

Rugged Handheld Terminal

- HT510 -



User's Manual

Version 1.0



Revision History

Date	Change Description	Version

Preface

About This Manual

Thank you for purchasing the unitech product.

This manual explains how to install, operate and maintain our product.

No part of this publication may be reproduced or used in any form, or by any electrical or mechanical means, such as photocopying, recording, or information storage and retrieval systems, without permission in writing from the manufacturer. The material in this manual is subject to change without notice.

Regulatory Compliance Statements

FCC Warning Statement

This device 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 with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with 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 device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure 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.
2. This device must accept any interference received, including interference that may cause undesired operation.

RF Radiation Exposure Statement

For body contact during operation, this device 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 1.0 cm from the body.

Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

European Conformity Statement

unitech Electronics co., Ltd herewith declares that the unitech product is in compliance with the essential requirements and all other provisions of the RED 2014/53/EU directive.

The declaration of conformity is available for download at :

<https://portal.unitech.eu/public/Safetyregulatorystatement>

CE RF Exposure Compliance

For body-worn operation, this device has been tested and meets the ICNIRP guidelines and the European Standard EN 62209-2, for use with dedicated accessories, SAR is measured with this device at a separation of 0.5 cm to the body, while transmitting at the highest certified output power level in all frequency bands of this device. Use of other accessories which contain metals may not ensure compliance with ICNIRP exposure guidelines.

CE Mark Warning

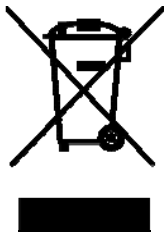


RoHS Statement



This device conforms to RoHS (Restriction Of Hazardous Substances) European Union regulations that set maximum concentration limits on hazardous materials used in electrical and electronic equipment.

Waste electrical and electronic equipment (WEEE)



unitech has set up a policy and process to meet the 2012/19/EU concerning electronic waste disposal.

For more detailed information of the electronic waste disposal of the products you have purchased from unitech directly or via unitech's resellers, you shall either contact your local supplier or visit us at :

<https://portal.unitech.eu/public/WEEE>

Taiwan NCC Warning Statement

低功率電波輻射性電機管理辦法

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。

低功率射頻電機需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。

SAR標準值2.0W/KG，送測產品實測值為：0.225 (W/KG)

注意事項：

1. 使用過度恐傷害視力。
2. 使用30分鐘請休息10分鐘；2歲以下幼兒不看螢幕，2歲以上每天看螢幕不要超過1小時。
3. 減少電磁波影響，請妥適使用。
4. 因應各地區/國家開放頻道不同，請依據當地主管機關與電信業者實際公告資訊為主，如服務細則有所變更，請自行洽詢電信業者，恕不另通知。
5. 無線資訊傳輸設備避免影響附近雷達系統之操作

Note:

Within the 5.25-5.35 GHz band, U-NII devices will be restricted to indoor operations to reduce any potential for harmful interference to co-channel MSS operations.

Laser Information

The unitech product is certified in the U.S. to conform to the requirements of DHHS/CDRH 21CFR Subchapter J and to the requirements of IEC 60825-1. Class II and Class 2 products are not considered to be hazardous. The unitech product 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 prescribed service operations.

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

* Laser information only applies to the products with laser components.

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, including binoculars, microscopes, and magnifying glasses, with will increase eye damage. This does not include eyeglasses worn by the user.

LED Information

The unitech product contains LED indicator(s) or LED ring whose luminance is not harmful to human eyes during normal operation, user maintenance or prescribed service operations.

*LED information only applies to the products with LED components.

