USER'S MANUAL

PHL-7100
PHL-7200

OPTICON

Ruggedized Portable Data Terminal.

CAUTION: This information is subject to change without prior notice.

Document History

Model Number:	PHL 7100, PHL 7200		Date:	2006-11-20

Limited Warranty and Disclaimers

PLEASE READ THIS MANUAL CAREFULLY BEFORE INSTALLING OR USING THE PRODUCT.

Serial Number

A serial number appears on all Opticon products. This official registration number is directly related to the device purchased. Do not remove the serial number from your Opticon device. Removing the serial number voids the warranty.

Warranty

Unless otherwise agreed in a written contract, all Opticon products are warranted against defects in materials and workmanship for two years after purchase. Opticon will repair or, at its option, replace products that are defective in materials or workmanship with proper use during the warranty period. Opticon is not liable for damages caused by modifications made by a customer. In such cases, standard repair charges will apply. If a product is returned under warranty and no defect is found, standard repair charges will apply. Opticon assumes no liability for any direct, indirect, consequential or incidental damages arising out of use or inability to use both the hardware and software, even if Opticon has been informed about the possibility of such damages.

Packaging

The packing materials are recyclable. We recommend that you save all packing material to use should you need to transport your scanner or send it for service. Damage caused by improper packaging during shipment is not covered by the warranty.

Trademarks

Trademarks used are the property of their respective owners.

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Chapter 1. Introduction

Congratulations on purchasing the Opticon PHL-7000 series Portable Data Terminal (PDT), a Microsoft Windows®CE .Net rugged PDT. Its special combination of features makes it perfect for using in a wide range of applications. These features as:

- Intel® XScale^{TM} PXA255 400MHz 32 bits RISC processor
- Windows® CE .NET 4.2 Operating System
- 128 MB SDRAM & 64 MB FlashROM
- User accessible SD/CF slot
- 240 x 320, 3.5" Color TFT display with touch panel
- Numeric keypad or alphanumeric keypad with LED backlight
- 802.11b Wireless LAN support (optional)
- Bluetooth support (optional)
- GSM/GPRS support (optional)
- Integrated 1D or 2D bar code reader

1.1 About this Manual

The following chapters contained in this manual are:

Chapter 1:   Introduction, General information about the PDT.

Chapter 2:   Getting started,   Describe the basic use of the PDT.

Chapter 3:   Setting, Provide basic instructions for customizing the PDT.

Chapter 4:   Communication,   Describe how to use all kinds of communication of the PDT.

Chapter 5:   Software Application, Describe the installed applications on the PDT.

For configuration of the bar code reader, refer to the Opticon Universal Menu Book.
The Universal Menubook can be downloaded from the opticon website

1.2 User and Product Safety

- Do not stare into the laser or LED beam directly or shine it into eyes.

- Never use strong pressure onto the screen or subject it to severe impact, as the LCD panel could become cracked and possibility cause personal injury. If the LCD panel is broken, never touch the liquid inside because the liquid irritates the skin.

- Although the PDT has passed the test of IP54 standard for water and dust resistance, avoid prolonged exposure to rain or other concentrated moisture. Such conditions exceeds the IP54 standard, and could result in water or other contaminants entering into the PDT.

- Use only the original approved AC Adapter with the PDT. Use of an unapproved AC Adapter could result in electrical problems, or even cause a fire or electrical shock to the user.

- Do not disassemble the PDT. Servicing should be done by Opticon only. If the PDT or accessories gets damaged due to wrong handling or unauthorized repair, warranty is void. In case the warranty seals are broken, warranty is void too.

- Make regularly back-ups of all important data.

- Under no circumstance will Opticon be liable for any direct, indirect, consequential or incidential damages aring out of the use or inability to use both the hardware and software and/or any data loss, even if Opticon has been informed about the possibility of such damages.

1.3 Battery Safety

Lithium-ion battery packs might get hot, explode, ignite and/or cause serious injury if exploded by abusive using. Please follow the safety warnings listed as below:

- Do not throw the battery pack in fire. Do not expose the battery to high temperatures.

- Do not connect the positive battery pack with negative battery pack to each other with any metal object (like wire).

- Do not carry or store battery pack together with metal objects.

- Do not pierce the battery pack with nails or drills, strike the battery pack with a hammer, step on the battery pack or otherwise expose it to strong impacts, shocks or excessive force.

- Do not solder onto the battery pack.

- Do not expose battery pack to liquid or allow the battery contacts to get wet.

- Do not disassemble or modify the battery pack. The battery pack contains safety and protection measures, which, if damaged, may cause the battery pack to generate heat, explode or ignite.

- Do not discharge the batteries outside the PHL-7000 series PDT. Do not use the battery in another device then the PDT or IRU-7000 series cradles. Otherwise, the battery pack can be damaged, or its life expectancy reduced. If the device causes any abnormal current to flow, it may cause the battery pack to become hot, explode or ignite and cause serious injury.

- In the event the battery pack leaks and the fluid gets into one's eye, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause damage to the eye.

1.4 FCC 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 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 distance 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.

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

LED AND LASER SAFETY INFORMATION
- Class 1 LED/Laser Product
- Do not stare at the LED/Laser or shine into eyes
- Do not allow young children to use the product without adult supervision
- Do not replace/repair the LED/Laser, these are not user replaceable
- Do not shine the LED/Laser on a shiny reflective surface

1.5 Recycling & disposal instructions.

Do not throw this product in the home waste bin. For proper end-of-life treatment consult the Environmental care section of the opticon website

1.6 Regulatory information.

CE For CE, FCC, RoHS and other Document of Conformities, consult the Regulatory section of the opticon website

1.7 Product Labeling

The PHL-7100 series PDT has several labels as showed in Figure 1-1 and 1-2.
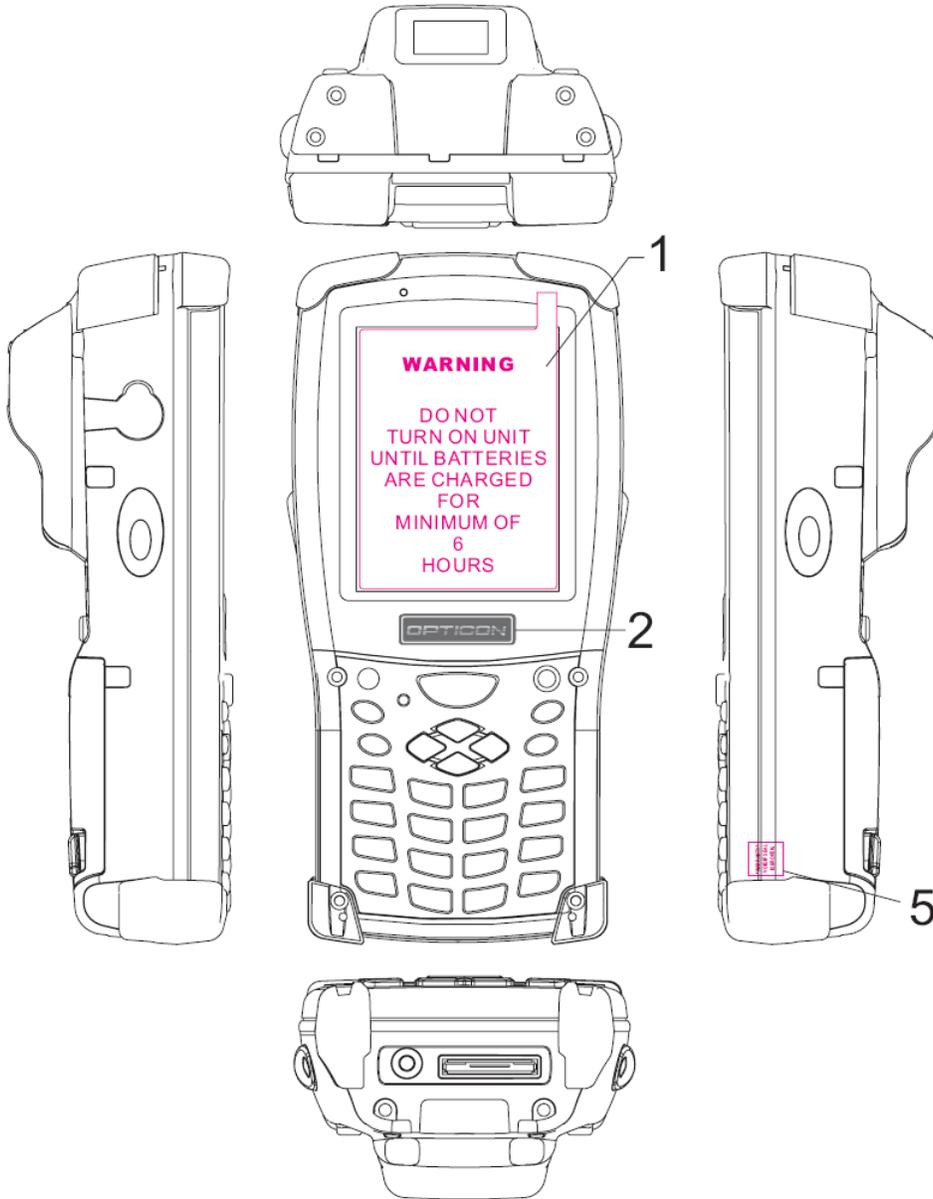
Figure 1-1 **PHL-7100 Labeling (Front and side views)**

Label nr.	Description
1	LCD panel protection film
2	Opticon logo
5	Warranty seal PDT

Table 1-1 **Front labeling**
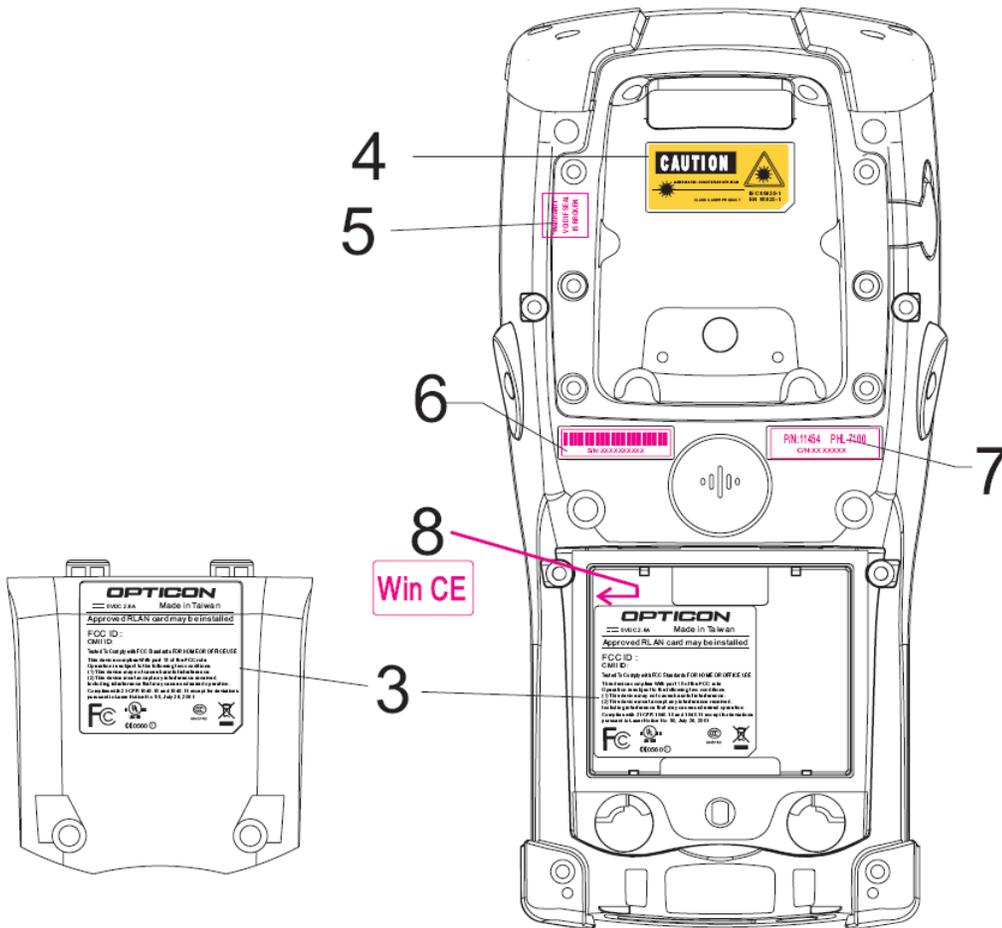
Figure 1-2 **PHL-7100 Labeling (Rear view)**

Label nr.	Description
3	System and regulatory label
4	LED/Laser radiation warning label
5	Warranty label bar code reader
6	Serial number
7	Article number and model number
8	Windows CE .NET label

Table 1-2 **Rear labeling**

The PHL-7200 series PDT has several labels as showed in Figure 1-3 and 1-4.
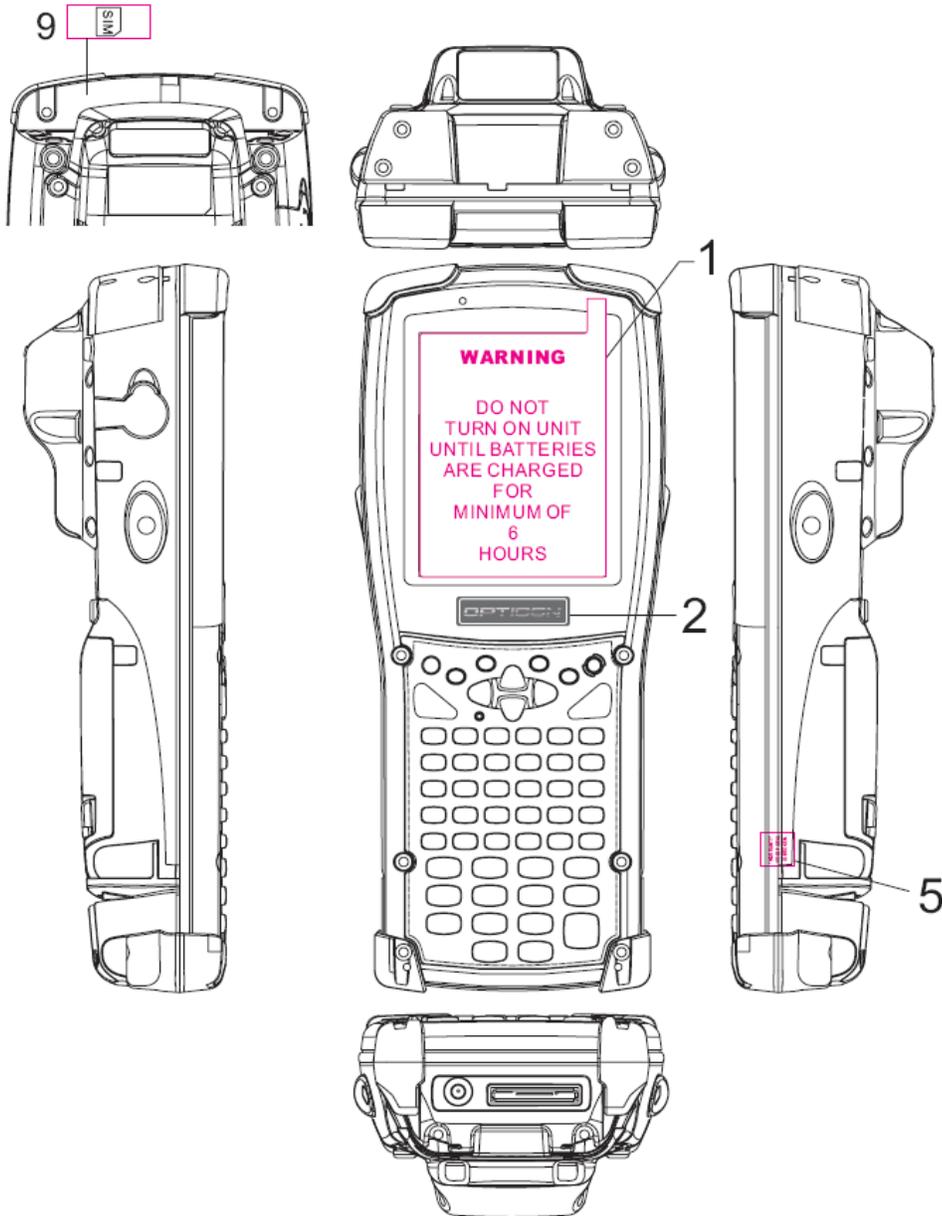
Figure 1-3 **PHL-7200 Labeling (Front and side views)**

Label nr.	Description
1	LCD panel protection film
2	Opticon logo
5	Warranty seal PDT
9	SIM card insertion (GSM/GPRS model only)

Table 1-3 **Front labeling**
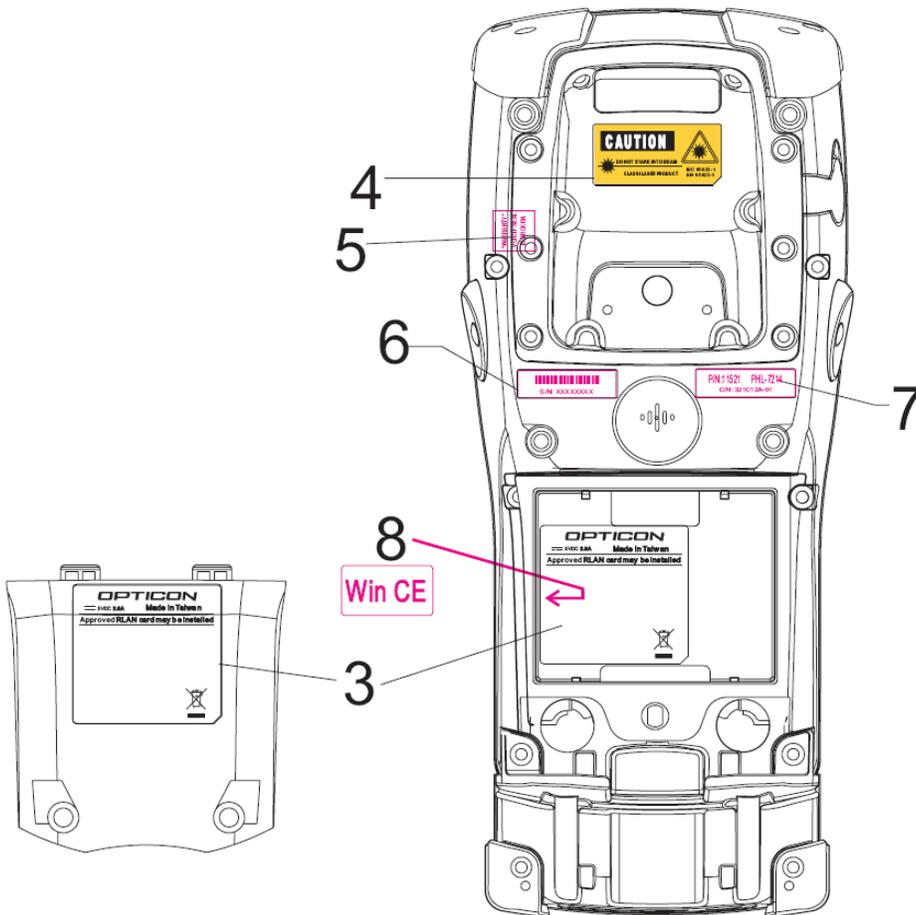
Figure 1-4 **PHL-7200 Labeling (Rear view)**

Label nr.	Description
3	System and regulatory label
4	LED/Laser radiation warning label
5	Warranty label bar code reader
6	Serial number
7	Article number and model number
8	Windows CE .NET label

Table 1-4 **Rear labeling**

1.8 System Specifications

The PHL-7000 series detailed specifications as follows. Unless otherwise noted, all the specifications are subject to change without prior notification.

PHL-7100, PHL-7200	
Processor	- 400MHz Intel PXA255 32 bits RISC CPU
Memory	- 64 MB Flash ROM - 128 MB SDRAM
Display	- 240 x 320 3.5" TFT 256K Color LCD with LED backlight
Audio	- One mono speaker - 2.5mm Stereo earphone jack with microphone input
Radio Support	- **Wireless LAN:** 802.11b (optional) - **Bluetooth:** Ver 1.2, class II (optional) - **GSM/GPRS:** (optional)
Communication Ports	- **USB:** Support USB v1.1 both host and client. (PDT and Cradle) - **Serial**: RS232 via optional cable or Cradle.
Scan Engine	- **Default:** 1D laser bar code reader - **Optional:** 2D CMOS SXGA (1280*1024) bar code reader
Expansion Slot	- One SD Card slot (SD memory only, no SDIO support) - One Compact Flash type-II slot (Availability depends of PHL-7000 model)
LED	- One triple-color LED for charging indication and alarm notification - One dual-color LED for bar code reader indicator

PHL-7100, PHL-7200		

Power System		- Standard Li-Ion battery pack, 3.7V, 3000mAh
		- Advanced smart battery
		- Built-in battery charger
		- 2.4V/15mAh rechargeable backup battery
		- Battery cover sensor switch
		- Power adapter:
		    100~240VAC, 50/60Hz input ;
		    5VDC, 2.6A output

Keypad	PHL-7100	- Power button - 4-way navigation button - 4 application keys - 3 bar code reader trigger keys - Software reset input button - 1 Pistol grip trigger button - 16 alpha-numeric keyboard
	PHL-7100	- Power button - 4-way navigation button - 4 application keys - 4 bar code reader trigger keys - Software reset input button - 1 Pistol grip trigger button - 44 alpha-numeric keyboard

Dimensions and Weight	PHL-7100	- Dimensions:
		  L : 192.5mm
		  W: 91.3mm / 78mm
		  H: 60.6mm / 42.2mm
		- Weight:
		   560g with standard battery pack
		   500g without battery pack

PHL-7100, PHL-7200		

	PHL-7100	- Dimensions:
		
		  L : 200 mm
		
		  W: 91.3mm / 78mm
		
		  H: 60.6mm / 42.2mm
		- Weight:
		
		  660g with standard battery pack
		
		  600g without battery pack

Color		- Black

Optional Peripherals and Accessories		- RS232 serial cable for PDT
		- USB host cable for PDT
		- High-capacity Li-Ion battery pack (3.7V, 4000mAh)
		- Compact Flash RFID card cover
		- IRU-7000 single slot cradle + battery charger
		- IRU-7004 4-slot battery charger
		- Power adapter for IRU-7000 and IRU-7004
		
		  100~240VAC, 50/60Hz input ;
		
		  5VDC, 6.5A output
		- Car adapter
		- Holster
		- Display Protect film

Software		- Microsoft Windows CE.NET 4.2 Professional

Table 1-5 **System Specification**

1.9 Environment and durability

Operating Temperature	$14^oF \sim 122^oF$ ($-10^oC \sim 50^oC$)
Storage Temperature	$-4^oF \sim 158^oF$ ($-20^oC \sim 70^oC$)
Humidity	5% ~ 80% (non-condensing)
Drop	5ft (1.5m) Drop on concrete
Water & Dust proof	IP54 certified and IP64 compliant
Vibration	MIL STD 810F

Table 1-6 **Environmental and durability**

1.10 Warranty and after service

Should this PDT require service, please contact your local reseller. In case of technical questions, send an email to **support@opticon.com** and provide information about the product name, the serial number (see chapter 1.7 "Product labeling" and/or chapter 3.2.4.1 "Information") and provide a detailed problem description.

Chapter 2. Getting started

2.1 Check the package

Open the package and check if no parts are missing or damaged. See next page:

2.1.1 PHL-7100

1. PHL-7100 PDT

2. Stylus

3. USB client cable for PDT

4. Earphone/ microphone set

5. Standard AC adapter 5VDC/2.6A

6. AC power cord

7. Standard battery pack (3.7V, 3000 mAh)

8. CF support guide

9. Quick Guide (not shown in the picture)

2.1.2 PHL-7200

Figure 2-2 **Package contents**

1. PHL-7200 PDT
2. Stylus
3. USB client cable for PDT
4. Earphone/ microphone set
5. Standard AC adapter 5VDC/2.6A
6. AC power cord
7. Standard battery pack (3.7V, 3000 mAh)
8. CF support guide
9. Quick Guide (not shown in the picture)

2.2 General View of the PDT

2.2.1 PHL-7100 front view

Figure 2-3 **PHL-7100 front view**

2.2.2 PHL-7100 rear view

Figure 2-4 **PHL-7100 rear view**

1	Bar code reader LED indicator	"Red" color	Bar code reader on
		"Green" color	Successful reading
2	Charge LED indicator	"Red" color	Charging battery
		"Green" color	Battery fully charged
3	LCM / touch panel	User input on touch panel by stylus	
4	Left scan key Right scan key Scan key	Start scanning bar codes by pressing any of these three scan keys	
5	Power key	Put the PDT into suspend mode Awake the PDT from suspend mode	
6	F1 ~ F4 key	Application keys, hot keys of application program defined by end user.	
7	Navigation key	Navigation keys for left, right, up and down directions	
8	Alpha-Numeric keys	Numeric keys, change to alpha keys	
9	Alpha key	Toggle alpha-mode for alpha-numeric keys	
10	Fn key	This key is used in combination with other keys to type special characters and perform system functions.	
11	Enter key	This key confirms data entry	
12	Earphone Jack Connector	Connector input for earphone set	
13	USB / RS232 Synchronization port	A connector to support USB host, client and RS232.	
14	Scan window	Bar code reader window	
15	Stylus	Use the stylus for selecting items and entering information.	
16	Battery Cover	Protect battery pack and remain IP54 rating	
17	Battery cover latch	To keep battery cover locked	
18	Hand Strap	This strap can be sealed tighter or looser	
19	Speaker	1.5W speaker for audio output	
20	DC Power Jack	A connector to input power suppy to PDT.	
21	End Cap	Protect CF slot and SD slot from dust and water	

Table 2-1 **Description of PHL-7100 General View**

2.2.3 PHL-7200 front view

Figure 2-5 **PHL-7200 front view**

2.2.4 PHL-7200 rear view

Figure 2-6 **PHL-7200 rear view**

1	Bar code reader LED indicator	"Red" color	Bar code reader on
		"Green" color	Successful reading
2	Charge LED indicator	"Red" color	Charging battery
		"Green" color	Battery fully charged
3	LCM / touch panel	User input on touch panel by stylus	
4	Left side scan key Right side scan key Left upper scan key Right upper scan key	Start scanning bar codes by pressing any of these four scan keys	
5	Power key	Put the PDT into suspend mode Awake the PDT from suspend mode	
6	F1 ~ F4 key	Application keys, hot keys of application program defined by end user.	
7	Navigation key	Navigation keys for left, right, up and down directions	
8	Numeric keys	Numeric keys	
9	Alpha key	Alpha keys	
10	Fn key	This key is used in combination with other keys to type special characters and perform system functions.	
11	Enter key	This key confirms data entry	
12	Earphone Jack Connector	Connector input for earphone set	
13	USB / RS232 Synchronization port	A connector to support USB host, client and RS232.	
14	Scan window	Bar code reader window	
15	Stylus	Use the stylus for selecting items and entering information.	
16	Battery Cover	Protect battery pack and remain IP54 rating	
17	Battery cover latch	To keep battery cover locked	
18	Hand Strap	This strap can be sealed tighter or looser	
19	Speaker	1.5W speaker for audio output	
20	DC Power Jack	A connector to input power suppy to PDT.	
21	End Cap	Protect CF slot and SD slot from dust and water	

Table 2-2 **Description of PHL-7200 General View**

2.3 Charging the Battery Pack

Before using the PDT, install and charge the battery by executing the steps described in this paragraph.

2.3.1 Installing the battery pack

1. On the PDT attached with a hand-strap, detach the hand-strap.

Figure 2-7 **Release the Hand strap from PDT**

2. Turn both battery cover latches downwards and lift the battery cover away from the PDT.

Figure 2-8 **Detach the battery cover from PDT**

3. Insert the battery pack into the battery compartment with the label facing upwards, and ensuring the battery snaps into it's place.
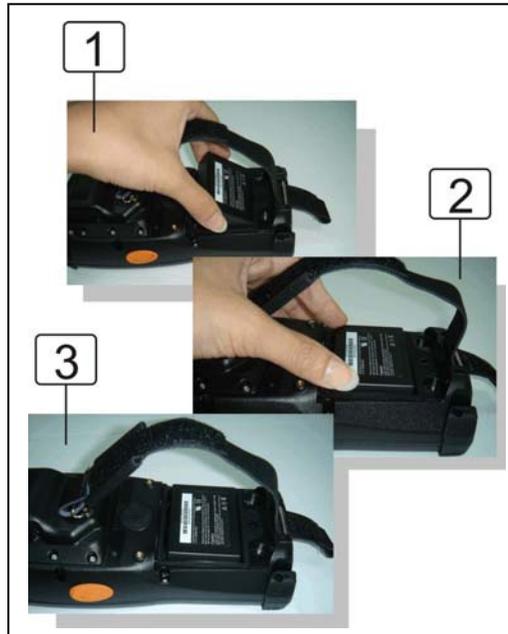
Figure 2-9 **Insert the battery pack**

4. Install the battery cover by inserting the top first, and then press the bottom in firmly. Turn both the battery cover latches upwards to secure the cover to the PDT.

Figure 2-10 **Replace the battery cover**

2.3.2 Charging the battery pack with Power Adapter

1. Connect the power cord to the power adapter.
2. Plug in the connector of the power adapter to the PDT.
3. Connect the power cord to a power source.

Figure 2-11 **Charging with power adapter (PHL-7100 shown)**

4. Charging time: to charge the battery pack for the first time, it needs approximately 6 hours. Subsequent charging time is approximately 4 hours.

- When charging the battery pack, the charge LED indicator on the PDT turns on Red.
- After the battery pack is fully charged, the charge LED indicator turns to Green.

