IT7000 User's Guide

WinCE. NET Rugged PDA

Dec. 04, 2004

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Chapter 1

Introduction

Congratulations on purchasing the IT7000 PDA, a Microsoft Windows®CE .Net rugged PDA. Its special combination of features make it perfect for using in a wide range of applications. These features as:

- Small rugged lightweight form factor
- Microsoft Windows CE. Net operating system
- Flexible module design
- Wireless mobility via 802.11b (Bluetooth by optional)
- Robust expansion capability
- Long battery life
- Transflective type color LCD display
- Backlit keypad

1.1 About this Manual

The following chapters contained in this manual are:

Chapter 1: Introduction --- Present the general information about the PDA.
Chapter 2: Getting started --- Describe the basic use of the PDA.
Chapter 3:Setting – Provide basic instructions for customizing the PDA by adjusting settings
Chapter 4:Communication--- Describe how to use all kinds of communication of the PDA.

1.2 User and Product Safety

◆ Do not stare into the laser 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, for such contact would irritate the skin.

◆ Although the IT7000 PDA has been passed the test of IP64 standard for water and dust resistance, avoid prolonged exposure to rain or other concentrated moisture. For these conditions exceed the IP64 standard, and could result in water or other contaminants entering into the PDA.

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

◆ Be sure that only authorized supplier are allowed to disassemble and reassemble the device. If the device or parts has been damaged due to any wrong handling, shall void the product and parts warranty.

◆ Always make back-up copies of all important data. Easy done by using a cable or Single Cradle (sold by optional) to transfer data to the computer. Manufacturer is not liable for any data damages or data loss caused by deletion or corruption by using of this device, or due to the drained battery.

◆ 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 place the battery pack in fire or heat the battery.
- Do not install the battery pack backwards so the polarity is reserved.
- 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, strike the battery pack with a hammer, step on the battery pack or otherwise put it to strong impacts or shocks.
- Do not solder directly 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 devices, which, if damaged, may cause the battery pack to generate heat, explode or ignite.
- Do not discharge the battery pack using any device except for the specified device. When it is used in devices other than the specified devices, 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.

1.3 Radio Frequency Interference Information

1.3.1 FCC Radiation Exposure Statement:

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

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

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.

> **Caution:** *Please also note that IT7000 is limited in CH1~CH11 for 2.4GHz by specified firmware controlled in U.S.A.*
> *The FCC ID of IT7000 is SPY-IT7000PDT*

1.4 Product Labeling

The PDA has several labels as showed in Figure 1-1 and 1-2.

Figure. 1-1 Product Labeling (Front side view)
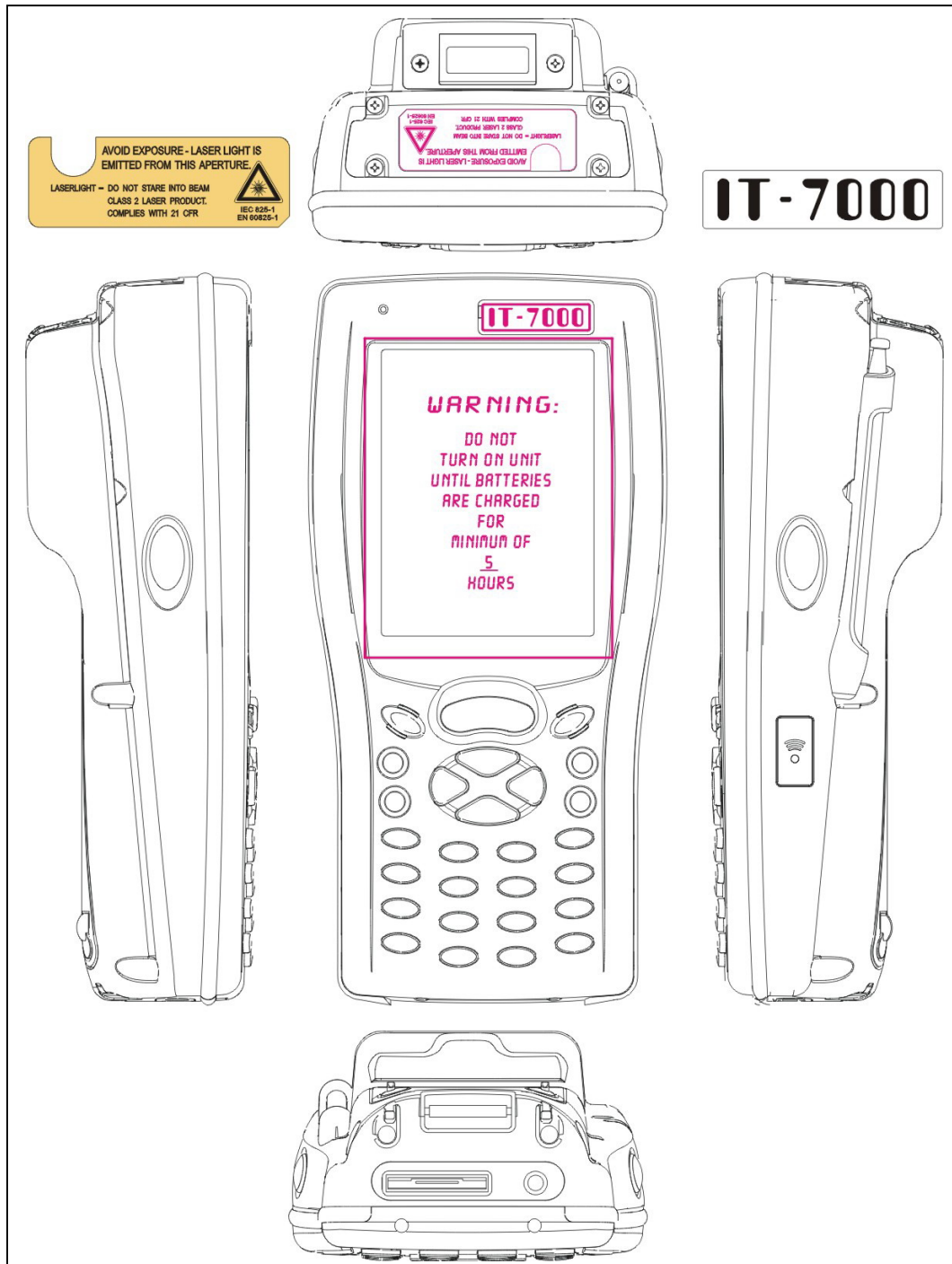
1.5 System Specifications

The IT7000 PDA detailed specifications as follows. Unless otherwise noted, all the specifications are subject to change without prior notification.

System Specification

IT7000	
Processor	- Intel® XScale PXA255 400Mhz 32 bits RISC
Memory	- 64MB (M-System) Flash ROM - 64 or 128MB SDRAM
Display	- Support 240 x 320 TFT 256K Color LCD - Transflective type TFT LCD with back light
Audio	- One mono speaker - 2.5mm DIA stereo earphone jack with Microphone input
Radio Support	**-Wireless LAN:** 802.11b -**Bluetooth:** Class II (optional)
Communication Ports	-**Infrared:** One IrDA 1.2 compliant port **-USB:** Support USB v1.1 both host and client (PDA and Cradle) -**Serial:** RS232 via optional cable or Cradle
Scan Engine	**-Default:** Symbol SE800 **-Optional**: Symbol SE900, Opticon VLM4000, Intermec EV-10 CCD, HHP 4080 2D Imager.
Expansion Slot	- One Compact Flash Type-II slot (support 3.3V) - One SD Card slot (support SD memory)
LED	- One three-color LED for Alarm notification (Blue) and charger indicator (RED & Green) - One two-color LED for scanner indicator

Power System	- Built in 7.4V, 2200mAh Li-ion removable battery pack (10 operation hours & 100 standby hours in 64MB DRAM and 64 ROM module) - 140mA rechargeable backup battery (It will hold the system data at least 3 hours)
Button/Key	- Power/Front light on/off button - LED light Key - 4-way navigation button - 4 Application Keys - 3 Scanner Enable Keys - SW Reset input button -16 alphanumeric keyboard
Dimensions and Weight	- Dimensions: 91/76mm (W) x 187mm (L) x 58/43mm (H) - Weight: 350g
Color	- Black
Peripherals and Accessories	Optional: Pistol Grip/ Single Cradle/ Ethernet Module
Software	- Microsoft WinCE.NET 4.2 (Professional Version)

1.6 Environment Standard:

Storage Temperature	-20℃~60℃
Operating Temperature	-10℃~50℃
Humidity	5% to 90% (non-condensing)
Drop	5ft (1.5m) drop to concrete
Water & Dust proof	IEC 529 rating IP64DW
Vibration	MIL STD 810F

1.7 Warranty and after service

Should this PDA be malfunctioned, please contact your original retailer providing information about the product name, the serial number, and the details about the problem.