Battery Notice

1. To guarantee optimal performance, it is recommended that rechargeable batteries be replaced every year, or after 500 charging cycles are completed. It is normal for the battery to balloon or expand after one year or 500 cycles. Although it does not cause damage, it cannot be used again and must be disposed of according to the location's safe battery disposal procedures.
2. If a battery performance decreases more than 20%, the battery is at the end of its life cycle. Stop use and ensure the battery is disposed of properly.
3. The length of time that a battery lasts depends on the battery type and how the device is used. Conserve the battery life by doing the following:
 - Avoid fully uncharging the battery because this places additional strain on it. Several partial uncharges with frequent charges are better than a fully uncharged battery. Charging a partially charged battery does not cause harm to the unit.
 - **DO NOT leave the battery pack or in the device in a hot condition such as in the car with closed door on a hot day or similar environment, and/or under direct sunlight for an extended period of time. High-temperature condition might cause the battery damaged for further safe usage. Keep the device with the battery within acceptable operating temperatures (please refer to the “specification” section for further details).**

To guarantee optimal battery performance, we generally recommend you replace your rechargeable batteries every two years, or after 500 charging cycles. By ignoring the warning message from above and continuing using the battery neglectfully may lead to a critical consequence.

- Do not leave the battery uncharged and unused for an extended period of time, the battery will wear out and the longevity of the battery will be at least half of one with frequent charges.
- 4. Protect battery life by not over or under charging the battery.
- 5. Please do not leave battery unused for long time without charging it. Despite unitech's safety precautions, the battery pack may begin to change shape. If so, stop using it immediately. Please check to see if you are using a proper power adapter to charge the battery or contact your service provider for service.
- 6. If you cannot charge the battery after it has been idle for an extended period of time and it begins to heat up, please do not try to charge it. It may not be functional anymore.
- 7. Please only use the original battery from unitech. Using a third party battery can damage our products. Please note that when such damage occurs, it is not covered by unitech's warranty policy.

CAUTION!

- RISK OF EXPLOSION IF BATTERY IS REPLACED INCORRECTLY.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
- 如果更換不正確之電池行事會有爆炸的風險
請依製造商說明書處理用過之電池
- 如果更換不正確之電池行事會有爆炸的風險
請依製造商說明書處理用過之電池

Battery charge notice

It is important to consider temperature when the battery pack is charging. 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 0°C to 40°C. Charging batteries outside of the specified range could damage the batteries and shorten their life cycle.

CAUTION! Do not charge batteries at a temperature lower than 0°C. This will make the batteries unstable and dangerous. Please use a battery

temperature detecting device for a charger to ensure a safe charging temperature range.

CAUTION! To ensure the unit working properly, please keep all connectors away from the contaminants staying inside of them such as dust, grease, mud, and water. The negligence may cause the unit with no communication, short circuited, overheated and so on.

CAUTION! If the connector is damaged, please ensure the connector is being fully repaired before use the unit to avoid causing short circuited.

Storage and safety notice

Although charged 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. Batteries may be stored at temperatures between -20°C to 60°C, however they may deplete more rapidly at higher temperatures. It is recommended to store batteries at room temperature.

** The message above only applies to the usage of the removable batteries.
For the products with non-removable batteries / without batteries, please refer to the specification of each product.*

Product Operation and Storage Notice

The unitech product has applicable operation and storage temperature conditions. Please follow the limitation of suggested temperature conditions to avoid failure, damage or malfunction.

**For applicable temperature conditions, please refer to the specification of each product.*

Adapter Notice

1. Please do not leave the power adapter in the socket when it is not connected to your unitech product for charging.
2. Please remove the power adapter when the battery is fully recharged.
3. The bundled power adapter that comes with your unitech product is not meant to be used outdoors. An adapter exposed to water or rain, or a very humid environment can cause damage to both the adapter and the product.
4. Please only use the bundled power adapter or same specification of adapter to charge your unitech product. Using the wrong power adapter can damage your unitech product.

** The message above only applies to the product connected to the adapter.
For the products without using the adapters, please refer to the specification of each product.*

Hearing Damage Warning

To prevent possible hearing damage, do not listen at high volume levels for long periods.



