

Rugged Tablet

- RT112 -



User's Manual

V1.0



Revision History

Date	Change Description	Version
20231016	First Published Version	V1.0



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.
- 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.
- 4. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

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.



IC Statements

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.



(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(i)Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Devices shall not be used for control of or communications with unmanned aircraft systems

Les dispositifs ne doivent pas être utilisés pour commander des systèmes d'aéronef sans pilote ni pour communiquer avec de tels systèmes.

IC Radiation Exposure Statement

This EUT is compliance with SAR for general population/uncontrolled exposure limits in IC RSS-102 and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528 and IEC 62209. This equipment should be installed and operated with minimum distance 10 mm between the radiator and your body. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet appareil est conforme aux limites d'exposition DAS incontrôlée pour la population générale de la norme CNR-102 d'Industrie Canada et a été testé en conformité avec les méthodes de mesure et procédures spécifiées dans IEEE 1528 et IEC 62209. Cet appareil doit être installé et utilisé avec une distance minimale de 10mm entre l'émetteur et votre corps. Cet appareil et sa ou ses antennes ne doivent pas être co-localisés ou fonctionner en conjonction avec tout autre antenne ou transmetteur.



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

UK Declaration of Conformity (DoC)

Hereby, Unitech electronics co., ltd. declares that the radio equipment type Rugged Handheld Computer is in compliance with UK Radio Equipment Regulations 2017(RER 2017 (SI 2017/1206)).

The full text of the UK declaration of conformity is available at the following internet address: https://www.ute.com

UKCA Mark Warning



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

取得審驗證明之低功率射頻器材,非經核准,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。低功率射頻器材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。前述合法通信,指依電信管理法規定作業之無線電通信。低功率射頻器材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。應避免影響附近雷達系統之操作。高增益指向性天線只得應用於固定式點對點系統。

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;未滿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. 减少電磁波影響,請妥善使用。

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.

Devices shall not be used for control of or communications with unmanned aircraft systems.



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 conditions 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).
 - For long-term storage, it is recommended to charge the battery to at least 50% every six months to ensure optimal performance and longevity. 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. Despite Unitech's safety precautions, the battery pack may experience changes in shape or swelling. 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.

- 4. 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.
- 5. 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.
- 電池若未正確更換,可能會爆炸。請用原廠建議之同款 或同等級的電池來更換。請依原廠指示處理廢電池。 請依製造商說明書處理用過之電池
- 如果更换不正确之电池行事会有爆炸的风险 请依制造商说明书处理用过之电池



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.
- 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.
- 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:

For complete contact information please visit the Web sites listed below.				
Taipei, Taiwan – Headquarters		Europe		
Tel:	+886-2-89121122	Tel:	+31-13-4609292	
E-mail:	info@hq.ute.com	E-mail:	info@eu.ute.com	
Address:	5F, No. 136, Lane 235, Baoqiao Road, Xindian	Address:	Kapitein Hatterasstraat 19, 5015 BB,	
	District, New Taipei City 231, Taiwan (R.O.C.)		Tilburg, the Netherlands	
Website:	http://www.ute.com	Website:	http://eu.ute.com	
China		Japan		
Tel:	+86-59-2310-9966	Tel:	+81-3-62310896	
E-mail:	info@cn.ute.com	E-mail:	info@jp.ute.com	
Address:	Room401C, 4F, RIHUA International Mansion,	Address:	Tosei Building 3F.,18-10	
	Xinfeng 3rd Road, Huoju Hi-tech District,		Nihonbashi-Hakozakicho, Cyuouku, Tokyo,	
	Xiamen, Fujan , China		103-0015, Japan	
Website:	http://cn.ute.com	Website:	http://jp.ute.com	
Asia & Pacific / Middle East		Latin America		
Tel:	+886-2-27911556	Tel:	+52-55-5171-0528	
E-mail:	info@apac.ute.com	E-mail:	info@latin.ute.com	
	info@india.ute.com	Address:	17171 Park Row, Suite 210 Houston,	
	info@mideast.ute.com		TX 77084USA (Rep.)	
Address:	4F., No. 236, ShinHu 2nd Rd.,	Website:	http://latin.ute.com	
	NeiHu District, 114, Taipei,Taiwan			
Website:	http://apac.ute.com / http://mideast.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	82.d94		
Address:	6182 Katella Ave, Cypress, CA 90630, USA			
Website:	http://us.ute.com		LE17 (KW0)	
		1		



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.



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Chapter 1 - Overview

1.1 Package

Please make sure the following contents are in the RT112 gift box. If something is missing or damaged, please contact your Unitech representative.

The Package Contents

- Tablet PC
- Battery Pack
- USB-C Power Adaptor (power cord optional)
- Quick Start Guide

Optional Accessories

- Rotatable Hand Strap
- Shoulder Strap
- Screen Protector
- Capacitive Stylus Pen (5.5mm) with coil strap
- Office Cradle
- Vehicle Cradle
- 3-Pin EU Power Cord
- 3-Pin UK Power Cord
- 3-Pin US Power Cord

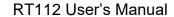


1.2 Product Detail

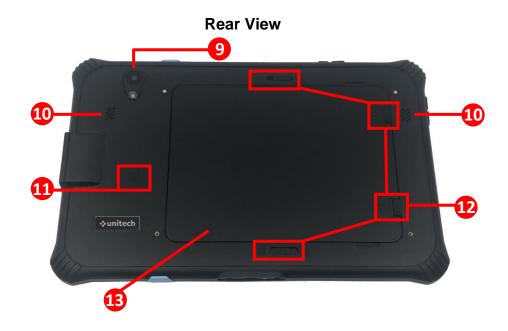
Top View 1 2 Left View 5 Right View

- 1. Scan Lens
- 2. Front Camera
- 3. USB Type-C Connector
- 4. Pogo Pin (reserved)

