



Unitech PA500

Portable Data Collection Terminal

User Guide

WWW.unitech-adc.com

Notice

This unit is equipped with a battery pack and backup battery. It is possible that the Unitech PA500 may not power-on due to battery discharge as a result of storage.

In the above situation, plug the PA500 to the USB charging cable which is with DC in port or put the unit into the cradle or docking station (with 5V/3A AC-DC adapter), and recharge the unit for 16 hours in order to fully charge its 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 PA500 for 16 hours in order for the main battery to fully charge the backup battery.

Backing-up data by backup battery only without the main battery installed in battery compartment may take as long as 1 hour. Therefore, in order to prevent data protection failure due to backup battery failure, do not leave the PA500 without the rechargeable battery pack installed, or without connection to AC power for an extended period of time.

Battery charge notice

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 0°C to 50°C. Charging batteries outside of the specified range could damage the batteries and shorten their charging life cycle.

Storage and safety notice

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 -20°C to 60°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.

Federal Communication Commission Interference Statement

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

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following three 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.
- (3) This device shall automatically discontinue transmission in case of either absence of information to transmit or operation failure.

INFORMATION TO USER

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

End users must follow the specific operation instruction for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The maximum reported Body SAR Measurement (1g) value is:

802.11b (2450MHz): 0.872 W/g

802.11g (2450MHz): 0.402 W/g

Contents

Chapter 1 Introduction	1
PA500 & Accessories	2
PA500 Features	3
Powerful System	3
Display	3
Barcode Scanner	3
Audio	3
Wireless Connectivity	3
Battery Life	3
User-friendly Interface	3
PA500 Tour	4
Front View	4
Rear View	6
Left and Right View	7
Top and Bottom View	8
First Steps with PA500	9
Chapter 2 Hardware and Command Interface	15
Using the Stylus	15
Using the SDIO/MMC Slot	16
Using the Laser Scanner	17
Using the Software Keyboard Button	19
Command Interface	20
Today Screen	20
Status Icons	23
Navigation Bar	24
Command Bar	24
Pop-up Menus	25
Notifications	26
Chapter 3 Getting Connected	29
Establishing Device-PC Connection	29
Installing Microsoft ActiveSync	29
Connecting the Device to Your Computer	30
Synchronizing with Your Computer	32
Connection Options	32
Synchronizing Information	42
Using ActiveSync to Exchange Files	44
Sharing Information	45
Connecting to the Internet	53

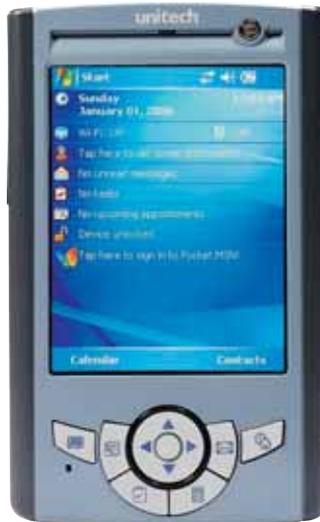
Chapter 4 Managing Programs	55
Accessing Programs	55
Opening a Program	55
Switching Between Programs	55
Accessory Programs	56
Scan2Key	56
Scanner Settings	57
Chapter 5 Customizing PA500	61
Adjusting Settings	61
Checking Main and Backup Battery Status	62
How to Save Battery Life	63
Changing the Automatic Power Settings	63
Adjusting Backlight Setting	64
Resetting the Device	67
Warm Boot	67
Clean Boot	68
Cold Boot	68
Viewing Flash ROM Files	69
Adding Programs	70
Adding Programs to Your Device	70
Adding a Program to the Start Menu	71
Removing Programs	75
Chapter 6 Regulatory and Safety Notices	77
System Specifications	77
CPU/Memory	77
Input/Output	77
Power	79
Barcode/Symbology	80
OS and Software Programming Tools	80
Mechanical and Environmental	80
Regulatory Compliance Statements	81
FCC Statement	81
Canadian Compliance Statement	81
European Conformity Statement	81
Laser Information	81
Index	83

Chapter 1 Introduction

Thank you for purchasing PA500.

Your PA500 is a rugged, compact and lightweight palm-size computer. It utilizes the Windows Mobile 5.0 operating system, and incorporates an integral barcode scanning laser device, color LCD with touch screen, keypad, IrDA interface, Bluetooth, and wireless communication capability. It provides the user with a standard Windows-based environment for customizing and operating the device.

This PA500 product reference guide will guide you to access your PA500.



Unitech PA500

PA500 & Accessories

After opening the box, please make sure the following accessories for the PA500 are present:



PA500 Main Body



Unitech PA500 Quick Reference Guide



Battery pack



PA500 CD



USB charging cable



Stylus



Earphone



AC adapter*

* The adapter's replaceable plug clips availability depends on region.

PA500 Features

Powerful System

- Microsoft Windows Mobile 5.0 operating system
- Intel PXA270 processor with speed of up to 520 MHz
- System memory:
 - 64 MB SDRAM
 - 64 MB Flash ROM

Display

- 3.5" QVGA LCD touch-sensitive screen
- 320 x 240 resolution

Barcode Scanner

- Symbol SE950
- Integrated Hitachi HD6433657W barcode decoder

Audio

- Supports Windows Media Player
- Voice recording and playback

Wireless Connectivity

- 802.11b + g with diversity antenna
- Bluetooth wireless technology
- Serial infrared port

Battery Life

- Normal usage: 6 hours
- Charging time: 3.5 hours
- Embedded backup battery cell

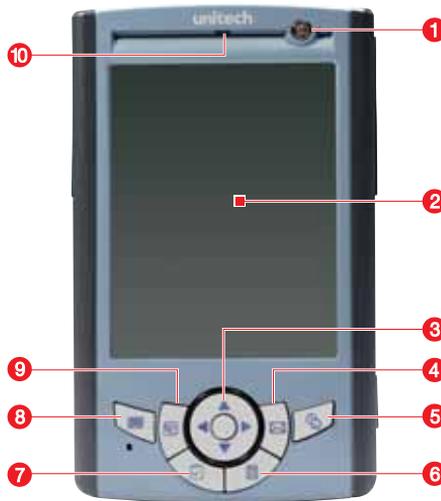
User-friendly Interface

- Quick launch hot keys for enabling software keyboard and other device management tasks
- Trigger keys for barcode scanning

PA500 Tour

The following section gives you a tour of the PA500 hardware interface.

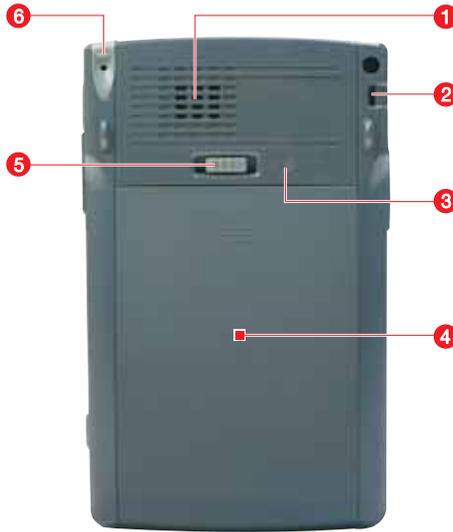
Front View



No.	Component	Description
1	Power button	If the device is off, press this button to turn it on. Alternatively, when the unit is on, this key must be pressed and held down for about two seconds in order to turn the device off.
2	LCD Touch screen	Displays the applications and data stored on your device. It is touch-sensitive and responds to the stylus or finger.
3	Navigation key	Press the Action button, center of the navigation key, to access the menu options and confirm your selection. Use the up, down, left, and right arrow keys to navigate through the menu options.
4	Email button	Launch Microsoft Outlook Express.