Chapter 2

Getting Started

2.1 Check the package

Open the package and check all the parts are inside without shortage and damage:

Figure 2-1   Inside the package

1. IT7000	2. Stylus
3. CF support Guide	4. DC-IN Converter
5. Standard AC Adapter	6. Standard Battery Pack
7. Cover of Battery Pack	8. Earphone Set with Microphone
9. USB Client Sync cable	10. Power Cord
11. Quick guide (Not shown)	12. User's Guide CD (Not shown)

2.2 General View of the PDA

2.2.1: PDA front side view

Figure 2-2   PDA Front side view

Power LED Indicator
Scan LED Indicator
LCD Touchscreen
Scan Key
Navigation Key
Ligth Key
F3 Key
F4 Key
Alpha-Numeric Keys
Enter Key
Left Scan Key
Power Key
F1 Key
F2 Key
FN Key
Ear Phone Jack Connector
DC Power Port And USB/Serial Client Synchronization Port
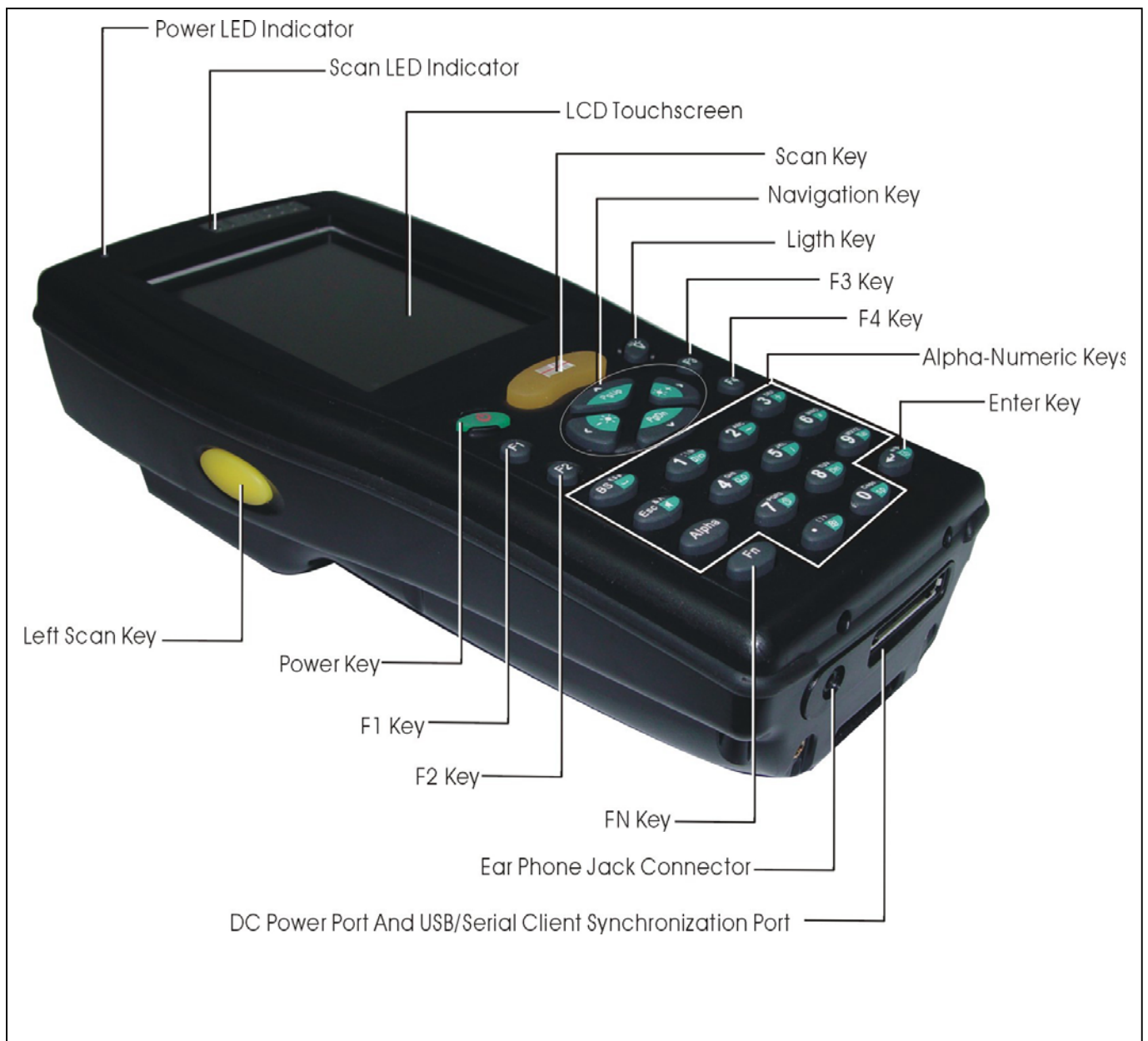
2.2.2: PDA back side view

Figure 2-3   PDA back side view
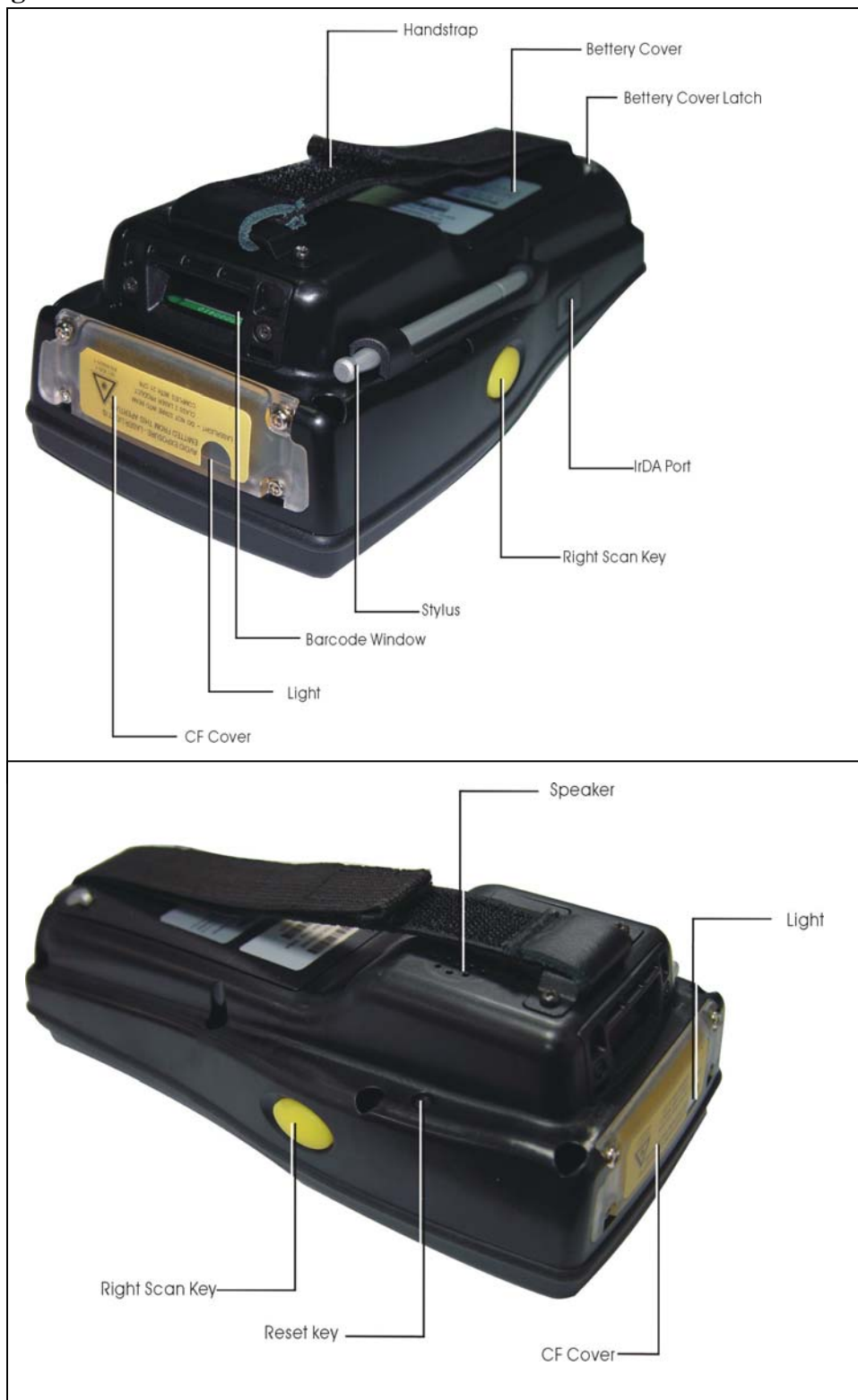
Table 2-1 Description of PDA General View

