MARS-1030F

WinCE. NET Rugged Portable Data Terminal

User Manual

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Acknowledgements

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Contents

CHAPTER 1

Introduction

This chapter presents general information about the MARS-1030F.

Chapter 1 Introduction

Congratulations on purchasing the MARS-1030F 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 are:

- Intel® XScale™ PXA255 400 MHz 32 bits RISC Processor
- Windows® CE .NET 4.2 Operating System
- 64/128/256 MB SDRAM & 64/128 MB Flash ROM
- Open Architecture: User Accessible SD/CF/PCMCIA Slot
- 240 x 320, 3.5" Color TFT Display with Touch Panel
- 1 Alpha-numeric Keyboards with LED backlight
- 802.11b Radio Support (Bluetooth Optional)
- Integrated 1D or 2D Barcode Scanner

1.1 About this Manual

The following chapters contained in this manual are:

Chapter 1:	Introduction—Presents general information about the PDT.
Chapter 2:	Getting started—Describes the basic use of the PDT.
Chapter 3:	Setting—Provides basic instructions for customizing the PDT by adjusting settings.
Chapter 4:	Communication—Describes how to use the communication features of the PDT.
Chapter 5:	Software Application—Software implement procedures.
Appendix A:	Barcode Setting—Provides instructions for customizing the barcode engine.

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 possibly cause personal injury. If the LCD panel is broken, never touch the liquid inside, for such contact would irritate the skin.
- Although the MARS-1030F PDT has passed IP54 standard tests for water and dust resistance, avoid prolonged exposure to rain or other concentrated moisture. For these conditions exceed the IP54 standard, and could result in water or other contaminants entering the PDT.
- Use only the 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.
- Be sure that only authorized suppliers are allowed to disassemble and reassemble the device. If the device or parts has been damaged due to wrong handling, the product and parts warranty shall be void.
- Always make backup copies of all important data. This is easily one by using a cable or Single Cradle (sold as an option) to transfer data to the computer. The manufacturer is not liable for any data damage or loss caused by deletion or corruption of data when using this device or caused by a drained battery.
- Lithium-ion battery packs might get hot, explode, ignite and/or cause serious injury abused. 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 reversed.
  - Do not connect the positive and negative terminals of the battery pack together with any electrically conductive object.
  - 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 subject 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.

Caution! *There is a danger of a new battery exploding if it is incorrectly installed. Do not attempt to recharge, force open, or heat the battery. Replace the battery only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.*

Achtung!

1.3 Declaration of conformity

FCC Class B

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.

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

Caution: *Advantech declares that MARS-1030F is limited in CH1~CH11 for 2.4GHz by specified firmware controlled in U.S.A.*

The FCC ID of MARS-1030F is M82-MARS-1030F.

CE

This product has passed the CE test for environmental specifications. Test conditions for passing included the equipment being operated within an industrial enclosure. In order to protect the product from being damaged by ESD (Electrostatic Discharge) and EMI leakage, we strongly recommend the use of CE-compliant industrial enclosure products.

IMPORTANT FOR LASER PRODUCTS

1. Class II Laser Product
2. Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
3. "Laser Radiation—Do not stare into beam"
4. Do not allow young children to use the product without adult supervision.
5. Do not replace/repair the LED/Laser. These are not user replaceable.
6. Do not shine the LED/Laser on a reflective surface.

1.4 Product Labeling

The PDT has several labels as shown in Figure 1-1 and 1-2.

Figure 1.1: Product Labeling (Front side view)

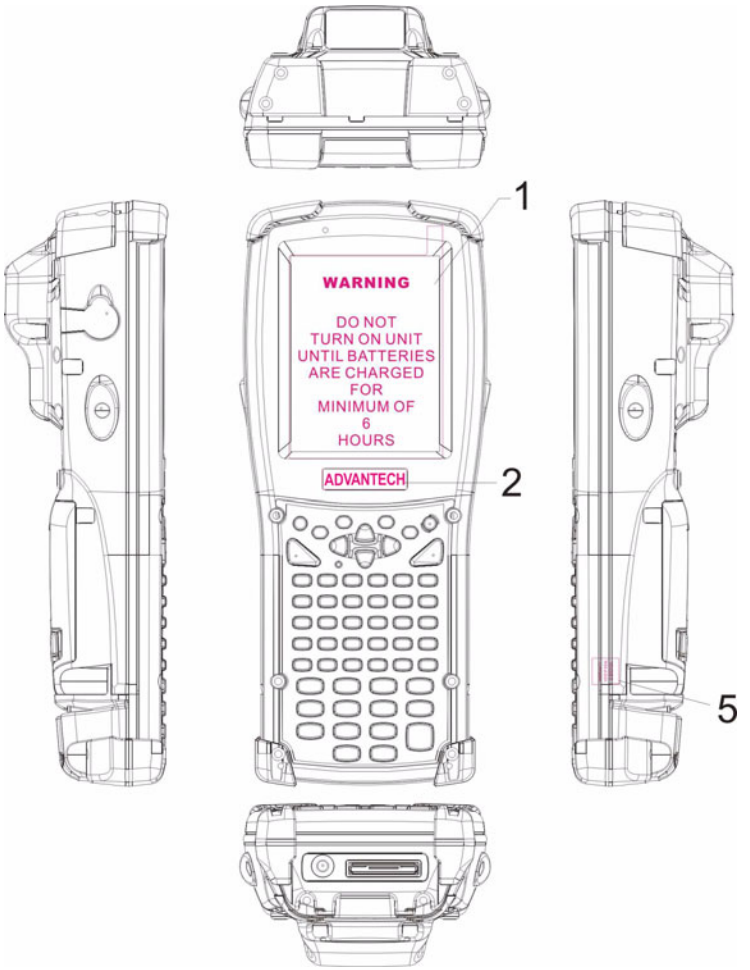
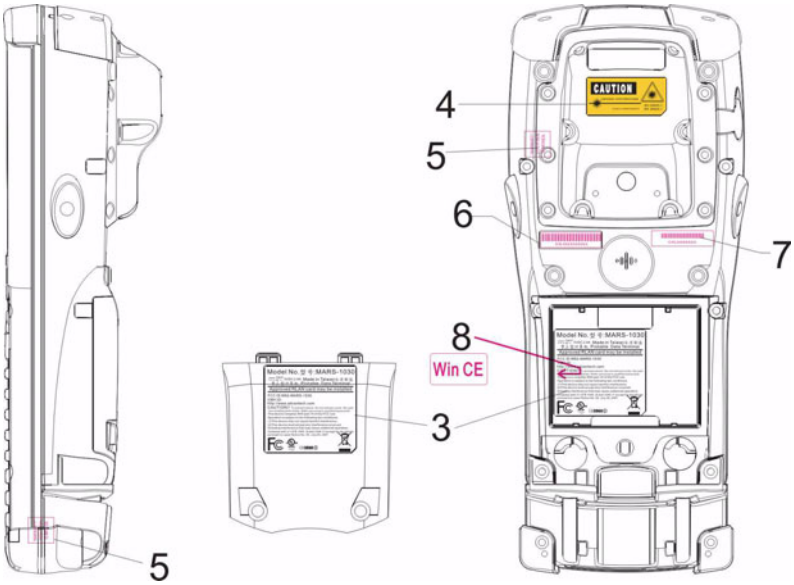


Figure 1.2: Product Labeling (Back side view)



1.5 System Specifications

The MARS-1030F PDT detailed specifications follow. Unless otherwise noted, all the specifications are subject to change without prior notification.

Table 1.1: System Specification	
MARS-1030F	
Processor	- 400 MHz Intel PXA255 32 bits RISC CPU
Memory	- 64 or 128 MB Flash ROM - 64,128 or 256 MB SDRAM
Display	- 240 x 320 3.5" TFT 256K Color LCD with LED backlight
Audio	- One mono speaker - 2.5 mm DIA Stereo Earphone Jack with Microphone input
Radio Support	- Wireless LAN: 802.11b (optional) - Bluetooth: Class II (optional)
Communication Ports	- USB: Support USB v1.1 both host and client. (PDT and Cradle) - Serial: RS-232 via optional cable or Cradle.
Scan Engine (Optional)	- Opticon Laser (1D) Engine - HHP 2D Imager.
Expansion Slot	- One Compact Flash Type-II slot - One PCMCIA slot - One SD Card slot (supports SD memory only)
LED	- One Triple-Color LED for Charger Indicator and Alarm Notification - One Dual-Color LED for Scanner Indicator
Power System	- Standard Li-Ion Battery Pack, 3.7 V, 3000 mAh - Advanced Smart Battery with Gas-Gauge - Built-in Battery Charger - 2.4 V / 15 mAh rechargeable backup battery - One Battery Cover Sensor Switch - Power Adapter: 100 ~ 240 V AC, 50/60 Hz Input; 5 V DC / 2.6 A, 3 A Output

Button/Key	- One power button - 4 navigation buttons - 4 application buttons - 3 barcode scanner buttons - One application hot key - 44 key alpha-numeric keyboard
Dimensions and Weight	- Dimensions: 220 mm (L) x 91.3 mm / 78 mm (W) x 42.2 mm / 60.6 mm (H) - Weight: 660 g with Standard Battery Pack 600 g without Battery Pack
Color	- Black
Standard packing list and Optional accessories	- Standard Packing list: 1. MARS-1030F Terminal 2. Stylus 3. USB Client Cable for Terminal 4. Earphone/ Microphone Set 5. Standard AC Adapter 5 V DC / 2.6 A 6. AC Power Cord 7. Standard Battery Pack (3.7 V, 3000 mAh) 8. CF Support Guide 9. Quick Guide - Optional Accessory: 1. RS-232 Serial Cable for Terminal 2. USB Host Cable for Terminal 3. High-Capacity Li-Ion Battery Pack (3.7 V, 4000 mAh) 4. RFID Card Cover 5. Single Dock 6. Pistol Grip 7. 4-Slot Battery Charger 8. Car Adapter 9. Holster 10. Protect Film
Software	- Microsoft Windows CE.NET 4.2 Professional

1.6 Environment Standard

Table 1.2: Environment Standard	
Operating Temperature	14 ~ 122° F (-10 ~ 50° C)
Storage Temperature	-4 ~ 158° F (-20 ~ 70° C)
Humidity	5 ~ 80% (non-condensing)
Drop	5 ft (1.5 m) Drop to Concrete
Water & Dust proof	IP54 Certificated
Vibration	MIL STD 810F

1.7 Warranty and after service

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

1.8 Technical Support and Assistance

1. Visit the Advantech web site at **www.advantech.com/support** where you can find the latest information about the product.
2. Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:
   - Product name and serial number
   - Description of your peripheral attachments
   - Description of your software (operating system, version, application software, etc.)
   - A complete description of the problem
   - The exact wording of any error messages

1.9 Document Feedback

To assist us in making improvements to this manual, we would welcome comments and constructive criticism. Please send all such - in writing to: support@advantech.com

CHAPTER 2

Getting Started

This chapter describes the basic use of the PDT.

Chapter 2 Getting Started

2.1 Check the package

Open the package and check that nothing is missing or damaged.

