P3 User Manual

Contents

P3 USER MANUAL 1

1.INTRODUCTION 2

1.1.PANEL DEFINITION 2

1.1.1.Front View 3

1.1.2.The Back View and Side View 4

1.2.BUTTON 5

1.3.LED DEFINITION 6

1.4.ACCESSORY 6

1.4.1.Cable 6

1.4.2. DSA-45PDH Adapter 7

1.4.3.Handheld bracket 7

2.BASIC OPERATION 8

2.1.POWER ON/OFF、RESTART、SLEEP 8

2.1.1.Power on 8

2.1.2. Power off 8

2.1.3.Awake/Sleep 8

2.1.4.Restart 8

2.2.INSTALL/DETACH SIM/TF CARD 9

2.3.CHARGING FOR BATTERY 9

2.4. ASSEMBLE TAPE 9

3.DATA TRANSMISSION 10

3.1.CONNECTIONS FOR DATA TRANSMISSION 10

3.1.1. P3 Disk 10

3.1.2. By B/T 10

3.2.ENABLE DEVELOPMENT DEBUG OPTION 10

4.OPERATING SYSTEM INTRODUCTION 11

4.1.SYSTEM INTERFACE AND START MENU 11

4.2.STATUS INDICATOR 12

4.3.PRE-INSTALLED APPLICATIONS 12

4.4. INTERACT WITH HANDHELD 12

4.5. INPUT METHODS 12

4.5.1.Physical Keyboard 12

4.5.2.Others 12

4.6.SETTING 12

4.6.1.Network and Internet 13

4.6.2.Connected Devices 13

4.6.3.Buttons 13

4.6.4.Applications and Notifications 13
4.6.5.Battery 13
4.6.6.Display 13
4.6.7.Sound 14
4.6.8.Storage 14
4.6.9.Privacy and Location Information 14
4.6.10.Account 15
4.6.11.Accessibility 15
4.6.12.System 15
4.6.13.About Mobile 15
4.7.OTHERS 16
5.SOFTWARE OPERATION 16
5.1.SOFTWARE INSTALLATION 16
5.1.1.Local Installation 16
5.1.2.Google Installation 16
5.2.SYSTEM FIRMWARE UPGRADE 16
5.2.1.Online Upgrade 17
6.TROUBLESHOOTING AND PRODUCT MAINTENANCE 17
6.1.TROUBLESHOOTING 18
6.2.DEVICE MAINTENANCE 18
APPENDIX 1 P3 PRODUCT SPECIFICATION 19
OVERVIEW OF P3 TECHNICAL SPECIFICATIONS 19
PHYSICAL CHARACTERISTICS 20
SYSTEM PLATFORM 20
INTERFACE COMMUNICATION 20
POWER SUPPLY 21

1. Introduction

This chapter introduces the feature, accessories, panel definition, button definition, connector definition of P3.

1.1. Panel definition

1.1.1. Front View

Figure 1-1 P3 Front View

Table 1-1 P3 Section Specification

No.	Section	Specification
1	Touch screen	Show the display and react when you touch the screen.
2	Keyboard	Including 27 number and special function keys.
3	Microphone	Record and make phone call

1.1.2. The Back View and Side View

Figure 1-2 P3 Back View and Side View

No.	Section	Specification
1	Camera	Take photos
2	Fflash light	Lighting
3	Tape hole	Fix the tape
4	Tape	Hold P3 handheld
5	Speaker	Make sound like music and voice
6	SIM/TF card slot	Install SIM card, TF card
7	USB Type-C	Charging, data transmitting, support USB OTG

