

Industrial PDA

User Manual

V3.0-1.0

Brief Introduction

First and foremost, thanks for buying this rugged tablet PC. This user manual includes module introduction, maintenance, wiring and operation as well as the solutions to module problems. In order to guarantee the proper operation of this tablet PC, please read this manual in detail before using; keep the manual in a safe and convenient place for quick response when problems appear.

Note:

Due to the continuous improvement and refinement of the tester, please kindly forgive us not to inform you of the modified manual.

Guaranteeing the accuracy, we will try to update the manual. If you find any mistakes, please inform us via the contact information in the back cover.

Without permission from supplier in writing, it is forbidden to copy all or part of the manual.

Chapter I

Summary and System Structure

1. Summary

This tablet PC is a portable and digital data acquisition equipment that combines 1D/2D barcode scanner, RFID reader, infrared meter reading, GPS and telephone function. It can be widely used in the area of power, survey and draw, routing inspection, asset management and industrial manufacturing etc.

This tablet PC has the wireless voice and communication module, which can log on internet through wireless network, and help you finish the work more quickly and voice call. User can choose different module to collect 1D barcode, 2D barcode and RFID's data. And we can achieve fast and efficient data collection and transmission through the GPRS, WiFi, Bluetooth and other wired wireless communication mode. This device meets IP-67 protection grade, portability is good; it can be used under any environment; it can help simplify the working process, improve working efficiency, and reduce the business operating cost.

This tablet PC adopts 1920*1200 and 1200*800 display screens and capacitive touch screen with high performance, and embedded with Android 7.1 operating system. With the

features of user friendly, easy to operation, visual scanning and recognizing result, it can meet your different needs, and transfer the data at real time, as well as improve your working efficiency. It is really your powerful working assist.

2. Checking the Package

Please open the packing box to make sure the accessories are correct before operation. Once there are some incorrect items or any need of optional accessories, please contact with us.

Essential Components:

Please check nameplate model and suffix code on the equipment back shell matches the stipulation in the table below.

Function module	Module code	Module classification	Note
GPS	G	GPS+BDS+GLONASS	
	B	GPS+BDS	optional
1D laser Barcode	N	1D laser barcode scanning module	optional

	Z	1D laser barcode scanning module	optional
2D laser Barcode	2	2D laser barcode scanning module	optional
	8	2D laser barcode scanning module	optional
	7	2D S-OFF barcode scanning module	optional
Infrared Meter Reading	T	Infrared Meter Reader module	
Infrared Temperature Measurement	w	Infrared Temperature Measurement module	

Standard Accessories:

Please make sure all the following accessories are in good condition:



Charger



USB Line



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Other optional Accessories:

(Users can choose according to different modules.)



Earphone



USB-OTG cable



USB-Serial line

3.Safety Warning and Attentions

In order to use the tester safely and efficiently, please read the following information before using.

Please use the tester according to the rules when you in the hospital.

Please keep far away from the precision instrument Do not use chemical solvent to clean the equipment. Do not throw away the waste battery. Put it into the battery recycling bins.

Please do not use or store the equipment as well as its accessories under the environment of high temperature, low temperature, high humidity or dust.

Please put the equipment and its battery in a safety place and avoid strong shake and impact.

When use the equipment for the first time, please charge the battery completely.

Don't disassemble the equipment by yourself. If you need, please go to the appointed professional organization to mend it.

Please put the equipment and its accessories in the place out of children's reach.

Please take care of the SIM card and avoid static, scratch, as well as bending.

Please use the original accessories of the product.

Please use the standard battery, charger and other accessories. We will not be responsible for anything if you use the accessories from the third party.

This product is Class A type and may cause radio interference in daily life. So it needs you to take practical methods to avoid such interference.

Same as other mobile equipment, with built-in antenna on the bottom of the product, there is some radiation and interface of this product. If you want to operate the product in light-hearted, as well as take of your personal safety, any part of your body do not too close to the antenna.

