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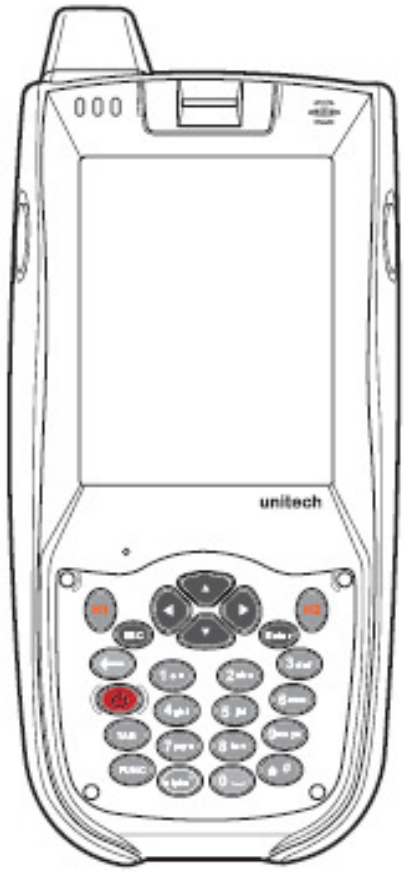
PA969 PDA Scanner

- PA969 -



User's Manual

Version 1.0

Preface

About This Manual

This manual explains how to install, operate and maintain the PA969 PDA Scanner.

Regulatory Compliance Statements

FCC Warning Statement

This equipment has been tested and found to comply with the limits for a Class B dig-ital 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.

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, avoid direct contact to the transmitting antenna during transmitting.
3. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

FCC Label Statement

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.

RF Radiation Exposure Statement

For body worn operation, this phone has been tested and meets FCC RF exposure guidelines when used with an accessory that contains no metal and that positions the handset a minimum of 1.5 cm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Canadian Compliance Statement

This Class B Digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numerique de la classe B respecte les exigences du Reglement sur le material broilleur du Canada.

European Conformity Statement

Declaration of Conformity with Regard to the R&TTE 1999/5/EC and EMC 89/336/ EEC directives.

RoHS Statement

This device conforms to RoHS (Reduction Of Hazardous Sub-stances) European Union regulations that set maximum con-centration limits on hazardous materials used in electrical and electronic equipment.

TaiwanNCC Warning Statement

交通部電信總局低功率電波輻射性電機管理辦法 (930322)

根據交通部低功率管理辦法規定：

第十二條　經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條　低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Laser Information

The Unitech PA969 series is certified in the U.S. to conform to the requirements of DHHS/CDRH 21CFR Subchapter J and to the requirements of IEC 825-1. Class II and Class 2 products are not considered to be hazardous. The PA600 series contains internally a Visible Laser Diode (VLD) whose emissions do not exceed the maximum limits as set forth in the above regulations. The scanner is designed so that there is no human access to harmful laser light during normal operation, user maintenance or during prescribed service operations.

The laser safety warning label required by the DHHS/IEC for the PA600 series' optional laser scanner module is located on the memory compartment cover, on the back of the unit.

CAUTION! Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser light. Use of optical instruments with the scanner will increase eye hazard. Optical instruments include binoculars, microscopes, and magnifying glasses. This does not include eyeglasses worn by the user.

Battery Notices

The PA969 is equipped with a Lithium-Ion battery pack and backup battery. Both batteries will discharge after an extended period of not being used.

When both batteries are discharged, recharge the unit for 16 hours in order to fully charge the main battery and backup battery. Recharge the PA969 through the following:

1. Plug the USB charging cable to the PA969 and plug the 12V/3A AC-DC adapter to the power jack of the USB charging cable.
2. Place the PA969 into the docking station and plug the 12V/3A AC-DC adapter to the power jack of the docking station.