2.3.3 Charging the battery pack with IRU-7000

CAUTION: IRU-7000 power adapter (5VDC/6.5A) is different from PDT power adapter (5VDC/2.6A). Please use the IRU-7000 Cradle power adapter only.

a) Leave the battery pack inside the PDT :
1. Connect the power cord to the power adapter
2. Plug in the connector of the power adapter to the IRU-7000
3. Connect the power cord to a power source
4. Insert the PHL-7100 into the IRU-7000. In case of PHL-7200 insert the support bracket in IRU-7000 first, thereafter insert PHL-7200 in IRU-7000.

Figure 2-12 **Charging with IRU-7000 cradle**

- When charging the battery pack, the charge LED indicator on the PDT turns on Red.
- After the battery pack is fully charged, this LED indicator turns to Green.

b) Place the spare battery pack into the IRU-7000's spare battery charging slot :

1. Connect the power cord to the power adapter
2. Plug in the connector of the power adapter to the IRU-7000
3. Connect the power cord to a power source
4. Insert the battery pack into the IRU-7000 spare battery slot

- When charging the battery pack in the IRU-7000 spare battery slot, the IRU-7000 charging LED indicator turns on Red.
- After the battery pack is fully charged, this LED indicator turns to Green.

CAUTION: Do not remove the battery pack too long from PDT after you have already full-charged the battery pack and backup battery pack and start to use the PDT. Otherwise the data stored inside SDRAM memory will be lost. Please also keep in mind power the PDT off if you want to change the main Battery pack.

2.4 Handling the PDT

2.4.1 Starting the PDT
Press the power key to turn ON/OFF the PDT. If the PDT does not power on, perform a cold boot, see chapter 2.7 "Resetting".

> **CAUTION: When a battery is fully inserted in PDT for the first time, the PDT powers on and boots automatically.**

When the PDT is powered on for the first time, it initializes its system. A splash screen (figure 2-13) appears for a short period of time followed by the WinCE.NET 4.2 window.
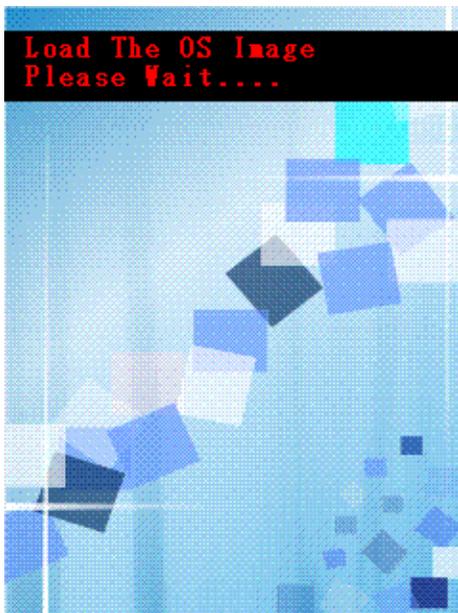
Figure 2-13 **Starting the PDT**

2.4.2 Power on / off

To turn ON the PDT
Press the power key briefly (⏻). If the PDT does not power on, perform a cold reset, see chapter 2.7.

While the PDT initializes its file system, the splash screen displays for about 30 seconds followed by the calibration screen. Every time you perform a cold reset, these screens will appear.

To turn OFF the PDT
Press the power key again. This action does not actually turn off the PDT, it only turns the PDT into suspend mode. All running applications remain as you left them, until you press the power key again to resume operation of the PDT.

2.4.3 Calibration of the touch Screen

On the initial boot-up of the PDT, the stylus calibration screen opens. Use the stylus to press and hold briefly on the center of each target as it moves around the screen.

If necessary, adjust the backlight on the PDT to make the screen readable (see chapter 2.4.4 "Adjusting the brightness").

When you experience that the touch screen function is poor or the operation does not match the exact location it should be, please recalibrate the screen by using the stylus to tap the **Start > Settings > Control Panel > Stylus**, to open the "**Calibration**" to recalibrate again.

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.
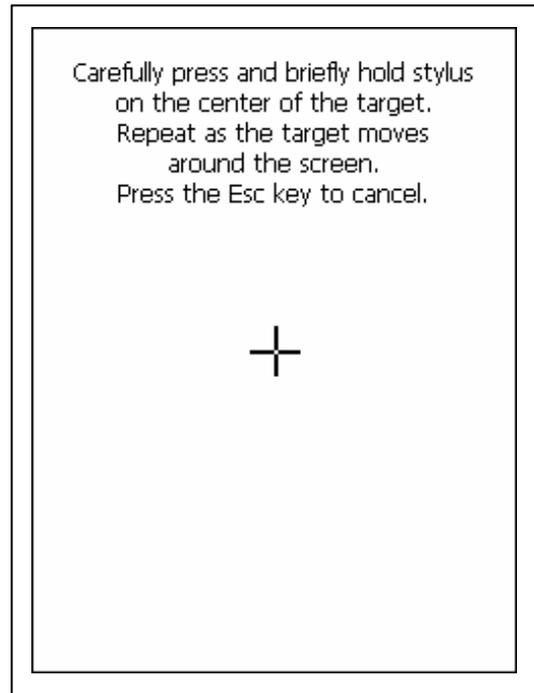
Figure 2-14 **Calibration**

2.4.4 Adjusting the brightness

The factory default for the brightness is in middle level. You can adjust the brightness to meet your environment and comfort as:

1) Increase brightness: Press the key and then press on the right key of Navigation key .

2) Decrease brightness: Press the key and then press on the left key of Navigation key .
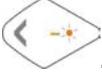
3) The display will dim automatically, if you do not perform any operation for a specific period of time. This will help to save the battery power. You can set up the specific period of time to see chapter 2.7 as reference.

2.4.5 To mute the sound

To mute the sound on PHL 7100, press the [Fn] key first, and then press the [ESC s€] key to turn off and on of the sound.

To mute the sound on PHL 7200, press the [Fn] key first, and then press the [W] or [X] key to move the sound up or down.

2.4.6 Using the stylus

The stylus is located next to hand-strap on the rear of the PDT as illustrated in figure 2-4 PDT rear view. The stylus function is similar as the mouse on a PC. Use the stylus to:

1) Navigate the display, select menu item and open optional applications.

2) Tap the characters on soft keyboard panel.

3) Hold the stylus on the screen and drag across the screen to select multiple items.

CAUTION: Never use a pen, pencil or any other sharp object on the display to avoid   damage of the touch screen.

2.4.7 Using the PHL-7100 keypad

Figure 2-15 **PDT Keypad**

Key	Main Function	Fn + Main Function	Alpha + Main Function
(round button)	User configurable Default : None		
(orange scan key)	Main bar code scan key		
(power)	Power On/Off		
F1	Internet Explorer		
F2	Microsoft WordPad		
F3	Inbox		
F4	File Explorer		
Right	Right	Backlight Increase	
Left	Left	Backlight Decrease	
Down	Down	Page Down	
Up	Up	Page Up	
ESC	ESC	Audio Mute	$ €
BS	Backspace	TAB	Caps
Alpha	Change to letters		
Fn	Function change		
1	1	@	: \
2	2	'	A B C
3	3	+	D E F
4	4	Paste	G H I
5	5	Del	J K L
6	6	—	M N O

Key	Main Function	Fn + Main Function	Alpha + Main Function			
7 PQRS	7	**Copy**	P	Q	R	S
8 TUV	8	**&**	T	U	V	
9 WXYZ	9	**∗**	W	X	Y	Z
0	0	**Space**	〔	〕		
.	. (Point)	**Start Menu**	,	;		
Enter	Enter	／	=	%		

Table 2-3 **Keypad list**

Reset Key	Functionality	Definition
F1 F4	**Warm Reset**	Press "**F1**" and "**F4**" button simultaneously.
Power F1 F4	**Cold Reset**	Press "**Power**", "**F1**" and "**F4**" button simultaneously.

Table 2-4 **Special reset key combinations**

Key	Main Function	Definition
○	**User configurable Default : None**	Configure its function by customer demand.
	Main BarCode Scan Key	Activates the scan function of PDT.
Power	**Power On/Off**	Puts the terminal into and wakes the terminal from suspend mode.
F1	**Internet Explorer**	Application key 1, **User can define F1 function from setting.**
F2	**Microsoft WordPad**	Application key 2, **User can define F2 function from setting.**
F3	**Inbox**	Application key 3, **User can define F3 function from setting.**
F4	**File Explorer**	Application key 4, **User can define F4 function from setting.**

Key	Main Function	Definition
	Right	Move the cursor one character to the right. The cursor will move continuously if button remains is pressed.
	Left	Move the cursor one character to the left. The cursor will move continuously if button remains pressed.
	Down	Move the cursor down one row or line The cursor will move continuously if button remains pressed.
	Up	Move the cursor up one row or line The cursor will move continuously if button remains pressed.
	ESC	This key performs a cancel action
	Backspace	"**Backspace"** key, it moves the cursor back one space each time the key is pressed. It deletes the previous character each time it is pressed if you are typing text. The cursor will move continuously if button remains pressed.
	Change to letters	1. The [Alpha] key enables you to toggle between the **numeric** and **alpha** modes. Numeric mode is when you type numbers with number keys. Alpha mode is when you type letters with the number keys. 2. When you press [Alpha] key, the "Alpha" icon appears at the task bar to indicate alpha mode is enabled. The keypad stays in the alpha mode until you press [Alpha] key again.

Key	Main Function	Definition
Fn	**Function change**	The Fn key is used in combination with other keys to type special characters and perform system functions.
1 : \	1	Number key "1"
2 ABC	2	Number key "2"
3 DEF	3	Number key "3"
4 GHI	4	Number key "4"
5 JKL	5	Number key "5"
6 MNO	6	Number key "6"
7 PQRS	7	Number key "7"
8 TUV	8	Number key "8"
9 WXYZ	9	Number key "9"
0 [ ]	0	Number key "0"
.	.	Dot key
↵ = %	**Enter**	This key confirms data entry

Table 2-5 **Definition of Main Function**

2.4.7.1 Special Function by "Fn" + main Function

The "Fn" key is used in combination with other keys to type special characters and perform system functions.

Key Sequence	Fn + Main Function	Definition
Fn ◇	**Backlight Increase**	Increase the LED backlight brightness of display screen(make lighter) You must press Fn key, then press ◇ key to increase backlight brightness each time.
Fn ◇	**Backlight Decrease**	1. Decrease the LED backlight brightness of display screen (make darker)

Key Sequence	Fn + Main Function	Definition
		2. You must press Fn key, then press ◁ key to decrease backlight brightness each time.
Fn PgDn ∨	**Page Down**	1. Move the cursor down one page. The cursor will move continuously if button remains pressed. 2. You must press Fn key, then press PgDn ∨ key to cursor down one page each time.
Fn ∧ PgUp	**Page Up**	1. Move the cursor up one page. The cursor will move continuously if button remains pressed. 2. You must press Fn key, then press ∧ PgUp key to cursor up one page each time.
Fn ESC	**Audio Mute**	1. Toggle the audio mute/on 2. You must press Fn key, then press ESC key to enable audio mute or turn on audio function each time.
Fn BS Caps	**TAB** (Tabulation)	1. The "TAB" function is to move the cursor to the next tab stop or the next control (on a form) 2. To do this function by pressing Fn key first, and then pressing BS Caps key each time.
Fn 1 :\	**@** (at)	Enter an {**@**, at} by pressing Fn key, then pressing 1 :\ key.
Fn 2 ABC	**'**	Enter a {'} by pressing Fn key, then pressing

Key Sequence	Fn + Main Function	Definition
		2 ABC key.
Fn 3 DEF	+ (Plus Sign)	Enter a plus sign by pressing Fn key, then pressing 3 DEF key
Fn 4 GHI	**Paste**	1. It is to do "Paste" function. 2. To do this function by pressing Fn key first, and then pressing 4 GHI key each time.
Fn 5 JKL	**Del** (Delete)	1. The "Delete" function delete the next character forward each time. 2. To do "Delete" function by pressing Fn key first, and then pressing 5 JKL key each time.
Fn 6 MNO	− **(**Minus Sign)	Enter a minus sign by pressing Fn key, then pressing 6 MNO key.
Fn 7 PQRS	**Copy**	1. Copy action. 2. You must press Fn key, then press 7 PQRS key to do "Copy" action each time.
Fn 8 TUV	& (AND)	Enter an AND sign by pressing Fn key, then pressing 8 TUV key.
Fn 9 WXYZ	* (Asterisk)	Enter an asterisk sign by pressing Fn key first,

Key Sequence	Fn + Main Function	Definition
		and then pressing ⌨9 wxyz key.
Fn 0 [ ]	**Space**	1. The "Space" function is to input a space at the cursor. 2. To do this function by pressing Fn key first, and then pressing 0 [ ] key each time.
Fn · ¨	**Start Menu**	1. It displays the Start menu. 2. To do this function by pressing Fn key first, and then pressing · ¨ key each time.
Fn ⌨= %	╱ **(Backslash)**	Enter a backslash by pressing Fn key first, and then pressing ⌨= % key.

Table 2-6 **Special Function key define**

2.4.7.2 Alpha keys by "Alpha" + main Function

1. The Alpha key enables you to toggle between the numeric and alpha modes. Numeric mode is when you type numbers with number keys. Alpha mode is when you type letters with the number keys.

2. When you press Alpha key, the "Alpha" icon appears at the task bar to indicate Alpha mode is enabled. It means Alpha mode is disabled if the "Alpha" icon is not present at Task bar. The keypad stays in the alpha mode until you press Alpha key again. For an example to type "cap1" word, press Alpha 2 ABC 2 ABC 2 ABC < wait 0.5 seconds > 2 ABC 7 PQRS Alpha 1 : \ .

3. If you want to type a lowercase "c", press **Alpha** **2 ABC** **2 ABC** **2 ABC** (The **2 ABC** key

three times, the **Alpha** key is needed if it's the first alpha character keying in). If a letter that is on the same key as the last letter entered, wait two seconds after you pressed the last key, then you can enter the correct series of keystrokes to create the next letter.

4. While you are in the Alpha mode and you press **BS Caps** key to set the Caps mode, the Caps

mode remains until you press **BS Caps** key again.

5. The "A" icon appears at the task bar during Caps mode.

To enter	Press the Keys	To enter	Press the Keys
$	Alpha ESC $€	€	Alpha ESC $€ ESC $€
Caps	Alpha BS Caps		
:	Alpha 1 :\	\	Alpha 1 :\ 1 :\
a	Alpha 2 ABC	A	Alpha BS Caps 2 ABC
b	Alpha 2 ABC 2 ABC	B	Alpha BS Caps 2 ABC 2 ABC
c	Alpha 2 ABC 2 ABC 2 ABC	C	Alpha BS Caps 2 ABC 2 ABC 2 ABC
d	Alpha 3 DEF	D	Alpha BS Caps 3 DEF
e	Alpha 3 DEF 3 DEF	E	Alpha BS Caps 3 DEF 3 DEF
f	Alpha 3 DEF 3 DEF 3 DEF	F	Alpha BS Caps 3 DEF 3 DEF 3 DEF
g	Alpha 4 GHI	G	Alpha BS Caps 4 GHI
h	Alpha 4 GHI 4 GHI	H	Alpha BS Caps 4 GHI 4 GHI
i	Alpha 4 GHI 4 GHI 4 GHI	I	Alpha BS Caps 4 GHI 4 GHI 4 GHI
j	Alpha 5 JKL	J	Alpha BS Caps 5 JKL
k	Alpha 5 JKL 5 JKL	K	Alpha BS Caps 5 JKL 5 JKL
l	Alpha 5 JKL 5 JKL 5 JKL	L	Alpha BS Caps 5 JKL 5 JKL 5 JKL
m	Alpha 6 MNO	M	Alpha BS Caps 6 MNO
n	Alpha 6 MNO 6 MNO	N	Alpha BS Caps 6 MNO 6 MNO
o	Alpha 6 MNO 6 MNO 6 MNO	O	Alpha 6 MNO 6 MNO 6 MNO
p	Alpha 7 PQRS	P	Alpha BS Caps 7 PQRS
q	Alpha 7 PQRS 7 PQRS	Q	Alpha BS Caps 7 PQRS 7 PQRS

To enter	Press the Keys	To enter	Press the Keys
r	Alpha 7PQRS 7PQRS 7PQRS	R	Alpha BSCaps 7PQRS 7PQRS 7PQRS
s	Alpha 7PQRS 7PQRS 7PQRS 7PQRS	S	Alpha BSCaps 7PQRS 7PQRS 7PQRS 7PQRS
t	Alpha 8TUV	T	Alpha BSCaps 8TUV
u	Alpha 8TUV 8TUV	U	Alpha BSCaps 8TUV 8TUV
v	Alpha 8TUV 8TUV 8TUV	V	Alpha BSCaps 8TUV 8TUV 8TUV
w	Alpha 9WXYZ	W	Alpha BSCaps 9WXYZ
x	Alpha 9WXYZ 9WXYZ	X	Alpha BSCaps 9WXYZ 9WXYZ
y	Alpha 9WXYZ 9WXYZ 9WXYZ	Y	Alpha BSCaps 9WXYZ 9WXYZ 9WXYZ
z	Alpha 9WXYZ 9WXYZ 9WXYZ 9WXYZ	Z	Alpha BSCaps 9WXYZ 9WXYZ 9WXYZ 9WXYZ
[	Alpha 0 [ ]	]	Alpha 0 [ ] 0 [ ]
,	Alpha . :	;	Alpha . : . :
=	Alpha ← = %	%	Alpha ← = % ← = %

Table 2-7 **Alpha + Numeric keys define**

2.4.8 Using the PHL-7200 keypad
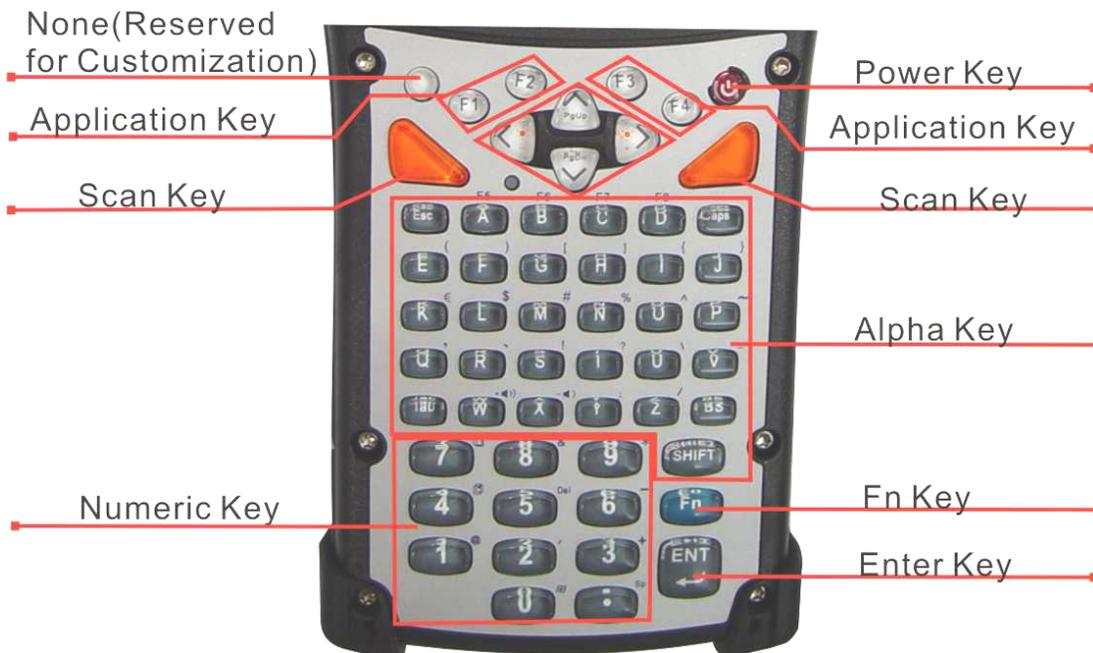
Figure 2-16 **PDT Keypad**

Key	Main Function	Fn + Main Function
	None	
	Main Barcode Scan Key	
	Power On/Off	
F1	**Internet Explorer**	
F2	**Microsoft WordPad**	
F3	**Inbox**	
F4	**File Explorer**	
	Right	**Increase of Brightness**
	Left	**Decrease of Brightness**
	Down	**Page Down**
	Up	**Page Up**
Esc	**Esc**	
Caps	**Caps**	
Tab	**Tab**	
BS	**Backspace**	
A	**A**	**F5**
B	**B**	**F6**
C	**C**	**F7**
D	**D**	**F8**
E	**E**	**(**
F	**F**	**)**

Key	Main Function	Fn + Main Function
G	G	[
H	H	]
I	I	{
J	J	}
K	K	€
L	L	$
M	M	#
N	N	%
O	O	^
P	P	~
Q	Q	,
R	R	`
S	S	!
T	T	?
U	U	\
V	V	=
W	W	+◀))
X	X	-◀)
Y	Y	;
Z	Z	/
1	1	@
2	2	'
3	3	+
4	4	Paste
5	5	Del
6	6	—
7	7	Copy
8	8	&
9	9	*
0	0	Start Menu
·	.	Space
SHIFT	SHIFT	
Fn	Function change	

Key	Main Function	Fn + Main Function
ENT ⏎	Enter	

Table 2-8 **Keypad list**

Assembler Key	Functionality	Definition
F1 F4	**Warm Reset**	Press "**F1**" and "**F4**" button simultaneously.
⏻ F1 F4	**Cold Reset**	Press "**Power**", "**F1**" and "**F4**" button simultaneously.
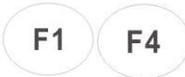
Table 2-9 **Special reset key combinations**

Key	Main Function	Definition
	None	Configure its function by customer demand.
	Main Barcode Scan Key	The [key icons] key activates the scan function of PDT
⏻	**Power On/Off**	The ⏻ key puts the terminal into and wakes the terminal from suspend mode
F1	**Internet Explorer**	Application key 1, **User can define F1 function from setting.**
F2	**Microsoft WordPad**	Application key 2, **User can define F2 function from setting.**
F3	**Inbox**	Application key 3, **User can define F3 function from setting.**
F4	**File Explorer**	Application key 4, **User can define F4 function from setting.**
⁂>	**Right**	Move the cursor one character to the right. The cursor will move continuously if button is pressed continuously.

Key	Main Function	Definition
	Left	Move the cursor one character to the left. The cursor will move continuously if button is pressed continuously.
	Down	Move the cursor down one row or line The cursor will move continuously if button is pressed continuously.
	Up	Move the cursor up one row or line The cursor will move continuously if button is pressed continuously.
	Esc	This key performs a cancel action
	Caps	Conversion of the capital & lower case of the alpha key.
	Tab	The "TAB" function is to move the cursor to the next tab stop or the next control (on a form)
	Backspace	"**Backspace"** key, it moves the cursor back one space each time the key is pressed. It deletes the previous character each time it is pressed if you are typing text. The cursor will move continuously if button is pressed continuously.
	A ~ Z	Use the alpha keys for alphabetic characters.
	1 ~ 0	Numeric value keys.
	.	Point key
	SHIFT	Press and release the SHIFT key to activate the keypad alternate SHIFT functions. The icon appears on the taskbar. Press and release the SHIFT key again to return to the normal keypad functions.

Key	Main Function	Definition
Fn	Function change	The Fn key is used in combination with other keys to type special characters and perform system functions.
ENT ↵	Enter	This key confirms data entry

Table 2-10 **Definition of Main Function**

2.4.8.1 Special Function by "Fn" + main Function

The "Fn" key is used in combination with other keys to type special characters and perform system functions.

Key Sequence	Fn + Main Function	Definition
Fn ☀>	**Increase of Brightness**	Increase the LED backlight brightness of display screen(Lighter) You must press Fn key, then press ☀> key to increase backlight brightness each time.
Fn <☀	**Decrease of Brightness**	3. Decrease the LED backlight brightness of display screen (darker) 4. You must press Fn key, then press <☀ key to decrease backlight brightness each time.

Key Sequence	Fn + Main Function	Definition
Fn PgDn ∨	**Page Down**	3. Move the cursor down one page. The cursor will move continuously if button is pressed continuously. 4. You must press Fn key, then press PgDn ∨ key to cursor down one page each time.
Fn ∧ PgUp	**Page Up**	3. Move the cursor up one page. The cursor will move continuously if button is pressed continuously. 4. You must press Fn key, then press ∧ PgUp key to cursor up one page each time.
Fn A	**F5** (Barcode Settings)	Application key 5, **User can define F5 function from setting.**
Fn B	**F6** (Media Player)	Application key 6, **User can define F6 function from setting.**
Fn C	**F7** (Calculator)	Application key 7, **User can define F7 function from setting.**
Fn D	**F8** (Information)	Application key 8, **User can define F8 function from setting.**
Fn E	**(**	Enter a **(** by pressing Fn key, then pressing E key.
Fn F	**)**	Enter a **)** by pressing Fn key, then pressing F key.

Key Sequence	Fn + Main Function	Definition
Fn G	[	Enter a **[** by pressing **Fn** key, then pressing **G** key.
Fn H	]	Enter a **]** by pressing **Fn** key, then pressing **H** key.
Fn I	{	Enter a **{** by pressing **Fn** key, then pressing **I** key.
Fn J	}	Enter a **}** by pressing **Fn** key, then pressing **J** key.
Fn K	€	Enter a **€** by pressing **Fn** key, then pressing **K** key.
Fn L	$	Enter a **$** by pressing **Fn** key, then pressing **L** key.
Fn M	#	Enter a **#** by pressing **Fn** key, then pressing **M** key.
Fn N	%	Enter a **%** by pressing **Fn** key, then press **N** key.

Key Sequence	Fn + Main Function	Definition
Fn O	^	Enter a ^ by pressing Fn key, then press O key.
Fn P	~	Enter a ~ by pressing Fn key, then pressing P key.
Fn Q	,	Enter a , by pressing Fn key, then pressing Q key.
Fn R	`	Enter a 、 by pressing Fn key, then pressing R key.
Fn S	!	Enter a ! by pressing Fn key, then pressing S key.
Fn T	?	Enter a ? by pressing Fn key, then pressing T key.
Fn U	\	Enter a \ by pressing Fn key, then pressing U key.
Fn V	=	Enter a = by pressing Fn key, then press V key.

Key Sequence	Fn + Main Function	Definition
Fn W	+◀))	Increases device volume, press Fn key and then press W key.
Fn X	-◀)	Decreases device volume, press Fn key and then press X key.
Fn Y	;	Enter a ; by pressing Fn key, then pressing Y key.
Fn Z	/	Enter a / character by pressing Fn key, then pressing Z key.
Fn 1	@	Enter a @ by pressing Fn key, then pressing 1 key.
Fn 2	'	Enter a ' by pressing Fn key, then pressing 2 key.
Fn 3	+	Enter a + by pressing Fn key, then pressing 3 key
Fn 4	**Paste**	To do a paste function by pressing Fn key first, and then pressing 4 key each time.
Fn 5	**Del**	To do a delete action, press Fn key

Key Sequence	Fn + Main Function	Definition
		first, and then press ⬚5⬚ key.
Fn 6	─	Enter a ─ by pressing Fn key, then pressing 6 key.
Fn 7	**Copy**	To do a copy action, press Fn key, then press 7 key.
Fn 8	**&**	Enter a & by pressing Fn key, then pressing 8 key.
Fn 9	**∗**	Enter a ∗ by pressing Fn key first, and then pressing 9 key.
Fn 0	**Start Menu**	To display **Start** menu press Fn key first, and then pressing 0 key each time.
Fn ·	**Space**	Enter a **Space** character by pressing Fn key first, and then pressing · key each time.

Table 2-11 **Special Function key define**

2.4.9 Using the Ear/Microphone

Connect the ear/microphone set to PDT earphone jack connector. The PDT has no built in microphone, if you like to record the voice, you have to the use ear/microphone set.

Figure 2-17 **Ear/microphone**

2.5 Navigating the Display

2.5.1 Setting Time and Date
In the Date/Time options, you can change the year, month, date, time, time zone, or select automatic adjust for daylight saving time. To set or change the date and time:

1. Select **Start > Settings > Control Panel > Date/Time**.
2. To change the year, select the year. Select the up arrow to increase the value, select the down arrow to decrease the value. Or you can type a new value in the field.
3. Select the month to open a pull-down list of months or press the arrow buttons to either side of the month to increase or decrease the month.
4. To change the time, select the hour, minute, seconds, or AM/PM and select the up arrow to increase the value; select the down arrow to decrease the value. Or you can type a new value in the field.
5. Select your correct time zone from the pull-down list.
6. To automatically adjust the clock for daylight saving time, enable the checkbox at the bottom of the screen.


Figure 2-18 **Date/Time properties**

7. Select **Apply** to save your changes or select **OK** to exit the **Date/Time** settings.

2.5.2 Entering the Data
To select and open programs, select **Start > Programs** from the task bar to open a list of available programs. If the program has an icon on the desktop, double-tap to open it.
There are several ways to enter data in an application on the PDT:

- Use the keypad to enter alpha-numeric characters, Refer to "**2.4.7 Using the PHL-7100 keypad**" and "**2.4.8 Using the PHL-7200 keypad**" .
- Use the stylus on the touch screen, Refer to "**2.4.6 Using the stylus**".
- Select text in the same way you select the text on a PC. Use the stylus to highlight the desired text by dragging the stylus across the desired text, double-tapping to select one word and triple-tapping to select an entire line/paragraph. Refer to "**2.4.6 Using the stylus**".
- Use the soft input panel with the stylus. Refer to "**2.5.5 The Soft Keypad**"
- Use the bar code reader to input the data from a bar code. Press one of the three trigger keys to start the bar code reader. The bar code data will enter in the current application's open window.

