



Palm OS Client

Version 1.0 Users Guide

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The Wavelink Palm Client Users Manual for Spectrum24
Revision 2-00

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About this Manual

Welcome to the Wavelink Studio Client for Palm OS User Manual. This manual will help you configure the Palm OS client for the Mobile Units on your wireless network.

Assumptions of this Manual

To use this manually effectively, it is recommended that you have a basic understanding of each component of your Spectrum One or Spectrum24 network. This includes knowledge of both the purpose and general operation of each component.

For example, you should know how to turn a Mobile Unit on and off, and the purpose of the configuration cradle in the network. You should also understand how to navigate and enter commands on a Mobile Unit.

See the appropriate Symbol Technologies documentation included with the purchase of your Spectrum One or Spectrum24 hardware for more information.

Typographical Conventions

This manual uses the following typographical conventions:

- **Courier New.** Any time you interact with a Wavelink Studio option, such as a button, or type specific information into a field, such as a file pathname, that option appears in the *Courier New* text style. This text style is also used for any keyboard commands that you might need to press.

Examples:

Click *Next* to continue.

Press *CTRL+ALT+DELETE*.

- **Bold.** Any time this manual refers to an option, such as descriptions of different options in a dialog box, that option appears in the **Bold** text style. This text style is also used for any noteworthy or cautionary information.

Examples:

Click *Open* from the **File** menu.

The **Connect** button automatically connects you with the selected server.

Note: You must reset the Mobile Unit before using the Wavelink Palm Client.

- **Italics.** Any time this manual refers to another section within the manual, that section appears in the *Italic* text style.

Example:

See the *Wavelink Startup Utility* section for more information.

About the Wavelink Palm Client

This section describes the different components and features that comprise the Wavelink Palm Client.

What is the Wavelink Palm Client?

The Wavelink Palm Client unleashes the full computing potential of your Mobile Unit by transforming it into a true thin client for the wireless network.

Today's model for efficient network communications is based on the addition of a thin client to the traditional client-server model. In a three-tier model, the burden of an application is intelligently shared between the host and client. Assignment of a specific application duty is based on client- or host-management efficiency. The Wavelink Palm Client is software that you install directly into the Non-Volatile Memory (NVM) of your Symbol Technologies' Spectrum One or Spectrum24 Mobile Unit. Once installed, you gain total control over Mobile Unit features. This control essentially transforms your Mobile Unit from a dumb terminal to an intelligent client. Consequently, you can effectively share the burden of an wireless application for maximum efficiency and power.

Some of the features of the Wavelink Palm Client are:

- **Event-driven architecture.** The Wavelink Palm Client's unique event-driven architecture means minimized wireless traffic. Using the Wavelink Palm Client, individual data packets are only sent across the network when prompted by specific user actions. With the Wavelink Palm Client you get the most efficient communications possible from your wireless network.
- **Total control over Mobile Unit features.** The Wavelink Palm Client offers total control over all Mobile Unit features ranging from the unit display to scanner. Cut down on entry errors by disabling the device keypad at scanner input prompts. All the control you need to empower wireless applications is at your fingertips.
- **Client-side menus.** The Wavelink Palm Client lets you save commonly used menus and other DOS-type files directly to a Mobile Unit's memory for future use. Accessing menus and other

important files in your application is instantaneous because there is no download time.

- **Barcode Configuration Files.** The Wavelink Palm Client lets you save custom barcode configuration files to a Mobile Unit's memory for future use. These barcode configuration files let you disable or enable barcodes by prompt based on type and length. With the Wavelink Palm Client, you never have to worry about scanning the wrong barcode!
- **AutoDiscovery™ Technology.** With unique AutoDiscovery™ technology, your Mobile Units are ready for immediate use without any client-side configuration. With AutoDiscovery™, Wavelink applications from across your entire network are automatically available for user selection without the configuration of a specific host assignment. Just activate your Mobile Units and start using your applications today!

Wavelink Palm Client Requirements

The Wavelink Palm Client functions with any Symbol Technologies' Spectrum24 Mobile Unit that has at least 256k of non-volatile memory.

If the resident Wavelink Palm Client software is ever erased from a Mobile Unit's memory, you must reinstall the software for the Mobile Unit to function with Wavelink Studio.