If the main battery is removed, the backup battery ensures the data on SDRAM is safe for up to 6 hours. To prevent data loss, do not leave the PA969 uncharged with the main battery removed for an extended period. See Charging the Battery on page8 for more details.

Note: Rechargeable batteries are advised to replace every year or when 500 charge/discharge cycles achieved to guarantee optimal performance. It is normal that the battery balloons or expands beyond one year or the maximum of 500 cycles. Although it does not cause harm, it cannot be used again and must be disposed of according to the location's safe battery disposal procedures.

If the performance decrease is greater than 20% in a Lithium-Ion battery, the battery is at the end of its life cycle. Do not continue to use, and ensure the battery is disposed of properly.

The length of time that a battery power lasts depends on the battery type and how the device is used. Conserve the battery life through the following:

- Avoid frequent full discharges because this places additional strain on the battery. Several partial discharges with frequent recharges are better than a deep one. Recharging a partially charged lithium-Ion battery does not cause harm because there is no memory.
- Keep the lithium-Ion battery cool. Avoid a hot car. For prolonged storage, keep the battery at a 40% charge level.
- Do not leave the lithium-Ion battery discharged and unused for an extended period because the battery will wear out and the longevity of the battery will be at least shorter than half of the one with frequent recharges.

Battery charge notice

It is important to consider the environment temperature whenever the Lithium-Ion battery pack is charged. Charging is most efficient at normal room temperature or in a slightly cooler environment. It is essential that batteries are charged within the stated range of 10℃ to 45℃. Charging batteries outside of the specified range could dam-age the batteries and shorten their charging life cycle.

CAUTION! Do not charge batteries at a temperature lower than 0℃, which will increase the internal resistance to cause heat and make the batteries unstable and unsafe. Please use a battery temperature detecting device for a charger to ensure a safe charging temperature range.

Storage and safety notice

Although charged Lithium-Ion batteries may be left unused for several months, their capacity may be depleted due to build up of internal resistance. If this happens they will require recharging prior to use. Lithium-Ion batteries may be stored at temperatures between -20℃ to 60℃, however they may deplete more rapidly at the higher temperature ranges. It is recommended to store batteries within normal room temperature ranges.

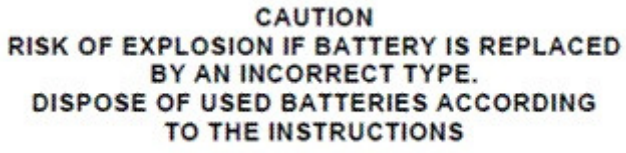
Warranty

The following items covered under Unitech Limited Warranty are free from defects during normal use:

- PA969 – 1-year limited warranty.
- Lithium-Ion battery – 6-month limited warranty.

Warranty becomes void if equipment is modified, improperly installed or used, dam-aged by accident or neglect, or if any parts are improperly installed or replaced by the user.

Use only the adapter supplied. Using the wrong adapter may damage the unit and will void the warranty.



The PDA Scanner may be affected by static electricity interference. please turn off the transmission function and wait a few minutes to start this function.

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Table of Contents

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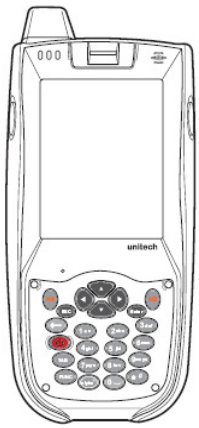
Chapter 1

Getting Started

Introducing the PA969

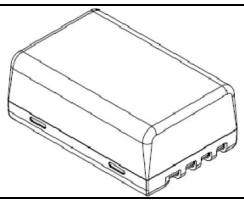
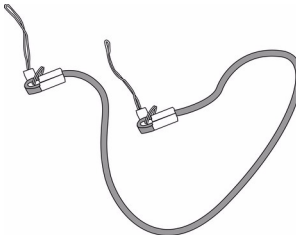
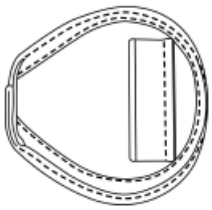
Thank you for purchasing the PA969 PDA Scanner.



