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HT660e Rugged Handheld Terminal

- HT660e -

User's Manual

400831G Version 1.0

Preface

About This Manual

This manual explains how to install, operate and maintain the HT660e Rugged Enterprise Terminal.

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Regulatory Compliance Statements

FCC Warning Statement

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

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 concentration limits on hazardous materials used in electrical and electronic equipment.

Taiwan NCC Warning Statement

國家通訊傳播委員會低功率電波輻射性電機管理辦法 (930322)

根據國家通訊傳播委員會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。

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 0 cm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Laser Information

The Unitech HT660e 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 HT660e 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 HT660e 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 HT660e 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 12 hours in order to fully charge the main battery and backup battery. Recharge the HT660e through the following:

1. Plug the USB charging cable to the HT660e and plug the 5V/2A AC-DC adapter to the power jack of the USB charging cable.
2. Place the HT660e into the cradle and plug the 5V/2A AC-DC adapter to the power jack of the cradle.

If the main battery is removed, the backup battery ensures the data on SDRAM is safe for up to 72 hours. To prevent data loss, do not leave the HT660e uncharged with the main battery removed for an extended period. See *First Time to Charge the Main Battery & Backup Battery* on page 9 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°C to 45°C. Charging batteries outside of the specified range could damage the batteries and shorten their charging life cycle.

CAUTION! Do not charge batteries at a temperature lower than 0°C, 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. Further, to protect and avoid battery from

inflating, the battery is detected for thermal protection and will not be charged when the temperature of battery is over 50 degrees. Do not leave the terminal for a long time in the charging cradle and do not charge the battery with a cable long, which will shorten the battery life and cause battery expanding/ballooning. The unit should not be subject to very high temperature, excessive moisture, and direct heat. Avoid the battery from being fully charged and staying in a high temperature environment. Avoid terminal or spare battery from staying in a hot vehicle. For prolonging the storage time, keep the battery at a 40% charge level. Lithium ion batteries oxidize least when they are stored at the state of 40% charge.

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°C to 60°C, 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:

- Terminal is covered by 1-year limited warranty.
- Cradle is covered by 1-year limited warranty.
- Cable is covered by 1-year limited warranty.
- Battery is covered by 3-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.

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Chapter 1

Getting Started

Introducing the HT660e

The HT660e is a rugged, compact and ergonomic handheld terminal powered by the WinCE. NET OS to make your work more efficient and profitable. It comes with an integral barcode scanning laser device, color LCD with touch screen, keypad, BT and wireless communication interface capability. It provides the user with a standard Windows-based environment for customization and operation.

The following HT660e Product Reference Guide provides simple step-by-step procedures to give you hands-on experience with your HT660e. For programming your HT660e, please refer to our SKD and programming manual.

Notice

1. This unit is equipped with a battery pack and backup battery. It is possible that the Unitech HT660e may not be powered ON due to battery discharge as a result of storage. In the above situation and the first-time use, plug the HT660e to the charging cable or charging cradle (with 5V/2A AC-DC adapter), and charge the unused unit for over 12 hours in order to fully charge its backup battery as well.
2. Under normal condition, the back-up battery will be charged from external power or the main battery (if the main battery still has enough power to turn on). If it is charged for the first time, the back-up battery will be fully charged while main battery is charged fully.

Warranty

Unitech's Limited Warranty provides for different warranty periods for different parts and accessories:

- Terminal is covered by 1-year limit warranty.
- Cradle is covered by 1-year limit warranty.
- Cable is covered by 1-year limit warranty.
- Battery is covered by 3-month warranty.

Regulatory

Compliance with RoHS
Certificate includes: CB, CE, CCC, FCC, BSMI, TELEC, VCCI

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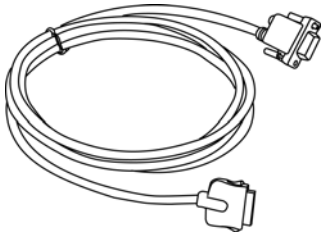
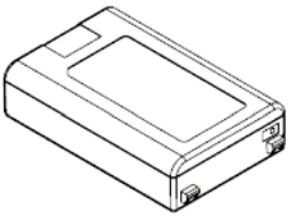
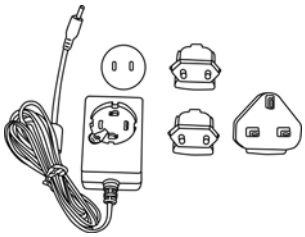
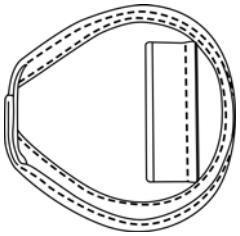
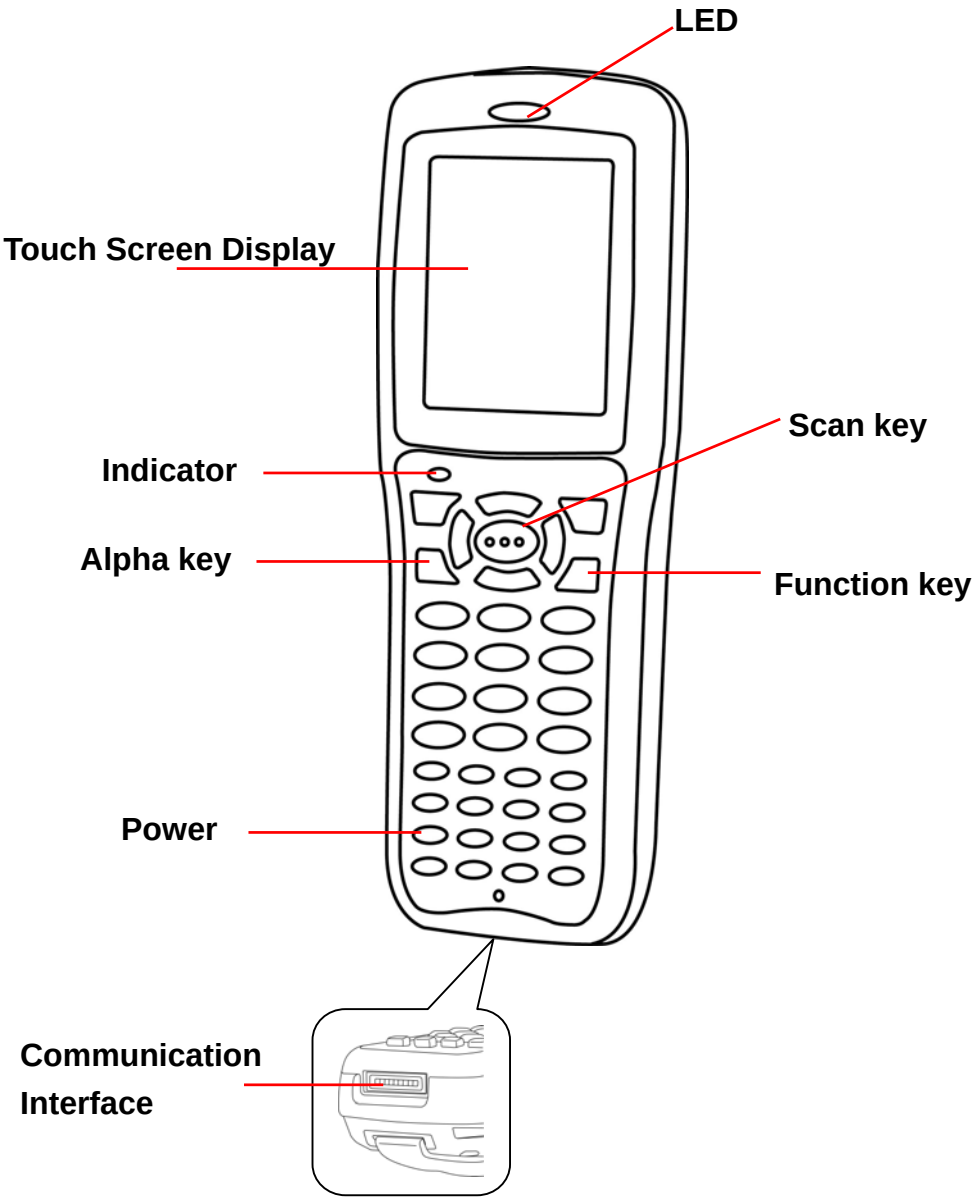
HT660e Model Specification

