

P9IV User Manual

Revision History

Version	Date	Description	Person
1.0	2022.08.01	Draft	Xiongli Ding

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1 Introduction

This chapter introduces the feature, accessories, panel definition, button definition, connector definition of P9IV.

1.1 Panel Definition

1.1.1 Front View



Figure 1-1 P9IV Front View

Table 1-1 P9IV Section Specification

No.	Section	Specification
①	Touch screen	Show the display and react when you touch the screen.
②	Keyboard	Including 26 number and special function keys.
③	Microphone	Record and make phone call.

1.1.2 The Back View and Side View



Figure 1-2 P9IV Back View and Side View

Figure 1-2 Section Specification

No.	Section	Specification
①	Speaker	Make sound like music and voice
②	Camera	Take photos
③	Tape hole	Fix the tape
④	Brace hole	Connect the P9IV handheld and the brace, fix the brace
⑤	Tape	Hold P9IV handheld
⑥	SIM/TF card slot	Install SIM card, TF card
⑦	Left side button	User-defined function key
⑧	USB Type-C	Charging, data transmitting, support USB OTG
⑨	Right side button	User-defined function key

1.2 Button/LED Definition



Figure 1-3 P9IV Handheld Button

Table 1-3 P9IV Handheld button function specification

No.	Section	Specification	
1	Numeric keys	Enter numbers	
	Special function key (Orange icons take effects when "Fn" is locked)	The orange icon of the key "1" (Voice function)	Voice input to make Surpad perform some voice commands
		The orange icon of key "2" (camera function)	Wake up "Camera" button
		The orange icon of key "3" (screenshot function)	Take a quick screenshot
		F1-F5	User-defined function key
2	Survey key	When Surpad interface isn't displayed, press to open or switch to Surpad interface. When Surpad interface is on display, press to collect data.	
3	Keys for direction	Move up, down, left, and right on the screen or menu in function state Up and down keys are for volume control when in the function state Left and right keys are for screen brightness control when in the function state	
4	Recent Key	Call the list of recent apps	
5	Home Key	Back to Home Page	
6	Return Key	Back to last interface	
7	Enter key	Confirm/line feed In Surpad interface, the key is used to collect data in the non-input state	

8	Delete Key	Delete one character before enter other characters	
9	Tab Key	Make table	
10	Shift Key	When using the physical keyboard as input method, this key can switch between numbers, lowercase and uppercase letters	
11	Fn Key	Fn mark will prompt in the upper notification bar when pressing this key, meaning the functions marked by orange icons on keys can be used	
12	Power LED	In standby mode	Solid red: power is <15%
			Off: power is >15%
12	Power LED	In charging	Flashing green: in charging
			Solid green: full of charge
13	Power button	Turn on/off device	
14	WiFi/Bluetooth LED	Blue: handheld is connected with receiver B/T; Green: handheld is connected with receiver WIFI; Off: handheld isn't connected through B/T or WIFI.	

1.3 Accessory

1.3.1 CTMM-1.5 Cable

User can use the cable CTMM-1.5 and the adapter to charge the P9IV and to transmit data. The cable type is 1.5m Type-C to Type-C.

1.3.2 DSA-45PDH Adapter

The output volt and current of the adapter is 5V/3A, 9V/3A.



Figure 1-4 CTMM-1.5 Cable



Figure 1-5 DSA-45PDH Adapter

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 vibrates, 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 P9IV or let the P9IV 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.

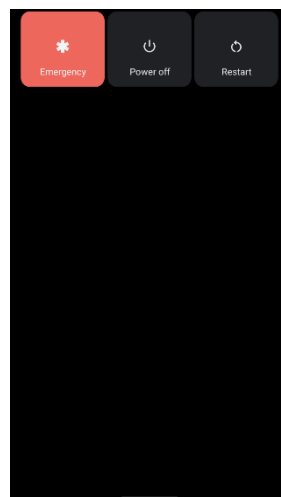


Figure 2-1

2.2 Screen Shot

Short press the “Fn” button until when the Fn icon appears at the top of the screen, press “3” in the white key area, corresponding to the orange function, and take a screenshot. Pull down the notification bar, and click the Screenshot in the notification bar to take a screenshot.

2.3 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.

2.4 Charging for Battery

Battery should be in full of charge for first use. It will take around 4 hours to charge from 0%, and keep operating for more than 20 hours. 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 $> 45^{\circ}\text{C}$ or $< 0^{\circ}\text{C}$.
- 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.

