

# PT930 and PT930MSR

## Product Reference Guide





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# NOTICE

This unit is equipped with a Lithium-Ion battery pack and Lithium backup battery. It is possible that the Unitech PT930 may not power-on due to battery discharge as a result of storage.

In the above situation, plug the PT930 to the RS232-Charging cable or put the unit into the Unitech PT093 Cradle (with 9V/2A AC-DC adapter), and recharge the unit for 14 hours in order to fully charge its Lithium backup battery. (It is not necessary to power on the PT930 in order to charge the backup battery.)

The backup battery will charge from external power or the main battery (if the main battery still has enough power to turn on). In the event the main battery is fully charged, refrain from using the PT930 for 14 hours in order for the main battery to fully charge the backup battery.

Backing-up data by Lithium battery only without the main battery installed in battery compartment may take as long as 2 hours. Therefore, in order to prevent data protection failure due to backup battery failure, do not leave the PT930 without the rechargeable battery pack installed, or without connection to AC power for an extended period of time.



## Chapter 1. Introduction

The Unitech PT930 series is a rugged, compact and lightweight palm-size computer. It utilizes the Windows CE® operating system, and incorporates an integral bar code scanning laser device, an MSR reader, an IrDA interface and wireless communication capability. It provides the user with a standard Windows-based environment for customizing and operating the device. The PT930 is well suited for warehouse management, transportation, distribution, retail logistics, asset tracking, and many other data collection applications.



**PT930**



**PT930MSR**

## Unitech PT930 & Accessories

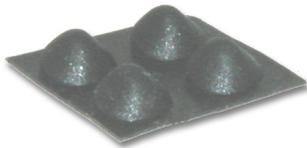
After opening the box, please make sure the following accessories for the PT930 are present:



**PT930 Main Body  
with Stylus**



**PT930 CD**



**Rubber Feet**



**Unitech PT930  
Quick Reference  
Guide**



**Pulling-tags**



**RF Card Cushion**

## Tour of the Unitech PT930

### PT930 Front and Left Side

#### **ON/OFF key**

Press this button to turn the PT930 on or off

#### **Left laser trigger**

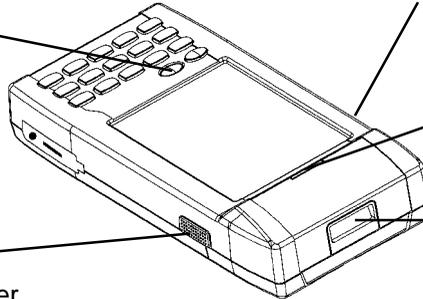
Press this button to enable laser engine to scan barcode label.

#### **Good read LED**

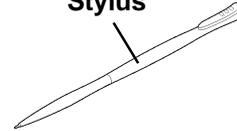
#### **Laser engine**

#### **Right laser trigger**

Press this button to enable laser engine to scan barcode label.



#### **Stylus**



### PT930 Back

#### **Stylus slot**

Holds the PT930 stylus

#### **PCMCIA compartment**

Install PC card here.

#### **Speaker**

#### **Battery compartment**

Install Lithium-ion battery pack here.

#### **Reset Hole**

Push enclosed button for system warm-start

#### **RS232/Charging port**

#### **Expansion Memory compartment**

Product Reference Guide

#### **IrDA port**

## **First Steps with the Unitech PT930**

There are three ways to provide power to the PT930:

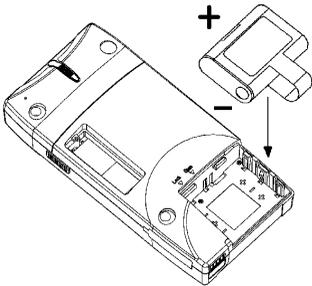
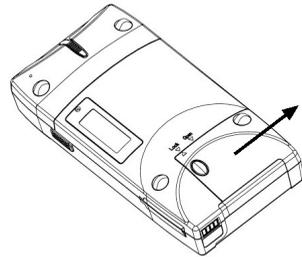
- Rechargeable Lithium-Ion battery pack
- RS232/Charging cable
- Docking Station

**NOTE:** *Data you enter may not be properly stored until the built-in backup battery has been adequately charged.*

### **Installing the Battery Pack**

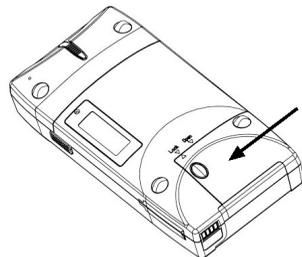
**CAUTION** - Improper installation of the rechargeable battery pack can cause the metal clips in the battery compartment to bend or break. Carefully read and follow the procedure below for installing the battery pack.

1. Remove the battery compartment door (located on the lower back side of the unit) by pressing the button in the door and sliding the door to the side.



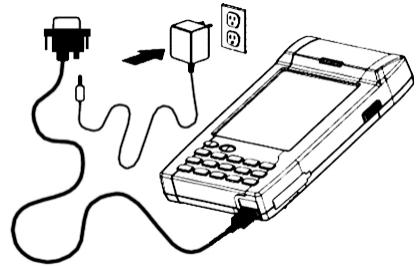
2. Position the battery pack with the label side towards you, and the battery pack strap towards the bottom of the unit. Insert and fully seat the battery pack, making sure the shape of the battery pack fits the shape of the battery compartment.

3. Position the battery pack strap over the battery pack and install the battery compartment door by sliding it over the battery pack from the side of the unit. The door should be pushed firmly into place until a click is heard indicating that the door latch has seated itself correctly. The battery compartment door should be flush with the rest of the unit.

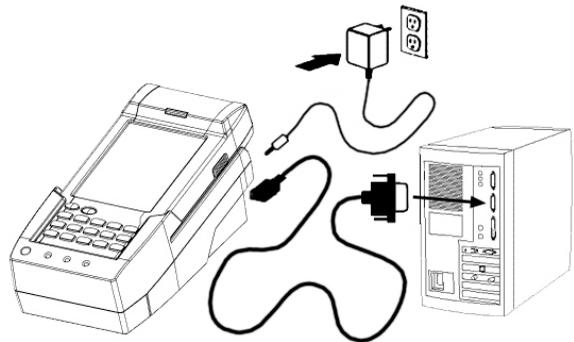


## Supplying Power to the PT930

Connect the RS232/Charging Cable to the PT930, and then connect the AC adapter to the cable's power jack and an electrical outlet.



Or place the PT930 into the Docking Station (first connect the power supply to the Docking Station).



## Charging the Main and Backup Batteries for the First Time

It may take up to 14 hours to fully charge the empty Lithium backup battery. The first time charge should be for at least 14 hours to insure a proper charge.

**CAUTION:** Operating the PT930 for the first time without the AC adapter, and without fully charging the Lithium backup battery may result in loss of data stored in RAM memory.

## Using the Stylus

**CAUTION:** Never use anything other than the PT930's stylus on the screen. Using another object as a stylus could cause permanent damage.

1. Hold the stylus as you would a pencil.
2. To make a choice from a menu, lightly tap the tip of the stylus on that choice.
3. To write data into a field on a form, use the stylus to print the letters or numbers. Use very light pressure.

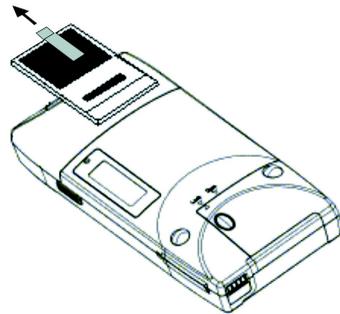


## PCMCIA Pulling Tags

Pulling Tags simplify the removal of PCMCIA cards from the PT930. Before inserting a PCMCIA card, remove one of the three Pulling Tags from the Pulling Tag sheet and adhere it to both sides of the PCMCIA card, leaving a short (approx. ½”) tab. To remove the PCMCIA card, simply pull outward on this tab.



If a PCMCIA card is inserted into the PT930 without previously attaching a Pulling Tag, the card can be removed by affixing a length of adhesive tape to the surface of the card and pulling the card out by pulling outward on the piece of tape.



## Protective Screen Film

The PT930 screen ships with a protective plastic film. You may remove this if desired by peeling from one corner. The screen will be more susceptible to scratching without the film, but will be more readable.

## First Operation of the Unitech PT930

### Pressing the ON/OFF Key

The Unitech PT930 welcome screen appears. The Windows CE® screen will appear shortly thereafter.



### Adjusting Screen Contrast

Press **[FUNC]+[TAB]** key or **[FUNC]+[●]** key to decrease or increase screen contrast.

### Calibrating the PT930

This screen will automatically appear when the unit is powered-on for the first time or after the system is reset. This screen can also be accessed at any time by pressing the hot key **[FUNC]** and the **[ESC]** key.

The PT930 will prompt you to calibrate the unit by tapping a sequence of screen locations. Tap gently but firmly. When you have completed the series of taps, press the **[ENT]** key to confirm it or press the **[ESC]** key to cancel it.

Carefully press and briefly hold stylus on the center of the target. Repeat as the target moves around the screen. Press the Esc key to cancel.



### Setting Time Zone, Date, and Time

After Calibrating the PT930, the “Date/Time Properties” dialog box will appear. Follow the steps below to set the date and time.