For more information on factory installed applications, refer to Chapter 5 "**Software Applications**".

2.5.3 The Command Bar

Use the **Command** bar at top of the screen to perform tasks in programs, such a opening a file, or editing a file.

2.5.4 The Task Bar

The **Task** bar at the bottom of the screen displays the icon, an icon for the active program, the current time, and system icons for utilities loaded in memory. The **Task** bar includes menu names, buttons, and the keyboard icon, which opens and closes the Soft Input Panel (SIP). The **Task** bar allows you to select and close programs. Refer to Figure 2-19 to view the **Task** bar.
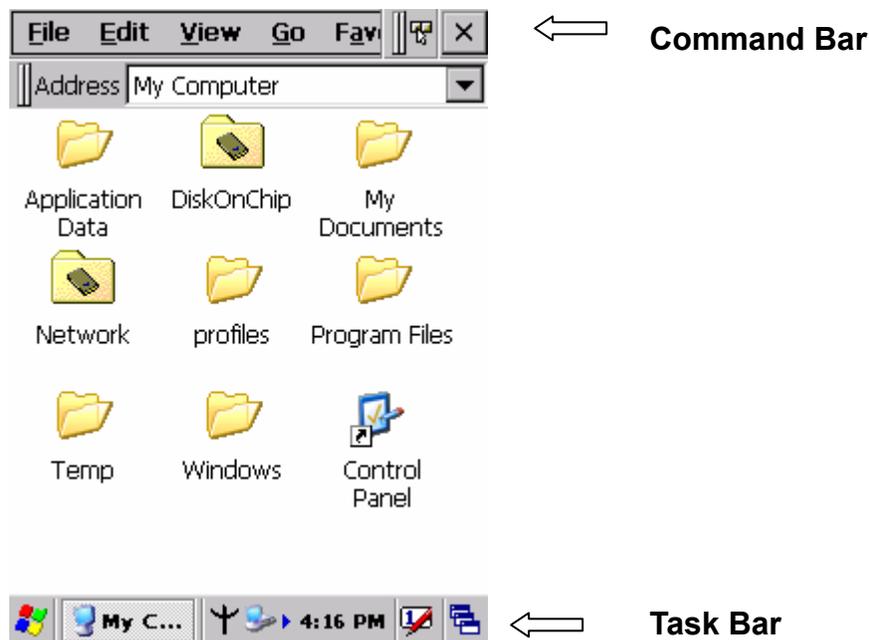
Figure 2-19 **Task Bar & Command Bar**

2.5.5 The Soft Keypad

In applications that accept keypad input, the Soft Input Panel (**SIP**) can be used to enter data using the stylus. The **SIP** is a software, QWERTY-style keyboard.

To open the **SIP**, tap the **keyboard** icon to open the menu and select **Hide Input Panel** to close the keyboard.

Use the stylus to select letters, numbers, or symbols from the **Soft Input Panel** for the current application.

2.5.6 Setting Up Wireless LAN RF

1) Press "Start"---"Settings"---"Control Panel" --- "WLAN Manager".

2) Launch the WLAN Manager to **Enable** WLAN device.

3) Into AP Browser tab, tap Scan button to renew the network.

4) Select a network, tap the Join button or double tap it for more options.

5) Press OK to save all your WLAN settings.

6) Tap the "Exit" button to **Disable** WLAN device.
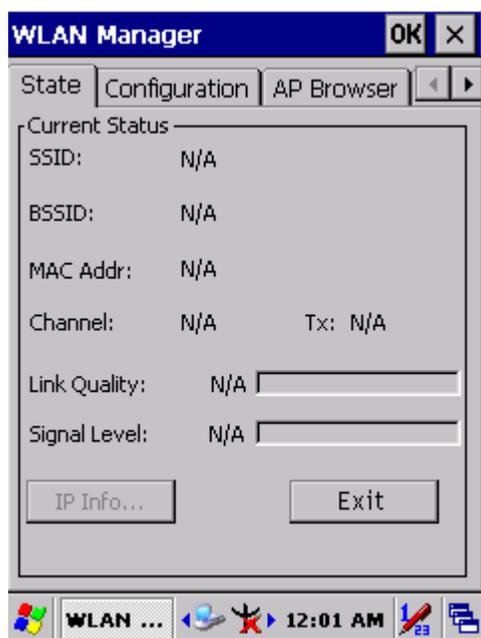
Figure 2-20 **WLAN Manager**   Figure 2-21 **WLAN Manager**

|	
	802.11b WLAN is not connected to a network.
	802.11b WLAN no signal.
	802.11b WLAN signal is Low.
	802.11b WLAN signal is Average.
	802.11b WLAN signal is Good.

Table 2-12 **WLAN Manager**
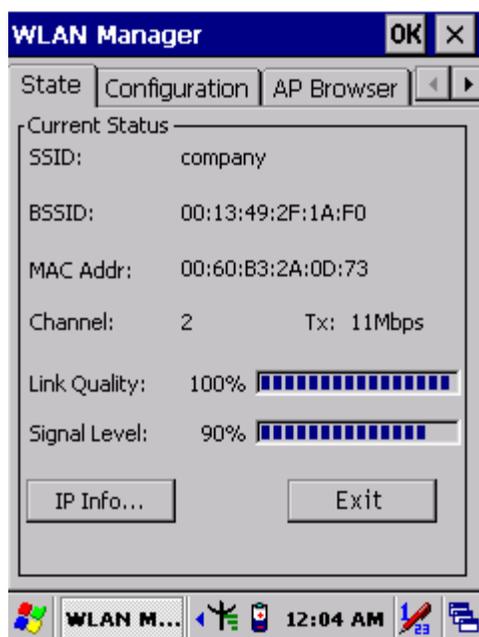

Figure 2-22 **WLAN Manager**
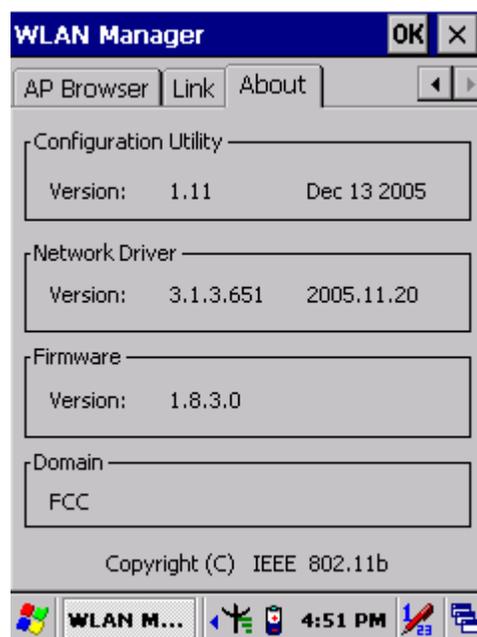
Figure 2-23 **WLAN Manager**

2.5.7 Reading bar codes, 1D laser version.

To use the scanning function, complete the following steps:

1. If you have not already done so, remove the protective plastic film before using devices equipped with a 1D laser bar code reader.
2. Run the **WordPad** software program.
3. Press one of the three bar code reader trigger buttons.
4. Aim the scanning beam at the center of bar code.

5. Good scanning position.

    The reading range is from 50 to 650mm distance.

    1) Decrease the scanning distance to the bar code when scanning small bar codes.
    2) Increase the scanning distance from the bar code when scanning large bar codes
    3) The scanning area is visible by a red laser beam.
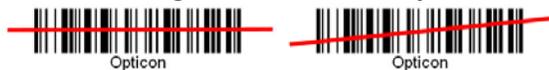
6. Bad scanning position.

    1) Make sure that the laser beam sweeps across whole bar code.
    2) Scanning operations may fail if the laser beam is positioned as below.

7. Upon reading a bar code, the red LED indicator turns on until the trigger is release or after five seconds. The green LED and the beep tone indicates a good read.

Note: this product scans using laser light. Never look directly into the laser light or shine the laser light into the eyes.

2.5.8 Reading bar codes, 2D CMOS version.

The 2D CMOS version can read both 1D and 2D bar codes. To use the scanning function, complete the following steps:

1. If you have not already done so, remove the protective plastic film before using devices equipped with a 2D CMOS bar code reader.
2. Run the **WordPad** software program.
3. Press one of the three bar code reader trigger buttons.
4. Aim the scanning beam at the center of bar code. To assists in aiming, there are 4 green aiming light spots. The bar code should be between the outside 2 green spots.
   The scanner is in focus in case the center 2 green spots joins into 1 spot.

5. Good scanning position.
   The reading range is from 45 to 260mm distance.
   4) Decrease the scanning distance to the bar code when scanning small bar codes.
   5) Increase the scanning distance from the bar code when scanning large bar codes
   6) The bar code should be located within the green light spots
   7) The scanning area is visible by a red illumination area.
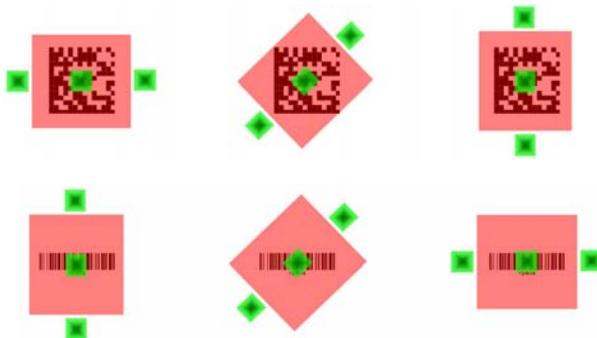
6. Bad scanning position.

    1)   Make sure that the laser beam sweeps across whole bar code.

    2)   Scanning operations may fail if the illumination beam is positioned as below.

7. Upon reading a bar code, the red LED indicator turns on until the trigger is release or after five seconds. The green LED and the beep tone indicates a good read.

2.5.9 Help

Tap "**?**" to get information for each program.

2.6 Power management

2.6.1 Suspend Mode
The PDT will go into a suspend mode when it is idle for a period of time. The idle duration can be customized using the Power control panel (refer to Figure "Schemes Tab") Suspend mode works and looks just like you have turned the unit off. Press the ⏻ key to suspend the PDT, Press the ⏻ key again for the PDT to resume its Previous state. Use the Battery power control panel to set the duration to switch state to Suspend mode when system using battery power. This will save battery power when PDT is not in use.
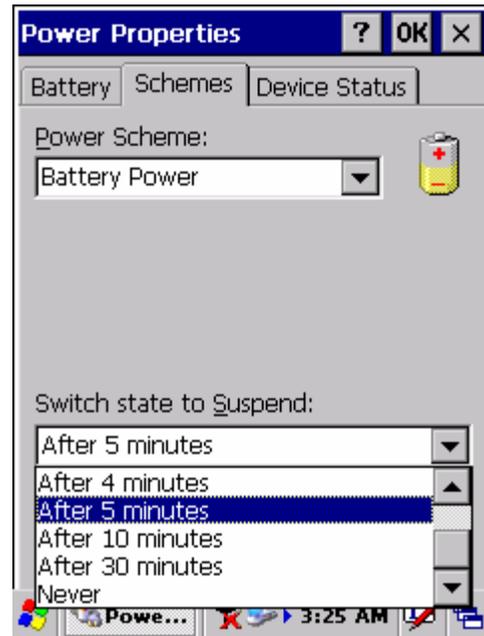
Figure 2-24 **Schemes Tab**

Suspending:
The following conditions will suspend:
- Press <**Power**> key while the unit is on.
- The duration timer of item "**Switch state to Suspend"** expires, which indicates that there has been no user activity for a specified of time.
- The battery pack is almost empty.
- Tap **Start > Suspend**

Tap here to let PDT enter into suspend mode
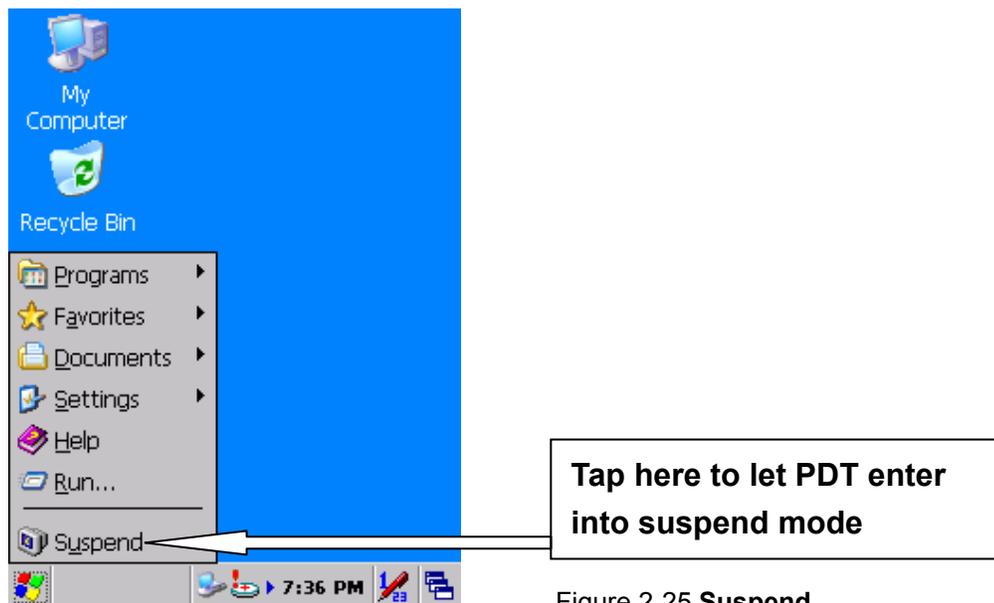
Figure 2-25 **Suspend**

2.6.2 Resuming

Use the following method to resume (wake up the PDT):

● Press <**Power**> key to suspend or resume (wake up).

When a battery pack completely discharges while the unit is in suspend mode, the PDT remains suspended until discharged battery condition is corrected.

2.7 Resetting the PDT

2.7.1 Warm Reset

A warm reset is a transition from the on, idle, or suspend power state that close all applications, clears the working RAM, but preserves the file system.

Reason to Warm Reset: If an application "hangs", initiate a warm reset to terminate the application only.

Process to Warm Reset: To warm reset, press "**F1**" and "**F4**" button simultaneously.

After Warm Reset:

● The desktop appears with the application shortcuts on the screen.

● The custom settings in the registry are persistent.

2.7.2 Cold Reset

CAUTION: Try warm reset before you initiate Cold Reset. All applications will be Closed and working RAM and all files will be cleared if you initiate the Cold Reset. It is strongly recommended to back up your files to FlashROM, Flashcard or PC.

1) You can use Cold Reset to initialize the PDT if WINCE.NET OS lock up or Warm Reset has no effect.

2) To perform Cold Reset, press "**Power**", "**F1**" and "**F4**" button simultaneously.

3) PDT will initiate boot up after Cold Reset.

Chapter 3. PDT settings

3.1 Introduction

To view available options for PDT's setting, tap **Start > Settings**. Then, there are three items inside **Settings**: "**Control Panel**", "**Network and Dial-up**" and "**Taskbar and Start**".

3.2 Control Panel

To view the **Control Panel** and settings you can modify by tapping **Start > Settings > Control Panel**.
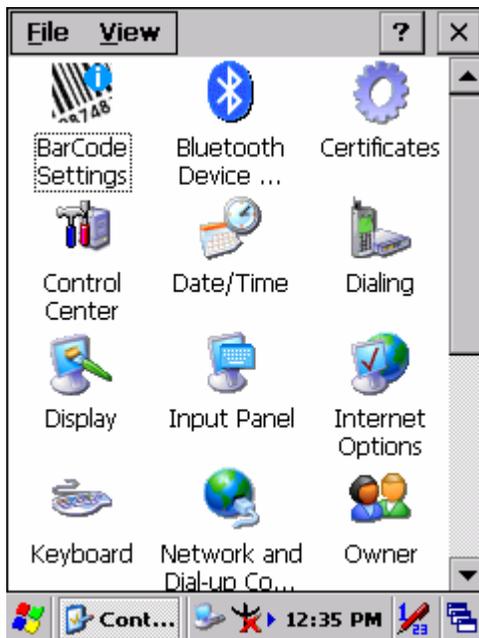
Figure 3-1 **Control Panel**

3.2.1 BarCode Settings

ICON	ITEM & FUNCTION
BarCode Settings	• Start bar code settings tool :
	✓ Enable or disable bar code scanner
	✓ Select bar code symbologies
	✓ Select prefixes and suffixes
	✓ Select quiet zone options
	✓ Select read mode options

Table 3-1 **Bar code settings**

3.2.1.1 Basic TAB

In the "Basic tab" the bar code reader behavior can be changed.
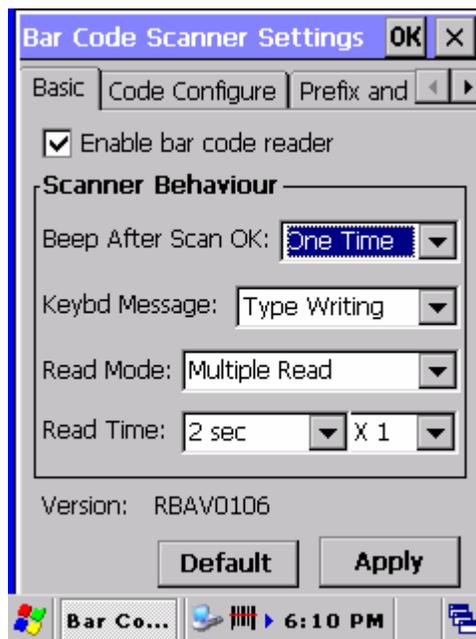
Figure 3-2 **Basic Tab**

Field name	Description
Enable bar code reader	Enable or disable the bar code reader. Default is enabled.
Beep After Scan OK	Select the number of beeps after scanning a bar code which is successfully decoded by the bar code reader.

	None	Disable beep after scanning bar code.
	One Time	Beep one time after scanning bar code (default).
	Two Times	Beep two times after scanning bar code.
Keybd Message	Select the bar code data transfer method	
	Disable	Data from bar code reader is ignored.
	Type Writing	Data from bar code reader is send as keyboard data to the application which currently has the focus (default).
Read mode	Select the bar code reading mode.	
	Single read	When a bar code has been decoded, the reader will be turned OFF. The reader must be triggered again to read another bar code (default).
	Multiple read	When a bar code has been decoded, the reader will stay ON for the time as set by 'Read time' options. The same bar code can only be decoded again after the label has not been detected for a number of scans.
Read time	The length of the period that the reader is ON after the trigger switch is pressed, or (in multiple read mode), after a label has been read.	
	0 sec	Reader will stay on as long as the trigger switch is being pressed.
	1 sec	1 second
	2 sec	2 seconds (default)
	3 sec	3 seconds
	4 sec	4 seconds
	5 sec	5 seconds
	6 sec	6 seconds
	7 sec	7 seconds
	8 sec	8 seconds

	9 sec	9 seconds
	Indefinitely	Single read mode : reader will stay on until a bar code is read. Multiple read mode : reader will stay on until power is recycled (not recommended)
	X1	No multiplication of read time (default)
	X10	Read time * 10
Version		Information field which shows the bar code readers firmware version. RBAV01xx is used for 1D laser module. FL23Jxx is used for 2D CMOS module. If no version is displayed the bar code reader is not found. Note xx can have a value between 01 and 99.

Table 3-2 **Basic TAB description**

3.2.1.2 Code Configure TAB

In the Code Configure tab the bar code symbologies can be enabled or disabled.
It is strongly recommended to select only the required code. Advantages of selecting the required codes are :

- faster reading,
- no accidental scanning of unwanted bar codes,
- reduced probability of reading errors which can not be prevented completely, because of the limited security of some bar code types.

Bar code specific options can not be selected in this version of the Bar Code Settings tool.
In case bar code specific options are required, refer to Opticon's Universal Menu Book, chapter 3 and lookup the serial command sequence, and enter this commands sequence in Bar Code Settings tool's "Advanced" TAB.

The Opticon Universal Menu Book can be downloaded from the opticon website.

Note : support for symbologies may be dependent of the bar code reader firmware.
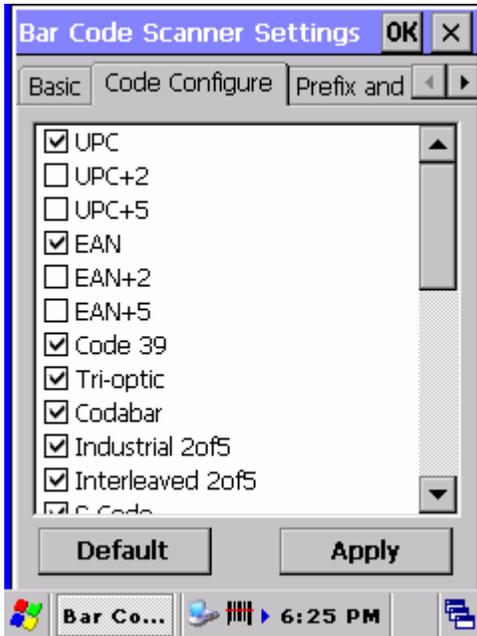
Figure 3-3 **Code configure Tab**

Field name	Description
UPC	Enable UPC A and UPC-E (default)
UPC+2	Enable UPC-A ADDON 2 and UPC-E ADDON 2
UPC+5	Enable UPC-A ADDON 5 and UPC-E ADDON 5
EAN	Enable EAN-13 and EAN-8 (default)
EAN+2	Enable EAN-13 ADDON 2 and EAN-8 ADDON 2
EAN+5	Enable EAN-13 ADDON 5 and EAN-8 ADDON 5
Code 39	Enable Code 39 (default)
Tri-optic	Enable Tri-optic (default)
Codabar	Enable Codabar (default)
Industrial 2of5	Enable Industrial 2of5 (default)
Interleaved 2of5	Enable Interleaved 2of5 (default)
S Code	Enable S Code (default)
Matrix 2of5	Enable Matrix 2of5

Chinese Post Matrix 2of5	Enable Chinese Post Matrix 2of5
Korean Postal Authority code	Enable Korean Postal Authority code
IATA	Enable IATA (default)
MSI/Plessey	Enable MSI/Plessey (default)
Telepen	Enable Telepen (default)
UK/Plessey	Enable UK/Plessey (default)
Code 128	Enable Code 128 (default)
Code 93	Enable Code 93 (default)
Code 11	Enable Code 11
RSS-14	Enable RSS-14
RSS-limited	Enable RSS-limited
RSS-expanded	Enable RSS-expanded
PDF417	Enable PDF417 (default)
MicroPDF417	Enable MicroPDF417 (default)

Table 3-3 **Code configure description 1D laser**

Field name	Description
UPC	Enable UPC A and UPC-E (default)
UPC+2	Enable UPC-A ADDON 2 and UPC-E ADDON 2
UPC+5	Enable UPC-A ADDON 5 and UPC-E ADDON 5
EAN	Enable EAN-13 and EAN-8 (default)
EAN+2	Enable EAN-13 ADDON 2 and EAN-8 ADDON 2
EAN+5	Enable EAN-13 ADDON 5 and EAN-8 ADDON 5
Code 39	Enable Code 39 (default)
Tri-optic	Enable Tri-optic (default)
Codabar	Enable Codabar (default)
Industrial 2of5	Enable Industrial 2of5 (default)
Interleaved 2of5	Enable Interleaved 2of5 (default)
IATA	Enable IATA (default)
MSI/Plessey	Enable MSI/Plessey (default)
Code 128	Enable Code 128 (default)
Code 93	Enable Code 93 (default)

RSS-14	Enable RSS-14
RSS-limited	Enable RSS-limited
RSS-expanded	Enable RSS-expanded
DataMatrix ECC000-ECC140	Enable DataMatrix ECC000-ECC140
DataMatrix ECC200	Enable DataMatrix ECC200 (default)
Aztec	Enable Aztec (default)
Aztec Runes	Enable Aztec Runes
QR Code	Enable QR Code (default)
Maxi Code	Enable Maxi Code (default)
PDF417	Enable PDF417 (default)
MicroPDF417	Enable MicroPDF417 (default)

Table 3-4 **Code configure description 2D CMOS**

3.2.1.3 Prefix and suffix TAB

With these options alterations can be made to the format of the transmitted data string.

Options available are :
- Transmission of a preamble,
- Transmission of a prefix,
- Transmission of a suffix,
- Transmission of a postamble.
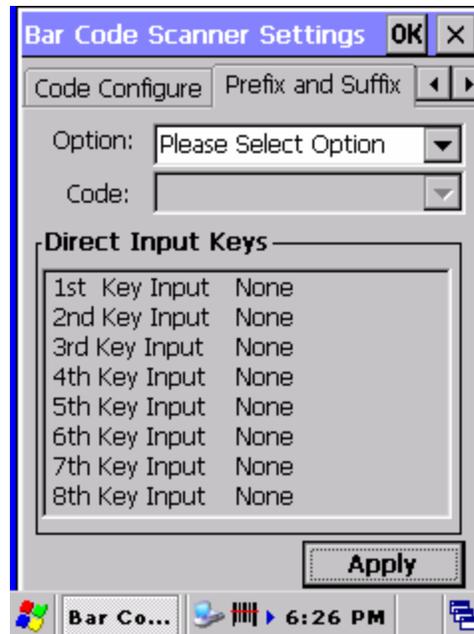
Figure 3-4 **Prefix and Suffix Tab**

The transmitted string format is :

preamble	prefix	bar code data	suffix	postamble
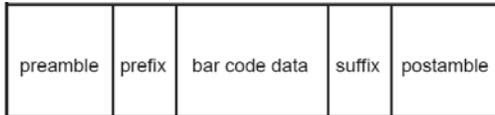
Figure 3-5 **Transmitted string format**

A prefix and suffix of maximum 4 direct input entries each may be included in front and at the end of the string respectively. A preamble is transmitted before the prefix and can contain up to 8 direct input characters. A postamble is transmitted after the suffix and can contain up to 8 direct input characters. A preamble and postamble will be transmitted for all symbologies. Default settings are :

  - Preamble : None

  - Prefix : None

  - Suffix : ^M (CR)

  - Postamble : None

Tap the "Please Select Option" field to select one of above mentioned options :
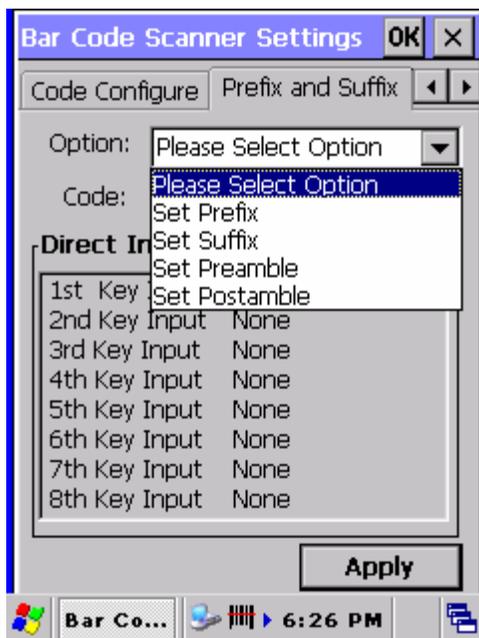
Figure 3-6 **Prefix and Suffix, select Option list box**

Select one of these 4 options which meet your requirement.

In the Prefix and Suffix option, 4 key input fields and their current settings are shown :
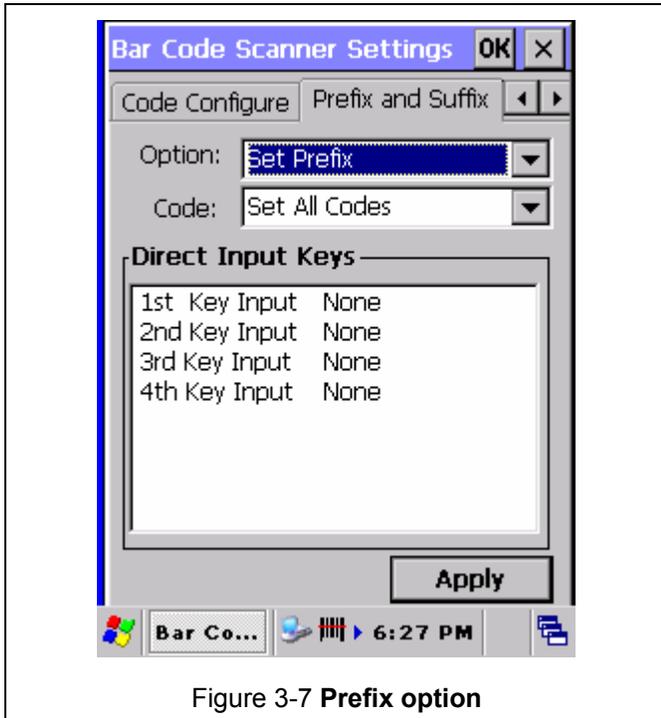
Figure 3-7 **Prefix option**
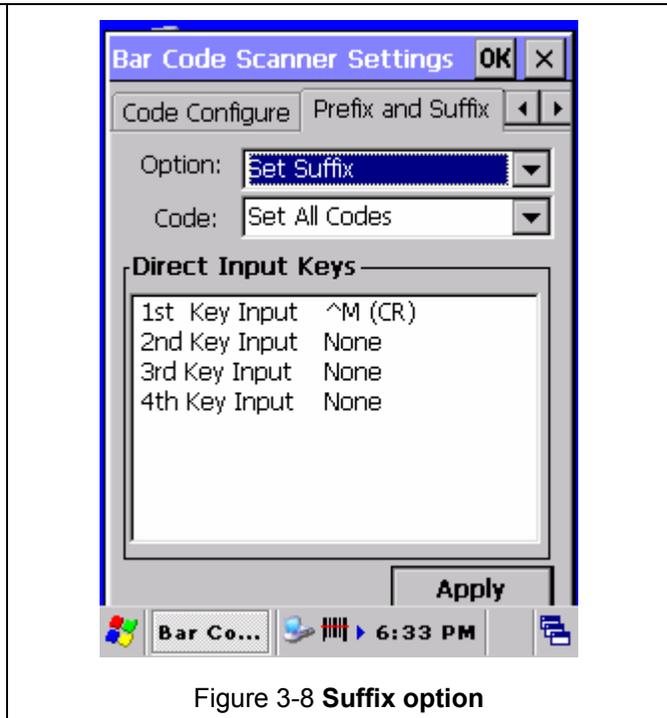
Figure 3-8 **Suffix option**

The default suffix is ^M (CR) .