1	Scanner LED Indicator	"Red" color	Reading barcode
		"Green" color	successful reading
2	Alarm/Charge LED Indicator	"Blue" color	Blinking for alarm
		"Red" color	Charging battery
		"Green" color	Battery charged full
3	LCM/ Touch Panel	Do specific action through touch panel by stylus	
4	Left Scan key Right Scan key Scan key	Start scanning the barcode by pressing any one of these three scan keys	
5	Power/Backlight key	1. Puts the terminal into and wakes the terminal from suspend mode if this key button isn't pressed more than two seconds. 2. Turns on/off the LED backlight of LCM if this key button is pressed more than two seconds.	
6	Light key	Turn the front illumination LED on/off	
7	F1 key~ F4 key	The four application keys, hot keys of application program defined by end user.	
8	Navigation key	Navigation keys for left, right, up and down directions	
9	Alpha-Numeric keys	Numeric keys, Change to Alpha keys after pressing Alpha key.	
10	Alpha key	Toggle Alpha-mode for Alpha-Numeric keys	
11	Fn key	This key is used in combination with other keys to type special characters and perform system functions.	
12	Enter key	This key confirms data entry	
13	Ear phone Jack Connector	A connector to plug a earphone set with microphone	
14	DC power /USB /Serial /Synchronization port	A connector to support DC power, USB Host/Client and serial functions	
15	CF Cover	Protect CF connector and SD connector from dust and water	
16	Light	A white LED flashlight	
17	Barcode window	A window for scanning of barcode reader	

18	stylus	Use the stylus for selecting items and entering information.
19	IrDA port	Provide SIR function
20	Battery Cover	Protect Battery pack, keep the switch of battery cover to leave system from suspend mode
21	Battery cover Latch	To keep Battery Cover locked
22	Hand strap	This strap can be sealed tighter or looser
23	Speaker	0.5W speaker for audio sound
24	Reset Button	A button for software reset

2.3 Charging the Battery Pack

Before using the PDA, perform the basic procedure of charging the battery pack through the following steps.

2.3.1 Installing the battery pack

1. On the PDA attached with a hand-strap, detach and loose the hand-strap.

Figure 2-4   Release the Hand strap from PDA

2. Turn the locking screws (right and left) downwards and lift the battery cover away from the PDA.

Figure 2-5   Detach the battery cover from PDA

3. Insert the battery pack into the battery compartment with the label facing out, and ensuring the battery snaps into place.

Figure 2-6   Insert the battery pack

3. Replace the battery cover by inserting the top first, and then press the bottom in firmly. Turn the locking screws (right and left) upwards to secure the cover to the PDA.

Figure 2-7   Replace the battery cover

4. Charge time. For the first time to charge the battery pack needs approximately 5 hours. Subsequent charging time needs approximately 3 hours.

◆. When charging the battery pack, the Power LED on the PDA turns on Red. After the battery pack is fully charged, the Power LED turns to green.

2.3.2 Charging the battery pack with Power Adapter

1. Plug in the DC-IN Converter to the PDA bottom connector
2. Connect the Power cord to the Power adapter
3. Plug in the connector of the power adapter with DC-IN Converter
4. Connect the power cord to a power source

Figure 2-8   Charging with power adapter

◆ When charging the battery pack, the Power LED on the PDA turns on Red.

◆ After the battery pack is fully charged, the Power LED turns to green.

2.3.3 Charging the battery pack with Single Cradle

a) Leave the battery pack inside of the PDA

1. Connect the Power cord to the Power adapter

2. Connect the power cord to a power source

3. Plug in the connector of the power adapter with Single Cradle

4. Insert the PDA into the Single Cradle

Figure 2-9   Charging with Single Cradle
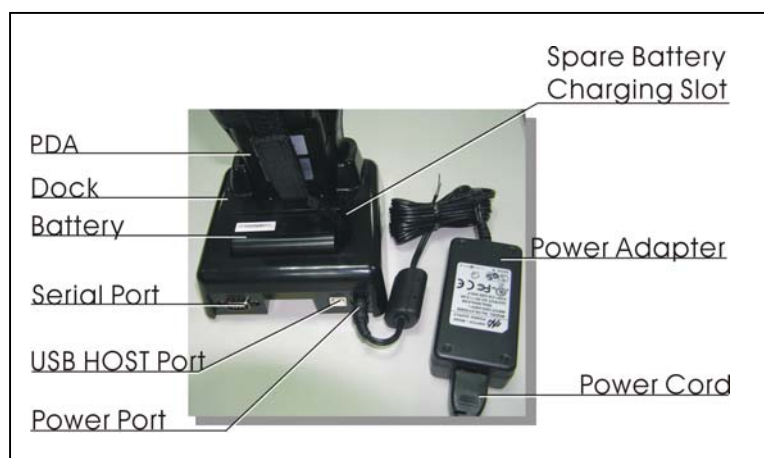
◆ When charging the battery pack, the Power LED on the PDA turns on Red. After the battery pack is fully charged, the PDA Power LED turns to green.

b) Place the spare battery pack into the Single Cradle's spare Battery charging slot

1. Connect the Power cord to the Power adapter
2. Connect the power cord to a power source
3. Plug in the connector of the power adapter with Single Cradle
4. Insert the Battery pack into the Single Cradle's spare Battery slot

◆ When charging the Battery pack in the Single Cradle's spare Battery slot, the Single Cradle charging LED will turn on Red. After the Battery pack is fully charged, this LED will turn to green

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

2.4 Handling the PDA

2.4.1 Starting the PDA

Press the Power key to turn on/off the PDA. If the PDA does not power on, perform a cold boot. See 2-7 Resetting on page 2-XX.

CAUTION: When a battery is fully inserted in PDA for the first time, upon the PDA's first power up, the device boots and powers on automatically.
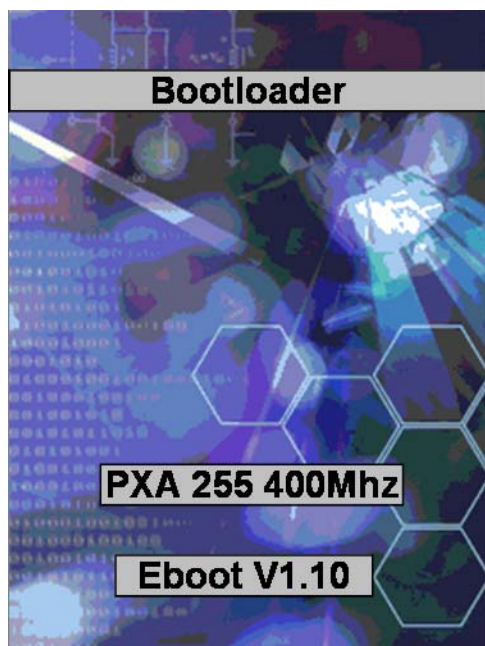
When the PDA is powered on for the first time, it initializes its system. A splash screen (figure 2-10) appears for a short period of time followed by the Wince.NET 4.2 window.

This section offers the basic procedures of PDA using.

Figure 2-10

2.4.2   Power (and Backlight) on / off

➢   **To turn on the PDA**

Press the Power/Backlight key briefly (⏻). If the PDA does not power on, perform the cold reset. See chapter 2.7.1.
As the PDA initializes its File system, the IT7000 splash screen displays for about 30 seconds followed by calibration screen. Every time you perform a cold reset, these

screens will also appear.
To turn off the PDA, just press the Power/Backlight key again. This action does not actually turn off the PDA, it only turn the PDA into suspend mode. All running applications remain as you left them, until you press the Power key again to resume operation of the PDA

➢   **To Turn on/off the backlight**
Press the Power / Backlight key briefly to turn on the PDA. And press the key again briefly to turn off the PDA. The backlight is always on as the default. When the PDA is ON, press the key longer, it will turn off the backlight. Press the Power / Backlight key a little while again, it will turn on the backlight. Or just touch the screen or press any key, it also can turn on the backlight again.

2.4.3: Calibration of the touch Screen   **Figure 2-11 Calibration**

On the initial boot-up of the PDA, the stylus calibration screen (Labeled Align 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 PDA to make the screen readable. (See below 2.4.4. Adjusting the brightness).

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.
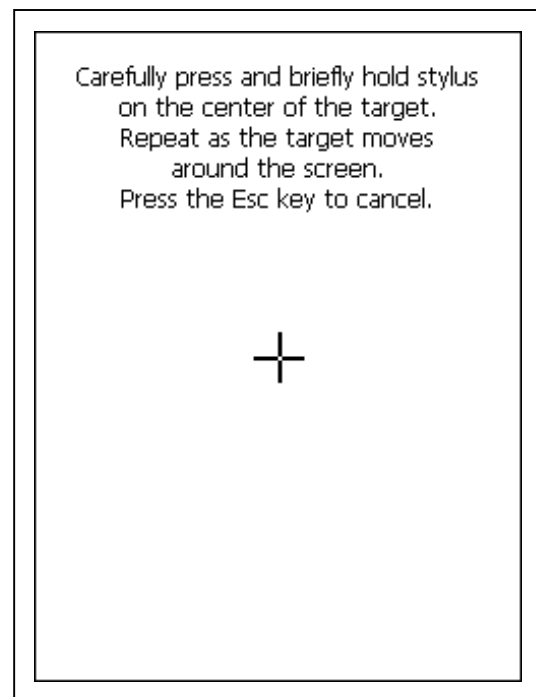
When you feel the touch screen function is poor or the operation does not match the exact location it should be, please recalibrate the screen by using the stylus to enter into the star bar --- Setting --- Stylus, to open the "Calibration" to recalibrate again.