The Wavelink Palm Client installation process requires additional hardware including a DOS or Windows® PC with a working serial communications port, and a Symbol Technologies' configuration cradle. See the Mobile Unit documentation for more information on configuration cradle compatibility.

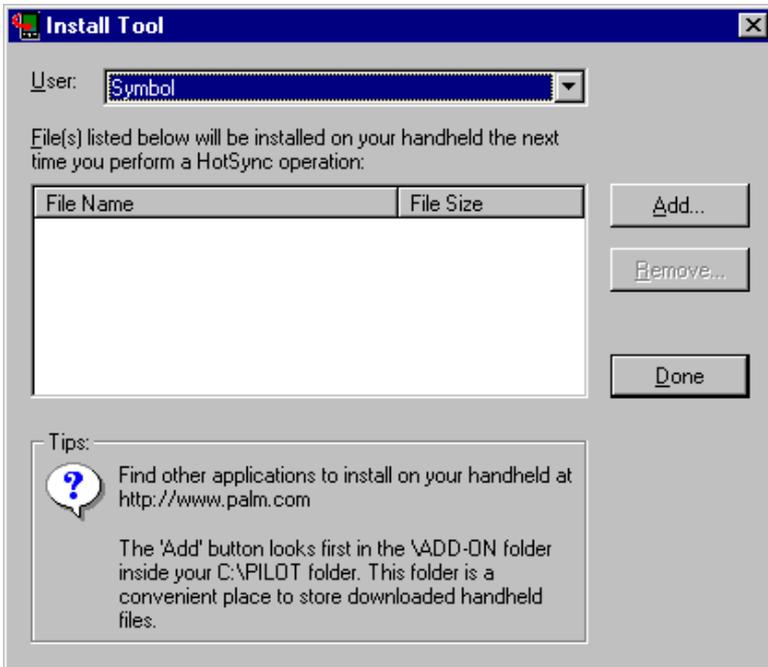
In addition to the Wavelink Palm Client software, you must install the Palm Desktop software on the desktop PC.

To use the AutoDiscovery™ features of the Wavelink Palm Client you must use Wavelink Studio version 3.5 or greater.

Installing the Wavelink Palm Client

To install the Wavelink Palm Client:

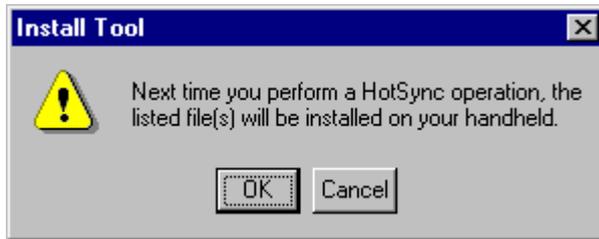
1. Download the file `wlc.prc` from a Wavelink-affiliated Web site.
2. Open the Palm Desktop application.
3. Use one of the following methods to open the Install Tool utility:
 - From the Palm Desktop application, click the **Install** icon on the Launch Bar.
 - From the **Start** button, highlight `Programs`, and select `Desktop > Install Tool`.



The Install Tool Utility

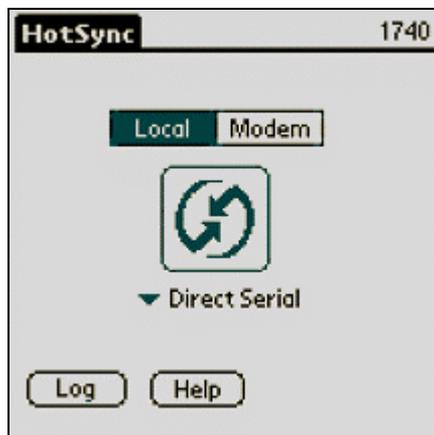
4. Select `Symbol` from the **User** field.
5. Click `Add`. The system's Open dialog box appears (not shown).

- Navigate to and select the `wlc.prc` file from the directory to which you downloaded it.
- Click **Open**. The `wlc.prc` file appears in the applications list in the Install Tool utility.
- Click **Done**. The following message box appears.