In the Preamble and Postamble option, 8 key input fields and their current settings are shown :
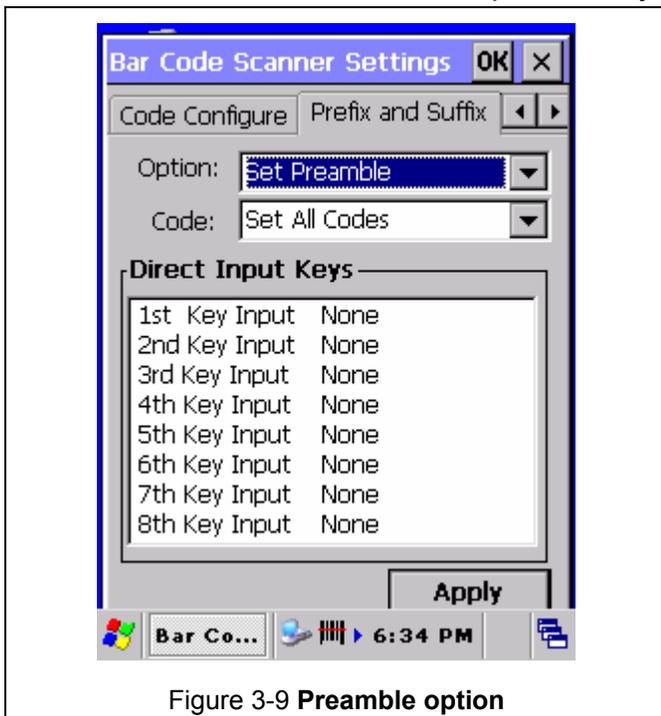
Figure 3-9 **Preamble option**
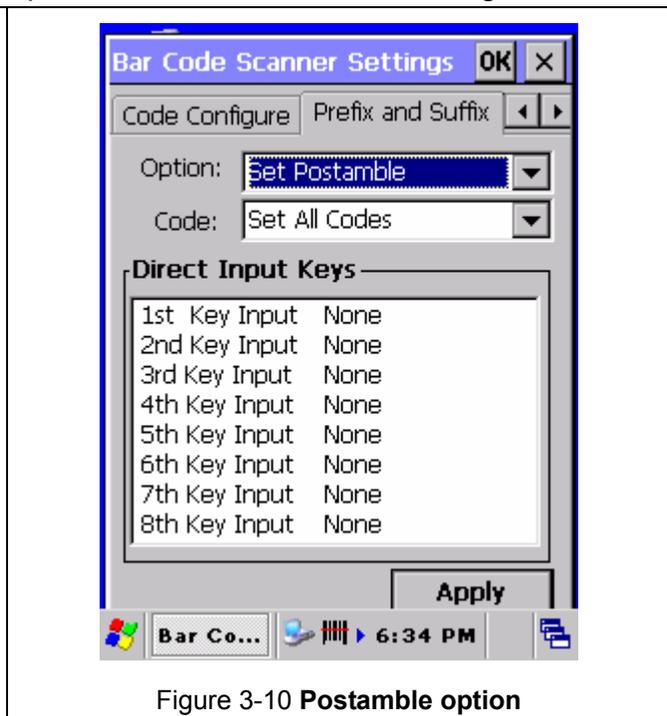
Figure 3-10 **Postamble option**

In the code option field can be indicated for which symbology the current prefix or suffix should be configured. The "Clear All Codes" options will clear the prefix for all symbologies.
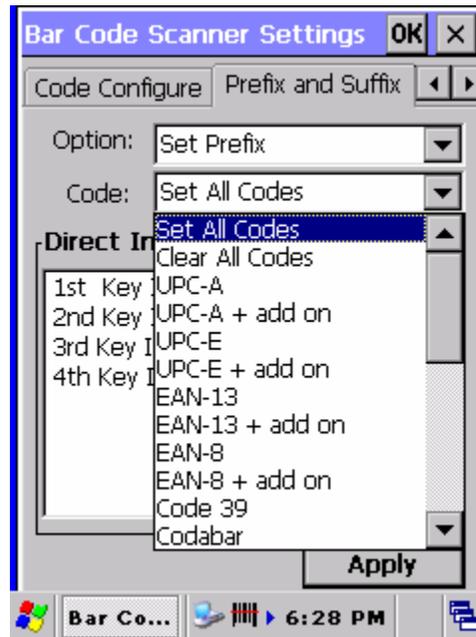
Figure 3-11 **Prefix : Code list box.**

Example : to set the characters "UPCA" for bar code symbology UPC-A, tap in the "Direct Input Keys" section, the field "1st Key Input". A list box will popup, which shows all 128 ASCII characters.

SPACE is the <Space> character (ASCII 32dec, 20hex).
DEL is the <DEL> character 127dec 7Fhex.
Scroll downwards to the character 'U' and tap the character 'U'.
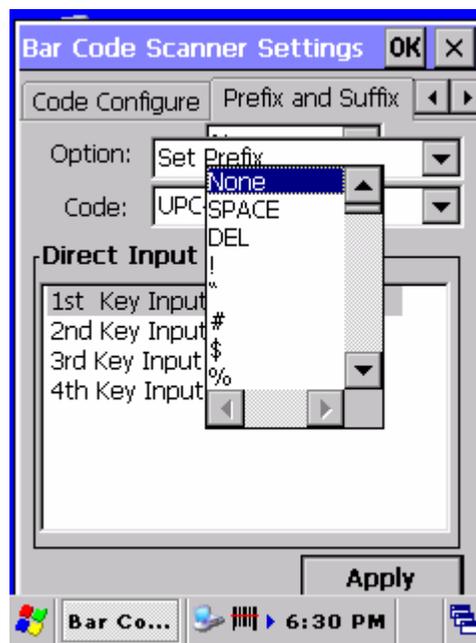
Figure 3-12 **Prefix : Direct input keys selection box.**

Thereafter the display will look like :

Bar Code Scanner Settings OK ✕

Code Configure | Prefix and Suffix ◀ ▶

Option: Set Prefix ▼

Code: UPC-A ▼

Direct Input Keys

1st Key Input U
2nd Key Input None
3rd Key Input None
4th Key Input None

Apply

🔲 Bar Co... 🔲 ▶ 6:33 PM
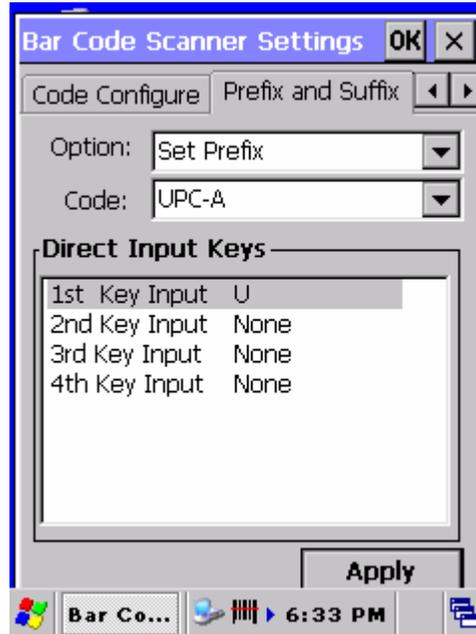
Figure 3-13 **Prefix : Selected character 'U' for UPC-A.**

Repeat these steps for the characters 'P', 'C' and 'A'.
Thereafter the display will look like :

Bar Code Scanner Settings OK ✕

Code Configure | Prefix and Suffix ◀ ▶

Option: Set Prefix ▼

Code: UPC-A ▼

Direct Input Keys

1st Key Input U
2nd Key Input P
3rd Key Input C
4th Key Input A

Apply

🔲 Bar Co... 🔲 ▶ 6:32 PM
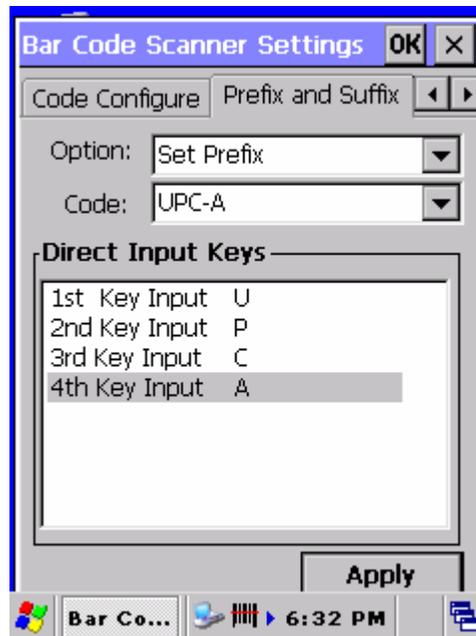
Figure 3-14 **Prefix : Selected characters 'UPCA' for UPC-A.**

If the bar code reader reads an UPCA label with data '071589812309', it will be send to the application as : 'UPCA071589812309<CR>' where <CR> is the default suffix ASCII character <CR>.

Preamble and postamble are applicable for all bar code symbologies. Therefore the code option list box shows only 1 option : "Clear all codes".
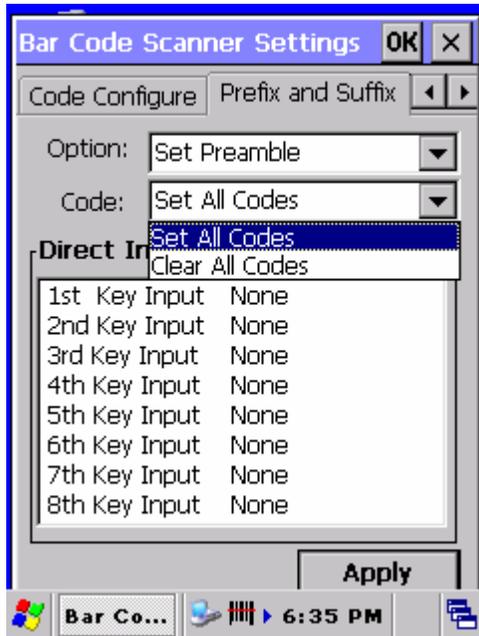
Figure 3-15 **Preamble : Only 1 code option.**

3.2.1.4 Quiet zone TAB

With this option the reader can decode bar codes that have smaller start and/or end margins than specified for the symbology. Be carefully when using this option. It may increase the possibility of partial reads and ghost reads. Do not use smaller margin checks then necessary. If possible replace the bar code labels by ones that have correct start and end margins.
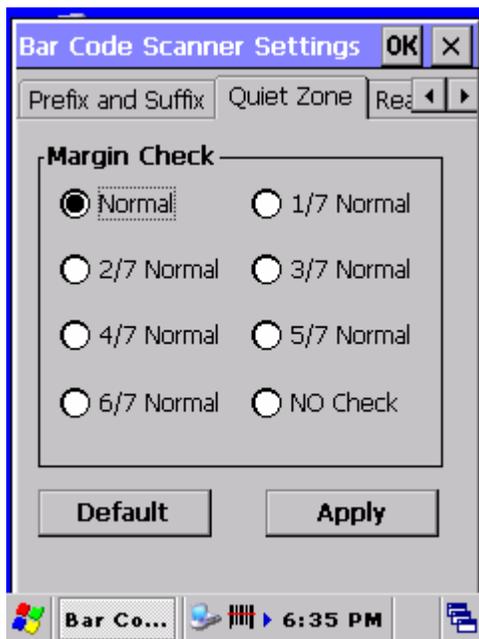
Figure 3-16 **Quiet zone options.**

3.2.1.5 Read Mode TAB

With this option several read modes can be changed.
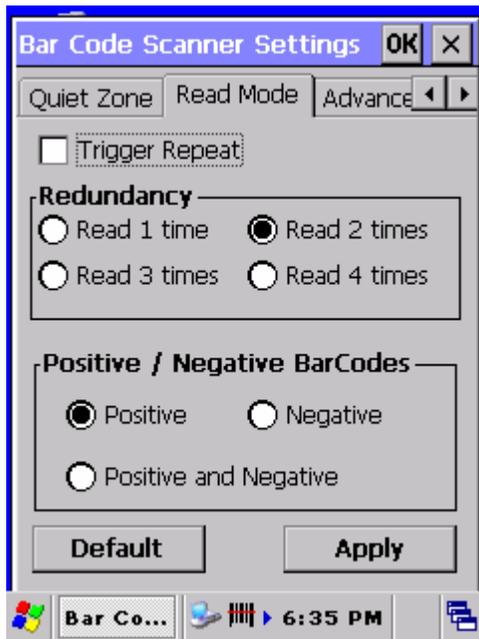
Figure 3-17 **Read mode options.**

| Field name	Description
Trigger repeat	This option makes it more easy to select a single bar code from a sheet filled with barcodes. If the trigger switch is pressed once, the laser beam is on during the configured read time. The laser beam can now be moved to the required bar code. If the trigger switch is pressed again, the bar code is decoded and transmitted. If the read time timer expires, the laser switches off and the trigger sequence should be repeated. If the read time is set to zero, then if the trigger switch is pressed, the laser is on, but does not accept bar codes. As soon the trigger switch is released, the barcode is decoded and transmitted. Default is disabled.
Redundancy	This is the number of times that a label must be correctly decoded before it is transmitted. Selecting a higher redundancy count makes reading slower, but is reduces the probability of reading errors, especially when labels of poor definition are used.

	Read 1 time	Redundancy = 0
	Read 2 times	Redundancy = 1 (default)
	Read 3 times	Redundancy = 2
	Read 4 times	Redundancy = 3
Positive / Negative bar codes	Usually bar codes are printed black on white, but sometimes white on black. These labels are called positive and negative respectively. In case the 'negative bar codes' option has been selected, positive labels may not be decoded or with difficulty.	
	Positive bar codes	Read black on white labels only (default)
	Negative bar codes	Read white on black labels only
	Positive and negative bar codes	Read positive or negative labels automatically.

Table 3-5 **Read mode options descriptions**

3.2.1.6 Advanced TAB

If enabled, this field can be used to send serial commands to the bar code reader.
Use this option only in case you want to access bar code reader features which are not documented in this user's manual, but are documented in Opticon's Universal Menu Book. If there is no need to make any other change to the bar code reader settings, do not use this option. A maximum of 180 characters can be input. Default this option is disabled.
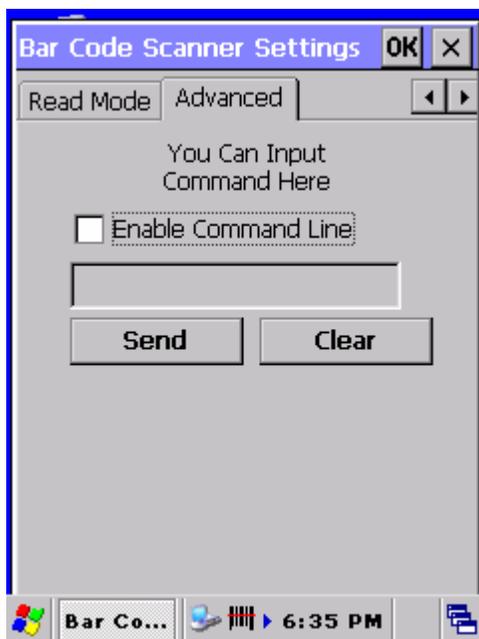
Figure 3-18 **Command line options.**

Example :

To set a prefix 'Test' for UPC-A, lookup in Opticon's Universal Menu Book (UMB) the serial command's of :

- prefix UPC-A : see UMB paragraph 4.2.1, serial command = N1
- Direct input 'T' : see UMB paragraph 4.3.4, serial command = 0T
- Direct input 'e' : see UMB paragraph 4.3.5, serial command = $E
- Direct input 's' : see UMB paragraph 4.3.5, serial command = $S
- Direct input 't' : see UMB paragraph 4.3.5, serial command = $T

Input these 5 commands into the Command line field by using the keyboard Input panel.

If the Send button is pressed, the serial command sequence is send to the bar code reader.

To save the settings in the bar code reader, add the commands Z2 after the last command sequence.

See picture below :
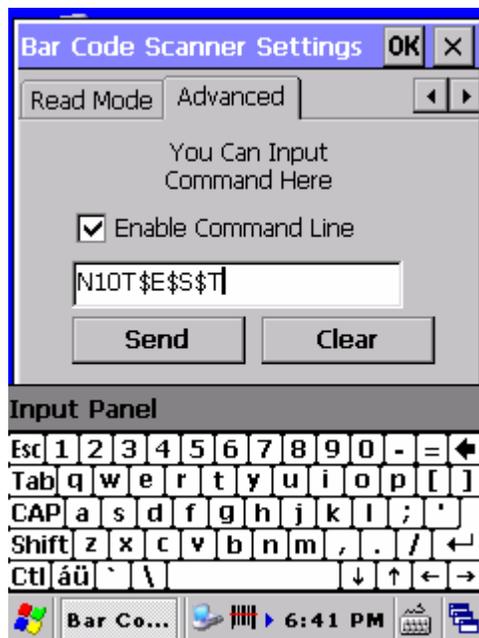
Figure 3-19 **Example of command line usage.**

3.2.2 Bluetooth Device Properties

ICON	ITEM & FUNCTION
	• "**Scan Device**" **Tab** (**Figure 3-20**) : ✓ Tap the **Scan Device** button to initiate a scan for Bluetooth devices. The Bluetooth manager lists the Bluetooth devices that it finds, see **Figure 3-21**. If Bluetooth hardware is not found in the PDT, the *Bluetooth Hardware Error* window appears, see **Figure 3-22**. **Table 3-7** describes the Bluetooth Icons. ✓ Double tap the device to connect to on the device list. The Bluetooth Manager Authentication window appears. Tap **No** to connect to the device without authentication, or tap **Yes** to authenticate the device before connecting. (**Figure 3-23**) ✓ If the **Yes** button was selected in the Bluetooth Manager Authentication window, the enter PIN windows appears. Enter a PIN (between 1 and 16 alpha numeric characters) in the *Enter PIN:* text box, and tap **OK**. The mobile computer sends the PIN request to the device for bonding. (**Figure 3-24**) ✓ When prompted, the same PIN must be entered on the other device. When the PIN is entered correctly on the other device, the bonded icon appears on the device list. (**Figure 3-25**)

Table 3-6 **Bluetooth Device Properties**
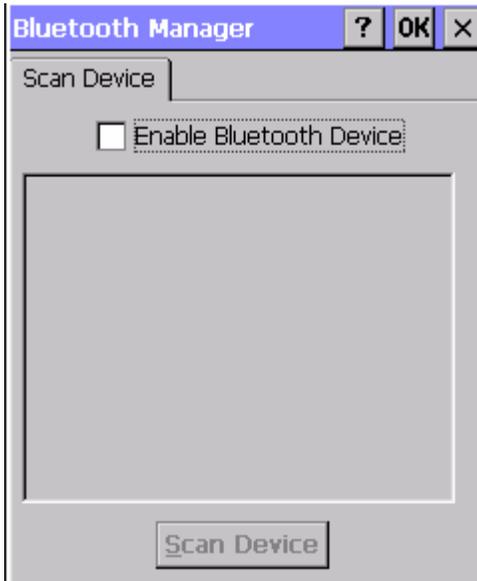
Figure 3-20 **Bluetooth Manager Window**
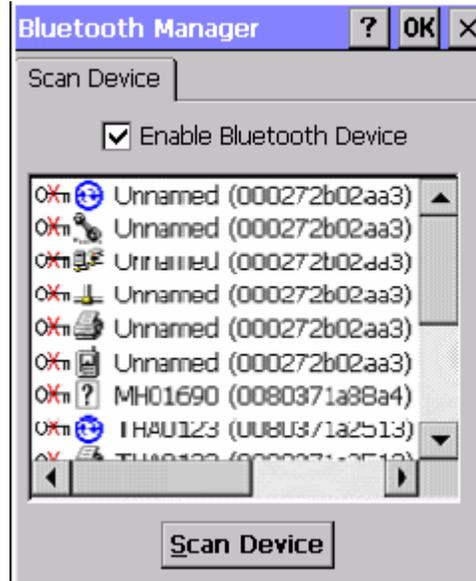
Figure 3-21 **Bluetooth Manager Window**

Figure 3-22 **Bluetooth Error Window**

Figure 3-23 **Bluetooth Manager Window**

Figure 3-24 **Bluetooth Enter PIN Window**
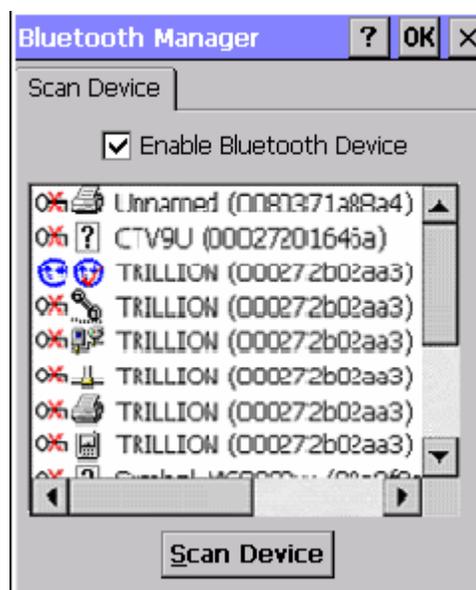
Figure 3-25 **Bluetooth Manager Window**

Note: If the device to which the PDT is bonding does not appear in the list, ensure it is turned on, in discoverable mode, and within range (30 feet / 10 meters) of the PDT.

Icon		Description
?	Unknown device icon	Device is not defined
O✗ᴨ	Locked icon	Device is locked and can not be bonded to.
O─ᴨ	Not locked icon	Device is not locked and can be bonded to.
🔵	Bluetooth device icon	Bluetooth device
🔴	Bonded device icon	Bonded Bluetooth device
🔲	Mobile device icon	Device is a mobile device
⚲	Phone icon	Device is a phone.
🖨	Printer icon	Device is a printer
🖥	Network icon	Device is a network.
⊥	Linked icon	Device is linked.

Table 3-7 **Bluetooth Icons**

3.2.3 Certificates

Certificates are used by some applications for establishing trust and for secure communications.

Certificates are signed and issued by certificate authorities and are valid for a prescribed period of time. Windows CE manages multiple certificate stores.

ICON	ITEM & FUNCTION
Certificates	• "**Store**" **Tab** (**Figure 3-26**) :
	✓ In the Stores tab, select the certificate store you wish to view or modify from the drop-down list (**Figure 3-27**).
	✓ The "**Trusted Authorities**" store lists the top-level certificates for authorities you trust. (**Figure 3-28**, **Figure 3-29**)
	✓ The "**My Certificates**" store contains your personal certificates, which you use to identify yourself.
	✓ Intermediate certificate authorities that help establish a chain of trust are stored in the "**Other Authorities**" store.
	• "**Store**" **Tab** :
	✓ To add a certificate or associated private key to the selected store, select "**Import**" (**Figure 3-30**).
	✓ To view more details of the selected certificate, such as the expanded name or expiration date, choose "**View**".
	✓ To delete the selected certificate from the store, choose "**Remove**".

Table 3-8 **Certificates**

Figure 3-26 **Certificates**

Figure 3-27 **Certificates**

Figure 3-28 **Certificates**
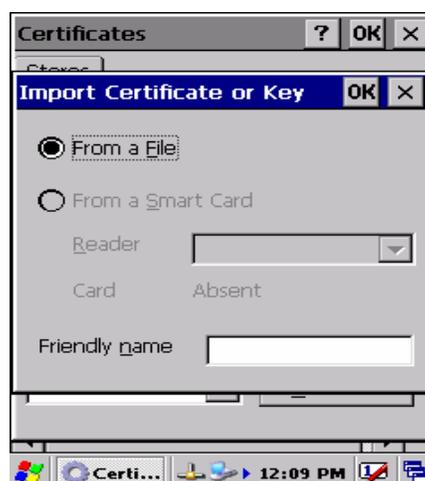
Figure 3-29 **Certificates**

Figure 3-30 **Certificates**

3.2.4 Control Center

The Control Center includes four Property buttons. These are property buttons for PDT device information, display brightness, system Backup Restore and Fn-Key Settings.

Figure 3-31 **Control Center**

3.2.4.1 Information

ICON	ITEM & FUNCTION
	• "**Information**" **Tab :**
	✓ Provide Software version, MAC address, Bluetooth ID, Serial No. and Configuration No.

Table 3-9 **Information**

3.2.4.2 Brightness

ICON	ITEM & FUNCTION	
	LCD Brightness Tune the LCD brightness by tapping right-arrow & left-arrow. Can also tune the LCD brightness by pressing right-direction key or left-direction key of keypad.	
	Amounts 7 steps: Every step have corresponding picture of self. 1. 2. 3. 4. 5. 6. 7.	
	☐ Enable Keypad Brightness	Open keypad brightness or not.
	Backlight Timeout Save battery life by automatically turning off the backlight when not used.	
	☑ Battery Power, turn off backlight after	The table must disable when its item is not marked.
		The table has 15 seconds, 30 seconds, 1 minute, <u>2 minutes</u> and 5 minutes.
	☐ AC Power, turn off backlight after	The table must disable when its item is not marked.
		The table has 15 seconds, 30 seconds, 1 minute, <u>2 minutes</u> and 5 minutes.
	☑ Dim backlight after 20 seconds of idleness.	Save battery life functionally of idleness mode, open it or not.
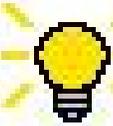
Table 3-10 **Brightness**

Figure 3-32 **Brightness**

3.2.4.3 Backup Restore

ICON	ITEM & FUNCTION
	1. You can backup/restore the system to/from flash disk or inserted memory card. (A. Disk on Chip, B. CF Card, C. SD Card, Figure 3-33) 2. When you launch this application, it must check backup file in Disk On Chip first. And if you select other storage, it will check again. 3. If a previous backup file is found, its date appears behind "Last backup date:"; if not, the "Restore Now" button is disabled. 4. When you press the Backup/Restore Button, a warning dialog will pop up. (Figure 3-34) 5. When system backup/restoring is finished, a message dialog will pop up. (A. Backup: Figure 3-35, B. Restore: Figure 3-36)

Table 3-11 **Backup Restore**

Figure 3-33 **Backup Restore**
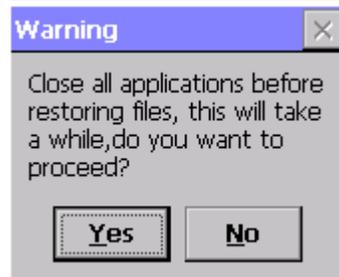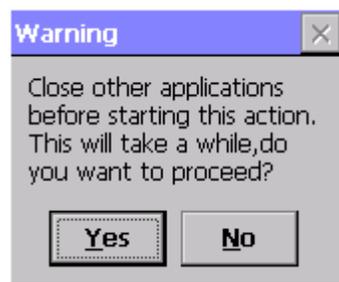
Figure 3-34 **Backup & Restore Start**
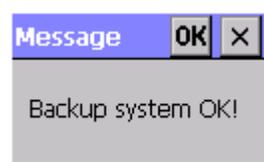
Figure 3-35 **Backup OK**
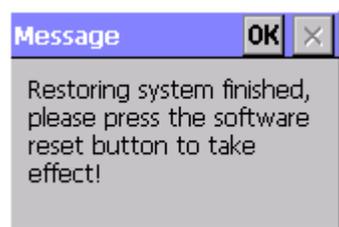
Figure 3-36 **Restore OK**

3.2.4.4 Fn-key Settings

ICON	ITEM & FUNCTION
	• Fn-Key Setting (**Figure 3-37**)
	Fn Key | **The Application Program of default setting**
	F1 | Internet Explorer
	F2 | Microsoft WordPad
	F3 | Inbox
	F4 | My Computer
	✓ To assign your favorite application program to F1, F2, F3 and F4 hot keys.
	✓ Choose one of F1, F2, F3 and F4 from pull-down list. (**Figure 3-37**)
	✓ To tap "Browse…" inside "**Assign program**" applet.
	✓ Select one application program you want from program list, then, choose "**OK**". (**Figure 3-38**)
	✓ To tap "Default" to return back to default setting. (**Figure 3-37**)

Table 3-12 **Fn-Key**
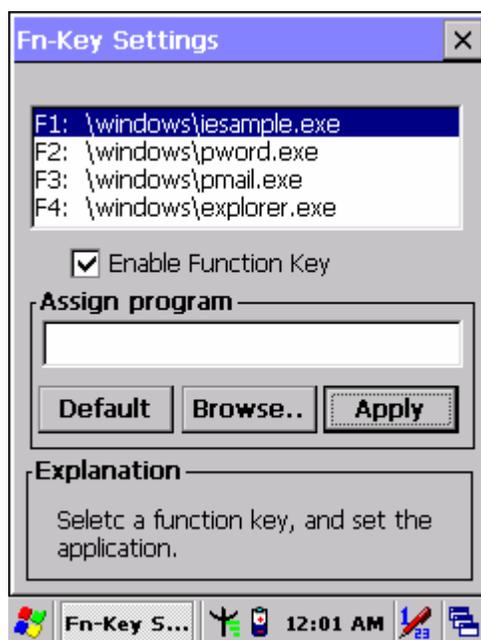
Figure 3-37 **Fn-Key Settings**
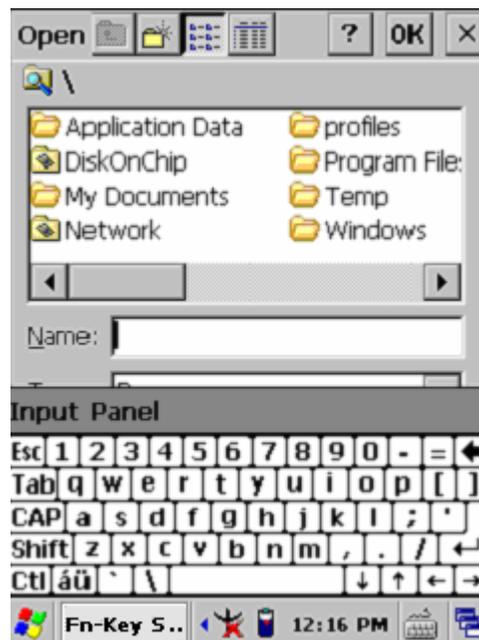
Figure 3-38 **Fn-Key Settings**

3.2.5 Date/Time

| ICON	ITEM & FUNCTION
Date/Time	• "**Date/Time**" Tab (**Figure 2-18**) : ✓ Please see the detail information of **2.5.1 Setting Time and Date**

Table 3-13 **Date/Time**

3.2.6 Dialing Properties

ICON	ITEM & FUNCTION

Dialing	• "**Dialing Properties**" Tab (**Figure 3-39**) :
	
	✓ In the **When dialing from** list, select the "**Location**" where you want to change settings. (**Figure 3-40**)
	✓ To create a new location, select "**New**". Enter the name of the location, and then select "**OK**". (**Figure 3-41**)
	✓ Enter or edit the area code and local country code as needed.
	✓ In **Dial using**, select "**Tone dialing**" or "**Pulse dialing**". Most phone lines are tone.
	✓ To automatically disable call waiting, select "**Disable call waiting by dialing**", select the appropriate number sequence in the list, or enter a new sequence.
	