Figure 2.1: Inside the package

1. MARS-1030F Terminal
2. Standard Battery Pack (3.7 V, 3000 mAh)
3. Earphone/Microphone Set
4. Stylus
5. USB Client Cable for Terminal
6. CF Support Guide
7. Standard AC Adapter 5 VDC / 2.6 A
8. AC Power Cord
9. Quick Guide (Not Shown)

2.2 General View of the PDT

2.2.1 PDT front side view

Figure 2.2: PDT Front side view

2.2.2 PDT back side view

Figure 2.3: PDT back side view

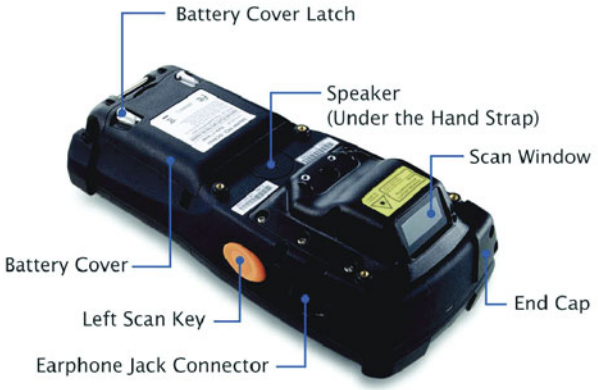


Table 2.1: Description of PDT General View			
1	Scanner LED Indicator	“Red” color	Reading barcode
		“Green” color	Successful reading
2	Charge LED Indicator	“Red” color	Charging battery
		“Green” color	Battery charged full
3	LCM / Touch Panel	Do specific actions with touch panel and stylus	
4	Left Scan key Right Scan key Scan key	Start scanning the barcode by pressing any one of these three scan keys	
5	Power key	Puts the terminal into and wakes the terminal from suspend mode.	
6	F1 ~ F4 key	Four application program keys and hot keys as defined by the end user.	
7	Navigation key	Navigation keys for left, right, up and down directions	
8	Numeric keys	Numeric keys	
9	Alphabetic key	Alphabetic 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	A connector to plug a earphone	
13	USB / Serial / Synchronization port	A connector to support USB Host/Client and serial functions	
14	Scan window	A window for scanning of barcode reader	
15	Stylus	Use the stylus for selecting items and entering information.	
16	Battery Cover	Protects the battery pack and keeps the battery switch covered to keep the system in suspend mode	
17	Battery Cover Latch	To keep the Battery Cover locked	
18	Hand-strap	This strap can be sealed tighter or looser	
19	Speaker	1.5 W speaker for audio sound	
20	DC Power Jack	A connector to support AC power.	
21	End Cap	Protects the CF and SD slots from dust and water	

2.3 Charging the Battery Pack

Charge the battery pack before using the PDT by following these steps.

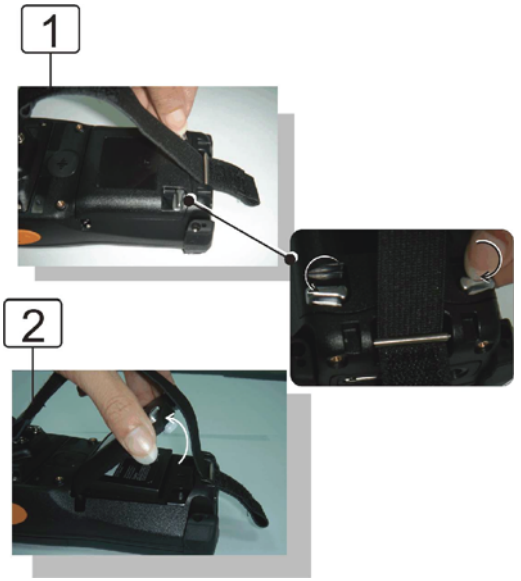
2.3.1 Installing the battery pack

1. Detach and loosen the hand-strap.

Figure 2.4: Release the hand-strap from PDT

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

Figure 2.5: Detach the battery cover from PDT

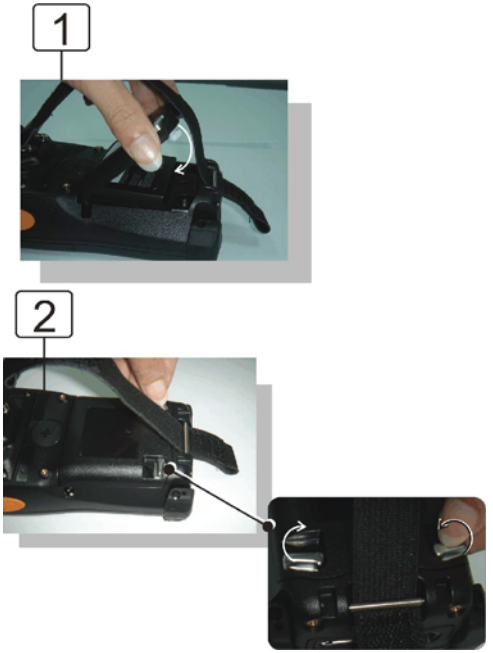


3. Insert the battery pack into the battery compartment with the label facing out, and ensure the battery snaps into place.

Figure 2.6: Insert the battery pack

4. 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 PDT.

Figure 2.7: Replace the battery cover



5. Charge the battery pack for about 6 hours, when charging for the first time. Subsequent charges need about 4 hours.

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

2.3.2 Charging the battery pack with a Power Adapter

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

Figure 2.8: Charging with a power adapter

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

2.3.3 Charging the battery pack with a Single Dock

a) Leave the battery pack inside the PDT

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 into the Single Dock.
4. Insert the PDT into the Single Dock.

Figure 2.9: Charging with a Single Dock

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

CAUTION: Single Cradle Adapter supplies 5 V DC / 6.5 A. This is different from the PDT Adapter (5 V DC / 2.6 A). Please use the Single Cradle Adapter only.

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 the connector of the power adapter into the Single Cradle.
4. Insert the battery pack into the Single Cradle's spare Battery slot.

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

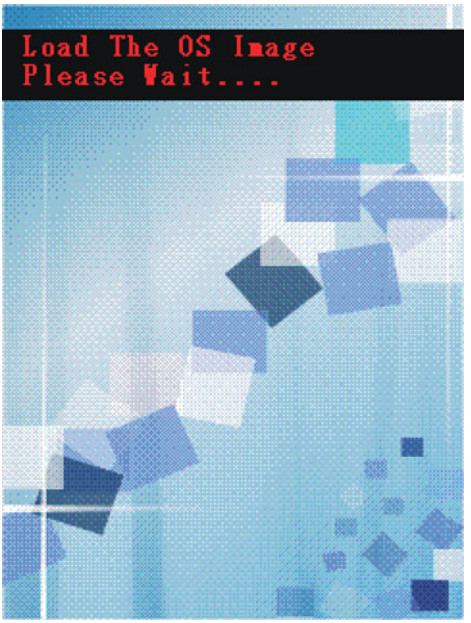
CAUTION: If the battery pack is removed from the PDT for too long, the data stored inside the SDRAM will be lost. Switch off the PDT if you want to change the main battery pack.

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 “Resetting the PDT” on page 50.

> CAUTION: When a battery is inserted into the PDT for the first time, upon the PDT’s first power up, the device boots and powers on automatically.



When the PDT is powered on for the first time, it initializes its system. A splash screen appears for a short period of time followed by the Win CE .NET 4.2 window.

Figure 2.10: 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 “Resetting the PDT” on page 50.

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

To turn off the PDT, just press the power key again. This action does not actually turn off the PDT, it only puts 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 (Labeled Align Screen) opens. Briefly press and hold the stylus 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.

The touchscreen can be recalibrated at any time using **Start** > **Settings** > **Control Panel** > **Stylus**, to open the Calibration program.

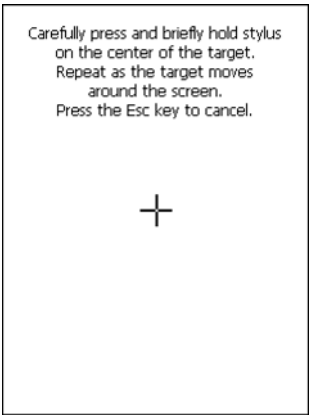


Figure 2.11: Calibration

2.4.4 Adjusting the brightness

Middle brightness is the factory default. You can adjust the brightness to meet your environment and comfort as follows.

- Press the Fn key and then press on the right key of Navigation key  to increase brightness.
- Press the Fn key and then press on the left key of Navigation key  to decrease brightness.
- The display will become dimmer automatically, if you do not perform any operation for a specific period of time. This helps to save battery power.

2.4.5 To mute the Sound

To mute the sound, press the Fn key first, and then press the ESC key to turn the sound off or on.

2.4.6 Using the Stylus

The stylus is located next to the hand-strap on the left rear side of the PDT as illustrated in “PDT back side view” on page 15. The stylus function is same as the mouse on a PC. Use the stylus to:

Navigate the display, select menu items and open applications.

Type characters on soft keyboard panel.

Select an item from a drop-down list.

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

2.4.7 Using the SC620 Keypad

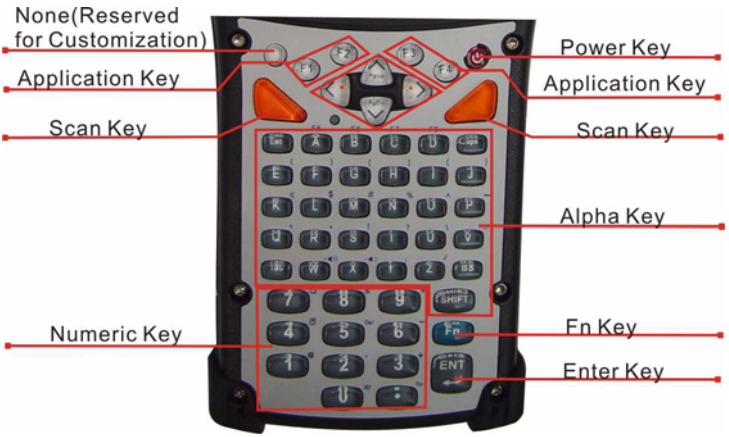


Figure 2.12: MARS-1030F Keypad

Table 2.2: Keypad List

Key	Main Keypad ListFunction	Fn + Main Function
	None	
	Main Bar-code Scan Key	
	Power On/Off	
F1	Internet Explorer	
F2	Microsoft WordPad	
F3	Inbox	
F4	File Explorer	

Table 2.2: Keypad List		
Key	**Main Keypad ListFunction**	**Fn + Main Function**
	Right	Increase of Brightness
	Left	Decrease of Brightness
	Down	Page Down
	Up	Page Up
	Esc	
	Caps	
	Tab	
	Backspace	
	A	F5
	B	F6
	C	F7
	D	F8
	E	(
	F	)
	G	[

Table 2.2: Keypad List		
Key	**Main Keypad ListFunction**	**Fn + Main Function**
	H	]
	I	{
	J	}
	K	€
	L	$
	M	#
	N	%
	O	^
	P	~
	Q	,
	R	‘
	S	!
	T	?
	U	\
	V	=

Table 2.2: Keypad List		
Key	**Main Keypad ListFunction**	**Fn + Main Function**
	W	
	X	
	Y	;
	Z	/
	1	@
	2	’
	3	+
	4	Paste
	5	Del
	6	(Minus Sign)
	7	Copy
	8	&
	9	*
	0	Start Menu
	. (Point)	Space

Table 2.2: Keypad List		
Key	**Main Keypad ListFunction**	**Fn + Main Function**
	SHIFT	
	Function change	
	Enter	

Table 2.3: Special Assembler Key		
Assembler Key	Functionality	Definition
	Warm Reset	Press “**F1**” and “**F4**” button simultaneously.
	Cold Reset	Press “**Power**”, “**F1**” and “**F4**” button simultaneously.

Table 2.4: Definition of Main Function		
Key	**Main Function**	**Definition**
	None	Keep its function by customer demand.
	Main Barcode Scan Key	The  key activates the scan function of SC620.
	Power On/Off	The  key puts the terminal into and wakes the terminal from suspend mode if this key button is not pressed more than **two seconds**.
	Internet Explorer	User definable application key 1

Table 2.4: Definition of Main Function		
Key	**Main Function**	**Definition**
F2	Microsoft WordPad	User definable application key 2
F3	Inbox	User definable application key 3
F4	File Explorer	User definable application key 4
	Right	Move the cursor one character to the right. The cursor will move continuously if the key is pressed continuously.
	Left	Move the cursor one character to the left. The cursor will move continuously if the key is pressed continuously.
	Down	Move the cursor down one row or line down.The cursor will move continuously if the key is pressed continuously.
	Up	Move the cursor up one row or line up. The cursor will move continuously if the key is pressed continuously.
Esc	Esc	This key cancels an action.
Caps	Caps	Conversion of the capital & lower case of the alpha key.
Tab	Tab	This key moves the cursor to the next tab stop or the next control (on a form).
BS	Backspace	This key deletes the previous character and moves the cursor back one space if you are typing text. The cursor will move continuously if the key is pressed continuously.

Table 2.4: Definition of Main Function		
Key	**Main Function**	**Definition**
A ~ Z	A ~ Z	Use the alphabetic keys for alphabetic characters.
1 ~ 0	1 ~ 0	Numeric keys
.	.	Decimal point key
SHIFT	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.
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

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.

Table 2.5: Special Function Key Definitions

Key Sequence	Fn + Main Function	Definition
	Increase Brightness	To make the screen lighter: press  , then  .
	Decrease Brightness	To make the screen darker: press  , then  .
	Page Down	To move the cursor down one page: press  , then  . The cursor will move continuously if the key is pressed continuously.
	Page Up	To move the cursor up one page: press  , then press  . The cursor will move continuously if the key is pressed continuously.
	**F5** (Barcode Settings)	User definable application key 5.
	**F6** (Media Player)	User definable application key 6.
	**F7** (Calculator)	User definable application key 7
	**F8** (Information)	User definable application key 8.
	(	To enter **(** press  , then press  .