System	CPU Processor	Samsung 6410 / 667mHz
	Operating System	Microsoft Windows CE 6.0 R3 Professional/Core
	Flash ROM	256MB
	MDDR	128MB
Keypad	Full Alphanumeric	36 keys
Enclosure	Weight (g)	360g (with Battery)
	Dimension (LxWxH mm)	199.5 X 79 X 39.6mm (Approximately)
Power source	Main Battery Type	3.7V / 2200mAH Li-ion, 8.14WH
	Battery Recharging Time	4 hrs.
	Battery Life	BT / RF disabled → 8 hours BT ON / RF OFF → 7 hours BT ON / RF ON → 8 hours BT OFF / RN ON →
	Backup Battery Type	120AH Li-polymer
Display	QVGA 240*320 Color 2.8" TFT LCD display with touch screen	
Cradle	USB or Modem	
Barcode Scanner Reader	1D Laser	
Rugged/Environment	Drop	1.5M
	IP Rating	IP 54
	Operation Temp.	14°F to 122°F (-10°C to 50°C)
	Storage Temp.	-4°F to 140°F (-20°C to 60°C)
	Humidity	5%~95% non-condensing
	ESD	Contact ± 8KV, Air ± 12KV
Communications	USB V1.1 Client, PAN Bluetooth V2.1 Class II, WLAN 802.11 b/g (Optional CCX4 certified radio), and Ethernet Cradle	
Expansion Slot	Supporting SD/SDHC memory up to 16GB	
Radio Options	802.11b/g	
	Bluetooth	

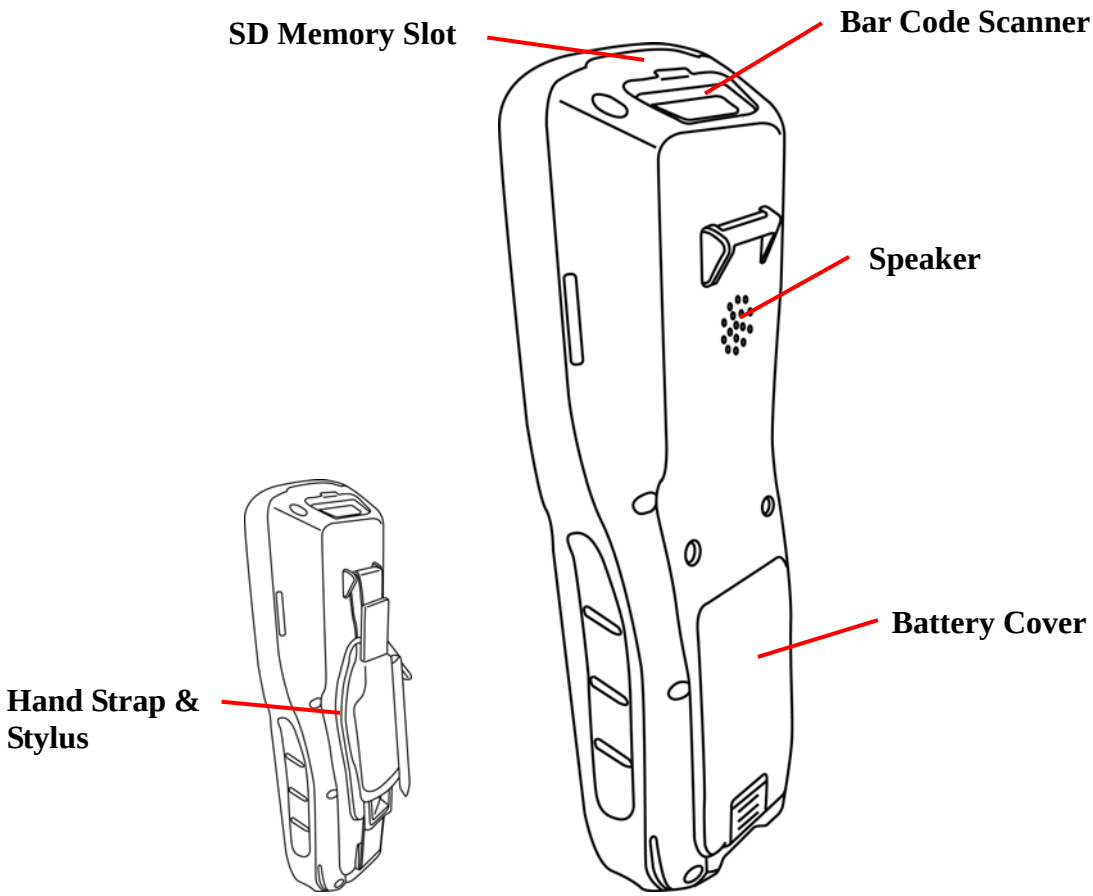
HT660e Product Introduction & Accessory Kit

HT660e Terminal	Manual CD
	
Communication Cable	Battery
	
Adaptor Kit	Hand Strap
	
Stylus Holder	

HT660e Front View



HT660e Rear View



First Step with HT660e

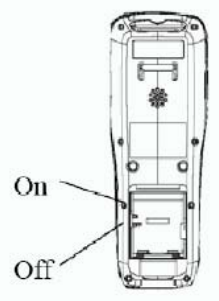
Before first using the HT660e, please ensure the battery is fully charged. There are three ways to charge your HT660e:

- Cradle with one battery charger slot
- USB/Charging cable
- Rechargeable Lithium-Ion battery pack

NOTE: Data loss may occur if the HT660e's backup battery is not adequately charged. Before charging the main battery, make sure the backup battery switch is ON.

Switch On Backup Battery

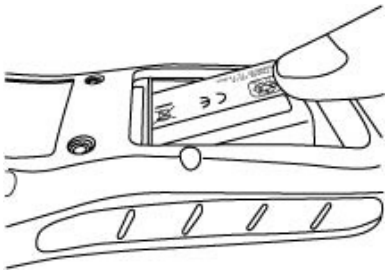
Before installing a battery, locate the backup battery switch inside the battery compartment on the left-hand side. Please ensure that it is in the “ON” position before charging the main battery.



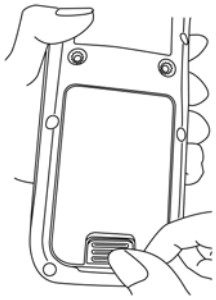
Install the Battery Pack

1. Remove the battery cover.

2. Move the backup battery switch to the ON position (see the description above).
3. Insert the battery pack so that the contacts on the battery pack line up with the contacts in the battery compartment. Fully seat the battery.



4. Cover the battery.



Supply Power to the HT660e

Connect the USB/Charging Cable to the HT660e and connect the AC adapter to the cable's power jack and an electrical outlet.

Or place the HT660e into the Cradle (first connect the power supply to the Cradle).

Charge the Battery for the First Time

We would like to propose to charge the battery at least up to 12 hours for the first time to use. While it normally only takes about 4 hours to charge the battery after it's been drained, when charging the battery for the first time please allow at least 16 hours. While charging the main battery the backup battery should also be charged. Please make sure the backup battery has been switched "ON" (this cannot be emphasized enough).

CAUTION: There is a high risk of data loss from RAM if the backup battery is not fully charged. This can happen if the main battery has been drained and the unit is not connected to the AC adaptor. For this reason, it is crucial that the backup battery is switched on before charging the main battery for the first time.

Protective Screen Film

To protect screen, the HT660e has been provided with a protective plastic film. You may remove it (if required). The screen will be more susceptible to scratching without the film, but will be more readable.

First Time Use of the HT660e

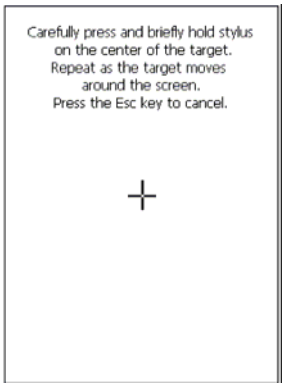
Pressing the Power ON/OFF Key

The Unitech HT660e welcome screen appears. The Windows CE screen will appear shortly thereafter.

Align the Screen

When prompted, use the stylus to tap the targets as they appear in order to align the touch screen.

When you complete the procedure, press any key or press anywhere on the touch screen to start up the WinCE system.



Adjusting Screen Brightness

To adjust the original default setting of the screen brightness, the backlight setting will be required. Please refer to the setting section below for the new setting procedure.

Setting Time Zone/ Date

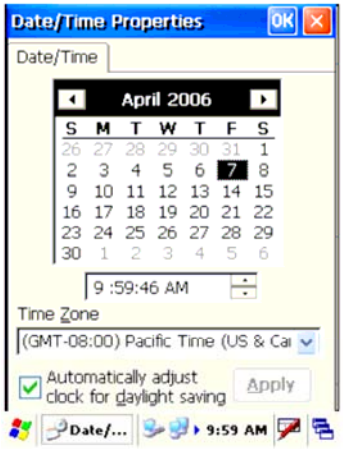
Before using the HT660e please take a few minutes to set the time and date so that data can be properly time-stamped.

Setting the Time Zone

Follow the steps below to set up your time zone.

1. Tap the location arrow to see a list of cities.
2. Choose your location (or nearest listed one).
3. Select the Daylight Savings Time check box, if necessary.
4. Tap the Apply button.

If you would like the terminal automatically adjust clock for daylight saving, please tick on it.



Setting Date/Time

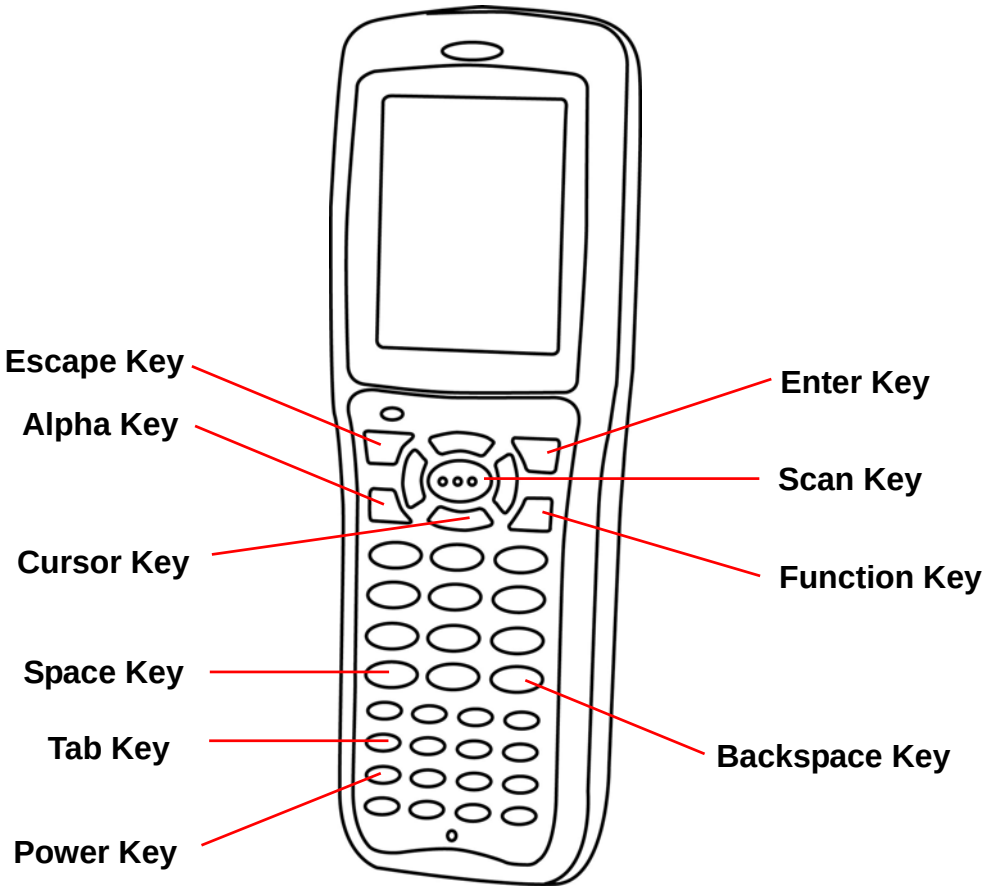
Tap the Left or Right arrows to scroll the year and month you desire. Or, directly tap location of year or month to change the year or month setting. To set up time, tap on the Hr/Min/Sec AM/PM to input the Hr/Min/Sec

Chapter 2

Using the Keypad and Scanner

Keypad

Data can be entered via its 36-key keypad, which includes: 0~9, alpha, function, escape, backspace, enter, scanner trigger, cursor, and on/off keys.



[ENT] The "Enter" key confirms data entry.

[FUNC] The Function Key is used in conjunction with specific number keys to operate as Hotkeys (see next page).

[Bksp] **The backspace key erases the character to the left of the cursor.**

[ESC] The escape key returns the user to a previous page.

[TAB] The Tab key moves the cursor to the next tab or next control on a form.

[Cursor] The cursor key moves the cursor around the screen.

[Alpha] The Alpha key toggles Alpha mode and Caps mode. First press of the Alpha key turns the HT660e's keys to input alpha characters, indicated by a blue LED light. A second press turns the input to upper-case characters, indicated by a green LED. A third press returns the HT660e to numeric input.

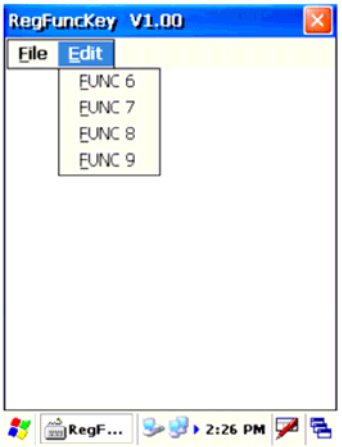
HT660e HotKey

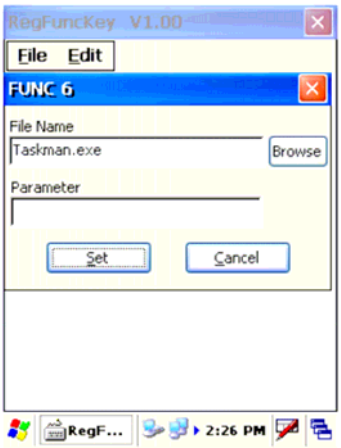
The HT660e provides hotkeys for frequently used functions. Press the Function key and the appropriate numeric key for the following functions listed below:

Func 6 = Task Manager
Func 7 = Scanner Setting
Func 8 = Power Properties
Func 9 = System Info

Hotkeys can be modified to suit the user's preferences. To modify hotkeys, please follow the path below:

Path: My computer/Windows/RegFuncKey.exe





Bar Code Scanner

The HT660e has an integrated 1D laser bar code scanner (depending on model number) capable of reading all major bar code labels.

Chapter 3

Power system

Charging the Lithium-Ion Battery Pack

The HT660e's batteries can be charged via the USB or serial communication cable, or via the optional cradle - both using the included AC adaptor. Please charge the battery for at least 4 hours per session to ensure a full charge. Please note that the first time charge should be for at least 12 hours (see the description below).

Charging the Main and Backup Battery for the First Time

When first charging the HT660e, please allow at least 12 hours to fully charge both the main and backup batteries. When the HT660e arrives from the factory the backup battery switch is in the OFF position in order to protect the backup battery. Before first charging the HT660e, make sure the backup battery switch is moved to the ON position. The backup battery switch can be found inside the main battery compartment. Data loss can occur if the backup battery is not adequately charged - therefore it is imperative to ensure that the backup battery switch is in the ON position before charging for the first time.

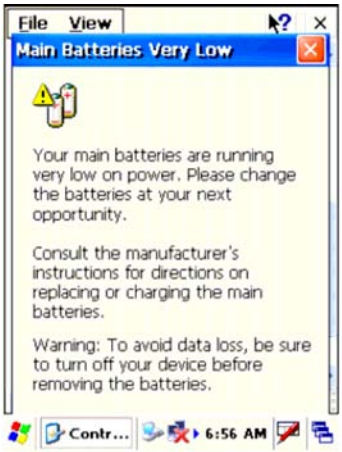
A fully charged backup battery can store data for up to 72 hours without power from the main battery. This is not recommended. Please make sure an adequately charged main battery or AC power is presented and try not to rely on the backup battery for other than unusual or emergency situations. To prevent data loss due to backup battery failure (always a slim possibility), please minimize the amount of time that the backup battery has to operate without the main battery pack installed or while disconnected from AC power.

Environment Consideration for Charging

It is important to consider the environment temperature whenever you are charging the Lithium-Ion battery pack. The process is most efficient at normal room temperature or slightly cooler. It is essential that you charge batteries within the stated range of -5°C to 50°C. Charging batteries outside of the specified range could damage the batteries and shorten their charging life cycle.

Power Status Indication

When the "Main Batteries Very Low" icon appears, charging the main battery pack as soon as possible is highly recommended in order to avoid system shutdown at an awkward moment.



"Backup Battery Low" Icon

When the "Backup Battery Low" icon appears, it indicates that the backup battery is low and needs to be charged.