## Setting the Time Zone first

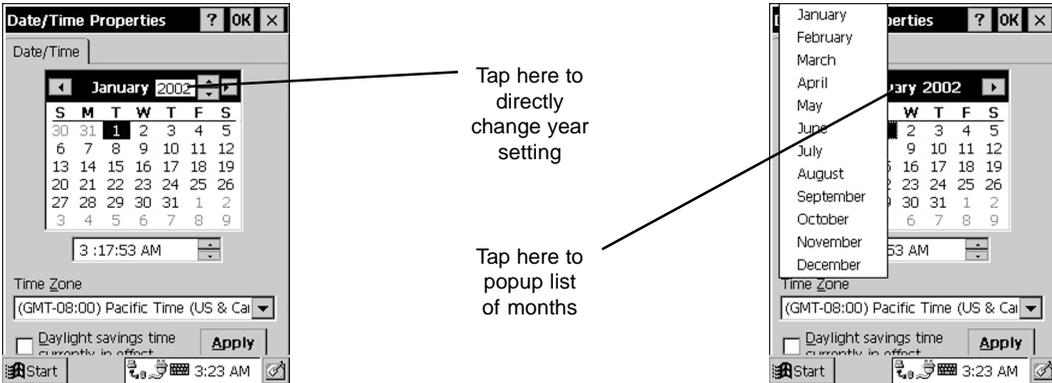
Follow the steps below to set up your time zone.

1. Tap the location arrow to see a list of cities.
2. Choose your location (or nearest listed one).
3. Select the Daylight Savings Time check box, if necessary.
4. Tap the APPLY button.



## Setting Year and Month

Tap the Left or Right arrows to scroll the month.



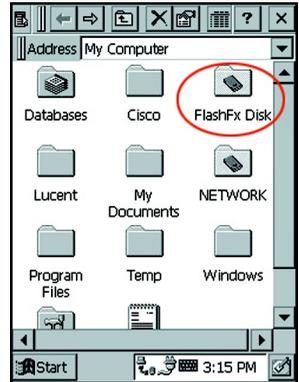
Or directly tap location of year or month to change the year or month setting.

## Exiting Date/Time Properties Settings

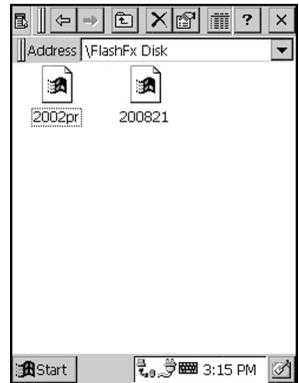
Tap **OK** or **X** (cancel) button at upper-right corner to exit.

## Flash Memory

Flash Memory is a re-writable location in which to store up to 8 MB of programs and data files. The benefit of this feature is that files and programs saved in Flash Memory are unaffected by the PT930's power status.



To access the contents of Flash Memory, simply select "My Computer" on the desktop and then select "FlashFX Disk". The programs and data files currently stored in Flash Memory will be displayed.



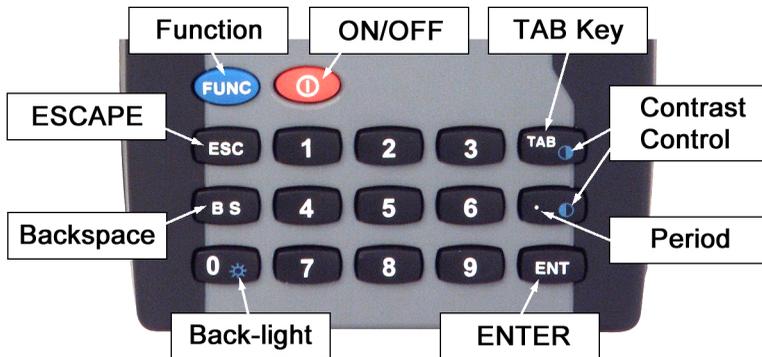
To save to Flash Memory, select File, Save To, and select FlashFX Disk just like you would select any other storage medium.



## Chapter 2. Using the Keypad and Scanner

### ***Keypad***

The PT930 keypad contains 17 keys, including 0~9, ON/OFF, Function, Escape, Backspace, and Enter key. Please refer to the picture below.



**ON/OFF** When the unit is off, pressing the On/OFF key will turn the unit on. Alternatively, when the unit is on, this key must be pressed and held down for about two seconds in order to turn the unit off.

**[ESC]** The Escape key will perform the same function as tapping the CANCEL button or the **X** button on the touch screen.

**[BS]** The Backspace key is used to erase previously input characters.

**[FUNC]** The Function key is used to perform alternative key functions.

**[TAB]** The Tab key is used to toggle between data fields or to place the cursor at pre-determined places in a programming or word processing application.

**[ENT]** The Enter key is used to initiate a process or confirm a selection made by the user.

## **Software Keyboard (Windows CE Keyboard)**

Since the PT930's keypad allows input of numeric characters only, the Windows CE Software provides a touch screen keyboard for input of other characters. The Windows based keyboard replicates the layout of a standard PC keyboard.

### **Opening the Windows CE Keyboard:**

The Windows CE keyboard can be opened by tapping the “keyboard” icon on the task bar. (Refer to picture).



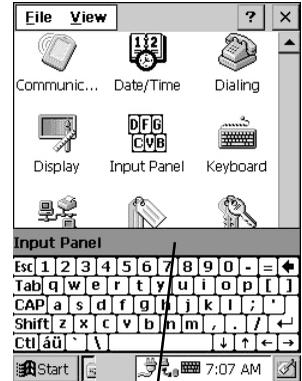
Double-tap here

### **Keying-in Characters:**

After tapping the “keyboard” icon, the Windows CE keyboard pops up. Character input is the same as on a standard PC. Simply tap the on-screen button corresponding to the character you want to input.

### **International Character Support:**

Tap the [áü] button to switch from the standard English keyboard to the European keyboard.



### **Moving the Keyboard:**

Use the stylus to point to the title bar (the bar displaying “Input panel”) and then move the stylus without lifting it from the screen.

### **Closing the Keyboard:**

Tap the keyboard icon to close the Windows CE keyboard.

Title Bar

## **Useful hotkeys**

The PT930 provides four combination hot keys to activate specified screen setting functions or programs. These hotkeys are useful for calibrating the touch screen, toggling the backlight, and adjusting screen contrast when the menu-driven operation is disabled. Below is the list of hotkeys. To use them, press and hold the [FUNC] key in combination with the corresponding second key.

<b>[FUNC] + [ESC]</b>	Calibrate the PT930's touch screen (Please refer to page 7).
<b>[FUNC] + [TAB]</b>	Decrease screen contrast.
<b>[FUNC] + [●]</b>	Increase screen contrast.
<b>[FUNC] + [0]</b>	Toggle screen backlight.
<b>[FUNC] + [6]</b>	Task manager
<b>[FUNC] + [9]</b>	System information

## **Using the Laser Scanner or MSR**

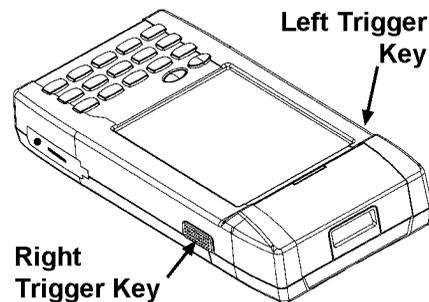
**Note:** Reading software must be enabled in order to operate the scanner. This can be a user-loaded application or a pre-loaded utility such as Bar2Key.exe (see page 37).

### **Laser Scanner**

The PT930 has an integrated laser scanner, which reads all major bar code labels with excellent performance.

Trigger keys are located on the left and right sides of the unit. Press either one to activate the laser scanner.

The PT930 also has a built-in TTY.EXE program that allows the user to test the barcode scan function. TTY.EXE is located in directory \WINDOWS and is also accessible by shortcut via "Program" on the Start menu.



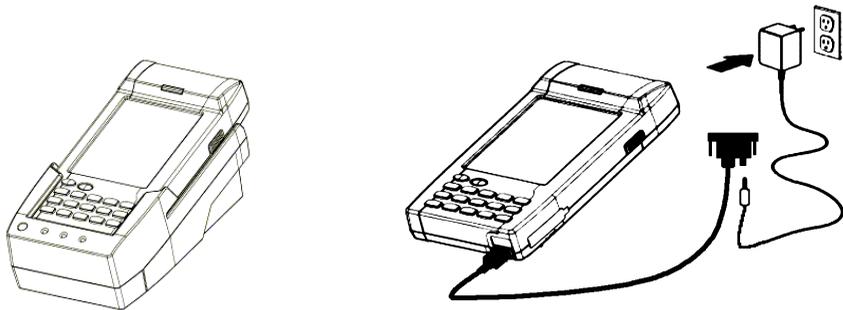
### **Magnetic Stripe Reader (MSR)**

The PT930MSR has an integrated Magnetic Stripe Reader which is activated by simply sliding a card with a magnetic stripe through its slot. The TTY.EXE sample program can also be used to demonstrate the MSR.

## Chapter 3. Power system

### Charging the Lithium-Ion Battery Pack

The optional PT093 Docking Station is a convenient accessory for daily use of the PT930. The docking station has a built-in circuit that can fully charge the Lithium-Ion battery pack in about 2½ hours. Or, when using the included Charging/RS232 Cable the charging time of the battery pack is about 3 hours.



### Charging the Main and Backup Battery for the First Time

**Note:** Before using the PT930 for the first time, charge the unit for 14 hours to fully charge the empty Lithium backup battery. Operating the PT930 for the first time without the AC adapter, and without fully charging the Lithium Backup Battery may result in loss of data stored in RAM memory.

**Note:** Backing-up data by Lithium battery only without the main battery installed in the battery compartment may take as long as 2 hours. Therefore, in order to prevent data protection failure due to backup battery failure, do not leave the PT930 without the rechargeable battery pack installed, or without connection to AC power for an extended period of time.