Table 2.5: Special Function Key Definitions		
Key Sequence	**Fn + Main Function**	**Definition**
Fn F	)	To enter) press Fn, then press F.
Fn G	[	To enter [press Fn, then press G.
Fn H	]	To enter] press Fn, then press H.
Fn I	{	To enter { press Fn, then press I.
Fn J	}	To enter } press Fn, then press J.
Fn K	€	To enter € press Fn, then press K.
Fn L	$	To enter $ press Fn, then press L.
Fn M	#	To enter # press Fn, then press M.
Fn N	%	To enter % press Fn, then press N.
Fn O	^	To enter ^ press Fn, then press O.
Fn P	~	To enter ~ press Fn, then press P.

Table 2.5: Special Function Key Definitions		
Key Sequence	**Fn + Main Function**	**Definition**
Fn Q	,	To enter , press Fn, then press Q.
Fn R	‘	To enter ‘ press Fn, then press R.
Fn S	!	To enter ! press Fn, then press S.
Fn T	?	To enter ? press Fn, then press T.
Fn U	\	To enter \ press Fn, then press U.
Fn V	=	To enter = press Fn, then press V.
Fn W		To increase the volume: press Fn, then press W.
Fn X		To decrease the volume: press Fn, then press X.
Fn Y	;	To enter ; press Fn, then press Y.
Fn Z	/	To enter / press Fn, then press Z.
Fn 1	@	To enter @ press Fn, then press 1.

Table 2.5: Special Function Key Definitions		
Key Sequence	**Fn + Main Function**	**Definition**
Fn 2	’	To enter ’ press Fn, then press 2.
Fn 3	+	To enter + press Fn, then press 3.
Fn 4	Paste	To paste an object or text: press Fn, then press 4.
Fn 5	Del	To delete the next character: press Fn, then press 5.
Fn 6	(Minus Sign)	To enter a minus sign: press Fn, then press 6.
Fn 7	Copy	To copy an object or text: press Fn, then press 7.
Fn 8	&	To enter & press Fn, then press 8.
Fn 9	*	To enter * press Fn, then press 9.
Fn 0	Start Menu	To show the Start menu.: press Fn, then press 0.
Fn •	Space	To enter a space: press Fn, then press •.

2.4.8 Using Earphones and a Microphone

Connect earphones and a microphone to PDT earphone jack connector. The PDT doesn't have a built in microphone; if you want to make voice recordings, you have to use an external microphone.

Figure 2.13: Earphones

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 automatically adjust for Daylight Saving Time. To set or change the date and time:

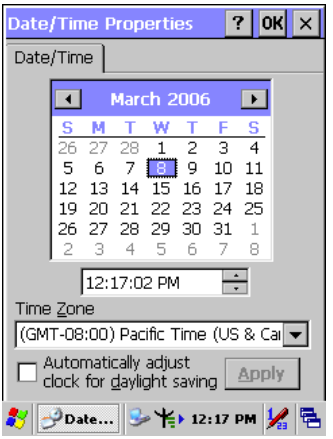


Figure 2.14: Date/Time properties

1. Select **Start > Settings > Control Panel > Date/Time**
2. 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.
3. Select the month to open a pull-down list of months or press the arrow buttons on either side of the month to increase or decrease the month.
4. To change the time, select the hour, minute, second, or AM/PM value, then select the up arrow to increase the value or select the down arrow to decrease the value, or type a new value into the field.
5. Select the 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 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 taskbar to open a list of available programs. Or if the program has a icon on the desktop, double-tap it to open it.

There are several ways to enter data on the PDT once in an application.

- Use the keypad to enter alphanumeric characters, Refer to “Using the SC620 Keypad” on page 27.
- Use the keypad to enter alphanumeric characters, Refer to “Using the Stylus” on page 26.
- 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 “Navigating the Display” on page 39.
- Use the soft input panel (digital keyboard) with the stylus. Refer to “The Soft Keypad” on page 41.
- Use barcode 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 “Scanning Barcode, 1D laser version” on page 44 for more information on using a scanner.

For more information on factory installed applications, Refer to “Software Applications” on page 124.

2.5.3 The Command Bar

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

2.5.4 The Taskbar

The **Taskbar** at the bottom of the screen displays an icon for the active program, the current time, and system icons for utilities loaded in memory. The **Taskbar** includes menu names, buttons, and the keyboard icon, which opens and closes the soft input panel (SIP). The **Taskbar** allows you to select and close programs.

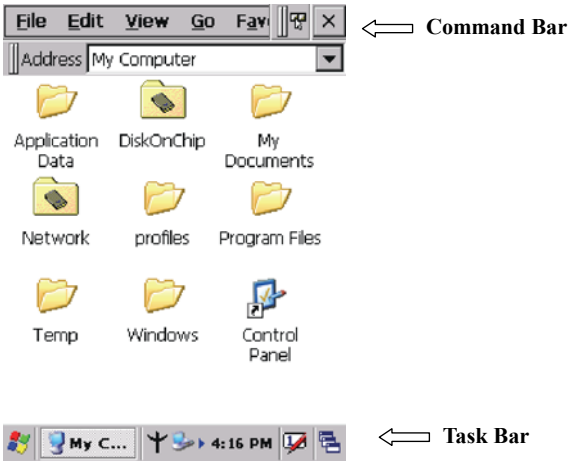


Figure 2.15: Taskbar & Command Bar

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 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 Setting Up a Wireless LAN

1) Press “Start” > “Settings” > “Control Panel” > “WLAN Manager”.

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

3) In the AP Browser tab, tap the Scan button to refresh the network.

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

5) Press OK to save all your Wireless LAN settings.

6) Tap the “Exit” button to **Disable** the WLAN device.

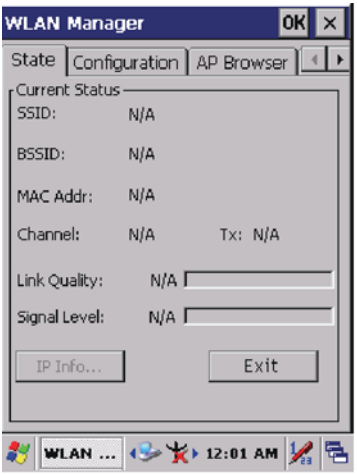


Figure 2.16: WLAN Manager

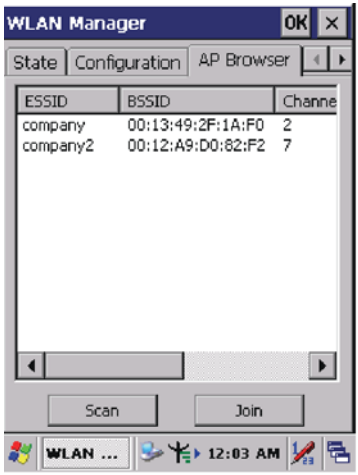


Figure 2.17: WLAN Manager

Note:

	The 802.11b WLAN is not connected to the network.
	The 802.11b WLAN has no signal.
	The 802.11b WLAN signal is low.
	The 802.11b WLAN signal is OK.
	The 802.11b WLAN signal is good.

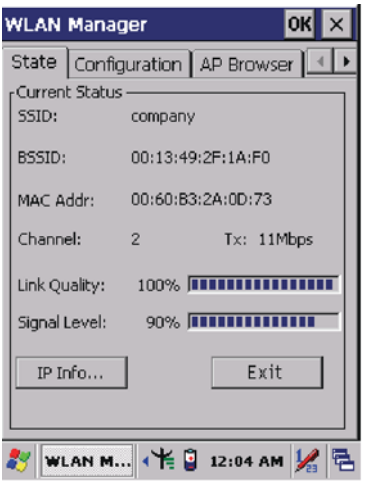


Figure 2.18: WLAN Manager

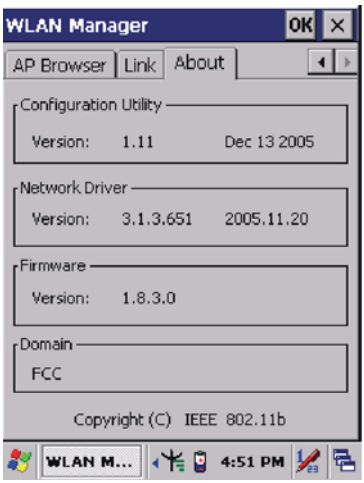


Figure 2.19: WLAN Manager

2.5.7 Scanning Barcode, 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 laser scanner.
2. Select **Start > Settings > Control Panel > Barcode Setting**. Configure settings as described in “Barcode Setting” on page 53.
3. Start **WordPad**.
4. Aim the scanning beam at the center of bar code.
   - Position the device close to bar code when scanning
   - Position the device further away when scanning larger 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 300 mm.
   - Position the laser scanner close to the barcode when scanning small barcodes and position it further away from the barcode when scanning large barcodes.
   - The reader emits a red beam.

8. Bad Scanning Position
   - Make sure that the bars enter the laser beam when scanning large barcodes.
   - Scanning operations may fail if the laser beam is in the positions shown below.

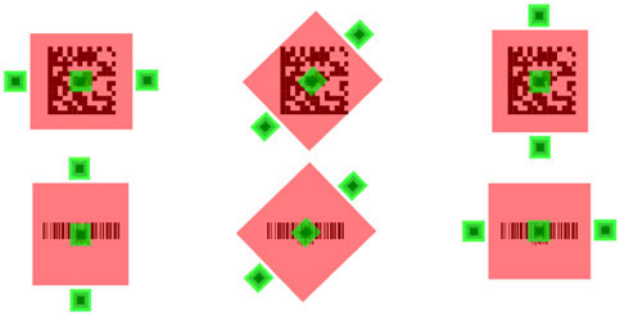
Note: this product scans using laser light. Never look directly into the laser light or shine the laser light into the eyes.

2.5.8 Reading barcodes, 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. Select Start > Setting > Control Panel > 2DBarcode; complete all configurations following all description of Appendix A. 2D Barcode Setting.
3. Run the WordPad software program.
4. Press one of the three bar code reader trigger buttons.
5. 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.

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



7. Bad scanning position.
   - Make sure that the laser beam sweeps across whole barcode.
   - Scanning operations may fail if the illumination beam is positioned as below.

8. 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

To tap "**?**" can get help 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. 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 the system is using battery power. This will save battery power when the PDT is not in use.

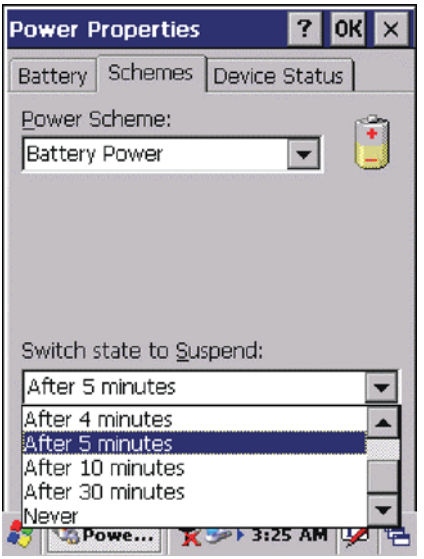
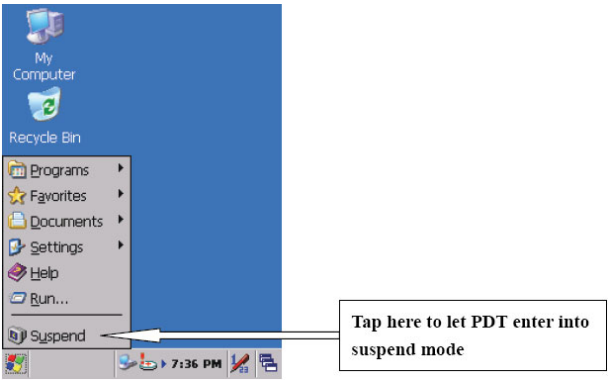


Figure 2.20: Schemes Tab

Suspending:

The following conditions will suspend:

- Press the <Power> key while the unit is on.
- The “Switch state to Suspend” time expires, which indicates that there has been no use for a specified of time.
- The battery pack is completely discharged.
- Tap Start > Suspend



2.6.2 Resuming

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

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

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

2.7 Resetting the PDT

2.7.1 Software (Warm) Reset

A warm reset is a transition from the on, idle, or suspend power state that closes all applications and 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.