1.2. Button

Figure 1-3 P3 Handheld Button

Table 1-3 P3 Handheld button function specification

No.	Section	Specification
1	Numeric keys	Enter numbers
	Special function key	(Orange icons take effects when “Fn” is locked The functions of F1-F6 can be customized by users in "Settings"
2	Power button	Turn on/off device/sleep/wake up
3	@ key	Enter the character @
4	Input method switching	Input uppercase/lowercase/digital switch
5	Return Key	Back to last interface
6	Fn Key	Tap to lock Fn and activate the function indicated by the yellow icon on the number key
7	shift Key	Input method select key, call out "Select input method" interface
8	Tab Key	Make table， advance to the next anchor point or move the input focus to the next control
9	Delete Key	Delete one character before enter other characters
10	Survey Key	Users can customize the function in the "Settings" button
11	Keys for direction	Move the cursor or anchor point
12	Application Key	Users can customize the function in the "Settings" button

1.3. LED Definition

Figure1-4 Power LED

LED Status	LED Definition
Green Breath Light	On the charge
Green Constant Bright	Charging completed
Red Breath Light	Low battery

1.4. Accessory

1.4.1. Cable

There are two types of cable.User can use the cable and the adapter to charge the P3 and to transmit data.

Figure 1-5 Type-C to Type-C Charging Cable

Figure 1-6 USB to Type-C Data Cable

1.4.2. DSA-45PDH Adapter

The input volt and current of the adapter is 5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/2.25A.

Figure 1-7 DSA-45PDH Adapter

1.4.3. Handheld bracket

Connect the P3 handheld and the brace, fix the brace.To maintain stability in the work scene, it can help solve the problem of jitter and instability that may occur when handheld devices, and improve the use experience.

Figure 1-8 Handheld bracket

2. Basic Operation

This chapter introduces the basic operation of the equipment

2.1. Power on/off、restart、sleep

2.1.1. Power on

Long press the power button and let go until the device vibrate, this process will take about 20 seconds.

2.1.2. Power off

When you do not need to use this device, long press the power button until it shows the picture like figure 2-1, and then click [power off] to shut down the device.

2.1.3. Awake/Sleep

Short press the power button to awake the P3 or let the P3 go into sleep mode.

2.1.4. Restart

Long press the power button until it shows the picture like figure 2-1,and then click the [restart] to restart the device.

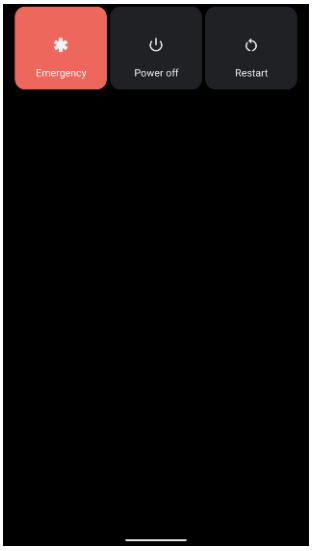


Figure 2-1

2.2. Install/detach SIM/TF card

（1） Open card cover. The left is for SIM/TF card when towards the screen.

（2） Following the direction signs on cover surfaces, put TF or SIM into card slot and cover it tightly.

2.3. Charging for Battery

Battery should be in full of charge for first use. It will take around 4.5 hours to charge from 0%, and keep operating for more than 15 hours.

（Test the working time under typical power consumption in industry applications: indoor room temperature 20 to 30 degrees Celsius, surpad, RTK five-star connection, coordinates were collected every second.Bluetooth, wifi, mobile network enabled, screen brightness and volume automatic）

Meanwhile, adaptor has protection for over charging.

Note: to maintain the best operating performance of this battery, please obey the following instructions.

- Please use dedicated adaptor provided with receiver.
- Please charge battery based on need instead of waiting until battery is flat.
- Please do not charge when the surrounding is in > 45℃ or <0℃.
- Advise to have a full charge every 3 months if this device hasn't been used for a long time. Over charging will impact battery's capacity of full load.

2.4. Assemble Tape

Match the upper end of tape with two back holes of device and use a screwdriver to tighten screws. And fix the other end of tape to the bottom hole of device.

When finishing assembly, it should look like the Figure 2-2.

Figure 2-2

3. Data Transmission

3.1. Connections for Data Transmission

3.1.1. P3 Disk

(1) Connect P3 with PC through USB cable;
(2) Slide down to open P3 drop-down box to use USB setting, and choose data transmission.
(3) After that, P3 disk sign will appear on PC's "My Computer". Click it to start transmission.