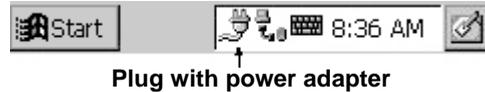
**It may take up to 48 hours to backup data when the PT930 is automatically shut down because of low battery power while the depleted batteries are still installed in the battery compartment.**

## Power Status Indication

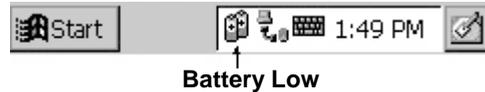
Four different icons are displayed on the status bar to indicate the on-board power status.

**“Plug” icon:** When displayed, this icon indicates that the battery is charging.

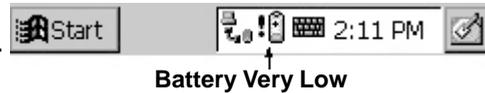
The PT930 is either plugged-in via the DC 9V/2A power adapter or in the docking station.



**“Battery Low” icon:** When displayed indicates the battery is low and needs to be charged. In other words, there is no external power supply, the battery charge is low or very low, and charging the PT930 is recommended.



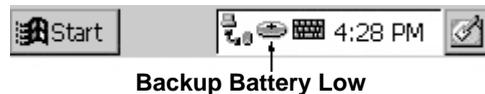
**“Battery Very Low” icon:** When displayed indicates the battery is very low. Stopping the operation and charging the PT930 immediately is highly recommended.



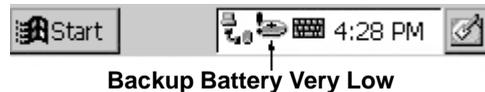
**No icon:** When displayed means there is no external power supply to the PT930 but its battery power status is good.



**“Backup Battery Low” icon:** When displayed indicates the backup battery is low and needs to be charged.



**“Backup Battery Very Low” icon:** When displayed indicates the backup battery is very low. Stopping the operation and charging the PT930 immediately is highly recommended.

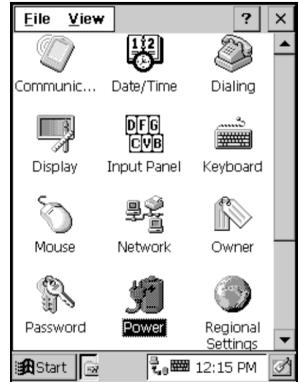


## Checking Main and Backup Battery Status

### Enter “Power Properties”:

If the above mentioned “Plug” icon or “Battery” icon is displayed, double tap this icon to bring up the “Power Properties” screen.

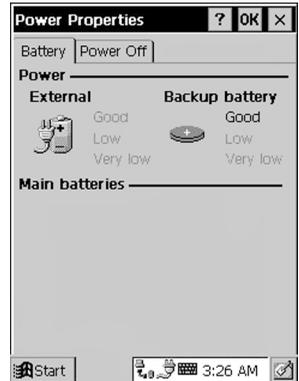
Or, select **Settings/Control Panel** from the **Start** menu and then double tap the “**Power**” icon to display “Power Properties”.



### Check Battery Status:

The battery menu item will show the status of the main and backup batteries. There are 3 kinds of status indicators — “Good”, “Low” and “Very Low”. Bold characters indicate the actual status, e.g. battery icons in the illustration at right mean both the main and backup batteries are “GOOD”.

It is necessary to charge the battery when “Low” or “Very Low” are displayed in bold characters. If “Low” or “Very Low” are still displayed after charging, please contact Unitech Technical Support.



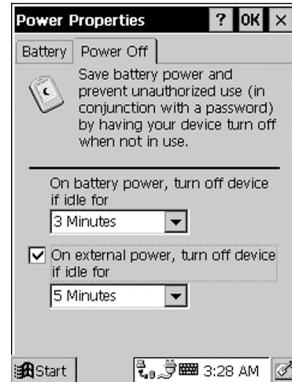
## How to Save Battery Power

### Automatic shut-down of the PT930

The PT930 will enter idle mode when there is no task, or all tasks are waiting for input. In default setting, the PT930 will automatically turn itself off if it remains idle for 3 minutes and when there is no external charging power applied. Pressing the power button will return the PT930 to the same point at the time of automatic shutdown.

In Power Properties, select “Power Off”. Customize automatic shut off time by tapping the arrow to select from a list of time periods. The available time periods are 1, 2, 3, 4, and 5 minutes.

This function can also be activated when the PT930 is plugged into the power adapter or placed in its cradle by tapping the check box and then tapping the arrow to select from a list of time periods. The available time periods are 1, 2, 5,10, 15 and 30 minutes.



### Backlight Setting

Because the power consumption of the LCD backlight is high, turn off the backlight function if it is not necessary. If a backlight is required, set “automatically turn off the back-light” function.

To change backlight settings, select Settings / Control Panel from the Start menu, and then double tap the “Display” icon.



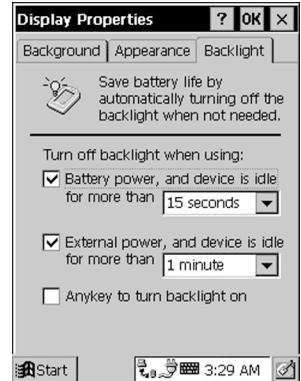
Tap the “Backlight” menu item to display the following 3 selections:

### **Automatically turn off the backlight when using battery power:**

Tap the check box to toggle this function. Available idle times are: 15 and 30 seconds, and 1, 2, and 5 minutes.

### **Automatically turn off the backlight when using external power:**

Tap the check box to toggle this function. Available idle times are: 15 and 30 seconds, and 1, 2, 5, 10, 15, and 30 minutes.



### **Automatically turn on the backlight when key pressing:**

This function is only activated by the PT930’s keypad rather than the Windows CE keyboard.

## **Warm Boot / Cold Boot**

### **Warm Boot**

- To perform a warm boot while the PT930 is operating, insert a pin (paper clip works well) into the reset hole on the back of the terminal, right on top of the Extension Memory compartment (see page 3), or
- Under the Windows folder of your terminal, locate the file BootMode.exe, execute the program, and confirm the warning message.

**WARNING: Warm Boot will cause unsaved data to be lost.**

### **Cold Boot**

While the terminal is ON, press and hold the “BS” key, and either press the reset button or run Bootmode.exe just like performing a “Warm Boot”. After the LCD display has turned OFF and back ON, release the “BS” key.

**NOTE: Cold Boot will cause the PT930 to return to its original factory settings.**

### **Charging Considerations**

It is important to consider the environment temperature whenever you are charging the Lithium-Ion battery pack. The process is most efficient at normal room temperature or slightly cooler. It is essential that you charge batteries within the stated range of 32°F to 113°F (0°C to 45°C). Charging batteries outside of the specified range could damage the batteries and shorten their charging life cycle.

### **Storage and Safety Precautions**

Although charged Lithium-Ion batteries may be left unused for several months, their capacity may be depleted due to build up of internal resistance. If this happens they will require recharging prior to use. Lithium-Ion batteries may be stored at temperatures between -4°F and 158°F (-20°C to 70°C), however they may be depleted more rapidly at the high end of this range. It is recommended to store batteries within normal room temperature ranges.

## Chapter 4. Communication

### **Introduction**

The Unitech PT930 allows users to link to a host computer via RS-232, IrDA, Modem, or RF connection for data communication.

This chapter provides an overview of the communication of the PT930. The following subchapters cover these topics:

- "Microsoft ActiveSync" for details about serial communication via RS232 port.
- "RF Communication" for details about wireless communication between mobile PT930s and host computers.

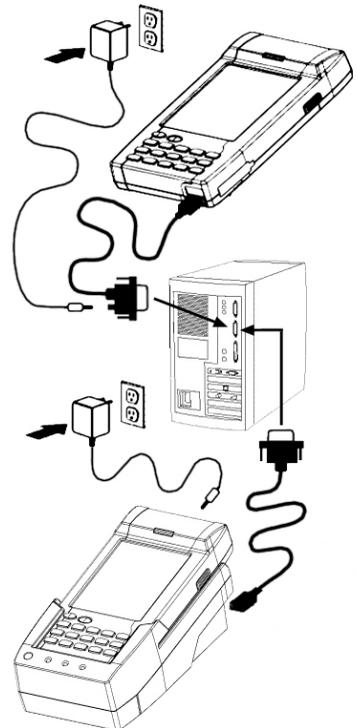
### **Connecting**

#### **Serial Cable**

Plug the RS232 end of the communication cable to the PC's 9 pin Com Port and the other into the PT930 RS232/Charging Port (see page 3). Plug the Power Supply into the Power Receptacle on the RS232 plug.

#### **Docking Station**

Plug the RS232 end of the communication cable to the PC's 9 pin Com Port and the other end into the Cradle's RS232 Port. Plug the Power Supply into the Power Receptacle on the Docking Station.



## **ActiveSync**

In order to exchange data between your desktop computer and the PT930, Microsoft ActiveSync must be installed on your desktop computer.

With Microsoft ActiveSync you can:

- Transfer data.
- Back up and restore PT930 data.
- Add programs to and remove programs from the PT930.

This chapter will introduce Microsoft ActiveSync version 3.5. ActiveSync provides a user-friendly interface and it can be downloaded free of charge from Microsoft's Web site.

### **Installing Microsoft ActiveSync**

Before beginning installation, carefully read the following:

- Because you will be restarting your computer during installation, save your work and quit all programs before you begin.
- To set up your communication settings, a PT930 serial cable is required to connect the PT930 to your host computer.
- If you run the Windows NT<sup>®</sup> operating system with a service pack, you will be informed during setup that you may need to reinstall the service pack. Try connecting first, and if unsuccessful, reinstall the latest service pack.

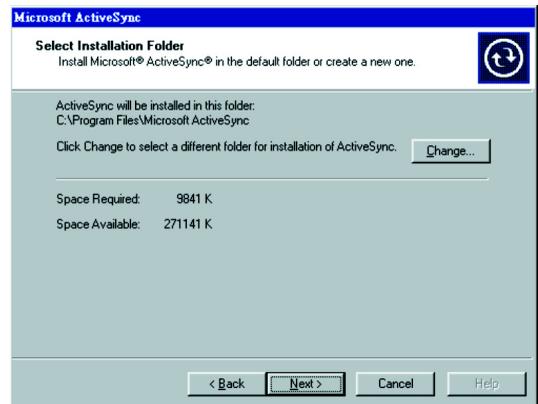
### **Installation**

Follow the installation procedure below to install Microsoft ActiveSync, connect your PT930 to your desktop computer, and establish a partnership for synchronization (if desired):

- Download the executable program “msasync.exe” from the Microsoft web site at:  
<http://www.microsoft.com/mobile/pocketpc/downloads/activesync35.asp>.  
 Execute this program.



- Select the folder into which Microsoft ActiveSync will be installed. If you choose not to download into the displayed default folder, click the **Change** button.



- After you’ve selected the folder, click **Next** to set up Microsoft ActiveSync. After you’ve installed Microsoft ActiveSync and restarted your computer, you’ll see the following screen:



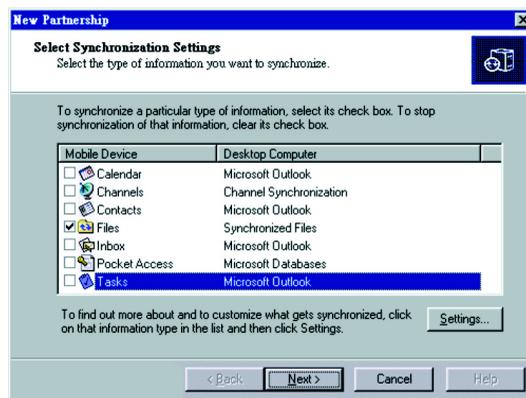
- Using the RS232 cable, plug the PT930 into a communication port on your desktop computer.
- Turn the PT930 on. Click the **Next** button.

Microsoft ActiveSync should recognize your PT930 and configure your communication port. If a message appears indicating that it is unable to detect a connection, click the **Cancel** button and manually configure the communication settings. For more information, see “Change Communications Settings” later in this chapter.

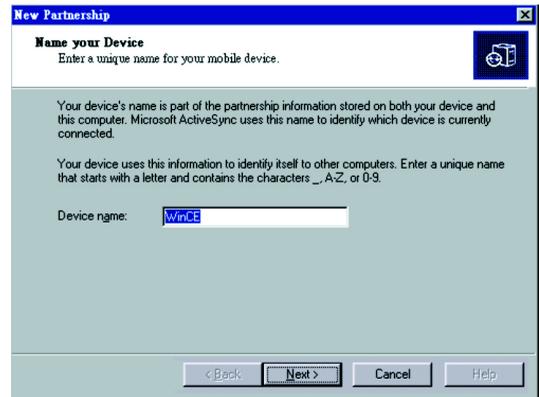
- When the PT930 is initially connected to a PC, the following screen appears prompting you to set up a “Partnership”. Setting up a Partnership is required if your PT930 is to be synchronized with other computers and/or terminals. Otherwise select No.



- Now select synchronization settings. Currently the PT930 can support “**Synchronized Files**”



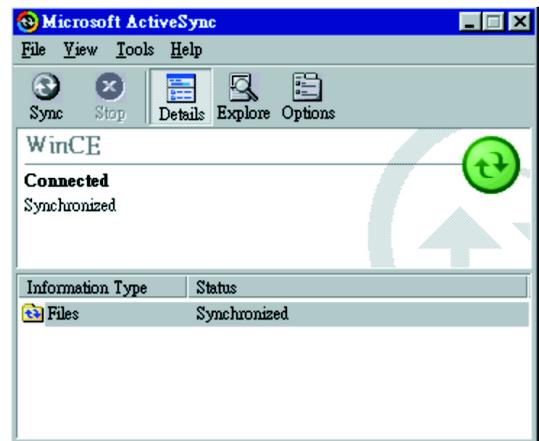
- Different PT930s cannot share the same Device Name if more than one terminal is to be connected to the same PC via a “Partnership”. The default Device Name assigned to the PT930 is “WinCE”. It is important to specify a different name for each terminal if more than one terminal is to be connected to the same PC. When ActiveSync displays the following screen, assign each terminal its own unique name.



Click the **Next** button and follow the instructions to set up a partnership between the PT930 and your desktop computer.

This partnership allows you to synchronize information between the two computers.

- When the configuration process is complete, you’ll see the following screen:

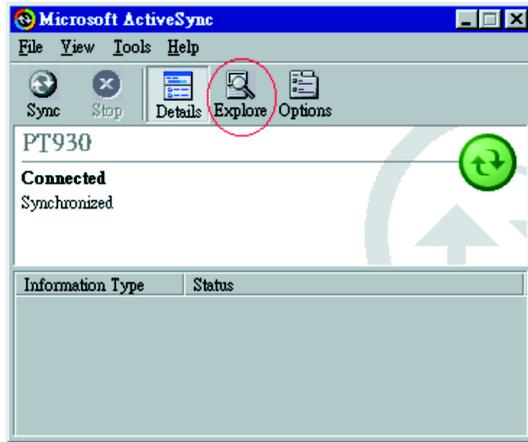


Synchronization will be initialized and will take place if you’ve chosen to synchronize periodically or upon connection.

**Note:** Your desktop computer can create a partnership with multiple PT930s. Also, a PT930 can create a partnership with up to two desktop computers.  
Product Reference Guide

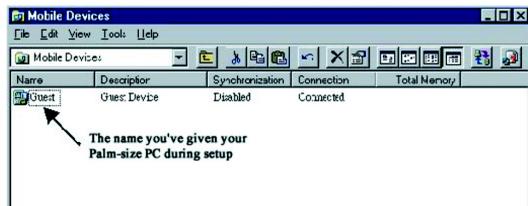
## Using the Mobile Devices Window

Start Microsoft ActiveSync by clicking the **Microsoft ActiveSync** shortcut on your desktop and then clicking the “Explore” icon.



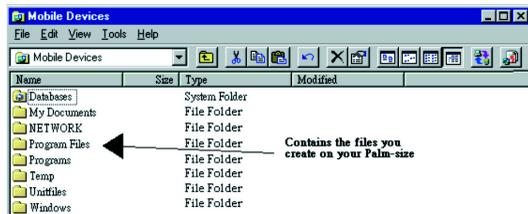
In the displayed window, you can:

- Select your PT930 to use Microsoft ActiveSync features such as changing synchronization options, as described in the “Synchronization” section starting on page 26.



- Open the Explorer window by double-clicking your device icon in the Mobile Devices window.

Use this window, which is the root window to the PT930, to copy and move files between the PT930 and your desktop computer, as described in the “Synchronization” section starting on page 26.



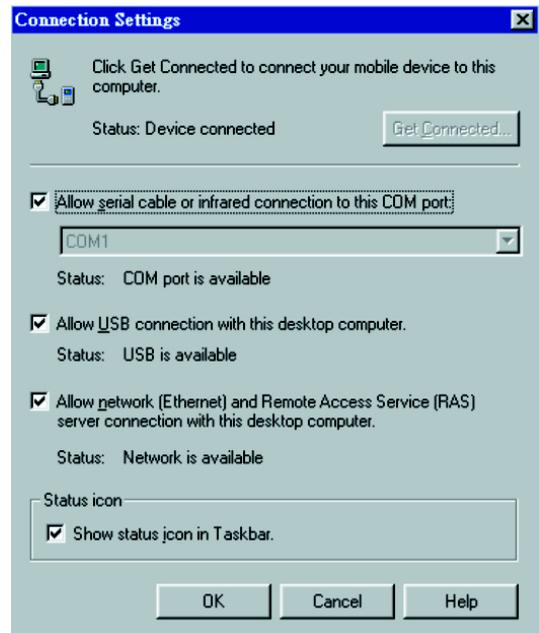
## Changing Communications Settings

If Microsoft ActiveSync fails to detect the PT930 during installation, set up communications manually instead. Make sure the following conditions are met:

- Verify that the correct communications port is selected for your desktop computer, and that it is free.
- Microsoft ActiveSync uses the specified communication ports to connect to the PT930. Make sure these resources are available for Microsoft ActiveSync to connect to the PT930. Other programs cannot use them while the PT930 and your desktop computer are connected.
- Set your baud rate on the PT930 and desktop computer will match it.

To check communications settings, open the Mobile Devices folder, and click **File => Connection Settings**.

The baud rate on the PT930 is set to 57600bps by default. To adjust the baud rate, tap **Start, Settings, Control Panel**, select the **Communication icon**, select the **PC Connection Tab**, and then tap the “**Change Connection....**” Button. For more information, see Microsoft ActiveSync Help.



If you want to change the terminal's default baud rate or use IrDA to communicate with the Host PC, follow the steps below to adjust it:

1. Tap **Start, Settings, Control Panel, Communications**
2. Tap the **PC Connection** tab.
3. Tap the **Change Connection** button
4. Select the baud rate from the list box.



## Synchronization

You can *synchronize* information between the PT930 and your desktop computer to insure both computers have current information. First you'll need to install Microsoft ActiveSync on your desktop computer (see page 20).

Synchronization takes place according to the options you chose during Microsoft ActiveSync setup, as described on page 20. If you accept the default (**On Connect**) synchronization option in the Microsoft ActiveSync Setup Wizard, you'll be able to simply connect your PT930 to your desktop computer, and synchronization will take place.

