

MDT-9000 Series



**Quick Reference Guide
for Windows CE .net 4.2**





Chapter Contents

Maintaining the MDT-9000	4
Introduction.....	5
Feature	5
Unpacking the Terminal	6
Parts of the MDT-9000	7
Parts	10
Accessories	10
Installing Battery	11
Charging Battery	14
Checking Battery Power.....	16
Installing a Roll-Paper	20
Attaching the Handstrap.....	21
Starting the MDT-9000	22
Specifications.....	33

Note: 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 or more 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.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

Cautions !

No part of this publication may be copied, distributed, stored in a retrieval system, translated into any human or computer language, transmitted, in any form or by any means, without the prior written consent of Mobitron Co., LTD.

All features and specifications are subject to change without notice.

Comments or suggestions on how to improve this document can be sent to webmaster@mobitron.co.kr.

Trademark

MDT-9000 and eCclipse™ are registered trademarks of Moibtron Co., LTD.

Windows CE is registered trademark of Microsoft Corporation.

Copyright © 2003 Mobitron Co., LTD

All rights reserved.



Maintaining the MDT-9000

The following contents are a guide to additional information to help you use MDT-9000 terminal.

- MDT-9000 terminal designed rechargeable, we recommend battery fully charge before use it the first time
- Use only appropriate rechargeable batteries and fully charged to use terminal.
- Terminal needs repair or inquire, stop using and contact service center.
- At discretion Disassemble/ assemble bring damage of unit and don't get A/S
- Do not leave the terminal in a place subject to direct sunlight, or in a location near high percentage of humidity.
- Do not put any heavy object on top of terminal and don't liquid fall into the terminal
- Avoid using chemicals to clean the terminal. Brush to surface use dry a lag.
- Keep off the terminal to magnetic products like TV
- Never use an actual pen or pencil or other sharp object on the surface of the MDT-9000 screen.

Introduction

The MDT-5300 terminal is a hand-held wireless terminal that supports credit & debit card transactions by networking over a high speed, secure CDMA or GSM/GPRS network.

And integrates all components that are combined as peripherals-printer, magnetic stripe reader, barcode scanner.

Feature

- **400Mhz Intel XScale PXA255 CPU**
- **3.5" TFT color LCD**
- **Window CE.net 4.2 O/S which is strong on extension**
- **2200 mA Lithum Polymer Battery**
- **Internet explorer support**
- **Easy interactive through keypad and touch screen**
- **Wireless data communication (Embedded Wireless Lan)**
- **Voice Communication (GSM/GPRS or CDMA)**
- **Up to 80 hours with Lithium Polymer Battery**
- **Speedy 2" thermal printer or 3" thermal printer**
- **Supply MSR for credit card reader**
- **2D Bar cord scanner for stock control, logistics, delivery service**
- **SDK Tool Kits by support for MDT-9000 series**



Unpacking the Terminal

Open the box and check components. If include components different list or if you find any destroy components, contact us where Mobitron Support Center.