Please use the equipment within network coverage

range.

The LCD display effect will change a little in the temperature severely-changed and long-time conversation environment.

4. General Operation Standards and Attentions

4.1. Operation Standards

USB port

Please do not short the port with metal; otherwise the internal circuit will be damaged.

Cleaning

The shell of this instrument is mainly made of plastic, when cleaning, use dry and soft cloth, and do not use volatile chemicals, otherwise, it will cause discoloring and deformation.

Protecting the case and operating panel

Do not pour volatile agents on the case or operation panel, and avoid prolonged contacting with rubber and PVC; otherwise, it may result malfunctioning.

When moving the instrument

Please make sure the power cord and connection cables are removed before shift the instrument. And unplug all the connecting cables from socket after using.

When the instrument is unused for a long time

If the instrument is unused for a long time, the battery characteristics may have deteriorated. And it will also take a longer time to charge. If it takes a very short time to charge and the operating time is extremely short, please replace the battery.

Faults

If there is strange sound, smell, or smoke coming from the instrument, please turn off the instrument and unplug of the power, and then contact with us immediately.

4.2. Attentions

Please charge the battery full when using it for the first time as well as each time.

Please use touch pen and click the screen gently to operate function keys, do not click it roughly, otherwise, the LCD may be damaged.

If there is any abnormal phenomenon during the process of operating, please turn off and restart it.

Please don't put the instrument under the strong direct sunlight or put it near the origin of heat. Or else, there will be bad effect to internal circuit as well as the shell.

Condensation may occur if the instrument is moved to another place where the temperature is higher or the room temperature change rapidly. In such situation, let the instrument adjust to the new environment for at least one hour before using the instrument.

5. Structures and Functions



NO	Name	Functions
1	Sealed cover	Sealing cover to dustproof and waterproof
2	Screen	Display the window
3	F1 key	Extended functional Button 1
4	Return key	To return the last operation
5	The Home key	To go to the main page quickly
6	Menu key	Long press to enter the task management
7	F2 Key	Extended functional Button 2
8	MIC	MIC
9	Indicator	Used to indicate the equipment status
10	Front Camera	Used to take pictures
11	Flashlight	Flashlight can be used for emergency lighting
12	Rear Camera	Used to take pictures and video
14	Motor	The Motor device
15	Loudspeaker	The loudspeaker device
16	SIM card slot	To use to insert SIM card
17	HDMI interface	To use to insert HDMI
18	TF card slot	To use to insert TF card

19	Headphone Hole	To connect with headphone
20	Charging Hole	Used to charge
21	USB Port	Used to connect with PC or for charging
22	Power key	Used to power on
23	Infrared	For infrared meter reading
24	Barcode scanner port	Used to barcode scanning
25	Volume Button-	Used to reduce the volume
26	Volume Button+	Used for increase the volume

Buttons:

Buttons	Name	Functions
	Power Button	Under power-on state, shortly pressing the button can close or light the screen; long pressing the button can pop up an operating menu of "Device Options". Under power-on state, long pressing the button can close the tester.
	Volume Button+	Used to increase the volume
	Volume Button-	Used to reduce the volume

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	Extended functional Button	Used for user customized buttons.
	Return Button	Return back to the previous page.
	Main Screen Button	Pressing this button to return back to the main screen window.
	Attribute Button	Used to edit menu properties
	Bar Code Scan Button	After opening the barcode scanning function, used to scan the barcode.

Indicator lights:

Top left of the equipment has indicator, when charging, the indicator is red, when fully charged, indicator turns green.

6. Instructions of Fixed Icon Display Area

	means GSM signal intensity;
	The more column bar is, the better the signal intensity will be.
	Means that there is unread multimedia message
	Means the signal intensity of the WLAN.
	Means Bluetooth function has been opened.
 	Means uploading or downloading files.
	Means that there is unread short message.
	Means it is in vibration mode
	Means it is in the flight mode.
	Means that the alarm clock has been set
	Means that TF card has been inserted into the equipment.
	Means that TF card hasn't been inserted into the equipment.
	Means the current battery power.
	Means the battery is charging.
	Means it is on the phone.