Your PA969 was designed for users who need a compact and durable mobile computer for data collection and real time transactions.

The PA969 is a rugged, compact and lightweight palm-size mobile computer using Windows Mobile 6.5 operating system, and incorporating an integral bar code scanning device, high-resolution digital camera, color LCD with touchscreen, and keypad. It provides users with a standard Windows-based environment for customizing and operating the device. To reduce TCO, the PA969 is sealed to meet IP65 standards and has undergone multiple drop tests to prevent downtime.

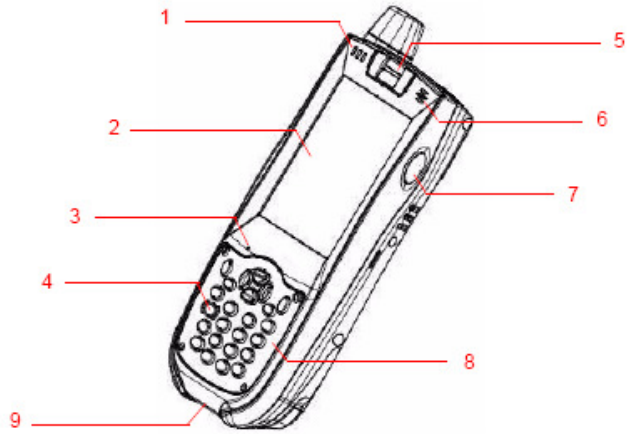
PA969 Product Introduction & Accessory Kit

	
PA969 Terminal	Manual CD
	
Stylus	Battery
	
Elastic Stylus String	Hand Strap
	
Stylus Holder	PA969 Cradle
	
USB Cable for Cradle	Power Adapter

Tour of the PA969

The following sections describe the main components and features of the PA969.

PA969 Front View



1 Status indicator

2 LCD Touch screen

4 Power button

5 Fingerprint reader

6 Receiver

7 Scanner trigger button

8 Keypad

9 Universal connector

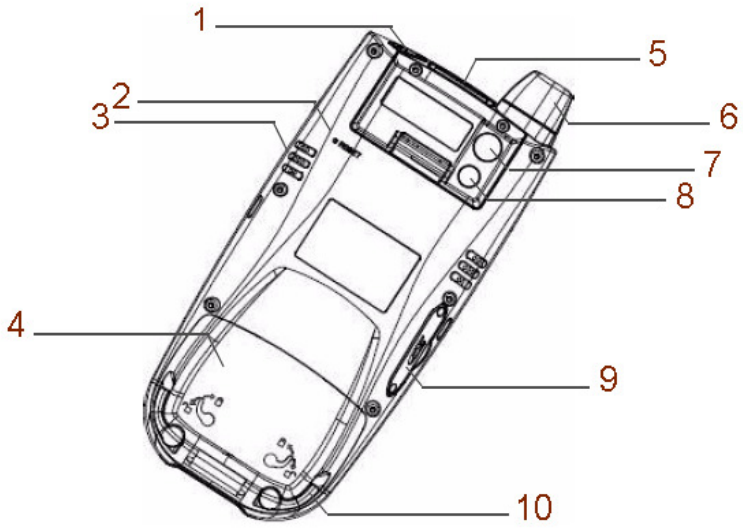
Turning ON the PA969 for the First Time

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

Powering-On Button

Turn ON your device by pressing the power button on the front panel.

PA969 Rear View



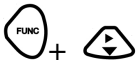
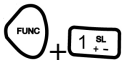
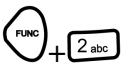
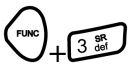
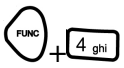
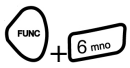
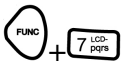
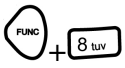
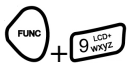
1	Earphone jack	**6**	Antenna
2	Reset button	**7**	Digital still camera
3	Speaker	**8**	LED Flash light
4	Battery compartment	**9**	Memory card slot
5	Barcode scanner window	**10**	Battery compartment tab

Keypads and Function Buttons

Key	Description	Key	Description
	Power button		Escape key
	Enter key		Backspace key
	Tab key		Function key
	Alpha key, toggle between numeric and alphabetic entrymodes		Four way cursor keys
	Alphanumeric keys		Punctuation key
	Answer key		Hang-off key
	Windows key		

When PA969 boots, the default condition is Numeric Mode on. When you toggle to Alpha Mode, the default condition is CAPS mode off. Please use the alpha Key to toggle to CAPS.

Using Function keys

Key	Description	Key	Description
	Calibration		Screen backlight toggling
	Keypad backlight toggling		Softkey L
	Softkey R		TALK
	END		Task manager
	Scanner setting		Power management
	Device information		

Using Alpha keys

Key	Alpha Off	Alpha On	
		CAPS Off	CAPS On
0 TAB	0	Space, @, $, “, 0	Space, @, $, “, 0
1 SL + -	1	+, -, \, %, 1	+, -, \, %, 1
2 abc	2	a, b, c, 2	A, B, C, 2
3 SR def	3	d, e, f, 3	D, E, F, 3
4 ghi	4	g, h, i, 4	G, H, I, 4
5 jkl	5	j, k, l, 5	J, K, L, 5
6 mno	6	m, n, o, 6	M, N, O, 6
7 LCD- pqrs	7	p, q, r, 7	P, Q, R, 7
8 tuv	8	t, u, v, 8	T, U, V, 8
9 LCD+ wxyz	9	w, x, y, z, 9	W, X, Y, Z, 9
* # .	*	, ; ! . /	, ; ! . /

This section explains how to install and charge the battery, how to check battery status, how to turn on the terminal, and how to calibrate the screen.

Installing the Battery

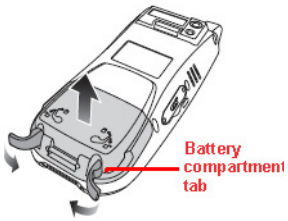
WARNING! There is a risk of fire and burns if the battery pack is handled improperly. DO NOT disassemble, crush, puncture, short external contacts, or dispose the battery pack in fire or water. DO NOT attempt to open or service the battery pack. Dispose of used batteries according to local recycling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

A backup battery cell is embedded into your device to prevent data loss when the removable battery pack is removed or completely discharged. This backup battery will keep the data and system setting for up to 8 hour if the main battery is removed.

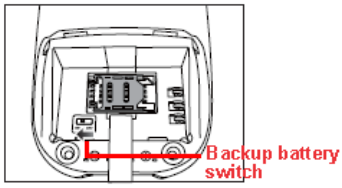
NOTE: To enable the internal battery cell to provide backup power supply, charge your device with the main battery pack for at least 16 hours.

NOTE: To power on the device properly, make sure replacing the battery compartment cover after installing the battery.

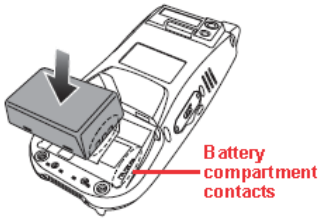
1. Open the battery compartment cover by sliding the tabs on both sides in the direction of the arrows shown and lift the cover up.