	• **Editing dialing patterns** (**Figure 3-42**)
	✓ Using the codes listed in the topic; revise the dialing patterns as needed.
	Notes:
	  ▪ If you need to use character other than the ones listed here, use manual dialing.
	  ▪ Hyphens and spaces in dialing strings are ignored.
	  ▪ Some modems may not respond to the following characters, even though your device lets you add them to the dial string.

Table 3-14 **Dialing properties**

Figure 3-39 **Dialing Properties**

Figure 3-40 **Dialing Properties**

Figure 3-41 **Dialing Properties**
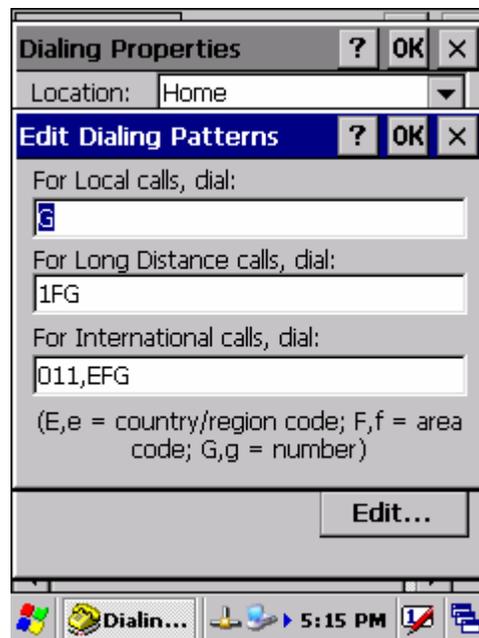
Figure 3-42 **Dialing Properties**

3.2.7 Display Properties

ICON	ITEM & FUNCTION
Display	• "**Background**" **Tab** (**Figure 3-43**) **:**
	✓ From the "**Image**" list, select an image you want as the background of the desktop. (**Figure 3-44**)
	✓ To locate an image in another folder, select "**Browse**". (**Figure 3-45**)
	✓ To have the image cover the entire background, select "**Tile image on background**"
	• "**Appearance**" **Tab** (**Figure 3-46**) **:**
	✓ Change the color scheme : (**Figure 3-47**)
	➢ From the "**Scheme**" list, select a scheme.
	➢ View your choice in the preview box. If you like the scheme, select "**Apply**".
	✓ Create a custom color scheme:
	➢ From the "**Item**" list, select a display item.
	➢ From the "**Basic colors**" list, select a color, and select "**OK**".
	➢ View your color selection(s) in the Preview box.
	➢ To save the scheme, select "**Save**".
	➢ In the "**Save this color scheme as**" box, enter a name for the scheme, and select "**OK**".
	➢ Select "**Apply**".

Table 3-15 **Display properties**

Figure 3-43 **Display properties**

Figure 3-44 **Display properties**

Figure 3-45 **Display properties**

Figure 3-46 **Display properties**
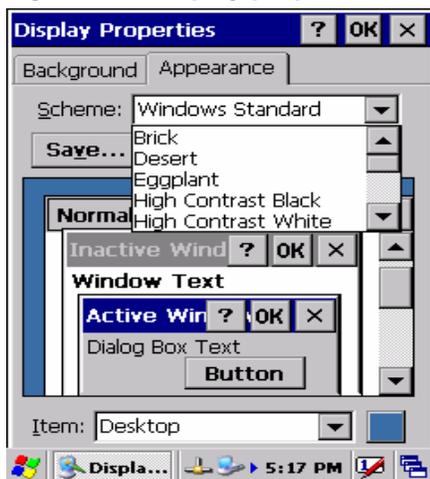
Figure 3-47 **Display properties**

3.2.8 Input Panel

ICON	ITEM & FUNCTION
Input Panel	• "**Input panel**" **Tab** (**Figure 3-48**) :
	✓ Select the input method you want to change.
	✓ To change the **Soft Keyboard Options** , tap "**Option**" (**Figure 3-49**).
	• "**Options**" **Tab** :
	✓ Change the soft keyboard options as desired, selecting from:
	➢ Large or small keys
	➢ Using gestures for space, black-space shift, and enter.
	✓ To exit the **soft keyboard Options**, press "**OK**" on the control bar, or press the <**Enter**> key on the keypad.
	✓ To exit the **Input Panel**, press "**OK**" on the control bar, or press the <**Enter**> key on the keypad.

Table 3-16 **Display properties**
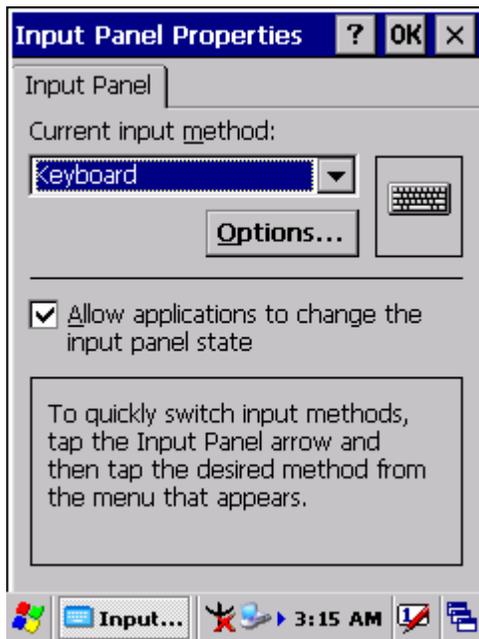
Figure 3-48 **Input Panel Properties**
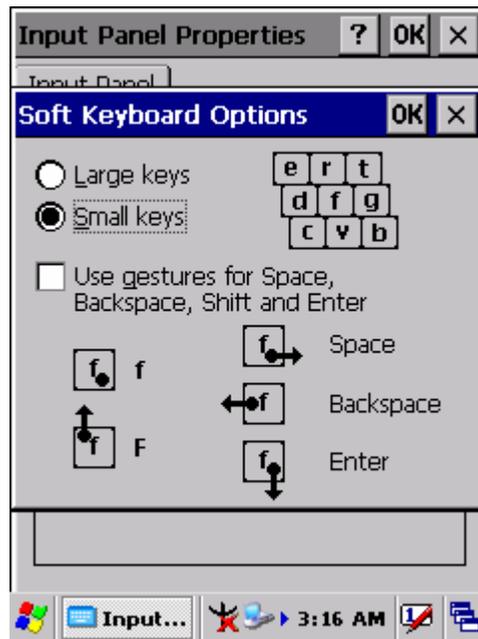
Figure 3-49 **Input Panel Properties**

3.2.9 Internet Options

ICON	ITEM & FUNCTION
Internet Options	• "**General**" **Tab** (**Figure 3-50**) :
	✓ Type in the URL of desired start page and the desired search engine. You also change the **Cache Size, clear the Cache** and **Clear the History**..
	• "**Connection**" **Tab** (**Figure 3-51**) **:**
	✓ Modify the network access setting as desired.
	• "**Security**" **Tab** (**Figure 3-52**) **:**
	✓ Modify the security settings as desired. You can enable any of the following by tapping the checkbox:
	➢ Allow cookies
	➢ Allow TLS 1.0 security
	➢ Allow SSL 2.0 security
	➢ Allow SSL 3.0 security
	➢ Warm when switching across secure and insecure areas.
	• "**Advanced**" **Tab** (**Figure 3-53**) **:**
	✓ Modify the security settings as desired. You can enable any of the following by tapping the checkbox:
	➢ Display Image in pages
	➢ Play sounds in pages
	➢ Enable scripting
	➢ Display a notification about every script error
	➢ Underline links-
	○ Never
	○ Always
	○ Hover

Table 3-17 **Internet Options**

Figure 3-50 **Internet Settings**
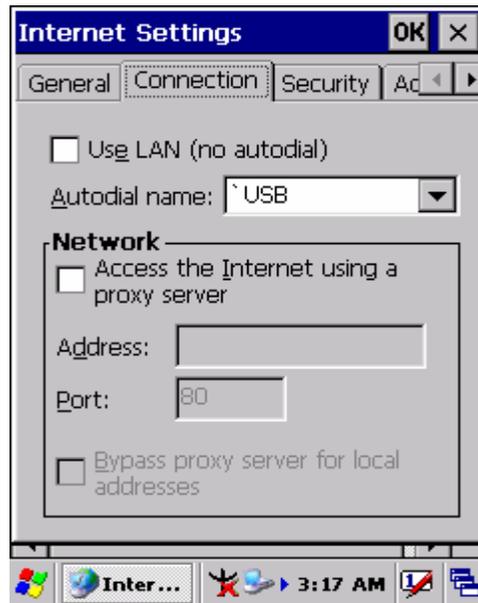
Figure 3-51 **Internet Settings**
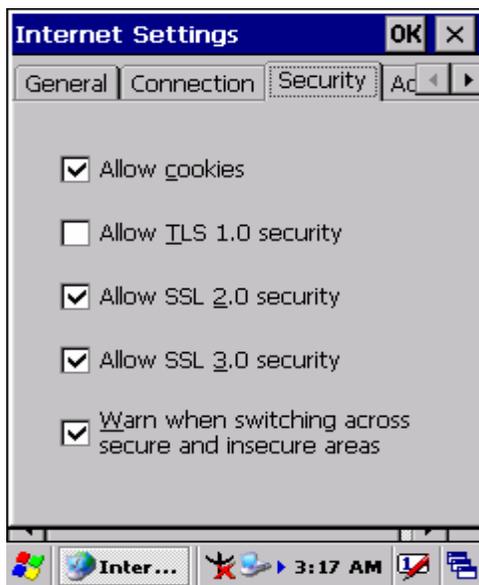
Figure 3-52 **Internet Settings**
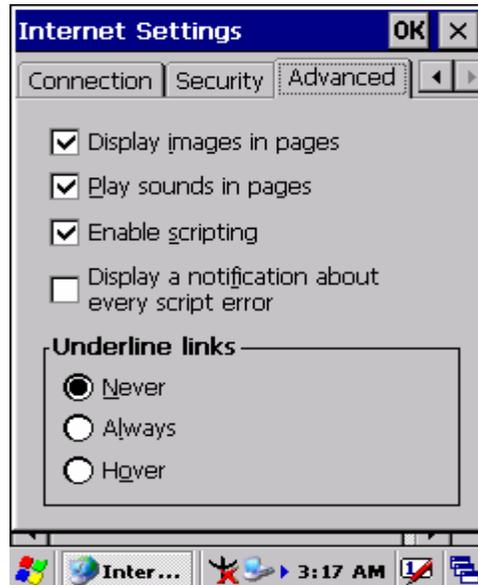
Figure 3-53 **Internet Settings**

3.2.10 Keyboard

ICON	ITEM & FUNCTION
Keyboard	• "**Repeat**" **Tab** (**Figure 3-54**) :
	✓ To change the amount of time between depressions before repetition starts, adjust the **Repeat delay** slider
	✓ To change the repeat rate, adjust the **Repeat rate** slider.
	✓ Test your new setting.
	✓ Tap "**OK**" to exit the "**Keyboard**" Tab.

Table 3-18 **Keyboard**
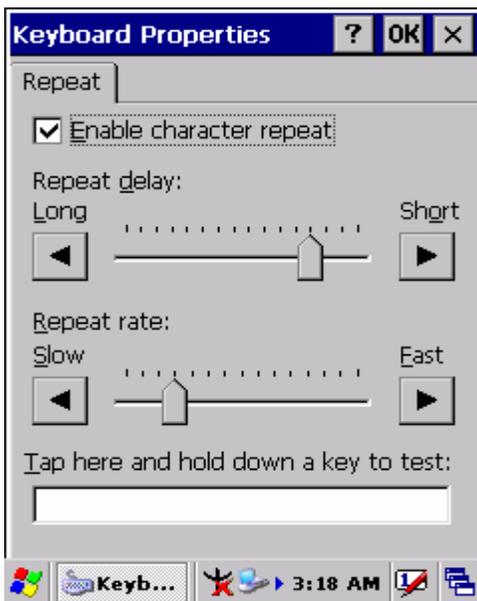
Figure 3-54 **Keyboard Properties**

3.2.11 Network and Dial-up Connections

ICON	ITEM & FUNCTION
Network and Dial-up Co...	• "**Connection**" **Tab :** ✓ To create a "**Dial-up Connection**" : ➢ Double-tap the "**Make New connection**". ➢ In the "**Make New Connection**" dialog box, enter a name for the connection. ➢ Select "**Dial-Up Connection**". ➢ Select the "**Next**" button. ➢ Select the modem you want use. ➢ Select "**Configure**" ➢ Under "**Connection Reference**", use the default settings provided. If you can't connect using these settings, see your ISP or network administrator for specific information. If you want to always enter a phone number before connecting, Select "**Manual Dial**". Select "**OK**". ➢ Select "**TCP/IP Settings**". In the "**General**" tab, ensure "**Use Server-assigned IP address**" is selected. In the "**Name Servers**" tab, ensure "**Use Server-assigned addresses**" is selected, and select "**OK**". If you are unable to connect with these default settings, see your ISP or network administrator for specific TCP/IP information. ➢ Select the "**Next**" button and type the telephone number. ➢ Select the "**Finish**" button. The connection you just created appears as an icon in the "**Network and Dial-up Connections**" folder. ✓ Set up a **point-to-Point Protocol (PPP)** account with an ISP and obtain the following information: ➢ Access telephone number ➢ User name ➢ Password

Once you have established an account, create a new connection on your device. When creating this connection, you should be able to use all of the default TCP/IP settings provided in the Make New Connection Wizard. If you can't connect using the default settings, contact your ISP or access your ISP's Web site for specific TCP/IP information as well as primary and secondary DNS address.

✓ **Modify connection setting**
  ➢ Select **Start > Settings > Network and Dialup Connections**
  ➢ Select the icon for connection settings you want to modify.
  ➢ Select **File > Properties**, or double- tap the appropriate icon.
  ➢ Select desired options. There may be additional settings that depend on the connection. To modify, select the icon and select the icon and select **Advanced Settings**… from the menu.

Table 3-19 **Network and Dial-up Connections**

Figure 3-55 **Network and Dial-up Connections**
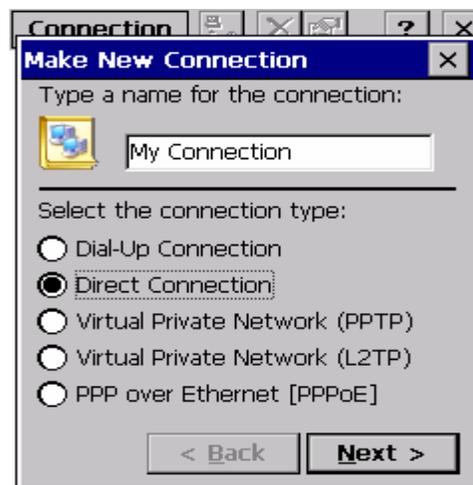
Figure 3-56 **Network and Dial-up Connections**
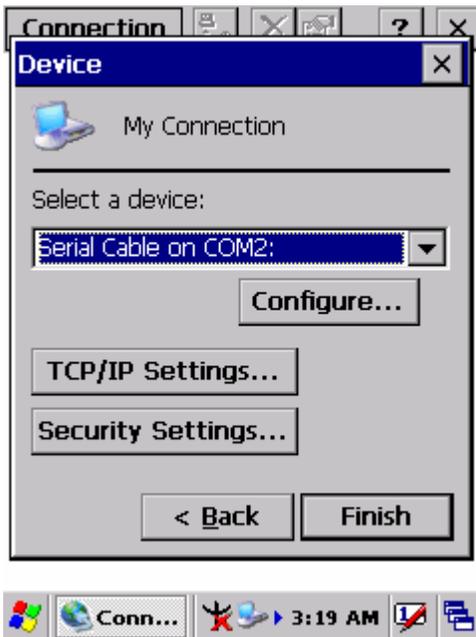
Figure 3-57 **Network and Dial-up Connections**
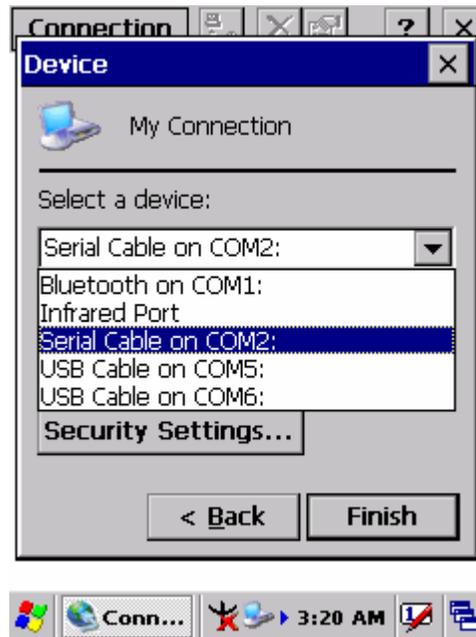
Figure 3-58 **Network and Dial-up Connections**
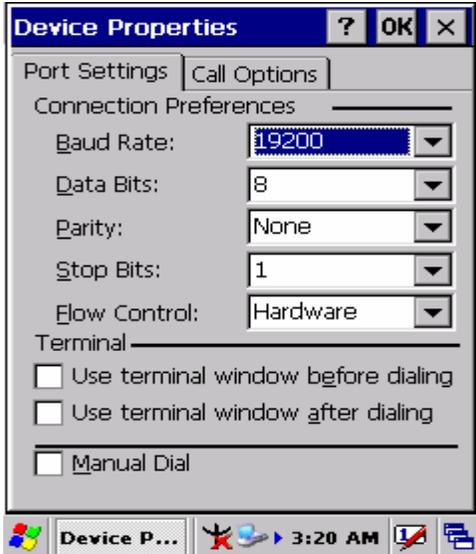
Figure 3-59 **Network and Dial-up Connections**
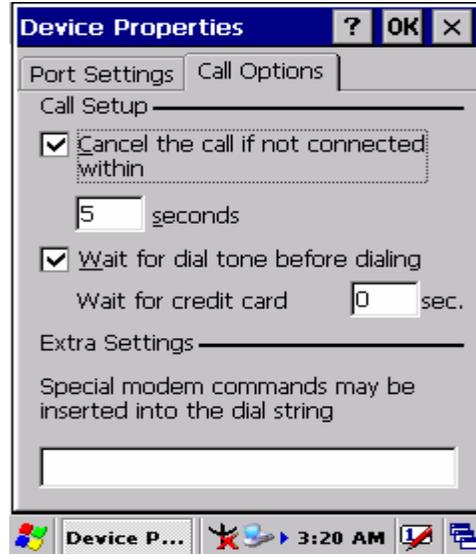
Figure 3-60 **Network and Dial-up Connections**
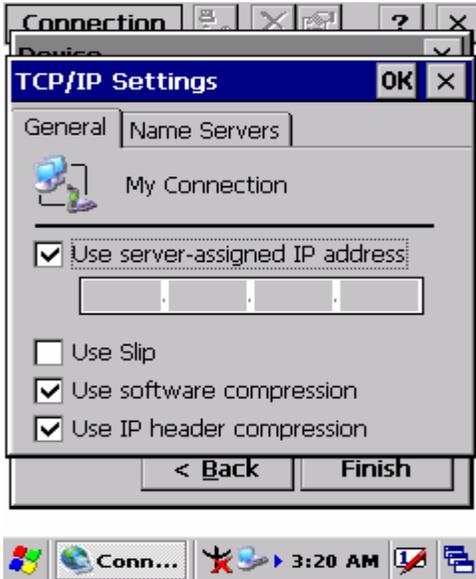
Figure 3-61 **Network and Dial-up Connections**
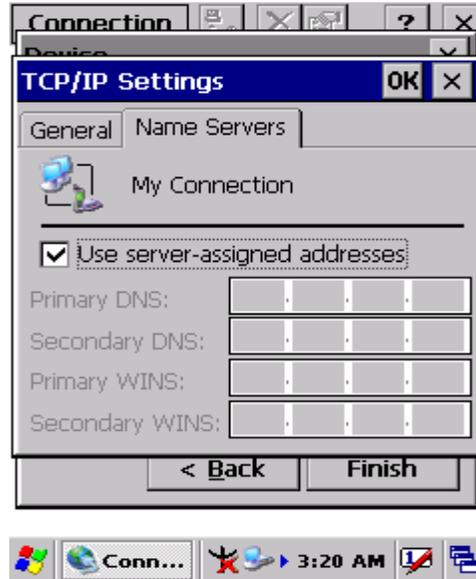
Figure 3-62 **Network and Dial-up Connections**
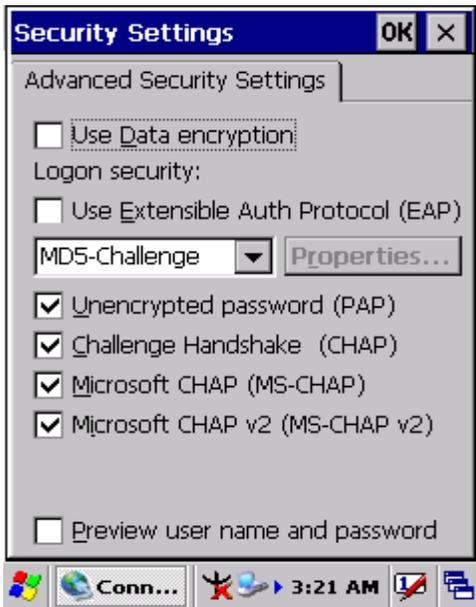
Figure 3-63 **Network and Dial-up Connections**
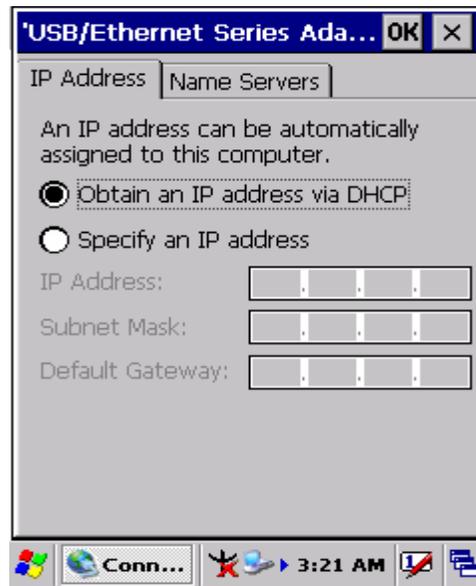
Figure 3-64 **Network and Dial-up Connections**

Figure 3-65 **Network and Dial-up Connections**   Figure 3-66 **Network and Dial-up Connections**
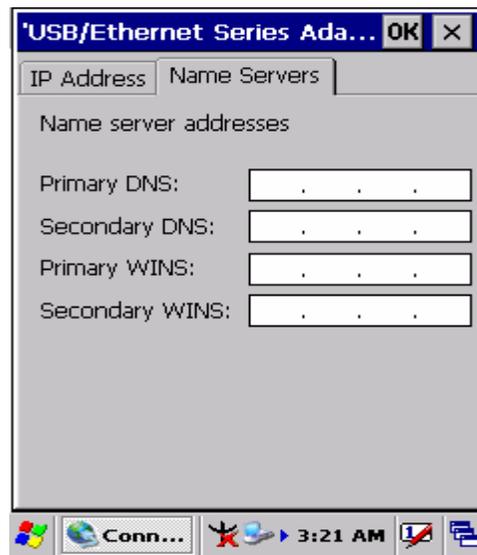
3.2.12 Owner

ICON	ITEM & FUNCTION
Owner	• "**Identification**" **Tab** (**Figure 3-67**) : ✓ Fill in or edit the data as desired. ✓ To have this information displayed when you start your device, select "**Display Owner Identification**" at Power On**.** ✓ To set up identification for remote networks, see Setting up identification for remote networks.
	• "**Network ID**" **Tab** (**Figure 3-68**) : ✓ Enter the user name, password, and domain name you use to log on to remote network.

Table 3-20 **Owner**
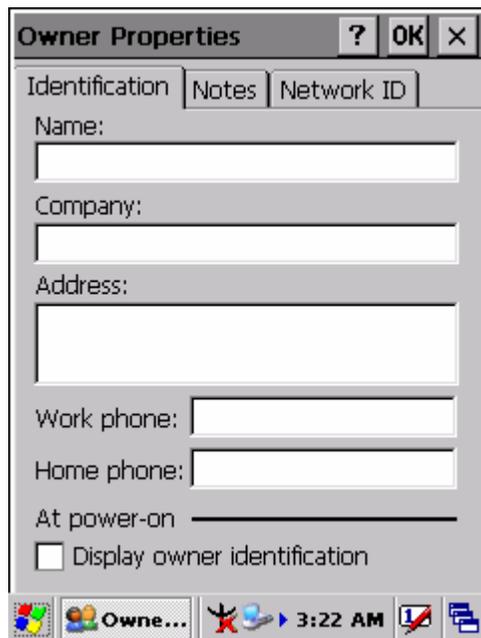
Figure 3-67 **Owner Properties**
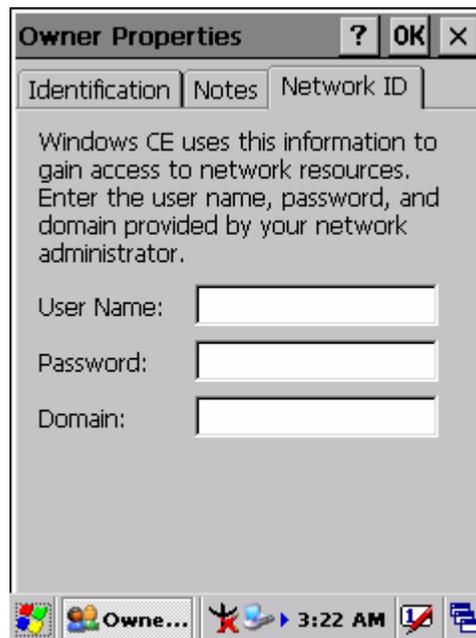
Figure 3-68 **Owner Properties**

3.2.13 Password

ICON	ITEM & FUNCTION
Password	• "**Password Setting**" **Tab** (**Figure 3-69**) **:**
	✓ Enter the password
	✓ In the "**Confirm password**" box, enter the password again.
	✓ To require the password on startup, select "**Enable password protection at power- on**", and/or select "**Enable password protection for screen saver**"
	✓ To exit the **Password** control panel, press "**OK**" from the control bar, or press the <**Enter**> key on the keypad.

Table 3-21 **Password**

Figure 3-69 **Password Properties**

3.2.14 PC Connection

ICON	ITEM & FUNCTION
PC Connection	• "**PC Connection**" Tab (**Figure 3-70**) :
	✓ Select the first checkbox to enable direct connections to the desktop computer. (**Figure 3-70**)
	✓ Tap the "**Change Connection…**" button to modify the connection method from **USB** or **Serial**. (**Figure 3-71**)
	✓ To exit the "**Change Connection**" dialog, press "**OK**" from the control bar, or press the <**Enter**> key on the keypad.
	✓ To exit the "**PC Connection**" properties control panel, press "**OK**" from the control bar, or press the <**Enter**> key on the keypad.