Warm Reset Process: To execute a warm reset, press the "**F1**" and "**F4**" buttons 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

You can use Cold Reset to a initiate device if the Win CE .NET OS locks up or the Warm Reset still doesn't work.

To perform a Cold Reset, press "**Power**", "**F1**" and "**F4**" buttons simultaneously.

Devices will initiate after Cold Reset.

CAUTION: Try warm reset before Cold Reset. All applications will be Closed and working RAM and all files will be cleared if you initiate a Cold Reset. It's better usually to back up your files to Flash ROM, Flash Card or PC.

CHAPTER 3

Setting

This chapter provides basic instructions for customizing the PDT by adjusting settings.

Chapter 3 Setting

3.1 Introduction

To view the available options for the PDT's settings, tap **Start > Settings**. 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 tapping **Start > Settings > Control Panel**.

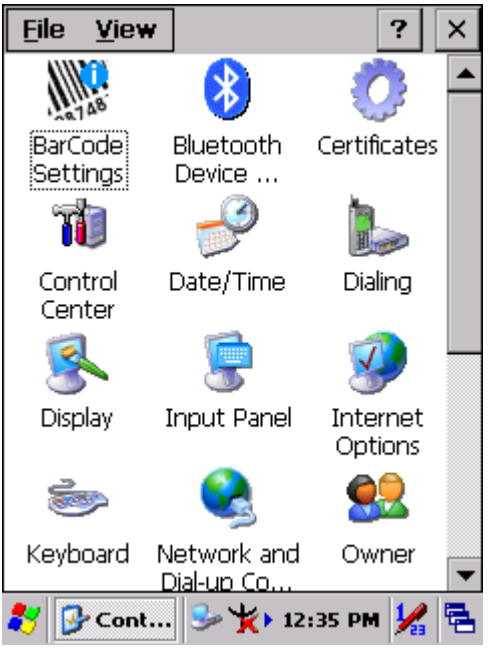


Figure 3.1: Control Panel

3.2.1 Barcode Setting

CAUTION: Please do not enter any Barcode Applications before completing barcode configuration.

There are three tabs for scanner configuration setting: “**Basic**”, “**Code Configure**” and “**Code ID**”. In addition, there is a “**Barcode Setup**” for the “Code Configure” tab.

3.2.1.1 “Basic” Tab

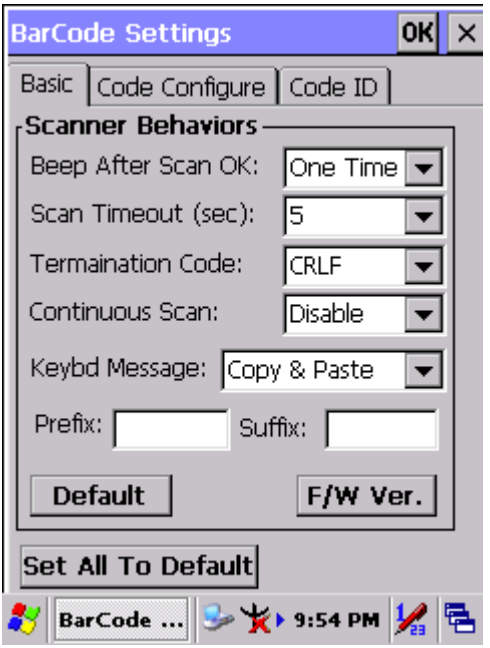


Figure 3.2: Basic Tab

Table 3.1: Basic Explanation		
Field Name	**Function Explanation**	
Beep After Scan OK	Select the number of beep tones after a successful scan.	
	None	After scanning the barcode, do not beep.
	One Time	After scanning the barcode, beep once.
	Two Times	After scanning the barcode, beep twice.
Scan Timeout	Select the scanning timeout duration (in seconds) from this pull-down list. 2 ~ 20 seconds. Default: 5 seconds	
Termination Code	None	After showing barcode, do not action.
	CRLF	After showing the barcode, jump to the next row.
	Space	After showing the barcode, jump one unit.
	Tab	After showing the barcode, jump a section.
Continuous Scan	Disable	Disable this functionality.
	1 ~ 5 sec	The duration of a continuous scan.
Keybd Message	Select a method based upon the barcode scanning application you will use.	
	Type Writing	A unit follows a unit, quickly showing the barcode number.
	Copy & Paste	Show the barcode number once.
Prefix	Type the desired label prefix in this text box.	
Suffix	Type the desired label suffix in this text box.	
Default	Press the “Default” button to reset all settings of the “Basic” Tab to default values.	
F/W ver.	Decoder firmware version.	
Set All To Default	Press the “Set All To Default” button to reset all settings of the “Basic” tab, “Code Configure” tab, “Code ID” tab and all barcodes of “Barcode Setup” to default values.	

3.2.1.2 “Barcode” Tab

Select the barcode symbologies you plan to scan from the list. Tap to enable/disable the desired symbologies.

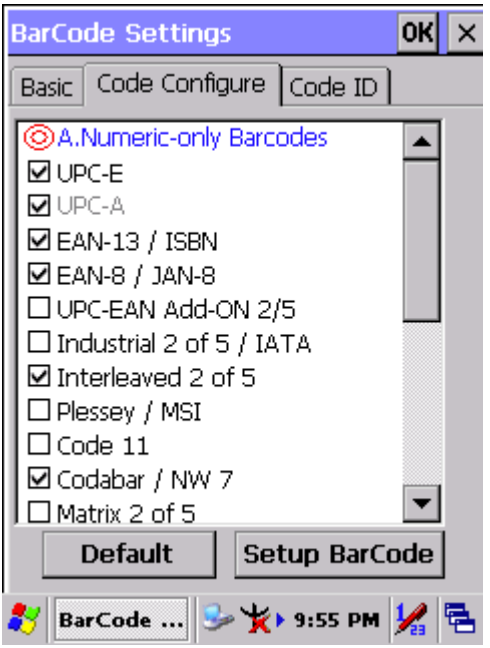


Figure 3.3: Code Configure Tab

Table 3.2: Code Configure Explanation		
Barcode Symbology		**Explanation**
Type A. Numeric-only Barcodes		
☑	UPC-E	Compressed version of UPC code for use on small products.
☑	UPC-A	Universal product code seen on almost all retail products in the USA and Canada.
☑	EAN-13 / ISBN	**EAN-13:** European Article Numbering international retail product code. **ISBN:** Special use of the EAN-13 symbol to used internationally to mark books.

Barcode Symbology		Explanation
☑	EAN-8 / JAN-8	Compressed version of EAN code for use on small products.
☐	UPC-EAN Add-ON 2/5	UPC-A, UPC-E, EAN-13, and EAN-8 may all include an additional barcode to the right of the main barcode. This second barcode, which is usually not as tall as the primary barcode, is used to encode additional information for newspapers, books, and other periodicals.
☐	Industrial 2 of 5 / IATA	Older code not in common use.
☐	Interleaved 2 of 5	Compact numeric code, widely used in industry, air cargo and other applications.
☑	Plessey / MSI	**Plessey:** Older code commonly used for retail shelf marking. **MSI:** Variation of the Plessey code commonly used in the USA.
☑	Code 11	Used primarily for labeling telecommunications equipment.
☑	Codabar / NW 7	Older code often used in library systems, sometimes in blood banks.
☐	Matrix 2 of 5	Used in miscellaneous industrial applications, and mechanical numbering systems.
Type B. Alphanumeric Barcodes		
☑	Code 39 / Code32	General purpose code in very wide use worldwide.
☐	Code 93	Compact code similar to Code 39.
☑	Code128 / UCC EAN128	Very capable code, excellent density, high reliability; in very wide use worldwide. Widely used data formatting model for Code 128
Type C. Others Barcodes		
☐	China Post	Used by China Postal Service for automated mail sorting.
☐	Code 4	---

Barcode Symbology		Explanation
☐	GTIN	Global Trade Identification Number
☐	Korea Code 3 of 5	---
☐	RSS	Reduced Space Symbology

3.2.1.3 “Code ID” Tab

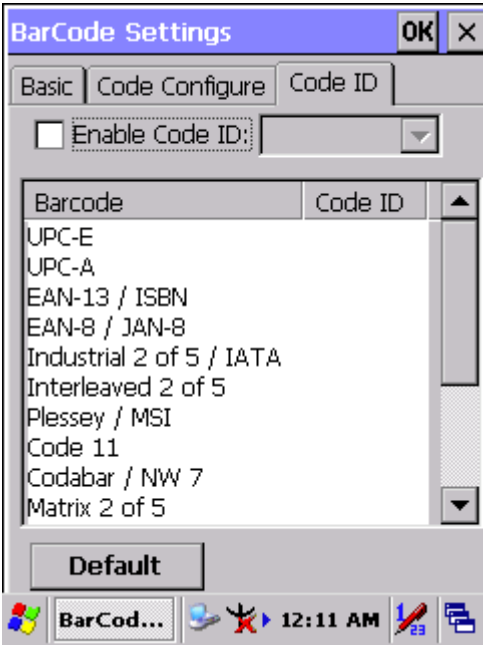


Figure 3.4: Code ID Tab

Table 3.3: Code ID Explanation		
The code ID is added to the prefix of the barcode to let users identify which kind of barcode is being scanned.		
☐ Enable Code ID		Enable this functionality.
	Set 1 ~ Set 5	Select one default value: Set 1 ~ Set 5. (See the table: “Code ID Set1 ~ Set5 Table” on page 60)
	User Define	User defined value.
	Barcode List	Set 1 ~ Set 5: default settings. User Define: select barcode to define.
Default		Press the “Default” button to reset all settings of the “Code ID” tab to default values.

Table 3.4: Code ID Set1 ~ Set5 Table					
	Set 1	**Set 2**	**Set 3**	**Set 4**	**Set 5**
UPC-E	S	E	C	E	E
UPC-A	M	A	A	A	E
EAN-13 / ISBN	M	A	A	F	E
EAN-8 / JAN-8	P	B	B	F	E
Industrial 2 of 5 / IATA	C	H	H	H	S
Interleaved 2 of 5	D	I	Z	I	S
Plessey / MSI	V	V	D	P	M
Code 11	J	J	J	J	J
Codabar / NW 7	F	N	X	N	F
Matrix 2 of 5	E	G	G	G	S
Code 39 / Code 32	A	C	Y	M	A
Code 93	I	L	L	L	G
Code 128	H	K	K	K	C
Code 4	U	U	U	U	U
Korea Code 3 of 5	R	R	R	R	R
RSS	R	R	R	R	R
UCC128 / EAN128	W	W	W	W	W

3.2.1.4 Barcode Setup

A. First select the barcode type then select a barcode setting.

B. Press the "**Default**" button to reset all settings of this barcode to default values.

C. Press the "**Apply**" button to apply these changes.

Please see "Symbologies List" on page 62 for more detailed information on each barcode.

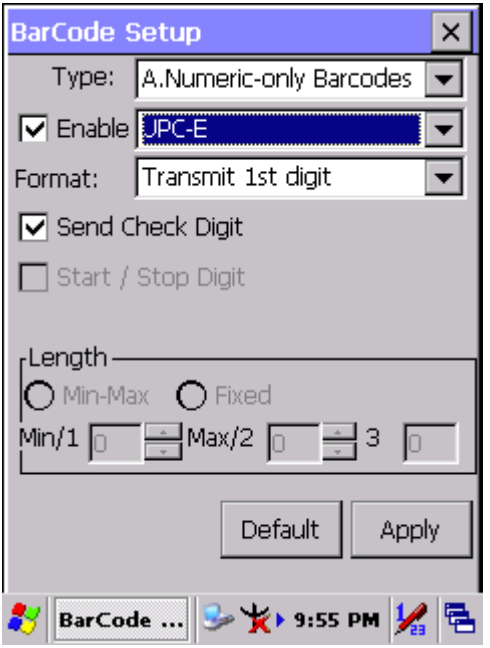


Figure 3.5: Barcode Setup

3.2.2 Symbologies List

A Type -- Numeric-only Barcodes

3.2.2.1 UPC-E

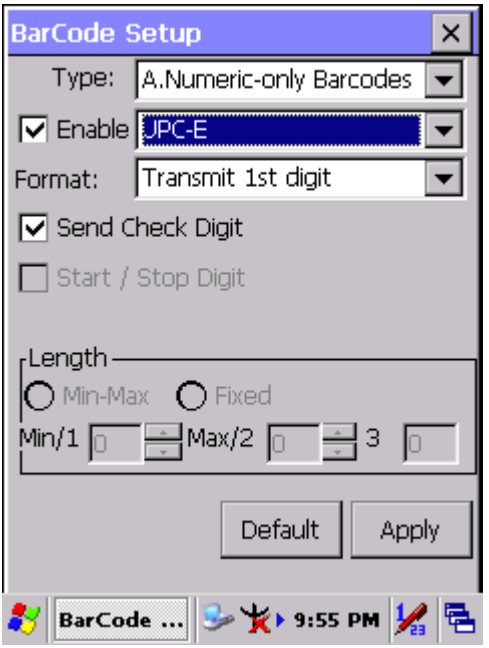


Figure 3.6: UPC-E

Table 3.5: UPC-E Explanation		
Item		**Explanation**
Format	Ignore 1st digit	Do not transmit 1st digit of the barcode.
	Transmit 1st digit	Transmit 1st digit of the barcode.
☑ Send Check Digit		This controls whether or not to send the check digit of the barcode.