If you have not enabled **On Connect**, start Microsoft ActiveSync in either of the following ways:

- On your desktop computer, double-click the My Computer icon and then double-click the Mobile Devices folder.
- Plug the RS232 cable between the PC and the PT930.
- Execute "Repllog.exe" from the PT930's Windows directory (if ActiveSync is setup to sync using the IrDA port on both PC and PT930).



To turn on IrDA:

1. Click on the "Control Panel" icon on your PT930
2. Double-click the "Communication" icon
3. Click the "PC Connection" tab
4. Tap the "Change Connection" button
5. Select IrDA.

Synchronization will take place according to options you've chosen. To initiate synchronization manually, click **Tools**, and then **Synchronize Now**.

Synchronization may take a few minutes, as each item to be synchronized needs to be processed. You'll see a message indicating that synchronization is taking place.



After you've synchronized, you'll see the status message in the status bar of the Mobile Devices windows. At any time, you can check the status. Click the Tools menu, and click ActiveSync Status to display the ActiveSync Status window.

## What Gets Synchronized

The following sections provide an overview of how various types of information are synchronized. For details on synchronizing specific items, see Microsoft ActiveSync Help.

### Files

All files you create on the PT930 are stored in a **My Document/PT930 My Documents** folder (if the assigned Device Name is **PT930**). View those files by double-clicking the short-cut **PT930 My Documents** icon on your desktop computer.

If you have enabled file synchronization, your PT930 files are automatically synchronized on your desktop computer file folder WinCE\_PC My Documents - unless a different name was chosen for the PT930. This folder can be found in one of following locations:

- Windows 95/98: My Documents\WinCE\_PC My Documents.
- Windows NT: WINNT\Profiles\*your user-name*\Personal\WinCE\_PC My Documents.

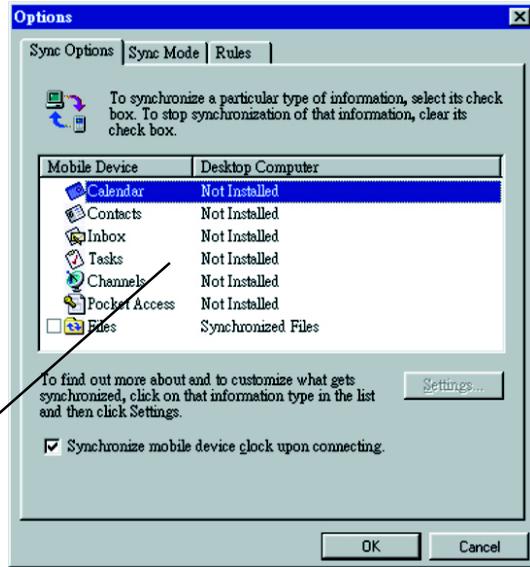
During synchronization, files are copied back and forth between the PT930 and the desktop computer.

## Changing Synchronization Options

Synchronization options can be modified, including when you synchronize and what gets synchronized. In the Mobile Device window, click **Tools**, and then **Sync Options**.

For each type of information, the synchronization process can be hastened by limiting the amount of data to be synchronized. To do this, select a service and click the **Settings** button.

Inbox, Tasks, and Channels not supported



- Note:**
- The PT930 only supports File synchronization. Inbox, channels, and Tasks are not supported.
  - After enabling a service, you must close and reopen the ActiveSync Options dialog box before the Option button is available for that service.

## Installing and Removing Software

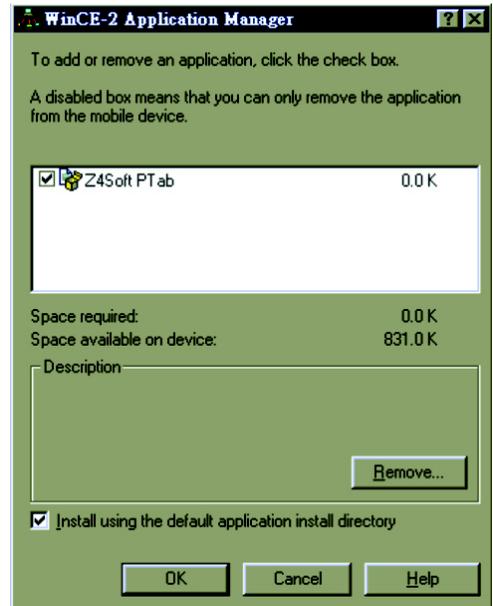
Any program created for your PT930 can be installed as long as there is sufficient memory or storage space.

First install the software on your desktop computer and then connect the PT930 to your desktop computer. Some software programs provide their own setup instructions. Most software programs use Application Manager to install and remove software on the PT930. In the Mobile Device window, click **Tools**, and then click **Application Manager**.

Application Manager detects the software that is available but not yet installed on the PT930.

System software and programs added to the PT930 at the factory are stored in FlashROM. You cannot remove or modify this software, and you'll never accidentally lose FlashROM contents.

Software programs and data files added to your PT930 after factory installation can be stored in RAM or Flash Memory.



## InBox

Following is an overview of InBox. Step-by-Step information on how to use this program can be found in the Help function on the PT930. To view Help, tap **Start**, and then **Help**.

## Sending and Receiving E-Mail with InBox

Use InBox to send and receive e-mail messages using any of these methods:

- Send and receive messages using a dial-up connection to a service provider or your corporate network.
- Send and receive messages using a wireless network card to a local area network (LAN).

**Note:** You can send and receive messages with InBox, but this function cannot be synchronized with Outlook.

## Sending Mail Remotely

In addition to exchanging mail messages with your desktop computer, you can send and receive mail from a remote mail server by setting up an e-mail account with a service provider.

**Note:** If you're setting up an Internet mail account with an ISP (Internet Service Provider), the ISP must use a POP3 mail server and an SMTP mail gateway.

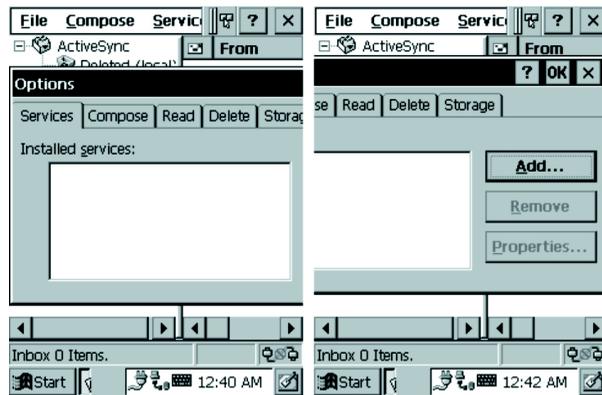
For dial-up connections, you'll require an internal PCMCIA type modem card available from Unitech, or external modem for the PT930. You'll also need to set up the remote connection on the PT930 using the Connections program.

For wireless connections, you'll require an RF card for the PT930. You'll also need to set up the remote connection on the PT930 via the **Network** setting.

## Setting Up Remote Mail

You can use multiple mail services to obtain mail. For each mail service you will access, first set up and name each mail service. If you will use the same service to connect to different mailboxes, set up and name each mailbox connection.

In the InBox on the PT930, tap **Compose**, **Options**, the **Services** tab, and then the **Add** button. A setup wizard will walk you through the steps.



The software for creating an Internet Mail connection to an ISP is pre-installed on the PT930.

## Work Remotely

Mail received via dial-up connection appears in the InBox folder on the PT930, together with the mail you synchronize with your desktop computer. Messages received remotely are linked to your mail server rather than to your desktop computer.

You can work online, which means that you read and respond to messages while connected to the server. Messages are sent as soon as you tap **Send**, which saves space on your device.

You can also work offline. Once you've downloaded new message headers or partial messages, you can disconnect from the server and then decide which message to download completely. The next time you connect, InBox automatically downloads the complete messages you've marked for retrieval and sends the messages you've composed.

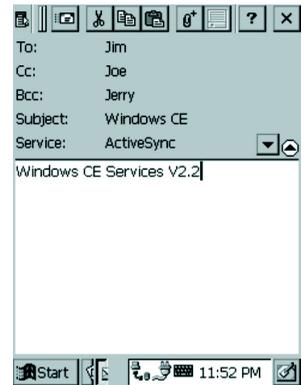
## Receiving Messages

Messages received by synchronizing with your desktop computer and through remote connections appear together in your InBox. Double-tap a message to read it.

When you connect to your Internet mail service, the InBox downloads only the first 100 lines of each new message to the InBox folder by default. No mail attachments are downloaded. When you synchronize with your desktop computer, only the first 50 lines of each new message remains on the mail server or your desktop computer.

You can mark the messages that you want to retrieve in their entirety the next time you synchronize or connect to your mail service. Select the message, tap **Service**, and then tap **Retrieve Full Copy**. The icons in the InBox messages list give you a visual indication of the message status.

Specify your downloading preferences when setting up the service or selecting your synchronization options. You can change them at any time.



- To change InBox delivery options for mail synchronization: in the Mobile Devices window on your desktop computer select your WinCE icon, click **Tools**, and then click **ActiveSync Options**. Select **Message** and then click **Options**. (For the **Options** button to be available, you must have previously enabled message synchronization.)
- To change InBox delivery options for remote mail: in InBox on your PT930, tap **Service** and then tap the service name. Then tap **Service** again and tap **Properties**.

You'll need to download a full message before you can view its attachments.

## Sending Messages

To compose a new message, tap the **New Message** button on the command bar. Enter an e-mail address in the **To** field or select a name from the Address Book. All e-mail addresses entered in the e-mail fields in Contacts appear in the Address Book.