Install Tool Message Box

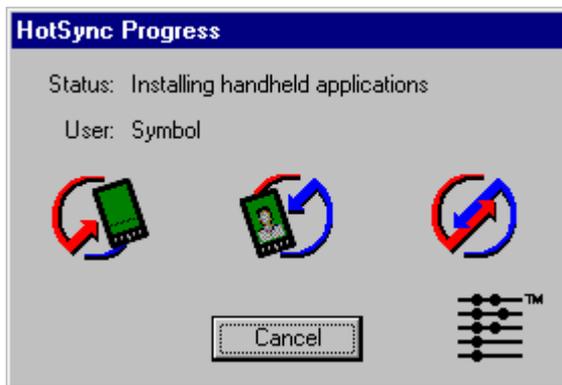
- Click **OK**.
- From the main screen of the Mobile Unit, select the **HotSync** icon. The following screen appears.



The HotSync Screen

- Verify that your current connection type (Direct Serial or Direct IR) has been selected.

12. Tap the **HotSync** icon. The HotSync application begins installing the Wavelink Palm Client to the Mobile Unit. The following screen appears on your desktop PC.



The HotSync Progress Message Box

When the HotSync application completes the installation of the Wavelink Palm Client, the Mobile Unit will display the following message: HotSync Operation Complete.

The Wavelink Palm Client icon appears in the list of applications on your Palm computer.

Note: You must reset the Mobile Unit before using the Wavelink Palm Client.

Spectrum24 Configuration

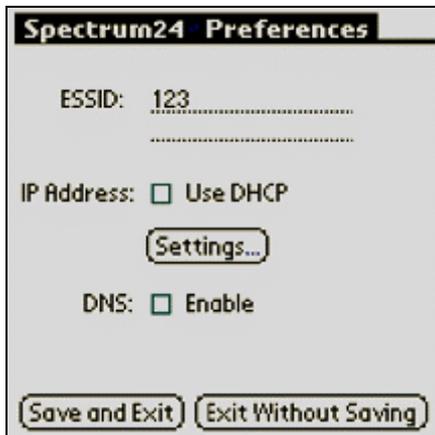
The Spectrum24 configuration screen lets you configure the Spectrum24 network settings required by the Mobile Unit. Each network option must be properly configured before the Mobile Unit can function with the network.

Once configured, you will not need to reconfigure these settings unless the Mobile Unit's non-volatile memory is lost or the network configuration changes.

To open the Spectrum24 configuration screen:

1. On the handheld, select `Prefs`.
2. Select `Network` from the **Preferences** pop-up list.
3. Select `Spectrum24` from the **Service** pop-up list.
4. Tap `Details`.

The following screen appears.



The Spectrum24 Preferences Screen

The **ESSID** field contains the ESSID, or Net ID, that identifies the radio network. All equipment on the wireless network must use the same ESSID.

The **IP Address** options allow you to configure either a static or dynamic IP address for the Mobile Unit. Select one of the following options:

- To dynamically assign the IP address using the Dynamic Host Configuration Protocol (DHCP), select the `Use DHCP` checkbox.
- To assign a static IP address, clear the `Use DHCP` checkbox and tap `Settings`. See *Configuring a Static IP Address* for more information.

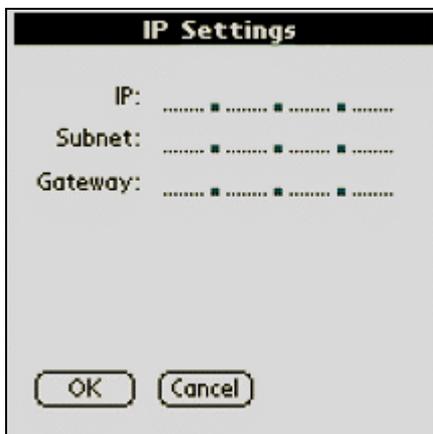
The **DNS** options allow you to configure a host using DNS. To configure a host using DNS, enable DNS and tap `Details`. See *Configuring DNS* for more information.

When you have finished configuring options, tap `Save and Exit`. If you want to exit without saving your changes, tap `Exit Without Saving`.

Configuring a Static IP Address

To configure a static IP address for the Mobile Unit:

1. Follow the procedures described in Spectrum24 Configuration.
2. In the Spectrum24 Preferences screen, clear `Use DHCP` and tap `Settings`. The following screen appears.

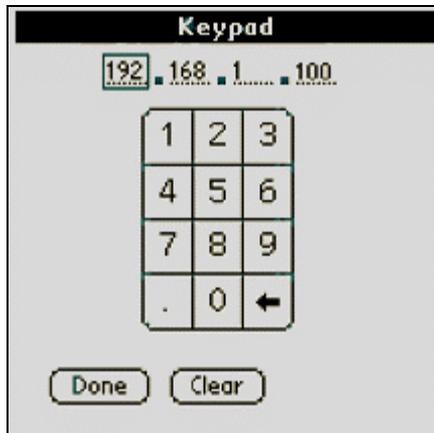


The IP Settings Screen

The following options contain four-part values (IP addresses or the subnet mask). Each part must be a decimal number in the range 0-255. The options available for configuration on this screen are:

- **IP.** Contains the current IP address for the Mobile Unit.
- **Subnet.** Contains the current subnet mask. The subnet mask is shared by all the network devices.
- **Gateway.** Contains the IP address of the node to which all packets destined for remote networks must be sent.

To change an IP address or the subnet mask, tap on the value you want to change. The Keypad screen appears.



The Keypad Screen

The selected IP address or subnet mask appears at the top of the Keypad screen. Tap on the portion of the value you want to change. A box appears around the selected portion. To clear the box, tap **Clear**. To set a new value, enter the desired number on the keypad.

Tap **Done** when you have completed configuring the four-part value.

In the IP Settings screen, tap **OK** to apply settings.

Configuring DNS

To configure Domain Name System (DNS) settings for the Mobile Unit:

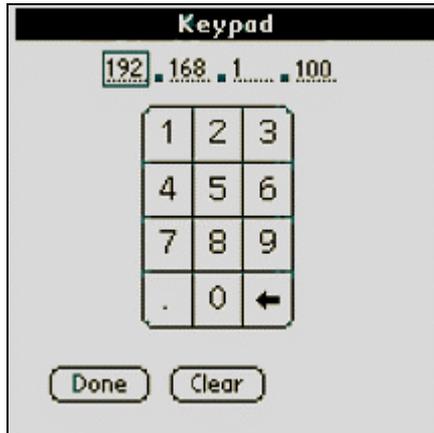
1. Follow the procedures described in Spectrum24 Configuration.
2. In the Spectrum24 Preferences screen, enable DNS and tap *Details*. The following screen appears.

The Details Screen for DNS

- **Host.** Contains the internal name for the Mobile Unit.
- **Domain Name.** Contains the domain name for the host in the following format, *organization.type*, for example, *wavelink.net*.
- **Primary DNS.** Contains the IP address for the primary domain name server.
- **Secondary DNS.** Contains the IP address for the secondary domain name server.

To change the host or the domain name, tap the right arrow button or open the keyboard. Enter the new value and tap *Done*.

To change an IP address, tap on the value you want to change. The Keypad screen appears.



The Keypad Screen

The selected IP address appears at the top of the Keypad screen. Tap the portion of the value you want to change; a box appears around the selected portion. To clear the box, tap **Clear**. To set a new value, enter the desired number on the keypad.

Tap **Done** when you have completed all changes.

In the Details screen, tap **OK** to apply settings.

Starting the Wavelink Palm Client

To start the Wavelink Palm Client on your Mobile Unit:

1. Access your main applications screen.



A Sample Applications Screen

2. Tap the **Wavelink** icon.

The Wavelink Palm Client Startup Screen appears.



The Wavelink Palm Client Startup Screen

Configuring the Wavelink Palm Client

The Wavelink Palm Client includes several configuration screens that allow you to custom configure various resources of the Mobile Unit.

To access the configuration screen, open the Wavelink Palm Client Startup Screen and tap the `Menu` icon. The following menu options appear:

- **Terminal settings.** Contains font and printer settings
- **Scan Test.** Runs a utility to echo the input value and display the input type for entered commands (keyed characters, function keys, and scans).
- **Assignment.** Allows you to set the network assignment for the Mobile Unit.
- **About.** Displays the version number for the Wavelink Palm Client.

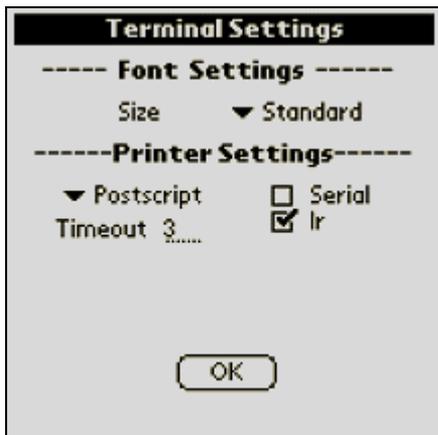
Tap on the desired option menu entry to configure options.

Terminal Settings

The *Terminal Settings* option lets you set font and printer options for the Wavelink Palm Client. To configure terminal settings:

1. From the Wavelink Palm Client Startup Screen, tap the `Menu` icon.
2. Select `Terminal Settings`.

The following screen appears.



The Terminal Settings Screen

In the **Font Settings** field, select either `Standard` or `Large` fonts.

Under **Printer Settings**, configure the following options:

- Select the printer type from the pop-up list.
- In the **Timeout** field, specify the number of seconds that the terminal will attempt to print before displaying an error message. The error message prompts the user to retry or cancel printing.
- Select the printer port by enabling either the `Serial` or `IR` check box.

Tap `OK` to apply settings.

Scan Test

The Scan Test screen displays the input value and input type for entered commands. To open the Scan Test screen:

1. From the Wavelink Palm Client Startup Screen, tap the `Menu` icon.
2. Select `Scan Test`.

The following screen appears.



The Scan Test Screen

On this screen, you can enter input from either the Mobile Unit's keypad or scanner. The screen echoes the input value and also displays the origin of the input. For example, if you input a standard character, the scan test screen will return the entered character and the message "From Key". If you enter a function command, the scan test screen will return the function command and the message "From Command". Finally, if you enter scanned input, the scan test will return the value of the barcode scanned, exact barcode type, and the message "From Label".

Assignment

The *Assignment* screen allows you to define the network assignment for the Mobile Unit. To open the Assignment screen:

1. From the Wavelink Palm Client Startup Screen, tap the Menu icon.
2. Select *Assignment*.

The following screen appears.



Host Assignment

Host IP/Token:
10.0.1.37

Port:
1000

OK

The Assignment Screen

Two values, a host IP address and a host port, comprise the network assignment.

- In the **Host IP** field enter the complete IP address of the application host.
- In the **Port** field enter the TCP/IP port used by the Mobile Unit when it connects to the selected host.

If you are using the Wavelink Studio version 3.5 or greater, you may alternatively enter an AutoDiscovery Token “mask” in the **Host IP** field in place of a specific network assignment (leave the **Port** field empty).

With Auto-Discovery™ technology, each Wavelink Studio Server Port Monitor may be assigned a specific Discovery Token name and priority level. Any Mobile Unit that has been assigned an Auto-Discovery™ Token mask rather than a specific host assignment will broadcast its “mask” to the network. Any Port Monitors with Discovery Token’s that match the client’s Token mask will automatically respond to the device.

Note: See your Wavelink Studio documentation for more information about configuring Port Monitors.

If the returned Discovery Token matches the client Token mask exactly and has Primary priority, the Spectrum24 device will automatically connect with the associated Port Monitor on a “first come, first served” basis.

If the returned Discovery Token matches the client Token mask exactly but has Secondary Priority, it will wait ten seconds for a response from a Primary Token before connecting with the Port Monitor associated with the Secondary Token.

If the returned Discovery Token contains a wild card character (“*”), the Spectrum24 device will receive a list of all returned Discovery Tokens. The user may then select from the list of returned Discovery Tokens which specific Port Monitor to connect with.

By default, the Wavelink Palm Client is configured with a wildcard (“*”) Discovery Token mask which will therefore return a list of all available Discovery Tokens from the network. A Discovery token is limited to eighteen alphanumeric characters.

About

The *About* screen displays the version number for the Wavelink Palm Client. To open the About screen:

1. From the Wavelink Palm Client Startup Screen, tap the Menu icon.
2. Select *About*.

The following screen appears.



The About Screen

Tap OK to close the About screen.

Connecting to a Wavelink Network

To connect your Mobile Unit to the application host, simply press `Connect to Host` from the Wavelink Palm Client Startup screen.



The Wavelink Startup Screen

If you are unable to connect, verify that you have entered the correct IP address and port for the network assignment. See *Assignment* for more information.

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