3.2.2.2 UPC-A

If you set UPC-A, then those settings will be automatically applied to EAN-13 too.

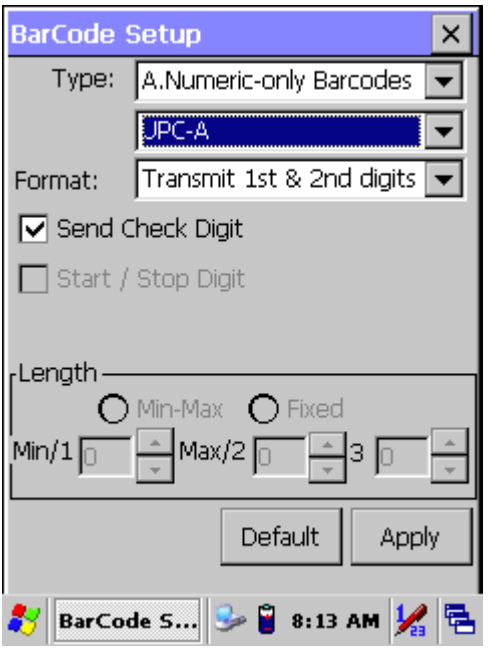


Figure 3.7: UPC-A

Table 3.6: UPC-A Explanation		
Item		**Explanation**
Format	Ignore 1st & 2nd digits	Do not transmit the 1st digit of the barcode.
	Transmit 1st digit	Transmit the 1st digit of the barcode.
	Transmit 2nd digit	Transmit the 2nd digit of the barcode.
	Transmit 1st & 2nd digits	Transmit the 1st and 2nd digits of the barcode.
☑ Send Check Digit		This controls whether or not to send the check digit of the barcode.

3.2.2.3 EAN-13 / ISBN

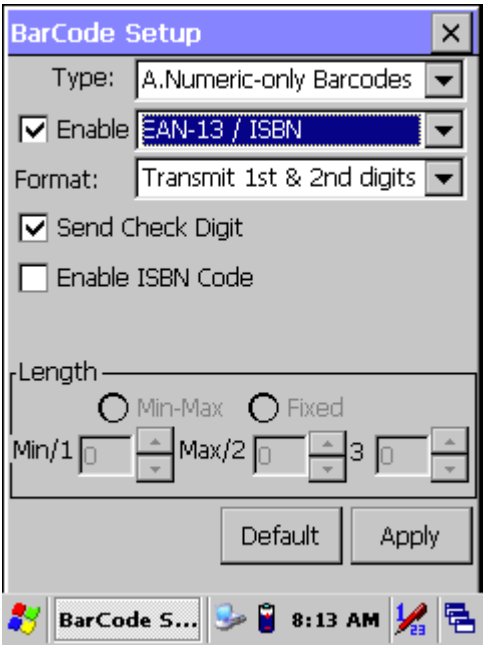


Figure 3.8: EAN-13/ISBN

Table 3.7: EAN-13 / ISBN Explanation		
Item		**Explanation**
Format	Ignore 1st & 2nd digits	Do not transmit the 1st digit of the barcode.
	Transmit 1st digit	Transmit the 1st digit of the barcode.
	Transmit 2nd digit	Transmit the 2nd digit of the barcode.
	Transmit 1st & 2nd digits	Transmit the 1st and 2nd digits of the barcode.
☑ Send Check Digit		This controls whether or not to send the check digit of the barcode.
☐ Enable ISBN Code		This controls whether or not to use the ISBN Code.

3.2.2.4 EAN-8/JAN-8

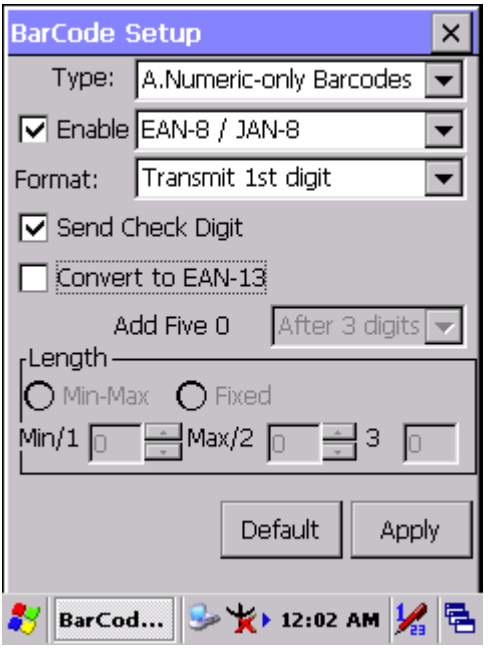


Figure 3.9: EAN-8/JAN-8

Table 3.8: EAN-8/JAN-8 Explanation			
Item			**Explanation**
Format		Ignore 1st digit	Do not transmit 1st digit by barcode.
		Transmit 1st digit	Transmit 1st digit by barcode.
☑ Send Check Digit			Whether send check digit by barcode.
Convert to EAN-13 ☐			When this option is selected the scanner will convert UPC-E to UPC-A by transmitting five zeroes …
	Add five 0	Ahead of code	Add five zeroes at prefix of the barcode.
		After 3 digits	Add five zeroes from 4th digits.

3.2.2.5 UPC-EAN Add on 2/5

- UPC-E, UPC-A, EAN-13/ISBN and EAN-8/JAN-8 may all include an additional barcode to the right of the main barcode.
- This barcode will show primary and additional codes together.
- The UPC-EAN Add-ON 2/5 code cannot be used alone. It must operate with UPC-E, UPC-A, EAN-13/ISBN or EAN-8/JAN-8.

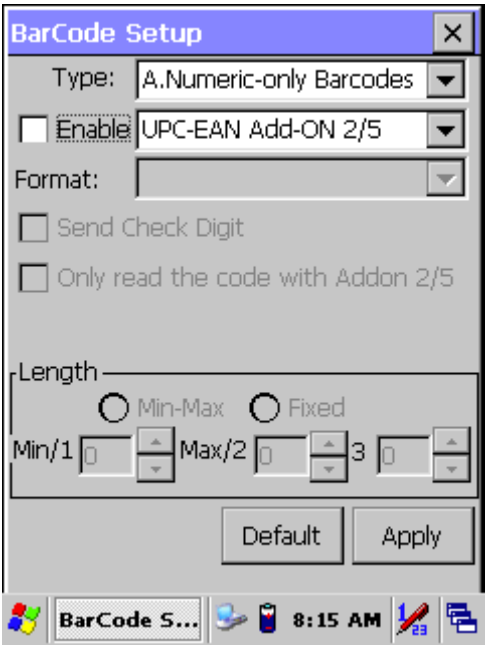


Figure 3.10: UPC-EAN Add on 2/5

UPC-EAN Add-On 2/5 Explanation

Item	Explanation
☐ Only read the code with Addon 2/5	Only reads the codes that have addenda.

3.2.2.6 Industrial 2 of 5 / IATA

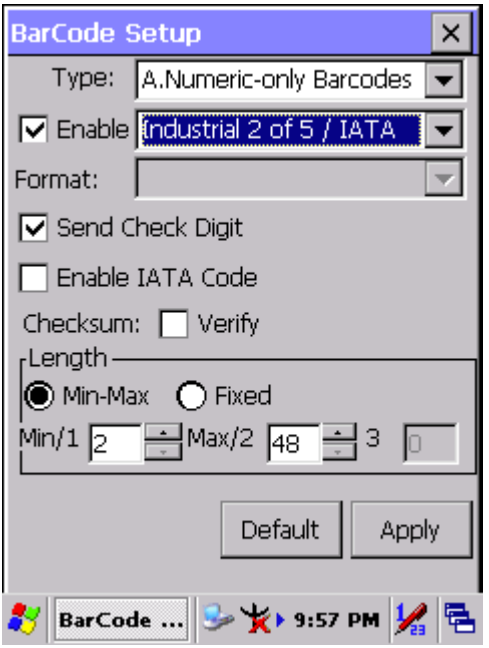


Figure 3.11: Industrial 2 of 5 / IATA

Table 3.9: Industrial 2 of 5 / IATA Explanation			
Item			**Explanation**
☑ Send Check Digit			This controls whether or not to send the check digits of the bar-code.
☐ Enable IATA Code			This controls whether or not to use this IATA Code.
Checksum	☐ Verify		This controls whether to verify the checksum of the barcode.
Length		◉ Min-Max (Default: 2 / 48)	Min Length can be from 2 to 48
			Max Length can be from 2 to 48
		○ Fixed	Length 1 can be from 2 to 48
			Length 2 can be from 2 to 48
			Length 3 can be from 2 to 48

3.2.2.7 Interleaved 2 of 5

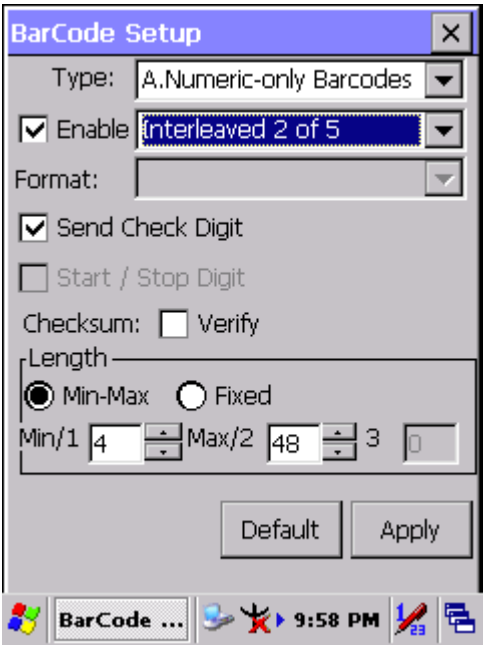


Figure 3.12: Interleaved 2 of 5

Table 3.10: Interleaved 2 of 5 Explanation			
Item			**Explanation**
☑ Send Check Digit			This controls whether or not to send the check digit of the bar-code.
Checksum	☐ Verify		This controls whether or not to verify the checksum of the bar-code.
Length		◉ Min / Max (Default: 4 / 48)	Min Length can be from 4 to 48
			Max Length can be from 4 to 48
		○ Fixed	Length 1 can be from 4 to 48
			Length 2 can be from 4 to 48
			Length 3 can be from 4 to 48

3.2.2.8 Plessey / MSI

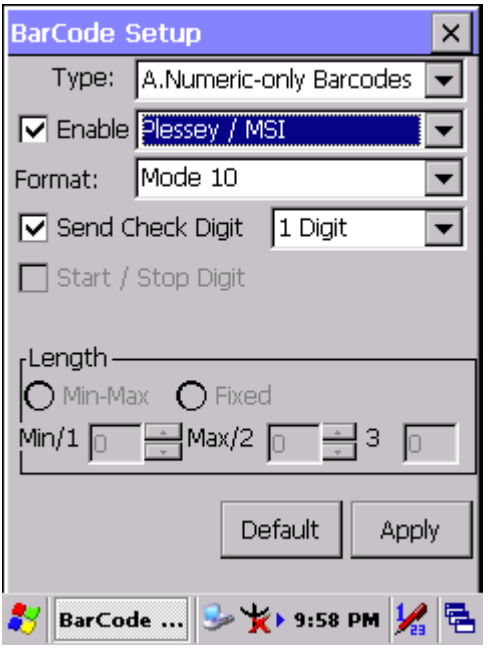


Figure 3.13: Plessey / MSI

Table 3.11: Plessey / MSI Explanation		
Item		**Explanation**
Format	Mode 10	Checksum mode for this barcode.
	Mode 10-10	
	Mode 11-10	
☑ Send Check Digit		This controls whether or not to send the check digit of the barcode.
	1 Digit	1 digit checksum.
	2 Digits	2 digit checksum.