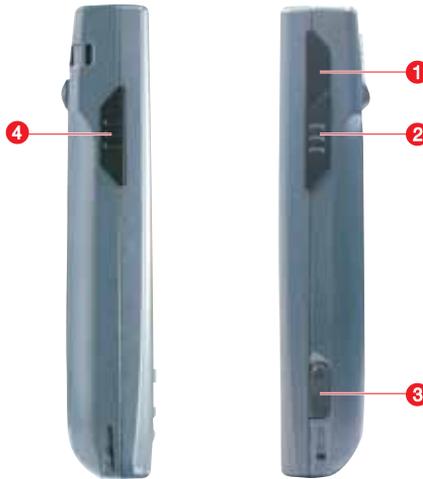
No.	Component	Description
5	Today button	Customize the look and information that is displayed on the Today screen.
6	Calendar button	Press to bring up Calendar. Calendar enables you to conveniently manage your schedules and appointments or any other activities associated with a date and time.
7	Tasks button	Keep track of what you have to do and prioritize them based on their importance and urgency.
8	Software keyboard button	Press to launch the Windows CE keyboard.
9	Notes button	Press to open Notes. Notes allows you to quickly capture thoughts, reminders, ideas, drawings, and phone numbers. You can create a written note or include a recording in a note.
10	Status indicator	Indicates the battery charging and barcode scanning status. <ul style="list-style-type: none">• Green - Battery is fully charged, the device is running on battery power, or barcode scanning process is completed without error.• Red - Battery is charging, barcode scanner is activated and processing.

Rear View



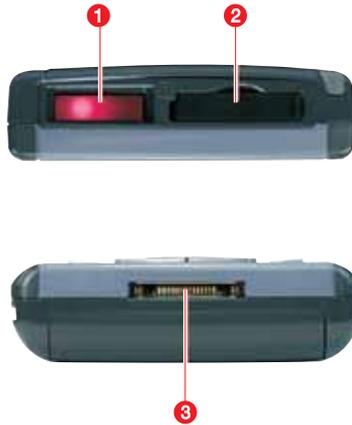
No.	Component	Description
1	Speaker	Listen to audio media. When speaker phone is active, sounds are emitted here.
2	Strap holder	Eyelet for holding strap.
3	Reset button	Press the end of the stylus into the button to reset your device.
4	Main battery	Removable and rechargeable 3.7 V, 2200 mAh battery pack.
5	Battery release latch	Slide toward the right side of the device and hold firmly, then detach the battery from its bay.
6	Stylus holder	To use the stylus, remove it from its holder and hold it the same way you hold a pen or pencil.

Left and Right View



No.	Component	Description
1	Infrared (IR) port	Uses infrared technology to transmit and receive data from other IR-enabled devices.
2	Right side scanner trigger button	Press to activate the barcode laser scanner.
3	Earphone jack	Lift the rubber cover from the earphone jack and connect an audio line-out device (earphone or headphone).
4	Left side scanner trigger button	Press to activate the barcode laser scanner.

Top and Bottom View



No.	Component	Description
1	Barcode laser scanner (optional)	Reads and captures information on a barcode label.
2	SDIO/MMC slot	<p>Accepts an SD (Secure Digital), MMC (Multimedia Card) or SDIO (Secure Digital Input Output) cards, allowing you to add more memory.</p> <p>Install add-on applications or use audio text files stored in it for use with internal applications. You can also use it to back up data from your device.</p>
3	Universal connector	<p>Connects your device to a USB charging cable, which in turn connects to the computer's USB port and through the AC adapter to an electrical outlet. This allows you to recharge your device and perform an ActiveSync operation.</p> <p>You can also use it to connect a peripheral hardware, such as a docking station, to your device.</p>

First Steps with PA500

Perform the following easy installation steps to start using your device:

- 1 Install the battery pack



.....

WARNING! There is a risk of fire and burns if the battery pack is handled improperly. **DO NOT** disassemble, crush, puncture, short external contacts, or dispose the battery pack in fire or water. **DO NOT** attempt to open or service the battery pack. **Dispose of used batteries according to local recycling guidelines in your area.**

A backup battery cell is embedded into your device to prevent data loss in instances when the removable battery pack is removed or completely discharged. This backup battery cell will support the system for a maximum of 60 minutes only.



.....

NOTE: To enable the internal battery cell to provide backup power supply, charge your device with the main battery pack, for at least 3.5 hours.

- (a) Position the battery pack, making sure the battery pack fits the shape of the battery compartment.
- (b) Slide the battery pack into the battery bay until it clicks into place.



- 2 Charge your device

For initial use, you need to charge your device for about 16 hours. After that, you can charge it everyday to recharge the battery to full capacity. You can charge your device using the USB charging cable or the docking station.



CAUTION: Operating the PA500 for the first time without the AC adapter, and without fully charging the backup battery may result in loss of data stored in RAM memory.



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

To charge the device using the USB charging cable:

- (1) Press and hold the connector button on the USB charging cable and connect it to the PA500.
- (2) Plug the AC adapter cable into the power jack on the USB charging cable.
- (3) Connect the AC adapter into an electrical outlet.



To charge the device using the docking station:

- (1) Plug the AC adapter cable into the power jack on the docking station.
- (2) Connect the AC adapter into an electrical outlet.



- (3) Slide the device into the docking station until it clicks into place.



The connection is secure when the bottom edge of the device is aligned smoothly with the docking station, and the LED indicator on the device lights up red.

LED status during charging:

- Solid red: Charging
- Solid green: Charging complete

If the battery level becomes low in the course of normal use, a status icon appears on the device screen indicating low or very low battery status. In both cases, perform an ActiveSync operation to back up your data, then recharge your device as soon as possible.

If the battery level reaches low status, the device will enter sleep mode; if the battery level reaches very low status, the device will enter deep sleep mode. In this case, you have about 72 hours to recharge your device after which you risk losing all data on your device's internal memory.

3 Start up the PA500

After you have initially charged your device for about 16 hours, the device is ready to be used. You can now start up your device where you'll calibrate the display, set up the system time zone, and learn some basic stylus usage.

- (1) Turn on your device by pressing the power button on the front panel.



NOTE: The PA500 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.

The Unitech PA500 welcome screen appears. The Windows Mobile screen will appear shortly thereafter.

(2) Calibrate the PA500

The calibrate 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 tapping Start > Settings > System tab > Screen.

The PA500 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 Action button to confirm it.

(3) Set the Time Zone, Date, and Time

Select your current time zone from the Time zone drop-down menu, then tap Next.

(4) Follow all onscreen instructions to complete the set up. The setup wizard provides tips for using the pop-up menus and assign a lock password to access your device.

Wait for a few moments while the preloaded applications are being installed into your device.

Chapter 2 Hardware and Command Interface

This chapter describes basic hardware procedures in using your PA500. Information on the device's command interface is also discussed.

Using the Stylus



CAUTION: Never use anything other than the PA500 stylus on the screen. Using another object as a stylus could cause permanent damage.

- 1 Remove the stylus from its holder.



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

Using the SDIO/MMC Slot

Your device has an expansion slot compatible with a range of SD, SDIO, and MMC storage cards, which are primarily used to back up or transfer files and data.

To insert a storage card:

- 1 Hold the device securely, then lift the rubber cover from the SDIO/MMC slot.



- 2 Push the card into the slot until you hear an audible system sound; this will signal that the card is already properly seated within the slot.



The card is secure when it is not protruding from the slot.

To remove a storage card:

- 1 Hold the device securely; then push against the top of the card, as if you were pushing it further into the slot, letting the card spring out. An audible system sound will signal that the card has been released.
- 2 Gently remove the card from the slot.

Using the Laser Scanner

PA500 has an integrated laser scanner which reads all major barcode labels with excellent performance.



NOTE: The 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 Scanner Settings.

PA500 has a built-in Scanner Settings utility that allows you to test the device's barcode scan function.

To launch Scanner Settings:

- 1 Tap Start > Settings > System tab.
- 2 On the System tab, tap Scanner Settings.



- 3 On the Settings tab, tap Barcode IDs.

- 4 Tap Test tab.



- 5 Activate the laser scanner by pressing either one of the trigger keys located on the left and right side of the unit.
- 6 Aim the laser scanner at the selected barcode and press both trigger keys to scan. The scanned barcode data appears on the screen.



- 7 Tap OK.

Using the Software Keyboard Button

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.

To open the Windows CE keyboard:

Do either of the following:

- Press the Software keyboard button on the device's front panel.



- Tap the keyboard icon on the command bar.