Figure 1 – Warning label (IEC 60417-6044)

Worldwide Support

unitech's professional support team is available to quickly answer questions or assist with 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:

Taipei, Taiwan – Headquarters	Europe
Tel: +886-2-89121122 E-mail: info@hq.ute.com Address: 5F, No. 136, Lane 235, Baoqiao Road, Xindian District, New Taipei City 231, Taiwan (R.O.C.) Website: http://www.ute.com	Tel: +31-13-4609292 E-mail: info@eu.ute.com Address: Kapitein Hatterasstraat 19, 5015 BB, Tilburg, the Netherlands Website: http://eu.ute.com
China	Japan
Tel: +86-59-2310-9966 E-mail: info@cn.ute.com Address: Room401C, 4F, RIHUA International Mansion, Xinfeng 3rd Road, Huoju Hi-tech District, Xiamen, Fujan , China Website: http://cn.ute.com	Tel: +81-3-35232766 E-mail: info@jp.ute.com Address: Kayabacho Nagaoka Building 8F.,1-5-19 Shinkawa, Chuo-Ku, Tokyo, 104-0033, Japan Website: http://jp.ute.com
Asia & Pacific / Middle East	Latin America
Tel: +886-2-27911556 E-mail: info@apac.ute.com info@india.ute.com info@mideast.ute.com Address: 4F., No. 236, ShinHu 2nd Rd., NeiHu Chiu, 114, Taipei,Taiwan Website: http://apac.ute.com / http://mideast.ute.com	Tel: +52-55-5171-0528 E-mail: info@latin.ute.com Address: 17171 Park Row, Suite 210 Houston, TX 77084USA (Rep.) Website: http://latin.ute.com
North America	Please scan QR Code to visit us :
Tel: +1-714-8916400 E-mail: info@us.ute.com / info@can.ute.com Address: 6182 Katella Ave, Cypress, CA 90630, USA Website: http://us.ute.com	

Warranty Policy

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

The warranty period is varied from each country. Please consult with your supplier or unitech local office for actual length of warranty period to your purchased product.

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

Table of Contents

Preface	i
Regulatory Compliance Statements	i
Laser Information	vi
LED Information	vi
Battery Notice	vii
Adapter Notice.....	x
Hearing Damage Warning	xi
Worldwide Support	xii
Warranty Policy	xiii
1.1 Package	1
1.2 Product Detail	2
1.3 Specifications	4
1.4 Getting Started	6
1.5 How to add a stylus to HT510	10

1.1 Package

Please make sure the following contents are in the HT510 gift box.
If something is missing or damaged, please contact your unitech representative.

The basic package contents

- HT510 Terminal
- Battery
- Cradle
- Adapter (with US, EU, UK plugs)
- USB Cable
- Stylus
- Wrist Strap
- Quick Start Guide
- Regulatory Compliance Statements

1.2 Product Detail

Front / Rear View



Left and Right View



1.3 Specifications

Operation System	
CPU	1.45GHz Quad Core
OS	Android 7
Memory	2 GB RAM 16 GB Flash
Languages support	English, Simplified Chinese, Traditional Chinese, Japanese, Spanish, German, French and multiple languages
Display	
Screen Size : 3.5 inch VGA (480x 640) color screen	
Touch panel : Capacitive color touch screen ; With screen backlight adjustment	
Buttons / Keypad	
32 keys; large number keys, functions and direction keys	
Camera	
5MP rear camera with LED flash and auto-focus function	
MDM Software	
MoboLink agent, ScanDMServer, SelfUpdate, StageGO, UnitechAPI, uNote,USUS, GenericUpdate, Startup, File Manager	
Engines	
	1D : UPC/EAN , POST, Code 128 , Code 39 , Code93 , Code 11 , Codabar , Interleaved 2 of 5 , Discrete 2 of 5 , Chinese 2 of 5 , MSI , RSSI 2D : 2D codes:Aztec Code, Codabar, Codablock F, Code 11,Code 128, Code 2 of 5, Code 39, Code 93,Data Matrix, EAN/JAN-13, EAN/JAN 8,EAN-UCC Composite Codes, EAN-UCCEmulation, IATA Code 2 of 5, Interleaved 2 of5, Matrix 2 of 5, MaxiCode, MicroPDF417, MSI