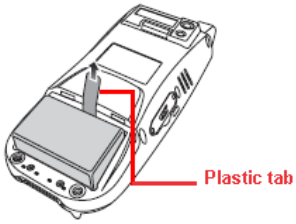


2. Turn ON the Backup Battery Switch.

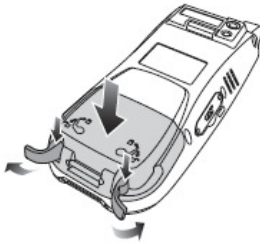


3. Position the battery pack, making sure the battery contacts are aligned with the contacts in the compartment and the battery is placed on top of the plastic tab.
4. Slide the battery pack while simultaneously pulling the plastic tab until the battery clicks into place.





5. Replace the battery compartment cover, push down the tabs and slide them back into place as shown.



NOTE: Make sure the battery compartment cover is securely closed, or you may be unable to turn ON the terminal.

Charging the Battery

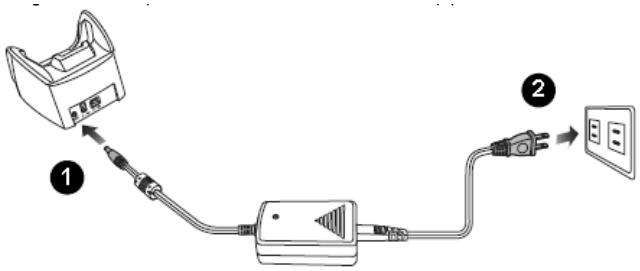
Before using the terminal for the first time, you need to charge it for about 16 hours. After that, you can charge the terminal for 4 hours to recharge the battery to full capacity. Charge the terminal using the USB charging cable or the docking station.

CAUTION! Operating the terminal for the first time without the AC adapter, and without fully charging the backup battery may result in loss of data stored in RAM memory. When the main battery is removed, the backup battery retains RAM data in memory for 8 hours. Please charge the battery for the period to avoid data loss in RAM memory.

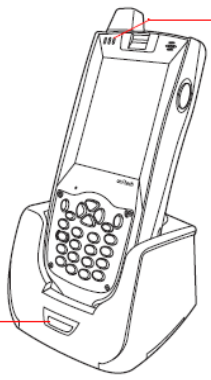
NOTE: Turn the backup battery switch on before charging the battery. Data you entered may not be properly stored until the built-in backup battery has been fully charged.

Charging the battery with the cradle

1. Plug the AC adapter cable into the power jack of the cradle (1).
2. Plug the AC adapter cord into an electrical outlet (2).



3. Slide the terminal into the cradle until it clicks into place.



4. The connection is secure when the bottom edge of the terminal is aligned with the cradle, and the LED indicator on the terminal lights up red.

Checking the LED status

	LED	Status	Description
Terminal	GPRS/Bluetooth	Flashing Yellow	GPRS module is enabled.
		Flashing Blue	Bluetooth module is enabled.
	Scan	Solid Red	Ready for Reading
		Solid Green	Successful reading
	Power	Solid Red	Being charged
		Solid Green	Fully charged
Cradle	Power/Communication	Solid Green	Power is on
		Flashing Green	Data synchronization is active.

Checking the Battery Status

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

CAUTION! Once the device is shut down, you should recharge the device within 48 hours. Otherwise you will lose all data including files stored in the RAM memory.

Chapter 2

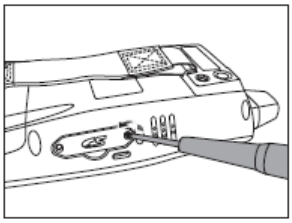
Using the Hardware

Using the SD Memory Card

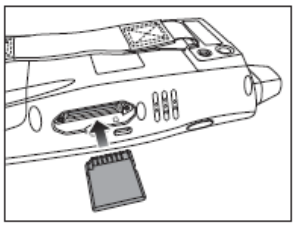
PA969 has an expansion slot compatible with a range of SD storage cards, which are primarily used to backup or transfer files and data.

Inserting a Storage Card

1. Remove the two screws on the SD compartment cover and remove the cover.



2. Insert the SD card with the notched corner as shown.



3. Push the card into the slot until you feel the SD card click into place.
4. Screw the SD compartment cover.

Removing the Storage Card

1. Remove the two screws from the SD compartment cover and remove the cover.
2. Press the card in and release. The card pops out.
3. Remove the card from the slot.