2.4.4: Adjusting the brightness

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

1) Become brighter: Press the <FN> key [Fn] and then press on the right key of

Navigation key [☀+ >] .

2) Become darker: Press the <FN> [Fn] key and then press on the left key of

Navigation key [< –☀] .

3) The display will become dimmer 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, press the <FN> key and <Esc> key together to turn off and on of the sound

2.4.6: Using the Stylus

The stylus is located next to CF cover or hand-strap on the left rear of the PDA as illustrated in figure 2-3 PDA Back side view (in page 2-3). The stylus function is same 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 the list of multiple items.

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

2.4.7: Using the Keypad

Figure 2-12   IT7000 Keypad
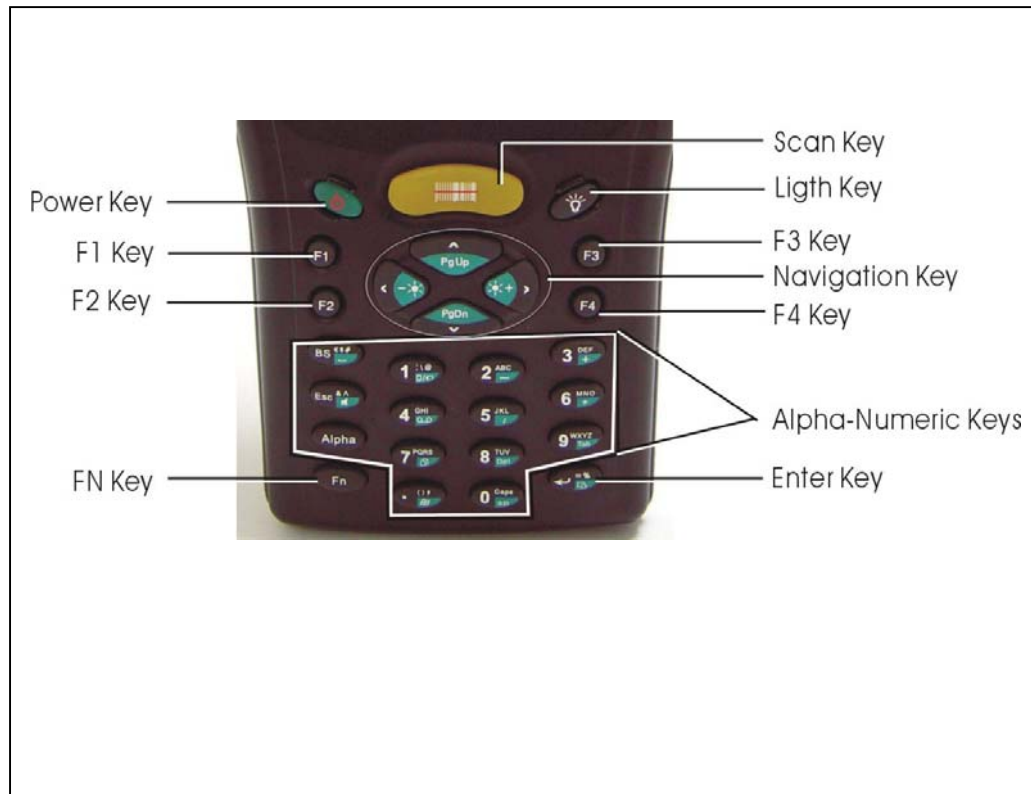
Table 2-2(A) Keypad List:

Key	Main Function	Fn+ Main Function	Alpha+ Main Function
	POWER ON/OFF		
	BarCode Start		
	Front Light		
F1	USER DEFINE		
F2	USER DEFINE		
F3	USER DEFINE		
F4	USER DEFINE		
	Right	Backlight Increase	

Table 2-2(B) Keypad List:

	Left	Backlight Decrease	
	Down	Page Down	
	Up	Page Up	
	ESC	Audio Mute	&　　　^
	Backspace	⌣	$　　　#
	Change to letters		
	Function change		
	1	Rotation	:　　\　　@
	2	—	A　　B　　C
	3	+	D　　E　　F
	4	Record	G　　H　　I
	5	／	J　　K　　L
	6	＊	M　　N　　O
	7	Copy	P　Q　R　S
	8	Delete	T　U　V
	9	Tab	W　X　Y　Z
	0	Space	Caps
	.	START	(　　)　　,
	Enter	Paste	%　=

Table 2-3(A) Definition of main Function:

Key	Main Function	Definition
	POWER ON/OFF or Backlight ON/OFF	1. The 🔴 key puts the terminal into and wakes the terminal from suspend mode if this key button isn't pressed more than **two seconds**. 2. The 🔴 key turns on/off the LED backlight of LCM if this key button is pressed more than **two seconds**.

Table 2-3(B) Definition of main Function:

	Bar Code Start	The key activates the scan function of IT7000.
	Front Light	1.It turns on the "White LED" flash light of IT7000 if this button is keeping pressed. 2.The "White LED" flash light is off immediately after this button is depressed.
F1	USER DEFINE	Application key 1, User can define F1 function from setting.
F2	USER DEFINE	Application key 2, User can define F2 function from setting.
F3	USER DEFINE	Application key 3, User can define F3 function from setting.
F4	USER DEFINE	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.
	Left	Move the cursor one character to the left. The cursor will move continuously if button is pressed continuously.
PgDn	Down	Move the cursor down one row or line The cursor will move continuously if button is pressed continuously.
PgUp	Up	Move the cursor up one row or line The cursor will move continuously if button is pressed continuously.
Esc &∧	ESC	This key performs a cancel action

Table 2-3(C) Definition of main Function:

BS	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.
Alpha	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, it appears" Alpha "icon at the Task bar to indicate Alpha mode is enabled. The keypad stays in the alpha mode until you press Alpha key again.
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	2	Number key "2"
3	3	Number key "3"
4	4	Number key "4"
5	5	Number key "5"
6	6	Number key "6"
7	7	Number key "7"
8	8	Number key "8"
9	9	Number key "9"

Table 2-3(D) Definition of main Function

0 Caps sp	0	Number key "0"
. ( ) ' 83	.	Point key
= %	Enter	This key confirms data entry

2.4.7.1: Special Function by "Fn" + main Function:

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

2. Each key modifies only the next key pressed. For example to change display from portrait type to landscape type(1) First, press "Fn" key, and then press "1" key. If you change display from landscape type to portrait type, you must press "Fn" key, and then press "1" key again.

Table 2-4(A) Special Function key define

Key sequence	Fn+ Main Function	Definition
Fn ,	Backlight increase	1. Increase the LED backlight brightness of display screen(Lighter) 2. 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(darker) 2. You must press Fn key, then press key to decrease backlight brightness 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. 3. There are different icons to show the status "Audio mute" & "Audio Enabled" at the TASK bar.

Table 2-4(B) Special Function key define

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, **1 :\@**	Rotation	If you change display from portrait type to landscape type, please press **Fn** key first, and then press **1 :\@** key. Otherwise, if you change display from landscape type to portrait type, you must press **Fn** key, and then press **1 :\@** key again.
Fn, **2 ABC**	—	Enter a minus sign by pressing **Fn** key, then pressing **2 ABC** key
Fn, **3 DEF**	+	Enter a plus sign by pressing **Fn** key, then pressing **3 DEF** key
Fn, **4 GHI**	Record	Enter "Record" application and do record action by pressing **Fn** key first, then pressing **4 GHI** key.
Fn, **5 JKL**	／	Enter a backslash by pressing **Fn** key first, and then pressing **5 JKL** key.
Fn, **6 MNO**	*	Enter an asterisk "*" sign by pressing **Fn** key first, and then pressing **6 MNO** key.

Table 2-4(D) Special Function key define

Fn , BS $\#$	⌣	1. Produces a space 2. To enable this function by pressing Fn key first, and then pressing BS $\#$ key. 3. You want to disable this function, you still need to press Fn key, then press BS $\#$ key again.
Fn , 8 TUV 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 8 TUV Del key each time.
Fn , 9 WXYZ Tab	Tab	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 9 WXYZ Tab key each time.
Fn , 0 Caps sp	Space	1. The "Space" function is to move the cursor one space. 2. To do this function by pressing Fn key first, and then pressing 0 Caps sp 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 , ↵ = %	Paste	It is to do "Paste " function. To do this function by pressing Fn key first, and then pressing ↵ = % key each time.

2.4.7.2: Alpha plane keys by "Apha" + 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, it appears "Alpha" icon at the Task bar to indicate Alpha mode is enabled. It means Alpha mode is disabled if there isn't "Alpha" icon at Task bar. The keypad stays in the alpha mode until you press [Alpha] key again. For a 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 [0 Caps sp] key to initial the CAPS mode, you will render a CAPS LOCK until you press [0 Caps sp] key again. Once you are in CAPS mode, you stay in CAPS until it is pressed again.

