

Handheld Data Terminal

- EA300 -



User's Manual

Version 0.1

Revision History

| Date | Change Description | Version |
|------|--------------------|---------|
| | | |
| | | |

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.

Operation on the 5.15 - 5.25GHz frequency band is restricted to indoor use only. The FCC requires indoor use for the 5.15-5.25GHz band to reduce the potential for harmful interference to co-channel Mobile Satellite Systems. Therefore, it will only transmit on the 5.25-5.35 GHz, 5.47-5.725 GHz and 5.725 – 5.850 GHz band when associated with an access point (AP).

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 1.5 cm from the body.

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

Canadian Compliance Statement

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

Cet appareil numérique de la classe B respecte les exigences du Règlement sur le matériel brouilleur du Canada.

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 R&TTE 1999/5/EC directive, the EMC 2004/108/EC directive and the Low Voltage 2006/95/EC directive.

The declaration of conformity is available for download at :

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

CE RF Exposure Compliance

This device meets EU requirements (1999/519/EC) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

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



This equipment complies with the requirements of Directive 1999/5/EC of the European Parliament and Commission from 9 March, 1999 governing Radio and Telecommunications Equipment and mutual recognition of conformity. The highest CE SAR values for the device are as follows :

W/kg @ 10g (Head)

W/kg @ 10g (Body)

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 EU directive 2002/96/EC and update 2003/108/EC 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。

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。

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。

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 825-1. 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, 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.
 - Keep the battery cool. Avoid hot vehicles. For prolonged storage, keep the battery at a 40% charge level.
 - 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 and make the batteries unstable and dangerous. Please use a battery temperature detecting device for a charger to ensure a safe charging temperature range.

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

Zx.3 Warning

The warning shall be placed on the equipment, or on the packaging, or in the instruction manual and shall consist of the following:

- the symbol of Figure 1 with a minimum height of 5 mm; and
- the following wording, or similar :

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




Figure 1 – Warning label (IEC 60417-6044)

Alternatively, the entire warning may be given through the equipment display during use, when the user is asked to acknowledge activation of the higher level.

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:

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

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..... | ix |
| Hearing Damage Warning | x |
| Worldwide Support | xi |
| Warranty Policy | xii |
| Chapter 1 - Overview..... | 1 |
| 1.1 Package | 1 |
| 1.2 Product Detail..... | 2 |
| 1.3 Specifications | 5 |
| 1.4 Getting Started | 8 |
| 1.5 Keypads Definition | 14 |
| Chapter 2 - Installation & Operation..... | 15 |
| 2.1 Connecting to PC | 15 |
| 2.2 Performing a Hardware Reset..... | 17 |

Chapter 1 - Overview

1.1 Package

Please make sure the following contents are in the PA726 gift box. If something is missing or damaged, please contact your unitech representative.

The standard package contents

- EA300 Terminal
- Battery
- USB Cable
- Cradle and cradle adapter
- Quick Start Guide
- Regulatory Compliance Statements

1.2 Product Detail

EA300 Front View



EA300 Rare View



EA300 Side View



1.3 Specifications

| System Features | |
|--|---|
| CPU | 1.2GHz, Qualcomm 8916 Quad-Core |
| Memory | 2GB DDR RAM 16GB ROM |
| Expanded slot | Micro SD/TF x 1(maximum of 32 GB), Micro SIM x 1, SAM x 1 |
| OS | Android 5.1 Enhanced security by preventing 3rd party data collection. |
| Languages support | English, Simplified Chinese, Traditional Chinese, Japanese, Spanish, German, French and multiple languages |
| Display | |
| 4" Gorilla Glass 3 touch screen. TFT-LCD HD (480 x 800) color. | |
| Keypad | |
| Front : 17 physical keys including Alpha/numeric, scan keys and special characters. | |
| Side : SCAN button x 2 (Left / Right), User-defined function button (programmable key), Volume switch button (+ / -), ON / OFF button. | |
| Indicator | |
| LED indicator Vibrator | |
| Symbologies | |
| 2D (Honeywell N6603) | All major 1D and 2D codes |

| | |
|--|---|
| Audio | |
| Microphone, speaker and 3.5mm audio jack | |
| Regulatory Approvals | |
| CE, RED, FCC, NCC | |
| Communication | |
| USB | Micro USB |
| WLAN | 802.11 a/b/g/n |
| PAN | Bluetooth 4.0 HS low energy |
| WWAN | 4G TDD/FDD/UMTS/EV-DO/GSM TDD-LTE (B38/B39/B40/B41) FDD-LTE (B1/B3) |
| RFID/HF/NFC | Frequency: 13.56MHz Tag Support: ISO14443A/B, ISO15693 standard Support NFC |
| GPS | GPS, AGPS, Glonass |
| Camera and Flash Light | |
| 5MP rear camera with LED flash and auto-focus function | |
| External Storage | |
| Support MicroSD memory card up to 128GB | |
| Other Sensors | |
| G-sensor , Light + Proximity sensor , E-Compass | |
| Power Source | |
| Battery | Rechargeable and swappable 3.8 V, 3800mAh Polymer Li-ION pack. |
| RTC | Real time clock battery |
| Enclosure | |
| Weight | 310g |
| Dimension | 152 mm (L) x 30mm (H) x 78mm (W) |
| Environmental | |
| Operating temperature | 14°F to 122°F (-10°C to 50°C) |
| Storage temperature | -4°F to 140°F (-20°C to 60°C) |
| Charging Temperature | 32°F to 104°F (0°C to 40°C) |
| Relative Humidity | 5% ~ 95% (non-condensing) |
| Drop test to Concrete | 1.5 meter |
| Environmental Sealing | IP65 |

| Radio type / Description | | Transmitter Frequency | Maximum Output Power |
|--------------------------|---------------|-----------------------|----------------------|
| GSM | GSM900 | 880-915MHz | 33dBm±2dB |
| | DCS 1800 | 1710-1785MHz | 30dBm±2dB |
| UMTS | FDD 1 | 1920-1980MHz | 24dBm+1.7dB/-3.7dB |
| | FDD 5 | 824-849MHz | 24dBm+1.7dB/-3.7dB |
| | FDD 8 | 880-915MHz | 24dBm+1.7dB/-3.7dB |
| CDMA | BCO | 824-849MHz | 24dBm+1.7dB/-3.7dB |
| FDD-LTE | FDD 1 | 1920-1980MHz | 23dBm+2.7dB/-2.7dB |
| | FDD 3 | 1710-1785 MHz | 23dBm+2.7dB/-2.7dB |
| TDD-LTE | TDD38 | 2570-2620 MHz | 23dBm+2.7dB/-2.7dB |
| | TDD39 | 1880-1920 MHz | 23dBm+2.7dB/-2.7dB |
| | TDD40 | 2300-2400 MHz | 23dBm+2.7dB/-2.7dB |
| | TDD41 | 2555-2655 MHz | 23dBm+2.7dB/-2.7dB |
| WLAN 2.4GHz | IEEE 802.11b | 2400-2483.5MHz | 15dBm |
| | IEEE 802.11g | 2400-2483.5MHz | 13dBm |
| | IEEE 802.11n | 2400-2483.5MHz | 11dBm |
| WLAN 5GHz | IEEE 802.11a | 5150-5350MHz | 12dBm |
| | | 5470-5725MHz | 12dBm |
| | IEEE 802.11n | 5150-5350MHz | 10dBm |
| | | 5470-5725MHz | 10dBm |
| | IEEE 802.11ac | 5150-5350MHz | NC |
| | | 5470-5725MHz | NC |
| Bluetooth | Bluetooth | 2400-2483.5MHz | 10dBm |
| RFID | NFC | 13.56MHz | -21.1dBuA@10m |

1.4 Getting Started

1.4.1 Installing the Battery

1. To loosen the two knobs on the battery cover. And lift up the battery cover to remove it.



Battery lock

2. Slide the battery into the battery compartment and making sure the battery contacts are aligned with the contacts in the compartment.
Close the battery cover and tighten the two knobs on the battery cover.



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

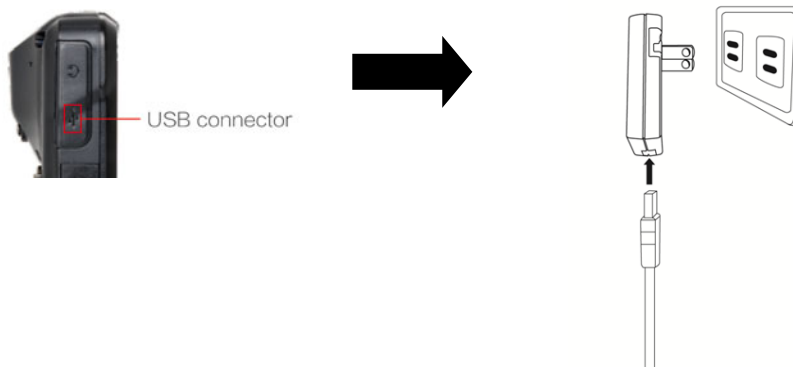
WARNING! There is a risk of fire and burns if the battery pack is handled improperly. DO NOT disassemble, crush, puncture, short external contacts, or dispose the battery pack in fire or water. DO NOT attempt to open or service the battery pack. Dispose of used batteries according to local recycling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

1.4.2 Battery Charging

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

1.4.2.1 USB Charging

Connect the micro USB cable to the USB port on EA300 and the other end of the USB cable please plug into your PC's USB port to simultaneously charge EA300. Or plug the AC power adapter into the electrical outlet on the USB plug.