Parts of the MDT-9000

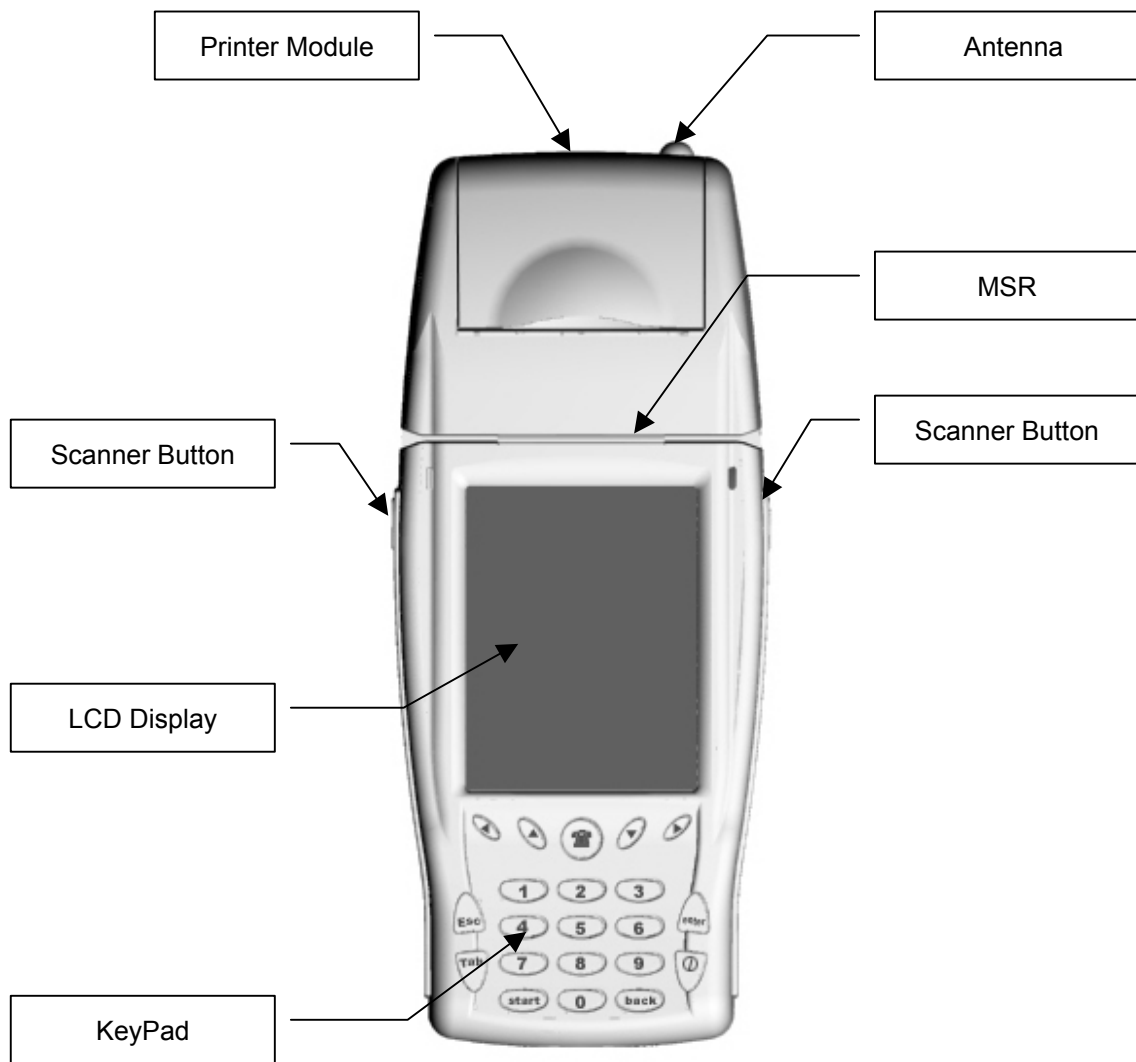


Figure 1. Parts of the MDT-9000

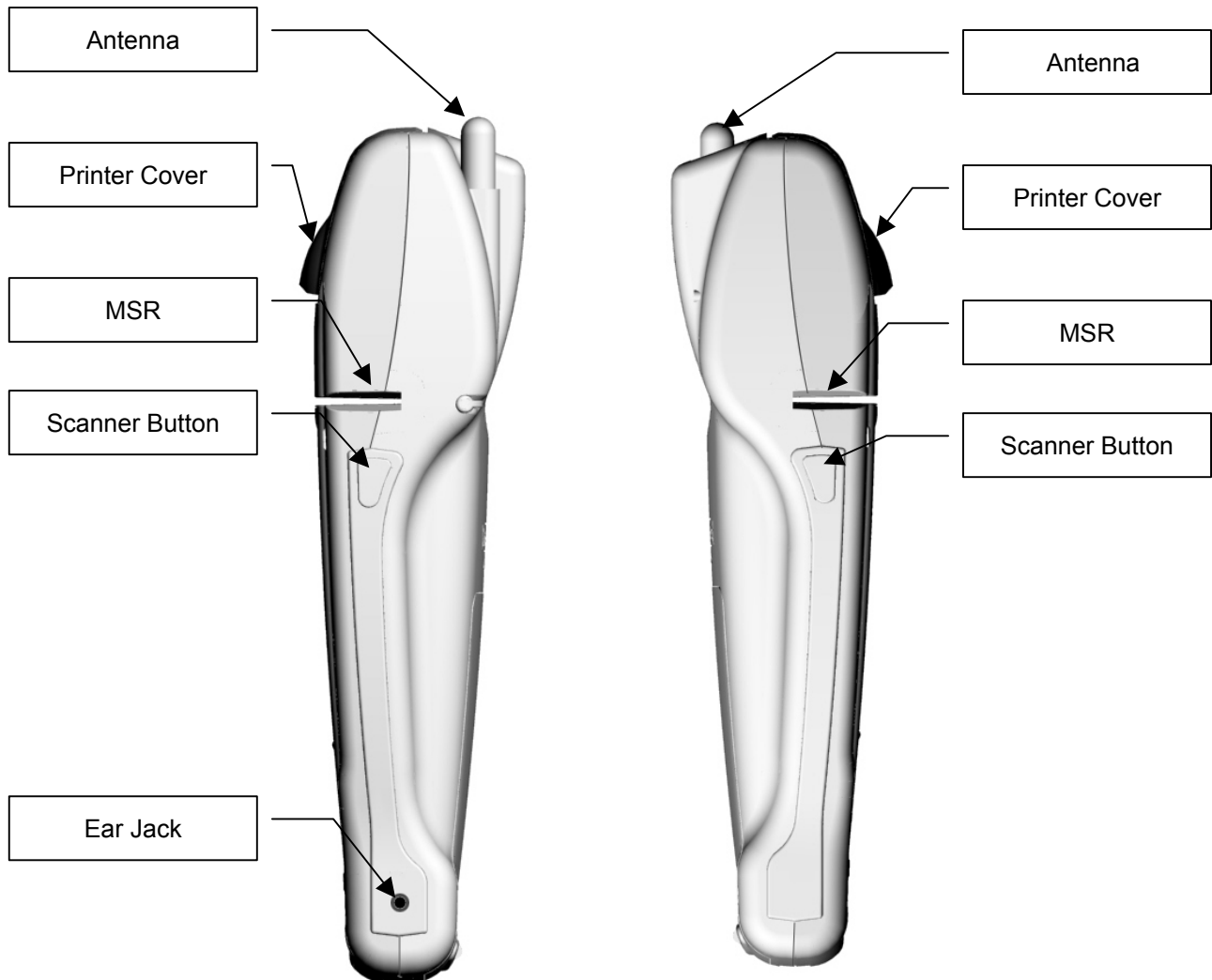


Figure 2. Parts of the MDT-9000 (continued)