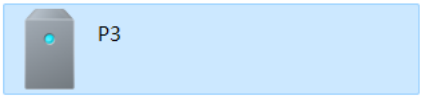


Figure 3-1

3.1.2. By B/T

Steps for windows 10 and P3:
(1) Select file on P3 and click "share" in lower left corner to choose Bluetooth as sending path, and then click to send.
(2) On PC, click to open message box to receive data.
(3) When P3 searches the Bluetooth device and finds the computer you want to transmit, click the corresponding device;
(4) Data transmission is ongoing. Choose storage address after transmission.

3.2. Enable Development Debug Option

To enable P3 development debug, please follow these steps:
(1) Enter [Setting] menu and find [About Phone] to click it.
(2) Find [Build number] at the bottom, click it 7 times continuously to enter Development Debug.
(3) Back to [Setting] menu, enter [System], Click [Advanced] and [Developer

Option] to set.

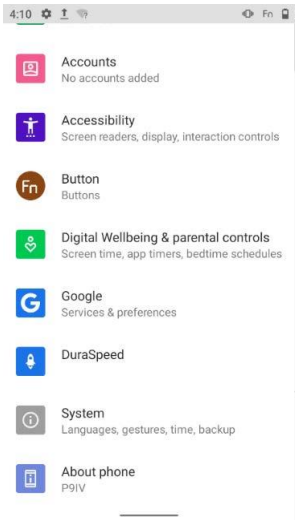


Figure 3-2

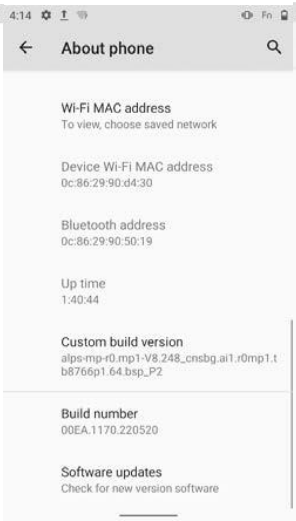


Figure 3-3

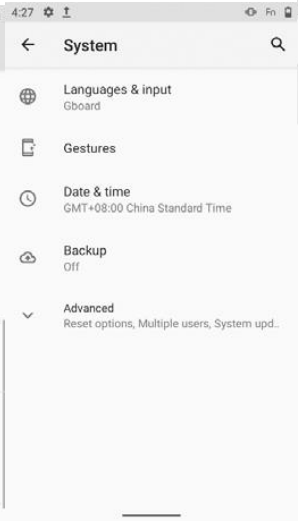


Figure 3-4

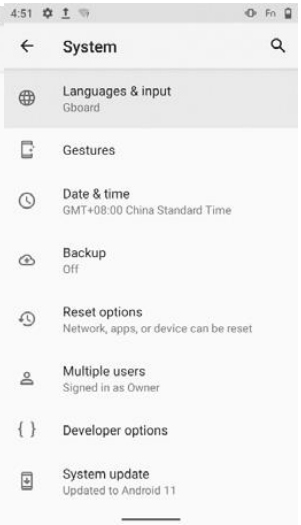


Figure 3-5

4. Operating System Introduction

4.1. System Interface and Start Menu

Hold power button to start device and see locked screen (Figure 4-1). Slide upwards to enter main interface (Figure 4-2).