2.5 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 P9IV Disk

- (1) Connect P9IV with PC through USB cable;
- (2) Slide down to open P9IV drop-down box to use USB setting, and choose data transmission.
- (3) After that, P9IV 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 P9IV:

- (1) Select file on P9IV 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 P9IV 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.

Steps for Windows 7 and P9IV:

- (1) Search B/T on PC Start Menu, and click “Change Bluetooth Setting”
- (2) Select file on P9IV and click 3 small dots in lower left corner to choose B/T as sending path, and then click to send.
- (3) Select the right PC from P9IV B/T list.

3.2 Enable Development Debug Option

To enable P9IV 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.

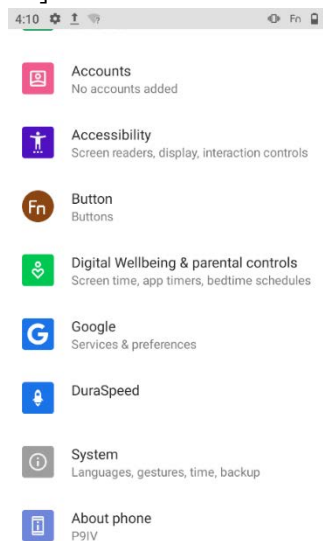


Figure 3-2

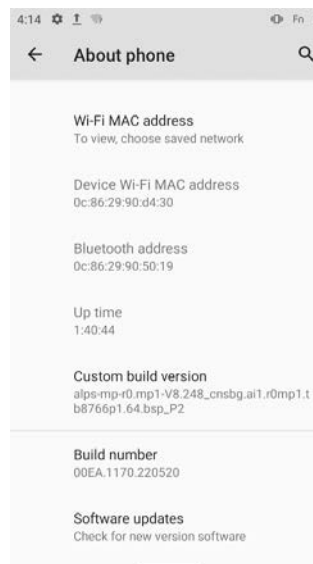


Figure 3-3

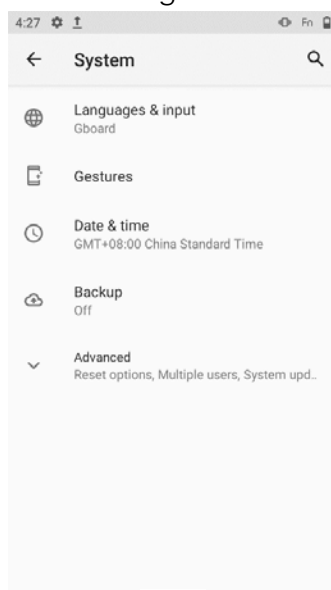


Figure 3-4

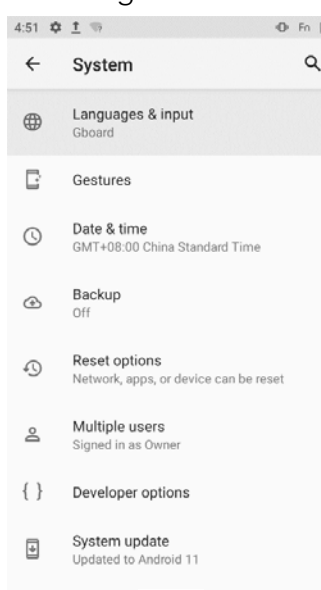


Figure 3-5

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).

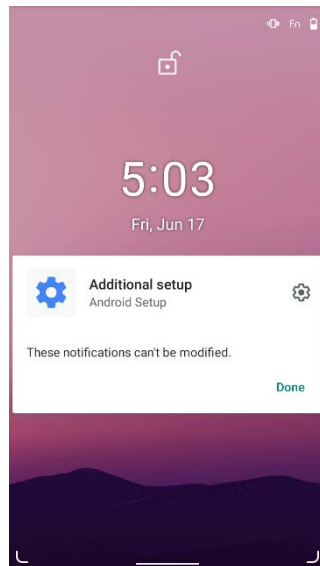


Figure 4-1

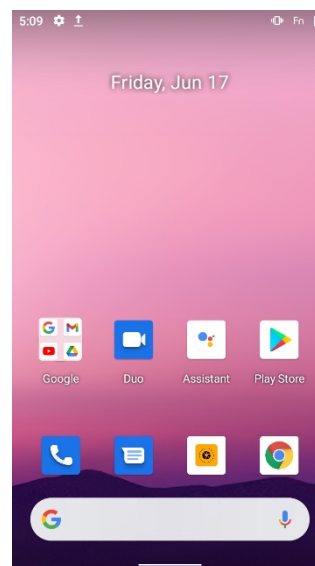


Figure 4-2

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.

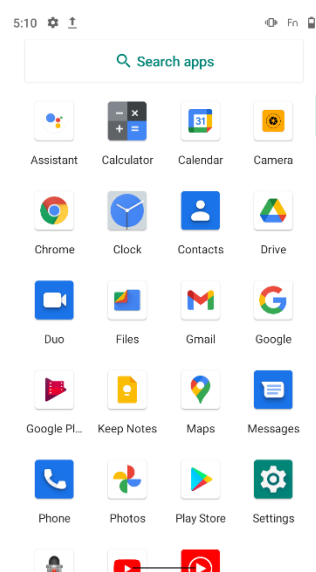


Figure 4-3

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.

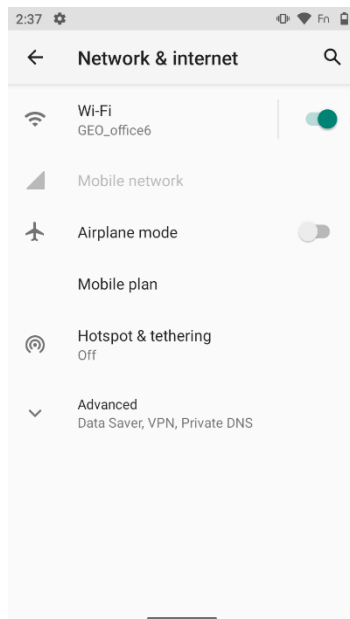


Figure 4-4

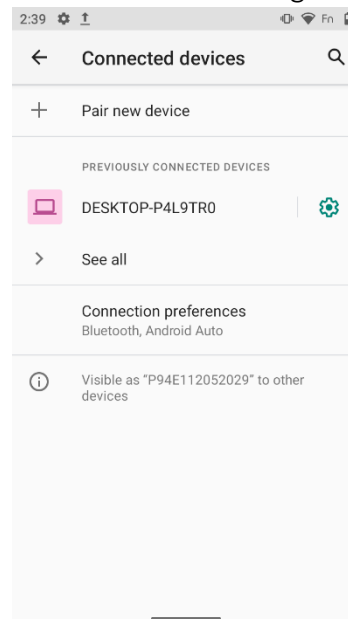


Figure 4-5

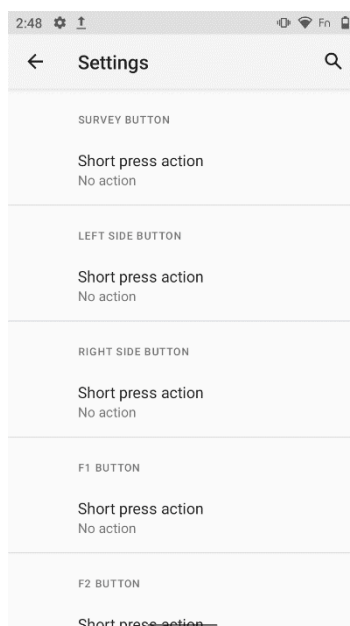


Figure 4-6

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.