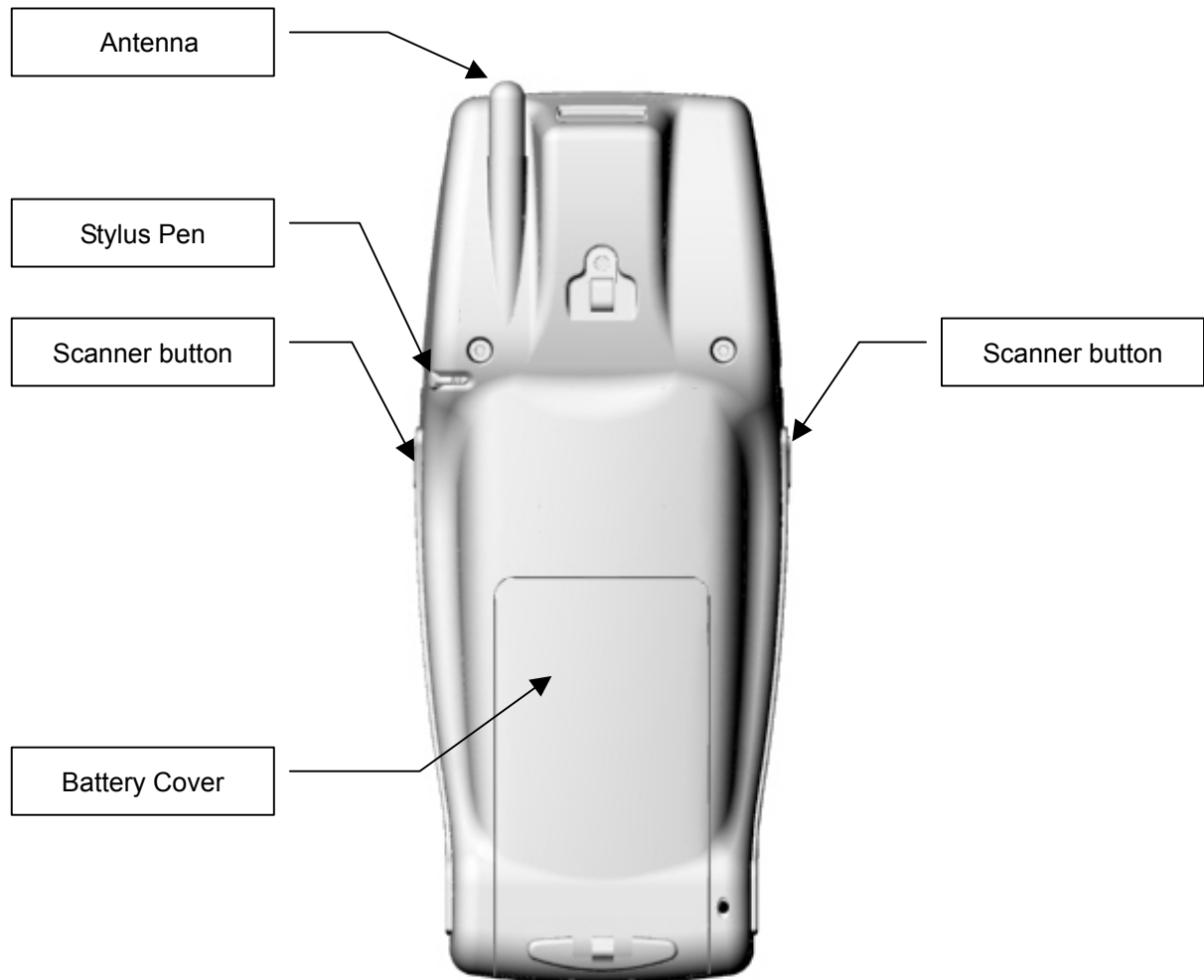


Figure 3. Parts of the MDT-9000 (continued)



Parts

MDT-9000 package contains the following items.