Audio	
Built-in microphone, speaker and headphone jack	
RFID	
UHF RFID : Frequency: 865~868MHz, 902~928MHz Protocol: EPC global Class 1 Gen 2 ISO 18000-6C/6B Antenna gain: 3dbi Output Power : 1-30dbm adjustable Data Capture Range: 6~8 meters HF RFID : Frequency 13.56Mhz (NXP PN548) ISO14443A/B, ISO15693 standard	
Regulatory Approvals	
NCC, BSMI	
I/O Interfaces	
USB	MiniUSB (Support OTG)
WLAN	IEEE 802.11a/b/g/n/ac
WWAN	4G LTE TDD-LTD(B38、B39、B40、B41)4G LTE FDD-LTD(B1、B3、B5、B7、B8)UMTS/HSDPA/HSPA/HSPA+(B1/B2/B5/B8)CDMA2000 1x EV-D0 Rev.A BC0 (800MHz)TD-SCDMA Band 34,39GSM/EDGE/GPRS (850,900,1800,1900MHz)
Expansion Slot	MicroSD x 1, up to 64GB
Power Source	
Standard Battery	3.8V, 4500mAH
Enclosure	
Weight	385g (including standard battery)
Dimension	L192 x W73.8 x H30 mm
Environmental	
Operating temperature	-14°F to 122°F (-10°C to 50°C)
Storage temperature	-4°F to 158°F (-20°C to 70°C)
Relative Humidity	5% ~ 95% (non-condensing)
Drop test to Concrete	1.5m
Environmental Sealing	IP65

1.4 Getting Started

1.4.1 Installing the Battery

Insert the battery from the top and slide it in the direction as shown in the picture below. Press the battery down into the battery compartment until the battery release latch snaps into place.



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, connect PC with USB to back up your data, and then recharge your device as soon as possible.

1.4.2 Turning on the terminal for the first time

It is recommended to fully charge HT510 before first use. You can now start up your device to set up the languages, WLAN setting, and date and time.

Power-On Button

Turn ON your device by pressing the power button on the side of the terminal.



1.4.3 Installing SIM / MicroSD Card



Inserting a SIM Card (Only use a standard SIM card)

1. Press battery latch and lift the battery to remove it.
2. Slide the SIM card into the corresponding slots with contacts facing down.
3. Press and pull the card to remove.

Inserting a Micro-SD (Only use a standard SIM card)

1. Slide the MicroSD card holder to **Open** position.
2. Lift the MicroSD card holder.
3. Slide the MicroSD card into the slot with contacts facing down.
4. Close the MicroSD card holder and slide to **Lock** position.

1.4.4 Using Cradle

One slot terminal charging cradle with battery charger

- Provide 5VDC power for operating the HT510
- Simultaneously charges up to one HT510 terminal and one battery using the standard cradle.



1.4.5 Factory Reset

To get in a recovery mode to launch the factory reset, please follow the instructions below.

1. Power off the device.
2. Hold "**Power button**" + "**Left Scan key**."
3. In Select Boot Mode menu, use Left Scan Key to select Recovery and Right Scan Key to enter the selection.
4. In recovery menu, use arrow key up and down to move the cursor.
Power key to enter selection.

1.5 How to add a stylus to HT510

Step 1 : Tie the string to the battery latch.

Knot the string to the latch.

Thread the end of the string through the hole of the battery latch.

Loop the string around the edge to bring it back over the latch.



Step 2 : Hook the stylus on the stylus holder of the wrist strap.

There is a stylus holder on the wrist strap. Slip the stylus in the loop.