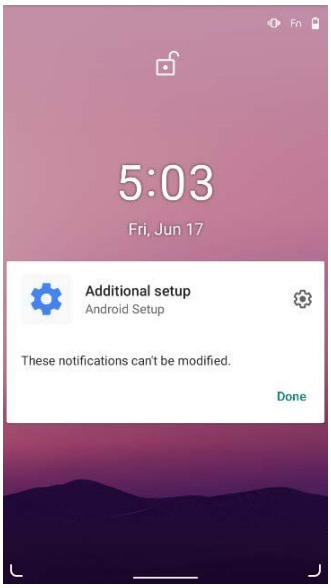


Figure 4-1

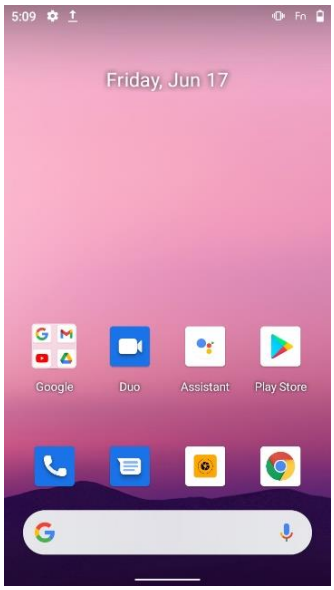


Figure 4-2

Slide upwards on main interface and then go to application interface (Figure 4-3). On this interface, you can slide upwards or downwards to check all applications installed. Hold an application logo until it pops up, after that you can move this logo to a satisfied place.

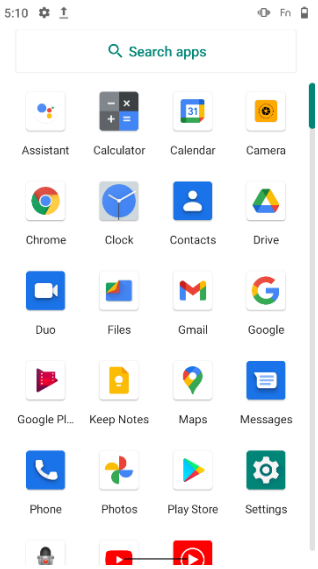


Figure 4-3

4.2. Status Indicator

Status indicator is in the title bar at the top of screen. Users could know actual settings, like time, battery power, SIM card status, WIFI, B/T, airplane mode, etc..

4.3. Pre-installed Applications

Common applications are pre-installed to provide a general function for users, such as phone, Gmail, Calendar, Gboard, etc..

4.4. Interact with Handheld

Touch options displayed on screen or slide downwards or upwards to interact and work with Handheld.

4.5. Input Methods

4.5.1. Physical Keyboard

Users can install the physical keyboard， it isn't installed by default.

4.5.2. Others

Third-party input methods are supported by device so that users can install a more suitable one based on needs.

4.6. Setting

After entering the settings page, the user can view and set the network and the Internet, connected devices, buttons, applications and notifications, battery, display, sound, storage, security and location information, account, accessibility, system, and mobile phone.

4.6.1. Network and Internet

Users can view and set WLAN, mobile network, hotspot, SIM card, flight mode, VPN, etc. here. Like Figure 4-4.

4.6.2. Connected Devices

Users can view and set the devices connected/ to be connected, and connection preferences here, as shown in Figure 4-5.

4.6.3. Buttons

Users can customize the custom buttons here, as shown in Figure 4-6.