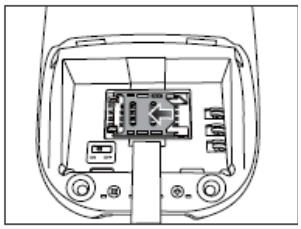
Using the SIM Card

The PA969 has a slot for GPRS SIM card inside the battery compartment.

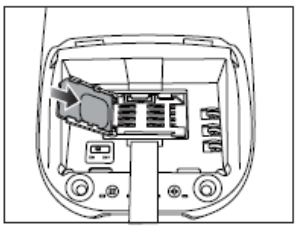
CAUTION! Before installing the SIM card, please backup your data to prevent data loss because of a low backup battery.

Inserting the SIM card

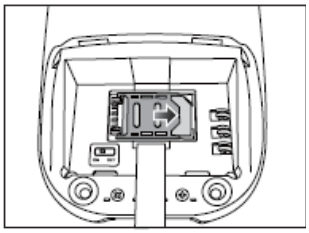
1. Remove the battery compartment cover and the main battery.
2. Slide the cover of the SIM card slot to the left to release the latch.



3. Lift the cover and insert the SIM card into the cover with notched corner up, contacts down as shown.



4. Put down the cover on the slot, and then slide the cover to the right to lock the SIM card.



5. Put the battery back into the battery compartment and replace the battery compartment cover.

Chapter 3

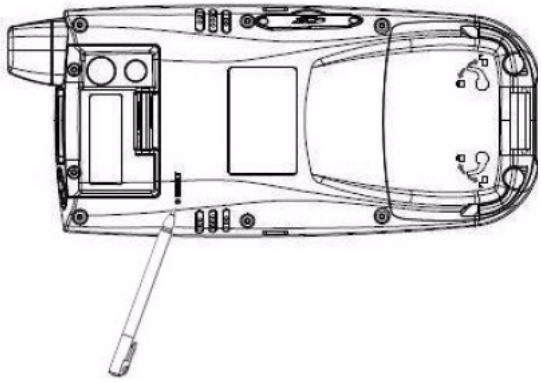
Advanced Settings

Performing a Hardware Reset

You may have to perform a reset if the device freezes (i.e., the device no longer responds to the buttons or tapping on the screen).
A soft reset allows your device to get a fresh start, similar to rebooting a computer.
This will restart your device and adjust memory allocation. All records and entries are retained after a soft reset. Unsaved data in open programs may be lost.

Performing a Warm Boot

1. Remove the stylus from its holder.
2. Lightly press the tip of the stylus to the reset button located at the rear side of the terminal.

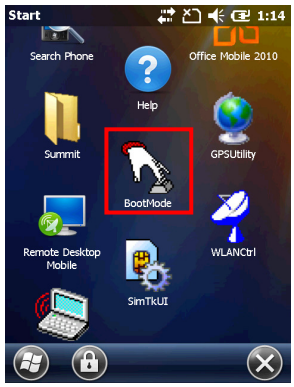


Performing a Cold Boot

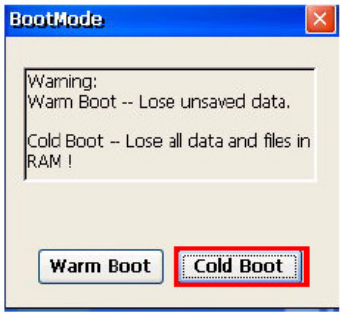
A cold boot will erase all data and all programs you have added, and will restore the device to the default factory settings.
Never perform a cold boot unless a warm boot does not correct your problem.
When you perform your next ActiveSync operation, you can restore any data that you previously synchronized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