1.4.2.1 Charge with cradle

1. Connect the adaptor into the cradle. LED indicates the cradle is operational.
2. Slide EA300 into the cradle.
3. The device will automatically begin charging and LED on terminal indicates the charging process.

For battery charge, please see the reference as shown in the pictures.



1.4.3 Turning on the terminal for the first time

After you have initially charged your device for about 24 hours, the device is ready to be used. You can now start up your device. You can then set up the languages, WiFi setting, and date and time.

Power-On Button



Turn ON your device by pressing the power button ◦

1.4.4 Checking the LED status

1.4.4.1 EA300 LED Status

| | Status | LED | Description |
|----------|--------|-----------------|---------------|
| Terminal | Power | Solid Red light | Charging |
| | | No LED light | Fully charged |

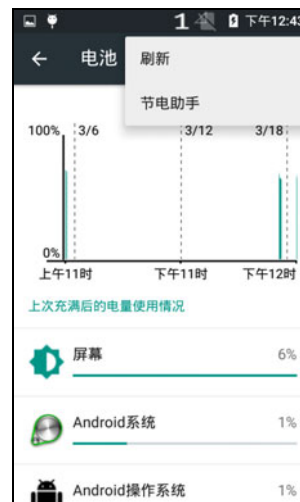
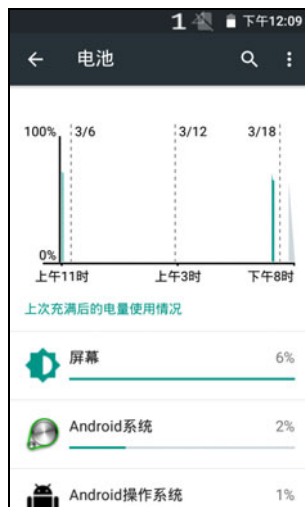
1.4.4.2 Cradle Charging LED Status

| | Status | LED | Description |
|--------|---------------------|-------------------|---------------|
| Cradle | Power ON LED | Solid Green light | Power on |
| | Charging Status LED | Solid Red light | Charging |
| | | Solid Green light | Fully charged |

1.4.5 Checking the battery level

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.

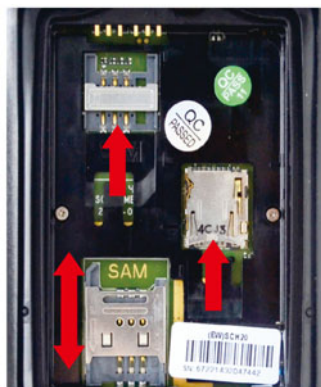
Please go to **setting** to check the battery level or to adjust applications for the battery use control.



1.4.5 Installing SIM/ TF Card

- 1.Swing open the main battery cover clip by 90 degrees, you can then remove the battery cover.
- 2.Insert the SIM card or Micro SD/TF card into their corresponding slots in the battery compartment.

Note: You should gently push the SIM/TF card to the correct position.



Note :

- 1 · Please use standard SIM card.
- 2 · Do not push too hard when SIM card · TF card · PSAM card are inserted into the slot.
- 3 · To remove the cards, please press cards to jump out from card slots.