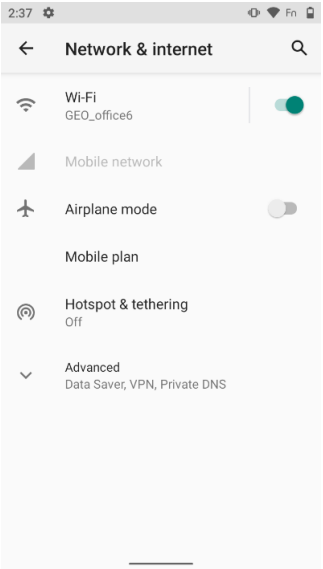


Figure 4-4

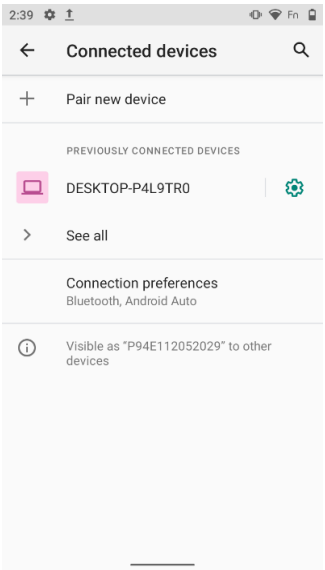


Figure 4-5

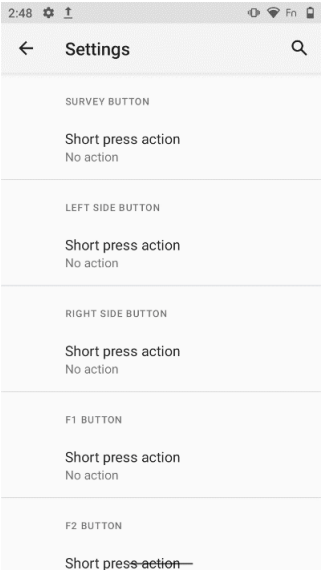


Figure 4-6

4.6.4. Applications and Notifications

Users can view and manage applications and notifications here, as shown in Figure 4-7.

4.6.5. Battery

Users can view and manage the battery status, mode and display here, as shown in Figure 4-8.

4.6.6. Display

Users can view and set screen brightness, night mode, wallpaper, sleep, display size, screen saver, etc. here, as shown in Figure 4-9.

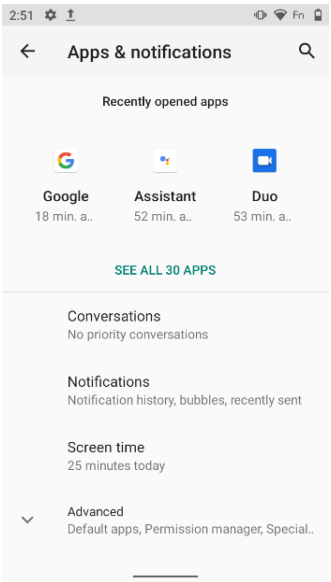


Figure 4-7

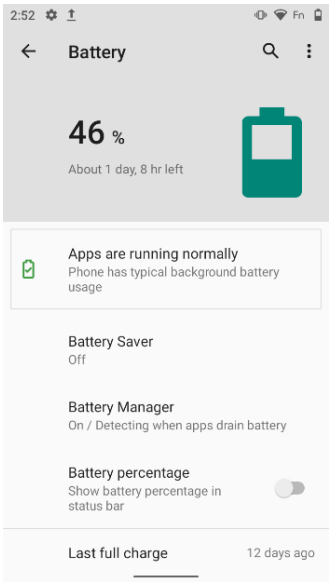


Figure 4-8

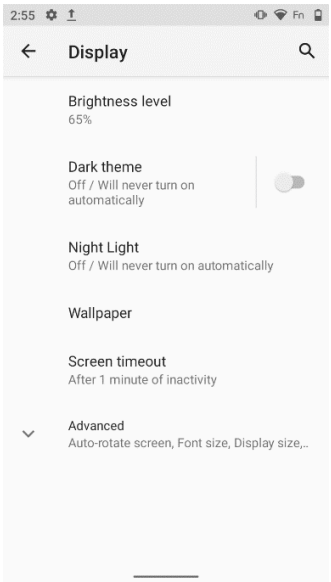


Figure 4-9

4.6.7. Sound

Users can view and set the volume, ring pattern, ringtone, alert tone and vibration, etc. here, as shown in Figure 4-10.

4.6.8. Storage

Users can view and manage the storage status of the handheld here, as shown in Figure 4-11.

4.6.9. Privacy and Location Information

Users can view and set the privacy and location information of the handheld here, as shown in Figure 4-12, 4-13.