Table 3-22 **PC Connection**
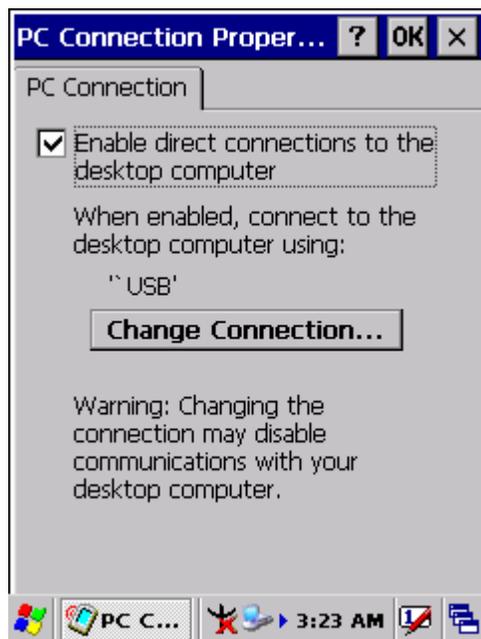
Figure 3-70 **PC Connection**   Figure 3-71 **PC Connection**

3.2.15 Power

ICON	ITEM & FUNCTION
Power	• "**Battery**" **Tab** (**Figure 3-72**) :
	✓ Provide change level indicators for **Main battery** and **Backup battery**.
	✓ Provide remaining power capacity of main battery.
	✓ If a "Main Batteries very Low" warning message shows, the remaining battery life is around 30 minutes before PDT shuts down. (**Figure 3-76**)
	✓ The PDT will shutdown if the main batteries capacity is around **0%**
	✓ To exit Battery control panel, press "**OK**" from the command bar, or press <**Enter**> key on keypad.
	• "**Schemes**" **Tab** (**Figure 3-73**) :
	✓ The **Scheme** Tab allows you to determine the time to switch state to Suspend mode when using either **Battery Power** or **AC Power**.
	✓ Select **Battery Power** or **AC Power** as the power scheme from the pull-down list. (**Figure 3-73**)
	✓ Select the time to suspend mode from the pull-down list. (**Figure 3-74**)
	• "**Device Status**" **Tab** (**Figure 3-75**) :
	Provide power level of the device – The power level ranges from "**High(D0)**" which means the device is at the highest power level to "**Off(D4)**" which means the device is at the lowest power level.
Note:	
	This ICON inside the Task Bar shows that AC adapter provides power to the PDT
	The ICON inside the Task Bar shows that Main Batteries provides the power to the PDT.
	The ICON inside the Task Bar shows that AC adapter provides the power to the PDT and is charging the main batteries..

Table 3-23 **Power**

Figure 3-72 **Power**
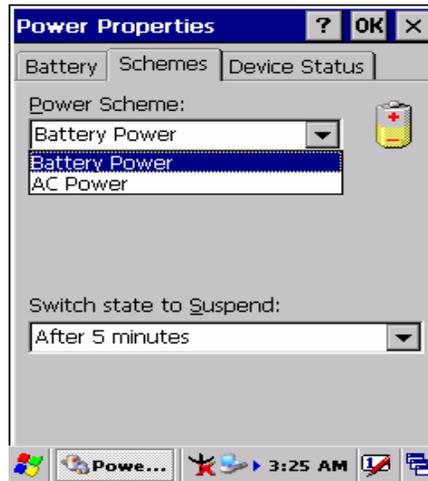
Figure 3-73 **Power**
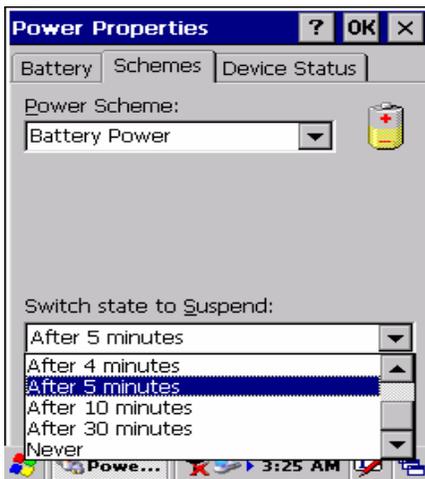
Figure 3-74 **Power**

Figure 3-75 **Power**
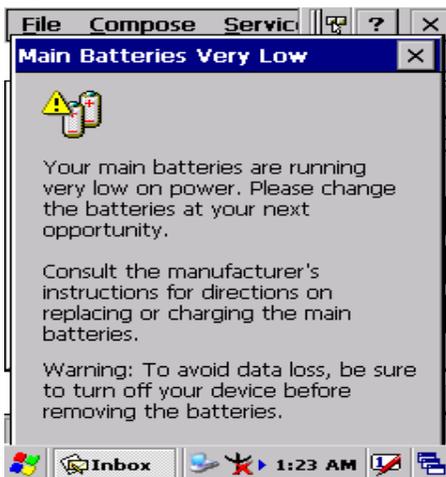
Figure 3-76 **Power**

3.2.16 Regional Settings

ICON	ITEM & FUNCTION
Regional Settings	• "**Region**" **Tab** (**Figure 3-77**) : ✓ Select the desired location/language. ✓ Review the **Appearance samples** in the bottom half of the screen. ✓ Select the Tab at the top for any settings you wish to change, Options to modify include **Number**, **Currency**, **Time**, and **Date**.

Table 3-24 **Regional Settings**
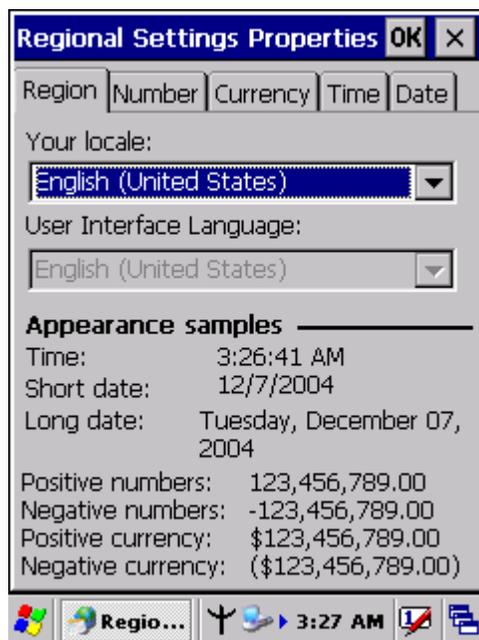
Figure 3-77 **Regional Settings**

3.2.17 Remove Programs

ICON	ITEM & FUNCTION
Remove Programs	• "**Remove Programs**" Tab :
	✓ Only user installed programs can be removed.
	➢ Select the program you wish to remove from the list and press "**remove**" button.

Table 3-25 **Remove Programs**

3.2.18 Storage Manager

ICON	ITEM & FUNCTION
Storage Manager	• "**Storage Manager**" Tab (**Figure 3-78**) :
	✓ To change Storage properties control panel default settings:
	Insert Compact Flash(CF) or Secure digital (SD) storage card into the unit.
	➢ Select **Start > Settings > Control Panel > Storage Properties**
	➢ From the "**Storage Info**" pull-down list, select the desired storage device.
	➢ You can also **format**, **dismount**, and create partitions on storage devices using this control panel.
	➢ To save and exit the **Storage Properties** control panel, press "**OK**" from the control bar, or press the <**Enter**> key on the keypad.
	Caution: Dismounting or formatting the DiskOnChip will erase all files and program stored in Flash Memory

Table 3-26 **Storage Manager**

Figure 3-78 **Storage Manager**

3.2.19 Stylus

ICON	ITEM & FUNCTION
Stylus	• "**Double-Tap**" **Tab** (**Figure 3-79, Figure 3-80**) **:**
	✓ Double-tap the checkerboard grip at a comfortable speed.
	✓ Double-tap clapboard to test your settings.
	✓ The function is OK if the figures are changed from Figure 3-79 to Figure 3-80.
	✓ To tap "**OK**" to exit the Stylus Properties.
	• "**Calibration**" (**Figure 3-81, Figure 3-82**) **:**
	✓ In the Welcome Wizard, you tapped a target with the stylus to set the amount of pressure needed for the screen to respond to your stylus taps.
	✓ Please also see **2.4.3 Calibration of the touch Screen**

Table 3-27 **Stylus**
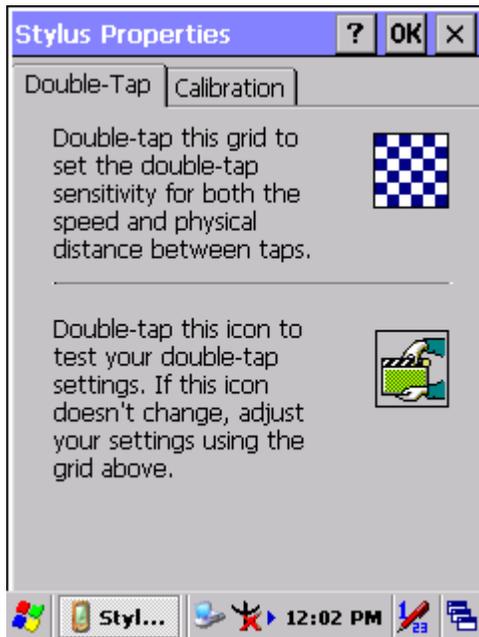
Figure 3-79 **Stylus Properties**
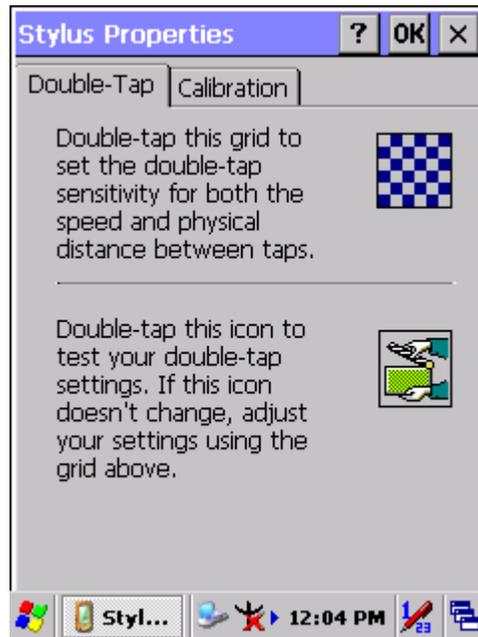
Figure 3-80 **Stylus Properties**

Figure 3-81 **Stylus Properties**
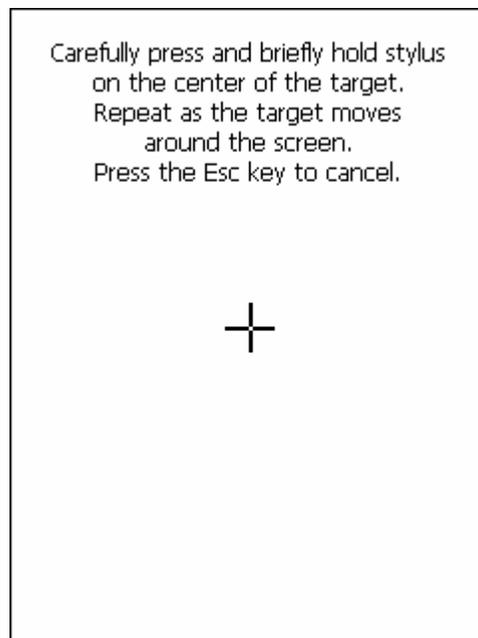
Figure 3-82 **Stylus Properties**

3.2.20 System

ICON	ITEM & FUNCTION
System	• "**General**" Tab (**Figure 3-83**) :
	✓ To show:
	➢ Firmware information
	➢ Information about Processor type, Memory size, Expansion card
	• "**Memory**" (**Figure 3-84**) :
	✓ Move the slider to adjust memory allocation. Default storage memory is normally set to about 8MB with the reminder assigned to Program memory.
	✓ Press the "**OK**" key on the Keypad.
	Note: the difference is occupied by OS between the RAM size in Information properties and total memory size of storage memory and program memory
	• "**Device Name**" Tab (**Figure 3-85**) :
	✓ Your device uses this information to identify itself to other computers.
	✓ The input panel will open to facilitate data entry.
	✓ To close the **Device Name**, press the "**OK**" button, or press the <**Enter**> key on keypad.
	• "**Copyrights**" Tab (**Figure 3-86**) :
	✓ Refer to this tab for specific copyright data. As a user, you are responsible to read this statement.

Table 3-28 **System**

Figure 3-83 **System Properties**
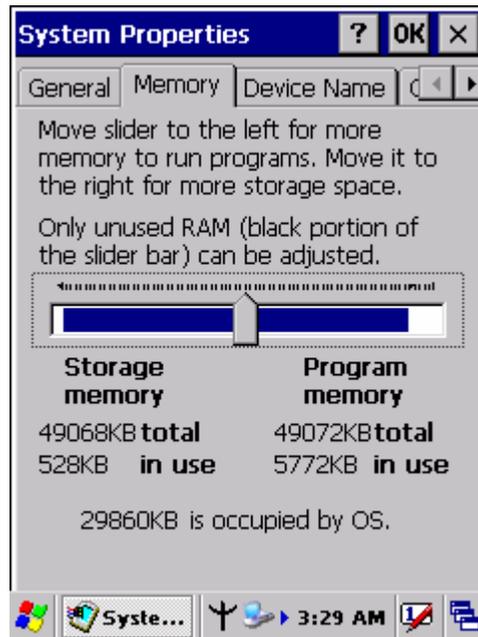
Figure 3-84 **System Properties**

Figure 3-85 **System Properties**
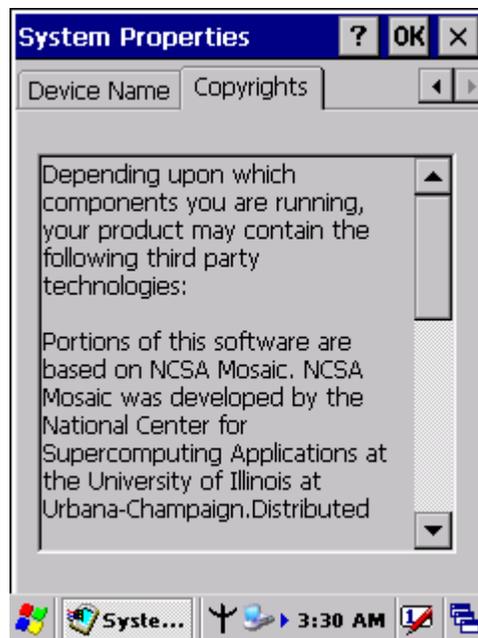
Figure 3-86 **System Properties**

3.2.21 Volume & Sounds Properties

ICON	ITEM & FUNCTION
Volume & Sounds	• "**Volume**" **Tab** (**Figure 3-87**) :
	✓ The factory default for Volume is the forth level. You can adjust the volume to your environment and comfort.
	➢ Set the volume by adjusting the slider from **Soft** to **Loud**, or press **Right** or **Left** edge of **Navigation** keys
	• "**Sounds**" **Tab** (**Figure 3-88**) :
	✓ Enable the desired sounds for key clicks, screen taps, notifications, and applications.

Table 3-29 **Volume & Sound**
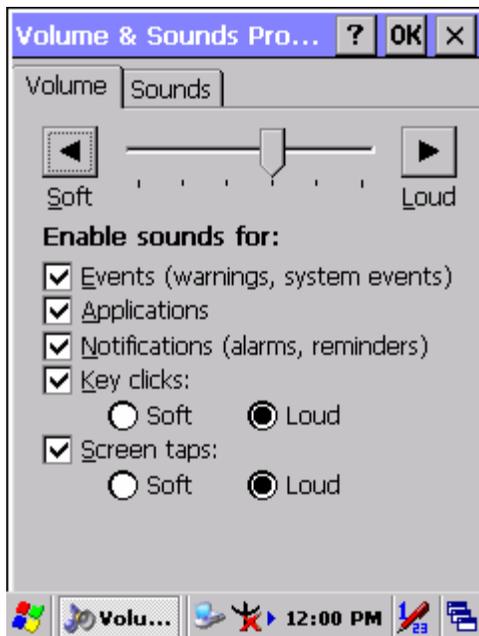
Figure 3-87 **Volume & Sound**   Figure 3-88 **Volume & Sound**
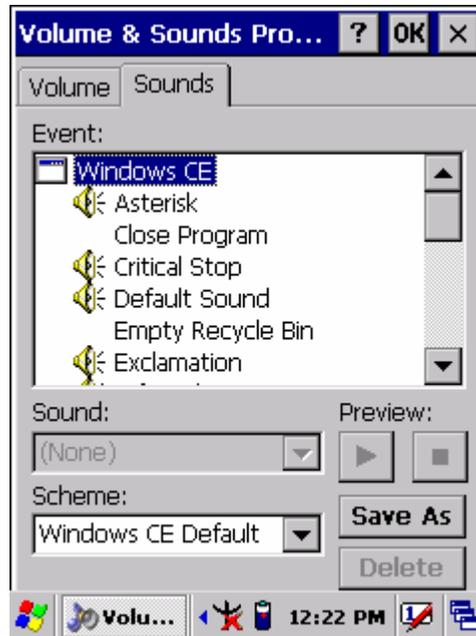
3.3 Taskbar and Start Menu

ICON	ITEM & FUNCTION
Taskbar and Start Menu	• "**General**" Tab :
	✓ In this tab, You can change the position of the Taskbar and Start menu ➢ Is **always on top** or not ➢ **Auto hide** or not ➢ **Show Clock** or not
	• "**Advanced**" Tab :
	✓ Tap the "**Clear**" button to remove the contents of the Documents Menu. ✓ Enable "**Expand Control Panel**" to list all icons of Control Panel from top to bottom.

Table 3-30 **Taskbar and Start menu**

Chapter 4. Communication

4.1 Installing & Setting Up Microsoft ActiveSync

4.1.1 Installing Microsoft ActiveSync on the Host PC

Microsoft ActiveSync is a file transfer tool to synchronize the files on a PC with the files on your PDT. To install Microsoft ActiveSync, complete the following steps on the PC:

1. Go to the Microsoft website www.microsoft.com. In the search field, search for "active sync". Download the latest current version of ActiveSync.
2. Install the latest version of Microsoft ActiveSync on the host PC.
3. Open ActiveSync.
4. Select **File > Communication Settings** from ActiveSync's menu bar.
5. Go to "**Using ActiveSync**" on page 4-1 to continue using ActiveSync.

4.1.2 Connecting PDT to Host PC

1. You can use either the USB/Serial (RS232) port from the IRU-7000 cradle or a USB/Serial (RS232) cable to connect the PDT to the Host PC.
- To use the cradle, you must first insert the PDT into the slot, making sure that the unit is firmly seated the cradle.
- To use the cable, connect the USB/Serial cable to the PDT.
2. Connect the USB/Serial cradle or cable to the Host PC's serial port or USB port.
3. Connect the cradle or PDT to the power adapter and power source.

4.2 Using ActiveSync

Use ActiveSync to transfer and synchronize files between the PDT and the Host PC.

4.2.1 Setting up a Partnership

During the Microsoft ActiveSync installation, you were prompted to create a partnership with your mobile device. When you set up a partnership, you select synchronization and file conversation settings, which are contained in a file on your desktop computer. This file enables your desktop computer to recognize your device. Only devices that have a partnership with a desktop computer can synchronize information between the two computers.
For more information on partnerships, please refer to your Microsoft ActiveSync documentation or help file.

Transferring Files:

To transfer files, complete the following steps on the host PC:

✓ Select **Start > Programs > Communication > (Serial, or USB) Activesync.**

✓ Double-click on the selected **ActiveSync** icon

✓ After you have established a connection with PDT, tap the "**Explore**" button at the top of the **ActiveSync** window (or select **Explore** from the File menu).

✓ Navigate to the target directory on your PDT and copy the desired file by using the **Copy/paste** method or dragging and dropping the desired file(s) into the folder.

Figure 4-1 **Communication**

4.2.2 ActiveSync File Synchronization

ActiveSync files synchronization requires an ActiveSync partnership between the PDT and the Host PC. Refer to "Setting up a Partnership", above:

- ✓ Select the files in the synchronization configuration for the PDT partnership.
- ✓ Select **Tools > Options** from the ActiveSync command bar to configure the synchronization options.
- ✓ Place the file to be synchronized in the **Synchronization** folder createdin your **My Documents** directory. Defaults to the desktop. During the ActiveSync connection, all files in the **Synchronization** folder will be synchronized to the **\My Documents** directory on the PDT.

Figure 4-2 **Connected**

4.3 Networking

Please see the **3.2.12 "Owner", Table 3-20 "Owner"** on page 3-40 for **setting up the network ID**. And see the **2.5.6 Setting Up Wireless LAN RF** to setup the 802.11b Wireless LAN for RF connecting.

Chapter 5. Software Applications

5.1 Introduction

The PDT includes several applications for example Calculator, email, etc.

You can switch to any software application by tapping the Start Menu.

5.2 Software Applications

5.2.1 Calculator

It can be used for basic calculations with "+", "-" "*" and "/".

✓ **Procedure:**

- ➢ Tap numeric number
- ➢ Tap one operator "**+**", "**-**", "*****" or "**/**"
- ➢ Then, tap another numeric number
- ➢ Tap another operator or numeric number if needed
- ➢ Tap "**=**" to get result

✓ **Button Function:**

- ➢ **"MC" –** Memory Clear : clear the memory
- ➢ **"MS"** – Memory Store : store the displayed value to memory
- ➢ **"MR"** – Memory Recall : Display the most recent stored value
- ➢ **"M+"** – Add stored numeric number into the displayed numeric value.
- ➢ **"Backspace"** – Same as " backspace" key
- ➢ **"CE"** – Clear current keying numeric number. Same as " Delete" key
- ➢ **"C"** – Clear the current calculation. Same as "ESC" key.

5.2.2 Inbox

Use **Inbox** to send and receive e-mail messages in the following ways:

✓ Synchronize e-mail messages with Microsoft Exchange or Outlook on the Host Computer.

✓ Send and receive e-mail messages by connecting directly to an e-mail server through an Internet server provider (ISP) or a network.

5.2.2.1 Setup "**Inbox**":

✓ Select **Start > Programs > Inbox** to open it.

✓ Select **Service > Options** from the command bar. Drag the dialog to show the right edge to configure e-mail.

✓ Select "**Add…**"

✓ In the "**Service Type"** list, select **POP3 Mail** or **IMAP4 Mail**. (**POP3** is the most common mail protocol for ISPs).Enter a unique name for e-mail service in the "**Service name**" field. This name cannot be changed later.

✓ Select "**OK**".

✓ The Mail Service Setup wizard appears after you add a service. If you are adjusting the setting of an existing service, select **Service > Options**, select the service you are using, and then **Properties**. In the **Service Definition** dialog box, complete the following entries as needed:

 ➢ **Connection**: Select the name of the connection you created to connect to the mail server. If you are receiving e-mail through a network(Ethernet) connection, select **Network Connection**. If you want Inbox to use your current connection, select (**none**). If you have not created a connection, select **Create new connection**. Double-tap the "**Make new Connection**" icon, and follow the instructions in wizard. When finished, select Inbox in the Taskbar and continue setting up Inbox.

 ➢ **POP3 Host**(POP3 only): Enter the name of the mail server you use to receive and send messages.

 ➢ **Server**(IMAP4 only): Enter the name of the mail server you use to receive and send messages.

 ➢ **User ID**: Enter the user name or mailbox ID assigned to you.

 ➢ **Password**: Enter the password you use to access this mail account. If you do not want to be prompted to enter the password each time you connect, select "**Save password**".

 ➢ **Domain(Windows NT)**: Enter your Windows NT domain name. This name is required only when connecting to networks, such as a corporate network, that use

Windows NT domain security. This is not required for most ISP accounts. If you have trouble connecting, try clearing this box.

> **SMTP Host**: If your mail service uses a separate server for SMTP, enter the name in the box. If you're setting up a POP3 Mail service with an ISP, the ISP must use an SMTP mail gateway.

> **Return Address**: By default, the return address is set to *username@POP3host* or *username@Servername*. Depending on the service you are using. If this is not your e-mail address, enter the correct address in the box.

5.2.2.2 Set general preferences:

If you are adjusting the setting of an existing service, select **Service > Options**, select the service you are using, select **Properties**, and then select **Next**. In the **General Preferences** dialog box, choose any of the following settings, all of which are optional:

> **Disconnect service after actions are performed**: Select to automatically disconnect from the server upon completion of all pending actions. This option minimizes connect time and cost.

> **Check for new messages every**: select the time interval (in minutes) at which you want the device to check for new mail. If this option is turned off, you must check for new mail manually by selecting **Services > Send/Receive Mail**.

> **Display a message box when new mail arrives** (POP3 only): Select to be informed that new mail has arrived.

> **Display a message box when new mail arrives** (IMAP4 only): Select to be informed that new mail has arrived.

> **Send using MIME format** (POP3 only): Select to send messages with extended characters.

> **Only display messages from last 3 days**: Select how many day's messages you want downloaded.

5.2.2.3 Set inbox preferences

If you are adjusting the settings of an existing service, select **Services > Options**, select the service you are using, select **Properties**, and then select **New** twice. In the **Inbox Preferences** dialog box, choose any of the following options:

> **Get message headers only**: Select to save storage space and time by downloading only headers. You can download a full copy of the message later by selecting the message and then **Services > Get Full Copy**.

> **Include <number> lines**: Select to set the message length (approximate number of

lines) that you want to download.

- ➢ **Get Full Copy of messages**: Select to receive a full copy of all messages. In addition to the message body, any options you select in **When getting full copy** will be downloaded. Selecting this option increases the amount of time needed to download messages.

- ➢ **Only synchronize folder hierarchy under Inbox** (IMAP4 only): Select to speed download time by preventing the complete downloaded of the folder list every time you connect.

- ➢ **Get meeting requests** (POP3 only): Select to download and store copies of meeting requests when getting full copies of messages. This setting applies whether you have chosen to download full copies of messages by default, or you selectively download full copies of messages by opening the message and selecting **Services > Get Full Copy** Limitations apply.

- ➢ **Get file attachments** (POP3 only): Select to download and save message attachments when getting full copies of messages. This option may use significant RAM and slow download time. This setting applies whether you have chosen to download full copies of messages by default, or if you selectively download full copies of messages and selecting **Services > Get Full Copy**.

- ➢ **Get file attachments and meeting requests** (IMAP4 only): Select to download and store meeting requests and message attachments when getting full copies of messages. This setting applies you have chosen to download full copies of messages by default, or if you selectively download full copies of messages by opening the message and selecting **Services > Get Full Copy** Limitations apply.

- ➢ **Only if small than** (IMAP4 only): Select to restrict the size of the attachments you download. Set to 10K if you want to receive meeting requests only.

5.2.2.4 Include the original message in a reply:

- ➢ Select **Services > Options > Compose** tab.
- ➢ Under **Reply**, select **Include Body**. This setting will place a copy of the original message beneath your response text.
- ➢ To indent the original message, select **Indent**.
- ➢ To add leading characters (such as >) to the original message lines, select **Add leading character**, and enter the character you want.

5.2.2.5 Save copies of sent messages:

By default, sent messages are not saved on your device.

> Select **Services > Options > Compose** tab.
> Select **Keep copy of sent mail in Sent folder**.

5.2.2.6 Set the action to follow deleting, moving, or responding to a message:

> Select **Services > Options > Read** tab.
> Select desired options.

5.2.2.7 Delete a message:

Select the message and select **File > Delete**. Messages are moved to Deleted (local) folder and deleted according to the option you have selected in **Services > Options > Delete** tab:

> **On connect/disconnect:** Deletes messages when you connect or disconnect from your mail service or exit Inbox.
> **Immediately:** Deletes messages as soon as you select **File > Delete**.
> **Manual:** Deletes messages when you select **File > Empty Deleted (local)**

Note: If you are working offline, messages that have been deleted from the device the next time you connect.

5.2.2.8 Empty the Deleted (local) folder:

> **Select File > Empty Deleted (local)**. This permanently deletes messages in the Deleted (local) folder.
> To check or adjust the current settings for deleting messages, select **Services > Options > Delete** tab.

5.2.2.9 Move or copy a message:

CAUTION: When you move a message that you have received through POP3 or synchronization to a folder you created on your device, the copy of the message on the server is deleted. This prevents duplicate copies of messages. Although the complete message is moved, message attachments will be deleted if you have not selected the option to download attachments. Once the message is moved, you will be able to access the message only from your device.

> Select the message
> Select **File > Move To** or **File > Copy To**.
> Select the destination folder. If you are working offline, the message will be moved or copied from the server the next time you connect.

5.2.2.10 Folder-

◆ **Create a folder:**

➢ Select **File > Folder > New Folder**

➢ Type a name for the folder.

◆ **Delete a folder:**

➢ Select the folder you want to delete

➢ Select **File > Delete**

◆ **Designate a folder as offline:**

Only IMAP4 folders can be designated as offline. All IMAP4 default folders, such as Inbox, are automatically designated as offline. Messages in offline folders can be viewed when you are disconnected from your mail server. If a folder is not designated as offline, you will be able to read and respond to messages in that folder only when connected to the server.

➢ To designate a folder as offline, select the folder and then select **Service > Offline Folder**.

◆ **Rename a folder:**

➢ Select the folder you want to rename.

➢ Select **File > Folder > Rename Folder**.

➢ Type the new name for the folder.

Notes:

● Default folders, such as Inbox, can't be renamed.

● Folders you create for IMAP4 mail servers can't be renamed.

◆ **Synchronize folders while connected:**

When you synchronize folders, the contents of your device folders and mail server folders are compared and updated. New mail messages are downloaded, and messages in your device Outbox folder are sent. The synchronization behavior depends on how you connect to your mail server.

➢ When you connect to a POP3 server, the Inbox and Outbox folders on your device are synchronized with the corresponding folders on the mail server. To synchronize after the initial connection, select **Services > Send/Receive Mail**.

➢ When you connect to an IMAP4 server, Inbox, Outbox, and all folders marked as offline are synchronized. To synchronize all folders after the initial connection, select **Services > Synchronize Folders**. To synchronize just the selected folder and the Outbox folder, select **Services > Send/Receive Mail**.

5.2.2.11 Compose and send a message:

 ➢ In list view, select **Compose > New Message**
 ➢ Enter the address of one or more recipients, separating them with a semicolon. If the recipient is listed in the Address Book, enter a few letters of the recipient's name and select **Compose > Check Name**. If there is only one match, the e-mail address is inserted. If there is more than one match, select the correct address from the **Choose E-mail Recipients** dialog box. If there is no match then add a new e-mail address through **Choose E-mail Recipients**.
 ➢ To attach a file, select **File > attachments > Add Attachment**.
 ➢ Select **File > Send**. If you are working offline, the message is moved to the Outbox folder and will be sent the next time you connect.

Tip: to see more header information, select the triangle in the lower-right corner of the header area. Select the triangle again to collapse the header area.

5.2.2.12 Save a message:

 ➢ Select **File > Save** to save the message you are composing or editing.

The message is not sent and is saved in the inbox folder of the active service.

5.2.2.13 Reply to or forward a message:

 ➢ Open the message, and then select **Compose > Reply to Sender, Reply to All, or Forward**.
 ➢ Enter your response.
 ➢ Select **File > Send**.

Tips:
 ● Selections in the Options dialog box determine whether the original text is included.
 ● To see more header information, select the inverted triangle in the lower-right corner of the header area. Select the triangle again to collapse the header area.

5.2.2.14 Check Inbox status:

 ➢ In list view, select **Compose > Status**. You can view details such as the number of messages to be sent, deleted, and copied, and the number of attachments to be downloaded.

5.2.2.15 Download message from the server:

When you download messages, you need to create two connections: a remote connection and a mail server connection. The remote connection connects you and your ISP or

network. The mail server connection downloads messages from your mail server to Inbox on your device. When you select Services> Connect in Inbox, Inbox starts a remote connection using the connection you specified when setting up the current mail service. If you are already connected through a remote connection other than the one you specified in the service, you will be asked if you want to use the current connection. If you choose not to, you will need to disconnect from the current connection before you can check for new messages.

- ➢ Select the **Services** menu and make sure that the service you want to use is selected (the selected service has a bullet next to it.)
- ➢ Select **Services > Connect**. The messages on your device and mail server are synchronized: new messages are downloaded to the device Inbox folder, messages in the device Outbox folder are sent, and messages that have been deleted on the server are removed from the device Inbox. Double-tap a message list to open it.
- ➢ If you read a message and decide that you need the full copy, select **File > Get Full Copy** while in the message window or **Services > Get Full Copy** while in list view. This will also download message attachments and meeting requests if you have those options selected in the **Inbox Preferences** dialog box. You can also choose to download full copies of messages by default.
- ➢ When finished, select **Services > Connect** to disconnect. You also need to disconnect your dial-up connection by double-tapping the icon in the status bar and selecting **Disconnect**.

Notes:

- Receiving entire messages consumes storage memory.
- The size column in the Inbox list view displays the local size and server size of a message. Even when a message has been downloaded fully, these numbers may differ because the size of a message can very between the server and the device.
- When using IMAP4 to get Outlook + data, you will see the contents of your Journal folder. File editing transactions and documents (such as Task items, e-mail message, and Word documents) attached using drag and drop will appear as shortcuts on the device. A copy of the document will not be moved to your device, and the shortcut on the device cannot be used to access the documents associated with a journal entry to the device, attach the document to the entry rather than dragging and dropping it. Also, be sure to set your IMAP4 service to receive full copies of messages, attachments, and meeting requests. For more information on using Journal, see the Help for the desktop version of Outlook.

5.2.2.16 Working with Message Attachments:

➢   If you receive messages through a remote mail server, in Inbox on the device, select the **Get file attachments and meeting requests** (IMAP4) or **Get meeting requests** (POP3) setting in the **Inbox Preferences** dialog box. For more information, see **Set Inbox preferences**.

Notes:

● Embedded images and OLE objects cannot be received as attachments

● Embedded messages can be viewed as an attachment when using IMAP4 to receive e-mail. However, this features does not work if TNEF is enabled so that you can receive meeting requests.

◆ **Check attachments status:**

➢   An attachment sent with an e-mail message, whether it has been downloaded or not, will appear as an icon at the bottom of the message in its own window pane. If you don't see this pane, select **File > Attachments > Show Attachments**. If TNEF is turned on so you can receive meeting requests, you will not see attachments until they are fully downloaded.

➢   To mark an attachment for downloading in a POP3 or IMAP4 service, double-click it. The attachment will be downloaded the next time you connect. You can also set Inbox to download attachments automatically when you get a full copy of a message. For more information, see **Receive attachments**.

◆ **Open an attachment:**

➢   With the message open, double-tap the attachment's icon at the bottom of the message. If you don't see this pane, select **File > Attachments > Show Attachments**.

◆ **Store an attachment:**

➢   Select **Service > Options > Storage** tab.

➢   Select to store attachments on internal RAM or a storage card.

➢   If you use more than one storage card, select it from the list.

Note: Once you make the above selection, all attachments will be moved to the selected card.

◆ **Delete an attachment:**

➢   To delete an attachment from a message you are sending, select the attachment, and then select **Edit > Clear** or press the **DEL** key on the keypad.

➢   To delete an attachment you have received, delete the message.

> **Attach a file to a message:**
> With the message open, select **File > Attachments > Add Attachment**.
> Select the file you want to attach.

Note:

OLE objects cannot be attached to Inbox messages.

Note 1: To add a mail service, select "**Add**", To remove a mail service, select the service from the **Installed service** box and select "**Remove**". To view a mail service's properties, select the service from the **Installed service** box and then select **Properties**.
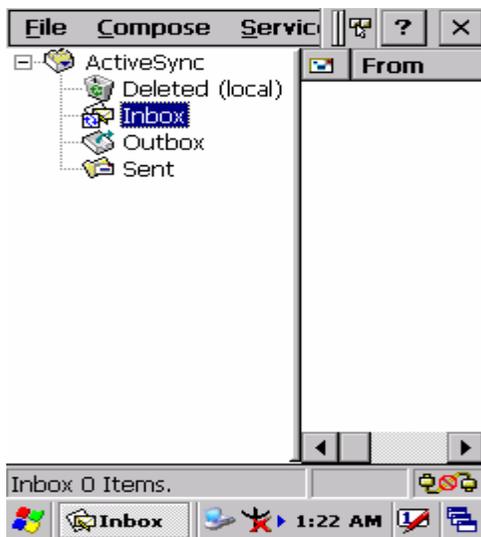
Figure 5-1 **Inbox**

5.2.3 Internet Explorer

With Internet Explorer, you can view Web or intranet Web pages on your device. You will need to use a modem or WLAN to connect to an Internet server provider (ISP) or network.

5.2.3.1 Connect to the Internet

Before you can view Web pages, you must set up a remote connection to your ISP or network.

5.2.3.2 Start Internet Explorer

✓ Open Internet Explorer by selecting **Start > Programs > Internet Explorer.**

✓ To get default home page, navigate to the desired default web page.

✓ Select **View > Internet Options** from the command bar.

✓ Enter the desired URL in the **Start page** field.

✓ Press the **OK** button.

Figure 5-2 **Internet Explorer**

5.2.3.3 Navigation Control

Internet Explorer uses sliding menus for application and navigation control. Tap and drag the sliding menus to the left or right to see the hidden menu items and toolbars.

To achieve more screen real estate in Internet Explorer, you can hide the **Status** bar and **View** menu. From the top menubar, go to **View > Hide Toolbars**.

Once it is hidden, you must cold reset to access these features again. Refer to 2.7.2 "**Cold Reset**" for more information.

5.2.3.4 Set up a proxy server

Proxy servers are often used when connecting to the Internet through a local network, such as a corporate network, for added security.

✓ Select **View > Internet Options > Connection** Tab.

✓ Select **Access the Internet using a proxy server**.

✓ Enter the proxy server address and port. For more information, see your administrator.

✓ To bypass the proxy server for local address, such as corporate intranet pages, select **Bypass proxy for local address**.

5.2.3.5 Enable Cookies

A cookie file contains information about your identity and preferences so that a Web site can tailor information to your needs. The Web site sends the file and it is stored on your mobile device.

- ✓ Select **View > Internet Options > Security** Tab.
- ✓ Select **Allow cookies**.

5.2.3.6 Search for an Internet Site

- ✓ Select **View > Go > Search** to search the web.

5.2.3.7 Go to an Internet address

- ✓ Select **Address Bar**, if necessary to display the Address bar
- ✓ Enter the address
- ✓ Press "**ENTER**" **key.**

5.2.3.8 View previously visited sites

- ✓ Tap the **Arrow** button at the right site of Address Bar
- ✓ Select the **Web Address** you want to view.

5.2.3.9 Add and view Favorites

- ✓ Go to the page you want add
- ✓ Select **Favorites > Add To Favorites**.
- ✓ If necessary, locate the folder you want.
- ✓ Confirm or change the name.
- ✓ To view your favorite Web sites, select **Favorites** and the Web site you want to view.

Note:

To organize your Favorites list, select **Favorites > Organize Favorites**.

5.2.3.10 Browse Web pages

- ✓ To move to a page you have previously view, select **View > Back**
- ✓ To move to the next page (provided you have viewed it previously), Select **View > Forward**.
- ✓ To return to your Home page, select **View > Go > Home**.

5.2.3.11 Refresh current page
✓ Select **View > Refresh**.

5.2.3.12 Stop loading a page
✓ Select **View > Stop**.

5.2.3.13 View current page
✓ Select **View > Internet Options**
✓ To view the protocol, page type, size, and address, selects the **General** tab.
✓ To view security information about the page, select the **Security** tab.

5.2.3.14 View HTML source code
✓ While viewing the page, select **File > Save As** and save the file as .txt file.
✓ Open the file in a word processing program, such as **WordPad**.

5.2.3.15 Change home and search page settings
✓ Open the page you want to use as your home or search page.
✓ Select **View > Go > Home** or **Search**.

5.2.3.16 Save a copy of current page
You can save Web pages and view them later when you're disconnected from the Internet or Intranet without using cached memory.
✓ Select **File > Save As**
✓ Specify a folder location and give the file name.

5.2.3.17 Copy a Web page to a document
✓ Select all or part of the Web page you want to copy.
✓ Select **Edit > Copy**.
✓ Go to the document where you want to place the information and select the location.
✓ Select **Edit > Paste**.

5.2.3.18 Select security Options
✓ Select **View > Internet Options > Security** tab
✓ Select the security protocols you want.

5.2.3.19 Change the font size

    ✓   Select **View > Text Size** and select the desired size.

5.2.4 Media Player

The PDT comes with Media Player for Windows
CE.NET installed.

    ✓   Open Media Player by selecting **Start >
Programs > Media Player** from the desktop.

    ✓   Select **File > Open** to open a new media file.

    ✓   Please refer to www.microsoft.com for
additional information and help with your
Microsoft Windows Media Player.

Figure 5-3 **Media Player**

5.2.5 Messenger

The Windows CE Messenger client application in Windows CE.NET allows you to communicate
real-time using text-based messaging, VOIP, and more.

    ✓   See who's online. See when your colleagues are online. You can also post your
presence information to a list of watchers that you define.

    ✓   Talk instead of type. Stop typing. Talk with a colleague anywhere in the world using the
microphone and speakers. Windows Messenger supports high-quality voice.

    ✓   Communicate using Session Initiation Protocol (SIP) or Hotmail contacts Windows
Messenger supports. Communication with your colleagues in the enterprise with a SIP
based communications service. You can also talk to your Hotmail contacts using
the .NET Messenger.

5.2.6 Microsoft WordPad

You can create and edit documents and templates in WordPad, using buttons and menu commands that are similar to those used in the desktop version of Microsoft Word. You can work with files Normal or Outline view.

WordPad documents are usually saved as **.pwd** files, but you can also save documents in other file formats, such as **.rtf** or **.doc**.

5.2.6.1 Selecting and Editing Text

✓ **Select text**

To select	Do this
Any amount of text	Drag the stylus over the text.
A word	Double-tap the word.
A single paragraph	Triple-tap within the paragraph.
An entire document	Select Edit > Select All
An picture	Tap the picture

✓ **Find text**

> ➢ To search for text in one part of a document, select that part. Otherwise, the whole document is searched.

> ➢ Select **Edit > Find**

> ➢ Enter the text you want to find. For a paragraph, enter **^p**. For a tab stop, enter **^t**.

> ➢ Select the search options you want.

> ➢ To continue searching, select **Edit > Find > Next**.

✓ **Replace text**

> ➢ To replace text in one part of document, select that part. Otherwise, the whole document is searched.

> ➢ Select **Edit > Replace**.

> ➢ Enter the text you want to find and the text you want to replace it with. For a paragraph, enter **^p**. For a tab stop, enter **^t**.

> ➢ Select the replacement options you want.

> ➢ Select **Find Next**.

> ➢ On the **Find/Replace** toolbar, select the appropriate button.

✓ **Move, copy, or delete text**

➢ Select the text you want to move, copy, or delete.

➢ To move or delete text, select the **Cut** button. To copy the text, select the **Copy** button.

➢ To paste the information, move the insertion point to the desired location, and select the **Paste** button.

Notes:

● To undo an action, select **Edit > Undo**.

● To restore the action, select **Edit > Redo**.

5.2.6.2 Formatting Text

✓ **Create bulleted and numbered lists**

➢ Select the **Bullets** or **Numbering** button.

➢ Type the first item.

➢ Press **ENTER**, type the next item, and repeat as needed.

➢ Select the button again to end list formatting.

Note: To change the number style for the selected list, select **Format > Paragraph**, in the **Format** list, select the style you want.

✓ **Set the default font**

➢ Select **Format > Font**.

➢ Select the font you want.

➢ Select **Set As Default**

➢ To confirm that your changes will be applied to subsequent documents you create, select **Yes**.

Note: To apply the default font and stylus to selected text, select **Apply Default**.

✓ **Select a different font**

➢ Select the text you want to change. To select all text, select **Edit > Select All**.

➢ From the **Font** list, select the font you want.

➢ From the **Font Size** list, select a size.

Note: To see more formatting options, select **Format > Font**.

✓ **Change font formatting**

➤ Select desired text.

➤ Select the **Bold**, **Italic**, or **Underline** button.

➤ To change the color, select **Format > Font** and select the color you want from the **Color** list.

✓ **Adjust the paragraph alignment**

➤ Select the paragraph you want to align.

➤ Select the **Align Left**, **Center**, or **Align Right** button.

Note: To see more formatting options, select **Format > Paragraph**.

✓ **Indent a paragraph**

➤ Select the paragraph you want to indent.

➤ Select **Format > paragraph**.

➤ Adjust the indentation settings as needed.

✓ **Set tabs**

➤ Select **Format > Tabs**.

➤ Change the tab settings as needed.

5.2.6.3 Adjusting the Display

✓ **Wrap text in the window**

➤ Select **View > Wrap to Window**.

✓ **Display the document using the full screen**

➤ Select **View > Full Screen**.

➤ To exit Full Screen view, select **Restore**.

➤ To move the **Restore** button, drag the bar on the left side.

✓ **Display or hide scroll bars**

➤ Select **View > Horizontal Scroll Bar** or **Vertical Scroll Bar**.

✓ **Zoom in or out**

➤ Select **View > Zoom**, and select the desired percentage.

Note: For **Custom**, enter the exact percentage and select **OK**.

5.2.6.4 Working in Outline View

✓ **Switch between Normal and Outline views**

➢ Select **View > Normal** or **Outline**.

✓ **Assign and change outline levels**

➢ Select **View > Outline**.

➢ Select the appropriate buttons on the toolbar.

5.2.6.5 Inserting Symbols

✓ Place the insertion point where you want to insert the symbol.

✓ Select **Tools > Insert Symbols**.

✓ Select the symbol you want, and then select **Insert**.

Tips:

If you select a different font (or subset of a font), a different set of Symbols will be displayed.

5.2.6.6 Printing a Document

✓ Select **File > Print**.

✓ Select the printing options you want.

Tips:

- **Port** list the available printer ports
- If **Network** is selected from the **Port** list, enter the path to the network printer to the **Net Path** box.

5.2.6.7 Setting a password for a Document

✓ Select **File > password**.

✓ Type and verify the password.

✓ You must save the document (**File > Save**) to return the password.

5.2.6.8 Converting Documents

✓ **About document conversion**

If an e-mail program is installed on your device and you receive an attached Word document or template created in Word version 6.0 or later, WordPad will convert the file on your device. To view the document, simply open the attachment in your e-mail program or open the file in the WordPad.

During conversion, some formatting attributes may be changed or lost. To avoid losing these attributes permanently, close the file after viewing it rather saving the file on your device. If you save the file, save with a different file name.

For more information about conversion performed on your device, see the following topics.

✓ **Changes caused by Word document conversion**

➢ **Formatting**

● **Borders and Shading**

Borders and shading are not displayed in WordPad, but are restored when converted back to a Word document. Shading is not restored when used in a table, but simple borders are restored.

● **Character formatting**

Bold, italic, strikethrough, superscript, subscript, and hidden text are retained and displayed. Other effects are changed or removed.

● **Colors**

Colors are retained and mapped to colors available on your device.

● **Fonts and font sizes**

Fonts not supported by your mobile device are mapped to the closest font available in WordPad.

● **Page Formatting**

Headers, footers, footnotes, columns, pages setup information, and style sheets are removed during conversion to WordPad. WordPad supports built-in headings.

● **Paragraph formatting**

Tabs, alignment, bullets, indentation, simple numbered lists, and paragraph spacing are retailed and displayed in WordPad.

➢ **Pictures**

Pictures are removed during conversion.

➢ **Table of Contents**

Table of Contents text and some formatting are preserved. However, any text set at right-aligned tab stops may wrap to the next line.

➢ **Index**

Index text and some formatting are preserved.

➢ **Tables**

Tables appear as tab-delimited text. Cells containing wrapped text, tabs, or paragraph markers may be difficult to read. Simple tables are displayed accurately and restored when you convert the WordPad file back to a WordPad document.

➢ **OLE Objects**

OLE Objects are removed during conversion.

➢ **Revisions marks, annotations, and comments**

Revision marks are visible but cannot be changed. Annotations and documents are removed during conversion.

5.2.7 Remote Connection

Using Remote Desktop Connection, you can log on to Windows Terminal Server and use all programs installed on this server. For example, instead of running Microsoft Pocket Word, you can run the desktop version of Microsoft Word.

5.2.7.1 Connecting to Terminal Server
- ✓ Select **Start > Programs > Remote Connection**, or run 'CETSC' from the command prompt.
- ✓ In the Server box, type or select a Terminal Server name or TCP/IP address, or select a server in the drop-down list.
- ✓ Select **Connect**.
- ✓ In the **Remote Connection** window, type your user name, password, and domain(if required), and then select **OK**.
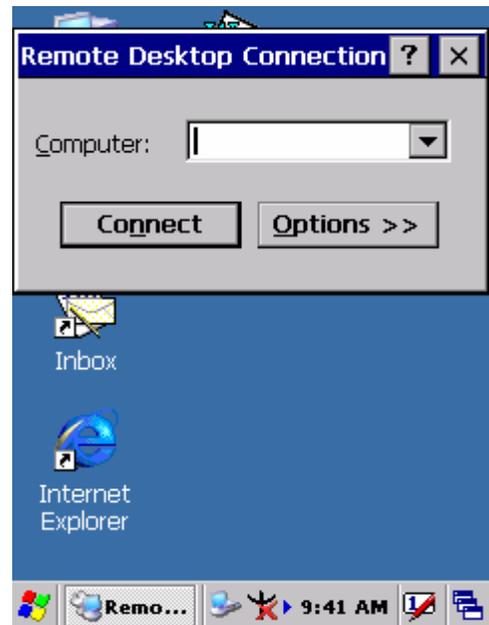
Figure 5-4 **Remote Connect**

5.2.7.2 Disconnecting Without Ending a Session
- ✓ In the **Remote Connection** window, select **Start > Shutdown**.
- ✓ Select **Disconnect > OK**.

Note: If you previously disconnected from a Terminal Server without ending the session, the Terminal Server will continue to execute any running processes and Remote Connection can later reconnect to this same session(if your administrator has configured Remote Connection to reconnect to disconnected sessions).

5.2.7.3 Disconnecting and Ending a Session
- ✓ In the **Remote Connection** window, select **Start > Shutdown**.
- ✓ Select **Log Off > OK**.

5.2.8 Windows Explorer

Windows Explorer works almost the same on your
PDT as it does on your PC. See the topics below for
information about the difference in Windows
Explorer on your device.

5.2.8.1 Navigating in File View

✓ **Go forwards and Back**
  ➢ To go to the previous folder, select **Go > Back**.
  ➢ To go to the next folder (which you have just viewed), select **Go > Forward**.
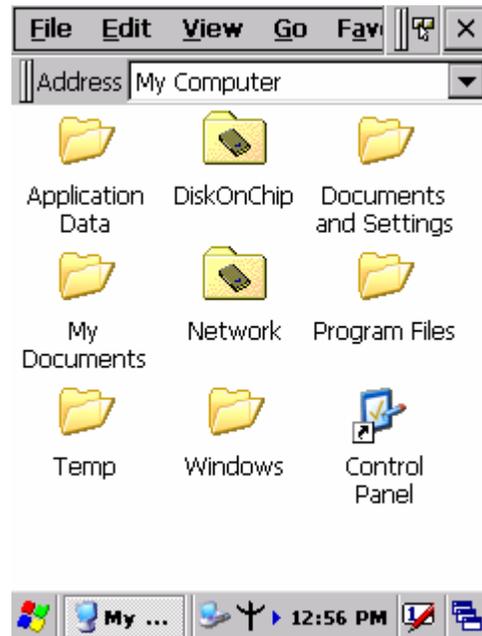
Figure 5-5 **Windows Explorer**

✓ **Use the Go menu**
  ➢ To quickly access the My Documents folder, select **Go > My Documents**
  ➢ To see all of the folders you have accessed, select **Go > History**. Double-tap a folder to return to it.

5.2.8.2 Viewing Files as Icons Lists

✓ To view icons, select **View > Large Icons** or **Small Icons**.
✓ To view a list, select **View > Details**.

5.2.8.3 Working with Files and Folders

✓ **Create a new folder**
  ➢ If necessary, open the folder where you want the new folder to reside.
  ➢ Select **File > New Folder**.
✓ **Add a folder to your Favorites list**
  ➢ Open the folder
  ➢ Select **Favorites > Add to Favorites**.
  ➢ In the **Name** box, type the shortcut name.
  Tips:
  ● To open a favorite file or folder, select **Favorites** and then select the folder.
  ● To organize your favorites, select **Favorites > Organize Favorites**.

✓ **Transfer a file using infrared**
  ➢ To send a file, select it, line up the infrared ports, and select **File > Send To > Infrared Recipient**.
  ➢ To receive a file, line up the infrared ports, and select **File > Receive**.

5.2.8.4. Creating Desktop Shortcuts

✓ Display the file or Web page for which you want to create a Shortcut.
✓ Select **File > Send to**.
✓ Select **Desktop as Shortcut**.

5.2.8.5 Switch to Internet

✓ Type a URL in the Address bar.

5.3 DiskOnChip

The DiskOnChip let the application or a data file can be stored into the Flash Memory.

Note: The DiskOnChip storage memory persists all reset (warm/cold reboot) conditions and software/firmware updates.

We strongly recommends installing all applications, applets, programs, and important data files to the DiskOnChip Flash location.

CAUTION: **If an application or a data file is only installed or saved in RAM, a cold reset will result in the loss of that application or data file.**

5.3.1 Saving to Flash

To save an application or data to the Flash Memory, from your current application, select **File > Save As >** navigate to the **DiskOnChip** location and save it.

5.3.2 DiskOnChip Location

To access the contents of DiskOnChip storage:

✓ Double-tap the **My Computer** icon on the desltop.
✓ Double-tap the **DiskOnChip** icon to view **DiskOnChip**.
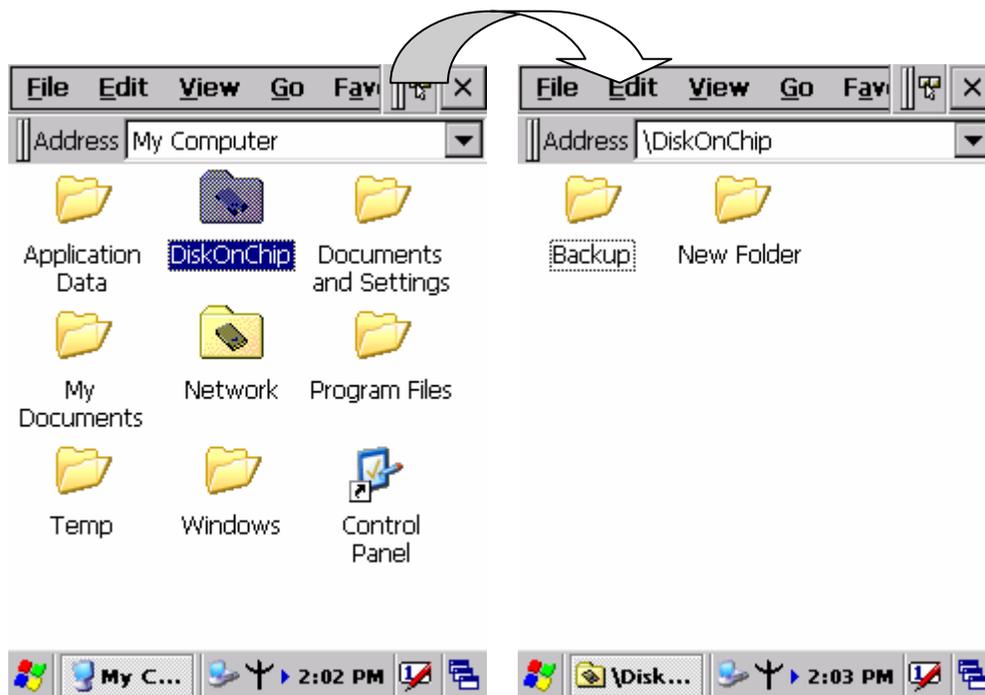

Figure 5-6 **DiskOnChip**

5.3.3 DiskOnChip Size

The size of the DiskOnChip will vary, depending on the size of system firmware.

✓ Inside the **DiskOnChip** directory, tap **File > Properties**.

✓ The **DiskOnChip Properties** dialog:

The number following **Free** is the amount of memory currently available on your device.
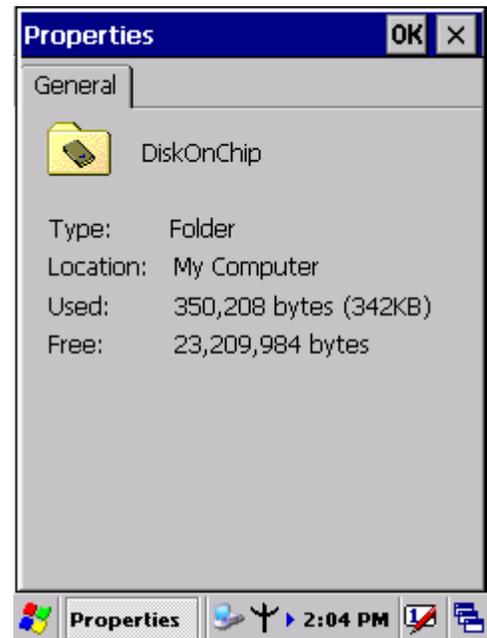
Figure 5-7 **DiskOnChip Size**

Chapter 6. Phone tools (GSM/GPRS)

6.1 Using the Phone Features

Use the PDT to make and receive telephone calls and send and receive SMS (Short Message Service) messages.

Your mobile phone service provider may provide other useful services such as voice mail.

The phone can also be used to connect to an Internet Service Provider (ISP) or work network so you can browse the Web and read e-mail. You can connect to the Internet or work network over GPRS (General Packet Radio Service), or you can use GSM (Global System for Mobile Communications) for dial-up access.

6.1.1 SIM Card

A SIM (Subscriber Identity Module) card is required to operate the phone features on your PDT. The SIM card is a plastic card embedded with a computer chip that stores and transacts data. After the SIM card is activated by your mobile phone service provider, the computer chip will contain information about your phone number, service, registration information, and contacts, as well as memory to store speed dial numbers and text or SMS messages that you receive.

With the exception of emergency calls, the SIM card must be inserted into the SIM slot under the battery on the back of the PDT in order for voice/data calls to work.

To dial an emergency number, from the Phone keypad, tap the emergency number appropriate for your region, and then tap **Talk** or **Send.**

Note: See your local telephone directory for emergency numbers used in your area.

6.1.2 Inserting a SIM Card

Note: If the battery is already installed, you must remove it before inserting the SIM card.

To insert the SIM card into the PDT:

1. Remove the 4 screws from the GSM End Cap with a screw driver, Torx type and size 8 (T8). And then remove the GSM End Cap.

Figure 6-1 **Remove screws from End Cap**

2. Insert the SIM card (with the gold side facing the inside of the slot) into the SIM slot.

Figure 6-2 **Insert SIM card**

3. Using 4 ~ 4.5 kgf-cm torque to fix the screws for GSM End Cap.

Note: Repeat the same steps to remove the SIM card from the SIM tray.

6.1.3 Enabling GSM/GPRS module

1. Tap the phone icon in the system tray twice.
2. A GPRS power control window is displayed.

3. You need to select "Enable GSM / GPRS" and tap the OK button.
4. After a few seconds you might need to input a PIN code and tap the OK button (only if PIN code is configured).
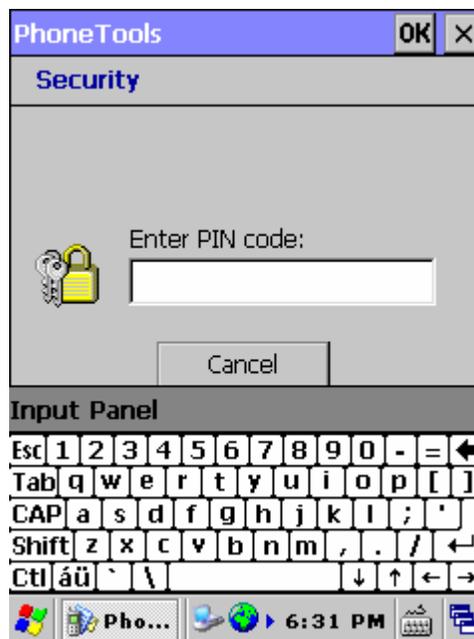
6.2 Interface layout

Depending on options available and the capabilities of your PDT, the main interface enables
you to:

- Look up all your messages using the **Inbox**, **Outbox** and **Sent** icons.
- Create and send **SMS** messages.
- Make a phone call using the **Dialer**, which also enables you to access SMS functions.
- Manage several **Phonebooks**.
- Navigate the Internet.