- 5. Trigger Key
- **6.** Power Key
- 7. Programming Key
- 8. Scan Engine









Bottom View

- 9. Rear Camera
- 10. Speaker
- **11.** NFC

- 12. Battery Cover Lock
- 13. Battery Cover
- 14. Volume Key



1.3 Specifications

System Features	System Features				
CPU	Qualcomm [®] Snapdragon™ 5430 Hexa Core Processor, 64bits,				
Ci U	6x CPU, up to 2.1 GHz				
Memory	6GB RAM / 128 GB Flash				
os	Android 13 with GMS & AER Certified				
Languages support Multiple languages					
Display					
Screen Size	10.1"(1920 x 1200) LCD Display 450nits				
Touch Donal	Gorilla® Glass, Multi-Touch User Interface with Capacitive,				
Touch Panel	stylus, glove, wet-finger Compatibility				
Keypad					
6 Physical Buttons: Power key, Volume+/- key, programmable key and 2 scan keys					
Camera					
5MP front camera (with fixed focus)					
13MP rear camera (with auto-focus and LED flash, Support Google Arcore & Depth API)					
Indicator Type					
LEDs, Vibrator					
Symbologies					
Support all major 1D & 2D barcodes					
RFID					
	Support HF/NFC				
HF	ISO14443-4(Type A, Type B), ISO15693, Mifare, Felica				
	(ISO/IEC18092)				
Power Source					
Main Battery	8800mAh (removable)				
Regulatory Approvals					
CE, UKCA, FCC, IC, NCC, BSMI, VCCI, TELEC, CCC, SRRC, BQB, RoHS, REACH					
Communication					
Bluetooth [®]	Bluetooth® 5.2				





	VLAN 6E, 2.4GHz & 5GHz & 6GHz					
WLAN	IEEE 802.11a/b/g/n/ac/d/h/i/k/r/v/ax (MU-MIMO 2X2, Support					
	DBS)					
Sancara	G-sensor(Accelerometer), Proximity + Light Sensor,					
Sensors	E-Compass, Gyroscope sensor					
I/O Interfaces						
USB	Single USB 3.1 (type-C)					
POGO PIN	POGO pin					
Expansion slot	Single Micro SD Card					
Audio	Dual-speakers, MIC x 2(noise cancelling & Background noise					
Audio	depression)					
Enclosure						
Dimensions	260 mm x 165 mm x 12 mm					
Weight	approx. 690g					
Environmental						
Operating temperat	-20°C to 55°C					
Storage temperatur	- 40°C to 70°C (without battery)					
Drop Specification	1.5 meter					
Vibration/Tumble te	MIL-STD-810H, Method 516.8, Procedure IV					
Software						
MDM Software	Support MDM Software Solutions and utilities such as					
INIDINI SUITWATE	Airwatch, SOTI, Ivanti Wavelink, and MoboLink					

Android is a trademark of Google LLC.

Note: The device is restricted to indoor use only when operating in the 5250-5350 MHz / 5945 to 6425 MHz (for LPI) frequency range.

	AT	BE	BG	HR	CY	CZ	DK
	EE	F	FR	DE	L	Ξ	Ш
	ΙT	LV					PL
	PT	RO	SK	SI	ES	SE	UK(NI)
	IS	LI	NO	СН	TR		



1.4 Getting Started

1.4.1 Remove the Battery

1. Push the four battery cover locks upwards to the unlock position.



2. Pick the battery cover from the groove on its side and lift upward to remove.



3. Push the battery lock at the bottom to the left (unlock) and keep holding it, then pull the battery strap and lift upward to remove the battery.







1.4.2 Install the Battery

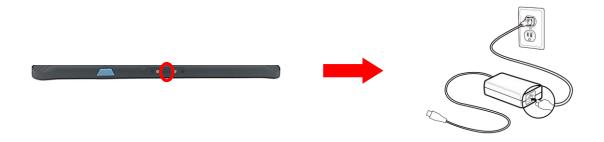
- 1. First, remove the battery. (please refer to step 1. & step 2. on P9 "Remove the Battery")
- 2. Push the battery lock at the bottom to the left (unlock) and keep holding it, then align the battery with the battery slot and insert. Make sure you hear a "click" sound, and the battery should not fall off while the battery is being locked.





1.4.3 Charging the Battery

Before starting to use the tablet, we would like to suggest you follow the illustrations below to begin to use the tablet.



WARNING! There is a risk of fire and burns if the battery 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. Dispose of used batteries according to local recycling guidelines in your area.

CAUTION! To ensure the unit working properly, please keep all connectors away from the

contaminants such as dust, grease, mud, and water.

Negligence may cause the unit to lose communication, short circuit, or overheated. If the connector is damaged, please ensure the connector is fully repaired before using the unit to avoid short circuiting.





1.4.4 Checking LED Status

	LED	Description				
Terminal		■ Battery charging				
	Red Light	■ Twinkling to indicate battery low				
		status (less than 15%)				
	Green Light	■ Battery fully charged				
		■ Barcode scan good read				
	Blue Light	Message				

Note: If scanner app is running, LED is controlled by scanner app. No LED (Red and Green) display when battery is out. (even AC IN)