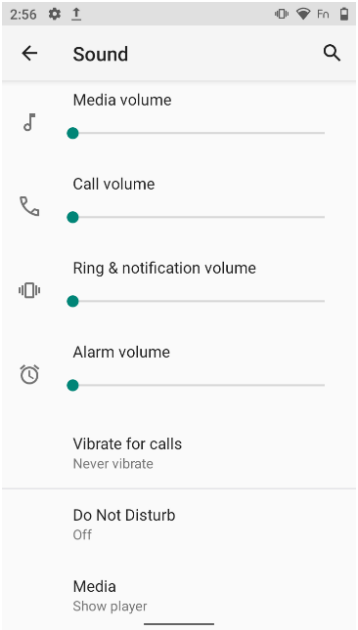


Figure 4-10

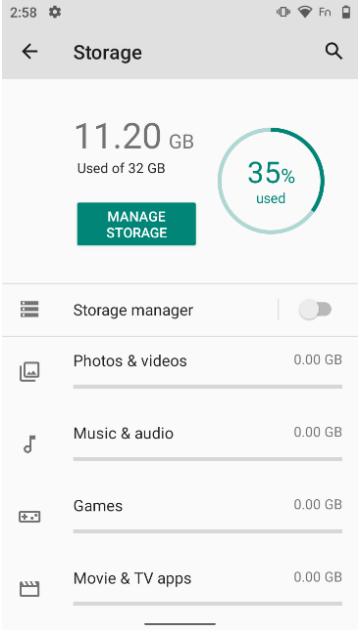
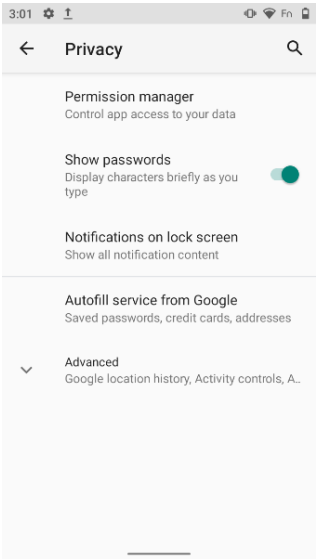


Figure 4-11



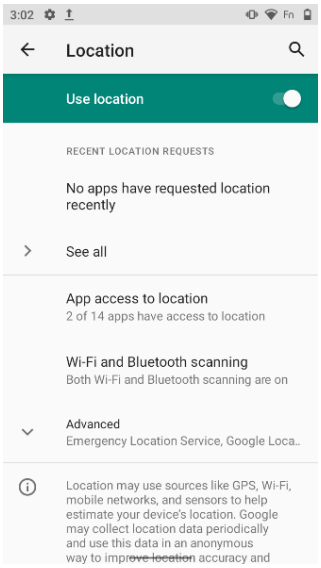


Figure 4-12 Figure 4-13

4.6.10. Account

Users can view and manage software account information, etc. here, as shown in Figure 4-14.

4.6.11. Accessibility

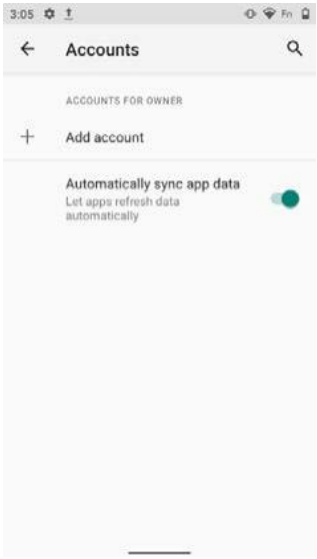
Users can view and set accessibility features here, as shown in Figure 4-15.

4.6.12. System

Users can view and manage the system language and input method, cleaning, date and time, backup, reset, and multiple users here, as shown in Figure 4-16.

4.6.13. About Mobile

Users can view the status of the handheld here, as shown in Figure 4-17.