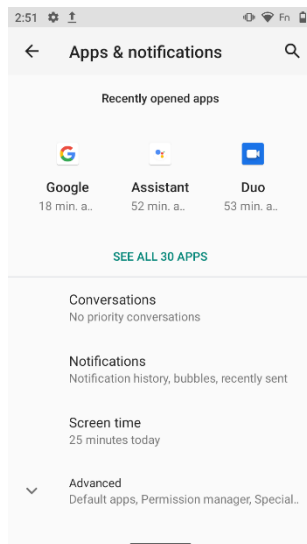


Figure 4-7

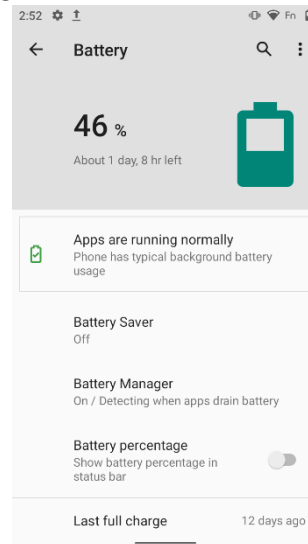


Figure 4-8

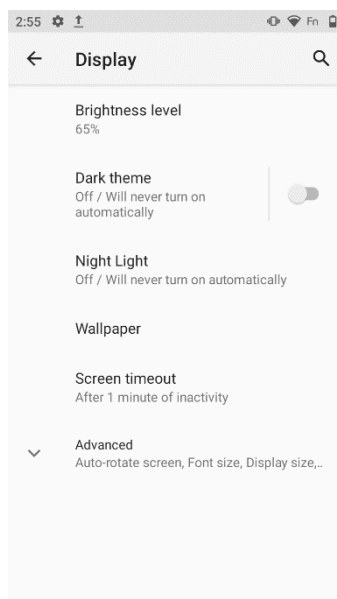


Figure 4-9

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.

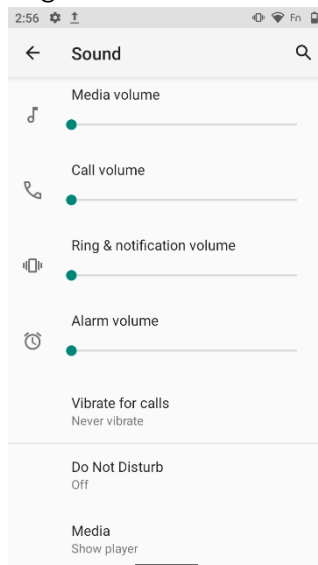


Figure 4-10

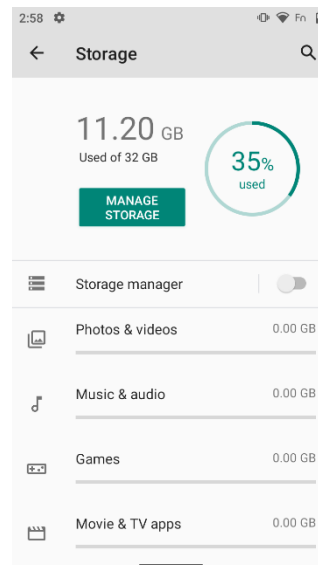


Figure 4-11

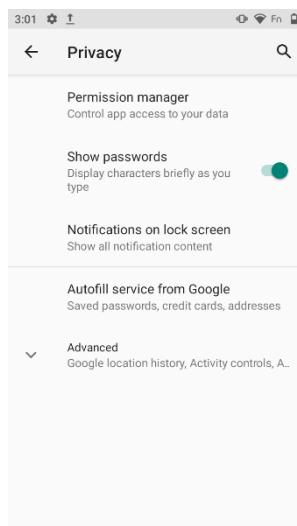


Figure 4-12

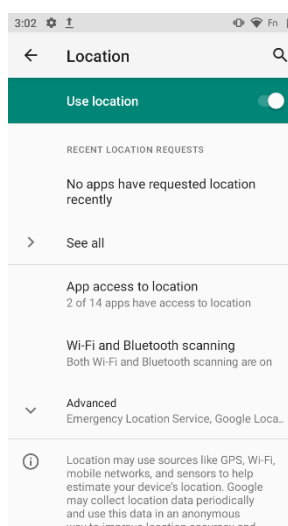


Figure 4-13

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.