Notes:

When you start the application for the first time, the communication settings configuration
screen is displayed automatically. You will not be able to access the main interface until these
settings have been specified. See selecting communication settings.
Actions, such as sending SMS, can be directly driven from the system. See System extensions.

6.2.1 Looking up messages

Inbox

Clicking the **Inbox** [icon] icon displays a list of all
messages received at the center of the screen. Unread
messages on this list appear in bold. The content of the
selected message is displayed in the lower frame.
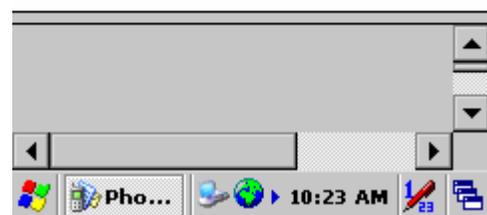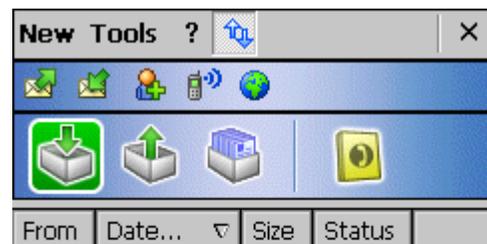
Figure 6-3 **Inbox**

Depending on the type of message, in order to send, see properties, move, resend, display, annotate or delete a message on the list:

1. Select the message and hold the selection with the stylus for a few seconds until a context menu is displayed.

2. Select the desired option.

3. Depending on the option selected, follow the usual procedure or click **Cancel** or the **OK** icon, located in the top right-hand corner of the screen, to return to the main interface.

To collect your messages, click on the **Tools** menu, then select **Retrieve SMS** from the list that shows up. Messages received are placed in the **Inbox** automatically.

Outbox

Clicking the **Outbox** icon displays a list of all messages sent at the center of the screen. The message content is displayed in the lower frame. This is a listing of messages waiting to be sent or sent from the application as well as those downloaded from your mobile phone.

Depending on the type of message, in order to send, see properties, move, resend, display, annotate or delete a message on the list:

1. Select the message and hold the selection with the stylus for a few seconds until a context menu is displayed.

2. Select the desired option.

3. Depending on the option selected, follow the usual procedure or click **Cancel** or the **OK** icon, located in the top right-hand corner of the screen, to return to the main interface.
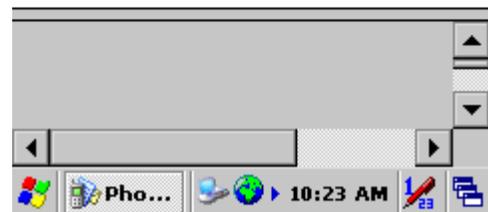
Figure 6-4 **Outbox**

Sent box

Clicking the **Sent** icon will display the list of messages sent from the outbox. The content of the selected message is displayed in the frame.

To send, see properties, transfer, and display, annotate or delete a message from the list:

1. Select the message and hold the selection with the stylus for a few seconds until a context menu is displayed.
2. Select the desired option.
3. Depending on the option selected, follow the usual procedure or click **Cancel** or the **OK** icon, located in the top right-hand corner of the screen, to return to the main interface.


Figure 6-5 **Sent box**

Phonebooks Folder

Clicking the **Phonebooks** icon displays a drop-down list containing the phonebooks you have created or imported. Select the one you wish to look up or edit from the list.

If the drop-down list is empty and you would like to import contacts from your mobile phone, select the **Tools > Retrieve phonebook** menu.

Figure 6-6 **Phonebooks Folder**

6.2.2 Icons and menus

Display icons

Clicking the [icon] icon located at the bottom of the screen and which symbolizes two arrows

on a blank page, displays the fast access icons for available functions (which are as follows, from left to right: send and receive **SMS messages**, add a new contact in your **Phonebook**, **Dialer**, **Internet connection**).
Click this icon again to hide them

Display numeric keypad

Clicking the [icon] icon located in the bottom right-hand corner of the screen and which

symbolizes a keypad displays the keypad. Click this icon again to hide the keypad

Drop-down menus

The **New** and **Tools** drop-down menus have several functions, depending on the context and options available:

New menu

Click on the **New** menu at the bottom of the screen, then select:

- **SMS:** To create and send an SMS message.
- **Phonebook:** To create a phonebook.
- **Phonebook Contact:** To add a contact to your phonebook.

Tools menu

Click on the **Tools** menu at the bottom of the screen, then select:

- **Retrieve SMS:** The application collects the SMS messages and places them in the Inbox.

- **Retrieve phonebook:** To download a phonebook: the one in your mobile phone or the one in your SIM card, or both.

- **Check cellular status...**.

- **Settings...:** To configure the application's communication settings. See selecting communication settings.

- **Dialer:** To make a call directly from the application.

- **Internet connection:** To access the Internet.

- **Logs:** To access the different logs: Data counters, Data sessions log, SMS counters, Calls missed, Calls received, Outgoing calls, Voice counters.

- **About...:** To access information about the application.

- **Close:** To close the application.

6.3 Selecting communication settings

Before using the communication features, make sure that the communication port and the equipment you are using are correctly declared.

General Setup Menu

Click the **Tools > Settings** to access the **General Setup** menu, which have different functions available depending on the type of your equipment. Select:

- **Communications device**: to configure your equipment and type of connection used.
- **Network operator**: to define your operator settings.
- **Internet connection**: to create, modify or delete internet connections.
- **SMS**: to configure the SMS transmission and reception options.
- **My text**: to record words or sentences you frequently use so they can quickly be added to a SMS message.
- **Dialer**: to define the dialer settings.
- **Advanced settings**: to configure Log events and the 'Close' option in the Tools menu.
- **Security**: to modify the PIN code of your SIM card.
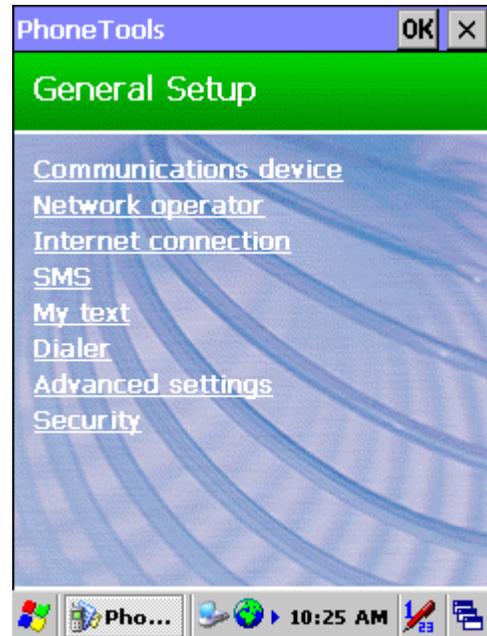
Figure 6-7 **General Setup Menu**

First launch

1. At the first launch, the communication settings configuration screen is displayed. Click **Yes** and follow the different step to specify the communication settings.
2. Depending on the type of connection, your mobile phone and your operator will automatically be detected. (If not, follow the instructions detailed in the next section.) Click the **OK** icon located at the top right-hand corner of the screen to save the settings.
3. A confirmation pop-up is displayed. Click **Yes** to save the defined settings.

Communications device tab

1. Select **Tools > Settings > Communications device**.
2. Select the **Manufacturer** and the **Model** of your equipment (modem or telephone).
3. Select **Connection type** being used.
4. Click the **OK** icon located at the top right-hand corner of the screen to confirm.

The **Terminal** button enables you to dialog directly with the modem via AT commands (like with Microsoft Hyper Terminal).

The **Status** button returns information on your equipment.
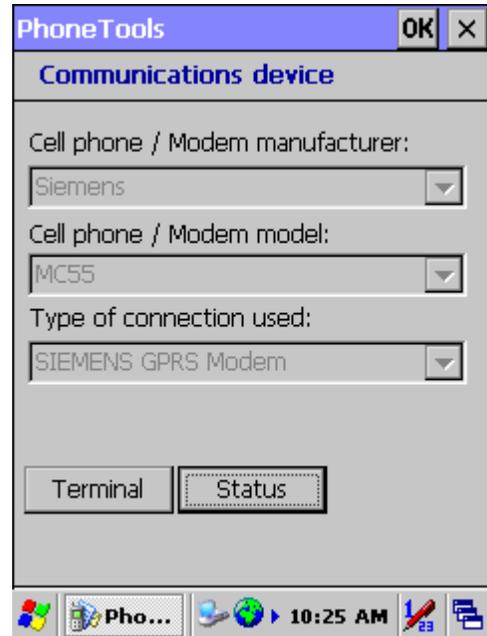
Figure 6-8 **Communications device tab**

6.3.1 System Extensions

PhoneTools system extensions are specific extensions for the **Contacts** application and the **Today** screen. Actions can be driven from the system and the PhoneTools Inbox status is available from the Today screen of your PDT.

Today screen extension

From the **Today** screen of your PDT, click:
- The PhoneTools Inbox status to directly launch PhoneTools. The application opens displaying the **Inbox**.
- The **New > SMS** menu to create a SMS.

Contacts menu extension

From your **Contacts** screen (**Start > Contacts**), select a contact from the list. You can either hold the click until a context menu is displayed or click the **Tools** menu, and then select:
- **Call**: to make a phone call to the selected contact.
- **Copy to the SIM**: to copy the properties of the selected contact into your SIM phonebook.
- **Send SMS**: to send a SMS to the selected contact.

6.4 Dialer

The Dialer module simulates the operation of a mobile phone in your personal assistant. It enables you to:

- make calls in various ways:
  - by directly selecting an entry in the **Contacts** folder of your digital assistant.
  - by selecting from a **Fast calls** list you will have pre-programmed.
  - by entering a number directly using the keyboard.
  - by redialing one of the last 10 numbers dialed.
  - using the missed calls log if the caller has not withheld his/her number.
- receive calls showing, where possible, the last and first names of your caller and playing a tune identifying the **Contacts** category to which your caller belongs.
- reject incoming calls.
- save outgoing, incoming as well as missed calls in call logs.
- send digits with the call to enable navigation across most voice servers.
- save the number of your message system for fast calls.
- check microphone and speaker volume for certain equipment.
- send and receive SMS messages.
- send and receive faxes.
- access the Internet using a single button.
- directly read signal strength and battery level of your mobile in cases involving external equipment or of your assistant in cases involving an internal card.
- request dialer to be called automatically on starting up the application.

Warning!

Certain dialer functionalities can be disabled due to incompatibility with the communications equipment.

6.4.1 Accessing the dialer

Starting from the main interface, select the **Tools** menu then the **Dialer** option. The dialer initializes your communications equipment then displays signal strength and battery level, as well as the name of your service provider. The keyboard will be enabled once the initialization stage is complete.

Figure 6-9 **Accessing the dialer**

6.4.2 Making a voice call

1. <u>Access the dialer</u> and use one of the following methods:
    - **Direct entry**, dial the number using the keys on the numeric keypad. To delete or correct the last digit displayed, click on the [icon] icon showing an arrow pointing to the left and a C. To make the call, click the [icon] icon showing a green receiver.

    - **From Phonebook**, click the **Contacts** [icon] icon to retrieve the number you are calling. If more than one number is assigned to the person being called, a new window will open enabling you to select the number to be called. Click **OK** next to make the call.

    - **Fast call**, click the icon with the # [icon] symbol. The list of the fast call contacts you pre-defined is displayed. Click the one you want to call.

    - **Again**, click the green [icon] button without entering any number. A listing of the last numbers dialed appears.

1. Select the number you wish to call, then click the **Call** button.
2. The number and name of the person being called (if not withheld) is displayed in the top frame during the call.
3. To end the call, click on the icon showing a red receiver. Call duration will then be displayed and an entry in the Dialer log created.

Notes:

- It is just as easy to connect to your voicemail by pressing and holding the "1" key. If you have not specified this number yet, the dialer will suggest configuring it.

*- You can also make a voice call directly from the Contacts application of your PDT. To do so, select the person you wish to call in the **Contacts** screen list, then click the **Tools** > **Call** menu.*

Missed calls

If one or more callers have attempted to contact you in your absence, the dialer will inform you with an on-screen message. If your callers have not withheld their numbers, you can see who called and you can call them back using the following procedure:

1. Click the **Logs** button which will open a tabbed box, the first of which is for missed calls.
2. Select the caller to be called then press the **Call** button.

Fast calls list

In the Dialer window, click the icon with the # symbol. The list of main contacts is displayed. Select a fast call contact you want to define, modify or call and hold the selection with the stylus until a context menu is displayed. Then, click one of the following options:

● **Edit** to create or modify the properties of the fast call contact. Then, click **OK**.
● **Delete** to delete the fast call contact from the list.
● **Extract from Contacts** to retrieve the properties of the contact from your Contacts
● **Dial** to call the selected contact.

6.4.3 Receiving a call

Ringer
The dialer issues a ringing sound to alert you to a caller trying to reach you. The tune played at this time can depend on how the caller is recorded in your Contacts folder. You can in fact specify contacts in your folder (Work, Friends, Family, etc.) and list your callers in one of them. Refer to the user manual for your digital assistant for further information on this subject.
The application may be configured to play different tunes depending on the category of the caller.
If this is the case, the application searches in the Contacts folder for an entry associated with the number, it then determines its category and, having done so, plays the tune you have configured for it.

Warning!

This will only work if the caller does not withhold his or her number.

Information

If the caller's number has not been withheld and if the caller is listed in **Contacts**, the dialer will display his or her name. If he or she is not listed, only the number will be displayed. If the caller's number has been withheld, the dialer will then display **Number Withheld**.

Accepting / Rejecting a call

Click the green ⬚ button to accept the call and click the red ⬚ button to reject it.

Receiving SMS messages

SMS messages are downloaded automatically as soon as your communications equipment informs the application that messages have been received. If the message received has high priority, its content is displayed automatically; otherwise you have to operate the **Envelope** button to read it.

6.4.4 Logs

The application records dates, durations and caller identifiers as the dialer is used, dividing them into three categories: missed calls, received calls and outgoing calls. You can look up details of these lists by pressing the **Logs** button. This will take you to a tabbed box listing the calls logged by category and, under the **Voice counters** tab, the various cumulative totals recorded, with a facility for resetting the counters.

6.5 Internet connection

The Internet connection ![globe icon] button enables connections to be made to Internet and to start up applications associated with it (see <u>connections</u>).

Warning! *On most equipment, the fact of connecting to the Internet prevents the dialer from being used.*

Use the red ![red disconnect icon] button to disconnect the Internet access session.

6.5.1 Configuration

Accessing configuration

- Before configuring the application's dialer function, select the communications equipment and the mobile telephony service provider using the **Settings** command on the **Tools** menu. Next, access dialer configuration by clicking the **Dialer** command in the General Setup window.

Configuring the answering machine

- You can add the number of your answering machine in the **Operator settings** selection dialogue box (**Tools > Settings** menu). It will be dialed automatically if you leave the stylus resting on the "1" key of the dialer.

Configuring a ringer

1. Starting from the main interface, select the **Tools > Settings** menu.
2. Click on the **Dialer** link. You can specify the various tunes to be played according to the categories to which the callers belong in the window displayed.
3. Select the type of call to which a ringer is to be assigned in the first drop-down menu in the **Events** field: **Incoming call**, or **Receive an SMS**.
4. If you have selected **Incoming call**, a second drop-down list will be displayed listing the various categories specified in **Contacts**. Select the category to which you would like to associate a tune.
5. Select the ringer in the **Associated sound** drop-down menu.
6. Use the **Play** and **Stop** buttons to test the selected ringer. Once you are satisfied with a ringer, click **OK** to confirm.
7. Repeat these steps for each type of call to which you would like to assign a ringer.

Calling the dialer automatically on application start-up.

1. Starting from the main interface, select the **Tools > Settings** menu.

2. Click the **Dialer** link.

3. Check the **On when loaded** box in the window that shows up.

6.6 SMS

What is the 'Short Message Service' (SMS)?

The **Short Message Service** enables you to send messages in text format (160 characters maximum) over a mobile phone network. This service requires a specific subscription.

Short messages are first sent to the **SMS Center**, which is part of the mobile phone network, which then forward them to the recipients.

Received messages are stored in the memory. You cannot receive any more new messages once this memory is full. For this reason, ensure you delete them regularly or configure the application so it transfers them to your assistant.

Configuring the service center

1. Starting from the main interface, select **Tools > Settings** and click the **Network Operator** link.

2. Select your country and mobile telephony operator. The number of the default Service Center is displayed. If it is not the number sent by your network operator, you can change it manually.

3. You can also use the **Automatic detection** button for the application to interrogate your equipment and configure these settings.

4. Enter the number for the answering machine suggested by your network operator. It will be used by the dialer.

5. Click **OK** to confirm.
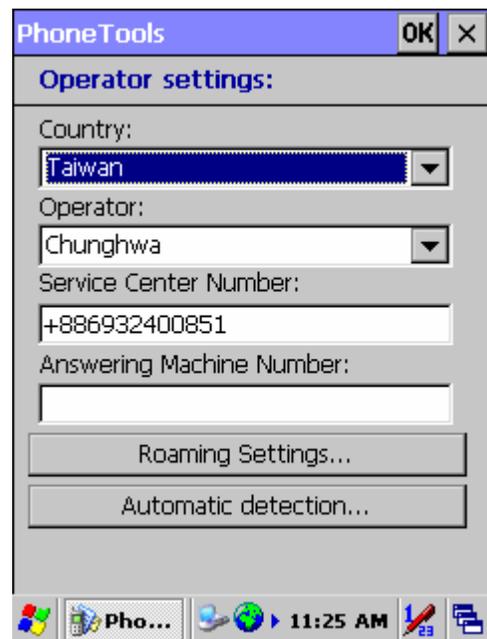
Figure 6-10 **Configuring the service center**

Configuring SMS messages

1. Starting from the main interface, select **Tools > Settings** and click the **SMS** link.

Sending:

    Validity period: if your message cannot be delivered immediately, the service center can record it and resend it later. This list specifies for how long your message will be repeated.

    Message type: to be used in very specific cases, this option configures the message format in line with the service center and the recipient.
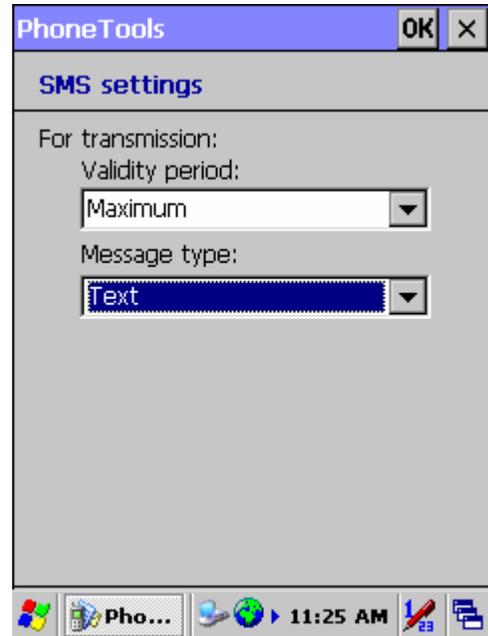
Figure 6-11 **Configuring SMS messages**

Receiving:

    Transferring SMS messages received: they may be either copied or moved from the communications equipment to the digital assistant. If you opt for the "copy" mode (option unchecked), messages received will accumulate in the communications equipment until it fills up and you risk losing messages to come. In this case you can always delete them from the application's inbox.

2. Click **OK** to confirm.

Configuring templates

If you frequently use the same words or sentences in your messages, you can record them in a list so they can be quickly added to your message. To do this:

    1. Starting from the main interface, select **Tools > Settings** and click the **My text** link.

    2. Select an entry to be edited from the upper list and click the **Edit** button (arrow pointing downwards) for the entry to be copied to the editing area.

    3. Once your sequence has been entered, click the **Change** button (arrow pointing upwards) to record it.

Sending an SMS message

1. Starting from the main interface, select **New > SMS** or click .

2. Enter the recipients' numbers using one of the following methods:
   ● **Direct entry**: if you have a single recipient, enter the number directly then click the Next
     button. If you have more than one recipient, enter their numbers then press the **Add** button
     (arrow pointing downwards) to add them to the list.
   ● **From Phonebook**: if your message recipients are recorded in the Contacts folder of your
     assistant, click the **Contacts** button and select your recipients and their numbers. Click
     OK next to add them to the Recipient list.

3. Enter the text of the message in the frame displayed. A character and SMS counter displays
   the relevant sizes as entry proceeds. A typical message contains up to 160 characters but the
   application can send content longer than this by linking more than one message together.
   You can insert pre-recorded passages of text in your message using the **My text** menu.

4. The default setting is for transmission requests not to be carried out immediately. This
   enables you to prepare your message off-line and to send it later on (to do this, select it in the
   Outbox, and select **Tools > Send**). Check the desired options:
   ● **Send now**: to send your message immediately.
   ● **High priority**: to display the content of your message directly on the recipient's mobile
     phone screen.
   ● **Request return receipt**: to receive a return receipt.
   ● **UCS2 format**: to ensure compatibility with non-European language PDTs.

5. Click **OK**.

Note:

You can also send SMS from outside the application, such as follow:
   ● *From the **Contacts** folder of your PDT assistant, select the contact to whom you want to
     send the SMS. You can either hold the click until a context menu is displayed and select
     the **Send SMS** option, or click the **Tools > Send SMS** menu.*
   ● *From the **Today** screen of your PDT assistant, click the **New > SMS** menu.*

Downloading received SMS messages

Select **Tools > Retrieve SMS**. If you have received SMS messages on your mobile phone, they will be automatically copied or transferred to the **Inbox**. Unread messages appear in bold. A single click on a message is enough to read it.

Viewing an SMS message

1. Select the SMS message you wish to view.
2. Select the **Tools > View** menu or hold the click until a context menu is displayed and select the **View** option on it. The content of the SMS message, as well as the sender, date and time of sending are displayed. If the inbox contains a number of messages, it is possible to go directly from one to the next from the same dialog box.
3. Click **OK** to return to the main screen.

Note:

Unread messages appear in bold. Click a message to read it.

Replying to an SMS message

1. In the **Inbox**, select the message you want to answer.
2. Hold the selection until a context menu is displayed in which to select the **Reply** option, otherwise select **Tools > Reply**. The SMS transmission screen is displayed. The **Phone Number** and, if applicable, **Name** and **Company** fields are already filled in.
3. Click **Next**.
4. Enter the message text.
5. The default setting is for transmission requests not to be carried out immediately. This enables you to prepare your message off-line and to send it later on (to do this, select it in the **Outbox**, and select **Tools > Send**). Check the desired options referring to the following heading: SMS Transmission options
6. Click **OK**.

Resending an SMS message

1. In the **Sent** folder, select the SMS message you want to send again.
2. Select **Tools > Resend** and refer to the steps listed under the Sending an SMS message heading.

SMS transmission options on composing them.

- **Send now**: check this box for the transmission request to be executed as soon as you click
  Send. Otherwise, the transmission request will be left pending in the **Outbox** of the main
  interface. To send your message, you need to select it, then select **Tools > Send**.
- **High priority**: check this box to display the content of your message directly on the recipient's
  mobile phone screen.
- **Request return receipt**: to receive a return receipt.
- **UCS2 format**: check this box to ensure compatibility with non-European language PDTs.

6.7 Phonebook management

PhoneTools enables you to create phonebooks, import contacts recorded in your mobile phone (memory + SIM card) and thus bring your various phonebooks into line.

6.7.1 Creating a phonebook

1. Select **New > Phonebook**.
2. Enter the phonebook name.
3. Click **OK**.

Adding a contact

1. Click the **Phonebooks** ![icon] icon then select from the drop-down list the phonebook to which you wish to add a contact.

2. Select **New > Phonebook Contact** or click ![icon].

   The **Cell phonebook entry** window is displayed.
3. Enter the contact's **Name** and **Number**. The entry will have an automatic **Entry position** in the phone book if you do not specify this field.
4. Click the **Contacts** icon to import contacts you created in the PDT Contacts application into the current PhoneTools phonebook. The PDT Contacts list is displayed. Select the contact you want to import. Then click **OK**. The properties of this contact are automatically filled.
5. Click **OK**.
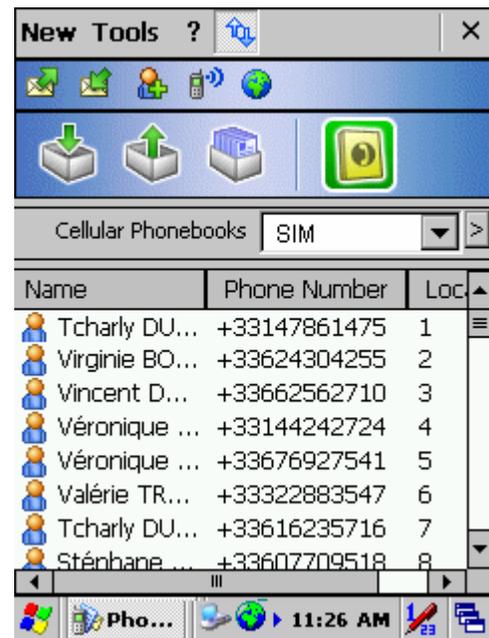
Figure 6-12 **Adding a contact**

6.7.2. Managing the phonebooks

1. Click the **Phonebooks** icon then select the **Phonebook management** button (> sign) next to the phonebook drop-down list. The **Phonebook management** window opens displaying the list of all your phonebooks.

2. Click one of the following buttons, depending on what you wish to do :
   - **Create**: to create a phonebook.
   - **Delete**: to delete the selected phonebook. The confirmation pop-up is displayed. Click **Yes**.
   - **Rename**: to rename the selected phonebook. Enter the changes in the **Enter Phonebook name** field. Then click **OK**.

3. Click **OK** to get back to the Phonebook window.

Changing a contact

1. Click the **Phonebooks** icon then select the phonebook to be changed from the drop-down list displayed.

2. Select the contact you wish to change.

3. Select **Tools > Modify**.

4. Enter your changes in the **Name**, **Phone Number** and **Entry position** fields.

5. Click **OK**.

Downloading your mobile phonebook

1. Select the **Phonebooks** folder by clicking on the **Phonebooks** icon.

2. Select **Tools > Retrieve phonebook**.

3. When prompted by the program, select the memory where the phonebook you want to download is stored.

4. Click **OK**. Your phonebook is downloaded.

Transferring a phonebook to your mobile phone

1. In the **Phonebooks** folder (click the **Phonebooks** icon), select the phonebook to be transferred.

2. Select **Tools > Transfer to cellular**.

3. When prompted by the application, select the memory to which the phonebook is to be transferred.

4. Click **OK**. Your phonebook is transferred.

6.8 Internet connections

6.8.1 Configuring Network operator

The application assists the user when configuring internet access. Since this configuration relates to the network operator, you must set it before anything else.

Configuring the network operator

1. Starting from the main interface, select **Tools > Settings** and click the **Network operator** link.

2. Select your country and mobile telephony operator. The **Automatic detection** button suggests searching your network operator automatically and configuring the application.

The **Roaming Settings** button allows you to detect and select a wireless operator when you are abroad and outside the reach of your Home Network.

Figure 6-13 **Configuring the network operator**

6.8.2 Creating and changing access configurations

Accessing the connections list
1. Starting from the main interface, select **Tools > Settings**.
2. Click the **Internet connection** link. The dialog box displays a list of network access configurations handled by the application. From this list you will be able to create, change and delete your configurations.

Creating an access configuration
1. Access the connections list.
2. Select the **New** option from the list. The first box appears, enabling the name to be assigned to your configuration to be entered.
3. Click the **Next** button. The application will then list software that can be run while this connection is live. This choice is optional.
4. Click the **Next** button. If your network operator handles different types of network (UMTS, GPRS, GSM, etc.), the application will prompt you to select the one to be used.

Warning!

Using "high speed" networks such as GPRS or UMTS is subject to subscription options.
5. Select a **Context ID**. Certain telephone devices offer connection profiles containig all parameters for use over "high speed" networks, such as GPRS. In order to avoid overwriting a pre-programmed configuration on your mobile, select a free storage profile using its context ID.
6. If your network operator is recognized by the application, the **Use standard settings** box is checked by default. Uncheck it if you want to specify the settings manually and click **Next** :
   - Specify the APN or number, Name and Password settings as required. Click **Next** and repeat for subsequent screens for IP address, DNS and QOS.
7. Click **Next**. The following dialog box enables a backup configuration to be created for your high-speed connection to be applied if it is unsuccessful. If you request a backup configuration to be created, the application will display the entry screens shown previously for "standard" connection.

Changing an access configuration

1. Access the connections list.
2. Click the connection to be changed or display the context menu by holding the stylus on the connection to be changed and select the **Modify** option.
3. Follow the Creating access configurations steps.

Deleting

1. Access the connections list.
2. Display the context menu by holding the stylus on the connection to be changed and select the **Delete** option.

Connecting

You can set up or access the connection from the main interface, from the **Tools > Internet connection** menu or by clicking on .

- You will be shown a list if more than one access is configured.
- If no access has been configured, the application will prompt you to access the Setup program to create one.