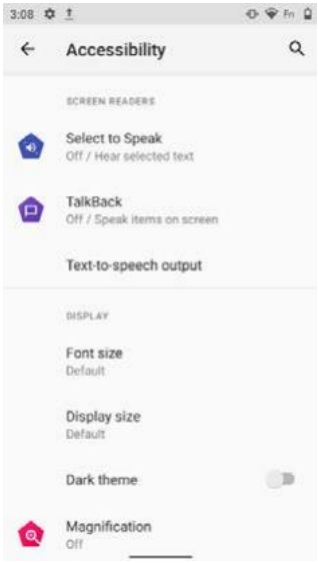


Figure 4-14 Figure 4-15

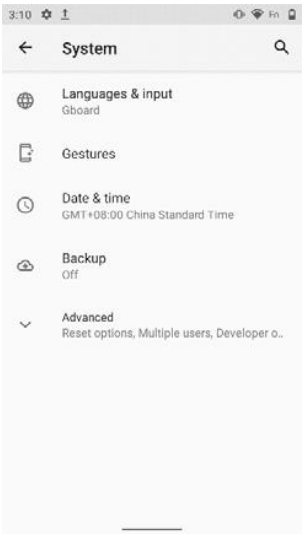


Figure 4-16

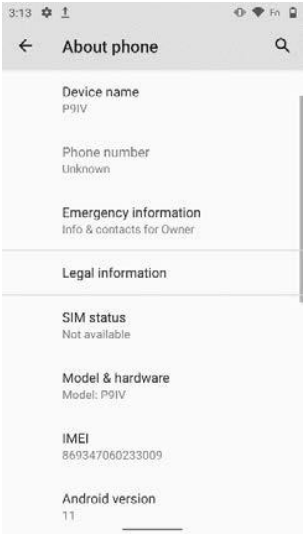


Figure 4-17

4.7. Others

a. Full Netcom, hands-free call is available.
b. Connect to private network, network can be customized
c. APN.
d. Support online system update.

5. Software Operation

In addition to applications pre-installed on the device, you can also install software you need on the device.

5.1. Software Installation

5.1.1. Local Installation

(1) Download the software that needs to be installed or save it locally in the handheld through other transmission methods.
(2) Find the installation software on the device file manager, click the software to install it by following instructions. You can choose the installation path during the installation process.

5.1.2. Google Installation

Use Google to install the software directly.
Note: If system prompts to restart the device after the application is successfully installed, follow the prompts.

5.2. System Firmware Upgrade

With networked, if handheld system firmware is updated, handheld will automatically notify the update.

To upgrade the system firmware, click the [System Update] icon in the application interface, as shown in Figure 5-1. At this time, there are two methods for users to choose.

5.2.1. Online Upgrade

When connected to the Internet, click [Check for Update], if there is a new update, you can follow the prompts to upgrade the system.

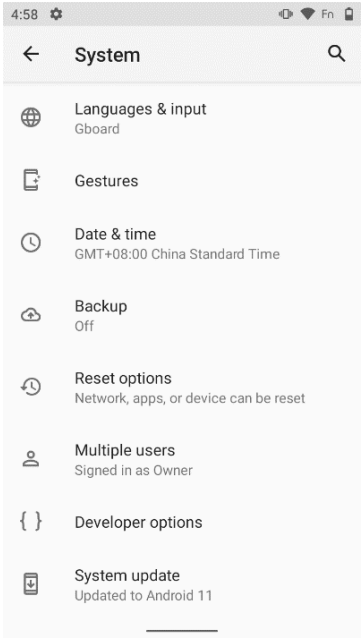


Figure 5-1

6. Troubleshooting and Product Maintenance

This chapter provides answers to the problems that may occur during the use of product, and introduces some maintenance rules. If you have any questions, please contact the relevant technical personnel.

6.1. Troubleshooting

Troubles	Solution
Unable to turn on	The remaining battery power may be too low to turn on and operation. Please charge for battery. If the battery power is too low, it takes about 30 minutes to charge to light handheld up.
Screen has slow response	Please make sure battery isn't in low power. If exclude this cause, please reset this device.
Screen has no response.	Please reset this device.
Fail to connect PC through USB cable.	Please make sure handheld and PC are turned on before connecting.
	Check if USB cable connected successfully with PC and handheld Type-C port.
	Re-start and re-connect through cable.
A warning	Delete files that are no longer needed.
message about insufficient memory	
	Delete applications that are no longer needed.
	Stop applications that are not currently in use. The method to view the application in execution is to press and hold the main menu key to display the currently used application.
	Reset this device.