5. It appears "CAPS" icon at TASK bar during CAPS mode.

Table 2-5(A) Alpha + Numeric keys define

To enter	Press the Keys	To enter	Press the Keys
$	[Alpha] [BS $#]	#	[Alpha] [BS $#] [BS $#]
&	[Alpha] [Esc &^]	Λ	[Alpha] [Esc &^] [Esc &^]
:	[Alpha] [1 :\@]	\	[Alpha] [1 :\@] [1 :\@]
@	[Alpha] [1 :\@] [1 :\@] [1 :\@]	(	[Alpha] [. ()']
)	[Alpha] [. ()'] [. ()']	,	[Alpha] [. ()'] [. ()'] [. ()']

Table 2-5(B) Alpha + Numeric keys define

Caps		=	
Caps	Alpha [0 Caps/sp]	=	Alpha [↵ =%]
%	Alpha [↵ =%] [↵ =%]		
a	Alpha [2 ABC]	A	Alpha [0 Caps/sp] [2 ABC]
b	Alpha [2 ABC] [2 ABC]	B	Alpha [0 Caps/sp] [2 ABC] [2 ABC]
c	Alpha [2 ABC] [2 ABC] [2 ABC]	C	Alpha [0 Caps/sp] [2 ABC] [2 ABC] [2 ABC]
d	Alpha [3 DEF]	D	Alpha [0 Caps/sp] [3 DEF]
e	Alpha [3 DEF] [3 DEF]	E	Alpha [0 Caps/sp] [3 DEF] [3 DEF]
f	Alpha [3 DEF] [3 DEF] [3 DEF]	F	Alpha [0 Caps/sp] [3 DEF] [3 DEF] [3 DEF]
g	Alpha [4 GHI]	G	Alpha [0 Caps/sp] [4 GHI]
h	Alpha [4 GHI] [4 GHI]	H	Alpha [0 Caps/sp] [4 GHI] [4 GHI]
i	Alpha [4 GHI] [4 GHI] [4 GHI]	I	Alpha [0 Caps/sp] [4 GHI] [4 GHI] [4 GHI]
j	Alpha [5 JKL]	J	Alpha [0 Caps/sp] [5 JKL]
k	Alpha [5 JKL] [5 JKL]	K	Alpha [0 Caps/sp] [5 JKL] [5 JKL]
l	Alpha [5 JKL] [5 JKL] [5 JKL]	L	Alpha [0 Caps/sp] [5 JKL] [5 JKL] [5 JKL]
m	Alpha [6 MNO]	M	Alpha [0 Caps/sp] [6 MNO]
n	Alpha [6 MNO] [6 MNO]	N	Alpha [0 Caps/sp] [6 MNO] [6 MNO]
o	Alpha [6 MNO] [6 MNO] [6 MNO]	O	Alpha [0 Caps/sp] [6 MNO] [6 MNO] [6 MNO]
p	Alpha [7 PQRS]	P	Alpha [0 Caps/sp] [7 PQRS]
q	Alpha [7 PQRS] [7 PQRS]	Q	Alpha [0 Caps/sp] [7 PQRS] [7 PQRS]
r	Alpha [7 PQRS] [7 PQRS] [7 PQRS]	R	Alpha [0 Caps/sp] [7 PQRS] [7 PQRS] [7 PQRS]
s	Alpha [7 PQRS] [7 PQRS] [7 PQRS] [7 PQRS]	S	Alpha [0 Caps/sp] [7 PQRS] [7 PQRS] [7 PQRS] [7 PQRS]
t	Alpha [8 TUV/Del]	T	Alpha [0 Caps/sp] [8 TUV/Del]
u	Alpha [8 TUV/Del] [8 TUV/Del]	U	Alpha [0 Caps/sp] [8 TUV/Del] [8 TUV/Del]
v	Alpha [8 TUV/Del] [8 TUV/Del] [8 TUV/Del]	V	Alpha [0 Caps/sp] [8 TUV/Del] [8 TUV/Del] [8 TUV/Del]
w	Alpha [9 WXYZ/Tab]	W	Alpha [0 Caps/sp] [9 WXYZ/Tab]
x	Alpha [9 WXYZ/Tab] [9 WXYZ/Tab]	X	Alpha [0 Caps/sp] [9 WXYZ/Tab] [9 WXYZ/Tab]
y	Alpha [9 WXYZ/Tab] [9 WXYZ/Tab] [9 WXYZ/Tab]	Y	Alpha [0 Caps/sp] [9 WXYZ/Tab] [9 WXYZ/Tab] [9 WXYZ/Tab]
z	Alpha [9 WXYZ/Tab] [9 WXYZ/Tab] [9 WXYZ/Tab] [9 WXYZ/Tab]	Z	Alpha [0 Caps/sp] [9 WXYZ/Tab] [9 WXYZ/Tab] [9 WXYZ/Tab] [9 WXYZ/Tab]

Note:

1. The Alpha key isn't needed to key in if the character isn't the first alpha character being keyed in.

2. The ⬛ keys are not needed to key in if it isn't the first capital alpha

   character being keyed in.

2.4.8: Using the Ear/Microphone

Connect Ear/Microphone to PDA earphone jack. The PDA is not built in microphone, if you like to record the voice, you have to use Ear/Microphone.

Figure 2-13   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. 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.
3. To change the year, select the year or open a numeric dial. 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.
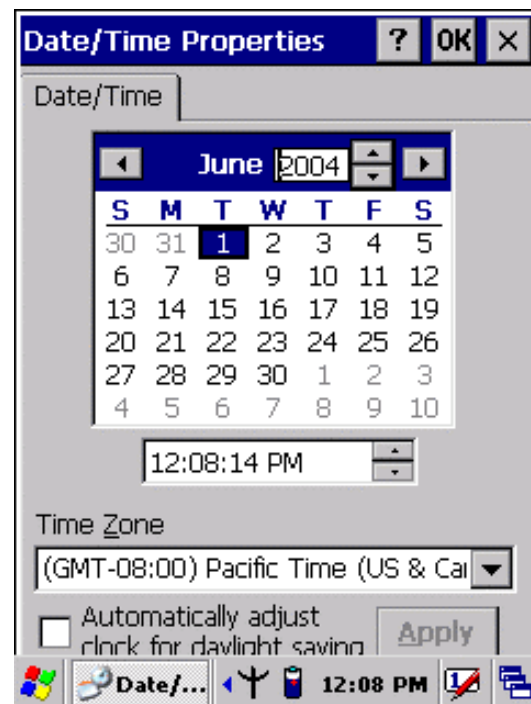
Figure 2-14 Date/Time properties

4. To change the time, select the hour, minute, seconds, or AM/PM and select the up arrow to increase the value; select /tape 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.

7. Select **Apply** to make save your changes [and make additional modifications] 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. Or if the program has a icon on the desktop, double-tap to open it.
There are several ways to enter data on the PDA once in an application:
- Use the keypad to enter alpha-numeric characters, Refer to "2.4.7 Using the keypad" on page 2-12.
- Use the stylus on the touch screen on page 2-6 for more information on 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-rapping to select an entire line/paragraph. Refer to "2.5 Navigating the Display" starting on page 2-22
- Use the soft input panel (digital keyboard) with the stylus. Refer to "2.5.5 The Soft Keypad" on page 2-23.
- Use the bar code scanning to enter data. Press the trigger or "Bar Code Start " key to initiate a scan. The scanned data will enter the current application's open file. Refer to :2.5.7 Scanning Barcode" starting on page 2-24 for more information on using a scanner.

For more information on factory installed applications, Refer to Chapter 4 " Software Programs".

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 2-15 to view the **Task** bar.
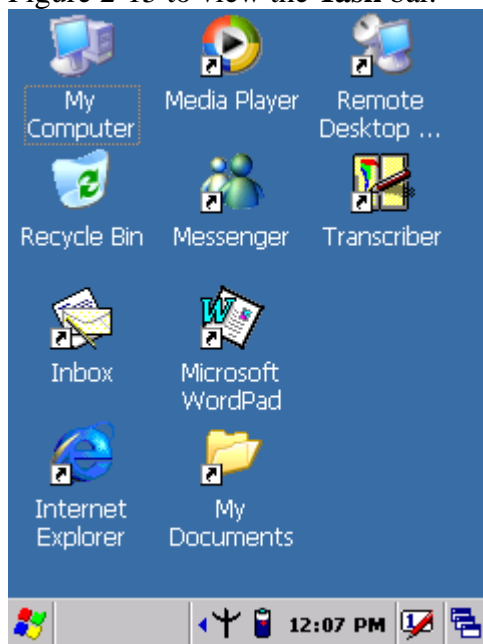
Figure 2-15 Task Bar

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 digital, 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: Initiating a Network Connection

To tap the   icon at **Task** bar, then a Wireless LAN screen "**PRISMNDS1**"(Figure 2-16-1), select page "**Wireless Information**". There is a list of Wireless access points. Select one by double-clicking the access point you want. Or double-click "**Add New** " to add a new access point.