Charging the Lithium-Ion Battery Pack

Automatic shutdown of the HT660e

The HT660e will enter idle mode when there is no task, or all tasks are waiting for input. In default setting, the HT660e will automatically turn itself off if it remains idle for 3 minutes and when there is no external charging power applied. Pressing the power button will return the HT660e to the same point at the time of automatic shutdown.

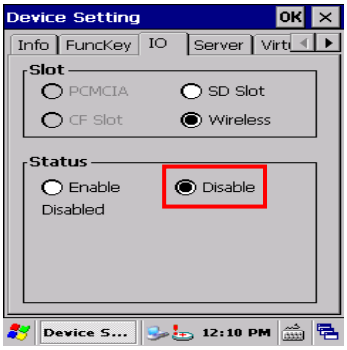
Do not leave the terminal for a long time in the charging cradle and do not charge the battery with a cable long, which will shorten the battery life and cause battery expanding/ballooning. The unit should not be subject to very high temperature, excessive moisture, and direct heat. Avoid the battery from being fully charged and staying in a high temperature environment. Avoid

terminal or spare battery from staying in a hot vehicle. For prolonging the storage time, keep the battery at a 40% charge level. Lithium ion batteries oxidize least when they are stored at the state of 40% charge.

To save the battery power, it is better to turn off wireless mode. Please follow the steps below to turn off the wireless mode

Tap **Setting** → **Control Panel** → **Device Setting** to enter the **Device Setting** zone.

Move to the **IO** tab and select **Disable** to disable the wireless mode.



Storage and Safety Precautions

Batteries should be stored in an open environment and placed where there is no risk of accidental shorting or other damage. Although charged Li-Ion batteries may be left unused for several months, their capacity may be reduced due to back up and internal resistance. If this happens they will require recharging prior to use. Li-Ion batteries may be stored at temperatures between -4°F and 158°F (-20°C to 70°C).

Warm Boot / Cold Boot / Factory Default

Warm Boot

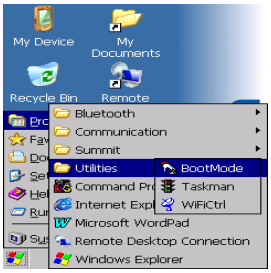
Warm Boot is a reset to re-boot the HT660e without losing saved data. Perform a warm boot when:

- The terminal fails to respond.
- After installing some software applications
- After making changes to certain system settings, such as network cards

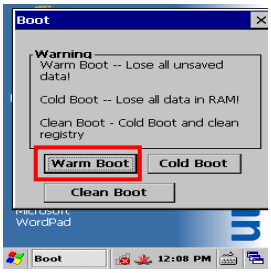
WARNING - Performing a Warm Boot will result in the loss of all unsaved data!

Warm Boot via Software

Tap **Start** → **Programs** → **Utilities** → **BootMode**.

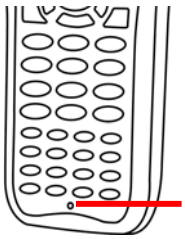


Tap "**Warm Boot**". The system will be warm started.



Warm Boot via Hardware

Use a blunt pin (like an unfolded paper clip) to stab the warm-boot pinhole located on the front of the HT660e, below the keypad.



warm-boot pinhole

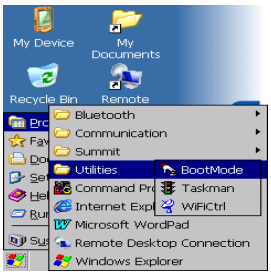
Cold Boot

Cold Boot is used to reset the operating system and reset the terminal after a bootloader, keyboard, or kernel upgrade.

WARNING - Performing a Cold Boot will result in the loss of all data in RAM!

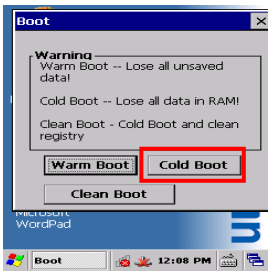
Cold Boot via Software

Tap **Start** → **Programs** → **Utilities** → **BootMode**.



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

You will need to recalibrate the screen and reset the date and time.



Cold Boot via Hardware

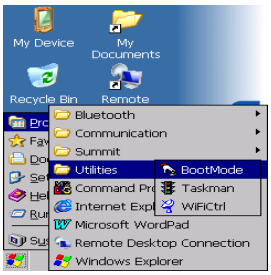
1. Remove the Main Battery.
2. Switch OFF the Backup Battery.
3. Switch the Backup Battery back ON.
4. Insert the Main Battery.
5. The terminal will restart.
6. Recalibrate the screen and reset the date and time.

Clean Boot via Software

Clean Boot is used to reset the terminal to factory default settings.

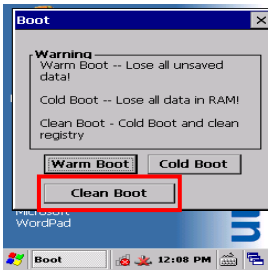
WARNING - Performing a Clean Boot will return the HT660e to its original factory settings!

Tap **Start** → **Programs** → **Utilities** → **BootMode**.



Tap “Clean Boot”. The system reset the terminal to factory default settings.

You will need to recalibrate the screen and reset the date and time.



Chapter 4

Data Communication

Introduction

The Unitech HT660e allows users to link to a host computer via USB, Bluetooth, or Wireless connection for data communication.

This chapter provides an overview of the communication of the HT660e. The following subchapters cover these topics:

- "Series or USB or Modem" communication via cable or cradle
- "RF Communication" for details about wireless communication between the HT660e and host computers
- "Microsoft ActiveSync" for details about serial communication via USB port

Connecting

Serial or USB Cable

Plug the USB end of the HT660e communication cable into your PC's USB port, and the other end into the HT660e's communication port. To simultaneously charge the HT660e, plug the AC power adaptor into the power jack of the USB cable.

Cradle

USB Cradle

For data transmission, plug one end of your HT660e's USB communication cable into your PC's USB Port and the other end into the HT660e Cradle's USB port. To simultaneously charge the HT660e, plug the AC power adaptor into the power receptacle on the Cradle.

Ethernet Cradle

For data transmission, plug telephone line to the RJ45 port of your HT660e cradle. To simultaneously charge the HT660e, plug the AC power adaptor into the power jack on the cradle.

Using ActiveSync

Using Microsoft ActiveSync, you can synchronize and transfer information between your desktop computer and terminal. The most current version of ActiveSync can be downloaded from www.microsoft.com.

Additional Capabilities

With ActiveSync, you can also:

- Back up and restore your device data.
- Copy (rather than synchronize) files between your device and desktop computer.
- Control when synchronization occurs by selecting a synchronization mode. For example, you can synchronize continually while connected to your desktop computer or only when you choose the synchronize command.
- Select which information types are synchronized and control how much data is synchronized. For example, you can choose how many weeks of past appointments you want synchronized.

Before beginning installation, carefully read the following:

- Because you will be restarting your computer during installation, save your work and quit all programs before you begin.
- To set up your communication settings, the HT660e serial cable is

required to connect the HT660e to your host computer.

- If you run the Windows NT® operating system with a service pack, you will be informed during setup that you may need to reinstall the service pack. Try connecting first, and if unsuccessful, reinstall the latest service pack.

Requirements

To synchronize, ActiveSync version 3.7 or higher must be installed on both your desktop computer and the HT660e terminal. The HT660e terminal is installed with ActiveSync and shipped. Therefore, you must install ActiveSync 3.7 on your desktop computer.

To install ActiveSync on your desktop computer, please link to Microsoft website to get free download driver.

Installation

Follow the installation procedure below to install Microsoft ActiveSync, connect your HT660e to your desktop computer, and establish a partnership for synchronization, if required.

In order to exchange data between your computer and the HT660e, Microsoft ActiveSync must be installed on your computer. Use A USB cable that comes with your device or the docking station to connect the device to your computer.

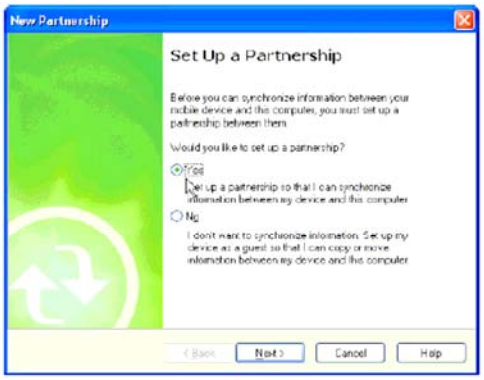
NOTE: If you have a previous version of the Microsoft ActiveSync installed in your computer, uninstall it first before installing the latest version of Microsoft ActiveSync.