6.2. Device Maintenance

Maintaining this product can ensure the normal operation of your product and reduce the risk of product damage:

- Do not place the product in a high temperature and high humidity environment;
- Avoid prolonged exposure to strong light or strong ultraviolet rays;
- Do not drop the product or make it have strong hit;
- Do not disassemble, repair or modify this product without authorization;
- When storing or carrying this product, avoid storing it with flammable,

explosive or corrosive materials;

Note: During the warranty period of the P3 handheld, if there is a performance failure, consumers can contact the local dealer for after-sales service.

Appendix 1 P3 Product Specification

Overview of P3 Technical Specifications

Item	Feature
Bluetooth	BT2.1+EDR/3.0/4.1LE/4.2/5.0 BLE
WiFi	802.11 a/b/g/n/ac
Network	Full Netcom 4G, supporting China Mobile, China Unicom, and China Telecom
Sim card slot	Nano SIM
TF card slot	Support MicroSD expansion, up to 512G
Memory	4GB
Storage	64GB
Indicator	1 pcs
Key	27 pcs
Electronic Blisters	Support
Electronic Compass	Support Support
Camera	13-million pixels of rear camera, with flash
GNSS	Three galaxies with single frequency, GPS、GLONASS、BeiDou
	Single point position, no raw data output

Detailed Technical Specifications

Physical Characteristics

Size	225*86*22.5mm
Weight	440g
Operating temp	-30 °C to +55 °C
Storage temp.	-40 °C to +80 °C
Protection Class	IP67
Humidity	5%-95 %, anti-condensing
Drop	Withstands 1.8 m drop onto hard surface

System Platform

Operating system	Android 11，8 core 2.0G
Memory	4GB LPDDR4X
Storage	64GB
External storage	Up to 512GB

Interface communication

Screen	5.5 inch HD touch screen
Key	27 keys，1 indicators，details see part 3
Connector	Std Type-C，Std Type-c，for charging and data transmission
Communication	B/T：BT2.1+EDR/3.0/4.1/4.2/5.0 BLE WiFi：2.4G/5G, 802.11 ac/a/b/g/n

Network	GSM: 850/900/1800/1900 WCDMA:B1/B2/B4/B5/B8 LTE-TDD:B38/B39/B40/B41 LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B20/B28
Other	External storage card slot External SIM card slot

Power Supply

Internal Battery	3.85V, 9000mAh, 24.64Wh
Input voltage	DC 9V2A/5V3A
Adaptor	Type-C PDAdaptor
Operating time	Above 15 hours

IC warning statements:

Specific Absorption Rate (SAR) information: This device meets the government's requirements for exposure to radio waves. The guide lines 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.

The SAR limit of ISED (Canada) is 1.6 W/kg averaged over one gram of tissue. Device types: Portable _PMN NAME_P3 Handheld (IC: 30492-P3) has also been tested against this SAR limit. according to this standard is less than 1.6W/kg w.

Informations sur le débit d'absorption spécifique (DAS) : cet appareil est conforme aux exigences gouvernementales en matière d'exposition aux ondes radio. Les lignes directrices sont basées sur des normes qui ont été élaborées par des organisations scientifiques indépendantes grâce à une évaluation périodique et approfondie d'études scientifiques. Les normes comprennent une marge de sécurité substantielle conçue pour assurer la sécurité de toutes les personnes, quel que soit leur âge ou leur état de santé.

La limite SAR d'ISED (Canada) est de 1,6 W/kg en moyenne sur un gramme de tissu. Types d'appareil : __Portable __PMN NAME__P3 Handheld __ (IC : 30492-P3) a également été testé par rapport à cette limite SAR. selon cette norme est inférieure à 1,6 W/kg w.
5150-5250MHz : Only indoor use.

FCC Warning:

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
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.
This Product 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.
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 followingmeasures:
-- 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.

RF Exposure Information (SAR)
This device meets the government’s requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels. The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/oet/ea/fccid.

MPE:

To ensure that RF exposure levels remain at or below the tested levels, use a belt clip, holster, or similar accessory that have no metallic component in the assembly and must maintains a minimum separation distance of 15mm between your body and the device.