, placing the smartphone in a cradle, or connecting it to any other device. You can do this in many ways, including the following:

- Ground yourself when you're holding your mobile device by simultaneously touching a metal surface that is at earth ground. For example, if your computer has a metal case and is plugged into a standard three-prong grounded outlet, touching the case should discharge the ESD on your body.
- Increase the relative humidity of your environment.
- Install ESD-specific prevention items, such as grounding mats.

Conditions that enhance ESD occurrences Conditions that can contribute to the buildup of static electricity in the environment include the following:

Low relative humidity. Material type. (The type of material gathering the charge. For example, synthetics are more prone to static buildup than natural fibers like cotton.)

- The rapidity with which you touch, connect, or disconnect electronic devices.

While you should always take appropriate precautions to discharge static electricity, if you are in an environment where you notice ESD events, you may want to take extra precautions to protect your electronic equipment against ESD.



For information on environmental programs, visit www.palm.com/environment.