To Click "**Connect**" icon to connect WLAN with Access point.(Figure 2-16-2)

To select page " Disable" to disable WLAN to save power consumption. (Figure 2-16-3 & Figure 2-16-4)
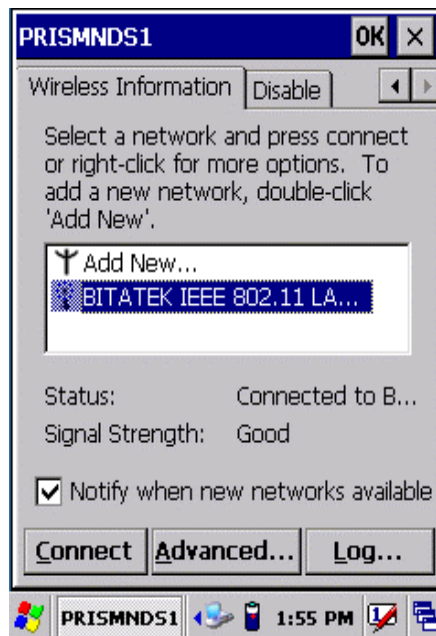
Figure 2-16-1   **Figure 2-16-2**
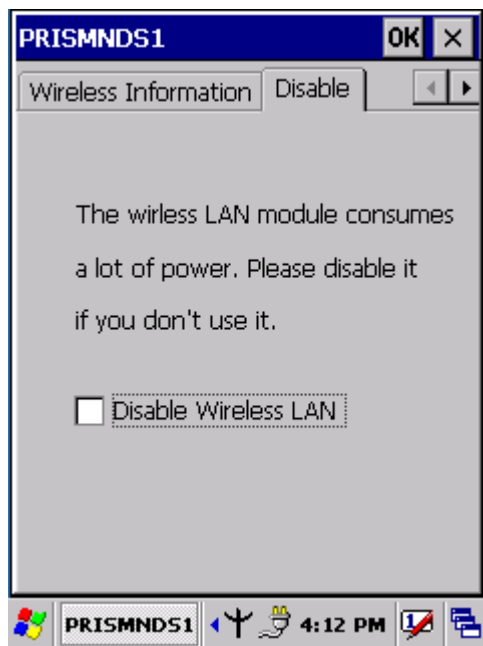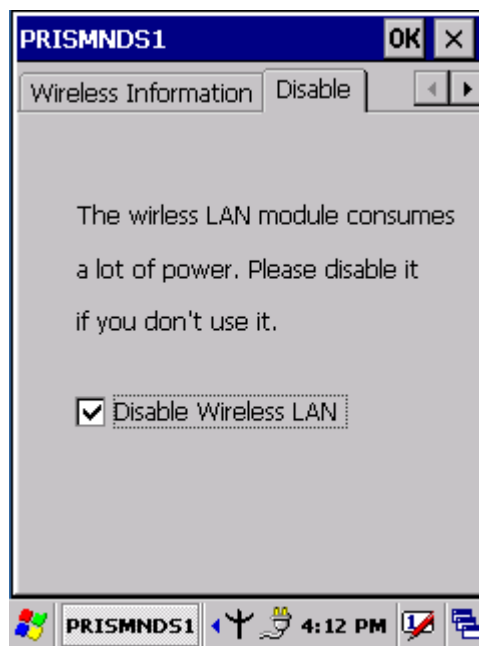
Figure 2-16-3   Figure 2-16-4

2.5.7: Scanning Barcode:

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 laser scanner.

2. Select **Start > Setting > Control Panel > Barcode setting**, set/ enable / disable the value of each item.
3. Run the **WordPad** software program
4. Aim the scanning beam at the center of bar code.

➢ Position the device close to bar code when scanning
➢ Position at a distance when scanning lager bar codes.
➢ The scanner is disabled after you release the key or after five seconds.

5. Press the Right/left/central scan key. The scanner scans as long as you hold the key or for five seconds.
6. Upon reading a bar code, the red LED indicator comes on until the trigger is release or five seconds. The green LED and the beep tone indicate a good read.

7.Barcode Scanning Position

This device can read from 40 to 300mm distance.

　　　1)　Position the laser scanner close to the barcode when scanning small barcodes. And position it is a distance from the barcode when scanning large barcodes

　　　2)　The reader can be detected by a red beam.

8.　Bad Scanning Position

　　　1)　Make sure that the bars enter the laser beam when scanning large barcodes.

　　　2)　Scanning operations may fail if the laser beam position as below.

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. Rotating the Screen:

If you change display from **portrait** type to **landscape** type, please press key first, and then press key. Otherwise, if you change display from **landscap**e type to **portrait** type, you must press key, and then press key again.

2.5.9. Help:

To tap "**?**" to get help information for each program.
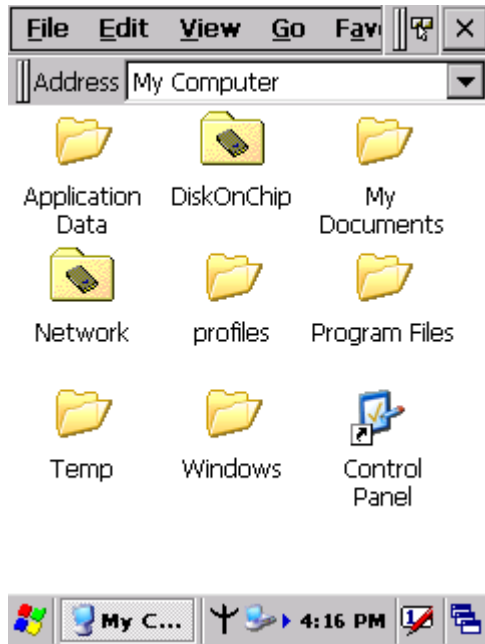
2.6 Power management

2.6.1 Suspend Mode

The PDA 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 PDA, Press the key again for the PDA 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 PDA is not in use.
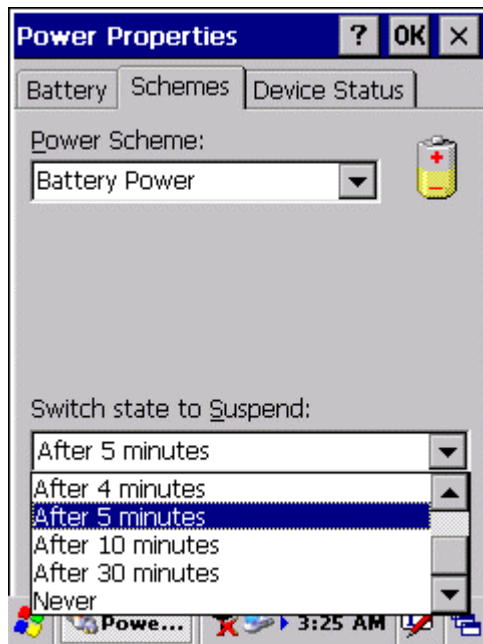
Schemes Tab

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 use for a specified of time.
- The battery pack is completely discharged.

2.6.2. Resuming:

Use one of following methods to resume(wake up the PDA):

- Press <**Power**> key to suspend or resume (wake up).
- Put the PDA into a dock.
- Press the <**Scan**> key to wake up the PDA.

When a battery pack completely discharges while the unit is in suspend mode,

the PDA remains suspended until discharged battery condition is corrected.

2.7: Resetting the PDA

2.7.1: Software (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 a application "hangs", initiate a warm reset to terminate the application only.

Reset Switch

Procedure to Warm Reset: To initialize a warm reset, press and hold the <**Reset>** key.

After Warm Reset:
- The desktop appears with the application shortcuts on the screen.
- The custom settings in the registry are persistent.
- The RF Network PC card if present, connects to the network system.

2.7.2: Cold Reset

1) You can use Cold Reset to initiate device if WINCE.NET OS lock up or Warm Reset still can't work
2) To perform Cold Reset, use stylus to press " **Reset**" key and press "**Power**" key simultaneously.
3) Device will initiate boot up after Cold Reset.

CAUTION: **Only use stylus to press the Reset key. 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's better usually to back up your files to Flash ROM, Flash Card or PC.**

Chapter 3

Setting

3.1 Introduction

To view available options for PDA's setting, tap **Start > Setting**. Then, there are three items inside **Setting**: "**Control Panel**", "**Network and Dial-up Connection** "and "**Task and Start Menu**".