To install Microsoft ActiveSync on your computer:

1. Close any open programs, including those that run at startup, and disable any virus-scanning software.
2. Download the ActiveSync software from the Microsoft ActiveSync Download page at http://www.microsoft.com/downloads/details.aspx?Fami-lyID=7269173a-28bf-4cac-a682-58d3233efb4c&DisplayLang=en.
3. Browse to the location of the downloaded file, and double-click it. The installation wizard begins.
4. Follow the instructions on the screen to install Microsoft ActiveSync.

Connecting the Device to Your Computer

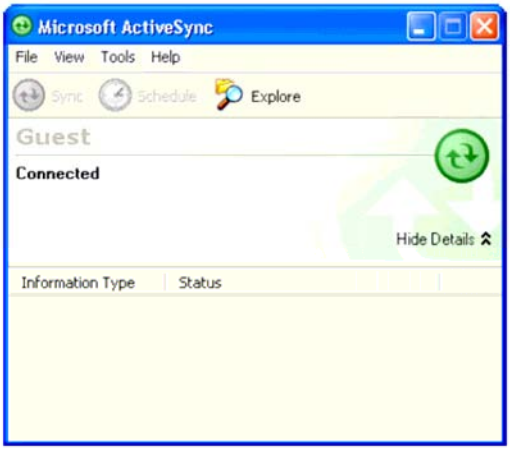
1. After ActiveSync has been installed, connect HT660e to your PC as described in Connecting the terminal to a host (PC/Notebook) to a PC.
2. Turn the HT660e on.
3. ActiveSync starts automatically and configure the USB port to work with the HT660e. The New Partnership setup wizard automatically starts.



NOTE: If ActiveSync doesn't start automatically, click Start → Programs → Microsoft ActiveSync.

NOTE: If a message appears indicating that it is unable to detect a connection, click the Cancel button and manually configure the communication settings.

4. Follow the on-screen instructions.
5. When the configuration process is complete, the Active-Sync window appears.



6. Synchronization will be initialized and will take place if you've chosen to synchronize periodically or upon connection.

NOTE: Your computer can create a partnership with multiple HT660es. Also, a HT660e can create a partnership with up to two computers.

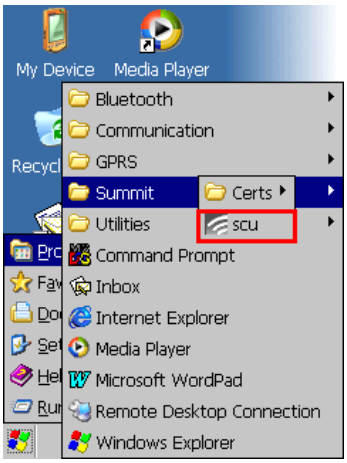
WiFi Connection

Unitech terminals come with built-in RF facility, Summit or Marvel. A wireless network can be added either when the network access point is detected or by manually entering setting data. Before following these instructions, make sure if authentication information is needed.

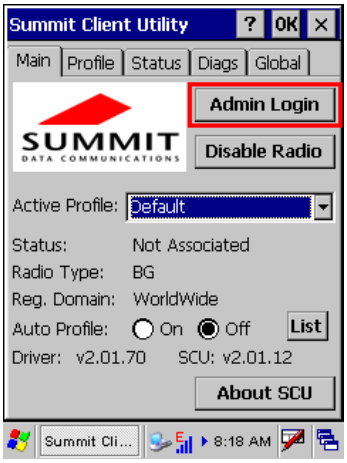
Here, you can use, for example, the Summit Client Utility tool to do or change the WiFi settings.

Admin Login

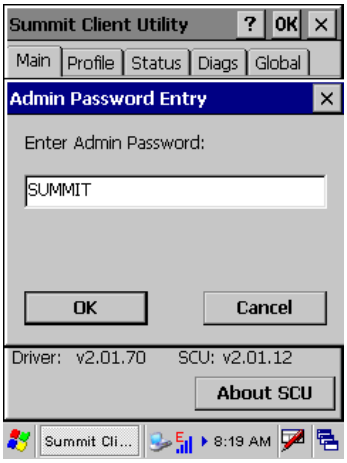
1. Tap **Start** → **Programs** → **SUMMIT** → **scu**.



2. To login as an administrator, tap **Admin Login**.

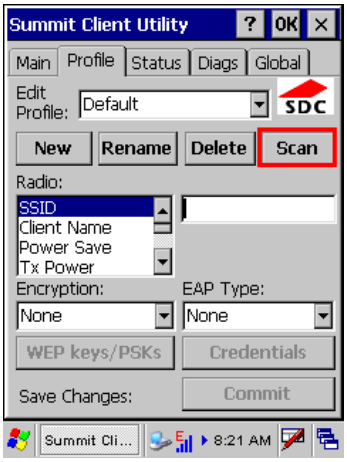


3. Enter the Admin Password. (Default pass-word: SUMMIT

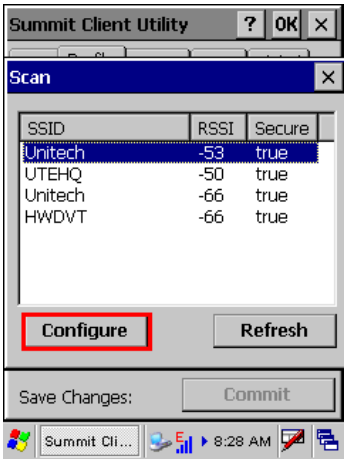


Scan Available AP

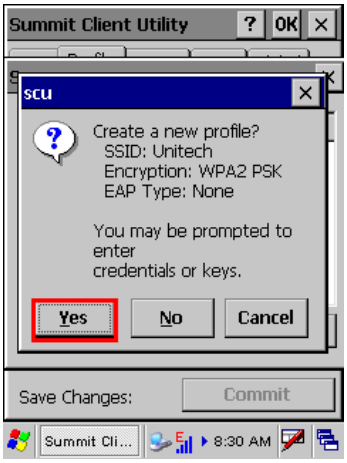
1. Under **Profil**e tab, tap Scan for available AP.



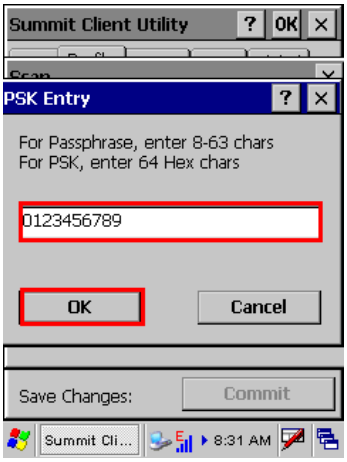
2. You may select a desired AP to create a new profile. Tap **Configure**.



3. Tap **Yes** to create the new profile.

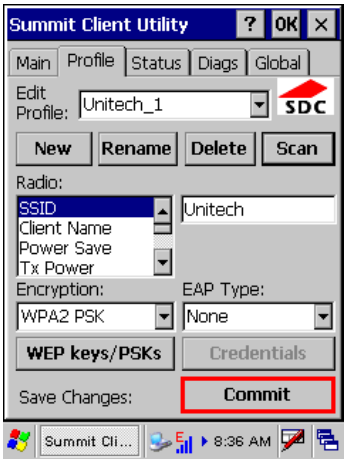


4. Enter the WEP key or network key. Tap **OK**.

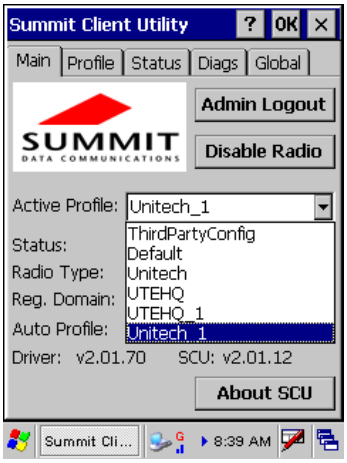


Commit and Activate

1. Tap **Commit** to activate the setting.



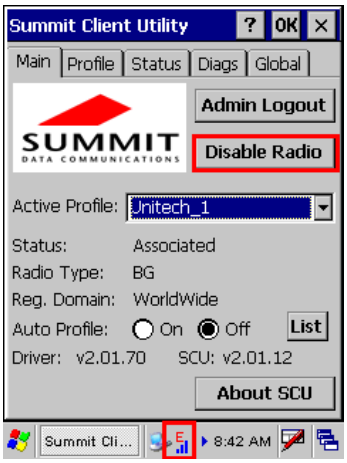
2. Under **Main** tab, select the profile you want to activate.