- MDT-9000 Terminal
- MDT-9000 Charging Adapter
- Battery
- Manual
- Ear-Micjack
- Printer Paper
- Handstrap
- ActiveSync Serial Cable

Accessories

The following accessories are available for the MDT-9000

- Printer Paper
- Charger Cradle
- Battery
- ActiveSync USB Cable
- Mobitron Software Developer's Kit (SDK)

Installing Battery

This chapter introduce several things that how to install battery, charge the battery, power on/off for correctly use method of MDT-9000 terminal

1. Remove the battery cover to backside of terminal

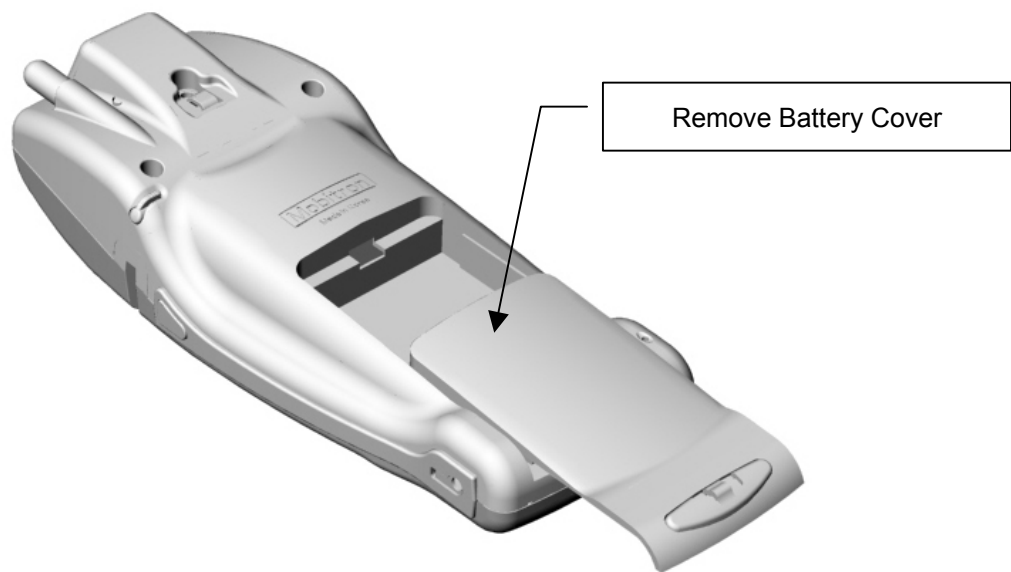


Figure 4. Remove the battery cover



2. Lower the battery into the battery bay, then press downward until the battery is seated.

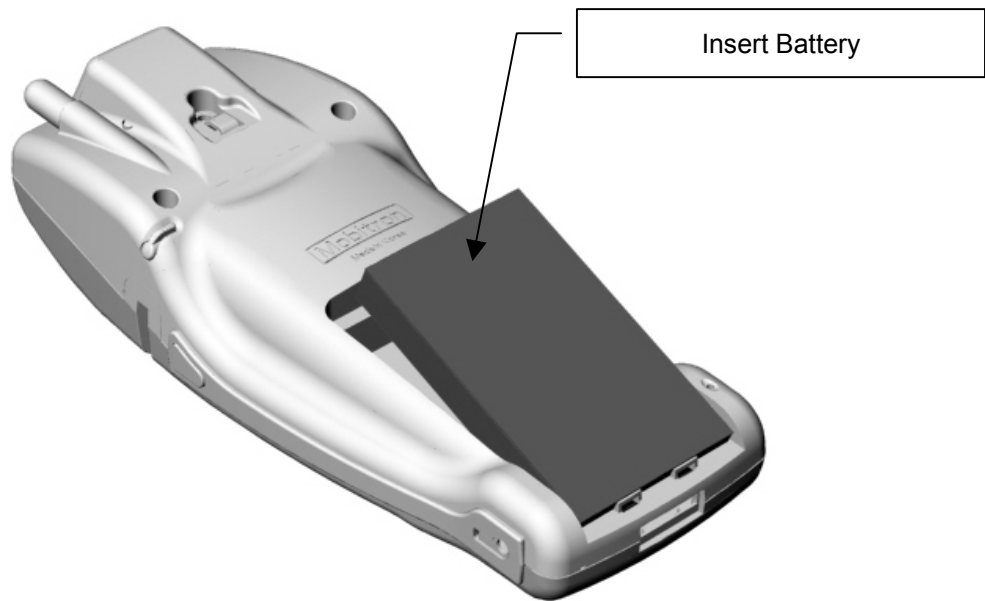


Figure 5. Insert the battery

3. After install battery, covers of battery close.



Figure 6. Replace the battery cover

Note

- Terminal must be power off before remove the battery.
 - Remove the battery in power on status, terminal initialized.
-



Charging Battery

Ensure the rechargeable battery is fully charged before using terminal for the first time.

Connect the adapter to MDT-9000 terminal and charge the battery.