3.2.2.9 Code 11

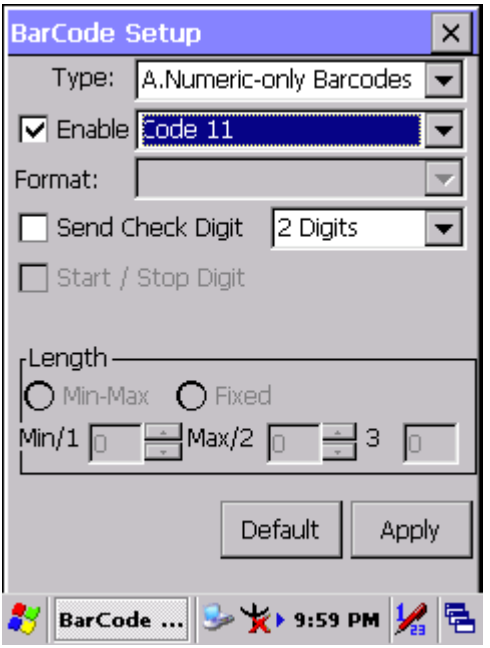


Figure 3.14: Code 11

Table 3.12: Code 11 Explanation		
Item		**Explanation**
☐ Send Check Digit		This controls whether or not to send the check digit of the barcode.
	1 Digit	1 digit checksum.
	2 Digits	2 digits checksum.

3.2.2.10 Codabar / NW7

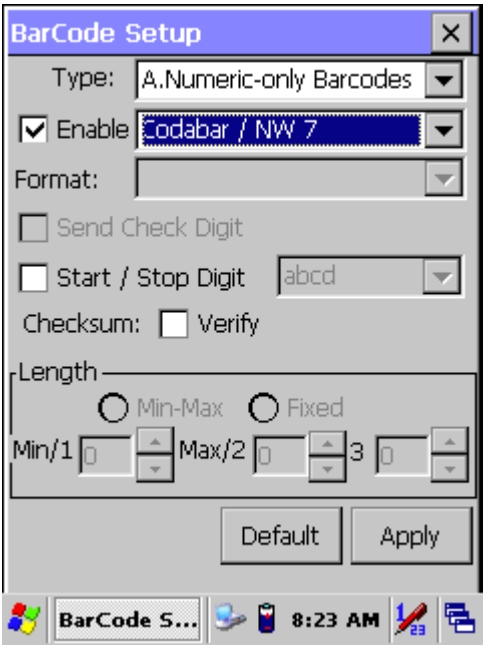


Figure 3.15: Codabar / NW7

Table 3.13: Codabar / NW7 Explanation		
Item		**Explanation**
☐ Start / Stop Digit		This controls whether or not to send start and stop digits.
	ABCD	Start / Stop transmit type
	abcd	
	TN*E	
	tn*e	
Checksum	☐ Verify	This controls whether or not to verify the checksum of the barcode.

3.2.2.11 Matrix 2 of 5

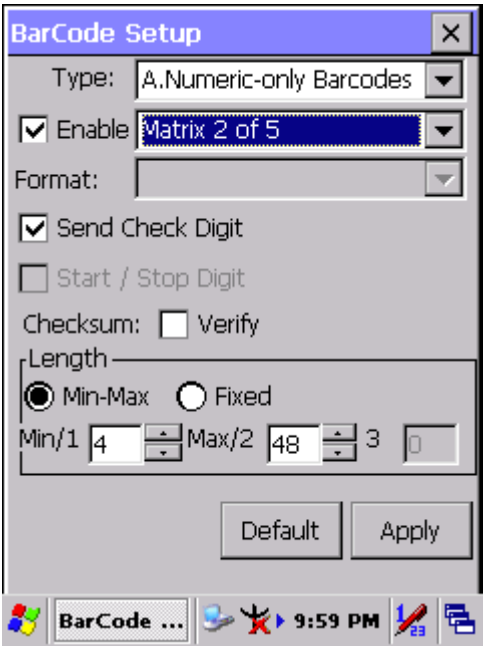


Figure 3.16: Matrix 2 of 5

Table 3.14: Matrix 2 of 5 Explanation			
Item			**Explanation**
☑ Send Check Digit			This controls whether or not to send the check digits of the barcode.
Checksum	☐ Verify		This controls whether or not to verify the checksum of the barcode.
Length		◉ Min-Max (Default: 4 / 48)	Min Length can be from 4 to 48
			Max Length can be from 4 to 48
		○ Fixed	Length 1 can be from 4 to 48
			Length 2 can be from 4 to 48
			Length 3 can be from 4 to 48

B Type -- Alphanumeric Barcodes

3.2.2.12 Code39 / Code32

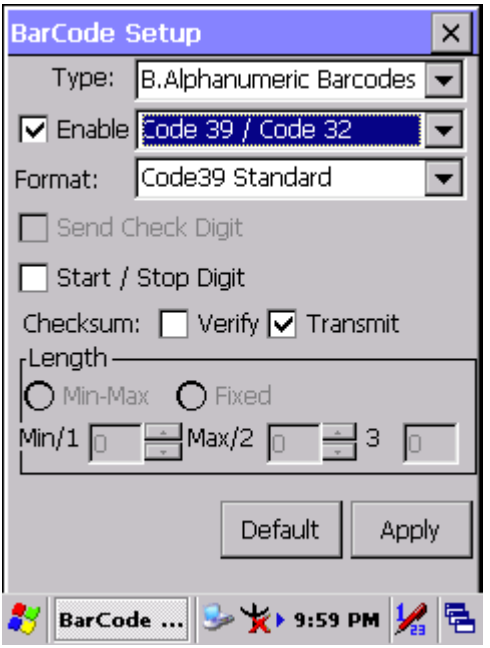


Figure 3.17: Code39 / Code32

Table 3.15: Code39 / Code32 Explanation		
Item		**Explanation**
Format	Code39 Standard	Enable Code 39 Standard characters
	Code39 Full ASCII	Enable Code 39 Full ASCII character
	Code32	Enable Code 32
☐ Start / Stop Digit		This controls whether or not to transmit start and stop digits.
Checksum	☐ Verify	This controls whether to verify the checksum of the barcode.
	☑ Transmit	This controls whether or not to transmit the checksum of the barcode.

3.2.2.13 Code93

Code93 has no configuration.

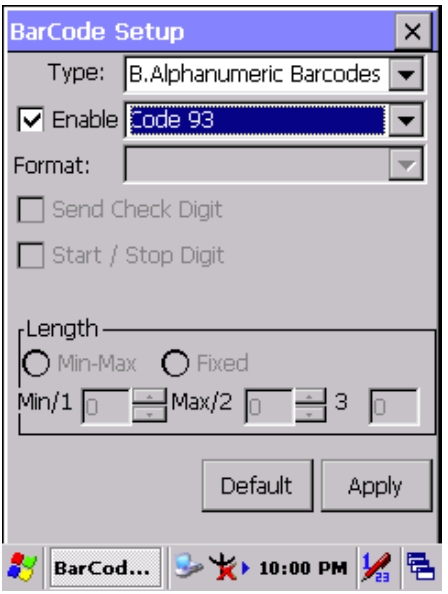


Figure 3.18: Code93

3.2.2.14 Code128 / UCC EAN128

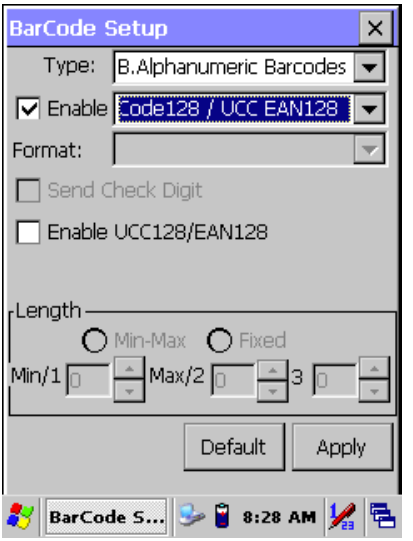


Figure 3.19: Code 128 / UCC EAN128

Code128 / UCC EAN128 Explanation

Item	Explanation
☐ Enable UCC128/EAN128	Enable UCC128/EAN128.

C Type -- Other Barcodes

3.2.2.15 China Post

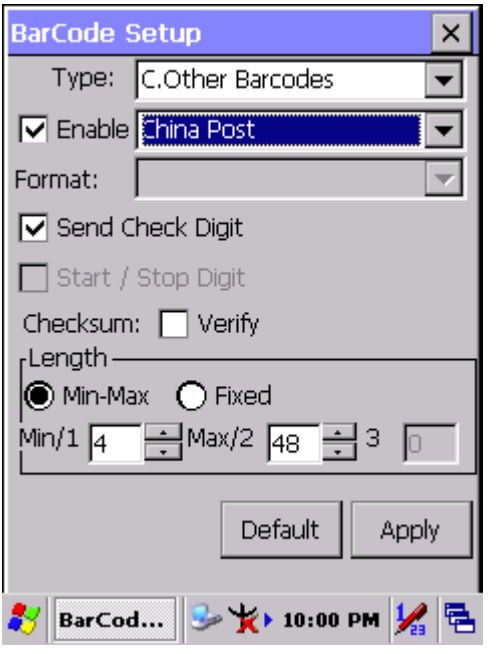


Figure 3.20: China Post

Table 3.16: China Post Explanation		
Item		**Explanation**
Checksum	☐ Verify	This controls whether or not to verify the checksum of the barcode.
☑ Send Check Digit		This controls whether or not to send the check digit of the barcode.
Length	◉ Min-Max (Default: 4 / 48)	Min Length can be from 4 to 48
		Max Length can be from 4 to 48
	○ Fixed	Length 1 can be from 4 to 48
		Length 2 can be from 4 to 48
		Length 3 can be from 4 to 48

3.2.2.16 Code4

Code4 has no configuration.

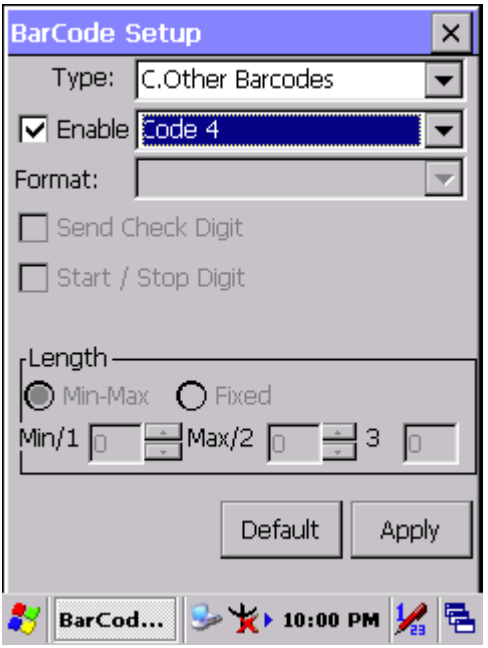


Figure 3.21: Code4

3.2.2.17 GTIN

GTIN has no configuration.

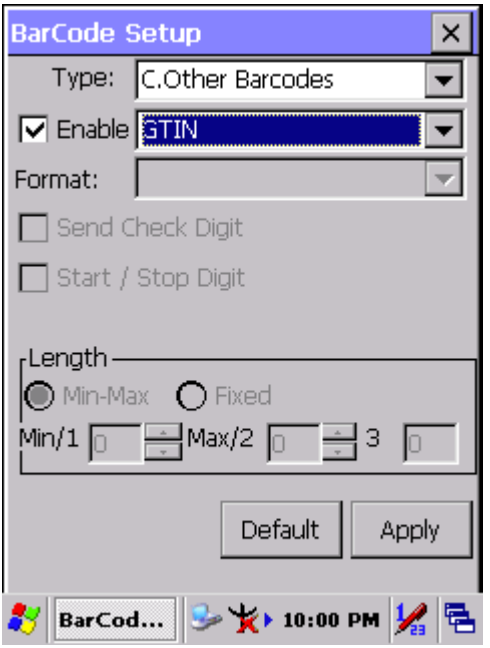


Figure 3.22: GTIN

3.2.2.18 Korea Code 3 of 5

Korea Code 3 of 5 has no configuration.