3. A pop-up window appears **"***A Power Cycle is required to make settings activate properly.*" Tap **OK**, and then tap **OK** to exit the Summit Client Utility.
4. Tap **Start** → **Programs** → **Utilities** → **Boot-Mode**. Tap **Warm Boot** to warm start the terminal and load the previous settings.
5. The Summit icon on the taskbar indicating the AP is connected.

   Double tap this icon to bring up Summit Control Utility. Tap **Disable Radio**, you can disconnect the AP.

   Under **Status** tab, you can see the IP address, signal strength and quality.



If you want to learn more detailed settings of the SUMMIT utility, please visite SUMMIT website (http://www.summitdatacom.com/documentation.htm).

Bluetooth Connection

Your device is provided with Bluetooth wireless technology that you can use to synchronize information with a computer equipped with a Bluetooth adapter or access point. Bluetooth wireless technology allows you to communicate with the computer whenever it is within a range.

You may use BTMAN, which will be described, to enable the Bluetooth module.

Using BTMAN to connect and pair a Bluetooth device

After enabling the built-in Bluetooth module, you may use BTMAN to connect and pair a Bluetooth device around.

BTMAN is a Bluetooth manager gathering and managing all Bluetooth profiles you add.

Tap **Start** → **Programs** → **Bluetooth** → **BTMAN** to open the manager.

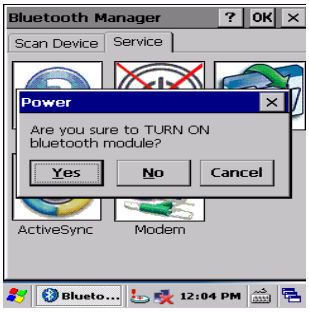
In the **Service** tab, six icons, **About**, **Power OFF/ON**, **FTP**, **ActiveSync**, and **Modem**, are arranged.

About: To show you the software version and BT module MAC address
Power OFF/ON: To enable ON or OFF the BT module
FTP: To transfer files to or receive files from a PC or terminal
ActiveSync: To synchronize with a PC
Modem: To allow you go on Internet after connecting to a cell phone as a modem

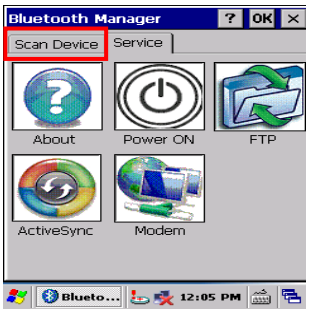
Power OFF/ON: To enable or disable paired Bluetooth earphones

First of all, tap the **Power OFF** icon to enable the Bluetooth module.

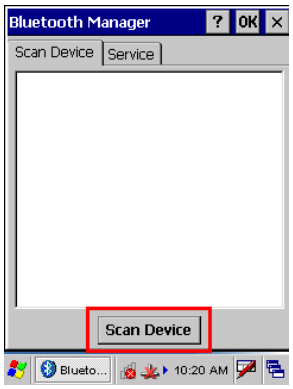
Tap **Yes** to turn ON the Bluetooth module.



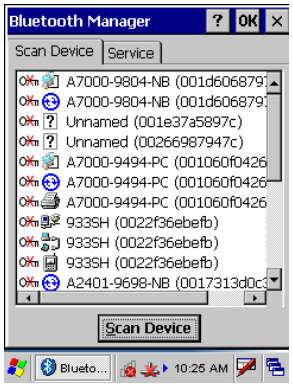
Tap the **Scan Device** tab to scan Bluetooth devices around.



Tap **Scan Device**.

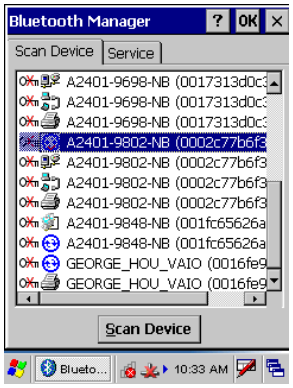


Scanned Bluetooth devices around are listed. Later, you may double tap a desired device and check Trusted and then Active.

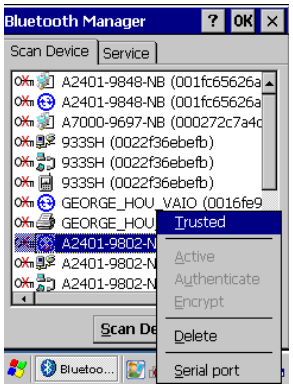


ActiveSync Between HT660e and a PC or Terminal

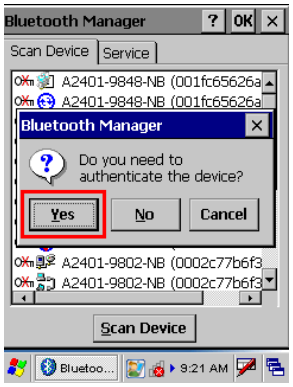
On the **Scan Device** tab, for example, select and double tap a desired PC.



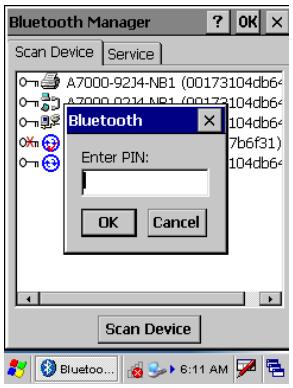
Tap **Trusted**.



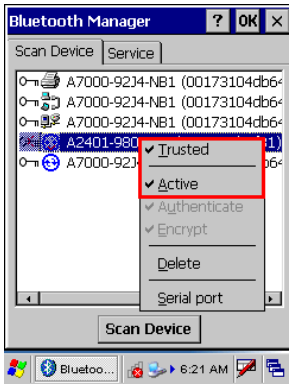
Tap **Yes**.



Enter a PIN code on the terminal and tap **OK**. Then, an Enter PIN dialog box pops up and enter the PIN code same as that you inputted on the terminal.

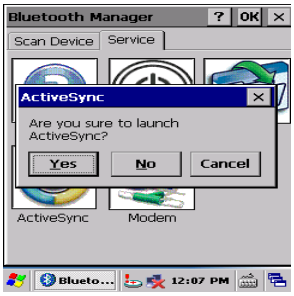


Double tab the paired PC. When the pairing is successful, **Trust** and **Active** are checked.



Move to the Service tab and tap **ActiveSync**.

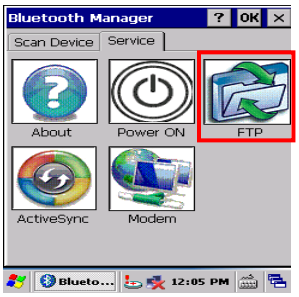
Tap **Yes** to launch ActiveSync. Then, HT660e will synchronize with the desired PC by means of Bluetooth.



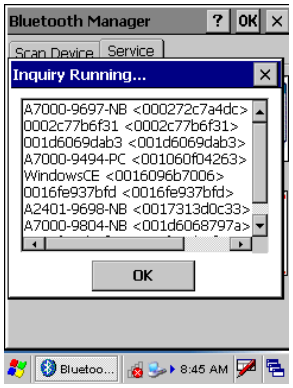
File Transfer Protocol (FTP) via Bluetooth

You may use the FTP profile to transfer files to and receive files from a PC or terminal. Please follow the instruction below to connect and pair the PC or terminal for file transfer and receiving.

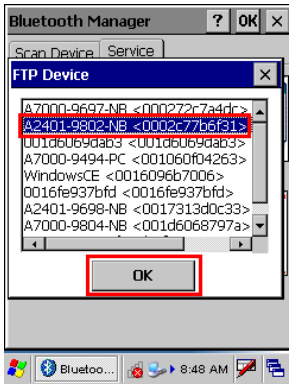
On the **Serve** tab, tap the **FTP** icon.



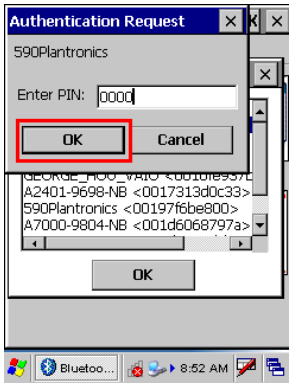
The terminal is searching for PCs and terminals that are provided with the FTP function.



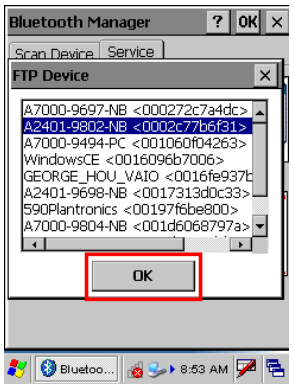
Select a device and tap **OK**.