1. Connect the adapter to the power connector on terminal.

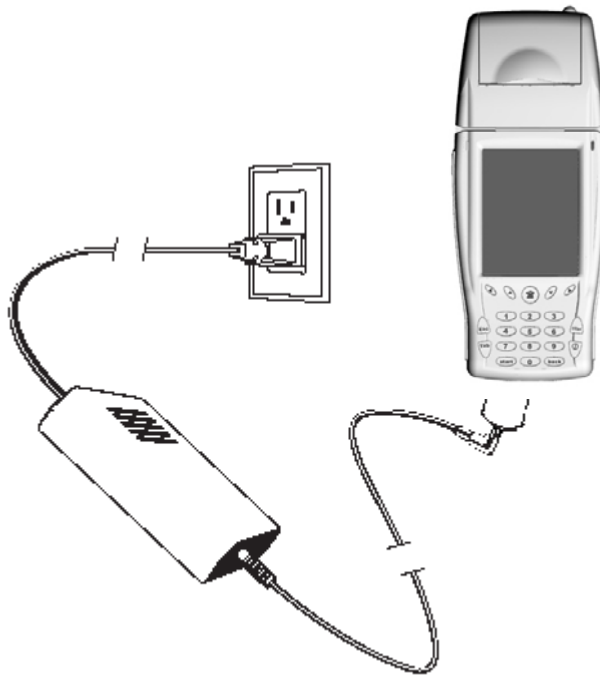


Figure 7. Connecting the charging adapter

2. When the charging progress, the charge indicator is red, if the charge indicator is yellow, it means that the charging is complete.

Note

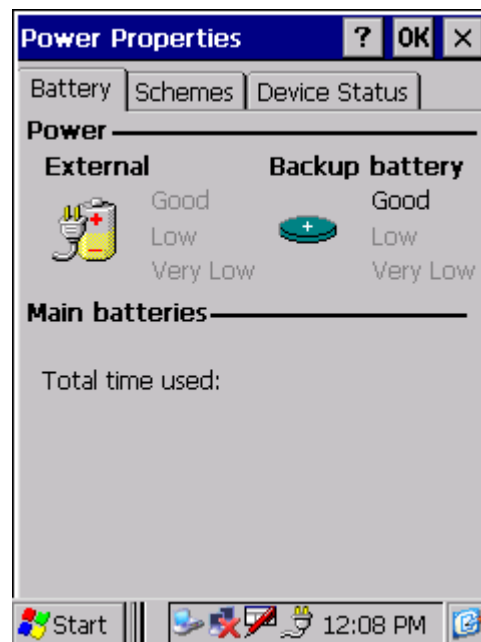
- Charge indicator does not work reconnect the battery. Although repeat operation, it doesn't work. Please inquire at the A/S center.
 - We highly recommend that use authorized power adapter. Use imitation will be dangerous, damage or explosion the battery.
 - Take high technology lithium ion battery, full discharge not necessary for charge the battery because of don't affect the battery.
 - The thermal of battery excess the limit (0 ~ 45 degree), adapter is standby charge.
-

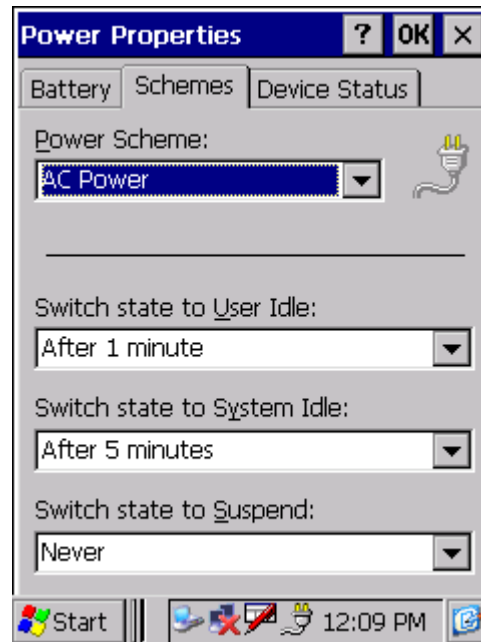


Checking Battery Power

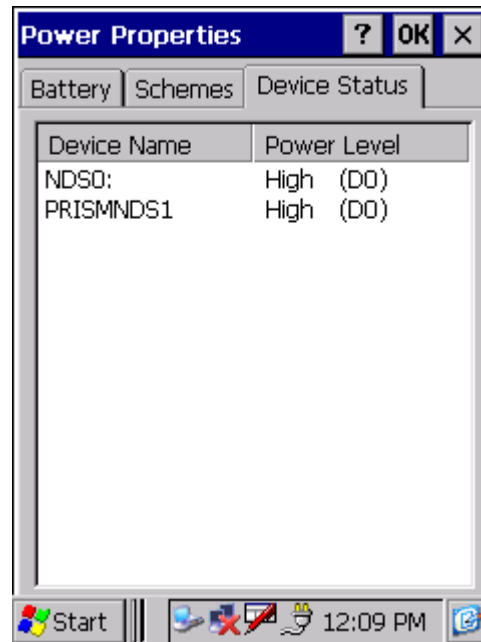
To confirm the battery charge state of terminal, run following steps.

: Tap Start ► Setting ► Control Panel ► Power





To conserve battery life, MDT-9000 terminal has an auto power off function. After a period of inactivity (Key, Touch), it automatically turns off.



This device status tab shows the power state of each device.

Commonsense about battery use time

- Always use authorized battery and adapter. Use imitation will be dangerous, damage or explosion the battery.
- Lifetime of battery is 1 year in standard condition.
- Take high technology lithium polymer battery, full discharge not necessary for charge the battery because of don't affect the battery.
- Check whether the adapter plug is properly connected when charge indicator doesn't work.
- Full charge spend 150 minute.
- Use time of battery is different under temperature, usage period and users.
- The thermal of battery exceed the limit (0 ~ 45 degree), adapter is standby charge.
- Too long or frequently stay in no service area, standby time is quickly shortens.
- The area that beam is weak or repeater is overlap, spends more battery
- Use to additional function like printer bring more battery spend
- As battery is expendables, battery use time is shorter than early



Installing a Roll-Paper

1. Pull the printer paper cover to arrow direction



2. Insert paper roll to arrow direction.



3. Push the printer paper cover to the end.



Attaching the Handstrap

MDT-9000 terminal offer handstrap for computable grip for a long time.

How to attach the handstrap, fixed handstrap ling to terminal's upper and lower.

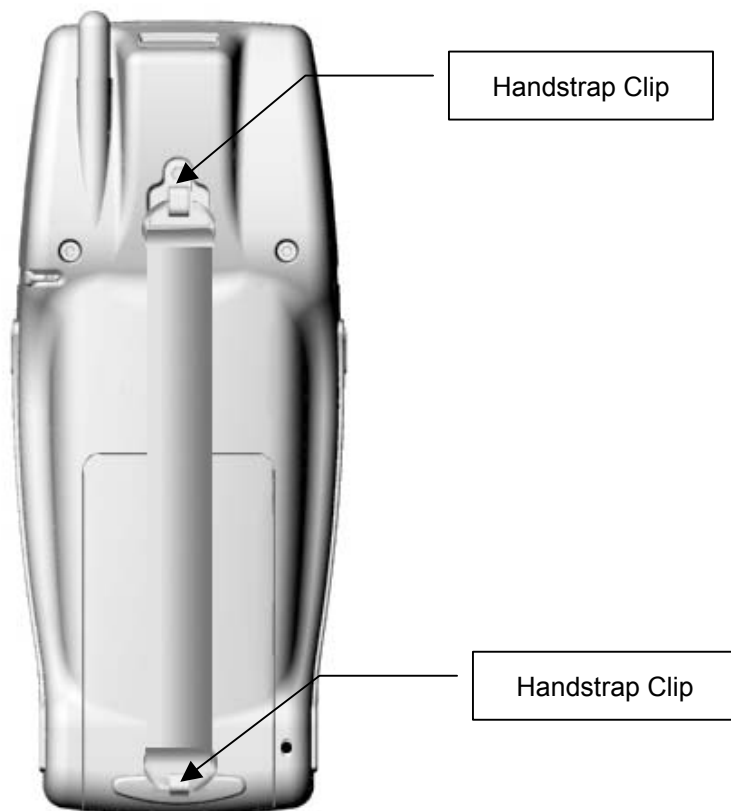


Figure 8. Attaching the handstrap



Starting the MDT-9000

After installing the battery, automatically start operating program. If does not operate the MDT-5300 terminal, press <Reset> button. Terminal will be cold boot.



Figure 9. Power button

After normal operating the terminal, appears following main screen.



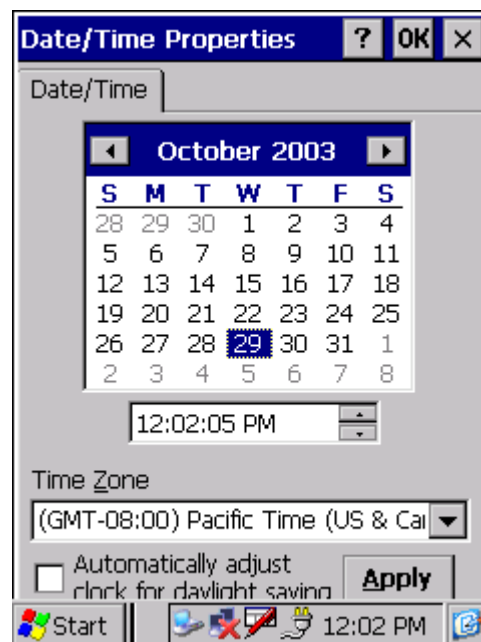
Figure 10. Main Screen Display



Setting Time and Date

CDMA modem is installed, operating system automatically get time and set. But terminal doesn't have modem user must be set the time oneself.