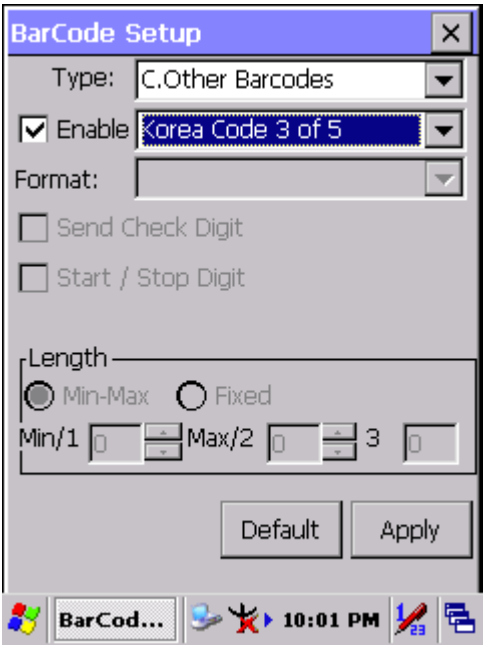


Figure 3.23: Korea Code 3 of 5

3.2.2.19 RSS

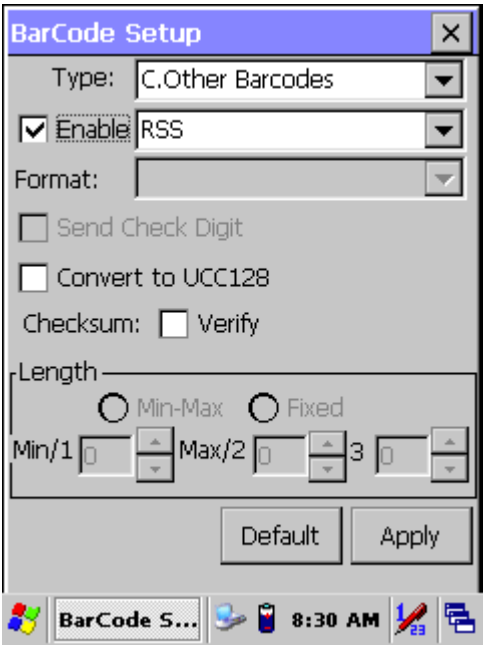


Figure 3.24: RSS

RSS Explanation

Item		Explanation
☐ Convert to UCC128		The scanner will convert RSS to UCC128.
Checksum	☐ Verify	This controls whether or not to verify the checksum of the barcode.

3.2.3 Bluetooth Device Properties

Table 3.17: Bluetooth Device Properties

Icon	Item and function
	• **"Scan Device" Tab (See "Bluetooth Manager Windows" on page 82**
	* Tap the **Scan Device** button to initiate a scan for Bluetooth hardware. The Bluetooth manager lists the Bluetooth devices that it finds, see "Bluetooth Manager Windows" on page 82. If Bluetooth hardware is not found, the *Bluetooth Hardware Error* window appears. See "Bluetooth Error Windows" on page 82. See "Bluetooth Icon" on page 84 for a description of Bluetooth icons. * Double tap the device add it to 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. ("Bluetooth Manager Windows" on page 82) * If the **Yes** was selected in the Bluetooth Manager Authentication window, the enter PIN windows appears. Enter a PIN between 1 and 16 characters in the *Enter PIN:* text box, and tap **OK**. The mobile computer sends the PIN request to the device for bonding. See "Bluetooth Enter PIN Windows" on page 83**.** * 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 in the device list. See "Bluetooth Manager Windows" on page 83.

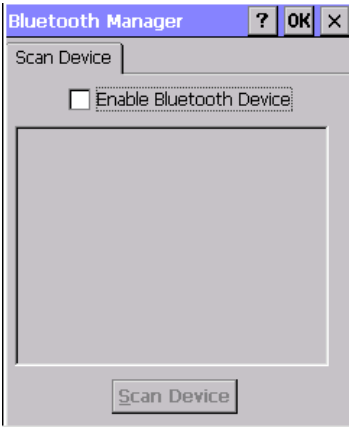


Figure 3.25: Bluetooth Manager Windows

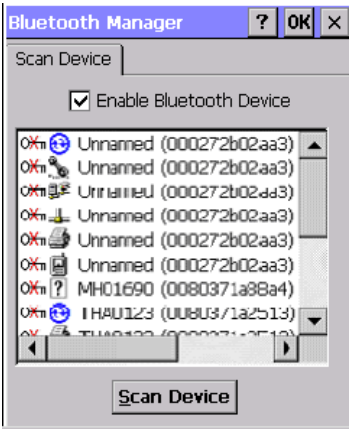


Figure 3.26: Bluetooth Manager Windows

Figure 3.27: Bluetooth Error Windows

Figure 3.28: Bluetooth Manager Windows

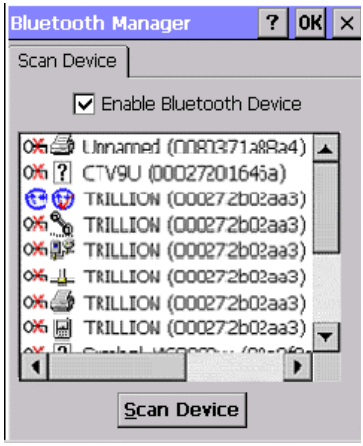


Figure 3.29: Bluetooth Enter PIN Windows

Figure 3.30: Bluetooth Manager Windows

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

Table 3.18: Bluetooth Icon		
Icon		**Description**
	Unknown device icon	Device is not defined
	Locked icon	Device is locked and cannot be bonded to.
	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.

3.2.4 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.

Table 3.19: Certificates

Icon	Item and function
 Certificates	• **"Store" Tab (Figure 3-31)**
	* In the Stores tab, select the certificate store you wish to view or modify from the drop-down list (**Figure 3-32**). * The "**Trusted Authorities** "store lists the top-level certificates for authorities you trust. (**Figure 3-33**, **Figure 3-34**) * 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 3-35**). * 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**".

Figure 3.31: Certificates

Figure 3.32: Certificates

Figure 3.33: Certificates

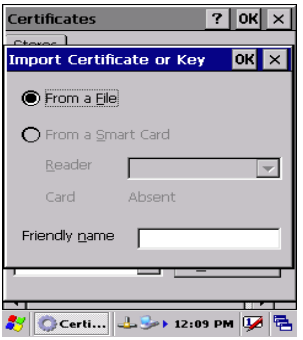


Figure 3.34: Certificates

Figure 3.35: Certificates

3.2.5 Control Center

The Control Center includes four applications, described below.

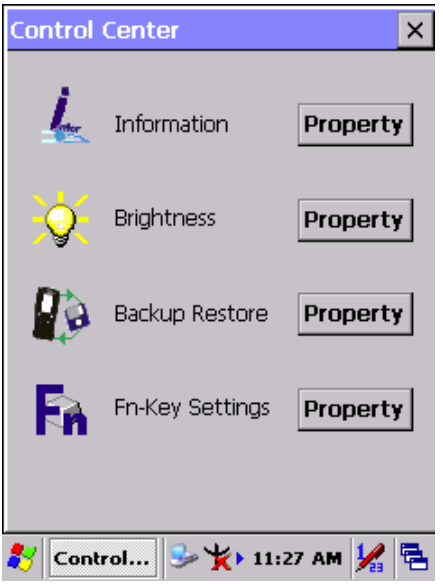


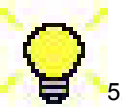
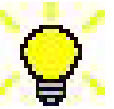
Figure 3.36: Control Center

3.2.5.1 Information

Table 3.20: Information	
Icon	**Item and function**
	• **"Information" Tab:**
	* Provide Software version, MAC address, Bluetooth ID, Serial No. and Configuration No.

3.2.5.2 Brightness

Table 3.21: Brightness

Icon	Item and function	
	LCD Brightness Change the LCD brightness by tapping right-arrow or left-arrow. You can also change the LCD brightness by pressing the right-direction key or left-direction key on the keypad.	
	The brightness setting has seven steps: Every step has a corresponding icon. 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 be disabled when its item is not marked.
		The table has 15 seconds, 30 seconds, 1 minute, 2 minutes and 5 minutes.
	AC Power, turn off backlight after ☐	The table must be disabled when its item is not marked.
		The table has 15 seconds, 30 seconds, 1 minute, 2 minutes and 5 minutes.
	☑ Dim backlight after 20 seconds of idleness.	Save battery life functionally of idleness.

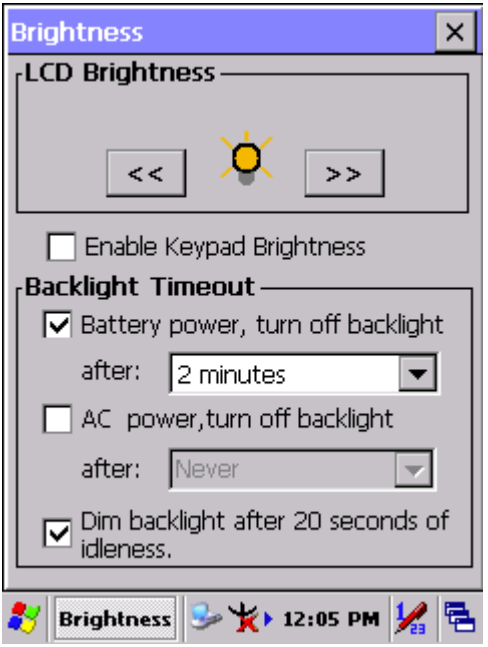


Figure 3.37: Brightness

3.2.5.3 Backup Restore

Table 3.22: Backup Restore

Icon	Item and function
	1. You can backup/restore the system to/from a flash disk or inserted memory card. **(A. Disk on Chip, B. CF Card, C. SD Card)** (Figure 3-38) 2. This application must check the backup file on the DOC first. If you select other storage, this item will be checked again. 3. If the file exists, the date appears next to “Last backup date:”. If the file doesn’t exist, the “Restore Now” button is disabled. 4. When you press the Backup/Restore button, a warning dialog box will appear. (Figure 3-39) 5. When the system backup/restore is finished, a message dialog will appear. (A. Backup: Figure 3-40, B. Restore: Figure 3-41)

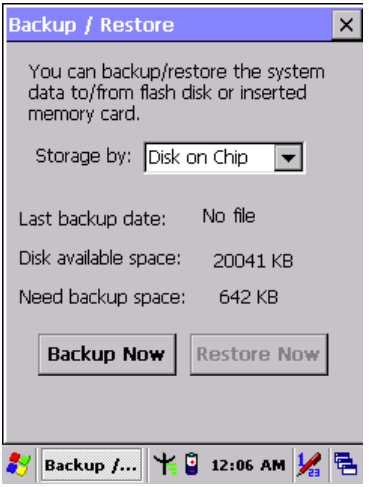


Figure 3.38: Backup Restore

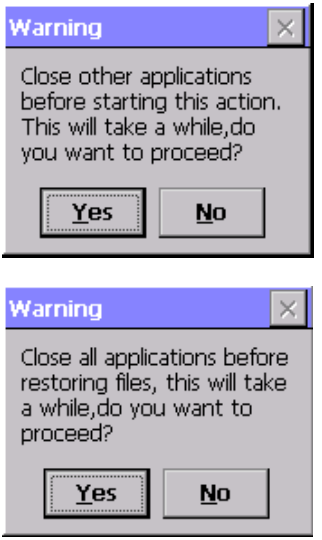


Figure 3.39: Backup & Restore Start

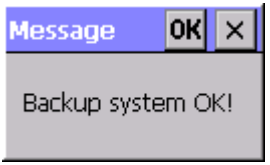


Figure 3.40: Backup OK

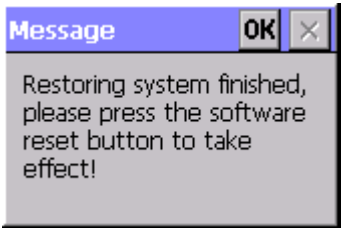


Figure 3.41: Restore OK

3.2.5.4 Fn-key Settings

Table 3.23: Fn-Key		
Icon	**Item and function**	
	Fn-Key Setting (Figure 3-42)	
	Fn Key	The application program default settings
	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 F1, F2, F3 or F4 from the pull-down list. (**Figure 3-43**) * Tap "Browse…" inside the "**Assign program**" applet. * Select one application program you want from the program list, then choose "**OK**". (**Figure 3-43**) * Tap "Default" to return to the default settings. (**Figure 3-42)**	