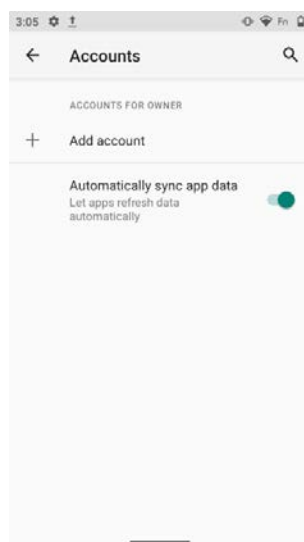


Figure 4-14

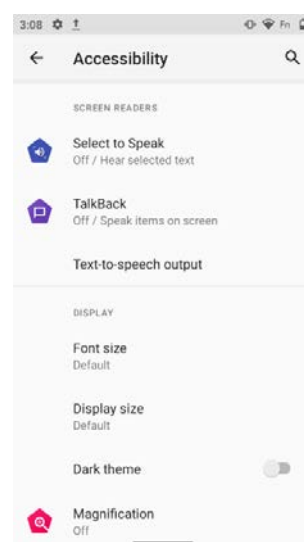


Figure 4-15

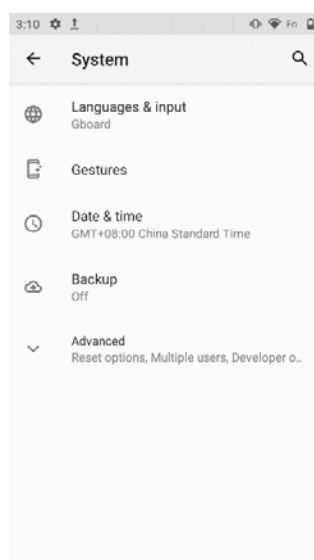


Figure 4-16

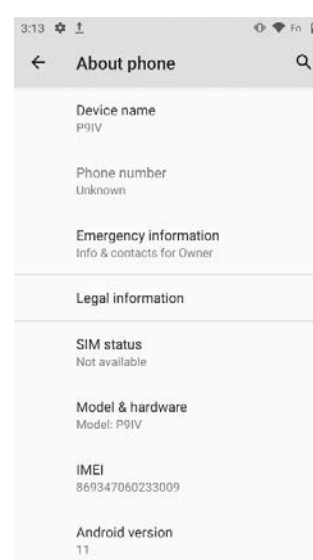


Figure 4-17

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 5-4. 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.

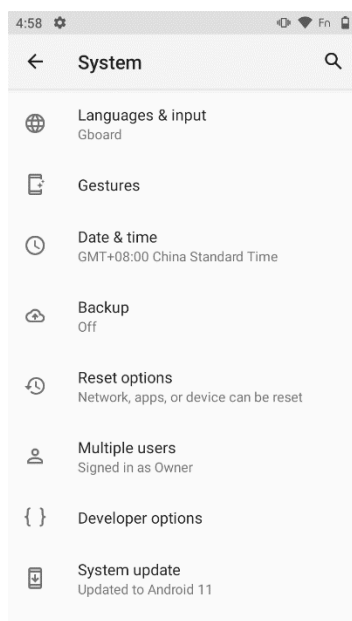


Figure 5-4

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 P9IV handheld, if there is a performance failure, consumers can contact the local dealer for after-sales service.

Appendix 1 P9IV Product Specification

Overview of P9IV 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	3GB
Storage	32GB
Indicator	2 pcs
Key	28 pcs
Electronic Blisters	Support
Electronic Compass	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	221.5*82.0*27mm
Weight	450g
Operating temp.	-30 °C to +60 °C
Storage temp.	-40 °C to +80 °C
Protection Class	IP67
Humidity	5%-95 %, anti-condensing
Drop	Withstands 1.2 m drop onto hard surface

System Platform

Operating system	Android 11
CPU	8 core 2.0G
Memory	3GB LPDDR4X
Storage	32GB
External storage	Up to 512GB

Interface communication

Screen	5.0 inch HD touch screen
--------	--------------------------

Key	28 keys, 2 indicators, details see part 1.2
Connector	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, 6400mAh, 24.64Wh
Input voltage	DC 5V3A / 9V2A
Adaptor	Type-C PD Adaptor
Operating time	Above 15 hours

FCC warning statements:

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your 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.

The device has been evaluated to meet general RF exposure requirement. Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

IC warning statements:

-English Warning Statement:

RSS-GEN ISSUE 5, 8.4 User manual notice

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

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

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

-French Warning Statement:

RSS - Gen version 5, 8.4 avis du manuel de l'utilisateur

Cet appareil contient un émetteur / récepteur sans licence conforme au RSS sans licence d'innovation, science et développement économique Canada. L'opération doit satisfaire aux deux conditions suivantes:

Cet équipement peut ne pas causer d'interférence.

L'équipement doit accepter toute interférence, y compris toute interférence qui pourrait entraîner un fonctionnement indésirable de l'équipement.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that are deemed to comply without testing of specific absorption ratio (SAR). Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radio électriques (RF) CNR-102 de l'IC. Cet équipement émet une énergie RF très faible qui est considérée conforme sans évaluation du débit d'absorption spécifique (DAS).

This equipment should be installed and operated with minimum distance 5mm between the radiator & your body.

Lors de l'installation et du fonctionnement de cet équipement, la distance minimale entre le radiateur et le corps doit être de 5 mm.