An Authentication Request box pops up. Then, input a PIN code and tap **OK**.

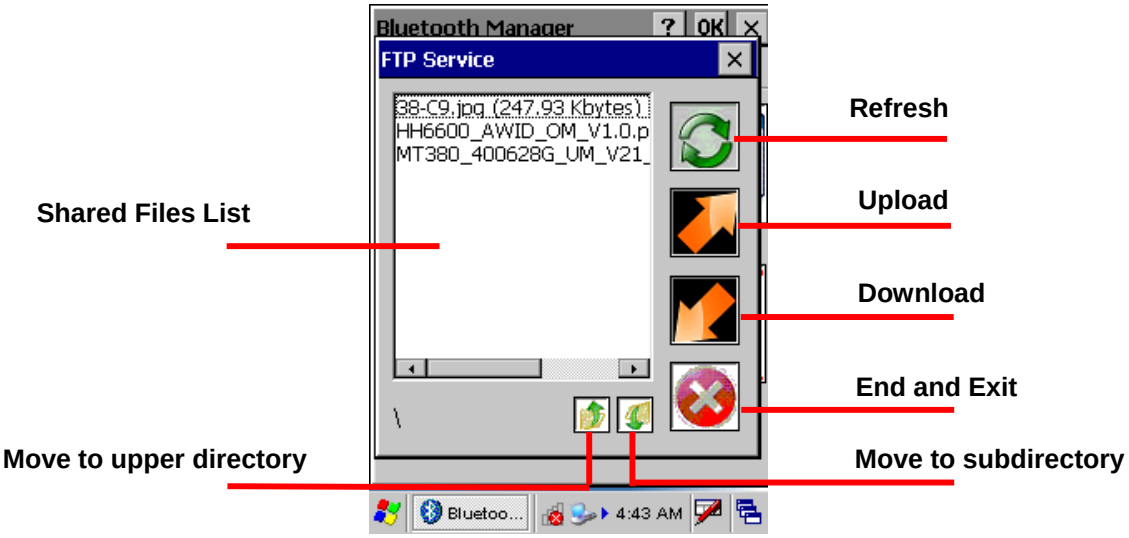


Choose a desired PC or terminal to or from which you want to transfer or receive data. Tap **OK** to confirm the connection.



Next, a dialog box pops up on the selected PC. Select and determine a path where a file or files may be transferred between HT660e and the PC.

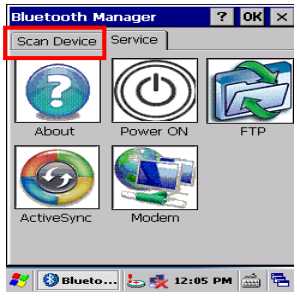
The FTP Service zone appears. All function icons in the zone are defined below.



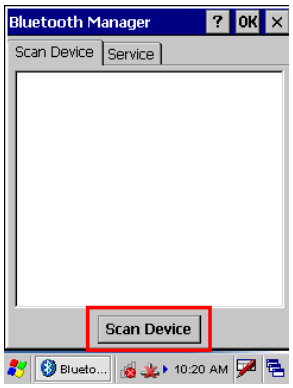
Modem

You may surf on Internet by connecting HT660e to a mobile phone that serves as a modem. Follow the instruction below to connect and pair a mobile phone with GPRS function.

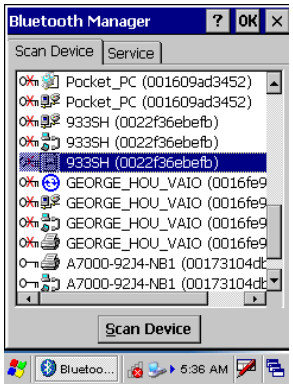
Tap the **Scan Device** tab to scan Bluetooth devices around.



Tap **Scan Device**.



Scanned Bluetooth mobile phones around are listed. Later, you may double tap a desired phone and check Trusted and then Active. Then, HT660e is successfully connect to and paired with the phone as the modem.



Chapter 5

Useful Utilities

Introduction

Unitech has been developing some of useful utilities for user's application. The followings are Unitech Utilities introduction.

Scanner Setting

When it is necessary for the user to change the default barcode symbology for a different application, Scanner Control Panel provides the setting function to change default symbology, place delimiter characters behind scanned data, and save the settings. Run this program from \Start\Setting\Control Panel\Scanner Setting.exe and Scanner Control Panel will be displayed.

Barcode Symbologies

Barcode Symbology	Enable/ Disable	Char Check / Digit verification	Transmit Check Char/digit	Leading Digit Transmit	Others
Bookland EAN	YES				
Codabar	YES	YES	YES		Transmit Start/Stop bits, CLSI format, *data length
Code 11	YES		YES		* check digits, *data length
Code 128	YES				*data length
Code 32	YES				Transmit Tailing digit
Code 39	YES	YES			For ASCII,

Barcode Symbology	Enable/ Disable	Char Check / Digit verification	Transmit Check Char/digit	Leading Digit Transmit	Others
					Transmit Start/Stop bits, Function Code, Double label decoding,*data length, *double labels separator
Code 93	YES		YES		*data length
Deta Code	YES	YES	YES		
EAN 128	YES		YES		Transmit Code ID, * Field separator
EAN 13	YES	YES			
EAN 8	YES	YES			* Not suppress first or last digit, *data length
Interleaved 2 of 5	YES	YES	YES		Fixed Length, * Not suppress first or last digit, *data length
Label Code IV&V	YES		YES		
MSI/Plessey	YES		YES		* Check digit double module 10, * data length
Interleaved 2 of 5	YES	YES	YES		Fixed Length, *Data Length
Telepen	YES				*Standard Character Set
UPC A	YES		YES	YES	
UPC E	YES		YES	YES	Zero Expension,NSC
UPC/EAN Group					Supplement 2, Supplement 5,Insert Space

Barcode Symbology	Enable/ Disable	Char Check / Digit verification	Transmit Check Char/digit	Leading Digit Transmit	Others
					before supplement, most have supplement, *Add-on code try level
Group GS1	YES				

Note: *Value Adjustable Scanner Control Pannel V3.0

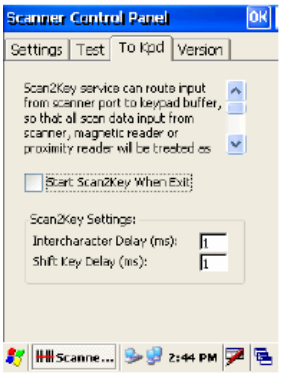
Barcode Symbologies 2D

Barcode Symbology	Enable/ Disable	Char Check / Digit verification	Transmit Check Char/digit	Leading Digit Transmit	Others
Aztec	YES				Runes, *data length
Codablock F	YES				*data length
Code 49	YES				*data length
Data Matrix	YES				*data length
EAN-UCC Composite	YES				UPC composite, *data length
MaxiCode	YES				*data length
MicroPDF417	YES				*data length
OCR	YES				OCR mode, OCR direction, Template, Group G, Group H, Check character
PDF-417	YES				*data length
QR Code	YES				
TLC-39 (TCIF Linked Code 39)	YES				

Note: *Value Adjustable Scanner Control Panel Version 5.14

Scan2Key

The Scan2Key application can route input from the scanner port to the keyboard buffer, with the result that all scanned data will be treated as if they were input from the keypad. With this router, scanned data can be directly input into generic applications like MS Pocket Word. Scan2Key can be found at: \Start\Setting\Control Panel\Scanner\To kpd.



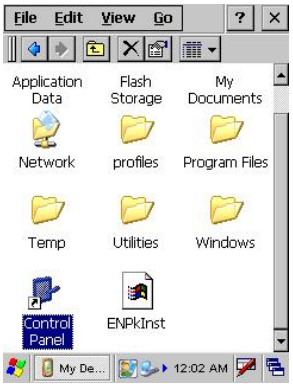
Chapter 6

Device Setting

Introduction

The Device Setting is a short cut for you to view device information and do settings, such as Function Key, I/O, Server and so on. The following description will guide you through completion of all device-setting items.

1. Left click Control Panel in My Device.



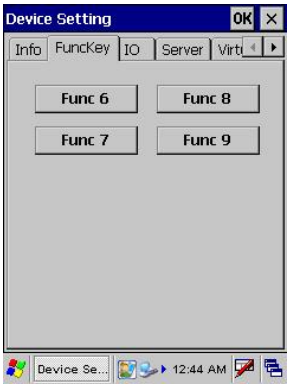
2. Double click Device Setting.