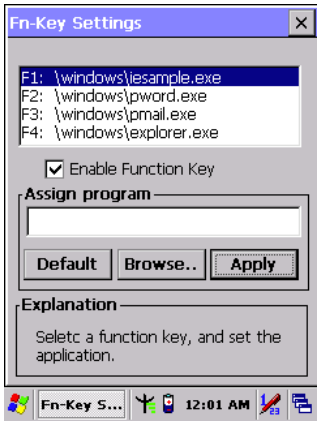


Figure 3.42: Fn-Key Settings

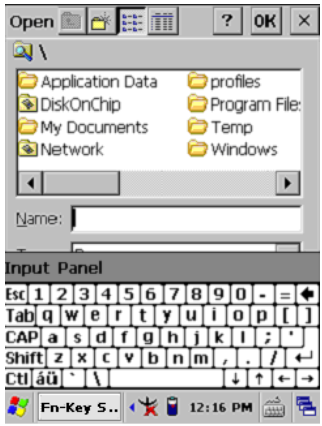


Figure 3.43: Fn-Key Settings

3.2.6 Date/Time

Table 3.24: Date/Time	
Icon	**Item and function**
 Date/Time	• **"Date/Time" Tab: (Figure 2-14)** * See "Setting Time and Date" on page 39

3.2.7 Dialing Properties

Table 3.25: Dialing properties	
Icon	**Icon and function**
 Dialing	• **"Dialing Properties" Tab (Figure 3-44)** * In the **When dialing from** list, select the "**Location"** for which you want to change settings. (**Figure 3-45**) * To create a new location, select "**New**". Enter the name of the location, and then select "**OK**". (**Figure 3-46**) * Enter or edit the area code and local country code as needed. * In **Dial using**, select "**Tone dialing**" or "**Pulse dialing**". Most phones use tone dialing. * 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 3-47)** * Using the codes listed, edit the dialing patterns as needed. **Notes:** - If you need to use characters 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.

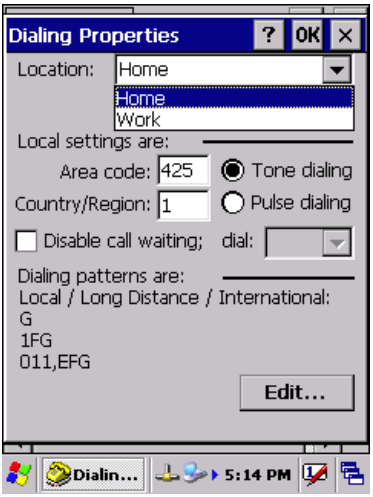


Figure 3.44: Dialing Properties

Figure 3.45: Dialing Properties

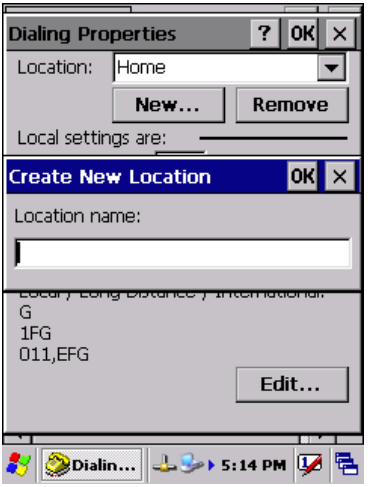


Figure 3.46: Dialing Properties

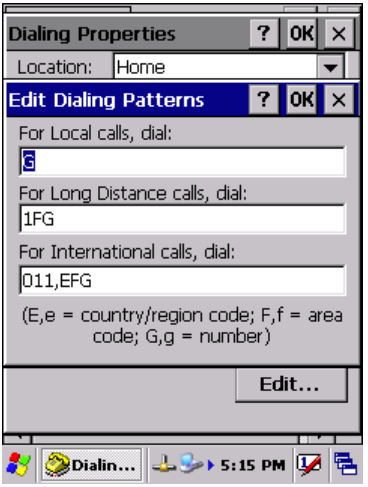


Figure 3.47: Dialing Properties

3.2.8 Display Properties

Table 3.26: Display properties	
Icon	**Icon and function**
 Display	• **"Background" Tab: (Figure 3-48)**
	* From the "**Image**" list, select an image you want as the background of the desktop. (**Figure 3-49**) * To locate an image in another folder, select "**Browse**". (**Figure 3-50**) * To have the image cover the entire background, select "**Tile image on background**"
	• **"Appearance" Tab (Figure 3-51)**
	* Change the color scheme: (**Figure 3-52**) - 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**".

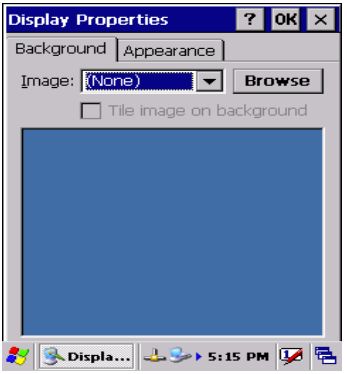
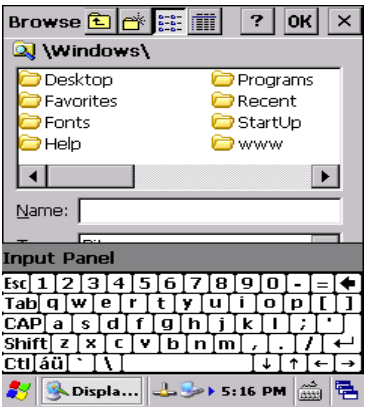


Figure 3.48: Display properties

Figure 3.49: Display properties



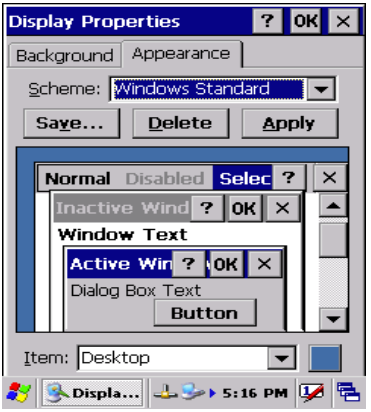


Figure 3.50: Display properties

Figure 3.51: Display properties

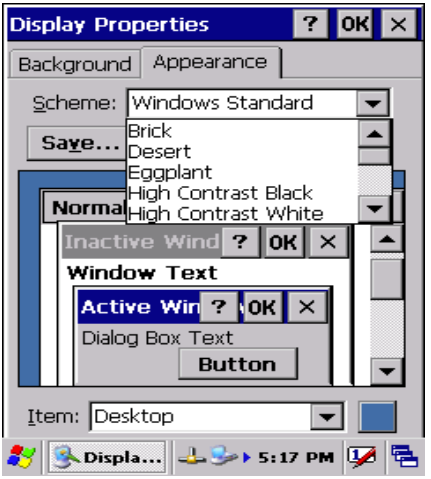


Figure 3.52: Display properties

3.2.9 Input Panel

Table 3.27: Display properties	
Icon	**Icon and function**
 Input Panel	• **"Input panel" Tab: (Figure 3-53)**
	* Select the input method you want to change. * To change the **Soft Keyboard Options**, tap "**Option**" (**Figure 3-54**).
	• **"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.

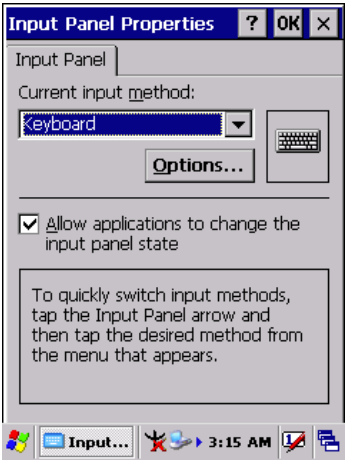


Figure 3.53: Input Panel Properties

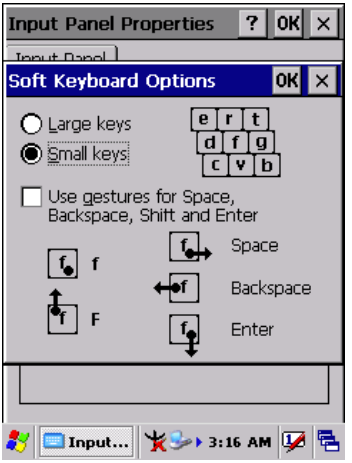


Figure 3.54: Input Panel Properties

3.2.10 Internet Options

Table 3.28: Internet Options

Icon	Icon and function
 Internet Options	• **"General" Tab: (Figure 3-55)**
	* Type in the URL of desired start page and the desired search engine. You can also change the **Cache Size,** clear the **Cache** and clear the **History**.
	• **"Connection" Tab: (Figure 3-56)**
	* Modify the network access settings as desired.
	• **"Security" Tab (Figure 3-57)**
	* 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 between secure and insecure areas.
	• **"Advanced" Tab (Figure 3-58)**
	* 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

Figure 3.55: Internet Settings

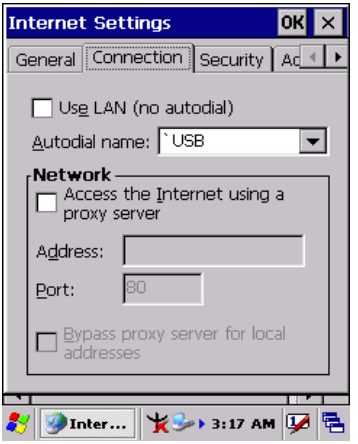


Figure 3.56: Internet Settings

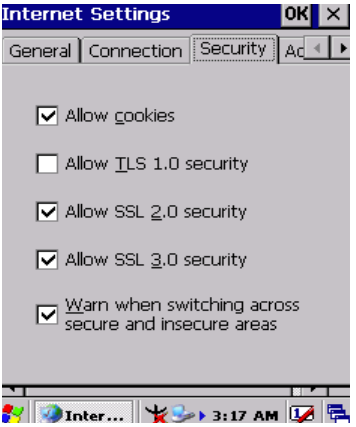


Figure 3.57: Internet Settings

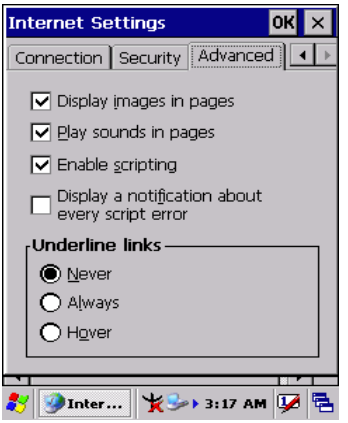


Figure 3.58: Internet Settings

3.2.11 Keyboard

Table 3.29: Keyboard	
Icon	**Icon and function**
 Keyboard	• **"Repeat" Tab: (Figure 3-59)** * 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.

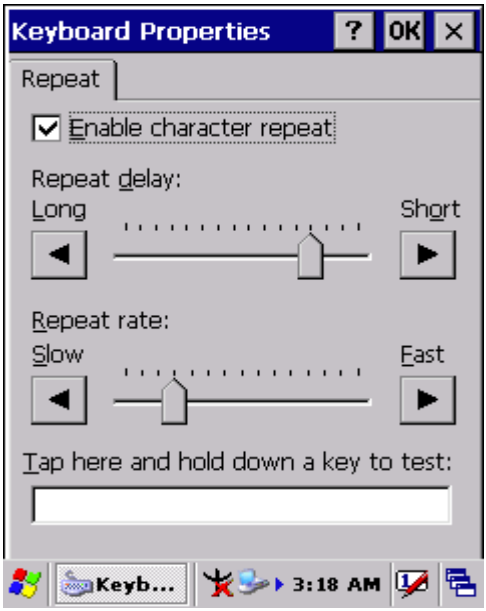


Figure 3.59: Keyboard Properties

3.2.12 Network and Dial-up Connections

Table 3.30: Network and Dial-up Connections

Icon	Icon and function
	• **"Connection" Tab:**
	* To create a "**Dial-up Connection**": - Double-tap "**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