7. Charging Battery Icon



: The battery is in low power and needs to charge.



: The battery is charging and displays in motion.



: The battery has already been full.

8. Install TF Card, SIM Card

Open the seal cover on the top of the equipment, find TF card slot, in the lower left adjust TF card gap, put TF card into the card slot, when there is a slight sound of clicks, the other end of TF card is nearly awash to TF card slot.

Open the seal cover on the top of the equipment, find SIM card slot, in the lower left adjust SIM card gap, put SIM card into the card slot, when there is a slight sound of clicks, the other end of SIM card is nearly awash to SIM card slot.

Take down TF card, open the seal cover on the top of the equipment, press TF card to the direction of card slot,

TF card will pop up, take down TF card.

Take down SIM card, open the seal cover on the top of the equipment, press SIM card to the direction of card slot, SIM card will pop up, take down SIM card.

9. Battery Usage

Battery performance

The standby time will be affected by system environment, system setting, service test, taking photos and using data service.

Calling or opening a backlight will consume more power than standby and standby time will shorten.

The standby time of no service area will be short than the normal standby time.

The battery performance will change with the charging status, temperature, local network as well as the background light status.

	10000mAh(Standard Battery)
Standby Time*	About 500 hours
Talking Time*	About 20 hours

More accurate time will depend on the local network status, using conditions and equipment card.

Charging:

This equipment supports charging by charger and USB port. Suggest to only use the specific charger of this

equipment for charging.

Insert the charger into the power socket with 100~240V, 50/60Hz. When it is charging, the battery power icon on the screen will shine; after charging finished, the battery power icon on the screen will stop shining.

After charging finished, pull the charger out of the equipment and then pull the charger out of the power socket.

Charging time

If the AC voltage is very low, you should charge the battery for a long time. It will lengthen the charging time in the using process of the equipment.

The charging time is about 6 hours. More accurate time will depend on the battery condition. The environment temperature of normally charging should be 0 ~40 . Charging under below 0 or above 40 , the battery performance will descend and the battery life will shorten. When charging under too high or too low temperature for a long time, it will cause damage to the battery. It will lengthen the charging time to use nonstandard charger. It will also lengthen the charging time to operate the tester when charging.

Note:

■ You should fully charge the tester before the first usage; please disconnect the charger in time after charging finished because the long-time charging will damage the battery performance.

- When it is not charging, please take the charger from the outlet.
- When it is charging in very low battery, the tester will not start immediately and will display low battery prompt if you do booting operation. After charging for a while, the tester will start normally.
- Charger is safety device, please use our specialized charger. Meanwhile, please be careful during the usage.

2. General Functions

2.1. On/Off

Open the equipment

Under the "off "condition and there is electricity in the battery, long press the power key, in the screen appears startup picture and meanwhile startup music from the speaker to start the equipment.

Close the equipment

Under standby interface, long press the power key to pop up an option menu and then choose "Power Off" to close the equipment.

2.2. Standby and Wake up

Under the "on" condition, the system will enter into standby state or shortly press on/off key to enter into standby state. Under standby condition, shortly press on/off key to wake up the system. (The time entering into standby is relevant with the backlight time setting in setup options. If the setting is "Light Forever", the system will not standby automatically. But you still can realize the standby by pressing on/off key.)