The Windows CE keyboard pops up.



To key-in characters:

Type information just like in a regular keyboard, by tapping the onscreen keys.

Command Interface

Today Screen



When you turn on your device for the first time each day or after a preset period of inactivity, you'll see the Today screen. You can also display it by doing either of the following:

- Tap Start > Today.
- Press the Today button on the device's front panel.



To define a preset period of inactivity after which the Today screen is displayed:

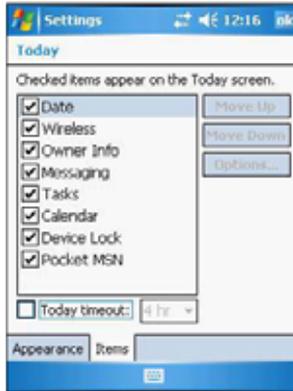
- 1 Tap Start > Settings.



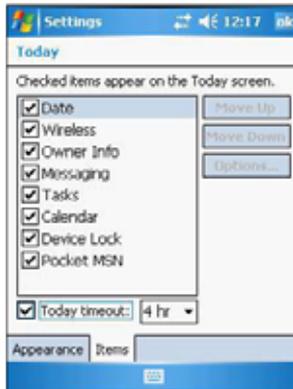
- 2 On the Personal tab, tap Today.



- 3 On the Items tab, select the Today timeout check box.



- 4 Tap the pick list beside the check box to set the period of inactivity.



- 5 Tap OK.

Today screen provides an at-a-glance view of the important reminders and details for the day.

Status Icons

The table below describes some of the status icons you may see on your device.

Status icon	Description
	Turns all sounds on and off.
	Indicates Bluetooth wireless technology is on.
	Indicates that the main battery is charging. The PA500 is either plugged-in via the AC adapter or docking station.
	Indicates the main battery is fully charged.
	Indicates the main battery is low and needs to be charged.
	Indicates the main battery is very low. Stop device operation and charge the device immediately.
	Indicates the backup battery is very low. Stop device operation and charge the device immediately.

Navigation Bar



The navigation bar is located at the top of the screen. It displays the active program and current time, and allows you to switch to other programs and close screens.

Command Bar

Use the command bar at the bottom of the screen to perform tasks in programs. The command bar includes menu names, buttons, and the Input Panel button.

- To create a new item in the current program, tap New.
- To view a notification or an image file received on your device, tap View.
- To open the Windows CE keyboard.
- To see the name of a button, tap and hold the stylus on the button. Drag the stylus off the button so that the command is not carried out.

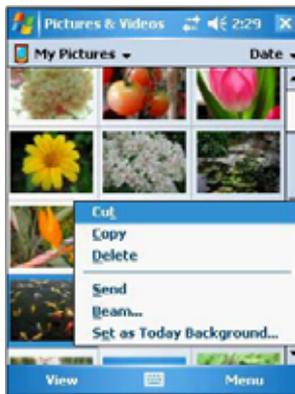


Pop-up Menu

With pop-up menus, you can quickly choose an action for an item. The actions in the pop-up menu vary from program to program.

To access a pop-up menu:

- 1 Tap and hold the stylus on the item that you want to perform the action on.
- 2 When the menu appears, lift the stylus, then do any of the following:
 - Tap the action you want to perform.
 - Tap anywhere outside the menu to close the menu without performing an action



Notifications

Your device reminds you in a variety of ways when you have something to do or receive a message. For example, if you've set up an appointment in Calendar, a task with a due date in Tasks, or an alarm in Clock, you'll be notified in any of the following ways:

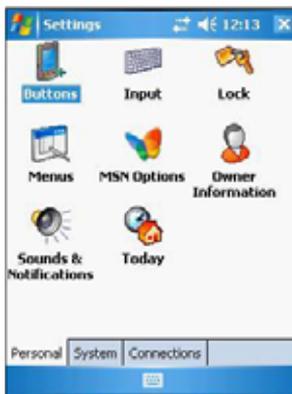
- A message box appears on the screen.



- A sound, which you can specify, is played.

To choose reminder types and sounds for your device:

- (1) Tap Start > Settings.



- (2) On the Personal tab, tap Sounds & Notifications.

- (3) On the Notifications tab, select the kind of events you want to be notified of and the manner of notification you prefer. The options you choose here are applied globally in your device.
- (4) Tap OK.

Chapter 3 Getting Connected

This chapter describes the procedures on how to connect the device to your computer.

Establishing Device-PC Connection

Installing Microsoft ActiveSync

In order to exchange data between your computer and PA500, Microsoft ActiveSync must be installed on your computer. The USB charging cable that comes with your device enables you to connect the device to your computer.



.....

NOTE: If you have a previous version of the Microsoft ActiveSync installed in your computer, uninstall it first before installing the latest version of Microsoft ActiveSync.

Minimum system requirements

- Microsoft Windows 2000 SP 4; XP Media Center Edition; Server 2003 SP 1; Server 2003, XP Professional 64-Bit Edition (Itanium); XP SP 1; XP SP 2; XP Tablet PC Edition
- Microsoft Outlook 2000 or later required for synchronization
- Microsoft Office 2000, Office XP or Office 2003
- Microsoft Internet Explorer 6.0 or later

To install Microsoft ActiveSync on your computer:

- 1 Close any open programs, including those that run at startup, and disable any virus-scanning software.
- 2 Download the ActiveSync software from the Microsoft ActiveSync Download page at <http://www.microsoft.com/windowsmobile/downloads/activesync42.msp>.
- 3 Install the ActiveSync setup software to your computer by clicking appropriate language.
- 4 Select Run this program from its current location and click OK.
- 5 Follow the onscreen instructions to complete installation.

After you have installed ActiveSync and restarted your computer, the ActiveSync icon will appear on your computer's system tray (on the lower right-hand corner of the screen) and the ActiveSync wizard appears.

For detailed information on how to use ActiveSync on your computer, start ActiveSync; then click Help > Microsoft ActiveSync Help.

Connecting the Device to Your Computer

- 1 After ActiveSync has been installed, connect the USB charging cable to your device. If necessary, connect an adapter.
- 2 Plug the other end of the USB charging cable into a USB port on your computer.



- 3 Turn the device on.



- 4 After ActiveSync should start automatically and recognize your PA500 and configure the USB port. The New Partnership setup wizard will automatically start.



NOTE: If ActiveSync doesn't start automatically, click Start > Programs > Microsoft ActiveSync > File > Connection Settings > Connect > OK.

If a message appears indicating that it is unable to detect a connection, click the Cancel button and manually configure the communication settings.

- 5 Follow the onscreen instructions.
- 6 When the configuration process is complete, the ActiveSync window appears.
- 7 Synchronization will be initialized and will take place if you've chosen to synchronize periodically or upon connection.



NOTE: Your computer can create a partnership with multiple PA500. Also, the PA500 can create a partnership with up to two computers.

Synchronizing with Your Computer

Synchronization takes place according to the options you choose while setting up ActiveSync on your computer. If you accept the default (On Connect) synchronization option in the Microsoft ActiveSync Setup Wizard, you'll be able to simply connect your PA500 to your desktop computer and synchronization will take place.

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

- On your computer, double-click My Computer > Mobile Devices folder.
- Connect the USB cable between the computer and PA500.
- Execute "Repllog.exe" from the PA500 Windows directory

Connection Options

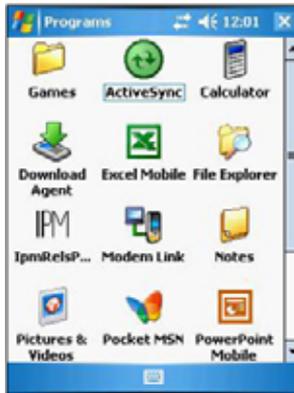
You can set remote synchronization with your computer using the following connection options:

- USB connection
- Infrared connection
- Bluetooth connection
- WiFi connection

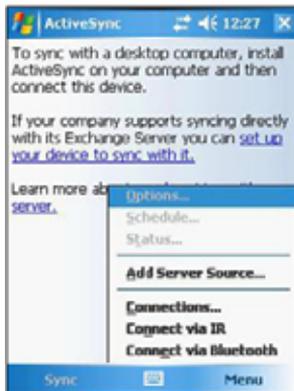
USB Connection

To synchronize with your computer using USB connection:

- 1 Open ActiveSync on your computer.
- 2 Connect your device to your computer using the USB charging cable. See "Connecting the Device to Your Computer" on page 30.
- 3 Initiate connection by tapping Start > Programs > ActiveSync.



- 4 Tap Menu, then Connections.

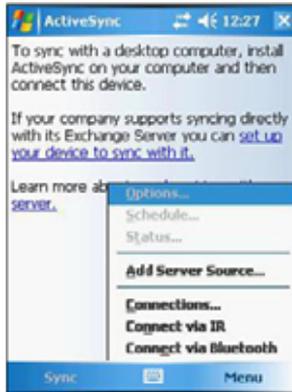


- 5 Select Synchronize all PCs using this connection check box.
- 6 Select a baud rate or cable type connection.
- 7 Tap OK.

Infrared Connection

The infrared (IR) port allows you to synchronize information with an infrared-enabled computer. Simply align the infrared port of your device with that on the computer. This method is ideal for quickly switching between multiple devices since there are no cables or adapters to change.

- 1 Perform the steps below on your computer.
 - (1) Configure an infrared port on your computer following the manufacturer's instructions.
 - (2) Once your computer's IR port is ready, open ActiveSync.
 - (3) Click File, then Connection Settings.
 - (4) Under the "In the Allow serial cable or infrared connection to this COM port" list, select Infrared Port (IR).
 - (5) Click OK.
- 2 Perform the steps below on your device.
 - (1) Align the IR port of your device with that on your computer so that they are unobstructed and within close range.
 - (2) Initiate connection by tapping Start > ActiveSync > Menu > Connect via IR.



- (3) Tap Sync.

Bluetooth Connection

Your device is equipped with Bluetooth wireless technology that you can use to synchronize information with a computer equipped with a Bluetooth adapter or access point. Bluetooth wireless technology allows you to communicate with the computer whenever it is within range.

- 1 Perform the steps below on your computer.
 - (1) On the Windows taskbar, click Start > Settings > Control Panel > Bluetooth Devices.
 - (2) Click the Options tab, select the “Turn discovery on” and “Allow Bluetooth devices to connect to this computer’s” options.
 - (3) On the COM port tab, click Add.
 - (4) Select “Incoming (device initiates the connection)”, then click OK.
Note the number of COM port that was added. The COM port must not be higher than 20.
 - (5) In the ActiveSync window, click File menu, then Connection Settings.
 - (6) Under the “In Allow serial cable or infrared connection to this COM port” list, select the COM port with the number you noted in step 3.
 - (7) Click OK.
- 2 Perform the steps below on your device.
 - (1) Enable Bluetooth on your device.

Using Today screen

- (a) On the Today screen, tap WiFi.



(b) Tap Bluetooth.



(c) Tap Done.

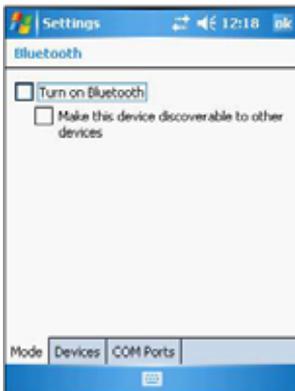
Using the Bluetooth program

(a) Tap Start > Settings.

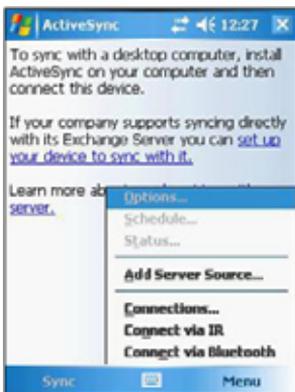
(b) On the Connections tab, tap Bluetooth.



- (c) On the Mode tab, select all the check boxes.



- (d) Tap Devices tab and create a Bluetooth partnership. Refer to page 47 for more information.
- (2) Make sure that the device and computer are within close range.
 - (3) Initiate connection by tapping Start > ActiveSync > Menu > Connect via Bluetooth.



- (4) Tap Sync.

WiFi Connection

With the device's embedded WLAN module, you can send and receive signals to a computer connected on the WiFi network then synchronize files.



NOTE: Before doing these steps, you must do the following:

- Make sure your computer have TCP/IP installed.
- Make sure the network system and remote access server in your workplace supports TCP/IP.
- Make sure you have remote access account. Ask your network administrator for assistance on setting up a wireless connection.
- First establish ActiveSync partnership with the PA500 using serial, USB or Bluetooth connection.

- 1 Perform the steps below on your computer.
 - (1) On the Windows taskbar, click Start > Settings > Control Panel > Network Connections.
 - (2) Right-click WLAN card, then click Properties.
 - (3) Select Internet Protocol (TCP/IP), then click the Properties tab.
 - (4) IP settings will be assigned automatically if your network supports this capability, then click Advanced.
 - (5) Click WINS tab.
 - (6) In the NetBIOS setting, select Enable NetBIOS over TCP/IP.
 - (7) Click OK.
 - (8) Connect your device to your computer using the USB charging cable. See "Connecting the Device to Your Computer" on page 30.
 - (9) Perform a standard partnership with PA500.
 - (10) Click Next.
 - (11) Select Synchronize with this desktop computer, then click Next.
 - (12) Select the type of information you want to synchronize.
 - (13) Follow the onscreen instruction to complete setup.
 - (14) Open ActiveSync on your computer.
 - (15) Click File, then Connection Settings.
 - (16) Select Allow network (Ethernet) and Remote Access Service (RAS) server connection with this desktop computer.
 - (17) Click OK.

2 Perform the steps below on your device.

(1) Enable WiFi access on your device.

Using Today screen

(a) On the Today screen, tap WiFi.



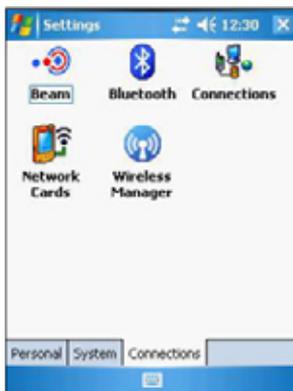
(b) Tap Wi-Fi to enable.



(c) Tap Done.

Using the Wireless Manager

- (a) Tap Start > Settings.
- (b) On the Connections tab, tap Wireless Manager.



- (c) Tap Wi-Fi to enable.



- (d) Tap Done.

- (2) If there are networks already detected, tap and hold network name, then select Connect.



If none, tap Add New and follow all onscreen instructions.

- (3) Under the Network to access drop-down menu, select Only computer-to-computer.
- (4) When finished, tap OK.

For more information on how to configure the wireless network settings, tap Start > Help .

Synchronizing Information

By default, ActiveSync does not enable automatic synchronization of all types of information. To select the types of information you want synchronized, on either your device or your computer, go to Menu, then Options. This section gives you an overview of the types of Outlook information you can synchronize.

Synchronizing Inbox

When you select E-mail for synchronization in ActiveSync, email messages are synchronized as part of the general synchronization process. During synchronization, the following events occur:

- Messages are copied from the Outlook Inbox folder on your computer, or from a Microsoft Exchange server, to the Inbox folder (under the ActiveSync account) on your device.
- By default, when synchronizing Inbox information with your computer, you will receive only messages from the last three days and the first 0.5 KB of each new message. You can also choose to download file attachments.
- The messages on your device and on your computer are linked. When you delete a message on your device, it is also deleted from your computer the next time you synchronize and vice versa.
- Messages in subfolders in other email folders in Outlook are synchronized only if the folders have been selected for synchronization in Inbox on your device.



NOTE: Text messages are not received in Inbox through synchronization. Instead, they are sent to your device by way of your mobile service provider.

Synchronizing Calendar

- Calendar items created on your device are copied to your computer and/or on a Microsoft Exchange server during synchronization, and vice versa. By default, Calendar items from the last two weeks will be synchronized.
- Similarly, Calendar items that are deleted from your device are deleted from your computer and/or server during synchronization, and vice versa.

Synchronizing Contacts

- Contacts created on your device are copied to your computer or on a Microsoft Exchange server during synchronization, and vice versa. By default, all of your contacts will be synchronized.
- Similarly, contacts that are deleted from your device are deleted from your computer and/or server during synchronization, and vice versa.

Synchronizing Tasks

- Task synchronization is, by default, automatically selected in ActiveSync.
- Tasks can only be synchronized with your computer; they cannot be synchronized with a server.
- Tasks created on your device are copied to your computer during synchronization, and vice versa. By default, only incomplete tasks will be synchronized.
- Similarly, tasks that are deleted from your device are deleted from your computer during synchronization, and vice versa.

Using ActiveSync to Exchange Files

You can use ActiveSync to exchange information from your device your computer and vice versa. Changes you make to the information on one location will not affect the information on the other one. If you want to automatically update information on both your device and computer, synchronize the information instead.

You can copy two types of information to your device: files and Pocket Access Windows CE Store information.

The procedure below only applies to copying files. Refer to the ActiveSync Help on your computer for instructions on how to copy Pocket Access Windows CE Store information.



.....

NOTE: Files created on your computer may need to be converted by ActiveSync so that they can be viewed and edited on your device, and vice versa.

To copy files:

- 1 Connect your device to your computer. You can connect your device to your computer using the following connection options:
 - USB connection
 - Infrared connection
 - Bluetooth connection
 - WiFi connectionSee “Synchronizing with Your Computer” on page 32 for more information about the connection options.
- 2 On the ActiveSync window on your computer, click Explore .
Windows Explorer will open the Mobile Device window for your device.
- 3 Locate the file that you want to copy on your device or computer.
- 4 Do either one of the following:
 - To copy the file to your device, right-click the file and click Copy. Place the cursor in the desired folder for your device, right-click, then click Paste.
 - To copy the file to your computer, right-click the file and click Copy. Place the cursor in the desired folder for your computer, right-click, then click Paste.

Sharing Information

You can use your PA500 to exchange information with other mobile devices and connect to your computer, a network, or the Internet. You have the following options:

- Infrared connection
- Bluetooth connection
- WiFi connection
- VPN connection
- Email server connection

Infrared connection

Using the infrared (IR) port on your device to beam information, such as contacts and appointments, from another IR-enabled device.

Setting up an IR connection

- 1 Activate the device's IR port.
 - (1) Tap Start > Settings.
 - (2) On the Connections tab, tap Beam.
 - (3) Tap the Receive all incoming beams check box.



- (4) Tap OK.

Sending and receiving information via IR

To send information via IR:

- 1 Switch to the program where you created the item you want to send and locate the item in the list.

- 2 Align the IR port of your device with that of the IR-enabled device so that they are unobstructed and within a close range.
- 3 Do any one of the following:
 - Tap and hold the item, then tap Beam Task on the pop-up menu.
 - Using File Explorer, tap and hold the item (but not folder), then select Beam File on the pop-up menu.
 - Using Pictures & Videos, tap and hold a thumbnail to display a pop-up menu of available actions, then tap Beam.
- 4 Select the IR device, then tap the Tap to send link.

To receive information via IR:

- 1 Align the IR port of your device with that of the IR-enabled device so that they are unobstructed and within close range.
- 2 Have the owner of the other device send the information to you. Your device will automatically receive it.



- 3 On the Receiving Data callout, tap Yes.

Bluetooth connection

Your device allows you to connect to a Bluetooth-enabled device, such as a handheld, headset, or computer. Once connected you can do the following:

- Beam files and information in Calendar, Contacts, Notes, Tasks, Excel Mobile, Word Mobile, PowerPoint Mobile, and Pictures & Videos programs, to other Bluetooth-enabled device.
- Wirelessly listen to audio files or locate and use services on a Bluetooth-enabled device.
- Locate and use any services available on the device.



IMPORTANT: Ensure that the two devices have Bluetooth turned on, discoverable, and within close range.

Setting up a Bluetooth connection

- 1 Activate the device's Bluetooth feature.

To activate Bluetooth connection, refer to “Enable Bluetooth on your device using Today screen” on page 35 for more information.



NOTE: Deactivate the Bluetooth feature when you do not plan to use it for an extended time.

- 2 Create a partnership between your device and another device.

- (1) Tap Start > Settings.
- (2) On the Connections tab, tap Bluetooth.
- (3) On the Devices tab, tap New Partnership.



Your device will search for other devices with Bluetooth capabilities and displays them in the device list.



- (4) Tap the name of the device in the list, then tap Next.
- (5) If you want to use a passkey, enter the alphanumeric passkey, then tap Next. Or, you can leave the passkey blank, then tap Next.

The passkey is recommended for enhanced security. Your passkey must be between 1 to 16 alphanumeric characters.



- (6) In the Display Name box, enter a new name for the device.

- (7) In the “Select services to use from this device” list, select a service.



- (8) Tap Finish.

Sending and receiving information via Bluetooth

To send information via Bluetooth:

- 1 Switch to the program where you created the item you want to send and locate the item in the list.
- 2 Do any one of the following:
 - Tap and hold the item, and then tap Beam Task on the pop-up menu.
 - Using Pictures & Videos, tap and hold a thumbnail to display a pop-up menu of available actions, then tap Beam.
 - Using File Explorer, tap and hold an item (but not folders), select Beam File on the pop-up menu.
- 3 Select the Bluetooth device, then tap the Tap to send link.

To receive information via Bluetooth:

- 1 Turn on the Bluetooth function.
- 2 Have the owner of the other device send the information to you. Your device will automatically receive it.
- 3 On the Bluetooth callout, tap Yes.

A Bluetooth connection with your device is indicated by  at the top of the screen.

For detailed information on how to use Bluetooth, tap Start > Help.

WiFi connection

Windows Mobile can support TCP/IP protocol, so the user can easily connect to the Internet by modem or high-frequency wireless LAN technology. WiFi 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.

With PA500 integrated WiFi, you can scan for existing wireless network access point or hot spot. Wireless network access point or hot spot can be found in homes and offices or public areas such as inside the airport, restaurant, coffee shops, hotels, subway stations, or campus. Using WiFi networking, you can connect to a computer, access the Internet, send and receive email and files.

A wireless network can be added either when the network is detected or by manually entering settings information. WiFi access in some areas may require a separate purchase of a service contract with a wireless service provider. You can check with a WiFi service provider for detailed information.



NOTE: Before doing these steps, you must do the following:

- Make sure your computer have TCP/IP installed.
- Make sure the network system and remote access server in your workplace supports TCP/IP.
- Make sure you have remote access account. Ask your network administrator for assistance on setting up a wireless connection.
- First establish ActiveSync partnership with the PA500 using serial, USB or Bluetooth connection.

Setting up a wireless network connection



NOTE: Before doing these steps, determine if authentication information is needed.

- 1 Enable wireless connection. Refer to “Enable WiFi access on your device.” on page 39 for more information.
- 2 Tap Start > Settings.
- 3 On the Connections tab, tap Network Cards.
- 4 Tap the Wireless tab.

If there are networks already detected, tap and hold network name, then select Connect.



If none, tap Add New and follow all onscreen instructions.

- 5 Under the Network to access drop-down menu, select from the following network connection options:
 - All available
 - Only access points
 - Only computer-to-computer

- 6 When finished, tap OK.

To configure the wireless network connection settings, tap Start> Settings > Connections tab > Network Cards. For more information on how to configure the wireless network settings, tap Start > Help .

VPN connection

If you have access to a network at work, you can send email messages, view Intranet pages, synchronize your device, and possibly access the Internet. You can connect to a network by creating a modem connection via a RAS (Remote Access Services) account or use a network card to connect directly to an Ethernet network and access Internet, Intranet or download emails. Before you can create these connections, your network administrator will need to set up a RAS account for you. Your network administrator may also give you the VPN (Virtual Private Network) settings.

Setting up a VPN connection

- 1 Ask your network administrator for the following information:
 - User name

- Password
 - Domain name
 - TCP/IP settings
 - Host name or IP address of the VPN server
- 2 Tap Start > Settings.
 - 3 On the Connections tab, tap Connections.
 - 4 On the Tasks tab, tap Add a new VPN server connection.
 - 5 Follow all onscreen instruction in the New Connection wizard. For more information, tap Start > Help.

Email server connection

You can set up a connection to an email server so that you can send and receive email messages by using a modem or network connection and Inbox on your device. You can use multiple email accounts to receive your messages. For each email account you intend to use, first set up and name the email service. If you use the same service to connect to different mailboxes, set up and name each mailbox connection.

There are two types of email account that can be managed using your device.

- Microsoft Outlook
Using Microsoft Outlook, your Inbox is updated each time you sync with your computer or corporate email server.
- POP3/IMAP4
This includes email service from providers. These email accounts can be managed remotely using a wireless connection.

For more information, tap Start > Help.

Connecting to the Internet

Your PA500 allows you to connect to your ISP (Internet Service Provider) and use the connection to do the following:

- Send and receive email messages
- View the Internet and Intranet
- Access Web pages
- Listen to streaming media

To connect to the Internet:

- 1 Ask your ISP for the following information:
 - Dial-up access telephone number or access point
 - User name and password
- 2 Tap Start > Settings.
- 3 On the Connections tab, do one of the following:
 - Tap Connections, then in My ISP, tap the Add a new modem connection link.
 - Tap Network Cards and set up a network card or wireless network connection.
- 4 Follow all onscreen instruction in the New Connection wizard.

For more information, tap Start > Help.

Chapter 4 Managing Programs

This chapter describes the procedures for launching programs. It also shows how to use the Scan2Key and Scanner Setting accessory programs.

Accessing Programs

Opening a Program

You can open programs in any one of the following ways:

- Tap a program name from the Start menu.



- You can select which programs are displayed on the Start menu. For instructions, see Adding a program to the Start menu on page 71.
- Tap Start, then Programs to see more programs.

Switching Between Programs

- Select another program from the Start menu.



.....
NOTE: To get detailed information on using any of the applications on your device, tap Start > Help.

Accessory Programs

Scan2Key

The Scan2Key application can route input from a scanner port to keypad buffer, so that all input from scanner will be treated as they are just input from touch screen keyboard. With this router, scanned data can be directly input into scanner port aware application, like MS Pocket Word.

To launch Scan2Key:

- 1 Tap Start > Programs.



- 2 Tap Scan2Key. Scan2Key will appear on lower right corner of the Today screen.



To exit Scan2Key:

- 1 Tap and hold the Scan2Key icon then tap Exit on the pop-up menu. The Quit Scan2Key dialog box appears.



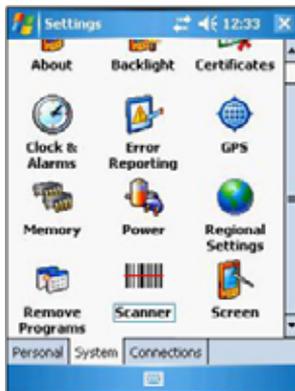
- 2 Tap Yes.

Scanner Settings

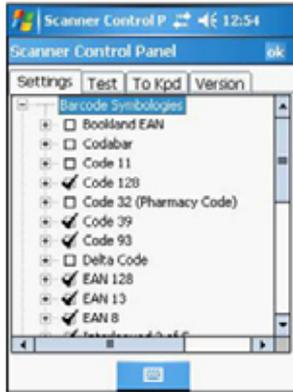
When it is necessary for the user to change the default barcode symbology for a different application, the Scanner Control Panel provides the ability to change default symbology. The Scanner Control Panel also lets you place delimiter characters behind scanned data and save the settings.

To view the default barcode symbologies:

- 1 Tap Start > Settings.
- 2 On the System tab, tap Scanner Settings.



- 3 On the Settings tab, tap the plus sign in front of Barcode Symbologies to expand and display the list of barcode symbologies.



Below table lists the standard protocol for a particular type of barcode symbology.

Barcode Symbology	Enable/Disable	Check Char/ Digit Verification	Transmit check char/digit	Transmit start & stop bits	Other
Bookland EAN	Yes				
CodaBar	Yes	Yes	Yes	Yes	CLSI format 3 to 48, data length
Code 11	Yes		Yes		2 check digits 1 to 48, data length
Code 128	Yes				1 to 64, data length
Code 32 (Pharmacy Code)	Yes				Transmit leading digit Transmit trailing digit
Code 39	Yes	Yes	Yes	Yes	Full ASCII Function Code 0 to 48, data length Double labels decoding Double labels separator
Code 93	Yes				1 to 48, data length
Delta Code	Yes	Yes	Yes		

Barcode Symbology	Enable/Disable	Check Char/ Digit Verification	Transmit check char/digit	Transmit start & stop bits	Other
EAN 128	Yes				Transmit code ID Fields separator
EAN 13	Yes		Yes		Transmit leading char/ digit
EAN 8	Yes		Yes		Transmit leading digit
Interleaved 2 of 5	Yes	Yes	Yes		Not Suppress start or stop digit Fixed length 10 to 64, data length
Label Code IV & V	Yes		Yes		
MSI/Plessey	Yes		Yes		Check digital double module 10 1 to 16, data length
Standard 2 of 5/Toshiba (China Postal Code) Group	Yes	Yes	Yes		Fixed length 4 to 48, data length
Telpen	Yes				Standard character set
UPC A	Yes		Yes		Transmit leading char/ digit
UPC E	Yes		Yes		Transmit leading char/ digit Zero Expansion NSC
UPC/EAN group					Supplement 2 Supplement 5 Insert space before supplement Must have supplement Add-on code try level

Chapter 5 Customizing PA500

This chapter describes the procedures on how to adjust the settings of your device.

Adjusting Settings

You can adjust the settings of your device to suit the way you work. Adjusting certain settings, such as backlight, auto power off timer, system volume, and processor speed.

To access Settings, tap Start > Settings.



Checking Main and Backup Battery Status

View power level for both the main and backup battery. To minimize power consumption, you can define settings for the auto-off function and the processor's operation speed.

To check the main and backup battery status:

- 1 Tap Start > Settings.
- 2 On the System tab, tap Power.



- 3 Do either of the following:
 - If the Plug  or Battery  icon appears on your device, double-tap the icon to bring the Power settings screen.
 - Tap Start > Settings > System tab > Power.
- 4 The battery tab will show the status of the main and backup batteries. There are four kinds of status icons, Good , Low , and Very Low  or , that may appear on the top of the Today screen to indicate main battery or backup battery status. For more information on the battery status icons, see page 23.



NOTE: It is necessary to charge the main battery when the Low  is displayed. To prevent data loss, replace or recharge the device when the Very Low  or  status icons are displayed. If both icons are still displayed after charging, pls. contact Unitech Technical Support.

How to Save Battery Life

You can save your device's battery life by doing either of the following:

- Change the automatic power settings
- Minimize use of backlight

Changing the Automatic Power Settings

The PA500 will enter idle mode when there is no task, or all tasks are waiting for input. In default setting, the PA500 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 PA500 to the same point at the time of automatic shutdown.

To change the automatic power settings:

- 1 Tap Start > Settings.
- 2 On the System tab, tap Power.



- 3 Tap the Advanced tab, then tap the “On battery power turn off device if not used for” check box and change the amount of time before the unit turns off the backlight while running in battery power mode.



This function can also be activated when the PA500 is plugged into the power adapter or placed in its docking station. On the Advanced tab, tap the “On external power turn off device if not used for” check box and change the amount of time before the unit turns off the backlight while running in external power mode.

Adjusting Backlight Setting

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 the backlight settings:

- 1 Tap Start > Settings.

- 2 On the System tab, tap Backlight.



- 3 On the Battery Power tab, do either of the following:
- Tap the “Turn off the backlight if device is not used for” check box and change the amount of time before the unit turns off the backlight while running in battery power mode.
 - Tap “Turn on backlight when button is pressed or the screen is tapped” check box.



- 4 On the External Power tab, do either of the following:
- Tap the “Turn off backlight if device is not used” check box and change the amount of time before the unit turns off the backlight while running in external power mode.

- Tap the “Turn on backlight when a button is pressed or the screen is tapped” check box.



Resetting the Device

There are three kinds of reset that you can perform on your device when the device's operating system stops responding or the system becomes corrupted. Depending on the situation, a warm boot, clean boot, or cold boot can be performed.

Warm Boot

You may have to perform a warm boot if the device freezes (i.e., device no longer responds to the buttons on the screen).

To perform a warm boot:

A warm boot or soft reset allows your device to get a fresh start, similar to rebooting a computer. This will restart your device and adjust memory allocation. All records and entries are retained after a warm boot. Unsaved data in open programs may in some cases be lost.

- 1 Remove the stylus from its holder.
- 2 Lightly press the tip of the stylus to the reset button located on the rear of the device.



Clean Boot

A clean boot allows your device to load the main operating system and perform diagnostic tests to determine the boot process problems.

To perform a clean boot:

- 1 Hold down the right and left scanner trigger buttons.
- 2 While holding down the scanner trigger buttons, gently press the tip of the stylus to the reset button located on the rear of the device.

Cold Boot

A cold boot will cut off power to your device. This will erase all records and entries, delete all programs you have added, and restore the device default factory settings. Never perform a cold boot unless a warm or clean boot does not correct your problem. When you perform your next ActiveSync operation, you can restore any data that you previously synchronized to your computer or you can restore data that you backed up to a storage card.



.....

NOTE: When you perform a cold boot, the date and time settings are not retained. Formats, preferences, and other settings are restored to their default factory settings.

To perform a cold boot:

- 1 Hold down the power button.
- 2 While holding down the power button, gently press the tip of the stylus to the reset button located on the rear of the device.

Viewing Flash ROM Files

Flash ROM (read-only memory) is a rewritable storage for programs and data files. The benefit of this feature is that files and programs saved in Flash ROM are unaffected by the PA500 power status.

To access the Flash Memory files:

- 1 Connect the device to your computer. See page 30.
- 2 On your computer, click My Computer > Mobile Device > Flash Storage.

To transfer files to Device's Flash Memory:

- 1 Connect the device to your computer. See page 30.
- 2 On your computer, click My Computer > Mobile Device > Flash Storage.
- 3 Select the file that you want to save.
- 4 Click File > Save To and select Flash Storage.

Adding Programs

Adding Programs to Your Device

Programs bundled with your device at the factory are stored in Flash ROM. You cannot remove these programs, and you'll never accidentally lose Flash ROM contents. Software programs and data files added to your PA500 after factory installation can be stored in RAM (random access memory).

To add programs using ActiveSync:

Before installing a program on your device, you must first install the appropriate software to your device on your computer.

- 1 Determine your device and processor type so that you know which version of the software to install.
 - (1) Tap Start > Settings.
 - (2) On the System tab, tap About.
 - (3) On the Version tab, make a note of the processor information.
- 2 Download the program to your computer (or insert the CD or disk that contains the program into your computer).

You may see a single *.xip, *.exe or *.zip file, a Setup.exe file, or several versions of files for different device types and processors. Be sure to select the program designed for Pocket PC and your device's processor type.



.....

NOTE: Read any installation instructions. Read Me files or documentation that come with the program. Many programs provide special installation instructions.

- 3 Connect your device to your computer.
- 4 Double-click the *.exe file.
 - If the file is an installer, the installation wizard will begin. Follow the directions on the screen. Once the software has been installed on your computer, the installer will automatically transfer the software to your device.

- If the file is not an installer, you will see an error message stating the program is valid but is designed for a different type of computer. You will need to move this file to your device. If you cannot find any installation instructions for the program in the Read Me file or documentation, use ActiveSync Explore button to copy the program file to the Program Files folder on your device. For more information on copying files using ActiveSync, see page 44.
- 5 Once installation is complete, tap Start > Programs, then the program icon to launch it.
If you are installing a *.cab file on your device, open ActiveSync on your desktop, then click the Explore button. The application will install on your device.

To add a program from the Internet:

- 1 Determine your device and processor type so that you know which version of the software to install. Refer to previous section for instructions.
- 2 Download the program to your device straight from the Internet using Internet Explorer Mobile.



.....
NOTE: Read any installation instructions. Read Me files or documentation that come with the program. Many programs provide special installation instructions.

- 3 Tap the file, such as *.xip or *.exe file. The installation wizard will begin.
- 4 Follow the onscreen instructions.

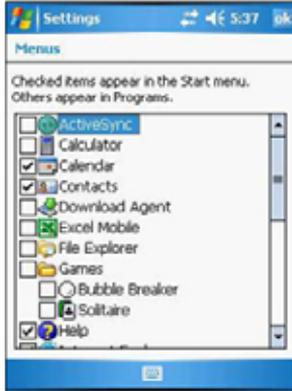
Adding a Program to the Start Menu

You can choose what program icons should appear on the menu based on which ones you use most often.

To add a program to the Start menu program using Settings:

- 1 Tap Start > Settings.

- 2 On the Personal tab, tap Menus.



- 3 Select the check box for the programs you wish to add.

If you do not see the program you want, you can either use File Explorer on your device to move the program to the Start Menu folder, or use ActiveSync on your computer to create a shortcut to the program and place the shortcut in the Start Menu folder.

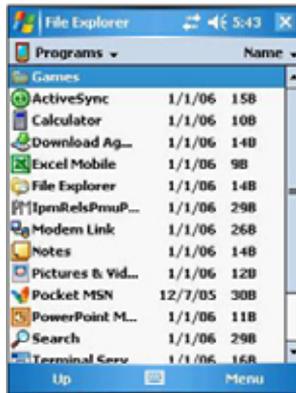
- 4 Tap OK.

To add a program to the Start menu program using File Explorer on your device:

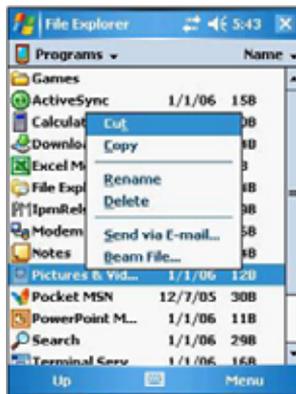
- 1 Tap Start > Programs > File Explorer.
- 2 Tap the My Device icon (tap the folder list, labeled My Documents by default, and then My Device to see a list of all folders on your device).



- 3 Open the path: Windows | Start Menu | Programs.

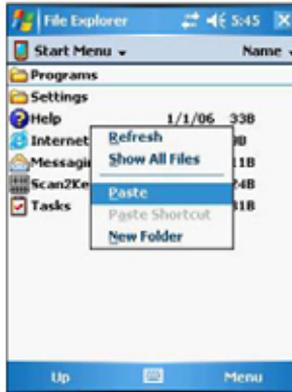


- 4 Tap and hold the program you want to add to the menu, then tap Cut on the pop-up menu.

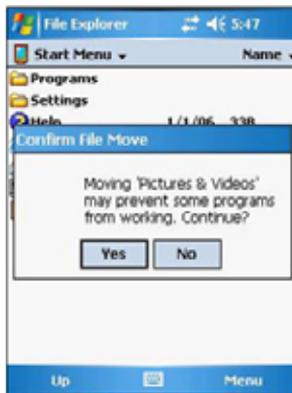


- 5 Open the path: Windows | Start Menu.

- 6 Tap and hold a blank area of the screen, then tap Paste on the pop-up menu.



- 7 A Confirm File Move dialog box appears, tap Yes.



The program will now appear on the Start menu.

To add a Start menu program using ActiveSync on your computer:

- 1 In the ActiveSync on your computer, click Explore to explore your device's files and locate the program.
- 2 Right-click the program, and then click Create Shortcut.
- 3 Open the path: Mobile Devices | Windows | Start Menu.
- 4 Move the shortcut to the Start Menu folder. The shortcut now appears on the Start menu.

For more information on using ActiveSync, see ActiveSync Help on

your computer.

Removing Programs

- 1 Tap Start > Settings.
- 2 On the System tab, tap Remove Programs.
- 3 Tap the program you wish to remove.
- 4 Tap the Remove button.

If the program does not appear in the list of installed programs, use File Explorer on your device to locate the program:

- 1 Tap and hold the program.
- 2 Tap Delete on the pop-up menu.