Info

Info tab shows general information of this terminal such as OS version, memory space, battery power, product ID and etc.

Funckey

1. Tap “FuncKey” tab. Four hot keys can be changed by the users.



2. Tap “Func6”. Tap “Browse” to select a file. Tap “Set”.

3. Press “Func” key and “6” key. Func6 will call the application that the users specified.
4. You can repeat the steps for Func7, Func8, and Func9.

   By default:

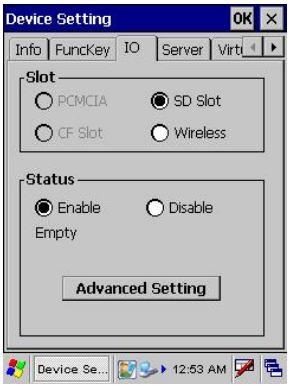
   Func6 – Task Manager

   Func7 – Scanner Settings

   Func8 – Power Properties

IO

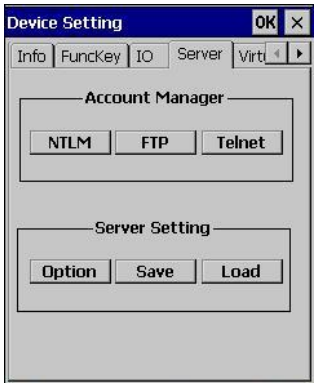
1. Tap “IO” tab.



2. Under status, select “Enable” or “Disable”.
3. When enable, SD/ Wireless card is always accessible; when disabled, SD/Wireless card is not accessible.

Server

Server Manager is a tool for the user to manager the NTLM (Windows NT LAN Manager) users, FTP users and telnet users.



Account Manager

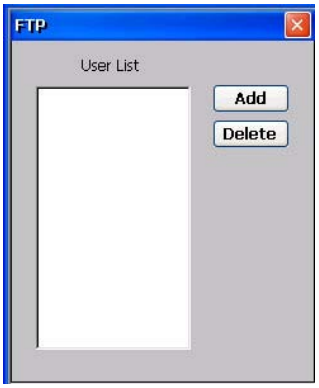
NTLM

1. Tap “Server” tab.
2. Tap “NTLM”. Tap “Add” to add a new user.

3. Key in the user name and password. Tap OK.
4. To modify a user's password, select the user and tap "Modify".
5. Enter the new password and confirm password. Tap OK.
6. To delete a user, select the user you want to delete, tap "Delete".

FTP

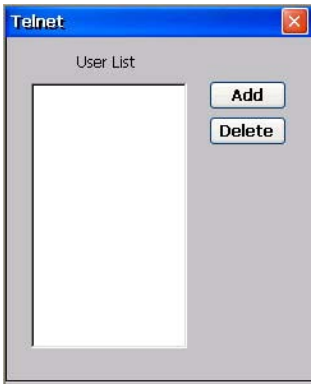
1. Under "FTP" tab, tap "Add" to add FTP user.



2. Select the user and tap "Add".
3. To delete ftp user, select the user and tap "Delete". You will see the dialog box – "*Do you want to delete the user X?*" Tap "Yes".

Telnet

1. Under "Telnet" tab, tap "Add". Add the telnet user from NTLM.
2. Select the user and tap "Add".

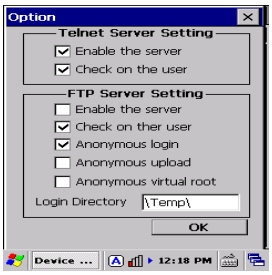


3. To delete telnet user, select the user and tap "Delete". You will see the dialog box – "*Do you want to delete the user X?*" Tap "Yes".

Server Settings

Option

1. Tap “Option”.



For telnet server setting, enable/disable server.

2. For FTP server setting, enable/disable server and define anonymous login.

Save

Tap “Save” to save the server settings.

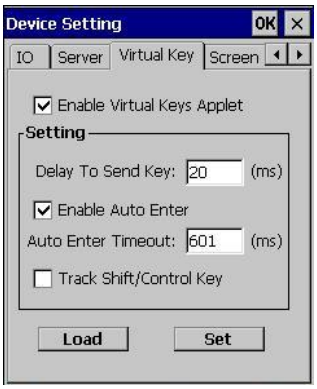
Load

Tap “Load” to load the saved server settings.

Virtual Key

This tool allows you to enable/disable the alpha keys on the terminal’s keypad, set auto enter and inter character delay.

1. Tap “Virtual Key tab.



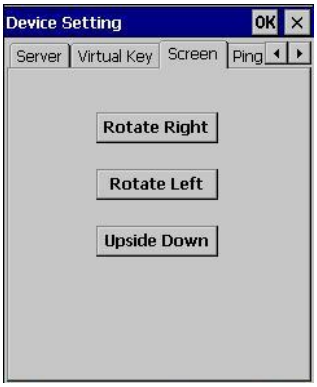
2. Check “Enable Virtual Keys Applet”. Tap “Set”. Tap OK.
3. Open MS WordPad and test alpha keys. Press “alpha” key and press numeric key. The characters output as alpha keys.
4. Uncheck “Enable Virtual Keys Applet”. Tap “Set”. Tap OK.
5. Press “alpha” key and press numeric key. The characters output as

non-alpha keys.

6. In “Virtual keys”, enter the time delay for “Delay To Send Key”. Characters will be output in the speed as defined.
7. In “Virtual keys”, check “Enable Auto Enter”.
8. Define a value for “Auto Enter Timeout”. Tap “Set”. Tap OK.
9. In MS WordPad, turn to alpha mode. Press and hold a key. The alpha characters are highlighted in a loop. Release the key. The character, which was focused on will be printed after a period of time, according to the auto enter timeout defined.
10. Tap “Load” to load the previous setting.

Screen

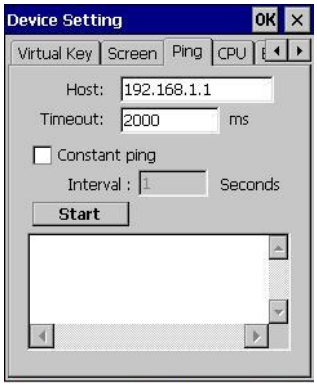
1. Tap Rotate Right. Screen rotates to the right.
2. Tap Rotate Left. Screen rotates to the left.
3. Tap Upside Down. Screen rotates upside down.



Ping

This tool allows you to ping to other devices in LAN network while your terminal is connected to the network.

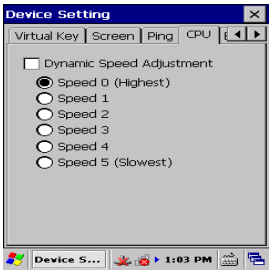
1. Tap “Ping” tab, on Host field, enter the IP address of the device you want to ping to.
2. Check “Constant Ping” so that your terminal will continuously ping to the remote device.
3. Tap “Start”. The terminal will search for the remote computer with the IP address, which you entered. If not found, you will see “Request Time Out”. If the remote computer is found, you will see “Host Responding”.



CPU

This allows you to select the speed of the CPU according to your requirement of the performance.

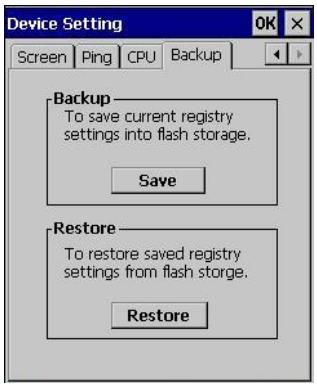
Check “Dynamic Speed Adjustment”, or select a CPU speed, which will let the CPU speed change.



Backup

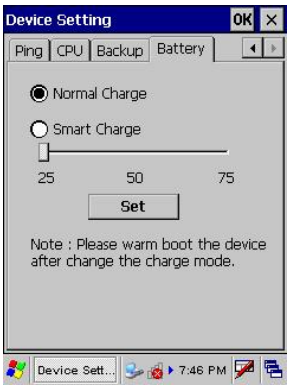
This tool allows you to save the current registry or reset to factory default.

1. Tap “Backup” tab.
2. Tap “Save” to save current registry settings.
3. Or tap “Restore” to reset registry to factory default. The terminal will be warm started. (Note that “Restore” button is grey out if the registry setting was not saved before.)



Battery

This tool allows you to charge the battery in the Smart Charge mode as soon as the power of battery decreases to a level to which you drag. After changing the charge mode, you are required to warm boot the device. Whenever you charge the battery in the Smart Charge mode, turn ON the device. The default charge mode is Normal Charge.



Appendix

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