To send your message, tap **File** and **Send**. Messages are placed in your OutBox folder on the PT930 and will be delivered to their destination in one of two ways:

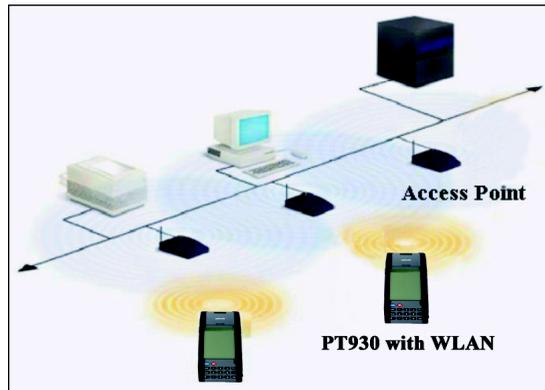
- They are transferred to the OutBox folder in Exchange or Outlook on your desktop computer the next time you synchronize.
- They are transmitted to your mail server the next time you connect remotely. In InBox, make sure the appropriate service is selected on the **Service** menu. Then tap **Connect**.

## RF Communication

Windows CE can support TCP/IP protocol, so the user can easily connect to the Internet by Modem or RF. The following chapter is an introduction on how to connect the PT930 to a network via TCP/IP.

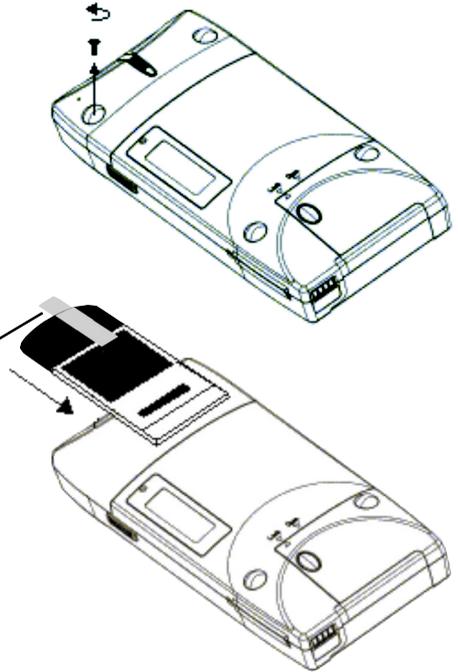
There are several PCMCIA RF cards available on the market. These cards provide the PT930 with wireless communications. Currently, Unitech provides Cisco 350, Lucent WaveLAN (Agere Orinoco) RF support for the PT930 with the drivers pre-installed. By selecting a supported card for the PT930 RF communication will be “plug-and-play”.

RF networks look and operate similarly to Ethernet networks. The only difference is that a radio transmission replaces the hard-wire connection between the various nodes. This means all of your existing applications that currently operate over Ethernet will also function utilizing WLAN without any special wireless network software. This picture illustrates a typical network topology including the PT930 with RF.



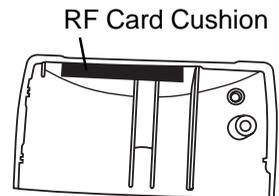
## Installing the Wireless Local Area Network (WLAN) Card

- Power off the PT930.
- Remove the stylus, remove the screw, and then open the PCMCIA compartment.
- Attach the snap-on antenna to the RF card if required (only the Cisco card comes with a pre-installed antenna).
- Attach pulling-tag to antenna.
- Insert the RF card into the PCMCIA slot.



## RF Card Cushion

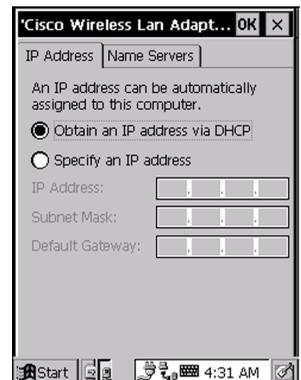
Remove the protective backing from the sticky side of the RF Card Cushion and install the cushion along the inside upper edge of the PCMCIA Cover as shown. The RF Card Cushion prevents damage to the RF card antenna in case the PT930 is accidentally dropped.



- Re-attach cover to the PT930

## Setting Up the Wireless Card

The PT930 is pre-loaded with connection software from Cisco and Lucent WaveLAN (Agere Orinoco). The PT930 will automatically detect these RF cards and then display the following screen during the first-time installation. Please note that there are two ways to set the IP address:



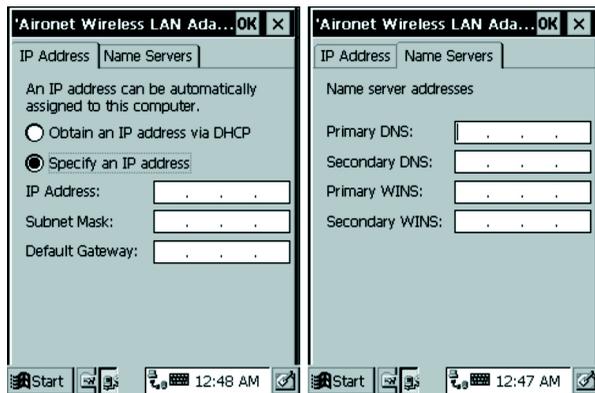
## Obtaining an IP Address via DHCP Server

Please check with your MIS department to determine whether a DHCP server is available in your LAN environment. If available, tap the radio button **Obtain an IP address via DHCP**, and then tap the **OK** button.

## Specifying an IP Address

If there is no DHCP server in your LAN environment, specify the individual IP address on each PT930 with the following steps:

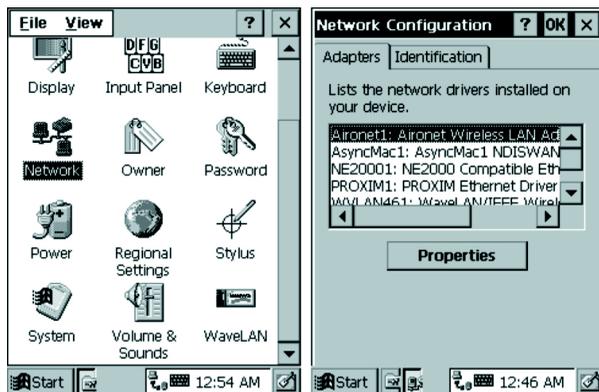
- Tap the radio button **Specify IP Address**.
- Input the proper **IP address**, **Subnet Mask**, and **Default Gateway**.
- Tap the **Name Servers** tab, and then input the proper **Primary DNS**, **Secondary DNS**, **Primary WINS**, and **Secondary WINS**.



To avoid conflict with your LAN environment, please consult with your MIS department for the correct TCP/IP setting.

**Note :** To change the above settings, please perform the following steps:

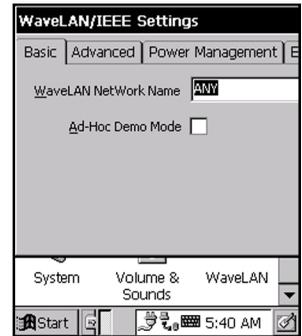
- Tap **Start, Control Panel**.
- Double tap the **Network icon**.
- Select the proper RF card driver and then tap the **Properties** button.



## How to Set SSID

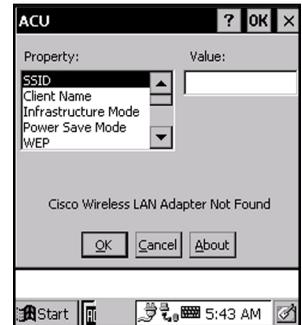
### Lucent WaveLAN (Agere Orinoco)

- Tap **Start**, **Control Panel**.
- Double-click the **WaveLAN icon**.
- Under the “**Basic**” tab, after “**WaveLAN Network Name**”, enter “**SSID**”. Tap **OK**



### Cisco

- Tap **Start**. **Run**, **Browse**.
- Select the **Windows directory**.
- Select **Aironet Client Utility.exe**, Click **OK**. Click **OK** again.
- Select **SSID**. Click **OK**



### Cisco 350 Site Survey Tool:

The Unitech PT930 includes the Cisco 350 Site Survey Tool pre-loaded.

To access the Site Survey Tool:

1. Open **My Computer** (or use **File Explorer**).
2. Open the Cisco file folder.
3. Open Site Survey Tool.

For more information on the Site Survey Tool, refer to the Cisco CE Manual.

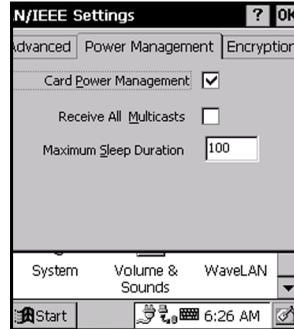
Or, go to: [http://www.cisco.com/univercd/cc/td/doc/product/wireless/airo\\_350/350cards/win\\_ce/hig/ce\\_appe.htm](http://www.cisco.com/univercd/cc/td/doc/product/wireless/airo_350/350cards/win_ce/hig/ce_appe.htm).

## Power Management

(Required to prevent battery drainage due to extra power usage of RF cards.)

### Lucent WaveLAN (Agere Orinoco)

- Tap **Start, Control Panel**.
- Double-click the **WaveLAN** icon.
- Under the “**Power Management**” tab, select “**Card Power Management**”. Tap **OK**



### Cisco

- Tap **Start. Run, Browse**.
- Select the **Windows** directory.
- Select **Aironet Client Utility.exe**, Click **OK**. Click **OK** again.
- Select **Power Save Mode**. Select **Fast PSP**. Click **OK**



## Chapter 5. Useful Application Program

### **Bar2Key**

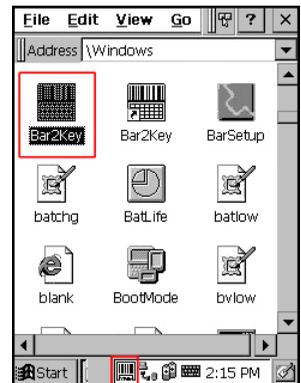
The PT930's built-in scanner is connected to the COM3 port. Applications written for the PT930 should therefore call Unitech's scanner DLL library (please refer to the PT930 SDK/Programming Manual for detailed functions of the DLL library). Sometimes, however, it is not easy for the user to get scanned data into the user's application program, especially if the application has been provided by a 3<sup>rd</sup> party and user modification of the source program is not allowed. In this situation use Bar2Key.exe.

“**Bar2Key.exe**” is a useful tool for users to get scanned data into any application program. While it is running, all scanned data will be routed to a standard keyboard input buffer. In other words, scanned data will be treated as keyboard input. Thus, any application program can receive scanned data as if it were input by the keyboard.

Locate “Bar2Key.EXE” in the \Windows folder. After executing it, a Barcode icon will appear on the taskbar. Then press the scanner trigger key to scan the barcode label.

In order to exit Bar2Key.exe, double tap the Barcode icon on the taskbar and then tap the Exit button.

For detailed barcode symbology settings, please refer to the next section.



### **BarSetup**

When it is necessary for the user to change the default barcode symbology for a different application, **BarSetup** provides the ability to change default symbology, place delimiter characters behind scanned data, and save the settings.

Run this program from **\Windows\BarSetup.exe** and two buttons will be displayed: “**Barcode Symbologies**” and “**Delimiter**”.

## Barcode Symbologies:

Set customization symbologies for each symbology including:

Symbology	Enable Disable	Send Check Digit	Max./Min Length	Send Leading Digit	Other
Code 39	Yes	Yes	Yes		Full ASCII Send Start/Stop Character
I 2 of 5	Yes	Yes	Yes		Send Start/Stop Character Fix Length
S25/Toshiba	Yes	Yes	Yes		Fix Length
Code 32	Yes				Send Leading Code Send Trailing Code
Telpen	Yes				Character Set
EAN 128	Yes				
Code 128	Yes		Yes		
MSI/Plessey	Yes	Yes	Yes		Check Digit Module
Code 93	Yes		Yes		
Code 11	Yes	Yes	Yes		One/Two Check Digit
CodaBar	Yes	Yes	Yes		Send Start/Stop Character CLSI Format On
Label Code	Yes	Yes			
UPC-A	Yes	Yes		Yes	
UPC-E	Yes	Yes		Yes	Zero Expansion On Enable NSC
EAN 13	Yes	Yes		Yes	Enable Bookland
EAN 8	Yes	Yes		Yes	
Delta Code	Yes	Yes			Calculate Check Digit
Supplement					Supplement 2 Supplement 5 Space Separator Inserted If Present, Transmit / Presence Required

## Delimiter:

1. First close the Bar2Key program if it's open.
2. Select your delimiter setting from the displayed choices (None, Tab, CR, LF, CRLF, Comma) and tap **OK**.
3. Tap **File, Save Setting**.
4. Name your new delimiter setting with a ".b2k" extension (default is "Default.b2k"). Tap **OK**.
5. Start the Bar2Key program.

## Appendix A

### Technical Specifications

#### CPU/Memory

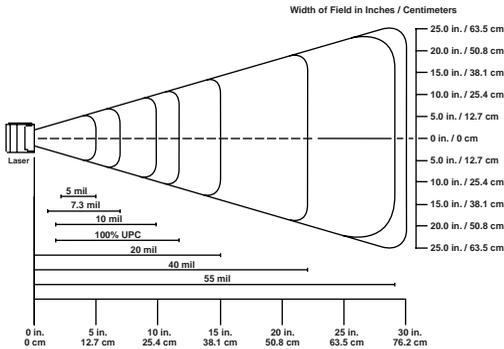
<b>CPU</b>	92 MHz 32 bits MIPS CPU. Built-in real-time clock. 32MB for OS and application programs.
<b>Flash ROM</b>	32MB Built-in (Flash Memory Manager included)
<b>SDRAM</b>	32 MB

#### Input/Output

<b>Input Devices</b>	Touch screen, stylus, keypad, full alphanumeric software keyboard, mag stripe reader, and bar code scanner
<b>Keypad</b>	16 physical keys including numeric keypad, TAB, ESC, FUNC, brightness and contrast controls
<b>Audio Output</b>	A piezoelectric buzzer with software controlled volume
<b>Display</b>	240 x 320 pixels portrait type, 4 gray scale, FSTN panel with touch screen and Electroluminescent backlight. Contrast adjustable by software hotkey
<b>LED Indicator</b>	Dual colors (green/red) for barcode good read indication

<b>Scan Engine</b>	<b>1D Laser:</b>	<b>2D (PDF) Laser</b>
● <b>Light Source:</b>	Visible Laser Diode (VLD) 650 nm	Visible Laser Diode (VLD) 650 nm
● <b>Scan rate:</b>	39± scans/sec	186± scans/sec
● <b>Scan angle:</b>	±53° from nominal	±37° from nominal
● <b>Min. print contrast:</b>	25% absolute dark/light reflectance at 650 nm	25% absolute dark/light reflectance at 650 nm
● <b>Power consumption:</b>	65mA typical @5V	170mA typical @5V
● <b>Depth of Field:</b>	(see next page)	(see next page)

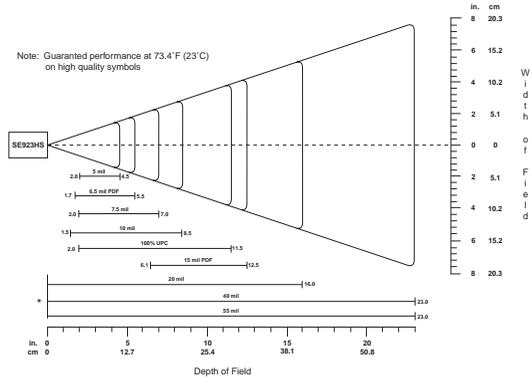
# Laser Typical Depth of Field



Typical Depth of Field in Inches/Centimeters

\*Minimum distance determined by symbol length and scan angle

Note: Typical performance at 68° F (20° C) on high-quality symbols



Note: Guaranteed performance at 73.4° F (23° C) on high-quality symbols

\*Minimum distance determined by symbol length and scan angle

	Near	Far
5 mil	2.0 in. (5.1 cm)	5.2 in. (13.2 cm)
7.5 mil	1.7 in. (4.3 cm)	8.0 in. (20.3 cm)
10 mil	1.8 in. (4.6 cm)	10 in. (25.4 cm)
100% UPC	1.9 in. (4.8 cm)	13 in. (33 cm)
20 mil	*	20 in. (50.8 cm)
40 mil	*	25 in. (63.5 cm)
55 mil	*	30 in. (76.2 cm)
* Dependent upon symbol width		

1D Decode Zone

	Near	Far
5 mil	2.0 in. (5.1 cm)	4.5 in. (11.4 cm)
6.5 mil PDF	1.7 in. (4.3 cm)	5.5 in. (14.0 cm)
7.5 mil	2.0 in. (5.1 cm)	7.0 in. (17.8 cm)
10 mil	1.5 in. (3.8 cm)	8.5 in. (21.6 cm)
100% UPC	2.0 in. (5.1 cm)	11.5 in. (29.2 cm)
20 mil	*	16.0 in. (40.6 cm)
40 mil	*	23.0 in. (58.4 cm)
55 mil	*	23.0 in. (58.4 cm)
* Dependent upon symbol width		

2D (PDF) Decode Zone

## Magnetic Stripe Reader (MSR)

Track	Triple tracks
Measuring Tap	PM50-7B (recording density 210BPI)
Tap Speed	19 cm/sec (7.5 inch/sec)
Life	300,000 passes

## Interface Port

**RS232/Charging Port** Power charging and EIA RS232C supports full duplex asynchronous communications and baud rate up to 115.2K bps.

**IrDA** Compliant to IrDA 1.2 (SIR). Baud rate up to 115.2K bps.

**PCMCIA** Type II slot accepts memory, modem, and RF cards

## **Power**

<b>Power Options</b>	Lithium-Ion @3.6V, 1550mAH Main Battery Pack (Battery pack can be recharged 500 cycles or more) External AC/DC adapter @9VDC/2A with regulator
<b>Power Consumption</b>	<b>Lithium-Ion battery: At 4V</b> Standby mode: 85mA Suspend mode: 3.1mA
<b>Battery Charge</b>	3 hours with external AC/DC adapter 2.5 hours with docking station
<b>Backup Battery</b>	1 rechargeable 3V, 30mAH lithium-ion battery cell for data backup
<b>Power Management</b>	Power consumption indicated on status bar

## **Barcode/Symbology**

<b>Symbology</b>	Codabar	EAN128
	Code 11	Interleaved 2 of 5
	Code 32	Label Code
	Code 39	MSI/Plessey
	Code 39 Full ASCII	Standard 2 of 5
	Code 93	Toshiba
	Code 128	Telpen
	Delta Code	Toshiba
	EAN-8, 13	UPC-A, E

## **OS and Software Programming Tools**

<b>OS</b>	Microsoft Windows CE version 3.0
<b>Development Language</b>	Microsoft Embedded Visual Tool for VB and VC programming
<b>Product Reference Guide</b>	

## **Mechanical and Environmental**

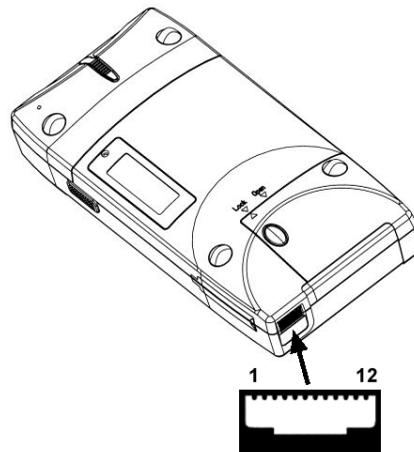
<b>Dimensions</b>	Length: 6.85" (17.4cm) Width: 3.35" (8.5cm) Depth: 1.57" (4.0cm)
<b>Weight</b>	12.87 oz. (365g) with battery pack
<b>IP Rating</b>	IP 42
<b>Temperature</b>	Operation: 32°F to 122°F (0°C to 50°C) Storage: -4°F to 158°F (-20°C to 70°C)
<b>Humidity</b>	5% to 95% RH non-condensing
<b>Shock</b>	Multiple 4.0' (1.2m) drops to concrete

## **Docking Station**

<b>Interface</b>	One EIA RS232C IDC type connector via PC/computer
<b>Power Input</b>	12 pin connector for charging and communication pads to main unit Quick charging typically takes 2.5 hours AC/DC adapter @ 9 VDC/2A with regulator

## **Pin Assignment of Charge and Communication Port**

Pin	Signal	Description
1	DCD	
2	RX	Receive Data
3	TX	Send Data
4	DTR	Data Transmit Ready
5	GND	Signal Ground
6	DSR	Data Set Ready
7	RTS	Request to Send
8	CTS	Clear to Send
9	RI	Ring Indicator
10	Charge	4.2V Input
11	GND	Ground
12	EXT	+9V Power



Unitech PT930

## Appendix B

### Update and Upgrade OS

#### Update OS via Compact Flash (ATA card)

In order to upgrade or re-install the PT930 OS via Compact Flash, you will require the following files (available from Unitech Technical Support):

- **RTOS.OUT**
- Image file of PT930 OS

**Note:** File name must be “RTOS.OUT” – do not rename it.

**CAUTION:** Users files will be erased!

1. Copy file “RTOS.OUT” from the PC to the root directory of the Compact Flash card.
2. Insert the Compact Flash Card into the PT930.
3. Plug the power adapter into the PT930.
4. Run \Windows\updatemode.exe from PT930 by tapping Start -> Programs -> File Explorer -> double tapping “Windows” folder. Locate and then double tap “Updatemode.exe”.
5. Select “Update OS through ATA” and then press OK.
6. The PT930 will display the following screen:



Insert CompactFlash chip into PC Card Adapter



#### UNITECH TEST MENU [2001/09/27]

- =====
1. SRAM Test
  2. LCD Test
  3. Keypad Writer
  4. TouchScreen Position
  5. TouchScreen Drawer
  6. UART B Send/Receive Data (115200bps)
  7. Auto Test
  8. Update OS Through ATA
  9. Reboot
  0. Protect Items

7. Press the '8' key to select "Update OS Through ATA". FlashRom's content will be erased and the new OS will be written to FlashRom. (Time is about 15 minutes) The screen will display the following sequence:

```
File [RTOS.OUT] opened
Start/End Block: 104/211
Erase Block
[104][105][106][107][108][109][110][111]
[112][113][114][115][116][117][118][119]
[110][121][122][123][124][125][126][127]
[128][129][130][131][132][133][134][135]
[136][137][138][139][140][141][142][143]
[144][145][146][147][148][149][150][151]
[152][153][154][155][156][157][158][159]
[160][161][162][163][164][165][166][167]
[168][169][170][171][172][173][174][175]
[176][177][178][179][180][181][182][183]
[184][185][186][187][188][189][190][191]
[192][193][194][195][196][197][198][199]
[200][201][202][203][204][205][206][207]
[208][209][210][211]
```

```
Write Block
[104][105][106][107][108][109][110][111]
[112][113][114][115][116][117][118][119]
[110][121][122][123][124][125][126][127]
[128][129][130][131][132][133][134][135]
[136][137][138][139][140][141][142][143]
[144][145][146][147][148][149][150][151]
[152][153][154][155][156][157][158][159]
[160][161][162][163][164][165][166][167]
[168][169][170][171][172][173][174][175]
[176][177][178][179][180][181][182][183]
[184][185][186][187][188][189][190][191]
[192][193][194][195][196][197][198][199]
[200][201][202][203][204][205][206][207]
[208][209][210][211]
```

After the OS is successfully updated, the PT930 will automatically cold-start with the new OS.

## Update OS via Serial Port

In order to upgrade or re-install the PT930 OS from the serial port, you will require the following files (available from Unitech Technical Support):

- **DL\_OS\_COM1.BAT** Batch file for upgrading OS from COM1
- **DL\_OS\_COM2.BAT** Batch file for upgrading OS from COM2
- **DL\_D602.EXE** Executable program DL\_OS2.BAT

**Note:** User's files will be erased when upgrading the OS. Please backup these files before upgrading.

1. Copy the following files to a directory on the host PC: DI\_AllImg\_COM1.bat, DI\_AllImg\_COM2.bat, DL\_D602.exe & the OS image (\*.out).
2. Connect the PT930 and PC via the RS232 cable or docking station.
3. Plug the power adapter to the PT930 charging/communication cable or docking station.
4. Disable ActiveSync on the desktop PC.
5. Run \Windows\updatemode.exe from PT930 by tapping Start -> Programs -> File Explorer -> double tapping "Windows" folder. Locate and then double tap "Updatemode.exe".
6. You will see the following display on the PT930 screen. Select "Update OS through serial" and then press OK.
7. The LCD display will disappear (just like power-off status) and the unit is ready to receive the new image.
8. Open the DOS Prompt window on your desktop PC.
9. If the PT930 is connected to COM1, please execute "DL\_OS\_COM1.bat". If connected to COM2, please execute "DL\_OS\_COM2.bat".
10. The new OS will download to the PT930 block by block. Block numbers will count down backwards (normally it takes about 50 minutes to complete this step).



```

C:\PT900\Release>dl_d602 2 115200 PT900V202_AllImg.out 0x91C00000 -s -d
$Header: /usr/local/cvs.repository/src/tools/dl_bin/dl_dbin.h,v 1.1.1.1 1996/10/
11 00:43:59 ribeiro Exp $
Disabled multiple
Enabled debug
--> File: PT900V202_AllImg.out (15099904 = 0xe66800)
ATTENTION...
get one byte K 75
ACKNOWLEDGE...
Header check...
get one byte G 71
get one byte N 78
--> Transferring data to monitor (e66800)
--> Transferring block 57 (256K):
One block is sent
get one byte A 65
Get ACK
get one byte B 66
Get ACK
get one byte O 79
Done
Get ACK
get one byte N 78
--> Transferring block 56 (256K):

```

11. After the OS is successfully downloaded, a “Finished” message will be displayed on the PC’s DOS prompt.
12. The PT930’s screen display will re-appear.
13. Close the DOS prompt window from the desktop PC.
14. Tap Start -> Programs -> File Explorer -> double tap “Windows” folder. Locate program “BootMode.exe” and then double tap it.
15. Press the BS key and hold it when tapping the OK button.
16. The PT930 will cold start with the new OS.

## Appendix C

### Troubleshooting Guide

Problem	Solution
Terminal does not power on.	Battery needs recharging or replacement (see page 13).
	Insure that battery is installed correctly (see page 4).
Terminal shuts itself down.	Adjust "Power Properties" (see page 16).
	Battery needs recharging (see page 13).
Battery life is short	Adjust "Power Properties" - especially if peripherals are used (see page 16).
	Replace battery pack if old (battery can be recharged approximately 500 cycles).
"Low Backup Battery" message	Charge terminal for 14 hours (see page 15)
Screen is blank	Make sure terminal is powered on.
	Adjust screen contrast (see page 7)
Terminal either doesn't respond, or responds inaccurately to touch-screen input.	Calibrate touch-screen (see page 7).
	Perform a warm boot - <b>Warning - Unsaved data will be lost</b> (see page 17).
	Perform a cold boot - <b>WARNING - Terminal will be reset to default settings and data will be lost.</b> (see page 17).
Bar code not read	Make sure scanning application is loaded and operational.
	Run "BarSetup" program to modify barcode read settings (see page 37).
	Bar code might be distorted and should be replaced (keypad input might be necessary).
	Battery needs recharging or replacement (see page 13).
Terminal will not shut off.	If terminal is processing data, attach charging cable to insure the battery isn't depleted.
	If terminal is connected to AC power, disconnect.
	Perform a warm boot - <b>Warning - Unsaved data will be lost</b> (see page 17).
	Perform a cold boot - <b>WARNING - Terminal will be reset to default settings and data will be lost.</b> (see page 17).

## **FCC Statement**

This is a FCC Part 15 Class B product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

## **Canadian Compliance Statement**

This Class B Digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte les exigences du Règlement sur le matériel brouilleur du Canada.

The device is certified to the requirements of RSS-139-1 for 2.4 GHz spread spectrum devices.

## **European Conformity Statement**

Declaration of Conformity with Regard to the R&TTE 1999/5/EC and EMC 89/336/EEC directives.

## ***Laser Information***

The Unitech PT930 is certified in the U.S. to conform to the requirements of DHHS/CDRH 21CFR Subchapter J and to the requirements of IEC 825-1. Class II and Class 2 products are not considered to be hazardous. The PT930 contains internally a Visible Laser Diode (VLD) whose emissions do not exceed the maximum limits as set forth in the above regulations. The scanner is designed so that there is no human access to harmful laser light during normal operation, user maintenance or during prescribed service operations.

**CAUTION** - Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser light. Use of optical instruments with the scanner will increase eye hazard. Optical instruments include binoculars, microscopes, and magnifying glasses. This does not include eye glasses worn by the user.

The laser safety warning label required by the DHHS/IEC for the PT930's optional laser scanner module is located on the memory compartment cover, on the back of the unit.