1.5 Keypads Definition



Blue Button : Trigger key

Fn Button : Function key

1 aA Button : switch numbers, lowercase or capital

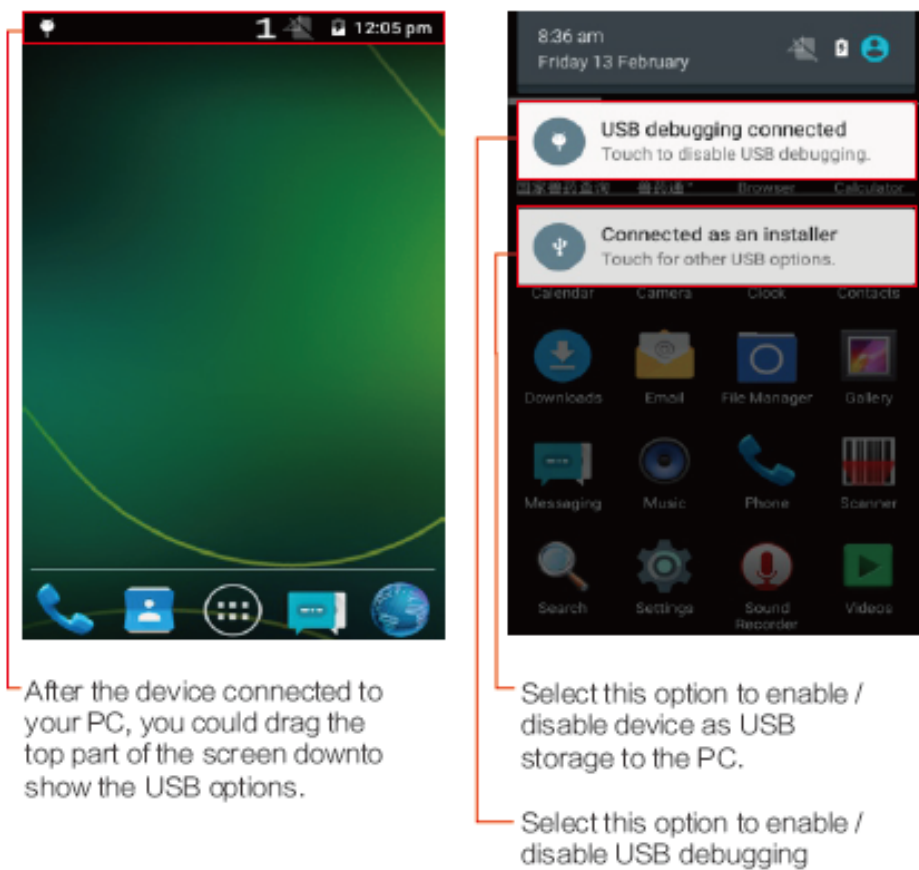
Back Space Button : Back key / Space key

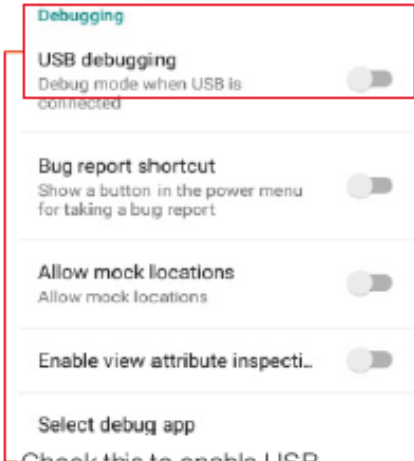
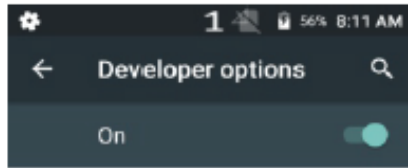
ENT Button : Enter key

Chapter 2 – Installation & Operation

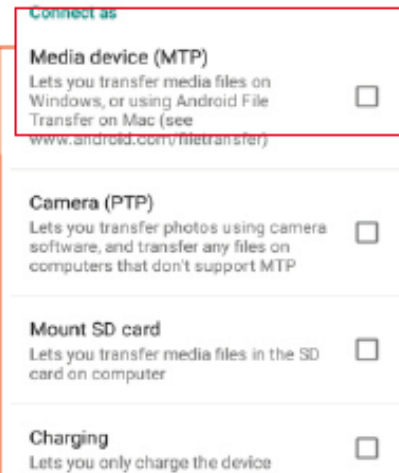
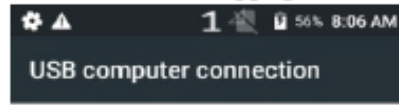
2.1 Connecting to PC

After you install the Android driver or an Android smart phone assistant, you can connect the devices to your PC with USB cable provided.





Check this to enable USB debugging.



Check this to enable device as USB storage to PC.

Note: When you enable device as USB Storage to PC, the flash memory of the device are map as a PC drive. At this point of time, you cannot install APK to the device. To install APK to the device, it should not be in USB Storage mode.

2.2 Performing a Hardware Reset

You may have to perform a reset if the device freezes (i.e., the terminal no longer responds to the buttons or tapping on the screen).

Long press Power key around 10 seconds to restart the device.

2.2.1 Warm Boot

Please long press power button to start warm boot.



2.2.2 Cold Boot

Please press **Fn key + reset button** simultaneously to start cold boot.