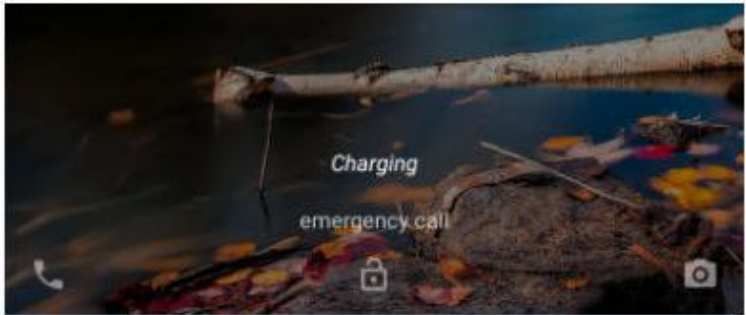
After waking up, the system will restore to the interface before the standby and the program will restore to the state before the standby.

2.3. Desktop management

The desktop screen acquiesces five screen, the desktop can display different screen through finger to slide

Lock and Unlock

When there is not equipment operation, after a period of time, the screen will lock automatically. We can rouse the screen through power key. We click the lock icon, then we need to slide up to unlock. As shown,



Main menu “Set>Show>Dormancy”, we can set the delay time of device before dormancy.

2.4 Application of device vibration

Device supports 2 vibration modes, one is the only Vibration, the other one is Ring & Vibration. We can press



volume- for long time until it becomes  it represents vibration mode.

Ring & vibration mode: we need to enter system setting>Sound>Ring & vibration

Chapter II

Usage and Maintenance

The following suggestions are helpful for the users to use and maintain this tester.

Put the tester and all the accessories in the place where the children can't reach.

Please keep the equipment dry. Because there may be mineral substance in the rain, moisture and various liquids which can corrode the circuits.

Please keep the tester far away from the magnetic equipment like magnetic card and floppy; don't put the tester, battery and charger in the electromagnetic field like electromagnetic oven and microwave oven.

Don't put the tester in the high temperature place. Because the high temperature may shorten the lifespan of the electronic equipment, damage the battery and make the plastic accessories deform or melt.

Don't put the tester in the low temperature place. Because when you move the tester from lower temperature place to the normal temperature place, there will be moisture inside of the tester, which may damage the circuits board.

Please don't try to uninstall the tester because the improper operation of the nonprofessional person may lead to the damage of the tester.

Please don't throw, hit or shake the tester because all rude using method break the inside main board.

Please don't use the irritant chemicals, irritant cleanser or caustic cleanser to clean the tester. When cleaning the tester, please use rag with mild soap water to wipe gently.

Please don't spread the pigment for the tester. Because the pigment may obstruct the usage of the active accessories.

Note: The max SAR is 2.0W/Kg, which meets the requirement of the national standard GB 21288.

Chapter III

Faults and Solutions

If you meet the following problems during the using process, please try to use the "Faults and Solutions" first to do the relative operation. If the problems still exist, please contact the professional maintenance person.

Problem	Reason	Solution
Unable to switch on the tester	The time of pressing the power key is not enough.	Press the power key for over 2 seconds and more.
	Low Battery	Charge the tester
Some programs can't be used normally.	The storage space is not enough.	Clean the messages of built-in multimedia promptly and other application programs as well as the download application records.
The standby time is not	The battery performance	Change the battery.

enough.	declines.	
	Play games and music for a long time.	Limit the time of playing games and music.
Charging fault	Poor contact	Check the contacts or change plug.
	Low battery voltage	There will be no charging display. Charging for about half an hour and then unplug it to recharge.
	Battery fault	Change battery.
	Wrong charger type	Change proper charger.
	Charger fault	Change or mend the charger.
The equipment is automatically closed	The battery electricity is severely not enough.	Please charge.
	Setting reason	Check whether setting the auto power-off or not.
	Get accident interference.	Restart

FCC CAUTIONS

15.19 Labeling requirements. 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.

15.21 Information to user. Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

15.105 Information to the user. Note: 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.

Absorption Rate (SAR) information: This mobile phone meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. FCC RF Exposure Information and Statement The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. This device was tested for typical body-worn operations with the back of the handset kept 0cm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 0cm separation distance between the user's body and the back of the handset. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

Body-worn Operation This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0 cm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna