Socket Wi-Fi® Products

For Windows Mobile

• Hardware: Go Wi-Fi!TM versions E300 and E500

• Software: Wi-Fi® Companion

User's Guide













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Feel free to contact SOCKET COMMUNICATIONS at:

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Other than the above, Socket Communications can assume no responsibility for anything resulting from the application of information contained in this manual.

Socket Communications requests that you refrain from any applications of the Socket Go Wi-Fi! card that are not described in this manual. Please refrain from disassembling the card. Disassembly of this device will void the product warranty.

You can track new product releases, software updates and technical bulletins by visiting Socket's web page at: www.socketcom.com.

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1 | Introduction

Socket's Wi-Fi products for Windows Mobile are the perfect tools to connect to enterprise and public Wi-Fi systems, so you can access email, the Internet, and corporate servers from your favorite Pocket PC.

Socket Go Wi-Fi!

The Socket Go Wi-Fi! wireless LAN cards use Direct Sequence Spread Spectrum (DSSS) technology at 2.4-2.5 GHz, conform to IEEE 802.11b specifications, and are Wi-Fi Certified to interoperate with other Wi-Fi products. Spread-spectrum communication provides a high-capacity network, and data rates up to 11 Mbps enable quick downloads.

The cards work with these types of WLAN security:

- · Open systems
- 40/64-bit or 128-bit WEP encryption
- 802.1x with EAP-TLS or PEAP
- WPA and WPA-PSK (Pocket PC 2003SE only)

There are two versions of Socket Go Wi-Fi!:

- E300: Secure Digital (SD) card
- E500: CompactFlash (CF) card





E300

E500

Socket Wi-Fi® Companion

Socket Wi-Fi Companion is an intuitive and graphical utility for Pocket PC 2003/2003SE devices with either the Socket Go Wi-Fi! E300/E500 or a built-in WLAN radio.

The software enables you to find WLANs in range and view their properties in detail, and connect whenever your favorite networks are available. You can even manage power settings to maximize battery life. Plus, diagnostic tools and connection statistics are provided for advanced users.





System Requirements — Go Wi-Fi!

Minimum device requirements for Go Wi-Fi! E300 (SD card):

- Pocket PC 2003/2003SE with available SDIO slot
- SDIO Now! software from BSQUARE in ROM

Note: For information about support for MontaVista Linux and Real-Time Operating Systems (RTOS), please email <u>developers@socketcom.com</u>

Minimum device requirements for Go Wi-Fi! E500 (CF card):

- Pocket PC 2003/2003SE with available CF or PC Card slot (PC Card adapter required for PC slot)
- Please note that the Socket Go Wi-Fi! E500 only connects to access
 points or radios that use long preamble. Every 802.11b access point
 supports long preamble, and most are configured this way by default.

Product Registration

If you purchased Socket Wi-Fi Companion for use with your Pocket PC's built-in WLAN radio, product registration is required to activate a full version of the software. Otherwise, the software will expire three days after installation.

Registration is not required to use Socket software with Socket Go Wi-Fi! E300/E500, but is highly recommends for all customers. Registered users receive priority for technical support, updates, and special offers. Register at: www.socketcom.com/prodreg

Useful Links

- For software updates: www.socketcom.com/support/support-wlan.asp
- For a device compatibility database: <u>www.socketcom.com/matrix</u>
- For a list of Wi-Fi hotspots and service providers in your area, visit <u>www.socketcom.com/product/wlan.asp</u> and click on the Hotspots link.
- Go Wi-Fi! E300/E500: The MAC address is printed on a label on the back of the card.

2 | Open or WEP-Enabled Networks

This section covers how to use Socket Wi-Fi Companion to find, configure and connect your Pocket PC to a WLAN running an open system or WEP encryption.



For help using the software, tap Start | Help.

Connection Summary

STEP 1: Install the software.

STEP 2: Insert Go Wi-Fi! or turn on WLAN radio.

STEP 3: Start Wi-Fi Companion.

STEP 4: Find a WLAN and create a profile.

STEP 5: Connect automatically to your network.



STEP 1: Install the Software

- 1. <u>Go Wi-Fi! E300/E500</u>: If you previously installed an older version of Socket WLAN card drivers on your Pocket PC, you must completely remove the old drivers by doing the following:
 - Make sure the WLAN card is not in the Pocket PC.
 - Tap Start | Settings | System tab | Remove Programs.
 - Select the WLAN card drivers and tap Remove.
 - Soft reset the Pocket PC by pressing the reset button.
- 2. Make an active connection between your device and a host PC. Use ActiveSync and a serial/USB/Ethernet connection cable or cradle.



ActiveSync should report Connected, and the ActiveSync icon should turn green.

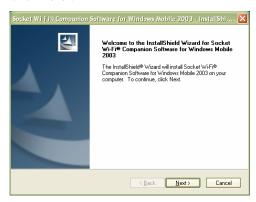


- 3. Insert the installation CD into your host PC.
- 4. Use My Computer or Windows Explorer to access your CD-ROM drive. In the CD, click on WTMESetup.exe.





5. The InstallShield Wizard will begin. Read the information in the first screen, then click Next>.



- 6. In the next two screens, read the software license agreement and choose a file location for the software.
- 7. In the Select Items to Install screen, Wi-Fi Companion will be selected by default. If using a Socket WLAN card, also select your version of the card, then click Next>.



- 8. Follow the instructions in the remaining wizard screens until installation is complete.
- 9. Disconnect the mobile computer from the host PC.
- 10. Soft reset the device by pressing the reset button.



IMPORTANT! If you installed Socket Wi-Fi Companion on a Pocket PC with built-in WLAN, you must register the software. Otherwise, the software will expire in three days.

No software registration is required for Socket Go Wi-Fi!

Software Registration

Software registration is only required if you will be using Socket Wi-Fi Companion on a Pocket PC with a built-in WLAN radio.

- Register the software online at <u>www.socketcom.com/prodreg</u>.
 You will receive an activation code by email.
- Make sure your Pocket PC's clock is set for the correct date, or the registration code will be rejected. Tap Start | Settings | Clock. After adjusting the date, tap ok.
- 3. Start Wi-Fi Companion. Either turn on the WLAN radio of your Pocket PC to automatically launch the program, or tap Start | Programs | Wi-Fi Companion.
- Tap on the Socket status icon at the top of your screen to view the main screen of Wi-Fi Companion.
- 5. In the main screen of Wi-Fi Companion, tap About at the bottom of the screen.

- 6. At the bottom of the About screen, tap Register.
- 7. In the Product Registration screen, enter the code you received by email. Tap **ok**.







Socket status icon, search mode.

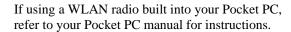




STEP 2: Insert Go Wi-Fi! or Turn on WLAN Radio

Insert Socket Go Wi-Fi! E300/E500 into the card slot, or turn on the WLAN radio.

If using Socket Go Wi-Fi! E300/E500, make sure the card is positioned correctly in the slot. Do not use excessive force, or damage may occur.





Go Wi-Fi! Status Indicator LEDs

E300 Link LED

LED Behavior	Meaning	
Off	Radio disabled/cannot transmit.	
Slow flash	Radio on, not connected.	
On	Connected	

<u>E500 LEDs</u>

LED Type	LED Behavior	Meaning	
Power	Off	Radio disabled/cannot transmit.	
ڻ ن	Flashing	Radio on, using Power Save Mode	
Green	On	Radio on, not using Power Save Mode	
Activity	Off	Radio disabled/cannot transmit.	
ıll	Slow flash	Radio on, no data traffic.	
Amber	Rapid flash	Connected. Faster flash denotes greater network activity.	

Note: To remove the SD card from your Pocket PC, first press the card into the slot. A spring mechanism will push the card out. Do not remove the card by simply pulling it, or damage may occur.

STEP 3: Start Wi-Fi Companion

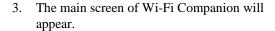
 After you insert the WLAN card or turn on the WLAN radio of your Pocket PC, Wi-Fi Companion will automatically launch, indicated by the Socket status icon at the top of the screen.



2. Tap on the icon. The icon varies depending on your connection status.

Alternatively, you can manually start the program by tapping:

Start | Programs | Wi-Fi Companion.





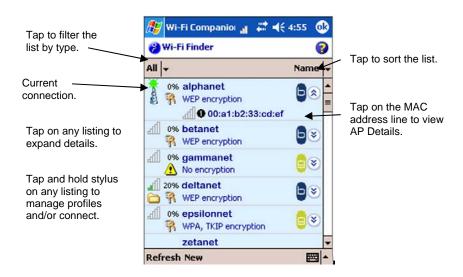


STEP 4: Find and Connect to a WLAN

1. In the main screen of Wi-Fi Companion, tap on the tower icon, or tap Tools | Wi-Fi Finder.

2. Wi-Fi Finder will list WLANs detected in range. Tap on any WLAN in the list to view additional properties.

If desired, tap on the Type or Sort by drop-down menus to change how the list is displayed. By default, All types are displayed, sorted by Name. If your WLAN is not listed, tap Refresh.



In.	Signal strength of strongest AP/ad hoc radio	3	Channel number
S. S.	WEP encryption, WPA (PSK), WPA (TKIP) or 802.1x	<u> </u>	Profile saved
<u> </u>	No encryption		802.11b, 802.11g

- 3. If Wi-Fi Finder cannot find your WLAN because its SSID is hidden, tap New to create a new profile for your network.
- 4. If your WLAN has a profile (indicated by a folder icon), Wi-Fi Companion may have already connected to it, indicated by a tower icon with a green burst on top.



To connect to a WLAN with a profile, tap and hold your stylus on the WLAN in the list. In the pop-up menu, tap Connect.

5. If your WLAN does <u>not</u> have a profile (no folder icon), tap and hold your stylus on the WLAN in the list, then tap Get connected to create a profile for the selected SSID.





Creating a WLAN Profile

After you tap New or Get connected in Wi-Fi Finder, you will be directed to Wireless Zero Config (WZC), the wireless connection editor built into Windows Mobile, to create a WLAN profile. For help with WZC, please refer to your Pocket PC manual. Consult with your network administrator to determine the settings needed to connect to your network.

 In the Configure Wireless Network screen, enter the Network name (SSID) if it isn't already provided. The SSID is case-sensitive.

Connects to:

Select either The Internet or Work.

Note: In most cases, you should select
The Internet. For a VPN/proxy server, refer to
your Pocket PC manual for instructions.



2. Follow the appropriate instructions for your type of network to enter the necessary security settings.

Open Networks

Depending on your Pocket PC 2003 version, your device may show two or three tabs at the bottom of the screen.

If your device shows three tabs, enter the following settings:

Network Key tab:

Authentication: Select Open.

Data Encryption: Select Disabled.

➤ 802.1x tab:

Do not enter any settings. Tap ok.

🎥 Settings	4 4 € 1:51 @
Configure Netw	ork Authentication 🛛 🔞
Authentication:	Open 🔻
Data Encryption:	Disabled ▼
The Key is pro	vided for me automatically
Network key:	******
Key index:	1 🔻
General Network	Key 802.1x

If your device shows two tabs, enter the following settings:

➤ <u>Authentication tab:</u> Uncheck all boxes. Tap **o**k.



WEP-Enabled Networks

Make sure your WEP key has the correct length. For 40/64-bit WEP, the key length is 10 hexadecimal or 5 ASCII characters. For 128-bit WEP, the key length is 26 hexadecimal or 13 ASCII characters.

Depending on your Pocket PC 2003 version, your device may show two or three tabs at the bottom of the screen.

If your device shows three tabs, enter the following settings:

Network Key tab

- Authentication: Select Open.
- Data Encryption: Select WEP.
- The Key is provided for me automatically:
 Uncheck. Enter the Network key and Key index.
 Use the correct key length.



> 802.1x tab

Uncheck Use IEEE 802.1x network access control and tap ok.



If your device shows two tabs, enter the following settings:

- ➤ <u>Authentication tab</u>
 - Data encryption: Check.
 - Network Authentication: Check if your network is set up for this. In most cases, you should uncheck.
 - The key is provided to me automatically: Uncheck. Enter the Network key and Key index. Use the correct key length.
 - Enable network access using IEEE 802.1X: Uncheck. Tap ok.



STEP 5: Connect Automatically to Your Network

1. After you enter the settings and tap **0k**, your device will automatically try to connect. You may see the Socket status icon at the top of your screen change from "networks available" to "networks out of range but configured."





- When your Pocket PC has connected, the following will occur:
 - The Socket status icon will change to 1-5 bars.
 - The "x" will vanish from the connection icon.
 - In Wi-Fi Finder, the WLAN will appear first in the list, showing a signal tower with a green burst on top.







Note: After you save a profile for a WLAN, Wi-Fi Companion will automatically try to connect to it whenever you insert the WLAN card or turn on the WLAN radio built into your Pocket PC.

3. Tap **ok** to return to the main screen.

Socket Status Icons

all	Associated or Connected. Number of bars indicates signal strength.	***************************************	Searching for networks.
Am.	Networks available.	-1000 -1000 -1000	Networks out of range but configured.

Main Screen of Wi-Fi Companion

The screen content varies depending on your connection status.

this screen from outside the utility. Your device properties. Wi-Fi Companio # ≠ 4:52 Internet ready. Tap to access email, Pocket_PC the Internet, ping or DHCP: 216.31.250.160 trace route. Icon Packets Sent: 43 Packets Received: 1020 appears only when Internet access is ready. WEP enabled. Data rate. Tap on the icon to view socketcomm signal strength and Duration: 00:06:22 data rate Quality: Good 00:a0:f8:39:be:eb distribution. 0 Tools Statistics About **| | -**

Socket status icon. Tap to access

 Packets sent and received

Device name

IP address

The icon always appears regardless of connection status. Tap on the device icon to view more IP addresses.

Encryption status. Tap on the icon to access a certificate management utility for WPA or 802.1x if needed.

Access point/remote device properties.

- SSID
- Connection duration
- Signal quality rating and percentage
- MAC address (also known as BSSID)
- Channel number (in black circle)

Tap for Wi-Fi Finder.

3 | WPA or 802.1x Networks

This section covers how to use Socket Wi-Fi Companion to configure and connect your Pocket PC to a WLAN running WPA or 802.1x with PEAP or EAP-TLS authentication.



WPA is supported by Windows Mobile 2003 Second Edition devices as well as some Windows Mobile 2003 (original version) devices with an updated ROM from the device manufacturer. If your device supports WPA, WPA and WPA-PSK options will appear in the "Configure Wireless Networks" screen.





For help using the software, tap **Start** | **Help**.

Connection Summary

STEP 1: Prepare network information.

STEP 2: Install the software.

STEP 3: Install authentication certificate(s).

STEP 4: Insert Go Wi-Fi! or turn on WLAN radio.

STEP 5: Find a WLAN and create a profile.

STEP 6: Connect automatically to your network.

STEP 1: Prepare Network Information

Verify Device and Network Compatibility

Some Pocket PCs can only connect to certain types of WPA and 802.1x networks. Check with your Pocket PC manufacturer. Your Pocket PC may only be able to connect to WPA and 802.1x networks that satisfy requirements such as:

- Windows Internet Information Service (IIS)
- Windows Internet Authentication Service (IAS)
- Windows Certification Authority (CA) with automatic approval and correct Pocket PC certificate format (via MS certificate template)
- Access point configured only for WPA or 802.1x (i.e., no multi-mode support or static 128-bit WEP keys)

Prepare Security Settings

If the network is compatible, ask the administrator for the necessary security settings:

- ☐ Wireless network name, known as SSID (case sensitive)
- ☐ Authentication type, user name, password, domain
- ☐ Pre-Shared Key, key format (hex or ASCII)
- ☐ Use of either DHCP or Static IP to assign IP addresses
- ☐ Authentication permission restrictions (e.g., domain administrators only)

For a Network Information Form that you can send to your network administrator, go to any of the following:

- Appendix C of this *User's Guide*
- *Docs* folder on the CD
- Visit: ftp://ftp.socketcom.com/wlan/WLAN_NetworkForm.txt



If your network only allows domain administrators to authenticate, ask your network administrator to assign you this privilege.

Obtain Authentication Certificate(s)

☐ Ask the network administrator for a copy of the root certificate from a Trusted Root Authority (no intermediary authority) if required. Installation instructions begin on the next page.



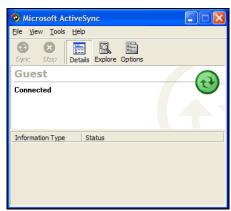
<u>EAP-TLS only</u>: You also need to set up a cabled connection to the network to install a personal certificate. Installation instructions begin on the next page.

STEP 2: Install the Software

- 1. <u>Go Wi-Fi! E300/E500</u> If you previously installed an older version of Socket WLAN card drivers on your Pocket PC, you must completely remove the old drivers by doing the following:
 - Make sure the WLAN card is not in the Pocket PC.
 - Tap Start | Settings | System tab | Remove Programs.
 - Select the WLAN card drivers and tap Remove.
 - Soft reset the Pocket PC by pressing the reset button.
- 2. Make an active connection between your device and a host PC. Use ActiveSync and a serial/USB/Ethernet connection cable or cradle.



ActiveSync should report Connected, and the ActiveSync icon should turn green.



- 3. Insert the installation CD into your host PC.
- 4. Use My Computer or Windows Explorer to access your CD-ROM drive. In the CD, click on WTMESetup.exe.





5. The InstallShield Wizard will begin. Read the information in the first screen, then click Next>.



- 6. In the next two screens, read the software license agreement and choose a file location for the software.
- 7. In the Select Items to Install screen, Wi-Fi Companion will be selected by default. If using a Socket WLAN card, also select the correct driver for your version of the card, then click Next>.



- 8. Follow the instructions in the remaining wizard screens until installation is complete.
- 9. Disconnect the mobile computer from the host PC.
- 10. Soft reset the device by pressing the reset button.



IMPORTANT! If you installed Socket Wi-Fi Companion on a Pocket PC with built-in WLAN, you must register the software. Otherwise, the software will expire in three days.

No software registration is required for Socket Go Wi-Fi!

Software Registration

Software registration is only required if you will be using Socket Wi-Fi Companion on a Pocket PC with a built-in WLAN radio.

- Register the software online at <u>www.socketcom.com/prodreg</u>.
 You will receive an activation code by email.
- Make sure your Pocket PC's clock is set for the correct date, or the registration code will be rejected. Tap Start | Settings | Clock. After adjusting the date, tap ok.







Socket status icon, search mode.

- 4. Tap on the Socket status icon at the top of your screen to view the main screen of Wi-Fi Companion.
- 5. In the main screen of Wi-Fi Companion, tap About at the bottom of the screen.



- 6. At the bottom of the About screen, tap Register.
- 7. In the Product Registration screen, enter the code you received by email. Tap **0k**.



STEP 3: Install Authentication Certificate(s)

- 1. If you have not done so already, get a root (server) certificate from your network administrator. The root certificate must come from a Trusted Root Authority (not an intermediary authority).
- 2. If Socket Go Wi-Fi! is inserted into your Pocket PC, remove it.
- 3. Make an active connection between your Pocket PC and host PC. Use ActiveSync and a serial/USB/Ethernet cable or cradle.



 Use My Computer or Windows Explorer to access your Mobile Device and copy the root certificate into your Pocket PC. Remember where you save the certificate.



- 5. On your Pocket PC, use File Explorer to navigate to the file location. Tap on the certificate.
- 6. A message will ask if you want to install the certificate. Tap Yes.



- <u>If your network uses PEAP</u>, disconnect your Pocket PC from the host PC. Soft reset the Pocket PC by pressing the reset button. Now you are ready to proceed to page 23 to find a WLAN and create a profile.
- <u>If your network uses EAP-TLS</u>, you also need to install a personal (client) certificate.
- To install a personal certificate, start Wi-Fi Companion. Tap Start | Programs | Wi-Fi Companion.



8. In the main screen of Wi-Fi Companion, tap on the keys icon if present. Alternatively, you can tap Tools | Certificates | Enroll.



9. Enter the User, Password, and Server as supplied by your network administrator. In the User field, enter your domain and user name in the format shown, using a backslash ("\") between the domain and user name.

Note: In the Server field, enter either the name or the IP address (using standard dot notation) of the server running Certificate Services on your network.

- 10. Tap Retrieve. After your Pocket PC retrieves a personal certificate, tap **ok**.
- 11. Disconnect the Pocket PC from the host PC.



STEP 4: Insert Go Wi-Fi! or Turn on WLAN Radio

Insert Socket Go Wi-Fi! E300/E500 into the card slot, or turn on the WLAN radio.

If using Socket Go Wi-Fi! E300/E500, make sure the card is positioned correctly in the slot. Do not use excessive force, or damage may occur.

If using a WLAN radio built into your Pocket PC, refer to your Pocket PC manual for instructions.



Go Wi-Fi! Status Indicator LEDs

E300 Link LED

LED Behavior	Meaning
Off	Radio disabled/cannot transmit.
Slow flash	Radio on, not connected.
On	Connected

E500 LEDs

LED Type	LED Behavior	Meaning	
Power	Off	Radio disabled/cannot transmit.	
ڻ ن	Flashing	Radio on, using Power Save Mode	
Green	Green On	Radio on, not using Power Save Mode	
Activity	Off	Radio disabled/cannot transmit.	
ıll	Slow flash	Radio on, no data traffic.	
Amber	Rapid flash	Connected. Faster flash denotes greater network activity.	

Note: To remove the SD card from your Pocket PC, first press the card into the slot. A spring mechanism will push the card out. Do not remove the card by simply pulling it, or damage may occur.

STEP 4: Start Wi-Fi Companion

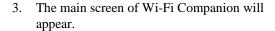
 After you insert the WLAN card or turn on the WLAN radio of your Pocket PC, Wi-Fi Companion will automatically launch, indicated by the Socket status icon at the top of the screen.



2. Tap on the icon. The icon varies depending on your connection status.

Alternatively, you can manually start the program by tapping:

Start | Programs | Wi-Fi Companion.





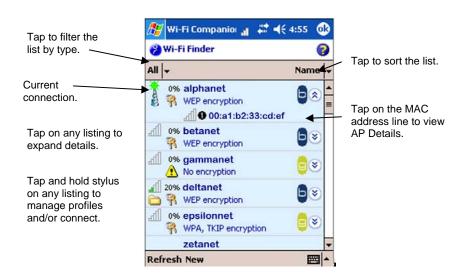


STEP 5: Find a WLAN and Create a Profile

 In the main screen of Wi-Fi Companion, tap on the tower icon, or tap Tools | Wi-Fi Finder.



2. Wi-Fi Finder will list WLANs detected in range. Tap on any WLAN in the list to view additional properties.





If desired, tap on the Type or Sort by drop-down menus to change how the list is displayed. By default, All types are displayed, sorted by Name. If your WLAN is not listed, tap Refresh.



3. If Wi-Fi Finder cannot find your WLAN because its SSID is hidden, tap New to create a new profile for your network.

 If your WLAN has a profile (indicated by a folder icon), Wi-Fi Companion may have already connected to it, indicated by a tower icon with a green burst on top.



To connect to a WLAN with a profile, tap and hold your stylus on the WLAN in the list. In the pop-up menu, tap Connect.



 If your WLAN does <u>not</u> have a profile (no folder icon), tap and hold your stylus on the WLAN in the list, then tap Get connected to create a profile for the selected SSID.



Creating a WLAN Profile

After you tap New or Get connected in Wi-Fi Finder, you will be directed to Wireless Zero Config (WZC), the wireless connection editor built into Windows Mobile, to create a WLAN profile. For help with WZC, please refer to your Pocket PC manual.

Enter the settings needed to connect to your network. Consult with your network administrator for help. For a Network Information Form you can send to your network administrator, refer to Appendix C.

 In the Configure Wireless Network screen, enter the Network name (SSID) if it isn't already provided. The SSID is case-sensitive.

Connects to: Select either The Internet or Work.

Note: In most cases, you should select The Internet. For a VPN/proxy server, refer to your Pocket PC manual for instructions.



2. Follow the appropriate instructions for your type of network to enter the necessary security settings.

WPA Networks

Network Key tab

 Authentication: Select the correct WPA type, either WPA or WPA-PSK.

If using WPA-PSK, also enter the Network key. The key length must be either 64 hex or 8-63 ASCII characters.

• Data Encryption: Select TKIP.

➤ <u>802.1x tab</u>

- Use IEEE 802.1x network access control: Check.
- EAP Type: Select the type of EAP authentication used by your network, either PEAP or Smart Card or Certificate (EAP-TLS)

When done, tap ok.





802.1x Networks

Depending on your Pocket PC 2003 version, your device may show two or three tabs at the bottom of the screen.

If your device shows three tabs, enter the following settings:

Network Key tab

- Authentication: Select Open.
- Data Encryption: Select WEP.
- The Key is provided for me automatically: Check.



> 802.1x tab

- Use IEEE 802.1x network access control: Check.
- EAP Type: Select the correct EAP type for your network, either PEAP or Smart Card or Certificate (EAP-TLS)
- When done, tap ok.



If your device shows two tabs, enter the following settings:

> Authentication tab

- Data encryption (WEP Enabled): Check.
- Network Authentication (Shared mode): Uncheck.
- The key is provided to me automatically: Check.
- Enable network access using IEEE 802.1x.
 Check. Select the correct EAP type for your network.
- When done, tap ok.



Automatic Connection

1. After you enter the necessary security settings and tap **0k**, your device will automatically try to connect.

You may see the Socket status icon at the top of your screen change from "networks available" to "networks out of range but configured."





- 2. When your Pocket PC has connected, the following will occur:
 - The Socket status icon will change to 1-5 bars.
 - The "x" will vanish from the connection icon.
 - In Wi-Fi Finder, the WLAN will appear first in the list, showing a signal tower with a green burst on top.

Note: After you save a profile for a WLAN, Wi-Fi Companion will automatically try to connect to it whenever you insert the WLAN card.



3. Tap ok to view the main screen of Wi-Fi Companion.

Socket Status Icons

all	Associated or Connected. Number of bars indicates signal strength.	1998	Searching for networks.
Aut.	Networks available.	******	Networks out of range but configured.

Main Screen of Wi-Fi Companion

The screen content varies depending on your connection status.

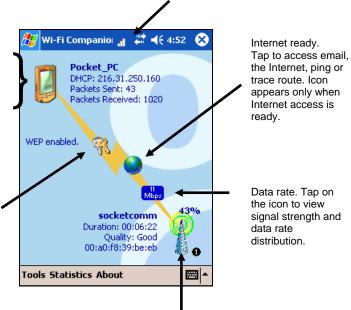
Socket status icon. Tap to access this screen from outside the utility.

Your device properties.

- Device name
- IP address
- Packets sent and received

The icon always appears regardless of connection status. Tap on the device icon to view more IP addresses.

Encryption status.
Tap on the icon to access a certificate management utility for WPA or 802.1x if needed.



Access point/remote device properties.

- SSID
- Connection duration
- Signal quality rating and percentage
- MAC address (also known as BSSID)
- Channel number (in black circle)

Tap for Wi-Fi Finder.

4 | Wi-Fi Companion

This chapter explains how to use the different features of Socket Wi-Fi Companion software.



The utility allows you to do the following:

- Turn wireless radio on/off
- View IP addresses
- Find networks
- Enable power save
- Ping
- Trace route
- Enroll a personal certificate for EAP-TLS
- Manage certificates
- View rates
- View graphs
- View tables
- View Help files

Turn Wireless Radio On/Off

You may want to turn off the radio to save power or if you are entering an area with radio restrictions (e.g., on an airplane).

Socket Go Wi-Fi!

If you are using Socket Go Wi-Fi!, you can turn off the card's WLAN radio directly from the main screen of Wi-Fi Companion.

- 1. From the Wi-Fi Companion main screen, tap Tools | Turn Radio OFF.
- 2. The Socket status icon will disappear from the top of the screen, and any active WLAN connections will cease.

When the radio is turned off, all access to statistical screens will be disabled, but the Show Networks, Cert Enroll, Manage Certificates, Ping, and Trace Route utilities will still be accessible.

Socket Go Wi-Fi! or WLAN radio built into your Pocket PC

- Tap on the connection icon (two arrows) at the top of your screen. In the bubble that appears, tap Turn on flight mode.
- 2. To turn the radio on again, tap on the connectivity icon (two arrows with an "x"). In the bubble that appears, tap Turn off flight mode.



Tools Statistics About

Tools Statistics About

🦉 Wi-Fi Companio: 🔐 🥰 🤫 5:07 🛭 🛞

View IP Addresses



You can only view IP address data if the WLAN card is actively connected to a WLAN network.

- Whenever your device has connected to a WLAN, the main screen of Socket Wi-Fi Companion will display the device's IP address, labeled as either "DHCP" or "static." To view more comprehensive IP address information, do either of the following:
 - Tap on the device icon.



- Tap Tools | IP Addresses.
- 2. The IP Addresses screen will appear, reporting Gateway, DNS server, DHCP server, and other IP address assignments.



Note: Lease information appears only if a network uses DHCP.

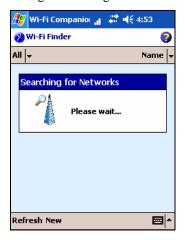
- 3. If your network uses DHCP, the Renew and Release functions will be enabled at the bottom of the screen.
 - Renew: Tap to get a new IP address and/or to update related lease data.
 - Release: Tap to release the IP address from the DHCP server.

Find Networks

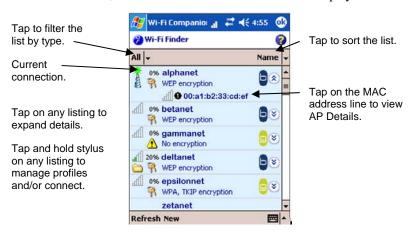
In the Wi-Fi Companion main screen, tap on the signal tower icon.
 Alternatively, tap Tools | Wi-Fi Finder.



2. The WLAN card will begin searching for networks in range.



3. After the search, a list of discovered networks will be displayed.



P	Signal strength of strongest AP/ad hoc radio	•	Channel number
S. S.	WEP encryption, WPA (PSK), WPA (TKIP) or 802.1x	<u> </u>	Profile saved
●	No encryption		802.11b, 802.11g

- 4. If desired, you can perform a variety of functions in the Show Networks screen:
 - To begin another search for networks in range, tap Refresh.
 - To configure network profiles, tap on a WLAN in the list. In the pop-up menu, tap Get Connected if no profile exists yet, or tap Edit Profile if a profile has already been saved for the WLAN.



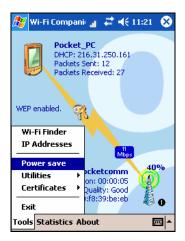
This will direct you to the Configure Wireless Networks screen of Wireless Zero Config.

5. To exit Wi-Fi Finder, tap ok.

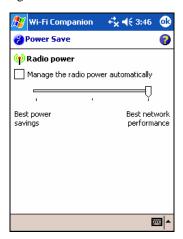
Enable Power Save

Socket Wi-Fi Companion offers both automatic and manual power management for the WLAN card.

1. In the main screen of Wi-Fi Companion, tap Tools | Power save.



 The Power Save screen will appear. If desired, check the box Manage the radio power automatically for automatic power management. Wi-Fi Companion will enable best performance when charging and best power savings when running on batteries.



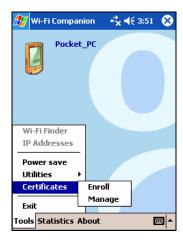
Otherwise, uncheck the box and use the slider to manually choose your power setting.

3. Tap ok.

Install Personal Certificate for EAP-TLS

Socket Wi-Fi Companion a quick link to the Cert Enroll utility, which helps you install a personal certificate, required to connect to 802.1x networks running EAP-TLS authentication.

1. In the main screen of Wi-Fi Companion, tap Tools | Certificates | Enroll.



2. The Personal Certificate Enrollment screen will appear. For help using the utility, pleaser refer to Chapter 4.



Manage Certificates

Windows Mobile 2003 includes a built-in utility for managing authentification certificates for WPA and 802.1x networks. Socket Wi-Fi Companion provides quick links to Microsoft's certificate management utility.

- 1. In the main screen of Socket Wi-Fi Companion, you can quickly access the Microsoft certificate management utility by either of two methods:
 - If the card is currently connected to a WLAN, the security status icon will appear as a pair of keys if the correct security settings have been configured, otherwise an error symbol will appear. Tap on the icon.



• Tap Tools | Certificates | Manage.



2. The Manage Certificates utility will appear. For help installing certificates for WPA or 802.1x, refer to Chapters 4. For more information about the certificate management utility, refer to your Pocket PC manual.



Ping

Use Ping to perform an ICMP ping to another address on the network. Ping is useful as a diagnostic tool to establish Layer 3 connectivity to another network node. In the continuous ping mode, it can also be used as a site survey tool to determine the edge of WLAN range or to look for spots with no coverage (dead spots).

- 1. In the main screen of Wi-Fi Companion, tap Tools | Utilities | Ping.
- 2. The Ping screen will appear. Tap Tools | Configure.



3. In the Configure Ping screen, enter the appropriate settings:



- Address: Enter a target address in the form of an IP address or a
 URL that can be resolved by a Domain Name System (DNS). For
 convenience, the last address used is the default, and the drop-down
 list shows prior addresses used.
- Size: Select a packet size, from 32 bytes up to 65550.
- Content: Select the packet payload data either All 00, All FF (hexadecimal), or Random.
- Repeat: Select a repeat number of pings, from a minimum of 5 to a maximum of Continuous.
- Verify Data: Select either Yes or No.
- Tap ok.

4. The main Ping screen will reappear. Tap Start.



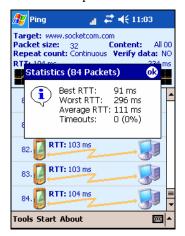
5. The ping test will begin. For each successful ping, the Roundtrip Time (RTT) will be shown. A line graph will display the series of RTTs for the last 24 pings.



If a ping is not successful within 2 seconds, a timeout will be displayed.



6. To stop the test, tap **Stop**. A prompt will report statistics of the test results. View the statistics and tap **ok**.



To view the statistics again, tap Tools | Statistics.

Trace Route

The Trace Route tool traces a packet from the Pocket PC to an Internet host, showing each hop and how long it takes to reach the destination. This allows the user to figure out where the longest delays are occurring if performance appears slow.

- 1. In the main screen of Wi-Fi Companion, tap Tools | Utilities | Trace Route.
- 2. The Trace Route screen will appear. Tap Tools | Configure.



3. In the Configure Trace Route screen, enter the appropriate settings:



- Address: Enter a target address in the form of an IP address or a
 URL that can be resolved by a Domain Name System (DNS). For
 convenience, the last address used is the default, and the drop-down
 list shows prior addresses used.
- Max hops: Select the maximum number of hops (default is 20).
- Resolve IP: Indicate whether you want to resolve the IP address from a URL (default is Yes).
- Tap ok.
- 4. In the main Trace Route screen, tap Start.



5. The Trace Route test will begin. For each successful hop, the hop time, host name and IP address are shown. Tap **Stop** to stop the trace at any time, or let the trace run until it is complete.



6. When the trace is complete, the Statistics dialog box will report the best hop, worst hop, average hop, and number of timeouts. Tap **ok** to close the box.



To view the statistics again, tap Tools | Statistics.

To view the full host name for any of the hops, simply tap on the hop in the list.



View Rates



Note: You can only view statistical rate information if the WLAN card is actively connected to a WLAN network.

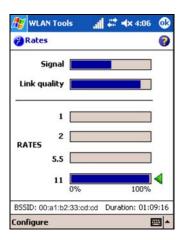
- 1. Whenever your device has connected to a WLAN, the main screen of Wi-Fi Companion will display the connection's data rate. To view more comprehensive data rate information, do either of the following:
 - Tap on the data rate icon.



• Tap Statistics | Rates.



2. The Rates screen will appear, reporting the current signal strength, signal quality, and a history of the relative number of packets sent at the four possible 802.11b connection speeds. Additionally, the screen shows the current BSSID and connection duration.



The green arrow indicates the current network speed.

3. By default, the Pocket PC will refresh the rate information every second. To configure the refresh rate to something different, tap Configure at the bottom of the screen.

View Graphs

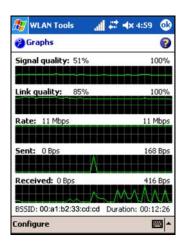


You can only view the statistical graphs if the WLAN card is actively connected to a WLAN network.

1. In the main screen of Wi-Fi Companion, tap Statistics | Graphs.



2. The Graphs screen will appear, displaying scrolling line graphs of the signal quality, link quality link speed, and sent and received data rates.



Two numbers are reported with each graph: the current value (displayed on the left side, after the graph title) and the maximum value (displayed on the far right). For the Sent and Received graphs, the maximum value may change.

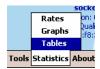
3. By default, the Pocket PC will refresh the graph information every second. To configure the refresh rate to something different, tap Configure at the bottom of the screen.

View Tables



You can only view the statistical tables if the WLAN card is actively connected to a WLAN network.

1. In the main screen of Wi-Fi Companion, tap Statistics | Tables.



2. The Tables screen will appear, displaying a table of comprehensive information about the current connection.

The table is divided into five screens: IP, TCP, UDP, ICMP, and Interface. Almost all of the information presented in the tables relates to performance and error counts.



Tap on a column header to sort the data.

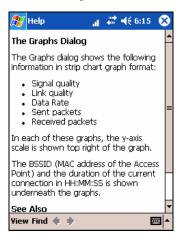
Reset: Tap to reset the contents of the Current column to zero.

Refresh: Tap to refresh the data of the open table. By default, the data will refresh every time you open a new table (e.g., when you switch between the different tabs).

View Help Files

There are two ways to access Help files for Socket Wi-Fi Companion.

- To view a list of all the Help files, make sure Socket Wi-Fi Companion is running and tap Start | Help.
- To view a Help file for the screen of Socket Wi-Fi Companion that is currently open, tap on the Help button . Except for the main screen, all screens of Socket Wi-Fi Companion feature a Help button.



Appendix A Specifications

Go Wi-Fi! E300 (SD card)

Physical Characteristics:

Card Dimensions: 1.57 x 0.94 x 0.08 in (40 x 24 x 2.1 mm)

Total Weight: 0.1 oz (4 g)

Operating Temperature: +14 to +158 °F (0 to +70 °C)Storage Temperature: -22 to +176 °F (-30 to +80 °C)

Power Consumption (3.3 V Supply):

Transmission: 187 mA **Receive:** 146 mA

Power-Saving Idle (listening): 15.8 mA

Power-Saving Sleep: 0.92 mA

Hardware Support:

Pocket PC 2003/2003SE with SDIO slot and *SDIO Now!* software from BSQUARE in ROM, including devices from Asus, Dell, HP, i-mate, and others

Compatible Processors:

- Intel XScale
- Samsung MIPS
- Texas Instruments OMAP

Operating System Support:

- Windows Mobile 2003/2003SE
- Windows CE 4.2 and 5.0
- For information about support for MontaVista Linux and Real-Time Operating Systems (RTOS), please email <u>developers@socketcom.com</u>

Interface Standards: SDIO

Standards Conformance:

Wi-Fi Certified — Enterprise Edition Meets 802.1x requirements

Transmit Power Output: 32 mW nominal, 40 mW maximum

Receiver Sensitivity:

1 Mbps: -91 dBm 11 Mbps: -83 dBm

Data Rate:

Complies with 802.11b specification to provide data rates up to 11 Mbps, with range and throughput optimized by Dynamic Rate Scaling to 5.5, 2, and 1 Mbps

Frequency Range: 2.4-2.5 GHz band

Range:

Indoors: Approx. 300 feet (typical office environment)

Outdoors: Approx. 1000 feet

Access Protocol: Carrier Sense Multiple Access with Collision

Avoidance Protocol (CSMA/CA)

Security Encryption/Authentication Hardware Support:

40/64-bit and 128-bit WEP data encryption 802.1x with EAP-TLS or PEAP (Pocket PC 2003 only) Wi-Fi Protected Access (WPA), WPA with Pre-Shared Key (WPA-PSK)

Software Included: Socket WLAN CD

Hardware Warranty: Three years

Certification/Compliance:

FCC: Part 15, Class B Industry Canada RSS210

Europe: CE Mark, R&TTE Directive

Australia: C-Tick

Go Wi-Fi! E500 (CF card)

Physical Characteristics:

CF Type I Size: 56.6 x 42.8 x 3.3 mm)

Total Weight: 13.6 g

Operating Temperature: 32 to 158 °F (0 to 70 °C) **Storage Temperature:** +5 to 185 °F (-15 to +85 °C)

Power Consumption (3.3 V Supply):

Idle (listening): <20 mA **Transmission:** 265 mA

Interface Standards:

CompactFlash Interface: CompactFlash Type I

With CompactFlash-to-PC Card Adapter: PCMCIA, Type II

Standards Conformance:

Wi-Fi Certified — Enterprise Edition Meets 802.1x requirements

Output Power: 40 mW maximum

Data Rate: Complies with 802.11b specification to provide data rates up to 11 Mbps, with range and throughput optimized by Dynamic Rate Scaling to 5.5, 2, and 1 Mbps

Frequency Range: U.S., Europe, and Japan product covering 2.4-2.5 GHz, programmable for different country regulations

Range: Approx. 300 feet (typical office environment)

Access Protocol: Carrier Sense Multiple Access with Collision Avoidance Protocol (CSMA/CA)

Security Encryption/Authentication Hardware Support:

40-bit and 128-bit WEP data encryption 802.1x with EAP-TLS or PEAP Wi-Fi Protected Access (WPA), WPA-PSK (Pre-Shared Key)

Operating System Support: Windows Mobile for Pocket PC 2003/2003SE

Software Compatibility: Windows COM port

Software Included: Installation CD

Warranty: CompactFlash Card: Three years

Certification/Compliance:

FCC: Part 15, Class B ETS 300 328 ETS 300 826

CompactFlash Spec. 2.0

TX Maximum Radiated EIRP:

U.S.: FCC Part 15.247 Europe: ETS 300 328 Canada: IC RSS210

TX Out-of-Band Emissions:

U.S.: FCC Part 15.247, 15.205, 15.209

Europe: ETS 300 328

Appendix B Safety and Usage Tips

Product Care

- Do not expose this product to liquid, moisture or extreme humidity.
- Do not expose this product to extreme high or low temperatures.
- Do not drop, throw or try to bend this product, as rough treatment could damage it.
- Do not attempt to disassemble this product a broken seal will void the warranty. The product does not contain consumer serviceable components. Should your Go Wi-Fi! need service, please contact Socket technical support at: support@socketcom.com.
- Treat this product with care. Keep in a clean, dry and dust-free place.
- Changes or modifications of this product, not expressly approved by Socket, may void the user's authority to operate the equipment.

Antenna Care

Do not place a metallic shield around your Go Wi-Fi! card since it will reduce the radio transmission efficiency.

Efficient Use

For optimum performance, please make sure that there is no metallic surrounding your Go Wi-Fi!.

Driving

RF energy may affect some electronic systems in motor vehicles, such as car stereo, safety equipment, etc. Check with your vehicle manufacturer's representative to be sure that your Go Wi-Fi! will not affect the electronic system in your vehicle.

Aircraft

- Turn off the Go Wi-Fi! before boarding any aircraft.
- To prevent interference with communications systems, you must not use your Go Wi-Fi card while the plane is in the air.
- Do not use it on the ground without permission from the crew.

Radio Frequency Exposure

Your Go Wi-Fi! is a radio transmitter and receiver. When in operation, it communicates with 802.11b-equipped devices by receiving and transmitting radio frequency (RF) magnetic fields in the frequency range 2.4 to 2.5 GHz. The maximum output power of the radio transmitter is 100 mW.

The Go Wi-Fi! unit is designed to be in compliance with the RF exposure limits set by national authorities and international health agencies when installed or used separately from other antennas or radio transmitters.

Operation of this device excludes body-worn holsters, belt clips, or similar operating configurations, as described in the FCC filing.

Appendix C Network Information

Consult with your network administrator, or have them complete this form.

1.	What is the network's wireless network name, known as SSID?			
	Note: The name is case-sensitive, maximum length 32 characters.			
2.	What type of security does your WLAN use? Check one of the boxes A-F below.			
	A Open System (no settings needed, proceed to Question 4) B WEP-40 C WEP-128 D WPA-PSK E WEP-PEAP F WEP-EAP/TLS			
3. If you checked B, C, D, E or F, please provide the necessary settings				
	[B] What is the WEP-40 key?			
40-bit (10 characters):				
	[C] What is the WEP-128 key? What is the key index?			
	128-bit (26 characters):			
	Key index: 1, 2, 3 or 4			
[D] What is the WPA-PSK key? What is the key format?				
	Key:			
	Key Format: ☐ Hexadecimal. Key length must be 64 characters.			
	ASCII. Key length must be 8-63 characters.			

[E-F] 802.1x Authentication only

IMPORTANT! Get the required authentication certificate(s) from your network administrator!

Specify the follo	Specify the following 802.1x settings:				
Authentication:	EAP-TLS May appear as "Smart Card or Certificate" in configuration menu.				
	☐ PEAP				
User name:(network login)	Server:(certificate server)				
Password:	Domain:				
	■ NO. If <i>No</i> , then you do not need any of the settings below. ■ YES. If <i>Yes</i> , then please specify the following:				
(a) Mobile Computer IP address:					
(b) Subnet Mask:					
(c) Gateway:	-··				
(d) DNS:	··				
(e) WINS*:					

*For Remote ActiveSync Only: If your server does NOT have use WINS services, use the IP address of the host PC instead of a WINS address.

Appendix D General Troubleshooting

SYMPTOM: My device does not recognize the Socket Go Wi-Fi! after I insert it.

POSSIBLE REASONS	SOLUTION
The card driver was not installed	Install the software properly.
or installed incorrectly.	

SYMPTOM: The Socket status icon doesn't appear after I insert the card into my Pocket PC.

POSSIBLE REASONS	SOLUTION
Your mobile computer may be	Remove the WLAN Card. Soft reset the
frozen.	device by pressing the reset button.
The WLAN card may not be	Remove and carefully re-insert the card
properly aligned in the card slot.	in the slot.

SYMPTOM: My device is not receiving a valid IP address.

POSSIBLE REASONS	SOLUTION
The DHCP request was not successful in receiving an IP address	Remove and reinsert the card or soft reset the mobile computer.
The SSID may be incorrect.	Check and re-enter the SSID. It is case-sensitive. Alternatively, try using an SSID of "any".
In Infrastructure operating mode, WEP encryption may not match access point settings.	Check with your company IT department to confirm access point security settings.

SYMPTOM: My device does not associate with an access point known to be within range.

POSSIBLE REASONS	SOLUTION
The SSID may be incorrect.	Check and re-enter the SSID.
	Try using an SSID of "any".
In Infrastructure operating mode,	Check with your company IT
WEP encryption may not match	department to confirm access point
access point settings.	security settings.
AP may require short preamble.	Change access point to long preamble.

Appendix E Technical Support

If you have trouble using the WLAN software, tap Start | Help to view Help files. For Wi-Fi Companion, you can also tap the Help button of for information about the open screen.

If you need further assistance with the Go Wi-Fi! card, Socket has two technical support resources to help you.

Socket On-Line Support

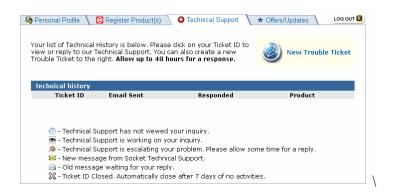
Socket On-Line Support (SOS) is an interactive technical support program and is the best place to start for technical support. To access SOS, visit: www.socketcom.com/support. Click on the SOS icon.



Live Technical Support

IMPORTANT! To obtain live technical support, you must first register your product online at www.socketcom.com/prodreg.

After product registration, log in. Click on the Technical Support tab. Click Trouble Ticket to submit an online inquiry for technical support. You can log in anytime to track the progress of your request. If we cannot resolve your inquiry online, we can arrange for a support engineer to call you at a specific time.





<u>802.1x only</u>: If you have trouble connecting to an 802.1x network, ask your network administrator for the event log and access point log, if supported. Send the log(s) to Socket technical support with your request for help.

58 | APPENDIX F: TECHNICAL SUPPORT

Limited Warranty

Socket Communications Incorporated (Socket) warrants this product against defects in material and workmanship, under normal use and service, for the following period from the date of purchase:

Plug-in card: Three years

Incompatibility is not a defect covered by Socket's warranty. During the warranty period, Socket will, at its option, repair or replace the defective product at no charge when furnished with proof of retail purchase, provided that you deliver the product to Socket or to an authorized Socket Service Center.

The returned product must be accompanied by a return material authorization (RMA) number issued by Socket or by Socket's Authorized Service Center. If you ship the product, you must use the original container or equivalent and you must pay the shipping charges to Socket. Socket will pay shipping charges back to any location in the contiguous United States. This warranty applies only to the original retail purchaser and is not transferable.

Socket may, at its option, replace or repair the product with new or reconditioned parts and the returned product becomes Socket's property. Socket warrants the repaired or replaced products to be free from defects in material or workmanship for ninety (90) days after the return shipping date, or for the duration of the original warranty period, whichever is greater.

This warranty does not cover the replacement of products damaged by abuse, accident, misuse or misapplication, nor as a result of service or modification other than by Socket.

SOCKET IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING DAMAGE TO PROPERTY AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURY. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some states do not allow limitation of implied warranties, or the exclusion or limitation of incidental or consequential damages, so that the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

This product may contain fully tested, recycled parts, warranted as if new.

For warranty information, email info@socketcom.com.

Limited Software Warranty

LIMITED WARRANTY. SOCKET warrants that the original disk or CD ROM is free from defects for 90 days from the date of delivery of the SOFTWARE.

CUSTOMER REMEDIES. SOCKET'S entire liability and your exclusive remedy shall be, at SOCKET'S option, either (a) return of the price paid or (b) replacement of the SOFTWARE which does not meet SOCKET'S Limited Warranty and which is returned to SOCKET with a copy of your receipt. Any replacement SOFTWARE will be warranted for the remainder of the original warranty period or 30 days, whichever is longer. THESE REMEDIES ARE NOT AVAILABLE OUTSIDE OF THE UNITED STATES OF AMERICA.

NO OTHER WARRANTIES. SOCKET disclaims all other warranties, either express or implied, including but not limited to implied warranties of merchantability and fitness for a particular purpose, with respect to the SOFTWARE and the accompanying written materials. This limited warranty gives you specific legal rights. You may have others which vary from state to state.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES. In no event shall SOCKET or its suppliers be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other pecuniary loss) arising out of the use of or inability to use the SOFTWARE, even if SOCKET has been advised of the possibility of such damages. Because some states do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply to you.

EXPORT LAW ASSURANCES. You may not use or otherwise export or reexport the SOFTWARE except as authorized by United States law and laws of the jurisdiction in which the SOFTWARE was obtained. In particular, but without limitation, none of the SOFTWARE may be used or otherwise exported or reexported (a) into (or to a national or resident of) a United States embargoed country or (b) to anyone on the U.S. Treasury Department's list of Specially Designated Nationals or the U.S. Department of Commerce's Table of Denial Orders. By using the SOFTWARE, you represent and warrant that you are not located in, under control of, or a national or resident of any such country or on any such list.

GOVERNMENT END USERS. If the SOFTWARE is supplied to the U. S. Government, the SOFTWARE is classified as "restricted computer software" as defined in clause 52.227-19 of the FAR. The U. S. Government 's rights to the SOFTWARE are as provided in clause 52.227-19 of the FAR.

CONTROLLING LAW AND SEVERABILITY. This License shall be governed by the laws of the United States and the State of California. If for any reason a court of competent jurisdiction finds any provision, or portion thereof, to be unenforceable, the remainder of this License shall continue in full force and effect.

Regulatory Compliance

Go Wi-Fi! E300/E500

Socket Go Wi-Fi! is designed to be compliant with the rules and regulations in locations where they are sold and will be labeled as required. This product is type approved users are not required to obtain license or authorization before using.

Radio Frequency Interference Requirements

This device complies with part 15 of the FCC rules. Operation is subject to the following 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 is also ETS 300 328 and ETS 300 826 compliant. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

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 may try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna of the radio or television.
- Increase the distance separating the equipment and the receiver.
- Connect the equipment to an outlet on a different branch circuit than that of the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet helpful:

How to Identify and Resolve Radio-TV Interference Problems

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402.

Radio Frequency Interference Requirements – Canada

This Class B digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la Classe B respecte toutes les exigencies du Reglement sur le Matériel Brouilleur du Canada.

NOTE: To comply with FCC and Industry Canada exposure requirements, this device is approved for operations in a user's hand when there is a distance of 20 cm or more between the device antenna and the user's body.

CE Marking & European Union Compliance

Products intended for sale within the European Union are marked with a CEMark which indicates compliance to applicable Directives and European Normes (EN), as follows. Amendments to these Directives or ENs are included: Normes (EN), as follows:

Applicable Directives:

- Electromagnetic Compatibility Directive 89/336/EEC
- Low Voltage Directive 73/23/EEC

Applicable Standards:

- EN 60950:2000 Safety of Information Technology Equipment
- EN 301 489-17 v1.11 (2000-09) Specified Conditions for Wideband Data and HIPERLAN Equipment
- EN 55 022 Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment.
- EN61000-4-2: 1995 Electrostatic Discharge
- EN61000-4-3: 1996 Radiated Electromagnetic Field
- ANSI C95.1 Safety Levels with Respect to Human Exposure to RF Electromagnetic Fields 300 KHz to 300 GHz

Product Disposal

Your device should not be placed in municipal waste. Please check local regulations for disposal of electronic products.





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