Double click the time indicator to set time and date when terminal does not have modem

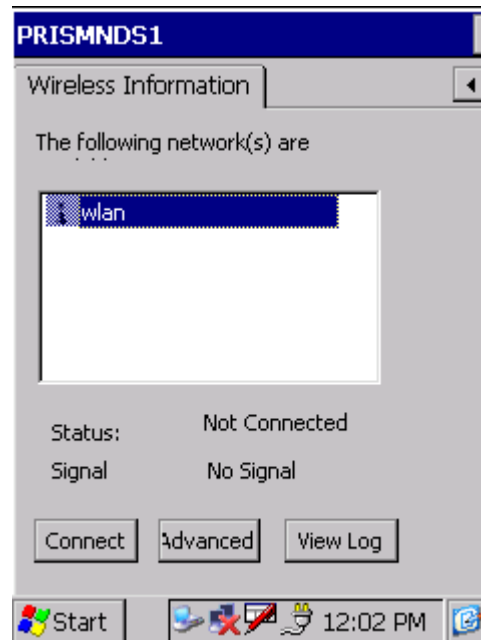


After set data and time in Data/Time properties, press <OK> button locate top of screen.

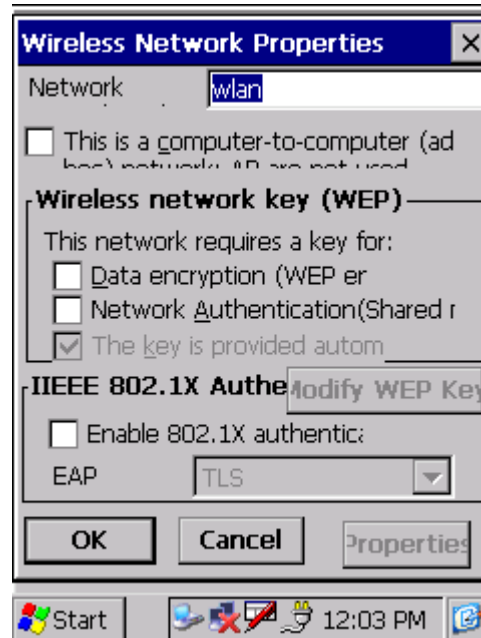
Setting Wireless Lan



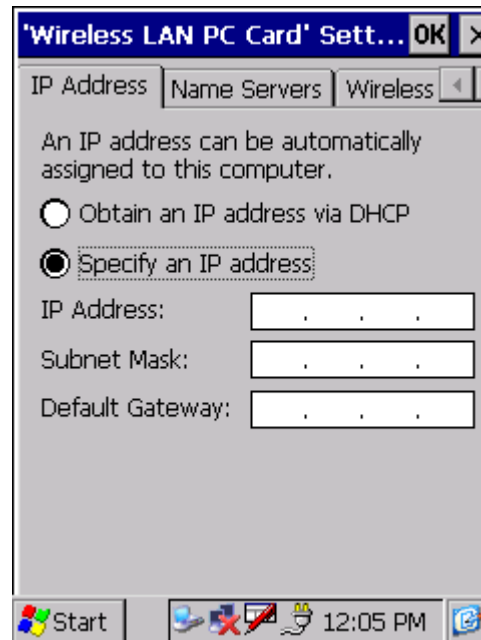
1. After the system boot, Mdt-9000 terminal display the zero configuration dialog(prismnds1).



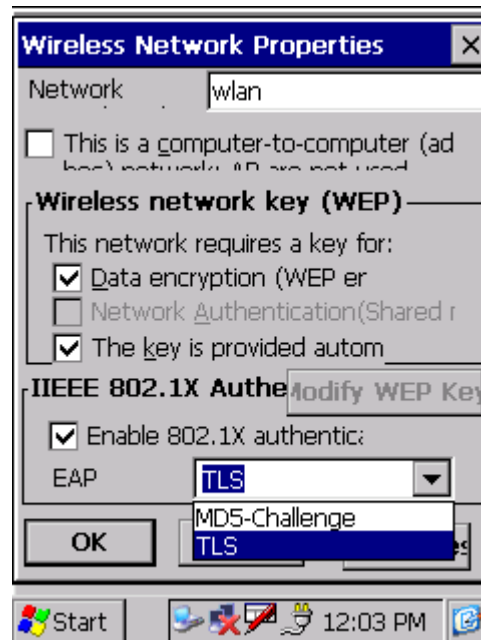
2. You can select the accessible access point in the list. After the selection, click <connect> button.



3. If your network supports DHCP, you don't need to set any information. Click <ok> button. After <ok> button clicked, systems automatically try to connect network.



4. If your network supports real IP connection, you have to set the IP information. Click <Advance> button and set IP address, Name servers.