Method 1: From Windows Mobile

1. Tap Start → BootMode.
   The BootMode Screen appears.

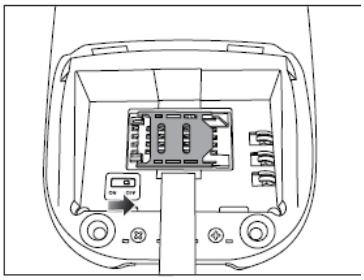


2. Tap Cold Boot.
   The system is reset and you will lose all data including all files in the RAM memory.

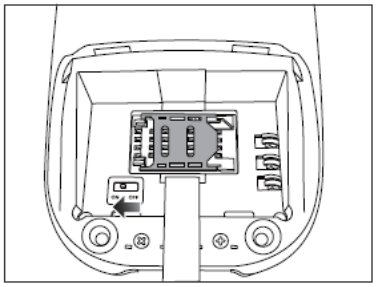


Method 2: From Hardware

1. Remove the battery compartment cover and the main battery. See the section of *Installing the Battery*.
2. Turn the backup battery switch off.



3. Turn the backup battery switch on.
4. Put the battery back into the battery compartment and replace the battery compartment cover.
   System will cold boot.



NOTE: When you perform hard reset, the data and time settings will not be retained. Formats, preferences, and other settings are restored to their default factory settings.

Appendix I

System Specification

CPU	Samsumg S3C6410 800Mhz	
Memory	RAM 256 MB RAM ROM 512 MB ROM (Nand mDoc)	
OS	Microsoft® Windows CE6 R3	
Keypad	Modularized backlight keypad with 24 keys or 44 keys	
Display	Full VGA (480 x 640), 3.5” TFT Color Transflective Touch Panel and backlight, supporting QVGA and VGA modes	
Code Engine	1D Laser scanner engine2D Imager (optional)	
Indicators	3 LEDs for charging status, scan status, WWAN communication Vibration (calls, good read)	
Audio	Speaker, Headset Connector (in/out)	
Address Locating	GPS (Optional)	
Memory Slot	SD slot standard (up to 2 GB) (16GB)	
Power Source	Main battery	13.69 Watts Li-ion battery pack
	Backup battery	One Ni-MH backup battery rechargeable
Enclosure	Weight	500g with battery
	Dimension	Approximately 199.5mm (H) X 88mm (W) X 43.3mm (T) (Antenna length excluded)
Environmental	Operating temperature	-10 ℃ ~ 50 ℃
	Charging temperature	10 ℃ ~ 40 ℃
	Storage temperature	-20 ℃ ~ 60 ℃
	Relative humidity	5% ~ 95% (non-condensing)
	Drop test to concrete	1.5 Meter
	Environmental sealing	IP65
Models	Basic Option; 2D Imager, BT (No GPS, No 3.5GWAN, No camera, No WLAN installed)	

	Limit Option; 2D Imager, 3.5GWAN, BT (No GPS, No camera, No WLAN installed)
	Full Option; 2D Imager, GPS, 3.5GWAN, BT (No camera, No WLAN installed)
Regulatory Approvals	CE, FCC, UL, RoHS compliant
Accessories	Stylus Handstrap Single Slot Ethernet cradle AC adaptor (with regional power cord)

Appendix II

Worldwide Support

Unitech's professional support team is available to quickly answer questions or technical-related issues. Should an equipment problem occur, please contact the nearest Unitech regional service representative. For complete contact information please visit the Web sites listed below:

Region	Web Site
Global Operation Center	http://www.ute.com
Unitech Taiwan	http://tw.ute.com
Unitech Asia Pacific & Middle East	http://apac.ute.com ; http://india.ute.com
Greater China Division	http://cn.ute.com
Unitech Japan	http://jp.ute.com
Unitech America	http://us.ute.com ; http://can.ute.com
Unitech Latin America	http://latin.ute.com
Unitech Europe	http://eu.ute.com