Chapter 6 Regulatory and Safety Notices

This chapter lists the specifications and regulatory and safety notices of PA500.

System Specifications

CPU/Memory

CPU	Intel PXA270 processor with speed of up to 520 MHz
Flash ROM	64 MB Built-in (Flash Memory Manager included)
SDRAM	64 MB

Input/Output

Input Devices	<ul style="list-style-type: none"> • Touch screen • Stylus • Control buttons • Full alphanumeric software keyboard • Mag stripe reader • Barcode scanner
Control and Quick launch hot keys	<ul style="list-style-type: none"> • Navigation key • Software keyboard button • Email button • Today button • Calendar button • Tasks button • Notes button
Audio	<ul style="list-style-type: none"> • Built-in speaker • 3.5 mm stereo earphone jack • Microphone
Display	<ul style="list-style-type: none"> • 3.5" QVGA LCD touch-sensitive screen and Electroluminescent backlight • 320 x 240 resolution
LED Indicator	Dual colors (green/red) for barcode read indication

Input/Output

- | | |
|-----------------------|--|
| Scan Engine | <ul style="list-style-type: none"> • Light Source: Visible Laser Diode(VLD) 650 nm. • Min. print contrast: 25% absolute dark/light reflectance at 650 nm • Power Consumption: 65 mA typical@5 V |
| Connectivity | <ul style="list-style-type: none"> • USB port • SDIO/MMC slot |
| Wireless connectivity | <ul style="list-style-type: none"> • Bluetooth <ul style="list-style-type: none"> • Version: 1.1 and 1.2 with class 2 specification • Peak output power: 2 ±2 dBm • Frequency band: 2400-2483.5 MHz • Operating channels: 79 Channels • Modulation Type: GFSK • WLAN (802.11b) <ul style="list-style-type: none"> • 802.11b low power (3.96 mW deep sleep mode) • Peak output power: 18 ±2 dBm • Frequency band: 2400-2483.5 MHz • Operating channels: 11 Channels • Modulation Type: <ul style="list-style-type: none"> - CCK (1Mbps) - DBPSK (2Mbps) - DQPSK (5.5/11Mbps) • WLAN (802.11g) <ul style="list-style-type: none"> • 802.11g low power (3.96 mW deep sleep mode) • Peak output power: 15 ±2 dBm • Frequency band: 2400-2483.5 MHz • Operating channels: 11 Channels • Modulation Type: OFDM (6~54Mbps) • Serial infrared port |

Power

Main battery	Standard battery: 3.7 V, 2200 mAh
Battery life	6 hours
Battery charge	<ul style="list-style-type: none">• 3.5 hours with external AC adapter• 3.5 hours with docking station
Backup battery	One hour data retaining time when main battery is removed
Power management	<ul style="list-style-type: none">• Provide all voltage outputs required in this terminal• Retain memory content more than 72 hours after automatic low battery shutdown• Provide 6 hours operating time with a standard battery. The activities in operating period are:<ol style="list-style-type: none">(1) Scan one barcode.(2) Send this barcode data to the host via wireless LAN.(3) Repeat items 1 and 2 every 5 seconds.• Provide 3-level battery status to show main battery capacity• Provide 3-level battery status to show back-up battery capacity• 3.5 hours charging time• 16 hours backup battery charging time

Barcode/Symbology

Barcode Scanner	Symbol SE950	
Symbology	<ul style="list-style-type: none"> • Bookland EAN • Codabar • Code 11 • Code 128 • Code 32 (Pharmacy Code) • Code 39 • Code 93 • Delta Code • EAN 128 • EAN 13 	<ul style="list-style-type: none"> • EAN 8 • Interleaved 2 of 5 • Label Code IV & V • MSI/Plessey • Standard 2 of 5/Toshiba (China Postal Code) group • Telpen • UPC A • UPC E • UPC/EAN group

OS and Software Programming Tools

OS	Microsoft Windows Mobile 5.0	
Language Support	<ul style="list-style-type: none"> • International English • Japanese 	<ul style="list-style-type: none"> • Simplified Chinese • Traditional Chinese

Mechanical and Environmental

Dimensions	<ul style="list-style-type: none"> • Length: 126 mm • Width: 76 mm • Depth: 23 mm
Weight	220 g
Temperature	<ul style="list-style-type: none"> • Operating: 0° to 50°C • Non-operating: -20° to 60°C
Humidity	Operating/Non-operating: 5% to 95% RH
Vibration	Operating/Non-operating: 2g, 10 - 500 Hz
Shock	<ul style="list-style-type: none"> • Operating: 10 g • Non-operating: 15 g
Drop	120 cm, without major damage

Regulatory Compliance Statements

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 PA500 series 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 considered to be hazardous. The PA500 series 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.

The laser safety warning label required by the DHHS/IEC for the PA500 series's optional laser scanner module is located on the memory compartment cover, on the back of the unit.

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.

Index

A

- accessories 2
- accessory program
 - Scan2Key 56
 - Scanner Settings 57
- adding programs
 - from Internet 71
 - to Start menu 71
 - using ActiveSync 70

B

- battery pack
 - installing 9
- Bluetooth 47
 - activate 47
 - create partnership 47
 - receive items 49
 - send items 49

C

- Canadian Compliance Statement 81
- charge 9
- charge device
 - docking station 10
 - USB charging cable 10
- command
 - pop-up menus 24
- command interface
 - bar 24
 - navigation bar 24
 - pop-up menus 25
 - status icons 23
 - today screen 20
- connectivity features
 - Bluetooth 47, 49
 - connect to email server 52
 - connect to network 51
 - infrared 45, 46
 - VPN 51
 - WiFi 50
- customize features
 - remove program 75
- customizing PA500 61
 - add programs 70
 - adjusting settings 61
 - check backup battery status 62

- check main battery status 62
- reset device 67
- save battery life 63
- view Flash ROM 69

D

- device
 - charge 9

E

- European Conformity Statement 81
- exchange files
 - using ActiveSync 44

F

- FCC statement 81
- features 3
 - audio 3
 - barcode scanner 3
 - battery life 3
 - display 3
 - powerful system 3
 - user-friendly interface 3
 - wireless connectivity 3
- first steps 9

G

- getting connected 29
 - device-PC connection 29

H

- hardware
 - laser scanner 15
 - SDIO/MMC slot 15
 - stylus 15

I

- information
 - sharing 45
 - synchronizing 42
- infrared
 - activate 45
 - receive items 46
 - send items 45
- installing
 - battery pack 9
 - Microsoft ActiveSync 29
- interface
 - command 15
 - hardware 15

Internet 53
 connect 53
 introduction 1

L

laser information 81
 laser scanner 17
 LED status 12

M

manage programs 55
 accessing 55
 accessory programs 56
 opening a program 55
 switching between programs 55
 Microsoft ActiveSync
 installing 29
 system requirements 29

N

notice ii
 battery charge ii
 storage and safety ii

O

options
 Bluetooth 32
 infrared 32
 USB 32
 WiFi 32

R

regulatory compliance statements 81
 Canadian Compliance 81
 European Conformity 81
 FCC 81
 laser information 81
 regulatory notice 77
 remove program 75
 reset device
 clean boot 68
 cold boot 68
 warm boot 67

S

safety notice 77
 save battery life
 adjust backlight setting 64
 change power settings 63

Scan2Key 56
 Scanner Settings 57
 SDIO/MMC slot 16
 sharing information
 Bluetooth 47
 infrared 45
 options 45
 VPN 51
 WiFi 50
 software keyboard 19
 specifications
 barcode symbology 80
 CPU 77
 input/output 77
 mechanical and environmental
 80
 memory 77
 OS and tools 80
 power 79
 Start menu
 adding program 71
 start up 12
 stylus 15
 synchronization 32
 options 32
 synchronizing
 Calendar 42
 Contacts 43
 Inbox 42
 information 42
 Tasks 43

T

tour 4
 bottom view 8
 front view 4
 left view 7
 rear view 6
 right view 7
 top view 8

U

using
 laser scanner 17
 SDIO/MMC slot 16
 software keyboard 19
 stylus 15

V

VPN
set up 51

W

WiFi
set up 50