3.2 Control Panel

To view the **Control Panel** and settings you can modify by tapping **Start > Setting > Control Panel**.(Figure 3-2)
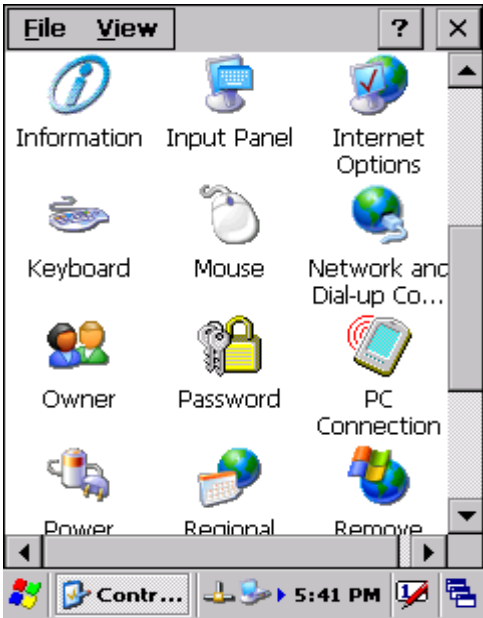
Figure 3-1 Control Panel

3.2.1 Backup Restore

Table 3-1 Backup Restore (A)

ICON	ITEM & FUNCTION
	1. **Backup** – You can backup registry or system to Flash disk or inserted (**Figure 3-2-1**)

Table 3-1 Backup Restore (B)

	Backup storage: Can storage backup data into (1) **Disk on Chip** (2) **CF Card** (3) **SD Card** (**Figure 3-2-2**) **Backup:** You can select backup data region only for **Registry region** or all the **Full system** region (**Figure 3-2-2**) It also shows **available Flash Disk** size**, Selected User Data** size that are already backup**,** and **Last backup date.** (**Figure 3-2-2**)
	"Backup Now" icon: Tap the icon " **Backup Now**" to start to backup data. And a Warming icon will pop up (**Figure 3-2-3**). Please tap "**OK**" to continue backup procedure if you still want to proceed it. This procedure will keep a few minutes, and a "**Message**" icon shows "**Backup system OK!** ". Please tap"**OK**" to finish this procedure. **"Delete Backup File**" icon: You can tap "**Delete Backup File"** to delete all backup data. There is also a "**Warning**" icon to ask you "**Are you sure to delete backup file**". Tap "**OK**" to continue deleting backup files **(Figure 3-2-2)**
	Restore: You can restore user data from Flash disk or inserted memory card.(**Figure 3-2-4**) **Restore storage:** Restore data from (1) **Disk on Chip** (2) **CF Card** (3) **SD Card (Figure 3-2-5)** **"Restore Now"** icon: tap "**Restore Now**" icon to start to restore data. And a "**Warning**" icon shows warning message. Tap "**Ok**" to continue this procedure. There is Message showing on the screen " **Restore system finished, please reset the system to take effect. Do you want to proceed?**" Please tap the "**OK**" icon to warm reset the system and start from a situation with the restored environment.

Figure 3-2-1

Figure 3-2-2
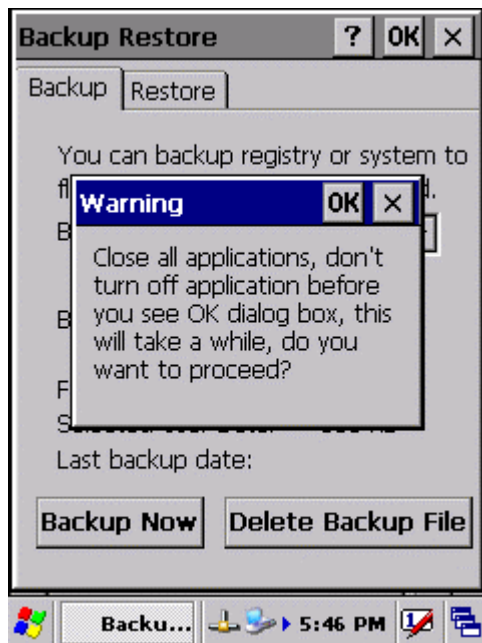
Figure 3-2-3
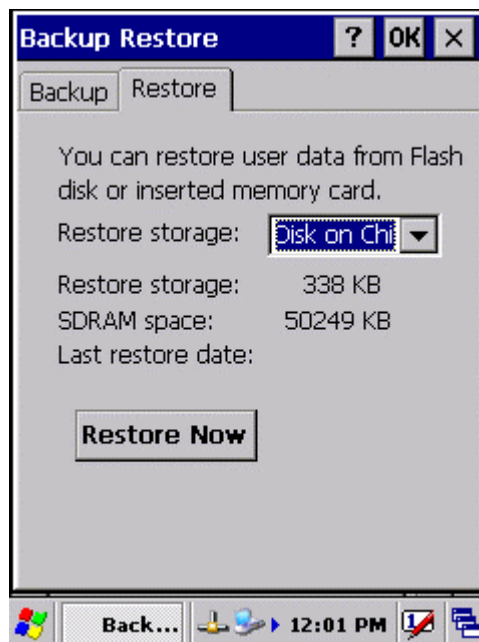
Figure 3-2-4

Figure 3-2-5

3.2.2 Bar Code Setting

Table 3-2(A)

▬ BarCode Setting	● There are three Tabs for scanner configuration setting: "**BarCode**", "**Detail**" and "**Misc.**".
	● "**BarCode**" **Tab**(**Figure 3-3-1 & Figure 3-3-2**): Select the bar code symbologies you plan to scan from the list. Tap to enable/disable the desired symbologies. **Please note that it's available barcode item with black words for built-in engine, and it's not available with grey words.**
	"**Symbologies**" **Tab**(**Figure 3-3-3**): Select the desired bar code symbology from the pull-down list and complete the fields. *Please see 3.2.3 Symbologies List for more detail information of each Bar Code.*

Field Name	Function/Operation
Symbology List	Select the bar code symbology from pull-down list
Enable	Tap/Enable this checkbox to enable the selected bar code symbology.
Format	Two kinds of format can be selectable: "**Standard**" & " **Full ASCII**"
Length **Min:**2-80 **Max:**2-80	✓ Not all symbologies have this option nabled. ✓ Set the minimum and maximum lengths from the up-down list in "**Min**" and "**Max**" items. If the numbers are the same, acceptable bar codes will only be that length.

Table 3-2(B)

⬛ BarCode Setting	"**Symbologies**" **Tab(Figure 3-3-3)**: Select the desired bar code symbology from the pull-down list and complete the fields. *Please see 3.2.3 Symbologies List for more detail information of each Bar Code.*	
	Field Name	**Function/Operation**
	Fixed Length The length can be set from 2 to 80	After the selected bar code is enabled, and the three kinds of length is filled inside these three blank items. Then, Only the selected bar code with one of these three kinds of length can be showed the customer's application program.
	Transmit	Transmit the bar code by adding selected type(s) of error checking protocol
	Verify	Enable/Disable the verification with Checksum.
	● "**Options**" **Tab (Figure3-3-4)**	
	Field Name	**Function/Operation**
	Trigger timeout(sec)	Select a trigger timeout duration(in seconds) from this pull-down list.(3 sec ~10sec)
	Keybd Message	Select from "**Type writing"** and "**Copy & paste**". Select a method based upon the bar code scanning application you will use.
	Termination Message	Select the desired termination code from the pull-down list.<**None, CRLF, Space, tab**>
	Beep after data collect	Select the numbers of beep tone when scanning. < **0,1,2** >
	Auto Scan	✓ Select "**Disable**" to disable the auto scan function. ✓ Select/Enable the auto scan duration(in seconds) from this pull-down list. < 1,2,3,4,5>

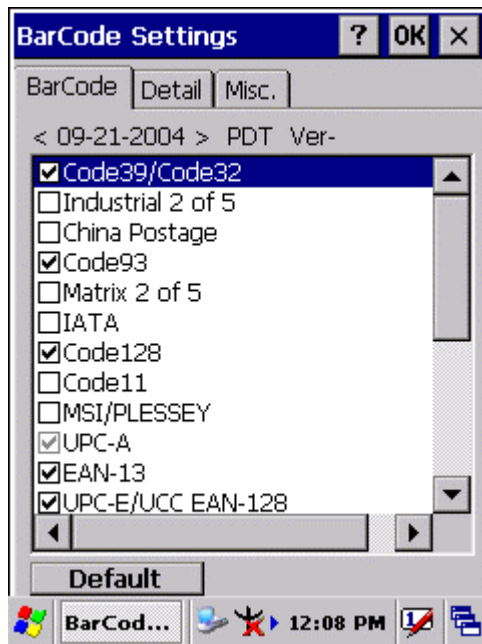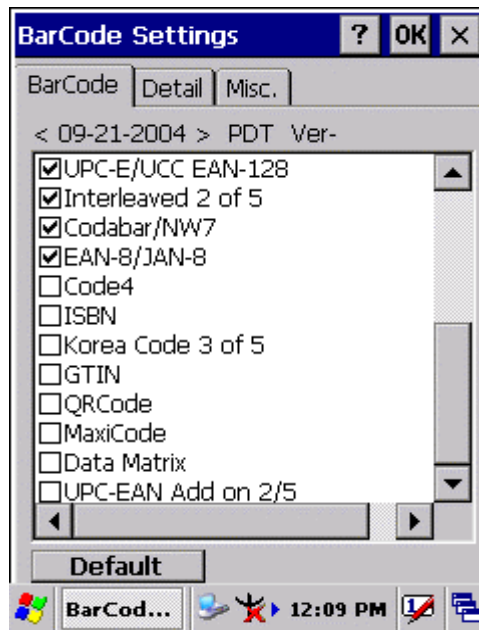|	**Label**	**Prefix**	Type the desired label prefix in this text box
		Suffix	Type the desired label suffix in this text box
	Default	Tap this tab to return back to the default value for "**Options**" applet.	

BarCode Settings

BarCode | Detail | Misc.