5. If you need, you can use the WEP key and authentication.



Using Sample Programs

- Using MSR sample

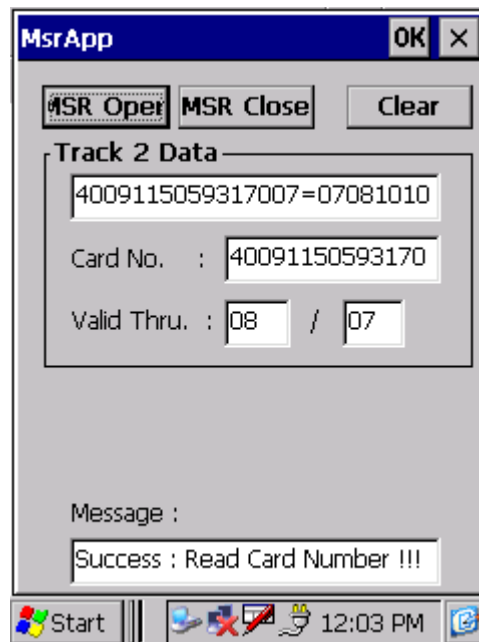


1. Double click MsrApp on the main screen



2. Click <Open> button, then you can show MSR Open success message.

3. Scan your credit card.

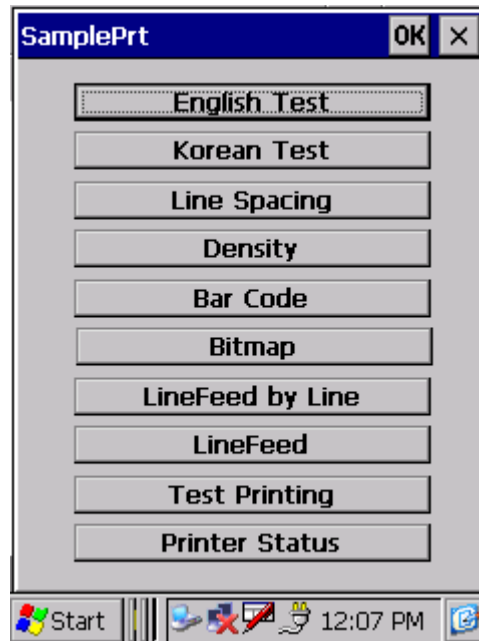


4. Now, you can check your card number and validate date on the program.



- Using Printer sample

1. Double click PrtApp on the main screen



2. This sample program supports full function of printer device. Click the each button you want to check.

Specifications

Display	LCD Touch Screen	240(w) x 320 (h) pixel graphics, 1/4 VGA with hardware acceleration
	Size	3.5" diagonal view Reflective
	Backlight	LED Backlight
	Color	TFT LCD 262,144 Colors
Card Reader	Magnetic Stripe	Bi-directional ISO 7811 Track1,2 or Track 2,3
	Reliability	500,000 reads
Barcode Scanner	Barcode Scanner Interface	Scan rate:186 scan/sec (bi-directional) 1 Dimension : UPC, EAN, CODE39/128, Codabar, MSI Plessey 2 Dimension : PDF417(Optional)
Key Entry	Keypad	21 button keypad with dedicated menu keys and software function keys waterproofed



Communications	CDMA	Operating Frequency Range: - Cellular 800 MHz - PCS 1,800 MHz - Dual Band (800 MHz & 1,900 MHz) Data rate: - up to 153 Kbps Software Stack: - CDMA 2000 1 x RTT - Built-in TCP/IP Proprietary - CDMA Protocol: IS-95A/B/C, IS-98A, IS-126, IS-637A,IS-707A - IS-637 SMS - IS-707-A.4: Async Data Service - IS-707-A.5: Packet Data Services - IS-96A: Voice Signal Coding IS-99: Circuit-Switched Data
	GSM/GPRS	Multi Band GSM/GPRS Class 10 Dual Band 900/1,800 MHz/900/1,900MHz Compliant with ETSI GSM Phase2 Standard. 3V SIM Interface with SIM Detection
	WLAN	IEEE 802.11 b 2.4GHz Direct Sequence Spread Spectrum Wireless CF Card, Compact Flash V1.4 CF + Type II Compliant
	Extra Peripheral	RS-232, USB, IrDA
Printer	Thermal Printer	Paper width : 58mm Full graphics w/384 dots/line 203 DPI print density 40mm/sec MTBF : 70,000 receipts

CPU		XScale PXA255 32Bit RISC processor 400MHz
Memory	RAM	64MB Standard
	Flash ROM	64MB Standard 128MB Optional
OS Platform	Microsoft	MS Windows CE.NET 4.2
Application Software Development		Fully compatible with MS SDK, Mobitron Proprietary SDK Toolkit available to support Application customizing software
Footprint	Dimensions	LxWxH (211mm x 100mm x 460 mm)
Weight		560g
Reliability	MTBF	100,000 (not including printer)
Power	AC	100-240 VAC, 50/60 Hz, 0.3A Max
	DC	8.4V (+0.05V/-0.02V) Battery Charging Current : 1,200mA
	Battery	Type : Lithium Polymer Voltage : 7.4 V / 2200mAh Standby Time : 80 Hours
Environment	Temperature	Operating temperature : -10 ~ 50 degrees C
	Humidity	Storage Temperature : -20 ~ 50 degrees C Relative Humidity : up to 85% non- condensing