

Rugged Handheld Computer

- EA630 -



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

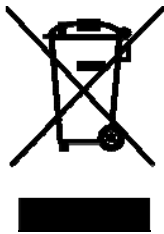


RoHS Statement



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：0.395 (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；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. 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 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	Europe 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 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, Fujian, China Website: http://cn.ute.com	Japan 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 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	Latin America 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 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	Please scan QR Code to visit us : 

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	6
1.4 Getting Started	9

Chapter 1 - Overview

1.1 Package

Please make sure the following contents are in the EA630 gift box.
If something is missing or damaged, please contact your unitech representative.

The basic package contents

- EA630 Rugged Handheld Computer
- Battery
- USB Type C Cable
- Quick Start Guide
- Regulatory Compliance Statements

Optional accessories

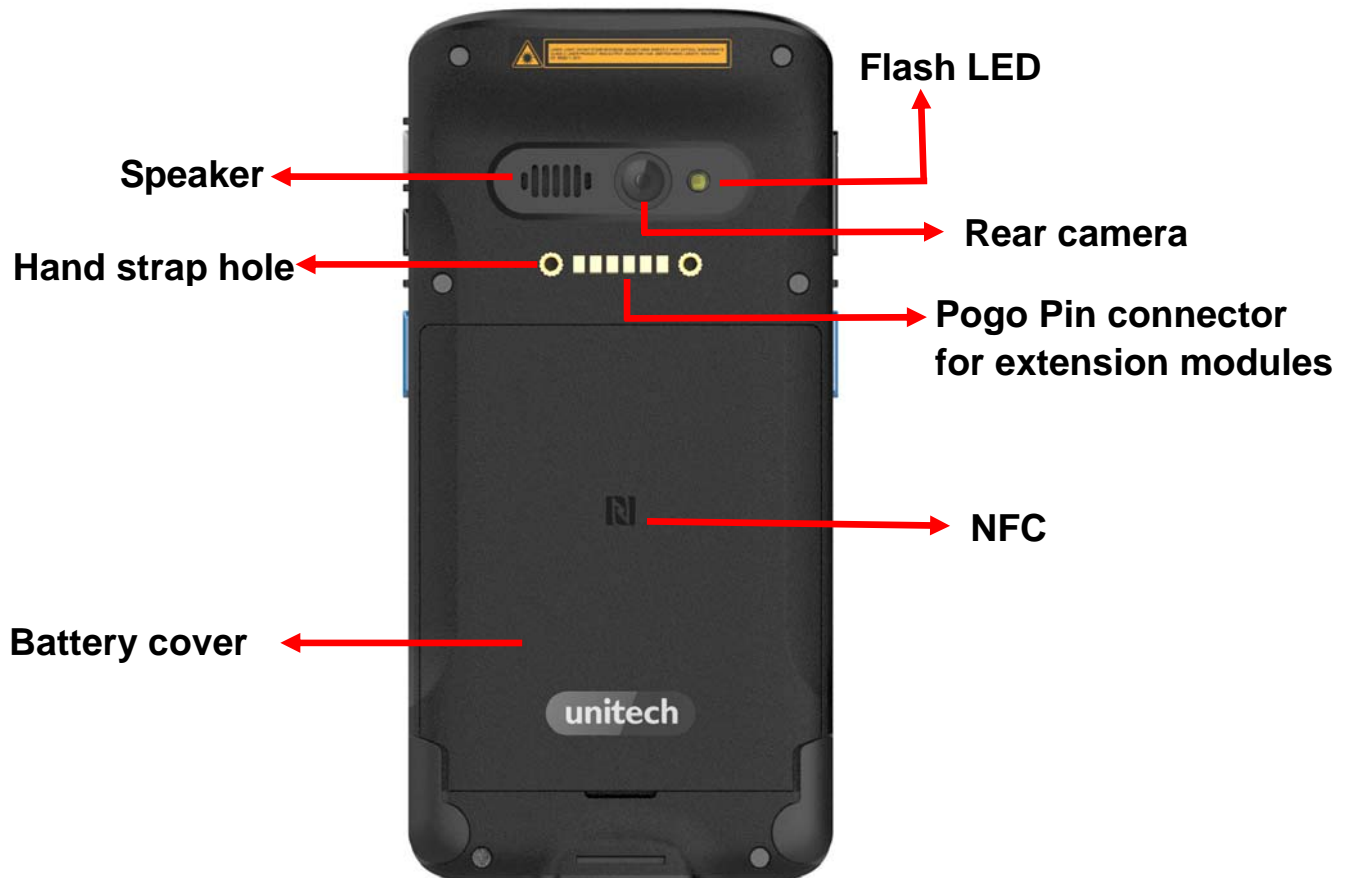
- Terminal Power Adapter (with US or EU plug)
- Hand Strap
- Cradle + Cradle Adapter

1.2 Product Detail

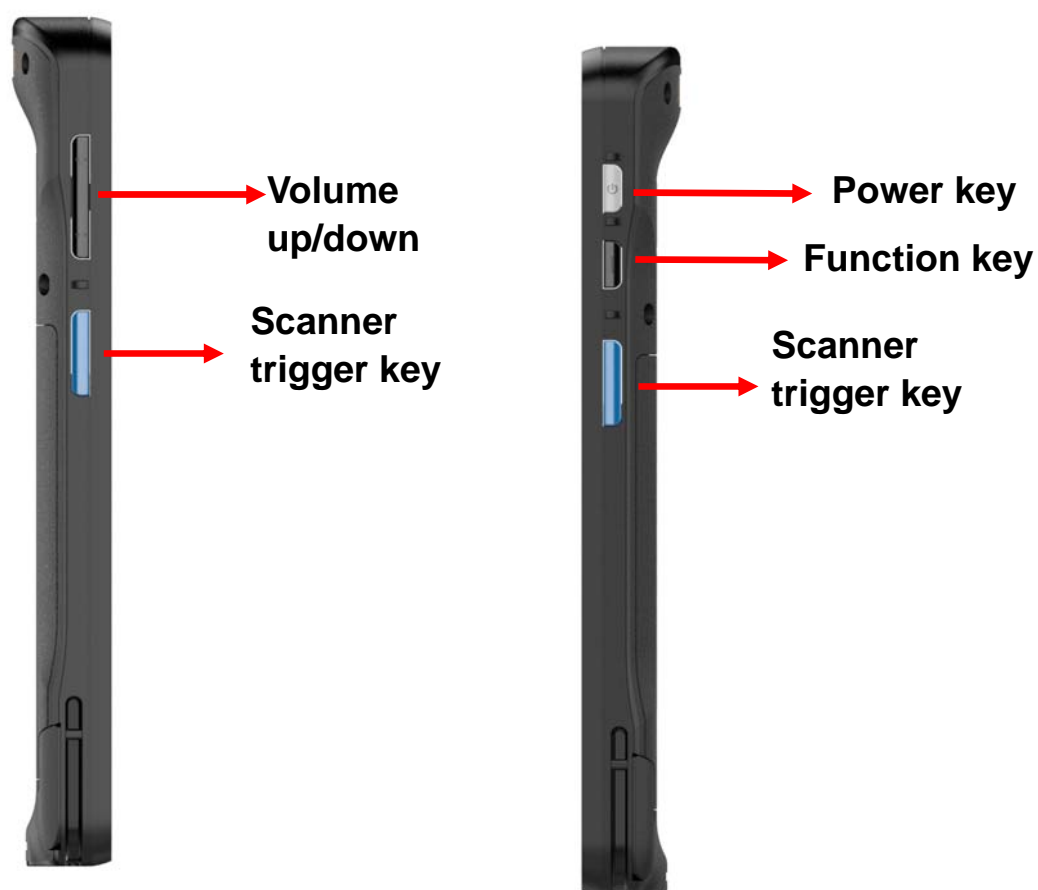
EA630 Front View



EA630 Rear View



EA630 Left and Right View



Barcode scanner window



Pogo pin
(For Cradle Charging)

USB Type C Port

Pogo pin
(For Cradle Charging)

1.3 Specifications

System Features	
CPU	Qualcomm Snapdragon 636 Octa core 64-bit Processor
Memory	3 GB RAM 32 GB Flash
Expanded slot	MicroSD, up to 128GB
OS	Android™ 9 with GMS
Languages support	English, Simplified Chinese, Traditional Chinese, Japanese, Spanish, German, French and multiple languages
Display	
Capacitive type 5 points multi-touch touch panel with Gorilla 6 Glass6", 18:9 Full-HD, Backlight, 450nits	
Indicator	
1 x LED indicator Vibrator	
Engines	
2D	<p>1D : UPC/EAN/JAN, GS1 DataBar, Code 39, Code 128, Code 32, Code 93, Codabar/NW7, Interleaved 2 of 5, Matrix 2 of 5, MSI, Trioptic,</p> <p>2D : PDF417, MicroPDF417, GS1 Composite , Code11, Aztec Code, Data Matrix, QR Code, Micro QR Code, MaxiCode, Han Xin Code, DOT</p> <p>CodePostal : Intelligent Mail Barcode, Postal-4i, Australian Post, Japanese Post, Netherlands (KIX) Post, Postnet, Planet Code OCR : OCR-A, OCR-B, E13B (MICR)</p>

Audio	
One speaker (95±3dB @ 10cm), One receiver , Dual noise-cancelling microphones	
Regulatory Approvals	
CE, FCC, NCC, VCCI, CCC, RoHS, CEC, BQB, GMS, N-Mark compliance	
Communication	
USB	USB 3.1 (type-C) support USB OTG
Camera	16 MP Rear and Flash Light
Bluetooth®	Bluetooth® 5 supported
WLAN	Wireless LAN 802.11a/b/g/n/ac, 2.4GHz and 5GHz Support 802.11d/e/f/h/i/k/r/v, fast roaming Compliant with WEP, WPA and IEEE 802.11i WPA2
WWAN	GSM : 850,900,1800,1900 MHz WCDMA : Band 1, Band 2, Band 5, Band 8 LTE:FDD-LTE (B1/B2/B3/B4/B5/B7/B8/B 12/B17/B19/B20/B28)TDD-LTE (B38/B39/B40/B41) Dual nano SIM Slot
GPS	AGPS, GPS, GLONASS, Beidou, Galileo, QZSS, SBAS support
Others	Gyroscope, Light sensor, e-Compress, Proximity sensor, Accelerometer sensor, SAR sensor
Power Source	
Standard Battery	3.85V, 4000mAH Li-polymer battery
Input	5V/3A (5V/2.5A for US & Japan), 9V/2A
Enclosure	
Weight	Approximately 250g
Dimension	157mm x 76.4mm x 13.9mm
Environmental	
Operating temperature	-14°F to 122°F (-10°C to 50°C)
Storage temperature	-22°F to 158°F (-30°C to 70°C without battery)
Relative Humidity	10% ~ 90% (non-condensing)
Drop test to Concrete	1.2m MIL-STD 810G
Tumble	0.5m tumbles for 300 cycles and 600 drops

ESD	+/-8KV direct discharge, +/-15KV air discharge
Software	
Android 9	
GMS (Android is a trademark of Google LLC.)	

Note:

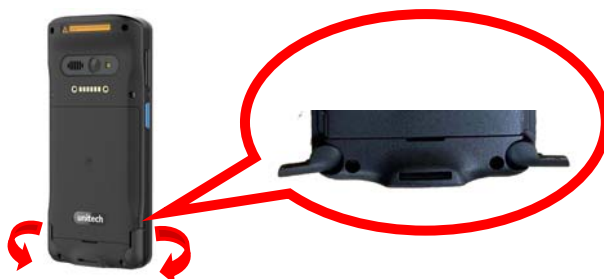
The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK
	IS	LI	NO	CH	TR		

1.4 Getting Started

1.4.1 Remove / Install the Battery Cover

1. To unlock the battery cover by turning the knobs a quarter of a turn (90°).



2. And pull the battery up to remove it.



3. To lock the battery cover by turning the knobs a quarter of a turn (90°). Make sure the battery cover is securely closed, or you may be unable to turn on the terminal.



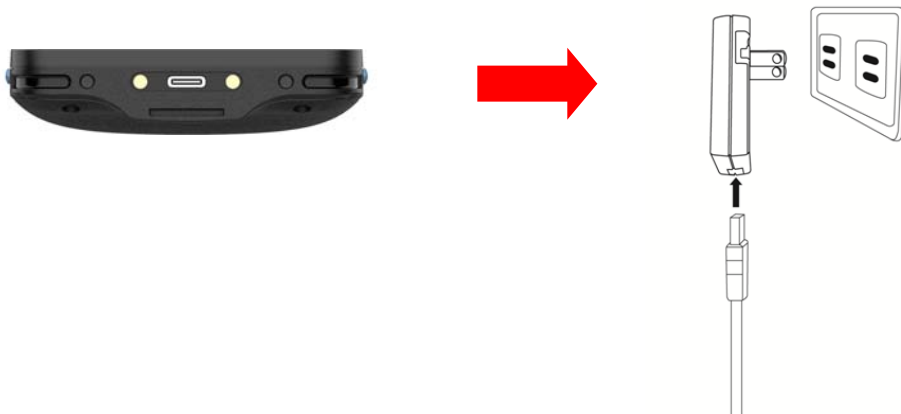
WARNING! *There is a risk of fire and burns if the battery is handled improperly. DO NOT disassemble, crush, puncture, short external contacts, or dispose the battery pack in fire or water. DO NOT attempt to open or service the battery. Dispose of used batteries according to local recycling guidelines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

1.4.2 Charging the Battery

Before using the terminal for the first time, you need to charge it for about 24 hours. For the regular use, you can charge the terminal for 4 hours to recharge the battery to full capacity. Charge the terminal using the USB charging cable or the cradle.

Connect the type C USB cable to the USB port on EA630 and the other end of the USB cable please connect to AC power adapter into the electrical outlet on the USB plug.

The charging LED indicator on EA630 is turning red when it is in charging state. The red light is off after the charger is fully charged.



1.4.3 Turning on the terminal for the first time

It is recommended to fully charge EA630 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.



1.4.4 Checking the LED status

	LED	Description
Terminal	Red Light	<ul style="list-style-type: none"> ■ Battery Charging ■ Twinkling to indicate battery low status(less than 15%)
	Green Light	<ul style="list-style-type: none"> ■ Battery Fully charged ■ Barcode scan good read
	Blue Light	Message
	All of LEDs can be controlled by software API	If scanner app is running, LED control by scanner app.
	No LED (Red and Green) display when battery is out(even AC IN)	

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.