< 09-21-2004 > PDT Ver-

☑ Code39/Code32
☐ Industrial 2 of 5
☐ China Postage
☑ Code93
☐ Matrix 2 of 5
☐ IATA
☑ Code128
☐ Code11
☐ MSI/PLESSEY
☑ UPC-A
☑ EAN-13
☑ UPC-E/UCC EAN-128

Default

BarCod... 12:08 PM

Figure 3-3-1

BarCode Settings

BarCode | Detail | Misc.

< 09-21-2004 > PDT Ver-

☑ UPC-E/UCC EAN-128
☑ Interleaved 2 of 5
☑ Codabar/NW7
☑ EAN-8/JAN-8
☐ Code4
☐ ISBN
☐ Korea Code 3 of 5
☐ GTIN
☐ QRCode
☐ MaxiCode
☐ Data Matrix
☐ UPC-EAN Add on 2/5

Default

BarCod... 12:09 PM

Figure 3-3-2

BarCode Settings

BarCode | Detail | Misc.

☑ Enable Code39/Code32

Format: Stardard

☑ Length: Min 4 Max 48

☐ Fixed Length: 1 ☐ 2 ☐ 3 ☐

Transmit: ☐ Check Digit ☐
　　　　☐ Start/Stop ☐ ☐
　　　　☑ Checksum

Verify: ☐ Checksum Verify Nor

☐ Enable Code32

Default

BarCod... 12:17 PM

Figure 3-3-3

BarCode Settings

BarCode | Detail | Misc.

┌ Behavior ────────────

Trigger Timeout(sec) 6

Keybd Message Type writi

Termination Code CRLF

Beep after data collect 1

Auto scan Disable

┌ Label ────────────

Prefix [　　] Suffix [　　]

Default

BarCod... 12:16 PM

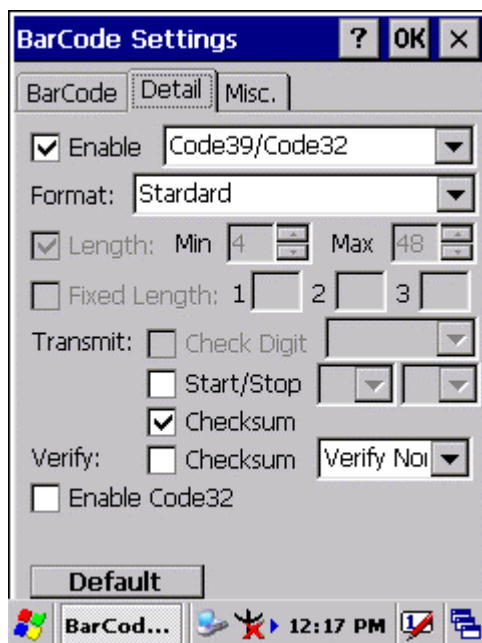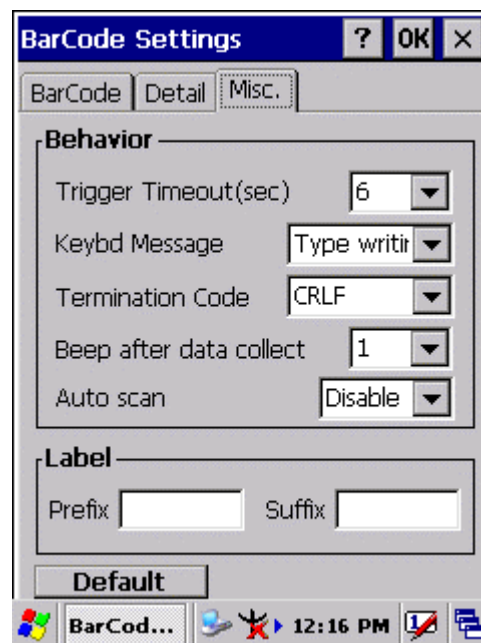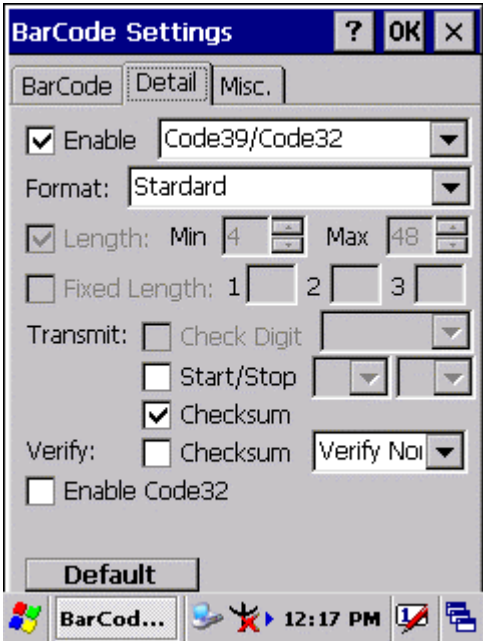**Figure 3-3-4**
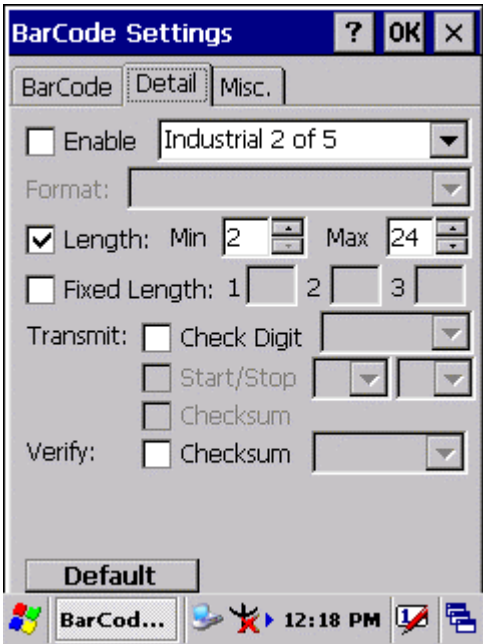
3.2.3 Symbologies List

3.2.3.1   Code39/Code32:

Code39 is a discrete, self-checking, **variable length** symbology. The character set is Uppercase **A-Z**, **0-9**, dollar sign "**$**", period "**.**",   slash"**/**",   percent"**%**", space" ", plus "**+**",   minus"**-**".

☐ **Enable**	☑	Enable/Disable Code39
	☐	
Format	Standard	Standard 43 Characters
	Full ASCII	Full ASCII character
☐ **Start/Stop**	☑	Transmit
	☐	Not transmit
☐ **Checksum**	☑	**Checksum** transmit
	☐	**Checksum** doesn't transmit
Verify	☑	One of two kinds of verification, "**Verify Strick**" or " **Verify Normal**" can be selected from the pull-down list.
☐ **Checksum**	☐	
☐ **Enable Code32**	☑	Enable Code32
	☐	Disable Code32
Default		Tap the "**Default**" tab to return back to default setting

3.2.3.2 Industrial 2 of 5

Enable	☑	Enable Industrial 2 of 5
	☐	Disable Industrial 2 of 5
Length	☑	**Min** Length can be set from **2** to **48**
		Max Length can be set from **2** to **48**
	☐	
Fixed Length	☑	**Fixed Length 1** 2-48
		Fixed Length 2 2-48
		Fixed Length 3 2-48
	☐	
Check Digit	☑	**Check Digit** transmit
	☐	**Check Digit** doesn't transmit
Verify	☑	Enabled
Checksum	☐	Disabled
Default		Tap the "**Default**" tab to return back to default setting

3.2.3.3 China Postage
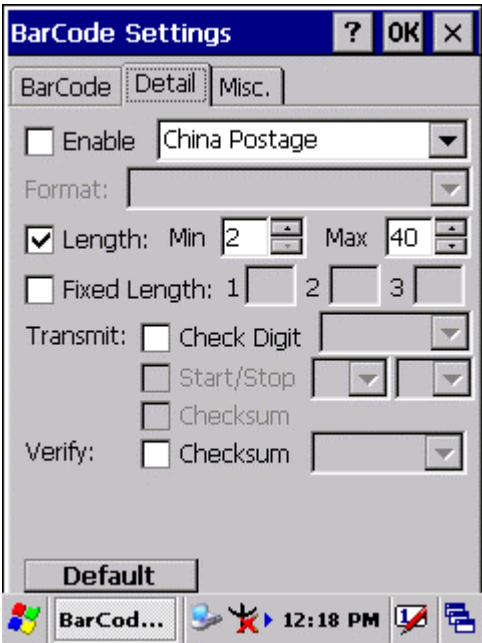
Enable	☑	Enable China Postage
	☐	Disable China Postage
Length	☑	**Min** Length can be set from **2** to **80**
		Max Length can be set from **2** to **80**
	☐	
Fixed Length	☑	**Fixed Length 1** 2-80
		Fixed Length 2 2-80
		Fixed Length 3 2-80
	☐	
Check Digit	☑	**Check Digit** transmit
	☐	**Check Digit** doesn't transmit
Verify	☑	Enabled
Checksum	☐	Disabled
Default		Tap the "**Default**" tab to return back to default setting